

33.3

1952

811
~~327~~ FAIRBANKS PROGRAM REPORTS 1952

CROSS REFERENCE

No. 32/ FBX

Date. July 1, 1952

From Niemi

To Zimmerman

Subject:

Request for Gravel Surface for Chena Road (Ditch Road)

Petition received from Dewey Smith and eight other signers, requesting a coat of gravel for the subject road and year round maintenance. This request should be considered with your maintenance program and priority submitted with 1953 appropriations.

Filed 13/26 -

Office Memorandum • UNITED STATES GOVERNMENT

TO : Wm. J. Niemi, Chief Engineer, ARC, Juneau

DATE: February 20, 1952

FROM : M. C. Zimmerman, District Engineer, ARC, Fairbanks *mcz*

SUBJECT: Change in Recommendations - 1952 operations

Reference is made to our letter of November 28, 1951, regarding recommendations for 1952 operations. Pursuant to our discussions at the District Engineers' Conference, the following outlined changes are submitted for your review and consideration:

(1). The \$30,000.00 allotted to local roads under Reconstruction to be redistributed to other reconstruction as follows:

3	Chf. Engr.
1	Admin.
2	Engrg.
	Acc't.
	Pers.
	Supply

Route 130.2 - Badger Road - Resurfacing of approximately 5 miles of this route.	\$7,500.00 ✓
Route 633 - Ester Road - Widening of several narrow cuts.	1,500.00
Route 631.1 - Farmers' Loop - Resurfacing of various sections.	8,000.00
Route 631 - Steese Highway - This \$13,000.00 added to the \$70,000.00 already allocated makes a total of \$83,000.00 for this route.	<u>13,000.00</u>
Total:	\$30,000.00

(2). Local roads listed under Reconstruction in our letter of November 28, 1951, are now grouped with Farm and Industrial roads and the \$50,000 allocated is proposed to be redistributed as follows:

Fairbanks Area (1)

1. <u>Pezar Road</u> -	\$ 5,000.00
X 2. <u>Country Club Extension (\$2000.00)</u> - Surfacing project and to be deferred at least one year.	---
(2) 3. <u>Becker-Dale-Conn</u> -	10,500.00
4. <u>Small Tracts (\$1500.00)</u> - Surfacing project and to be deferred at least one year.	3 ---
(3) 5. <u>Chena Hot Springs and Branches</u> -	8,500.00
6. <u>Otto Geist Road (\$2500.00)</u> - Surfacing project and to be deferred at least one year.	---
7. <u>Project No.1 (Petition No. 50-1)</u>	5,500.00
8. <u>Project No.2 (Petition No. 50-2)</u>	4,500.00
9. <u>Project No.3 (Petition No. 50-3)</u>	4,000.00
(4) 10. <u>Project No.4 (Petition No. 51-9)</u> - This was originally proposed as an east and west road along the half section line through Section 20 T1S RLW. We now propose starting at the SW corner of Section 20 and run north	<u>38,000.00</u>

*10,000
17,500
11,500
8,500
Fairbanks
Highway
Area*

(5)

Mr. Niemi

February 20, 1952

along the Section line for 1/2 mile.

17,000
\$ 1,750.00

(6)	11. Project No. 5 (Petition No. 51-1)	2,500.00
(7)	12. " No. 6 (Petition No. 51-2)	1,200.00
(8)	13. " No. 7 (Petition No. 51-3)	800.00
(9)	14. " No. 8 (Petition No. 51-4)	4,500.00
(10)	15. " No. 9 (Petition No. 51-5)	1,250.00
		<hr/>
		\$50,000.00

38,000 ~~62,500~~
~~42,500~~

DEPARTMENT OF THE INTERIOR
ALASKA ROAD COMMISSION
Juneau, Alaska

FAIRBANKS DISTRICT - OPERATIONS ORDERS - SEASON 1952
Effective March 1, 1952

GENERAL

The following work orders and discussion outline the Fairbanks District program as established for the 1952 season. The distribution of funds is generally based on District recommendations. No overruns are contemplated or authorized under the work orders without approval of Headquarters. Unpredictable emergencies may arise requiring additional funds, but each will be considered individually and additional allotments will be forthcoming only if considered necessary and advisable. Crews should be kept at a size to assure completion of all construction projects within the length of the construction season and funds available. In like manner, maintenance crews must be tailored to meet the maintenance requirements for the season, or for year-round basis on those roads on which maintenance is performed during both winter and summer.

Previous information has been forwarded to Districts regarding the stringent personnel limitations under which the entire Alaska Road Commission must operate, especially during the present period to July 1, 1952. It now appears that most construction work must be curtailed until after July 1. Before normal start of most construction in May, each District will be further advised of ceiling limitations on personnel. In the meantime, all operations will be maintained at the very minimum consistent with adequate maintenance and protection of the road system.

Instructions have been sent to the Districts regarding the responsibility for close control of allotments which have been made for the various work orders. Control of expenditures, at least for the present, will be attempted through District control of expenditures for labor, for which an amount is set up in each work order under "District Direct" and through "District Clearing", which covers mechanics' wages, local purchases, local operating expenses of depots, and other wages not directly chargeable to work orders. Instructions have been issued Districts to furnish detailed information for each four-week period.

Headquarters personnel will hold frequent field discussions and make studies of the allotments with the District Engineer and District Administrative Officer during field trips. This will require detailed personal knowledge of each project by the District Engineer, especially as to size of crews and current progress of the project.

MAINTENANCE - THROUGH ROADS

Routes 130, 131 - Richardson Highway and Iadd Field Strip

Funds are programed for both summer and winter maintenance as recommended.

Normal maintenance of pavements and shoulders, brush control, possibly by chemical means, and additional drainage to provide water escapement, are of primary importance.

Reconstruction of areas where heavy subsidence has occurred is to be undertaken to eliminate these danger spots. These areas will be built up to bottom of subgrade with select borrow material and finished off with crushed rock base course. Plant-mix pavement is not planned for this year, but penetration treatment should be applied to prevent raveling of the surface. Repair of shoulder settlement falls in this same category of repair work.

Winter maintenance includes snow removal and surface maintenance as required.

Route 230 - Alaska Highway

Maintenance funds programed as recommended are for improvement of drainage with additional culverts and lateral drainage ditches where required on the paved section between Tok Junction and Johnson River, shoulder stabilization between Sears Creek and Tok Junction, brush control, preferably by chemical means if growth is not too large, and routine surface maintenance.

Where surface has failed between Tok Junction and Johnson River, repairs are to be continued and asphaltic penetration treatment used to finish off the surface.

Maintenance should be held to a minimum on the section from Tok Junction to Northway Junction, which will be placed under contract for reconstruction and paving this summer. On the remaining section to the Canadian border, only such regravelling should be done as will be required to hold the surface for the 1952 season and part of 1953. Current plans are to place this under contract for reconstruction and paving in 1953-1954.

Route 330 - Glenn Highway

Summer and winter maintenance are included in the funds programed for the Fairbanks District section from Little Tok River to Tok Junction. Special attention must be paid to the adequacy of maintenance during reconstruction of this section, which was not too good last season, and especially during the night shutdown period. Numerous private cars became mixed down at night due to insufficient attention to soft areas.

Routes 630, 632 - Steese Highway (to North Camp and to University)

Funds are programed for normal summer and winter maintenance as recommended.

The section to the University should be observed during the summer to determine whether seal coating may be necessary over part of this road.

Route 132 - International Airport Road

The Alaska Road Commission has assumed maintenance of this highway over its entire length. Maintenance to be performed, as recommended, includes shoulder rehabilitation, correction of subsidences, brush control, signs and possible sealing. If sealing is required, additional funds must be programed upon request of the District.

Both summer and winter maintenance is to be performed on the route.

MAINTENANCE - FEEDER ROADS

Route 231 - Northway Feeder

Funds are programed as recommended for summer and winter maintenance as well as some additional shaping and graveling.

Route 331 - Taylor Highway

Funds are programed in the amount recommended for summer maintenance only.

Maintenance during the coming season will be tied in with reconstruction, which is covered as a separate item and which work will extend from junction with the Alaska Highway to the Canadian border. Principal items for which maintenance funds are provided include improvement of drainage, surface blading, painting of steel bridges and such surfacing as funds will permit.

Milepost signs are being provided and are to be installed during the season. Additional road signs should also be planned to meet the requirements of expected increased traffic as this route to Dawson improves and becomes known.

Routes 631, 633, 634 - Steere Highway

Funds are programed as recommended for summer maintenance over the entire route, and for winter maintenance from Fairbanks to Chatanika.

Maintenance work should again be coordinated with reconstruction, for which additional funds are provided as a separate item in the District program.

Route 731 - Elliott Highway

Included in the funds programed are summer maintenance over the entire system and winter maintenance only to Olmes. Summer maintenance, as recommended, will include ditching, brush cutting, surface maintenance and such spot graveling as funds will permit. Painting of steel bridges at Chatanika and Tolovana Rivers should be undertaken as indicated.

Manley Hot Springs - Euroka - Route 732

Funds for a normal maintenance program are provided as recommended. Included in the season's program are additional clearing, ditching, surfacing, brush cutting and other maintenance items as may be possible within the funds allotted.

No winter maintenance is included for this route.

Route 031.1 - Ruby-Long-Pookmar

Funds programed are primarily for replacement of four bridges, which were included in District recommendations under Reconstruction. No reconstruction funds will be available. Extensive maintenance work of the type recommended will not be undertaken due to small amount of activity in the area. However, it is recognized that bridges must be kept in condition so that the road can be traveled by trucks when conditions are right, and tractors at other times.

MAINTENANCE -- LOCAL ROADS

Routes 130.1, 130.2, 130.3, 130.4, 130.5, 132.1 - Fairbanks Locals

Funds are provided as recommended for both summer and winter maintenance.

Included are Becker-Dale-Conn, Small Tracts and Peger roads (Route 132.1) which were not previously included. Funds were adjusted to take care of this addition.

331.2,

Routes 331.1 - Forty-Mile Local Roads (Taylor Highway)

Roads included in this system are Jack Wade-Boundary, Eagle-Mission and Eagle-70 Mile River.

