SECTION 3
AFFECTED ENVIRONMENT

3.1 OVERVIEW

This section describes existing environmental conditions within the project study area. The project study area is located north of the CBD of downtown Atlanta and is approximately bounded by 14th Street to the south, Northside Drive to the west, Trabert Avenue and the I-75/85 Brookwood Interchange to the north, and Peachtree Circle and Peachtree Street to the east (Figure l-l). However, given the potential influence of this redevelopment project, land use (Section 3.3.8), socioeconomic conditions (Section 3.3.9), and potential environmental justice (EJ) areas (Section 3.3.10) were characterized out to a mile from the study area boundary listed above. Similarly, traffic conditions were characterized in some areas beyond the immediate study area given the potential traffic impacts of this project. The information presented in this section serves as a baseline from which changes in conditions can be compared. The description of existing conditions focuses on the resource categories most likely to be affected by the proposed redevelopment project.

3.2 NATURAL ENVIRONMENT

The existing natural environment at the Atlantic Steel site is changing daily because of site cleanup activities. Past'and current soil removal activities by Atlantic Steel have removed the natural vegetation on-site and altered site drainage patterns and aquatic habitat. This section describes the natural environment of the site prior to initiation of site cleanup activities and the rest of the study area. Section 4 describes the impacts of these cleanup activities in combination with redevelopment of the site.

3.2.1 Earth Resources

The study area is located in the southern section of the Piedmont Physiographic Province. The study area is located in the Gainesville Ridges District of the Upland Georgia Subsection of the Piedmont. The Gainesville Ridges occur along the border of the Upland Georgia Subsection and the Midland Georgia Subsection of the Piedmont, and consist of a series of northeast-trending, low, linear, parallel ridges separated by narrow valleys (Clark and Zisa 1976; Law 1999a).

The site occupies a narrow, west to east-sloping valley. The valley turns abruptly to the north at the eastern property boundary, near I-75/85. The valley floor ranges in elevation from approximately 915 feet above mean sea level (MSL) at the western end to about 865 feet at the eastern end. Surrounding ridge tops reach off-site elevations of approximately 1,000 feet MSL. As a result of the natural valley setting, drainage from the surrounding area converges onto the site.

Natural soils typically found in the study area are brownish red in color, consisting of silts, sands, and silty clays. The soil originated from weathered granitic and gneissic rock and contains micaceous

and quartzic materials. The Atlantic Steel site also contains fill material which is reported to contain a mixture of soil and slag (a byproduct from melting scrap metal in the steel production process).

3.2.2 Groundwater

Groundwater in the study area occurs in the overburden soil and bedrock. On the Atlantic Steel site, groundwater generally flows towards the northeastern and southeastern areas of the site (Law 1999d). Depth to groundwaterranges from approximately 10 to 40 feet across the Atlantic Steel site (Law 1999a).

Groundwater in the greater Atlanta region occupies joints, fractures and other secondary openings in bedrock, and pore spaces in the overlying mantle of residual material (Cressler, Thurmond and Hester 1983). Fractures and joints extend through the bedrock in intersecting patterns. At depth, these structures are mineralized and closed. However, at more shallow levels, they may act as conduits for groundwater flow beneath the mantle of residual material (Law 1999a).

Groundwater recharge to the fractured bedrock occurs through seepage of precipitation through the overlying mantle of residual material, or by flowing directly into openings in the exposed rock (outcrops). Depth to bedrock and thickness of the overlying residual material varies in the area, and ranges from exposed rock outcrops to 30 to 80 feet of saprolite (Law 1999a).

Limited groundwater contamination has been detected beneath the Atlantic Steel site (Section 3.3.2). The Georgia Environmental Protection Division (EPD) has prohibited the use of groundwater at the site and requires that groundwater discharge be intercepted before it exits the eastern site boundary at the I-75/85 boundary (Law 1999a).

3.2.3 Surface Water Resources/Hydrology

Surface water features present in the study area are limited to the Atlantic Steel site. The nearest surface water features outside the study area, include Tanyard Creek to the north and the Atlanta Reservoir, which lies to the west of Northside Drive at the Hemphill Water Treatment Plant.

The Atlantic Steel site is located within a narrow, west-to-east sloping valley. Surface drainage generally flows to the north and east and converges into a municipal sewer main that follows along the original drainage features of the valley floor (Law 1999d). The surface water features of the site consist of a channel and two surface water impoundments that convey stormwater to the municipal sewer main. Off-site drainage enters the site from a storm sewer outfall near the southwest property boundary, from a 36-inch storm sewer running from Bishop Street, north of the property, and from a 30-inch diameter storm sewer that runs parallel to the railroad tracks. The storm sewer from Bishop Street historically discharged to the eastern upper impoundment, and the storm sewer parallel to the railroad tracks historically drained to the middle upper impoundment (Figure 3-l).

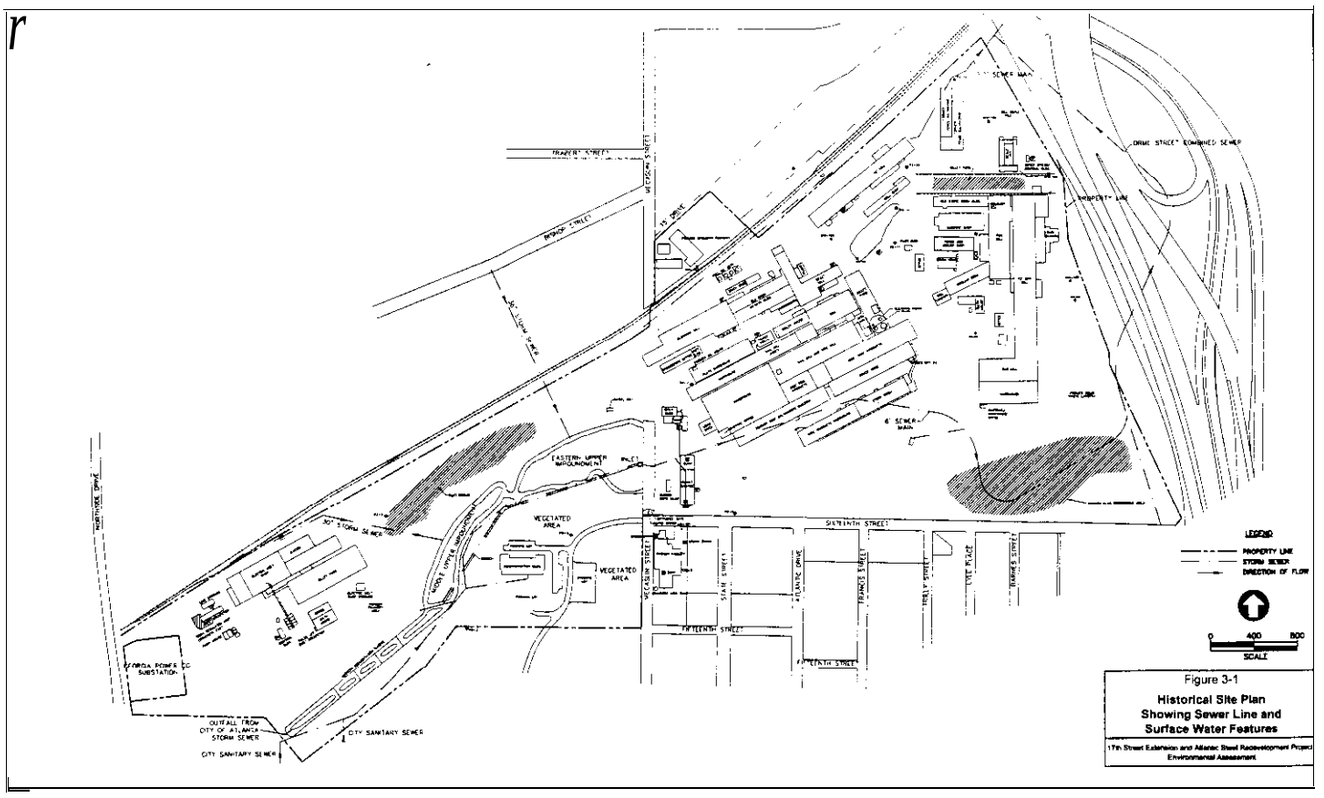


Figure 3-1

Historical Site Plan Showing Sewer Line and Surface Water Features

17th Street Extension and Atlantic Steel Redevelopment Project Environmental Assessment

Current surface water conditions at the site are changing due to the clean-up activities in progress. Stormwater from the southwest combined sewer outfall discharged to a channel and historically flowed to the northeast, discharging to two surface water impoundments (Figure 3-2). Flows from the surface water impoundments discharged to a sewer inlet structure. This sewer inlet is connected with a City of Atlanta combined sewer main that enters the property from 14" Street, near the southwest boundary, and runs east, connecting with the Orme Street Combined Sewer near the southeastern property boundary. Stormwater and surface water from the site is received by the Orme Street Combined Sewer. This combined sewage system also collects stormwater from the surrounding areas. Sewage from the Orme Street Combined Sewer is treated at the R. M. Clayton Water Reclamation Plant, except when rain events exceed conveyance capacity, in which case flows are directed to the Tanyard Creek Combined Sewer Overflow (CSO) Treatment Facility.

Flows from the southwest storm sewer averaged 2.72 million gallons per day (MGD) from August 12, 1999 to August 23, 1999 (Law 1999e). In June 2000, the City of Atlanta took action to address sanitary discharges into Atlantic Steel ponds. The Hemphill Water Treatment Plant historically contributed to surface water flows via this combined sewer under an agreement with Atlantic Steel for the City of Atlanta to provide flows periodically for reuse as process water. The Hemphill Water Treatment Plant periodically discharged filter backwash waters to the surface waters of the site as late as January 1998 (Richards 1998). Filter backwash waters are produced when the flow to the water treatment plant's filters is reversed for the purpose of cleaning the filters. The magnitude of these discharges ranged from 69,000 gallons to 272,000 gallons (Richards 1997).

Surface water runoff calculations were prepared for the site under the present conditions using the TR-55 Model (Law 1999g). The site was divided into three basins for modeling purposes (Figure 3-3). For the present condition, the following assumptions were made during the calculation of peak stormwater discharges from the site:

- Rainfall amount for the 25-year, 24-hour storm event: 6.8 inches.
- Type II rainfall distribution.
- Hydrologic Soil Group D (fill material).
- Predevelopmentacreage: 134 acres.
- Cover types for pre-development scenario were estimated from aerial photographs.
- Composite Manning's "n" coefficients were developed from weighted averages of each land cover type.

Peak stormwater discharge from the site under the pre-development condition was calculated as 538 cubic feet per second (cfs). The peak discharge occurred at 12.3 hours into the storm event. A complete list of the stormwater modeling assumptions and results is presented in Appendix C.

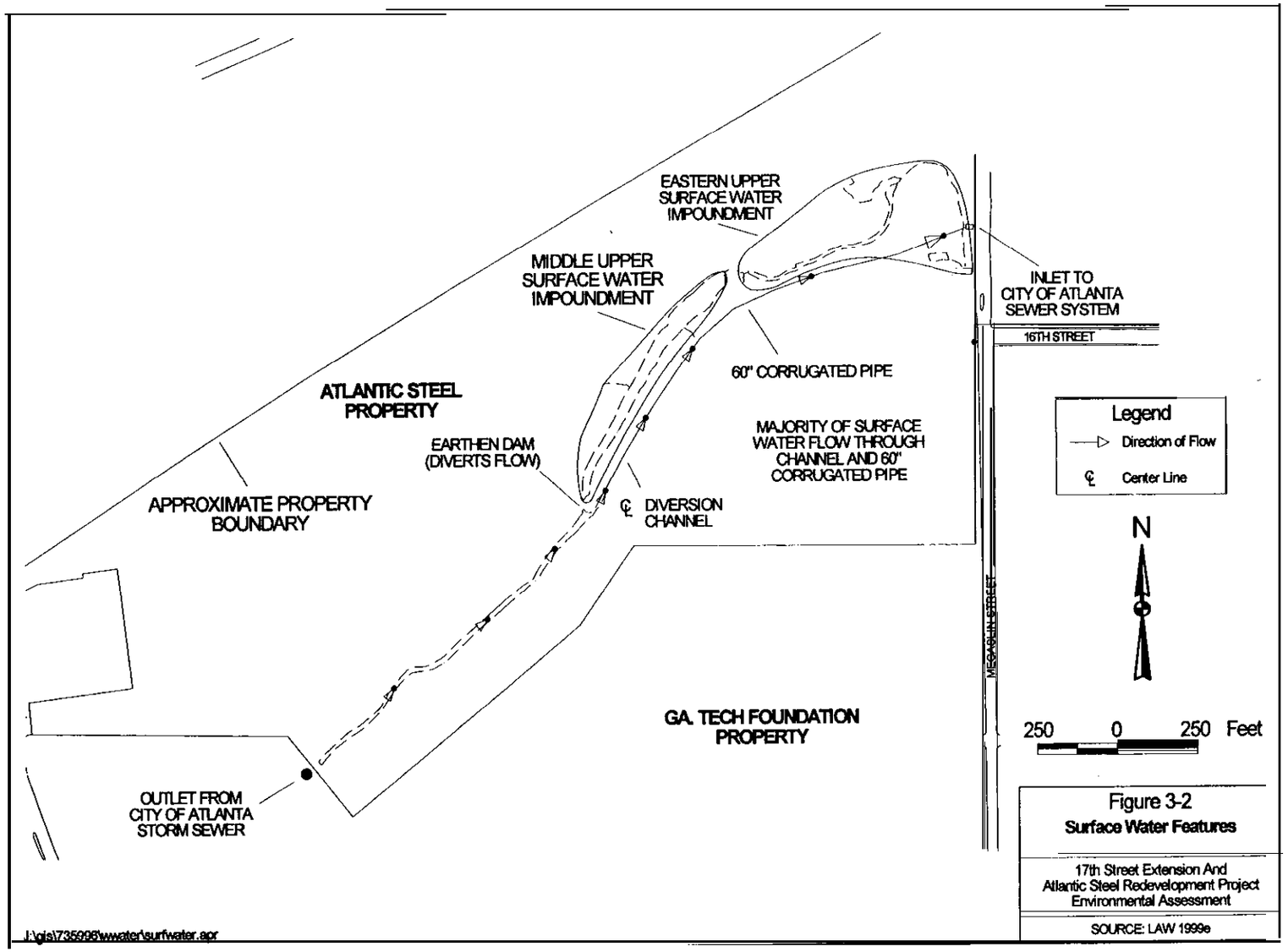
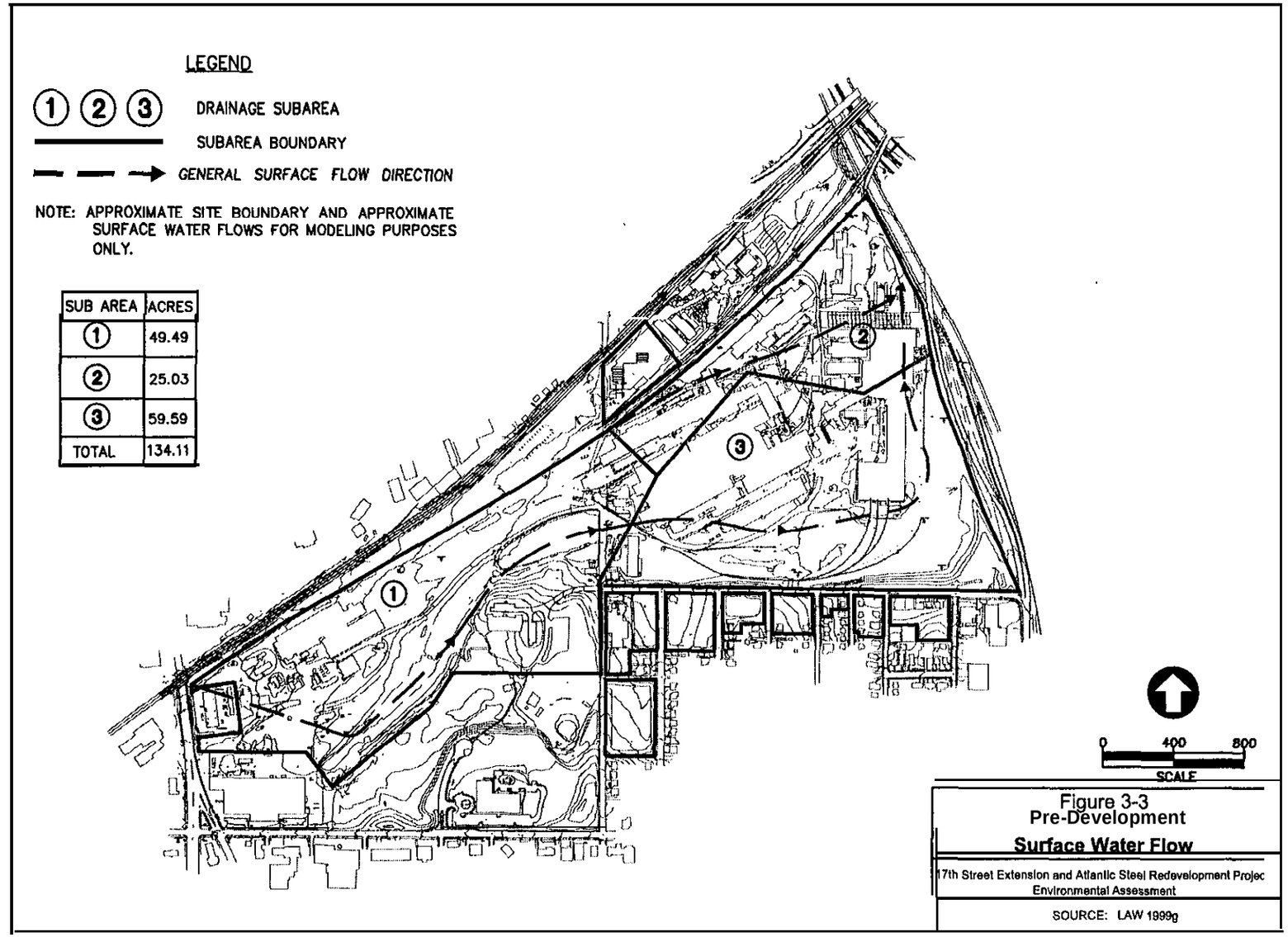


Figure 3-2
Surface Water Features

17th Street Extension And
Atlantic Steel Redevelopment Project
Environmental Assessment

SOURCE: LAW 1999e



3.2.4 Terrestrial Habitat

The study area is characterized as an industrial and urban environment. It includes typical urban features like railroads, roads, highways, parking lots, sidewalks, residential neighborhoods, commercial buildings, industrial buildings, and some low-quality natural areas. The majority of terrestrial habitat in the study area includes some areas on the Atlantic Steel site, old field/scrub areas along the south side of 16" Street adjacent to the Atlantic Steel property boundary, and residential yards that occur in the adjacent neighborhoods. The yards contain older trees and appear to be regularly maintained by landowners. The study area to the east of I-75185 is almost entirely developed with very little natural habitat. All the pre-existing natural areas appear to have been altered to some degree by development.

A survey of the Atlantic Steel site was completed in July 1999. Typical tree species present at the time of the field survey included hackberry (*Celtis occident&),* water oak (*Quercus nigra*), sweet *gum (Liquidumbar styraciflua*), and red cedar (*Juniperous siliciola*). Dominant tree species along the surface water drainage feature included water oak, eastern cottonwood (*Populus deltoides),* empress tree (*Paulownia tomentosu)* boxelder (*Acer negundo*), black willow (*Salix nigra*), silk tree (*Albizia julibrissin*), and *sycamore (Plutunus occident&s).* Old field/scrub area vegetation cover included goldenrod (*Solidago fistulosa*), Japanese honeysuckle *(Loniceru juponicu),* sweet gum and oak saplings, and various grass species. The site also includes an upland portion that was partially forested with shrubs and grass.

Terrestrial species that are typical for these areas include small mammals (i.e., squirrels, mice, and voles), various birds (i.e., song-birds, doves, and raptors), and many species of reptiles and amphibians (i.e., bull frog, garter snake, black racers, bull snake, and painted turtle). During the site survey, fauna species observed included a mallard duck (*Anas platyrhynchos*), a red-tailed hawk (*Buteo jamaicenis*), *American crows (Corvus brachyrhnchos*), an array of pigeons (*Columba spp*), and mourning doves *(Zenaida macroura*).

3.2.5 Aquatic Habitat

Aquatic habitat located within the study area is confined to the Atlantic Steel site and consists of the two impoundments. The status of these impoundments is changing due to clean-up activities. The upper middle impoundment (Figure 3-2) was approximately eight feet deep (Law 1999e) and dominated by cattail (*Typha angustifolia*), while the eastern upper impoundment was dominated by smartweed *(Polygonurn setaceum*). The eastern upper impoundment was approximately five feet deep (Law 1997). The edge communities of both impoundments were dominated by eastern cottonwood (*Populus deltoides),* boxelder (*Acer negundo),* black willow (*Salix nigra*), and sycamore (*Platanus occidentalis*). Off-site and on-site stormwater drainage was the primary source of water for the impoundments. A dense canopy of riparian forest vegetation covered the channel that runs northeast through the site.

The impoundments were historically used for storage of process water for the steel mills. Annual dredging and maintenance was conducted to keep the impoundments clear of debris and siltation. Chlorine was added to the water to control bacteria. Maintenance to both impoundments was discontinued more than 15 years ago and maintenance to the streambed/riparian area was ceased over 25 years ago (Harmon 1999a). The water in the stream and impoundments was murky and stagnant, and a very distinguishable septic smell was apparent in both areas.

3.2.6 Wetlands

According to the U.S. Army COE and the EPA, wetlands are defined as follows:

> Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas (Environmental Laboratory 1987).

Wetlands located within the study area are confined to the Atlantic Steel site and consist of the two impoundments. The impoundments located within the Atlantic Steel site total 3.75 acres and are classified as palustrine wetlands. A palustrine system typically includes all nontidal wetlands dominated by trees, shrubs, persistent, and emergent plants (Cowardin 1979). The wetlands displayed the characteristics required for a jurisdictional determination by standards set forth in the 1987 Corp of Engineers Wetlands Delineation Manual (i.e., prevalence of hydrophytic vegetation, hydric soils, and permanent or periodic inundation or saturation).

During rain events, the impoundments on site typically receive surrounding area stormwater drainage. The impoundments receive ample water to be flooded more than 14 consecutive days during the growing season. Standing water was present during the 1999 survey. The wetlands appear to support few species, which include the mallard duck, as well as other more common urban birds such as the crow and pigeon. The majority of flora are those that typically prosper in disturbed urban areas, including black willow, sycamore (Niering 1985), cattail, and smartweed (Tiner 1988). Over the years, the wetlands have received large amounts of stormwater and process water that was also reported to contain sewage (Richards 1998). The wetlands do not appear to have been able to process the contamination, and therefore, the overall quality of habitat is degraded. The wetlands function, to some extent, as a treatment for the inflow of stormwater. In summary, the wetlands are characterized by low species diversity, have been historically maintained, have been severely affected by wastewater discharges, and do not qualify as unique habitats.

3.2.7 Endangered and Threatened Species

Consultation with the USFWS and the Georgia Natural Heritage Program (GNHP) regarding the potential occurrence of threatened or endangered species within the study area was completed in September 1999 (Appendix D). A list of the potential species of concern based on information received from both agencies *is* provided in Table 3-l. According to GNHP records, no federal threatened or endangered species occur within a three-mile radius of the Atlantic Steel property. Based on correspondence with the two agencies and findings of the site survey, it was concluded that no federally threatened or endangered species occur in the study area. The only species of concern noted by the GNHP (Krakow 1999) *is* the state threatened Bay star-vine (*Schisandra glabra*), which is found in the understory of richly forested bottomland hardwoods and adjacent lower slopes. No suitable habitat for this species was identified in the study area. According to the USFWS, "there is little likelihood for the presence of natural wildlife or any federally- and state-listed species to occur within the project study area" (Tucker 1999).

Table 3-1. Listed Species Known to Potentially Occur in Fulton County, Georgia[1]

Common Name	Scientific Name	Listing	Suitable Habitat	Survey Findings
Bald Eagle	*Haliaeetus leucocephalus*	T, SE	Inland waterway and estuarine areas in Georgia.	No individuals or suitable habitat was observed during the site reconnaissance.
Red-cockaded woodpecker	*Picoides borealis*	E. SE	Nest in mature pine with low understory vegetation (<1,5m) forage in pine hardwoods stands >30 years of age, preferable >10" dbh.	No individuals or suitable habitat was observed during the site reconnaissance.
Gulf moccasinshell mussel	*Medionidus pencillatus*	E, SE	Medium streams to large rivers with slight to moderate current over sand and gravel substrate, may be associated with muddy sand substrate around tree roots.	No individuals or suitable habitat were observed during the site reconnaissance.
Bachman=s sparrow	*Aimophila aestivalis*	SR	Abandoned field with scattered shrubs, pines, or oaks.	No individuals or suitable habitat were observed during the site reconnaissance.
Appalachin Bewick=s wren	*Thyromanes bewickialtua*	SR	Dense undergrowth, overgrown fields, thickets, and brush in open or semi-open habitat, feed primarily on insects.	No individuals or suitable habitat were observed during the site reconnaissance.
Blue stripe shiner	*Cyprinella callitaenia*	ST	Brownwater streams.	No individuals or suitable habitat were observed during the site reconnaissance.
Peregrine Falcon	*Falco peregrine*	SE	Nest on high cliffs, high hills, or tall buildings.	No individuals or suitable habitat were observed during the site reconnaissance.
Bay star-vine	*Schisandra glabra*	ST	Twining on subcanopy and understory trees/shrubs in rich alluvial woods.	No individuals or suitable habitat were observed during the site reconnaissance.
Piedmont barren strawberry	*Waldsteinia lobata*	ST	Rocky acidic woods along streams with mountain laurel; rarely in drier upland oak-hickory-pine woods.	No individuals or suitable habitat were observed during the site reconnaissance.

ey to Listings:

E Endangered (Federal) SE State Endangered SR State Rare
T Threatened (Federal) ST State Threatened

[1] — Threatened and endangered species information was received from the United States Fish and Wildlife Service Athens, Georgia Field Office in letter correspondence dated September 22, 1999. Species information was also received from the Georgia Natural Heritage Program at the World Wide Web Site (http://www.dnr.state.ga.us/dnr/wild/gnhpds.htm) and in letter correspondence dated September 8, 1999.

3.3 MAN MADE ENVIRONMENT

3.3.1 Utilities

This section primarily describes existing utilities and historic usage on the Atlantic Steel site. Future impacts to these utilities, related to predictedusage, is presented in Section 4. Other utilities in the study area that may be affected during roadway construction would be identified during the roadway design phase (see Section 4.3.1).

3.3.1.1 Water Supply

The City of Atlanta provides potable water to the site and surrounding area. A 12-inch main entering the site from Mecaslin Street to the south provides the current potable water supply to the existing facilities. Water consumption in 1999 was estimated at approximately 6,900 cubic feet per month (Harmon 1999b). Water distribution lines in proximity to the site include two S-inch lines, two 16-inch lines, and two 36-inch lines (Law 1999f).

3.3.1.2 Wastewater Disposal

During operation, Atlantic Steel discharged sanitary wastewater to the City of Atlanta sewer system. One 6-foot sewer main and one 3-foot sewer main service the Atlantic Steel property. The 6-foot sewer main runs west to east, entering the property from 14th Street and connecting with the Orme Street Combined Sewer, which runs south to north along the eastern property boundary (Harmon 1999b; Law 1999d). The 6-foot main is maintained by the City of Atlanta. The 3-foot sewer main originating on site runs to the northeast, discharging to the Onne Street Combined Sewer (Figure 3-1). The 3-foot main is maintained by Atlantic Steel. Sewage from the Orme Street Combined Sewer is treated at the City of Atlanta's R.M. Clayton Water Reclamation Plant, except when rain events exceed conveyance capacity and flows are directed to the Tanyard Creek CSO Treatment Facility and.

3.3.1.3 Solid Waste Disposal

Solid waste disposal needs at the site were minimal during Atlantic Steel operations (Harmon 1999b). The City of Atlanta provides routine, municipal waste pick-up services for the study area.

3.3.1.4 Electrical Power

Electrical power in the study area is provided by Georgia Power. Electrical power consumption at the Atlantic Steel Facility in 1999 was estimated at 214,400 kilowatt hour (kWh) per month (Harmon 1999b). Electrical power lines that service the site enter from the Georgia Power electrical substation located adjacent to the western boundary of the property.

3.3.1.5 Natural Gas

Natural gas is provided for the Atlantic Steel facility by the Atlanta Gas Light Company. The site is currently served by a 16-inch natural gas main that enters **near the** Mecaslin Street gate to the site (Law 1999b). Natural gas consumption was estimated in 1999 at 690 cubic feet per month (Harmon 1999b). Existing natural gas mains in proximity to the site include three 16-inch mains and one 20-inch main (Law 1999b).

3.3.2 Hazardous Substances

A comprehensive search for potentially hazardous substances was conducted within the study area. Most of the areas identified were on the Atlantic Steel site; however, several potential off-site areas were identified (Section 3.3.2.5).

3.3.2.1 Atlantic Steel Property Conditions

The Atlantic Steel site has been used for steel-making and steel product fmishing operations for nearly 100 years. Steel-making operations were discontinued in 1991. Wire drawing operations, galvanizing and rod cleaning operations ceased in the mid-1990s, and all other operations ceased in December 1998. During its operation, the plant made finished steel from scrap that was melted. Selected product runs of wire rod were acid-pickled in sulfuric acid (rod cleaning) and lime-coated in preparation for wire drawing. Hazardous materials were used, and hazardous wastes were generated during all operating periods.

Since June 1987, Atlantic Steel Industries, Inc. has held a hazardous waste facility permit (HWFP) issued by EPD under authority of the Georgia Hazardous Waste Management Act. During its routine maintenance operations, Atlantic Steel conducted groundwater monitoring activities, solid waste management unit investigations, held financial assurance for post-closure care, and completed other actions associated with the requirements of the permit.

A Phase II Investigation Report was submitted as a Final Report to the Georgia EPD in October 1999 (Law 1999a). This report documents the past uses of hazardous materials at the Atlantic Steel site as well as the locations of potential hazardous waste contaminated areas.

3.3.2.2 Potentially 'Contaminated Areas

Twenty-nine Potentially Impacted Areas (PIAs) were identified where past operations on the Atlantic Steel site may have impacted soil or groundwater (Law 1999a). Subsurface sampling was conducted in each PIA; fifteen of the PIAs were identified for remediation because they contained chemical constituents at levels greater than acceptable limits.

Groundwater investigations, baseline assessments, profiling of materials, and a PIA assessment were performed at the site from August through November 1998. Laboratory results for groundwater samples analyzed indicated the presence of barium, lead (Pb), zinc, beryllium, and cadmium, trichloroethylene (TCE), l,l-dichloroethane, cis-1, 2-dichloroethylene, and vinyl chloride. The constituents which exceed EPA Region III Tap Water Values (TWVs) for drinking water were TCE, cis-1,2-dichloroethylene, vinyl chloride, benzo(a)anthracene, cadmium, and zinc.

Soil samples were taken in the first residual soil layer encountered beneath surface till soil. Results of the "first soil" baseline sample analyses indicated the presence of metals in all samples. Polycyclic aromatic hydrocarbons (PAHs) were detected in two samples. PAHs were not detected in the other eight samples analyzed. VOCs, pesticides, polychlorinated biphenyls (PCBs), cyanide, herbicides, and semi-volatile organic compounds (SVOCs) (other than PAHs) were not detected above their respective detection limits. The only constituents which exceeded criteria used for residential land uses, or Residential Risk Based Criteria (RBCs), were vanadium, arsenic, and benzo(b)fluoranthene.

3.3.2.3 Risk Assessment Findings

A risk assessment was conducted to evaluate the potential risks to human health and the environment in accordance with direction provided by EPD and other federal guidance. The risk assessment (Law 1999a) addressed pathways where exposure could occur. Since the site development would provide for the removal of or cover over contaminated areas, any exposure pathways would be eliminated. Potential future human receptors would not be exposed to existing site soils or groundwater because the new construction would include permanent exposure barriers in the form of structures, pavement, and clean soil cover with institutional controls for future use and maintenance activities at the redeveloped property. In addition, following redevelopment of the property, wildlife and vegetation would not be exposed to contaminated soils since they would be covered with new structures, pavement and clean soil. Therefore, the ecological exposure pathways were eliminated (Law 1999a).

A risk assessment was performed to determine the risk to construction workers posed by contaminants identified at the proposed facility. It was assumed that the complete exposure pathways for construction workers are listed as follows:

1. Incidental ingestion of soil;
2. Inhalation of fugitive dust;
3. Dermal contact with soil;
4. Incidental ingestion of groundwaterand;
5. Dermal contact with groundwater.

Several SVOCs, primarily PAHs, were detected in soil samples from various PIAs within the Atlantic Steel site. Organic constituents detected included trichloroethene and PCBs (PCB-1248, PCB-1254, and PCB-1260) in soil samples from PIAs where these constituents were used. In addition, elevated levels of arsenic, cadmium, and Pb were also detected at the Atlantic Steel site (Law 1999a).

The maximum detected concentrations of arsenic, cadmium, Pb, mercury, zinc, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, PCB-1248, PCB-1254, PCB-1260, and trichloroethene exceeded the risk-based residential screening criteria, and were therefore selected as constituents of potential concern (COPCs).

Analytical results for the eight groundwater monitoring wells installed during the Phase II Investigation were used to select COPCs. Results of analyses from these eight wells indicated that five metals (barium, beryllium, cadmium, Pb, and zinc), four volatiles (1,1-dichloroethene, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride), and seven PAHs were detected in groundwater on the site. The maximum detected concentrations of cadmium, Pb, zinc, benzo(a)anthracene, cis-1,2-dichloroethene, trichloroethene, and vinyl chloride in ground-water exceed the risk-based screening criteria for tap water and were selected as COPCs (Law 1999a).

The risk assessment was first conducted for future construction workers exposed to all potential impacted areas on the site, and the Hazard Index (noncarcinogenic) and Lifetime Cancer Risks were then calculated. The cumulative Hazard Index was calculated to be 0.1. A Hazard Index of less than

1 .O indicates adverse health effects are not expected to occur as a result of exposure to contaminant levels at the site. The Lifetime Cancer Risk was calculated to be 3x10" (three-in-one million). The EPD "trigger" level for further assessment and potential action due to an unacceptable increased Lifetime Cancer risk, is $1x10^{-6}$ (one-in-one million). The EPA Region 4 Lifetime Cancer Risk "trigger" level is $1x10^{-4}$ (one-m-ten thousand). The calculated Lifetime Cancer Risk of $3x10^{-6}$, is significantly less than the EPA "trigger" level of $1x10^{-4}$, but greater than the EPD "trigger" level of $1x10^{-6}$.

Potential "hot spots" (areas containing high levels of contamination) were then identified for excavation and off-site disposal. The Hazard Index and the Lifetime Cancer Risk were recalculated based on the remaining area. The Hazard Index was calculated to be 0.07 and the Lifetime Cancer Risk was $4x10^{-7}$. Both of these levels are below the EPD and the EPA "trigger levels" for further assessment and potential action due to an unacceptable increased risk.

3.3.2.4 Asbestos Containing Materials

Several buildings that were demolished on the Atlantic Steel site contained asbestos-containing fireproofing materials (Harmon 1999a). Asbestos is a known carcinogenic material whose primary exposure route is through inhalation. When disturbed, asbestos-containing materials release fibers into the air (i.e., become "friable"), and thereby create a risk to construction workers. In order to protect individual health and the environment, demolition of these structures occurred in accordance with state and federal standards. The materials were disposed of in a manner acceptable under the state and federal requirements.

3.3.2.5 Off-Site Concerns

A search of environmental databases was conducted for environmental regulatory information. This regulatory records search was based on information published by state and federal regulatory agencies and is used to determine if the site or nearby properties are listed as having a past or present record of actual or potential environmental impacts. It was determined that there are six underground storage tanks (UST) sites within approximately 0.25 miles of the Atlantic Steel site and seven leaking underground storage tank (LUST) sites within 0.5 miles of the site. There are also 3 sites within 0.25 miles of Atlantic Steel that generate small quantities of hazardous waste.

The National Smelting and Refining Company formerly owned and operated a facility located across the railroad tracks, north **of** the Atlantic Steel site. In the early 1990's, EPA and several companies conducted a removal action at the National Smelting and Refining Company property under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The site is continuing to undergo investigationunder the direction of EPA.

Three other sites were identified that contain either USTs or previously identified LUSTs. These three sites have the potential to impact or be impacted by the proposed roadway improvements. Westinghouse Electric Corporation owns property on the comer of Bishop Street and Northside Drive, and a previous LUST was identified on the property. The extension of 17^{th} Street to Northside Drive would occur in the vicinity of this property. In addition two gasoline stations, with USTs and previously identified LUSTs on-site, are located on the north side of 14" Street between Williams Street and Spring Street. Widening of 14^{th} Street would occur in this area.

