



UNITED STATES
DEPARTMENT OF THE INTERIOR
ALASKA ROAD COMMISSION
Fairbanks District,
Fairbanks, Alaska.

December 3, 1951

Supervisor H. C. ...

Chf. Engr.
Admin.	<i>W.M.</i>
Op'ns.	<i>R.D.S.</i>
Engrg.	<i>W.L.B.S.</i>
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Mr. Wm. J. Niemi
Chief Engineer
Alaska Road Commission
Juneau, Alaska

Dear Mr. Niemi:

Annual Report

The annual report of the operations of the Fairbanks District relative to the maintenance and construction of roads within this District would be incomplete without a brief resume' of the situation as it existed at Fairbanks in December, 1950.

A new District Engineer, K. F. Goodson, had been appointed and took office on December 1, 1950. His predecessor, Mr. Frank Nash, had occupied the position of District Engineer for approximately eighteen years; and through the many years of small operation and into the period of expanded operations, Mr. Nash had accomplished much with funds provided. However, due to adverse housing conditions and other circumstances, the personnel within the Fairbanks District had become disorganized, demoralized and inattentive to the requirements. When Mr. Goodson became District Engineer, there was no Assistant District Engineer, the Administrative Officer and District Mechanic as well as the Fairbanks Shop Mechanic were all on extended annual leave, and there was no supervising foreman for the large operation at Tok. With a great deal of personal effort by Mr. Goodson, the personnel within the Fairbanks District has during the past year been reorganized, and are now a very close-knit, effective, efficient group. The equipment is in much better condition than when Mr. Goodson came to this position, and other improvements both materially and organization-wise are evident. Upon his leavetaking, Mr. Goodson can honestly say in all fairness he is leaving a better organization than the one that he found.

I. MAINTENANCE

A. ROADS AND DEPOTS

THROUGH ROADS

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

During the past season, the maintenance of the Richardson Highway has continued with normal winter snow removal and surface

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planing, summer surface planing, waterway control, culvert and bridge maintenance. The Tanana River, Shaw Creek and Salchaket Bridges were painted with a standard Alaska Road Commission aluminum during the past season. The paved section near Salchaket Lake, Birch Lake and across the Shaw Creek flats was patched and relayed but to no avail. The roadway continued to settle and the riding surface is very uneven. Some shoulder stabilization was accomplished during the past period, and a great deal more will be required during the next year.

The Donnelly Dome camp burned in September with a loss of approximately \$16,000.00. The Bureau of Public Roads personnel engaged in the construction of the Richardson "C" section was housed at both Big Delta Junction and Donnelly Dome camps. At Big Delta Junction, the Alaska Road Commission erected a knock-down type mess hall and barracks for these personnel. This facility is available for next season.

Winter Maintained	-	136 miles
Summer	"	- 136 "
Grader-dozer	-	400 yds.
Scraper	-	250 "
Shovel-loaded	-	6000 yds.
Truck hauled	-	24000 CYM

Route 230 - Alaska Highway - 203 miles

The Alaska Highway has been maintained in very good condition throughout the past year except a portion from Gardiner Creek to the Canadian border became quite rough at the end of the summer season. In the early spring on April 6th, paved section from Tok to Johnson River was closed to heavy traffic due to the spongy condition of the paving. On about May 10th, this section was reopened to traffic. There was a loss of paved surfacing in excess of 19000 sq. yds. between Tok Junction and Sears Creek.

The land-ice areas normally troublesome near Tanacross were less so this past season. There were no floods or overflow on the flats beyond Big Gerstle and in all the maintenance was not serious in any consideration.

The contractor engaged in the reconstruction of Alaska Section, A,B1 commenced construction in July and this section from Sears Creek to Big Delta was under construction the rest of the season. There was some detouring required around this construction, but the contractor very carefully maintained these detours to the satisfaction of all concerned.

The paved section of the Alaska Highway required considerable maintenance work this past season. It was necessary to remove all the damaged sub-grade and ballast material, and in many instances these were stretches 150' to 300' long. There were innumerable sections of 30 to 40 square foot areas that were removed. All of these sections were replaced with materials not susceptible to frost action and impervious to water.

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Later, these replaced sections were covered with hot MC-0 bitumen to seal them. At a later date, a portion of them were sealed with RC-3 but not all of these places were completed since it was rather late in the season and the oil could not be applied at this late date.

Winter Maintained	-	203 miles
Summer "	-	203 "
Dozer Moved	-	4200 yds,
Scraper "	-	None
Truck Hauled	-	33,000 CYM
Shovel-loaded	-	11,000 "

Route 330 - Glenn Highway - 33.5 miles

The maintenance of the Glenn Highway within the Fairbanks District was increased from the Big Tok River to the Little Tok River this past year. This included the section known as 21 Mile Hill, and a great deal of maintenance during the winter time was accomplished on this. This road was kept in traveling condition at all times, but during the summer construction season the public was infrequently required to be towed through wet sections under construction. Normal winter maintenance together with summer maintenance, culvert and bridge maintenance, etc., were accomplished throughout this route. No particular trouble was occasioned at any time and maintenance problems are now minimized by the reconstruction program completed over this route.

