

Implementation Plan & Financial Analysis



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**CDM
Smith**

Table of Contents

Section 1 Phase I Implementation Plan

1.1	Tract 'B'	1-1
1.1.1	Suggested Layout and Development Concept	1-2
1.1.2	Field Investigations	1-10
1.1.3	Development Phasing and Infrastructure Upgrades	1-10
1.1.4	Schedule for Implementation	1-13
1.1.5	Illustrative Renderings	1-16
1.1.6	Inland Port / Multimodal Center Development	1-16
1.2	Tract 'F'	1-16
1.2.1	Suggested Layout and Development Concept	1-16
1.2.2	Field Investigations	1-26
1.2.3	Development Phasing and Infrastructure Upgrades	1-26
1.2.4	Schedule for Implementation	1-30
1.2.5	Illustrative Renderings	1-30

Section 2 Phase I Financial Analysis

2.1	Funding Sources	2-1
2.1.1	Local / Airport Sources	2-2
2.1.2	State and Federal Sources	2-2
2.1.3	Other Sources	2-5
2.2	Financial Assumptions	2-6
2.3	Baseline Financial Models	2-7
2.3.1	Tract 'B' Baseline Model	2-7
2.3.2	Tract 'F' Baseline Models	2-7
2.4	Sensitivity Analysis	2-11
2.4.1	Tract 'B' Development Options Comparison	2-11
2.4.2	Tract 'F' Development Options Comparison	2-14
2.5	Summary and Conclusions	2-19

Tables

Table 2-1	Tract 'B' Baseline Financial Model	2-8
Table 2-2	Tract 'F' - Baseline Development #1	2-9
Table 2-3	Tract 'F' - Baseline Development #2	2-10
Table 2-4	Tract 'B' – Sensitivity Analysis #1	2-12
Table 2-5	Tract 'B' – Sensitivity Analysis #2	2-13
Table 2-6	Tract 'F' – Sensitivity Analysis #1	2-15
Table 2-7	Tract 'F' – Sensitivity Analysis #2	2-17

Figures

Figure 1-1 Tract 'B' – Industrial Land Use	1-4
Figure 1-2 Tract 'B' – Jurisdictional Boundary	1-5
Figure 1-3 Tract 'B' – Original Concept.....	1-6
Figure 1-4 Tract 'B' – Final Revised Concept.....	1-7
Figure 1-5 Tract 'B' – Topography	1-8
Figure 1-6 Tract 'B' – Existing Infrastructure	1-9
Figure 1-7 Tract 'B' - Soil Borings.....	1-11
Figure 1-8 Tract 'B' – Wetlands	1-12
Figure 1-9 Tract 'B' – Proposed Roadway	1-14
Figure 1-10 Tract 'B' – Proposed Infrastructure	1-15
Figure 1-11 Tract 'B' – Illustrative Rendering (West)	1-18
Figure 1-12 Tract 'B' – Illustrative Rendering (North).....	1-19
Figure 1-13 Tract 'B' – Illustrative Rendering (Street).....	1-20
Figure 1-14 Inland Port.....	1-21
Figure 1-15 Tract 'F' – Land Use.....	1-22
Figure 1-16 Tract 'F' – Development Concept.....	1-24
Figure 1-17 Tract 'F' – Existing Infrastructure	1-25
Figure 1-18 Tract 'F' – Soil Borings.....	1-27
Figure 1-19 Tract 'F' – Wetlands.....	1-28
Figure 1-20 Tract 'F' – Phasing	1-29
Figure 1-21 Tract 'F' – Proposed Infrastructure	1-31
Figure 1-22 Tract 'F' – Illustrative Rendering	1-32

Section 1

Phase I Implementation Plan

Upon completion of the master land use plan and site development concepts, two development areas/tracts were identified as having the greatest potential for Phase I short-term development based on existing market demand and overall site conditions. The following pages detail the analyses, field investigations, and the recommended concept development plan for the two Phase I tracts that were selected, which include Tract 'B' and Tract 'F'. These tracts were selected because they have few obstacles to development and/or there is existing activity and demand for development in these areas. These two areas of the airport property have many existing advantages that can be leveraged to facilitate short-term development.

This section will address the following items:

- Why Tracts 'B' and 'F' were selected
- Field investigations
- Site layout and concept revisions
- Ongoing adjacent development and/or activity
- Phasing and infrastructure requirements/upgrades
- Concept Implementation schedule

1.1 Tract 'B'

Tract 'B' was selected as the non-aviation parcel for development implementation planning because it offers significant near-term development opportunities and would benefit from additional analysis and planning. In comparison, Tract A is expected to mainly remain a single large parcel.

Tract 'B' is separated from the airfield by the J. Verne Smith Parkway, and its development should have little impact on the existing or future airfield operations. Further, the site offers many advantages that could facilitate relatively cost effective development and serve as an example for additional airfield property development.

1.1.1 Suggested Layout and Development Concept

In order to properly analyze the capabilities of Tract 'B', the anticipated site use, parcel subdivision flexibility, infrastructure needs, and other internal and external factors related to the tract were considered in the development plan.

1.1.1.1 Land Use

As outlined in previous sections of this report, Tract 'B' was identified as having potential for Industrial land use (**Figure 1-1**). Several factors, including a planned Intermodal Center, which will be addressed in a later section, confirm the Industrial classification. It should be noted that due to the recommended parcel sizes, heavy industrial buildings on very large sites are not anticipated. Major industrial development of this level is more appropriate for Tract 'A'. The mid to light-industrial land use will help minimize the impact to adjacent land uses compared to a single parcel with one major industrial development.

As part of the site layout and land use analysis, a review of applicable city and/or county jurisdictions was completed in order to better understand how development of several parcels within Tract 'B' may be completed. As shown in **Figure 1-2**, Tract 'B' lies within the limits of both the City of Greer and Spartanburg County. Significant coordination to facilitate development and avoid parcels that may fall within two jurisdictions would likely be necessary.

1.1.1.2 Parcel Layout and Development Flexibility

Tract 'B', as presented in **Figure 1-3**, was originally segmented into nine parcels ranging in size from four acres to nearly 35 acres. Further refinement of the Tract 'B' concept, as illustrated in **Figure 1-4**, resulted in fewer parcels (down to six) with larger acreages. In the final revised Tract 'B' concept, two large parcels, each rough 50.0 acres in size, have been created to take advantage of potential intermodal access and facilities on the adjacent port authority property and are the most likely for significant sized development. The remaining four parcels, ranging in size from roughly eight acres to 25 acres to 33 acres, can still be developed but may not yield the same level of opportunity for investment and job production. The parcel in the northwest corner of the site has some significant topographic challenges that would likely limit economical development of large buildings. The smaller parcels would likely be light industrial or service related users that support the other larger industrial users. It should be noted that these acreages seek to indicate economically viable developable area. Actual parcel sizes conveyed to users would likely be larger.

Three dominating physical features equally divide the acreage of Tract 'B' and limit the options for future development. To the north the site is constrained by an existing Norfolk-Southern rail line and the future port authority intermodal yard development. Cutting across the middle of the property is a stream that runs west to east and would likely be under USACOE permitting protection. Near the south of the property are two existing roadways including Victor Hill Road. While closing some roadways may be an option, it is not anticipated that Victor Hill Road could be eliminated within the GSP property. In addition to these three items, a Greer CPW power transmission line crosses the site at an askew angle to the stream, further complicating

development options. This line could be re-located, but at a high cost to a future user. It has been assumed that the existing McElrath Road, which crosses the interior of the site and has which has fallen into significant disrepair, can be closed.

Another challenge to the parcel development that was considered was the significant elevation changes within Tract 'B'. Rolling terrain generally does not support large scale industrial developments due to the high cost of earthwork required to obtain a common elevation for a large factory floor. **Figure 1-5** provides an illustration of the elevation changes across the tract as well as potential grading necessary for the placement of large building pads.

The parcels have been worked around these features to yield reasonable sizes for the industrial development targeted. Despite these challenging limitations, the recommended parcel layout does offer flexibility to future users. The goal was to maximize the parcel sizing while maintaining future flexibility as the site develops. For example, the larger 50 acre parcels could be converted to smaller 25.0 acre parcels to meet the needs of smaller users.

1.1.1.3 Existing Infrastructure Assets

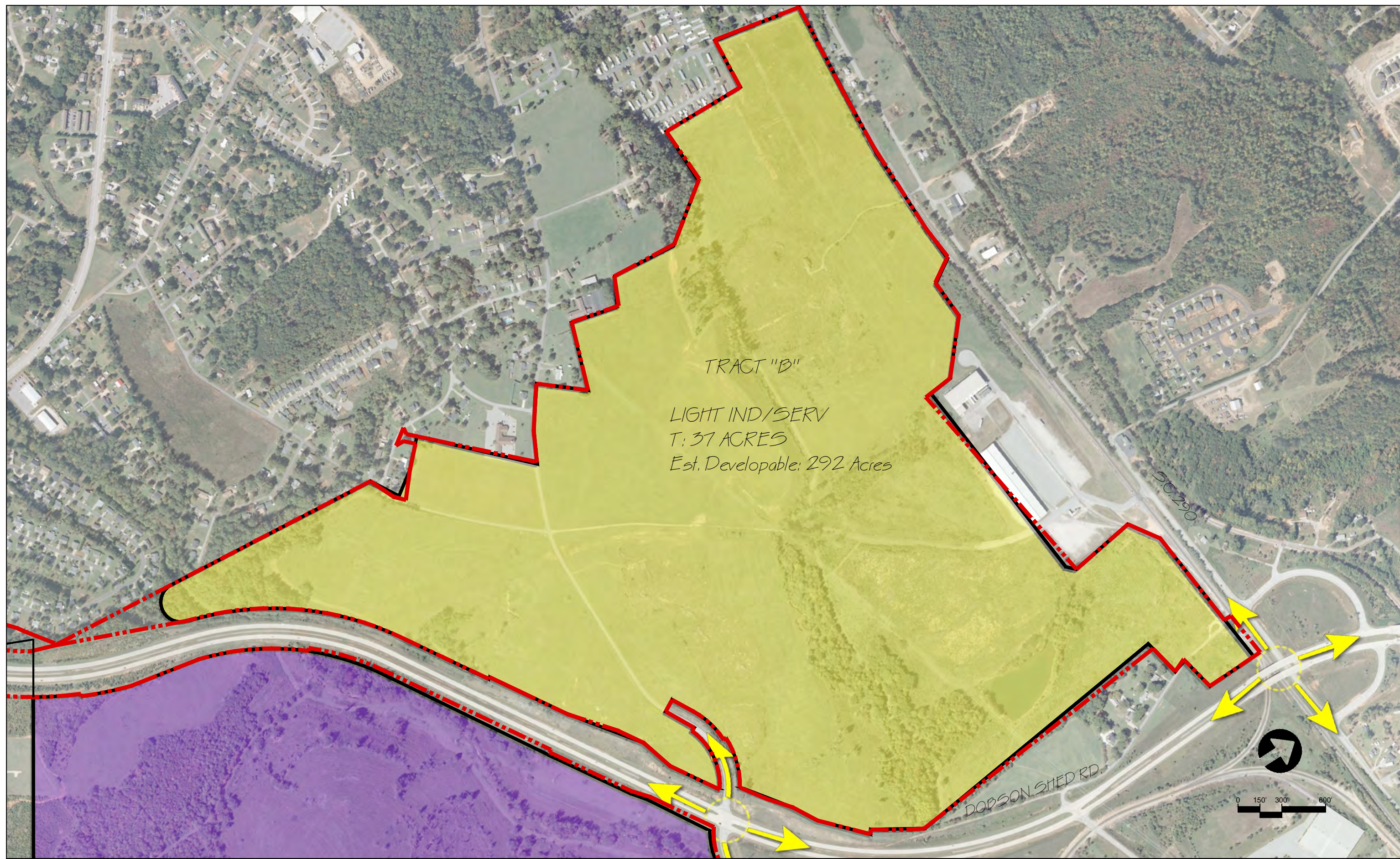
While the existing roadways and electrical lines can hinder the parcel layout, the existing infrastructure is also one of the greatest assets of Tract 'B'. Having existing on-site infrastructure capable of supporting the desired level of industrial development can result in a significant cost savings in upgrading and preparing the sites to a point that they are attractive to potential industrial users.

As shown in **Figure 1-6**, Tract B has existing water lines, sewer lines, and electrical lines on or directly adjacent to the site. Per preliminary discussions with Greer CPW, the 12-inch water and 15-inch sewer lines have adequate available capacity for the anticipated development. This means that the cost to make each parcel marketable by ensuring access to water and sewer capacity is significantly reduced to the costs associated only with pipeline extensions within Tract B.

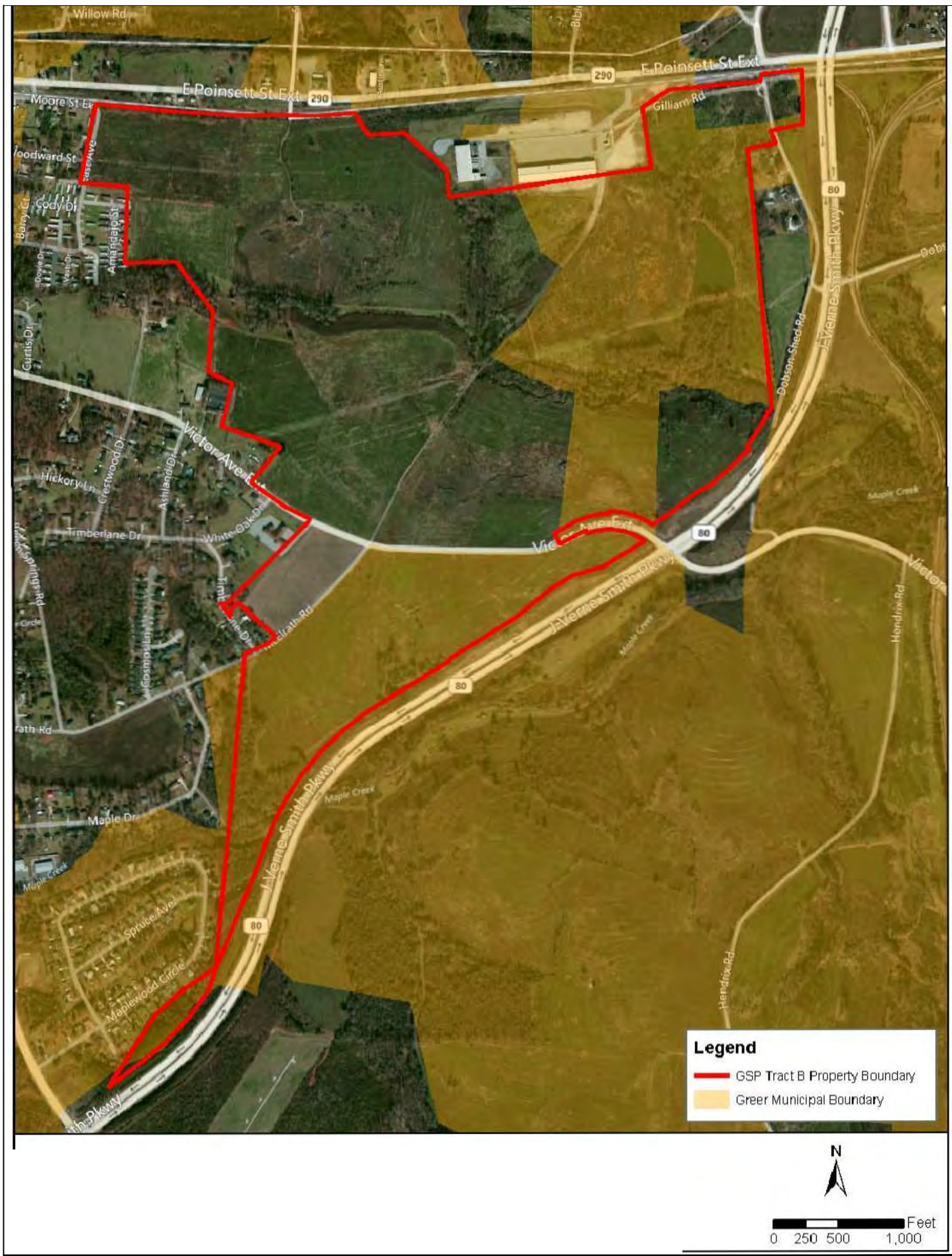
The adjacent J. Verne Smith Parkway provides four-lane access (via Highway 101) to Interstate 85. This is a major selling point to potential users. As will be detailed later, it does not appear feasible to obtain rail access to any of the sub-divided parcels.