3.3.3 Transportation Features

3.3.3.1 Existing Street System

The City of Atlanta Department of Public Works (DPW) and GDOT share the responsibility for maintaining the existing street system in the study area. Generally, DPW maintains the local streets, and GDOT maintains the state routes (SR). State routes in the study area include: Interstate 75 (SR 401), Interstate 85 (SR 403), Northside Drive (US 41/SR 3), 14" Street (US 19/SR 9), Spring Street (US 19/SR 9), and West Peachtree Street (US 19/SR 9). All traffic signals, landscaping, and street lighting on both local streets and state routes are maintained by DPW.

The Atlantic Steel site and the Midtown area are accessed via exits at 10" and 14" Streets from I-75/85. Due to the existing ramp configurationsat 10" and 14" Streets, this area can only be accessed in certain directions. Traffic from the north on I-75 and I-85 can only exit at 14th Street. Traffic from the south on I-75/85 can only exit at 10th Street.

Existing traffic volumes on roadways in the study area were collected in December 1998 and May 2000 at all signalized intersections and at major unsignalized intersections in the study area. Freeway and ramp traffic volumes were obtained from GDOT. The average annual daily traffic volumes (AADT) for the study area are presented in Figure 3-4. AADT represents the average traffic volume on a roadway segment on any given day of the year (MAAI 2000a). Additional information on existing A.M. and P.M. peak hour traffic volumes on specific roadways is not presented in this EA, but is contained in the latest version of the GDOT Concept Report and is available from GDOT upon request.

Due to the limited access into Midtown Atlanta, a tremendous amount of traffic utilizes the two above-mentioned interchanges, especially at 14" Street. Due to traffic congestion at these interchanges, the east-west movement of traffic is also severely limited. Roadways such as those included in the study area are rated for operational effectiveness using a Level of Service (LOS) scale. LOS is a standardized means of classifying traffic conditions associated with various traffic volume levels. LOS ranges from "A" through "F."

Table 3-2 presents general definitions for each LOS. Figures 3-5 and 3-6 show the LOS and existing areas of congestion on the interstates, ramps, and at key intersections and surface streets, in the A.M. and P.M. peak hours, respectively. Non-colored surface streets represent a LOS of C or better while green, yellow, and red colored streets and intersections represent LOS of D, E, and F respectively.

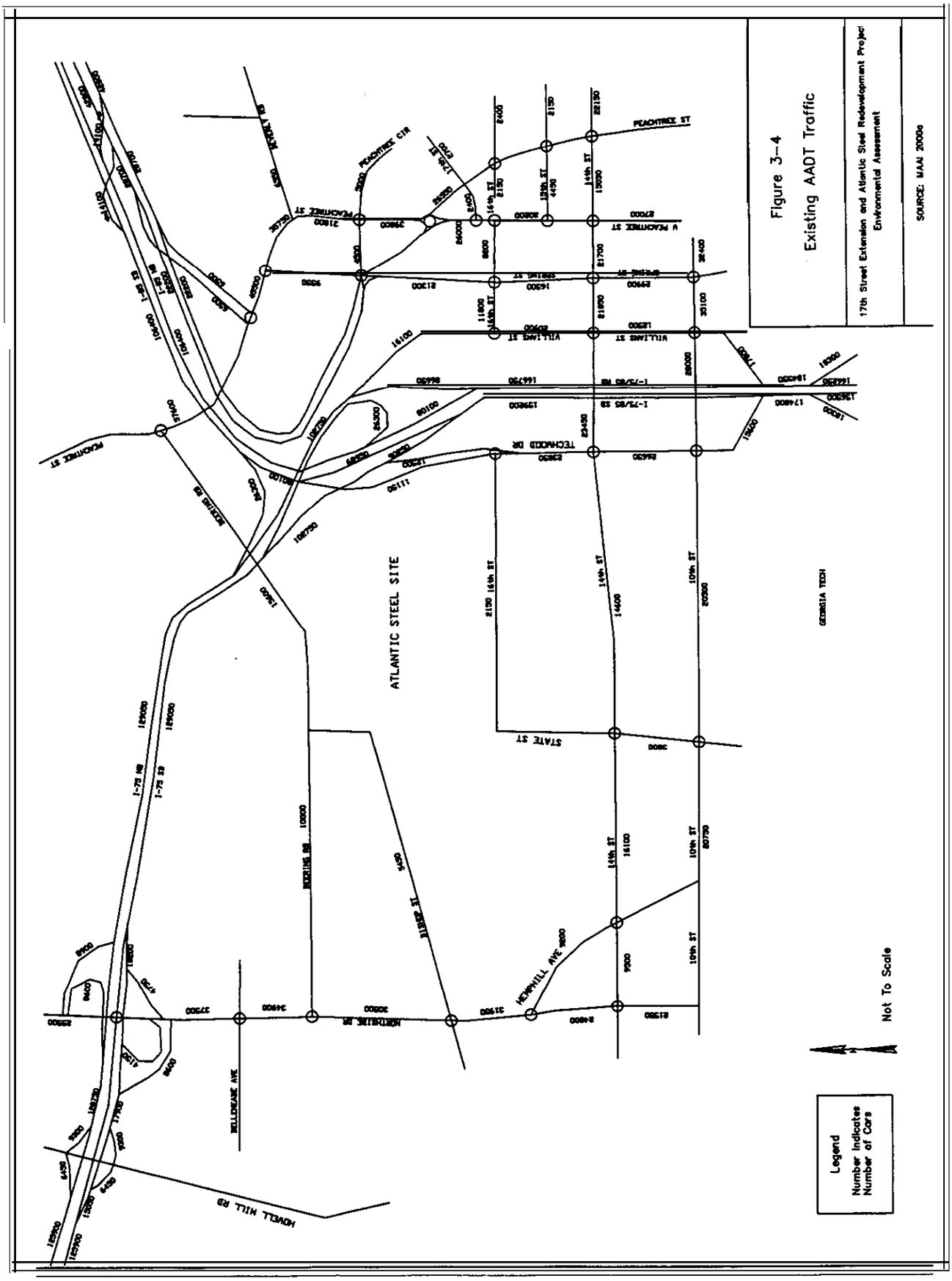


Table 3-2. Level of Service Definitions

Level of Service	Definition
A	Represents free flow traffic.
B	In the range of stable flow, but the presence of other users in the traffic flow begins to be noticeable.
C	In the range of stable flow, but marks the beginning of traffic flow in which the operation of individual users becomes significantly affected by interactions with others in traffic.
D	Represents high-density, but stable, traffic flow. Driver or pedestrian experiences a general poor level of comfort.
E	Represents operating conditions nearing capacity level. All speeds are reduced to a low, but uniform value. Traffic operating at this level is unstable and small increases in traffic flow can cause system breakdown.
F	Represents transportation system breakdown. Stop and go situations occur for long stretches of the roadway.

Source: Highway Capacity Manual, Special Report 209, Transportation Research Board 1997

3.3.3.2 Modal Interrelationships

Transit. The majority of the transit service for the Atlanta area is provided by MARTA. MARTA currently operates a 46-mile rapid rail system as well as a fleet of 700 buses. The bus transportation network is organized to feed the surrounding areas to the rapid rail system. MARTA also operates 36 rapid rail stations in its network. The closest of these, the Arts Center Station, is located in proximity to the Atlantic Steel site, on the east side of I-75/85. Existing MARTA buses provide service in the study area and interface with the Arts Center Station. Bus service from the Atlantic Steel site will have access to the MARTA Arts Center Station. Cobb County operates Cobb Community Transit (CCT) which provides bus service that connects with the MARTA system at the Arts Center Station. Currently, CCT buses exit at 14" Street for access to the Arts Center Station.

Bicycle. Atlanta estimates that currently less than one percent of the population uses bikes to get to and from work, shopping, or school (City of Atlanta 2000). Atlanta hopes that by providing safe and convenient bike facilities, it can increase ridership and decrease automobile dependency. Currently, the City of Atlanta has three programs to initiate this process: the Greenway Trail Corridor Plan, the Atlanta Commuter On-Street Bike Plan, and the Bicycling Parking Plan. There is one major bike trail that is under design/construction that is in the study area, the Arts District Trail. This trail is part of the aforementioned Greenway Trail Corridor Plan. When completed, this trail will stretch from downtown Atlanta, north to Atlanta Memorial Park (ARC 1995).

Pedestrian. In most areas of downtown Atlanta, it is often unsafe or uncomfortable for people to walk across the street or along a street. This is due to lack of adequate sidewalks, crosswalks, and pedestrian signals. Pedestrian access in the Atlantic Steel immediate vicinity is especially a problem. However, in 1997 the City of Atlanta constructed sidewalks on both sides of 14th Street, south of the Atlantic Steel site. This was done to link the Georgia Tech campus with the Midtown area. As part of

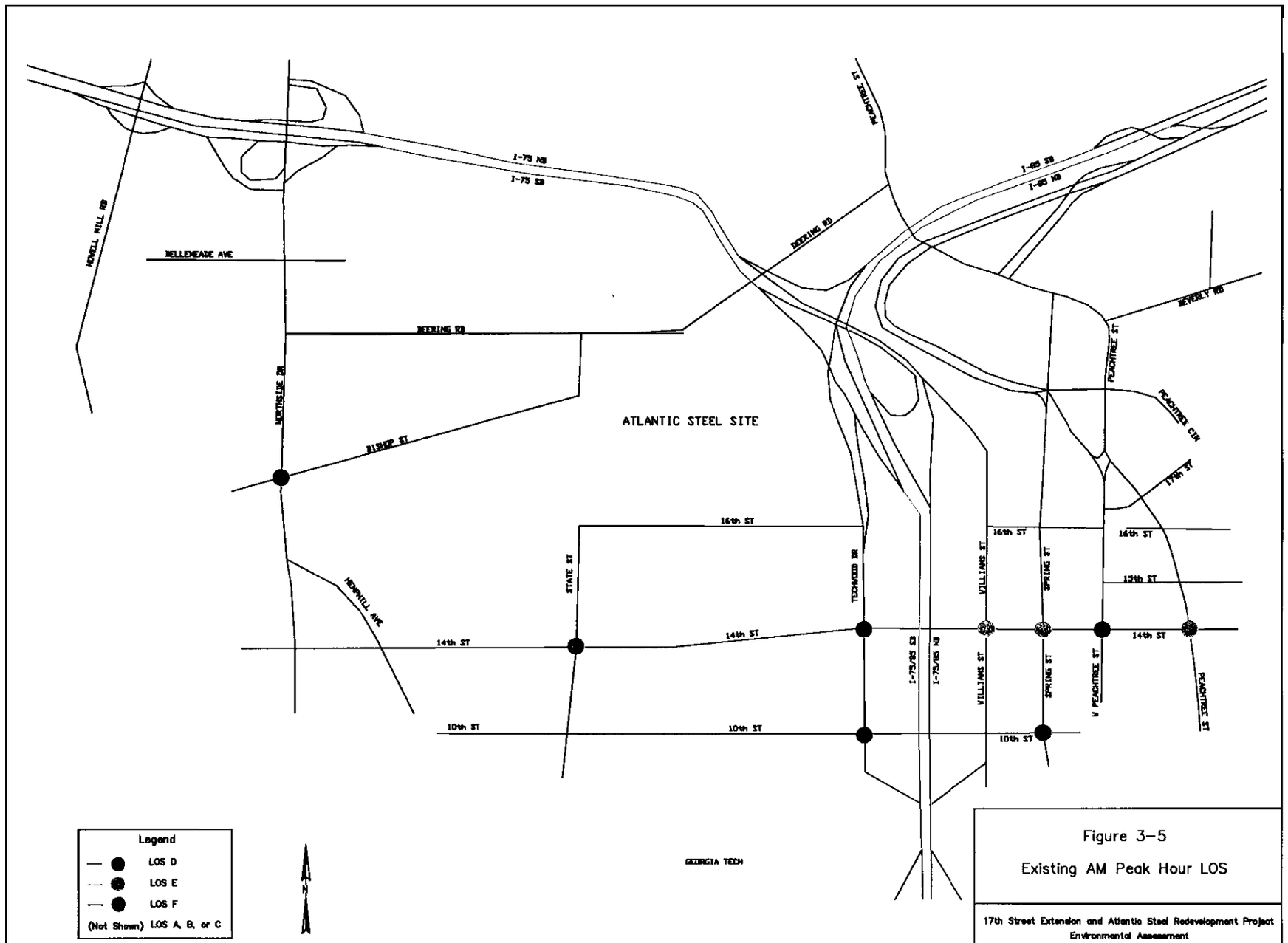


Figure 3–5

Existing AM Peak Hour LOS

17th Street Extension and Atlantic Steel Redevelopment Project
Environmental Assessment

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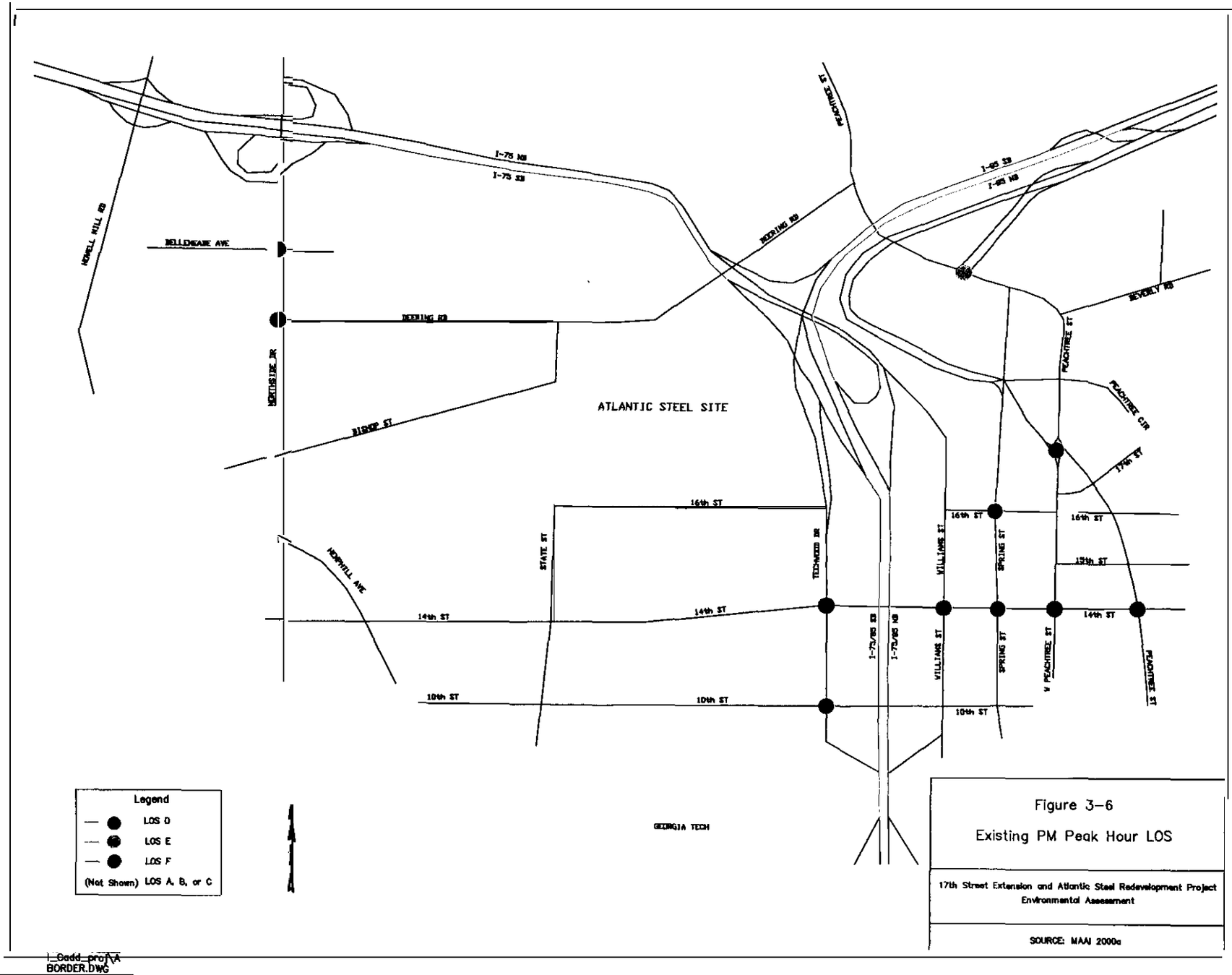

Figure 3–6

Existing PM Peak Hour LOS

17th Street Extension and Atlantic Steel Redevelopment Project
Environmental Assessment

SOURCE: MAAI 2000a

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a process to improve pedestrian awareness, the City of Atlanta started a sidewalk construction program in 1996 to increase safety and connectivity to major destination points. Currently Atlanta has several plans to increase pedestrian awareness: Operation Crosswalk, the Pedestrian Master Plan, and the Atlanta-Fulton Pedestrian Safety Task Force.

3.3.4 Air Quality

This section describes the regulatory context and current air quality status for the study area. The EPA has established primary and secondary National Ambient Air Quality Standards (NAAQS) for criteria pollutants under the provisions of the CAA. Primary NAAQS are established at levels necessary, with an adequate margin of safety, to protect the public health. Similarly, secondary NAAQS specify the levels of air pollution determined appropriate to protect the public welfare from any known or anticipated adverse effects associated with air contaminants. Federal ambient air quality standards for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respimble particulate matter smaller than 10 microns (PM_{10}), and Pb are summarized in Table 3-3. Areas not in compliance with the NAAQS are termed "non-attaimnent" areas. Attainment of the NAAQS is determined through continuous ambient monitoring. Thirteen counties surrounding and including the City of Atlanta and Fulton County are currently designated as "non-attainment" area due to ozone violations of the NAAQS.

Table 3-3. National Ambient Air Quality Standards

Pollutant	Averaging Time	Primary Standard
Ozone	1 Hour	0.12 ppm
Carbon **Monoxide (CO)**	1 Hour	35 ppm
	8 Hour	9 ppm
Nitrogen Dioxide (NO_2)	Annual Average	0.053 ppm
Sulfur Dioxide (SO_2)	3 Hour	0.5 ppm (a)
	24 Hour	0.14 ppm
	Annual Average	0.03 ppm
PM_{10}	24 Hour	150 ug/m3
	Annual Geometric Mean	50 ug/m3
Lead (Pb)	Calendar Quarter	1.5 ug/m3

Secondary Standard

Source: US EPA National Primary and Secondary Ambient Air Quality Standards (40 CFR 50)

Ozone is of particular concern in the Atlanta Metropolitan area. Ozone is a highly reactive compound formed by a series of complex photochemical reactions involving VOCs and NOx. These photochemical reactions require the presence of intense sunlight. The NAAQS for ozone is based on the expected number of days per year with a one hour concentration of 0.12 ppm or greater. The severity or magnitude of the exceedance is determined by the amount the measurement is above the standard. Five (5) classifications of non-attainment for the one-hour ozone standard are specified in the 1990 CAA Amendments (CAAA) as marginal, moderate, serious, severe and extreme. With respect to ozone, the area has not met the NAAQS for this criteria pollutant since monitoring began in

1980. In 1992, a 13-county region encompassing the Atlanta metropolitan area was designated as a "serious" non-attainment area under Section 18 1 of the CAA.

Current air quality in the vicinity of the study area is monitored by EPD's Air Protection Branch through a network of fourteen monitoring sites, including seven sites monitoring for ozone. The maximum monitored ambient concentrations for all six criteria pollutants and ozone precursors for the City of Atlanta between 1995 and 1999 are summarized in Table 3-4. As reported in this table, the Atlanta area continues to achieve compliance with the NAAQS for all pollutants with the exception of ozone.

3.3.5 Noise

Noise is often defined as unwanted sound. Sound is easily measured with instruments, but the human variability is subjective and physical responses to sound complicates the understanding of its impact on people. People judge the relative magnitude of sound by subjective terms such as "loudness" or "noisiness."

Sound-pressure level (L_p) is measured and quantified in terms of a logarithmic scale in decibels (dB). Research on human hearing sensitivity has shown that a 3 dB increase in the sound is barely noticeable and a 10 dB increase would be perceived as twice as loud. The human hearing system; however, is not equally sensitive to sound at all frequencies. Therefore, a frequency-dependent adjustment called "A-weighting" has been devised so that sound may be measured in a manner similar to the way the human hearing system responds. The A-weighted sound level is often abbreviated "dBA" or "dB(A)."

The hourly contributions of highway noise are examined using primarily L_{eq} (average hourly equivalent sound level) and statistical values such as L_{10} (the sound level exceeded 10 percent of a specific time period). While both are accepted by FHWA and GDOT, the L_{10} is used to analyze this traffic noise study.

The proposed mixed-use development and 17" Street Bridge/Interchange is within a major urban area that is bisected by the I-75/85 connector. Existing noise measurements were taken at representative locations that were expected to receive the largest impact, where there was insufficient traffic data, and in areas where there exists a unique physical situation. The L_{10} noise levels were measured using the Bruel & Kjaer Type 2231 Modular Precision Sound Level Meter system. Appendix E presents noise measurement locations and monitoring results.

Existing traffic noise levels along the Interstate and the associated roadways were calculated using the FHWA Highway Traffic Noise Prediction Model (FHWA 1982). This model is based on the highway traffic noise prediction method specified in FHWA-RD-77-108. Calculated future noise levels, L_{10}, across the entire study area ranged **from 58** to 79 dBA (MAAI 2000b). The existing calculatednoise levels are shown in Appendix E.

Table 3-4. Maximum Monitored Ambient Concentrations in Atlanta for 19951999 (a)

Pollutant	Averaging Time	Concentration (b)	Year of Occurrence	Exceeds Standard?
c o	1-hour	5.1 ppm	1999	No
		5.1 ppm	1998	No
		6.4 ppm	1997	No
		7.8 ppm	1996	No
		28.9 ppm	1995	No
	8-hour	3.2 ppm	1999	No
		3.1 ppm	1998	No
		4.3 ppm	1997	No
		3.9 ppm	1996	No
		7.1 ppm	1995	No
NO_2	1-year	.022 ppm	1999	No
		.024 ppm	1998	No
		.025 ppm	1997	No
		.027 ppm	1996	No
		.019 ppm	1995	No
SO_2	3-hour	.061 ppm	1999	No
		.118 ppm	1998	No
		.095 ppm	1997	No
		.062 ppm	1996	No
		.083 ppm	1995	No
	24-hour	.024 ppm	1999	No
		.033 ppm	1998	No
		.028 ppm	1997	No
		.027 ppm	1996	No
		.024 ppm	1995	No
	1-year	.004 ppm	1999	No
		.004 ppm	1998	No
		.004 ppm	1997	No
		.004 ppm	1996	No
		.004 ppm	1995	No

Table 3-4 (Concluded). Maximum Monitored Ambient Concentrations in Atlanta for 1995-1999 (a)

Pollutant	Averaging Time	Concentration (b)	Year of Occurrence	Exceeds Standard?
O_3	1-hour	.157 ppm	1999	Yes
		.158 ppm	1998	Yes
		.135 ppm	1997	Yes
		.142 ppm	1996	Yes
		.166 ppm	1995	Yes
PM_{10}	24-hour	55 ug/m^3	1999	No
		62 ug/m^3	1998	No
		72 ug/m^3	1997	No
		61 ug/m^3	1996	No
		62 ug/m^3	1995	No
	1 -year	27.4 ug/m^3	1999	No
		27.6 ug/m^3	1998	No
		30.2 ug/m^3	1997	No
		27.4 ug/m^3	1996	No
		30.1 ug/m^3	1995	No

a. Source: EPA 1999
b. First highest maximum concentration at monitoring sites in Atlanta, Georgia.
ug/m^3 - micrograms per cubic meter.

3.3.6 Archaeological/Historic Resources

3.3.6.1 Regulatory Environment and Terminology

NEPA, as amended (42USC 4371 et seq), the National Historic Preservation Act (NHPA) of 1966, as amended (16 USC 470), Section 4(f) of the US DOT Act, as amended (49 USC 303(c)), and other applicable federal, state, and local legislation govern the identification and treatment of historic properties that are affected by a proposed federal action. Sections 106 and 110 of the NHPA require the evaluation of effects of federal actions on historic properties. Implementing guidelines for the NHPA also encourage coordinated compliance among Section 110, Section 106, and NEPA. Coordination with the Georgia SHPO is being conducted as part of this EA process, as well as coordination with other agencies and interested parties, including the Advisory Council on Historic Preservation, Atlanta Urban Design Commission, Atlanta History Center, and Georgia Trust for Historic Preservation. The existing EA process is being used to fulfill the coordination requirements of Section 106, as encouraged by 36 CFR 800.2(a)(4).

An initial step in the Section 106 identification process is to determine the area within which historic properties will be affected or are likely to be affected. The "Area of Potential Effects" (APE) is defined in 36 CFR 800.16(d) as "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties, if any such properties exist." In accordance with 36 CFR 800.4(a), the EPA consulted with the Georgia SHPO to determine the boundaries of the APE. Boundary delineation also relied on physical examination of the project site and its vicinity, public comments received at public meetings during the NEPA process, and known concerns of parties interested in historic properties, such as the Atlanta Urban Design Commission, the Ansley Park community, and the Home Park neighborhood. In addition to considering potential physical effects (e.g., ground disturbance at the project site and related road construction), the APE includes a physical "buffer" area that considers visual impacts to the surrounding area. The APE is bounded roughly by 14" Street on the south, Northside Drive on the west, Trabert Avenue and the I-75/85/Brookwood Interchange on the north, and Peachtree Circle/Peachtree Street on the east (see Figure l-l). For the purposes of this project, the study area and APE are the same.

Two major transportation corridors pass through the APE: the Norfolk Southern Railroad and I-75/85. The proposed redevelopment site occupied by the former steel mill is the primary feature in the western portion of the APE. The APE contains a variety of other building types, including light industrial and railroad-related properties adjacent to Northside Drive to the west, and Norfolk Southern Railroad to the north, a portion of the early-20th century residential neighborhood of Home Park south of the Atlantic Steel site, and a combination of commercial and residential development east of I-75185, including a portion of the Ansley Park neighborhood east of Peachtree Street.

"Archaeological and historic resources," as used in this EA, are synonymous with "historic properties," defined broadly by 36 CFR 800 as "any prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in, the National Register of Historic Places." Historic properties are "significant" in American history or prehistory, and include archaeological and man-made resources. Properties that qualify for inclusion in the National Register must meet at least one of the following four criteria:

Criterion A: Association with events that have made a significant contribution to the broad patterns of our history;

Criterion B: Association with the lives of persons of significance in our past;

Criterion C: Embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose component may lack individual distinction; or,

Criterion D: Have yielded, or may be likely to yield, information important in prehistory or history (36 CFR 60.4).

Properties that qualify for the National Register also must possess integrity, defined by the following seven aspects: location, design, setting, materials, workmanship, feeling, and association. The term "eligible for inclusion in the National Register" includes both properties formally designated as eligible and all other properties determined to meet National Register criteria. In keeping with NHPA regulations (36 CFR 800), "historic property" refers only to resources which are 50 years of age or greater and are listed in, or eligible for listing in, the National Register. In order for buildings and structures less than 50 years of age to be eligible for the National Register, these resources must meet "special criteria considerations" as outlined in 36 CFR 60.4. National Historic Landmarks are defined as historic properties of outstanding national significance that have been specially designated by the Secretary of the Interior, in accordance with 36 CFR 65. For purposes of this discussion, the term "archaeological resources" refers to cemeteries and prehistoric or historical subsurface sites. "Historic resources" refers to buildings, structures, or objects, including historic districts. More detailed assessments of the identification and evaluation effort for archaeological and historic resources are contained in separate reports (Parsons ES 2000a; 2000b) conducted for this project.

3.3.6.2 Archaeological Resources

The archaeologicalassessment conducted as a result of consultation with the SHPO consisted of a literature and records search, and a windshield-level field reconnaissance. The literature and records search covered the entire APE for the project, while the field reconnaissance focused on areas that would experience direct physical impacts.

With the exception of the railroad tracks constructed from 1869-1873, the majority of the project area was undeveloped prior to erection of the Atlantic Steel Mill in the early twentieth century. As the steel mill expanded during the twentieth century, the original landform changed considerably. Most notably, the intermittent drainage which ran through the property was filled in on its eastern end, and buildings were constructed over top of it. Part of the drainage was turned into a pond. Portions of the site also were filled, to create a level building surface for the steel mill. Finally, a prominent hill originally situated at the eastern end of the Atlantic Steel site was reduced by approximately 25 feet so that additional buildings could be constructed there. The soil that was removed from the hill was used to fill in areas to the north and south of the hill (Harmon 1999c).

The remainder of the study area saw building construction beginning in the early-twentieth century and continuing through the late-twentieth century. A more complete description of the historic land use in these areas is presented in the Archaeological Assessment Report (Parsons ES 2000a).

No archaeological sites previously had been recorded in the APE, and none were observed during the field survey. Much of the APE area has been disturbed from development and associated grading. The only portion of the project area that appears to have the potential to yield archaeological resources is the intersection of Hemphill Avenue and Northside Drive north of 14th Street. The roadbed of Hemphill Avenue may contain buried trolley tracks, and the area beneath or alongside Hemphill Avenue could contain original water pipes associated with the National Register-listed Atlanta Waterworks Hemphill Avenue Station. Both of these resources would be potentially eligible for listing in the National Register.

3.3.6.3 Historic Resources

This section summarizes the findings of the Historic Architectural Properties Identification and Evaluation Report (Parsons ES 2000b). The historic resources evaluation was conducted as a result of consultationwith the SHPO and consisted of several tasks:

- Historic literature/map research at such repositories as the: Georgia Department of Natural Resources, Historic Preservation Division; Atlanta History Center archives; Atlanta Urban Design Commission; Fulton County Central Library; Georgia Archives; and the Georgia Trust for Historic Preservation at Rhodes Hall;
- Review of key materials such as:
  - National Register/National Historic Landmark nomination forms;
  - Files and inventories for locally significant properties housed at the Atlanta Urban Design Commission; and
    Previous investigations (e.g., surveys and compliance-related reports);
- Consultation withlocal agencies and individuals, including the Georgia SHPO, Atlanta Urban Design Commission, Atlanta History Center, Neil Harmon (Principal Environmental Engineer and long-time employee of Atlantic Steel Industries); Ruth Dusseault (an independent photographer and artist who conducted a photographic documentary of the mill site); and Dominique Bohnamour-Lloyd (a Professor at Georgia Institute of Technology who directed a class project that involved documentation of the Atlantic Steel Mill); and
- Architectural survey of the APE, with particular focus on those areas that would experience direct physical impacts due to redevelopment of the Atlantic Steel site and the related off-site roadway improvements.

There are eleven known historic architectural properties within the APE: four properties are listed in the National Register (Rhodes Hall, Garrison Apartments, the Ansley Park Historic District, and the Atlanta Waterworks Hemphill Avenue Station), and seven properties were previously identified as being eligible for the National Register by the Atlanta Urban Design Commission (Ewe11 Jett House, The Granada, The Belvedere, Winwood Apartments, First Presbyterian Church, Mitchell King House, and the Castle). Four additional properties were identified as eligible as a result of the identification/evaluation effort for this project (Atlantic Steel Industries, Norfolk Southern Railroad, Siemens, and Kool Komer Grocery). These properties are presented in Table 3-5, shown in Figure 3-7, and described briefly in Appendix F.

Table 3-5. Historic Properties in the APE

Resource #	Resource Name/Address	Date	Current Use	NR Eligibility
1	Atlantic Steel Industries	1901 and after	Demolished	Yes (Identified Eligible)
2	Norfolk Southern Railroad	1869-1873	Railroad	Yes (Identified Eligible)
3	Siemens 1299 Northside Drive	1941	Commercial	Yes (Identified Eligible)
4	Kool Komer Grocery 349 14" Street	Circa 1935	Commercial	Yes (Identified Eligible)
5	Ewe11 Jett House 1385 Spring Street NE	1916	Commercial	Yes (Previously Identified)
6	The Granada 1302 W Peachtree Street	1924	Granada Best Western Suite Hotel	Yes (Previously Identified)
7	The Belvedere 1384 W Peachtree Street	1922	Apartments	Yes (Previously Identified)
8	Winwood Apartments 1460 W Peachtree Street	1931	Apartments	Yes (Previously Identified)
9	First Presbyterian Church 1328 Peachtree Street NW	1919	Church	Yes (Previously Identified)
10	Mitchell King House 1382 Peachtree Street NW	1912	Commercial (Nix, Mann & Associates)	Yes (Previously Identified)
11	The Castle(Fort Peace) 87 15th Street, NW	1910	Commercial	Yes (Previously Identified)
12	Rhodes Hall 1 S 16 Peachtree Street, NW	1904	Commercial	Listed 1974
13	Garrison Apartments 1325-1327 Peachtree Street NE	1924	Reid House (Apartments))	Listed 1979
14	Ansley Park Historic District (including Firs Church of Christ Scientist)	Early 20th c	Residential Neighborhood	Listed 1979
15	Atlanta Waterworks Hemphill Avenue Station	1892-1893	Water Treatment Plant	Listed 1978

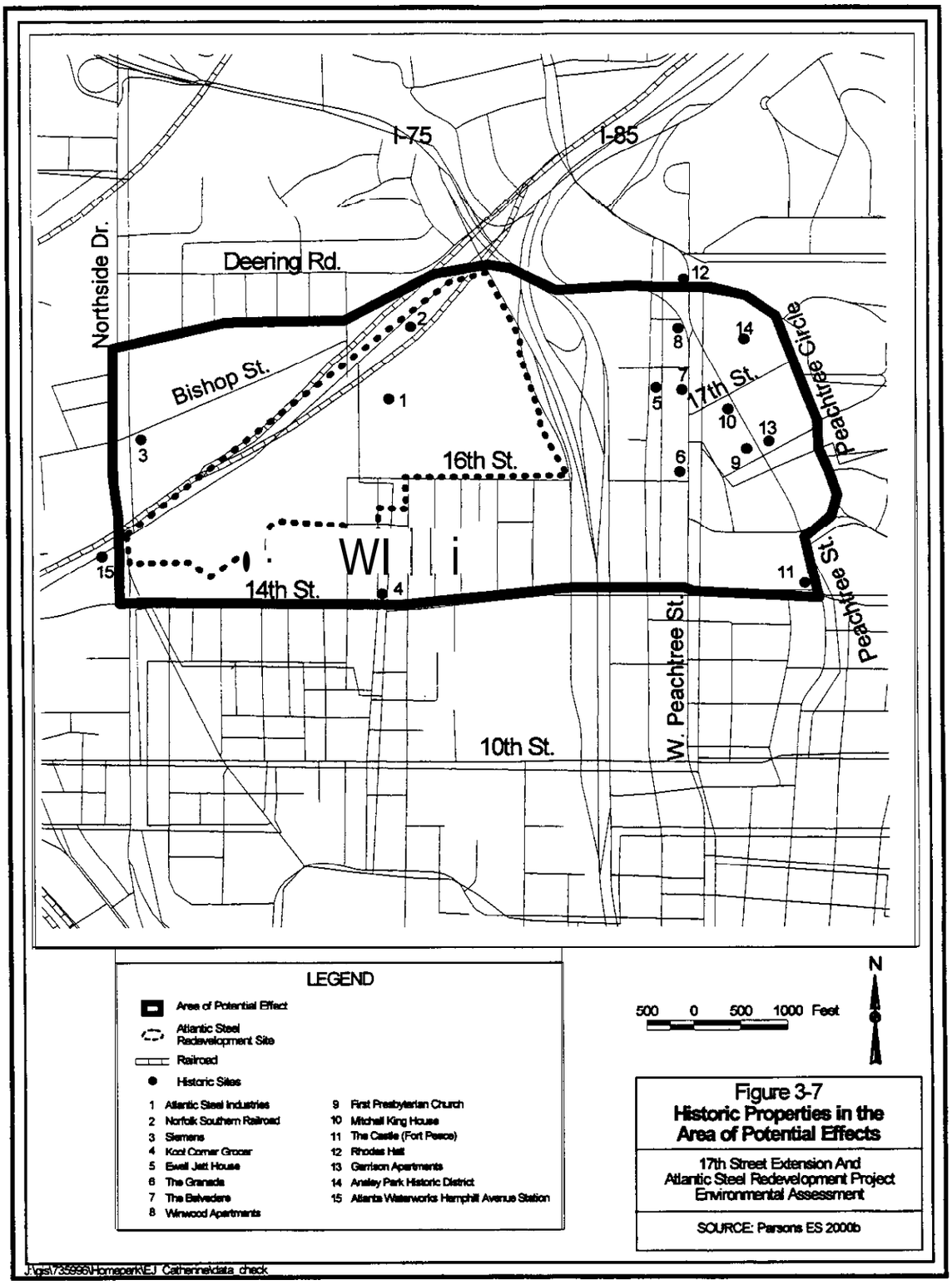
I-75
I-85
Northside Dr.
Deering Rd.
Bishop St.
16th St.
14th St.
17th St.
Peachtree Circle
Peachtree St.
W. Peachtree St.
10th St.
LEGEND
Area of Potential Effect
Atlantic Steel Redevelopment Site
Railroad
Historic Sites
1 Atlantic Steel Industries
2 Norfolk Southern Railroad
3 Siemens
4 Kool Corner Grocer
5 Ewell Jett House
6 The Granada
7 The Belvedere
8 Winwood Apartments
9 First Presbyterian Church
10 Mitchell King House
11 The Castle (Fort Peace)
12 Rhodes Hall
13 Garrison Apartments
14 Ansley Park Historic District
15 Atlanta Waterworks Hemphill Avenue Station
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Figure 3-7
Historic Properties in the Area of Potential Effects
17th Street Extension And Atlantic Steel Redevelopment Project Environmental Assessment
SOURCE: Parsons ES 2000b
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3.3.7 Section 4(f) Applicability

Section 4(f) of the DOT Act of 1966 applies to all Federal-Highway programs, including Federal-Aid Highway subsidies. The purpose of Section 4(f) is to protect parks, recreation areas, wildlife/waterfowl refuges, and historic sites, by requiring transportation projects to provide additional examination of these resources before approval can be granted. Section 4(f) applies to all historic sites, but only publicly owned parks, recreational areas, and wildlife and waterfowl refuges. Section 4(f) stipulates that the FHWA and FTA can only approve a project that uses land from identified Section (4f) resources if:

- There is no feasible and prudent alternatives to the use of these resources; and
- All possible planning has been taken to minimize harm to the resources.

