



Fig. 1-9 US 97 - Livengood to Harek -
m-24 ditch shaping.



Fig. 1-N US 97 - Livengood to Breke -
Caterpillar #12 Motor Grader
dressing shoulders.



Fig. 1-1 US 97 - Livengood to Burckn -
Maximum cut.



Fig. 1-1 US 97 - Livengood to Murcha -
Culvert stockpile.



Fig. 1-K US 97 - Livengood to Sureka -
Maximum grade.



Fig. 1-1 US 97 - Livengood to Durck -
Maximum fill.



Fig. 1-M US 97 - Livengood to Buraka -
Typical borrow pit outside
right-of-way.



Fig. 1-N US 97 - Lavenood to Mureka -
Bureau of public roads camp.

2. US 97 - BURKA TO LIVENGOOD

Location

This project is a section of the proposed highway from Fairbanks to Nome. Two crews are working toward each other on the portion of US 97 between Burka to Livengood. (See Section 1 this report).

The section constructed this season by the crew working from Burka begins south of the Burka landing strip at a point approximately 20.8 miles northeast of Manley Hot Springs. The road follows the Nutlinana Creek approximately 0.2 mile east of its point of origin and thence in a northeasterly direction traversing the mountainous country south of the Elephant, Wolverine and Sawtooth Mountains for a distance of 18 miles.

Physical Data

The roadbed width is 24 feet shoulder to shoulder, and the cleared width is approximately 150 feet to 200 feet.

The estimated average fill in flat areas is approximately 2 feet. The estimated maximum cut is 15 feet at centerline and maximum fill is 20 feet at centerline.

The estimated maximum gradient is approximately 10%; however, the grade does not appear finished and will probably receive additional excavation. It appears that the maximum design grade is approximately 7 or 8%.

The earthwork balance is similar to other projects visited in that they do not appear to be balanced by the adjustment of grade lines. It appears that when additional material is needed for embankments the cuts are widened.

The topography of this area is essentially mountainous resulting in heavy cut and fill sections and side hill sections. Thus, the project is largely a cut and fill operation in contrast to a borrow pit operation. However, a gravel pit was noted at mile 2.6 (from west end) which was being exploited for building an overlay fill in a low area.

Drainage structures consist of numerous small (24-inch) corrugated metal pipe culverts. A bridge will be required to span the Nutlinana Creek (see pictures).

Statistics

The major pieces of equipment on the project were:

- 7 - Caterpillar D8
- 3 - Scrapers
- 1 - Caterpillar D6 w/hystaway
- 1 - International TD-24
- 1 - Caterpillar D6 w/dozer
- 1 - Galion motor patrol
- 1 - Wagner Scoopmobile
- 2 - Dump trucks

The equipment reputedly was barged from Fairbanks on the Tanana River, and construction was started on July 7. There were approximately 12 men in the camp at the time of the writer's visit (September 25).

The design standards are similar to those listed in Section 1 (Livengood to Eureka).

This project is not accessible by highway. However, there are many contractors on the railbelt equipped to supply this project via the Alaska Railroad to Nenana, thence by barge to Manley and then to Eureka by highway.



Fig. 2-4 D807 - Hurcha to Livengood -
D-8 Cat cutting ditches.
Typical 3 feet of gravel fill
in low area.



Fig. 2-5 US 97 - Sureka to Livengood.
These cats and cans with push
cat working borrow pit.



Fig. 2-1 US 97 - Duraka to Lävengedal -
Scrapers building fill. Scraper
on right turning into borrow
pit shown in Fig. 2-0.



Fig. 2-1 US 97 - Sureka to Livenood -
Wagner scoopmobile excavating
trench for CMP culvert.



Fig. 2-2

US 97 - Baraka to Lavenwood -
Installing and backfilling
CMP culvert.



Fig. 3-8 US 97 - Eureka to Livengood -
Daylight cut on horizon. Typical
ridge road section.



Fig. 2-6

US 97 - Burkea to Livenood -
Sidehill cut and fill section
at summit of mountain. Grade
beyond is approximately 10%;
however, it appears that
additional work remains to be
done in this area.