No. PW031203-07

March 7, 2003

Lisa Seaman
GIS Coordinator
City of Rapid City
300 Sixth Street
Rapid City, South Dakota 57701

RE: Request for Data Sharing Agreement

Lisa,

Regarding our conversation this afternoon, I am providing you with a description of how the requested digital information will be used and the products that will be developed and made available to the City. It is our intention to only use this information primarily for teaching purposes and some advanced student study projects. Any resulting information will be shared and made available to the City.

In the Civil and Environmental Engineering Department we teach a watershed and floodplain modeling course (CEE 437/537) and are always striving to use the most current tools and data to do our teaching. In this class we select a watershed(s) within Rapid City to study. The students develop a comprehensive hydrologic model to predict peak flows, volumes and hydrographs. Various coverages would result from this including watershed delineations, modeling parameters, and soils. The results are written up in a formal report by the students. The second part of the course uses the results from the watershed hydrologic model to do hydraulic modeling for delineation of the floodplain according to FEMA requirements. The hydraulics model results are also written up in a report format along with floodplain delineations based on the modeling. The modeling tools we are using are integrated with GIS and thus make use of the advanced digital data. These models would be available to the City.

Another area we will use the information is in stormwater quality modeling using distributed rainfall. Graduate students would conduct this project work as independent studies and thesis projects. Information from these studies will provide information on critical areas for stormwater management and quality control.

In summary the information that would be developed and available to the City includes the following,

1. Hydrologic watershed studies of selected watersheds within the City.
2. Coverages of subbasins, soils modeling parameters used to develop the hydrologic models.
3. The hydrologic models developed for these watersheds.

4. Hydraulic studies on floodplain delineation for selected areas with the watersheds being studied.
5. Digital coverages of floodplain delineations.
6. Stormwater quality related modeling and digital coverages of pollutant sources within the City.

Currently we are using the Landfill watershed as our study area for the class. The specific aerial and topo grids requested at this time are; F43, F44, F51, F52, F53, F54, F61, F62, F63, F64, G43, G44, G51, G52, G53, G54, G61, G62, and G60

I appreciate your consideration of this data sharing agreement with SDSM&T. If there are any questions please give me a call or email to scott.kenner@sdsmt.edu.

Sincerely

Scott J. Kenner PhD., PE
Associate Professor and Chair

CC: Dan Bjerke