

March 22, 2013

123-89568

Ms. Cindy Mulkey
Program Administrator—Siting Coordination Office
Florida Department of Environmental Protection
3900 Commonwealth Blvd.
Tallahassee, FL 32399-3000

**RE: PETITION FOR MODIFICATION AND TRANSFER OF THE POWER PLANT SITE CERTIFICATION,
CEMEX CONSTRUCTION MATERIALS FLORIDA, LLC SOUTH CEMENT PLANT'S STEAM
ELECTRIC GENERATING PLANT (PA-82-17); AMENDMENT OF PETITION**

Dear Ms. Mulkey:

As indicated in our July 10, 2012 correspondence to your office, CEMEX Construction Materials Florida, LLC advised Central Power & Lime, Inc. that it would like to modify the certified site boundary to exclude the rail spur located in the northeastern portion of the certified site and land located north of the rail spur. Enclosed please find the revised text, figures, and appendices depicting the modified certified site boundary that will supplement the original text, figures, and appendices submitted in the Petition for Modification and Transfer of the Power Plant Site Certification. In addition, the boundary survey (enclosed) has been revised to depict the new geometry of this portion of the certified site.

Please note that a post-certification package that was submitted to the Southwest District FDEP and the Siting office on September 7, 2012 reflected modifications to the biomass storage yard area and consequently required revisions to the ERP-related information. The post-certification submittal was approved (deemed complete) in October 2012 by the FDEP. The ERP-related information from the post-certification submittal is not included with this petition for modification and transfer since this information has already been submitted to and approved by the FDEP.

Please note that Figure 1, Proposed Project Impacts, is being provided herein to reflect the updated earthworks quantities shown on the construction plans. In addition, the construction plan sheets provided with this submittal include 7 of the 12 sheets that have been updated to depict the approximate location of the modified certified site boundary and the corresponding revised acreages associated with the project.

Should you have any questions on this matter, please contact either of the undersigned.

Sincerely,

GOLDER ASSOCIATES INC.



Scott Osbourn, PE
Associate



Heather T. Ahrens
Senior Ecologist

Enclosures: Table identifying associated text, figure, and appendix modifications
Revised pages of Petition for Modification and Transfer of the Power Plant Site Certification
Revised Figures
Revised ERP Figure 1, Proposed Project Impacts
Revised Attachment A, Site Location Information, Figures 2, 3, 5, and 6
Revised Attachment B, Construction Plan Sheets 01-03; 04, 06-07, and 12
Revised Attachment D, Topographic and Wetland Survey
Revised Appendix 8.7.6, Site Survey

cc: James P. Morris, Regional Environmental Manager, CEMEX
James Daniel, Plant Manager, CEMEX
Daniel A. (Tony) Hopkins, CPL

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Text, Figure, and Appendix Modifications to the Petition for Modification and Transfer

Page	Existing	Change
viii	177-acre area	Boundary and Site Acreage
9	177 acres	Site Acreage
12	Pits-Dumps complex (174 acres)	Calculation Change because of site acreage
12	Remaining 2.8 acres	Calculation Change because of site acreage
19	19.2 acre proposed fuel storage	Calculation Change because of site acreage
19	4 construction laydown areas (an additional 5.32 acres combined)	Calculation Change because of site acreage
19	Approximately 0.4 acre of electric power facilities	Calculation Change because of site acreage
19	2 of the 5 proposed construction laydown areas (± 1.2 acres)	Calculation Change because of site acreage
20	(Wetlands A and C, ± 0.5 acre each)	Calculation Change because of site acreage
20	Approximately 0.3 acre of mixed wetland	Calculation Change because of site acreage
20	Wetland B and a 1.0-acre portion	Calculation Change because of site acreage
21	Approximately 3.6 acres of willow forest	Calculation Change because of site acreage
21	And a 0.7-acre portion of Wetland C	Calculation Change because of site acreage
51	Approximately 177 acres that will be	Boundary and Site Acreage
51	Occupy approximately 5.3 acres located	Calculation Change because of site acreage
53	The construction of the Proposed Project will not adversely impact any wetlands or other surface waters.	Change to language regarding no wetland impacts
76	Design storm is estimated to be 14.13 cfs and 14.78 cfs for Outfall E and F	Calculation Change because of site acreage
Figure 1.2.0-3	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.1.2-1	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.2.1-1	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.2.1-2	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.3.1-5	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.3.1-6	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.3.3-1	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.3.3-2	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.3.4-1	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.3.5-1	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.3.5-2	Proposed certified site boundary	Boundary and Site Acreage

Text, Figure, and Appendix Modifications to the Petition for Modification and Transfer

Page	Existing	Change
Figure 2.3.5-3	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.3.5-4	Proposed certified site boundary	Boundary and Site Acreage
Figure 2.3.7-1	Proposed certified site boundary	Boundary and Site Acreage
Appendix 8.4 ERP	Figure 1	Proposed Project Impacts Acreage
	Attachment A – Figures:	
	Figure 2 Soils	Boundary and Site Acreage
	Figure 3 Aerial	Boundary and Site Acreage
	Figure 5 Land Use/Land Cover	Boundary and Site Acreage
	Figure 6 FEMA Flood Zones	Boundary and Site Acreage
	Attachment B- Construction Plans:	
	Sheet 01 Cover Sheet	Boundary and Site Acreage
	Sheet 02 General Notes	Site Acreage
	Sheet 03 Existing Conditions	Boundary and Site Acreage
	Sheet 04 Proposed Site Plan	Boundary and Site Acreage
	Sheet 06 Post Development Drainage Plan	Boundary and Site Acreage
	Sheet 07 Post Development Drainage Plan	Boundary and Site Acreage
	Sheet 12 Traffic Plan	Boundary and Site Acreage
	Attachment D- Topography and Wetland Survey	Boundary and Site Acreage
Appendix 8.7.6	Site Survey	Boundary and Site Acreage



Definitions

Brooksville South Facility (aka the Facility)	Refers to the CEMEX-owned land, Gregg Plant limestone processing facility, the Chemical Lime Hydrating Plant, the waste tire processing facility, the cement plant, and Florida Crushed Stone Company's Brooksville South Cement Plant's Steam Electric Generating Plant
Construction Laydown Areas	Refers to land included within or in proximity to the Proposed Certified Site that has been granted a temporary easement by the landowner that will be used temporarily for project-related activities during construction of the Proposed Project, including, but not limited to, parking, material laydown and assembly, and equipment storage.
Cooling Water Outfall Structure	Refers to the outfall structure located along the shoreline of recirculation cooling ponds No. 5, where Cement Plant Road extends from West Yontz Road.
Emergency Outfall Structures	Refers to the structure located along the western embankment of recirculation cooling ponds No. 4, where water from the recirculation cooling ponds will leave the ponds under severe weather conditions (25-year/24-hour storm)
Existing Associated Facilities	Refers to the existing certified recirculation cooling ponds Nos. 4 and 5, existing certified 115-kV transmission line between the power plant and the Progress Energy Brookridge substation, existing certified rail spur, existing certified access road, and existing certified coal pile
Existing Certified Site	Approximately 125.92-acre area that was the subject of the initial certification (PA82-17) as adopted on March 12, 1984, depicted in Figure 2.2.3-1 of the initial application
Existing Licensee	CEMEX Construction Materials Florida, LLC
Groundwater Monitoring Plan	Under the Conditions of Certification (PA82-17), an approved plan defining the groundwater monitoring conditions at the Facility and attached as part of Appendix 8.7.5 of this modification petition
Licensee Brooksville mine	Refers to the mining activities associated with the CEMEX-owned Brooksville mine
Project Site	Refers to the existing electrical generating unit where the proposed improvements are planned and the new biomass fuel storage areas and the fuel handling equipment, all located within the Proposed Certified Site
Proposed Certified Site	Refers to the 477 <u>166</u> -acre area (see Appendix 8.7.6) which includes the Project Site, a portion of the access roads, intake and outfall structures and the new biomass fuel delivery, handling and storage facilities.
Proposed co-Licensee	Florida Power Development, LLC
Proposed Project	Refers to conversion of the existing electrical generating unit operation and fuel supply from coal to biomass and related onsite improvements. The conversion will include: removal of components of the existing coal-fired boiler and associated support facilities; installation of replacement components that will convert the boiler to operate as a biomass-fired boiler; installation of biomass-fired boiler fuel equipment with independent environmental pollution control measures; updating of the equipment control capabilities; and construction and operation of a new biomass fuel delivery, handling and storage facilities, including alteration of the access road.



2.2.1 Zoning and Land Use Plans

On June 2, 2011, the Florida Local Government Comprehensive Planning and Land Development Regulation Act was redesignated as the Community Planning Act. Under the new Act, each county and municipality in Florida is still required to adopt a local comprehensive plan that complies with the Florida Statutes. Although some provisions of the previous Act have been repealed, existing (adopted) Comprehensive Plans are still valid. Hernando County has an adopted Hernando County Comprehensive Plan (last amended October 26, 2010) and the Hernando County Zoning Regulations (last amended March 22, 2011) that implement the goals, objectives, and policies of the Hernando County Comprehensive Plan and regulate the development within the unincorporated areas of Hernando County.

According to the Hernando County Comprehensive Plan Map, dated January 6, 2011, and confirmation from the Hernando County Planning Department, the Proposed Certified Site (approximately ~~477~~-166 acres) is located within the Industrial and Mining future land use category (Figure 2.2.1-1). The Industrial future land use designation allows uses that are ancillary commercial activities, industrial uses, minor public facilities, and ancillary residential. The purpose of the Industrial future land use designation is to “provide for a clustering of industrial activity at locations of high tenant demand and with sufficient infrastructure, which do not significantly impact surrounding land uses” (Hernando County Comprehensive Plan Section D). The Mining future land use designation allows mining and ancillary mining activities, mining support related or industrial uses which consume mining products and agriculture. The purpose of the Mining future land use designation is to “allow for the extraction of mineral resources where impact on major residential areas will be minimal. Allow for co-location of mining support related or industrial uses which consume mining products within the mining land use category where surface mining occurs” (Hernando County Comprehensive Plan Section D). The Proposed Project and the Proposed Certified Site are currently consistent and will remain consistent with the applicable provisions of the Hernando County Comprehensive Plan.

In 1983, during the original site certification proceeding, the Siting Board determined that the Existing Certified Site was consistent with the land use plans and zoning ordinances of Hernando County (Appendix 8.6.3, Final Land Use Order). Since 1982, the Proposed Certified Site and the immediate surrounding area, which includes the electrical generating unit, cement manufacturing operation, mine processing operation, and mining areas, have received the following zoning approvals from Hernando County:

- 1982—Rezoning approval (H-82-43) to rezone portions of the Existing Certified Site and immediate surrounding area from mining to industrial for cement manufacturing plant.
- 1982—Rezoning approval (H-82-65) to rezone portions of the Existing Certified Site from mining to industrial to construct a cement manufacturing plant and power plant



Dumps complex (~~174~~162.6 acres). This soil complex consists of pits created from the removal of limestone and dumps where the limestone has been piled. Most areas with this soil complex are still actively being mined.

The remaining 2.8 acres are composed of Kendrick Fine Sand, 0 to 5 percent slopes. This soil consists of well-drained, nearly level to gently sloping upland soils. Typical depth to water table is below 72 inches with rapid permeability above the subsoil to moderate permeability in the subsoil.

The Proposed Certified Site has elevations ranging from less than 80 ft to 150 ft from north to south. The 7.5-minute topographic map is presented in Figure 2.3.1-6, and the 15-minute topographic map is presented in Figure 2.3.1-7.

2.3.2 Subsurface Hydrology

The general vicinity of the Proposed Certified Site has two aquifer systems, the surficial aquifer system and the Floridan aquifer system (FCS, 1984). Any confining beds present between the surficial and Floridan aquifer system at the Proposed Certified Site can be characterized as discontinuous. The two aquifer systems are connected such that the Floridan aquifer system acts as a water table aquifer. Where a confining bed does exist, a perched water table can occur, but this condition is isolated. The surficial aquifer consisting of the surficial deposits (undifferentiated sediments of the lower Hawthorn Group) overlies the limestone and receives water almost entirely from local precipitation; the exception being recharge from artesian seepage and from various man-made sources such as irrigation.

The water level in the surficial aquifer system ranges from slightly below to as much as 17 ft above the water level in the Floridan aquifer system (FCS, 1984). The greatest difference in water level altitudes between the two aquifers occurs in the topographically higher Brooksville area. In this area water moves downward from the shallow aquifer and recharges the Floridan aquifer system.

Undisturbed soil samples were taken by the US Geological Survey (FCS, 1984) and indicated the coefficient of permeability for the surficial aquifer in the vicinity of the Proposed Certified Site to be 0.001 gallon per day per square foot. The porosity and specific yield for the same sample (sampling depth 3.0 to 3.2 ft) were 45.5 and 7.1, respectively. These values indicate that although the shallow aquifer has relatively low permeability, the storage capacity is large and the volume of water that can drain from the material, given enough time, is large.

Other than the isolated undifferentiated sediments of the lower Hawthorn Group, the Floridan aquifer system at the site consists of limestone and dolomite from the following formations in descending order from younger to older:



Disturbed Land (FLUCFCS 740)

Disturbed land encompasses areas that have been changed primarily due to human activities other than mining (FDOT 1999).

Approximately Majority 19.4 acres of the 19.226.7-acre proposed fuel storage and handling area is categorized as disturbed land, which includes 4-one of the 5-five proposed construction laydown areas (that consists of approximately 0.86 acres). The remaining 4-An additional two construction laydown areas are also categorized as disturbed land. (an additional 5.32 acres combined)-These additional areas are a combination of bare ground interspersed with sparse patches of vegetation or open grassy areas. Vegetated areas within the proposed construction laydown areas are composed primarily of bahiagrass (*Paspalum notatum*), crabgrass (*Digitaria ciliaris*), cogon grass (*Imperata cylindrica*), and other ruderal, weedy vegetation.

Electric Power Facilities (FLUCFCS 831)

Electric power facilities comprise hydropower, thermal, nuclear, gas turbine plants, transformer yards, and substations (FDOT 1999).

The electric power facilities are located primarily within the central and western portions of the Proposed Certified Site and include the administrative building, parking areas, recirculation cooling ponds, switch yard, transmission line, rail spur, access roadways, and perimeter stormwater ditch associated with plant operation. The proposed fuel storage and handling area encompasses approximately 0.4 acre of electric power facilities. In addition, the remaining 2-two of the 5-proposed construction laydown areas (± 1.2 acres) and the conveyor system (± 1.6) consist of electric power facilities.

Upland Habitat

Hardwood-Coniferous Mixed Forests (FLUCFCS 434)

Hardwood-coniferous mixed forest habitats are upland areas in which neither upland conifers nor hardwoods achieve 66 percent crown canopy dominance (FDOT 1999).

An area of hardwood-coniferous mixed forest was identified along the northern portion of the Proposed Certified Site, outside the areas to be impacted by the Proposed Project, just east of an existing construction building. This area is composed of a combination of pines and hardwood trees. This upland forest is bounded by the rail spur to the north, a surface water ditch to the west and the south, and Camp Mine Road to the east.



Surface Water/Aquatic Habitat

Streams and Waterways (Ditches) (FLUCFCS 510)

Streams and waterways include rivers, creeks, canals, and other linear water bodies (FDOT 1999).

Several ditches were identified within the Proposed Certified Site. These surface water ditches are primarily constructed in upland soils; however, two ditches located within the proposed fuel storage and handling area are hydrologically connected to wetland systems through a surface water connection or culvert crossing (Wetlands A [± 0.02 acre] and C, [± 0.50 acre] ~~each~~) (Figure 2.3.5-1). Vegetation in these surface water ditches consists primarily of upland species, such as cogon grass. ~~Impacts to ditches are not anticipated due to the Proposed Project. Minor secondary impacts to ditches will occur due to grading within the minimum 15-ft upland buffer; these temporary secondary impacts will occur only during the active construction phase of the Proposed Project. The upland buffer zone will be allowed to naturally revegetate and, subsequently, will not be mowed or regularly maintained. Silt fence will be erected along the edge of the surface water to prevent impacts to wetlands and other surface waters. As discussed with FDEP Southwest District office personnel on August 29, 2012, no mitigation for these temporary secondary impacts is anticipated.~~

Reservoirs (FLUCFCS 530)

Reservoirs are defined as artificial impoundments of water used for irrigation, flood control, municipal and rural water supplies, recreation, and hydroelectric power generation (FDOT 1999).

Several reservoirs are located within the eastern portion of the Proposed Certified Site. One of these reservoirs, a stormwater pond, approximately 1.1 acres in size, was noted within Wetland A in the northeastern corner of the proposed fuel storage and handling area (Figure 2.3.5-1). This surface water system is dominated by cattail (*Typha* sp.). Minor permanent impacts to this surface water (0.03 acre) are necessary due to the proposed installation of two culverts for stormwater management system design. Mitigation for these impacts are not anticipated because of the minimal area of impact and the fact that the impacted surface water is a constructed stormwater pond (Minick, Allyson, 2011).

Wetland Habitats

Stream and Lake Swamps (Bottomlands) (FLUCFCS 615)

Stream swamp habitats are forested wetlands usually found on, but not restricted to, river, creek, and lake floodplain or overflow areas (FDOT 1999). These wetlands are typically dominated by a variety of hardwood species tolerant of occasional inundation and hydric soils. The nearest stream and lake swamp is located east of the proposed fuel storage and handling area, and outside the Proposed Certified Site, on the eastern side of Camp Mine Road.



Mixed Wetland Hardwoods (FLUCFCS 617)

Mixed wetland hardwood forests are composed of a large, ill-defined mixture of hardwood species that are tolerant of hydric conditions.

Approximately 0.3 acre of mixed wetland hardwood forests, consisting of Wetland B and a 1.0-acre portion of Wetland C, were identified within the footprint of the proposed fuel storage area (Figure 2.3.5-1). These are disturbed, low-quality wetlands created due to their relation to an elevated rail spur, elevated road to the south, and Camp Mine Road to the east. Wetland hydrology in these systems is altered due to drainage by ditches and culverts. Dominant canopy species in Wetland B include sweetgum (*Liquidambar styraciflua*), American elm (*Ulmus americana*), box elder (*Acer negundo*), swamp dogwood (*Cornus foemina*), and some small persimmons (*Diospyros virginiana*). Groundcover is sparse and includes catbrier (*Smilax* sp.), marsh fern (*Thelypteris* sp.), and Virginia chain fern (*Woodwardia virginica*). Dominant vegetation in Wetland C includes Carolina willow, red maple (*Acer rubrum*), box elder, wax myrtle (*Myrica cerifera*), catbrier (*Smilax* sp.), and Virginia chain fern. Impacts to ~~mixed wetland hardwood forests~~ Wetland B are not anticipated due to the Proposed Project. Minor secondary impacts to Wetland C will occur due to grading within the minimum 15-ft upland buffer; these temporary secondary impacts will only occur during the active construction phase of the Proposed Project. The upland buffer zone will be allowed to naturally revegetate and, subsequently, will not be mowed or regularly maintained. Silt fence will be erected along the wetland edge to prevent impacts to wetland areas. As discussed with FDEP Southwest District office personnel on August 29, 2012, no mitigation for these temporary secondary impacts is anticipated.

Willow and Elderberry (FLUCFCS 618)

Willow and elderberry communities are forested wetlands composed of pure or predominant stands of Carolina willow, which occasionally include elderberry (*Sambucus canadensis*) as a primary component (FDOT 1999).

Approximately 3.6 acres of willow forest, consisting of portions of Wetlands A and a 0.7-acre portion of Wetland C, were identified within the footprint of the proposed fuel storage and handling area. These systems are disturbed, low-quality wetlands that are connected to surface water ditches and/or reservoirs, which further contribute to their altered hydrology. Stands of cattail are interspersed throughout Wetland A. Additional species observed in Wetland A include buttonbush (*Cephalanthus occidentalis*), Florida swamp privet (*Forestiera segregata*), primrose willow (*Ludwigia peruviana*), soft rush (*Juncus effusus*), box elder, winged loosestrife (*Lythrum alata*), and smartweed (*Polygonum* sp.). Wetland C consists of Carolina willow, rose mallow (*Hibiscus* sp.), mallow (*Kosteletzkya* sp.), saltbush (*Baccharis halmifolia*), primrose willow, and wax myrtle. Minor secondary impacts to Wetlands A and C will occur due to grading within the minimum 15-ft upland buffer; these temporary secondary impacts will only occur during the active construction phase of the Proposed Project. The



upland buffer zone will be allowed to naturally revegetate and, subsequently, will not be mowed or regularly maintained. Silt fence will be erected along the wetland edge to prevent impacts to wetland areas. As discussed with FDEP Southwest District office personnel on August 29, 2012, no mitigation for these temporary secondary impacts is anticipated.

Freshwater Marshes (FLUCFCS 641)

Freshwater marshes are non-forested wetlands that are usually confined to relatively level, low-lying areas (FDOT 1999). These wetlands typically include shrubs and herbaceous species, such as common buttonbush, maidencane (*Panicum hemitomon*), cattail, lance-leaved arrowhead (*Sagittaria lancifolia*), soft rush (*Juncus effusus*), and pickerelweed (*Pontederia cordata*).

The closest freshwater marsh is located east of the proposed fuel storage and handling area, and outside the Proposed Certified Site, on the eastern side of Camp Mine Road.

2.3.6 Ecology

The Proposed Certified Site was evaluated for the potential presence of important plant and wildlife species. Important species of plants and animals, include: (1) species listed by the US Fish and Wildlife Service (USFWS) as endangered or threatened under 50 Code of Federal Regulations 17, (2) species listed by the Florida Fish and Wildlife Conservation Commission (FFWCC) in Chapter 39-27, FAC, as endangered, threatened, or species of special concern, (3) species listed as game, furbearers, or freshwater game fish in Chapter 39-1, FAC, and (4) species that are indicators of, endemic to, or are otherwise unique to specific plant communities and habitat types.

In addition to these important species, the Proposed Certified Site was also evaluated for the potential presence of plant species listed as threatened or endangered by the Florida Department of Agriculture and Consumer Services (FDACS).

The Florida Natural Areas Inventory (FNAI) maintains a database of known occurrences of listed species throughout Florida. Listed plant species are those plants that are listed by the USFWS or FDACS as endangered, threatened, of special concern, or commercially exploited. Listed animal species are those animals that are listed as endangered, threatened, or of special concern federally by the USFWS or within the state of Florida by the FFWCC.

