1. The purpose of the meeting was for Village Safe Water to present another community site plan for developing the community of Newtok at the Mertarvik site as an alternate to the other community layout prepared by ASCG, Inc. in 2004.

2. Village Safe Water hired Hi Res Graphics & Design to assist them in developing both site plans using information that has been gathered since the plan was last drawn by ASCG, Inc. in 2004. Since 2004, the following information was developed:

   Orthophotography with contour lines. The new orthophotography displays topographic information that allows engineers to easily identify which areas of the site are flatter or steeper. In the old plans the terrain appeared flat.

   Wetlands Delineation. The wetlands delineation report for the Mertarvik site and related GIS layer will be provided to VSW on a CD.

   Other. Some features of the new community, such as the potential airport layout, are more certain and the community has developed
specific ideas about where they need to have certain types of features.

3. Greg Magee described the factors that are especially important when considering providing cost-effective water and sanitary sewer systems and to propose a layout that was less conventional or grid like.

   Terrain. A key factor was the terrain. In general, it is less costly to build on areas that are naturally flat. Less ground has to be disturbed by costly heavy equipment. When the topographic information was layered over the ASCG’s plan, it showed that the community was placed on a very steep slope. A lot of ground would have to be excavated and filled to form flat terraced areas for buildings. VSW take the ASCG, Inc. layout and move it on a gentle, less steep terrain near the proposed barge landing location.

   Gravity. Another factor was to use gravity to move waste through a piped system out into a sanitary sewer system. Using gravity would minimize force mains and lift stations, which would be costly to operate and maintain.

   Circular Layout. The alternate community plan incorporates both single family and multiple family housing with community buildings (Tribal offices, community center, clinic, etc.) arranged in a circular fashion in the center of the community.

3. Jon Menough, Village Safe Water engineer, explained that development of a community site plan would allow Village Safe Water to identify the approximate location to drill one (maybe two) exploratory wells in Spring 2007. If this is to happen in the spring, a contract to a drilling firm needs to be awarded by the end of January 2007. He described the contracting process Village Safe Water uses and how the Newtok Traditional Council would be asked assist in selecting the firm to perform the work.

4. A hard copy of the alternate community plan prepared by VSW was presented at the meeting and discussed. It was stressed that this was a ‘first cut’ plan and comments/changes were encouraged and that Newtok Traditional Council changes would be needed. Brief discussions included the following:

   Water Loops. The plan includes two ‘water loops’, one for the south side, and another for the west side. Recirculating water loops are used to provide continuously running water to homes and businesses within the community. As the water returns to the source, heat is added to keep the water from freezing as it flows through the pipes. These pipes are insulated and can be
run in above-ground utilidors or, depending on site conditions, they can be buried.

Residences. The alternative plan has the same number of residences as presented in the 2004 ASCG report. Stanley Tom described how the Newtok Traditional Council has performed a house-to-house survey in the existing community of Newtok and determined that 41 houses are not moveable and 22 are moveable. The group discussed how the community plan would need to consider future housing needs and something along the lines of a 25-year plan should be developed.

Water Well and Water Storage. Jon Menough noted that the preference would likely be to put the well and water storage system on the inside of the ‘curve’ formed by the alternate plan. The land on the inside of the curve is higher and this would allow for a gravity feed into the recirculating water main.

Power Plant and Waste Heat. Stanley Tom noted that Alaska Energy Authority would like to see some kind of community building next to the power plant so the waste heat can be used. Jon Menough said that he has seen one project were the power plant is in the same building as water treatment. In the case of Mertarvik, it’s anticipated that the water source will be a well located near a treatment facility/washeteria somewhere on the high side of the community. The treatment facility would either be adjacent to or within the same building as the power station, conserving construction costs and minimizing heat losses.

