

FUTURE LAND USE
Existing Land Use
Population Projections
Analysis

EXISTING LAND USE

Figure 2.1 shows the pattern of existing land use and Table 2.1 shows the acreage figures. As noted thereon, there are no "conservation" uses.

There are no beaches or mineral extraction sites. No areas of critical State concern are within Plantation. Figure 2.2 shows floodplains. Wellfields are depicted in Figure 2.3. Wetlands are shown in Figure 2.5.

The following are designated wetlands within the City of Plantation, as shown in Figure 2.5:

- Volunteer Park
- Plantation Preserve
- Central Park

The Preserve Indian Burial Site within the Plantation Preserve is a historic resource.

The existing land use of land in the City is shown on the Existing Land Use Map (Figure 2.1).

Table 2.1
Existing Land Use 2005
City of Plantation

	Sub-Totals In Acres	Gross Acres	Percent- All Land	Percent- Dev. Land
Residential				
Estate 1		1,195	8.5%	12%
Low 3		3,052	22%	30%
Low 5		830	6%	8%
Low-Medium 10		850	6%	8.5%
Medium 16		547	4%	5.5%
Medium-High 25		266	2%	3%
TOTAL RESIDENTIAL:		6,740	48.5%	67%
Commercial		1,064	8%	10.5%
Limited Commercial Office Park		163	1%	1.5%
Industrial		166	1%	1.5%
Commercial Recreation		914	6.5%	9%
Parks		475	3%	5%
Community Facility		503	3.5%	5%
Utility		58	.5%	.5%
Total Developed		10,083	72%	100.0%
Transportation		2,475	18%	
Water		1,030	7%	
Vacant		365	3%	
Single Family	300			
Multi-Family	7			
Commercial	33			
Limited Comm. Office Park	4			
Industrial	9			
Community Facility	12			
Recreation	0			
TOTAL LAND:		13,953	100.0%	

Source: City of Plantation, Planning Department, 2005

POPULATION PROJECTIONS

Background

This Plan is based in large part: on projections of the future population of the City. As width, length and height are the scales of architecture, population is the scale for community planning.

As defined by Chapter 9J-5, Florida Administrative Code (FAC), "resident population" means inhabitants counted in the same manner utilized by the United States Bureau of the Census, in the category of total population.

The "seasonal population" means part-time inhabitants who utilize, or may be expected to utilize, public facilities or services, but are not year-round residents. The seasonal population includes tourists, migrant farm workers, group quarters and other short-term and long-term visitors.

There are many different methodologies that can be utilized to estimate and project population. Chapter 9J-5, FAC, requires that population estimates and projections to be those provided by the University of Florida, Bureau of Economic and Business Research (BEBR), the Executive Office of the Governor, or proposed by the local government. The City uses a combination of BEBR and Broward County Population Forecast Model (BCPFM).

Permanent and seasonal population projections for the years 2005, 2010, 2015, 2020, 2025 and 2030 are based on the Future Land Use Plan capacity, housing unit production rates, an assumed City average of 2.6 persons/dwelling unit.

Total population through 2030 is projected to be the following:

Table 2.2
City Population Increase

Year	Permanent Population	Seasonal Population	Total
2005	85,157	527	85,684
2010	90,832		
2015	96,463	598	97,061
2020	100,826		
2025	105,944		
2030	109,530	687	110,217

Source: BCPFM, 2005.

Methodology for Estimation and Projections of Population

The City has worked with Broward County to develop population projections. The projections use a cohort survival model, which consists of two major parts, natural increase and net migration. Natural increase is the difference between the number of births and the number of deaths for a given period. Net migration equals the number of people moving into the City minus the number of people moving out of the City.

Table 2.3
Permanent Housing Unit Projections

Year	Amount
2006	36,166
2010	37,042
2015	38,493
2020	39,699
2025	40,803
2030	41,885

Source: BCPFM, 2005.

Unless the densities for vacant property shown on the Land Use Plan are increased, the buildout population will be reached at or about the year 2015.

The population projected for 2005 through 2030 is based on the dwelling unit projection rates shown above and approximately 2.6 persons/dwelling unit, the assumed City average. The permanent population is projected to be the following, excluding potential vacancy rates:

Table 2.4
Permanent Population Projection

Year	Permanent Population
2005	85,157
2010	90,832
2015	96,463
2020	100,826
2025	105,944
2030	109,530

Source: BCPFM, 2005.

**Table 2.5
Seasonal Population Estimate**

Year	Seasonal Population
2005	527
2010	
2015	598
2020	
2025	
2030	687

Source: BCPFM, 2005.

**Table 2.6
Total Population 2005-2030**

Year	Permanent Population	Seasonal Population	Total
2005	85,157	527	85,684
2010	90,832		
2015	96,463	598	97,061
2020	100,826		
2025	105,944		
2030	109,530	687	110,217

Source: BCPFM, 2005.

ANALYSIS

Availability of Facilities and Services

Traffic: Some streets function at level of service (LOS) "E" or "F". The Traffic Circulation Element recommends specific road improvements to address existing and projected problems.

Sanitary Sewer: The 16.9 mgd wastewater treatment plant can serve existing land uses, land for which development orders have been issued, and vacant land available for development compliant with the adopted LOS standard. The treatment facility is rated for 16.9 mgd of domestic wastewater plus 2.0 mgd of concentrate from the City's two water treatment plants.

Solid Waste: Solid waste disposal, provided by a private hauler under contract, can serve existing land uses, land for which development orders have been issued, and vacant land available for development compliant with the adopted LOS standard.

Drainage: The drainage system is functioning at adopted LOS standards.