Winter Maintained	-	33.5 miles
Summer "	-	33.5 "
Dozer Graded	-	500 yds.
Scraper "	-	2500 "

Route 630 - Steese Highway (To North Camp) - 1.5 miles
" 632 - " " (To University) - 4 "

Normal winter maintenance, surface planing and snow removal, and normal summer maintenance, shoulder stabilizing, ditching, brush cutting, signing, etc., was accomplished on this route. This route carries a tremendous volume of traffic, relatively speaking, and does require a higher type maintenance. Brush was encroaching the roadway in several sections and this brush was removed during the past summer, by machine operation and hand labor. Additional roadway ditches were made as well as drainage ditches to take the water away from the roadway toward the sloughs. Short sections were resealed with hot bitumen and chips.

Winter Maintained	-	5.5 miles
Summer "	-	5.5 "

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International Airport Road (CAA Road) - 4.5 Miles

This route was designated a portion of the assignment for year-round maintenance by order of the Commissioner of Roads for Alaska even though this route is administered by the Territory of Alaska. It is a paved section 4.5 miles leading from South Cushman Avenue at Gaffney Way to the new International Airport located approximately 4.5 miles west and south of Fairbanks.

Normal winter maintenance of snow removal and surface planing together with some land-ice control, was accomplished during the past winter. In the summer, a considerable amount of shoulder grading was done to re-establish the shoulder line on long sections of this route that had been disturbed by traffic and construction work along this route not associated with the highway itself. There was no particular trouble on this route except that the seal-coat that was applied is spalling badly, and there is about 2½ miles of this route that has never been seal-coated. It was necessary to apply some bitumen to horizontal cracks that appeared. There are two sections of this route that have settled badly, and will require patching next season:

Winter Maintained	-	4.5 miles
Summer	"	- 4.5 "

DEPOTS

Fairbanks Depot - Route 301

Certain improvements have been accomplished within the Fairbanks Depot area during the past season. A contract was let to the A. E. Waxberg Construction Co. to construct a 40 x 120 steel frame warehouse. An old grease building that was at the same location; this building was torn down as well as a loading dock.

A Security Fence around the perimeter of the property was constructed. The Office Building and large warm storage building was painted standard Road Commission grey and red. The equipment storage yard west and north of the Office within the perimeter of the property was raised and graveled during the season. A barracks building to house transit employees was established within the Depot in one of the old warehouse buildings. A 40 KW standby diesel electric set was set up and connected to the power failure which appears to be a very strong probability when the City of Fairbanks actually begins to produce power and the FE Company goes off stream.

The main shop building was touched up with paint where paint had flaked off the building and the interior of the building was thoroughly cleaned. A program of housekeeping was installed whereby the space was used for the utility intended.

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When the Security Fence was constructed, it restricted access to the property owned by the Union Oil Co. and other land owners west of the Fairbanks Depot and it was necessary for us to construct a very short road around the north perimeter of the Depot.

Gravel loaded by shovel - 4600 yds.
Gravel hauled by truck - 9200 CYM

Tok Depot - Route 302

The long awaited rehabilitation and reconstruction program within the Tok Depot was accomplished during the past season. This included the rehabilitation of the sewage disposal system, reconstruction of the water supply to the west portion of the Depot, some rehabilitation of all buildings, the construction of a Security Fence around the west portion of the Depot, regrading the area, placing a concrete floor slab within the main shop, certain construction work within the grease storage building to establish as a welding and blacksmith shop as well as other improvements in the lighting and electrical system throughout the depot.

Grader-dozer - 1300 yds.
Scraper - 2500 "

Fairbanks Apartment - Route 311

This duplex building received very little maintenance other than normal housekeeping and sealing of the windows and sills. Peat moss was hauled to the yard area, applied and spread in preparation for a lawn next year. A gravel driveway was established around the house. A small fence was built along Gillam Way.

Gravel hauled by shovel - 400 yds.
" hauled by truck - 800 CYM
Moss hand-loaded - 225 yds.

FEEDER ROADS

Route 231 - 6.1 miles - Northway Feeder

Normal maintenance both summer and winter was accomplished on this route. It was open to traffic at all times, and while rough and dusty, it was of sufficient utility to handle the traffic. There was not a great deal of maintenance work done other than normal maintenance work and a very few spot loads of gravel applied. Ditches were recut and some small amount of brush was cut near the Nebesna River Bridge.

Winter Maintained - 6.1 miles
Summer " - 6.1 "

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Taylor Highway - Route 331 - 158 miles

Winter maintenance of this road commenced in February and was used for the utility of the Alaska Road Commission in hauling the Forty Mile River Bridge steel to its site. During the summer, a program of fixing the worst spot throughout the route of this newly constructed highway was under way. This amounted to hauling material to several sections that had subsided or heaved and in sections where the shoulder had settled badly. Some bridge maintenance was done but largely this was a bare minimum. The route was closed to traffic from November 15 to February 6 approximately. Throughout the summer, this route was exceptionally rough and of poor riding quality. But very little money was spent maintaining it since it needs a program of reconstruction throughout its entirety and money spent patching is money wasted.

The section from Eagle to Liberty was opened up about the 10th of May, and what little traffic is on that highway had the utility of it by the 16th of May. This section of the route was not maintained too well during the past summer, and no work was done at all toward the patching or rehabilitation of it.