Funds are provided for summer maintenance only, as recommended, of which the bulk will probably go into the section from Jack Wade to Boundary in conjunction with the reconstruction program on this section.

Routes 630.1, 631.1, 631.2, 631.3, 631.4, 632.1 - Fairbanks and Steese Highway Branches

Included in this group are twenty-seven roads, as listed in your recommendations, plus the Otto Geist road (Route 632.1), Country Club Extension road (Route 631.1) and Chena Hot Springs Branches (Route 631.2). Funds provide for normal summer maintenance (and winter maintenance on some) as recommended, and such minor improvements as can be accomplished with the funds allotted.

Route 731.1 - Elliott Highway Branches

The program is for minimum summer maintenance of these short roads, as recommended by the District.

732.1 - Manley Hot Springs - Toftry

Summer maintenance funds only are programed as recommended, for spot graveling, brush clearing, ditching and drainage work.

Route 050.1, Carl Creek and 050.2, Rommark-Little Nainok Creek

While no funds are programed for actual field work, a 1942 Chevrolet dump truck will be shipped to each of these locations for maintenance work by local inhabitants.

Route 030.3 - Wiseman Locals

The minimum amount of maintenance funds recommended by the District are provided for roads in the Wiseman area. The set of D-7 tracks and necessary fuel oil should be shipped by air, as suggested. The situation at Wiseman should be carefully reviewed this summer as a guide to future recommendations.

Route 030.4 - Ruby Airfield Road

Funds are provided as recommended for heavy maintenance to place this road in good condition, thereby reducing maintenance in future years.

Route 030.5 - Nulato Airfield Road and 030.6, Nenana Cemetery, Ferry-Eva Creek

Funds are programed as recommended for minimum maintenance of these roads.

A brief report is desired in next year's recommendations on the Ferry-Eva Creek road as to condition, number of users, amount of freight and like pertinent information. It appears that this road may be in the same classification as the Ruby-Poorman road, where we might consider appropriate future cutbacks in maintenance funds.

Route 130.6 - Meadows Road

Summer and winter maintenance is programed from funds contributed by military forces. The amount authorized must cover a full year's operations, including surface blading, drainage maintenance and snow removal.

Pedro Dome Road

This is another reimbursable maintenance project for the armed services and funds are programed for such maintenance as is desired by the local military commander within funds allotted.

Fairbanks Depot

As previously discussed, there will be no provision in the funds to move a building from the lower yard to the depot for warm storage this season. Authorized work includes a security fence around this lower yard and such other maintenance and improvements as the funds will permit.

Tok Depot

Funds are programed for construction of a service shop in the warehouse and shop area instead of replacing the heavy equipment shop destroyed by fire last winter. It is understood that heavy equipment repair can be done in other shops, provided equipment servicing can be concentrated in one building.

Other work, as recommended, will include new floors in the office and washroom and such other maintenance as may be possible within the programed funds.

Fairbanks Apartments

Funds have been adjusted over the original recommendations, primarily to correct insulation deficiencies around windows and in walls, and to perform maintenance and improvements listed in District submissions.

Route 040, A - Marshall Road

Although no funds for field work are provided, an old dump truck is to be shipped to Willow Creek Landing (Marshall) from Ruby. Headquarters will also arrange to have a grader moved up from Alakanuk, near the mouth of the Yukon River, if it can be spared from that location, where it apparently is used only infrequently to maintain a landing strip.

Permanent Maintenance Camp

No funds are programed due to other immediate demands such as service shop at Tok and additional security fence at Fairbanks.

The District should continue studies as to location of future maintenance camps and particularly as to size of such installations. The idea of an extra gang to perform major maintenance in each District during the summer season has considerable merit, and would reduce the size of crews and installations at fixed locations, possibly to two men for each fifty miles of road. The extra gang would be completely on wheels, kitchens and all, and would merely need parking area and water supply to go to work.

RECONSTRUCTION

Route 330 - Glenn Highway

The section for which funds are programed as recommended extends from Little Tok River to Tok Junction, 33 miles. Reconstruction will consist of completion of those grading and drainage features not finished in 1951 due to frozen ground or unstable conditions, plus ballast over most of the remaining area to bring the section into condition for letting of the paving contract. Bridges at Tok River, two sloughs of Tok River and Trail Creek, begun in 1951, are to be completed and Little Tok River bridge replaced with a standard pile trestle. Materials should be on hand from previous requisitions for all of these bridges.

Only the three townpulleys now in the Fairbanks District will be available instead of five listed in the recommendations for this section.

The importance of effective maintenance during construction has previously been stressed under that heading.

Route 691 - Steese Highway

The program of widening and improving this route will be continued as recommended, between a point four miles beyond Chatanika River Bridge and Faith Creek, and from a point nine miles north of Central to Circle City. No major line changes are contemplated. Any replacement of existing small bridges deemed necessary should be undertaken, and field data submitted for design and procurement of materials by Headquarters Bridge Design Branch.

This reconstruction program should be closely geared to the maintenance program in order to obtain maximum benefit from each operation in the overall improvement of this road.

Route 031.1 - Ruby-Long-Poorman

No funds are programed except those which appear under Maintenance.

Route 130.2 - Badger Road

Funds are programed as recommended for regrading and resurfacing approximately five miles of old road.

Route 633 - Ester Road

Funds provide for widening several narrow cuts as recommended.

Route 631.1 - Farrars' Loop

The program and funds provide for resurfacing weak sections as recommended.

Grachl Approach Road

Funds provide for completion of the road between the proposed Chena River Bridge and the Steese Highway, which was programed in 1951 but not constructed.

CONSTRUCTION -- BY GOVERNMENT FORCES

Route 331 - Taylor Highway

Funds are programed as recommended for completion of the section from Fortymile River to Liberty to a uniform standard within funds available. This will include permanent steel bridges across Fortymile River and O'Brien Creek and standard timber trestles over Alder Creek, King Solomon Creek and the North Fork of King Solomon Creek.

Concurrently with construction northward from Fortymile River, it will be necessary to pick up slides and to do some additional widening of the sidehill road back from Fortymile Bridge toward the old Polly Creek Camp. The entire highway, from the Dawson junction at the head of Jack Wade Creek to Liberty, should be brought to about the same standard throughout before any extensive widening or improvement is done on any section. The goal is useable road to Liberty and Eagle for vehicular traffic at the end of the 1952 construction season.

A second but no less important phase of the season's plans will include the regrading and resurfacing where necessary of the section from the Alaska Highway to the Canadian border. Some heavy widening work will be encountered on short sections from the South Fork of Fortymile River to the head of Jack Wade Creek. Increased traffic is expected on the route to Dawson, so the purpose is to bring this section of the Taylor Highway to a higher standard as rapidly as possible and still assure the completion of the road to Eagle for car traffic this season.

Farm and Industrial Roads

The policy on Farm and Industrial Road program continues to be one of stage construction whereby the greatest numbers are provided some type of road, however meager, as quickly as possible at this time of greatest demand. Improvement

can follow in succeeding years. Fairbanks District recommendations follow this pattern for 1952 season very well.

Funds are programed for several projects under one work order for each general area. This provides the District with desirable flexibility by authorizing reasonable transfers of programed amounts between projects under the same work order, as well as changes in construction priority to best utilize crews and equipment in an orderly manner. Transfers between separate work orders are not authorized without prior Headquarters approval.

Projects as recommended include the following for new construction or improvement:

Fairbanks Area:

- (1) Peger Road
- (2) Becker-Dale-Conn
- (3) Chena Hot Springs and Branches
- (4) Project No. 3 (Petition No. 50-3)
- (5) Project No. 4 (Petition No. 51-9)
- (6) Project No. 5 (Petition No. 51-1)
- (7) Project No. 6 (Petition No. 51-2)
- (8) Project No. 7 (Petition No. 51-3)
- (9) Project No. 8 (Petition No. 51-4)
- (10) Project No. 9 (Petition No. 51-5)

It is desired that Projects Number 3 through Number 9 be given some distinctive name to set them apart from each other, and so that they may be readily identified on present and future maps. In like manner, the "Small Tracts" road constructed in 1951 should be renamed.

Richardson Highway Area:

- (1) Project No. 1 (Petition No. 50-1)
- (2) Project No. 2 (Petition No. 50-2)

Distinctive and appropriate names should also be assigned to the above two projects.

Kenneth A. Murray Clearing:

Funds are programed to perform necessary clearing to cover payment for 8.8 acres of gravel taken from the homestead during the paving of the Richardson Highway.

CONSTRUCTION - BY CONTRACT

A. I. Penn Bridges, Richardson C. Lane-4329

Funds are programed for District expense for engineering, inspection and other District costs in connection with this contract.

Chena River and Noyes Slough at Winnie St. Bridges

These bridges will be advertised for contract construction early in the spring. Funds are programed at this time for engineering, inspection and other District field costs pertaining to this future contract.

SURVEYS

Farm and Industrial Roads

Funds are programed for the survey of farm and industrial roads, not only those planned for 1952 but also those for which petitions are on file and on which construction is anticipated in future years.

Livengood-Rampart

Although funds are programed at this time, this survey will be undertaken only if personnel are available within the District and ceiling limitations will permit. The survey, when undertaken, would utilize part of the Livengood-Wiseman survey completed to the Yukon River in former years. Location to Rampart would leave this line at approximately 17 miles north of Livengood, heading westward toward Livengood, roughly parallel to Hess Creek.

EQUIPMENT

The following equipment is being procured for the District, as discussed and agreed upon at the District Engineers' Conference:

- 1 10-ton Roller
- 1 1500-gallon Distributor Truck
- 1 Rotary Broom, towed type
- 1 Chip Spreader
- 1 3000-gallon, 3-compartment tank, Semi-Trailer
- 1 Electric Arc Welder, 300 amp. (for Tok)

In addition, assignment of new equipment ordered last fall is being made to the Fairbanks District as follows:

- 1 Chevrolet Coupe
- 4 Chevrolet 1/2-ton Pickups

Equipment transfer between Districts is as follows:

- 1 3/4 yd. Buckeye Shovel from Valdez


Wm. J. Niemi
Chief Engineer

Distribution:

- 2 District
- 1 Commissioner of Roads
- 3 Engineering Division
- 5 Operations Division
- 4 Administrative Div.