Potable Water: The potable water system, with a total capacity of 24 mgd of finished water, that can adequately serve existing land uses, land for which development orders have been issued, and vacant land available for development compliant with the adopted LOS standard. However, in accordance with the SFWMD Water Availability Rule, the City of Plantation may only withdraw 17.4 mgd through both water treatment facilities combined, from the Biscayne Aquifer. The City of Plantation has prepared a 10-year water supply plan. This plan is an appendix to the Infrastructure Element Data and Analysis section. The Water Supply Plan predicts that by the year 2018, the City will have a demand not met of 0.77 mgd. The City's Water Supply Plan outlines the alternatives the City will be utilizing to accommodate the 0.77 mgd demand not met potential.

Aquifer Recharge: There are no problems with the Biscayne Aquifer in Plantation. Both County and City regulations provide wellfield protection. The City has also incorporated policies within the Infrastructure Element and Conservation Element discouraging land use plan amendments to the future land use map that propose industrial uses that could result in contamination of the groundwater.

Vacant Land Analysis

Amount: Some 365 acres of land is either vacant or in interim agricultural use pending development. Virtually all of it is located to the west of Pine Island Road. See Existing Land Use Map.

Soils: Most of the vacant land has fine sand soil types; Hallandale, Margate or Pompano are the principal varieties. See Figure 2.4. These soils are acceptable for construction, but not septic tanks; no new development will be allowed to use septic tanks except on an interim basis where sewer extension is now infeasible. Even in these cases, rigorous County standards must be met, including replacement of the problem soil with more permeable soil.

Topography: The level terrain of Western Plantation is indicated by the fact that the Elevation above sea level varies from six to nine feet.

Natural Resources: As outlined in the Conservation Element, there are no natural features of major significance in the western half of Plantation. However, there are some naturally wooded areas in Plantation Acres that are worthy of preservation as part of the large-lot residential development occurring there.

Historic Resources: There are none in western Plantation where the vacant land is located.

Land Needed to Accommodate Projected Population

As outlined earlier in this Element, the projected 2015 population for the City is based upon the Land Use Plan capacity, i.e., a build-out population. The methodology used to make this projection is contained in the population section.

**Table 2.7
 Dwelling Unit and Population Capacity By Residential Density Category
 City of Plantation, 2005**

Residential Density Category In Units Per Acre	Gross Vacant Acres	Total Acres on Land Use Plan i.e., Buildout Acreage	Number of Dwelling Units at Buildout	Population at Buildout
Single Family				
1	229	1,195	1,927	4,818
3	71	3,052	9,156	22,890
5	0	830	4,150	10,375
Multi- Family				
10	3	795	7,950	19,875
16	0	547	8,752	21,880
25	4	266	6,650	16,625
TOTAL:	307	6,685	37,853	96,463

Prepared by City of Plantation Planning Department, 2005

Table 2.7 shows the various residential density categories, together with vacant land and ultimate buildout capacity in housing units and population; this data is also available broken down by Flexibility Zone.

The significant conclusion from this analysis is that there is vacant residentially designated land in a variety of density categories, both single family and multifamily. This is analyzed in more detail in the Housing Element.

Redevelopment

An analysis of the need for redevelopment indicates there are no areas of serious blight or incompatible land use within Plantation.

The City has focused on the older residential neighborhoods east of University Drive for minor home repair and special needs housing assistance.

Assistance is provided in the form of direct grants to income-qualifying households in accordance with Plantation's Local Housing Assistance Plan (LHAP). The funding source is the

State Housing Initiatives Partnership Program (SHIP). Rehabilitation funding is also provided by Community Development Block Grant (CDBG) funds and HOME funds.

The State Road 7/U.S. 441 business corridor (Plantation Gateway) is the target of a significant revitalization effort. A Safe Neighborhood Plan, adopted in 1990, provides the framework for an ongoing public/private physical improvement partnership. This corridor has also been designated a CRA redevelopment area (Plantation Gateway).

The goal is to make the business corridor an attractive business location and shopping destination. The objectives for the two-mile long business corridor include improved traffic circulation and safety, a reduction in crime and the perception of crime, and coordination of private/public, redevelopment activities.

Improved traffic circulation and safety is currently being addressed by improvements to circulation on redeveloped sites and in some situations providing cross-access agreements between sites. The continuous shopping drive separates the fast-moving State Road 7/U.S. 441 traffic from the shopping traffic and allows shoppers to conveniently access the businesses located along the corridor without having to mix with the thru traffic.

Public/private redevelopment is being coordinated via the City site plan review process. Uniform standards for sign design and location, street/business lighting, landscaping, and pedestrian areas (sidewalks, paver blocks and benches) have been established and are implemented on an ongoing basis via the site plan development approval process.

The Plantation Midtown is currently in the implementation phase of the Central Plantation Conceptual Master Plan which provides for the vision and strategies to guide economic revitalization efforts, urban design, public improvements, transportation systems, and other development activities in the Plantation Midtown District.

Flood Prone Areas

As shown on Figure 2.2, virtually the entire City is within the 100-year flood plain. This underscores the importance of enforcing the flood plain provisions of Chapter 9 of the City Code, and related FEMA regulations and Regional Planning Council policies.

Public Schools

In 1995, the Florida Legislature enacted Chapter 95-341 (Committee Substitute for House Bill 1797). Section 10 of that chapter amended § 163.3177(6)(a), Florida Statutes (F.S.) by requiring local governments to identify those future land use map designations where public schools are an allowable use, to include sufficient lands in the future land use designations proximate to residential development to meet the projected needs for schools in coordination with public school boards; to adopt different requirements for schools of different size or type, if desired; to require that the local government comprehensive plan be amended by October 1st, 1996 to comply with this requirement; and to exempt amendments proposed by local governments for purposes of identifying future land use map designations in which public schools shall be an allowable use from the limitation on the frequency of plan amendments contained in Section 163.3187, F.S.