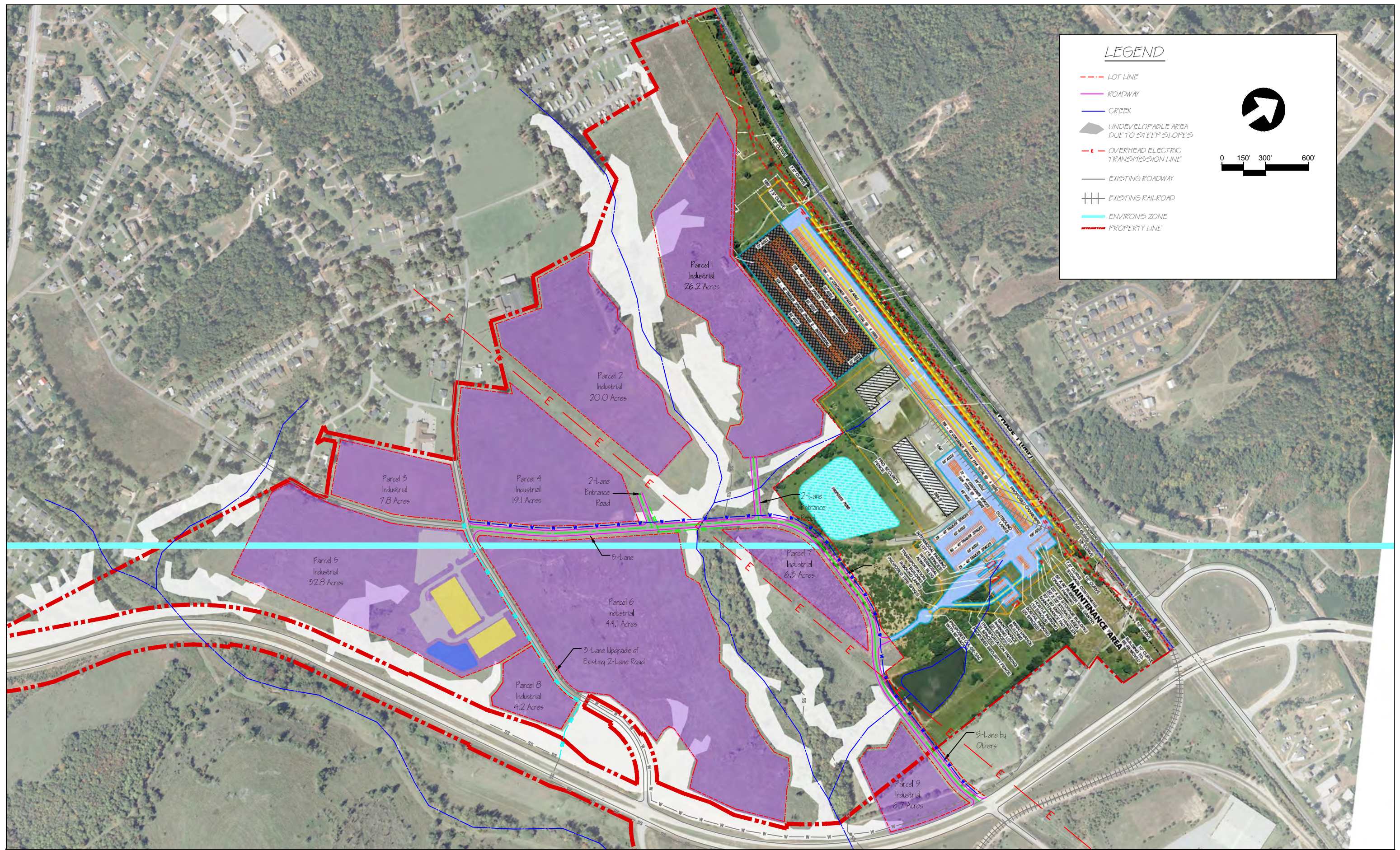
1.1.1.4 Airfield Impacts

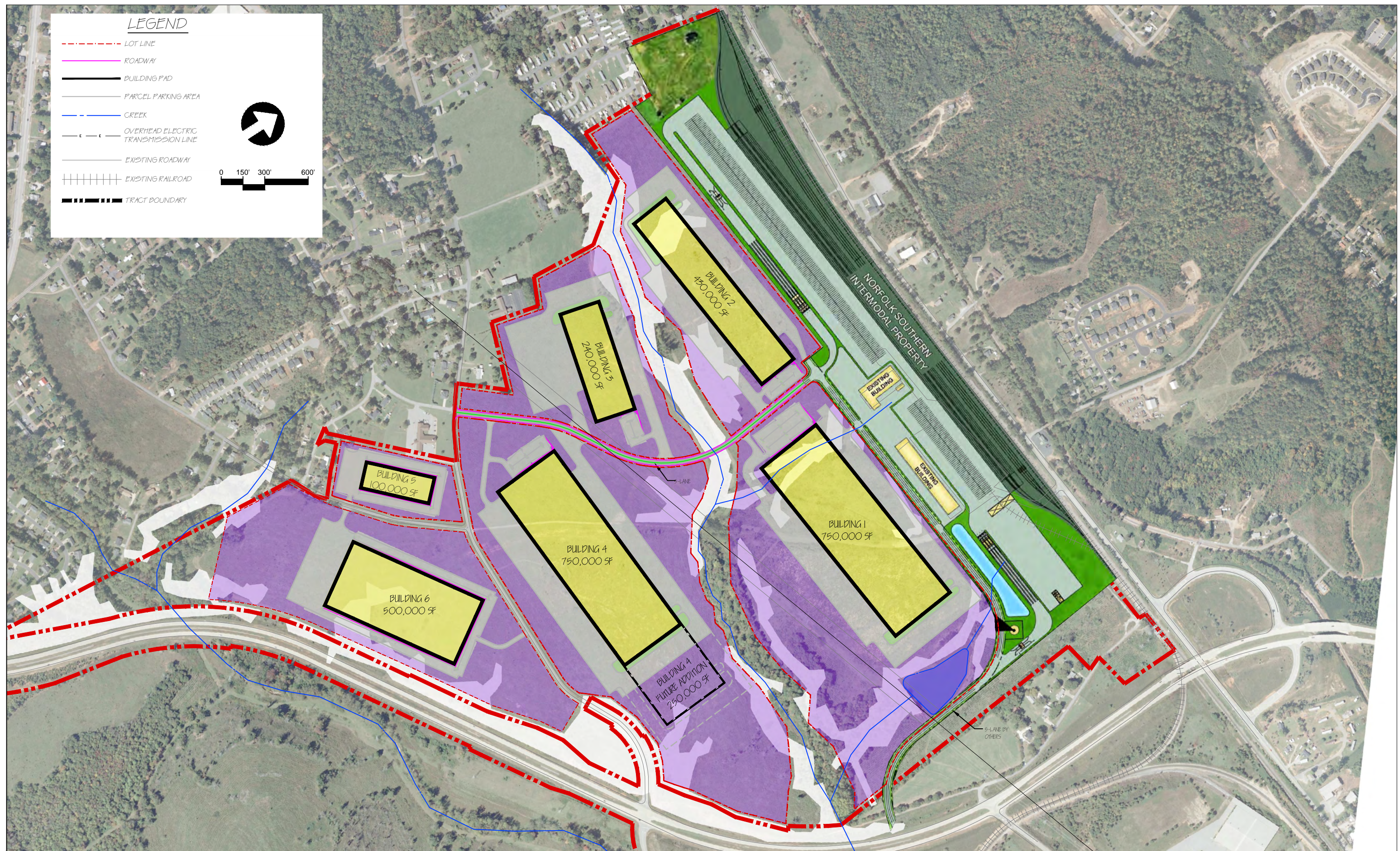
Tract 'B' is largely separated from the airfield operations and to some degree airspace restrictions, is very distant from the traditional entrance to the airport, and is physically separated from the airport by the J. Verne Smith Parkway. During planning, design and development of Tract 'B', consideration will need to be given to the location and height of structures as well as the location and type of any storm water ponds or basins. Otherwise, overall development of Tract 'B' is expected to have little to no impact on the airport's operations.

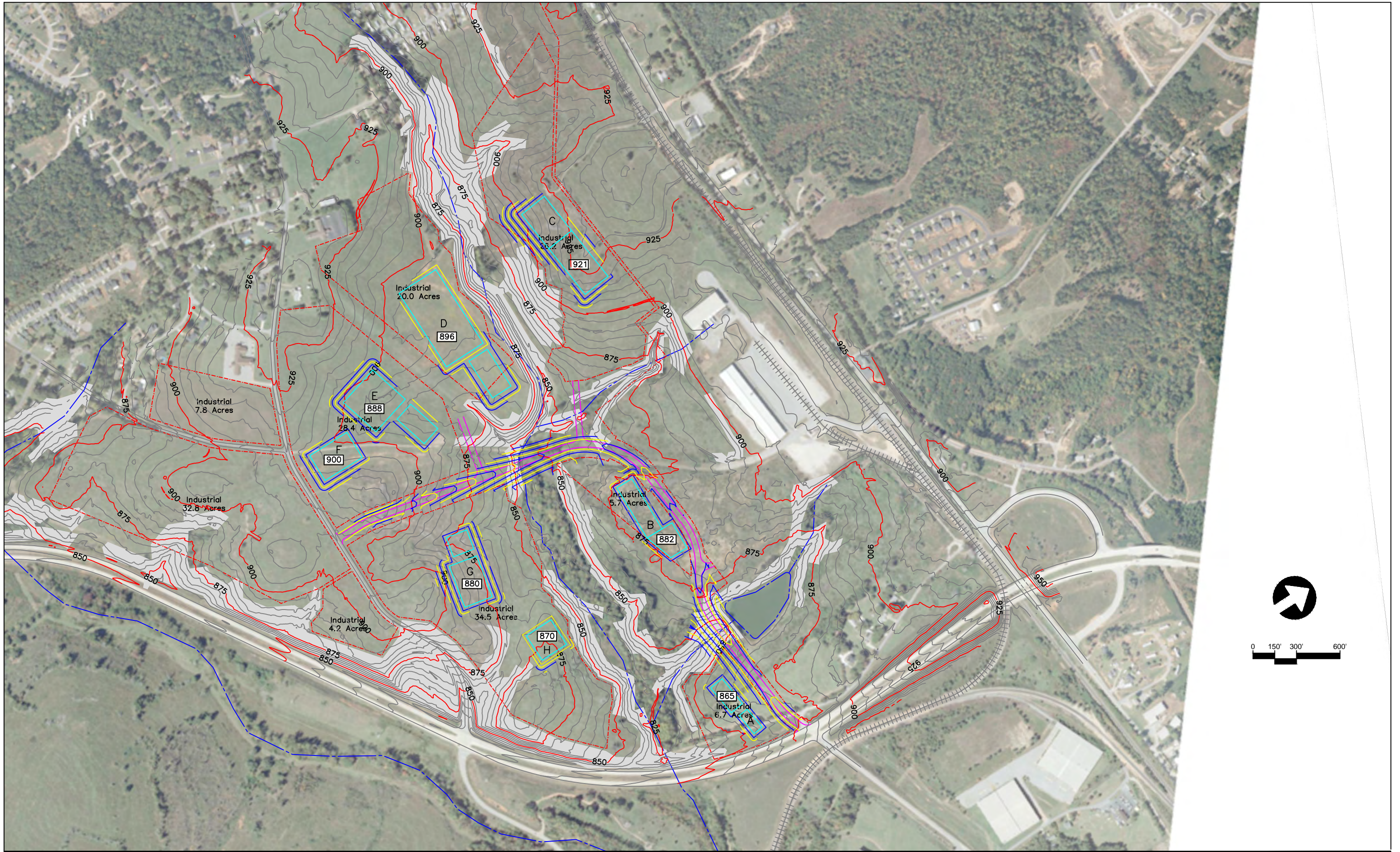


TRACT "B" - INDUSTRIAL LAND USE









TRACT 'B' - TOPOGRAPHY

1.1.2 Field Investigations

As part of our assessment of the feasibility to develop Tract 'B', limited field investigations were performed. While these investigations were preliminary in nature, they were very helpful in establishing potential restrictions on future development.

1.1.2.1 Geotechnical Investigations

Geotechnical investigations were very limited, but provided a great deal of information. The most important confirmation was that future IBC seismic design (used for structural design of buildings) site classification would likely be a "C". Site classifications of "D" can greatly inhibit industrial development.

Two soil borings, the locations of which are shown in **Figure 1-7**, were taken within the Tract 'B' area and the results varied greatly. One boring (B2) revealed rock at a depth of five feet. The second boring in Tract B was 25 feet in depth (B3) and did not encounter rock. This information confirms that rock is present and will vary greatly across the site. It also confirms that it is not feasible, for master planning purposes, to presume that deep earthwork cuts will be economical. Therefore, building pad sites may have to be created using mostly fill earthwork volumes. This increases the cost of large pads and may limit the desire for industrial parcels larger than those shown on the current plan.

Before a final development plan is executed and new infrastructure is designed, additional site geotechnical investigations are recommended. The geotechnical field investigation and boring results are provided in **Appendix 'A'**.