The potential for Section 4(f) resources was researched and surveyed in the study area. These efforts resulted in the identification of fifteen potential Section 4(f) resources, consisting of the fifteen historic properties that are listed or eligible for listing in the National Register of Historic Places. These properties are discussed in Section 3.3.6.3 and Appendix F, as well as detailed in the Historic Architectural Properties Identification and Evaluation Report (Parsons ES 2000b).

FHWA and GDOT are responsible for determining the applicability of Section 4(f) for this project. As described previously, the Atlantic Steel site was identified as a potential Section 4(f) resource because it has been identified as eligible for listing in the National Register. However, as described in Section 2.7, under the no action alternative, the Atlantic Steel Site would be cleaned up and redeveloped regardless of whether or not the 17" Street Extension occurs. Demolition of all on-site buildings has occurred and cleanup of the site is currently underway as part of the private redevelopment action. Therefore, there is no Section 4(f) applicability to the Atlantic Steel Site since the buildings have been demolished as part of the enviromnental remediation and proposed redevelopment. As part of EPA's decision to approve this project as a TCM, compliance with Section 106 of the NHPA was required for adverse effects to the Atlantic Steel Site (see Section 4.3.6).

3.3.8 Land Use

For purposes of defining existing land use, socioeconomic conditions (Section 3.3.9), and potential environmental justice (EJ) areas (Section 3.3.10), an area of influence for these categories was identified based on a broader, one-mile buffer surrounding the previous defmed study area (Peachtree Circle/Peachtree Street on the east, 14th Street to the south, Trabert Avenue/Brookwood Interchange to the north, and Northside Drive to the west). This broader area of influence was identified because of the potential social and economic impacts that are likely to occur as a result of this redevelopment project.

3.3.8.1 Existing Land Use

Land use in this one-mile area of influence includes the residential neighborhoods of Home Park, Loring Heights, and Ansley Park; the Midtown commercial district; Georgia Institute of Technology campus and all its related facilities; and heavy and light industrial complexes, primarily to the west. This entire area is a major employment center in the Atlanta metropolitanregion.

The one-mile buffer contains approximately 4,852 acres of land. The largest land use within the one-mile buffer is associated with the Industrial/Commercial Complexes, at 21 percent. This is followed closely by the Medium Density Residential land use category, at 19 percent. The smallest land uses in the study area are associated with the Urban-Other and Deciduous Forest categories, both at one percent. Table 3-6 shows a breakdown of land uses in this area. Existing land uses are shown in Figure 3-8.

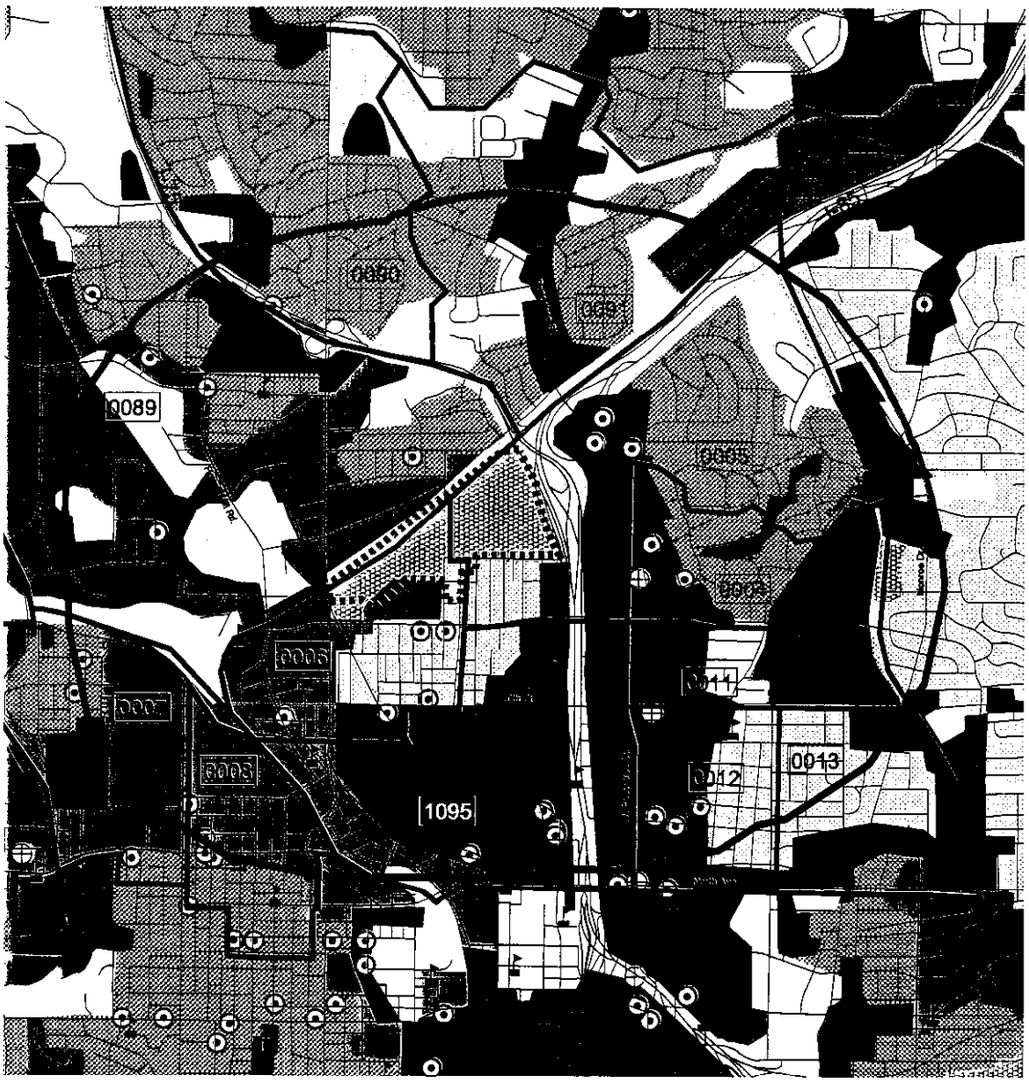
Table 3 - 6. Existing Land Use in the Vicinity of Atlantic Steel

Type of Land Use	Acres in Study Area	Percentage of Total
Residential-Medium Density	930	19
Residential-High Density	454	9
Residential-Multi-Family	176	4
Commercial	804	17
Industrial	151	3
Institutional	399	8
Golf Courses	69	2
Forest-Deciduous	55	1
Parks	207	4
Trans/Comm/Utilities	266	6
Ind/Comm Complexes	1,036	21
Urban-Other	44	1
Highways	261	5
Total	**4,852**	**100**

This project conforms to several of the goals and objectives of the adopted *City of Atlanta 2001* Comprehensive *Development Plan* (City of Atlanta 2000) which projects the kinds of future development that may occur in the City in the foreseeable future. The City of Atlanta predicts residential land use patterns to increase in the study area in terms of higher density and in-fill development similar to Atlantic Steel. Residential land uses should become more prominent as the City attempts to discourage sprawl.

3.3.8.2 Neighborhoods and Community Facilities

Neighborhoods. The organized neighborhoods within the area of influence are: Home Park, located immediately south of the Atlantic Steel site; Ansley Park, which is located east of I-75/85; and Loring Heights, which is located north of the Atlantic Steel site. Home Park and Loring Heights are single-family residential areas containing mostly bungalow-style housing units built in early to mid-1900s and are established neighborhoods with a mixture of rental and owner-occupied residences. Ansley Park was constructed in the early twentieth century and encompasses an area of approximately 275 acres. It includes approximately 600 single-family homes and several apartment buildings.



LEGEND

Landuse

- Atlantic Steel Site
- 1 Mile Buffer
- Tract Boundary and Tract Number
- Hospital
- Library
- Cemetery
- Religious Center
- School
- Transit Station
- Commercial
- Industrial
- Trans/Comm/Utilities
- Ind/Comm Complexes
- Urban-other
- Res-med density
- Res-high density
- Res-multi-family
- Institutional - Intensive
- Golf Courses
- Forest deciduous
- Ltd Access Highways
- Parks

1000 0 1000 2000 Feet

N

Figure 3-8

Land Use In the Vicinity of Atlantic Steel

17th Street Extension And
Atlantic Steel Redevelopment Project
Environmental Assessment

SOURCE: Atlanta Regional Commission, 1997

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Schools. Schools are a strong indicator of community values. The Atlanta Public School System provides public education in the City of Atlanta. There are ten school properties and one four-year university located within the one-mile area of influence. There are three other schools and the Georgia Institute of Technology academic center locatedjust south of the Atlantic Steel site.

Parks, Recreation Areas, and Open Space. There are no parks located within the immediate study area. There are four regional/neighborhood parks that are located within the one-mile area of influence: Piedmont Park, Eubanks Park, Winn Park, and Underwood Hills Park. The Ansley Park Golf Course is located within the one-mile area of influence and situated east of I-75/85 and north of Piedmont Park. The YMCA recreational facility center is located within the study area, south of the Atlantic Steel site. A private recreational ball field owned by Georgia Tech also is located south of the Atlantic Steel property, west of Mecaslin Street. The former Home Park Neighborhood Recreational Facility is also located within the study area and south of Atlantic Steel. However, it has been converted into a day care facility. The adjacent park land area is used by the day care center during the day and is open to the public in the evenings and on the weekends.

There are a few parcels of land within the one-mile area of influence that are considered to be open or vacant. At the time of this report, no development of these parcels is anticipated.

Places of Worship and Cemeteries. There are three religious institutions located in the immediate study area. The First Presbyterian Church is located near the Peachtree Branch library and on the east side of I-75/85. The other two facilities, Atlanta Mosque and Mission Church of God, are located southwest of the Atlantic Steel site, in the Home Park Neighborhood. There are 21 other places of worship located within the one-mile area of influence. Most of these religious institutions are located south and west of the Atlantic Steel site. There are no known cemeteries within the immediate study area or the one-mile area of influence.

Hospitals and Health Centers. There are four medical facilities located within the one-mile area of influence. The Piedmont Hospital complex is located just to the north of the I-75/85 split. The Georgia Tech University Infirmary is located south of the Atlantic Steel site, in the heart of campus. The remaining two facilities are located southeast of the Atlantic Steel site and east of I-75185. They are the Atlanta Hospital and the Psychiatric Institute of Atlanta.

Libraries and Museums. The Atlanta-Fulton County Public Library system operates one library within the one-mile area of influence, Peachtree Branch. The Robert W. Woodruff Arts Center is located within the study area. It is located across I-75/85, adjacent to the Arts Center MARTA Station. The Woodruff Arts Center is dedicated to excellence in the performing and visual arts. It is home to the Alliance Theatre Company, Atlanta College of Art, Atlanta Symphony Orchestra, 14" Street Playhouse, and the High Museum of Art. The Woodruff Arts Center offers its patrons a unique, multi-faceted experience of many distinctive arts institutions all located on a single campus.

Emergency Services - Fire and Rescue. Fire protection in the area is provided by the City of Atlanta. The city is broken into five districts, and each district has several fire stations to cover the sub-areas of that district. The Atlantic Steel site is located in District Three and the closest fire station is located east of I-75/85 and south of the project study area

Emergency Services - Police. Police protectionis also provided by the City of Atlanta. Atlanta is broken into six precincts. The Atlantic Steel site is in the same precinct as the downtown CBD, Precinct Five. Several mini-precinct offices are located in each of the six major precincts. The closest mini-precinct is located east of I-75/85 and south of the project study area.

3.3.9 Socioeconomics/Demography/Economic Conditions

3.3.9.1 Population

Population and employment estimates for the one-mile area of influence are presented in Table 3-7 and are based on 1990 US Census data. Updates to these statistics are provided in the text where available. Other characteristics including population by age group, race, income, and percentage of households with income below poverty levels are presented by census tract. The twelve census tracts listed in Table 3-7 are shown on Figure 3-8. Some of these census tracts extend beyond the one-mile buffer of the site and encompass the Midtown business district, the Georgia Institute of Technology campus, and the industrial/commercial areas along the I-75/85 corridor. Although the study area is heavily urbanized and the predominant land uses are office, commercial and industrial, several residential communities are scattered throughout the project vicinity. Most of the resident population is located within the neighborhoods of Home Park, Loring Heights, and Ansley Park as shown in census tracts 4, 5, 6, 89, 90, and 91.

The age profile indicates that the residential population is largely comprised of persons within the range of 15-34 years old, reflecting a fairly young age group living within the area.

The predominant racial group of the study area is white, although some concentrations of other racial groups are present in areas west of the project site in the vicinity of Northside Drive, and south of the site in the vicinity of Georgia Institute of Technology. Based on a GIS analysis of 1990 US Census data for the project area, the percent minority population within the one-mile area of influence is estimated to be 18.2%; the percent of households below poverty levels is approximately 24.2% for this same area.

The median household income levels for the project area range from approximately $15,000 to the mid-$40,000 range, indicating a wide range of income levels among various neighborhoods within a one-mile buffer. Some of the lower income levels may be associated with the student population of the nearby colleges and younger age groups living in the study area. This information is from the 1990 census and more recent data indicates that the median household income level is on the rise. According to the Midtown Alliance (1999), the average household income reported within a one-mile, three-mile and five-mile buffers of 10” Street and Peachtree Street is approximately $55,781, $58,856 and $6 1,0 11, respectively.

3.3.9.2 Employment

As listed in Table 3-7, the employment population within the study area far exceeds the residential population which indicates that the area is a strong employment center. The majority of these jobs are in the service and commercial sectors. Based on information provided by the Midtown Alliance, a non-profit business development organization in the area, the top ten employers within the study area are: Alston and Bird, AT&T, Bank of America, BellSouth Corporation, The Coca-Cola

Table 3-7. Summary of 1990 Population and Employment Characteristics of the Study Area

Characteristics	Census Tracts											
Tract	**89**	**90**	**91**	**5**	**4**	**6**	**7**	**1095**	**11**	**8**	**12**	**13**
Population	9791	3472	6176	2564	1545	1335	34x7	6460	1427	1516	3137	3391
Age												
o-4 **years**	437	280	164	101	50	18	40	77	11	120	54	100
5-14 years	576	189	258	186	96	17	96	34	12	1x3	52	128
15-19 **years**	437	109	167	64	51	76	310	2233	33	XX	77	72
20-34 **years**	4789	1416	2767	800	475	948	1922	3661	812	319	1664	1816
35-59 **years**	2681	1003	1879	961	614	166	948	396	432	466	864	974
60+ years	871	475	941	452	259	110	171	59	127	340	426	301
Race												
White	7586	3192	5307	2336	1391	1070	630	5018	988	27	2278	2401
Non-white	2205	280	869	228	154	265	2857	1442	439	14x9	859	990
Hispanic	394	86	122	31	34	35	79	216	30	3	79	77
Asian	212	23	xx	43	13	164	8	636	32	2	49	17
Median HH Income	$32,202	$45,691	$3 1,007	$45,300	$40,417	$21,827	$20,000	$14,929	$20,824	$10,318	$20,979	$26,939
Employment	16328	1127	11x09	8033	13149	3741	2459	11198	3574	994	13x45	2655

Source: us Census Data. 1990

Company, Crawford Long Hospital, Federal Deposit Insurance Corporation, Georgia Institute of Technology, Georgia Power, and Turner Broadcasting.

3.3.9.3 Relocations

The 17th Street Extension and Atlantic Steel Redevelopment project will require houses, businesses, and/or industry located within the study area to be relocated. Those property owners subjectto relocationare addressedin Section4.3.9.3.

3.3.10 Environmental Justice

Executive Order 12898 on *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* (Executive Order 12898 1994)requires all federal agencies to identify and address disproportionately high and adverse human health or environmental effects of federal programs on minority and low-income populations. The general purpose is to foster non-discrimination in federal programs and to provide minority and low-income communities greater opporhmities for public participation in, and access to public information regarding human health and environmental issues. As part of the NEPA process, potential EJ areas (areas that have high levels of minority and/or low income populations relative to a reference area) are identified in the screening process to ensure that these communities have access to both concise and clear information sufficient to effectively participate in the public involvement process; and to ensure that these communities are not disproportionately impacted by this project.

A general approach for identifying potential EJ areas involves the use of comprehensive demographic information. Once identified, the locations of these geographic areas are then compared to areas in which environmental and socioeconomic impacts are predicted to occur to determine if these communities will be affected, and also to determine whether or not these impacts will be disproportionate (significantly greater) than those experienced from the nearby non-EJ areas. If disproportionate impacts are identified in this process, mitigation to alleviate those impacts to those communities should occur.

3.3.10.1 Demographic Characterizations

General screening to identify potential EJ areas for this project involved comparing the minority and low-income characteristics of a smaller geographic area (project area) with those of a larger geographic area (reference area). In this project, U.S. Census data for 1990 were used for the minority and low-income analysis. Data were collected at the block group level for the project area and the Atlanta metropolitan statistical area (MSA) for the reference area. Similar to Section 3.3.9, for the purposes of the EJ analysis, the area of influence for this project or the "project area" was approximated based on a one mile buffer surrounding the study area for the project (Figure 3-9). The Atlanta MSA is comprised of twenty counties surrounding the City of Atlanta. The block group data level, instead of the tract level, was used because it provides the best combination of demographic accuracy and data accessibility. The Atlanta MSA was selected as the appropriate reference area because of the potential regional influence of this project, and the MSA best represents a regional project area.

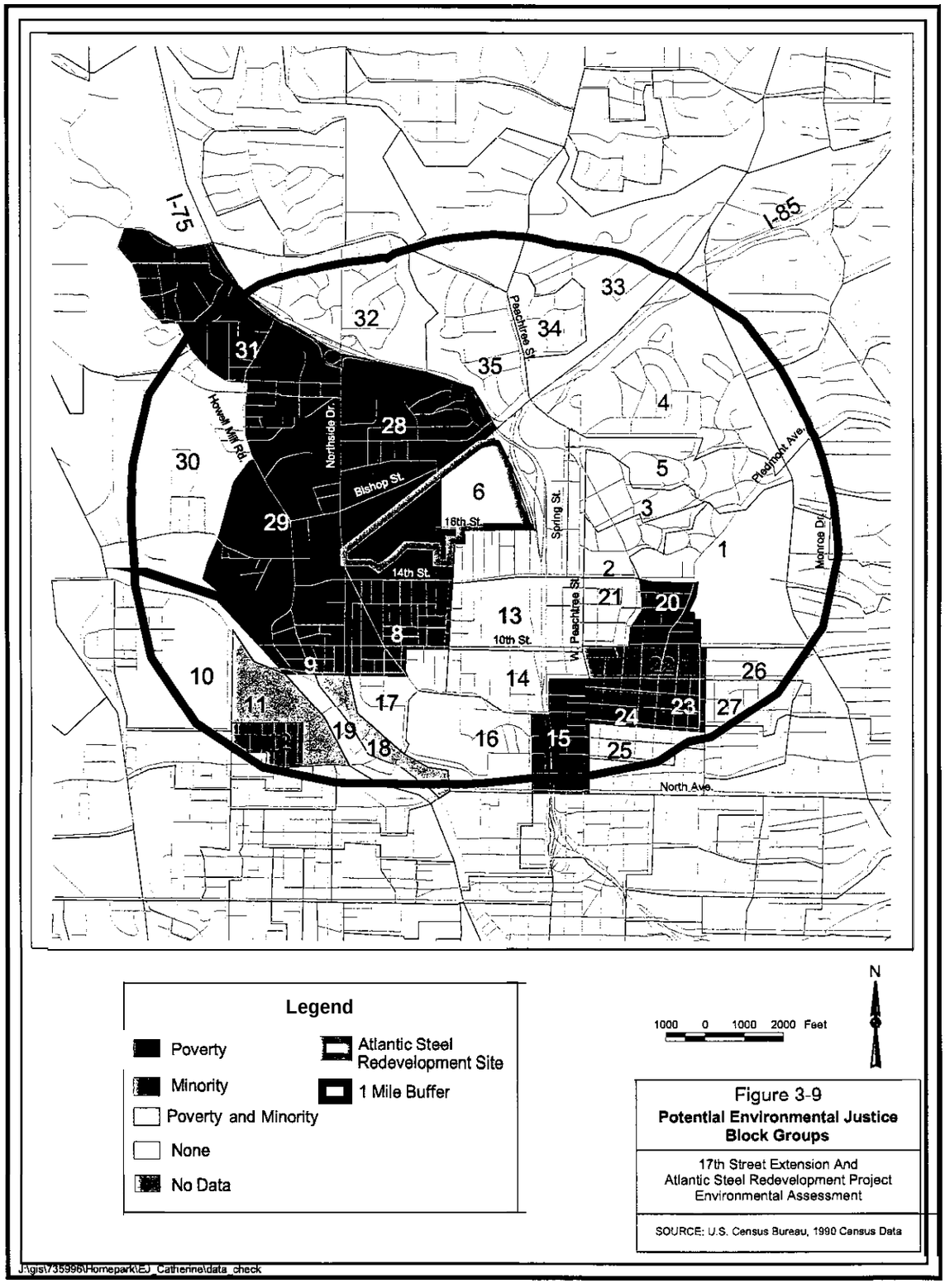

Figure 3-9
Potential Environmental Justice Block Groups

17th Street Extension And
Atlantic Steel Redevelopment Project
Environmental Assessment

SOURCE: U.S. Census Bureau, 1990 Census Data

According to the U.S. Bureau of Census, minority populations are those groups that include African Americans, American Indians, Asians, Pacific Islander, Hispanics, Eskimos, Aleuts and other races. These population categories were used in this study to determine the minority percentage for each block group in the project area and Atlanta MSA.

There are two options for defining low-income populations in EJ analyses. An absolute income level (e.g., $15,000) or poverty status may be used to determine significant low-income populations. Poverty data were used in this analysis as an indication for low-income status because it is adjusted for family size and number of dependents. Specifically, two-times the national poverty level was used to reflect the higher cost of living in the Atlanta MSA and project area.

3.3.10.2 Potential Environmental Justice Areas

In order for an area to be considered a potential EJ area of concern, either the minority or low-income population of the project area must be "meaningfully greater" than that of the reference area (EPA 1998). *The Draft Guidancefor Conducting Environmental Analyses* (EPA 1998a) suggests the use of a multiplier of 1.2 times the calculated percent of both the minority and low-income populations for the reference area. Multiplying the calculated percentage of the reference area by 1.2 establishes a threshold level at which the project area would contain a significantly higher minority or low-income resident percentage of its population. Any block group with a percentage of residents above the minority or low-incomethresholds established for the Atlanta MSA are identified as potential EJ areas of concern.

As a result of our analysis, several communities in the project area were determined to contain minority and/or low-income populations at levels that are significantly higher than that of the Atlanta MSA. The thresholds established for the Atlanta MSA are as follows: Minority: 35.71% and Low-Income: 28.40%. The threshold levels for the Atlanta MSA and the block groups exceeding these thresholds are presented in Table 3-8. These block groups are depicted in Figure 3-9. Based on the low-income and minority population percentages, eighteen of thirty-five block groups within the project area exceeded or equaled the MSA thresholds and are therefore considered potential EJ areas of concern. Of these block groups, two are minority, ten are low-income, and six are a combination of minority and low-income (see Table 3-8). The majority of these block groups appear to be distributed in clusters west and southeast of the site (see Figure 3-9). Block group 13 includes the Georgia Institute of Technology.

3.3.11 Aesthetic Resources

The Atlantic Steel project site occupies approximately 135 acres and has been in heavy industrial use since the early 1900s. The original mill buildings and associated structures remained on-site and until the summer of 2000, were in some degree of neglect. The visual appearance of the site has changed dramatically because of site cleanup activities, including demolition and removal of all on-site buildings. However, the appearance of the site is still relatively poor and undesirable from the viewpoint of residential neighbors and employees/customers of the commercial developments in the study area

Table 3-8. Potential Environmental Justice Block Groups

THRESHOLD LEVEL FOR POPULATION WITH MINORITY STATUS: 35.71% THRESHOLD LEVEL FOR POPULATION WITH LOW-INCOME STATUS*: 28.40%			
Block Group Number	**Total Population**	**Percent of Population with Minority Status****	**Percent of Population with Low-Income Status****
1	915	16.28%	24.70%
2	123	14.63%	26.83%
3	496	2.22%	9.88%
4	977	1.64%	3.99%
5	1,216	16.78%	16.02%
6	431	14.39%	19.72%
7	303	13.53%	***79.87%***
8	875	23.54%	***69.37%***
9	108	22.22%	***79.63%***
10	3,051	***85.19%***	***55.30%***
11	NO DATA		
12	22	***59.09%***	0.00%
13	826	***45.40%***	***63.20%***
14	372	0.00%	17.74%
15	2,571	24.70%	***78.26%***
16	727	16.51%	0.00%
17	1,655	17.04%	0.00%
18	NO DATA		
19	413	***59.32%***	***70.22%***
20	1,232	34.09%	***35.06%***
21	324	***40.12%***	***53.67%***
22	433	***41.80%***	15.24%
23	628	21.34%	***38.30%***
24	287	6.97%	***29.62%***
25	961	***36.84%***	***51.65%***
26	535	9.35%	16.45%
27	960	16.04%	25.63%
28	1,491	25.22%	***46.88%***
29	455	7.47%	***51.65%***
30	110	***55.45%***	***85.45%***
31	1,302	15.98%	***36.48%***
32	1,529	21.58%	26.49%
33	2,172	20.63%	22.50%
34	355	0.00%	5.63%
35	1,657	13.76%	11.41%

*Low-Income Status is determined by income levels up to two times the National Poverty Threshold.

** ***Bold numbers*** indicate that the block group exceeds the threshold and is identified as a potential Environmental Justice area.

I:\ATLSTEEL\Report\Draft\Tables\Table 3-8.doc

The Atlantic Steel site is located immediately west of the Brookwood Interchange of I-75185 which is a dominant visual element within the study area. I-75 and I-85 serve as a major transportation facility in the region, with a total of 10 north and southbound lanes adjacent to the eastern boundary of the project site. At this location, the freeway is mostly below-grade and can only be seen from the easternmost portion of the project site, or from structures such as medium-to-high-rise buildings in the Midtown area or from the bridges and ramps in the study area.

Other significant visual elements within the study area include the Norfolk Southern Railroad corridor and the Midtown business district of Atlanta. The rail line is located immediately adjacent to the north of the project site. The Midtown business area is located west, east, and north of I-75/85 and contains medium-to-high-riseoffice buildings and apartments/condominiums. The Midtown area is a defined portion of the city located just north of the downtown CBD. The Midtown area is a major employment center for the Atlanta metropolitan region. Views of the site from this vantage point would be unlimited (see photographs, Appendix G).

The residential areas adjacent to Atlantic Steel include the communities of Home Park and Loring Heights. These neighborhoods are characterized by medium-density, single-family residences, most of which were built during the 1930-50s. Most of the housing stock is in fair to good condition; a few of the residences are substandard and in poor condition. Generally, the residential neighborhoods bordering the project site are shielded from views of the site by mature vegetation/trees, other structures, or minimized by distance or angle of view. The Ansley Park neighborhood is listed in the National Register of Historic Places, The rolling terrain, open parks, and curvilinear streets provide the setting for this planned suburban community. Houses display a range of architectural styles, including Colonial revival, Neoclassical, and Victorian, among others.

The non-residential areas north and south of the project site are generally low-rise buildings constructed in early to mid-twentieth century. These buildings are used for light to heavy industrial and commercial purposes and many have limited views of the Atlantic Steel site.

SECTION 4
IMPACTS

4.1 OVERVIEW

This section describes potential impacts to the existing environmental conditions as a result of the proposed 17" Street Extension and Atlantic Steel Redevelopment Project (Preferred Alternative, as described in Section 2.8). The description of impacts focuses on the resource categories most affected by the proposed action and mitigative measures proposed where appropriate. Mitigation is defined as measures taken to avoid, reduce, or minimize potentially adverse impacts.

4.2 NATURAL ENVIRONMENT

4.2.1 Earth Resources

Topography would be altered from existing conditions due to grading associated with the clean-up activities, redevelopment, and roadway construction activities. Soils would be excavated from each PIA at the Atlantic Steel site, and properly disposed of off-site. Remediation of the site would also occur under any of the alternatives, including the no action scenario in accordance with EPD requirements. The amount of soil to be removed during clean up is presented in Section 4.3.2. The transportation improvements associated with this project are located in a small area of urban Atlanta and would not significantly change or impact any existing soils or geology.

4.2.2 Groundwater

As part of the Atlantic Steel site remediation (Law 1999c), a groundwater interception system would be installed to collect and contain groundwater on the Atlantic Steel site. Groundwater would also be monitored and treated, if required, prior to discharge to the City of Atlanta sanitary sewer system. The City of Atlanta and the Georgia Department of Natural Resources approved a conservation easement holding JAR responsible for implementing the approved remediation plan. The easement has been prepared in order to assure that the necessary engineering and institutional controls are maintained in-perpetuity. The operation of the groundwater extraction system would prevent groundwater from migrating off-site.

Based on the identified directions of groundwater flow and the configuration of the bedrock, the proposed groundwater interception system has been designed in two sub-systems located in the southeastern and northeastern comers of the site. Groundwater flow presently leaving the site through the southeastern comer flow path would be intercepted with four vertical extraction wells, each pumping one gallon per minute (gpm) or less. Spacing between the wells would be approximately 150 feet, and their individual depths would range from 30 to 40 feet below ground surface. Groundwater flow presently leaving the site through the northeastern comer flow path would be intercepted with four vertical extraction wells each pumping 3.5 gpm. Spacing between

the wells would be approximately 150 feet, and their individual depths would range from 30 to 40 feet below ground surface.

If groundwater treatment is required for extracted groundwater, the treatment would consist of two systems, each associated with the groundwater extraction subsystems described previously. The design and operation of the groundwater interception systems is largely dependent on two criteria: 1) the anticipated groundwater quality entering the system; and 2) treatment criteria that must be met prior to discharge.

The anticipated organic loading to the treatment systems is reported to be low based on existing groundwater quality data (Law 1999a). Based on an assessment of the analytical results, total suspended solid (TSS) and vinyl chloride content would primarily direct the selection of treatment technologies to be used. Discharge of the treated effluent to the local sanitary sewer system was determined to be the most feasible discharge option. Treatment criteria would meet the City of Atlanta's ordinance discharge criteria and would be conducted in accordance with state and federal requirements (Law 1999c). All groundwater remediation activities associated with the Atlantic Steel site would occur in accordance with the EPD approved Remediation Plan (Law 1999c).

Site grading and roadway construction activities associated with the project's roadway improvements would not impact groundwater. No aspect of the proposed action would alter groundwater direction of flow.

4.2.3 Surface Water Resources/Hydrology

The proposed development would include the construction of a new storm sewer bypass system that would convey off-site wastewater and stormwater, including that from the southwest outfall, around the redevelopment to the Orme Street Combined Sewer (Appendix H). A new 8-foot by S-foot storm sewer bypass system would originate near the southwest corner of the property and would flow northeast along the northern boundary of the current property line. The new storm sewer bypass system would tie into the Orme Street Combined Sewer just north of the property boundary and prior to the Tanyard Creek CSO Treatment Facility. The existing 36-inch diameter storm drain originating from Bishop Street would tie into the new storm sewer bypass system along the northern property boundary. Other existing storm drains on the site would be plugged and abandoned in place (Law 2000i). The proposed storm sewer bypass system connection to the Orme Street Combined Sewer would meet the City's requirements under the condition that the proposed storm sewer bypass system be properly designed by JAR, to allow for a future extension by others to a connection point downstream of the Tanyard Creek CSO Treatment Facility after all off-site wastewater sources have been disconnected. The alignment and connection point of the future extension would have to be approved by the City of Atlanta (Appendix H).

The remediation will necessitate the excavation and filling of the ponds or impoundments located on the Atlantic Steel site (see also Section 4.2.5). Dewatering of the existing impoundments will be coordinated with the City of Atlanta to prevent overburdening of the Orme Street Combined Sewer and the Tanyard Creek CSO Treatment Facility (Law 2000i). The Remediation Permit from the EPD requires the placement of a liner or other hydraulic control to separate surface waters from groundwater in these areas.

The City of Atlanta requires that the proposed development meet all of the City's codes, ordinances, and regulations related to on-site stormwater systems. The proposed development would be required to provide detention facilities to reduce the peak runoff from the post-development condition to less than or equal to the pre-development conditions (Appendix H). An additional stormwater detention capacity of approximately 20% would be provided by JAR as part of its stormwater design to assist the City in the management of flows to the Tanyard Creek CSO Treatment Facility.

Preliminary surface water runoff calculations were developed for the site under the post-development conditions using the TR-55 Model (Law 1999g). The site was divided into three basins for modeling purposes using the same configuration as the predevelopment conditions (see Figure 3-3); and cover types were estimated from the project conceptual plans. Peak stormwater discharge from the site under the post-development condition was calculated as 1,140 cfs, compared to 538 cfs for the pre-development scenario. This represents an increase in the peak discharge of 110%. A complete list of the TR-55 model assumptions and results are presented in Appendix C.

As a result of the tilling of the channel and Atlantic Steel impoundments, stormwater storage capacity on the site would be significantly reduced. To offset the removal of the surface water features and provide adequate stormwater storage capacity, two stormwater detention structures would be constructed on the site. A large detention structure in the center of the redevelopment would provide approximately 12.8 acre-feet of stormwater storage above the normal pond elevation. An underground detention structure would be constructed in the northeast comer of the redevelopment and would provide approximately 4 acre-feet of stormwater storage. Stormwater from both detention structures would discharge to the new storm sewer bypass system.

Coverage under a National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges from Construction Activities would be required for redevelopment of the site. Construction activities that disturb at least five acres of land and that discharge stormwater runoff to waters of the United States are covered under this permit (40 CFR 122.26). Requirements of the permit include the submission of a Notice of Intent (NOI) and development and implementation of a Stormwater Pollution Prevention Plan (SWPPP). The City of Atlanta also requires the development and implementation of an Erosion and Sediment Control Plan (Atlanta Code Sec. 74-43) and a Grading and Stormwater Management Plan (Atlanta Code Sec. 74-105). Best Management Practices are required for all land disturbing activities and shall be designed to control soil erosion and sediments for all rainfall events up to and including a 25-year, 24-hour rainfall event.

Stormwater control measures for all transportation improvements associated with the project would be developed in the latter phases of the design. All road construction activities would comply with City of Atlanta and GDOT stormwater design standards.

42.4 Terrestrial Habitat

Impacts to the terrestrial habitat (upland forest, mesic forest, riparian habitat, old field/scrub-shrub lands, and open grassy areas) would result from the construction, redevelopment and remediation of the Atlantic Steel site. These impacts would be permanent and are attributed to the requirements outlined for the clean-up of the site (Law 1999c). The EPD has approved the

Remediation Plan, which is necessary to protect future individuals from exposure to contaminated soil and groundwater on-site. The Plan's measures include the following:

- A groundwater extraction system that would prevent migration of groundwater off site (see Section 4.2.2);
- Excavation of contaminated soil; and
- Removal of vegetation in association with soil excavation and installation of the groundwater extraction system.