Golder obtained an Official Standard Data Report from FNAI for listed species of flora and fauna within a 1.5-mile radius surrounding the Proposed Certified Site (FNAI Official Standard Data Report, Appendix 8.7.1). The 1.5-mile radius incorporates the power plant footprint and the adjacent land areas and is typical of the radius utilized by FNAI for production of its Official Data Reports. In addition, the FFWCC Bald Eagle Nest Locator database was used to identify the location and status



Impacts from the use of chemicals for cleanup of chemical, oil, or grease spillage will be minimized through proper handling and disposal practices. Construction contractors will be required to implement environmental control practices to minimize spills, e.g., by designating specific areas for fueling and maintenance. These areas will be located so that any spills, if they do occur, will not be adjacent to any surface waters. If any spills occur, cleanup will be expedited with ultimate disposal of collected material in an approved facility. No adverse impacts to surface waters are anticipated.

Construction areas that will result in a disturbance of 1 acre or more, are required to seek coverage under the Generic Permit for Stormwater Discharge from Large and Small Construction Activities [FDEP Document 62-621.300(4)(a)]. FPD will prepare a Notice of Intent (NOI) to obtain such coverage, and will develop and implement a stormwater pollution prevention plan (SWPPP) as required under the Generic Permit. The NOI will be submitted to FDEP at least two days prior to commencement of construction. The SWPPP will be prepared prior to filing of the NOI.

4.4 Groundwater Impacts

Due to the existing nature of the site, groundwater will not be adversely affected by construction of the Proposed Project. There are no proposed construction impacts to groundwater and therefore, no new measuring and monitoring programs are proposed.

4.5 Ecological Impacts

4.5.1 Impact Assessment

Terrestrial Systems

FPD maintains an easement in perpetuity with CEMEX that gives FPD use and access to approximately 125 acres where the principal electrical generating unit is located. The electrical generating unit's footprint is situated within the approximately 125 acres. In addition, the existing stormwater system and recirculation cooling ponds are situated on 1,205 acres, which are located west of the electrical generating unit footprint. The Proposed Certified Site is made up of approximately ~~177~~ 166 acres that will be used for construction of the Proposed Project. The temporary construction laydown areas will occupy approximately 5.3 acres located to the east and south of the electrical generating unit. The terrestrial systems within the Proposed Certified Site and the areas planned to be used as the proposed construction laydown areas were previously cleared and previously impacted in connection with mining operations between 1998 and 1999 (Google Earth historical imagery 2011). The construction of the Proposed Project will not cause adverse ecological impacts because the construction will be contained within previously impacted areas.



Fugitive dust generated by Proposed Project construction activities will be minimized through reasonable precautions pursuant to FDEP Rule 62.296.320(4)(c)3., FAC. Any localized fugitive dust will not adversely affect the terrestrial systems in the vicinity of the Proposed Certified Site.

Noise from construction activities is not anticipated to significantly affect wildlife in the vicinity of the Proposed Certified Site. This is because the area currently experiences noise from human activities; mining activities; and operation of the rail spur, the existing power plant, and cement plant kilns. No noise-sensitive wildlife is known to occur on the Proposed Certified Site or within the immediate vicinity. Wildlife in the area would have been acclimated to noise associated with the existing mine and power plant operations.

The Proposed Certified Site does not contain unique wildlife species and is not considered important wildlife habitat because of its disturbed nature. No adverse impacts to federally or state-listed terrestrial plants and/or animals are anticipated to occur in association with the construction of the Proposed Project, due to the lack of suitable onsite habitat for listed species and the industrialized nature of the Proposed Certified Site.

Aquatic Systems/Wetlands

The Proposed Project has been designed to avoid any significant impacts to wetlands or surface waters. Three low-quality wetland systems (wetlands A, B, and C on Figure 2.3.5-1) and several surface waters (stormwater ponds and ditches) were identified within the Proposed Project (see Section 2.3.5); however, project design efforts eliminated any significant impacts to these systems.

One minor permanent impact to the stormwater pond in Wetland A has been deemed necessary in order to allow for the installation of two culverts for stormwater management system design. Mitigation for this impact is not anticipated because of the minimal area of impact and the fact that the impacted surface water is a constructed stormwater pond (Minick, Allyson. 2011). ~~The construction of the Proposed Project will not adversely impact any wetlands or other surface waters.~~ In addition, ~~avoidance of sminor, temporary, secondary impacts to these wetlands and other surface waters will be managed by buffering these areas with a 25-ft occur within the minimum 15-ft upland buffer zones of these wetlands and other surface waters during active construction. Secondary impacts to the upland buffer zones will be allowed to revegetate and, subsequently, will not be mowed or regularly maintained. Silt fence will be erected along the wetland edge to prevent impacts to wetland areas. As discussed with FDEP Southwest District office personnel on August 29, 2012, no mitigation for these temporary secondary impacts is anticipated. The construction of the Proposed Project will not adversely impact any wetlands or other surface waters.~~



Project is anticipated to be minimal, if any. If hazardous wastes are generated, the Proposed Project is anticipated to maintain a Conditionally Exempt Small Quantity Generator status. Any hazardous wastes that are generated will continue to be collected and stored onsite in a designated location and disposed of by a licensed hazardous waste contractor. Hazardous waste will be managed according to all applicable federal, state, and local rules and regulations.

5.7 On-site Drainage System

The proposed surface water management system for the fuel handling and storage area is designed to meet the requirements of all applicable local, State, and federal requirements, which include the rules of Hernando County, FDEP, and USEPA. The design rainfall event, based on a 25-year, 24-hour storm, is approximately ~~9.5-2~~ inches. The basic design requires that the required water quality treatment volume of runoff from the fuel Handling and storage area will be treated by onsite retention. The remainder of the Proposed Project area will continue to drain into the existing surface water management system.

A detailed description of the pre-construction and post-construction site drainage features and associated modeling of design stormwater runoff is presented in Appendix 8.4. The pre-construction peak runoff is estimated to be 15.89 cubic feet per second (cfs) and 11.07 cfs for Outfall E and Outfall F, respectively, for the 25-year 24-hour storm.

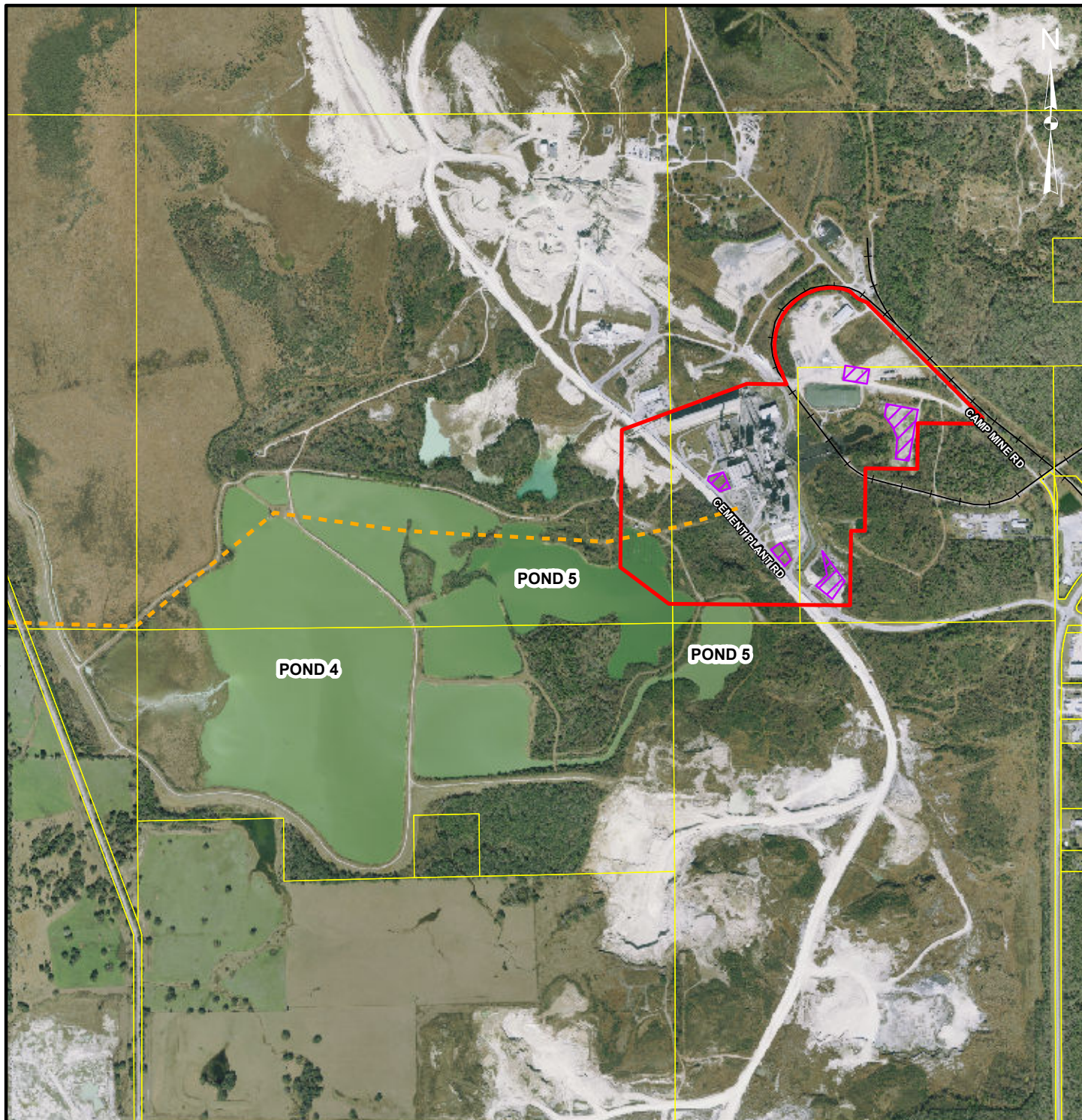
Operational runoff from the fuel handling and storage area will be handled by a new stormwater management system. The stormwater management system will provide the required water quality treatment through an existing wet detention pond (Pond 2) and a new dry detention pond (Pond 1) as shown on Sheet 6 of the engineering drawings (included in Appendix 8.4). Runoff in excess of the water quality treatment volume will be discharged to the adjacent wetlands and uplands. The peak discharge flow resulting from the design storm is estimated to be ~~40.026 cfs and 12.726 cfs~~ ~~14.13 cfs and 14.78 cfs~~ for Outfall E and Outfall F, respectively. The proposed drainage basins will maintain the historical flow patterns of surface water runoff from the site. The Proposed Project is not anticipated to have an adverse impact to the existing surface water management system or receiving waters.

5.8 Associated Linear Facilities

The existing transmission lines that are supporting the existing electrical generating unit will remain at the current voltage and location. There are no proposed changes to the existing transmission system.

There is currently is an active rail spur located within the Proposed Certified Site. Coal is shipped to the power plant and cement operation via rail. The Proposed Project will no longer require the use of coal; therefore, there will be a reduction in rail traffic. The Cement Plant operation will still require coal, but will require less coal than what is currently being brought in.

FIGURES



LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- APPROXIMATE PROPOSED CONSTRUCTION LAYDOWN AREAS
- PARCEL BOUNDARY
- EXISTING FPD TRANSMISSION LINE
- COUNTY ROAD
- RAILROAD

REFERENCES

1. APPROXIMATE PROJECT AREAS AND PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. EXISTING FPD TRANSMISSION LINE: GOLDER ASSOCIATES INC., 2011
3. PARCEL BOUNDARIES: HERNANDO COUNTY PROPERTY APPRAISER, 2011
4. ROADS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2011
5. RAILROADS: GOLDER ASSOCIATES INC., 2011
6. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT



1	10/05/12	JDG	PROPOSED CERT. SITE BNDY UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

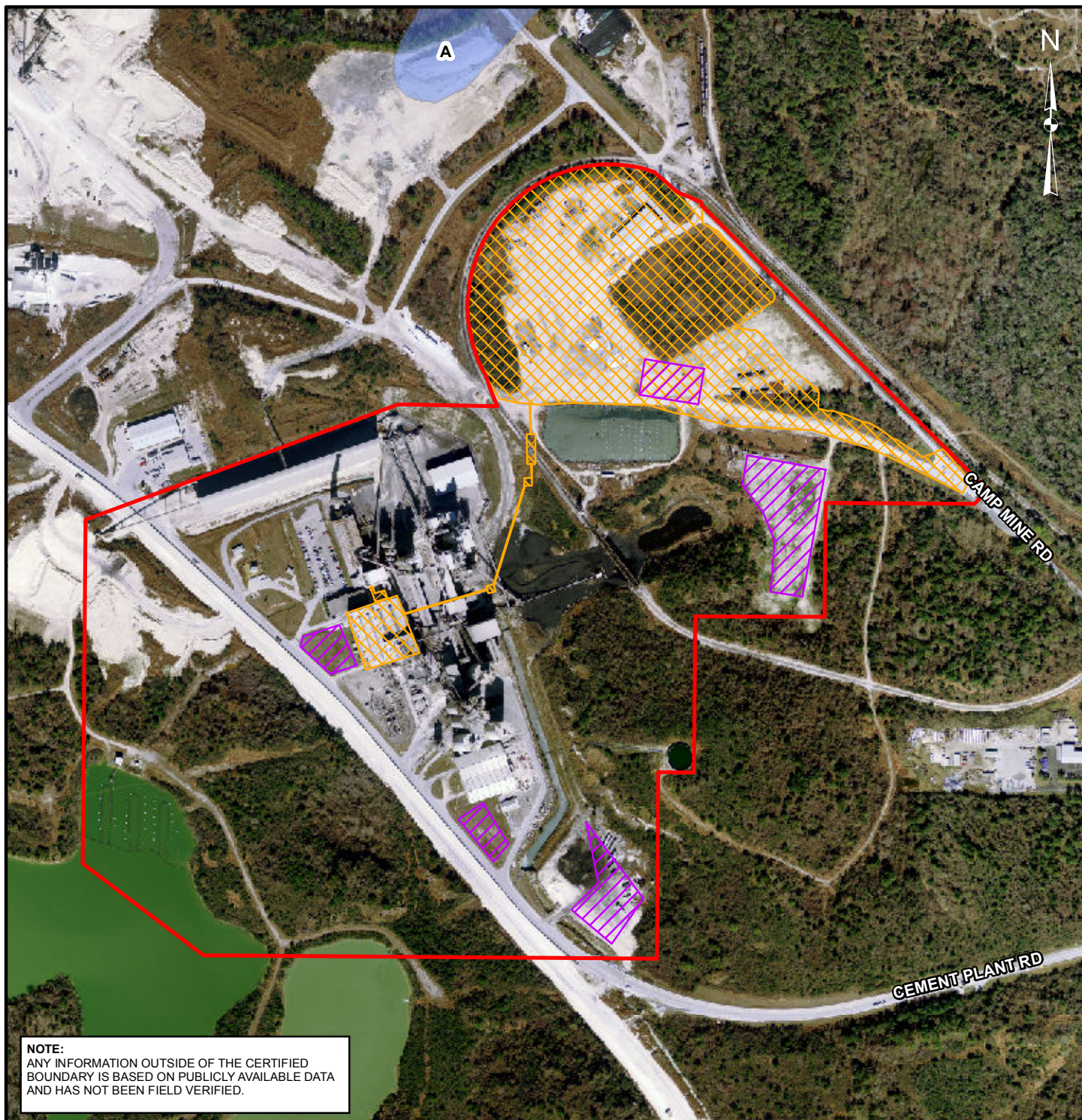
FPD BIOMASS CONVERSION PROJECT

TITLE

PROPOSED CERTIFIED SITE BOUNDARY AND
PROPOSED CONSTRUCTION LAYDOWN AREAS



PROJECT No. 113-89534			FILE No. 113-89534A015		
DESIGN	JDG	06/13/2011	SCALE: AS SHOWN	REV.	1
GIS	JDG	06/07/2012	FIGURE 1.2.0-3		
CHECK	KJK	06/07/2012			
REVIEW	SHO	06/07/2012			



NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

LEGEND

 PROPOSED CERTIFIED SITE BOUNDARY

 APPROXIMATE PROPOSED
CONSTRUCTION LAYDOWN AREAS

 APPROXIMATE PROPOSED
NEW INFRASTRUCTURE

 A - AN AREA INUNDATED BY 100-YEAR FLOODING,
FOR WHICH NO BASE FLOOD ELEVATIONS HAVE
BEEN DETERMINED.

NOTE

ALL UNSHADED AREAS ARE ZONE X AND DO NOT FALL WITHIN A FLOOD ZONE.

REFERENCES

1. APPROXIMATE PROPOSED NEW INFRASTRUCTURE, CONSTRUCTION LAYDOWN AREAS AND PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. FLOOD ZONES: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), 1996
3. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010

600 0 600
Feet

2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY AND INFRASTR. AREA UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

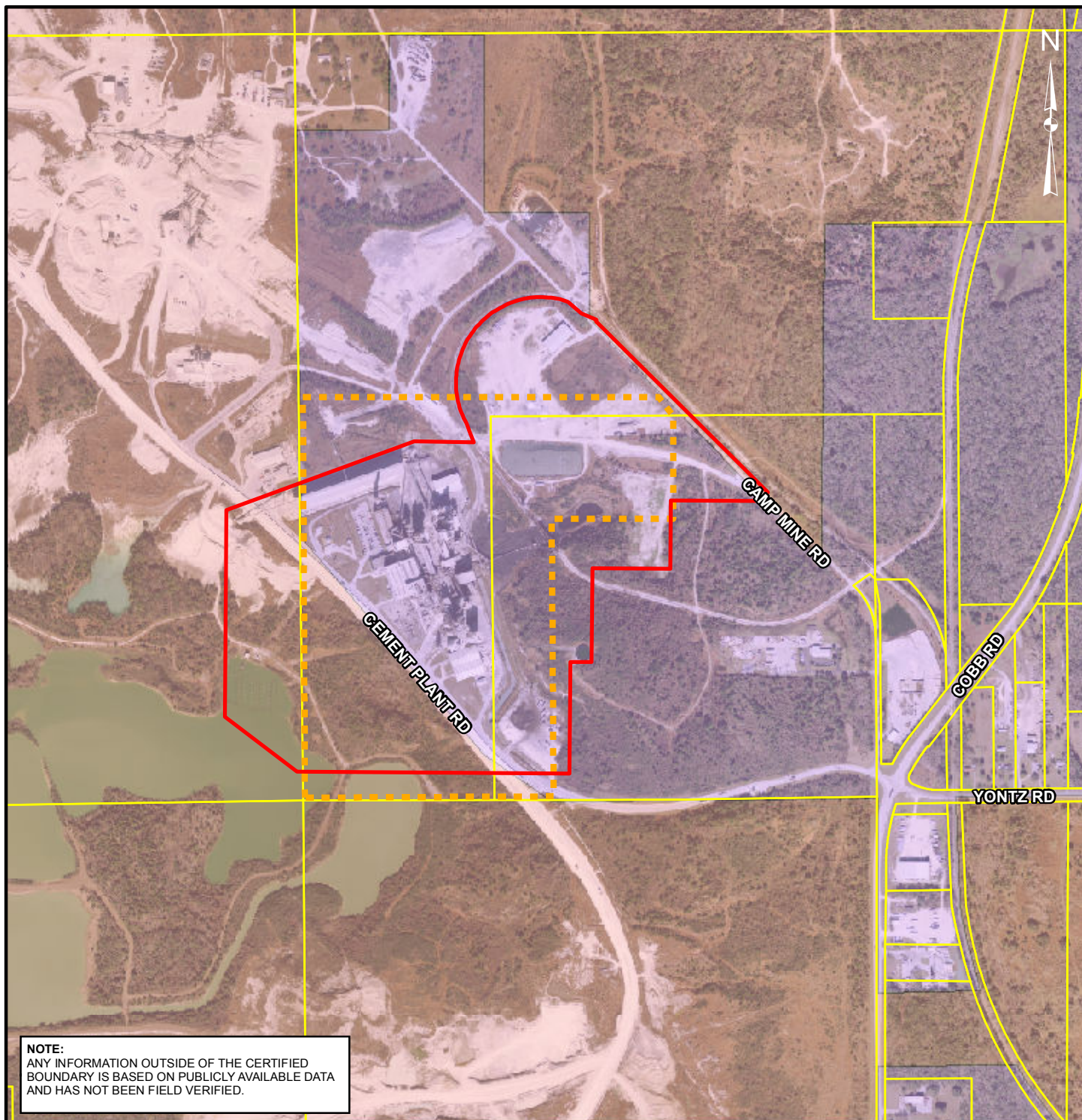
FPD BIOMASS CONVERSION PROJECT

TITLE

FEMA FLOOD ZONES



PROJECT No. 113-89534			FILE No. 113-89534A011		
DESIGN	JG	06/13/2011	SCALE: AS SHOWN	REV.	1
GIS	JG	06/07/2012	FIGURE 2.1.2-1		
CHECK	KLH	06/07/2012			
REVIEW	SHO	06/07/2012			



NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

LEGEND

- APPROXIMATE EXISTING
- CERTIFIED SITE BOUNDARY
- PROPOSED CERTIFIED SITE BOUNDARY
- PARCEL BOUNDARY
- INDUSTRIAL
- MINING

REFERENCES

1. PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. APPROXIMATE EXISTING CERTIFIED SITE BOUNDARY: FLORIDA CRUSHED STONE, 1982 (PA82-17)
3. PARCEL BOUNDARIES AND FUTURE LAND USE: HERNANDO COUNTY PROPERTY APPRAISER, 2011
4. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010