Shovel Loaded - 11,500 yds.
Truck hauled - 23,000 CYM

Winter Maintained - None
Summer Maintained - 123 miles

Steese Highway - Route 631 - 160.1 miles

" 633 - University to Ester - 5.5 miles

" 634 - Central to Circle Hot Springs - 18.9 miles

The Steese Highway opened for traffic the earliest it has ever been opened on May 15, 1951. Normal summer maintenance together with a program of reconstruction and improvement was accomplished during the past year on these routes. Summer maintenance included ditching, brush cutting, surface planing, culvert maintenance, etc. The Chatanika River Bridge was painted with standard bridge prime coat and standard Road Commission aluminum paint during the past season. As reported under Reconstruction and Improvement, the Steese Highway was improved in several sections. The Ester Road near Ester was improved by cutting down the grade going into Ester Creek and reblading the Ester section of the road.

There was no particular trouble on this section winter maintained by the Alaska Road Commission except a few land-ice areas north of Engineers Creek that required constant attention. In early spring, accumulated water inundated a portion of the road across the Chatanika flats but this has been eliminated by destroying beaver dams on the low side of the Highway which will allow waterway access to the Chatanika River. The majority of

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the work accomplished during this past season is being reported arbitrarily under Reconstruction and Improvement, and is not shown under Maintenance.

Winter Maintained -	71.5 miles
Summer Maintained -	183.6 "
Dozer -	2200 yds.
Scraper -	800 "
Shovel loaded -	2200 yds.
Hauled by truck -	8800 CYM

Elliott Highway - Route 731 - 71 Miles

Normal summer maintenance which included the spring opening of this road throughout its length was not particularly difficult. Several washouts in the vicinity of Globe Creek, Tolovana River, Chatanika River, and near Olive Creek required some little maintenance work. Surface planing and ditching was accomplished throughout the entirety of this route from Olnes to Livengood as well as its branches. No particular improvements were accomplished on this route other than increased ditching and cleaning of culvert and bridge waterways. Throughout the season, the road was in very good travelling condition and it was reported that many travelers were able to drive from Fairbanks to Livengood in less than two hours which speaks well for the condition of the highway.

Winter Maintained -	None
Summer-Maintained -	71 miles
Grader-dozer -	None
Shovel Loaded -	2800 yds.
Truck hauled -	4200 CYM

Manley-Hot Springs-Eureka - Route 732 - 25.7 miles

This route was summer maintained only, and very ably so by Mr. Harry Bronson. Throughout the entirety of this route, a program of spot graveling, brush removing, bridge maintenance, culvert maintenance, etc. was accomplished. Near Washington Creek and across the hill approaching Washington Creek from Eureka, the heavy wooded section was cleared back about 50' from the road to allow the sun to dry out this section. The Hot Springs slough bridge was painted partially this past season.

The road was in very excellent driving condition throughout the season, and the residents of Manley Hot Springs were very well pleased with the accomplishments of the Alaska Road Commission this past season as evidenced by the many letters so stating.

During the season, the Alaska Road Commission purchased an 150 P & H Dragline from Joe Coble at Manley Hot Springs for use in maintaining and rehabilitating the road system there.

Winter Maintained -	None
Summer	" - 25.7 miles

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18" x 13" x 18" CMP	-	120'
24" x 13" x 18" "	-	140'
Grader-dozer	-	7800 yds.
Hauled by trucks	-	11700 CYM
Loaded by shovel	-	4000 yds.
Hauled by trucks	-	8000 CYM

Ruby-Long-Poorman - Route 031.1 - 56.5 miles

The Alaska Road Commission maintained only that portion of the road from Ruby to Monument Creek, a distance of 41 miles. This maintenance included normal summer maintenance, surface planing, ditching, brush removal, considerable spot graveling, together with waterway clean-out on all bridges and culverts. The road was in very excellent traveling condition throughout the season, and that portion between Monument Creek, and Ruby, is now complete to local road standard except five bridges must be replaced. The road is very well stabilized and has good surfacing for the utility intended. Mr. Lester Sweetsir, foreman, did a very commendable job on the maintenance of this route and has been so informed by this Office. Improvements accomplished during the past season was in establishing a road within the town of Ruby along the waterfront. This road is approximately 30' wide with heavy ballast course of about 15" and eliminates a bog hole that was formerly their street. There was no trouble on this route, and everything went along very smoothly under the able direction of Mr. Sweetsir.

Winter Maintained	-	None
Summer "	-	41 miles
Shovel loaded	-	None
Dozer	-	9000 yds.
Hauled by truck	-	22500 CYM

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. Normal winter maintenance where authorized, and summer maintenance consisting of surface planing, ditching, etc. was performed on this route throughout the year. A very small amount of gravel patching and other forms of maintenance were performed this past season. A very few metal culverts were installed, but largely the maintenance consisted of snow removal in the winter, and surface planing in the summer.

Winter Maintained	-	25.4 miles
Summer "	-	43.9 "
Shovel Loaded	-	400 yds.
Truck Hauled	-	1600 CYM

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

The only maintenance work performed on these roads was blading and ditching this summer. There was no winter maintenance performed and the snow removal was accomplished by others. A very minor amount of ditching was accomplished and all of the work required and accomplished was a very minimum.

