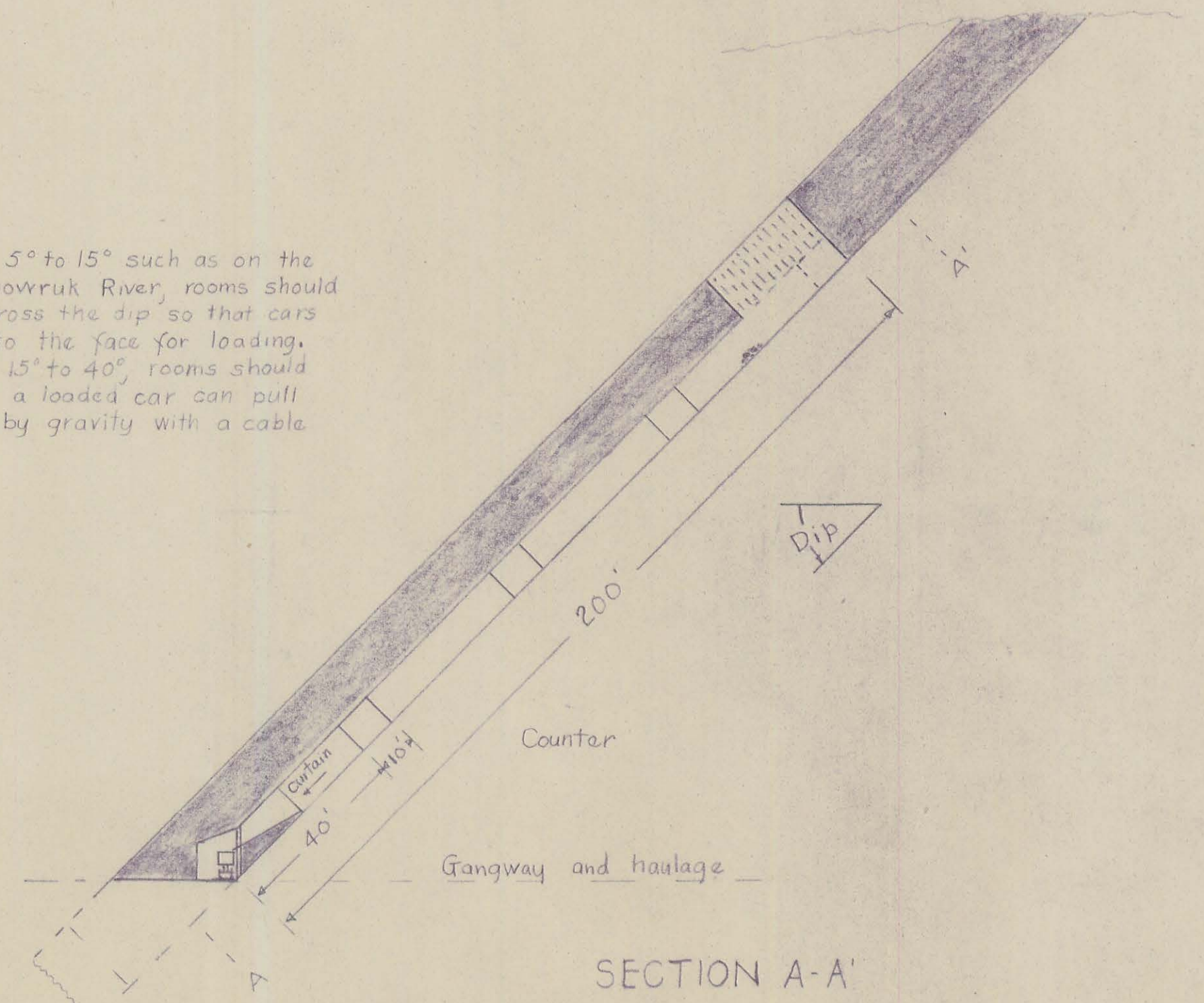


In areas where dips are  $5^{\circ}$  to  $15^{\circ}$  such as on the Kuk River and the Kukpowruk River, rooms should be driven at an angle across the dip so that cars can be pushed manually to the face for loading. In areas where dips are  $15^{\circ}$  to  $40^{\circ}$ , rooms should be double-tracked, so that a loaded car can pull an empty car to face by gravity with a cable and sheave.



Advance mining in lower bench of coal bed and retreat mining in upper benches of coal in rooms.

Fig. 4, Plan adaptable to coal mining in the Arctic Regions of Alaska.