File

PROGRAM SUMMARY AS OF MARCH 1, 1952
FAIRBANKS DISTRICT
SEASON - 1952

<u>Work Order Number</u>	<u>Route</u>	<u>Title</u>	<u>Activity</u>	<u>Amount</u>
31	130, 131, 132	Richardson Highway	Maintenance, Through	\$164,500
32	230	Alaska Highway	" "	215,000
33	330	Glenn Highway	" "	25,000
34	630, 632	Steese Highway (Through Standard)	" "	10,000
35	231	Northway Feeder	Maintenance, Feeder	2,000
36	331	Taylor Highway	" "	45,000
37	631, 633, 634	Steese Highway & Feeders	" "	155,000
38	731	Elliott Highway	" "	35,000
39	732	Manley Hot Springs-Turoka	" "	25,000
310	031	Ruby-Long-Pocoman	" "	25,000
311	130.1 thru 130.5 and 132.1	Fairbanks Locals	Maintenance, Locals	32,400
312	331.1, 331.2	Portmills Locals (Taylor Highway)	" "	2,200
313	630.1, 631.1 thru 631.4, 632.1, 633.1, 634.1	Fairbanks & Steese Highway Branches	" "	46,900
314	731.1	Elliott Highway Branches	" "	2,000
315	732.1	Manley Hot Springs-Hobby Locals	" "	8,000
316	030.3	Wiceman Locals	" "	8,000
317	030.4	Ruby Locals (Airfield)	" "	1,500
318	030.5, 030.6	Kulato-Airfield & Railroad Locals	" "	4,000
319	631	Steese Highway	Reconstruction	83,000
320	330	Glenn Highway	"	237,500

<u>Work Order</u> <u>Number</u>	<u>Route</u>	<u>Title</u>	<u>Activity</u>	<u>Amount</u>
321	331	Taylor Highway	Construction	\$700,000
322	633	Fairbanks-Nenana Survey	Prep. of Plans	
326	130	Richardson C Bridges	Construction, Contract	
327	320	Alaska Highway, Sec. A, E-1	" "	
328	130	Richardson Highway Sec. C	" "	
333	130	Chena River & Minnie St, Bridges	" "	
334		Fairbanks Warehouse	Maintenance, Distribu- table	
343	630.1	Grashl Approach Road	Reconstruction	7,500
344		Miscellaneous Reimbursable	Reimbursable	
346	330	Glenn Highway Sec. E	Prep. of Plans	
351	130	Richardson Highway Paving	Construction, Contract	1,000
353	130.6	Meadows Road	Reimbursable	
354	631.3	Pedro Dome Road	Reimbursable	
355		Tok Garage Fire	Construction	
357		Fairbanks Depot and Apts.	Maintenance, Distribu- table	34,000
358		Tok Service Building	Maintenance, Shop Fac.	100,000
359	030.1, 030.2 040.4	Yukon River Locals	Maintenance, Local	1,000
360	130.2	Hedger Road	Reconstruction	7,500
361	633	University-Hester	"	1,500
362	631.1	Farmers Loop	"	8,000
363		Farm Roads, Fairbanks Area	Construction	40,000
364		Farm Roads, Richardson Area	"	10,000
365		Farm & Industrial Road Surveys	Prep. of Plans	25,000
366		Idrengood-Rampart Survey	"	40,000



UNITED STATES
DEPARTMENT OF THE INTERIOR
ALASKA ROAD COMMISSION

Fairbanks, Alaska
Fairbanks, Alaska.

November 28, 1951

1	Chf. Engr. W. J. Niemi
5	Admin. [Signature]
4	Op'ns. [Signature]
2	Engrg. [Signature]
3	Acc't.
	Pers.
	Supply

1/10/52

Mr. Wm. J. Niemi
Chief Engineer
Alaska Road Commission
Juneau, Alaska

Dear Mr. Niemi:

Your letter of November 8, 1951, outlining the general program and the anticipated funds for the season of 1952 has been the basis for the forthcoming recommendations. The distribution of funds for maintenance of the individual routes as listed has been accomplished with the assistance of my successor, Mr. M. C. Zimmerman. The other features of these recommendations and the outline of the plan of operations are the result of discussions with the members of the engineering, supervisory and administrative staffs of this District.

I. MAINTENANCE

A. ROADS AND DEPOTS

THROUGH ROADS

ROUTE 130 - Richardson Highway - 135.6 miles
Route 131 - Ledd Field Spur - 0.4 "

The maintenance of the Richardson Highway will continue to be a most expensive operation until all sections are thoroughly stabilized. Near Harding Lake, Birch Lake, across the Shaw Creek flats and from the Tanana River to Big Delta, a considerable amount of reconstruction will be required to repair the roads where it has subsided and/or heaved. Along the Tanana River from Canyon Creek to Shaw Creek, there are several sections where the downhill slope continues to seek its own angle of repose with the result of settlement in the roadway surface. It is noted recently that long longitudinal cracks are appearing in several sections in the mountainous portions of the Richardson Highway. While a portion of the road will be under construction next year, some maintenance will be required from Big Delta Junction to Black Rapids, particularly the opening up in the springtime and the continued surface planing throughout the summer. A great deal more snow removal and better maintenance will be required throughout the Richardson Highway as time progresses as the public will demand safer highways. This demand will result in a great deal more surface planing during the winter time and even though we have several pieces of equipment to accomplish this work, it will require considerable money to finance the demands.

Retained copy
W. J. Niemi

Mr. Niemi

November 28, 1951

It is recommended that a program of patching the damaged sections of the Richardson Highway be instituted in the early spring, and all sections now with uneven riding surface be either relaid, or torn up and a new cake applied. It is anticipated that this will require approximately four and one half miles of paving. Personnel necessary to accomplish this work would be housed at Fairbanks, Silver Fox, Big Delta Junction and Donnelly Dome camps. Summer maintenance would require approximately eighteen people including the patching crew.

Winter Maintenance -	\$79,500.00	
Summer Maintenance -		\$82,000.00
Total:	-	\$161,500.00

Route 230 - Alaska Highway - 203 Miles

The Alaska Highway will require considerable shoulder stabilization from Sears Creek toward Tok. A continued program of relaying the inverted, penetration paving surface and increasing amount of surface planing both summer and winter will be required. While Alaska Section "A" will be in the process of construction next summer, a considerable amount of maintenance work will be required regardless. A definite program of brush-cutting must be instituted along this route. Some few places culverts should be installed to handle the drainage. Running plank on several of the bridges, specifically the Tanana, Tok, Johnson River, Chief Creek, Yerrick Creek and Bear Creek must be installed. In the sections beyond Gardiner Creek toward the Canadian border, there should be some wearing material applied to the roadway as this section is becoming increasingly the worst spot in the Fairbanks District. *asph. mat surface instead of running plank*

Personnel required for this maintenance and reconstruction will total approximately 15 people stationed at Johnson River, Tok and Gardiner Creek.

Winter Maintenance -	\$115,000.00	
Summer Maintenance -		\$100,000.00
Total:		\$215,000.00

Route 330 - Glenn Highway - 33.5 miles

Normal surface planing and snow removal will be the principal requirements of this route since forces of the Alaska Road Commission will be in the process of surfacing sections of this highway throughout the summer. You will note this mileage only includes that section from Tok Junction to Little Tok River Bridge, and does not include the section from Little Tok River to the Mentasta Cut-Off.

Winter snow removal and spring opening of drainage structures will require some additional expenditures but not more than is allowed herein. Personnel will be four people stationed at Tok.

Winter Maintenance -	\$19,000.00	
Summer Maintenance -		\$6,000.00
Total:		\$25,000.00

Mr. Niemi

November 28, 1951

Route 630 - Steese Highway (To North Camp) - 1.5 Miles

Snow removal in the winter together with some shoulder maintenance, culvert cleanout, brush cutting, etc., will be accomplished on this route. The paving is withstanding traffic very well, and does not require any appreciable amount of maintenance.

Winter Maintenance -	\$2000.00	
Summer Maintenance -		\$1000.00
Total:	-	\$3000.00

Route 630 Steese Highway (To University) - 4 Miles

The same maintenance service applied to Route 630 will be applied to this route. However, near the University some ditching work will be required as well as several signs. It is entirely possible that before the summer is over a small amount of seal-coating will be necessary, but this is not anticipated unless it is a very wet season. For both Routes 630 and 632, approximately three people stationed at Fairbanks will be required to accomplish all the maintenance.

• Winter Maintenance -	\$4500.00	
Summer Maintenance -		\$2500.00
Total:		\$7000.00

International Airport Road (CAA Road) - 4.5 Miles

This road does not have a route number, but is a portion of the Fairbanks District maintenance by directive from the Commissioner of Roads. The Territory of Alaska received this section of the road from the CAA, and has supplied the funds required to maintain it. A continued program of snow removal and surface maintenance in the winter as well as shoulder rehabilitation, drainage structure maintenance, brush cutting, signs, etc., will be required. There is listed under the heading of II, Reconstruction, a recommendation that this road be sealed.

Winter Maintenance -	\$1500.00	
Summer Maintenance -		\$1500.00
Total:	-	\$3000.00

These funds will be forthcoming from the Territory of Alaska, and are not a portion of the funds received from the Congress for the maintenance of roads in Alaska for the Fairbanks District.

DEPOTS

Fairbanks Depot - Route 301

Within the Fairbanks Depot, certain improvements should be made. Included herein should be additional warm storage space for winter-used equipment. The large warehouse now in the lower yard should be moved to the Depot yard and installed therein. This building should be sealed

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Not
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and utilized as a warm storage building for small equipment so that the larger buildings within the Depot can take the larger pieces of equipment. Personnel required will be two.