Sewage Lagoons and Wetlands for Wastewater Treatment. Greg Magee noted that the distance of the force main to carry sewage from the community to a sewage lagoon area, as presented by the alternate plan would need to be changed. This lagoon area was sited to allow wetlands areas near the Takikchak River to potentially provide tertiary water treatment for wastewater. Estrella Campbellone noted that a wetland east of the barge landing had been suggested for this. Stanley Tom said that the Newtok Traditional Council had already applied for permits for a landfill and sewage lagoon. Estrella Campbellone also described how the drainage just east of the barge landing was an intermittent drainage. Stanley Tom said the Newtok Traditional Council had already determined it would be best to not put wastewater and solid landfill facilities west of the community because these facilities would not be good to have near their important subsistence fishing areas in the Takikchak River. Placing the wastewater lagoon and solid waste facility east of the town is not expected to create any problems for the community. Wetlands in the vicinity of the lagoon could still provide tertiary treatment of the wastewater. Distances from the airstrip will still have to be verified.
Overall a few thoughts were shared. It was clear that there was much information still to be exchanged. Greg Magee asked to have the drawings back. Greg Magee mentioned it would not be a problem to share with the Corps the dwg file with the layouts. Greg Magee, Hi Res, and Estrella Campellone will coordinate this transfer of information. It is hoped that Hi Res Graphics will be able to produce new drafts of potential community layouts that can be sent to the community before Thanksgiving. This will provide the community to review and “mark-up” the plans prior to the next trip Stanley Tom will make to Anchorage on November 28.

5. Brenda Kerr briefly discussed that the Corps of Engineers would be offering to put $140,000 into a services contract to perform geotechnical testing on a few features within the community in the Spring of 2007. She said that geotechnical testing is only needed to support design of the airport, roadway, fuel tank farm, and school. For the testing to occur in the Spring of 2007, a firm layout of these key features would be needed before March 2007 (it takes at least two to three months to prepare a scope of work and select a contractor, so if the testing is to occur by the spring the layout should be sited-at least the key features that need geotechnical testing-by the end of January). The Corps will be discussing this with ADOT&PF, Village Safe Water and others. To secure the money there will need to be interagency agreements soon and other agencies will need to contribute funding. If this can be done cooperatively a multiple mobilization and demobilization costs to the site may be saved. If more than one site is presented for a facility the costs for testing increase.

6. A group discussed the value of agencies responsible for critical infrastructure identifying preferred facilities sites before a contractor was hired to develop the community layout plan. Some stressed the importance of deciding upon the a conceptual site plan and then ‘locking-in’ or ‘freezing’ it because they have experienced planning efforts where the inability for all parties to move beyond set decisions have resulted in failed processes. It was agreed that the identification of locations for water and wastewater infrastructure was an important preliminary step for community layout planning.

7. There was some discussion of the need to include the Lower Kuskokwim School District (LKSD) in the identification of a proposed school site. Sally Cox, Division of Community Advocacy said she would be talking with Bill Ferguson of the LKSD about this. Estrella Campellone noted that even if the LKSD did not know exactly what the school at the new site would look like it would likely suffice to know the criteria and construction requirements LKSD use so they can be incorporated during Mertarvik layout planning and design. Sally offered her serviced to contact LKSD. This would likely be enough to plan for geotechnical testing and to site the facility within the new community. The possibility of a joint trip to Bethel by Brenda Kerr, Sally Cox and Jon Menough to visit with the School System was also briefly discussed.
8. Greg Magee briefly discussed the continued need for an Overall Project Manager, a traffic cop. He said it is exciting to work on a new site plan but there needs to be strategic planning and coordination because of the many agencies that would be involved. Sally Cox suggested that there may be a need to look to non-governmental agencies to fund a project management contractor. The Rasmussen Foundation was suggested as one possible funding source to investigate. Sally Cox suggested that key agencies involved in the relocation process meet and develop a join project schedule to use as a guide until funding for a project management contractor was secured.

9. Hess of Running Dog Publications also attended the meeting and took photos. He is a freelance writer/photographer/designer and for the past nine years RurAL CAP has been his client. He has been making the Alaska’s Village Voices newspaper for them. He will be including a story on the Newtok erosion situation in the final issue of this publication.