10. Construction Materials. Data collection for feasibility and specifications level designs is similar.

A. Borrow Materials. Consider required excavation material as a possible source.

(1) An earth materials report/inventory containing complete detailed information on those potential sources of available materials. Classification of all materials taken from test holes as soils, rock, etc., should be designed according to Unified Soils Classification System (see the *Earth Manual*). Location and extent of rock, areas of high ground water, and other unusual conditions should be shown.

(2) Reference to service history of any material considered suitable for use on the project if specific material application and performance records are available. This should also include results of sample analysis and tests including previous tests and photographs of sources.

(3) Location of and distance to borrow areas or commercial sources and approximate quantities available:

(a) Impervious and pervious embankment materials.

(b) Rockfill.

(c) Rock for riprap.

(d) Pipe embedment.

(e) Information on concrete aggregates. (See the *Concrete Manual*.)

(f) Information on sources and character of acceptable road surfacing materials.

(4) Environmental impacts associated with removing or obtaining construction materials.

I. Requirements concerning permanent stockpiles and suggested permanent stockpile locations.

J. Report alkali conditions in soil and water which might affect the choice of sulfate resisting cement.

K. Information including catalogues on firms that are within practical hauling distance from the site and that manufacture precast concrete products and brick or other masonry units.

L. Data on commercial concrete plants within practical hauling distances from the structure site.

M. Statement of availability of timber for structural work and other purposes.

N. Pipelines:

(1) Embedment requirements for pipe (native soil, select material, gravel, CLSM (controlled low strength material)).

(2) Desirability of including CLSM as an allowable pipe embedment option.

(3) Types of pipe commonly used on the project or in the project area, including types of pipe which are not acceptable for use on the project.