On-site impacts from the clean-up process include vegetation clearing and removal of the PIAs. Cumulative effects of construction would be limited, as most of the areas are characterized as highly disturbed. The conceptual design depicts an addition of "greenspace" or planted areas (see Figure 2-4). However, according to requirements of the clean-up, restrictions would be placed on landscaping of the site.

Construction of the project would also result in permanent alteration of wildlife habitat. Clearing of the vegetation would reduce cover, nesting, and foraging habitat for some urban wildlife. The conceptual design proposes to impact approximately 42 acres of pre-existing vegetated land (Law 1999g). Construction would likely displace animals due to habitat loss. During surveys, the only observed species present were some bird species, which should be able to adapt to adjacent habitats. Based on the conceptual site design, it is estimated that 10 acres of public greenspace would be created.

Construction activities associated with the project's roadway improvements off-site would not impact terrestrial habitat.

4.2.5 Wetlands and Aquatic Habitat

Impacts to the wetlands and aquatic habitat would result from the construction, redevelopment, and remediation of the Atlantic Steel site. Likely environmental consequences include the following:

- Excavation and fill of 3.75 acres of jurisdictional wetlands (upper middle impoundment and eastern upper impoundment (Figure 3-2);
- Removal of vegetation within the aquatic and wetland habitats; and
- Excavation and fill of the channel and associated vegetation.

Based on the wetland delineation completed at the Atlantic Steel site, it was calculated that 3.75 acres of palustrine unconsolidated wetlands would be impacted by the clean-up and redevelopment. Construction activities associated with the project's roadway improvements off-site would not impact wetlands or aquatic habitat. As described in Section 4.2.3, a new stormwater detention structure is proposed in the center of the redevelopment. The 3.75 acres of wetlands under the Remediation Plan guidelines would be excavated, filled, and covered with a liner.

4.2.6 Wetland Mitigation Plan

A Nationwide Permit (NWP) 38 was applied for and authorized by the Savannah District, COE (Johnson 2000; see Appendix D). The NWP 38 allows activities to be completed in wetlands that

are required to effect the containment, stabilization, or removal of hazardous or toxic wastes that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority. The authorization of NWP 38 was due to the approval of the Remediation Plan by the EPD. It was calculated that 20 mitigation credits were required. Based on the Standard Operating Procedures for Compensatory Mitigation, the credits were applied to an "in-lieu of fee" Mitigation Plan. Approval of the Mitigation Plan was coordinated with the EPA, USFWS, and the EPD (Johnson 2000).

Southeast Waters, a non-profit organization, in conjunction with AmeriCorps was authorized to implement the mitigation plan. An escrow account was created and will be managed by Southeast Waters to enhance and improve stream areas in the City of Atlanta/Fulton County. The Mitigation Plan designated three stream areas to be studied for potential upgrade, which include Proctor Creek at Grove Park, Proctor Creek at Carver Hills, and North Utoy Creek at Ben Mays Drive. The total amount of mitigation was approximately $100,000, based on $5,000 per mitigation credit. The sum of credits will remain the same and may be applied to one area or a combination of areas depending on final determination.

4.2.7 Endangered and Threatened Species

No adverse impacts on rare, threatened, or endangered species are anticipated due to the redevelopment or roadway improvements.

4.3 MAN MADE ENVIRONMENT

4.3.1 Utilities

Off-site utilities that, may be affected during roadway construction would be identified during the roadway design phase. GDOT would coordinate any pipeline or electrical line relocation or reconfiguration associated with the 17" Street Extension, outside the development, with Fulton County and/or the City of Atlanta. Existing on-site above ground and below ground utilities would be identified by the remediation contractor prior to any excavation or remediation. Pursuant to the City of Atlanta zoning conditions, all utilities for the redevelopment are to be located underground.

During redevelopment, JAR would work with the builders and users of the property to encourage their participation in the Green Building Council's "Leadership in Energy and Environmental Design" (LEED) program (EPA 1999b). The LEED Green Building rating system is a voluntary rating system that evaluates environmental performance from a whole-building perspective. The rating system addresses site selection and sustainability, water efficiency, energy and atmosphere, materials and resources and indoor environmental quality (Green Building Council 2000). Utilities on the Atlantic Steel site are addressed in the following paragraphs.

4.3.1.1 Water Supply

Potable water supply would be more than adequate to support the proposed action since the Hemphill Water Treatment plant is located close to the site. Water usage at the site for the last full year of steel production (1990) was 36 million cubic feet. The estimated usage under the redevelopment scenario is 73 million cubic feet, an increase of 100%. Estimates for peak water flowrates range from 3,500 to 5,000 gpm (gallons per minute) for domestic use and 3,000 to 10,000 gpm for fire use (Porterfield 2000). The City of Atlanta has confirmed that sufficient water

treatment capacity exists for the estimated water flows based on a hydraulic model of the City's water distribution system (Appendix H).

Current distribution lines in the vicinity of the site include two 16-inch lines and two 36-inch lines. The two 16-inch lines are located north of the site. One 36-inch line is located to the west, and one to the south. Water distribution improvements to the site would consist of a network of pipes paralleling the proposed roadways. Pipes would be sized based on customer demand and adequate fire flow requirements (Law 1999f).

JAR would promote water conservation measures such as water flow restrictors, the use of on-site recycling systems for landscape irrigation, and the use of drought-tolerant indigenous plant species for landscaping to minimize irrigation requirements (EPA 1999b).

4.3.1.2 Wastewater Disposal

Under the proposed development of the site, separate sanitary sewers and storm sewers would be constructed. New dedicated sanitary sewer lines would be installed to service the redevelopment. The main sanitary sewer trunk would originate near the southwest comer of the property and would flow northeast along the northern boundary of the current property line. The existing 24-inch diameter sanitary sewer line entering the site from 14" Street would tie into the new sanitary main line. The main sanitary sewer trunk from the redevelopment would be connected to an existing 54-inch diameter sanitary sewer line located on the west side of the Tanyard Creek CSO Treatment Facility (Law 2000h). The City of Atlanta is requiring that the proposed sanitary sewer extension be connected directly to the Tanyard Creek Interceptor Sewer downstream of the Tanyard Creek CSO Treatment Facility (Appendix H). This tie in would complete the separation. of sanitary and stormwater flows after additional off-site sources are disconnected and would help to alleviate capacity issues at the Tanyard Creek CSO Treatment Facility. Other existing sanitary sewer lines on the site would be plugged and abandoned in place (Law 2000i).

The estimated sewage flows from the proposed redevelopment are as follows (Appendix H):

- [illegible] **0.6** MGD
- [illegible] 1.4 MGD
- Year2012 1.8 MGD

The First Amended Consent Decree requires certification by the City of Atlanta that adequate treatment, transmission, and collection capacity exists to handle new sewer services or increases in flow from existing sewer services (United States District Court 1999). The City of Atlanta has confirmed that the existing City of Atlanta sewer lines and treatment facilities (R.M. Clayton Water Reclamation Plant) have adequate capacity to convey and treat the estimated 1.8 MGD of wastewater from the proposed development. A copy of the Certification of Adequate Capacity from the City of Atlanta is provided in Appendix H.

The two proposed groundwater extraction systems are expected to contribute approximately 26,000 gallons per day of flow to the City of Atlanta Sanitary Sewer System based on the proposed remediation design pumping rates. This volume is negligible compared to the estimated sanitary

flows for the proposed development. The precise location of the connection point would be established when the development plans for the site have been finalized (Law 1999c).

Stormwater from the off-site roadway construction improvements would discharge to the existing outfalls. All road construction activities would comply with City of Atlanta and GDOT stormwater design standards.

4.3.1.3 Solid Waste Disposal

Demolition and removal of buildings on the site were carried out as part of the remediation activities required by EPD. The remediation plan requires that the structures on the property are removed. The site previously contained approximately 15,000 tons of ferrous metal buildings that were located on the site during the operation of Atlantic Steel. Ten buildings were disassembled and sold for reuse. Forty buildings and structures were scrapped for recycling of the metal. Approximately one dozen buildings on the site had asbestos coatings on the metal siding or the roof. Asbestos materials were removed and disposed of in a landfill in accordance with state and federal requirements. The main office and a small building near the front gate were removed in June 2000. The eastern smokestack would be retained for possible reuse in the redevelopment.

Approximately 153,000 cubic yards of concrete and asphalt was crushed and recycled on-site and used as fill material instead of being disposed of off-site in a landfill. In addition, asphalt and pavement removal as a result of road construction would be recycled. The use of other recycled asphalt as part of roadway construction would be encouraged.

Participation in the Green Building Council's LEED program requires the implementation of a recycling program that serves all future buildings (EPA 1999b). JAR would work with the builders to determine which solid waste management measures to apply for the LEED program.

4.3.1.4 Electrical Power

Electrical power consumption rates for the proposed development were estimated based on the square footage of the proposed development. Electrical power consumption for the proposed redevelopment is estimated at 2.6×10^8 kWh per year (Porterfield 2000). During the last full year of steel production at the site, electrical consumption was 3.0×10^8 kWh per year and was provided by the Georgia Power substation located adjacent to the site's western boundary. The Georgia Power substation appears to have adequate capacity to supply the electrical power needs of the proposed redevelopment. Any increases in proposed electrical consumption would be addressed in the final design phase of the redevelopment project.

Off-site utilities associated with the proposed development would include lighting for bike paths, pedestrian walkways, and upgrades to the MARTA station. The electrical requirements for these improvements would be negligible compared with the electrical usage of the proposed development.

JAR proposes to work with the Georgia Institute of Technology and the Southface Energy Institute, a national leader in sustainable building technology, to develop strategies that would minimize energy usage. These strategies would include the selection of energy efficient construction materials and building technologies and the siting and orientation of buildings and landscaping so as to maximize solar gain during the winter and minimize solar gain during the summer.

4.3.1.5 Natural Gas

The natural gas lines are assumed to be capable of providing adequate pressure for the post-development condition. During the last full year of steel production at the site, natural gas consumption was 1.05 x 10^6 Mcf (thousand cubic feet) per year (Harmon 1999a). Preliiinary estimates of natural gas consumption based on the square footage of the proposed development range from 219,000 to 307,000 cubic feet per year (Porterfield 2000). This represents a significant reduction in natural gas usage.

4.3.2 Hazardous Substances

4.3.2.1 Atlantic Steel Property

PIAs identified for remediation would be excavated, and associated media would be removed from the site. The horizontal and vertical extents of the media to be removed at each PIA were evaluated previously, and the associated excavation volumes were estimated. Individual PIA volumes ranged from 3 to 29,000 cubic yards. The total volume of soil to be removed is estimated at 80,000 cubic yards. Soil sampling with field screening would be used to further establish and delineate the areas requiring excavation at the PIAs. In addition, soils beneath concrete slabs that are located within or adjacent to PIAs selected for removal would be sampled. Remediation of these areas would be conducted in accordance with the methodology outlined in the Remediation Plan approved by EPD (Law 1999c).

Materials would be excavated or accumulated, staged in short-term roll-off boxes or on concrete slabs with appropriate runoff control, sampled, properly characterized, and disposed based on the results of the characterization. This process would ensure proper characterization, disposal, and documentation of all excavated materials. Excavated materials and associated wastes would be transported off-site for disposal in accordance with state and federal requirements.

Once remediation is implemented, future occupants and users of the redeveloped site would not be exposed to existing site soils or groundwater. Redevelopment and construction would, by design, provide permanent engineered barriers to exposure in the form of new structures, pavement, concrete and/or soil cover, which would be maintained through institutional controls for future use (Law 1999c).

Hazardous substances are not expected to be generated as a result of the preferred alternative. No USTs storing hazardous substances would be installed during construction of any components of the proposed action. Any future changes to the property, such as the repair of the infrastructure or construction, would be required by EPD to be done in accordance with the terms of the remediation plan and conservation easement. Adherence to these requirements would ensure that human health and the environment are protected in the future.

Land uses associated with the proposed action are primarily residential and commercial. Hazardous wastes that potentially could be generated from proposed technology buildings would be minimal in volume. Disposal of these wastes would be the responsibility of the building occupants and would comply with all state and federal requirements.

4.3.2.2 National Lead Smelting Site

As part of ongoing investigations at the National Lead Smelting site, EPA will determine if any aspects of the site present an unacceptable risk to human health and welfare or the environment. At this time, impacts to human health and welfare, or the environment have not been identified. If unacceptable risks are identified, EPA will develop options for reducing or eliminating those risks and coordinate those with JAR and EPD. As part of this process, the public would have an opportunity to submit comments to EPA at major decision points.

4.3.2.3 Other Concerns

During the proposed roadway design phase, GDOT would further investigate the exact location of all USTs and LUSTs in the vicinity of the proposed roadway improvements prior to beginning construction. If GDOT determines that these USTs or LUSTs would be impacted by roadway improvements, tank closure, removal, clean-up, and disposal would occur in accordance with state and federal regulations.

4.3.3 Transportation Features

During the course of the planning efforts for this project, several transportation alternatives were developed to address public concerns, traffic congestion problems, and any additional traffic problems anticipated with the extension of 17" Street and the redevelopment of Atlantic Steel. Several of the specific roadway alternatives recommended improving both the city streets and the state highway system. The preferred alternative is a hybrid of improvements to the transportation system as a whole. By improving the city streets, the state highway system, and providing transit access, the Midtown Atlanta driver should notice a slight improvement in traffic operations on most major roads in the. study area as compared to not implementing the project. More detailed information concerning the justification and implementation of city street, state highway, and transit improvements for this project is included in the Concept Report (MAAI 2000a). The Concept Report and updates are available for public review at GDOT offices in Atlanta.

4.3.3.1 Changes to Existing Roadway System

As described in Section 2.5.3, in response to public concerns about the original design of some of the proposed roadway improvements, several key intersections and roadways were redesigned. Some of the important aspects of the redesign included: 1) an opportunity by the City of Atlanta to post a 25 miles per hour (mph) speed limit on 17" Street; 2) removal of through lanes and turning lanes on 17" Street, 16" Street, Spring Street, Williams Street, and Techwood Drive; 3) narrowing of through lanes and turning radii; and 4) inclusion of wide sidewalks, landscaping, and lighting throughout the project area as part of the roadway improvements. In making these changes, additional urban design criteria were considered such as pedestrian safety and context sensitive design, creating a more acceptable urban corridor, with less emphasis on accommodating future traffic volumes alone.

However, in considering these additional design criteria, it was agreed that a certain amount of predicted additional congestion would be acceptable (see Section 4.3.3.3). In designing the project with fewer lanes, maintenance of minimally acceptable levels of service throughout the project area was balanced with maximizing benefits for pedestrians and transit. A decreased level of service was determined to be permissible in order to accommodate the other design criteria. The primary design concern was that traffic would not backup on the Interstate exit ramps and affect the

operations and safety of the Interstate system. Traffic and pedestrian signal timing and operations would be controlled by the City of Atlanta to prevent backup on the Interstate, and maximize benefits for pedestrians and transit.

The following is a brief description of the specific roadway improvements associated with the overall preferred alternative for the project.

Changes in City Streets. The most significant change in the city street system would be the Extension of 17" Street on a new alignment from West Peachtree Street, across I-75185 on the new bridge structure, and through the Atlantic Steel site to Northside Drive. From Northside Drive to Spring Street on the east, 17" Street would have two through lanes and a dedicated transit lane in each direction, totaling six lanes of traffic. Pedestrian and bicycle access would also be incorporated into the 17" Street design. Bishop Street would remain as it is today except for the addition of turning lanes at its intersection with the new 17" Street. This is designed to assist with overall traffic flow at this intersection. South of Atlantic Steel, 16" Street would be widened between Techwood Drive and Mecaslin Street as part of the new development. The 16th Street/Techwood Drive intersection would be realigned to improve traffic flow. The 16" Street/Williams Street intersection on the east side of the Interstate would be realigned to improve traffic flow. Techwood Drive would be widened at the 14th Street intersection to four, 1 l-foot urban lanes. Williams Street would not be widened, but would be relocated to the east to accommodate the new northbound Interstate exit ramp to the 17th Street Bridge. All proposed roadway widenings are summarized in Table 2-4.

Changes in State Route System. The most significant change to the State Route system would be the change in access from I-75 and I-85 proposed as part of the project. Drivers traveling southbound on I-75 would have direct access to 16th Street and 14" Street. Drivers traveling southbound on I-85 would have direct access to 17" Street and 14" Street. Drivers traveling northbound on I-75/85 would have direct access to 17" Street from the new proposed exit ramp. The northbound and southbound through lanes on the interstates would remain unchanged. The 14" Street Bridge crossing I-75/85 would be widened to accommodate dual left turning lanes in each direction. Northside Drive would have additional turning lanes added at the new intersection with 17" Street. Spring Street and West Peachtree Street laneage would remain unchanged. More detailed information concerning the justification and implementation of all improvements to city streets and the State Route system in the project area is included in the Concept Report (MAAI 2000a).

4.3.3.2 Forecasted Traffic Impacts

Potential impacts to roadways are addressed in terms of forecasted traffic estimates and predicted congestion in the area. As described in Sections 2.5 and 2.7, existing traffic volumes and background Year 2025 AADT volumes were developed for roads in the study area. Year 2025 traffic volumes for the preferred alternative and for the no action alternative were developed to determine future traffic conditions whether or not the project is implemented. This information formed the basis for comparison of the preferred alternative and the no action alternative so that project impacts could be determined. Additional information on Year 2025 A.M. and P.M. peak hour traffic volumes for the no action and preferred alternatives on specific roadways is not presented in this EA, but is contained in the latest version of the Concept Report (MAAI 2000a).

Future AADT forecasts for the no action and preferred alternatives were analyzed and compared against the existing AADT's in the study area. Figures 4-l and 4-2 present AADT volumes in the study area for the no action alternative and the preferred alternative, respectively. When comparing roadways in the study area from 1998 to 2025, the traffic numbers increase over the entire area for either the no action or the preferred alternative. This is due to the expected in-till development in the Midtown area and some level of development occurring at the Atlantic Steel site. The largest single increase in traffic over existing conditions attributable to the project (other than on the new 17th Street) was observed on 16" Street immediately south of the Atlantic Steel site. This increase is primarily due to the change in adjacent land use on the Atlantic Steel site and new function of the road.

When comparing the 2025 no action alternative and the 2025 preferred alternative, the future distribution of traftic in the study area would be different, primarily due to the construction of the 17th Street Bridge and Extension (as part of the preferred alternative). Of the 61 surface roadway segments analyzed for this project, traffic conditions on 29 road segments in the study area are predicted to improve (i.e., traffic volumes are predicted to decrease), 14 are not expected to change, and 18 are predicted to experience increases in traffic volumes with the construction of the 17" Street Bridge and Extension (in comparison with the no action alternative) (see Tables 4-l and 4-2). Traffic on the Interstates, however, is predicted to remain virtually the same with or without the 17" Street Extension (Table 4-3).

Predicted decreases in traffic volumes on the 29 roadway segments, comparing the preferred versus no action alternatives, range from 2% to 81%. The median percent decrease in traffic volumes on these 29 segments is estimated to be 23%. The roadway segments in the study area that would experience the greatest decreases in traffic volumes include: State Street in Home Park, Williams Street, 14" Street, 10" Street, and West Peachtree Street (see Tables 4-l and 4-2). These predicted decreases in traffic volumes are directly related to providing new and improved access from the Interstate and a new east-west minor arterial in the Midtown area at 17" Street across I-75/I-85.

Predicted increases in traffic volumes on the 18 roadway segments, comparing the preferred versus no action alternatives, range from 1% to 104%. The median percent increase in traffic volumes on these 18 segments is estimated to be 9.5%. The roadway segments in the study area that would experience the greatest increases in traffic volumes include 17" Street, 16" Street, and 15" Street (see Tables 4-l and 4-2). The 104% predicted increase in traffic volumes would occur on the new 17" Street within the development, between State Street and Bishop Street, where it does not currently exist. The predicted increases in traffic volumes are attributable to the attraction of the Atlantic Steel Redevelopment and provision of a new east-west connection from West Peachtree Street to Northside Drive. These increases would occur over an approximate twenty-year time frame and should not adversely affect the overall traffic patterns in these areas. More detailed information concerning the traffic numbers for individual roadways in the study area for the existing conditions, 2025 no action alternative, and the 2025 preferred alternative is summarized in Tables 4-1, 4-2, and 4-3.

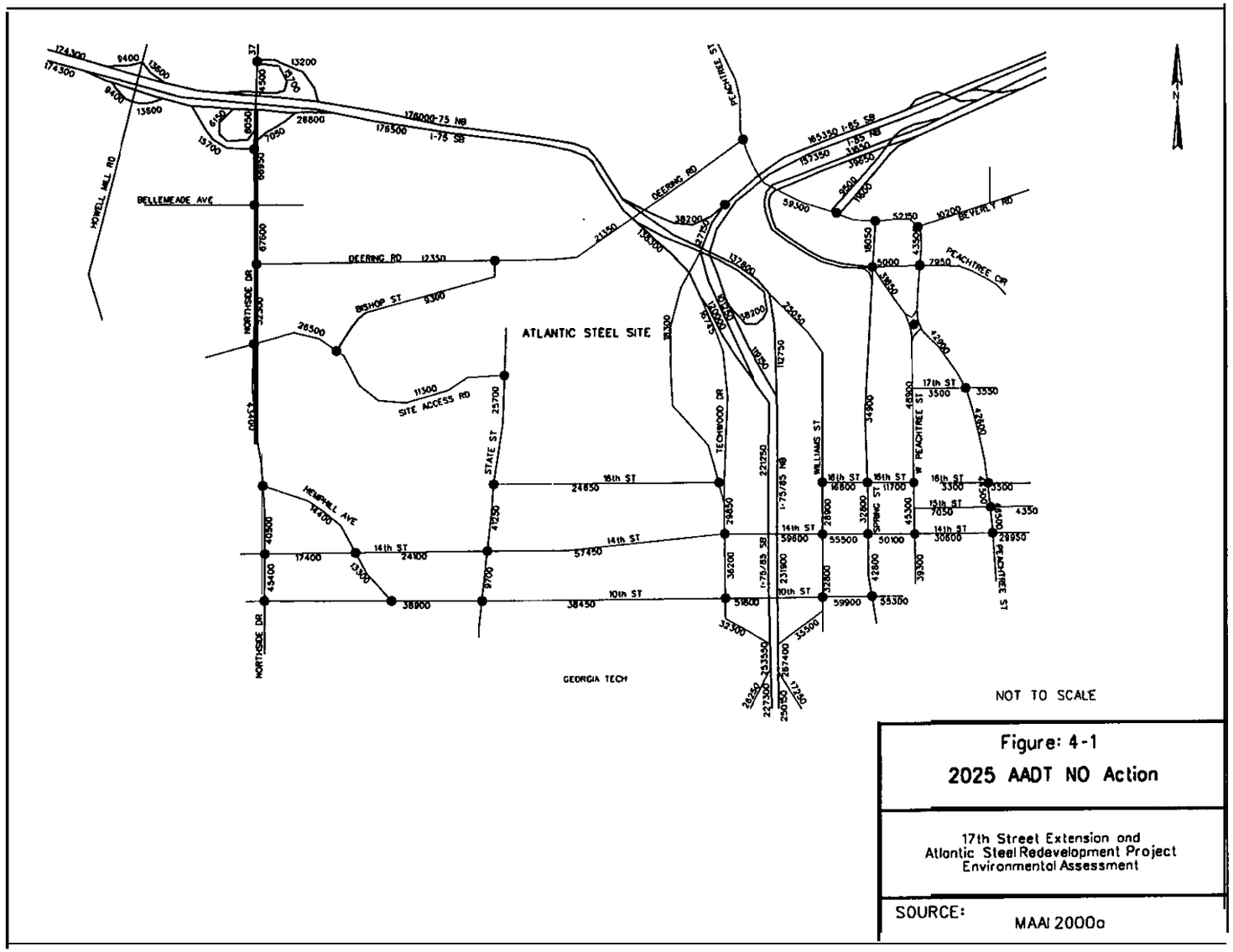

Figure: 4-1
2025 AADT NO Action

17th Street Extension and
Atlantic Steel Redevelopment Project
Environmental Assessment

SOURCE: MAAI 2000o

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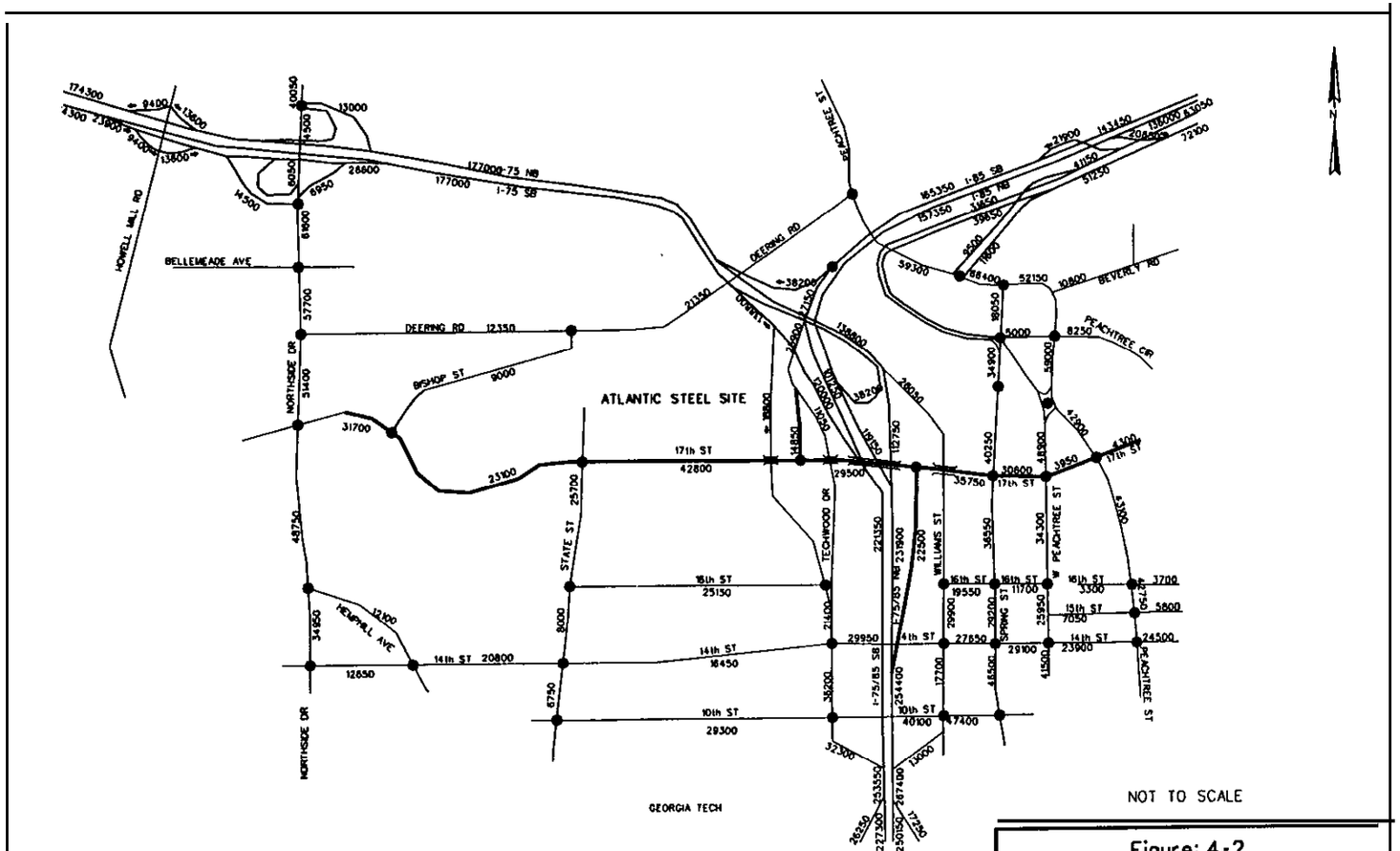

Figure: 4-2

2025 AADT Preferred Alternative

17th Street Extension and
Atlantic Steel Redevelopment Project
Environmental Assessment

SOURCE: MAAI 2000a

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Table 4-l. Roadways in the Eastern Portion of the Study Area

Average Annual Daily Traffic

oadway	Existing	2025 No Action	2025 Preferred Alternative	Change from No Action to Preferred Alternative	% Change from No Action to P:referred Alternative
Villiams Street					
I-75 Entrance to 16th St	16,100	25,050	26,050	+1,000	+4%
16th St. to 14th St.	20,900	28,900	29,900	+1,000	+3%
14th St. to 10th St.	12,500	32,800	17,700	-15,100	-46%
10th St. to I-75/I-85 Exit	17,800	42,800	13,000	-29,800	-70%
pring Street					
Peachtree St. to Buford Conn.	9,550	18,050	18,050	0	0%
Buford Conn. to 16th St.	21,300	34,900	34,900	0	0%
16th St. to 14th St.	16,500	32,800	29,200	-3,600	-11%
14th St. to 10th St.	29,900	42,800	46,500	+3,700	+9%
Vest Peachtree street					
Buford Conn. to 17th St.	26,000	48,900	48,900	0	0%
17th St. to 16th St.	25,000	47,200	34,300	-12,900	-27%
16th St. to 14th St.	20,200	45,300	25,950	-19,350	-43%
14th St. to 10th St.	27,000	39,300	41,500	+2,200	+6%
eachtree Street					
Spring St. to Beverly Rd.	35,750	52,150	52,150	0	0%
Beverly Rd. to Peachtree Circle	31,800	43,500	47,800	+4,300	+10%
Peachtree Circle to Buford Conn. N.	39,800	61,400	59,000	-2,400	-4%
Buford Connector N. to 17th. St.	26,550	42,900	42,900	0	0%
17th Street to 16th Street	29,900	42,600	43,100	+500	+1%
16th Street to 15th Street	30,000	44,500	42,750	-1,750	-4%
15th Street to14th Street	32,600	46,500	43,000	-3,500	-8%
:everly Road					
East of Peachtree Street	6,550	10,200	10,800	+600	+6%
:hodes Drive					
Spring to West Peachtree	4,500	5,000	5,000	0	0%
eachtree Circle					
Peachtree Street to 17th Street	5,000	7,950	8,250	+300	+4%
7th Street					
West Peachtree to Peachtree Street	2,400	3,500	3,950	+450	+13%
Peachtree Street to Peachtree Circle	2,700	3,550	4,300	+750	+21%
6th Street					
Williams St. to Spring St.	11,800	16,800	19,550	+2,750	+16%
Spring St. to West Peachtree St.	8,200	11,700	11,700	0	0%
Lombardy Way to Peachtree Street	2,150	3,300	3,300	0	0%
Peachtree Street to Peachtree Circle	2,400	3,500	3,700	+200	+6%
5th Street					
West Peachtree to Peachtree Street	4,450	7,050	7,050	0	0%
Peachtree Street to Peachtree Circle	2,150	4,350	5,800	+1,450	+33%
4th Street					
Techwood Dr. to Williams St.	23,450	59,600	29,950	-29,650	-50%
Williams St. to Spring St.	21,850	55,500	27,650	-27,850	-50%
Spring St. to West Peachtree St.	21,700	50,100	29,100	-21,000	-42%
West Peachtree to Peachtree Street	15,050	30,600	23,900	-6,700	-22%
Peachtree Street to Piedmont	22,150	29,950	24,500	-5,450	-18%
0th Street					
Techwood Dr. to Williams St.	28,000	51,800	40,100	-11,700	-23%
Williams St. to Spring St.	35,100	59,900	47,400	-12,500	-21%
Spring St. to West Peachtree St.	32,400	55,300	48,750	-6,550	-12%

)urce: MAAI 2000a

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Table 4-2. Roadways in the Western Portion of the Study Area

Average Annual Daily Traffic

Roadway	Existing	2025 No Action	2025 Preferred Alternative	Change from No Action to Preferred Alternative	% Change from No Action to Preferred Alternativ
Northside Drive					
Deering Rd. to Bishop St.	30,500	52,300	51,400	-900	-2%
Bishop St. to Hemphill Dr.	31,950	43,400	48,750	+5,350	+12%
Hemphill Dr. to 14th St.	24,800	40,500	34,950	-5,550	-14%
14th St. to 10th St.	21,550	45,400	40,700	-4,700	-10%
Deering Road					
Northside Dr. to State St.	10,000	12,350	12,350	0	0%
State St. to Peachtree St.	15,600	21,350	21,350	0	0%
Bishop Street					
Northside Dr. to Deering Road	5,450	9,300	9,000	-300	-3%
Hemphill Drive					
Northside Dr. to 14th St.	9,200	14,400	12,100	-2,300	-16%
17th Street					
State St. to Bishop St.	DNE	11,300	23,100	+11,800	+104%
Bishop St. to Northside Dr.	DNE	26,500	31,700	+5,200	+20%
16th Street					
State St. to Techwood Dr.	2,150	24,650	25,150	+500	+2%
14th street					
Northside Dr. to Hemphill Dr.	9,500	17,400	12,650	-4,750	-27%
Hemphill Dr. to State St.	16,100	24,100	20,800	-3,300	-14%
State St. to Techwood Dr.	14,600	57,450	16,450	-41,000	-71%
10th Street					
Hemphill Dr. to State St.	20,750	38,900	27,100	-11,800	-30%
State St. to Techwood Dr.	20,500	38,450	29,300	-9,150	-24%
State street					
Atlantic Steel to 16th St.	DNE	25,700	25,700	0	0%
16th St. to 14th St.	2,450	41,250	8,000	-33,250	-81%
Techwood Drive					
I-85 Exit to 16th St.	11,150	18,300	11,050	-7,250	-40%
I-75 Exit to 16th St.	12,500	16,745	18,800	2,055	+12%
16th St. to 14th St.	23,850	29,850	21,400	-8,450	-28%
14th St. to 10th St.	26,650	36,200	36,200	+0,000	+0%
10th St. to I-75/I-85 Entrance	15,600	32,300	32,300	+0,000	+0%

Source: MAAI 2000a

DNE Does Not Exist

NA Not Applicable

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Table 4-3. Interstate Roadways in the Study Area
Average Annual Daily Traffic

Roadway	Existing	2025 No Action	2025 Preferred Alternative	Change from No Action to Preferred Alternative	% Change from No Action to Preferred Alternative
I-75 Southbound					
Northside Dr. to I-85 NB Exit	129,050	176,500	177,000	+500	+0.28%
I-85 NB Exit to 14th St. Exit	102,750	138,300	138,800	+500	+0.36%
14th St. Exit to Downtown Connector	90,250	120,000	120,000	0	0%
I-75 Northbound					
Dtwn Connector to Williams St. Entrance	86,650	112,750	112,750	0	0%
Williams St. Entrance to I-85SB Entrance	102,750	137,800	138,800		
I-85 SB Entrance to Northside Dr.	129,050	176,000	177,000	+1,000	+0.57%
I-85 Southbound					
Monroe Entrance to I-75 NB Exit	106,400	165,350	165,350	0	0%
I-75 NB Exit to 14th St. Exit	80,100	127,150	127,150	0	0%
14th St. Exit to Downtown Connector	68,950	101,250	101,250	0	0%
I-85 Northbound					
Downtown Connector to I-75 SB Entrance	80,100	119,150	119,150	0	0%
I-75 SB Entrance to Monroe Exit	106,400	157,350	157,350	0	0%
Downtown Connector Southbound					
I-75/I-85 Merge to 10th St. Entrance	159,200	221,250	221,250	0	0%
10th St. Entrance to North Ave. Exit	174,800	253,550	253,550	0	0%
Downtown Connector Northbound					
North Ave. Entrance to 10th St. Exit	184,550	267,400	267,400	0	0%
10th St. Exit to I-75/I-85 Split	166,750	231,900	231,900	0	0%

Source: MAAI 2000a

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4.3.3.3 Forecasted Traffic Operations/Congestion

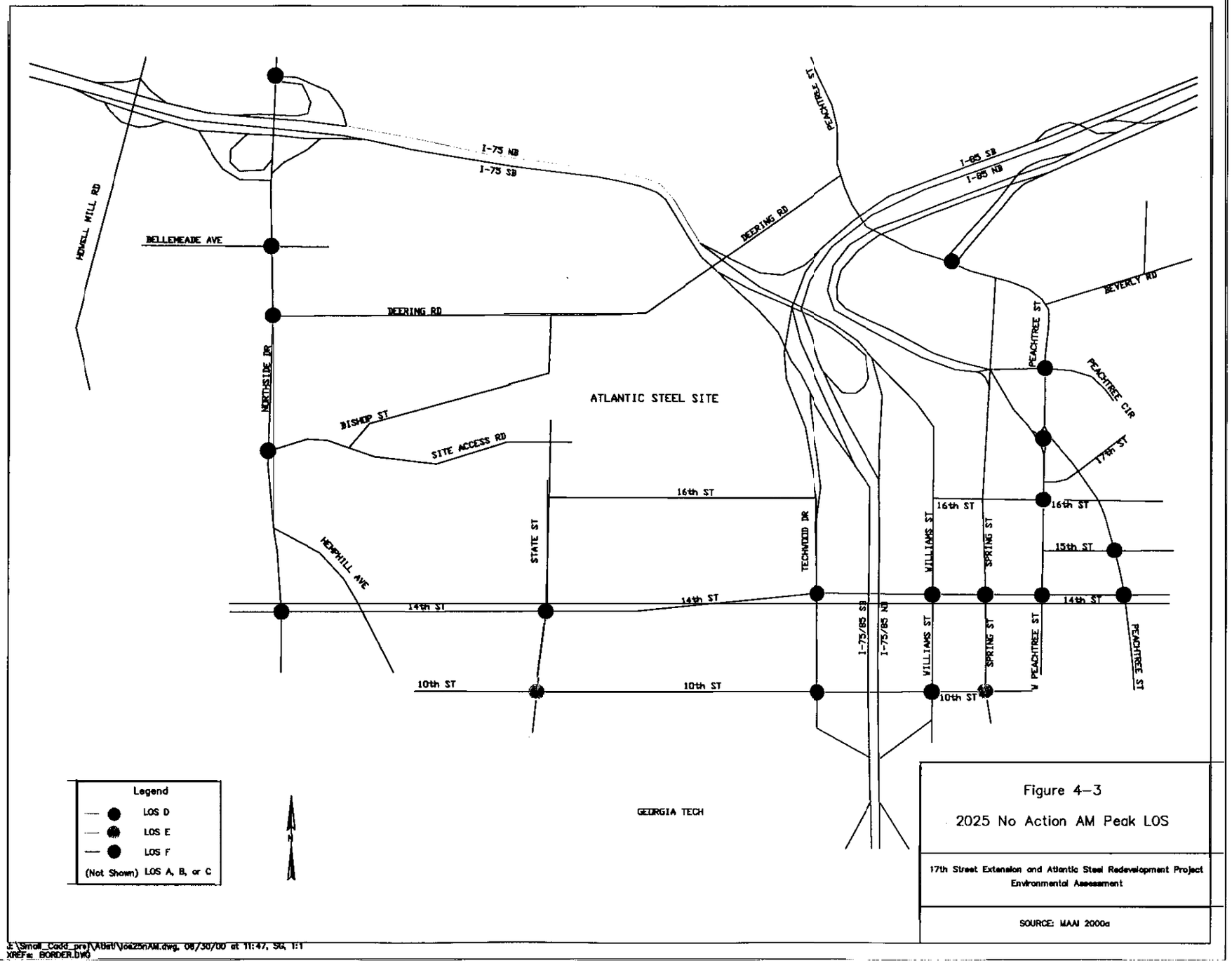
The degree of congestion that is experienced by the user of the road system in Midtown Atlanta depends upon the relationship between traffic volumes and the capacity of the road or intersection. Many factors contribute to the capacity of a specific section of road or intersection. These factors include number of lanes, lane widths, shoulder widths, speed, grades, percent trucks, directional distribution of traffic, and intersection location. Road capacity is often controlled by the signalized or stop controlled intersections on roadways with closely spaced side streets.