Winter Maintenance -	\$5000.00	
Summer Maintenance -		\$5000.00
Total:		\$10,000.00

Tok Depot - Route 302

A majority of the long required reconstruction of the Tok Depot was accomplished this past year. A few more things should be done but they are of a minor nature. Particularly, I refer to a new floor within the office building in the section devoted to the office at Tok. The office and latrine within this building should be refloored. The doors of the main shop should be rebuilt and patched. Before the season is out, it is very possible that a portion of the sewage disposal system will require rehabilitation. The personnel required will be two.

Winter Maintenance -	\$5000.00	
Summer Maintenance -		\$5000.00
Total:		\$10,000.00

Fairbanks Apartments - Route 311

This duplex house requires some maintenance work principally repainting the exterior doors, insulating around the windows and a lawn should be planted in the area that has already received peat moss. A few shrubs can very readily be planted in this yard, and it would help the beauty of the layout as a whole. Actually, there is considerable work to be done at some later date to insulate this building properly but it is not believed necessary at this time since a little sealing around the windows and sills has stopped a majority of the air leaks.

Winter Maintenance -	\$750.00	
Summer Maintenance -		\$750.00
Total:		\$1500.00

FEEDER ROADS

Northway Feeder - Route 231 - 6 Miles

This route from the Alaska Highway to Northway Military Installation will require summer surface maintenance, and winter maintenance as well as the application of a small amount of surfacing. This route is not in good shape at the moment, but it is believed a small amount of maintenance work with a shovel and truck for a couple days will improve the

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route considerably.

Winter Maintenance -	\$ 800.00	
Summer Maintenance -		\$1200.00
Total:		\$2000.00

Taylor Highway - Route 331 - 158 Miles

The maintenance of the Taylor Highway has been very meager in the past, and it will require this next season a great deal of maintenance work. Those sections that have subsidence and/or heaving will require ballast and surfacing, but this will be done under construction. Maintenance will principally be recutting ditches, brush removal, opening up drainage structures, painting the several steel bridges and a continued program of surfacing in the roadway surface. Personnel required will be five stationed at Tok and West Fork.

Winter Maintenance -	\$ 5000.00	
Summer Maintenance -		\$40,000.00
Total:		\$45,000.00

Steese Highway - Route 631 - 160.1 miles

" 633 - University to Ester - 5.5 miles

" 634 - Central to Circle Hot Springs - 18.0 miles

Normal summer maintenance which includes surface blading, roadway ditching, waterway maintenance, signing, brush cutting, etc., as well as the winter maintenance which will include snow removal and surface planing from North Camp to Chatanika will be required on this route. Considerable surface maintenance will be required in the section from Chatanika River to Faith Creek and from Faith Creek to Central. Personnel required will be three at Fairbanks, two at Chatanika, three at 82 $\frac{1}{2}$ mile and five at Central.

Winter Maintenance -	\$65,000.00	
Summer Maintenance -		\$90,000.00
Total:		\$155,000.00

Elliott Highway - Route 731 - 71 Miles

The maintenance of the Elliott Highway from Fox to Livengood will require normal summer surface planing at an accelerated rate together with ditching, brush cutting signing, waterway maintenance, bridge maintenance, etc. If possible, it is anticipated, we will paint the Chatanika and Tolovana River bridges this next season but it is not entirely definite that time will allow for this painting. Personnel required will be two at Fairbanks and three at Livengood.

Winter Maintenance -	\$ 5000.00	
Summer Maintenance -		\$30,000.00
Total:		\$35,000.00

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Manley Hot Springs-Eureka - Route 732 - 25.7 Miles

A continued program of rehabilitation on this road by maintenance forces will require some surface planing, placing of some surfacing, brush cutting, signs, waterway maintenance, bridge maintenance, ditching and through some sections it will be necessary to widen the clearing to allow the sun to hit the road, and dry it out somewhat. Now the high brush has encroached the roadway, and it is very difficult to maintain these wet frozen sections. Personnel required will be four at Manley Hot Springs.

Winter Maintenance - None		
Summer Maintenance -	\$35,000.00	
Total:		\$25,000.00

Ruby-Long-Poorman - Route 031.1 - 56.5 Miles

Continued summer surface maintenance such as ditching, brush cutting, waterway maintenance, bridge maintenance together with some surfacing will be required on this route. During the past summer, certain improvements were made which have been reflected in a decrease of funds to maintain this route. Personnel required will be four. Under II, Reconstruction and Improvement, there is a recommendation for funds for the construction of four bridges on this route next season.

Winter Maintenance - None		
Summer Maintenance -	\$25,000.00	
Total:		\$25,000.00

LOCAL ROADS

Route 130.1 Cushman Street Extension -	0.5
" 130.1 West Fairbanks -	3.1
" 130.2 Badger Farm Roads -	20.1
" 130.3 Old Richardson Highway -	14.5
" 130.4 Lake Harding Branch -	1.7
" 130.5 Richardson Highway-Democrat -	4.0

This system of roads forms a network of the Tanana Valley within the immediate vicinity of Fairbanks and requires maintenance throughout the year, both summer maintenance and winter surface planing. During the past summer, certain work was accomplished that has reduced the cost of maintenance. However, the increasing demand of utility for these roads requires a higher standard of maintenance. This whole system will require frequent surface planing during the summer and secondary snow removal during the winter. Personnel required will be three stationed at Fairbanks.

Winter Maintenance -	\$18,000.00	
Summer Maintenance -		\$12,000.00
Total:		\$30,000.00

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Route 331.1 - Jack Wade-Boundary	14.0
Eagle-Mission on Yukon	3.3
Eagle-70 Mile River	4.0

These secondary routes will require summer surface planing and some waterway maintenance but by and large they will not require a large amount of maintenance work. The Jack Wade-Boundary section will require some surfacing, and this can be accomplished when the equipment is working on the Taylor Highway. It should be noted here that the Jack-Wade-Boundary spur is 14 miles, not 18 miles, since the junction of the Dawson Spur ties into the Taylor Highway at the head of Jack Wade Creek.

Winter Maintenance -	None	
Summer Maintenance -		\$2200.00
Total:		\$2,200.00

Route 630.1 - Graehl Branch	- 0.5
631.1 - Farmer's Loop	- 8.7
Isabella Creek Road	- 3.7
Ballaine-Richert	- 2.5
Crossman-Fideler	- 0.7
Yankovich Road	- 2.0
Grenac Road	- 1.1
631.2 Steel Creek Branch	-10.0
631.3 Gilmore-Pearl Creek	- 8.8
Fairbanks Creek Road	-15.0
Fish Creek Road	- 8.3
Little Eldorado Rd.	- 1.5
Miller House-Harrison Creek-	
Mastadon Creek-Miller Crk.	-15.2
Porcupine Creek	-11.0
631.4 United States Creek	-11.0
Eagle Creek	- 1.0
Sourdough Creek	- 4.8
Faith Creek	- 1.5
632.1 U. of A. Campus	- 2.1
Chena Pump Station	- 4.8
Ester Dome Road	- 5.3
St. Patrick's Goldstream	- 9.5
Ester-Beegler	- 3.2
Ready Bullion Creek Rd.	- 2.5
Deadwood Creek	- 9.5
Ketchum Creek	- 5.0

This group of roads comprises the system of roads in and around Fairbanks that feed to the Steese Highway. Normal summer surface planing, ditching, brush cutting, waterway maintenance, etc., as well as winter snow removal will be accomplished with the funds provided. Personnel required will

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be four people stationed at Fairbanks:

Winter Maintenance -	\$20,000.00	
Summer Maintenance -		\$24,000.00
Total:		\$44,000.00

Pedro Dome Road - 3.7 Miles

This route is designated separately as the Alaska Road Commission is maintaining this during the winter at the request of the Army. The estimated costs we have given the Army is \$3200.00 for winter maintenance and these funds will be provided by the Army, and are not included in the funds provided the Alaska Road Commission, Fairbanks District, by the Congress.

Route 731.1 - Brooks-Livengood	-	7.0
Amey Creek Road	-	1.0
Wilbur Creek Road	-	1.2

This local road system connects to the Elliott Highway, and requires very little maintenance other than infrequent and occasional surface planing, ditching and localized spot graveling. No maintenance is anticipated for the winter, and funds are provided only for summer maintenance.

Winter Maintenance -	None	
Summer Maintenance -		\$2,000.00
Total:	-	\$2,000.00

Route 732.1 - Manley Hot Springs-Tofty - 18.0

This local road will require some maintenance this next season, since some traffic will be involved. Some spot graveling, considerable brush clearing, ditching, waterway maintenance, etc. will be required during the summer months only. No funds are programmed for winter month's maintenance.

Winter Maintenance -	None	
Summer Maintenance -		\$8,000.00
Total:		\$8,000.00

Route 030.1 - Coal Creek Road	=	7.0
030.2 - Rampart-Little Ninook Creek	=	4.5

The Coal Creek Road will receive next spring a 1942 Chevrolet dump truck as authorized by Headquarters for the maintenance of the Coal-Creek-Woodchopper Road. No funds are programmed for this maintenance. During the past year, the Rampart-Little Ninook Creek received a 1942 Chevrolet dump truck for maintenance of this route. No funds are provided for the maintenance of this road.

Route 030.3 - Wiseman Locals - 13.0

This system is a bone of contention with the Road Commission each

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season. The people there are non-cooperative, argumentative and disagreeable. Regardless of the work accomplished, these people are never satisfied. Objectively reviewing the situation, one must realize that there is only one truck other than the Alaska Road Commission. The freight and supplies hauled by this one truck is very meager. To continue to maintain these roads is deemed unadvisable by this Office. It is recommended that only a very minimum amount of labor be accomplished in this area for the time being until a better economy is established in the Wiseman area.

It will be necessary to fly into Wiseman a set of D-7 tracks and about 45 drums of fuel during the next spring. The funds required for this work should be charged to the maintenance of the Wiseman locals. One man for perhaps two and one half months with occasional help from local residents would be the recommended crew in this area.

Winter Maintenance - None		
Summer Maintenance -	\$8,000.00	
Total:		\$8,000.00

Route 030.4 - Ruby Airfield Road

This short road will require a considerable program of ditching together with additional culverts this next season. At the end of next season, the requirements of this road could be very small and it should be in such a condition that an occasional surface blading should be sufficient.

