Feasibility of an Inland Logistics Center at Ocala, Florida

Final Phase II Engineering Analysis

Prepared for:

The City of Ocala and the Florida Department of Transportation

Prepared By:

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Executive Summary

In determining whether an Inland Logistic Center (ILC) development is an attractive and feasible opportunity for Ocala, there are a number of important considerations. These include: site availability and readiness; market interest and competition; community and neighborhood impacts; and overall feasibility. To address these questions, the City of Ocala, in partnership with the Florida Department of Transportation, commissioned this *Feasibility of an Inland Logistics Center at Ocala, Florida* (the "feasibility Study"). The Feasibility Study consists of three work phases. The Phase I Market Analysis Report, completed in September of 2015, addressed markets, competiveness, and preferred development scenarios and sites. The Phase II Environmental Memorandum, completed in December 2015, addressed the existing environmental conditions such as jurisdictional wetlands and surface water and protected species within the project area. This Phase II Engineering Analysis Report addresses the engineering feasibility while the final Phase III report will address financial feasibility.

This Phase II report builds on the initial concept layout from Phase I. This preliminary engineering study includes evaluating converting the project site to industrial use as well as meeting the requirements for the CSX Select Site certification criteria including developing a site development plan, identifying neighboring site uses, flood plain and slope and terrain. In addition the criteria include identifying street and highway access and developing a utility infrastructure map.

Subsequent to examining and evaluating the existing infrastructure, this study identifies possible future infrastructure needs and includes a Rough Order of Magnitude (ROM) cost of the required infrastructure. The ROM cost estimate includes construction costs for major items: contractor mobilization, demolition, general conditions, site clearing and earthwork, buildings, utilities, rail track, and pavement.

The existing utility infrastructure shown on the concept plan(s) in this report was derived from the City's GIS website and from individual utility companies. Future utility needs will be based on the operations at the site.

We have prepared conceptual drawings depicting proposed site improvements including, but not limited to, ingress and egress points, rail, access road and service road alignments, track configurations, stormwater treatment ponds, adjustments to existing and proposed utilities, zoning boundaries, etc.

From an engineering feasibility prospective, the Project site is well-suited for development. Given the fact that the land is relatively flat, utility infrastructure is available for connection, the site is adjacent to property zoned industrial, the site has immediate access to major roads, the site is not located in a flood zone, and the site only includes one small, low quality wetland. Based upon geological analysis, zoning and available infrastructure, this site should be able to be permitted, designed, and constructed – assuming that existing soils are found to be suitable for construction.

This Phase II Engineering Feasibility investigation does not recommend a "go decision" on ILC development at this site. That decision should be informed by looking at the results of all three phases of investigations together, along with larger market and community factors.

Section One -- Introduction and Site Conditions

Purpose and Scope

The purpose of this Phase II engineering feasibility study is to build upon the results of Phase I (Market Analysis) with additional investigations. Phase II includes two tasks: (1) Preliminary Environmental Analysis and (2) Preliminary Engineering Analysis. The purpose of this report is to document the Preliminary Engineering Analysis. The project concludes with Phase III (Financial Analysis), which is documented separately.

Project Location and Access

The proposed Project site is located in north central Florida within the City limits of Ocala approximately one mile east of Interstate 75 and 1.2 miles north of NW 10th Street.

- Figure 1, *Regional Map*, depicts the location of the Project site in reference to central Florida.
- As shown in Figure 2, *Vicinity Map*, the site is situated between Interstate 75 and US Highway 441.
- Figure 3, *Proximity to I-75*, shows the project site's eastern boundary is adjacent to CSXT's railroad mainline and is located within 2 miles of an on/off ramp for I-75. The Project site is serviced by existing public roadways to the west and north. NW 35th Street adjacent to the northern edge of the project site is a 4-lane divided major arterial, urban road. On the western edge of the site is NW 27th Avenue which is a 2-lane, minor collector, rural road. Figure 3 also shows a proposed interchange at NW 49th which has been approved by FDOT – the project is currently in the planning stages.