In 1998, the Florida Legislature enacted Chapter 98-176 (Committee Substitute for Senate Bill Number 2474). Section 4 of that chapter amended §163.3177(6)(a), F.S. as follows: it extended the deadline from October 1, 1996 to October 1, 1999 for local governments to amend their comprehensive plan to identify those future land use map designations where public schools are an allowable use; it required that the future land use element include criteria which encourage the location of schools proximate to urban residential areas; it required that the local government seek to collocate public facilities (such as parks, libraries, and community centers) with schools; and it provided that the local government would be prohibited from amending their comprehensive plan unless the above requirements were met. This section addresses those future land use map designations where public schools are allowed, documents that sufficient lands are available to meet future needs, addresses criteria which encourage the location of schools proximate to urban residential areas, and criteria that require public facilities to be collocated with schools to the extent possible.

1. Future Land Use designations where public schools are allowed. The City of Plantation Land Use Plan considers public schools to be a Community Facility use. Community Facilities are allowed in Residential, Commercial, and Community Facilities future land use designations. Policy 1.6.6 identifies those future land use designations where public schools are an allowable use.
2. Sufficiency of appropriately designated lands to meet projected public school needs. Of the 13,953 total acres within the City, 11,814 acres (85 percent) have a future land use designation that permits public schools. Given that nearly 90 percent of all lands within the City have future land use designations that allow public schools, it is reasonable to assume that future land use designations are not an impediment to the location and development of new public school sites.

The City's future land use designations are not an impediment to the expansion of existing public school sites. As of April 1999, the School Board for Broward County, Florida had 10 educational facilities located with the City.

3. Collocating public schools with parks, libraries and community centers. Policy 1.6.7 provides four (4) site selection criteria that are to be used as a guideline by the City and School Board when considering the collocation of public facilities. These criteria are a consolidation of site review criteria used by the School Board when locating public schools. The first criterion is the availability of vacant land of a suitable size and dimensions for the collocated public uses. This criterion incorporates the School Board's criteria on availability of vacant land of suitable size and dimension and parks. When reviewing sites, the School Board uses the site size and dimensions shown in Table 2.8 as a guideline.

Table 2.8
Educational Facility Capacity and Site Size

Educational Facility	Student Capacity	Site Size (Acres)
Elementary	830	11
Middle	1,787	21
High	2,857	37

Source: Capital Planning and Programming Department, Broward County School Board, 2006.

The second criterion is compatibility with surrounding areas. The School Board uses several Compatibility criteria, including compatibility with adjacent area, avoidance of interference from noise or odors, avoidance of airport flight path approach and railroad and highway rights-of-way, and avoidance of FPL power lines. This criterion is broader than the School Board's because it explicitly considers future land use compatibility.

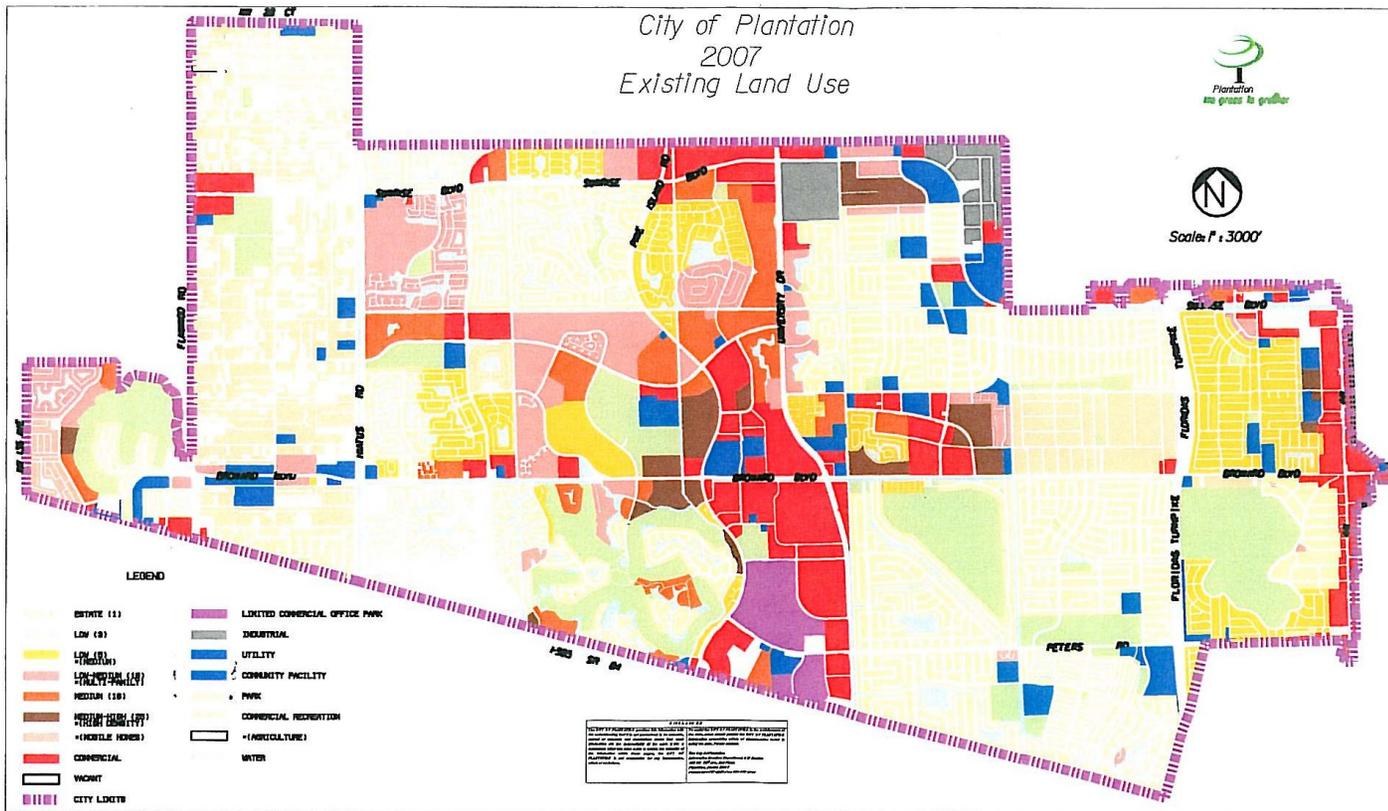
The third criterion is the availability of concurrency and utilities. This criterion incorporates the School Board's Criteria on drainage, roads, and availability of utilities.