Winter Maintenance - None		
Summer Maintenance -	\$1,500.00	
Total:		\$1,500.00

Route 030.5 - Nulato Airfield Road - 1.0	
030.6 - Nenana-Cemetery - 2.5	
<u>Ferry-Eva Creek -21.8</u>	

This system of roads falls in the same category as the Wiseman locals differing only that the people involved are more pleasant to work with. However, there is only one group of miners in this area, Nels Jackson, and it hardly seems practical for the Alaska Road Commission to continue to subsidize this one mine. Therefore, it is the recommendation of this Office that maintenance on this road be reduced to bare minimum and the persons concerned be notified that ending next year, the Alaska Road Commission will not furnish funds to maintain this road.

Winter Maintenance - None		
Summer Maintenance -	\$4,000.00	
Total:		\$4,000.00

The following routes are local roads built during the past year that will require funds to maintain them. They do not have route numbers

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yet, and it is requested that Headquarters assign proper route numbers. These roads will require normal summer maintenance as well as snow removals in the winter:

Tok Townsite Roads	-	2.1
Country Club Extension	-	.8
Otto Geist Road	-	1.8
Becker-Dale-Conn Road	-	3.3
Small Tracts Road	-	1.0
Peger Road	-	1.0
Chena Hot Springs Road and Branches	-	3.8

Winter Maintenance	-	\$1,800.00	
Summer Maintenance	-		\$3,500.00
Total:	-		\$5,300.00

Route 130.6 - Meadows Road - Army "D" - 17.1 miles

The Military has requested and allotted to the Alaska Road Commission \$10,000.00 for maintenance of this road. The funds are from a Military source and are not included in the programmed funds of the Alaska Road Commission. Normal summer maintenance together with snow removal and surface planing will be required.

Winter Maintenance	-	\$6,000.00	
Summer Maintenance	-		\$4,000.00
Total:	-		\$10,000.00

Summary of Funds Recommended:

Winter Maintenance	-	\$489,650.00	
Summer Maintenance	-		\$335,350.00
Total:	-		\$825,000.00

Territory of Alaska funds:

Winter Maintenance	-	1,500.00	
Summer Maintenance	-		1,500.00
Total:	-		3,000.00

Military Funds:

Winter Maintenance	-	9,200.00	
Summer Maintenance	-		4,000.00
Total:	-		13,200.00

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B. PERMANENT MAIN CAMP - \$120,000.00

The consensus of opinion appears to be that the primary main camp required will be situated at Big Delta Junction. Building the camp at this site one would be at the hub of the Richardson and Alaska Highways and very possibly at the most important point which is near the Army Arctic Training Center at Big Delta. There are some disadvantages to this location; namely, the principal source of winter maintenance on every section of the road is more than twenty five miles from this location. Under the premise that the Johnson River, Canyon Creek and Silver Fox camps would be temporarily closed down or rather infrequently used, we could therefore assume that we will build a camp large enough to maintain the following routes:

The Richardson Highway from approximately Mile 300 to Mile 230
and the Alaska Highway from Mile 1428 to Mile 1370.

This is quite a section of road to have under one camp, but with the faster plows we now have and with the only occasional use of motor graders, it is conceivable that it can be done.

My idea of this maintenance building would be roughly as follows. A building approximately 80' long with the center section two stories high and 40' wide; on either side, wings approximately 25' in width running the full length of the building. One section of the lower floor of the building would be devoted to repair and maintenance of equipment for the 1st, 2nd and 3rd echelon will be required. The back 20' of this building would be the warehouse, parts room and storage area. The wing sections of the building would be utilized for warm storage of equipment with the exception of one section in the rear which would be made into perhaps 10 single men's rooms complete with latrine, etc. On the upper floor, I believe four apartments for married couples complete with kitchen, bath, single bedrooms and living room would be ample. There would be no facilities for feeding any personnel by Road Commission mess halls. This building would be a self-contained unit, fire proof, and with central heating. It would have a well within itself, sewage disposal with septic tank and disposal field. Electricity is available from the Army at this camp, but a 10 KW diesel plant could be used as a standby auxiliary unit.

In the main shop, only light duty repairs would be accomplished with the personnel at the location charged with this responsibility. Heavy repairs would be sent either to Tok or Fairbanks for accomplishment.

Utilizing this camp as a central main camp, I would then establish Johnson River and Silver Fox as a secondary camps where equipment may be stored and personnel and equipment occasionally and infrequently subsisted in the nearby roadhouses. Under no circumstances would I recommend a

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continuation of messing facilities at these maintenance camps. These secondary camps would be utilized only during extremely poor weather, and when conditions in the immediate vicinity of the secondary camps required constant maintenance. Neither the buildings at Silver Fox nor Johnson River would be allowed to deteriorate and would be held in readiness for a possible emergency but I would not continue to staff these camps with any permanent employees.

The programmed funds of \$120,000 are not sufficient to accomplish the requirements. It is the opinion of this Office that rather than build a lesser quality and utility building at this location at a cheaper price, it would be better to defer construction until more ample funds are available and the funds programmed for the Fairbanks District be given to another District, so they may build an adequate camp or the funds from another District be transferred to Fairbanks so we may build an adequate camp.

With the possibility of being redundant, I would like to emphasize here that the sooner the Alaska Road Commission can abandon the practice of providing messing facilities for their employees, the sooner the costs of maintenance will diminish. This messing facility is both an expensive direct cost, and a very, very expensive indirect cost. With the coming of more population in Alaska and commercial enterprises engaged in this service, it seems peculiar that the Alaska Road Commission continues to maintain a catering service in the small maintenance camps. The camps similar to Johnson River and Gardiner Creek, Bartel Creek, Palmer, etc., could just as well be married couples camps and not require the Alaska Road Commission to maintain a catering service for the employees. It would require an initial cost for constructing duplex housing, or some similar construction, but in the ultimate end over a period of years, the cost would be greatly reduced.

Seems reasonable for small camp
N. G. L.

II. RECONSTRUCTION

Route 230 - Glenn Highway

Total funds programmed for this Reconstruction and Improvement is \$235,000.00. These funds are sufficient to construct the remaining portions of the bridges over the Tok River, the two small sloughs, Trail Creek and Little Tok River as well as providing a ballast course throughout the length of the project, 33.25 miles. It is anticipated that a minimum of four and perhaps five rubber-tired prime moving tractors with self-loading carryall scrapers will be available for this work. Suitable material will be available within economic hauling limits with this type equipment throughout the job. Basing the estimate on approximately 16 inches of ballast throughout the job, we have estimated 265,000 cu. yds. as the requirement. To properly do this ballast work will require considerable close planning and coordination within the organization of the Fairbanks District. Primarily when one is using rubber-tired prime moving equipment, the loading cycle is the most important cycle. The hauling and dumping cycles are secondary. It is recommended in lieu of the usual practice of the Road Commission to boost load that provisions be made to snatch load with auxiliary tractors. Snatch loading is a great deal faster providing straight line power and giving the loading operator the

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opportunity to manipulate the loading levers without worrying about steering the unwieldy rubber-tired tractor. The tractor was made primarily for a pulling unit, and not a pushing unit, and consequently whenever possible the tractor should be used for pull. By snatch loading, there is no occasion to stop either machine in hooking on or breaking off and the loading operation can be facilitated by both operators being able to see the amount of load carried by the scraper.

There will be a few short sections of this route that will require primary grading and draining, but these do not exceed more than half a mile in their entirety. These sections were those that were not completed in 1951 due to the fact that they were in frozen terrain and it was felt advisable to abandon the idea of removing the frozen ground during the late season.

The progress of the work should commence at the intersection of the Glenn and Alaska Highways and proceed toward the Little Tok River. In this manner, one can utilize the Tok River camp at an early date, later moving into the Clearwater Camp and finally the Little Tok River camp. The ballast construction should start approximately May 15th and I would not advise any earlier commencement on this phase of the work. The bridge construction should be done in conjunction with the Forty Mile River Bridge on the Taylor Highway; that is, while those persons are engaged in erecting steel structures on the Forty Mile River Bridge, a second group can be applying stringers and decking to the aforementioned bridge on the Glenn Highway. This work should be commenced about the 15th of February, and approximately forty days should be allowed to complete the stringers and decking of these bridges as well as hand rails, etc. A group of not more than ten persons will be involved.

During the summer construction season, it is anticipated that an average crew of about 18 people will be required to complete the ballast work on the Glenn Highway. The equipment required will be as listed below:

- 1 - Tandem drive Motor Grader
- 1 - 3/4 yd. Shovel (part time)
- 2 - D-8 Caterpillar tractors
- 5 - Heavy rubber-tired mounted prime moving tractors with scrapers attached.
- 2 - 1942 or earlier model dump trucks
- 6 - L-180 Reo dump trucks (part time)
- 1 - 1942 or earlier flat rack
- 2 - Pickups
- 1 - Lubricating Unit
- 1 - Suburban carryall
- 1 - Welding machine

This work will be under the general supervision of Claude E. Rogers and it is suggested that Vernon L. Johnson be placed in direct charge of the construction on the Glenn Highway. Vern is a young lad who has had some little experience as an operator and approximately two years experience as a foreman. He deserves an opportunity to head up a job and it is believed he will make a very capable showing.

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Route 631 - Steese Highway Reconstruction

It is recommended that \$70,000.00 be allocated to the reconstruction of the Steese Highway. These funds will provide for the continued program of widening, both horizontal and vertical realignment, brush cutting, ditching and general rehabilitation of the route from approximately four miles north of Chatanika River to Faith Creek, and from a point nine miles north of Central to Circle City. It is recommended that the same program be followed this next season as was in force during the 1951 season; wherein the equipment assigned to the Fairbanks area be used first on the Steese work, then going onto the Farm Road program. There will necessarily be some survey work prior to the construction but largely this reconstruction can be carried on in conjunction with engineering survey. It is recognized that this is not a usual procedure, but it is rather difficult to anticipate what sections will be frozen and impossible to work. It is believed that with the two groups working together it will be possible to skip construction and hit those portions that are readily constructed first and then drop back into the tougher going after they have been opened up.