Figure 1: Regional Map

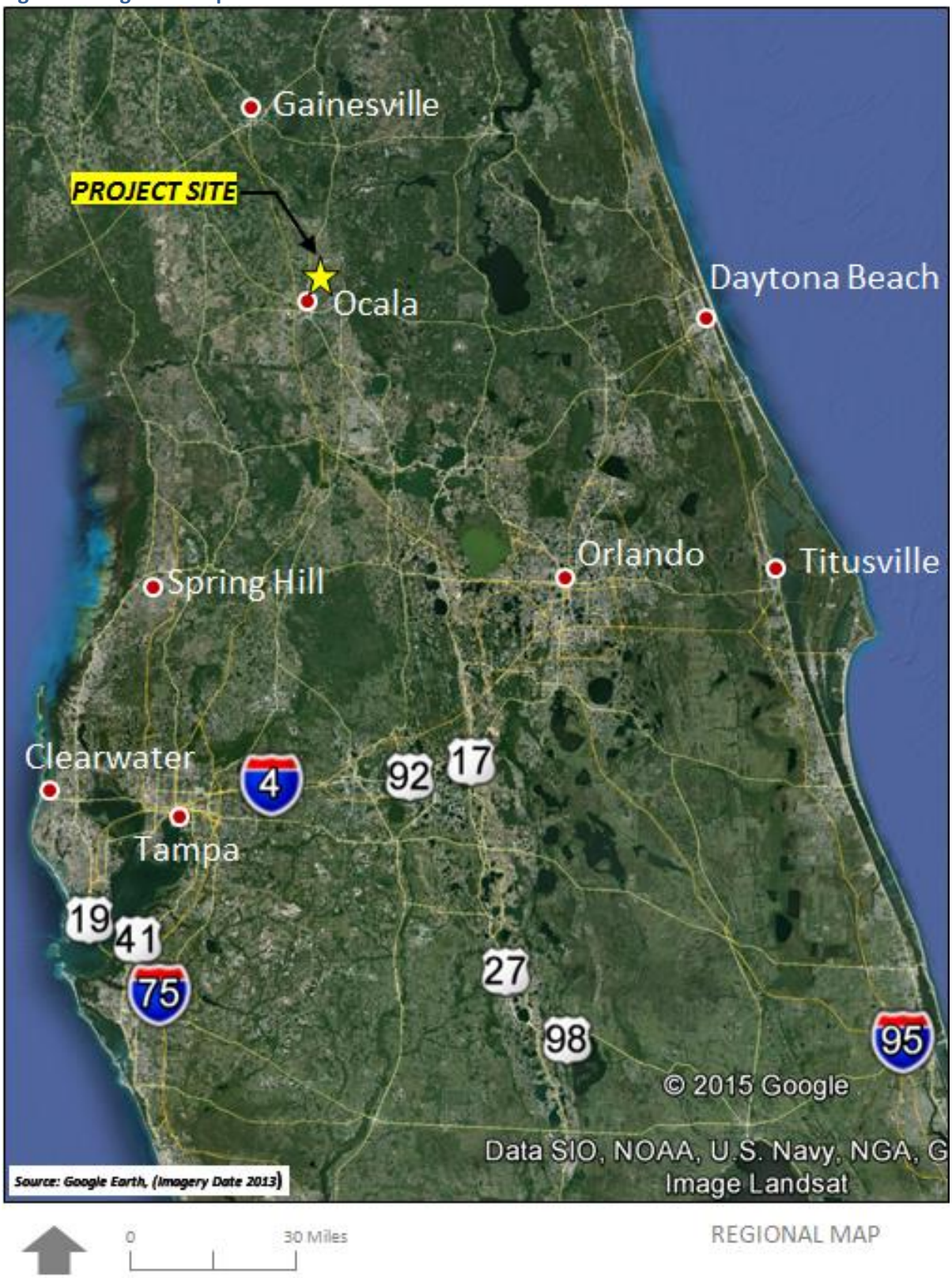


Figure 2: Vicinity Map

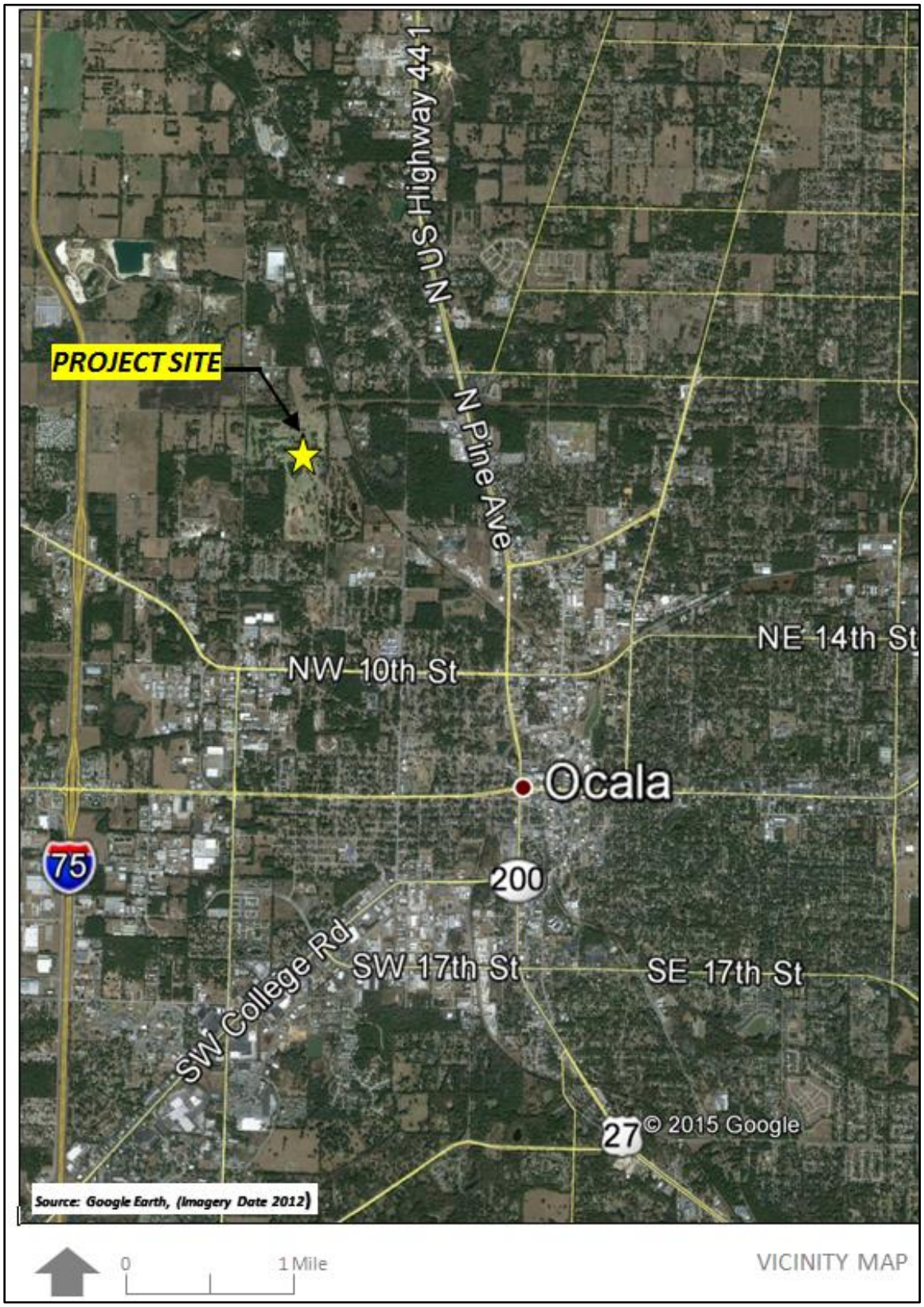
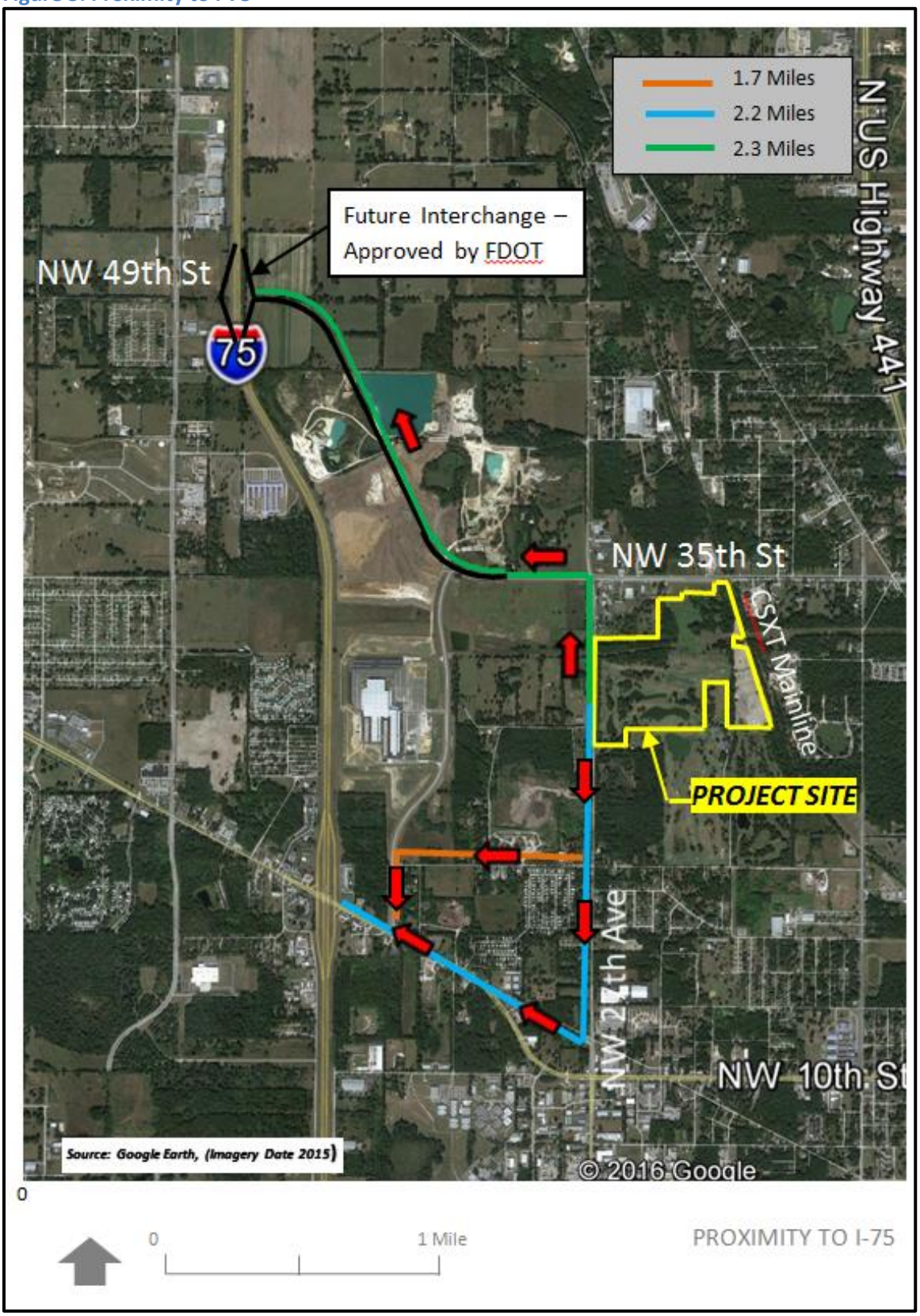


Figure 3. Proximity to I-75



Project Site Description

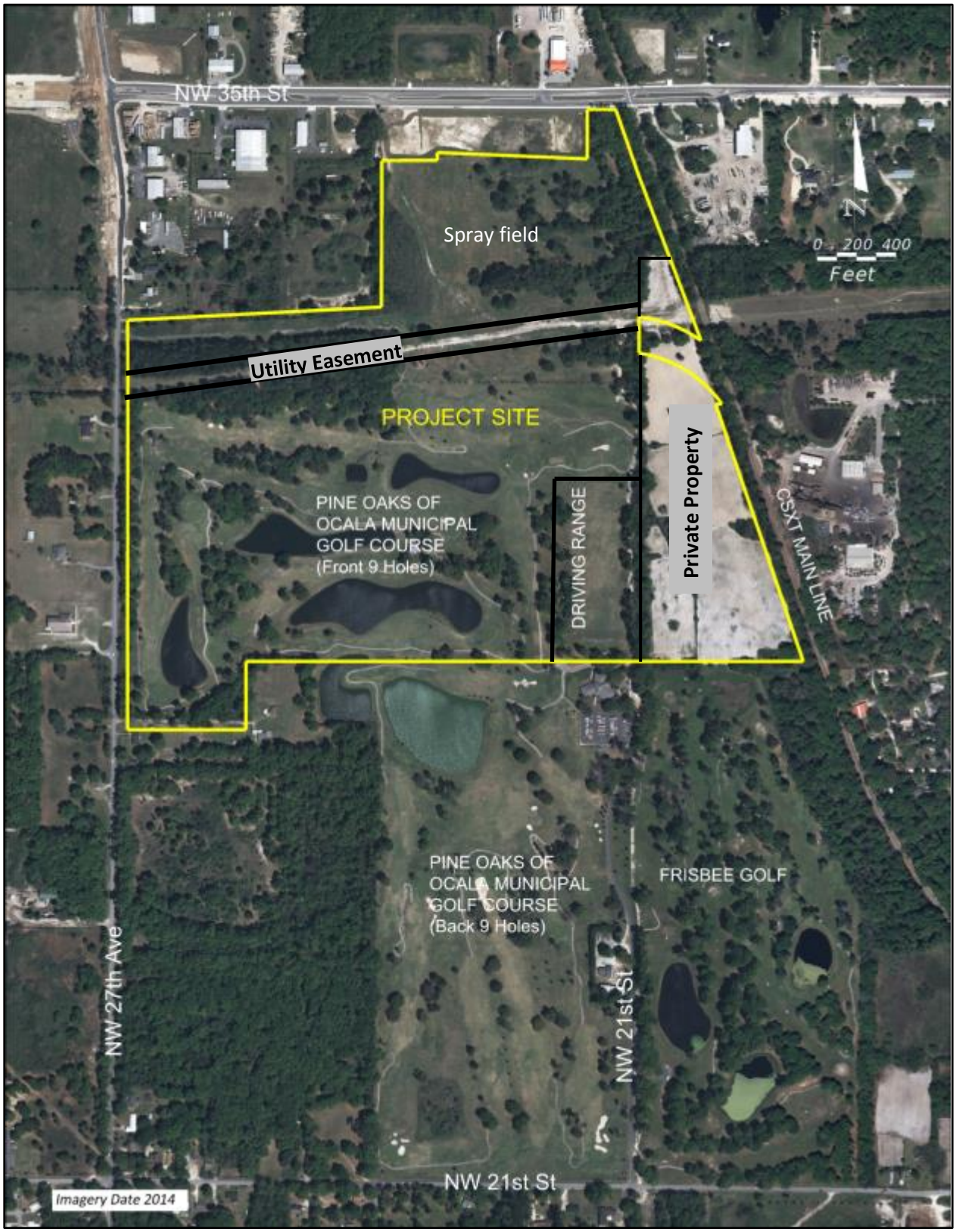
The site comprises approximately 140 acres. As shown on Figure 4, it includes:

- A portion (the front 9 holes) of the Pine Oaks public golf course, owned by the City of Ocala.
- An undeveloped area currently being utilized for reclaimed water disposal (the spray field), owned by the City of Ocala. The spray field portion is bisected from the golf course by an easement for utility poles with overhead wires.
- Optionally (if available and advantageous) an additional 21 acres of private property.

