DEPARTMENT OF FISH AND GAME

333 RASPBERRY ROAD ANCHORAGE, ALASKA 99502

March 9, 1981

Edward Reed Terrestrial Environmental Specialists, Inc. RD. 1, Box 388 Phoenix, Arizona 13135

Dear Ed:

As you know, I have had concerns about the overall study approach of the Susitna Project since its inception. In particular, I have been concerned about compatibility of big game and plant ecology studies. In correspondence and meetings between October 1979 and January 1980, we discussed this issue at length. Some modifications were made in the plant ecology studies, but it appeared that available photography would not permit the desired level of resolution in vegetation maps. Since we appeared stuck with that situation for Phase I, I decided to wait until Dr. Taber was appointed and the first vegetation maps were available for review.

At our first meeting in December 1980, Dr. Taber shared our reservations that it might be difficult to relate the vegetation maps to our animal location data in a way that would indicate habitat selectivity. We examined a number of alternatives and decided to attempt a scheme where we would classify habitat at random points using the same methods we use at animal locations. This would allow us to assess the availability of various habitat characteristics to the animal. This scheme was beyond the scope of our original studies, but we felt it was important enough to at least test the procedure during Phase I.

Last week we reviewed this scheme for the third time and took a closer look at the 1:24,000 scale vegetation maps. We reluctantly concluded that there were major problems with both approaches. The main problem is that both the maps and our aerial classifications tend to focus on overstory, yet understory is probably more important to the animals. At certain times, particularly in fall, we can classify some understory from the air but at other times we can do no better than the maps. Some habitat/animal relationships will be obvious even with crude maps, but there is a vast area of medium density spruce that appears to have a heterogeneous understory. We believe that a different approach is needed to determine habitat selectivity in such areas.

I strongly recommend that a determined effort be made to design Fhase II studies that will effectively deal with the problem. Substantial expertise in ungulate/habitat relationships exists, some of it in Alaska. I feel we should enlist the aid of these individuals in the design effort. Otherwise, we are likely to waste time and money on a half baked assessment. The timing of Phase II proposals is not clear to me, but I recommend that you start the design process over the next month or so to allow maximum time for thoughtful input.

In the meantime, we will continue to collect data in a manner that will permit a simple assessment of animal use of geographic areas. We will continue to classify vegetation and other environmental parameters at all of our animal locations. When the 1:63,360 vegetation maps are available, we will test the compatibility of the maps with our aerial classifications.

In summary, we will strive to collect our data in a manner that will be compatible with whatever final approach to impact assessment is selected so that no options will be precluded. We will gladly participate to the extent we can in designing, testing and implementing a study approach.

Sincerely,

Karl B. Schneider Research Coordinator Division of Game

cc: Kevin Young, Acres
Richard Taber, U. of W.
Robert Mohn, APA
Tom Trent, ADF&G