1.1.2.2 Wetland and Stream Assessment

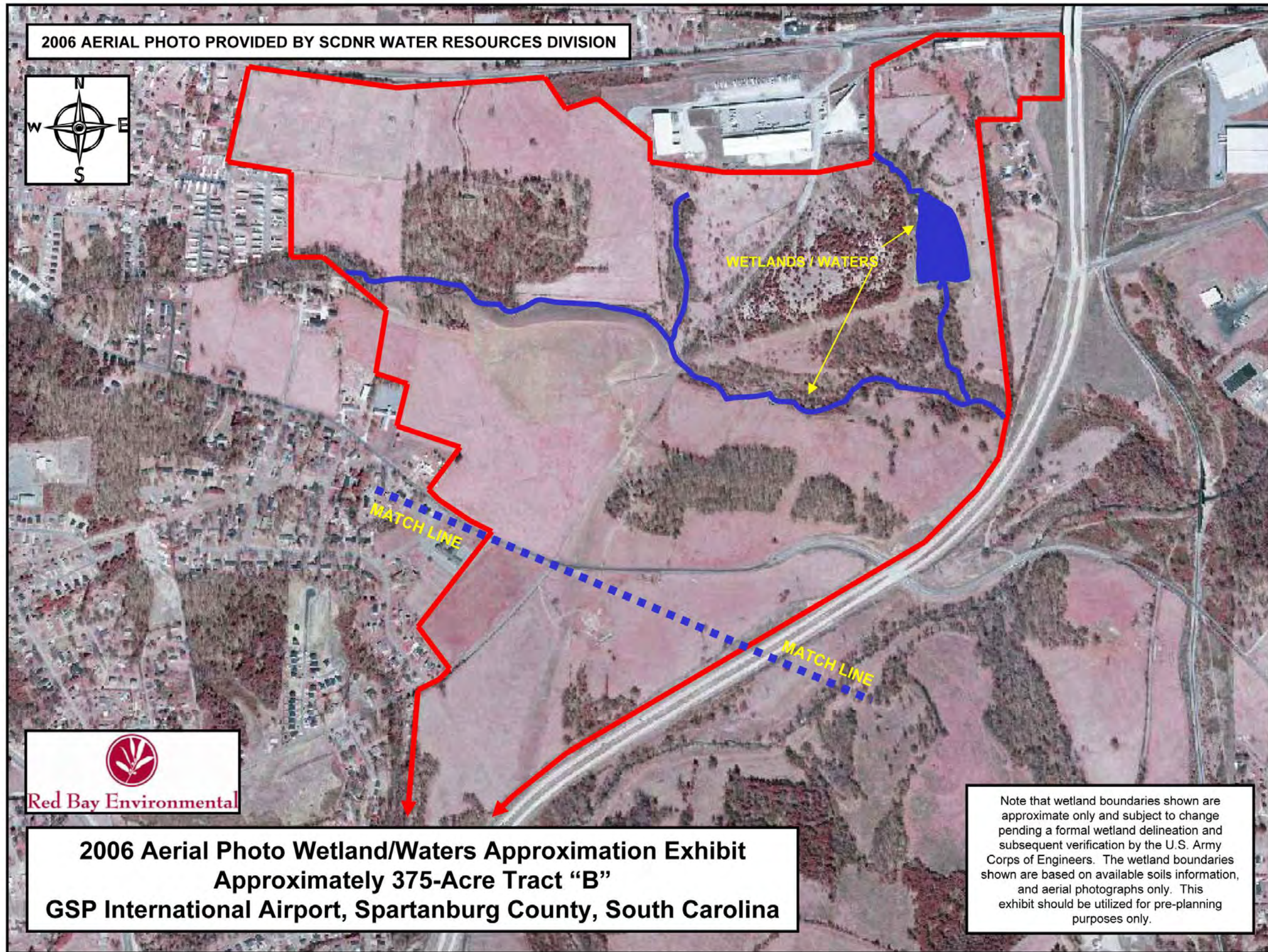
As part of the effort to further understand the site's existing limitations, a preliminary environmental assessment was performed to investigate the expectation of wetland and stream impacts. As anticipated, many of the streams on-site would likely require a US Army Corp of Engineers permit for any impacts. This does not prevent encroachments into the streams, but does present significant limitations on the amount of stream footage that can be impacted. The preliminary wetlands exhibit is provided in **Figure 1-8**.

1.1.3 Development Phasing and Infrastructure Upgrades

1.1.3.1 Phasing

When reviewing the layout for Tract 'B', it is our recommendation that the infrastructure upgrades to elevate the marketability of the site be completed in a single phase. It is common in industrial park development planning to phase the development of acreage to minimize capital costs. However, with so much of the utility infrastructure in place, phasing does not carry the normal advantages. Approximately 75 percent of the proposed infrastructure costs are related to the roadway improvements.

Figure 1-7 Soil Borings



1.1.3.2 Proposed Infrastructure

Improving the existing infrastructure to support the intended development land use and parcel layout will be required to attract future users. The improvements listed below are estimated at approximately \$5,977,884 million. A detailed order of magnitude estimate for all development components of Tract 'B' is included in **Appendix B** of this report.

The most expensive and critical infrastructure improvement will be the construction of a central arterial road within Tract 'B'. It is our understanding that the SCPA is strongly considering an improved intersection along J Verne Smith Parkway that would create a new access point to the overall site and their planned Intermodal Center. It would be advantageous to allow this new roadway to serve as an access point for the remainder of Tract B. For the purposes of this study, it has been assumed that the SCPA would construct a new access point to J Verne Smith Parkway and that the roadway could be continued by GSP to serve the other parcels and connect to Victor Avenue. The new arterial roadway has been projected to be a five-lane industrial roadway.

In addition, our estimates have assumed that Victor Avenue would be improved to a widened three-lane section from the J Verne Smith Parkway intersection to McElrath Road. This would allow for an improved access on the major highway that could be predominantly used by local traffic and worker vehicles, thereby allowing the other intersection to be primarily heavy truck traffic for the Intermodal Center. Proposed roadway improvements are illustrated in **Figure 1-9**.

Sewer is available to many of the proposed sites through a 15-inch line that follows the main stream as well as an existing 18-inch line along J Verne Smith Parkway. Additional sewer lines will need to be constructed to connect the newly divided parcels with these main sewer lines.

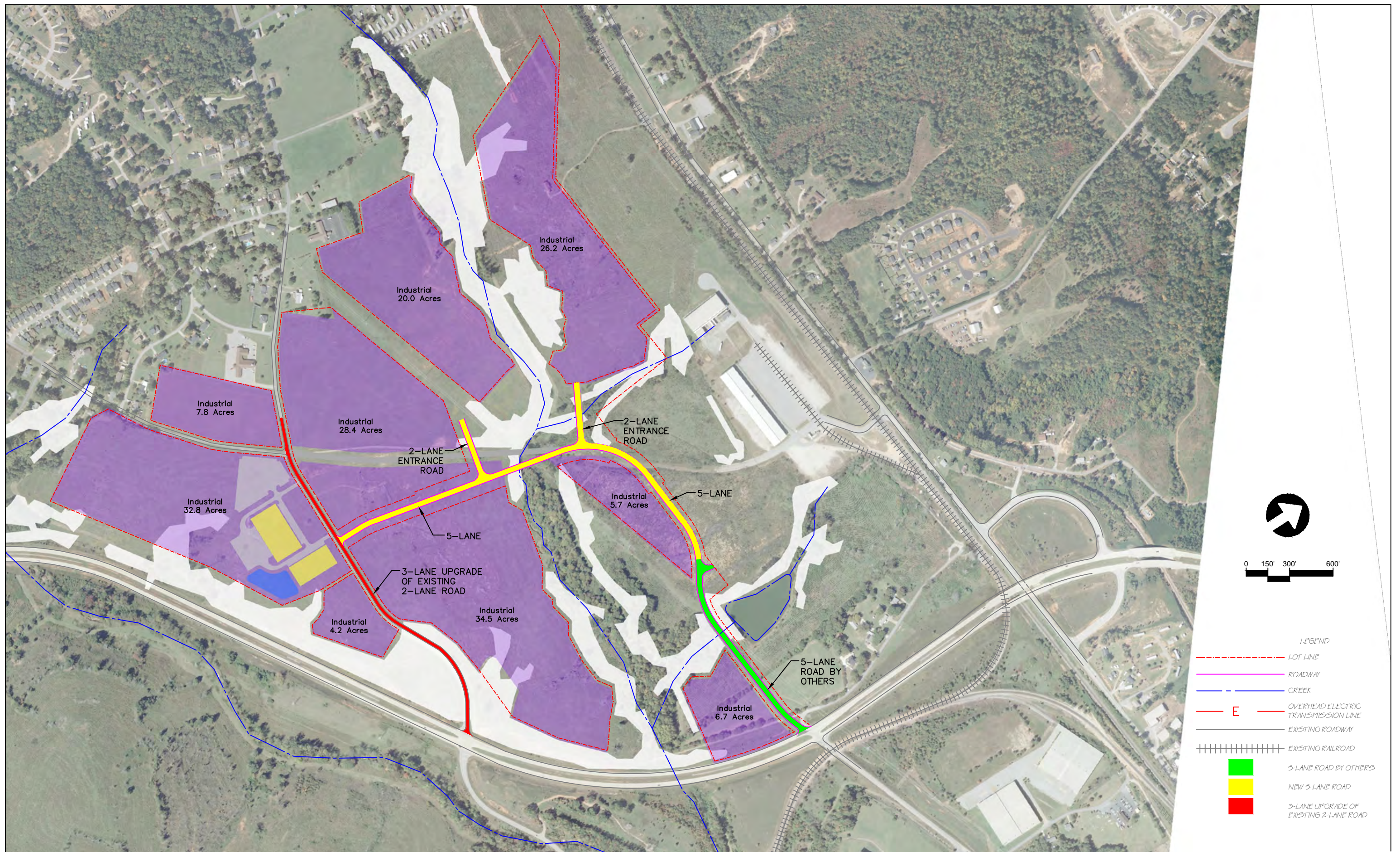
The existing 12-inch water line along J Verne Smith Parkway should be able to serve several of the proposed sites. A new 12-inch water line is anticipated along the new central roadway. Proposed water and sewer lines are shown below in **Figure 1-10**.

As a result of a preliminary engineering analysis, it is recommended that rail not be brought onto two of the parcels as was planned earlier in the concept stage. Very large volumes of earthwork would be required and would push the price of a short rail line to well over \$2 million. Rail access is not likely worth that investment to a future user given the close availability of the Intermodal Center.

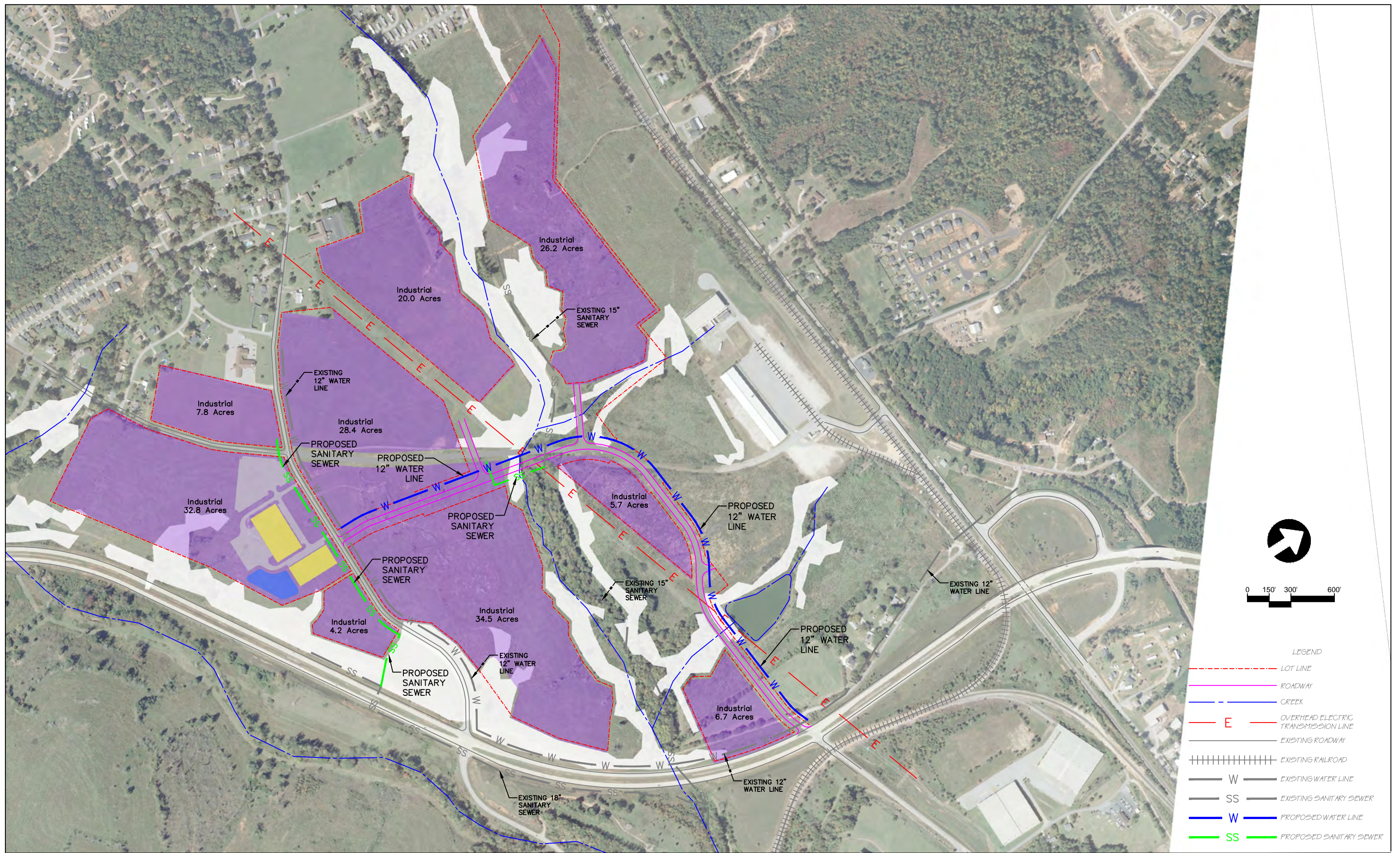
1.1.4 Schedule for Implementation

Implementation schedules for the proposed work can vary significantly. The most variable factor will be permitting. Should the limits on impacts for a USACOE Nationwide Permit be exceeded, and an Individual Permit is required, the timeline below may require an eight month extension. The schedule listed below is strictly conceptual and could be condensed or extended based upon the conditions found in the field as well as the needs of the airport.

- | | |
|--------------------------|-----------|
| • Design | 6 months |
| • Permitting | 4 months |
| • Bidding & Construction | 10 months |



TRACT 'B' - PROPOSED ROADWAY



TRACT 'B'- PROPOSED INFRASTRUCTURE

1.1.5 Illustrative Renderings

As part of the Phase I implementation effort, artist renderings of the final revised Tract 'B' concept were prepared to illustrate the overall vision for development and the general level of quality and aesthetic value anticipated by GSP. Three different viewpoints were developed for Tract 'B' to depict how the ultimate development may look in the future based on the current conditions, planning assumptions, guidelines and development criteria considered in this report. The illustrative renderings are presented in **Figures 1-11, 1-12 and 1-13**.