ILC development would have to be carefully integrated within a larger community-sensitive multi-use development plan for the overall area. At this time, the City anticipates improving the back 9 holes of the Pine Oaks course (directly south of the site) as an Executive Golf Course, improving the existing Frisbee Golf course (directly south of the site) for eco-tourism, and retaining the existing driving range.

City reclaimed water enters the project site from two separate locations – on the north boundary (flow from the City's Wastewater Treatment Plant #3) and on the east (flow from the City's Wastewater Treatment Plant #1). The reclaimed water is then pumped throughout the golf course to stormwater ponds and to the spray field north of the golf course.

Figure 4: Project Aerial



Neighboring Land Uses

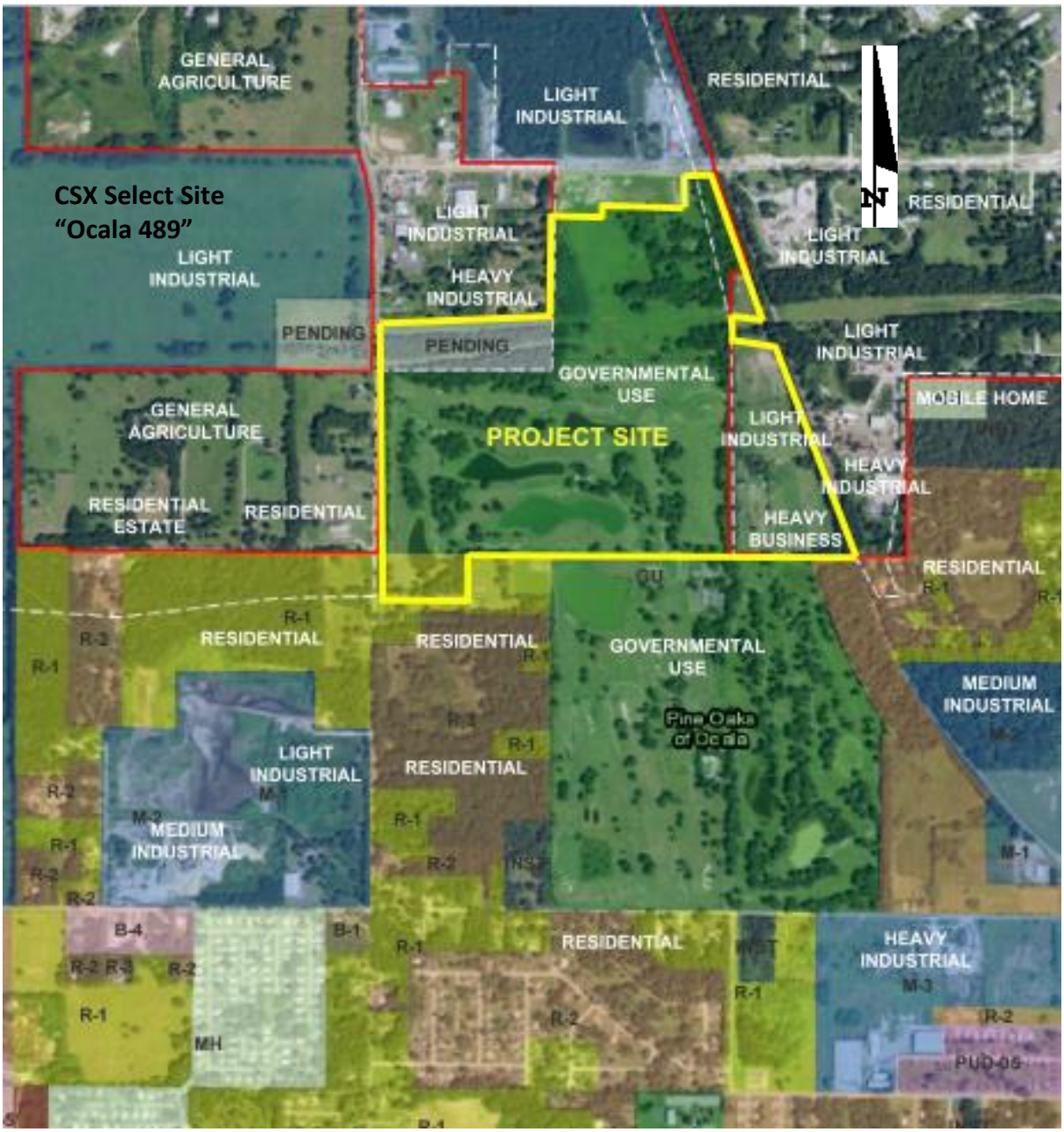
The majority of this site is located within the City limits. The only area located outside the City limits (in Marion County limits) is the privately-owned triangular parcel on the eastern edge of the site. As can be seen from Figure 5 *Adjacent Land Uses*, the entire portion of the site within City limits is zoned GU – Governmental Use. Governmental use classification is intended to apply to those areas where activities conducted are those of the US Government, State of Florida, Marion County Board of Commissioners, Marion County School Board or incorporated communities in Marion County. Uses typical to a GU designation generally include but are not limited to airport, fire station, hospital, landfill, parks and recreation areas, jails, schools, spray fields, etc. The portion of the site located outside the City limits is currently zoned for M-1 - light industrial and B-5 heavy business. Before development of the site as an ILC begins, the proper steps will need taken to re-zone the land from GU to Industrial (light, medium, or heavy) to suit the operations.

The project site is surrounded by land zoned a mixture of land uses including industrial, agriculture, business, and residential. Of particular significance are:

- Residential areas to the west and south, where buffering and protection will need to be addressed; and
- The Ocala 489 property, across 27th Avenue west of the site.

The Ocala 489 site is currently zoned light industrial. It includes the new Fed Ex Ground facility, and also includes the only CSX "Select Site" in Florida, as shown in Figure 5 following. CSX has a national program to identify and establish "Select Sites" that meet specific criteria. CSX then markets these sites to industrial customers. At this time, it is not known whether Ocala 489 development will include rail served uses; if it does, the project site will need to accommodate a rail connection from the CSX mainline (west of the site), crossing the site in an east-west direction (south of the utility easement), and crossing 27th Avenue at grade and into the Select Site.

Figure 5: Adjacent Land Uses



Suitability for Rail-Served Users

Rail served uses are an important opportunity for ILC development, and the CSX Select Site criteria provide useful standards for developing the site in a manner that supports rail service and rail users. The entire Select Site Due Diligence Checklist is provided in Appendix A of the Phase I report. An abbreviated version (with item titles only) is shown in Table 1 following.