1,000 0 1,000
Feet

2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

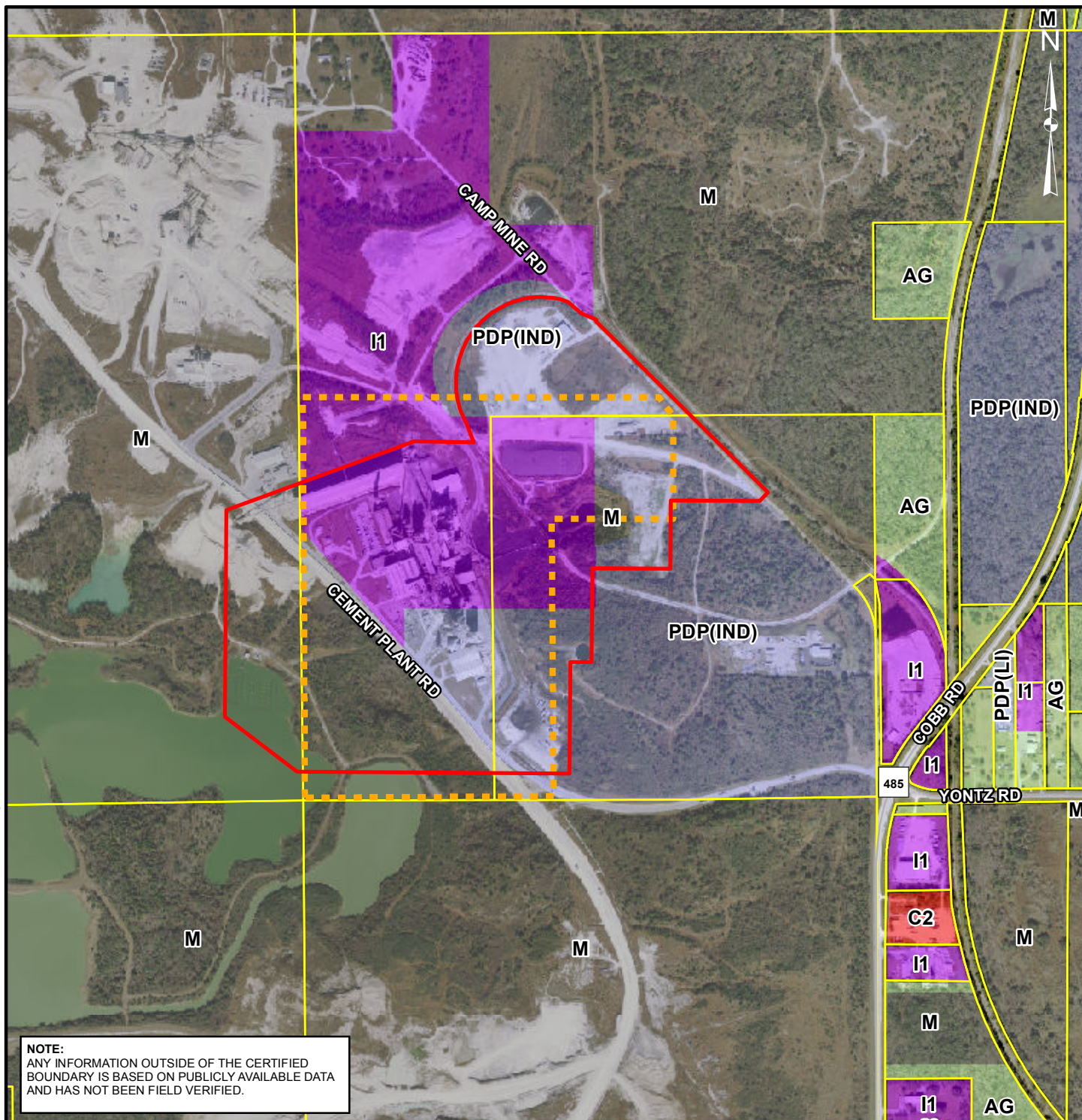
FPD BIOMASS CONVERSION PROJECT

TITLE

FUTURE LAND USE



PROJECT No. 113-89534			FILE No. 113-89534A023		
DESIGN	JDG	06/13/2011	SCALE: AS SHOWN	REV.	1
GIS	JDG	06/07/2012	FIGURE 2.2.1-1		
CHECK	KLH	06/07/2012			
REVIEW	SHO	06/07/2012			



NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

LEGEND

 	PROPOSED CERTIFIED SITE BOUNDARY	ZONING
 	APPROXIMATE EXISTING CERTIFIED SITE BOUNDARY	AG - AGRICULTURAL DISTRICT
 	PARCEL BOUNDARY	C2 - HIGHWAY COMMERCIAL DISTRICT
	COUNTY ROAD	I1 - INDUSTRIAL DISTRICT
		M - MINING DISTRICT
		PDP(IND) - PLANNED DEVELOPMENT INDUSTRIAL
		PDP(LI) - PLANNED DEVELOPMENT LIGHT INDUSTRIAL

REFERENCES

1. PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. APPROXIMATE EXISTING CERTIFIED SITE BOUNDARY: FLORIDA CRUSHED STONE, 1982 (PA82-17)
3. PARCEL BOUNDARIES AND ZONING: HERNANDO COUNTY PROPERTY APPRAISER, 2011
4. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010



2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

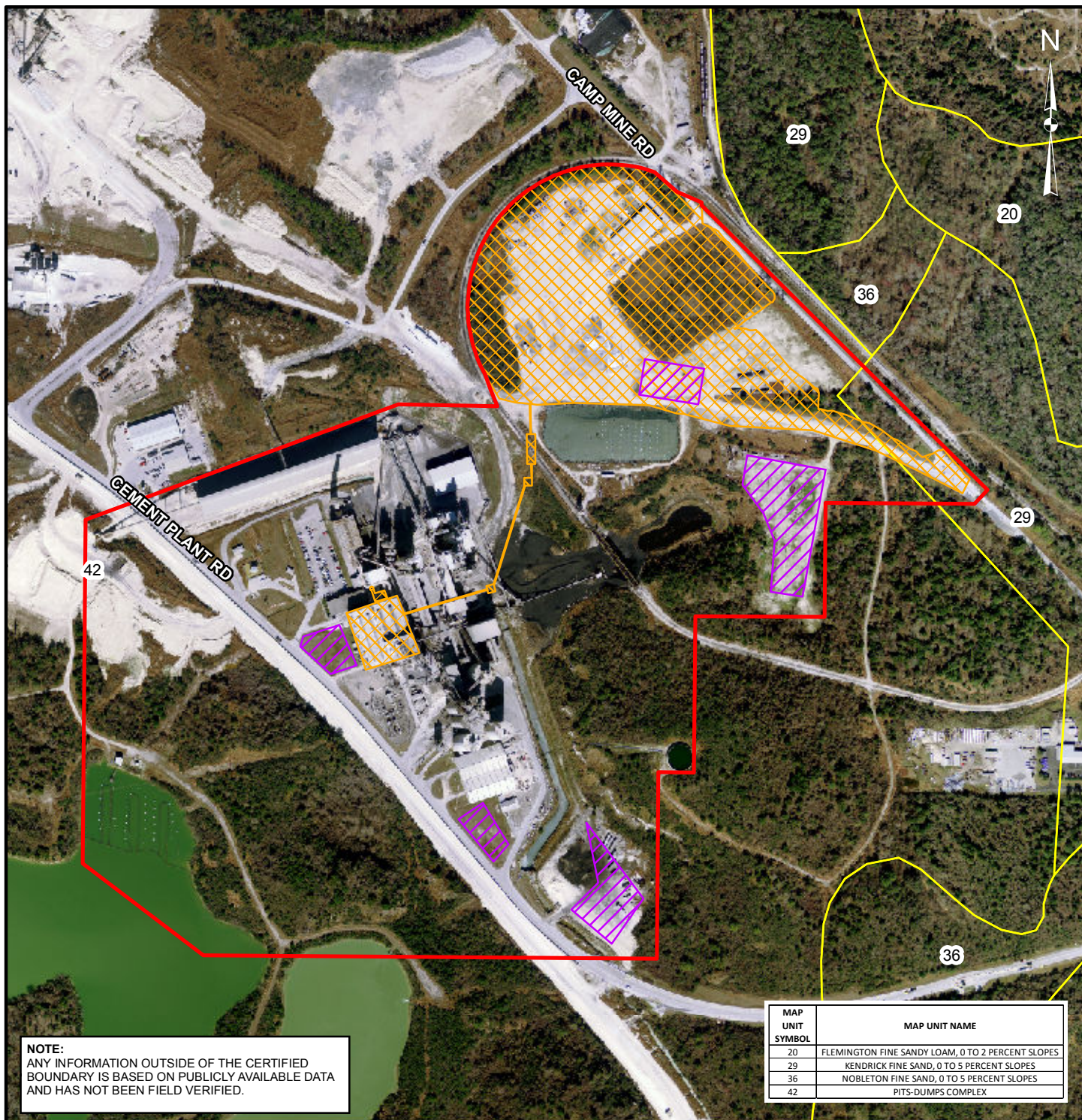
PROJECT	FPD BIOMASS CONVERSION PROJECT					
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TITLE	ZONING MAP					
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PROJECT No. 113-89534	FILE No. 113-89534A001
DESIGN JDG 05/12/2011	SCALE: AS SHOWN REV. 1
GIS JDG 06/07/2012	
CHECK KLH 06/07/2012	
REVIEW SHO 06/07/2012	

FIGURE 2.2.1-2



LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- APPROXIMATE PROPOSED CONSTRUCTION LAYDOWN AREAS
- APPROXIMATE PROPOSED NEW INFRASTRUCTURE
- SOIL BOUNDARY

REFERENCES

1. APPROXIMATE PROPOSED NEW INFRASTRUCTURE, CONSTRUCTION LAYDOWN AREAS AND PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. SOILS: U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2010
3. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010

600 0 600
Feet

2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY AND INFRASTR. AREA UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

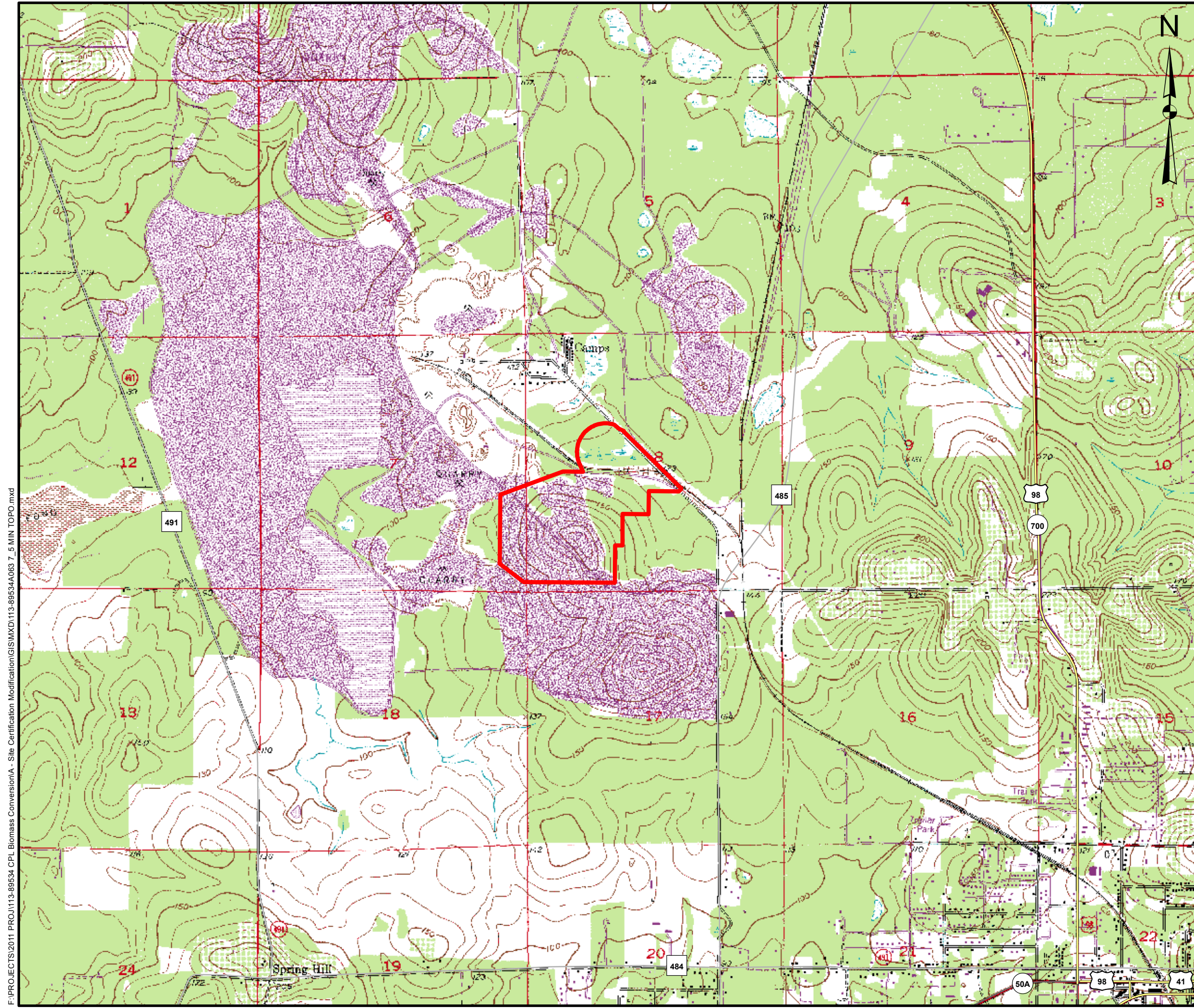
PROJECT	FPD BIOMASS CONVERSION PROJECT
---------	--------------------------------

TITLE	SOILS
-------	-------



PROJECT No. 113-89534	FILE No. 113-89534A010
DESIGN JDG 06/13/2011	SCALE: AS SHOWN REV. 1
GIS JDG 06/07/2012	
CHECK HTA 06/07/2012	
REVIEW SHO 06/07/2012	

FIGURE 2.3.1-1



LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- US ROAD
- STATE ROAD
- COUNTY ROAD

NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

REFERENCES

1. PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. ROADS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2011
3. TOPOGRAPHIC BASE MAP: USGS BROOKSVILLE, FL 7.5 - MINUTE TOPOGRAPHIC MAP, 1988



2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

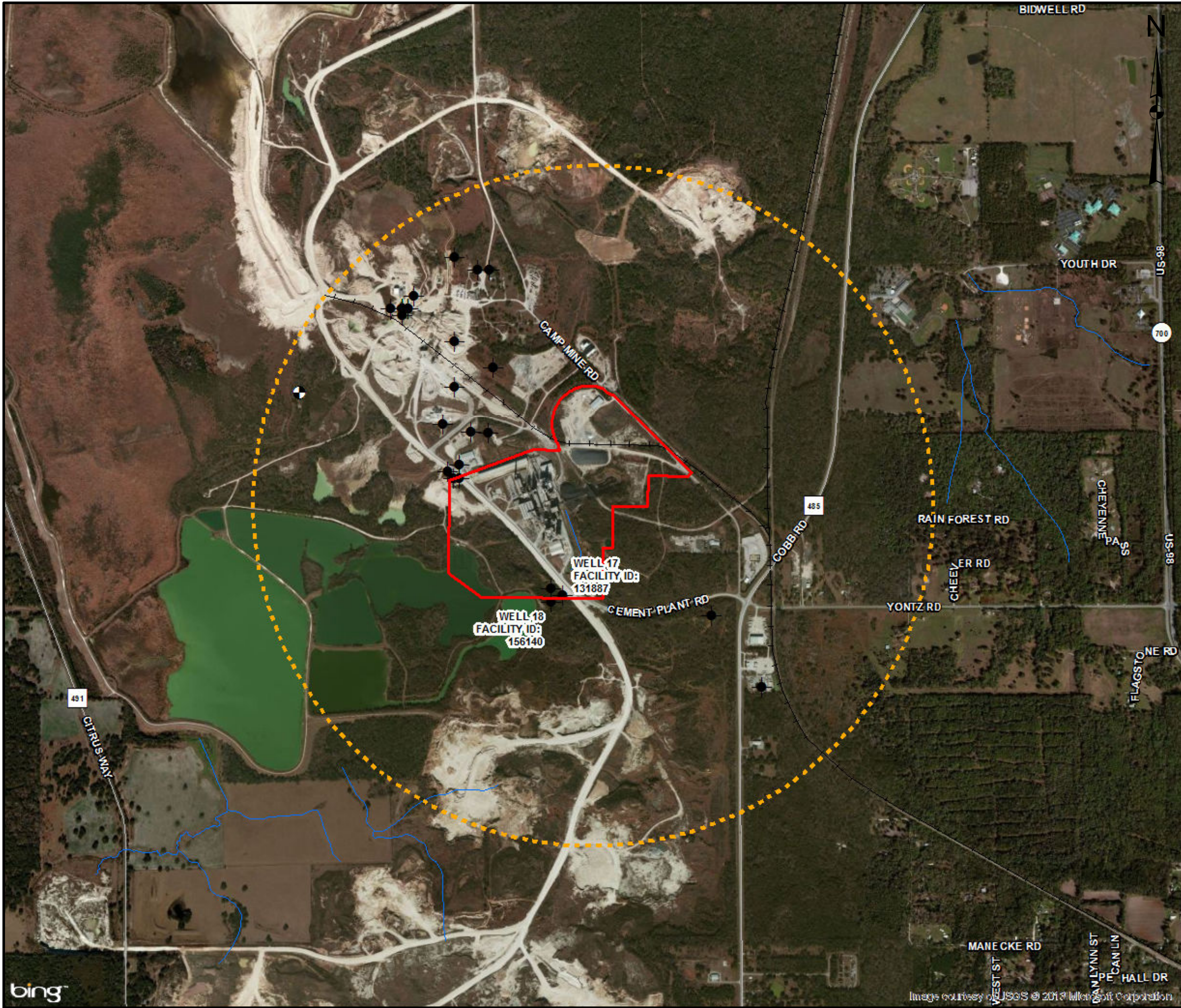
PROJECT
FPD BIOMASS CONVERSION PROJECT

TITLE
7.5 - MINUTE TOPOGRAPHIC MAP



PROJECT No. 113-89534			FILE No. 113-89534A063	
DESIGN	JDG	07/08/2011	SCALE: AS SHOWN	REV. 1
GIS	JDG	06/07/2012	FIGURE 2.3.1-6	
CHECK	MLM	06/07/2012		
REVIEW	SHO	06/07/2012		

F:\PROJECTS\2011 PROJ\113-89534 CPL Biomass Conversion\A - Site Certification Modification\GIS\MXD\113-89534A027 WUPWP WITHIN 1 Mile.mxd



LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- 1 - MILE RADIUS
- STATE ROAD
- COUNTY ROAD
- RAILROAD
- RIVER/STREAM/DITCH/CANAL

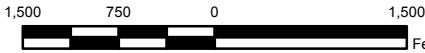
WITHDRAWAL POINTS

- MONITORING WELL
- WITHDRAWAL OF GROUNDWATER

NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

REFERENCES

- PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
- 1 - MILE RADIUS: GOLDER ASSOCIATES INC., 2011
- WITHDRAWAL POINTS: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, 2011
- RIVER/STREAM/DITCH/CANAL: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2006
- ROADS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2011
- RAILROADS: FEDERAL RAILROAD ADMINISTRATION (FRA), 2010
- AERIAL: ARCGIS ONLINE-BING MAPS AERIAL; MICROSOFT CORPORATION AND ITS DATA SUPPLIERS, 2010



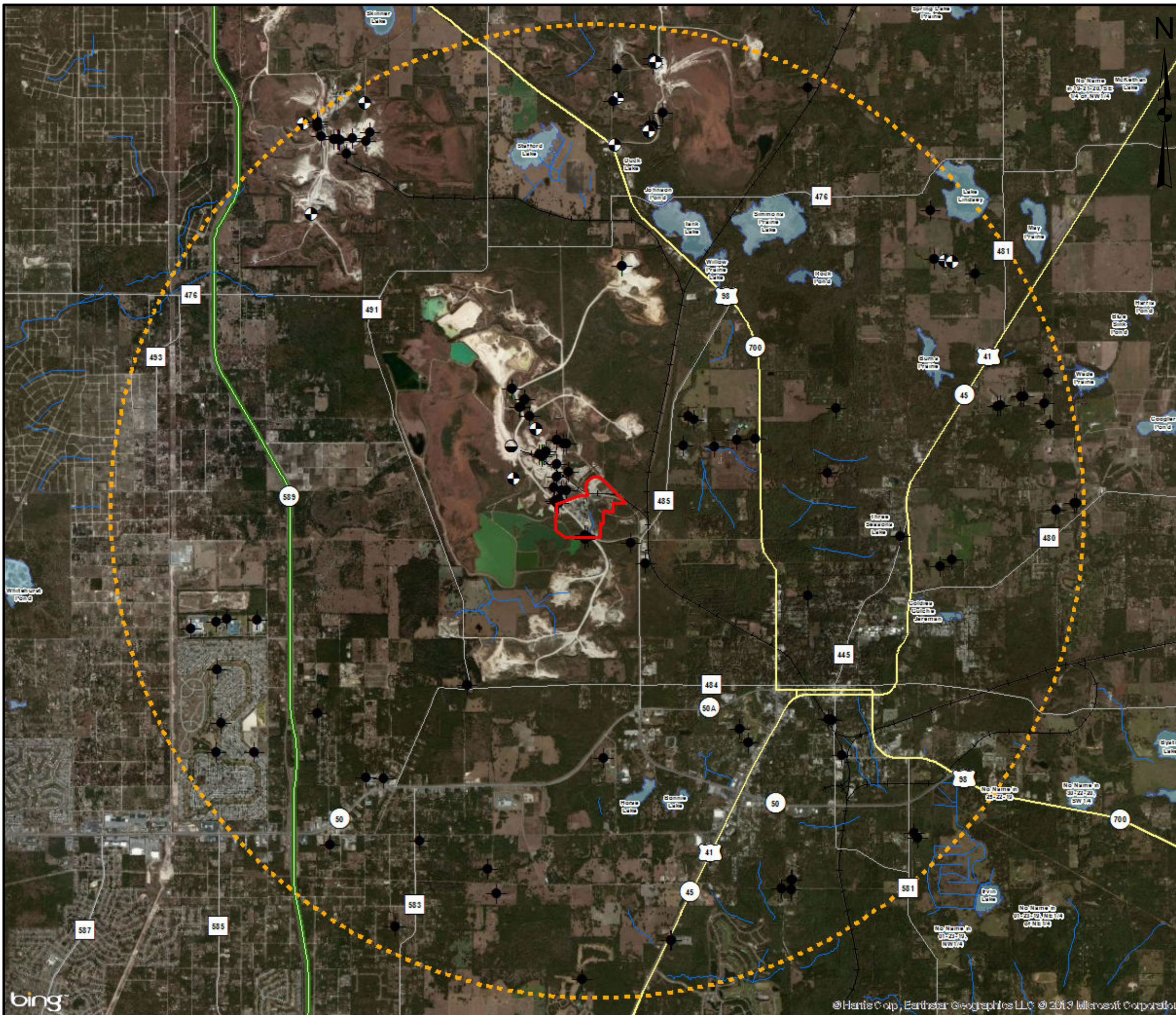
2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT
FPD BIOMASS CONVERSION PROJECT