1.1.6 Inland Port / Multimodal Center Development

During the development of this study, South Carolina Ports Authority made public a plan to develop an approximate 70 acre Inland Port / Intermodal Center for the transfer of rail and truck cargo along the northern portion of Tract 'B'. It is anticipated that this development will encourage other industrial related activity in the area. The location of the Intermodal Center as it relates to the rest of Tract B is shown in **Figure 1-14**.

1.2 Tract 'F'

Tract 'F' was selected as the aviation parcel for development implementation planning because it requires the least site preparation to make development ready and offers significant near-term development opportunities due to significant recent increases in air cargo demand from BMA and local logistics providers. This makes Tract 'F' the aviation parcel that would benefit from additional analysis and planning.

Tract 'F' is adjacent the parallel taxiway, south of the existing FedEx facility and north of the corporate aviation FBO and facilities. The majority of the site has largely been site prepped already and offers many advantages that could facilitate relatively cost effective development and serve as an example for additional airfield property development.

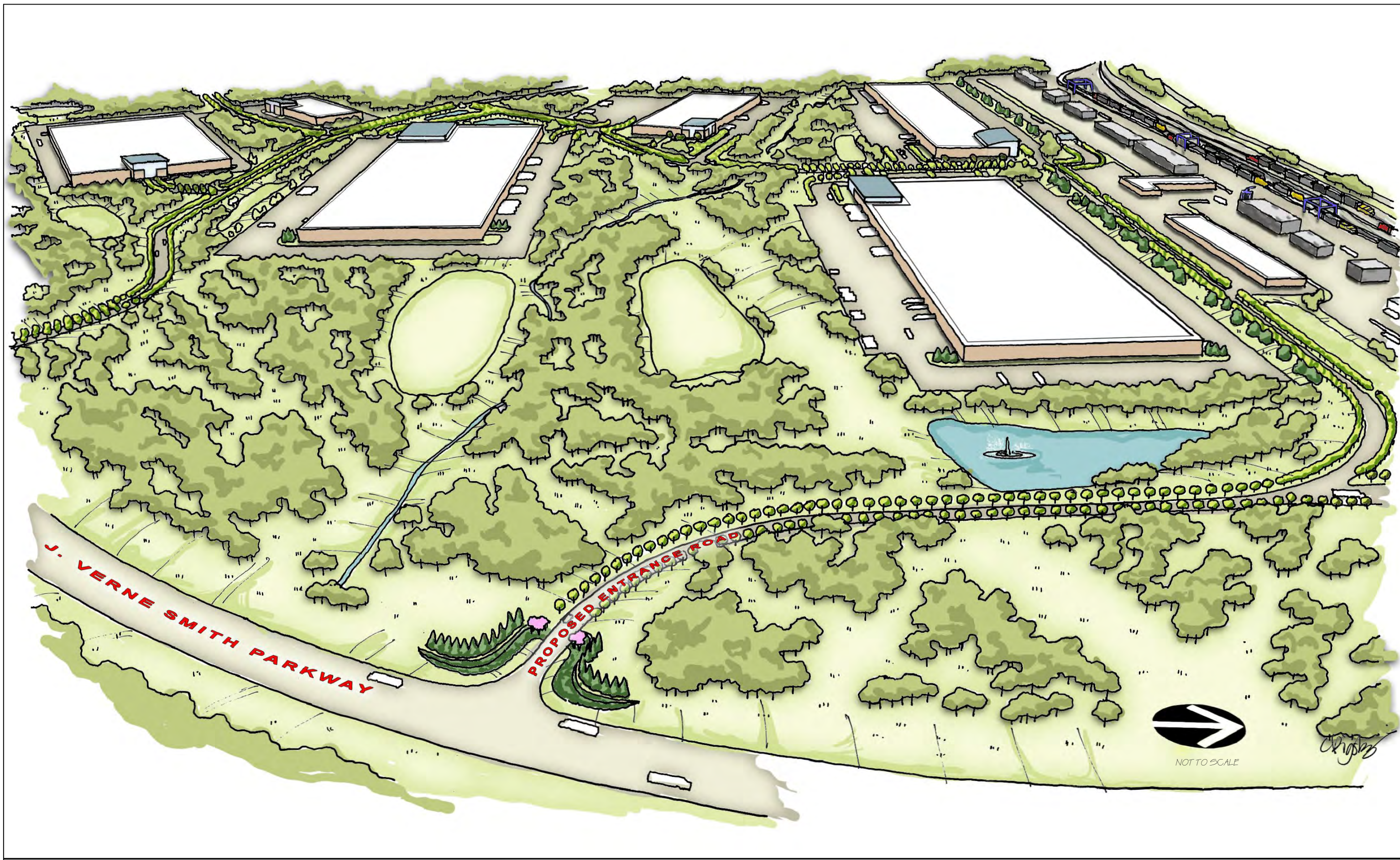
1.2.1 Suggested Layout and Development Concept

In order to properly analyze the capabilities of Tract 'F', the anticipated site use, facility use and flexibility, infrastructure needs, and other internal and external factors related to the tract were considered in the development plan.

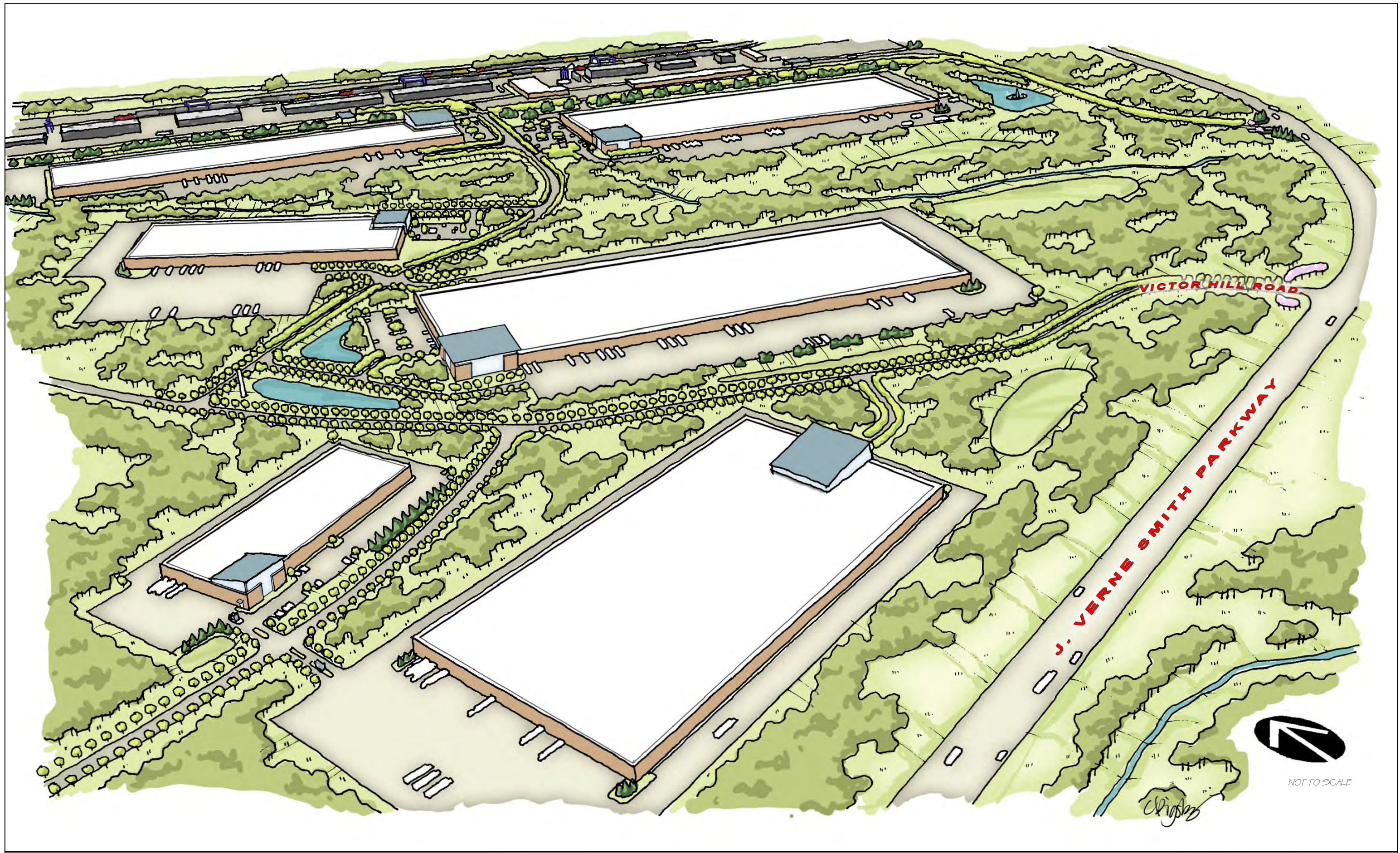
1.2.1.1 Land Use

As outlined in previous sections of this report, Tract 'F' was identified as an aviation land use (**Figure 1-15**) due to its location adjacent the runway with direct airfield access. Further, Tract 'F' has generally been subdivided more specifically for air cargo use to the north of the site within the area that is predominantly flat and graded and for corporate aviation to the south of the site. This segregation of uses is supported by the surrounding land uses adjacent the site with the FedEx cargo facility to the north and the Stevens and other corporate aviation facilities to the

south. Segregation of user traffic to and from these facilities will likely be desirable due to the difference in the type of traffic and was considered during development of the site concept.



TRACT "B" - ILLUSTRATIVE RENDERING
BIRDS EYE VIEW WEST



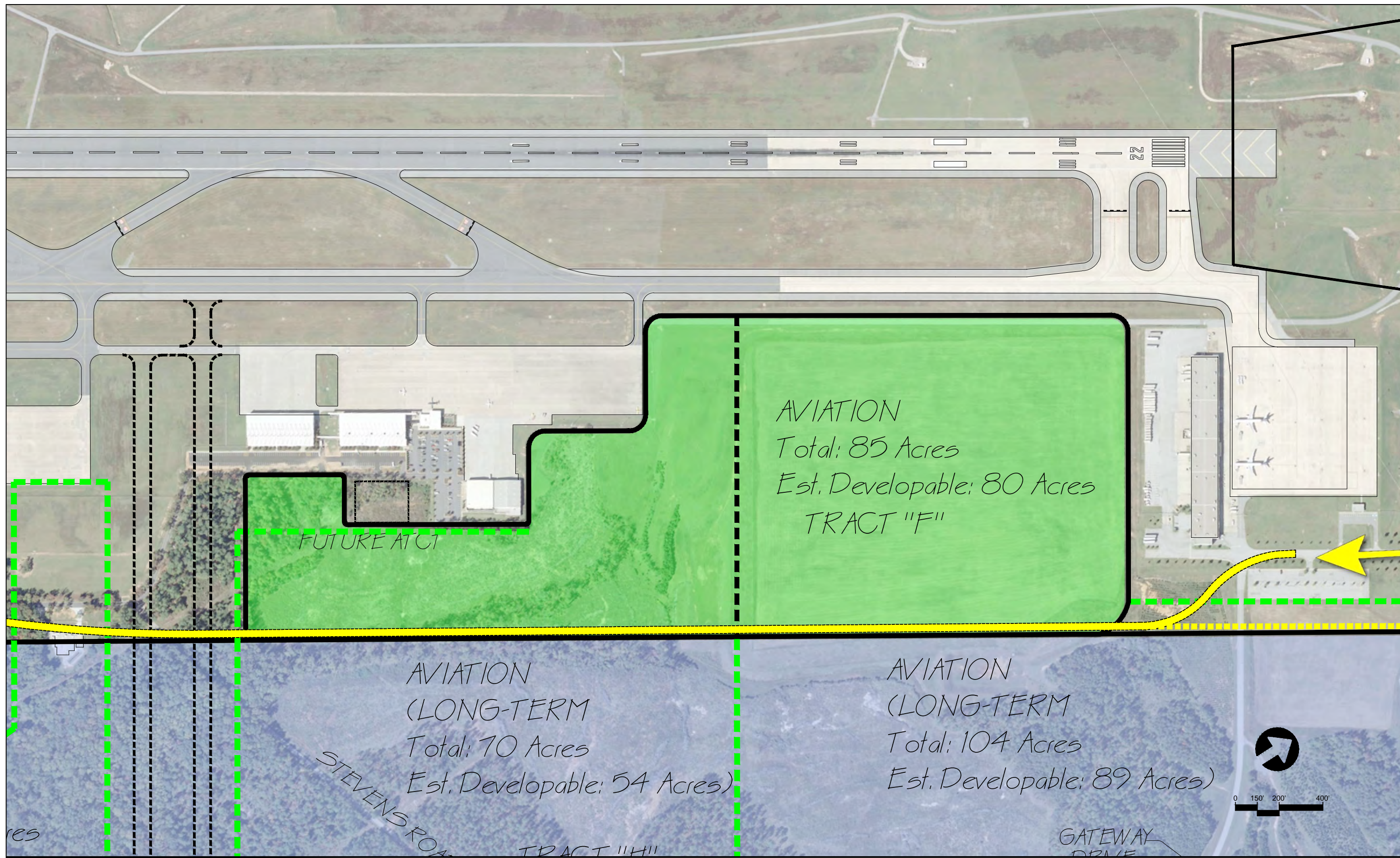
TRACT "B" - ILLUSTRATIVE RENDERING
BIRDS EYE VIEW NORTH



NOT TO SCALE

TRACT "B" - ILLUSTRATIVE RENDERING
STREET VIEW

Figure 1-14 Inland Port



TRACT "F" - LAND USE

1.2.1.2 Parcel Layout and Development Flexibility

The Tract 'F' development concept, as presented in **Figure 1-16**, outlines an air cargo facility directly south of the existing FedEx facility. The air cargo facility is design to ADG V standards and could accommodate up to six B747 aircraft at one time. Two 160,000 sq/ft buildings are located on either side of a central apron to accommodate typical air cargo/freight operations. Auto parking and truck dockage is also included. Up to six additional corporate aviation hangars are also included along the existing apron are south of the proposed cargo facilities. Two of these corporate hangars would replace an existing hangar and allow an extension of the existing roadway north to the air cargo facilities. A new access road is proposed and would link the existing access road near FedEx to GSP drive near the FBO facilities.

The site is constrained by the runway and parallel taxiway to the west and a stream to the east of the site that generally runs north to south and would likely be under USACOE permitting protection. Another challenge to the parcel development that was considered was the significant elevation changes on the east side of Tract 'F'. The terrain drops significantly in this area from the flat elevation that dominates the site down to the stream that borders it to the east.