Table 1: CSX Select Site Due Diligence Checklist

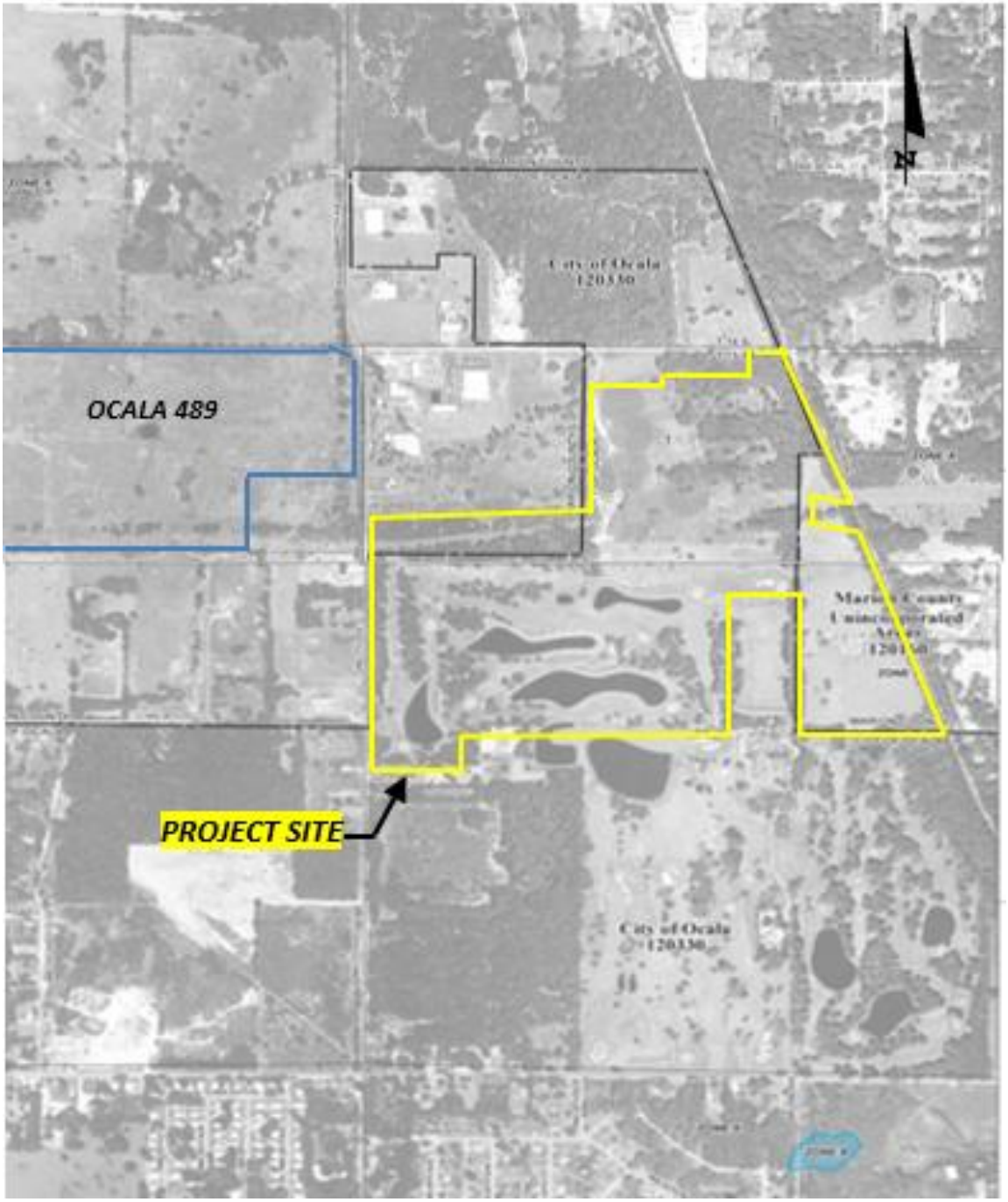
Item #	Item Description
1.	**Fundamental Attributes of Site and Development**
1.1	Ownership and Property Information
1.2	Site Development Plan
1.3	Strategic Marketing Plan
1.4	Neighboring Site Uses Identified
1.5	Official Letters of Support
1.6	Flood Plain
1.7	Slope and Terrain
1.8	Geological Stability
1.9	Easements, Liens, Leases, Mineral Rights, etc.
2.	**Land Use Planning, Municipal Zoning, and Emergency Services**
2.1	Local Zoning, Deed Restrictions, Land Use Processes
2.2	Overview of the Process for Obtaining a Site Grading Permit
2.3	Overview of the Process for Obtaining a Building Permit
2.4	Emergency Services
3.	**Environmental and Cultural Protections**
3.1	Environmental Assessment (soil and groundwater)
3.2	Species Endangered / Threatened
3.3	Air Attainment Status (by pollutant)
3.4	Wetlands and Waterways
3.5	Archaeological / Historical / Cultural Resources
4.	**Transportation Infrastructure**
4.1	Street and Highway Access
4.2	Traffic Flow, Impact, and Regulation
4.3	Foreign Trade Zone Designation (FTZ)
4.4	Port (water, barge)
4.5	Air (Commercial, Hub, Cargo)
4.6	Inter-Modal Container Facility
4.7	Freight Rail Service
5.	**Utility Infrastructure & Standards**
5.0	Utility Infrastructure Map
5.1	Electricity
5.2	Natural Gas
5.3	Water
5.4	Raw Water
5.5	Sanitary Sewer
5.6	Telecommunication
5.7	Infrastructure Improvements

We are responsible, under this project, to investigate the gray highlighted items in the table. Items 3.1 through 3.5 have been completed and are detailed in the Phase II Preliminary Environmental Screening Analysis Report. The remaining highlighted items under Items 1, 4 and 5 are described in this report.

Flood Plain

According to the Flood Insurance Rate Map (FIRM) depicted in Figure 6, the project site is not located in a flood zone. The entire project site is located in Zone "X" and by FIRM description this denotes "Areas of 0.2% annual chance flood; areas of 1% chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood".

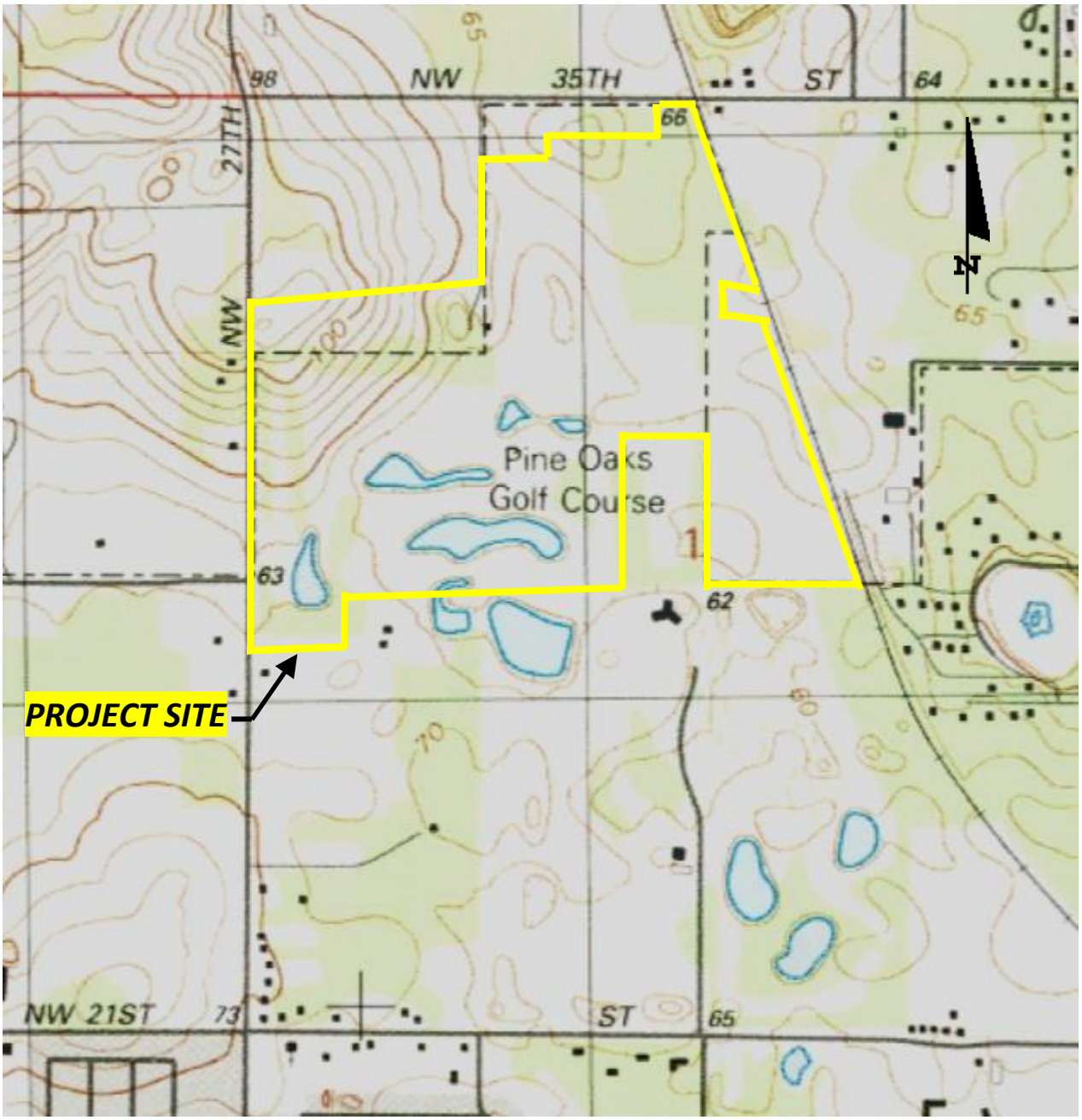
Figure 6. FIRM Map



Slope and Terrain

According to the USGS Topographic Map (Figure 7 below), the project site is relatively flat except for a berm in the northwest corner. This was also verified by the PB Team when the Environmental field review was performed. The site should not need to be raised/lowered to meet standard building requirements. The slope and terrain is well-suited for development. Before design commences, it is recommended that a topographic survey and geotechnical borings be taken in order to map the existing features and ground elevations and to determine the existing soil strata.

Figure 7: USGS Topographic Map



Utility Infrastructure Map

The Project site is serviced by existing utility infrastructure already installed within or near the site. The existing utility infrastructure map is incorporated with the conceptual plans shown in Appendix A. The existing publicly-owned utilities (force main sewer, reclaimed water, potable water, fire hydrants) were extracted from the City's and County's GIS websites. The locations of the other private utilities such as electric, fiber optic (phone and cable), and natural gas was determined by contacting the individual utility companies. Before commencing design, the City may be required to obtain commitment letters from each of the utility providers confirming commitment to provide the required services.

As can be seen on the conceptual plans, the site currently has a network of reclaimed water pipes. The reclaimed water flows into the site from the two of the City's three wastewater treatment plants. The water flows into interconnected stormwater ponds and then is pumped throughout the golf course to the other stormwater ponds to facilitate equalization and maximize available volume. The reclaimed water is also pumped to the dedicated spray field on the northern portion of the project site.

The Utility infrastructure improvements proposed for the conceptual plan options are discussed in more detail in Section 2 below.