Winter Maintained	-	None
Summer	"	- 21.3

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
Y 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 Road	-	1.5
Miller House-Harrison Crk-		
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
		<u>149.2</u>

This group of roads comprises the system of roads in and around Fairbanks that feed to the Steese Highway. Normal winter maintenance consisting of land-ice control where authorized was accomplished as well as summer maintenance throughout all the routes. The summer maintenance was mainly surfacing, some spot graveling, ditching, waterway maintenance, etc.

Winter Maintained	-	34.4 miles
Summer	"	- 145.2 "
Shovel loaded	-	1280 yds.
Truck hauled	-	1920 CYM
Reditching and backsloping	-	122,000 lin. ft.

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Pedro Dome Road - 3.7 Miles

This route is presently being maintained for the Army in the wintertime under a separate agreement, but during the past year was only summer maintained. Normal summer maintenance was accomplished on this road consisting of surface maintenance, ditching and waterway maintenance.

Winter Maintained - None
Summer " - 3.7 miles

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

This local road system consists of those roads connecting to and feeding the Elliott Highway in and around Livengood. Only occasional and infrequent surface planing in the summer time was accomplished on these roads, and no other maintenance was accomplished on this.

Winter Maintained - None
Summer Maintained - 9.2

Manley Hot Springs - Route 732.1 - 18.0 miles

This local road is from Manley Hot Springs to Tofty and requires only normal summer maintenance. Surface planing and ditching was accomplished this past year as well as brush removal, some surfacing as well as a small amount of bridge repair and maintenance.

Winter Maintained - None
Summer " - 18.0 Miles

Dozer grader loaded - 2240 CYM

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

No work was accomplished on these routes during the past season. A 1942 Chevrolet dump truck was assigned to Rampart-Little Ninook Creek Road during the past year upon receipt of authority from Headquarters to this effect. It is planned to assign another 1942 Chevrolet dump truck to the Coal Creek Road this next season as previously authorized by Headquarters. While no work was accomplished by employees of the Alaska Road Commission, certain maintenance work was accomplished by interested parties who were financed by the Territory. On both these routes, the Territorial Highway Engineer has assigned the maintenance to interested individuals and the work was accomplished.

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Route 030.3 - Wiseman Locals - 13.0 miles

These local roads in and around Wiseman were maintained throughout the summer by the Alaska Road Commission. Normal summer maintenance consisted of blading, ditching, waterway maintenance, etc. Throughout the year this road was in fair traveling condition only but for the traffic at this place, it was sufficient.

May it be noted here that this Office does not concur in the continued maintenance of the Wiseman road or the Wiseman local roads. Since the equipment there is very minor and those persons who do have equipment suitable to the travel on the roads can very readily accomplish the maintenance thereof.

Winter Maintained	-	None
Summer	"	- 13 miles
Shovel Loaded	-	600 yds.
Hauled by truck	-	6000 CYM

Route 030.4 - Ruby Airfield Road - 1.2 miles

The Ruby Airfield Road was almost completely rehabilitated this past season in the maintenance program. Two culverts were installed as well as surface material, new ditching and more adequate drainage provided throughout its entirety. There was summer maintenance only and was passable in the latter part of the season.

Winter Maintained	-	None
Summer	"	- 1.2 miles
90 lin. ft. 24" corrugated pipe		
Dozer loaded	-	1400 yds.
Hauled by truck	-	2100 CYM

Route 030.5 - Nulato Airfield Road	-	1.0
030.6 - Nenana-Cemetery	-	2.5
Ferry-Eva Creek	-	21.8

No work was accomplished on the two former roads in this designation, but on the Ferry-Eva Creek Road, Nels Jackson, a local miner, opened up this road in the early spring, patching up wherever required and bladed throughout its entirety. This small amount of summer maintenance is all that was accomplished on this route, and was all that was required. Here again, we would like to say that it is not believed economical to continue to maintain this Ferry-Eva Creek road for the benefit of only one person and it is recommended that the Alaska Road Commission so inform the local miner, Nels Jackson.

Winter Maintained	-	None
Summer	"	- 21.8

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

During the past season, the road known as the "Army D" road was completed to the satisfaction of the Military and subsequently this road has been named "Meadows Road". Maintenance on this road as required by the Military is on a year-round basis and they are furnishing funds to accomplish this maintenance. During the past year normal winter maintenance was accomplished on approximately 9.4 miles. During the summer normal summer maintenance was accomplished on 12.3 miles. Summer maintenance was in the nature of only surface blading and some shoulder maintenance but largely was carried on with the construction program then in progress.

Winter Maintained	-	9.4 miles
Summer	"	- 12.3 "

No yardage is reported here since this was done mainly under the Construction program.