The fourth criterion deals with environmental considerations and it consolidates the School Board's criteria on environmental considerations and soil conditions.

It should be noted that the City of Plantation and the School Board already have established some precedent for the collocation of public facilities. Consistent with Recreation and Open Space Element Policy 1.1.2 the City can continue to use lease agreements with the School Board to correct existing local park deficiencies.

Legislation enacted by the 2005 Florida Legislature (Senate Bill 360, Laws of Florida 2002-290) mandates a comprehensive focus on school planning by requiring local governments and school boards to adopt a school concurrency system. School concurrency ensures coordination between local governments and school boards in planning and permitting developments that affect school capacity and utilization rates. The City has entered into an inter-local agreement with the Broward County School Board and Broward County and will adopt a school element in the future.

Figure 2.1



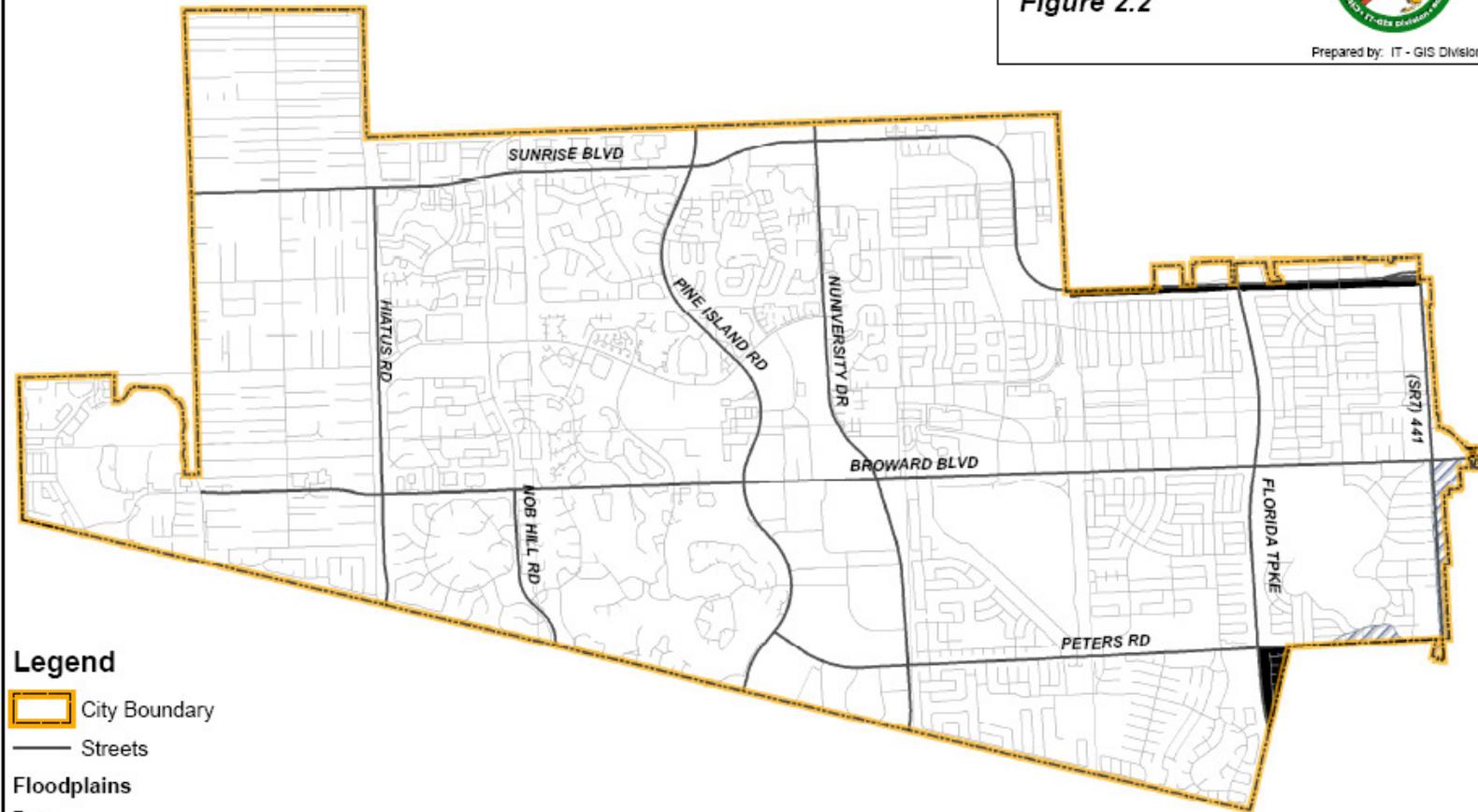
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City of Plantation