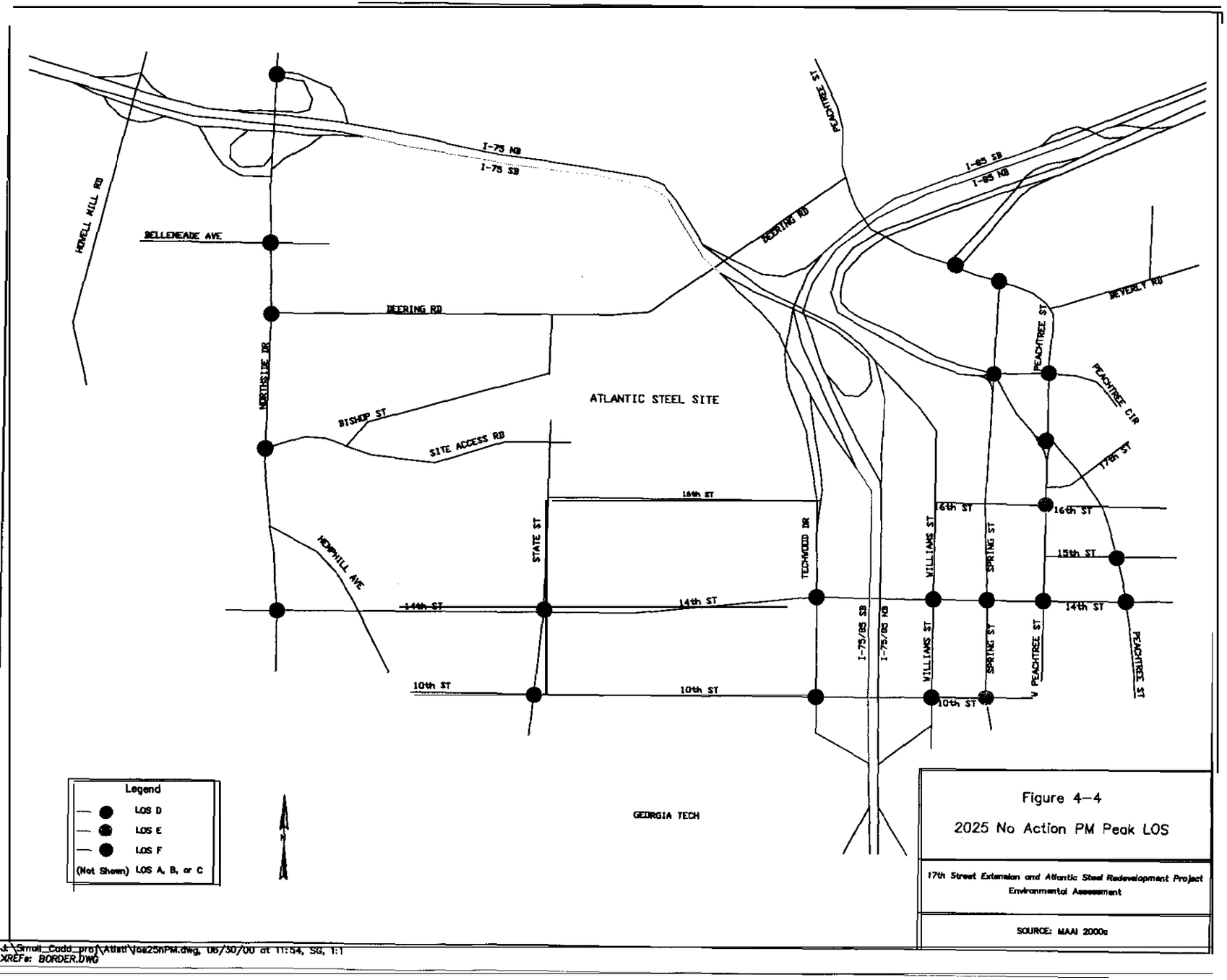
The standard volume to capacity (v/c) ratio analysis was utilized to produce LOS on area roadways, and average vehicle delay on area intersections. The procedures used were those contained in the 1997 update to the *1994 Highway Capacity Manual, Special Report* 209, published by the Transportation Research Board (Transportation Research Board 1997). A computer software package was used to determine these values. Traffic congestion was ranked from LOS A to LOS F for the A.M. and P.M. peak hour. LOS A is the best operating condition, where traffic has no conflicts and complete freedom of movement. LOS F is the worst operating condition, with traffic demand being greater than the capacity of a facility. For LOS F, stop and go conditions occur on road segments and long backups exist at all approaches to signalized or unsignalized intersections.

This information is presented graphically in Figures 4-3 and 4-4 for the no action alternative and Figures 4-5 and 4-6 for the preferred alternative. Intersections and roads that experience LOS A through LOS C are not shown as those intersections and roads manage the traffic successfully. Intersections and roads that experience a LOS D rating are correlated with intersections and roads near capacity (becoming congested but still operating effectively--shown in green). Intersections and roads that experience a LOS E rating are correlated with intersections and roads at capacity (serious congestion, but fully utilizing the facility--shown in yellow). Intersections and roads that experience a LOS F rating are correlated with intersections and roads over capacity (extremely congested with traffic moving in a start-stop mode or long traffic back-ups at intersections--shown in red).

When comparing traftic LOS for roadways and intersections in the study area from 1998 to 2025, the LOS decreases over the entire area for either the no action or the preferred alternative. The majority of roads and intersections in the study area would experience a decrease in operating capacity over the 25-year planning horizon. This is due to the expected in-till development in the Midtown area and some level of development occurring at the Atlantic Steel site. The interstates are currently at or over capacity and will continue to be for the foreseeable future.

When comparing the 2025 no action alternative and the 2025 preferred alternative, traffic congestion in the study area would be different, primarily due to the construction of the 17" Street Bridge and Extension (as part of the preferred alternative). Of the 26 surface roadway intersections analyzed for this project, LOS in the A.M. and P.M. peak hours at 21 intersections in the study area is predicted to stay the same or improve (i.e., traffic is predicted to move more efficiently), and five intersections are predicted to experienced decreases in LOS with the construction of the 17" Bridge and Extension (in comparison with the no action alternative) (see Tables 4-4 and 4-5). Traffic congestion on the Interstates, however, is predicted to remain virtually the same with or without the 17" Street Extension (Table 4-6).


I-75 NB
I-75 SB
HOWELL MILL RD
BELLEMEADE AVE
DEERING RD
NORTHSIDE DR
BISHOP ST
SITE ACCESS RD
ATLANTIC STEEL SITE
HEMPHILL AVE
STATE ST
16th ST
14th ST
10th ST
TECHWOOD DR
I-75/85 SB
I-75/85 NB
WILLIAMS ST
SPRING ST
W PEACHTREE ST
PEACHTREE ST
PEACHTREE CIR
17th ST
15th ST
BEVERLY RD
I-85 SB
I-85 NB
GEORGIA TECH
Legend
LOS D
LOS E
LOS F
(Not Shown) LOS A, B, or C
N
Figure 4-3
2025 No Action AM Peak LOS
17th Street Extension and Atlantic Steel Redevelopment Project
Environmental Assessment
SOURCE: MAAI 2000a



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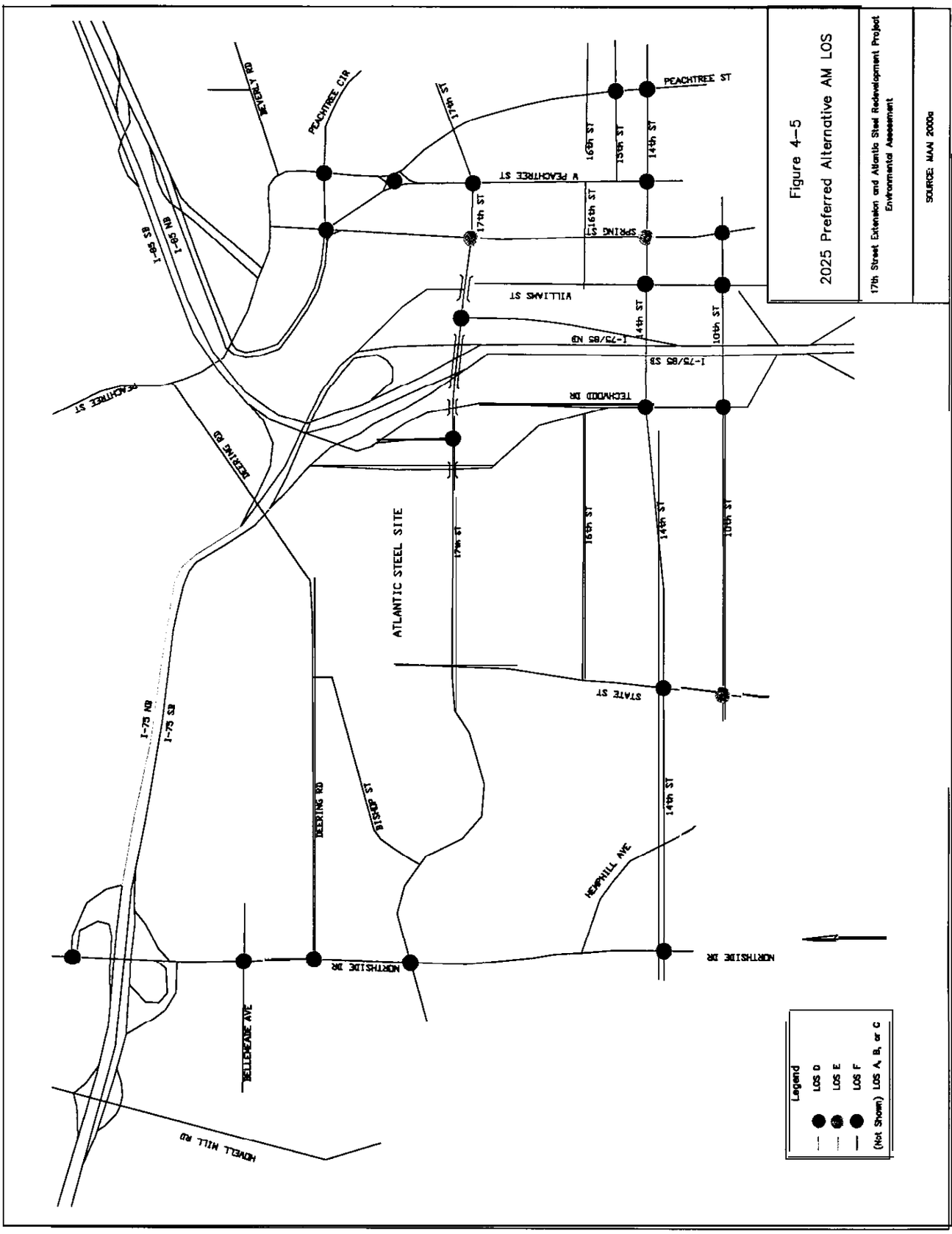
Figure 4-5
2025 Preferred Alternative AM LOS
17th Street Extension and Atlantic Steel Redevelopment Project
Environmental Assessment
SOURCE: MAAI 2000a
PEACHTREE ST
W PEACHTREE ST
17th ST
16th ST
15th ST
14th ST
SPRING ST
WILLIAMS ST
I-75/85 NB
I-75/85 SB
TECHWOOD DR
ATLANTIC STEEL SITE
STATE ST
10th ST
BISHOP ST
DEERING RD
HEMPHILL AVE
NORTHSIDE DR
BELLEMEADE AVE
HOWELL MILL RD
Legend
LOS D
LOS E
LOS F
(Not Shown) LOS A, B, or C
J:\Small_Cadd_pro\Atlstl\los25bAM.dwg, 06/30/00 at 11:58, SG, 1:1
XREFs: BORDER.DWG

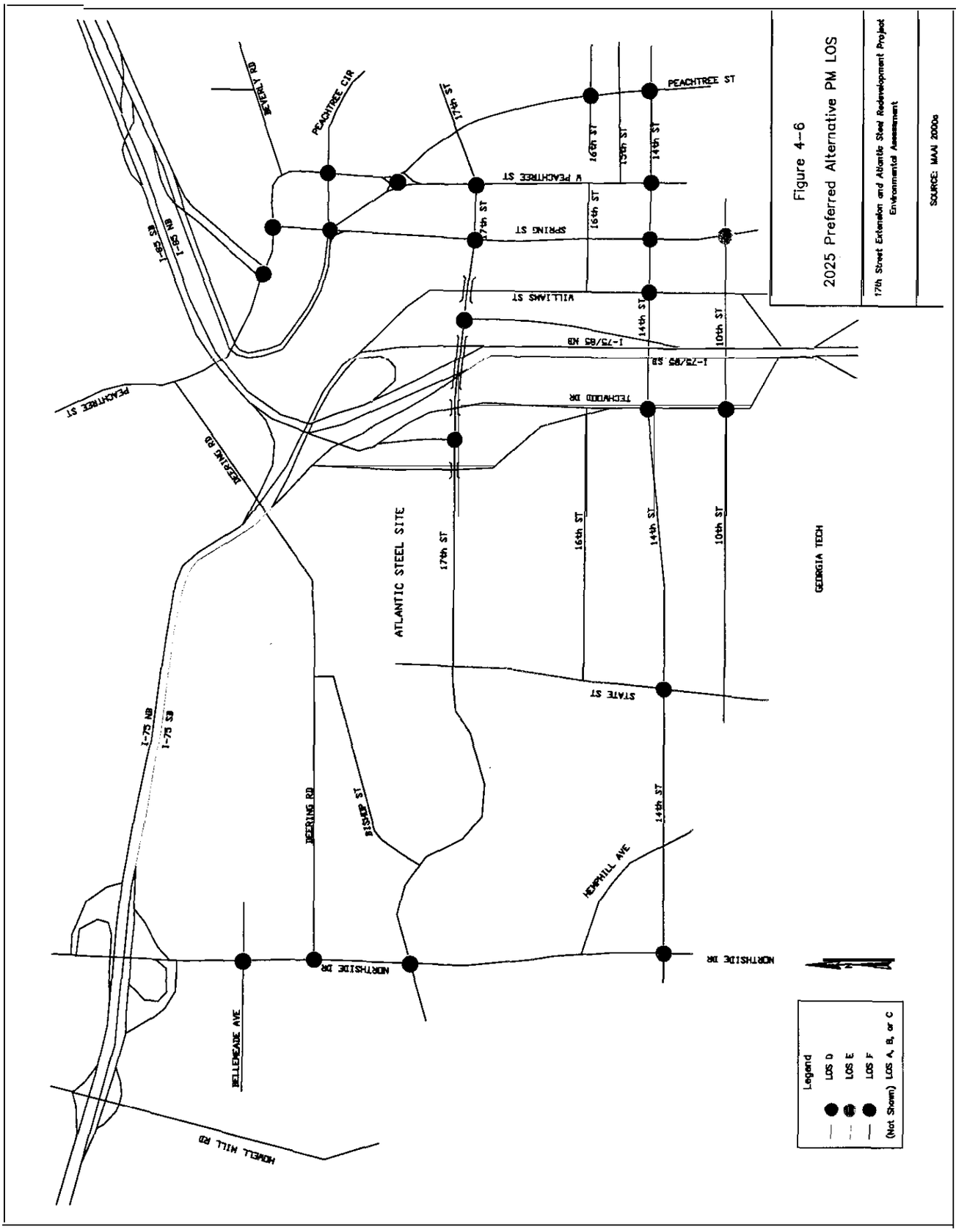
Figure 4-6
2025 Preferred Alternative PM LOS
17th Street Extension and Atlantic Steel Redevelopment Project
Environmental Assessment
SOURCE: MARTA 2000a
PEACHTREE ST
PEACHTREE CIR
BEVERLY RD
17th ST
16th ST
15th ST
14th ST
W PEACHTREE ST
SPRING ST
WILLIAMS ST
I-75/85 NB
I-75/85 SB
TECHWOOD DR
10th ST
BEGLINE RD
ATLANTIC STEEL SITE
GEORGIA TECH
STATE ST
I-75 NB
I-75 SB
MERRITTS AVE
BISHOP ST
MEMPHILL AVE
NORTHSIDE DR
BELLEMEADE AVE
HOWELL MILL RD
Legend
LOS D
LOS E
LOS F
(Not Shown) LOS A, B, or C

Table 4-4. Roadways in the Eastern Portion of the Study Area

Intersection	Level of Service Existing	2025 No Action	2025 Preferred Alternative
Williams St. & 16th St.			
AM	B	B	B
PM	C	C	B
Williams St. & 14th St.			
AM	E	F	F
PM	D	F	D
Williams St. & 10th St.			
AM	C	F	F
PM	C	F	C
Spring St. & Buford Conn.			
AM	C	C	D
PM	C	D	D
Spring St. & 16th St.			
AM	C	C	C
PM	D	B	C
Spring St. & 14th St.			
AM	E	F	E
PM	D	F	D
Spring St. & 10th St.			
AM	D	E	D
PM	C	E	E
W. Peachtree St. & 16th St.			
AM	B	D	C
PM	C	E	C
W. Peachtree St. & 14th St.			
AM	D	D	D
PM	F	F	D
Peachtree St. & Spring St.			
AM	B	C	B
PM	C	F	F
Peachtree St. & Beverly Rd.			
AM	B	B	B
PM	B	B	C
Peachtree St. & Peachtree Cir.			
AM	B	D	D
PM	B	D	D
Peachtree St. & W. Peachtree St.			
AM	C	F	D
PM	D	F	F
Peachtree St. & 17th St.			
AM	B	B	C
PM	B	C	C
Peachtree St. & 16th St.			
AM	B	B	B
PM	C	C	D
Peachtree St. & 15th St.			
AM	C	D	D
PM	C	D	C
Peachtree St. & 14th St.			
AM	E	F	F
PM	D	F	F

Source: MAAI 2000a

Table 4-5. Roadways in the Western Portion of the Study Area

Level of Service

Intersection	Existing	2025 No Action	2025 Preferred Alternative
Northside Dr. & Deering Rd.			
AM	C	D	D
PM	D	D	D
Northside Dr. & Bishop St.			
AM	D	F	F
PM	C	F	F
Northside Dr. & Hemphill Dr.			
AM	B	C	C
PM	B	B	B
Northside Dr. & 14th St.			
AM	C	D	D
PM	C	D	D
14th St. & Hemphill Dr.			
AM	B	B	B
PM	B	C	C
14th St. & State St.			
AM	D	D	D
PM	C	F	D
14th St. & Techwood Dr.			
AM	D	F	D
PM	F	F	F
10th St. & State St.			
AM	C	E	E
PM	C	D	C
10th St. & Techwood Dr.			
AM	D	F	D
PM	D	F	F

Source: MAAI 2000a

Table 4-6. Interstate Roadway Segments in the Study Area
Level of Service

Interstate Section	Existing	2025 No Action	2025 Preferred Alternative
A.M.			
I-75 Southbound			
Northside Dr. to Brookwood Interchange	D	F	F
I-75 Northbound			
Brookwood Interchange to Northside Dr.	D	E	E
I-85 Southbound			
Monroe Entrance to Brookwood Interchange	D	F	F
I-85 Northbound			
Brookwood Interchange to Monroe Exit	D	F	F
Downtown Connector Southbound			
Brookwood Interchange to 10th St. Entrance	E	F	F
10th St. Entrance to North Ave. Exit	E	F	F
Downtown Connector Northbound			
North Ave. Entrance to 10th St. Exit	D	F	F
10th St. Exit to Brookwood Interchange	D	F	F
P.M.			
I-75 Southbound			
Northside Dr. to Brookwood Interchange	D	E	E
I-75 Northbound			
Brookwood Interchange to Northside Dr.	F	F	F
I-85 Southbound			
Monroe Entrance to Brookwood Interchange	D	F	F
I-85 Northbound			
Brookwood Interchange to Monroe Exit	E	F	F
Downtown Connector Southbound			
Brook-wood Interchange to 10th St. Entrance	D	E	E
10th St. Entrance to North Ave. Exit	E	F	F
Downtown Connector Northbound			
North Ave. Entrance to 10th St. Exit	D	F	F
10th St. Exit to Brookwood Interchange	D	F	F

Source: MAAI 2000a

The intersections in the study area that are estimated to experience the greatest increase in LOS (improvement in traffic flow) are: Williams Street and 10" Street (P.M.); Spring Street and 14" Street (P.M.); West Peachtree Street and 16" Street (P.M.); West Peachtree Street and 14" Street (P.M.); Peachtree Street and West Peachtree Street (A.M.); 14" Street and State Street (P.M.); 14" Street and Techwood Drive (A.M.); and 10" Street and Techwood Drive (A.M.) (see Tables 4-4 and 4-5). As described in the previous section, these predicted increases in LOS are directly related to providing new and improved access from the Interstate and a new east-west minor arterial in the Midtown area at 17" Street across I-75/I-85.

The intersections in the study area that are estimated to experience a decrease in LOS are: Spring Street and Buford Highway Connector, Spring Street and 16" Street, Peachtree Street and Beverly Road, Peachtree Street and 17" Street, and Peachtree Street and 16" Street (see Tables 4-4 and 4-5). These decreases in LOS would occur over an approximate twenty-year time frame and are viewed as minor decreases (going from LOS B to LOS C and LOS C to LOS D) that should not adversely affect the overall traffic patterns in these areas. More detailed information concerning the traffic LOS for individual roadways and intersections in the study area for the existing conditions, 2025 no action alternative, and the 2025 preferred alternative is summarized in Tables 4-4, 4-5, and 4-6.

4.3.3.4 Transit Impacts

The closest transit station to Atlantic Steel is the MARTA Arts Center Station. It was recognized in the early stages of alternatives development that a transit linkage to MARTA was desirable and necessary for the project to be considered a TCM. The preferred roadway improvements, specifically the 17" Street Bridge with dedicated transit lanes, provide a range of potential transit services between the Atlantic Steel site and the nearby MARTA Arts Center Station. Initial transit service would be via shuttle bus between Atlantic Steel and the MARTA Arts Center Station. This initial service would be integrated with existing MARTA schedules to ensure efficient operation. Transit riders would access the MARTA Arts Center Station via a dedicated pull-out lane and covered walkway to the station along West Peachtree Street. Shuttle buses would traverse 17" Street and the 17" Street Bridge on dedicated transit lanes, circulate throughout the development, and return (see Figure 2-5). It is anticipated that there would be as many as fifteen bus trips during the peak hours and approximately seven bus trips during the non-peak hours making the round trip circulation. Impacts of these bus trips during the day are not considered significant given the volumes associated with roadways in this area. A positive impact of this connection would include increased ridership and fare revenues for MARTA. In addition, the retail portion of the redevelopment would contribute a one cent sales tax revenue source dedicated to MARTA.

The new 17" Street Bridge would be designed to provide for other transit options when conditions warrant and future technologies such as light rail are identified for implementation. More detailed information concerning the justification and implementation of transit services to the Atlantic Steel site is included as an appendix in the Concept Report (Dames & Moore 2000).

4.3.3.5 Non-Motorized Travel Impacts

The Arts District Bicycle Trail is located within one-mile of the project area. The ability to link any future bike routes including the Arts District Trail is another form of a TCM. The exact

square footage addition of bike lanes in conjunction with the road improvements is difficult to estimate at this time, due to lack of final engineering design data. The preferred roadway improvements provide bicycle access and dedicated bicycle lanes on 17" Street on the Atlantic Steel site and the 17" Street Bridge. All bicycle route improvements to be added would be inconsistent with the City of Atlanta/ARC Bike Plan (ARC 1995). More detailed information concerning the justification and implementation of bike lanes on the 17th Street Bridge is included in the Concept Report (MAAI 2000a). As part of the zoning conditions for the site, bicycle lanes would also be included on State Street (including the loop north of 17" Street) and Center Street. In addition, JAR would utilize the existing at-grade crossing over the railroad at Mecaslin Street to provide a signalized bike/pedestrian crossing into the Loring Heights community. JAR would provide a grade separated (elevated) bike/pedestrian crossing at the location, depending on negotiations with Norfolk Southern Railroad.

The preferred roadway improvements provide new pedestrian access throughout the study area, including new sidewalks throughout the Atlantic Steel site and on the 17" Street Bridge. The exact square footage addition of pedestrian walkways in conjunction with the road improvements is difficult to estimate at this time, due to lack of final engineering design data. The pedestrian access with the preferred alternative would occur via dedicated walkways within the public right-of-way. Pedestrian walkways would also be constructed throughout the redevelopment project. More detailed information concerning the justification and implementation of pedestrian walkways throughout the study area is included in the Concept Report (MAAI 2000a).

4.3.3.6 Roadway Construction Impacts

Construction would create some unavoidable inconveniences to motorists, but construction activities would be conducted in a manner that would maintain access to existing roadways and minimize conflict with traffic. The safety of the general public and residents of the area would be considered at all times. All construction functions would be accomplished in a timely and orderly fashion so as to keep disruptions minimal, for short duration and so as not to compromise safety.

The transportation improvements are listed in the 2001-2003 Atlanta Transportation Improvement Program for right of way acquisition to begin in Fiscal Year 2002 (July 1, 2001 to June 30, 2002) and construction to begin in Fiscal Year 2003 (July 1, 2002 to June 30, 2003). Due to the magnitude and complexity of the proposed improvements to the roads and bridges in the area, the project is envisioned to be constructed in three primary phases.

Phase 1 would consist of the reconstruction of the I-75 southbound ramps to 16" and 14" Streets and widening of Techwood Drive. The I-85 southbound exit to 14" Street would be realigned and the new direct ramp from I-85 southbound to 17" Street would be constructed. The section of the 17" Street Extension from West Peachtree Street to the Atlantic Steel property including the new bridge over I-75/I-85 would also be constructed during this first phase. Phase 2 would consist of the continued construction of 17" Street from the Atlantic Steel property over the Norfolk Southern Railroad west to Northside Drive. It is anticipated that roadway construction of 17th Street would be coordinated with the Atlantic Steel redevelopment. Improvements would be required along Northside Drive, Bishop Street at Northside Drive, and along relocated Bishop Street at 17" Street. Phase 3 would consist of the relocation of Williams Street to the east, construction of a new northbound off ramp from I-75/I-85 to 17" Street, and reconstruction of the

14th Street Bridge over the freeway. Improvements would be required along 16" Street between Williams Street and Spring Street.

It is anticipated that Phase 1 would require 24-30 months for construction, Phase 2 would require 18-24 months for construction, and Phase 3 would require 30-36 months for construction. It is also envisioned that construction of Phases 1 and 2 would overlap in time thereby reducing the total construction time period in the area. Phase 3 construction is not scheduled to occur until completion of Phases 1 and 2. The number and types of construction equipment that would be used in conjunction with the various roadway improvements would vary according to each phase of construction. Some examples of heavy equipment to be used include front-end loaders, dump trucks, bulldozers, and cranes, At this time, it is not known what the individual use of each piece of equipment or the duration of use would be. Specific construction staging areas have not yet been identified; however, every effort would be made to locate construction staging areas as far away from residential areas as possible.

Delays and inconveniences to motorists and area residents would be minimized wherever possible. Night work would be specified and conducted to meet contractors and the public's needs. However, citizens would be advised in advance of all major construction activities such as lane closures and detours. GDOT would utilize a variety of methods to convey construction information to the public, including: 1) utilizing portable and/or permanent variable message boards along the roadsides in the work zones; 2) maintaining direct and constant contact with area news media, including print, television, and radio, and distributing information to these organizations well in advance of major construction events; 3) providing up-to-date information on the world wide web internet site, www.Georgia-Navigator.com; and 4) maintaining accurate, convenient information for cellular phone customers at the *DOT number.

4.3.3.7 Measures for Addressing Community Traffic Concerns

As part of the rezoning process for the Atlantic Steel site and additional public involvement for this project, a number of citizens from the neighborhoods in the study area (Ansley Park, Home Park, and Loring Heights) raised concerns about potential traffic impacts to their communities resulting from the 17" Street Extension and Atlantic Steel redevelopment. Through subsequent meetings with the City of Atlanta Neighborhood Planning Unit (NPU-E) for this area, as well as individual meetings with the neighborhood civic associations, a number of measures were developed to address these community concerns. These measures are summarized below:

Design Modifications. Several design modifications were developed for the original 17" Street Concept based on direct input from the neighborhoods. The major design modifications to the 17" Street Bridge and its transition into Midtown Atlanta, both east and west of I-75/I-85, were discussed in Section 4.3.3.1. In addition, design modifications were developed with input from Loring Heights and Ansley Park as summarized in the following paragraphs.

Three alternatives were presented to the Loring Heights Neighborhood Association related to the design of the intersection of Bishop Street and the proposed 17" Street. The neighborhood discussed these alternatives with the adjacent commercial district along Bishop Street and identified a preferred alternative. This design alternative was incorporated into the latest design of this intersection.

Five design alternatives for 17" Street, east of Peachtree Street, were presented to representatives of the Ansley Park Civic Association as measures to discourage cut-through traffic on 17" Street into this neighborhood. The representatives agreed to discuss these alternatives with the rest of the neighborhood and the adjacent commercial district to identify which of the alternatives would be preferred. However, a final decision on a preferred alternative would be reached after a comprehensive study of traffic in this area is completed (see Memorandum of Understanding (MOU) section below, as well as Appendix I).

Other General Measures. When the Atlantic Steel property was rezoned in 1998, specific zoning conditions were included to address the surrounding neighborhood's concerns related to future traffic impacts. Condition 4 of the current zoning requires JAR to work with the City of Atlanta and Home Park to limit cut-through traffic on residential streets perpendicular to and south of 16" Street by means of cul-de-sacs, speed humps, gates, control arms, and other traffic calming devices. JAR is also required to work with the City of Atlanta and the Loring Heights neighborhood to limit cut-through traffic on Bishop Street. In addition, Condition #23 of the current zoning requires JAR to develop a transportation management plan that will attempt to reduce single occupancy vehicle (SOV) trips to and from the site. Both of these conditions represent enforceable measures on behalf of the City of Atlanta and JAR to work with these adjacent neighborhoods to minimize traffic impacts in the future.

In addition, the Atlantic Steel TCM requires annual monitoring of the build-out and performance of the Atlantic Steel site relative to certain site design and transportation performance measures. The TCM contains four site design criteria and four performance targets which will collectively ensure that the redevelopment is designed and built with elements that encourage alternatives to SOV trips, and also that the project will perform in ways to lower VMT and associated emissions (see Section 4.3.4.4).

Memorandum of Understanding. While the predicted traffic increases due to the 17" Street Extension and Atlantic Steel Redevelopment project alone would not adversely affect the overall traffic patterns in the study area, the neighborhoods have raised concerns about the cumulative increase in traffic in their communities. The communities are concerned about the cumulative traffic increases resulting not only from this project, but from other new development in the area that is already occurring, or that would occur in the future.

Based on these concerns, a MOU between EPA, GDOT, GRTA, City of Atlanta JAR, Ansley Park, Home Park, Loring Heights, and the Midtown Alliance is being developed that establishes an agreement between the parties on conditions to be met and procedures to be followed for continued study of traffic impacts to neighborhoods associated with new development in Midtown Atlanta. All parties are concerned about the localized impacts of smart growth and urban revitalization projects and seek to conserve the integrity and stability of existing neighborhoods and support overall community improvement goals.

The primary purpose of the MOU is to establish a community-based planning process that would provide a future mechanism, outside the scope of this project alone, for the collection of specific data on future trips associated with the redevelopment of the Atlantic Steel site and other development projects in Midtown Atlanta. The purpose of this process would be to study the magnitude and cumulative effects of traffic in the neighborhoods and develop and implement means of minimizing these impacts. Commitments in the MOU consist of: 1) existing

commitments in the City of Atlanta zoning for the Atlantic Steel site; 2) proposed commitments in the TCM included in the Georgia SIP;, and 3) other new commitments. Funding for any traffic improvements identified by this process is anticipated to come from a variety of public and private sources. The Draft MOU is included as Appendix I.

4.3.4 Air Quality

This section summarizes the air quality impacts of the preferred alternative. In order for the 17" Street Extension and Atlantic Steel Redevelopment project to proceed, the project must comply with federal requirements as defined under the CAA of 1990. Also, as described in Section 1 and 2, the project is being considered as a TCM. The following sections present the approach used to show that the project would not produce new violations of the NAAQS and that the project has the characteristics to qualify as a TCM. To demonstrate that the project would not produce new violations of the NAAQS, the emissions from the project were examined at the regional and local level.

4.3.4.1 Regional Impacts

Because the Atlanta region is designated nonattainment for ozone, a quantitative analysis of transportation-related emissions of NOx and VOC (precursors to ground-level ozone formation) was performed on a regional scale as part of the process to determine if the project could qualify as a TCM. This analysis was discussed previously in Sections 2.3 and 2.4. The study concluded that by the year 2015, the Atlantic Steel Redevelopment project has the potential to reduce regional VMT by 50,000 to 200,000 VMT/day, and to reduce associated emissions of NOx and VOC by 0.2 to 0.3 tons/day and 1.1 to 1.2 tons/day, respectively. Therefore, the Atlantic Steel Redevelopment project is expected to help improve future air quality in the Atlanta region with respect to ozone. By considering the impacts of development location and design on regional VMT and air emissions, study results indicate that the most regionally central, most transit-accessible, and most pedestrian-friendly location and site design combinations -- those at the Atlantic Steel site -- produced the least VMT and air emissions. For these reasons, the project qualifies as a TCM and would not produce new violations of the NAAQS.