During the past season, the Fairbanks District completed several local roads in the Farm & Industrial program, including the following:

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

While the maintenance did not include a full portion of the summer season, some maintenance was accomplished on these routes:

Winter Maintained	-	12.8
Summer	"	- 13.8

II. RECONSTRUCTION

Route 330 - Glenn Highway

The reconstruction of the old Tok Cut-Off, now known as the Glenn Highway, proceeded from Station 661 at the approximate end of the 1950 construction across the Tok River and thence along the Tok River to the Mineral Point Landing Field; thence up the Little Tok River Valley along the old Tok Cut-Off route and finally crossing the Little Tok River at approximately the old river crossing. This show was largely a tractor and carryall spread ably supervised by Earl La Bree under the desultory

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supervision of Mr. L. L. Nichols, Area Superintendent, at Tok. There was assigned to this project 20 TD-2¹/₄ International Harvester Tractors, 4 - TD-14's, 1 D-8 Caterpillar and 16 Carryall scrapers - 12 yards and larger. This work was slow in the early spring since some of the stripping required was wet going and the ground was frozen. Finally in June we began to roll, and the heavy fills across the Tok Valley toward Mineral Point Landing Field was completed. This was the majority of the yardage accounted for in this section of the road amounting to approximately 280,000 cu. yds. From the flat above the Tok River immediately adjacent to the Mineral Point Landing Field, thence into Log Cabin vicinity, the construction was slowed somewhat by frozen ground with some very wet terrain. There were several large fills requiring considerable embankment from adjacent borrow pits but most of this was accomplished by side borrow method. From the Log Cabin to the Little Tok River was mostly side borrow with occasional pit borrow. On all the Glenn Highway, it was the policy of this Office to raise the fills considerably above the immediate surrounding terrain, to have wide ditches approximately 2' deep on alignment that offered the possibility of a minimum 1500' sight distance at all times. This was accomplished without any appreciable increment in yardage moved, but certainly has paid off in the beauty of the road.

Late in the season, authority was given the Fairbanks District to reconstruct that portion of the road from the commencement of construction of 1950 near the hills immediately ~~east~~^{east} of Tok Junction to the intersection of the Alaska and Glenn Highway. This construction commenced in early September, and was finally completed October 17, 1951. This section is a tangent approximately 8.2 miles long, and has been constructed with wide side borrow pits on either side with occasional pit borrow. The old grade was built up approximately 2' throughout its entire length, and it is presently a very high speed road.

At the end of the season it was noted that of the equipment assigned to this job, there were only two pieces of equipment not running which speaks well of the overhaul program done during the 1950-51 winter. At the conclusion of this past year, we have reconstructed 33.27 miles of the Glenn Highway that lies within the Fairbanks District with an exception of .4 miles that has not been completed as of this date due to frozen hillsides in very isolated sections. During the past year, approximately 21¹/₄ miles was constructed except as noted for the .4 miles above. To accomplish this reconstruction during 1951, we have moved approximately 738,000 cu. yds. We cleared and stripped 13.49 miles or 196 acres. Stripping during the past season amounted to 120' wide - 20' of which was cleared for the Alaska Communication System. There was no shovel and truck haul this past season. We installed 2480 lin. ft. of 24" metal culverts, 50 lin. ft. of 30" culverts, 750 lin. ft. of 36" culverts, 68 lin. ft. of 13 x 18 metal culverts.

Route 631 - Steese Highway

The Steese Highway during the past season received a reconstruction program amounting to 11.3 miles as well as an additional four miles north of Central which was reconstructed late in the season. This work was accomplished through Engineers Creek (1 mile), near Chatanika (3.3 miles), and across the

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Chatanika flats (7 miles). This reconstruction amounted to horizontal and vertical realignment, raising the grade, easing curves, widening, ditching, and culvert installations. The completed work was very satisfactory.

Cleared and stripped	- 2 miles or 2.2 acres
Grader-dozer	- 72,217 yds.
" hauled	- 65,537 "
Surfaced	- 14.2 miles
Shovel loaded	- 24,282 CYM
Truck hauled	- 28,650 CYM

16 lin. ft. 18" culvert
544 " " 24" "
252 " " 36" "

1 - 5 x 10 x 55 - culvert
1 - 5 x 6 x 40 - "

In addition thereto, we ditched 311,520 lin. ft. throughout the entirety of this route in sections not contiguous with one another but requiring this work.

III. CONSTRUCTION

Army "D" Road - Route 130.6 - 17.1 miles

During the past construction season, the Fairbanks District constructed a primary road in the amount of 5.3 miles as well as reconstructed 11.8 miles. This work was accomplished for the Military under Work Order #335. The construction involved an access road to a Firing Range. The funds established for this road were in excess of the original requirements and consequently the Military requested us to build additional facilities for their use in this area. Therefore, a short connecting road was made from the Firing Range road to the Delta River flats and a road of about four miles in length was constructed across the flats.

In addition to this construction, we built six Fighter Bomber Aerial target bunkers and appurtenances as well as several small connecting roads, etc. The Military was very well pleased with the construction and evidenced their pleasure with a letter complimenting the Alaska Road Commission for the accomplishments on the Army Training Base Road now known as the "Meadows Road".

Cleared and stripped	- 6 miles or 6 acres
Grader-dozer	- 38,675 yds.
" scraper	- 20,200 "
Gravel shovel loaded	- 20,360 "
Surfaced	- 11.9 miles
Gravel hauled	- 52,300 yds.
Installed - 120 lin. ft. 13 x 18 metal culverts	
- 178 " " 26 x 42 " "	

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Taylor Highway - Route 331

During the past construction season, the Taylor Highway was under construction throughout the entire length from Upper Jack Wade Creek to Liberty Creek, a distance of approximately 34 miles. Construction work consisted primarily of opening up ground, of stripping frozen moss and other materials from boggy sections and wet sidehills as well as clearing the tundra from frozen sections. The several sections that required drilling and shooting in rock was accomplished. The very hazardous and laborious task of building a pioneer road down the south slope of the Forty Mile River to the crossing of the Forty Mile River at O'Brien Creek was accomplished. This pioneer road is approximately 12' wide on centerline and will require considerable work before it is a highway.

