Supporting Documentation

7) TYPICAL ELEMENTS OF CONCEPT DESIGN

7) Typical Elements of Concept Design

Typically, a Concept Design is prepared using Base Mapping (Scale 1:10,000). Some elements are developed during the route planning component of the EA process. Although the elements may be modified on a project-specific basis during the EA process, they typically include the following:

- 1. a general description of location and endpoints;
- 2. the highway type, including access control;
- 3. they type of transit technology (if transit included); and
- 4. the types of associated infrastructure; including, for example:
 - a. highway / transitway line-haul alignment and cross section
 - b. highway interchanges
 - c. transitway stations (if known)
 - d. rail and highway / road modifications requirements
 - e. valley and watercourse crossing types.

Specific to the sub-elements of #2 above, typical engineering details are listed for each as follows:

- a. Highway/Transitway Line-Haul Alignments And Cross Section
 - general horizontal alignment
 - · general vertical alignment/profile
 - number of basic highway/transit way lanes
 - highway/transitway ROW requirements
 - highway median treatment and width
 - basic right-of way minimum width
 - potential additional right-of-way requirements where excessive cuts/and fills are likely
- b. Highway Interchanges
 - interchange locations
 - configuration and footprint at each interchange
 - Transitway Stations (if known at time linear facility planning occurs)