4.3.4.2 Localized Impacts

In addition to regional emissions, a voluntary analysis of the potential impacts of the Atlantic Steel Redevelopment project on localized CO concentrations was conducted to ascertain if the NAAQS for CO would be exceeded with the project. This CO analysis is recorded in the *MicroScale Carbon Monoxide Impact Assessment for the Atlantic Steel Development Project* (Appendix J). At the local level, the pollutant of most concern is CO emissions from automobiles. Roads in the study area for the preferred alternative were examined, including new roads, ramps and the bus transit system. The CALINE4 line source dispersion model was used to predict CO concentrations in the study area for project years 1998, 2005, and 2025. This model used traffic data input including roadway geometry and widths, traffic volumes, average vehicle speeds, and lane capacities. CALINE4 also requires emission factors which are produced using MOBILE5a. The mean coldest January day was used for MOBILE5a and CALINE4 as a worst case temperature. Also, other worst case meteorological data (including wind speed and direction) were assumed for CALINE4 modeling. The CO concentrations predicted by CALINE4 were added to the background concentration to generate a predicted total CO concentration. The background concentration was based on measurements taken at the Georgia Tech Campus in the summer during

the Georgia Tech/EPA U.S. Olympic Measurement program and scaled for winter conditions. The background CO concentration derived for study area was 2.0 ppm for a 1-hour average.

The CO concentrations in the study area were predicted based on worst case A.M. and P.M. conditions using the methodology outlined above. Based on the CALINE4 prediction, background concentration, and accuracy of the data, the maximum, worst case CO concentrations would be less than 17 ppm for the l-hour standard in the years 2005 and 2025 (Appendix J). This is under the federal one-hour average CO standard of 35 ppm. The project is not expected to exceed the federal eight-hour average CO standard of 9 ppm (Georgia Tech 1999). Between the A.M. and P.M. peak hours, traffic volumes decrease and travel speeds increase. In addition, favorable meteorological conditions during this period result in lower emission rates and increased pollutant dispersion. Thus, it is extremely unlikely that the Atlantic Steel Redevelopment project would exceed the eight-hour standards (Georgia Tech 1999).

The above results were based on the original JAR design for the Atlantic Steel site. As discussed in Section 2.4, a new redesigned Atlantic Steel development has been developed, and, as a result, regional VMT is expected to decrease by two percent with the redesign compared to the original design. Therefore, the redesign may result in lower localized CO concentrations at various intersections. At the same time, some intersections are expected to carry larger traffic volumes, which may result in higher CO concentrations than predicted in the above study. However, given the large margin between the federal one-hour CO standard and the ambient concentrations predicted in the study, the potential increases in CO are not expected to result in exceedences of the NAAQS. Furthermore, the localized CO analysis was completed before EPA finalized more stringent tailpipe emissions and gasoline sulfur standards, which should serve to further reduce future motor vehicle CO emission rates below those assumed in the analysis.

4.3.4.3 Construction Related Impacts

All phases of construction operations associated with site redevelopment and roadway construction would temporarily contribute to air pollution. The two main regional pollutants of concern during the construction phase of the project are PM_{10} (fugitive dust and combustion by-products) and NO_2 (from diesel fueled truck exhaust and diesel power generators). Particulates would increase slightly in the study area as dust from construction collects in the air surrounding the project. The construction equipment would also produce slight amounts of exhaust emissions. Construction emissions should be slight and of short duration; therefore, construction related emissions during construction would not likely result in new violations of the federal standards for NO_2 and PM_{10}.

4.3.4.4 Mitigative Measures

TCM Mitigation/Monitoring. The implementation and performance of the Atlantic Steel TCM will include a monitoring program to assess the project's effectiveness and to allow for necessary in-place corrections or alterations. The two primary components of the monitoring plan include the establishment of certain site design criteria and travel performance measures. The site design criteria are presented in Table 4-7 and help ensure that the redevelopment would contain the high density, mixed use, transit- and pedestrian-friendly components studied.

Table 4-7. Atlantic Steel TCM Site Design Criteria

Criterion	Description	Target Value
Overall Density	Total number of residents + employees on site	≥ 12,000
Transit-Oriented Density [1]	Total number of residents + employees per net acre within ¼-mile of an on-site transit stop	≥ 180
Activity Diversity	Percent of blocks with mixed uses [2]	≥ 33
External Street Connectivity	Average distance (in feet) between site ingress/egress streets	≤ 1,000 -- unless the City of Atlanta specifies otherwise [3]

[I] Transit-oriented density around any individual transit stop may vary significantly, but the average density around all transit stops must be equal to or greater than 180 people per net acre within ¼ mile of the stop. This measure only includes on-site acreage.

[2] Percent of blocks with mixed uses. A block is defined traditionally by the area contained within streets. Classification of uses will be according to major Standard Industrial Classification codes.

[3] This is calculated by dividing the length of the site's perimeter in feet by the number of ingress/egress streets. It is possible that the City of Atlanta would prevent connectivity of some streets or close access to some streets after they are built at the request of adjacent neighborhoods. Because this would be beyond the control of JAR, if such an event occurs, the target value is no longer effective

The travel performance measures are presented in Table 4-8 and set travel standards to ensure VMT and mode split for the project. The fourth travel performance measure was developed by the City of Atlanta and EPA, specifically in response to public comments, as a way to better balance the regional air quality benefits with the localized impacts of additional traffic created by this project. This performance measure was added to provide a mechanism to minimize future traffic impacts associated with build-out of the Atlantic Steel site. This measure identifies an upper limit for the average daily total number of vehicle trips, other than transit, that would be generated by the project. The benefits of this additional performance measure are: 1) it does not constrain the amount of development that could occur on-site, but rather places more emphasis on restricting vehicle trips; 2) it encompasses the impacts of ALL trips to and from the site (not just those made by residents and employees); and 3) it places more emphasis on making the Atlantic Steel redevelopment a transit and pedestrian-oriented development.

It is anticipated that the four site design criteria and four performance targets would collectively ensure that the redevelopment is designed and built with elements that encourage alternatives to SOV trips, and that the project would perform in ways to lower VMT and associated emissions.

Table 4-8. Atlantic Steel TCM Travel Performance Measures

Performance Measure	Description	Target Value
VMT Per Resident	Average daily VMT for all trips made by residents of the site	≤ 27
VMT Per Employee	Average daily VMT for trips to and from work for employees working on site	≤ 11
Mode Split	Percent of all trips to, from and on the site made by residents and employees combined, using non-SOV modes	≥ 25
Total Vehicle Trips	Average daily total vehicle trips to and from the site [1], other than transit	≤ 72,000

[1] Daily total vehicle trips include those trips that have an on-are origin and an off-site destination, and trips that have an off-site origin and an on-site destination. It does not include trips that pass through the site but do not have an on-site origin or destination, and it does not include trips that have both an on-site origin and an on-site destination (i.e., internal capture).

The TCM also contains contingency measures that encourage more travelers to use alternatives to SOVs, should the monitoring program conclude that the project is not meeting the performance targets. If the site is not meeting or exceeding the applicable performance targets contained in Table 4-8, JAR would identify funding or fund the creation of a TMA, if employers and property managers are not participating in a TMA already. The TMA would consult with the City of Atlanta concerning implementation of additional alternative transportation programs that achieve the performance standards stipulated in Table 4-8. The City of Atlanta and JAR would ensure that these programs would be developed and implemented, as appropriate, by the TMA. Examples of suggested programs are:

1. Transit discounts for on-site employees.
2. Increased provision of shuttle bus service or other transit service.
3. Increased parking rates, by time-of-day, by facility, and by parking type.
4. Reduction of available parking facilities or spaces.
5. Carpool/vanpool matching services.
6. Providing free or highly discounted annual regional transit passes with each residential unit (included in leases and property covenants).
7. Addition of traffic calming measures, such as raised pedestrian crosswalks, sidewalk bump-outs, diagonal on-street parking, or pedestrian islands.
8. Provisions and support for neighborhood car rental, car sharing systems, and real-time ridesharing services for residents and visitors.

9. Provision of additional facilities and amenities for non-SOV users such as bus shelters, bike racks and lockers, sidewalks, bike paths, park-and-ride facilities, telephones at shelters, newsstands, convenience retail, and daycare facilities.

10. Provision of guidance for telecommuting and alternative work schedules.

11. Employee Commuter Choice incentives--employees would be given the opportunity to purchase employer-discounted transit passes and vanpool benefits.

Construction Mitigation. To further ensure construction emissions are minimized, JAR and GDOT are responsible for compliance by all workers, including subcontractors operating at the site, with EPD rules. The following provision of the EPD rules is expected to be applicable to the construction activities:

The 391-3-1-02.(2)(n) Provisions – Fugitive Dust rule requires that all persons responsible for any operation, handling, transportation or storage facility that may result in fugitive dust shall take all reasonable precautions to prevent such dust from becoming airborne. This includes the use of water or chemicals for the control of dust during construction operations; the grading of roads or the clearing of land; and the covering, at all times when in motion, of open bodied trucks and transporting materials likely to give rise to airborne dusts.

Compliance with fugitive dust regulations would be achieved through the implementation of comprehensive construction management practices.

4.3.5 Noise and Vibration

Short term construction noise and vibration impacts as well as long term noise impacts associated with the future traffic for the proposed Atlantic Steel Redevelopment and the 17" Street Extension is presented in this Section. The Noise Impact Analysis Report (MAAI 2000b)for this project is included in Appendix E. For the purposes of this analysis, the study area was divided into five groups: Area A (Northside Drive/14th Street/Bishop Street), Area B (14" Street/Techwood Drive and Home Park), Area C (Midtown Atlanta/East of the I-75/85 Connector), Area D (Ansley Park), and Area E (Redeveloped Atlantic Steel Property) (see Figure Al in Appendix E).

4.351 Short Term Construction Impacts

Construction Noise Impacts. Noise impacts from construction activities of the proposed project are a function of the noise generated by construction equipment, the location and sensitivity of nearby land uses, and the timing and duration of the noise-generating activities. Normally, construction activities are carried out in phases, and each phase has its own noise characteristics based on the mix of construction equipment in use. Overall, construction noise levels are governed by the noisiest pieces of equipment (i.e. pile driver). The anticipated construction activities are demolition, earthwork, new building construction on the Atlantic Steel site, and bridge and roadway construction. These activities would occur adjacent to Areas A, B, C and D. Area E is the Atlantic Steel redevelopment site. The impact assessment due to construction noise at Areas A, B, C, and D is summarized below:

- Area A: The main construction activity along Northside Drive and 17" Street is earthwork, bridge foundations, and roadway works. The land usage along these roads is commercial; no significant construction noise impacts are anticipated.

- Area B: There are mixed land uses in this area. The main land usage along Techwood Drive is commercial. Some residential, areas are located in the vicinity of 16" Street which would experience short term construction noise impacts.
- Area C: During the earthwork, pile driving operations are expected. The land usage in the vicinity of the proposed 17" Street Bridge is commercial. There would be roadway improvements along Williams Street, but the land usage along the road is commercial; therefore, no significant construction noise impacts are anticipated.
- Area D: Ansley Park is located at least 800 feet away from the closest proposed improvements; therefore, no significant construction noise impacts are anticipated.

Construction Vibration Impacts. Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods employed. Operation of construction equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the construction site respond to these vibrations with varying results ranging from no perceptible effects at the lowest levels, low rumbling sounds and perceptible vibrations at moderate levels and slight damage at the highest levels. The vibratory pile driver would be the most dominant source of vibration. Other heavy equipment such as bulldozers, drill rigs, and vibratory compactors are major sources of vibration.

The following activities would likely cause short term vibration impacts:

- Foundation Work for Bridge Construction: The major vibration source of this activity is the pile driver. Midtown Heights North Building may receive some cosmetic damage. Workers in the commercial areas within 300 feet from the geometric center of the pile driving operations would likely be annoyed.
- Other Roadway Construction: Heavy construction equipment such as pavement vibratory roller and bulldozer are the main sources of vibration. This operation is not likely to cause any structural damage, but it would annoy nearby receptors within 100 feet from the edge of the activity. The impacted receptors would be residential or commercial areas adjacent to the proposed roadway improvement sites located west of Northside Drive, north of 17" Street, west of Techwood Drive, and east of Williams Street.
- Earthwork/Building Construction: These activities would occur mainly on the Atlantic Steel Site. This operation would not be expected to cause any structure damage. Residential or commercial areas in the vicinity of 16th Street, which directly face the construction boundaries of the redevelopment, would likely be annoyed during this operation.

4.3.5.2 Long Term Traffic Noise Impacts

This project would impact the future noise levels in the study area due to additional traffic and changes in traffic patterns. This analysis is summarized from the *Traffic Noise Study, Proposed Redevelopment of the Former Atlantic Steel Site* (MAAI 2000b; see Appendix E).

Two methods were used for predicting a noise impact. The first method involved an evaluation of the predicted noise increases from the proposed project to determine if the noise levels approach or exceed GDOT Noise Abatement Criterion (NAC). This would be considered an impact. GDOT has defined approach to mean within one decibel of the NAC. A 69 dBA of L_{10} is

approach level for schools, libraries, residences, churches, playgrounds, and recreational areas, and 74 dBA of L_{10} for commercial activities. The second method to determine noise impacts involved an analysis of the amount of increase from existing to future noise levels. Impacts were identified where there was a "substantial increase" from existing levels. GDOT considers a substantial increase to be 10 dBA or more.

Noise levels (L_{10}) associated with traffic across the entire study area were developed for the A.M. and P.M. peak hours. Noise levels would range from 58 to 79 dBA L_{10} for the preferred alternative conditions in 2025, with decreases and increases ranging from -7 to +12 dBA L_{10} compared to the no action alternative conditions in 2025.

Noise levels were predicted at 100 representative receiver locations (Appendix E). Modeling results for the preferred alternative indicate that 24 locations would be impacted: 23 locations would approach or exceed the GDOT NAC, and one location would experience a substantial increase in noise from existing to future levels. These impacted sites are depicted graphically in Appendix E. Of those impacted sites, 14 locations are existing commercial, four are existing residential, and six are future residential on the Atlantic Steel site (Area E). The future predicted traffic noise levels associated with the no action alternative were shown to impact 3 1 locations in the project area. All 3 1 approach or exceed the GDOT NAC, and two of these also experience a substantial increase in noise from existing to future conditions. Of those impacted sites, 19 are existing commercial and 12 are existing residential. These impacted sites are depicted graphically in Appendix E.

Of the 24 impacted locations associated with the preferred alternative, noise levels are predicted to increase for six, stay the same for nine, and decrease for three as compared to the no action alternative. A comparison of noise levels at the six impacted future residential locations on the Atlantic Steel Site (Area E) with the no action alternative was not possible (see below). The following bullets describe the distribution and impact of traffic generated noise throughout the study area. For specific receptors identified, refer to Appendix E.

- Area A: The future noise levels for the preferred alternative at commercial areas along 16" Street and 17" Street represented by Receptors Al through A7 would increase slightly or remain the same as compared to the future no action. The L_{10} at the northeastern comer of a commercial building adjacent to the proposed 16" Street Extension (Receptors A8 and A9) is predicted to increase from 6 to 10 dBA. However, under the preferred alternative, the L_{10} at the west, or south of this building, is predicted to be lower than the no action scenario.
- Area B: In general, the project would reduce the future traffic noise levels in Area B as compared to the no action alternative. The predicted noise levels at 27 of 28 representative locations in this area would be the same or lower than the future no action. Commercial areas south of 14" Street, represented by Receptors B20, B21a, and B21b, would be impacted. However, the future noise levels at these receptors would be identical or higher by only 1 dBA than the future no action. Residential areas along 14" Street, represented by receptors B24 through B26, are currently impacted by existing noise levels, and would continue to be impacted under the future no action scenario, as well as the preferred alternative conditions. The predicted P.M. peak hour noise levels at receptors B24 through

B26 are 71 to 73 dBA for the preferred alternative, which are 1 to 3 dBA less than the future no action conditions.

- Area C: The future preferred alternative noise levels in Area C would impact eight commercial locations in this area, however, the no action alternative would impact nine. Commercial areas along Williams Street, such as a hotel (Cl), a funeral home (C4), and office buildings (C6 and C8), would be impacted. The future noise level increases at these impacted buildings as compared to the no action alternative range from 0 to 3 dBA. Commercial areas along Peachtree Street and West Peachtree Street represented by receptors C17, C 19, and C20 would be also impacted.
- Area D: The future traffic noise levels at residential or commercial areas in Ansley Park would remain virtually identical between the future no action and future preferred alternative conditions. The future preferred alternative noise levels at one commercial area (D2) and one residence (D7) would remain the same as the future no action, but would still experience an impact (L_{10} of 75 dBA and 69 dBA, respectively). The residence is located at the comer of 15th Street and Peachtree Street; thus, these two streets contribute high traffic noise levels to the residence.
- Area E: This area is within the proposed Atlantic Steel Redevelopment site. Future noise levels at specific receptor locations for the preferred alternative were developed using the latest site design; however, this was not possible for the no action alternative because a specific site design is not available. Therefore, a comparison of future noise levels on-site between the preferred and no action alternatives was not completed. The future noise levels at the designated multi-family residential areas represented by receptors E5, E6, E22, and E24 would be 69 or 70 dBA; therefore, there would be impacts. The noise levels at residential areas along 16" Street represented by receptors E11 and El2 would also exceed GDOT NAC.

4.353 Mitigative Measures

Construction. The temporary construction activities at the noise sensitive receptors adjacent to the proposed development and bridge would increase the ambient noise levels. Vibration due to the activities such as earthwork and roadway works would also cause adverse impacts. The following are the mitigative measures that would be considered and implemented to minimize the impacts of construction noise:

- Nearby residents and the traveling public on Bishop Street to the north, 16" Street, Atlantic Street, and other streets on the south will be informed of upcoming construction activities by signage (see Section 4.3.3.6).
- Construction equipment would be required to have factory-installed mufflers or their equivalents in good working order during the life of the construction contracts.
- Construction, where feasible, would take place primarily, during the less noise sensitive daylight hours to avoid impacts during the hours associated with sleep.
- A 15 foot earth berm has been constructed adjacent to 16" Street and has been tied into an existing embankment across Atlantic Street. Earth berms attenuate construction noise more effectively than wood. This should minimize construction noise impacts to the adjacent Home Park residences.

. GDOT would conduct case-by-case discussions with individual property owners and studies may be conducted to minimize construction related noise impacts.

Based on implementation of these mitigative measures and the fact that construction noise and vibration impacts are short-term and temporary, no significant noise and vibration construction impacts are anticipated.

Long Term Traffic Noise. Noise abatement was considered for the 24 sites (six within the proposed redevelopment) predicted to be impacted. A number of conditions were taken into account at impacted sites to determine the feasibility of abatement. Abatement measures considered included barriers, traffic management, alteration of horizontal and vertical alignments, and acquisition of right-of-way to serve as buffer zones. The effectiveness of a noise barrier or cost per benefited unit make traffic noise mitigation measures infeasible or unreasonable for most of the areas impacted. For a wall to be effective, it should be continuous and without any openings. However, a continuous wall would block residential access to the local roadways. A noise barrier, approximately 500 feet long and 7 to 10 feet high beginning just south of the 14th Street bridge extending south, mounted on top of the existing retaining wall/Jersey barrier adjacent to I-75/85, was identified as feasible and would possibly reduce noise levels at a hotel, identified as receptors B20a, B21a and B21b. However, the barrier would block the hotel view and sign; therefore, it may not be desirable for its business operation. Abatement measures other than barriers were found to be infeasible or ineffective or would not meet abatement conditions. JAR will work with, and encourage builders at the site to use noise reducing construction materials and/or orient buildings in a manner that would reduce noise levels at the site.

Throughout the study area, the large majority of noise levels stay the same or improve by implementing the project as compared to not implementing the project. Based on this and the consideration and implementation of mitigative measures, no significant long team noise impacts are anticipated.

4.3.6 Cultural Resources

The criteria for determining effects as presented in this EA conform to criteria established in the Section 106 regulations (36CFR800.5), which consider direct, indirect, and cumulative impacts. An "adverse effect" is found when an undertaking may alter, directly or indirectly, the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association. Adverse effects may include reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative (36CFR800.5(a)(1). Adverse effects on historic properties include, but are not limited to:

- Physical destruction of or damage to all or part of the property;
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (36CFR68) and applicable guidelines;
- Removal of the property from its historic location;

- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- Introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features;
- Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- Transfer, lease, or sale of property out of federal ownership or control without adequate and legally enforceable restriction or conditions to ensure long-term preservation of the property's historic significance.

4.3.6.1 Historic Resources

The following section summarizes potential impacts on identified historic resources located within the APE. There will be no atmospheric effects to these resources as a result of project implementation. The project is consistent with the State Implementation Plan for air quality in the region.

Atlantic Steel Industries, Inc., is located in the northwestern section of the City of Atlanta immediately west of Interstates 75 and 85. The property extends roughly from the Norfolk Southern Railroad line paralleling Bishop Street south to approximately 14" Street. The eligible National Register boundary includes the current legal property boundary, or approximately 135 acres (Figure 4-7). This proposed boundary contains all National Register qualifying characteristics and features of the property and includes the locations of all of the former mills, warehouses, other associated buildings and machinery, and their immediate surroundings. The potential eligibility of Atlantic Steel Industries, Inc., has been recognized by consulting parties from the initial stages of the proposed project, as the Atlantic Steel facility is well known locally for its significance to the City of Atlanta, as well as to the southeastern United States. The resource is considered eligible under National Register Criterion A for its contributions to the development of the steel industry in Atlanta and the Southeast region, as well as National Register Criterion C for its architectural and engineering significance throughout a century of continuous operation.

Environmental remediation and proposed redevelopment would have an **adverse effect** on Atlantic Steel Industries, Inc., related to the demolition of this historic steel mill. These actions would result in physical destruction, damage, and alteration to the resource. As previously noted, the Atlantic Steel site would be cleaned up and redeveloped regardless of whether or not the 17" Street Extension occurs.

The character of the setting of Atlantic Steel Industries, Inc., outside the eligible National Register boundary consists of a mixture of land uses that have remained constant throughout the operation of the steel mill. The southern boundary of the parcel abuts the northern and western edges of the early-20" century residential subdivision of Home Park. The remainder of the surrounding area is largely industrial and commercial due to the proximity of the railroad, and features various early- to mid-20" century commercial office buildings and industrial warehouses. However, project implementation would result in maintaining residential and commercial uses in this area and therefore would not adversely affect this neighboring setting.

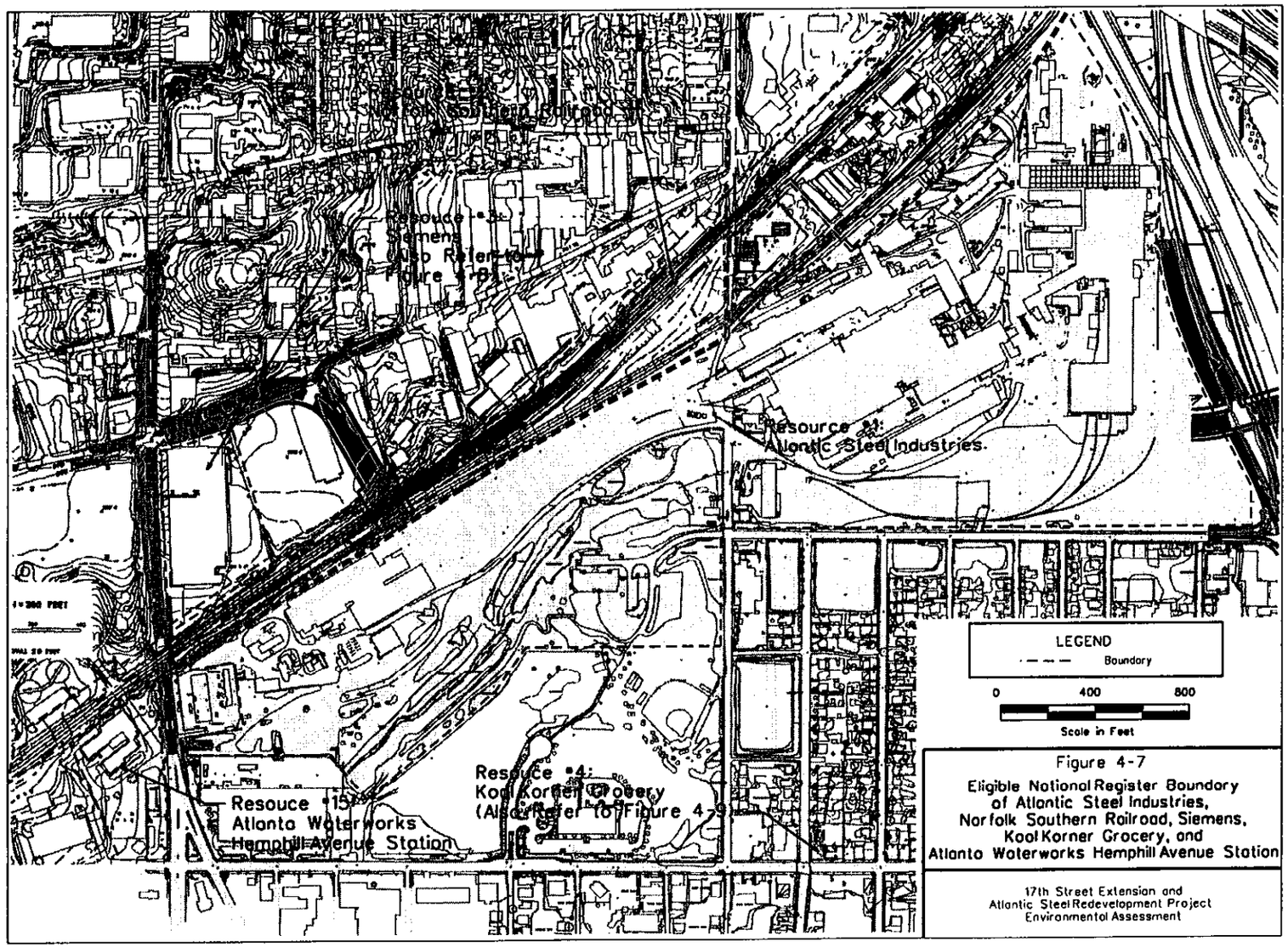

Figure 4-7
Eligible National Register Boundary of Atlantic Steel Industries, Norfolk Southern Railroad, Siemens, Kool Korner Grocery, and Atlanta Waterworks Hemphill Avenue Station

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Specific mitigation measures discussed during consultation with the SHPO, the City of Atlanta Urban Design Commission (AUDC), and the Atlanta History Center (AHC) include comprehensive, Historic American Buildings Survey-Historic American Engineering Record (HABS-HAER)-quality, large-format black-and-white photographs of the site as it exists prior to redevelopment. The requirements and responsibilities for this mitigation are contained in a Programmatic Agreement for the project initiated during consultation between the EPA and SHPO. The JAR, AUDC, and AHC were concurring parties for this agreement (see Appendix F).

Other preservation efforts regarding Atlantic Steel Industries, Inc., have occurred within the last ten years. Efforts to preserve the facility's heritage at various off-site locations include the preservation of selected structures, machinery, and buildings by transfer or sale to various museums throughout Georgia, including the Atlanta History Center, the Railroad Museum in Savannah, the Southeastern Railway Museum in Duluth, and the Carter Machine Company in Toccoa. The preservation of many company records has occurred through transfer to the Atlanta History Center. JAR has committed to the implementation of a Public Education and Outreach Plan to be coordinated with the SHPO, the AUDC, and the AHC. Components of this Education and Outreach Plan will include compilation of an oral history of Atlantic Steel Industries, Inc., development of educational materials, and the potential creation of a permanent exhibition space celebrating and incorporating the history of Atlantic Steel in the redevelopment plan.

The effects of visual impacts, noise, and vibration for the Atlantic Steel Industries, Inc., property are not applicable since remediation of the site would require the demolition of all existing historic resources.

The Norfolk Southern Railroad borders the northern portion of the Atlantic Steel site and extends east and west to provide service from Atlanta northeastward to Washington, D.C. (Figure 4-7). The eligible National Register boundary corresponds with the legal property boundary of the railroad line that abuts the current property boundary of the neighboring Atlantic Steel site. This proposed boundary contains all National Register qualifying characteristics and features of the resource, including its track beds and a spur line located south of the main Norfolk Southern line and immediately adjacent to the northern edge of the Atlantic Steel parcel. The resource is considered eligible under National Register Criterion A for its contributions to the development of the economic and transportation history of the state, region, and local community. The resource is also significant under National Register Criterion C as an example of rail transportation engineering in Georgia.

The preferred alternative would have **no adverse effect** on the Norfolk Southern Railroad. Physical destruction, damage, or alteration of the property would not occur with implementation of the preferred alternative. Physical taking of the railroad right-of-way is not part of the proposed project. Construction of a new elevated crossing over the railroad as part of the 17" Street Extension and a potential elevated bike/pedestrian bridge at Mecaslin Street would not adversely affect the railroad. These road improvements would not substantially change the character of the historic resource, nor would they change its eligibility under National Register Criteria A or C.

The character of the setting of the Norfolk Southern Railroad outside the eligible National Register boundary consists of a mixture of land uses that have remained constant throughout the existence of the rail line. The railroad parallels the former Atlantic Steel Industries, Inc., site. The

remainder of the surrounding area is largely industrial and commercial due to the presence of the railroad, and features various early- to mid-20" century commercial office buildings and industrial warehouses. Project implementation would not affect commercial uses in this area and therefore would not adversely affect this neighboring setting.

The Norfolk Southern Railroad would be visually affected by implementation of the preferred alternative. However, this impact would not be an adverse effect since the adjacent commercial and residential development would not compromise the National Register eligibility of the resource. The effects of noise and vibration for the Norfolk Southern Railroad are not applicable since this resource is not a noise-sensitive receptor.

Siemens (1299 Northside Drive) is situated at the southeastern comer of Bishop Street and Northside Drive in the northwestern section of the APE adjacent to the proposed roadway improvements along Northside Drive and Bishop Street. The eligible National Register boundary corresponds with the legal property boundary and extends along the edge of pavement along both Northside Drive and Bishop Street (Figure 4-7 and 4-S). This proposed boundary contains all National Register qualifying characteristics and features of the resource, including all of the commercial and warehouse space, driveways, and parking and loading areas.

The potential eligibility of this resource has been recognized by the Georgia SHPO, as the resource is a notable example of modem architecture in Atlanta designed by the well-known local firm of Robert & Co., Inc. Furthermore, since the building was originally constructed for the Westinghouse Electric Company, the resource represents the steady growth of the company as a regional corporate center. Despite the replacement of its original glass-block windows, the exterior remains largely intact and continues to convey the character-defining features of the Art Moderne style. The resource is considered eligible under National Register Criterion A for its contributions to the development of the Westinghouse Electric Company as a regional corporate center in Atlanta. The resource is also significant under National Register Criterion C as a notable example of the Art Moderne style both designed and located in Atlanta.

The preferred alternative would have **no adverse effect** on the Siemens property. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. The roadway improvements on Northside Drive would occur within the existing right-of-way and sidewalks would align with existing sidewalks. The construction of 17" Street at Northside Drive, requiring realignment of Bishop Street, would occur within the existing right-of-way at bishop Street and on the north side of Bishop Street. Roadway improvements would not change the overall character of the resource or its historical and architectural significance under National Register Criteria A or C.

The character of the setting of Siemens outside the eligible National Register boundary consists of a mixture of land uses that have remained constant throughout the development of this portion of the APE. The southern boundary of the parcel parallels the Norfolk Southern railroad. The remainder of the surrounding area to the west, north, and east is largely industrial and commercial due to the presence of the railroad, and features various early- to mid-20" century commercial office buildings and industrial warehouses. However, project implementation would result in maintaining commercial uses in this area and therefore would not adversely affect this neighboring setting. Furthermore, the resource would not be isolated from the character of its

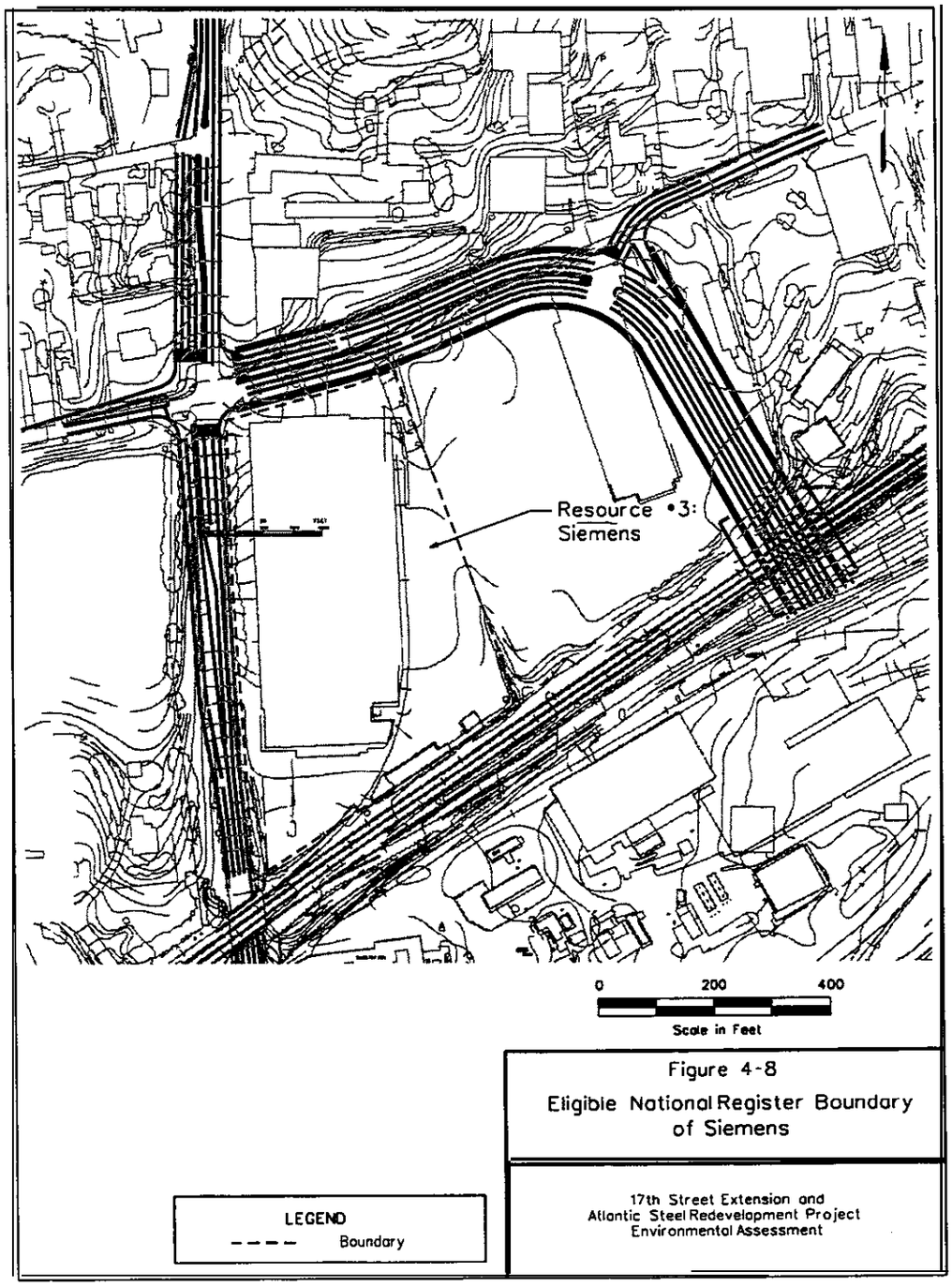

Figure 4-8
Eligible National Register Boundary
of Siemens

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setting since existing access along the northern boundary would be maintained (via the new 17" Street Extension).

Siemens would be visually affected by implementation of the preferred alternative. However, this impact would not be an adverse effect since the adjacent commercial and residential development and roadway improvements would not compromise the National Register eligibility of the resource.

The existing noise level near Siemens is 72 dBA L_{10} (A.M.) and 73 dBA L_{10} (P.M.). While the preferred alternative noise level for the year 2025 would be 74 dBA L_{10} (A.M. and P.M.), the noise level for the no action alternative would also be 74 dBA L_{10} (A.M. and P.M.). The two-decibel increase between the existing and preferred alternative conditions would occur over an approximate twenty-year time frame and would not be perceptible to the human ear. In addition, the resource is expected to receive a noise increase whether or not the proposed project is implemented. The noise level "approaches" but does not exceed the FHWA noise abatement criterion of 75 dBA L_{10} for commercial land use. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The **Kool Komer** Grocery (349 14" Street) is situated at the northeastern comer of 14" and State Streets (Figures 4-7 and 4-9). The eligible National Register boundary corresponds with the legal property boundary of the resource. This proposed boundary contains all National Register qualifying characteristics and features of the resource, including the commercial space fronting 14" Street and the residential space to the rear.

The potential eligibility of this resource has been recognized by the Georgia SHPO. The resource is considered eligible under National Register Criterion A for its role as a local community landmark historically significant for its commercial and social functions within the surrounding community. The resource is also significant under National Register Criterion C as an example of an historic comer store building. Although the building has undergone some minor alterations, the resource retains its essential character-defining features, as well as some intact interior elements.