The work in this area was quite slow. All the work can properly be reported as preparatory work, and this work will very definitely pay dividends during the 1952 construction season. With the exception of approximately 6000', all of the Forty Mile Road is now open to four wheel-drive traffic, and should rapidly be completed for public traffic next season. To appraise the accomplishments during the past season by any known set of progress measurement is rather difficult. My own impression of accomplishments there was that every move made was toward the ultimate completion of the highway and all was accomplished with a minimum of expenditures. In early February, a contract was let to a local trucking firm to haul the old Matanuska Bridge to its new site at the crossing of Forty Mile. This work proved to be hazardous and expensive operation. The contractor's equipment and the Alaska Road Commission equipment broke through the ice on the South Fork of the Forty Mile River and the Forty Mile itself. Luckily, no one was injured and no equipment was lost but only through the efforts of the foreman was this work even partially completed. Vernon Johnson was charged with this responsibility, and while a cursory examination of the accomplishments would evidence a lot of expenditure for a little work, actually getting the bridge steel to its site, the camp to the north bank of the Forty Mile River, and all of the equipment into O'Brien Creek was a very, very difficult task. In extremely cold weather which we were experiencing at that time - 55 degrees below - nothing works right but by perseverance and tenacity of purpose, these people did the objective and there was not a great deal of money expended toward this end.

Poor Dist
 Top haul
 078

The section from South Fork to Lassen Field was partially reggraded and widened this past season, and some little surfacing was applied but there remains a majority of the widening to be accomplished. In addition to this section, there is a short section south of the South Fork bridge that must be widened and another short section near Stamme's camp in Jack Wade Creek and the majority of the road from the head of Jack Wade Creek to the intersection of Boundary Spur must be reditched. From this intersection to Polly Creek the road was largely reggraded and surfaced this past year, but there remains some additional surfacing and a small amount of widening to be accomplished.

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The old bridge at the location of Shaw Creek on the ^{Richardson} Taylor Highway was dismantled and moved to and erected at the Walkers Fork Crossing. This 125' span was very economically dismantled and moved by the personnel of the Alaska Road Commission and was re-erected very rapidly. In dismantling, it was determined that the truss members could be disconnected into only three component parts, and re-erected very rapidly.

During the course of construction of this bridge, a very tragic accident occurred. Mr. Howard Stuart was drowned while attempting a crossing of the Walkers Fork in a makeshift raft. This unfortunate accident occurred on a Tuesday, and the body was not recovered until the following week on Friday. Due to the flood proportions of the river at this particular time, it was at first thought that Mr. Stuart's body would never be recovered, but constant search by personnel of the Alaska Road Commission and other interested parties resulted in the discovery of the body at the mouth of Walkers Fork.

The concrete piers and trestle pile footings required for the crossing of the Forty Mile River were placed during the latter part of the season. The bridge steel for this bridge was all straightened, and it is ready to erect. There remains a few pieces on order now that need to be replaced. All the work connected with this bridge is very difficult but the progress was quite rapid under the supervision of Robert R. Smith.

During the past season, Mr. Edwin E. Peyton acted as supervising foreman under the general supervision of L. L. Nichols, Area Superintendent at Tok, and Mr. Peyton effectively and efficiently carried out the planned work on the Forty Mile Road. He was assisted throughout the season by Mr. Otto Bayless, Doc Cripes, Vernon L. Johnson, Wyman Fritsch and Seward Harbison, bridge foreman. These people are mentioned here for commendation for their efforts in effectively carrying out the planned procedures as formulated early in the season despite many circumstances beyond their control that dictated policies otherwise.

Cleared and grubbed	- 19.3 miles
Graded and drained	- 18.2 "
Surfaced	- 0
Grader-dozer	- 28,000 yds.
" scraper	- 13,000 "
Shovel loaded	- 17,000 "
Truck hauled	- 17,000 CYM

Culverts as follows:

18'	- 12"
24'	- 16"
58'	- 18"
280'	- 30"
320'	- 10" hydraulic pipe
55'	- 10 x 5 elephant hut.

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Farm & Industrial Roads

During the course of the year, the Farm & Industrial Roads within the Fairbanks District accomplished work on the following:

Tok Townsite Streets	-	Work Order #336
Country Club Extension	-	" " #337
Otto Geist Road	-	" " #339
Becker-Dale-Conn Road	-	" " #340
Priority #6 and #9	-	" " #349
Peger Road	-	" " #349
Harding Lake Road	-	" " #348
Tanana Valley Sportsmen's Road	"	" " #348
Bentley Island Work	-	" " #319
Chena Hot Springs & branches	-	No work order.

All of this construction amounted to 12.25 miles. This was accomplished with the equipment assigned to the Fairbanks area and used in the early portion of the season on the Steese reconstruction. This work was under the direction of George Morton supervised by T. J. Brignole.