• Commencing at about Mile 145, three miles south of Birch Creek Bridge, thence through the Mountainous area and across the flats toward Circle City, we should realign, widen and clear the roadway throughout. This is relatively easy going and can be accomplished with a minimum of labor and equipment. It is recommended that work can be accomplished under the general supervision of George Morton with T. J. Brignole as direct supervising foreman. It is anticipated a crew of approximately 18 persons for fifty days will accompany the programmed reconstruction and improvement. Equipment required is as follows:

- 1 - 8 yd. Heil Carryall scraper
- 3 - Garwood scrapers
- 1 - Large motor grader
- 1 - Tandem Grader
- 1 - Pull Grader - Power controlled
- 1 - 3/4 yd. Shovel
- 3 - TD-18 International Harvester tractors
- 3 - D-8 Caterpillar tractors
- 1 - 1942 or earlier dump truck
- 6 - IHC - L-180 dump truck (part time)
- 5 - D-21 RB Reo's (part time)
- 1 - 1942 or earlier flat rack
- 2 - Pickups
- 1 - Lubricating unit
- 1 - Suburban carryall
- 1 - Welder

Route 031.1 - Ruby-Long-Poorman

- Cut out if it will be needed

Under Reconstruction and Improvement, it will be necessary to construct at least four bridges this next season on this route. These bridges will not require pile driving, and do not necessitate any particular equipment

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requirements other than those pieces already on hand at Ruby. However, for a continued program of maintenance in this area, it is suggested that this next season, the P & H 150 Dragline now at Tok be shipped to Ruby for utilization there in the maintenance, reconstruction and improvement. In line with this shipment, it is noted here that in addition to this suggested drag line, the following other pieces of equipment should be shipped downriver:

A set of Model L Rollers, tracks and swing frames that will come from the salvaged Model L tractor at Eagle; a set of D-7 - 9G series Caterpillar tracks salvaged from a tractor at Tok together with the required rollers and swing frames plus a rebuilt engine that will be available in late winter at the Fairbanks Shop.

For Manley Hot Springs, it will be necessary to ship a #10 Motor Grader Caterpillar, ARC 1161, as well as a set of tracks rails for the TD-18. For both areas, we will have a certain amount of culvert and bridge materials as listed above. This should make a large bargeload and we should receive a very attractive price for this shipment.

It is recommended that Lester Sweetsir continue as foreman at Ruby, and his supervision be by either the District Engineer, or Assistant District Engineer. A crew average of five men for approximately five and one half months will be required. This crew will include the foreman who will be a working foreman. Total funds for this Route will be \$10,000.00.

Local Roads

The recently constructed roads as listed herewith built during the 1951 construction season under the Farm and Industrial Road Program and with funds provided by interested parties must be surfaced and completed this season. This work is primarily surfacing and will require the utilization of trucks and shovels, but must be done before these roads will be of any value to the public. It is realized that this could possibly be erroneously grouped under Reconstruction and Improvement, but the Farm Road program is never sufficient to accomplish the required construction. Therefore, since these roads are not complete, we will list them under Reconstruction.

Peger Road. The amount recommended for this road is \$5000.00. This road will require about one mile of surfacing together with approximately 1100' embankment 2½' high. The material source is at a considerable distance and will require a truck and shovel spread.

Country Club Extension. It is recommended that \$2000.00 be used next season on this road. Material is available nearby and will not necessitate a long haul. Surfacing only is required.

Becker-Dale-Conn. It is recommended that \$10,500.00 be allotted for the reconstruction of this route which includes two bridges, one approximately 20' clear span and another approximately 40' clear span. This route is 3.25 miles in length and will connect the Farm system toward the south on a road that will be constructed this next season.

on some in future ... some notes ...

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Small Tracts. This is Priority #6 and #9 as listed in 1950 recommendations. It is recommended that \$1500.00 be allotted for the surfacing of this route. Material is available from the same source as for the Peger Road listed above.

Chena Hot Springs and Branches. It is recommended that \$8500.00 be allotted for the reconstruction and surfacing of 3.4 miles of the Chena Hot Springs road and approximately 1.25 miles of a branch that connects the Chena Hot Springs road with the Steel Creek Road. By the reconstruction and surfacing of these two routes, it will be possible to abandon during the winter the expensive maintenance of the Steel Creek Road over the very heavy hill section. This route serves approximately forty families and is a definite requirement immediately. Interested parties donated \$750.00 this past season, and it was so important in the opinion of this Office that additional funds were extended over and beyond the \$750.00. It is urged and recommended that funds be forthcoming under this allotment to construct an all-weather route through this section.

Otto Geist Road. It is recommended that \$2500.00 be allotted to surface the Otto Geist Road. While this is listed as the Otto Geist Road, it also includes a road to the McKinley Subdivision listed as Priority #11 in the 1950 recommendations. We have completed both of these short routes. Home seekers immediately moved into these two sections upon the commencement of construction and the area has now built up almost solid.

Total Reconstruction Under This Local Road Program Is - \$30,000.00

International Airport Road (CAA)

This road is the paved section from Cushman Street to the new International Airport, a distance of approximately 4.5 miles. It is recommended that the entire route be resealed with a seal coat of hot bitumen and chips. There was a seal coat applied on a portion of this section but none has been applied for approximately two and one half miles of the route. The portion that did receive the seal coat did not ~~take~~ and this is very ragged and spalling badly. It is recommended that this seal coat be accomplished in conjunction with a patching program that will be required in two places, mainly immediately west of the Fairview Manor and approximately 1000' west of this initial settlement. Both of these installations are over corrugated pipe installations and have settled badly. Funds in the amount of \$20,000.00 will be required, but there are no funds programmed from the allotment under Reconstruction and Improvement funds. This is a route under the jurisdiction of the Territory, and the Territory should supply the funds for its maintenance. This is definitely required and must be accomplished early next season or the paving will rapidly deteriorate during the summer months.

III. CONSTRUCTION

Listed under this heading, we will include two routes that were not accomplished during the 1951 construction season:

Route 360-1 - Reconstruction Graehl Approach Road - Work Order #243 in the amount of \$7500.00.

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Due to circumstances beyond the control of the Alaska Road Commission, this work was not done and remains to be done next season. This entails the construction of a road toward the Chena River crossing from the Steese Highway. In its entirety, it does not amount to a particularly large chore, but should be included.

Work Order #351 - Work to be performed on Kenneth A. Murray's homestead in exchange for 8.8 acres of gravel pit. We have recently completed negotiations with Mr. Murray and will commence the construction of approximately two miles of clearing around the perimeter of Mr. Murray's homestead in exchange for the 8.8 acres of gravel pit. This work is not particularly hard, and can be accomplished in 2 $\frac{1}{2}$ days with one tractor. Funds in the amount of \$1000.00 have already been programmed for this work, and should be carried over for the next season.

A. Taylor Highway

Funds in the amount of \$850,000.00 have been scheduled for the completion of the Taylor Highway. This highway will very possibly be uncompleted in its entirety at this time next year regardless of the rapidity and thoroughness of construction since there is a vast amount of work to accomplish next season.

It is recommended that work be commenced on the Forty Mile River Bridge about February 10th. The steel erection should be largely completed by the end of February under the direction of Jess Davis. If possible, the structure planned for the crossing of the O'Brien Creek be erected immediately upon completion of the Forty Mile River Bridge; that is to say, the steel work itself. It is the understanding of this Office that the old Gakona River Bridge will be used and it is recommended that concrete piers not be used on this bridge, but rather pile driven to preclude the necessity of pouring concrete in extremely unfavorable weather conditions. The pile can be driven far enough back from the banks on the river to insure safety and this bridge can be erected by the same crews immediately after the erection of the steel on the Forty Mile River Bridge. Then the group who have erected the bridge over the Forty Mile and O'Brien Creek, can proceed toward Eagle erecting in succession, Alder Creek, Columbia Creek, King Solomon Creek and the North Fork of King Solomon Creek. This group would be driving pile and setting caps for the bridge. The group that has already been mentioned for reconstruction on the Glenn Highway could then move in and install stringers, decking, hand rails, etc. on all these bridges. In this way a specialized crew would be accomplishing specialized work. The two large culverts to be installed at Chicken and Lost Chicken Creek should be on hand by early spring and should be installed as soon as possible.

The grading and draining will be treated under two headings:

1. That portion of the Highway from Polly Creek to Eagle.
2. That portion from Tetlin Junction to Polly Creek including the branch road to Boundary.

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From Polly Creek to Liberty Creek requires the use of a minimum of tractor equipment, but will require at least two $3/4$ yard shovels together with approximately 15 dump trucks. With the exception of 8000 lin. ft., the entire route is now open for the placement of either imported borrow where required and/or surfacing material. With the new dozers we have purchased, it will be possible to cut some of the banks which we did not cut this past season and the tractor equipment can accomplish some primary grading ahead of the truck and shovel operators. But largely this next season, the Forty Mile Road will be a truck and shovel spread. We should commence at Polly Creek and widen with one truck and shovel outfit. Across the river about $2\frac{1}{2}$ miles upstream on the O'Brien Creek, another shovel outfit should set in and head to Liberty Creek. As soon as the first outfit has completed its work down the Forty Mile River and up to the second shovel, it should skip over and commence construction at approximately Columbia Creek. As soon as the second outfit completes to Columbia Creek, it should jump over the crew there at Columbia Creek and go on all the way to Liberty Creek.

Tractor equipment that will be employed on the section from Polly Creek to Liberty Creek will by this time have completed its assignment and can be directed toward the accomplishment of the reconstruction towards Eagle. Toward the latter part of the season, both shovels can move into the Eagle section and accomplish surfacing as required. It must be born in mind that the roadway from Liberty to Eagle will not be widened too much through American Creek Canyon, but it will be approximately 20' in width all the way.

A crew of approximately forty people will be required on this construction throughout the summer, and can utilize the camps already established; the fly camp at Cripes Creek, Columbia Creek, Liberty Creek and Eagle. Presently, there is a plethora of tractor equipment for the Forty Mile Road, and it will necessarily be used at other locations as detailed herein elsewhere.