The preferred alternative would have no **adverse effect** on the Kool Komer Grocery. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the eligible National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of the Kool Komer Grocery outside the eligible National Register boundary consists of a mixture of land uses that likely have remained constant throughout the development of this portion of the APE. The southern boundary of the parcel abuts 14th Street, a highly traveled 4-lane State Route that extends to the east and west and provides Interstate access. The western and northern boundaries of the parcel along State Street are situated at the edge of Home Park, an early-20th century residential subdivision. However, project implementation would

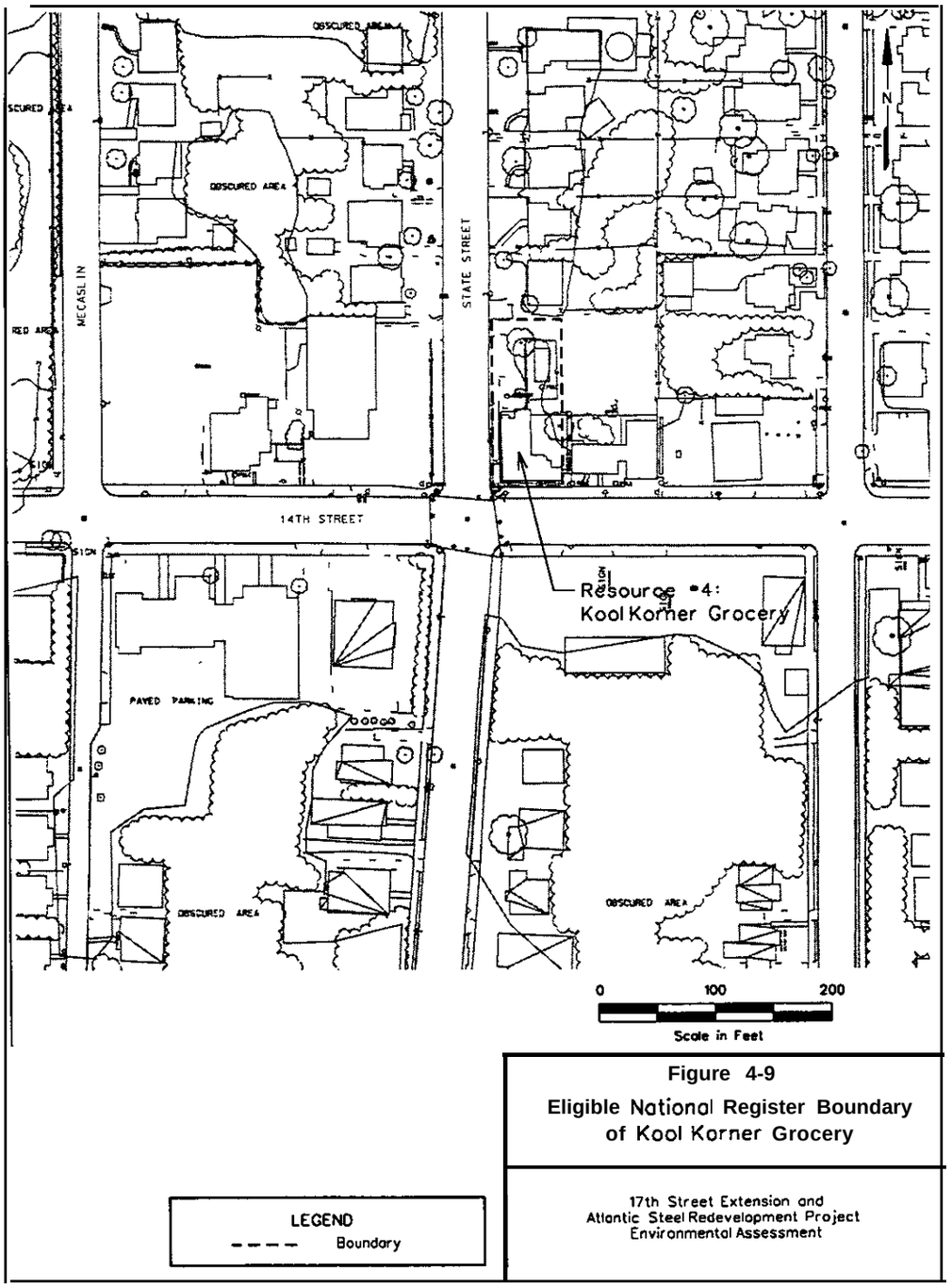

Figure 4-9
Eligible National Register Boundary of Kool Korner Grocery

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not affect these current land uses and therefore would not adversely affect this neighboring setting, nor change the overall character of the resource or its historical and architectural significance under National Register Criteria A or C.

The Kool Komer Grocery would not be visually affected by implementation of the preferred alternative. Currently fronting 14" Street, the proposed redevelopment and roadway improvements would occur approximately 1,000 feet to the north. Therefore, there would be no visual adverse effects to this resource.

The existing noise level at the Kool Komer Grocery is 66 dBA L_{10}. The no action noise level for the year 2025 would be 72 dBA L_{10} (A.M.) and 74dBA L_{10} (P.M.). The noise level for the preferred alternative would be 68 dBA L_{10} (A.M. and P.M.). The two-decibel increase between the existing and preferred alternative conditions would occur over an approximate twenty-year time frame and would not be perceptible to the human ear. Also, the resource is expected to receive a noise increase whether or not the proposed project is implemented. In addition, the noise level would not approach or exceed the FHWA noise abatement criterion of 75 dBA L_{10} established for commercial land use, and is predicted to be lower than if the project is not implemented. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The **Ewe11 Jett House** (13 85 Spring Street NE) is situated on the eastern side of Spring Street, approximately 200 feet north of the alignment for the proposed 17" Street improvements (Figure 4-10). The eligible National Register boundary corresponds with the legal property boundary and contains all National Register qualifying characteristics and features of the resource. The property is considered eligible under National Register Criterion C as a notable early-20" century example of a residential American four-square. Current use of this property is commercial.

The preferred alternative would have no **adverse effect** on the Ewe11 Jett House. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the eligible National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of the Ewe11 Jett House outside the eligible National Register boundary consists primarily of commercial land uses. The western boundary of the parcel abuts Spring Street, a highly traveled one-way State Route that extends south. Therefore, project implementation would not adversely affect this neighboring setting nor change the overall character of the resource or its architectural significance under National Register Criterion C. The Ewe11 Jett House would be visually affected by implementation of the preferred alternative, especially along the western and southern boundaries of the parcel. However, this impact would not be an adverse effect due to the existing urban visual setting of this area nor would it compromise the National Register eligibility of the resource.

The existing noise level in the vicinity of the Ewe11 Jett House is 72 dBA L_{10} (A.M.) and 70 dBA L_{10} (P.M.). While the no action noise level for the year 2025 will be 73 dBA L_{10} (A.M.) and 72 dBA L_{10} (P.M.), the noise level for the preferred alternative would be 73 dBA L_{10} (A.M.) and

Figure 4-10

Eligible National Register Boundary of Ewell Jett House. The Granada, The Belvedere, and Winwood Apartments

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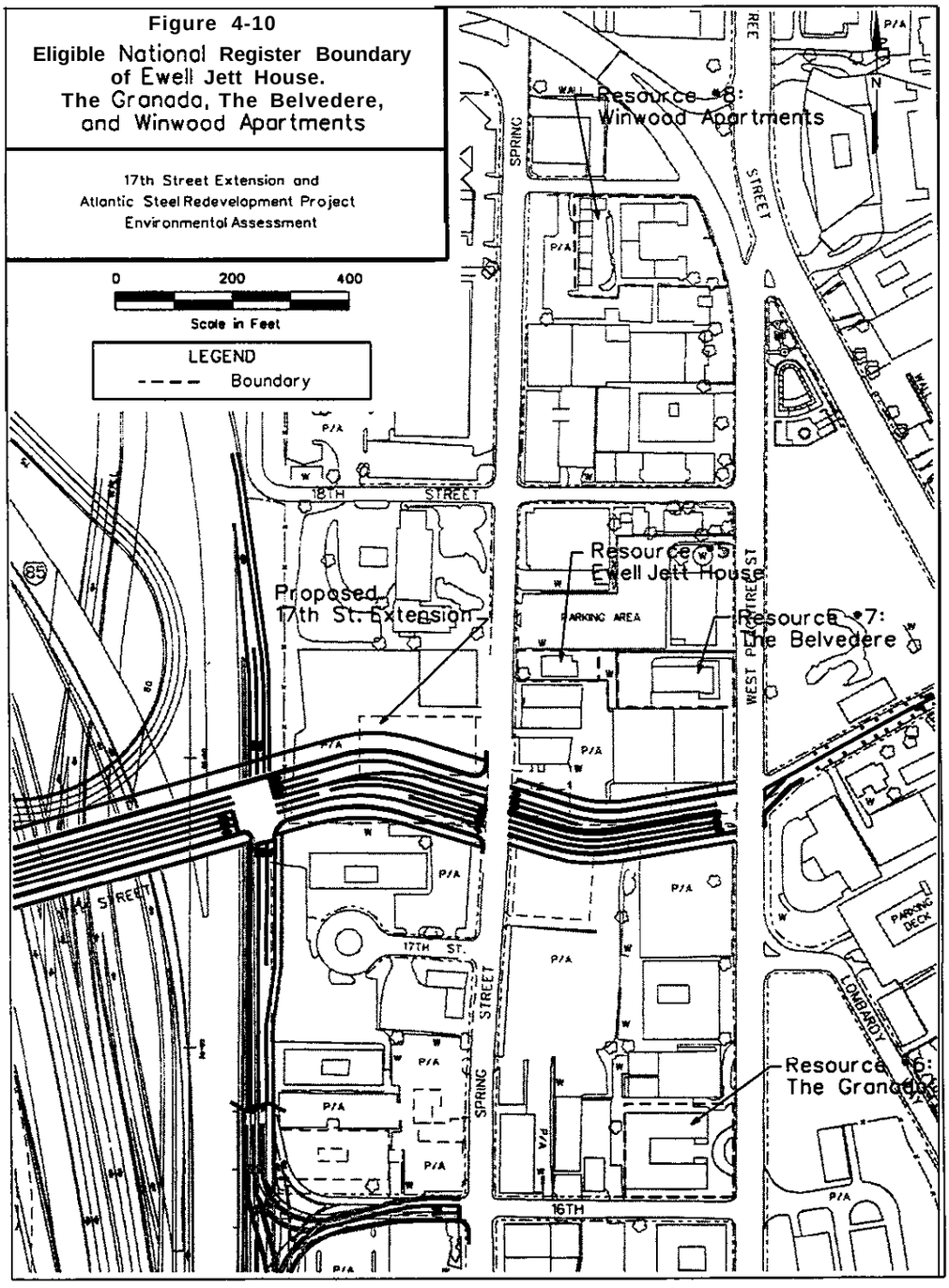

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71 dBA L_{10} (P.M.). The one to two decibel increase between the existing and preferred alternative conditions would not be perceptible to the human ear. Also, the resource is expected to receive a noise increase whether or not the proposed project is implemented. In addition, the noise level would not approach or exceed the FHWA noise abatement criterion of 75 dBA L_{10} established for commercial land use, and is predicted to be slightly lower than if the project is not implemented. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The Granada (1302 W. Peachtree Street) is situated at the northwestern comer of 16" and W. Peachtree Streets, approximately 600 feet south of the proposed 17" Street improvements and approximately 300 feet east of the proposed improvements to 16" Street (Figure 4-10). The eligible National Register boundary corresponds with the legal property boundary and contains all National Register qualifying characteristics and features of the resource. The property is considered eligible under National Register Criterion A for its contributions to the development of middle class multi-family housing in Midtown Atlanta in the early-20" century. The resource is also significant under National Register Criterion C as an outstanding example of the Spanish Revival style. Current use of this property is as a commercial hotel.

The preferred alternative would have no **adverse** effect on The Granada. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the eligible National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of The Granada outside the eligible National Register boundary consists primarily of commercial land uses. The eastern boundary of the parcel fronts W. Peachtree Street, a highly traveled one-way State Route that extends to the north and provides access to the Interstate. With the exception of the indirect effect of increased traffic on W. Peachtree Street, implementation of the project would not adversely affect this neighboring setting. Furthermore, the prefened alternative would not alter the overall character of the resource or its historical or architectural significance under National Register Criteria A and C.

The Granada would be visually affected by implementation of the preferred alternative, especially along the northern and western boundaries of the parcel. However, this impact would not be an adverse effect due to the existing urban visual setting of this area, nor would it compromise the National Register eligibility of the resource.

The existing noise level in the vicinity of The Granada is 69 dBA L_{10} (A.M.) and 71 dBA L_{10} (P.M.). The no action noise level for the year 2025 would be 71 dBA L_{10} (A.M.) and 74dBA L_{10} (P.M.). The noise level for the preferred alternative would be 71 dBA L_{10} (A.M.) and 72 dBA L_{10} (P.M.). The one to two decibel increase between the existing and preferred alternative conditions would not be perceptible to the human ear. Also, the resource is expected to receive a noise increase whether or not the proposed project is implemented. In addition, the noise level of the prefened alternative would not approach or exceed the FHWA noise abatement criterion of 75 dBA L_{10} established for commercial land use, and is predicted to be slightly lower than if the project is not implemented. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The Belvedere (1384 W. Peachtree Street) is situated on the western side of W. Peachtree Street, approximately 150 feet north of the proposed 17" Street improvements (Figure 4-10). The eligible National Register boundary corresponds with the legal property boundary and contains all National Register qualifying characteristics and features of the resource. The property is considered eligible under National Register Criterion A for its contributions to the development of middle class multi-family housing in Midtown Atlanta in the early-20" century. The resource is also significant under National Register Criterion C as a notable example of the Chicago-influenced Commercial style. Current use of this property is residential apartments.

The preferred alternative would have no **adverse effect** on The Belvedere. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the eligible National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of The Belvedere outside the eligible National Register boundary consists primarily of commercial land uses. The eastern boundary of the parcel fronts W. Peachtree Street, a highly traveled one-way State Route that extends to the north and provides access to the Interstate. With the exception of the indirect effect of increased traffic on W. Peachtree Street, implementation of the project would not adversely affect this neighboring setting. Furthermore, the preferred alternative would not alter the overall character of the resource or its historical or architectural significance under National Register Criteria A and C.

The Belvedere would be visually affected by implementation of the preferred alternative, especially along the southern and western boundaries of the parcel. However, this impact would not be an adverse effect due to the existing urban visual setting of this area, nor would it compromise the National Register eligibility of the resource.

The existing noise level in the vicinity of The Belvedere is 72 dBA L_{10} (A.M.) and 74 dBA L_{10} (P.M.). The no action noise level for the year 2025 would be 74 dBA L_{10} (A.M.) and 76 dBA L_{10} (P.M.). The noise level for the preferred alternative would be 75 dBA L_{10} (A.M.) and 76 dBA L_{10} (P.M.). The two to three decibel increase between the existing and preferred alternative conditions would occur over an approximate twenty-year time frame and would not be perceptible to the human ear. Also, the resource is expected to receive a noise increase whether or not the proposed project is implemented. Although the noise level of the preferred alternative exceeds the FHWA noise abatement criterion of 70 dBA L_{10} for residential land use, current levels already exceed this limit. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The Winwood Apartments (1460 W. Peachtree Street) are situated on the western side of W. Peachtree Street near the intersection of Peachtree Street, approximately 800 feet north of the proposed 17th Street improvements (Figure 4-10). The eligible National Register boundary corresponds with the legal property boundary and contains all National Register qualifying characteristics and features of the resource. The property is considered eligible under National Register Criterion A for its contributions to the development of middle class multi-family housing in Midtown Atlanta in the early-20" century. The resource is also significant under National

Register Criterion C as a good example of the Neoclassical style. Current use of this property is residential apartments.

The preferred alternative would have no **adverse effect** on the Winwood Apartments. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the eligible National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of the Winwood Apartments outside the eligible National Register boundary consists primarily of commercial land uses. The eastern boundary of the parcel fronts W. Peachtree Street, a highly traveled one-way State Route that extends to the north and intersects the on-ramp to the interstate. With the exception of the indirect effect of increased traffic on W. Peachtree Street, implementation of the project would not adversely affect this neighboring setting. Furthermore, the preferred alternative would not alter the overall character of the resource or its historical or architectural significance under National Register Criteria A and C. The larger setting of the resource has already been affected by the extension of the Buford Highway Connector to I-85 northbound.

The Winwood Apartments would be visually affected by implementation of the preferred alternative, especially along the southern and western boundaries of the parcel. However, this impact would not be an adverse effect due to the existing urban visual setting of this area, nor would it compromise the National Register eligibility of the resource.

The existing noise level in the vicinity of the Winwood Apartments is 68 dBA L_{10} (A.M.) and 70 dBA L_{10} (P.M.). The no action noise level for the year 2025 would be 74 dBA L_{10} (A.M.) and 77 dBA L_{10} (P.M.). The noise level for the preferred alternative would be 75 dBA L_{10} (A.M.) and 76 dBA L_{10} (P.M.). There would be a six to seven decibel increase between the existing and preferred alternative conditions. However, the resource is expected to receive a noise increase whether or not the proposed project is implemented. Predicted noise levels for the preferred alternative would be virtually identical to the no action alternative. Although the noise level of the preferred alternative exceeds the FHWA noise abatement criterion of 70 dBA L_{10} established for residential land use, current levels already approach or exceed this limit. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The First Presbyterian Church (1328 Peachtree Street NW) is situated at the northwest comer of 16” Street and Peachtree Street NE, approximately 600 feet southeast of the proposed 17” Street improvements (Figure 4-l 1). The eligible National Register boundary corresponds with the legal property boundary and contains all National Register qualifying characteristics and features of the resource. The property is considered eligible under National Register Criterion A for its contributions to the broadcasting of services throughout the Southeast in the early-20” century. The resource is also significant under National Register Criterion C as a notable example of the Gothic style. Current use of this property is as a church.

Figure 4-11

Eligible Notional Register Boundary of First Presbyterian Church. and Garrison Apartments

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The preferred alternative would have no **adverse effect** on the First Presbyterian Church. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the eligible National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of the First Presbyterian Church outside the eligible National Register boundary consists primarily of commercial land uses. The eastern boundary of the parcel fronts Peachtree Street, a highly traveled urban thoroughfare that extends to the northwest and southeast. With the exception of the indirect effect of increased traffic on Peachtree Street, implementation of the project would not adversely affect this neighboring setting. Furthermore, the preferred alternative would not alter the overall character of the resource or its historical or architectural significance under National Register Criteria A and C.

The First Presbyterian Church would be visually affected by implementation of the preferred alternative, especially along the northern and western boundaries of the parcel. However, this impact would not be an adverse effect due to the existing urban visual setting of this area, nor would it compromise the National Register eligibility of the resource.

The existing noise level at the First Presbyterian Church is 68 dBA L_{10} (A.M.) and 68 dBA L_{10} (P.M.). The no action noise level for the year 2025 will be 70 dBA L_{10} (A.M.) and 70 dBA L_{10} (P.M.). The noise level for the preferred alternative would be 69 dBA L_{10} (A.M.) and 69 dBA L_{10} (P.M.). The one to two decibel increase between the existing and preferred alternative conditions would occur over an approximate twenty-year time frame and would not be perceptible to the human ear. Also, the resource is expected to receive a noise increase whether or not the proposed project is implemented. Although the noise level for the preferred alternative "approaches" the FHWA noise abatement criterion of 70 dBA L_{10} established for residential land uses, including churches, the predicted noise levels would be slightly lower than if the project is not implemented. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The Mitchell King **House** (1382 Peachtree Street NW) is situated at the southwest comer of 17" Street and Peachtree Street NE, adjacent to the proposed intersection improvement at 17" Street and Peachtree Street (Figure 4-12). The eligible National Register boundary corresponds with the legal property boundary and contains all National Register qualifying characteristics and features of the resource. The property is considered eligible under National Register Criterion C as a notable example of an early-20" century Craftsman- and Tudor Revival-inspired residence. Current use of this property is commercial.

The preferred alternative would have **no adverse effect** on the Mitchell King House. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Intersection improvements would occur within the existing right-of-way on 17" Street and Peachtree Street. Project implementation would not alter the character of the setting of this resource within the eligible National Register boundary since the proposed roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

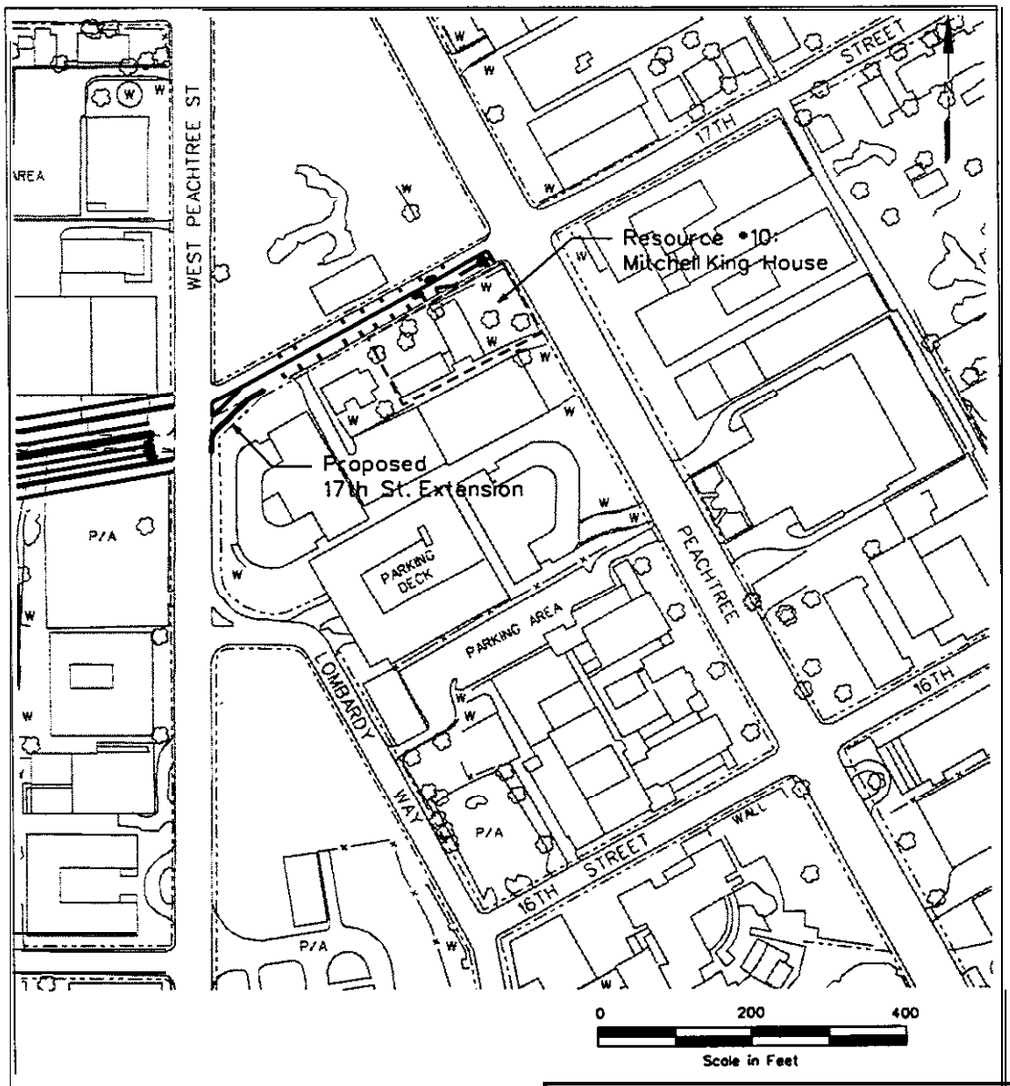

Figure 4-12

Eligible National Register Boundary of Mitchell King House

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The character of the setting of the Mitchell Ring House outside the eligible National Register boundary consists primarily of commercial land uses. The eastern boundary of the parcel fronts Peachtree Street, a highly traveled urban thoroughfare that extends to the northwest and southeast. With the exception of the indirect effect of increased traffic on Peachtree and 17" Streets, implementation of the project would not adversely affect this neighboring setting. Furthermore, the preferred alternative would not alter the overall character of the resource or its architectural significance under National Register Criterion C.

The Mitchell Ring House would be visually affected by implementation of the preferred alternative, especially along the northern and western boundaries of the parcel. However, this impact would not be an adverse effect due to the existing urban visual setting of this area, nor would it compromise the National Register eligibility of the resource.

The existing noise level at the Mitchell Ring House is 66 dBA L_{10} (A.M.) and 67 dBA L_{10} (P.M.). The no action noise level for the year 2025 would be 69 dBA L_{10} (A.M.) and 68 dBA L_{10} (P.M.). The noise level for the preferred alternative would be 70 dBA L_{10} (A.M.) and 72 dBA L_{10} (P.M.). The four to five decibel increase between the existing and preferred alternative conditions would occur over an approximate twenty-year time frame, and the resource is expected to receive a noise increase whether or not the proposed project is implemented. In addition, the noise level would not exceed the FHWA noise abatement criterion of 75 dBA L_{10} for commercial land uses. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The Castle (Fort **Peace)** (87 15" Street NW) is situated at the southwest comer of Peachtree Street and 15" Street, approximately 1,500 feet south of the proposed roadway improvements to 17" Street and approximately 1,700 feet northeast of the proposed roadway improvements along the 14" Street overpass (Figure 4-13). The eligible National Register boundary corresponds with the legal property boundary and contains all National Register qualifying characteristics and features of the resource. The property is considered eligible under National Register Criterion A for its cultural contributions to the Atlanta arts community. The resource is also significant under National Register Criterion C as an unusual example of various architectural styles. Current use of this property is commercial.

The preferred alternative would have **no adverse effect** on The Castle. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the eligible National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of The Castle outside the eligible National Register boundary consists primarily of commercial land uses. The northern boundary of the parcel fronts 15" Street, a commercial thoroughfare that extends to the east and west. With the exception of the indirect effect of increased traffic on both W. Peachtree and 15" Streets, implementation of the project would not adversely affect this neighboring setting. Furthermore, the preferred alternative would not alter the overall character of the resource or its historical and architectural significance under National Register Criteria A or C.

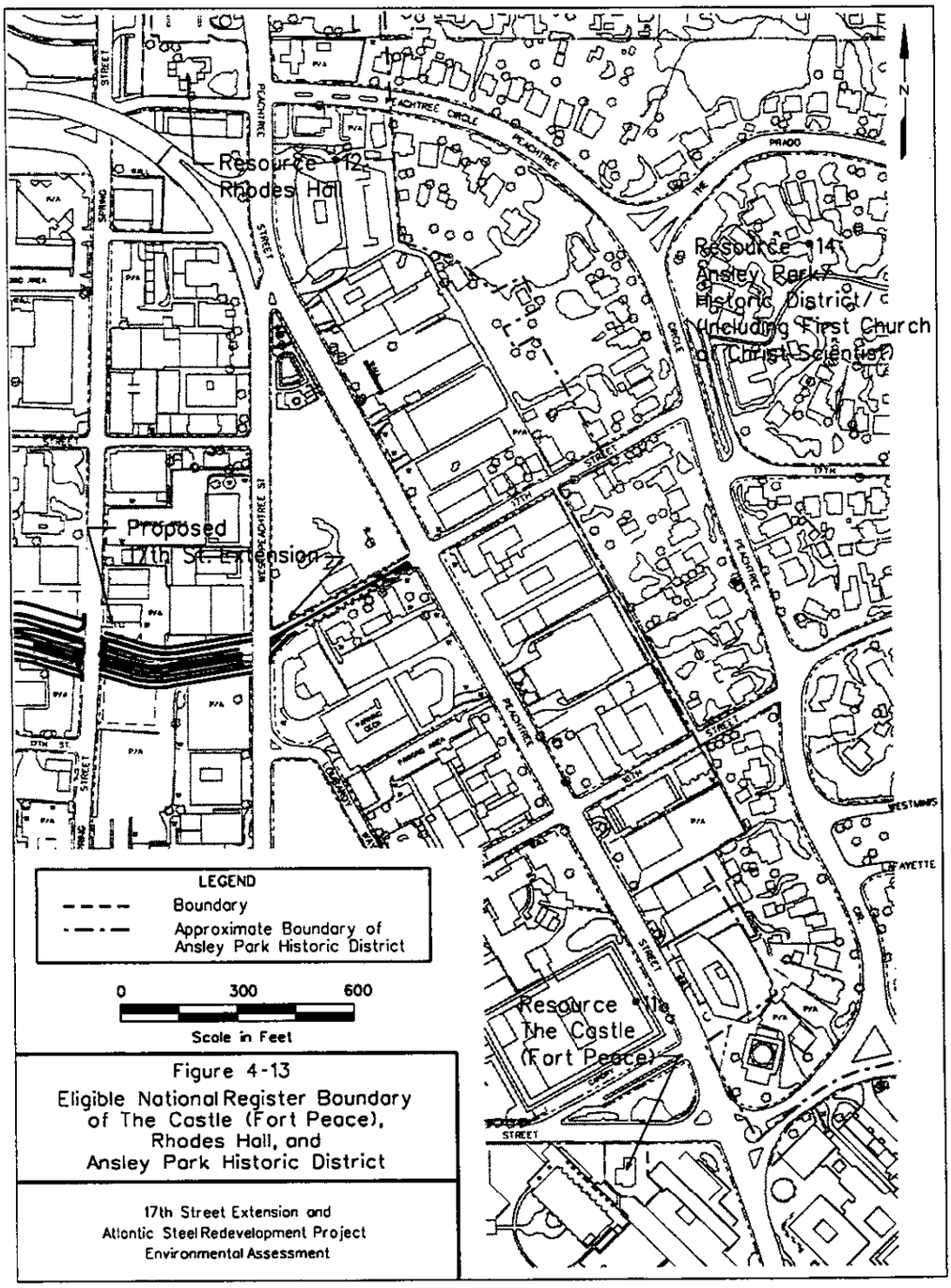

Figure 4-13
Eligible National Register Boundary
of The Castle (Fort Peace),
Rhodes Hall, and
Ansley Park Historic District

17th Street Extension and
Atlantic Steel Redevelopment Project
Environmental Assessment

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The Castle would not be visually affected by implementation of the preferred alternative. Currently fronting 15" Street, the proposed redevelopment and roadway improvements would occur at significant distances to the northwest and southwest. The only potential for indirect visual impacts would occur along the northern and western boundaries of the property. However, this impact likely would be concealed by the existing urban density of Midtown and therefore would neither be an adverse effect nor compromise the National Register eligibility of the resource.

The existing noise level at The Castle is 66 dBA L_{10} (A.M.) and 67 dBA L_{10} (P.M.). The no action noise level for the year 2025 would be 68 dBA L_{10} (A.M.) and 69 dBA L_{10} (P.M.). The noise level for the preferred alternative would be 70 dBA L_{10} (A.M.) and 72 dBA L_{10} (P.M.). The four to five decibel increase between the existing and preferred alternative conditions would occur over a approximate twenty-year time frame. The preferred alternative would not exceed the FHWA noise abatement criterion of 75 dBA L_{10} established for commercial land uses. In addition, the resource is expected to receive a noise increase whether or not the proposed project is implemented. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

Rhodes Hall (1516 Peachtree Street NW) is situated on the western side of Peachtree Street north of South Rhodes Drive, approximately 1,500 feet north of the proposed roadway improvements to 17" Street (Figure 4-13). The boundary of the resource corresponds with its established National Register boundary that contains all National Register qualifying characteristics and features of the property. Current use of this property is commercial and home to the Georgia Trust for Historic Preservation.

The preferred alternative would have no adverse effect on Rhodes Hall. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of Rhodes Hall outside its National Register boundary consists primarily of commercial land uses. The eastern boundary of the parcel fronts Peachtree Street, a highly traveled urban thoroughfare that extends to the north and south. With the exception of the indirect effect of increased traffic on Peachtree Street, implementation of the project would not adversely affect this neighboring setting. Furthermore, the preferred alternative would not alter the overall character of the resource or its historical and architectural significance.

Rhodes Hall would not be visually affected by implementation of the preferred alternative. Currently fronting Peachtree Street, the proposed redevelopment and roadway improvements would occur at significant distances to the south and southwest. The only potential for indirect visual impacts would occur along the southern and western boundaries of the property. However, this impact likely would be concealed by the existing urban density of Midtown and therefore would neither be an adverse effect nor compromise the historic integrity or significance of the resource.

The existing noise level at Rhodes Hall is 72 dBA L_{10} (A.M.) and 73 dBA L_{10} (P.M.). The no action noise level for the year 2025 would be 73 dBA L_{10} (A.M.) and 75 dBA L_{10} (P.M.). The

noise level for the preferred alternative would be 73 dBA L_{10} (A.M.) and 75 dBA L_{10} (P.M.). The one to two decibel increase between the existing and preferred alternative conditions would occur over an approximate twenty-year time frame and would not be perceptible to the human ear. The noise level equals the FHWA noise abatement criterion of 75 dBA L_{10} established for commercial land uses. Although the noise level equals the FHWA noise abatement criterion for the preferred alternative, the resource is expected to receive the same increase in noise whether or not the proposed project is implemented. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The Garrison Apartments (1325 Peachtree Street NE) are situated on the eastern side of Peachtree Street, approximately 400 feet southeast of the proposed intersection improvement at 17" Street and Peachtree Street (Figure 4-11). The boundary of the resource corresponds with its established National Register boundary that contains all National Register qualifying characteristics and features of the property. Current use of this property is residential apartments.

The preferred alternative would have **no adverse effect on** the Garrison Apartments. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of the Garrison Apartments outside its National Register boundary consists primarily of commercial land uses. The western boundary of the parcel fronts Peachtree Street, a highly traveled urban thoroughfare that extends to the north and south. With the exception of the indirect effect of increased traffic on Peachtree Street, implementation of the project would not adversely affect this neighboring setting. Furthermore, the preferred alternative would not alter the overall character of the resource or its historical and architectural significance.

The Garrison Apartments would not be visually affected by implementation of the preferred alternative. Currently fronting Peachtree Street, the proposed redevelopment and roadway improvements would occur at significant distances to the north and west. The only potential for indirect visual impacts would occur along the northern and western boundaries of the property. However, this impact likely would be concealed by the existing urban density of Midtown and therefore would neither be an adverse effect nor compromise the historic integrity or significance of the resource.

The existing noise level at the Garrison Apartments is 68 dBA L_{10} (A.M.) and 68 dBA L_{10} (P.M.). The no action noise level for the year 2025 would be 70 dBA L_{10} (A.M.) and 70 dBA L_{10} (P.M.). The noise level for the preferred alternative would be 69 dBA L_{10} (A.M.) and 69 dBA L_{10} (P.M.). The one decibel increase between the existing and preferred alternative conditions would not be perceptible to the human ear. The resource is expected to receive a noise increase whether or not the proposed project is implemented. Although the noise level for the preferred alternative "approaches" the FHWA noise abatement criterion of 70 dBA L_{10} established for residential uses, the predicted noise levels would be slightly lower than if the project is not implemented. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The Ansley Park Historic District is situated east of Peachtree Street NE, roughly between 14" and Beverly Streets. The boundary of the resource corresponds with its established National Register boundary that contains all National Register qualifying characteristics and features of the district (Figure 4-l 3).

The preferred alternative would have **no adverse effect** on the Ansley Park Historic District. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained.

The character of the setting of the Ansley Park Historic District outside its National Register boundary to the west consists primarily of commercial land uses. The western boundary of the District abuts the commercial district along Peachtree Street, a relatively highly-traveled urban thoroughfare that extends to the north and south. Although implementation of the proposed project would increase the amount of traffic on most of the entrances into Ansley Park and Peachtree Street, the preferred alternative would not adversely affect this neighboring setting. This increase in traffic should not adversely effect overall traffic patterns in this area. Furthermore, the preferred alternative would not alter the overall character of the resource or its historical and architectural significance.

As a whole, the Ansley Park Historic District would not be visually affected by implementation of the preferred alternative. However, since some of the residences in the western portion of the district are located on a high bluff the tallest buildings within the proposed redevelopment project to the west may be visible from these selected homes. Yet for the most part, this impact likely would be concealed by the existing urban density of Midtown and therefore would neither be an adverse effect nor compromise the historic integrity or significance of the district.