TITLE
WATER USE PERMIT WITHDRAWAL POINTS
WITHIN A 1 - MILE RADIUS

PROJECT No. 113-89534			FILE No. 113-89534A027		
DESIGN	JDG	07/08/2011	SCALE: AS SHOWN	REV.	1
GIS	JDG	06/07/2012	FIGURE 2.3.3-1		
CHECK	MLM	06/07/2012			
REVIEW	SHO	06/07/2012			

F:\PROJECTS\2011 PROJ\113-89534 CPL Biomass Conversion\A - Site Certification Modification\GIS\MXD\113-89534A024 WUPWP WITHIN 5 Miles.mxd



LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- 5 - MILE RADIUS
- LAKE
- TOLL ROAD
- US ROAD
- STATE ROAD
- COUNTY ROAD
- RAILROAD
- RIVER/STREAM/DITCH/CANAL

WITHDRAWAL POINTS

- ALTERNATIVE USE
- MONITORING WELL
- WITHDRAWAL OF GROUNDWATER

NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

REFERENCES

1. PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. 5 - MILE RADIUS: GOLDER ASSOCIATES INC., 2011
3. WITHDRAWAL POINTS: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, 2011
4. RIVER/STREAM/DITCH/CANAL: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 2006
5. LAKES: HERNANDO COUNTY: 2004
6. ROADS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2011
7. RAILROADS: FEDERAL RAILROAD ADMINISTRATION (FRA), 2010
8. AERIAL: ARCGIS ONLINE-BING MAPS AERIAL; MICROSOFT CORPORATION AND ITS DATA SUPPLIERS, 2010



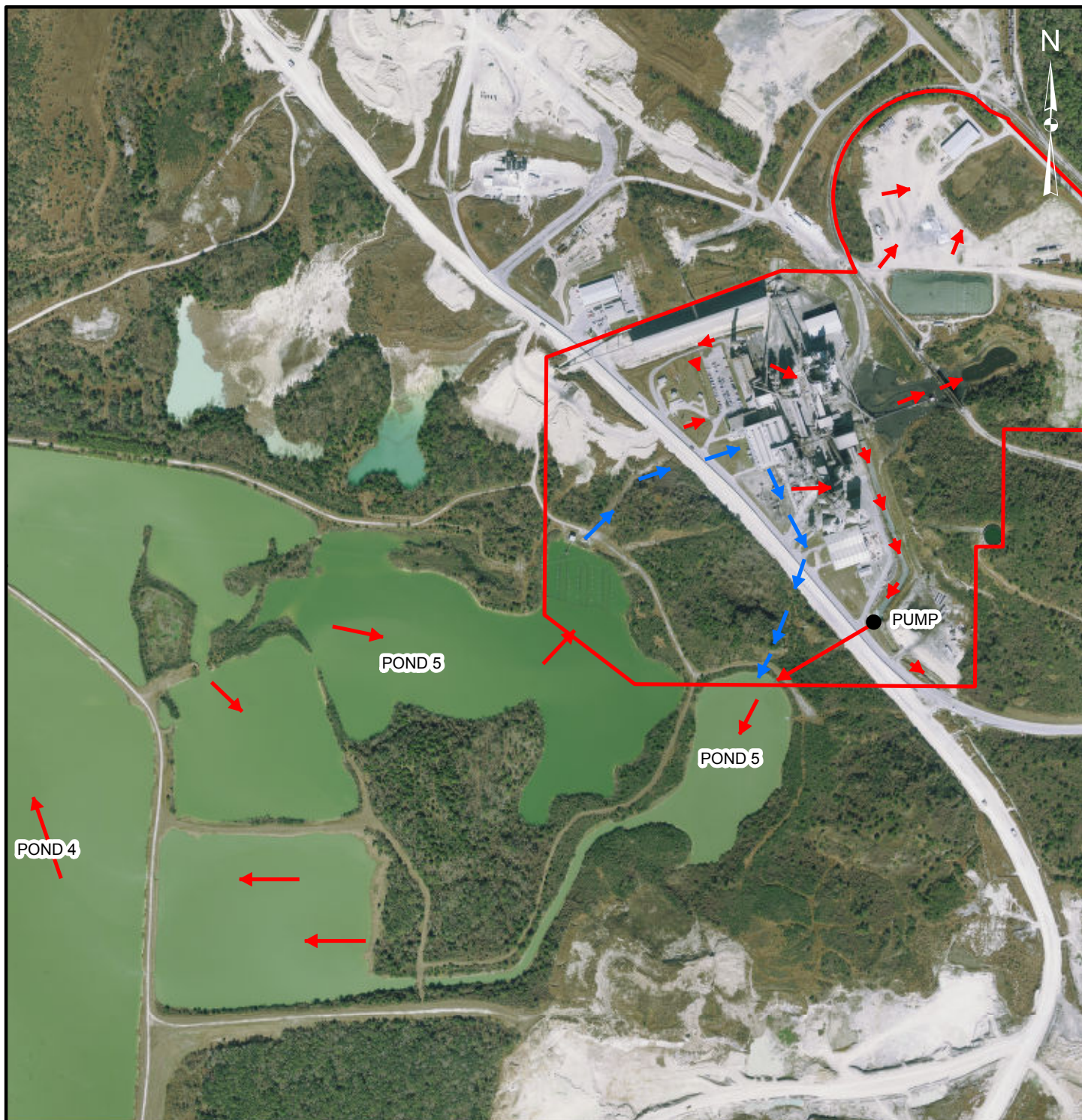
2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT
FPD BIOMASS CONVERSION PROJECT

TITLE
WATER USE PERMIT WITHDRAWAL POINTS
WITHIN A 5 - MILE RADIUS

PROJECT No. 113-89534			FILE No. 113-89534A024		
DESIGN	JDG	07/08/2011	SCALE:	AS SHOWN	REV. 1
GIS	JDG	06/07/2012	FIGURE 2.3.3-2		
CHECK	MLM	06/07/2012			
REVIEW	SHO	06/07/2012			





LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- ➡ APPROXIMATE COOLING WATER FLOW PATTERN
- ➡ APPROXIMATE STORMWATER FLOW
- PUMP

REFERENCES

1. APPROXIMATE STORMWATER FLOW AND APPROXIMATE COOLING WATER FLOW: FLORIDA POWER DEVELOPMENT, 2012
2. PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2011
3. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010

800 0 800
Feet

1	10/05/12	JDG	PROPOSED CERT. SITE BNDY UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

FPD BIOMASS CONVERSION PROJECT

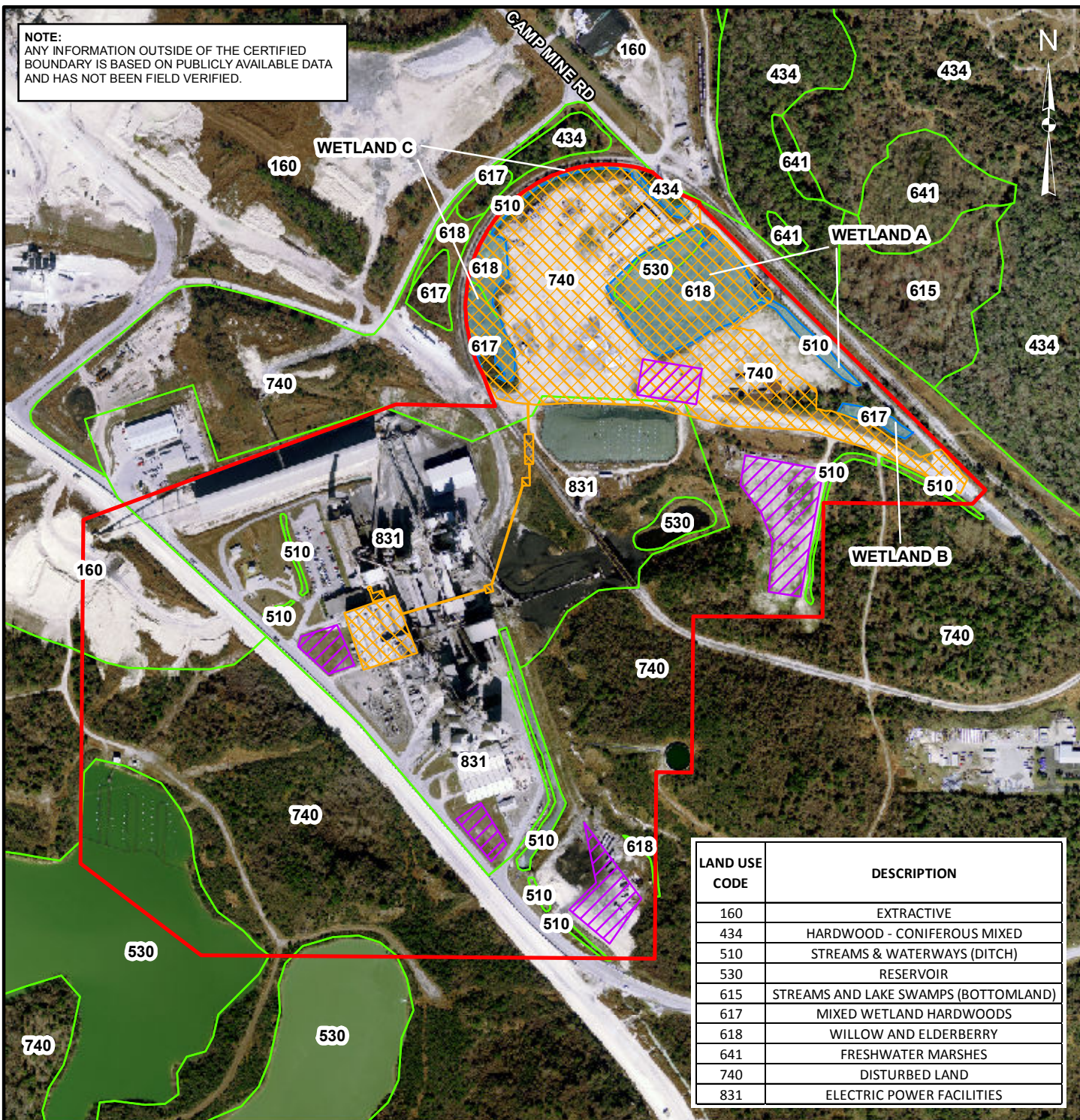
TITLE

EXISTING SITE COOLING WATER AND
STORMWATER FLOW PATTERNS



PROJECT No. 113-89534			FILE No. 113-89534A026		
DESIGN	JDG	07/11/2011	SCALE: AS SHOWN	REV.	1
GIS	JDG	06/07/2012	FIGURE 2.3.4-1		
CHECK	MHS	06/07/2012			
REVIEW	SHO	06/07/2012			

NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.



LAND USE CODE	DESCRIPTION
160	EXTRACTIVE
434	HARDWOOD - CONIFEROUS MIXED
510	STREAMS & WATERWAYS (DITCH)
530	RESERVOIR
615	STREAMS AND LAKE SWAMPS (BOTTOMLAND)
617	MIXED WETLAND HARDWOODS
618	WILLOW AND ELDERBERRY
641	FRESHWATER MARSHES
740	DISTURBED LAND
831	ELECTRIC POWER FACILITIES

LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- APPROXIMATE PROPOSED CONSTRUCTION LAYDOWN AREAS
- APPROXIMATE PROPOSED NEW INFRASTRUCTURE
- SURVEYED WETLAND/SURFACE WATER BOUNDARY
- LAND USE/LAND COVER BOUNDARY

REFERENCES

1. APPROXIMATE PROPOSED NEW INFRASTRUCTURE, CONSTRUCTION LAYDOWN AREAS AND PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. LAND USE/LAND COVER: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, 2009 AND GOLDER EDITS, 2011
3. SURVEYED WETLAND/SURFACE WATER BOUNDARIES: U.S. SURVEYOR AND GOLDER ASSOCIATES INC., 2011
4. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010



2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY AND INFRASTR. AREA UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

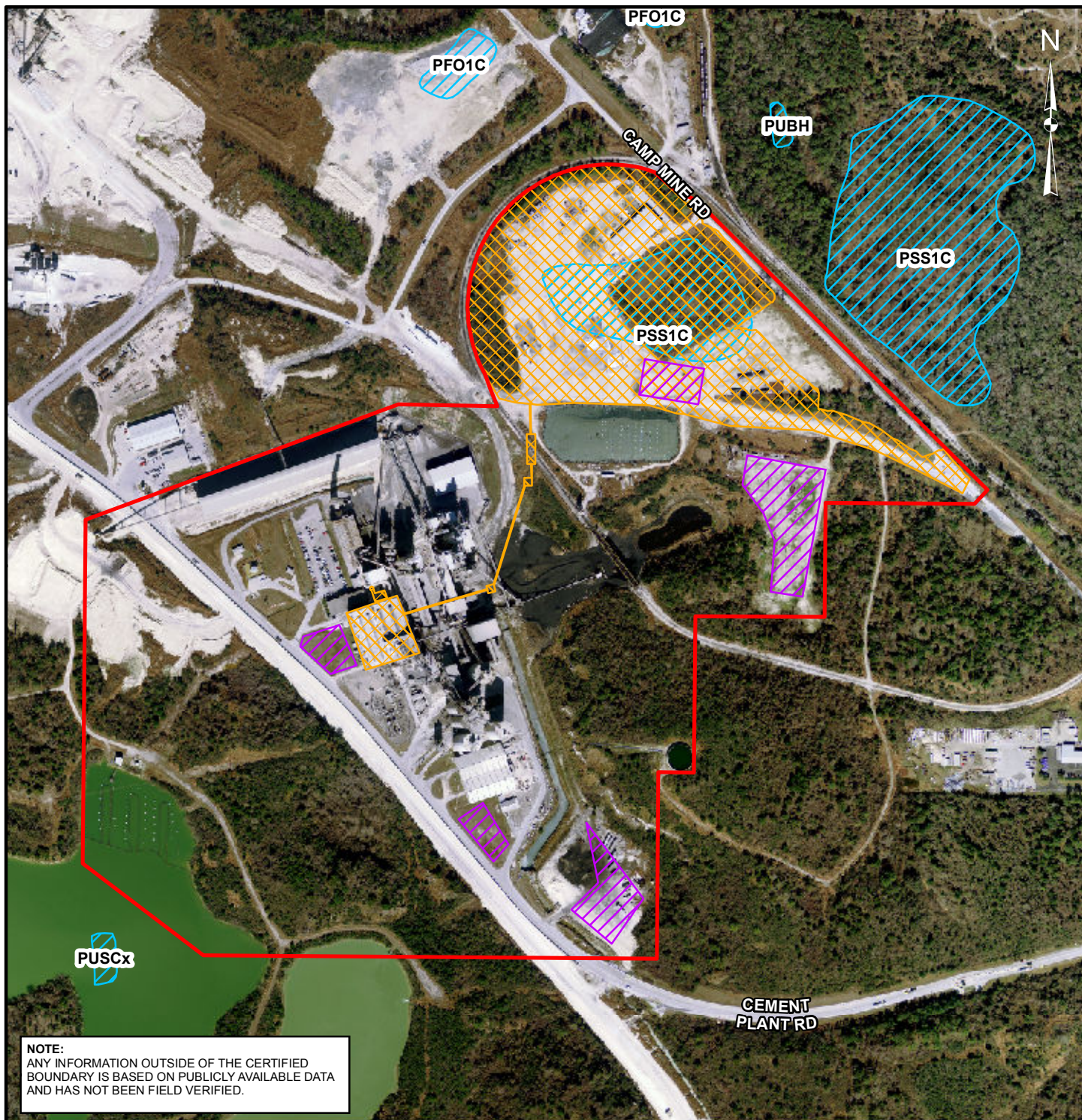
FPD BIOMASS CONVERSION PROJECT

TITLE

LAND USE/LAND COVER



PROJECT No. 113-89534			FILE No. 113-89534A008		
DESIGN	JDG	06/13/2011	SCALE: AS SHOWN	REV.	1
GIS	JDG	06/07/2012	FIGURE 2.3.5-1		
CHECK	HTA	06/07/2012			
REVIEW	HTA	06/07/2012			



LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- APPROXIMATE PROPOSED NEW INFRASTRUCTURE
- APPROXIMATE PROPOSED CONSTRUCTION LAYDOWN AREAS
- NATIONAL WETLANDS INVENTORY WETLAND

PFO1C = PALUSTRINE; FORESTED; BROAD-LEAVED DECIDUOUS; SEASONALLY FLOODED
PSS1C = PALUSTRINE; SCRUB-SHRUB; BROAD-LEAVED DECIDUOUS; SEASONALLY FLOODED
PUBH = PALUSTRINE; UNCONSOLIDATED BOTTOM; PERMANENTLY FLOODED
PEM1F = PALUSTRINE; EMERGENT; PERSISTENT; SEMIPERMANENTLY FLOODED
PUSC = PALUSTRINE; UNCONSOLIDATED SHORE; SEASONALLY FLOODED; EXCAVATED

REFERENCES

1. APPROXIMATE PROPOSED NEW INFRASTRUCTURE, CONSTRUCTION LAYDOWN AREAS AND PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. NATIONAL WETLANDS INVENTORY: U.S. FISH AND WILDLIFE SERVICE, DIVISION OF HABITAT AND RESOURCE CONSERVATION, 2008
3. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010

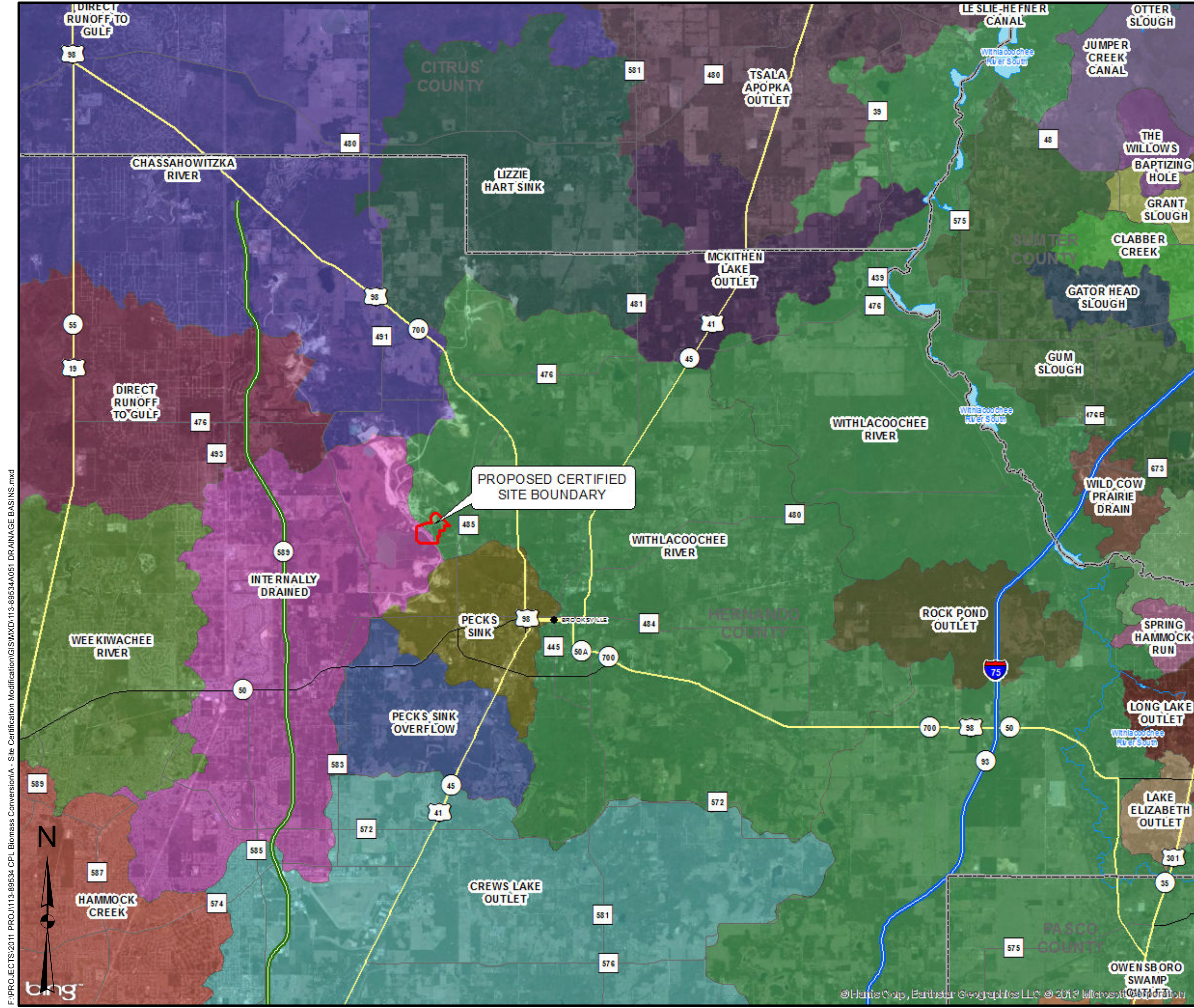


2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY AND INFRASTR. AREA UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT	FPD BIOMASS CONVERSION PROJECT					
TITLE	NATIONAL WETLANDS INVENTORY					



PROJECT No. 113-89534			FILE No. 113-89534A007		
DESIGN	JDG	06/13/2011	SCALE: AS SHOWN	REV.	1
GIS	JDG	06/07/2012	FIGURE 2.3.5-2		
CHECK	HTA	06/07/2012			
REVIEW	SHO	06/07/2012			