The development concept has been created to work around many of these features to yield reasonable sizes for the air cargo and corporate aviation development targeted. Despite these challenging limitations, the recommended layout does offer flexibility to future users. If demand warrants, additional cargo apron and facilities could be built by extending the concept layout to the east. Likewise, additional corporate aviation apron and facilities could be "clustered" around the existing corporate area to increase capacity.

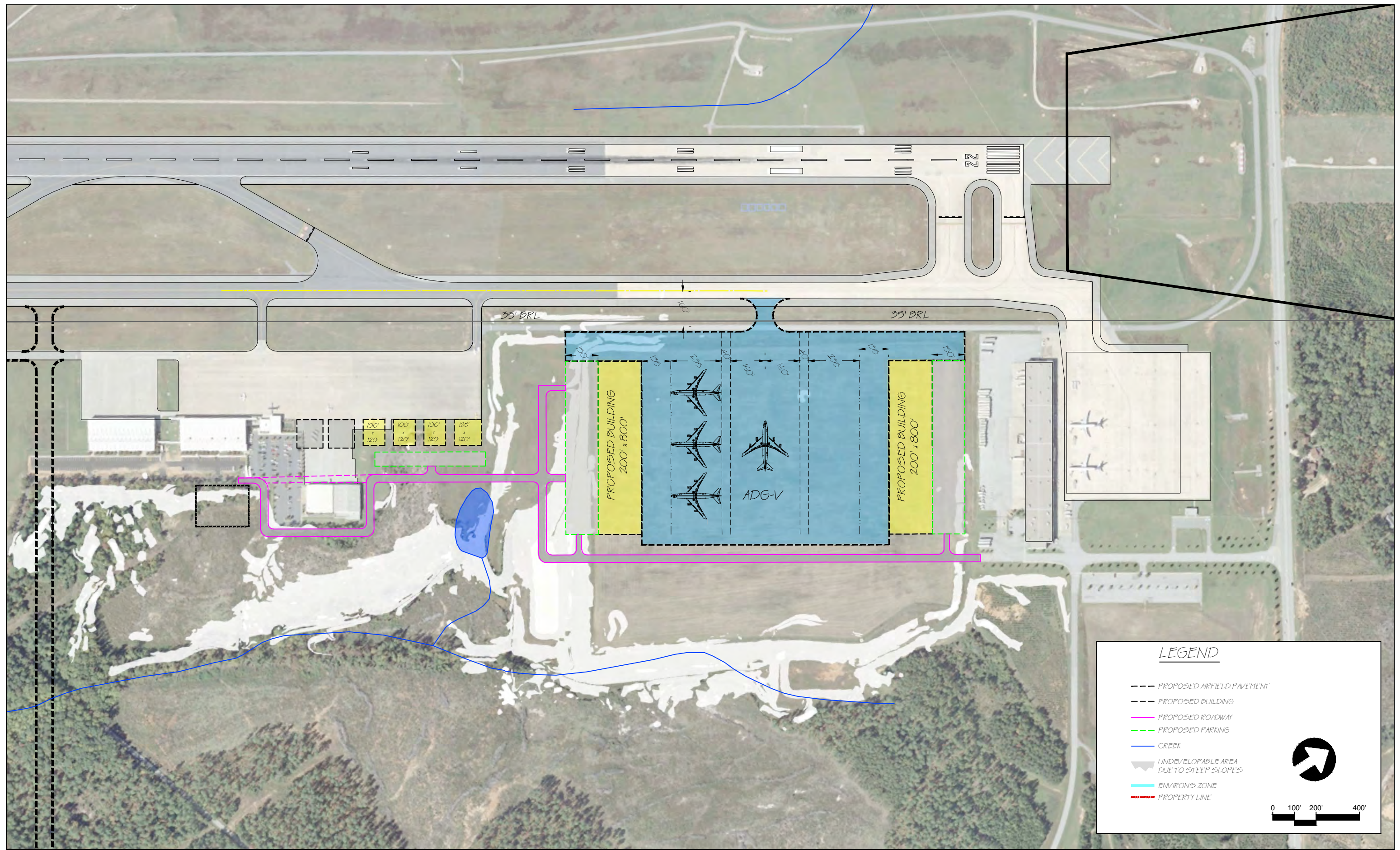
1.2.1.3 Existing Infrastructure Assets

Tract 'F', like Tract 'B', has a wealth of existing infrastructure and utilities either on site or nearby. Existing on-site infrastructure is capable of supporting the desired level of development will likely result in a significant cost savings for Tract 'F'. As shown in **Figure 1-17**, Tract 'F' has existing water lines, sewer lines, electrical lines, natural gas and fiber optics on or directly adjacent to the site. This means that the cost to fully develop Tract 'F' is significantly reduced to the costs associated only with apron, hangar/facility and roadway construction.

Extending the access road from the existing Fed Ex facility to the existing corporate aviation and FBO area will provide access (via Highway 101) to Interstate 85. This is a major selling point to potential users.

1.2.1.4 Airfield Impacts

Though Tract 'F' is located adjacent the airfield and has direct runway access, the development site is located beyond the 35-foot building restriction line (BRL). Future development of the site will be outside of the protected safety and object free areas and will comply with all FAA guidance on airport construction. Further, aircraft operations generated from the development of Tract 'F' are not anticipated to be of a significant volume that would impact airfield capacity. Thus, development of Tract 'F' is expected to have little to no impact on the airport's operations.





1.2.2 Field Investigations

As part of our assessment of the feasibility to develop Tract 'F', limited field investigations were performed. While these investigations were preliminary in nature, they were very helpful in establishing potential restrictions on future development.

1.2.2.1 Geotechnical Investigations

Geotechnical investigations were very limited, but provided a great deal of information. The most important confirmation was that future IBC seismic design (used for structural design of buildings) site classification would likely be a "C". Site classifications of "D" can greatly inhibit industrial development.

One soil borings, the locations of which are shown in **Figure 1-18**, was taken within the Tract 'F' area. One boring (B1) revealed rock at a depth of less than one foot. This information confirms that rock is likely present in much of the site. It also confirms that it is not feasible, for master planning purposes, to presume that deep earthwork cuts will be economical. Therefore, building pad sites may have to be created using mostly fill earthwork volumes. Before a final development plan is executed and new infrastructure is designed, additional site geotechnical investigations are recommended. The geotechnical field investigation and boring results are provided in **Appendix 'A'**.

1.2.2.2 Wetland and Stream Assessment

As part of the effort to further understand the site's existing limitations, a preliminary environmental assessment was performed to investigate the expectation of wetland and stream impacts. As anticipated, the existing stream on-site would likely require a US Army Corp of Engineers permit for any impacts. This does not prevent encroachments into the stream, but does present significant limitations on the amount of stream footage that can be impacted. The preliminary wetlands exhibit is provided in **Figure 1-19**.

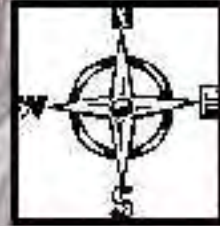
1.2.3 Development Phasing and Infrastructure Upgrades

1.2.3.1 Phasing

Tract 'F', as shown in **Figure 1-20**, could be completed in a single phase or broken into as many as 3 phases depending on demand and capital requirements. It is common in development planning to phase the development of acreage to minimize capital costs. If a phased approach were taken, Phase 1 should include the northern most half of air cargo apron and associated access roadway. Phase two could be determined by market demand and include either the corporate aviation development or additional air cargo. The final phase would likely be the southern air cargo area and would link the two development areas together to complete the concept for Tract 'F'.

Figure 1-18 Soil Borings

2006 AERIAL PHOTO PROVIDED BY SCDNR WATER RESOURCES DIVISION

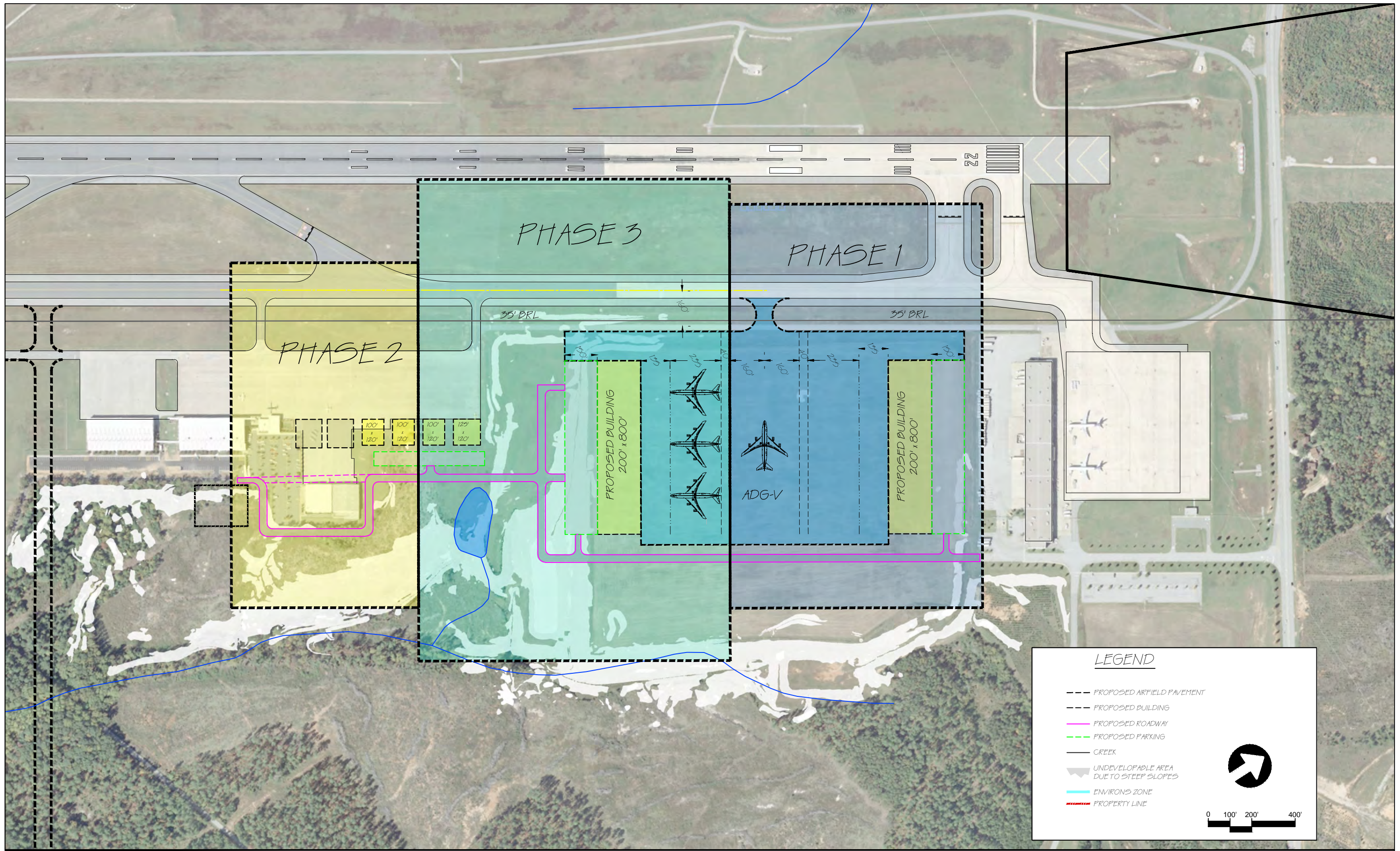


Note that wetland boundaries shown are approximate only and subject to change pending a formal wetland delineation and subsequent verification by the U.S. Army Corps of Engineers. The wetland boundaries shown are based on available soils information, and aerial photographs only. This exhibit should be utilized for pre-planning purposes only.



2006 Aerial Photo Wetland/Waters Approximation Exhibit
Approximately 99-Acre Tract "F"
GSP International Airport, Spartanburg County, SC





TRACT "F" - PHASING

1.2.3.2 Proposed Infrastructure

Improving the existing infrastructure to support the intended development land use and parcel layout will be required. The improvements listed below are estimated at approximately \$26,093,681 million. A detailed order of magnitude estimate for all development components of Tract 'F' is included in **Appendix C** of this report.

The most expensive and critical infrastructure improvement will be the construction of the aircraft apron for Tract 'F'. However, the capital cost of the apron could be shared between the FAA, state of South Carolina and GSP through available grant funding. This would significantly reduce the overall development cost to the airport.

Water and sewer is available to Tract 'F' from lines that come in from the north by the FedEx facility and from the south by the existing corporate aviation facilities. Additional water and sewer lines will need to be constructed to connect the new development with these main water and sewer lines. It is anticipated that both of the existing water and sewer lines would be extended along the proposed access road to connect the southern and northern lines. Proposed water and sewer lines are shown below in **Figure 1-21**.