Representative worst-case existing noise levels for Ansley Park are 66 dBA L_{10} (residential) and 72 dBA L_{10} (commercial) during the daytime and 67 dBA L_{10} (residential) and 73 dBA L_{10} (commercial) in the evening. The no action noise level for the year 2025 would be 68 dBA L_{10} (residential) and 73 dBA L_{10} (commercial) during the daytime and 69 dBA L_{10} (residential) and 75 dBA L_{10} (commercial) in the evening. The noise level for the preferred alternative would be 68 dBA L_{10} (residential) and 73 dBA L_{10} (commercial) during the daytime and 69 dBA L_{10} (residential) and 75 dBA L_{10} (commercial) in the evening. The three decibel increase between the existing and preferred alternative conditions would occur over an approximate twenty-year time frame and would not be perceptible to the human ear. Although, the noise level for the preferred alternative "approaches" the FHWA noise abatement criterion of 70 dBA L_{10} established for residential land uses and equals the 75 dBA L_{10} established for commercial land uses, these resources are expected to receive the same increase in noise whether or not the proposed project is implemented. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

The Atlanta Waterworks Hemphill Avenue Station (1210 Hemphill Avenue NW) is situated at the southwestern comer of Hemphill Avenue and Northside Drive adjacent to the proposed

improvements on Northside Drive and across the Street from the other new entrance into the Atlantic Steel Property. The boundary of the resource corresponds with its established National Register boundary that contains all National Register qualifying characteristics and features of the property (Figure 4-7). Current use of this property is commercial.

The preferred alternative would have **no adverse effect** on the Atlanta Waterworks Hemphill Avenue Station. Physical destruction, damage, or alteration of all or part of the property would not occur with implementation of the preferred alternative. Project implementation would not alter the character of the setting of this resource within the National Register boundary since the proposed development and roadway improvements would occur outside of this boundary. Improvements to Northside Drive would occur within existing right-of-way. Furthermore, the resource would not be isolated from the character of its setting since existing access would be maintained. However, construction at the new entrance north of the intersection of Hemphill Avenue and Northside Drive may impact potential archaeological resources that could be associated with the station and located in this area of the APE. The potential impacts to these archaeological resources are addressed in Sections 4.3.6.2 and 4.3.6.3.

The character of the setting of the Atlanta Waterworks Hemphill Avenue Station outside its National Register boundary consists primarily of commercial land uses. The eastern boundary of the parcel fronts Northside Drive, a highly traveled State Route that extends to the north and south. With the exception of the indirect effect of increased traffic at the Hemphill Avenue intersection due to the proposed road improvements, implementation of the project would not adversely affect this neighboring setting. Furthermore, the preferred alternative would not alter the overall character of the resource or its historical and architectural significance.

The Atlanta Waterworks Hemphill Avenue Station would be visually affected by implementation of the preferred alternative, especially along the southern and eastern boundaries of the parcel. However, this impact would not be an adverse effect due to the existing urban visual setting of this area, nor would it compromise the historic integrity or significance of the resource.

The existing noise level in the vicinity of the Atlanta Waterworks Hemphill Avenue Station is 69 dBA L_{10} (A.M.) and 70 dBA L_{10} (P.M.). The no action noise level for the year 2025 would be 72 dBA L_{10} (A.M.) and 72 dBA L_{10} (P.M.). The noise level for the preferred alternative would be 70 dBA L_{10} (A.M.) and 71 dBA L_{10} (P.M.). The one decibel increase between the existing and preferred alternative conditions would not be perceptible to the human ear. The resource is expected to receive a noise increase whether or not the proposed project is implemented and the increase would be less under the preferred alternative. The noise level for the preferred alternative does not exceed the FHWA noise abatement criterion of 75 dBA L_{10} established for commercial land uses. For these reasons, implementation of the preferred alternative would not audibly affect the resource.

4.3.6.2 Archaeological Resources

There are no known prehistoric or historic archaeological resources that would experience physical impacts from the proposed project. The only portion of the project area that appears to have the potential to yield significant archaeological resources is the intersection of Hemphill Avenue with Northside Drive. The roadbed of Hemphill Avenue may contain buried trolley tracks, and the area beneath or alongside Hemphill Avenue may contain original water pipes associated

with the National Register-listed Atlanta Waterworks Hemphill Avenue Station. A short turn-lane is proposed on the east side of Northside Drive, north of the Hemphill Avenue intersection that has the potential to affect these resources.

4.3.6.3 Measures Proposed to Address Cultural Resource Concerns

During project construction, it is recommended that a qualified archaeological consultant monitor any construction and subsurface activities that are to occur along Northside Drive in the vicinity of Hemphill Avenue. Should the remains of either trolley tracks or water pipes be located, the archaeological consultant should notify the SHPO about the nature of the findings. Consultation with the SHPO and/or other interested parties would occur to discuss further treatment measures. Documentation of these resources would follow Georgia Historic Preservation Division and GDOT guidelines.

Cumulative impacts to historic properties in the study area associated with future transportation improvements that could be proposed outside the scope of this project, but as part of the MOU discussed in Section 4.3.3.5, are impossible to predict at this time. Agency and public concerns have been raised by the SHPO, the Georgia Trust for Historic Preservation, the Atlanta Preservation Center, and citizens of Ansley Park about the potential for impacts to historic properties. As stated in the MOU (Appendix I), the City of Atlanta, in consultation with the Atlanta Urban Design Commission, will take appropriate steps to insure that historic properties that could potentially be affected by any proposed future transportation improvements are taken into account at the earliest possible opportunity. This will include coordination with the SHPO, the Georgia Trust for Historic Preservation, the Atlanta Preservation Center, and the Ansley Park neighborhood.

4.3.7 Section 4(f) Evaluation

No recreation areas, or wildlife/waterfowl refuges were identified in the study area; however, four publicly owned parks were identified within a one-mile radius of the Atlantic Steel site. These parks include Piedmont Park, Eubanks Park, Winn Park, and Underwood Hills Park. It was determined that the 17” Street Extension and its associated roadway improvements would have no adverse effect on these parks.

Investigations of historic properties within the study area are summarized in Section 4.3.6 and provided in the Historic Architectural Properties Identification and Evaluation Report (Parsons 2000b). The evaluation identified fifteen properties listed in the National Register, previously identified as eligible, or identified as eligible from the resulting field surveys. As described in Section 3.3.7, Section 4(f) applies only to fourteen of these properties (excluding the Atlantic Steel Site). These fourteen sites include: Norfolk Southern Railroad, Siemens (1299 Northside Drive), Kool Komer Grocery (349 14” Street), Ewe11 Jett House (13 85 Spring Street), Granada Apartments (1302 W. Peachtree St.), The Belvedere (1384 W. Peachtree St.), Winwood Apartments (1460 W. Peachtree St.), First Presbyterian Church (1328 Peachtree St.), Mitchell King House (1382 Peachtree St. NE), the Castle (Fort Peace) (87 15” Street NW), Rhodes Hall (1516 W. Peachtree Street NW), Garrison Apartments (1325 Peachtree Street NE), Ansley Park Historic District, and the Atlanta Waterworks Hemphill Avenue Station (12 10 Hemphill Avenue NW). According to the evaluation, the 17” Street Extension would have no use of, or adverse effect on, any of these

resources. Therefore, no Section 4(f) sites are impacted by the transportation project, and no further Section 4(f) evaluation is required.

4.3.8 Land Use

Evaluation of land use as it relates to this redevelopment project refers to the determination of impacts to land use planning and regional development. This analysis involves the identification of potential impacts to local and regional economic planning, existing transportation systems, public community services, and environmental issues.

4.3.8.1 Existing Land Use

Impacts to existing land uses would result from the redevelopment of the Atlantic Steel site and acquisition of right-of-way for transportation related improvements. Within the study area, industrial type land use is by far the most affected by the preferred alternative. This is due to the redevelopment of the Atlantic Steel site into an urban mixed-use development. Of the approximate 135 acres that would be converted, approximately 14 acres would become roadways that would provide access into and out of the Atlantic Steel site. Approximately 20 acres of existing commercial land within the study area would be converted into roadways as part of the 17" Street Extension and other improvements. Approximately two acres of residentially zoned land within the study area would be taken for site development purposes, as part of the redevelopment project. This would likely include rebuilding residential units in the same area. The remaining existing land uses would not be altered, and therefore, no adverse impacts are anticipated.

4.3.8.2 Neighborhoods and Community Facilities

As stated in Section 3.3.8.2, the neighborhoods in the vicinity of the Atlantic Steel Redevelopment project are Home Park, Loring Heights, and Ansley Park. The redevelopment of Atlantic Steel would not alter the existing land uses of these neighborhoods. No large tracts of land in any of these neighborhoods would be required for this redevelopment project to occur. The redevelopment would, however, remove a large industrial land use and replace it with a more homogeneous type mixed-land use that would complement these established neighborhoods. Additional positive impacts of the redevelopment project include more commerciahretail opportunities to be provided within walking or biking distance to many existing residences. The following information provides impacts to known community facilities within the study area surrounding the Atlantic Steel redevelopment project.

Schools. There would be no direct impacts to any school-related property in the study area. Minor short-term impacts to schools in the area would be limited to possible delays during road and redevelopment construction. The only foreseeable impact to Atlanta public schools is the anticipated additional student population due to the residential development portion of Atlantic Steel. It is not known at this time how many additional students or the age of the students that would attend Atlanta public schools in the future. The retail portion of the redevelopment would contribute a Special Purpose Local Option Sales Tax revenue source that would be allocated to the City of Atlanta School System.

Parks, Recreation Areas, and Open Space. There would be no direct impacts to any of the parks, recreation areas, or significant open space areas in the study area. Minor short-term impacts to parks, recreation areas, and significant open space in the study area would be limited to possible

delays during road and redevelopment construction. No other impacts to parks, recreation areas, or significant open space areas are anticipated with this project.

Places of Worship and Cemeteries. There are no cemeteries located inside the study area. There would be no direct impacts to any place of worship in the study area. Minor short-term impacts to places of worship and cemeteries in the area would be limited to possible delays to members or visitors during construction. The only foreseeable impact to places of worship is the anticipated additional memberships due to the residential development portion of Atlantic Steel. It is not known at this time how many additional people would attend local places of worship in the future.

Hospitals and Health Centers. There would be no direct impacts to any hospital or health center property in the study area. Minor short-term impacts to hospitals and health centers in the area would be limited to possible delays during road and redevelopment construction. No other impacts to hospitals or health centers are anticipated with this project.

Libraries and Museums. There would be no direct impacts to any library or museum property in the study area. Minor short-term impacts to libraries and museums in the area would be limited to possible delays during road and redevelopment construction. No other impacts to libraries or museums are anticipated with this project.

Emergency Services -- Police, Fire and Rescue. There would be no direct impacts to any police, fire or rescue property in the study area. Minor short-term impacts to police, fire and rescue response capabilities in the area would be limited to possible delays during road and redevelopment construction. In the long-term, the additional crossing of the Interstate should result in improved response time for emergency vehicles. One foreseeable impact to police, tire and rescue service is the capacity of the Atlanta Police Department and the Atlanta Fire Department to adequately serve this area. Resources of the Departments could be strained due to the magnitude of the development.

No additional tire stations were anticipated to be added in conjunction with the Atlantic Steel redevelopment project. However, one additional City of Atlanta police satellite station with emergency medical technicians (EMT) is anticipated to be added by JAR in conjunction with the Atlantic Steel redevelopment project. All other existing emergency services would be expected to provide support and/or protection for the Atlantic Steel site. It is feasible that funds from a Tax Allocation District (TAD) could be used to fund future improvements to public service including emergency services.

4.3.8.3 Consistency With Local Comprehensive Plan

The development of the Atlantic Steel site into mixed-use land proposed under the preferred alternative conforms to the recommendations of the Adopted Atlanta 2001 Comprehensive Development Plan (City of Atlanta 2000). The adopted Comprehensive Plan contains policies on future land use development within the city. These policies encourage mixed-used development; emphasize medium and high-density residential uses; encourage minimizing sprawl; and promote the reuse or redevelopment of vacant, under-utilized, or structurally deteriorated industrial and commercial properties.

4.3.9 Socioeconomics/Demography/Economic Conditions

An analysis of both positive and negative impacts of socioeconomic concerns that are attributed to the 17th Street Extension and Atlantic Steel Redevelopment project are presented in this section. The primary impacts on existing socioeconomic conditions from this project are from residential and commercial displacements, changes in employment in this area of Midtown Atlanta, and changes in tax revenue to service provider and local governments.

Economics Research Associates (ERA) conducted an analysis of economic and fiscal benefits of the proposed Atlantic Steel redevelopment (ERA 1999). The economic benefits include the effects of a new development on the local economy. Effects to the local economy include the creation of new jobs, added population, increases in payroll, and new retail spending. The fiscal benefits are the effects of new development on the local budgets. A number of short-term and/or one-time benefits have been excluded from analysis, as they would have no long- term effects on the local economy or local budgets. In addition to the positive economic and fiscal benefits on the City of Atlanta itself, the Atlantic Steel redevelopment project would also produce substantial indirect benefits to the Atlanta region as a whole (ERA 1999). The findings of the ERA study are summarized in the subsections that follow.

4.3.9.1 Population and Demographics

As presented in Section 3.3.9.1, population and demographic data within the study area is based on the 1990 US Census data. The proposed Atlantic Steel redevelopment is expected to add 4,200 full time residents to the Midtown area. Those new residents to the Atlantic Steel area would reside in the proposed 2,400 housing units. The ERA analysis report uses an average household size of 1.75 persons per household for the Atlantic Steel project area. Occupancy rates within the City of Atlanta have averaged greater than 85 percent since 1990. A similar occupancy rate was therefore assumed to occur for the new housing that is anticipated at Atlantic Steel. At this time it is not known whether a majority of residents in the Atlantic Steel area would be owner-occupants or renters. It is also not known what the specific gender, age, and racial breakdowns as well as median household income and employment data of the population would be that would inhabit this development.

4.3.9.2 Employment and Economic Characteristics

There are currently a number of Midtown developments proposed or underway along the east side corridor, as well as the expansion of the TBS Techwood Campus and the Atlantic Steel Redevelopment on the west side. Approximately 7,800,000 square feet of commercial and residential development is proposed or under construction on the east side of I-75/85 and approximately 8,400,000 square feet of new development on the west side.

The Atlantic Steel redevelopment project is being financed with the help of a TAD. This process was used to provide front-end funding for the large-scale redevelopment project. The tax revenues paid to taxing units (City of Atlanta, Atlanta Schools, and Fulton County) are computed on the initially established tax base during the redevelopment period. The Atlantic Steel project would then be redeveloped using funds provided by the sale of tax allocation bonds. The City or a specially created taxing district for specific site improvements would sell these bonds. Due to the now higher value of the Atlantic Steel site, more tax revenue is collected and the tax difference between the initially established level goes into a fund to retire the bonds.

The proposed Atlantic Steel redevelopment project is expected to add significant retail, office, and hotel space as well as to increase the employment base and tax base in the Midtown Atlanta area. Future commercial space for Atlantic Steel is anticipated to include:

- 1,500,000 square feet of total build out retail space;
- 2,000,000 square feet of total build out office space; and
- 2,000,000 square feet of total build out high-tech office space.

This would result in a gain of 5,500,000 square feet of total build out commercial space to the Midtown Atlanta area. At the time of this report, it was not known the specific types of businesses that would inhabit these spaces.

To help service this area's business travel as well as tourist travel needs, it is anticipated that the Atlantic Steel site would contain 1,000 hotel rooms when the site is completely built-out. No specific information regarding type and quality of hotels was available at the time of this report.

According to the ERA analysis report, retail sales and hotel sales are anticipated to generate approximately $480,000,000 and $41,600,000, respectively, in sales revenue. This would result in total retail sales tax revenue of approximately $3,500,000 and total hotel sales tax revenue of approximately $1,700,000. The annual property taxes from the office spaces and hotel rooms are anticipated to generate $11,900,000 for the City of Atlanta, $17,600,000 for Atlanta public schools, and $9,700,000 for Fulton County.

According to the ERA analysis report, new employment information for Atlantic Steel was based on the following information:

- 2 employees per 1,000 square feet of retail space, which would equal 3,000 workers.
- 4 employees per 1,000 square feet of office space, which would equal 8,000 workers.
- 3.33 employees per 1,000 feet of high-tech office space, which would equal 6,660 workers.
- 0.4 employees per hotel room, which would equal 400 workers.

This results in a potential gain of approximately 18,060 total jobs related to the Atlantic Steel redevelopment when it is completed. Some of these jobs could be shifted from other areas in the Atlanta region to Atlantic Steel, or within the Midtown area itself.

In order to calculate specific wage information, an average wage was assumed for each type of job created. The following information was developed as part of the ERA analysis report:

- Retail services average annual wage is $16,200, which equals $48,600,000 in total income.
- Office services average annual wage is $35,200, which equals $281,600,000 in total income.
- High-tech office services average annual wage is $42,300, which equals $281,718,000 in total income.
- Hotel services average annual wage is $19,300, which equals $7,720,000 in total income.

This results in a potential gain of $619,638,000 total salaries paid to the new jobs related to the Atlantic Steel redevelopment when it is completed.

4.3.9.3 Relocations

The 17" Street Extension and Atlantic Steel redevelopment project would require the relocation of houses, businesses, and/or industry located within the study area. The number of displacements for this project was determined by reviewing current Fulton County tax mapping, aerial mapping, and conducting site visits. For the purposes of this EA, property that would be taken for the implementation of the redevelopment project has been divided into two categories. The first category is property required for transportation improvements, while the second category is property required by the developer for site improvements.

Transportation Improvements. Roadway improvements associated with the preferred alternative would displace 19 commercial businesses, which currently occupy approximately 20 acres of land. No other type of structure would be displaced as a result of the proposed transportation improvements. Based on the results of a field survey, there appears to be no elderly, handicapped persons, or large families affected by this proposed project. It is estimated that approximately 200 employees from these businesses would be affected. The 19 business displacements consist of eight office/warehouse spaces, eight retail businesses, two restaurants, and one gas station/convenience store. These 19 businesses have an approximate fair market value of $10,625,000 (MAAI 2000c). These businesses are listed in Table 4-9. A copy of the Conceptual Stage Study, Relocation Report and updates are available from GDOT upon request.

The Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended, requires that property owners are offered fair market value for property being acquired as a result of roadway improvements. Actual acquisition costs for those properties acquired for roadway improvements would be determined by GDOT and would be based on standards and procedures adopted by GDOT.

Site Redevelopment. The Atlantic Steel redevelopment project would displace eight (8) residential buildings, seven of which are owned by JAR. No other type of structure would be displaced as a result of site redevelopment improvements. Based on the results of a field survey, there appears to be no elderly, handicapped persons, or large families affected by this portion of the project. The residential property has an estimated fair market value between $150,000 and $170,000 (MAAI 2000c). These residences are listed in Table 4-10. Nearby, available housing for similar, single-family homes appears to be in adequate supply.

4.3.9.4 Community Cohesion

Community cohesion is defined by the FHWA as "perceptual relationships that are shared among residents of a community that cause the community to be identifiable as a discrete, distinctive geographic entity". The neighborhoods of Home Park, Ansley Park, and Loring Heights as well as the Atlantic Steel site, are easily distinguishable and contain elements that establish them as independent communities. The Atlantic Steel site is situated in the midst of these independent communities. The former Atlantic Steel Mill site and other properties along Northside Drive and Bishop Street were part of an area that was dominated by heavy industry in the early to mid 1900's. The communities of Home Park and Loring Heights were largely connected to this industry through employment. However, this relationship no longer exists due to a gradual transition from heavy industry to more compatible land uses for downtown Atlanta. The proposed redevelopment

Table 4-9. Inventory of Business Displacements

Parcel	Owned Tenant	Type Displacement/ Square Feet	FMV in $	Type Neighborhood	Age	Type Business	No. of Employees
Restaurant 80 14th Street 17- 107-04-046	Tenant	1,600 SF	$650 K	Commercial	35 +/-	The Red Basil Restaurant	15 +/-
Office 74 14"' Street 17- 107-04-004	Tenant	1,800 SF	$400 K	Commercial	40 +/-	Offices	10 +/-
Retail 1160 Spring Street 17-107-04-005	Tenant	2,000 SF	$500 K	Commercial	30 +/-	Retail, Video Solutions	5 +/-
Utility Site Atlanta Gas 17-107-04-053	Tenant	800 SF	$200 K	Commercial	20 +/-	Utility, Atlanta Gas	N/A
Office/Warehouse 1360 Spring Street, NW 17-108-01-033	Tenant	4,200 SF	$275 K	Commercial	40 +/-	Office/Warehouse, Home Mission Board	15 +/-
Office 1362 Spring Street, NW 17-108-04-012	Tenant	4,350 SF	$300 K	Commercial	35 +/-	Office, Georgia Nurses Association	15 +/-
Multi-tenant retail 1341 Spring Street, NW 17-108-04-022	Tenant	15,000 SF	$500 K	Commercial	50 +/-	Retail, Kwik Copy	20 +/-
Office 1359 Spring Street, NW 17-108-04-03 1	Tenant	4,000 SF	$250 K	Commercial	50 +/-	Office, Vacant	10 +/-
Retail 1205 Techwood Drive, NW 17- 108-07-099	Tenant	2,500 SF	$150 K	Commercial	40 +/-	Retail, Dog Grooming	5 +/-
Retail 1203 Techwood Drive, NW 17-108-07-100	Tenant	2,700 SF	$150 K	Commercial	40 +/-	Retail/Office	8 +/-

Table 4-9. Inventory of Business Displacements

Parcel	Owner/ Tenant	Type Displacement/ Square Feet	FMV in $	Type Neighborhood	Age	Type Business	No. of Employees
Retail/Warehouse 1195 Techwood Drive, NW 17-108-07-101	Tenant	5,000 SF	$250 K	Commercial	40 +/-	Retail, Office Furniture Sales	10 +/-
Office Warehouse 1370 Spring Street 17-108-01-032	Tenant	20,000 SF	$750 K	Commercial	40 +/-	Office/Warehouse	30 +/-
Restaurant 144 14th Street 17- 107-03-024	Owner	4,000 SF	$275 K	Commercial	20 +/-	Chinese Restaurant	15 +/-
Retail/Fuel Station 77 14"' Street 17-108-08-066	Tenant	1,000 SF	$1.1 M	Commercial	10 +/-	Amoco fuel station/convenience store	10 +/-
Trucking/Distribution 490 Bishop Street 17-148-LL-03	Tenant	50,000 SF	$2.2 M	Commercial	30 +/-	Warehouse, distribution facility	10 +/-
Hair/Spa Salon 494 Bishop Street 17-148-LL-026	Owner	2,125 SF	$1.2 M	Commercial	50 +/-	Hair Salon	10 +/-
Retail 1345 Northside Drive 17-148-04-016	Tenant	9,800 SF	$1.0 M	Commercial	40+/-	Northside Drive Liquor Store	15 +/-
Auto Body Shop Bishop Street 17-108-07-026	Tenant	2,750 SF	$200 K	Commercial	20 +/-	Auto Body Shop	6 +/-
Office 204 16th Street 17-108-07-003	Tenant	1,700 SF	$275 K	Commercial	30 +/-	Realty Company	1o+/-

Source: MAAI 2000c

Table 4-10. *Inventory* of Residential Displacements

Parcel	Owner/ Tenant	Type Displacement/ Square Feet	Estimated Rent/FMV in $	Estimated Household Income in $	Age	Family Size/ Minors	Rooms/ Bedrooms	Housing Available
1282 Lyle Place, NW	Tenant	Frame / 598 SF	$850 per month $165,000	$30,000	60+	2/0	5/2	**Yes**
1276 Lyle Place, NW	**Owner**	Frame / 766 SF	**$170,000**	$40,000	60+	3/0	6/2	**Yes**
1275 Lyle Place, NW	Tenant	Frame / 598 SF	$850 per month $150,000	$30,000	65+	2/0	5/2	**Yes**
1281 Lyle Place, NW	Tenant	Frame / 598 SF	$850 per month $150,000	$30,000	65+	2/0	5/2	**Yes**
1278 Barnes Street	Tenant	Frame / 916 SF	$900 per month $165,000	$40,000	65+	3/0	5/2	**Yes**
188 16'" Street, NW	Tenant	Frame / 746 SF	$900 per month $150,000	$30,000	65+	2/0	5/2	**Yes**
194 16'" Street, NW	Tenant	Frame / 598 SF	$850 per month $150,000	$30,000	65+	2/0	5/2	**Yes**
200 16th Street, NW	Tenant	Frame / 804 SF	$900 per month $150,000	$30,000	65+	3/0	5/2	Yes

Source: MAAI 2000c

of this site into mixed-use residential and commercial land uses continues this transition and provides opportunities for reconnection with the surrounding communities. By removing the existing industrial land use that is Atlantic Steel and replacing it with a more homogeneous type mixed-land use, the overall community feeling between the established neighborhoods is no longer broken. In addition, when the Interstate was initially constructed in the 1960's, access and community dynamics in Midtown Atlanta completely changed. Several existing roadways were severed by the initial freeway project. Construction of the 17" Street Bridge and Extension provides another opportunity to reconnect the east and west sides of Midtown Atlanta and restore continuity for communities in this area.

4.3.10 Environmental Justice

As discussed in Section 3.3.10, several communities in the project area were determined to contain minority and/or low-income populations at levels that are significantly higher than that of the Atlanta MSA. The majority of these areas appear to be distributed in clusters west and southeast of the site (see Figure 3-l 1). Since the preferred alternative was found to have some potential for EJ concerns, various potential environmental impacts to low-income and minority populations were considered. The 17" Street Extension project and transformation of the Atlantic Steel site into a mixed-use development would include both positive and negative impacts to low-income and minority communities in the **area;** however, it was determined that the overall quality of life for nearby minority and low-income communities would be improved. Specific issues considered are described in greater detail below.

Community/Neighborhood Impacts. Using 1990 U.S. Census Data the majority of the block groups that comprise two of the three neighborhoods in the immediate study area (Home Park and Loring Heights) are identified as potential EJ areas. However, similar to other neighborhoods in the City of Atlanta, demographics in these areas are changing rapidly. The Home Park Civic Association identifies the Home Park community as "one of the most diverse and dynamic neighborhoods in Atlanta." Huge changes are occurring in these neighborhoods related to the increased popularity of in-town living in Atlanta. This is evident by increased property values, rental prices, and property improvements throughout the neighborhoods. The transformation of these neighborhoods has been occurring for some time and would likely continue with or without the Atlantic Steel redevelopment project and 17" Street Extension. The goals of both neighborhoods is to guide this transformation with the objective of maximizing the beneficial impacts, while minimizing the negatives.

EPA, GDOT, the City of Atlanta, and JAR recognized these goals and placed strong emphasis on community involvement in the development of this project. Public outreach activities and meetings with affected neighborhoods have been a major component of this effort. The City of Atlanta, JAR, EPA, and GDOT gave presentations and participated in several monthly neighborhood meetings related to development of the project and to solicit input from the neighborhoods on issues of concern. EPA and JAR hosted a meeting in December 1998 with the Home Park community to discuss specific design aspects of the redevelopment. Concerns raised in these meetings have been largely incorporated into the latest design of the site and of the associated transportation improvements. The City of Atlanta and JAR commit to continued involvement with the neighborhoods as the site builds-out to provide information about the latest site design and solicit input on issues of concern to the neighborhoods.

Property Values. The improvement of the Atlantic Steel Brownfields Redevelopment Area is likely to continue to enhance the value of a substantial portion of the real property in the district. This would have both a positive and negative impact on the surrounding communities. The effect would be positive for individuals in the community who own property and can afford to pay for the increasing taxes likely to ensue over time. Other residents who rent or own property but cannot afford to pay for the higher property taxes may be forced to move out of the area and find alternative housing.

Employment/Economic Activity. Closure of the Atlantic Steel Mill has left the City of Atlanta with an underutilized piece of property that contributes very little to the economic tax base of the area. Transformation of the site into a mixed-use development of residential units, commercial office space, hotel rooms and retail would have many positive impacts in terms of new employment and economic activity for the nearby minority and low-income residents, including creating approximately 17,000 to 20,000 new jobs. It is envisioned that a wide range of jobs and skill levels would be available and allow for job advancement within the area. Similarly, there would be new employment opportunities related to build-out of the site and construction of the associated off-site roadway improvements. However, it is impossible to estimate how the net new jobs created by the proposed action would be allocated by jurisdiction; therefore, it is impossible to accurately quantify how the proposed action would affect minority and/or low-income populations. New employees would be hired by skill level, experience, or other qualifications, not by jurisdiction of residence.

Based on several comments received at public meetings, JAR has agreed to place an emphasis on minority participation in the redevelopment of the Atlantic Steel site, specifically in short-term construction jobs and long-term employment opportunities. JAR is currently in the process of putting together a comprehensive strategy that addresses this goal for the project.

Public Facilities and Services. The amount of educational ad valorem tax revenues collected in excess of the amount needed for debt service is projected to increase greatly after the project is fully developed, thereby providing a substantial new revenue source for the school system. Further, the development is expected to generate further revenue increases for the school system as a result of increased property values. This would benefit the minority and low-income residents located within the project area. JAR will also provide a satellite police and emergency services station on-site as part of the redevelopment. This station would not only serve the Atlantic Steel site, but the adjacent communities, as well.

Visual Impacts. The transformation of the Atlantic Steel site into a mixed-use development would include several activities that would improve the overall visual character of nearby minority and low-income communities. Improvements include: demolition of an industrial steel making facility and cleaning up a major brownfields site; undergrounding unsightly utilities; and creating a development that would include pedestrian and bike friendly, well-functioning, aesthetically pleasing corridors, and streetscaping.

Access. The multi-modal connection created by the 17" Street Bridge would give residents, workers, and shoppers a variety of transportation options. Use of the free bus shuttle system connection from the MARTA Arts Center Station would allow mass transit users to have a reliable connection to reach employment, residential, and retail opportunities on-site.

Traffic Impacts. As described in Section 4.3.3, there would be additional traffic on surrounding roadways associated with the extension of 17" Street and redevelopment of the Atlantic Steel site. However, the greatest increases in AADT, as compared to the no action alternative, are predicted to occur in non EJ-designated areas. In addition, without the 17" Street Extension and redevelopment project as currently proposed, significant increases in traffic along 14th and 10" Streets, adjacent to potential EJ areas, are predicted.

However, given concerns raised by the surrounding neighborhoods related to traffic impacts, a MOU is being developed between EPA, GDOT, GRTA, the City of Atlanta JAR, Ansley Park, Home Park, Loring Heights, and the Midtown Alliance. This MOU would commit the above mentioned agencies to collect specific data on future trips associated with the project and additional development in the vicinity of the project in order to study the magnitude and cumulative effects of traffic in the neighborhoods as well as to develop and implement means of minimizing these impacts. Based on these commitments, no disproportionate adverse impacts associated with additional traffic are anticipated to low-income or minority populations.

Noise. As described in Section 4.3.5, 17 sites or receptors (13 commercial businesses and 4 residences) outside the Atlantic Steel property were identified as being impacted by future traffic-generated noise associated with this project. Based on the distribution of these receptors, there would be minimal impacts to potential EJ areas. Seven of the seventeen receptors are located in potential EJ areas; however, the majority of the receptors are located in non-EJ designated areas. Therefore, no disproportionate adverse impacts associated with noise are anticipated to low-income or minority populations.

Possible Commercial Business/Residential Displacements. As described in Section 4.3.9.3, the project would require residences and/or commercial businesses located within the study area to be displaced or relocated. A total of 19 commercial businesses and eight residences would be displaced as a result of the project. Based on the distribution of these displacements, there would be miniial impacts to potential EJ areas. Seven of the eight residences are properties currently owned by JAR and are located in non-EJ designated areas. Nine of the 19 commercial businesses are located in potential EJ areas; however, the majority of the commercial businesses to be displaced are located in non-EJ designated areas. Therefore, no disproportionate adverse impacts associated with property relocations are anticipated to low-income or minority populations.

4.3.11 Aesthetic Resources

Aesthetic resource impacts are highly subjective. However, the redevelopment of the Atlantic Steel site and associated roadway improvements would drastically alter the visual landscape of the Midtown Atlanta area. Not only would the abandoned Atlantic Steel site be converted from an industrial use to a residential/commercial/retail use, but the addition of an interchange at 17" Street over I-75/85 would alter traffic patterns in this area, affecting how citizens view this part of Atlanta. The Atlantic Steel site would emerge as an attractive area for people to live and enjoy social events, inviting people back into the urban core of the city. The planned Atlantic Steel redevelopment is expected to contain residential units, retail space, hotel rooms, and several large office buildings as well as a lake, park area, and roadway facilities (Appendix G).

Careful coordination of the Atlantic Steel redevelopment and 17" Street Bridge with the surrounding communities would assist in keeping project harmony with the surrounding landscape.

Also, such coordination efforts would provide opportunities to incorporate any scenic viewshed areas into the overall design. To effect this coordination, there are a number of specific zoning conditions for the Atlantic Steel site that address aesthetic, architectural, and landscaping requirements (see Appendix A). In general, design and placement of specific buildings would be completed in a manner so as to create transitions from, and compatibility with, surrounding uses. For example, residential components along 16" Street, adjacent to Home Park, would be constructed as low-rise single family dwellings and condominiums. Building height would gradually increase and land use would change towards the center and northeast portion of the site to provide for an appropriate transition from residential to mixed retail and office use. The proposed high-rise office buildings are anticipated to be located in the northeast corner of the property, the highest point on the property. These high rise office buildings would be designed to complement existing high rise buildings in Midtown Atlanta on the east side of the Interstate. The high tech office and mixed use village is proposed on the western portion of the site. Design of these areas would likely complement some of the older industrial facilities along Northside Drive, such as the Atlanta Water Works building.

The new 17" Street Bridge and Extension would provide direct access into the Atlantic Steel area, Midtown Atlanta, and the nearby MARTA Arts Center Station. The bridge over the interstate would be multi-modal, meaning that vehicles, pedestrians, bicycles, and transit buses would all utilize it. At this time, potential designs for the bridge are unknown; however, there is a general agreement that the 17" *Street* Bridge should be designed as a "gateway" structure into the heart of Downtown Atlanta if possible. Regardless, qualified landscape architects would work to ensure that aesthetic values and overall compatibility with existing and future Midtown streetscapes are achieved in the course of final bridge and roadway design. These are anticipated to be beneficial visual effects.

SECTION 5
REFERENCES AND
LIST OF ACRONYMS

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LIST OF ACRONYMS

AADT	Average Annual Daily Traffic
ADT	Average Daily Traffic
AHC	Atlanta History Center
APE	Area of Potential Effects
ARC	Atlanta Regional Commission
AUDC	Atlanta Urban Design Commission
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CBD	Central Business District
CEQ	Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
c o	Carbon Monoxide
COE	U.S. Army Corps of Engineers
COPC	Constituents of Potential Concern
c s o	Combined Sewer Overflow
dB	decibels
DOT	Department of Transportation
DPW	Department of Public Works
DPZ	Duany Plater-Zyberk
EA	Environmental Assessment
EJ	Environmental justice
EMT	Emergency medical technicians
EPA	U.S. Environmental Protection Agency
EPD	Georgia Environmental Protection Division
ERA	Economics Research Associates
FHWA	Federal Highway Administration
FTA	Federal Transit Administration

LIST OF ACRONYMS (con't)

GDOT	Georgia Department of Transportation
GIS	geographical information system
GNHP	Georgia Natural Heritage Program
gpm	gallon per minute
GRTA	Georgia Regional Transportation Authority
HABS-HAER	Historic American Buildings Survey – Historic American Engineering Record
HOV	High Occupancy Vehicle
HWFP	Hazardous Waste- Facility Permit
IMR	Interchange Modification Report
ITE	Institute of Transportation Engineers
JAR	Jacoby Atlantic Redevelopment, L.L.C.
kWh	kilo watt hour
LOS	level of service
LP	sound-pressure level
LEED	Leadership in Energy and Environmental Design
LRT	light rail transit
LUST	leaking underground storage tank
MARTA	Metropolitan Atlanta Rapid Transit Authority
Mcf	thousand cubic feet
MGD	Million Gallons per Day
MOU	Memorandum of Understanding
mph	miles per hour
MSA	metropolitan statistical area
MSL	mean sea level
NAAQS	National Ambient Air Quality Standards
NAC	noise abatement criteria
NEPA	National Environmental Policy Act of 1969
NOI	Notice of Intent
NO_2	Nitrogen Dioxide
NO_x	Nitrogen Oxides

LIST OF ACRONYMS (CON'T)

NPDES	National Pollutant Discharge Elimination System
NPU-E	Neighborhood Planning Unit - E
NWP	Nationwide Permit
PAHs	Polycyclic Aromatic Hydrocarbons
Pb	lead
PCB	PolyChlorinated Biphenyl
PIA	Potentially Impacted Area
PM_{10}	Particulate Matter smaller than 10 microns
RBC	Risk Based Criteria
RTP	Regional Transportation Plan
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	Sulfur dioxide
s o v	single occupancy vehicle
S R	State Route
s v o c	Semi-Volatile Organic Compound
SWPPP	Storm Water Pollution Prevention Plan
TBS	Turner Broadcasting Systems
TCE	Ttichloroethylene
TCM	Transportation Control Measure
TMA	Transportation Management Association
TSS	Total Suspended Solid
T w v	Tap Water Value
USFWS	U.S. Fish and Wildlife Service
UST	underground storage tank
VMT	vehicle miles traveled
v/c	volume to capacity
v o c	Volatile Organic Compounds