Section Two -- Conceptual Site Layout Configurations

An initial site development concept was developed and included in the Phase I Report. The layout has been modified to include possible site improvements including, but not limited to, ingress and egress points, rail track and yard configurations, pavement, buildings, stormwater treatment ponds, etc.

Several different site layout configurations are possible for the project site. For the purpose of this engineering feasibility report, PB developed two (2) basic, conceptual plans (see Appendix A) - both assume full-site build-outs - including, rail yards, asphalt paving, buildings, utilities and the required buffers and stormwater retention facilities. Both alternatives also assume that the current golf driving range is to remain in-place. The purpose of the conceptual plans have a basis to develop a rough order of magnitude (ROM) estimate so that we can perform a "break-even" financial analysis (which will be summarized in a report in the next phase, Phase III).

- Conceptual Plan Option #1 depicts a possible site build-out considering that the current golf driving range will remain where it is today. In addition, the plan assumes the privately-owned triangular parcel located on the eastern portion of the site will not be purchased by the City.

- Conceptual Plan Option #2 depicts a possible site build-out considering that the current golf driving range will remain where it is today, and the City will purchase the privately-owned triangular parcels located on the eastern portion of the site.

The major features shown on the conceptual plans are discussed in more detail below.

Site Clearing and Earthwork

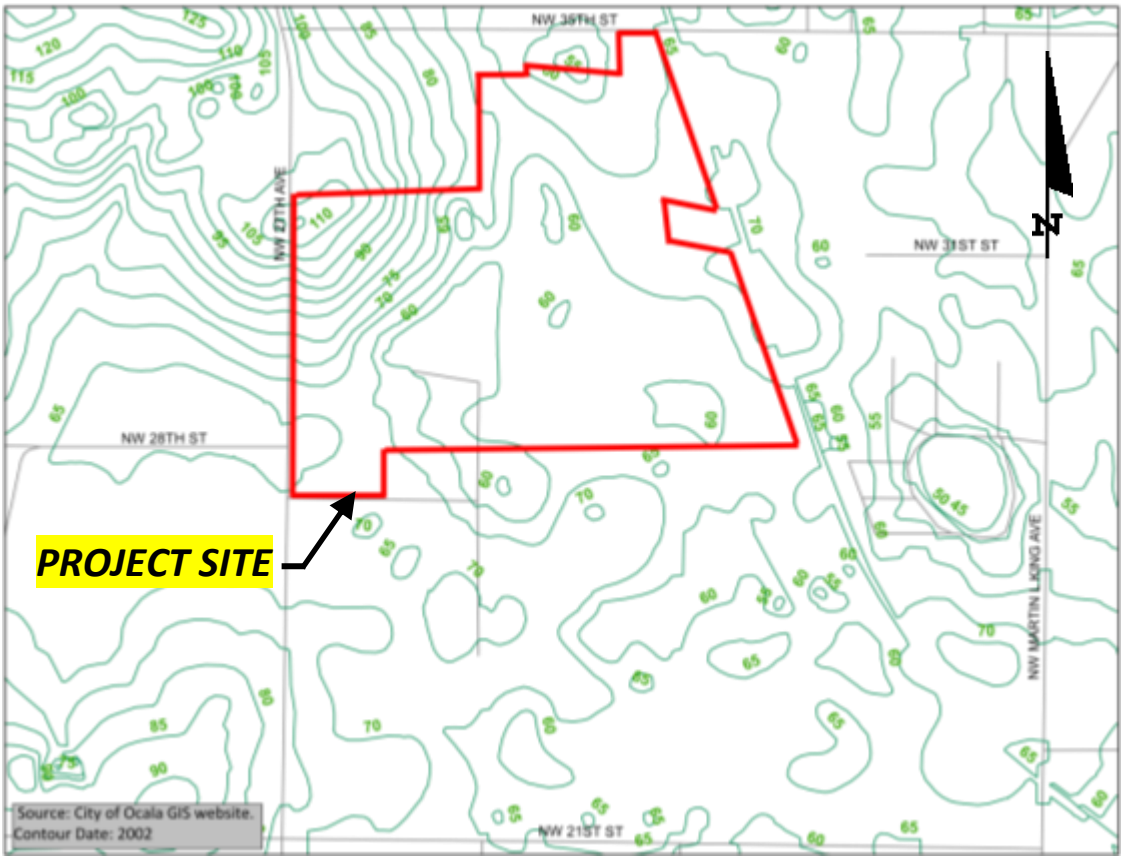
The clearing of the site for development should be a minor cost since the site does not include any permanent features or pavement that will need to be removed. The majority of the site clearing will involve clearing the existing trees. In addition, the site is relatively flat with elevations in the range of 60' to 70' (NAVD 88) and includes an existing berm in the northwest corner with elevations exceeding 110' (NAVD 88). Site elevations are per the County's 5' contour map (see Figure 8 below) and confirmed with both the USGS topographic map shown in Figure 7 and 2' contour CAD files provided by the City's survey department. PB imported the 5' contours into CAD software to determine the quantity of embankment required to level the site.

According to the analysis, if the site is leveled to approximately 67' (NAVD 88), there will be no need to import fill to the site assuming the existing soil is usable and will meet permitting requirements. Geotechnical soil borings were not part of this project's scope therefore we do not have soil profiles to determine if the existing soil is suitable for construction.

The proposed ponds shown in the conceptual plans will need to be excavated and the required ponds for the wetland recharge area will also need to be excavated. Again assuming the soil is usable, the

excavated material could also be used to level the site. The ROM costs shown in Section 4 for earthwork were developed assuming the existing soil is usable to level the site and that removal/disposal of material is not required. Hence, the cost for earthwork does not include removal/replacement of unsuitable materials.

Figure 8. 5' Contour Map



Pavement

Both of the conceptual plan options show full site build-out with flexible asphalt pavement covering most of the site. For the purpose of this study, it is assumed the majority of the pavement will be heavy-duty asphalt. Once design commences, a combination of heavy-duty and light-duty pavement (employee parking areas) can be utilized. Rigid, concrete pavement is also an option in lieu of, or in addition to, the heavy-duty asphalt.

In order to develop the rough order of magnitude cost for this engineering feasibility report, and since the necessary information to perform a pavement design is not available, a general container storage yard pavement design is assumed as follows: 8" of asphalt pavement, 12" of aggregate base, and stabilization of the existing subgrade to at least 95% of the maximum dry density at optimum moisture content. If the

soil borings show the existence of poor/unsuitable soils, the existing subgrade should be proof-rolled to determine if pumping or yielding is present and if so, the unsuitable soils should be removed.

Rail Track and Rail Yards

The rail track and rail yards are depicted for conceptual purposes only; however, the rail track shown on the concept plans is designed per current CSXT standards for rail turnouts, curvatures, clearances, etc. Standard number 8 and number 10 turnouts are shown along with standard 10 degree and 12 degree curves. Ladder tracks are spaced at 13 feet on-center. In addition, the tracks are assumed to be level, at 0% vertical grade, for ease of loading/unloading operations.

Considering the driving range remains where it is today for both options, the rail will not be able to be looped with the existing CSXT mainline. Therefore, a sidetrack, adjacent to and paralleling CSX's mainline, is shown. With the sidetrack in place, approximately 6,500 linear feet of track is available off the mainline to the southern half of the property.

At this time, the specific rail needs of potential tenants cannot be determined, but the track layout shown on the conceptual plans should be more than adequate for fairly intensive daily service. As discussed in the Phase I market study, we expect that railcars may be handling a variety of commodities in hopper cars, tank cars, boxcars, and/or flatcars, but not intermodal containers or trailers, which are far more likely to be trucked to and from the site.

The design plan accommodates a rail connection to the Ocala 489 site across 27th Avenue, by extending one or two tracks west along the southern edge of the utility easement.

At-grade rail crossings will be necessary at the three locations shown on the conceptual plan. It is assumed that full-depth, heavy duty, concrete crossings meeting CSX standards will be utilized. In addition, end-of-rail bumper posts and mainline derails will be required. In some cases, CSX requires radio-controlled switches and de-railers off their mainline. At this time, it is assumed that radio-controllers will not be necessary. Once design commences, the rail design will need to be reviewed and approved by CSX.

In order to develop the rough order of magnitude cost for this engineering feasibility report, it is assumed that the rail will be 115 LB standard gage, new rail. When design commences, relay rail (used rail) may also be an option. In addition it is assumed that 6" of ballast and 6" of subballast is utilized.

Stormwater & Wetlands

As the City has requested that the existing driving range is to remain, a separate stormwater plan will need to be developed for the range once the project site is operational. For the site development, standard stormwater pipe will be routed as necessary from ditch bottom inlets to receiving ponds for attenuation and treatment. The City has requested that a portion of the stormwater runoff be routed to the wetland recharge area (currently the Frisbee golf course). For the ROM estimate, PB assumed all

proposed stormwater pipes will be reinforced concrete pipe (RCP) Class V pipe under the rail track and Class III in all other areas.

As noted in the Environmental Study Report, there is only one small, low quality wetland on the project site. The current concept plans shown in Appendix A show the proposed rail track impacting this wetland. Of course, impact to the wetland may be avoided given a different track alignment. For the purpose of this study, it was assumed that the wetland will be impacted and a minor cost will be associated with mitigating for the impact.

Proposed Buildings

The conceptual plans show three different types of buildings (five structures total) on the site: warehouse, covered storage, and administration. These buildings may or may not be a part of the site build-out, but they are depicted to give an idea of how the site can be utilized. The approximate cost of the buildings and their associated utilities are shown in the ROM estimate for each option. Typically the costs for the buildings and utilities are assumed by the developer as shown in Table 3.