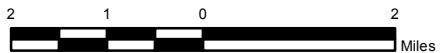
LEGEND

- CITY
- INTERSTATE
- TOLL ROAD
- US ROAD
- STATE ROAD
- COUNTY ROAD
- PROPOSED CERTIFIED SITE BOUNDARY
- COUNTY BOUNDARY
- MAJOR RIVER
- DRAINAGE BASINS
 - BAPTIZING HOLE
 - CHASSAHOWITZKA RIVER
 - CLABBER CREEK
 - CREWS LAKE OUTLET
 - DIRECT RUNOFF TO GULF
 - GATOR HEAD SLOUGH
 - GRANT SLOUGH
 - GUM SLOUGH
 - HAMMOCK CREEK
 - INTERNALLY DRAINED
 - JUMPER CREEK CANAL
 - LAKE ELIZABETH OUTLET
 - LESLIE-HEFNER CANAL
 - LITTLE WITHLACOOCHEE
 - LIZZIE HART SINK
 - LONG LAKE OUTLET
 - MCKITHEN LAKE OUTLET
 - OTTER SLOUGH
 - OWENSBORO SWAMP OUTLET
 - PECKS SINK
 - PECKS SINK OVERFLOW
 - ROCK POND OUTLET
 - SPRING HAMMOCK RUN
 - THE WILLOWS
 - TSALA APOPKA OUTLET
 - WEEKIWACHEE RIVER
 - WILD COW PRAIRIE DRAIN
 - WITHLACOOCHEE RIVER

NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

REFERENCES

1. PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. DRAINAGE BASINS: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 1997
3. MAJOR RIVERS: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 1989
4. CITY/TOWN: FLORIDA GEOGRAPHIC DATA LIBRARY, 2004
5. ROADS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2011
6. COUNTY BOUNDARIES: FLORIDA GEOGRAPHIC DATA LIBRARY, 2008
7. AERIAL: ARCGIS ONLINE-BING MAPS AERIAL; MICROSOFT CORPORATION AND ITS DATA SUPPLIERS, 2010



2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

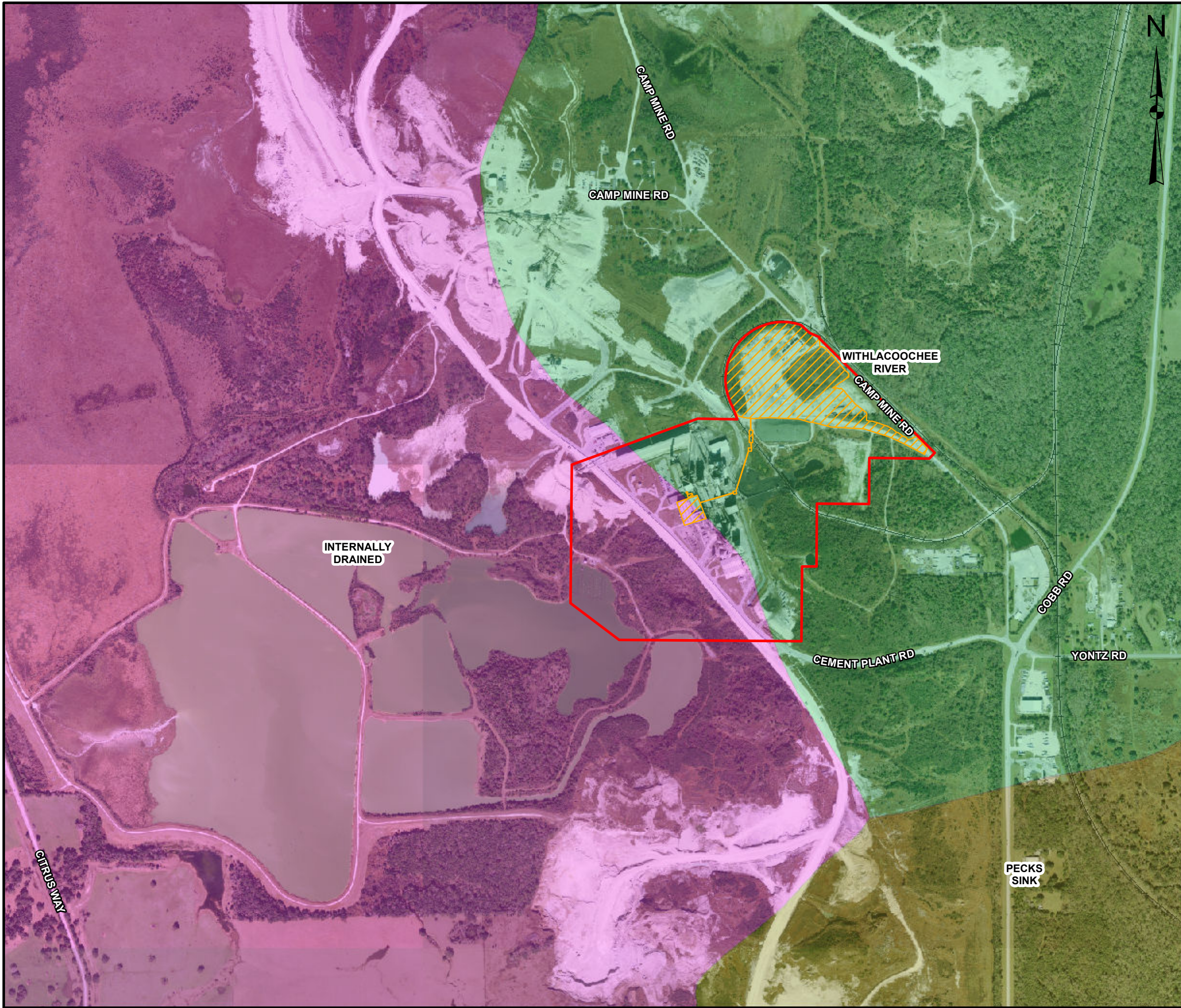
PROJECT
FPD BIOMASS CONVERSION PROJECT

TITLE
WATER MANAGEMENT DRAINAGE BASINS

PROJECT No. 113-89534			FILE No. 113-89534A051		
DESIGN	JDG	08/02/2011	SCALE:	AS SHOWN	REV. 1
GIS	JDG	06/07/2012	FIGURE 2.3.5-3		
CHECK	HTA	06/07/2012			
REVIEW	SHO	06/07/2012			



F:\PROJECTS\2011 PROJ\113-89534 CPL Biomass Conversion\A - Site Certification Modification\GIS\MXD\113-89534A052 DRAINAGE BASINS 1 MILE.mxd



LEGEND

- COUNTY ROAD
- RAILROAD
- APPROXIMATE PROPOSED NEW INFRASTRUCTURE
- PROPOSED CERTIFIED SITE BOUNDARY

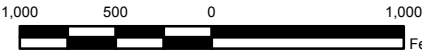
DRAINAGE BASINS

- INTERNALLY DRAINED
- PECKS SINK
- WITHLACOOCHEE RIVER

NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

REFERENCES

1. PROPOSED CERTIFIED SITE BOUNDARY AND APPROXIMATE PROPOSED NEW INFRASTRUCTURE: FLORIDA POWER DEVELOPMENT, 2012
2. DRAINAGE BASINS: FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, 1997
3. RAILROADS: GOLDER ASSOCIATES INC., 2011
4. ROADS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2011
5. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010

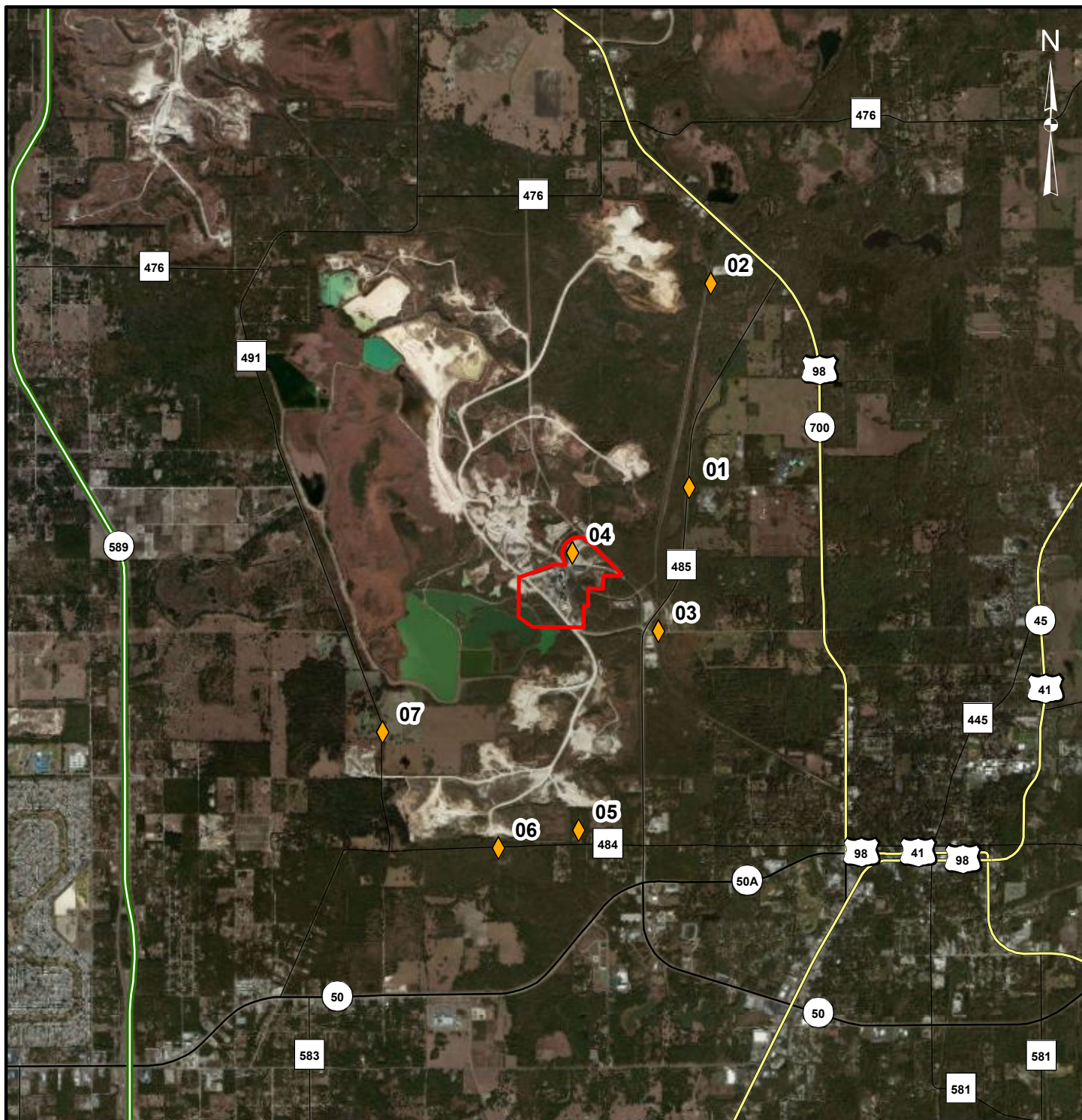


2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY AND INFRASTR. AREA UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT
FPD BIOMASS CONVERSION PROJECT

TITLE
WATER MANAGEMENT DRAINAGE BASINS
WITHIN A 1-MILE RADIUS

	PROJECT No. 113-89534			FILE No. 113-89534A052	
	DESIGN	JDG	08/02/2011	SCALE: AS SHOWN	REV. 1
	GIS	JDG	06/07/2012	FIGURE 2.3.5-4	
	CHECK	HTA	06/07/2012		
	REVIEW	SHO	06/07/2012		



LEGEND

-  NOISE POINT LOCATION
-  TOLL ROAD
-  US ROAD
-  STATE ROAD
-  COUNTY ROAD
-  PROPOSED CERTIFIED SITE BOUNDARY

REFERENCES

1. PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. NOISE POINT LOCATIONS: GOLDER ASSOCIATES INC., 2011
3. ROADS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2011
4. AERIAL: ARCGIS ONLINE-BING MAPS AERIAL; MICROSOFT CORPORATION AND ITS DATA SUPPLIERS, 2010



1	10/05/12	JDG	PROPOSED CERT. SITE BNDY UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT	FPD BIOMASS CONVERSION PROJECT
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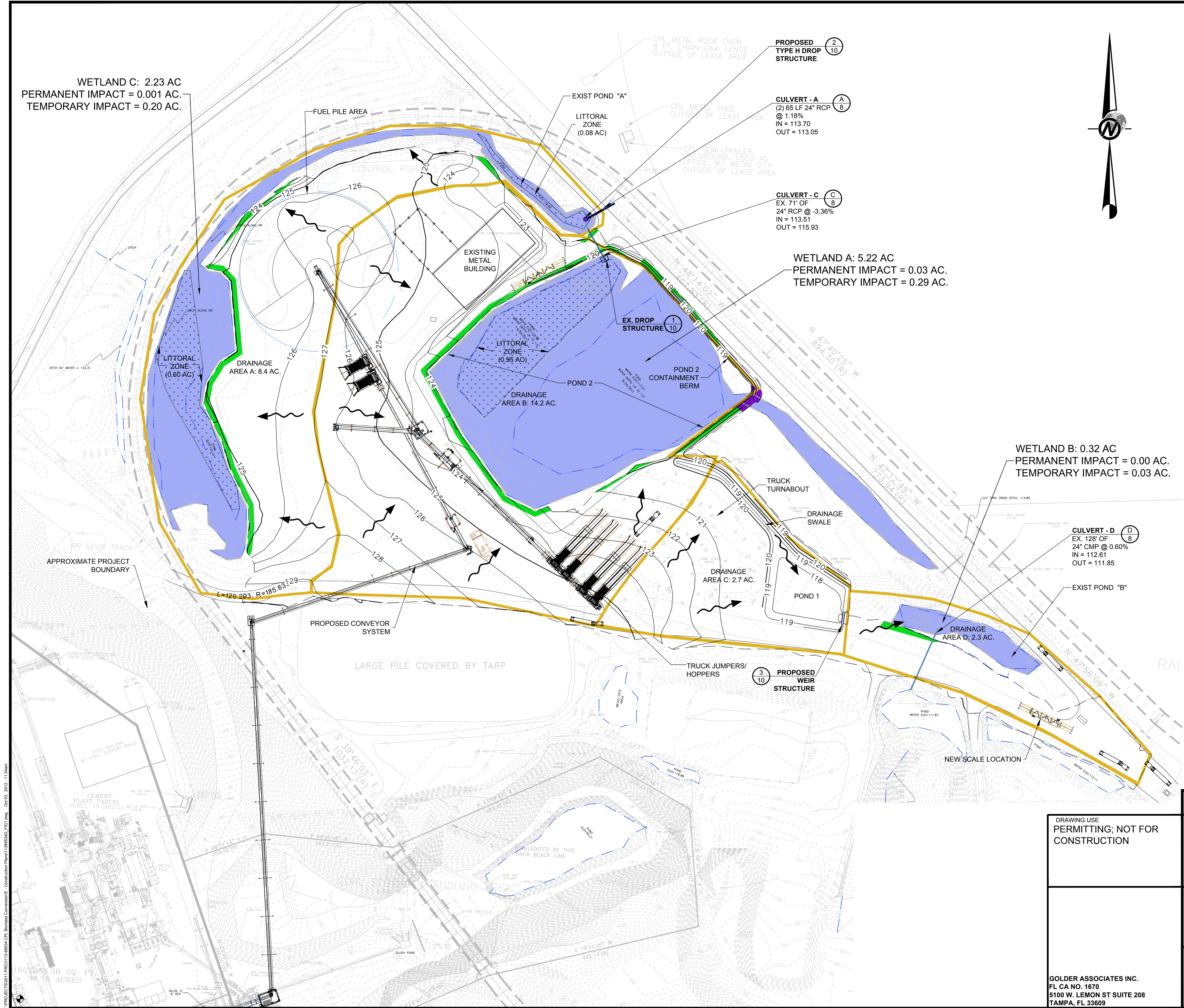
TITLE	NOISE POINT LOCATIONS
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PROJECT No. 113-89534			FILE No. 113-89534A054	
DESIGN	JDG	09/12/2011	SCALE: AS SHOWN	REV. 1
GIS	JDG	06/07/2012	FIGURE 2.3.7-1	
CHECK	GM	06/07/2012		
REVIEW	SHO	06/07/2012		

FIGURE 2.3.7-1

**ENVIRONMENTAL RESOURCE PERMIT
FIGURE 1
REVISED PROPOSED PROJECT IMPACTS**



LEGEND

EDGE OF EXISTING POND

STORMWATER FLOW DIRECTION

PROJECT BOUNDARY

DRAINAGE AREAS

TEMPORARY (SECONDARY) IMPACTS TO UPLAND BUFFER (0.52 ACRES)

PERMANENT WETLAND DISTURBANCE (0.03 ACRES)

EXISTING STORMWATER AREAS

CONSTRUCTION QUANTITIES:

EARTHWORKS SUMMARY TABLE		
CUT (CY)	FILL (CY)	NET VOLUME (CY)
2,169	4,715	2,546 (FILL)



- NOTES:
1. CONVEYOR LAYOUT AND ALIGNMENT IS APPROXIMATE. DETAILED DESIGN TO BE COMPLETED BY OTHERS

2. PROPOSED CONVEYOR TO BE COVERED. DESIGN CONSIDERATIONS WILL BE MADE TO PREVENT COMMINGLING OF STORMWATER AND LUBRICANTS FROM CONVEYOR.
- REFERENCES:
1. SURVEY PROVIDED & PERFORMED BY US SURVEYOR BETWEEN 08/01/11 AND 08/24/11.

2. THE HORIZONTAL DATUM UTILIZED FOR THIS PROJECT IS NAD 1983 (2007 ADJUSTMENT) FLORIDA WEST ZONE, U.S. SURVEY FEET.

3. THE VERTICAL DATUM UTILIZED FOR THIS PROJECT IS NAVD 1988, U.S. SURVEY FEET.

4. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.

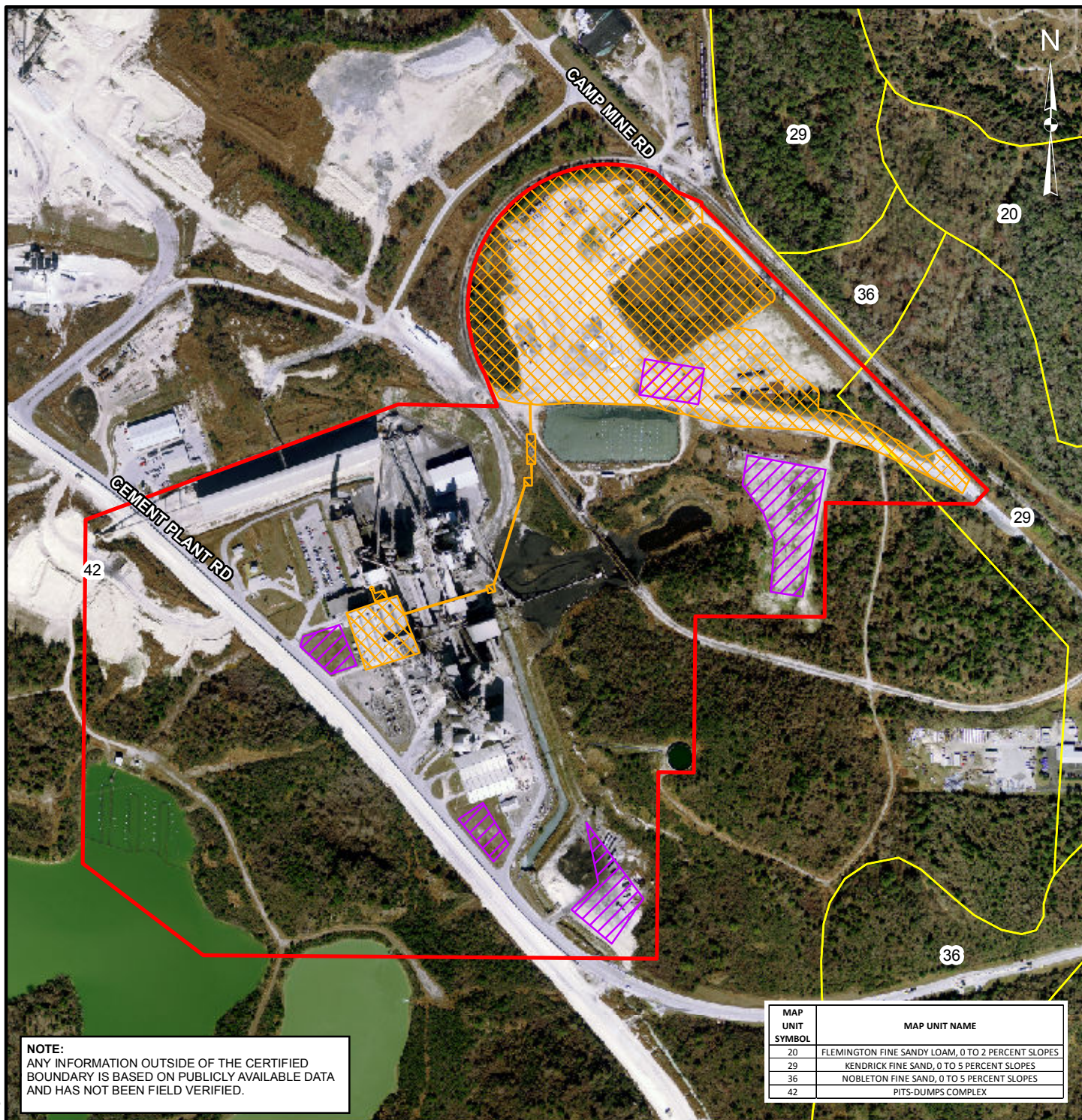
1	9/27/12		FDEP INFORMAL COMMENTS	BML	EKN	MHS
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
PROJECT			FLORIDA POWER DEVELOPMENT, LLC BIOMASS CONVERSION			
TITLE			PROPOSED PROJECT IMPACTS			
			PROJECT No. 113-89534		FILE No. NEW PROPOSED	
			DESIGN	MHS	08/03/12	SCALE As Shown
			CADD	JCB	08/03/12	REV. 1
			CHECK	MHS	----	FIG. 1
			REVIEW	KHE	----	

DRAWING USE
PERMITTING; NOT FOR
CONSTRUCTION

GOLDER ASSOCIATES INC.
FL CA NO. 1670
5100 W. LEMON ST SUITE 208
TAMPA, FL 33609

ATTACHMENT A
REVISED SITE LOCATION INFORMATION

F:\PROJECTS\2011 PROJ\113-89534 CPL Biomass Conversion\ID- ERPI\Figures\113-89534D004 SOILS.mxd



LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- APPROXIMATE PROPOSED CONSTRUCTION LAYDOWN AREAS
- APPROXIMATE PROPOSED NEW INFRASTRUCTURE
- SOIL BOUNDARY

REFERENCES

1. APPROXIMATE PROPOSED NEW INFRASTRUCTURE, CONSTRUCTION LAYDOWN AREAS AND PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. SOILS: U.S. DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICE, 2010
3. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010



2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY AND INFRASTR. AREA UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

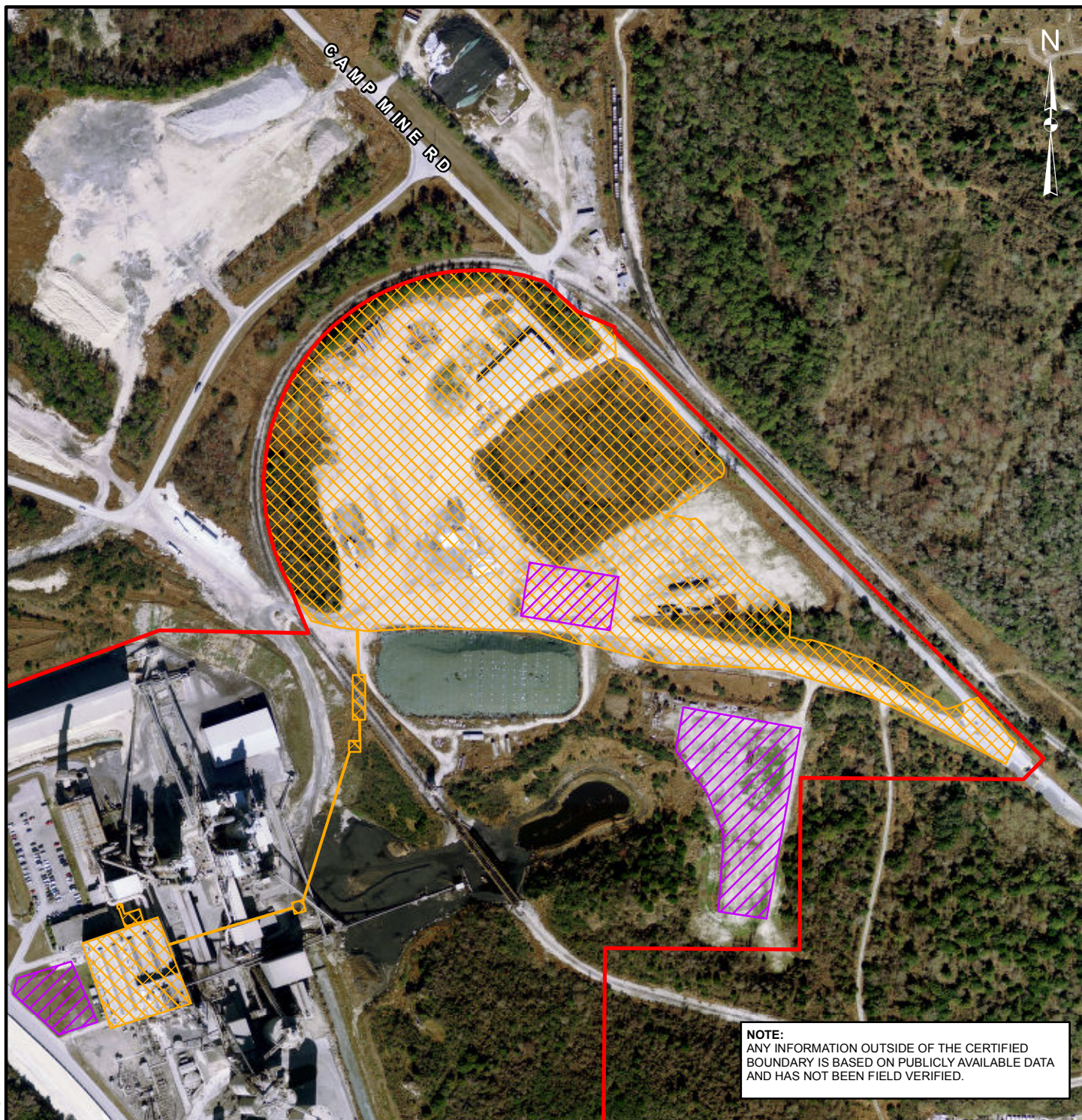
PROJECT	FPD BIOMASS CONVERSION PROJECT
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TITLE	SOILS
-------	-------



PROJECT No. 113-89534	FILE No. 113-89534D004
DESIGN JDG 06/13/2011	SCALE: AS SHOWN REV. 1
GIS JDG 07/30/2012	
CHECK MHS 07/30/2012	
REVIEW HTA 07/30/2012	

FIGURE 2



NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- APPROXIMATE PROPOSED CONSTRUCTION LAYDOWN AREAS
- APPROXIMATE PROPOSED NEW INFRASTRUCTURE

REFERENCES

1. APPROXIMATE PROPOSED NEW INFRASTRUCTURE, CONSTRUCTION LAYDOWN AREAS AND PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010



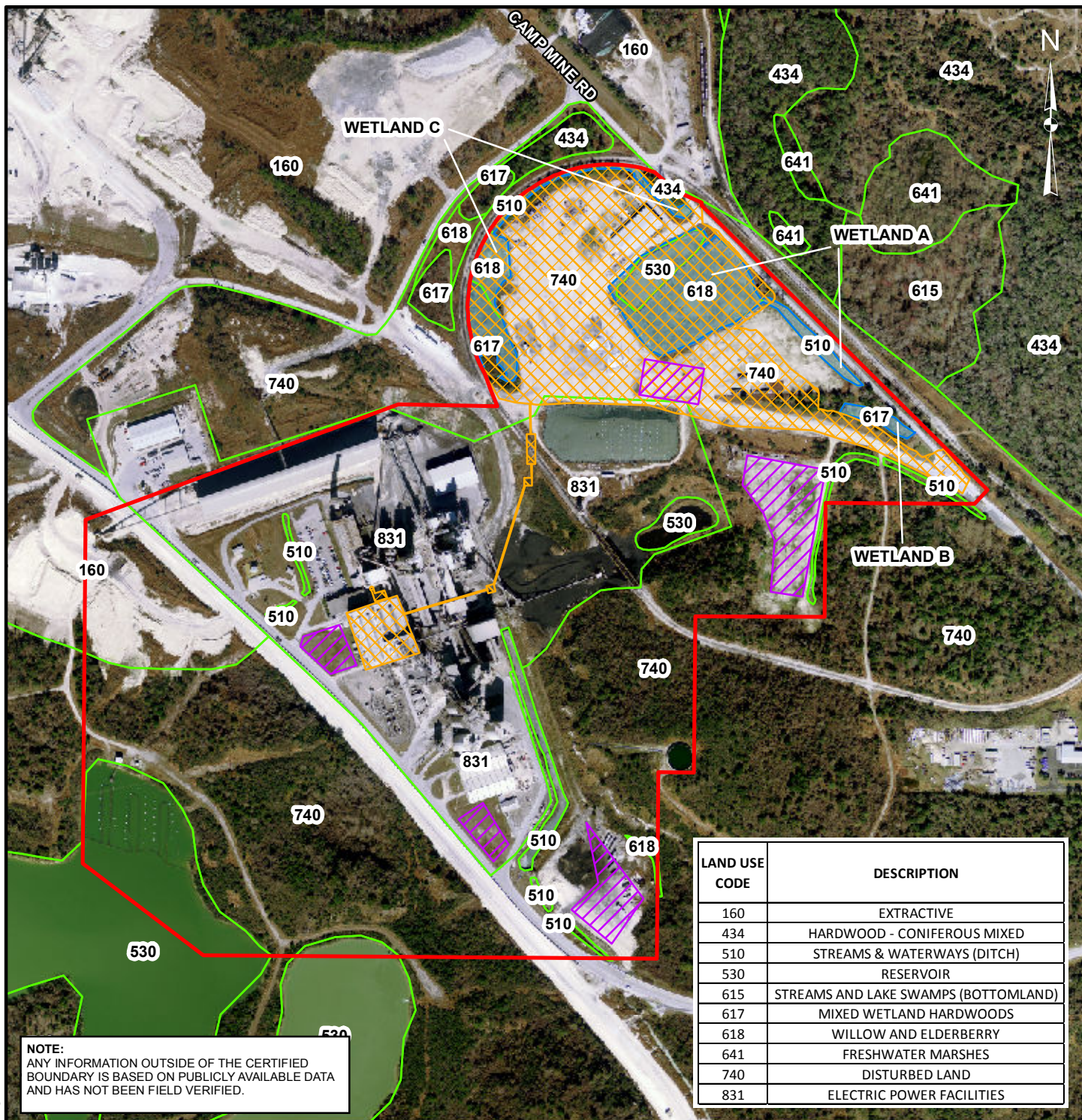
2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY AND INFRASTR. AREA UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT						
FPD BIOMASS CONVERSION PROJECT						

TITLE						
AERIAL						



PROJECT No. 113-89534			FILE No. 113-89534D003		
DESIGN	JDG	06/13/2011	SCALE: AS SHOWN	REV.	1
GIS	JDG	07/30/2012	FIGURE 3		
CHECK	MHS	07/30/2012			
REVIEW	HTA	07/30/2012			



LEGEND

- PROPOSED CERTIFIED SITE BOUNDARY
- APPROXIMATE PROPOSED CONSTRUCTION LAYDOWN AREAS
- APPROXIMATE PROPOSED NEW INFRASTRUCTURE
- SURVEYED WETLAND/SURFACE WATER BOUNDARY
- LAND USE/LAND COVER BOUNDARY

REFERENCES

1. APPROXIMATE PROPOSED NEW INFRASTRUCTURE, CONSTRUCTION LAYDOWN AREAS AND PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER DEVELOPMENT, 2012
2. LAND USE/LAND COVER: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT, 2009 AND GOLDER EDITS, 2011
3. SURVEYED WETLAND/SURFACE WATER BOUNDARIES: U.S. SURVEYOR AND GOLDER ASSOCIATES INC., 2011
4. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND WOOLPERT, INC., 2010



2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY AND INFRASTR. AREA UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

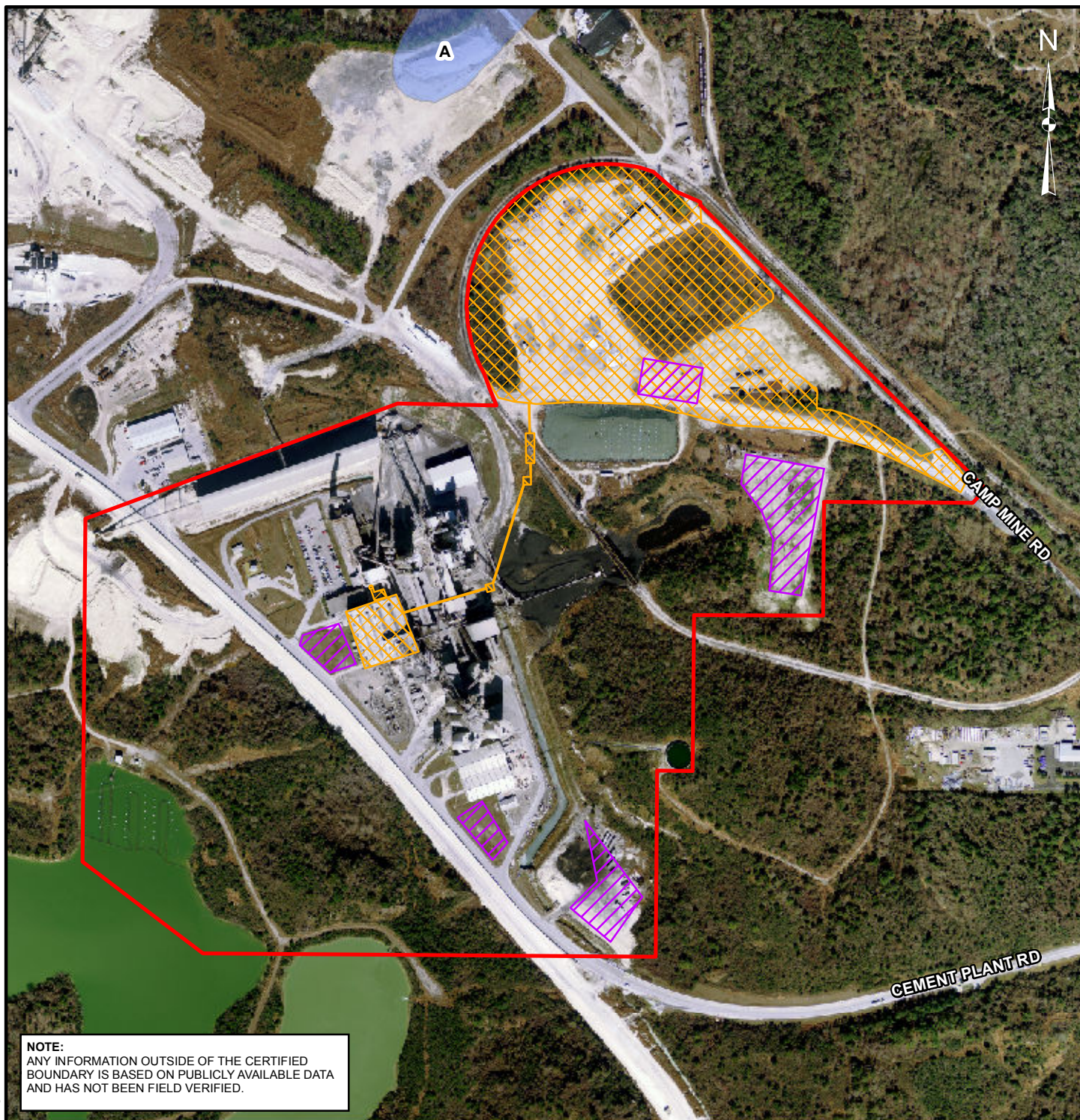
FPD BIOMASS CONVERSION PROJECT

TITLE

LAND USE/LAND COVER



PROJECT No. 113-89534			FILE No. 113-89534D002		
DESIGN	JDG	06/13/2011	SCALE: AS SHOWN	REV.	1
GIS	JDG	07/30/2012	FIGURE 5		
CHECK	MHS	07/30/2012			
REVIEW	HTA	07/30/2012			



NOTE:
ANY INFORMATION OUTSIDE OF THE CERTIFIED
BOUNDARY IS BASED ON PUBLICLY AVAILABLE DATA
AND HAS NOT BEEN FIELD VERIFIED.

LEGEND

 PROPOSED CERTIFIED SITE BOUNDARY

 APPROXIMATE PROPOSED
CONSTRUCTION LAYDOWN AREAS

 APPROXIMATE PROPOSED
NEW INFRASTRUCTURE

 A - AN AREA INUNDATED BY 100-YEAR FLOODING,
FOR WHICH NO BASE FLOOD ELEVATIONS HAVE
BEEN DETERMINED.

NOTE

ALL UNSHADED AREAS ARE ZONE X AND DO NOT FALL WITHIN A FLOOD
ZONE.

REFERENCES

1. APPROXIMATE PROPOSED NEW INFRASTRUCTURE, CONSTRUCTION LAYDOWN
AREAS AND PROPOSED CERTIFIED SITE BOUNDARY: FLORIDA POWER
DEVELOPMENT, 2012
2. FLOOD ZONES: FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), 1996
3. 2010 AERIAL: SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT AND
WOOLPERT, INC., 2010

600 0 600
Feet

2	03/07/13	JDG	ADDED DISCLAIMER	JDG	HTA	KJK
1	10/05/12	JDG	PROPOSED CERT. SITE BNDY AND INFRASTR. AREA UPDATE	JDG	HTA	KJK
REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW

PROJECT

FPD BIOMASS CONVERSION PROJECT

TITLE

FEMA FLOOD ZONES



PROJECT No. 113-89534			FILE No. 113-89534D006		
DESIGN	JG	06/13/2011	SCALE: AS SHOWN	REV.	1
GIS	JG	07/30/2012	FIGURE 6		
CHECK	MHS	07/30/2012			
REVIEW	HTA	07/30/2012			

**ATTACHMENT B
REVISED CONSTRUCTION PLANS**

FLORIDA POWER DEVELOPMENT, LLC

BIOMASS CONVERSION



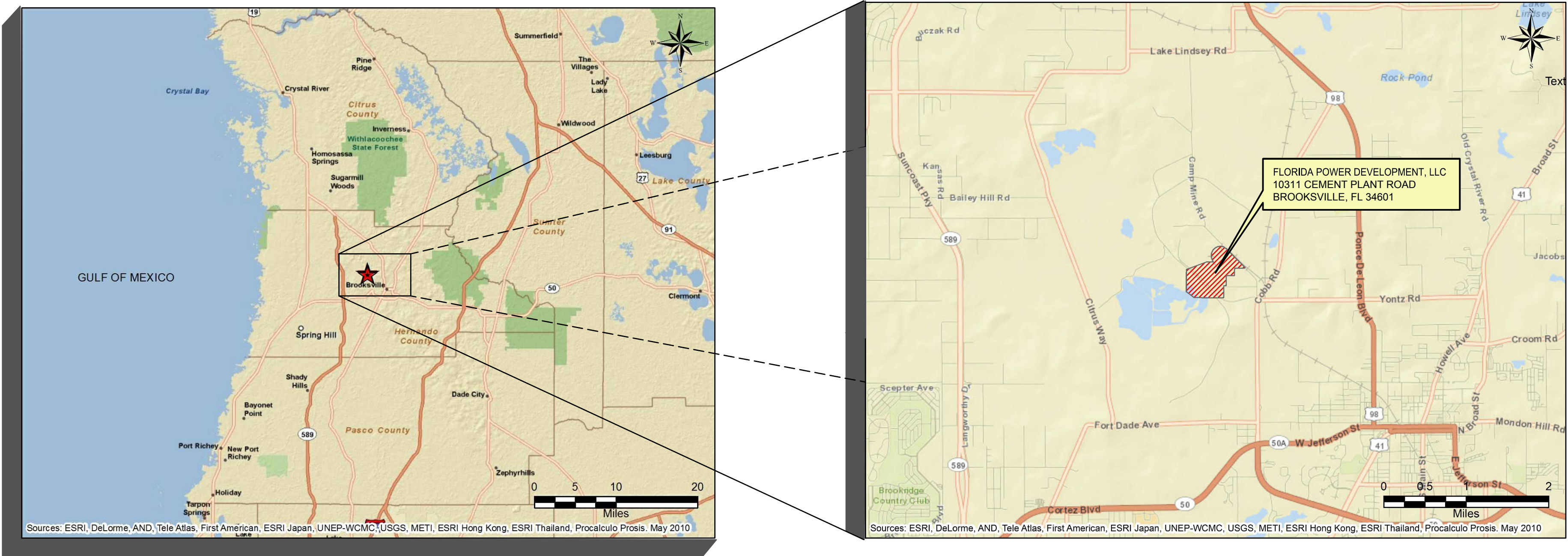
DATE:	9/27/2012
PROJECT NUMBER:	113-89534
PROJECT NAME:	BIOMASS CONVERSION
PREPARED BY:	GOLDER ASSOCIATES INC.
PREPARED FOR:	FLORIDA POWER DEVELOPMENT, LLC
SET DESCRIPTION:	CONSTRUCTION PLANS
SET USE:	CONSTRUCTION

CONSTRUCTION PLANS

SECTION 8 TOWNSHIP 22 South, Range 19 East

HERNANDO COUNTY, FLORIDA

48 HOURS BEFORE DIGGING
CALL TOLL FREE
811 or
1-800-432-4770
SUNSHINE STATE UNDERGROUND
UTILITIES NOTIFICATION CENTER



SITE ADDRESS

FLORIDA POWER DEVELOPMENT, LLC
10311 CEMENT PLANT ROAD
BROOKSVILLE, FL 34601

ENGINEERS

GOLDER ASSOCIATES INC.
5100 WEST LEMON STREET, SUITE 208
TAMPA, FLORIDA 33609
PHONE: (813) 287-1717
FAX: (813) 287-1716

SURVEYOR:

SURVEY PROVIDED & PERFORMED BY
US SURVEYOR BETWEEN 08/01/11
AND 08/24/11.

Sheet List Table

Sheet Number	Sheet Title
01	COVER SHEET
02	GENERAL NOTES
03	EXISTING CONDITIONS
03-A	PRE-DEVELOPMENT DRAINAGE MAP
04	PROPOSED SITE PLAN
05	PROPOSED EROSION AND SEDIMENT CONTROL PLAN
06	POST DEVELOPMENT DRAINAGE PLAN
07	PROPOSED GRADING PLAN
08	PIPE PROFILES
09	DETAIL SHEET 1 OF 2
10	DETAIL SHEET 2 OF 2
11	POND CROSS SECTIONS
12	TRAFFIC PLAN

PROJECT DATA TABLE	
PROJECT NAME	BIOMASS CONVERSION
PROJECT NUMBER	113-89534
LOCATION	HERNANDO COUNTY, FLORIDA
PARCEL ID NUMBER	R08_222_19_1550_0010_0010; R08_422_19_0000_0050_0000; R07_422_19_0000_0010_0000
AREA	
FLOOD ZONE	SUBJECT PROPERTY APPEARS TO BE LOCATED IN FLOOD ZONE A, ACCORDING TO FLOOD INSURANCE RATE MAP 120110, PANEL NO. 0175 B, HERNANDO COUNTY, FLORIDA, DATED APRIL 17 1984.
PROPOSED CERTIFIED SITE ACREAGE	166.0 ACRES

REVISIONS:	DATE
1. GRADING AND STRUCTURAL CHANGES PER CLIENT REQUEST	08/31/12
2. FDEP INFORMAL COMMENTS	09/21/12
3. FDEP INFORMAL COMMENTS	09/27/12
4.	
5.	
6.	



