



5.18 LIST OF REQUIRED FEDERAL PERMITS

The permits and approvals shown in **Table 5-25** will be required to implement the proposed project.

TABLE 5-25 REQUIRED PERMITS AND APPROVALS	
Regulatory Program or Proposed Action	Agency
Section 404 Nationwide Permit	USACOE, USFWS, TP&WD
National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Construction Activities	EPA, TCEQ
Development permit to perform construction activities in a flood zone	FEMA, Municipality
Storm Water Management	Municipality
Sewer Modification	Municipality
Section 4(f), Section 6 (f)	USDOT, US Dept. of Interior
Chapter 26, Texas Parks and Wildlife Code	TP&WD
USACOE – US Army Corps of Engineers EPA – Environmental Protection Agency FEMA – Federal Emergency Management Agency USDOT – US Department of Transportation USFWS – US Fish & Wildlife Service	THC – Texas Historical Commission SHPO – State Historic Preservation Officer TP&WD – Texas Parks & Wildlife Department TCEQ – Texas Council on Environmental Quality

Source: S.R. Beard & Associates, Inc., 2006

5.19 RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND LONG-TERM PRODUCTIVITY

Short-term uses of the natural, physical, and built environment would be required in order to implement the proposed project. Such uses are minimized because of the proposed use of existing public street and highway right-of-way for the majority of the project. Short-term uses are also considered temporary since they are principally associated with the construction period. The tradeoff with the short-term use requirements is a long-term benefit associated with the implementation of the project. These tradeoffs are identified in the following discussion.

Short-term uses of the environment that would be required to implement the LRT Alternative include the following:

- Some loss of soils during construction through erosion
- Some loss of vegetation during construction due to site clearing
- Temporary changes to visual quality due to construction activities
- Traffic disruptions during construction
- Temporary disruptions to freight rail service during construction
- Displacement of economic activities
- Disruption of economic activities for non-displaced businesses during construction
- Temporary air quality, noise, and vibration effects during construction

Long-term productivity that would either be maintained or enhanced by the proposed project includes the following:

- Alternative choice of transportation throughout the region
- Enhanced transit and traffic capacity within existing right-of-way
- Improved access to employment opportunities
- Reduced congestion at key roadway intersections
- Improved safety conditions along corridor
- Improved and alternative use of energy consumption
- Replacement of aging infrastructure

- Long-term improvements in economic conditions
- Enhanced potential for high-density, transit-oriented development

5.20 IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT OF RESOURCES

Implementation of the LRT Alternative would involve a commitment of a range of natural, physical, human, and fiscal resources. Land required for the proposed project would be considered an irreversible commitment. The majority of the land required for the project alignment is currently owned by TxDOT, the City of Irving and Dallas/Fort Worth International Airport (DFWIA), and would, therefore, represent an efficient use of already committed property. Additional property requirements would be necessary at station locations and where the proposed project alignment would depart from publicly-owned transportation right-of-way. Most notably this would be associated with the area from IH-35E to Loop 12, and from the North Las Colinas Station west to Walnut Hill Lane.

The acquisition of property and associated displacement of residences and businesses in order to construct the proposed project and its stations would represent an irreversible commitment of real property. Owners, residents, or tenants of these properties would be afforded opportunities to relocate (as discussed in Section 5.2 Acquisitions and Displacements), but their existing properties would be converted to transit uses necessary to support the project.

Considerable amounts of fossil fuels, labor, and construction materials would be expended in the construction of the proposed project. Large amounts of labor and natural resources would also be used in the fabrication and preparation of construction materials. These materials are generally considered irretrievable. However, their availability is not limited and their use would not have an adverse impact on continued availability of these resources. The construction of the proposed project would also require substantial expenditure of local and federal funds which, once spent, would not be retrievable.

5.21 CUMULATIVE EFFECTS

Cumulative effects are the combined impacts of independent projects and the Northwest Corridor LRT Line to Irving/DFW on the environment. Cumulative effects refer to those effects that "...result from the incremental impact of a proposed action when added to other past, present, and reasonably foreseeable future actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time." (40 CFR 1508.7). The discussion of cumulative effects presented below refers to the proposed LRT Line to Irving/DFW project.

Methodology

Cumulative effects of the proposed LRT project were identified, analyzed and determined using methodology described in ***Considering Cumulative Effects Under the National Environmental Policy Act CEQ, 1997***. This methodology was applied throughout the environmental analysis process, from project scoping through description of existing conditions to analysis of various environmental impact areas. Cumulative effects analysis incorporates the following principles:

- past, present, and reasonably foreseeable future actions;
- federal, non-federal, and private actions;
- focus on truly meaningful effects;
- use natural boundaries to determine geographic extent;
- focus on affected resources, ecosystems, and human communities;
- address additive, countervailing, and synergistic effects;
- look beyond the life of the proposed action; and
- address the sustainability of resources, ecosystems, and human communities