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CRREL Technical Memorandum

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CRREL collected EM61 data from the SAS school area in March 2007 as part of the Former Communications Site (Taku) geophysical survey (Figure 1). We identified several anomalies around the school. These anomalies are related to past construction, prior to the school construction, as well as dry wells and other buried utilities related to the school.

- A utility from the 1940's is present south of the school that is parallel to a gravel road that was present when the SAS building was constructed (shown as green dashed line on Figure 2). This anomaly was believed to be an old sewer pipe (per Joe Malen), but upon further examination of the SAS building as-built, it appears that the old sewer pipe was on the west side of the old roadway while the anomaly from the EM61 results is on the east side of the roadway.
- To the east of the school, there is another utility believed to be from the same time-period that aligns with former Quonset Hut buildings that were present in the 1940's (shown as green dashed line on Figure 2).
- Six dry wells are shown on the SAS building as-built. The EM61 data show anomalies very near to these dry well locations that likely correspond to the true dry well locations.
- Eight additional small anomalies were identified just south of the school. These could represent utilities, or other metal associated with the SAS building.
- Several linear anomalies were delineated from the EM61 results (shown as blue lines). The cause of these anomalies is unknown, but I suspect that they are old curbs and/or utilidors.
- An area east of the school near Neely Road contains some buried debris (Figure 1). This area was fenced during construction of the Taku Family Housing in 2006. This area was investigated with GPR and found to be near-surface. It is possible that there is some small metal debris that was left behind from the construction yard.

- No indication of a burial pit or other such anomaly was detected with the EM61 on school grounds. The playground equipment, buildings, sidewalk, curbs, utilidor (north of school), and fences all created EM61 anomalies as the instrument passed closely to them. These known sources of metal were not considered as anomalies of concern during this investigation.

Figure 1. SAS building EM61 survey results.

Figure 2. SAS building EM61 anomalies of concern.