PERMITS				
AGENCY	TYPE	NUMBER	DATE	STATUS

MICHAEL H. SCOTT, P.E. FL P.E. No. 72475

DATE

SITE INFORMATION

- SITE ADDRESS: 10311 CEMENT PLANT ROAD BROOKSVILLE, FL. 34601
- PROPERTY OWNERS: FLORIDA CRUSHED STONE CO
- APPLICANT: FLORIDA POWER DEVELOPMENT LLC

SAFETY

- DURING THE CONSTRUCTION AND MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
- LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER OF THE DEPARTMENT OF TRANSPORTATION.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN ITS OWN SAFETY EQUIPMENT IN ACCORDANCE WITH ITS HEALTH & SAFETY PROGRAM AND ALL OTHER APPLICABLE LEGAL AND HEALTH AND SAFETY REQUIREMENTS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR PROVIDING ITS EMPLOYEES AND SUBCONTRACTORS WITH ADEQUATE INFORMATION AND TRAINING TO ENSURE THAT ALL EMPLOYEES AND SUBCONTRACTORS AND SUBCONTRACTORS' EMPLOYEES COMPLY WITH ALL APPLICABLE REQUIREMENTS. CONTRACTOR SHALL REMAIN IN COMPLIANCE WITH ALL OCCUPATION SAFETY AND HEALTH REGULATIONS AS WELL AS THE ENVIRONMENTAL PROTECTION LAWS. THE FOLLOWING IS NOT TO BE PERCEIVED AS THE ENTIRE SAFETY PROGRAM BUT JUST BASIC REQUIREMENTS.
- ALL EXCAVATIONS BY THE CONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF LABOR'S OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION RULES AND REGULATIONS. PARTICULAR ATTENTION MUST BE PAID TO THE CONSTRUCTION STANDARDS FOR EXCAVATIONS, 29 C.F.R. PART 1926, SUBPART P.
- THE MINIMUM STANDARDS AS SET FORTH IN THE CURRENT EDITION OF "THE STATE OF FLORIDA MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS" SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE AND REMOVAL OF ALL TRAFFIC CONTROL DEVICES, WARNING DEVICES AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.
- ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
- IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.
- THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES AND SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE UTILITY COMPANIES PRIOR TO CONSTRUCTION TO OBTAIN FIELD LOCATIONS OF EXISTING UNDERGROUND UTILITIES. CALL SUNSHINE STATE ONE CALL 811 OR 1-800-432-4770 TO ARRANGE FIELD LOCATIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THE CONTRACTOR CALLED FOR IN THIS CONTRACT.
- ALL UNDERGROUND UTILITIES MUST BE IN PLACE AND TESTED OR INSPECTED PRIOR TO BASE AND PAVEMENT CONSTRUCTION.

SITE PLAN AND COORDINATE GEOMETRY

- SURVEY PROVIDED & PERFORMED BY US SURVEYOR BETWEEN 08/01/11 AND 08/24/11.
- ALL POINTS AND MONUMENTS SHALL BE SURVEYED UPON MOBILIZATION TO VERIFY THEIR ACCURACY. ANY DISCREPANCIES DISCOVERED MUST BE BROUGHT TO THE ATTENTION OF THE ENGINEER IN WRITING.
- MONUMENTS AND OTHER SURVEY CONTROL POINTS SHALL BE PROTECTED FROM DAMAGE AND DISTURBANCE. IF ANY CONTROL POINTS ARE DAMAGED OR DISTURBED, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ENGINEER AND REPLACE THE CONTROL POINTS TO THEIR ORIGINAL CONDITION AT HIS OWN EXPENSE.
- THE HORIZONTAL DATUM UTILIZED FOR THIS PROJECT IS NAD 1983 (2007 ADJUSTMENT) FLORIDA WEST ZONE, U.S. SURVEY FEET.
- THE VERTICAL DATUM UTILIZED FOR THIS PROJECT IS NAVD 1988, U.S. SURVEY FEET.
- LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.
- UPON COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE OWNER'S ENGINEER WITH COMPLETE "AS-BUILT" INFORMATION CERTIFIED BY A REGISTERED LAND SURVEYOR. THIS "AS-BUILT" INFORMATION SHALL INCLUDE INVERT ELEVATIONS, LOCATION OF FITTINGS, LOCATION OF STRUCTURES FOR ALL UTILITIES INSTALLED, AS WELL AS TOP OF BANK, TOE OF SLOPE AND GRADE BREAK LOCATIONS AND ELEVATIONS FOR POND AND DITCH CONSTRUCTION. NO ENGINEER'S CERTIFICATIONS FOR CERTIFICATE OF OCCUPANCY PURPOSES WILL BE MADE UNTIL THIS INFORMATION IS RECEIVED AND APPROVED BY THE OWNER'S ENGINEER.

CONSTRUCTION NOTES:

MISCELLANEOUS

- THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS SPECIFIED BY THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION AND SCHEDULE ANY NECESSARY INSPECTIONS ACCORDING TO AGENCY INSTRUCTIONS.
- ALL SPECIFICATIONS AND DOCUMENTS REFERRED TO IN THESE PLANS SHALL BE OF THE LATEST REVISION.
- ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO THE OWNER'S ENGINEER FOR APPROVAL. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL LOCATE EXISTING UTILITIES BEFORE ORDERING MATERIALS AND CASTING STRUCTURES.
- ADJUSTMENTS OF INLETS, JUNCTION BOXES, MANHOLE TOPS, WATER VALVES, WATER METERS, ETC. SHALL BE INCLUDED IN THE CONTRACTOR'S BID AND NO CLAIM SHALL BE MADE AGAINST THE OWNER OR ENGINEER FOR THESE ADJUSTMENTS, IF REQUIRED.

CLEARING/DEMOLITION

- THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE NECESSARY FOR THE CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, SODDED OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
- REMAINING EARTHWORK THAT RESULTS FROM CLEARING AND GRUBBING OR SITE EXCAVATION IS TO BE UTILIZED ON-SITE IF REQUIRED, PROVIDED THAT THE MATERIAL IS DEEMED SUITABLE FOR CONSTRUCTION BY THE OWNER'S SOILS TESTING COMPANY. EXCESS MATERIAL IS TO BE EITHER STOCKPILED ON THE SITE AS DIRECTED BY THE OWNER OR OWNER'S ENGINEER, OR REMOVED FROM THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY

FOR REMOVING EXCESS EARTHWORK FROM THE SITE.

- ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIALS SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATORY AGENCY REQUIREMENTS.
- CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL, PURSUANT TO ALL FEDERAL, STATE, COUNTY, CITY OR OTHER GOVERNMENT AGENCY REQUIREMENTS, OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED WITHIN THE NEW FACILITIES.

PAVING AND GRADING

- ALL DELETERIOUS SUBSURFACE MATERIAL (I.E. MUCK, PEAT, BURIED DEBRIS) IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS OR AS DIRECTED BY THE OWNER, THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS TO BE BACK FILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS. CONTRACTOR IS RESPONSIBLE FOR ACQUIRING ANY PERMITS THAT ARE NECESSARY FOR REMOVING DELETERIOUS MATERIAL FROM THE SITE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING OR SHORING AS NECESSARY.
- ALL NECESSARY FILL AND EMBANKMENT THAT IS PLACED DURING CONSTRUCTION SHALL CONSIST OF MATERIAL SPECIFIED BY THE OWNER'S SOIL TESTING COMPANY OR ENGINEER AND BE PLACED AND COMPACTED ACCORDING TO THESE PLANS.
- PROPOSED SPOT ELEVATIONS REPRESENT FINISHED PAVEMENT OR GROUND SURFACE GRADE UNLESS OTHERWISE NOTED ON DRAWINGS.
- CONTRACTOR SHALL TRIM, TACK AND MATCH EXISTING PAVEMENT AT LOCATIONS WHERE NEW PAVEMENT MEETS EXISTING PAVEMENT.
- CONTRACTOR TO PROVIDE A 1/2" TO 1" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER AT ABUTMENT OF CONCRETE AND OTHER MATERIALS (BUILDINGS, OTHER POURED CONCRETE, ETC.)
- ALL PAVEMENT MARKINGS SHALL BE MADE WITH PERMANENT THERMOPLASTIC AND SHALL CONFORM TO F.D.O.T. STANDARD INDEX NO. 17346.
- CONTRACTOR IS TO PROVIDE EROSION CONTROL AND SEDIMENTATION BARRIER (HAY BALES OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. IN ADDITION, CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AS SHOWN ON THE PLANS.
- IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION OR OTHER ACCEPTABLE METHODS.
- THE CONTRACTOR WILL STABILIZE BY SEED AND MULCH, SOD OR OTHER APPROVED MATERIALS ANY DISTURBED AREAS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE UTILITY SYSTEMS AND PAVEMENT AREAS. CONTRACTOR SHALL MAINTAIN SUCH AREAS UNTIL FINAL ACCEPTANCE BY OWNER.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING SCHEDULE LOCATED ON TABLE SC-1. UPON COMPLETION OF THE WORK, SOILS ENGINEER WILL SUBMIT CERTIFICATIONS MET.
- A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN PLACE MATERIALS AS REQUIRED BY THESE PLANS AND THE VARIOUS AGENCIES. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COST OF SAID RETESTING.

DRAINAGE & GRADING

- STANDARD INDICES REFER TO THE LATEST EDITION OF F.D.O.T. DESIGN STANDARD.
- ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS.
- ALL STORM DRAINAGE PIPING SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.
- THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS FOR THESE PURPOSES.
- THE DISCHARGE CONTROL STRUCTURE SHALL BE FITTED WITH AN ALUMINUM SKIMMER.
- ALL DISTURBED AREA SHALL BE SODDED, UNLESS OTHERWISE NOTED.
- SOD MAY BE EITHER CENTIPEDE, BAHIA, OR BERMUDA GRASS, AND SHALL BE WELL MATTED WITH ROOTS. THE SOD SHALL BE TAKEN UP IN COMMERCIAL-SIZE RECTANGLES AT LEAST 12 BY 24 INCHES OR ROLLS AT LEAST 12 INCHES IN WIDTH. SOD SHALL BE A MINIMUM OF 1-1/4 INCH THICK INCLUDING A 3/4" THICK LAYER OF ROOTS AND TOPSOIL. THE SOD SHALL BE SUFFICIENTLY THICK TO SECURE A DENSE STAND OF LIVE GRASS. THE SOD SHALL BE LIVE, FRESH AND UNINJURED AT THE TIME OF PLANTING. IT SHALL BE FREE OF NOXIOUS WEEDS AND SEEDS.
- DISTURBANCE COVERS APPROXIMATELY 15.2 ACRES. AREA CONTRIBUTING RUNOFF TO THE STORMWATER MANAGEMENT SYSTEM INCLUDES APPROXIMATELY 27.6 ACRES.
- CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN.
- EROSION CONTROL MEASURES SHALL REMAIN INTACT THROUGHOUT CONSTRUCTION. FAILURE TO MAINTAIN THESE MEASURES WILL RESULT IN ENFORCEMENT. THE LOCATIONS AND DETAILS FOR EROSION CONTROL MEASURES WERE DEVISED BY THE ENGINEER TO MEET THE REQUIREMENTS OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL PERMIT FOR CONSTRUCTION ACTIVITY.
- DEWATERING IS NOT EXPECTED TO OCCUR DURING CONSTRUCTION OF THE WORK SHOWN ON THESE DRAWINGS. IF DEWATERING BECOMES NECESSARY TO EXECUTE THE WORK, THE CONTRACTOR SHALL NOTIFY FLORIDA POWER DEVELOPMENT, LLC WITH SUFFICIENT NOTICE TO EVALUATE PERMITTING REQUIREMENTS.
- UNLESS NOTED OTHERWISE, STORMWATER DITCH SLOPES ARE 4 HORIZONTAL TO 1 VERTICAL.
- THE CONTRACTOR SHALL CLEAR AND GRUB WITHIN THE LIMITS OF DISTURBANCE: ALL TREES, STUMPS, BRUSH, AND OTHER VEGETATION, DOWN TIMBER, ROTTEN WOOD, RUBBISH, AND OTHER OBJECTIONABLE MATERIAL INTERFERING WITH INSTALLATION OF NEW CONSTRUCTION. IT SHALL INCLUDE BUT NOT LIMITED TO, FENCE, LUMBER, TRASH PILES, AND OTHER OBSTRUCTIONS INTERFERING WITH THE PROPOSED WORK AND DISPOSING OF DEBRIS; FURNISHING OF EQUIPMENT, LABOR AND MATERIALS AS DIRECTED BY THE OWNER. TEMPORARY STOCKPILING ON-SITE WILL BE AT THE OWNER'S DIRECTION. ALL DEBRIS AND WASTE MATERIAL STOCKPILED ON-SITE SHALL BE REMOVED AS DIRECTED BY THE OWNER AND FOLLOWING ALL APPLICABLE RULES.
- NO OPEN BURNING OF ANY KIND OF MATERIAL WILL BE PERMITTED ON-SITE.
- TOPSOIL SHALL BE STRIPPED FROM WITHIN THE LIMITS OF DISTURBANCE AND DISPOSED OF OFF-SITE BY THE CONTRACTOR, OR REUSED ON-SITE AS DETERMINED BY THE ENGINEER.
- FOLLOWING STRIPPING WITHIN THE LIMITS OF DISTURBANCE AND ASSOCIATED AREAS, THE ENGINEER WILL INSPECT THE SURFACE TO EVALUATE WHETHER ANY UNSUITABLE MATERIALS ARE PRESENT. IF UNSUITABLE MATERIALS ARE DETERMINED TO BE PRESENT BY THE ENGINEER, THESE MATERIALS SHALL BE EXCAVATED, REMOVED AND PLACED IN DESIGNATED STOCKPILES OR HAULED OFFSITE.
- SUBGRADE TO RECEIVE EARTHFILL, PROOFROLL WITH ROLLER LOADED TO WEIGH 10 TONS AT THE APPROXIMATE FINISHED GRADE ELEVATION (+.05 FEET) TO MEET COMPACTION AS SPECIFIED IN SC-1 TESTING SCHEDULE. TRAVEL AT A SPEED OF 2 TO 5 MILES PER HOUR DURING ALL PASSES. FILL DEPRESSIONS, RESULTING FROM PROOFROLLING, WITH EARTH FILL, COMPACT, AND PROOFROLL AREAS THUS FILLED.
- REMOVE SUBGRADE MATERIAL AND ANY UNSUITABLE MATERIAL TO A DEPTH WHICH THE ENGINEER DETERMINES TO BE SUITABLE TO BEAR FILL.
- STRUCTURAL FILL SHALL BE WELL GRADED SAND TO GRAVELLY SAND HAVING A MAXIMUM PARTICLE SIZE OF 1 INCH AND LESS THAN 15 PERCENT BY WEIGHT PASSING THE US NO. 200 SIEVE. STRUCTURAL

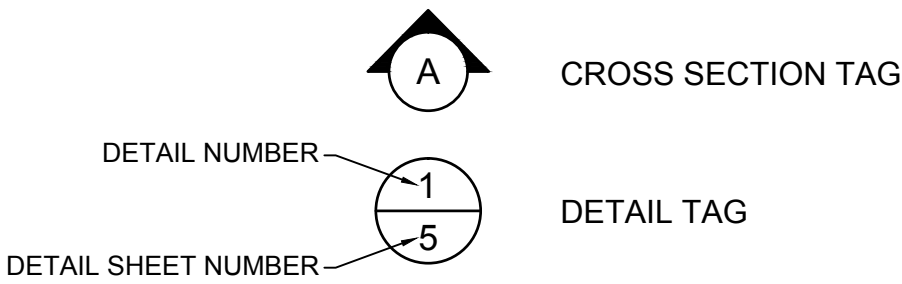
FILL SHALL NOT CONTAIN STONES, ROCK, CONCRETE, CLODS, OR OTHER RUBBLE LARGER THAN 1 INCH IN DIAMETER. IT SHALL HAVE PHYSICAL PROPERTIES WHICH ALLOW IT TO BE EASILY SPREAD AND COMPACTED. EARTH FILL MATERIAL SHALL BE FREE OF ORGANIC MATERIAL, ROOTS, TRASH, OR OTHER OBJECTIONABLE MATERIAL. EXCESS OR UNSUITABLE SOIL MATERIAL AS DESIGNATED BY THE ENGINEER SHALL BE REMOVED FROM THE JOB SITE BY THE CONTRACTOR, AND TAKEN OFF-SITE BY THE CONTRACTOR.

- THE CONTRACTOR IS REQUIRED TO SECURE A BORROW SOURCE FOR SOIL WHICH CAN MEET THE REQUIREMENTS OF THESE SPECIFICATIONS, DRAWINGS, AND CONTRACT DOCUMENTS FOR THIS PROJECT. STRUCTURAL FILL MATERIAL FROM ON- AND OFF-SITE SOURCES SHALL BE SUBJECT TO REVIEW BY THE ENGINEER AND APPROVAL BY FLORIDA POWER DEVELOPMENT, LLC.
- FILL MATERIALS SHALL BE PLACED IN APPROXIMATELY HORIZONTAL LAYERS NOT TO EXCEED 12 INCHES IN UNCOMPACTED THICKNESS, UNLESS SPECIFICALLY STATED OTHERWISE HEREIN.
- MATERIAL DEPOSITED IN PILES OR WINDROWS BY EXCAVATING AND HAULING EQUIPMENT SHALL BE SPREAD AND LEVELED BEFORE COMPACTION.
- IF THE TOP SURFACE OF THE PRECEDING LAYER OF EARTH FILL BECOMES TOO DRY TO ALLOW SUITABLE BOND IT SHALL BE SCARIFIED AND MOISTENED BY SPRINKLING TO AN ACCEPTABLE MOISTURE CONTENT PRIOR TO PLACEMENT OF THE NEXT LAYER OF EARTH FILL.
- EACH LAYER OF MATERIAL BEING COMPACTED SHALL HAVE THE BEST PRACTICABLE UNIFORM MOISTURE CONTENT TO ENSURE SATISFACTORY COMPACTION. THE CONTRACTOR WILL BE REQUIRED TO ADD WATER AND HARROW, DISK, BLADE, OR OTHERWISE WORK THE MATERIAL IN EACH LAYER TO ENSURE UNIFORM MOISTURE CONTENT AND ADEQUATE COMPACTION.
- EACH LAYER SHALL BE THOROUGHLY COMPACTED BY ROLLING OR OTHER METHOD ACCEPTABLE TO THE ENGINEER TO 95 PERCENT OF MAXIMUM DRY DENSITY AT A MOISTURE CONTENT WITHIN 3 PERCENT OF THE OPTIMUM MOISTURE CONTENT. MAXIMUM DRY DENSITY AND OPTIMUM MOISTURE CONTENT SHALL BE DETERMINED BY THE ASTM D698 TEST PROCEDURE.
- TOPSOIL SHALL BE NATURAL, FRIABLE, SANDY LOAM, OBTAINED FROM WELL DRAINED AREAS, FREE FROM PARTICLES LARGER THAN ONE INCH IN MAXIMUM DIMENSION, AND FREE OF SUBSOIL, ROOTS, GRASS, OTHER FOREIGN MATTER, HAZARDOUS OR TOXIC SUBSTANCES, AND DELETERIOUS MATERIAL THAT MAY BE HARMFUL TO PLANT GROWTH OR MAY HINDER GRADING, PLANTING, OR MAINTENANCE.
- TOPSOIL SHALL BE PLACED TO A MINIMUM DEPTH OF 5 INCHES FOR SOD AND 6 INCHES FOR SEED. THE SUBGRADE OF ALL AREAS TO RECEIVE TOPSOIL AND SEED SHALL BE RAKED AND ALL RUBBISH, STICKS, ROOTS, AND STONES LARGER THAN 2 INCHES SHALL BE REMOVED. TOPSOIL SHALL BE SPREAD AND LIGHTLY COMPACTED TO FINISHED GRADE. COMPACTED TOPSOIL SHALL NOT BE LESS THAN THE DEPTH SPECIFIED. NO TOPSOIL SHALL BE SPREAD IN WATER OR WHILE FROZEN OR MUDDY.