It is suggested that this work be accomplished under very rigid supervision to preclude the possibility of wasting material by unnecessary excavating or changing alignment. Therefore, it is recommended that Robert R. Smith be placed in direct charge of this work, and foremen be under his supervision. Foreman suggested for this section of the road are Otto Bayless, Douglas Huers; and Ed Peyton should be supervising foreman over these foremen but taking his directions from Robert Smith. Robert Smith would be under the general supervision of Claude Rogers, and of course the District Engineer and Assistant District Engineer. This sounds rather complicated, but in reality it is necessary when one realizes that the majority of our foremen are not conscious of the costs when one deviates from an alignment either horizontal or vertical and they must follow the engineering layout to accomplish this work without a great deal of unnecessary expenditure.

It is recommended that Phil Anderson be placed as foreman supervising the work to be accomplished by the group engaged in surfacing from Tetlin Junction to Polly Creek, and that foremen be employed and/or promoted to directly supervise each one of the shovel crews.

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Group 2. It is recommended that two additional shovels together with ten large dump trucks be assigned the programmed reconstruction of the Taylor Highway from Tetlin Junction to Polly Creek including the Boundary Spur. One shovel outfit with five trucks would be stationed at the West Fork camp and another outfit starting at about six mile with the crew stationed at Tok, and work progressively toward the West Fork crew, who will be working back toward the commencement of the construction. When these two crews meet, it is suggested that the first shovel crew jump ahead to about South Fork and operate out of Lassen Field camp and come from South Fork all the way through to Polly Creek and the Boundary Spur. The crew at West Fork would not move the rest of the season, but would continue from West Fork to South Fork after they had met the group coming from Tetlin Junction. It is believed in this manner we can effectively place surfacing and reconstruct those sections that require reconstruction with a minimum of equipment and manpower.

For this group, it is believed that not more than 28 people will be required and that will include 2 shovel runners, 10 truck drivers, 4 tractor operators, 2 motor grader operators, 2 foremen, 2 cooks, 2 flunkies, 2 bull cooks and 2 laborers.

Throughout the entirety of this route, there are sections not contiguous with one another that do require considerable reconstruction. Specifically, approximately three and one quarter miles south of the South Fork Bridge, approximately one and one half miles north of the South Fork Bridge, all of the four miles coming out of Jack Wade Creek toward the Boundary Spur, as well as a section at 6 Mile, another at 11 Mile, a third at 17 Mile, a fourth at 27 Mile, at 44 Mile Logging Cabin Creek, immediately north of the Logging Cabin Creek across the flats, the two and one half miles approaching West Fork, immediately north of the West Fork bridge, at Mile 51, 52, 53, 57, then across the niggerhead flats going into Mosquito Fork, and then approaching the Chicken Townsite, some little reconstruction should be accomplished. None of these sections are particularly difficult or hazardous within themselves, but a combination of all of them will require considerable work before they are up to the standards of the Road Commission.

Personnel required would be 70 people for an average of six months. Equipment will be as follows:

3 Latourneau Carry-all scrapers (1 Model U
2 " Y)
1 - 105 CFM compressors
3 - 210 " "
2 - 315 " "
2 - Power control Pull graders
1 - Small Tandem Motor Grader
2 - Large Tandem " "
4 - Flash boilers
1 - Skid-mounted double drum hoist
1 - 1/2 yd and 3 - 3/4 yd. shovels
1 - Large ripper
2 - D-4 tractors
2 - D-7 "

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Equipment cont'd on Taylor Highway:

- 4 - D-8 Caterpillar tractors
- 2 - 1942 or earlier dump trucks
- 8 - Ford six-cylinder dump trucks
- 6 - IHC - L-180 dump trucks (part time)
- 10 - Reo D-19's " "
- 10 - Reo E-23 DR - 5 yd. dump trucks
- 4 - 1942 or earlier flat rack
- 4 - Pickups
- 2 - Dodge power wagons
- 1 - Suburban carryall
- 1 - Lubricating unit
- 2 - Welders
- 1 - Steam-driven pile driver with leads.
- 1 - Swinging lead pile driver and the part time use of the Link Belt Speeder mounted on the Sterling.

B. Livengood-Rampart.

\$500,000.00 has been allotted the primary construction of the Livengood-Rampart road. It is understood that the present plans are to construct this route from Livengood to the Hess River, down the Hess River to the Yukon River, and along the east bank of the Yukon to Rampart. Very little knowledge of this section is available at this time other than that learned in flights over this section. At the outset it should be noted here that this is entirely nebulous job and suggestions and recommendations made herewith are made under proviso that we are assuming by aerial observation only that this job can be constructed in the manner suggested herewith.

Primarily this job looks to me to be strictly a cat and scraper job; primarily with dozers and a few carryalls picking up heavy fills. There is going to be a lot of niggerhead flat crossings but from observation most of these are a short haul, and the material on the ridges looks dry and unfrozen. It is, therefore, the recommendation of this Office that the planning be toward utilizing the available equipment on hand which includes the equipment listed below.

Undoubtedly this job will require at least two camps, and one of these camps will necessarily for a short period of time be supplied by air with fresh vegetables and meats. I would establish a camp at approximately the mouth of the Hess River, and from this point work back toward Livengood where a second camp would be established. From Livengood, I would push out as far as possible until the construction meets the crew coming from the Hess River camp. As soon as this group meet and a supply road established, then the Hess group would commence construction from the Hess River to Rampart and the other crew would improve and finish construction from the Hess River to Livengood. With available equipment it is believed that approximately 30 to 35 miles of construction can be accomplished next season, but here again it is going to

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take some very close coordination with both engineering and construction personnel. It appears to me that this job would be ideal for Earl La Bree to supervise as a General Foreman, under the supervision of the District and Assistant District Engineers. It may be that this is not possible since the personnel set-up is not along these lines; but at any rate, Earl La Bree would be my suggestion as the supervising foreman under the supervision of George Morton.

It is rather difficult to actually establish here what will be required on a job that is neither surveyed nor seen by the writer, but from all apparent circumstances, the job lends itself to be a cat and carryall spread. Therefore, we will list the equipment below accordingly. Personnel required will be approximately a thirty man crew for six months.

- 8 TCR Model Woolridge scraper
- 1 - 12' Pull blade power control
- 3 - Flash boilers
- 1 - Shovel - 3/4 yd.
- 1 - D-4 tractor
- 2 - TD-14 IHC tractors
- 1 - D-8 Caterpillar tractors
- 10 - TD-24 IHC "
- 2 - 1942 or earlier dump trucks
- 4 - Pickups
- 2 - Power wagons
- 1 - Lubricating unit
- 1 - Suburban carryall
- 2 - Welders

C. Eielson-Big Delta

The route between these two points has been observed by the writer on two occasions but am not too certain exactly where the Military wants to build this road. Assuming that they will build on the south bank of the Tanana River rather than where the Richardson Highway is presently constructed on the north bank, it will require the crossing of the Tanana and Delta Rivers. There is an old trail along this route that I have observed many times and it is entirely possible that this old trail can be constructed very rapidly with tractor and carryall scraper. We are, therefore, assuming that this will be carryall and tractor layout primarily, and have so scheduled equipment to accomplish it.

Two headings could be made on this job, and it should be done with the exception of the crossings if they are to be bridges in one season. I would commence construction at Eielson Field down to the Tanana, and start up the south bank. Now I am not certain that this is the way the Military wants the road, but think it is since I have made several reconnaissance flights with the Army Arctic Training Center and 4th Infantry personnel, and both groups evidenced considerable interest in this route. Assuming that this is the way they are going, we would go up the south bank with this group of equipment similarly to the method we employed on the Tok Cut-Off work; that is,

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side borrow and occasional pit borrow. The other group would start from near Big Delta Junction, cross the Delta River there and proceed down the Delta River until they met the group proceeding up river. Here again it would be a matter of side borrow with occasional pit borrow all of which would be accomplished by cat and carryall equipment. In this manner, complete mobile camps similar to those constructed by the Cantwell construction would be required since the equipment would be moving rather rapidly.

In the event both the Livengood-Rampart job and the Eielson-Big Delta jobs are in force at the same time together with the other construction, there is no recommendation for a supervising foreman; but should the Eielson work alone be under construction, it is recommended that Earl LaBree be placed in charge of this work. A force of approximately 45 men for six months will be required to accomplish this proposed construction. Equipment as listed below will be required:

- 3 - Caterpillar #80 carryall scrapers
- 3 - La Plante-Choate #314 scrapers
- 3 - Woolridge TC - 42 scrapers
- 1 - 12' pull blade power control
- 2 - Large motor graders
- 1 - Flash boiler
- 1 - Shovel
- 2 - TD-14 IHC tractors
- 1 - D-8 tractors
- 10 - TD-24 "
- 2 - 1942 or earlier dump trucks
- 6 - IHC L-180 dump truck (part time)
- 2 - 1942 or earlier flat racks
- 2 4 Power wagons
- 3 - Pickups
- 1 - Lubricating unit
- 1 - Suburban carryall
- 1 - Welder

D. Farm & Industrial Roads

Project Number One:

Construct about two miles of road to serve homesteaders, at least four families, in the vicinity of Shaw Creek. The construction of this road will definitely aid the settlement of the immediate area. Location of this road is along the section line between Sections 34, 35 and 27, 26 T7S; R8E. Construction is relatively easy and should be accomplished at a total expenditure of an estimated \$5500.00. Sketch and petition were forwarded with the 1950 Recommendations under Project Two.

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Project Two

Build one and three quarters miles of road in Sections 19 and 20; T4S, R4E home of Lt. P. R. Johnson and serving at least two other families. Development in this section will definitely be speeded by the construction of this short road. Additional land is available immediately adjacent to the proposed new road. Estimated total expenditure for a low standard road without surfacing would be \$4500.00. Sketch and petition were forwarded with the 1950 Recommendations under the listing of Priority Seven.