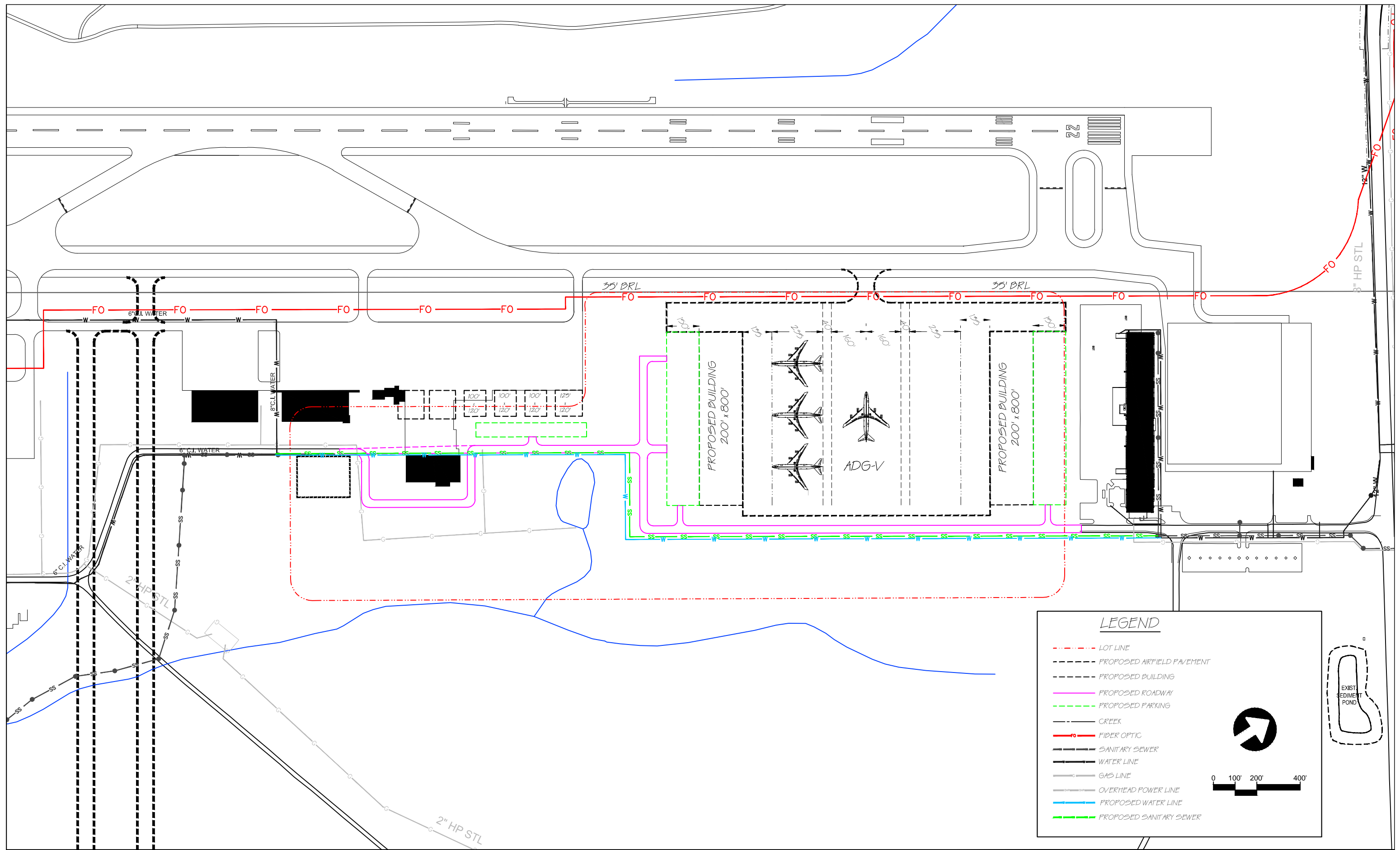
1.2.4 Schedule for Implementation

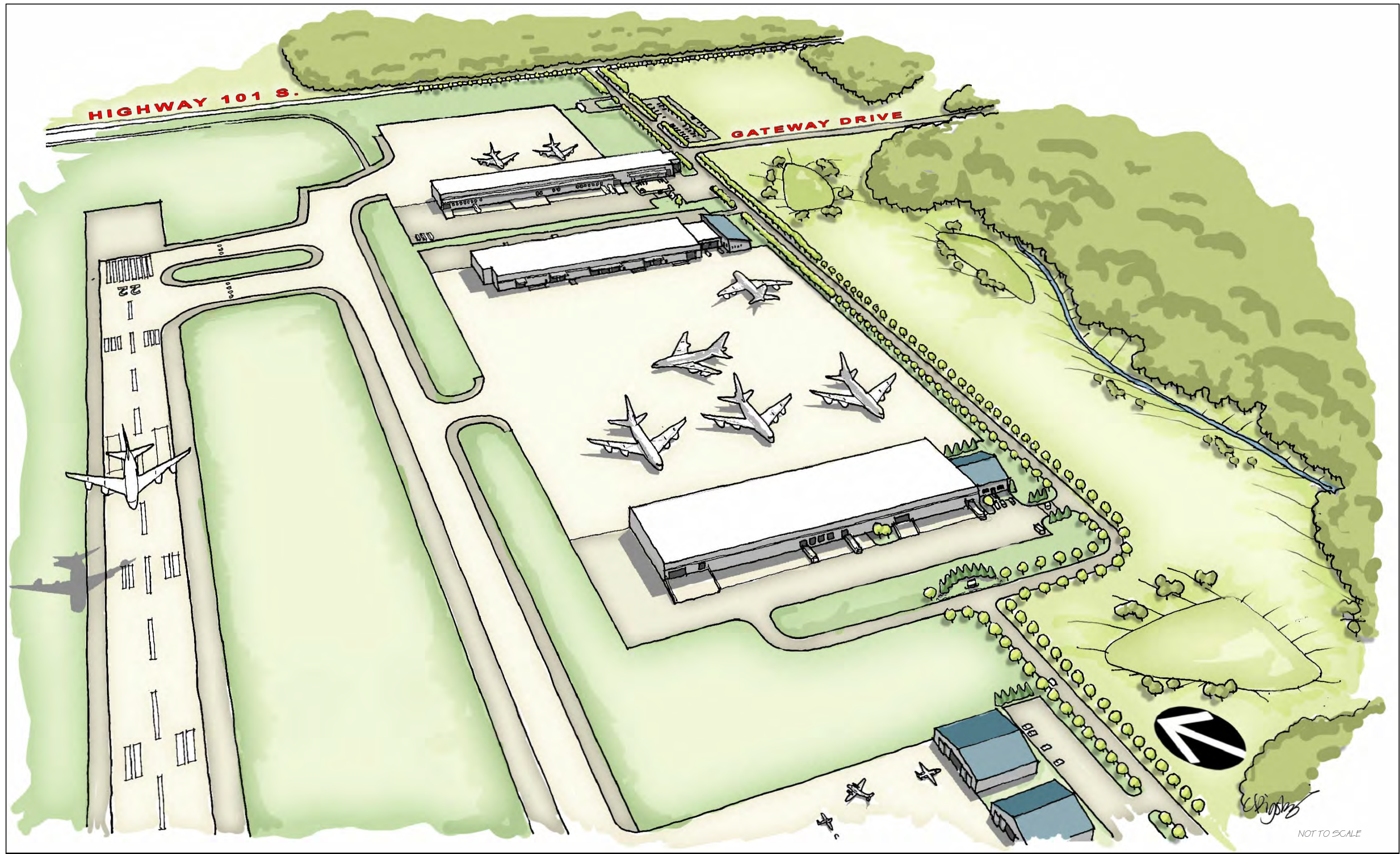
Implementation schedules for the proposed work can vary significantly. The most variable factor will be permitting. Should the limits on impacts for a USACOE Nationwide Permit be exceeded, and an Individual Permit is required, the timeline below may require an eight month extension. The schedule listed below is strictly conceptual and could be condensed or extended based upon the conditions found in the field as well as the needs of the airport.

- | | |
|--------------------------|-----------|
| • Design | 9 months |
| • Permitting | 4 months |
| • Bidding & Construction | 12 months |

1.2.5 Illustrative Renderings

As part of the Phase I implementation effort, an artist rendering of the proposed Tract 'F' development concept was prepared to illustrate the overall vision for development anticipated by GSP. One viewpoint was developed for Tract 'F' to depict how the ultimate development may look in the future based on the current conditions, planning assumptions, guidelines and development criteria considered in this report. The illustrative renderings are presented in **Figures 1-22**.





Section 2

Phase I Financial Analysis

This section presents the fiscal evaluation of the Phase I site development areas by establishing the financial basis for the strategies and development opportunities identified in previous sections. The financial analysis will evaluate the feasibility, financial actions, and potential investment returns to enable an effective strategic implementation plan. A review of available and alternative funding sources and a sensitivity analysis that evaluates potential changes to the base financial model and alternative methods for the Phase I site development areas will be completed to determine potential return on investment.

As studied and determined in previous tasks, Phase I development includes land and infrastructure improvements to Tract B located off-airport as well as land, infrastructure and facility development to Tract F located on-airport. Both tracts are owned by Greenville-Spartanburg International Airport (GSP). Tract B was selected as the non-aviation parcel for the development of 166 acres of multiple segmented properties that offer significant near-term development opportunity to expand light and mid-sized industrial capacities of the region. This tract is separated from the airfield by the J. Verne Smith Parkway, and its development should have little impact on the existing or future airfield operations while being conveniently located close to the Airport. Tract F is an aviation parcel providing direct airfield access via Taxiway A. This tract would be developed to expand the Airport's cargo and aircraft storage.

The financial implications associated with the cost of development and expected revenue generated from these tracts will provide an understanding on the potential return on the investment. Further, sensitivity analyses that consider alternative development/leasing scenarios allow for further investigation on possible outcomes.

2.1 Funding Sources

There are various funding sources and mechanisms available to an airport depending on the location and type of airport, management structure and policies of the airport/owner, type and magnitude of a project, and general operating characteristics of the airport and local community. Of these, the primary funding sources for operating expenses and capital improvements at GSP, and airports in general, include:

- Local/Airport sources (county general fund contributions and operating revenue from fees, lease income, etc.)
- State and federal grants (SCDOT, FAA, CDBG and EDA)
- Public-private partnerships and/or third-party financing
- Bonding and/or commercial paper mechanisms

The following sections discuss these funding sources in greater detail and review when each source may be appropriate for use at GSP.

2.1.1 Local / Airport Sources

Of the sources listed above in Section 4.1, local County funds and airport operating revenues are typically the funding source that is used for the day-to-day operation and maintenance of the Airport. The remaining three sources listed are typically associated with capital projects and expenditures for improvement or expansion of an airport, including large pavement maintenance projects such as runway and taxiway overlays or rehabilitations. However, county funds and airport revenues are also used for the local “match”, or share, of state and federal grants for capital projects.

The airport operating revenues at GSP have typically been collected through the following primary sources:

- Landing and other airfield fees
- Space and ground rental fees
- Concession revenue
- Expense reimbursement and other revenue

These revenue sources are typical instruments that many commercial service and general aviation airports utilize to generate operating revenue. Additional sources of operating revenue that are sometimes implemented at airports include; user fees, fuel sales through airport operated fuel services, and expanded lease and sublease provisions to gain revenue from additional business activities.

2.1.2 State and Federal Sources

Common funding sources that are typically used to fund capital expenditures at an Airport include state and federal grant programs. Though the state and federal grants are typically tied to specific project eligibility and often come with specific assurances for the continued operation of an airport, these funding sources are the primary mechanism for funding airport improvements at airports nationwide.

The Airport Improvement Program (AIP) was established by the Airport and Airway Improvement Act of 1982. The initial AIP provided funding legislation through fiscal year 1992. Since then, the AIP has been authorized and appropriated on a yearly basis. Funding for this program is generated from a tax on airline tickets, freight waybills, international departure fees, a tax on general aviation fuel, and a tax on aviation jet fuel.

The FAA issues and administers AIP grants through its regional offices and airport district offices. The AIP provides up to 90 percent funding for AIP eligible project costs, with the State and local sponsors splitting the remaining 10 percent non-federal share.

AIP funding must be spent on FAA eligible projects as defined in FAA Order 5100.38 “Airport Improvement Program (AIP) Handbook.” In general, the handbook states that:

- An airport must be in the currently approved National Plan of Integrated Airport Systems (NPIAS),
- AIP provides up to 90 percent federal funding for most eligible public-use airport improvements, and
- General aviation terminal buildings, T-hangars, and corporate hangars and other private-use facilities are not eligible for federal funding.

The Passenger Facility Charge (PFC) Program which is administered by the FAA, allows for the collection of PFC fees up to \$4.50 for every boarded passenger at commercial airports controlled by public agencies. Airports use these fees to fund FAA-approved projects that enhance safety, security, or capacity; reduce noise; or increase air carrier competition. Greenville-Spartanburg International Airport does not currently collect PFCs. Other airports in South Carolina collect PFCs ranging from \$3.00 to \$4.50 per passenger and include Charleston, Columbia, Florence, Hilton Head and Myrtle Beach airports. Of the eligible landside funding available through PFC sources, passenger terminal development represents 87 percent of the finding distributions.

The South Carolina Aeronautics Commission (SCAC) also has a grant program for airports within the state through its Airport Development Section. The airport development section is responsible for the administration of the state aviation fund and the oversight and development of 60 public-use airports. The staff and leadership of this group work closely with the FAA Southern Regional Office, and the FAA Atlanta Airports District Office (ADO) to administer millions of dollars of federal grants each year.

The SCAC state aviation fund, which is used to provide grants to local airports for maintenance and capital needs and to be used as matching funds for FAA grants, is funded through tax revenue generated on fuel purchases for aircraft used for pleasure at a rate of 6% of retail sales prices. During fiscal year 2009-2010, SCAC provided almost \$600,000 in state grants for airport capital improvement programs.

The SCAC has published its own set of guidelines and applications for sponsors seeking SCAC funding. Since GSP is a federally obligated facility through its past and present acceptance of funding, SCAC funds are utilized for the 5 percent state match.

Other state and federal grants that can be used to fund specific airport projects include; community development block grants (CDBG) and economic development administration (EDA) grants. The CDBG is a federal program that provides funding for housing and community development. The objectives of the program are to benefit low- and moderate-income persons, prevent or eliminate slum or blight, and address urgent community development needs. The program consists of an Entitlement component (provides funds directly to urban areas) and a Small Cities component (provides funds to the states for distribution to rural areas). The program is an excellent opportunity for communities to obtain funds for projects that the community cannot otherwise afford and it provides a means to implement projects that local governments may not have staff to complete. Popular examples of community projects include:

- Rehabilitation and Preservation of Housing
- Water and Sewer Improvements
- Street Improvements

- Economic Development Activities
- Creating Jobs for Low and Moderate Income People
- Downtown Revitalization
- Parks and Recreation Projects
- Drainage Improvements

The EDA grants are a competitive federal grant process where “all projects are evaluated to determine if they advance global competitiveness, create jobs, leverage public and private resources, can demonstrate readiness and ability to use funds quickly and effectively and link to specific and measureable outcomes.” Part of the EDA’s mission is to promote innovation and competitiveness and prepare American regions for growth and success in the worldwide economy. EDA grants are given to state and local government, Indian tribes, Economic Development Districts, public and private non-profits, universities and other institutions of higher education to support the development and implementation of economic development strategies. The EDA has seven investment programs that include:

- Public Works & Economic Development
- Economic Adjustment Assistance
- Planning
- Technical Assistance
- Research & Evaluation
- Trade Adjustment Assistance for Firms
- Global Climate Change Mitigation Incentive Fund

EDA grant funding priority is generally given to projects that support:

- Long-term, coordinated, and collaborative regional economic development approaches
- Innovation and competitiveness
- Entrepreneurship
- Strategies and investments that connect regional economies with the worldwide marketplace

Though the SCAC and FAA grants are the typical and most commonly used state and federal funding sources for airports like GSP, consideration should be given to CDBG and EDA grants as a possible source for funding projects identified in this study. The CDBG and EDA grants should especially be considered the development identified in Tract B because it supports regional collaboration and economic development.

The SCAC and FAA project funding described above is typically limited to aviation projects with a direct benefit to all or most airport users. Additionally, projects that are intended to meet the exclusive needs of a single or small group of users are not typically eligible for funding through state or federal aviation sources. Therefore, is it likely that the majority of funding for these

projects will not come from SCAC or FAA sources. The Airport should seek funding for other capital projects that meet state and federal eligibility requirements in order to free airport and/or county general funds for ineligible projects.

2.1.3 Other Sources

The remaining funding sources identified in Section 4.1 that can be used to fund capital projects at airports include the use of public-private partnerships, third party financing and bonding or commercial paper mechanisms. These funding sources are typically more complex and involve various considerations that may or may not make them appropriate for various airports and/or projects. Public-private partnerships and/or third party financing instruments are often used for specific projects when the airport would like to have increased control over a project/development but does not have, or is not willing to commit, the funds necessary to construct the project. The arrangements are often used for hangar and other similar projects that create a final product (e.g. building/facility) that the airport can then lease to the developer to manage as a whole or can be leased directly to individual tenants. In either case, such arrangements can often provide a viable tool for limiting the financial burden to the airport for development of a project while still increasing the potential lease revenue of the completed facility over that of a standard ground/land lease.