Proposed Utilities

Given the purpose and level of this study, proposed utilities are not shown for the conceptual plan options. However, in order to develop a rough order of magnitude estimate, the quantity of each proposed utility is based on the site layout shown and engineering judgement. Design considerations for the proposed utilities are discussed below.

As potable water is available just south of the site, pipe will need to be added to extend into the site as necessary for operations. In addition, water demand calculations will need to be performed to determine if the City can provide the required demand and pressure. Fire hydrants will need to be added per current local standards – again, the City/County will need to determine if their line has the required pressure and capacity for fire hydrants and the fire suppression systems in the buildings. Potable water pipes may be either ductile iron or Poly-Vinyl Chloride (PVC) depending on local permitting requirements. Small diameter (less than 12”) potable water pipes are typically PVC but City/County requirements may dictate the need for a different material.

The existing sanitary sewer force main at the golf club house can be extended into the site as well. Wastewater calculations need to be performed to determine the amount of wastewater that will be added to the City’s sewage treatment facility. Sanitary pipes are typically PVC but City/County requirements may dictate the need for a different material.

This project will impact the reclaimed water network, the pump, and receiving ponds. However the City of Ocala has indicated that they already have the replacement capacity for these impacts accounted for in the proposed wetland recharge area just south of the project site. If the project site is a full build-out, infrastructure replacements for the reuse system at Pine Oaks, in order to accommodate the inland logistic center will require the elimination of the reuse storage, relocation of end rum pump station, relocation of irrigation pump station and upgrade of existing lift station at an estimate cost of $4 million (see Table 2).

Natural gas is available at the project site via TECO Peoples Gas. At this time, it is assumed the lines can be extended and/or re-routed as necessary for operations at the site.

Electric and telecommunication is also available and can be extended and/or re-routed as necessary for operations. It is assumed that all future electric and communication conduits will be underground. If the project progresses into the design phase, a review of the existing available electrical voltage, capacity, transformer, etc. will need to be performed to determine the maximum demand that can be delivered to the site.

Permits and Engineering

Permit and engineering fees will be associated with any development at the site and approximate costs for each effort are shown in the ROM estimate. These costs are typically paid for by the developer. The developer will be required to submit permit applications and associated fees to the local, state, and federal permitting agencies. These fees are often based on a percent of the cost of construction, but certain agencies have a standard fee structure based on other variables. The engineering costs to develop signed and sealed drawings for construction are typically between 3% and 10% of the total construction cost. For the purpose of this study the engineering cost is shown at 5% of the total cost.

Termination of Golf Contract, New 9-Hole Golf Course

The City provided the estimate for the Termination and buyout of the existing golf services contract and Construction of a new 9-hole executive golf course and retention of the driving range (see Table 2).

Section Three -- Rough Order of Magnitude Cost Estimate

Cost Summary

After discussion with the City, it was decided to provide a Rough Order of Magnitude Cost Estimate (ROM) for Option 1 only since it is not known at this time if the City will purchase the triangular property from the private owner. The purpose of this ROM estimate is to provide information necessary to move forward with the next phase - to prepare a "break even" financial analysis for the development plan.

The unit prices used to develop the ROM costs are in 2016 dollars and were derived from a compilation three sources: (1) Florida Department of Transportation's Average Unit Prices, (2) experienced estimators price books, (3) unit prices of other projects in central Florida. With the information available at the time of developing this ROM, the ROM includes a contingency of 35%. As the project moves forward into design, the estimate can be improved as more information is obtained and the site requirements are refined. A summary of the ROM Cost Estimate for Option 1 is shown in Table 2 below and detailed in Appendix B.

The ROM includes the cost of a full site build-out per the Concept Plan for Option 1 shown in Appendix A. Some of the costs will be the responsibility of the future developer and some the responsibility of the City – one possible way the costs might be split is shown in the table below. The ultimate decision of who pays for the site improvements is yet to be determined, so we have made assumptions regarding a possible division of cost responsibilities. Other assumptions were made in order to arrive at the rough order of magnitude estimates, as discussed in Section 2 of this report.

The total Rough Order of Magnitude Costs are approximately $177 million for the full build-out scenario shown in the conceptual plan for Option 1 including a 35% contingency. Of this amount, the share assigned to the City is $25.2 million. The remainder is assumed to be the responsibility of the developer(s), rail service provider, user(s), and/or other non-City parties.

Table 2: ROM Costs for Option 1

ITEM DESCRIPTION	TOTAL COST OPTION 1	Non-City	City
Mobilization, Demob & General Conditions	$6,324,892	$6,324,892	
Site Clearing & Grubbing	$2,100,000		$2,100,000
Earthwork	$9,000,000		$9,000,000
Pavement, Landscaping & Fencing	$12,945,280	$12,945,280	
Rail	$6,844,150	$6,844,150	
Stormwater	$1,021,400	$1,021,400	
Buildings	$79,000,000	$79,000,000	
Utilities	$1,032,000		$1,032,000
Sewer & Reclaimed Water Replacement*	$4,000,000		$4,000,000
Environmental	$155,000	$155,000	
Permits	$45,000	$45,000	
Termination & Buyout of Golf Contract*	$571,000		$571,000
Construction of New 9-hole Golf Course*	$2,000,000		$2,000,000
Engineering	$5,921,136	$5,921,136	
Subtotal	$130,959,858	$112,256,858	$18,703,000
35% Contingency	$45,835,950	$39,289,900	$6,546,050
TOTAL	**$176,795,808**	**$151,546,758**	**$25,249,050**

