

6.0 CONCLUSIONS AND RECOMMENDATIONS

The following discussion presents a reconstruction of the evolution of the routes of travel within Waiko`eko`e *ahupua`a*. An examination of traditional accounts, as well as early historic maps and documents, suggests that an ancient trail ran down the center of Waiko`eko`e *ahupua`a*. This *mauka-makai* trail was one of at least two such pathways that led from the traditional settlements around the present town of Waimea into the valley of Waipio. It is not clear how closely this trail corresponds to the present alignment of the Mud Lane corridor. The central Waiko`eko`e trail, however, does not appear to have been the primary access route into and out of Waipio Valley. The main trail, referred to in historic times as the "Old Mahiki Road", skirted the southern foothills of the Kohala Hills and followed along the western edge of the *ahupua`a* of Waiko`eko`e. Traditional accounts indicate that this trail, which passes through the forests of Mahiki, led to an entrance to the underworld at Keoni on the floor of Waipio, and that it was also a known route of the Night Marchers. The trail leading through the forest of Mahiki is associated in chant and legend with the goddess Hi`iaka and her struggles to defeat a horde of *mo`o* that inhabited the forest. These and other traditional accounts strongly suggest that the Mahiki trail served as the main route of travel between Waipio and the settlements of South Kohala. It appears that at some time between the 1880s and the early 1900s the Old Mahiki Road went out of general use and the Mud Lane became the primary thoroughfare for those traveling between the ranching town of Waimea and the plantation town of Kukuihaele. This transformation may have been due to the gradual decrease in population within Waipio Valley and the growing importance of the Pacific Sugar Mill at Kukuihaele. Around this time, the original Mud Lane trail was widened and straightened to form a dirt wagon road that connected to the Alanui Aupuni, the coastal Government Road, near Kukuihaele.

Indications are that the Mud Lane Road was used by a number of groups during the early years of the 20th century. The sugar plantations (first the Pacific Sugar Mill and later the Honokaa Sugar Company) made extensive use of the lower portion of the road, up to the Forest Reserve area, to access their fields. Sugar plantation workers and other residents of Kukuihaele probably used Mud Lane as their main access to Waimea and to the towns on the Kona side. It is unlikely that they would have rode or driven to Honoka`a and then taken the "New Road" up to Waimea, when Mud Lane offered a much shorter and more direct route. The same would have been true for anyone wishing to travel from Waimea to Kukuihaele.

The Mud Lane road was also the main thoroughfare for those who had homesteads adjoining it. The residents of the John Baker homestead not only used the road, but planted eucalyptus trees along the upper portion to serve as windbreaks and shade. For the owners of the lower homesteads, Mud Lane served as the only route of access to their properties. When, eventually, Parker Ranch leased much of the Baker and other homesteads for grazing lands, they would have used it to herd cattle and as an access to repair fences and monitor herds.

When the Upper Hāmākua Ditch and its various offshoots were in operation, employees of the Hawaiian Irrigation Company would have traveled along Mud Lane to monitor and maintain the reservoir at Ululani and the Pacific Sugar Mill irrigation ditch that runs parallel to the road

for much of its length.

Interviews of local residents familiar with Mud Lane in the 1950s and later indicate that its use continued, though probably on a much diminished scale up until relatively recently. Paul Christianson, former supervisor for Honokaa Sugar Company, has stated that the plantation regularly graded the road and ran heavy trucks along it, but this probably only applies to the stretchy of road *makai* of the present project area. Ka'ai Batalona and Kelly Loo both mention motored vehicles traveling on the road, in addition to horses and wagons.

Parker Ranch appears to have set up a gate and the boundary between its land and the lands of Hamakua Sugar, and this probably resulted in a major drop in traffic up and down the road.

It is not clear exactly when the paved road surface uncovered during the present excavation was constructed. The most likely date appears to have been sometime between the early 1900s, when maps first indicate the presence of a carriage road, and the 1950s, when use of Mud Lane began to decline. A possible date might be the 1920s, 30s or 40s, when motorized vehicles came into more common use. Road beds laid down prior to this might be more likely to possess raised curbs to keep draft animals from straying off the track. It is also not clear who built the road bed. The sugar plantation may have had it constructed, but this seems somewhat unlikely since it was located *mauka* of their property line. However, it does strongly resemble plantation era roads in other parts of the Hāmākua Coast (the Ninole road bed). The individuals owning homesteads along the road may have had it built to enhance access to their properties. Who ever built it must have invested a substantial amount of effort in its construction. The large boulders that edge the road would have taken considerable energy to maneuver into place, and the interior fill would have had to have been brought in by the cartload.

The stone road bed unearthed within the Mud Lane corridor does not appear to represent the remnants of a traditional Hawaiian trail dating "to about 1500 AD when major Chiefs Umi and Liloa expanded and improved the footpath systems on the island." The paved area revealed by the present excavations is far wider than would be needed for a traditional Hawaiian trail and does not resemble any such trails so far known. The stone pavement is even wider than what one would expect from an early historic trail, and it does not possess the raised stone curbing that are so characteristic of these early carriage roads. The pavement, roughly 14 feet wide and without a raised curbing, more strongly resembles roads constructed in the early 20th century to allow for the passage of motor vehicles through particularly muddy areas. Examples of very similar road beds have been found a short distance up the Mud Lane road corridor and in the vicinity of Ninole, just down the Hāmākua Coast.

Our excavations revealed no evidence of the traditional trail that once passed through this area. If portions of this trail did follow the route of the present road corridor, it was most likely obliterated by the widening of the road and the constructed of the stone road bed.

The Mud Lane road bed has been assigned State site number 50-10-7-____. Hawai'i Administrative Rules outline the criteria for evaluating the significance of such a site. In order to be considered significant and worth of preservation, the site must possess integrity of location, design, setting, materials, workmanship, feeling, and association and meet one or more

of the following criteria:

- A. Be associated with events that have made an important contribution to the broad patterns of our history;
- B. Be associated with the lives of persons important in our past;
- C. Embody the distinctive characteristics of a type, period, or method of construction; represent the work of a master; or possess high artistic value;
- D. Have yielded, or is likely to yield, information important for research on prehistory or history;
- E. Have an important value to the native Hawaiian people or to another ethnic group of the state due to associations with cultural practices once carried out, or still carried out, at the property or due to associations with traditional beliefs, events or oral accounts – these associations being important to the group's history and cultural identity.

The sections of road bed surviving within the present project area are remnants of what was once a much longer and far more intact road surface. The integrity of this road bed has been substantially compromised by the grading and paving of the upper section of the Mud Lane Road and by the graveling of the lower section. Although an interesting example of a late historic stone road bed, site 50-10-7-26257 is nowhere near as well preserved as similar stretches of road, such as that located near Ninole. The only significance criteria that site 50-10-7- 26257 fulfills is criteria D, the potential to yield information. The present survey and its associated excavations have served to collect and document information about the appearance and construction of the road bed, and in doing so have satisfied the requirements of criteria D. These requirements having been met, it is recommended that no further archaeological work needs to be undertaken within the project corridor.