Floodplains Figure 2.2



Prepared by: IT - GIS Division



Legend

City Boundary

Streets

Floodplains

Zone

AE - Base flood elevations determined

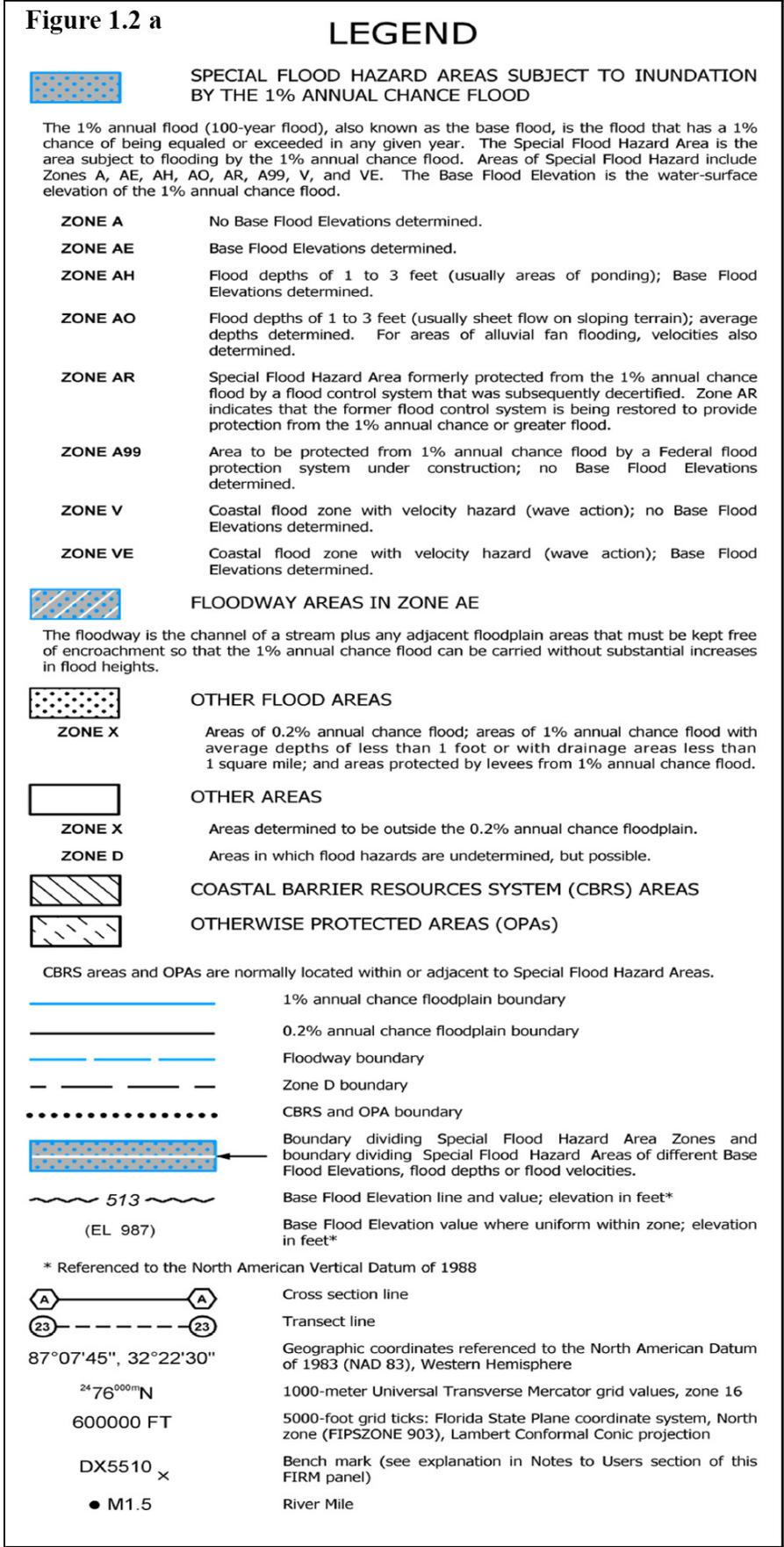
AH - Flood depths of 1 to 3 feet

X - Areas of 500 year flood

Source: Federal Emergency Management Agency (FEMA), 1992



Figure 2.2a



City of Plantation

Wellfield Protection Zones

Figure 2.3



Prepared by: IT - GIS Division



Legend

City Boundary

Streets

Wellfields Protection Zones

Zone 1

Zone 2

Zone 3

Source: DPEP, Pollution Prevention and Remediation Division, 2007

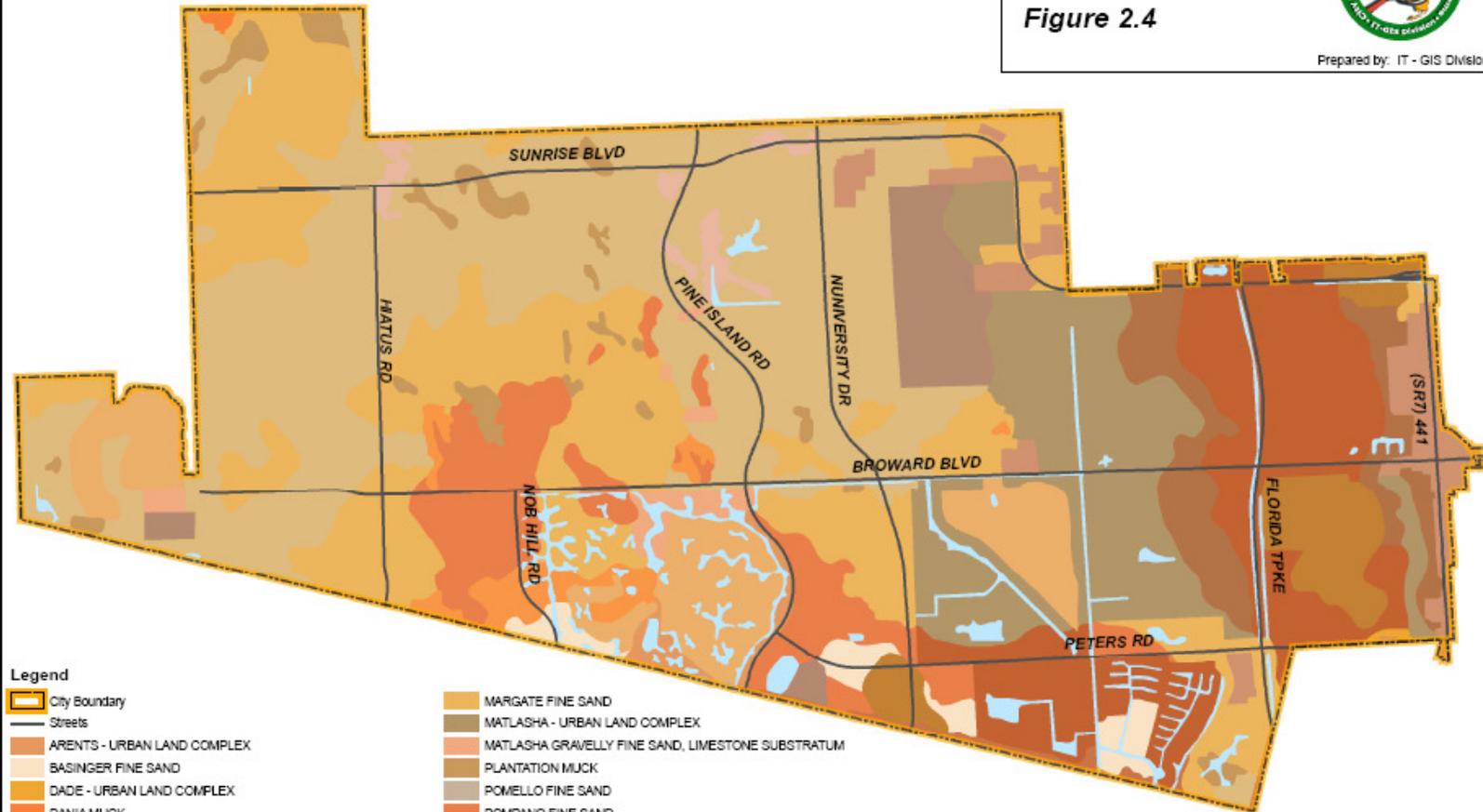
City of Plantation

Soils

Figure 2.4



Prepared by: IT - GIS Division



Legend

- City Boundary
- Streets
- ARENTS - URBAN LAND COMPLEX
- BASINGER FINE SAND
- DADE - URBAN LAND COMPLEX
- DANIA MUCK
- HALLENDALE - URBAN LAND COMPLEX
- HALLENDALE FINE SAND
- IMMOKALEE - URBAN LAND COMPLEX
- IMMOKALEE FINE SAND
- IMMOKALEE, LIMESTONE SUBSTRATUM - URBAN LAND COMPLEX
- LAUDERHILL MUCK
- MARGATE FINE SAND
- MATLASHA - URBAN LAND COMPLEX
- MATLASHA GRAVELLY FINE SAND, LIMESTONE SUBSTRATUM
- PLANTATION MUCK
- POMELLO FINE SAND
- POMPANO FINE SAND
- SANIBEL MUCK
- UDORTHERTS
- UDORTHERTS - URBAN LAND COMPLEX
- UDORTHERTS, SHAPED
- URBAN LAND
- WATER