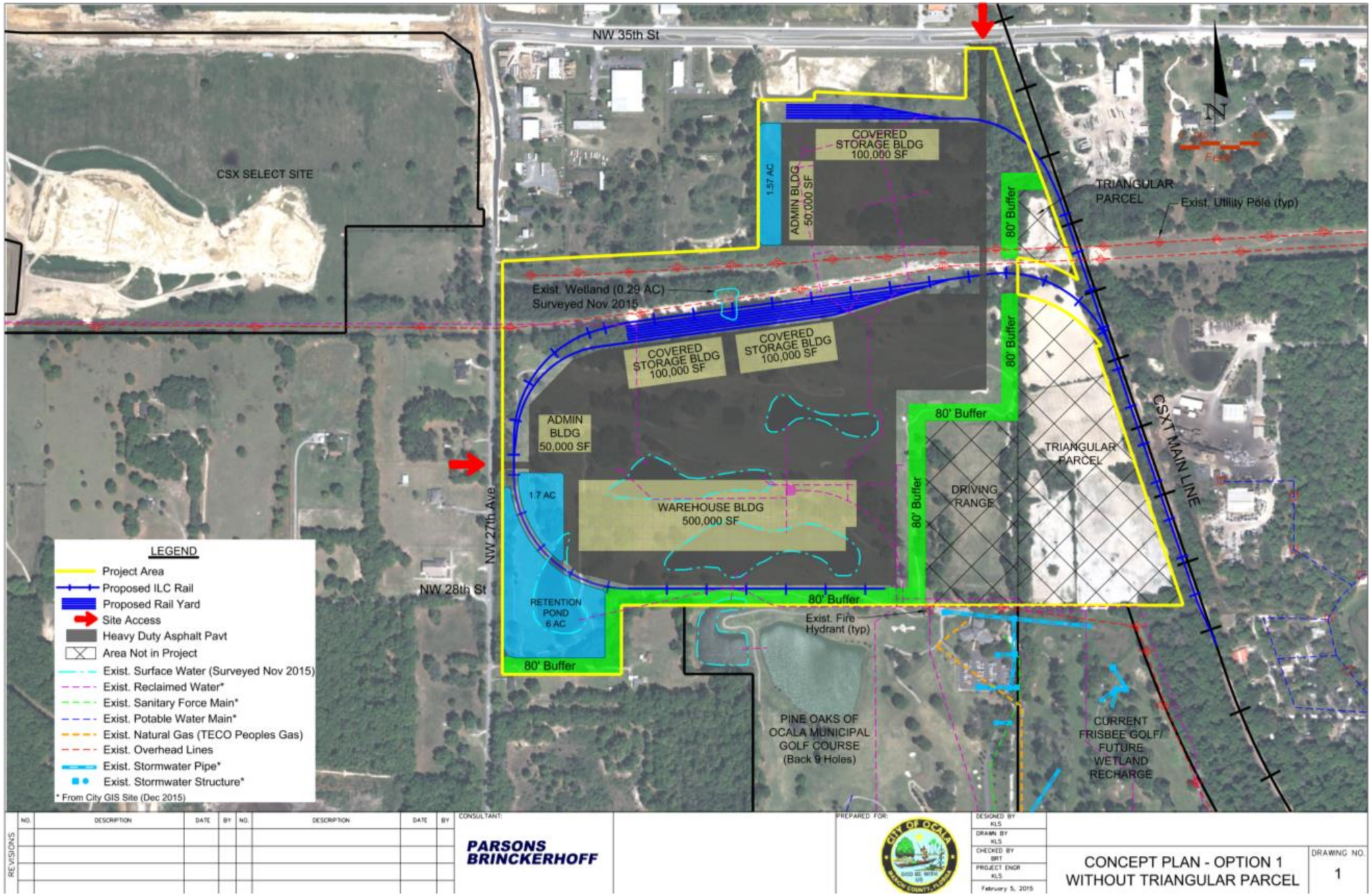
*Estimate provided by the City

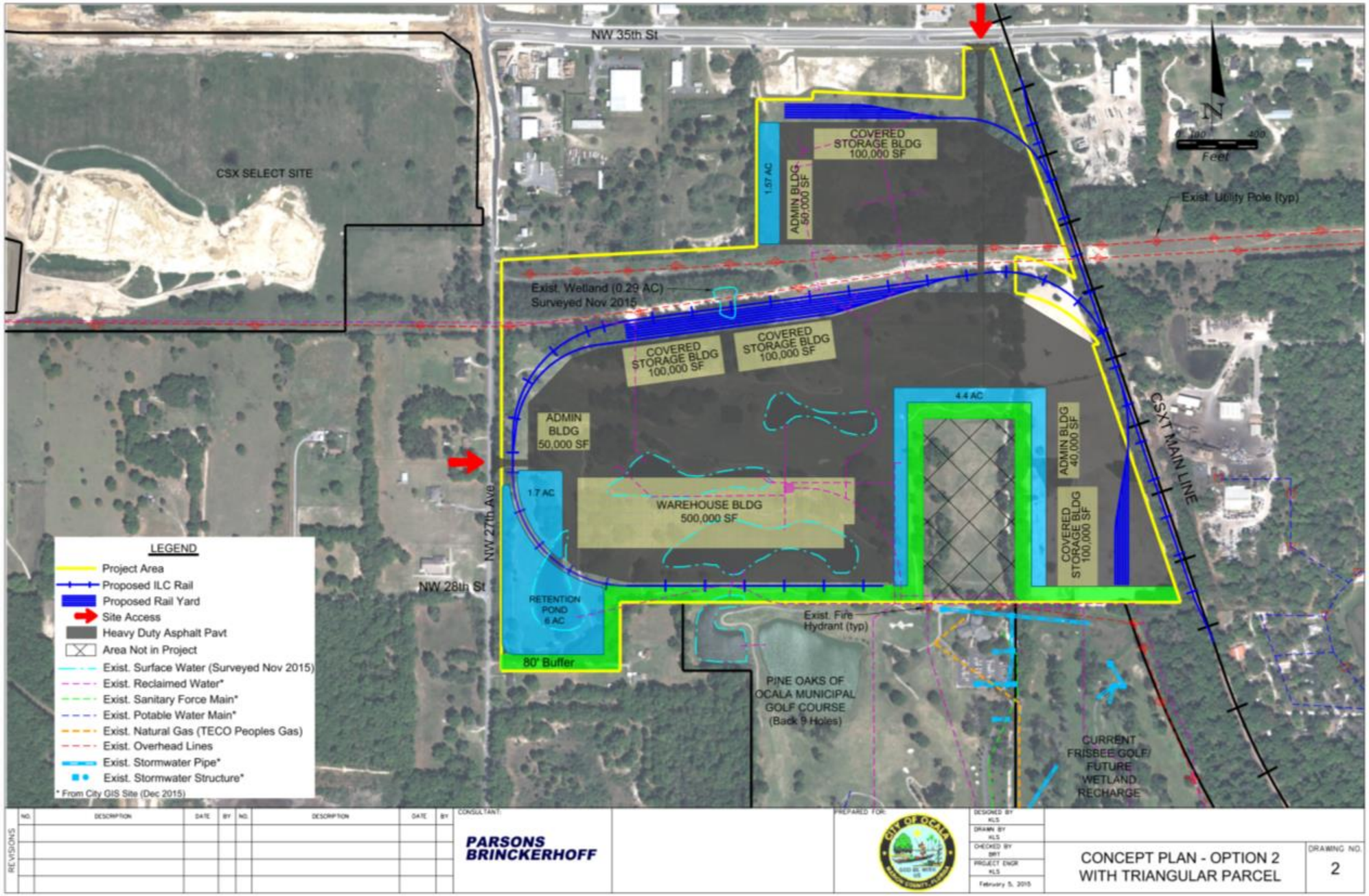
Section Four -- General Conclusions

This Phase II Engineering Feasibility investigation finds that based on available information, the project site appears well-suited for development from an engineering prospective. Given the fact that the land is relatively flat, utility infrastructure is available for connection, the site is adjacent to property zoned industrial, the site has immediate access to major roads and railroads, the site is not located in a flood zone, and the site is void of endangered species and only includes one small low-quality wetland, this site should be able to be permitted, designed, and constructed -- assuming the existing soils are found to be suitable for construction. This site meets several requirements for the CSX Select site certification criteria as identified in Table 1.

This Phase II Engineering Feasibility investigation does not recommend a "go decision" on ILC development at this site. Once the final phase, Phase III financial analysis, is completed the decision on whether and how to proceed with the ILC development should be informed by the results of all three phases taken together as a whole, along with due consideration of market, community, and other factors.

Appendix A – Conceptual Drawings


NW 35th St
CSX SELECT SITE
COVERED STORAGE BLDG 100,000 SF
1.57 AC
ADMIN BLDG 50,000 SF
80' Buffer
TRIANGULAR PARCEL
Exist. Utility Pole (typ)
Exist. Wetland (0.29 AC) Surveyed Nov 2015
COVERED STORAGE BLDG 100,000 SF
COVERED STORAGE BLDG 100,000 SF
ADMIN BLDG 50,000 SF
80' Buffer
TRIANGULAR PARCEL
CSXT MAIN LINE
1.7 AC
WAREHOUSE BLDG 500,000 SF
DRIVING RANGE
NW 27th Ave
NW 28th St
RETENTION POND 6 AC
80' Buffer
Exist. Fire Hydrant (typ)
PINE OAKS OF OCALA MUNICIPAL GOLF COURSE (Back 9 Holes)
CURRENT FRISBEE GOLF/ FUTURE WETLAND RECHARGE
LEGEND
Project Area
Proposed ILC Rail
Proposed Rail Yard
Site Access
Heavy Duty Asphalt Pavt
Area Not in Project
Exist. Surface Water (Surveyed Nov 2015)
Exist. Reclaimed Water*
Exist. Sanitary Force Main*
Exist. Potable Water Main*
Exist. Natural Gas (TECO Peoples Gas)
Exist. Overhead Lines
Exist. Stormwater Pipe*
Exist. Stormwater Structure*
* From City GIS Site (Dec 2015)
REVISIONS
NO. DESCRIPTION DATE BY NO. DESCRIPTION DATE BY
CONSULTANT:
PARSONS BRINCKERHOFF
PREPARED FOR:
DESIGNED BY KLS
DRAWN BY KLS
CHECKED BY BRT
PROJECT ENGR KLS
February 5, 2015
CONCEPT PLAN - OPTION 1
WITHOUT TRIANGULAR PARCEL
DRAWING NO. 1


NW 35th St
CSX SELECT SITE
COVERED STORAGE BLDG 100,000 SF
1.57 AC
ADMIN BLDG 50,000 SF
Exist. Utility Pole (typ)
Exist. Wetland (0.29 AC) Surveyed Nov 2015
COVERED STORAGE BLDG 100,000 SF
COVERED STORAGE BLDG 100,000 SF
4.4 AC
ADMIN BLDG 50,000 SF
ADMIN BLDG 40,000 SF
COVERED STORAGE BLDG 100,000 SF
CSXT MAIN LINE
1.7 AC
WAREHOUSE BLDG 500,000 SF
NW 27th Ave
NW 28th St
RETENTION POND 6 AC
80' Buffer
Exist. Fire Hydrant (typ)
PINE OAKS OF OCALA MUNICIPAL GOLF COURSE (Back 9 Holes)
CURRENT FRISBEE GOLF/ FUTURE WETLAND RECHARGE
N
Feet
LEGEND
Project Area
Proposed ILC Rail
Proposed Rail Yard
Site Access
Heavy Duty Asphalt Pavt
Area Not in Project
Exist. Surface Water (Surveyed Nov 2015)
Exist. Reclaimed Water*
Exist. Sanitary Force Main*
Exist. Potable Water Main*
Exist. Natural Gas (TECO Peoples Gas)
Exist. Overhead Lines
Exist. Stormwater Pipe*
Exist. Stormwater Structure*
* From City GIS Site (Dec 2015)
REVISIONS
CONSULTANT:
PARSONS BRINCKERHOFF
PREPARED FOR:
DESIGNED BY KLS
DRAWN BY KLS
CHECKED BY BRY
PROJECT ENGR KLS
February 5, 2015
CONCEPT PLAN - OPTION 2 WITH TRIANGULAR PARCEL
DRAWING NO. 2