Project Three

Extend road begun in 1940 including service to present homesteaders in Section 20; T1S, R1W. Recommended road will include two miles of new construction. The extension of the present road will serve a minimum of four families and make additional adjacent land attractive to prospective homesteaders. Estimated total expenditure is \$4000.00. Sketch and petition were forwarded with 1950 Recommendations under the listing of Priority Eight.

Project Four

Construct one mile of road commencing at the 1/4 Corner between Sections 20 and 21; T1S, R1W, FM; thence one mile west to the 1/4 between sections 19 and 20. This road will be a part of the Farm system west and south of Fairbanks. Estimated funds will be \$3500.00. Sketch and petition attached.

Project Five

Construct 1 1/4 mile of road commencing near S.E. Corner of Section 5; T1S R1W FM; thence west 1 1/4 miles along the section line between sections five and eight. This road will be a part of the network west of the Fairbanks north of the Chena River. Estimated total cost of this construction is \$2500.00. Sketch and petition attached.

Project Six

Construct a road in Section 12 T1S, R1E, commencing at the SE corner of the NW quarter of the SE quarter; thence South 3/8 of a mile intersecting the winter road of the Badger Road. This road will serve at least five families in the immediate vicinity of this area and will be a portion of the network East of Fairbanks and north of the Chena River. Cost of construction will be approximately \$1200.00. Sketch and petition attached.

Enclosed herewith for your information and consideration is a copy of a letter received from Mr. Fred J. Weiler, Manager, Bureau of Land Management, Fairbanks, together with certain sketches prepared by Mr. Weiler. This Office is in agreement with the recommendations made by Mr. Weiler and recommends that the projects listed on the enclosed letter and shown on the attached sheets be included in our Farm Road program as the following projects:

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Listing #1	-	Project Number Seven	-	Estimated Cost	\$ 800.00
" #2	-	" "	Eight	-	" " 4500.00
" #3	-	" "	Nine	-	" " 1500.00
" #4	-	" "	Ten	-	Must be surveyed
					and projected - 3500.00
" #5	-	" "	Eleven	-	Estimated Cost 1500.00
" #6	-	" "	Twelve	-	No estimated cost
					Must be surveyed -
					- No possibility of completing next season.

Project Thirteen

Construct as a continuing program about two and one half miles or road east and west along the section lines between Sections 24, 25, 23 and 26 of T1S, R2W, and to Chena River Pump Station Road; use winter crossing of Chena River. This proposed road will serve at least 20 families, and will make accessible additional lands to prospective settlers. No estimate of cost except it will be more than \$8000.00. Petition and sketch forwarded with 1950 Recommendations.

The accomplishment of the Farm and Industrial Roads will be done at the conclusion of the tractor and scraper work on the Steese Highway Reconstruction. This work should be done under the direct supervision of T. J. Brignole, supervised by George Morton, General Foreman. During the early part of the season, it will be possible to assign one tractor for the necessary clearing and grubbing, and then at a later date, this equipment be then augmented by the equipment from the Steese Reconstruction. In the early part of the summer, the engineering group can work on these projects and have them well-staked out, and a comprehensive plan of operations formalized by the time the Steese Highway Reconstruction is completed. It is the opinion of this Office that the work on clearing and grubbing should be done in the early spring where necessary; and grading and draining should commence about August 10th. The equipment scheduled for the Steese Highway Reconstruction is also intended for the use on the Farm road program. Therefore, there will be no equipment shown here. Personnel required for the construction will be approximately 10 persons including the foreman for sixty days.

IV. SURVEYS

Under the heading of surveys, it is assumed that all surveys will be accomplished. This will include construction survey, pioneer locations, soils and materials sampling, etc. Under this assumption, we are listing herewith the recommendations for the 1952 construction season:

- 1. Farm and Industrial Roads. \$20,000.00

This will include Chief of Party who will act as instrument man

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and three chainmen and rodmen (engineering aides). This group will accomplish all the required location and construction survey in connection with the Farm and Industrial Roads program as detailed herein.

2. Eielson-Big Delta - \$30,000.00

This group will consist of a Resident Engineer, 2 transitmen-levelmen and five engineering aides. They will be responsible for the location and construction survey required for the Eielson-Big Delta Highway.

3. Livengood-Rampart - \$30,000.00

This group will consist of the Resident Engineer, 2 transitmen-levelmen and six engineering aides who will be responsible for the location and construction survey of the Livengood-Rampart Highway.

A Materials Engineer together with his required staff will largely be employed on contract engineering and funds necessary for their support will be forthcoming from the work orders connected with the contract construction. Whenever it is required that a Materials Engineer move into ware-board construction, funds will be deducted from the Reconstruction amounts as stated before.

For both Livengood-Rampart and Eielson-Big Delta, there is available for each job one cook trailer and two bunk trailers with housing available for eleven persons. These are complete mobile units, and can be utilized on both jobs. Tractors will be two new D-6 Caterpillar and two D-4 Caterpillars. Sufficient light plants, stoves, radios, etc., are available and on hand at the Fairbanks Depot for both survey groups. Necessarily, a portion of these surveys will be accomplished as pioneer surveys, and will require logistical support by air. Since neither of the jobs are too far away from civilization, this air support will not be too expensive. To the best of our knowledge, the trailer equipment is ready to go with the exception of one cook trailer which will need a hot water heater, and all plumbing fixtures be installed. The tractors are all in good shape, and should easily finish the season without more than normal maintenance.

The Farm Road program survey would require only a Pickup and one Suburban Carryall throughout the season. The personnel assigned this will be constantly on the move, and will require equipment definitely assigned to them for their use.

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Your attention is invited to the fact that certain pieces of equipment will be required in the Fairbanks District during the next season. These include the following which have already been ordered:

8 - 1/2 ton pickups
1 - Pickup coupe

In addition it is noted in our equipment assignment list that we will require two additional Suburban-type carryalls for transportation of engineering personnel. Should the Eielson-Big Delta and Rampart-Livengood jobs, or either one of the two, become a reality, we will require at least three additional 4 x 4 pickups similar to the Dodge power wagons. Very definitely we should procure three additional lubricating units for field lubricating of all type equipment. These units can readily be utilized on any type construction job and are cheap enough to be purchased for every large construction job under progress.

There should be an additional asphalt distributor truck purchased for this type work. In Fairbanks, the S. Birch-Morrison-Knudson Construction Company has a Roscoe Distributor mounted on an International truck, a complete unit with a full spray bar, foot per minute gauge, pressure gauge, retort, etc. This unit is not new, but is in very good condition and can be purchased quite reasonably. It is recommended that negotiations be commenced with the contractor for its purchase.

Very definitely the Fairbanks District requires two additional trailers; one a tank trailer of 2000 gallon capacity and one a high bed semi for transporting loads other than heavy equipment. A repetition of the disastrous fire of this past season will be a result of hauling construction materials, and other heavy loads on the lowbeds at high speeds. A 2000 gallon trailer is a must if either of the two construction jobs in the Fairbanks area become a reality. *Both units (one is in the Fairbanks area) 12/52*

It is understood that there will be available at least five rubber-tired tractor prime movers complete with carryall scrapers attached for use in the Fairbanks District next season. Contingent upon the fact that the two large jobs under consideration in the Fairbanks Area do become firmed up, we will require three additional 3/4 yd. shovels. These shovels need not be new, and it is believed that the Valdez District can supply two Buckeye Clippers, and one older-type Bay City. It would be possible to scrape by with two shovels but very definitely we would require a minimum of two 3/4 yard shovels. We should have two flash boilers in approximately the 18 horsepower class, similar to the Wm. Bros type.

It is recommended that consideration be given the possibility of purchasing and mounting on a D-8, an Emsco rocker shovel front. This shovel front can mount directly on the D-8, and we would then have a unit capable

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of handling rock cuts and hard digging without the necessity of putting in a tractor to push up for the small shovels. This would be used in the Forty Mile next season working shot ground, and would more than pay for itself in one season. It would preclude the possibility of moving the small shovel and tractors on these hard cuts and will dig more in a day than these small shovels. We have presently within the District enough tractor equipment to make available a D-8 for this work, and we would not impair the program in any fashion by pulling one D-8 out of the lineup.

V. CONTRACTS

Contrary to the information received in your instructions, there will be an additional contract under construction during the 1952 construction season; namely, the four Richardson "C" I-Beam Bridges, Contract I-arc-4339, in addition to the Chena River Bridge. We have directed your attention to these bridges to emphasize the fact that the equipment we have available for personnel transportation will be limited in view of the fact that one crew of engineers will be engaged in these bridges in the spring and early summer. The Resident Engineer at Fairbanks will require a car and the party assigned to this work should have some type transportation; and it is believed that the Station Wagon presently on hand will be sufficient for this. From the University of Alaska engineering instruction personnel, we will be able to obtain engineers capable of administering this contract as well as accomplishing all required engineering functions.

Very truly yours,



K. F. Goodson
District Engineer

November 8, 1951

Mr. Kenneth F. Goodson
District Engineer
Alaska Road Commission
Fairbanks, Alaska

Dear Mr. Goodson:

Recommendations for the 1952 operations are to be submitted to reach headquarters not later than January 11 in order to permit review prior to the District Engineers' Conference in late January or early February. As a basis for preparing these recommendations for next season's operations, the following will be used as a guide:

I. MAINTENANCE		
A. Roads and Depots	\$825,000	
B. 1 Permanent Maintenance Camp..	120,000	\$ 945,000
II. RECONSTRUCTION		
		345,000
III. CONSTRUCTION		
A. Taylor Highway.....	850,000	
B. Livengood-Nanpart.....	500,000	
C. Eielson-Big Delta.....	700,000	
D. Farm & Industrial Roads.....	50,000	2,100,000
IV. SURVEYS		
		<u>80,000</u>
TOTAL		3,470,000

Under date of November 2, 1951 there was issued to all districts a standard form for submission of recommendations which should be followed in breaking down the funds to each road or group of roads under maintenance or to routes under the construction program. Only the total amount is required, without further breakdown to the three sections of District Direct, District Clearing and Headquarters Clearing which has appeared on Work Orders. For planning purposes, to determine size of crews and length of season, it is suggested that a tentative figure of 35% of the total for each project be used to arrive at District Direct charges for

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