None of the Farm roads were gravel surfaced and this requirement remains. Most of the work was accomplished by stripping and heaping the debris in the center of the right-of-way and subsequently by side borrow filling over the stripping. This method raises the grade above the surrounding terrain and does not make a lot of long haul work, and can be accomplished with tractor and scraper. For the use intended this construction is recommended:

Acres cleared	-	86
Grader dozer	-	43,900 yds.
" scraper	-	26,640 yds.
Surfacing applied to Tanana Valley Sportsmen's Assoc. Road-		850 yds.
Truck hauled	-	600 CYM
Bentley Island:		
Truck Hauled	-	3200 yds. 4000 CYM
Culverts:		96 lin. ft. 24"
		208 " " 36"

On the Otto Geist roadway, there were two bridges constructed; 1 - 20 x 20 and 1 - 18 x 20,

Various accomplishments that could not otherwise be listed will be listed under Construction. Among these are included the clearing of a trail for the Bureau of Reclamation from the Tolovana River to Duncan Creek and from Duncan Creek to Beaver Creek to the proposed dam site on Beaver Creek.

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The Fairbanks District also moved some rather large tanks for the Alaska Communication System from their installation at Canal Station "L" to Tok, and from Cathedral Bluffs to Station "L", and Harding Lake. We housed and fed personnel for the Bureau of Public Roads, Alaska Communication System, contractors engaged in construction for the Alaska Communication System, Mortenson Construction Company and Wiggins Construction Company.

During the year, we also accomplished many innumerable services for other agencies that consisted of overhauling equipment, towing them in, supplying parts, etc. as well as gasoline, oil, lubricants, anti-freeze, tires and innumerable other items.

It might be noted here that the Fairbanks District engaged in the large heavy overhaul program that accounted for the rebuilding of several large pieces of equipment including therein 14 D-8 caterpillar tractors, 2 D-7's, 13 TD-24 I.H. tractors, 2 - TD-18 I.H. tractors, 4 TD-14 I.H. tractors, 7 TCR Woolridge scrapers, 3 LeTourneau scrapers, the construction of one truck-mounted crane from a semi-truck tractor and crawler-mounted shovel. The design and fabrication of two snow plows mounted on large truck tractors with trailing motor grader moldboard mounted thereon; the partial overhaul of 13 dump trucks and of course the normal maintenance required for 398 pieces of construction and maintenance equipment. The accomplishment of the Fairbanks mechanical maintenance staff has been phenomenal and the program engaged in by the Fairbanks District whereby all equipment is constantly maintained to its best performance status is successful as evidenced by the heavy productivity, low maintenance costs and the fact that the equipment is ready to operate on a full capacity basis at all times.

IV. SURVEYS

During the past year only one primary survey was in operation in the Fairbanks District. This survey consisted of a location of a line from Fairbanks to Nenana; more particularly that portion from Ester to Berg - 25.2 miles. This survey was completed through very heavily wooded sections over frozen terrain, and some rather steep sidehill country. The relocation line begins at Ester ascending the Ester ridge, then along the ridge in the general direction of Nenana and then into Gold Creek and down the Gold Creek into the valley where the Alaska Railroad has constructed its alignment.

T. Hugh Wilson was Resident Engineer on this work and did a very commendable job. He was assisted by seven classified student engineers from several universities, two tractor operators and a cook. All of the unit traveled in three trailer houses mounted on mud sleds, pulled by small tractor equipment. Their supply base was Fairbanks with supplies being received via railroad or truck from Fairbanks.

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Progress was not too fast on this survey since very heavy timber was encountered on a portion of this route, and it necessarily slowed the "P" line, and "L" line location. Infrequent aerial reconnaissance assisted in the location.

Under Surveys and Plans, it would be appropriate to note that surveys were accomplished on the Chena River Bridge, the Minnie Street Bridge together with the necessary connecting roads from the Steese Highway to the City of Fairbanks. In addition to this survey there was several other minor field locations, among those being the Weighing Station at Mile 352, approximately, on the Richardson Highway, and the location of the Chena River Bridge site test boring.

The survey that was accomplished in 1950 from Livengood to Eureka stored the tractor and trailer equipment at Eureka. In March, 1951, T. J. Briagnole, foreman, was directed to bring this equipment in from Eureka which he accomplished without too much expenditure and in very good shape. While he was moving in this equipment, he cleared the Livengood highway of snow with the equipment.

During the past season, a tremendous volume of soil sampling and other material sampling was accomplished by the Fairbanks District Soils Section, under the direction of Harvey Dunham. Laboratories were established in Fairbanks and Tok, and equipment necessary was purchased and installed. With the exception of a very few elaborate tests, the Alaska Road Commission, Fairbanks District, can now analyze soils and properly classify them with personnel and equipment presently on hand. Among the accomplishments of this section was the testing of 43 miles of the Glenn Highway for soils determination, all concrete design data for contracts listed below as well as wage-board concrete construction, numerous bridge testing and sampling of deckings, etc. Infrequent specific assignments within the Fairbanks District to check or test soils, contracts, lumber, existing structures buildings, etc. were also accomplished.

V. CONTRACTS

During the past construction season, the following contracts have been in force:

1. Chena River & Minnie St. Bridge - awarded to J. J. Badraun Co., Seattle, and subsequently cancelled - \$468,000.00
2. Con.No. - Mike Erceg Drilling Co. - Drilling test holes for the Chena River Bridge abutments - 2,000.00
3. " " 4299- Noyes Slough Bridge - Munter Construction Co. - A portion of a contract in the amount of - 262,291.38 Completed this past season.