Appendix B – Rough Order of Magnitude Costs Details

Rough Order of Magnitude Construction Cost Estimate - Option 1

ITEM DESCRIPTION	UNIT	EST. QUAN.	UNIT PRICE	TOTAL COST
Mobilization, Demob & General Conditions				
Mobilization and Demobilization	%	0	$ 112,097,830	$ 5,604,892
General Conditions	Month	24	$ 30,000	$ 720,000
Total				**$ 6,324,892**
Site Clearing				
Site Clearing and Grubbing	AC	140	$ 15,000	$ 2,100,000
Total Site Clearing				**$ 2,100,000**
Earthwork				
Land Leveling	CY	900,000	$ 10	$ 9,000,000
Total Earthwork				**$ 9,000,000**
Pavement, Landscaping & Fencing				
Proof Roll & Compaction	SY	240,260	$ 3	$ 720,780
Asphalt Pavt (Heavy, 8")	SY	240,260	$ 30	$ 7,207,800
Asphalt Base (Crushed Concrete 12")	SY	240,260	$ 20	$ 4,805,200
Landscaping	SY	0	$ 25	$ -
Fence - Perimeter (8' w/barbed wire)	LF	11,250	$ 18	$ 202,500
Fence Gate (Dual 15' Swing Gate)	EA	2	$ 4,500	$ 9,000
Total Pavement				**$ 12,945,280**
Rail				
Rail Track (115# RE) w/crossties, and 6" ballast	TF	23,630	$ 200	$ 4,726,000
Subballast (6" Limerock)	SY	39,215	$ 10	$ 392,150
RR turnouts (#6, #8, #10)	EA	17	$ 70,000	$ 1,190,000
RR Double Swith Point Derail	EA	2	$ 35,000	$ 70,000
RR Crossing (full depth concrete)	EA	3	$ 100,000	$ 300,000
Bumping Post (End of Rail Line)	EA	13	$ 10,000	$ 130,000
Flagman when working near CSX main	DAYS	30	$ 1,200	$ 36,000
Total Rail				**$ 6,844,150**
Stormwater				
Manhole (J-8) (<10')	EA	20	$ 5,000	$ 100,000
DBI (Type D W/J BOT) (<10')	EA	10	$ 5,000	$ 50,000
DBI (Type G) (<10')	EA	50	$ 5,500	$ 275,000
RCP, CL3	LF	6,000	$ 80	$ 480,000
RCP, CL5	LF	200	$ 120	$ 24,000
MES	EA	6	$ 2,500	$ 15,000
Control Structures	EA	4	$ 5,000	$ 20,000
Fence (4' chain link) ponds	LF	5,000	$ 8	$ 40,000
Fence Gate (6') ponds	EA	4	$ 600	$ 2,400
Staked Silt Fence, Type III	LF	5,000	$ 3	$ 15,000
Total Drainage				**$ 1,021,400**

Buildings				
Warehouse Bldg	SF	500,000	$ 55	$ 27,500,000
Admin Bldg (1 story)	SF	150,000	$ 125	$ 18,750,000
Covered Storage Bldg	SF	300,000	$ 35	$ 10,500,000
Fire, Electrical, HVAC, Water, Sanitary (Warehouse)	SF	500,000	$ 25	$ 12,500,000
Fire, Electrical, HVAC, Water, Sanitary (Admin)	SF	150,000	$ 35	$ 5,250,000
Fire, Electrical, HVAC, Water, Sanitary (Covered Stg)	SF	300,000	$ 15	$ 4,500,000
Total Building				**$ 79,000,000**
Utilities				
Potable Water Master Meter (3")	EA	1	$ 25,000	$ 25,000
Potable Water (6" PVC)	LF	7000	$ 30	$ 210,000
Backflow Preventor	EA	2	$ 20,000	$ 40,000
Fire Hydrants	EA	15	$ 5,000	$ 75,000
8" Steel Casing for RR xing 6" PVC	LF	400	$ 80	$ 32,000
12" Steel Casing for RR xing 8" HDPE	LF	200	$ 100	$ 20,000
Electric (poles, boxes, conduit, wire, etc)	LS	1	$ 600,000	$ 600,000
Utility Connections	LS	1	$ 15,000	$ 15,000
Utility Relocations	LS	1	$ 15,000	$ 15,000
Total Utility				**$ 1,032,000**
Environmental				
Wetland Mitigation	LS	1	$ 5,000	$ 5,000
Erosion Control	LS	1	$ 150,000	$ 150,000
Total Environmental				**$ 155,000**
Permits				
City Site	LS	1	$ 10,000	$ 10,000
ERP	LS	1	$ 10,000	$ 10,000
ACOE	LS	1	$ 10,000	$ 10,000
Wetland Delineation & Survey	LS	1	$ 15,000	$ 15,000
Total Permit				**$ 45,000**
Miscellaneous (Provided by City)				
Termination & Buyout of Golf Contract	LS	1	$ 571,000	$ 571,000
Construction of New 9-hole Golf Course	LS	1	$ 2,000,000	$ 2,000,000
Sewer & Reclaimed Water Replacement	LS	1	$ 4,000,000	$ 4,000,000
Total Miscellaneous				**$ 6,571,000**
Engineering				
Engineering	%	5%	$ 118,422,722	$ 5,921,136
Total Engineering				**$ 5,921,136**
			Subtotal	**$ 130,959,858**
			Contingency 35%	$ 45,835,950
			TOTAL	**$ 176,795,808**

PROJECT: COST ESTIMATE
INLAND LOGISTIC CENTER SEWER & RECLAIMED WATER REPLACEMENTS

DATE: 05/05/16

ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
1	**GENERAL CONSTRUCTION**				
101-01.01.01	MOBILIZATION	LS	1	$60,000.00	$60,000.00
101-01.02.01	GENERAL CONDITIONS	LS	1	$60,000.00	$60,000.00
120-01.01.01	EXCAVATION, GENERAL	LS	1	$20,000.00	$20,000.00
120-01.02.01	BACKFILL MATERIAL	LS	1	$20,000.00	$20,000.00
120-01.07.02	REMOVE UNSUITABLE MATERIAL	LS	1	$20,000.00	$20,000.00
210-02.01.04	LIMEROCK 12" BASE	LS	1	$20,000.00	$20,000.00
334-72.03.01	ASPHALT PAVEMENT 2" SUPERPAVE - 12.5	LS	1	$60,000.00	$60,000.00
425-02.01.05	STORMWATER STRUCTURES & PIPING	LS	1	$20,000.00	$20,000.00
477-01.01.01	CONSTRUCTION SURVEY	LS	1	$10,000.00	$10,000.00
477-06.02.07	MEGA LUG FITTING RESTRAINT	LS	1	$15,000.00	$15,000.00
477-06.03.07	PIPE JOINT RESTRAINT	LS	1	$15,000.00	$15,000.00
506-01.01.01	RECLAIMED WATER SYSTEM ASBUILT	LS	1	$10,000.00	$10,000.00
506-01.01.02	RECLAIMED WATER SYSTEM DEMOLITION	LS	1	$100,000.00	$100,000.00
522-02.01.01	CONCRETE DRIVEWAYS	LS	1	$15,000.00	$15,000.00
550-10.02.01	CHAIN LINK FENCING	LS	1	$7,500.00	$7,500.00
550-60.03.04	16' CHAIN LINK FENCE GATE	LS	1	$2,500.00	$2,500.00
570-01.02.07	SOD - TIFTON 419 BERMUDA	LS	1	$15,000.00	$15,000.00
580-01.01.01	LANDSCAPE	LS	1	$15,000.00	$15,000.00
	GENERAL CONSTRUCTION SUBTOTAL				$485,000.00
497	**SANITARY SEWER SYSTEM**				
497-01.01.06	8" GRAVITY SEWER REPLACEMENT	LS	1	$20,000.00	$20,000.00
497-35.01.06	BYPASS PUMPING	LS	1	$20,000.00	$20,000.00
497-70.01.06	SUBMERSIBLE LS INSTALLATION	LS	1	$100,000.00	$100,000.00
	SANITARY SEWER SYSTEM SUBTOTAL				$140,000.00
507	**RECLAIMED WATER SYSTEM**				
507-01.01.15	REUSE WATER MAIN INSTALLATIONS	LS	1	$50,000.00	$50,000.00
507-02.06.01	COMPACT DIP MJ FITTINGS	LS	1	$35,000.00	$35,000.00
507-02.15.02	DIP FLANGED FITTINGS	LS	1	$45,000.00	$45,000.00

507-03.03.05	MJ BUTTERFLY VALVES & VALVE BOXES	LS	1	$55,000.00	$55,000.00
ITEM NO.	DESCRIPTION	UNIT	ESTIMATED QUANTITY	UNIT PRICE	TOTAL PRICE
507-03.04.12	FLANGED ELECTRIC OPERATED BUTTERFLY VALVES	LS	1	$45,000.00	$45,000.00
507-03.04.14	ELECTRIC OPERATED VALVE PANEL & ELECTRICAL	LS	1	$45,000.00	$45,000.00
507-03.04.16	SCADA SYSTEM MODIFICATIONS	LS	1	$40,000.00	$40,000.00
507-03.07.07	FLANGED MAGMETERS	LS	1	$20,000.00	$20,000.00
507-11.08.08	CONNECTIONS	LS	1	$20,000.00	$20,000.00
507-25.01.01	CONCRETE SLAB	LS	1	$30,000.00	$30,000.00
507-25.01.03	MASONRY BLOCK BUILDING	LS	1	$250,000.00	$250,000.00
507-25.01.06	GENERATOR	LS	1	$250,000.00	$250,000.00
507-25.01.07	GENERATOR AUTOMATIC TRANSFER SWITCH	LS	1	$125,000.00	$125,000.00
507-25.01.08	ELECTRICAL & VFD INSTALLATION	LS	1	$150,000.00	$150,000.00
507-25.01.09	PLC & INSTRUMENTATION	LS	1	$150,000.00	$150,000.00
507-25.01.10	SYSTEM STARTUP TESTING & TRAINING	LS	1	$15,000.00	$15,000.00
507-25.01.11	GROUND STORAGE TANK	LS	1	$1,500,000.00	$1,500,000.00
507-25.01.12	REUSE PUMP STATION	LS	1	$550,000.00	$550,000.00
	RECLAIMED WATER SYSTEM SUBTOTAL				$3,375,000.00
	TOTAL ESTIMATE				$4,000,000.00