In addition to public-private partnerships and third party financing, airports sometimes use standard open market financing mechanisms such as bonding and/or commercial paper. These types of financing mechanisms are typically used on large airport projects and often by large reliever general aviation airports and commercial service airports. Since the level of risk and cost on these mechanisms is typically greater than that associated with the funding sources discussed previously, especially considering the financial markets we have witnessed in recent years, the anticipated return from or overall demand for the subject project must justify the use of these funding sources to the airport owner. Example projects that have been associated with such funding mechanisms include;

- Large scale strategic master plans for commercial service airports
- Development of large (300-500 acre) airport business/commerce parks
- Construction of new commercial terminal and/or cargo facilities
- Construction of new airports

Additionally, these funding sources are typically combined with many of the previously discussed sources and are often not the sole funding mechanism employed. This allows airport owners to manage the overall risk and cost of the subject development in order to maintain a reasonable anticipated return and ensure future debt service costs associated with the development are manageable.

2.2 Financial Assumptions

Based on the target market, operational, business and financial data presented in this section, provided by Airport staff and discussed in previous sections of this report, a financial analysis was completed in order to better understand the overall impact of implementing specific revenue enhancement and development strategies for Tracts B and F. Several underlying assumptions were included in this analysis and the resulting financial models. These assumptions include:

- For the baseline scenarios, no financing mechanisms, such as commercial paper or bonds, are to be employed to finance the development of Tracts B and F. In sensitivity analyses, if loans are established for the development in Tracts B and/or F, a standard debt service rate of 3.0 percent will be used.
- In all instances of estimated future revenues and expenses, all estimations are trended to be conservative (revenues were not over-stated and expenses were not under-stated).
- Baseline and incremental calculations were made for both revenues and expenses. Baseline costs and revenues are those that come from existing facilities continuing to function and exist in their current state, while incremental refers to the “new” costs and revenues that are added to the calculations as development is completed.
- A general rate of inflation of 2.6 percent annually, based on the average rate of inflation in the U.S. between 2000 and 2011, was used to escalate expenses beyond the development period. Nominal charges for grounds maintenance and electrical service to common areas as well as unleased space were applied.
- Future lease rates were escalated at 3.0 percent annually, to be consistent with the average consumer price index (CPI) for the historical trend from 2000 through 2010.
- Capital improvement project costs in Tract B are not eligible for SCAC or FAA AIP grant funding. The only project costs eligible for such funding in Tract F may be pavement related.
- The baseline absorption rate of 4.0 percent annual absorption is based on the existing industrial market and experience at the Airport. Absorption rates are adjusted in various analyses to reflect higher or lower expected performance.
- It is expected that design, permitting, bidding and construction of development depicted in Tract B will take approximately two years. Development planned for Tract F will follow a phased plan based on tenant demand.
- The unimproved land lease rate is currently \$4,000 per acre. This rate will be increased regularly to reflect the change in CPI.
- An 8 to 10 percent cap rate is applied to improvements made to the Tracts.

2.3 Baseline Financial Models

Initial baseline financial models were developed to illustrate the anticipated revenues and expenses associated with the capital improvements for Tracts B and F. The results of these baseline models are presented in **Tables 2-1, 2-2 and 2-3**. They include a pro-forma financial projection showing the return on investment over the next five years based on the anticipated level of occupancy, utilization of standard funding mechanisms and obtaining revenue from the traditional sources of existing land or facility leases, and the assumptions outlined in the previous section. State and federal grants funds have been included for eligible capital improvement projects. No other development planned or anticipated by the airport is included in this analysis. The baseline financial models do not include revenue enhancing approaches, lease contract modifications or marketing techniques.

The baseline financial models established the basis from which sensitivity analyses may be conducted to determine if specific actions will have a positive or negative impact on the financial results related to this development. Alternative models will be discussed later in Section 2.4 and the results will be compared and evaluated against performance of the baseline models in this section.

2.3.1 Tract B Baseline Model

The baseline financial model for Tract B assumes that the initial amount of land leased in year 1 is 40 acres. All available land within the Tract will be leased at an absorption rate of 4 percent. **Table 2-1** presents the Tract B baseline financial model.

The baseline analysis for Tract B shows that the initial investment to improve access and utilities of the Tract to make it suitable for ground lease tenants will recover about \$1.24 million over the first five-year period. Based on the assumed occupation and absorption rates as well as established lease rates and annual increases, the tract will begin realizing a profit at year 14.

2.3.2 Tract F Baseline Models

In order to understand how possible market absorption rates and initial leasing options may affect the return on investment associated with Tract F, two baseline financial models for the Tract were developed. The first baseline financial model for Tract F, shown in **Table 2-2**, assumes that there will be no initial bulk amount of leased property assigned at the outset of the development period and all available land within the Tract will be leased within a 25-year timeframe, resulting in an annual absorption rate of 4 percent.

Table 2-1 Tract 'B' Baseline Financial Model

	Year				
	1	2	3	4	5
Assumptions					
Lease Escalation Rate (CPI)					3.0%
Inflation Rate (Expenses)					2.6%
Debt Service Rate					N/A
Annual Absorption Rate					4.0%
Improvement Cap Rate					9.0%
Improved Land (ac)	175	175	175	175	175
Unimproved Land (ac)					
Developed Facilities (sq ft)					
Improved Ground Lease Rate (ac/year)	\$ 4,360	\$ 4,491	\$ 4,626	\$ 4,764	\$ 4,907
Unimproved Ground Lease Rate (ac/year)	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502
Facility Lease Rate (sq ft/mo)					
Leasing Details					
Leased - Improved Land (ac) ¹	40	47	54	61	68
Leased - Unimproved Land (ac)					
Leased - Facilities (sq ft)					
Operating Revenues					
Rents & Royalties	\$ 174,400	\$ 211,068	\$ 249,778	\$ 290,622	\$ 333,691
Other Miscellaneous Revenues					
General Fund					
Interest Earnings					
Total Operating Revenue	\$ 174,400	\$ 211,068	\$ 249,778	\$ 290,622	\$ 333,691
Operating Expenditures (before depreciation)					
Mowing & Landscape Services	\$ 3,500	\$ 3,589	\$ 3,681	\$ 3,775	\$ 3,871
Electricity	\$ 800	\$ 820	\$ 841	\$ 863	\$ 885
Water/Sewer Service					
Promotional Activities					
Non-capital Equipment					
Total Operating Expenditures	\$ 4,300	\$ 4,410	\$ 4,522	\$ 4,637	\$ 4,756
Total Operating Income	\$ 170,100	\$ 206,658	\$ 245,256	\$ 285,984	\$ 328,935
Non-Operating Revenues					
State Grants					
Federal Grants					
Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Operating Expenditures (CIP / Prof. Services)					
Professional & Contractual Services (12%)	\$ 543,443				
Debt Service					
Tract Development Capital Costs					
Street/Grading Construction (Airport Portion Only)	\$ 3,565,100				
Water System Utilities	\$ 541,200				
Sewer System Utilities	\$ 206,140				
Landscaping / Street Buffers	\$ 1,122,000				
Total Capital Expenditures	\$ 5,977,884	\$ -	\$ -	\$ -	\$ -
Total Non-Operating Income	\$ (5,977,884)	\$ -	\$ -	\$ -	\$ -
Total Annual Income (loss)	\$ (5,807,784)	\$ 206,658	\$ 245,256	\$ 285,984	\$ 328,935
Cumulative Income (loss)	\$ (5,807,784)	\$ (5,601,126)	\$ (5,355,870)	\$ (5,069,885)	\$ (4,740,950)
Notes					
¹ 40 acres available ground leased in year 1					

Table 2-2: Tract F - Baseline Development #1

	Year				
	1	2	3	4	5
Assumptions					
Lease Escalation Rate (CPI)					3.0%
Inflation Rate (Expenses)					2.6%
Debt Service Rate					N/A
Annual Absorption Rate					4.0%
Improvement Cap Rate					9.0%
Improved Land (ac)	47	47	47	47	47
Unimproved Land (ac)					
Developed Facilities (sq ft)					
Improved Ground Lease Rate (ac/year)	\$ 10,890	\$ 11,217	\$ 11,553	\$ 11,900	\$ 12,257
Unimproved Ground Lease Rate (ac/year)	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502
Facility Lease Rate (sq ft/mo)					
Leasing Details					
Leased - Improved Land (ac) ¹	2	4	6	8	9
Leased - Unimproved Land (ac)					
Leased - Facilities (sq ft)					
Operating Revenues					
Rents & Royalties	\$ 20,473	\$ 42,175	\$ 65,160	\$ 89,486	\$ 115,214
Other Miscellaneous Revenues					
General Fund					
Interest Earnings					
Total Operating Revenue	\$ 20,473	\$ 42,175	\$ 65,160	\$ 89,486	\$ 115,214
Operating Expenditures (before depreciation)					
Mowing & Landscape Services					
Electricity					
Water/Sewer Service					
Promotional Activities					
Non-capital Equipment					
Total Operating Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Income	\$ 20,473	\$ 42,175	\$ 65,160	\$ 89,486	\$ 115,214
Non-Operating Revenues					
State Grants	\$ 989,719				
Federal Grants	\$ 17,814,938				
Total Non-Operating Revenue	\$ 18,804,656	\$ -	\$ -	\$ -	\$ -
Non-Operating Expenditures (CIP / Prof. Services)					
Professional & Contractual Services (12%)	\$ 2,795,751				
Debt Service					
Tract Development Capital Costs					
Earthwork	\$ 2,105,650				
Roadway Access Construction	\$ 345,000				
Landscape/Beautification	\$ 281,600				
Auto Parking	\$ 493,350				
Sewer/Water System Utilities	\$ 622,955				
Aircraft Apron	\$ 19,449,375				
Total Capital Expenditures	\$ 26,093,681	\$ -	\$ -	\$ -	\$ -
Total Non-Operating Income	\$ (7,289,025)	\$ -	\$ -	\$ -	\$ -
Total Annual Income (loss)	\$ (7,268,552)	\$ 42,175	\$ 65,160	\$ 89,486	\$ 115,214
Cumulative Income (loss)	\$ (7,268,552)	\$ (7,226,377)	\$ (7,161,217)	\$ (7,071,730)	\$ (6,956,516)
Notes					
¹ No initial take down - 4% available ground leased in year 1					

Shown in **Table 2-3**, the second baseline analysis for Tract F assumes that all available land within the Tract will be incrementally leased within a 5-year timeframe, at an annual absorption rate of 20 percent. Additionally, to reflect a reduced build-out option, capital costs for apron and roadway access development (with associated earthwork) will be 2/3 of the projected Phase I development.

Table 2-3: Tract F - Baseline Development #2

	<u>Year</u>				
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Assumptions					
Lease Escalation Rate (CPI)					3.0%
Inflation Rate (Expenses)					2.6%
Debt Service Rate					N/A
Annual Absorption Rate					20.0%
Improvement Cap Rate					9.0%
Improved Land (ac)	20	20	20	20	20
Unimproved Land (ac)					
Developed Facilities (sq ft)					
Improved Ground Lease Rate (ac/year)	\$ 10,890	\$ 11,217	\$ 11,553	\$ 11,900	\$ 12,257
Unimproved Ground Lease Rate (ac/year)	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502
Facility Lease Rate (sq ft/mo)					
Leasing Details					
Leased - Improved Land (ac) ¹	4	8	12	16	20
Leased - Unimproved Land (ac)					
Leased - Facilities (sq ft)					
Operating Revenues					
Rents & Royalties	\$ 43,560	\$ 89,734	\$ 138,638	\$ 190,397	\$ 245,136
Other Miscellaneous Revenues					
General Fund					
Interest Earnings					
Total Operating Revenue	\$ 43,560	\$ 89,734	\$ 138,638	\$ 190,397	\$ 245,136
Operating Expenditures (before depreciation)					
Mowing & Landscape Services					
Electricity					
Water/Sewer Service					
Promotional Activities					
Non-capital Equipment					
Total Operating Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Income	\$ 43,560	\$ 89,734	\$ 138,638	\$ 190,397	\$ 245,136
Non-Operating Revenues					
State Grants	\$ 453,667				
Federal Grants	\$ 8,165,998				
Total Non-Operating Revenue	\$ 8,619,664	\$ -	\$ -	\$ -	\$ -
Non-Operating Expenditures (CIP / Prof. Services)					
Professional & Contractual Services (12%)	\$ 1,236,498				
Debt Service					
Tract Development Capital Costs					
Earthwork	\$ 979,402				
Roadway Access Construction	\$ 26,833				
Landscape/Beautification	\$ 28,160				
Auto Parking	\$ 98,670				
Sewer/Water System Utilities	\$ 124,591				
Aircraft Apron	\$ 9,046,497				
Total Capital Expenditures	\$ 11,540,652	\$ -	\$ -	\$ -	\$ -
Total Non-Operating Income	\$ (2,920,988)	\$ -	\$ -	\$ -	\$ -
Total Annual Income (loss)	\$ (2,877,428)	\$ 89,734	\$ 138,638	\$ 190,397	\$ 245,136
Cumulative Income (loss)	\$ (2,877,428)	\$ (2,787,694)	\$ (2,649,056)	\$ (2,458,659)	\$ (2,213,523)
Notes					
¹ 20% available ground leased in year 1					

The two financial analyses presented above assume that FAA AIP and SCAC funding will be made available for eligible roadway access and apron pavement components of the project. This funding, subtracted from the total capital development program, leaves the airport with their share of the capital development costs.

The two baseline analyses for Tract F represent the extreme possible outcomes associated with the Tract development. The first baseline model assumes conservative leasing potential with large development costs, while the second shows high levels of leasing with conservative development. Over the course of the first five-year period, the first baseline model for Tract F shows that the airport will receive approximately \$332,000 in ground lease revenue. Based on the assumptions and rates provided, the project will realize a profit after 22 years. For the same period shown in the second baseline model for Tract F, the airport will receive about \$700,000 in ground lease revenue and realize profitability after year 13.

2.4 Sensitivity Analyses

This section presents the results of various sensitivity analyses that were developed with input from the airport and completed to evaluate the financial impacts of scenarios that could result from the development of Tracts B and F. These analyses generally focused on reviewing the impacts of a development approach that demonstrate the levels of risk involved with the development as well as potential changes in market conditions that could have beneficial or detrimental effects. The results of this evaluation are presented in the following sections.

2.4.1 Tract B Development Options Comparison

Two sensitivity analyses, shown in **Tables 2-4 and 2-5**, were created for Tract B. Each presents a change in the annual absorption rate from that shown in the baseline model in order to measure its impact on potential lease revenue and resulting income. All other baseline assumptions are carried through the analysis.

Table 2-4 shows the results of the first sensitivity analysis for Tract B, where the annual absorption rate is adjusted to 5.0 percent.