Source: Natural Resources Conservation Service (NRCS), 1984



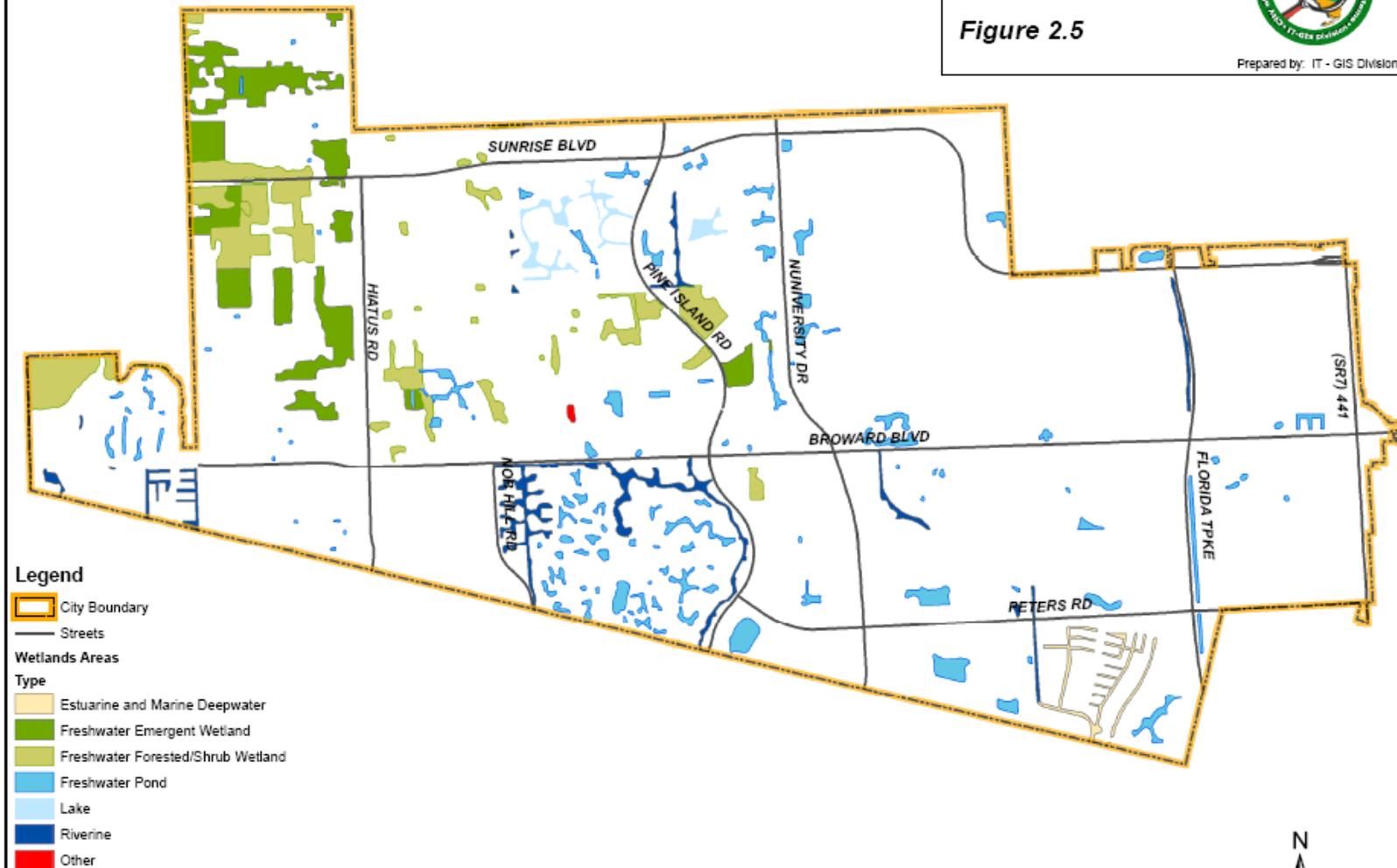
City of Plantation

Wetlands Data

Figure 2.5



Prepared by: IT - GIS Division



Legend

- City Boundary
- Streets
- Wetlands Areas
- Type
 - Estuarine and Marine Deepwater
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Riverine
 - Other

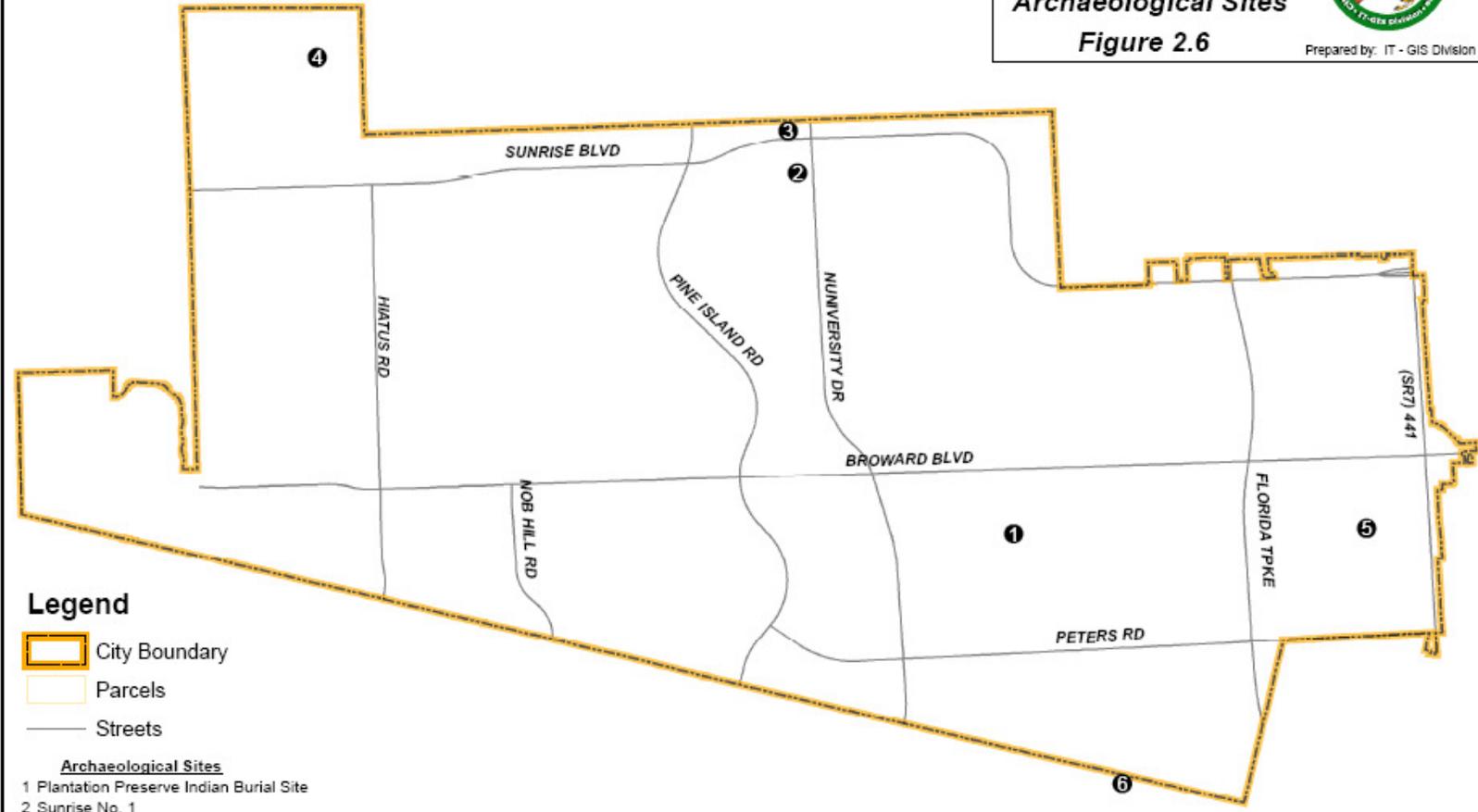
Source: U.S. Fish and Wildlife Service, 200605, NWIDBA.CONUS_wet_poly: Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, DC. FWS/OBS-79/31., U.S. Fish and Wildlife Service, Branch of Habitat Assessment, Washington, D.C.