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4.	Contract No. 4339	- Four I-Beam Bridges - Richardson "C" Munter Construction Co. - Presently in progress of completion.	\$131,366.75
5.	" "	4274 - Shaw Creek Bridge - Munter Construction Co. - A portion of a contract amounting to:	297,900.00
6.	" "	4352 - Fairbanks Warehouse - A. E. Waxberg Construction Co.	80,178.28
7.	" "	4121 - Fairbanks Shop - A. E. Waxberg Construction Co. - Rebuilding windows -	1,050.00
8.		Hauling steel for Forty Mile Bridge from Matanuska River Bridge - Alaska Consolidated Freightways -	6,808.50

These contracts were ably administered under the general supervision of M. C. Zimmerman, Assistant District Engineer, with Kjell Jartun, Woodrow Johansen, Harvey Dunham and Robert Smith acting as Resident Engineers on the various contracts. Of particular note, the services of the following inspectors has been exceptionally commendable:

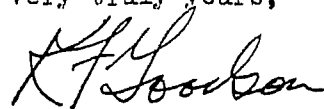
Kjell Jartun
James Anderson
Sherman Morrison
Guinn Metzger
Gregory Novak, Jr.

Harvey Dunham has done a great deal of commendable work in connection with Materials Inspection and deserves a special comment at this point.

In addition to the contracts administered by the Alaska Road Commission, there are two contracts in Force Account within the Fairbanks District that are being administered by the Bureau of Public Roads:

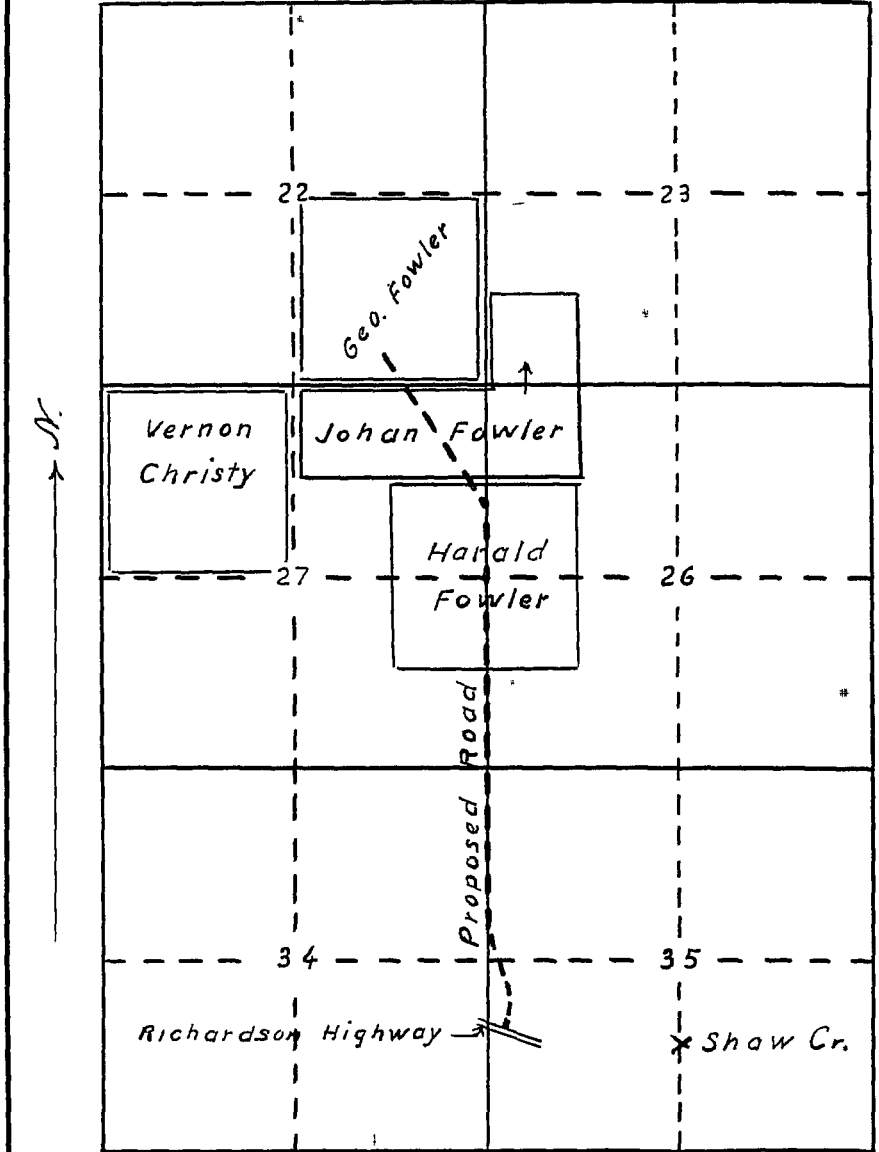
1. The reconstruction and paving of the Richardson Highway Section "C" from Big Delta to Black Rapids in the amount of \$1,771,091.00 awarded to Lytle & Green Construction Co., Contract 4303.
2. The reconstruction and paving of the Alaska Highway, Section A,B1, in the amount of \$1,884,391.00 awarded to Rogers Construction Co. and Babler Bros. - Contract I-are-4298.

Very truly yours,



K. F. Goodson
District Engineer

T. 7 S. R. 8 E. Fairbanks Base & Meridian



Scale: 1" = 1/2 Mile