Table 2-5 shows the results of the second sensitivity analysis for Tract B, where the annual absorption rate is adjusted to 3.3 percent.

Table 2-4: Tract B – Sensitivity Analysis #1

	Year				
	1	2	3	4	5
Assumptions					
Lease Escalation Rate (CPI)					3.0%
Inflation Rate (Expenses)					2.6%
Debt Service Rate					N/A
Annual Absorption Rate					5.0%
Improvement Cap Rate					9.0%
Improved Land (ac)	175	175	175	175	175
Unimproved Land (ac)					
Developed Facilities (sq ft)					
Improved Ground Lease Rate (ac/year)	\$ 4,360	\$ 4,491	\$ 4,626	\$ 4,764	\$ 4,907
Unimproved Ground Lease Rate (ac/year)	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502
Facility Lease Rate (sq ft/mo)					
Leasing Details					
Leased - Improved Land (ac) ¹	40	49	58	66	75
Leased - Unimproved Land (ac)					
Leased - Facilities (sq ft)					
Non-Operating Revenues					
State Grants					
Federal Grants					
Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Operating Expenditures (CIP / Prof. Services)					
Professional & Contractual Services (12%)	\$ 543,443				
Debt Service					
Tract Development Capital Costs					
Street/Grading Construction	\$ 3,565,100				
Water System Utilities	\$ 541,200				
Sewer System Utilities	\$ 206,140				
Landscaping/Beautification	\$ 1,122,000				
Total Capital Expenditures	\$ 5,977,884	\$ -	\$ -	\$ -	\$ -
Total Non-Operating Income	\$ (5,977,884)	\$ -	\$ -	\$ -	\$ -
Total Annual Income (loss)	\$ (5,807,784)	\$ 214,517	\$ 261,446	\$ 310,997	\$ 363,286
Cumulative Income (loss)	\$ (5,807,784)	\$ (5,593,267)	\$ (5,331,821)	\$ (5,020,825)	\$ (4,657,539)
Notes					
¹ 40 acres available ground leased in year 1					

With a one percent increase in the annual absorption rate from the baseline model, as shown in this analysis, the amount of leased property increases from 67 to 73 acres in the five-year time period. The total ground lease revenue realized over the five-year period is increased by almost \$80,000 which could be used to offset the tract development capital costs.

Table 2-5: Tract B – Sensitivity Analysis #2

	Year				
	1	2	3	4	5
Assumptions					
Lease Escalation Rate (CPI)					3.0%
Inflation Rate (Expenses)					2.6%
Debt Service Rate					N/A
Annual Absorption Rate					3.3%
Improvement Cap Rate					9.0%
Improved Land (ac)	175	175	175	175	175
Unimproved Land (ac)					
Developed Facilities (sq ft)					
Improved Ground Lease Rate (ac/year)	\$ 4,360	\$ 4,491	\$ 4,626	\$ 4,764	\$ 4,907
Unimproved Ground Lease Rate (ac/year)	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502
Facility Lease Rate (sq ft/mo)					
Leasing Details					
Leased - Improved Land (ac) ¹	40	46	52	57	63
Leased - Unimproved Land (ac)					
Leased - Facilities (sq ft)					
Operating Revenues					
Rents & Royalties	\$ 174,400	\$ 205,566	\$ 238,446	\$ 273,113	\$ 309,645
Other Miscellaneous Revenues					
General Fund					
Interest Earnings					
Total Operating Revenue	\$ 174,400	\$ 205,566	\$ 238,446	\$ 273,113	\$ 309,645
Operating Expenditures (before depreciation)					
Mowing & Landscape Services	\$ 3,500	\$ 3,589	\$ 3,681	\$ 3,775	\$ 3,871
Electricity	\$ 800	\$ 820	\$ 841	\$ 863	\$ 885
Water/Sewer Service					
Promotional Activities					
Non-capital Equipment					
Total Operating Expenditures	\$ 4,300	\$ 4,410	\$ 4,522	\$ 4,637	\$ 4,756
Total Operating Income	\$ 170,100	\$ 201,157	\$ 233,924	\$ 268,475	\$ 304,890
Non-Operating Revenues					
State Grants					
Federal Grants					
Total Non-Operating Revenue	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Operating Expenditures (CIP / Prof. Services)					
Professional & Contractual Services (12%)	\$ 543,443				
Debt Service					
Tract Development Capital Costs					
Street/Grading Construction	\$ 3,565,100				
Water System Utilities	\$ 541,200				
Sewer System Utilities	\$ 206,140				
Landscaping/Beautification	\$ 1,122,000				
Total Capital Expenditures	\$ 5,977,884	\$ -	\$ -	\$ -	\$ -
Total Non-Operating Income	\$ (5,977,884)	\$ -	\$ -	\$ -	\$ -
Total Annual Income (loss)	\$ (5,807,784)	\$ 201,157	\$ 233,924	\$ 268,475	\$ 304,890
Cumulative Income (loss)	\$ (5,807,784)	\$ (5,606,627)	\$ (5,372,703)	\$ (5,104,228)	\$ (4,799,338)
Notes					
¹ 40 acres available ground leased in year 1					

Lowering the absorption rate from 4.0 percent (shown in the baseline model) to 3.3 percent in the second sensitivity analysis for Tract B, results in a decrease of leased property of five acres

within the five-year period. Compared to the baseline model, the total ground lease revenue realized over the five-year period shown in this sensitivity analysis is decreased by \$55,000, which is projected in the estimate of debt associated with the development of the Tract.

2.4.2 Tract F Development Options Comparison

Two sensitivity analyses, shown in **Tables 2-6 and 2-7**, were created for Tract F. The second baseline model for Tract F was adjusted in each sensitivity analysis to reflect different development, funding and leasing options in order to measure its impact on potential lease revenue and resulting income.

Table 2-6 shows the results of the first sensitivity analysis for Tract F, where a 50,000 square foot cargo building (est. \$5 million) was added and 100 percent of the building is leased in year 2 at a rate of \$100 per square foot.

Table 2-7 shows the results of the second sensitivity analysis for Tract F, where a 50,000 square foot cargo building (est. \$5 million) was added and 100 percent of the building is leased in year 2 at a rate of \$100 per square foot. Additionally, this analysis assumes that the airport would incur debt (15 years at 3 percent) to help pay for development costs.

Table 2-6: Tract F – Sensitivity Analysis #1

		Year				
		<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Assumptions						
	Lease Escalation Rate (CPI)					3.0%
	Inflation Rate (Expenses)					2.6%
	Debt Service Rate					N/A
	Annual Absorption Rate					20.0%
	Improvement Cap Rate					9.0%
	Improved Land (ac)	20	20	20	20	20
	Unimproved Land (ac)					
	Improved Ground Lease Rate (ac/year)	\$ 10,890	\$ 11,217	\$ 11,553	\$ 11,900	\$ 12,257
	Unimproved Ground Lease Rate (ac/year)	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502
	Facility Lease Rate (sq ft)		\$ 9	\$ 9	\$ 10	\$ 10
Leasing Details						
	Leased - Improved Land (ac) ¹		5	10	15	20
	Leased - Unimproved Land (ac)					
	Leased - Facilities (sq ft)	50,000	50,000	50,000	50,000	50,000
Operating Revenues						
	Land Rents & Royalties	\$ -	\$ 56,084	\$ 115,532	\$ 178,497	\$ 245,136
	Facility Rents & Royalties		\$ 450,000	\$ 463,500	\$ 477,405	\$ 491,727
	General Fund					
	Interest Earnings					
	Total Operating Revenue	\$ -	\$ 506,084	\$ 579,032	\$ 655,902	\$ 736,863
Operating Expenditures (before depreciation)						
	Mowing & Landscape Services					
	Electricity					
	Water/Sewer Service					
	Promotional Activities					
	Non-capital Equipment					
	Total Operating Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -
	Total Operating Income	\$ -	\$ 506,084	\$ 579,032	\$ 655,902	\$ 736,863
Non-Operating Revenues						
	State Grants	\$ 453,667				
	Federal Grants	\$ 8,165,998				
	Total Non-Operating Revenue	\$ 8,619,664	\$ -	\$ -	\$ -	\$ -
Non-Operating Expenditures (CIP / Prof. Services)						
	Professional & Contractual Services (12%)	\$ 1,236,498				
	Debt Service					
	Tract Development Capital Costs					
	Earthwork	\$ 979,402				
	Roadway Access Construction	\$ 26,833				
	Landscape/Beautification	\$ 28,160				
	Auto Parking	\$ 98,670				
	Cargo Building (50,000 sq/ft)	\$ 5,000,000				
	Sewer/Water System Utilities	\$ 124,591				
	Aircraft Apron	\$ 9,046,497				
	Total Capital Expenditures	\$ 16,540,652	\$ -	\$ -	\$ -	\$ -
	Total Non-Operating Income	\$ (7,920,988)	\$ -	\$ -	\$ -	\$ -
	Total Annual Income (loss)	\$ (7,920,988)	\$ 506,084	\$ 579,032	\$ 655,902	\$ 736,863
	Cumulative Income (loss)	\$ (7,920,988)	\$ (7,414,904)	\$ (6,835,872)	\$ (6,179,971)	\$ (5,443,108)
Notes						
	¹ 20% available ground leased in year 1					

The addition of a 50,000 square foot cargo building to the second Tract F baseline model results in a revenue increase of almost \$21,000,000 over the five-year period. Given the upfront investment of \$5,000,000 to construct the cargo building, the cumulative income projected in this analysis is \$15 million over the five-year period versus the projected cumulative income loss of \$772,000 over the same period without the cargo building.

Table 2-7: Tract F – Sensitivity Analysis #2

	Year				
	1	2	3	4	5
Assumptions					
Lease Escalation Rate (CPI)					3.0%
Inflation Rate (Expenses)					2.6%
Debt Service Rate					5.5%
Annual Absorption Rate					20.0%
Improvement Cap Rate					9.0%
Improved Land (ac)	20	20	20	20	20
Unimproved Land (ac)					
Improved Ground Lease Rate (ac/year)	\$ 10,890	\$ 11,217	\$ 11,553	\$ 11,900	\$ 12,257
Unimproved Ground Lease Rate (ac/year)	\$ 4,000	\$ 4,120	\$ 4,244	\$ 4,371	\$ 4,502
Facility Lease Rate (sq ft/mo)		\$ 9	\$ 9	\$ 10	\$ 10
Leasing Details					
Leased - Improved Land (ac) ¹		5	10	15	20
Leased - Unimproved Land (ac)					
Leased - Facilities (sq ft)	50,000	50,000	50,000	50,000	50,000
Operating Revenues					
Land Rents & Royalties	\$ -	\$ 56,084	\$ 115,532	\$ 178,497	\$ 245,136
Facility Rents & Royalties		\$ 450,000	\$ 463,500	\$ 477,405	\$ 491,727
General Fund					
Interest Earnings					
Total Operating Revenue	\$ -	\$ 506,084	\$ 579,032	\$ 655,902	\$ 736,863
Operating Expenditures (before depreciation)					
Mowing & Landscape Services					
Electricity					
Water/Sewer Service					
Promotional Activities					
Non-capital Equipment					
Total Operating Expenditures	\$ -	\$ -	\$ -	\$ -	\$ -
Total Operating Income	\$ -	\$ 506,084	\$ 579,032	\$ 655,902	\$ 736,863
Non-Operating Revenues					
State Grants	\$ 453,667				
Federal Grants	\$ 8,165,998				
Total Non-Operating Revenue	\$ 8,619,664	\$ -	\$ -	\$ -	\$ -
Non-Operating Expenditures (CIP / Prof. Services)					
Professional & Contractual Services (12%)	\$ 1,236,498				
Debt Service	\$ 269,490	\$ 257,037	\$ 243,882	\$ 229,985	\$ 215,304
Tract Development Capital Costs					
Earthwork	\$ 979,402				
Roadway Access Construction	\$ 26,833				
Landscape/Beautification	\$ 28,160				
Auto Parking	\$ 98,670				
Cargo Building	\$ 5,000,000				
Sewer/Water System Utilities	\$ 124,591				
Aircraft Apron	\$ 9,046,497				
Total Capital Expenditures	\$ 16,810,142	\$ 257,037	\$ 243,882	\$ 229,985	\$ 215,304
Total Non-Operating Income	\$ (8,190,478)	\$ (257,037)	\$ (243,882)	\$ (229,985)	\$ (215,304)
Total Annual Income (loss)	\$ (8,190,478)	\$ 249,047	\$ 335,150	\$ 425,917	\$ 521,559
Cumulative Income (loss)	\$ (8,190,478)	\$ (7,941,431)	\$ (7,606,281)	\$ (7,180,365)	\$ (6,658,806)
Notes					
¹ 20% available ground leased in year 1					

The second sensitivity analysis for Tract F development introduces the application of debt to help pay capital costs. Over the first five-year period, the interest paid on the debt is \$658,000, which is equal to the cumulative income difference seen between Tract F Sensitivity Analysis #1 and #2. Over the life of the 15-year loan, the interest paid would be approximately \$1.2 million.

2.5 Summary and Conclusions

This section presents the fiscal evaluation of the Phase I site development areas identified in previous sections. The financial analysis evaluates potential funding sources, costs and return on investment associated with the Tracts B and F, recommended for development and leasing to potential tenants. Baseline financial models were used to establish a basic understanding of costs and potential revenue that could be experienced for each tract. Additional sensitivity analyses evaluated potential changes to the base financial models and alternative methods for the Phase I site development areas to determine potential return on investment.

The baseline analysis for Tract B shows that the initial investment to improve access and utilities of the Tract to make it suitable for ground lease tenants will recover about \$1.2 million over the first five-year period. Based on the assumed occupation and absorption rates as well as established lease rates and annual increases, the tract will begin realizing a profit at year 11. Sensitivity analyses created for this task presented alternative leasing potential, showing that a one percent in absorption would provide an additional \$80,000 in revenue and a reduction of absorption to 3.3 percent would reduce revenue by about \$55,000.

The two baseline analyses created for Tract F represent opposite ends of the development and leasing potential spectrum. The first baseline model for Tract F shows that the airport will receive approximately \$130,000 in ground lease revenue in the first five years and realize a profit after 24 years. In the second baseline model for Tract F, the airport will receive about \$660,000 in ground lease revenue and realize profitability after year eight. Sensitivity analyses prepared for this Tract introduced the possibility of a 50,000 square foot cargo building to the development. This had a profound impact on the revenue and cumulative income generated by the Tract. Without debt, the first sensitivity analysis showing this cargo building resulted in about \$21 million in extra revenue. The second sensitivity analysis, showing debt service associated with the development, resulted in \$1.2 million paid in interest.

In making the decision to pursue development of these tracts, the airport should consider the risk versus return. For Tract B, development costs to prepare the Tract for tenant build-out will cost about \$4 million. If there is strong demand for such space near the airport, development may be justified. Similarly, the development of Tract F may hinge on the potential for committed occupancy. If potential tenants for Tract F existing, the potential return on investment associated with cargo building development would be well justified, if in demand.