City of Plantation

Historical and Archaeological Sites Figure 2.6



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Legend

- City Boundary
- Parcels
- Streets

Archaeological Sites

- 1 Plantation Preserve Indian Burial Site
- 2 Sunrise No. 1
- 3 Sunrise No. 2
- 4 Plantation Acres

Historical Sites

- 5 Fort Lauderdale Country Club
- 6 Lock No. 1, North new River Canal



Source: Planning, Zoning & Economic Development Department, 2007

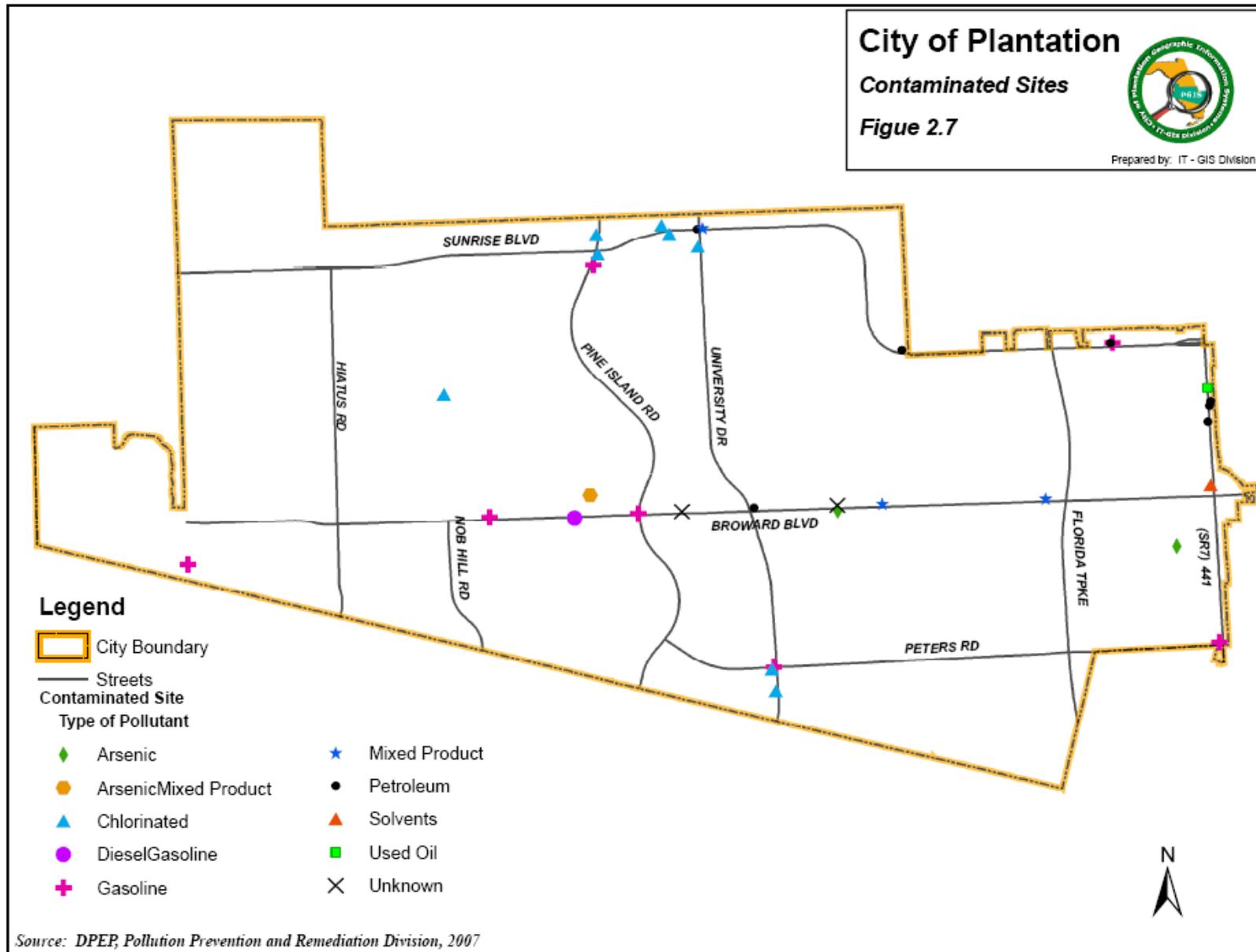
City of Plantation

Contaminated Sites

Figure 2.7



Prepared by: IT - GIS Division



Source: DPEP, Pollution Prevention and Remediation Division, 2007