SC-1 TESTING SCHEDULE

ITEM	TEST	TEST FREQUENCY
EMBANKMENT AND COMPACTED FILL	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER SOIL TYPE
	TBD, MAXIMUM DENSITY AS DETERMINED BY AASHTO T99-57 (ASTM D-698)	ONE PER 5,000 SF HORIZONTALLY PER LIFT; IN 12 INCH LIFTS
UTILITY TRENCH BACKFILL OVER PIPELINES AND AROUND STRUCTURES	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER SOIL TYPE
	TBD, MAXIMUM DENSITY AS DETERMINED BY AASHTO T99-57 (ASTM D-698)	ONE PER 500 FEET HORIZONTALLY PER LIFT
SUB GRADE	TBD, MAXIMUM DENSITY AS DETERMINED BY AASHTO T180-57 (ASTM D1557) - NO TOLERANCE / PROOF ROLLING USING 10-TON NON-VIBRATORY DRUM ROLLER	PER 5000 SF OF COMPACTED SUBGRADE
STABILIZED SUBGRADE	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER MATERIAL TYPE
	MINIMUM LBR (TBD) TBD, MAXIMUM DENSITY AS DETERMINED BY AASHTO 99-57 (ASTM D-698) - NO TOLERANCE	*** PER MATERIAL TYPE
BASE (OTHER THAN SOIL CEMENT)	OPTIMUM MOISTURE/MAXIMUM DENSITY	PER SOURCE
	MINIMUM LBR (TBD)	PER SOURCE
	TBD, MAXIMUM DENSITY AS DETERMINED BY AASHTO 99-57 (ASTM D-698) - NO TOLERANCE	*** EACH LIFT
CONCRETE	GRADATION, ATTERBURG LIMITS	PER SOURCE
	SLUMP TEST	ONE PER SET OF CYLINDERS
	COMPRESSIVE STRENGTH CYLINDERS	ONE SET OF THREE (3) CYLINDERS FOR 100 CUBIC YARDS OR FRACTION THEREOF
ASPHALTIC CONCRETE	AIR CONTENT	ONE PER SET OF CYLINDERS
	AGGREGATE ANALYSIS	ONE PER DESIGN
	DESIGN MIX	ONE PER TYPE
	BITUMEN CONTENT	ONE PER DAY
	GRADATION STABILITY FLOW	ONE PER DAY
	PROPERTIES OF IN PLACE MATERIALS (MARSHALL)	ONE PER DAY
	THICKNESS (TBD)	
	TBD, LAB DENSITY	

GENERAL LEGEND

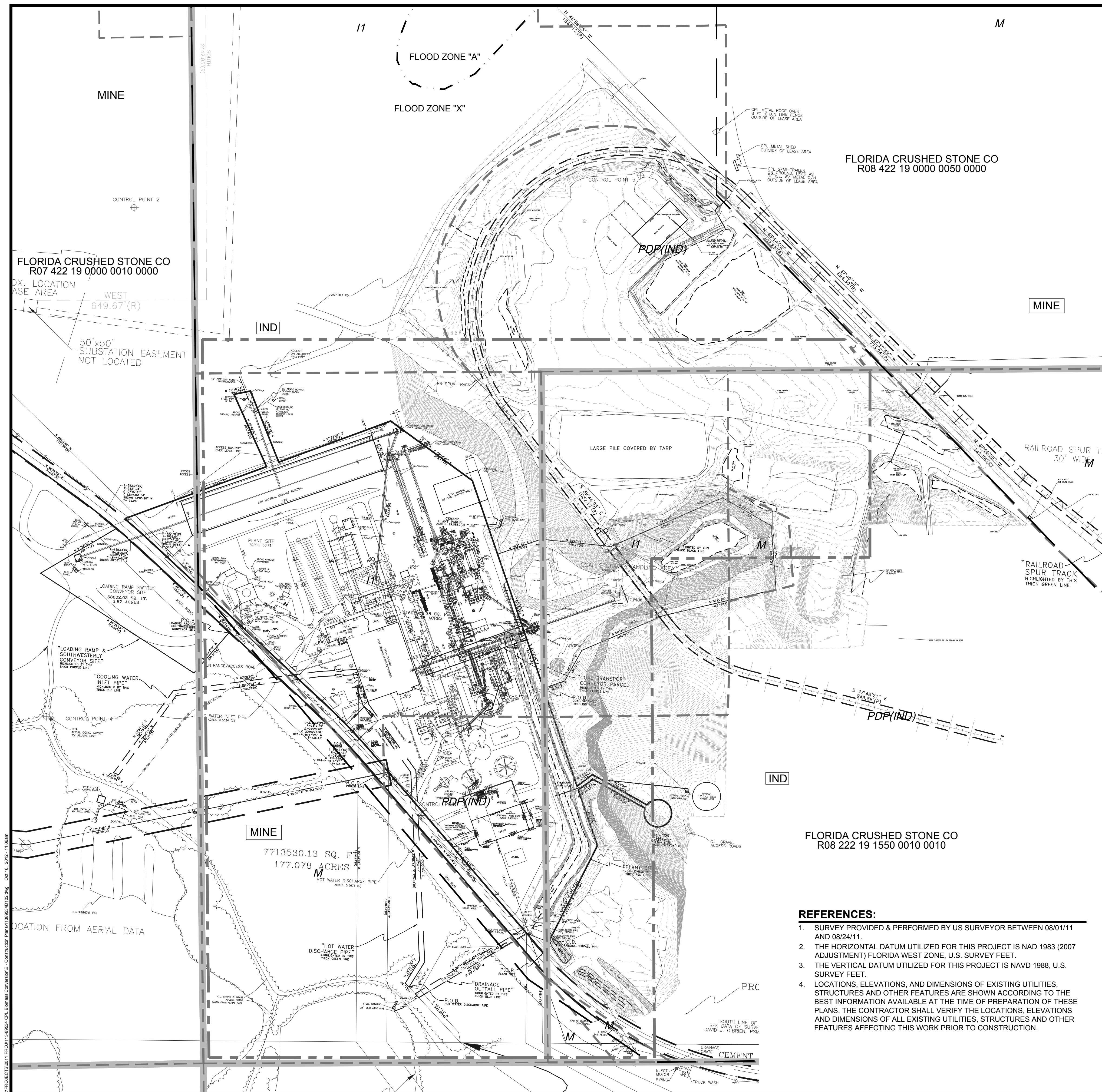


NOTE:
THESE GENERAL NOTES ON THIS SHEET ARE SUBJECT TO REVIEW AND MODIFICATION BASED ON FUTURE GEOLOGICAL CHARACTERIZATION STUDIES AND RECOMMENDATIONS.

1	9/5/12	MHS	GRADING AND STRUCTURAL CHANGES PER CLIENT REQUEST	BML	EKN	KHE
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVV
PROJECT						
FLORIDA POWER DEVELOPMENT, LLC BIOMASS CONVERSION						
TITLE						
GENERAL NOTES						
PROJECT No. 113-89534			FILE No. 11389534D106			
DESIGN	MHS	9/16/11	SCALE	As Shown	REV.	1
CADD	JCB	9/16/11				
CHECK	MHS	9/16/11				
REVIEW	KHE	9/16/11				

MICHAEL H. SCOTT, P.E.
FL PE NO. 72475
GOLDER ASSOCIATES INC.
FL CA NO. 1670
5100 W. LEMON ST SUITE 208
TAMPA, FL 33609





LEGEND

-
- EXISTING CERTIFICATION BOUNDARY
- PARCELS LINE
- ZONING DISTRICT LINE
- FUTURE LAND USE DESIGNATION LINE
- FEMA FLOOD ZONE LINES

FLORIDA CRUSHED STONE CO
R17 422 19 0000 0010 0000

PROPERTY OWNER & PARCEL
NUMBER

FUTURE LAND USE DESIGNATIONS

IND

INDUSTRIAL

MINE

MINING

ZONING DISTRICTS

 M

MINING DISTRICT

 $PDP(IND)$

PLANNED DEVELOPMENT PROJECT DISTRICT (INDUSTRIAL)

AG

AGRICULTURAL DISTRICT

11

INDUSTRIAL DISTRICT



REFERENCES:

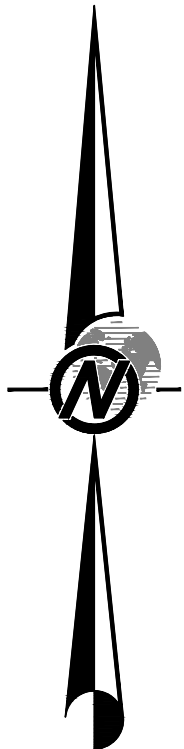
1. SURVEY PROVIDED & PERFORMED BY US SURVEYOR BETWEEN 08/01/11 AND 08/24/11.
2. THE HORIZONTAL DATUM UTILIZED FOR THIS PROJECT IS NAD 1983 (2007 ADJUSTMENT) FLORIDA WEST ZONE, U.S. SURVEY FEET.
3. THE VERTICAL DATUM UTILIZED FOR THIS PROJECT IS NAVD 1988, U.S. SURVEY FEET.
4. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION.

REV	9/5/12	MHS	GRADING AND STRUCTURAL CHANGES PER CLIENT REQUEST			BML	EKN	KHE	
DATE	DES	REVISION DESCRIPTION					CADD	CHK	RVW
PROJECT									
FLORIDA POWER DEVELOPMENT, LLC BIOMASS CONVERSION									
TITLE									
EXISTING CONDITIONS									
			PROJECT No. 113-89534			FILE No. 11389534D102			
			DESIGN	MHS	9/16/11	SCALE	As Shown	REV.	1
			CADD	JCB	9/16/11	03			
			CHECK	MHS	9/16/11				
			REVIEW	KHE	9/16/11				



LEGEND

- AREA OF PROPOSED GRADING CHANGES
- LIMITS OF PONDS
- PROPOSED CERTIFICATION BOUNDARY (SEE NOTE 3)



200 0 200 400
SCALE: 1" = 200' FEET

NOTES:

- CONVEYOR LAYOUT AND ALIGNMENT IS APPROXIMATE. DETAILED DESIGN TO BE COMPLETED BY OTHERS
- PROPOSED CONVEYOR TO BE COVERED. DESIGN CONSIDERATIONS WILL BE MADE TO PREVENT COMMINGLING OF STORMWATER AND LUBRICANTS FROM CONVEYOR.
- PROPOSED CERTIFICATION BOUNDARY SHOWN IS APPROXIMATE, AND IS SUBJECT TO FINAL VERIFICATION BY A REGISTERED PROFESSIONAL LAND SURVEYOR.

REFERENCES:

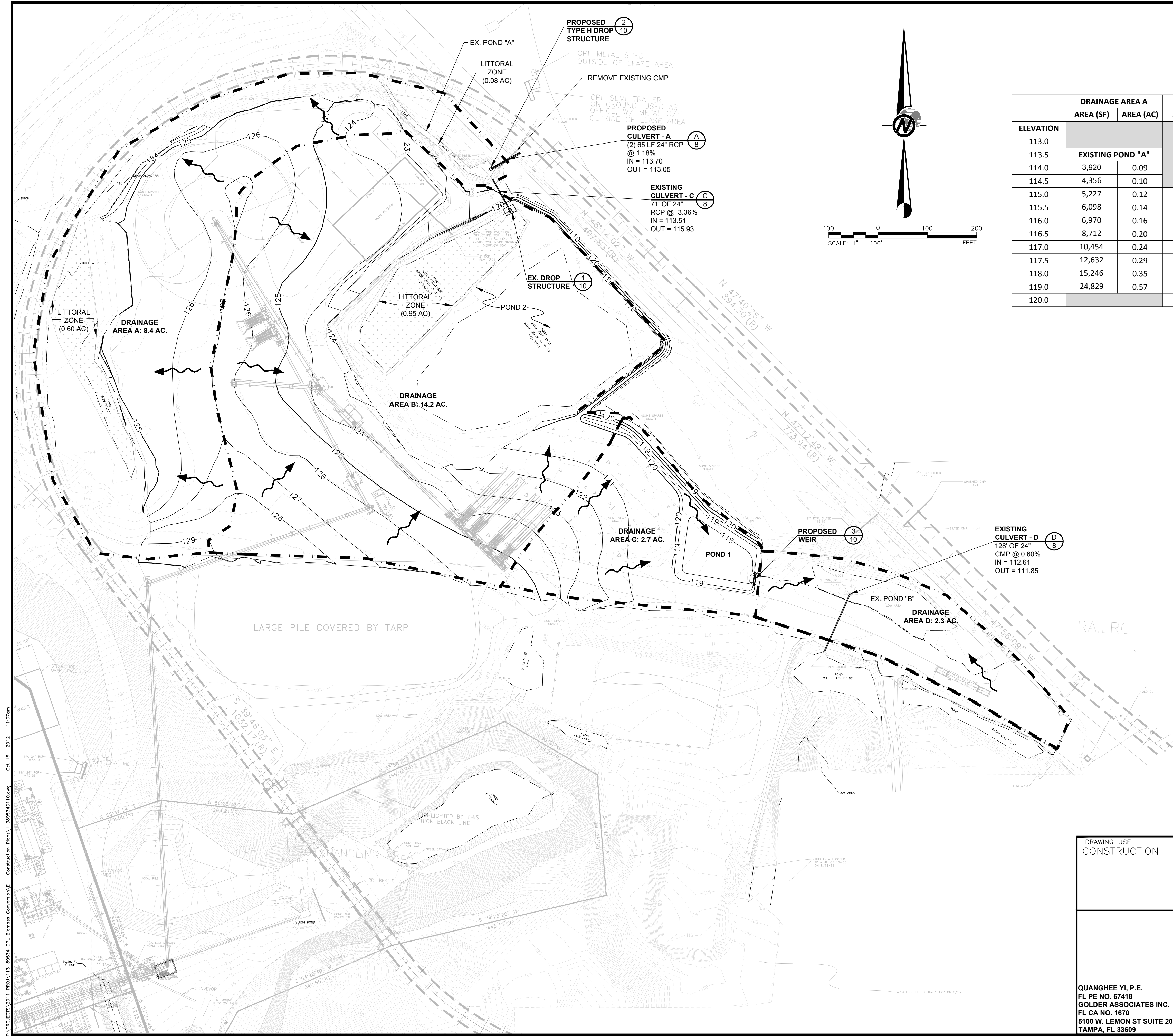
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DRAWING USE
CONSTRUCTION

MICHAEL H. SCOTT, P.E.
FL PE NO. 72475
GOLDER ASSOCIATES INC.
FL CA NO. 1670
5100 W. LEMON ST SUITE 208
TAMPA, FL 33609

2	9/21/12		FDEP INFORMAL COMMENTS	BML	EKN	MHS
1	9/5/12		GRADING AND STRUCTURAL CHANGES PER CLIENT REQUEST	BML	EKN	MHS
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW
PROJECT						
FLORIDA POWER DEVELOPMENT, LLC BIOMASS CONVERSION						
TITLE						
PROPOSED SITE PLAN						
			PROJECT No. 113-89534	FILE No. 11389534D104		
DESIGN	MHS	9/16/11	SCALE	As Shown	REV.	2
CADD	JCB	9/16/11				
CHECK	MHS	9/16/11				
REVIEW	KHE	9/16/11				





	DRAINAGE AREA A		DRAINAGE AREA B		DRAINAGE AREA C		DRAINAGE AREA D	
	AREA (SF)	AREA (AC)	AREA (SF)	AREA (AC)	AREA (SF)	AREA (AC)	AREA (SF)	AREA (AC)
ELEVATION							EXISTING POND B	
113.0							8	0.00
113.5	EXISTING POND "A"						116	0.00
114.0	3,920	0.09					350	0.01
114.5	4,356	0.10					1,074	0.02
115.0	5,227	0.12	POND 2				1,749	0.04
115.5	6,098	0.14	41,817*	0.96*			9,876	0.23
116.0	6,970	0.16					15,466	0.36
116.5	8,712	0.20						
117.0	10,454	0.24	41,791	0.96			62,726	1.44
117.5	12,632	0.29	136,092	3.12	POND 1			
118.0	15,246	0.35	161,315	3.70	11,996	0.28		
119.0	24,829	0.57	200,028	4.59	16,973	0.39		
120.0			204,732	4.70	21,950	0.50		

* APPROXIMATE AREA OF POND BOTTOM. POND BOTTOM ELEVATION MEASURED BY GOLDER (9/14/2011) TO BE 115.38
NOTE:
LITTORAL ZONE TO BE VEGETATED BY NATURAL RECRUITMENT

LEGEND	
	PROPOSED 5' CONTOURS
	PROPOSED 1' CONTOURS
	EXISTING 5' CONTOURS
	EXISTING 1' CONTOURS
	PROPOSED MAJOR DRAINAGE AREA
	PROPOSED MINOR DRAINAGE AREA
	FLOW ARROWS

- REFERENCES:
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 - PROPOSED CONVEYOR TO BE COVERED. DESIGN CONSIDERATIONS WILL BE MADE TO PREVENT COMMINGLING OF STORMWATER AND LUBRICANTS FROM CONVEYOR.

3	9/27/12		FDEP INFORMAL COMMENTS	BML	EKN	MHS
2	9/21/12		FDEP INFORMAL COMMENTS	BML	EKN	MHS
1	9/5/12		GRADING AND STRUCTURAL CHANGES PER CLIENT REQUEST	BML	EKN	MHS
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RW

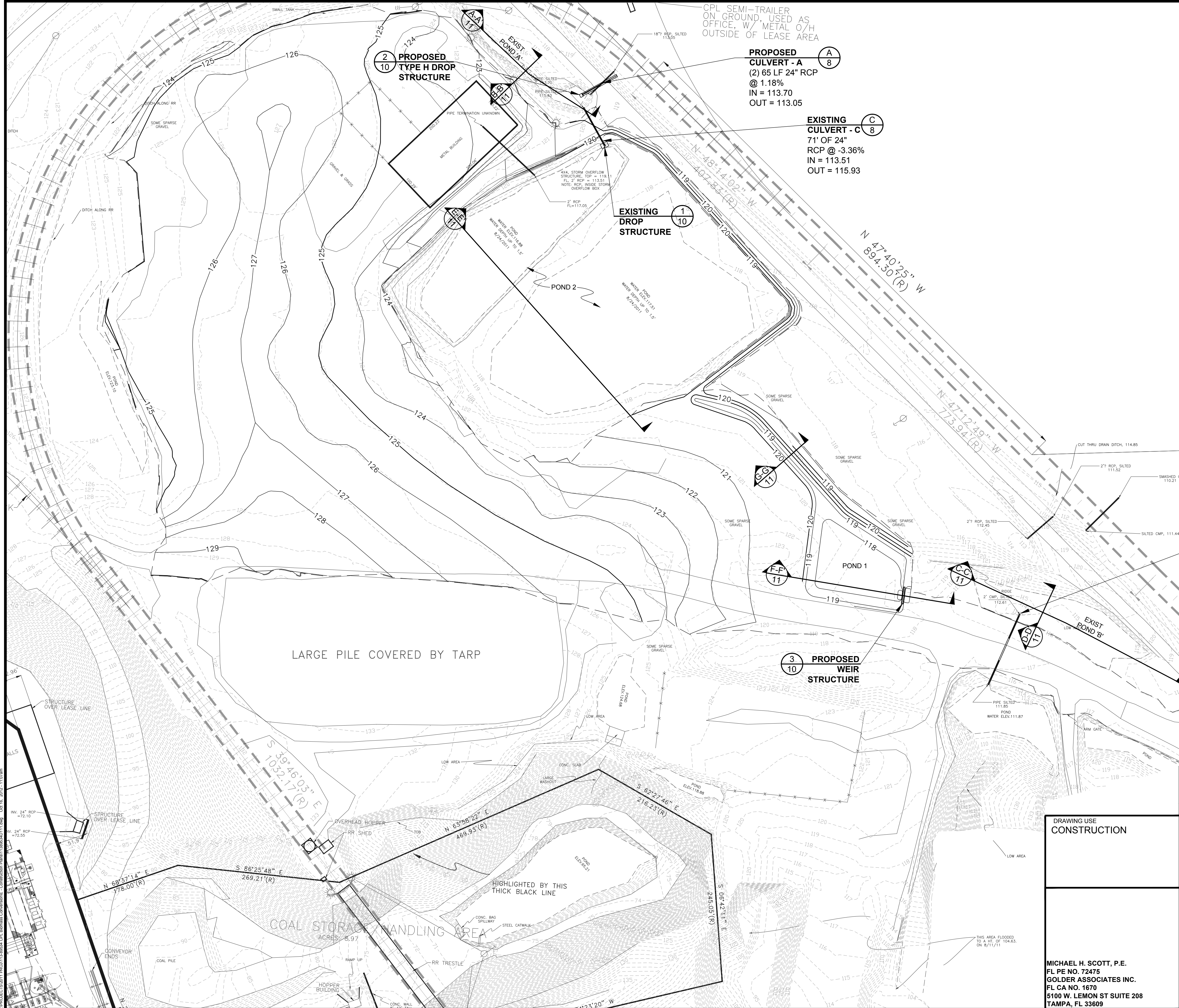
DRAWING USE
CONSTRUCTION

PROJECT		FLORIDA POWER DEVELOPMENT, LLC BIOMASS CONVERSION	
TITLE		POST DEVELOPMENT DRAINAGE PLAN	

QUANGHEE YI, P.E.
FL PE NO. 67418
GOLDER ASSOCIATES INC.
FL CA NO. 1670
5100 W. LEMON ST SUITE 208
TAMPA, FL 33609

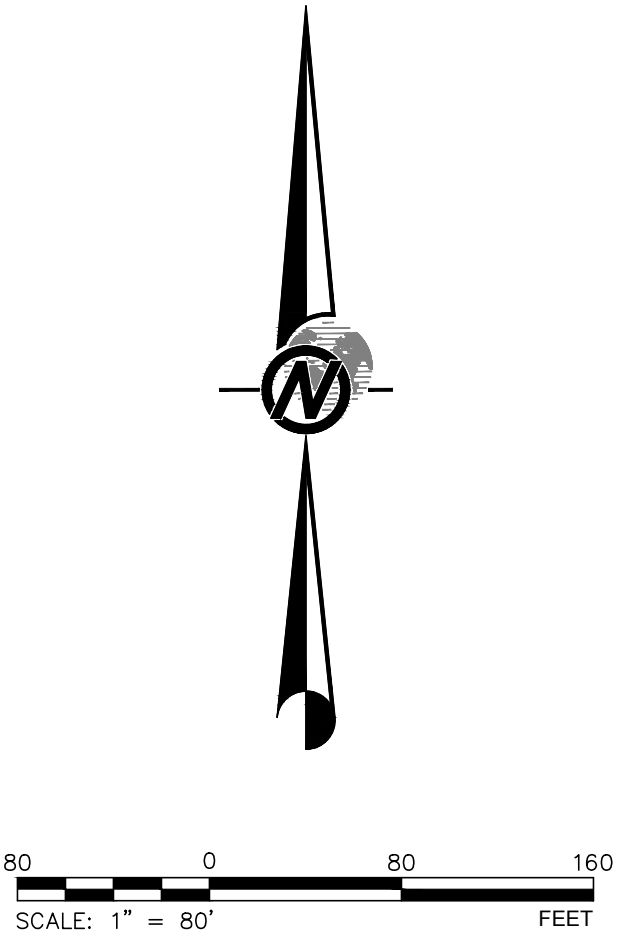


PROJECT	No.113-89534	FILE	No.11389534D110
DESIGN	MHS	9/16/11	SCALE As Shown
CADD	JCB	9/16/11	REV. 3
CHECK	QY/MHS	9/16/11	06
REVIEW	KHE	9/16/11	



LEGEND

- 125 PROPOSED 5' CONTOURS
- 121 PROPOSED 1' CONTOURS
- 125 EXISTING 5' CONTOURS
- 121 EXISTING 1' CONTOURS
- 1.33% SLOPE SYMBOL



- REFERENCES:**
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- NOTES:**
- ALL PROPOSED CULVERTS TO HAVE MITERED END SECTIONS. SEE DETAIL, SHEET 9, FDOT INDEX NO. 273.
 - POLLUTANT LOADING GENERATED FROM VEHICLE TRAFFIC WITHIN DRAINAGE BASIN D IS NOT ANTICIPATED TO INCREASE FROM PROPOSED ACTIVITIES.

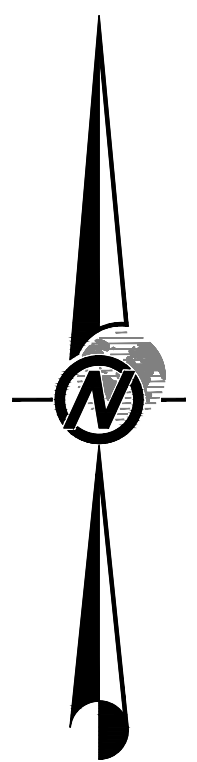
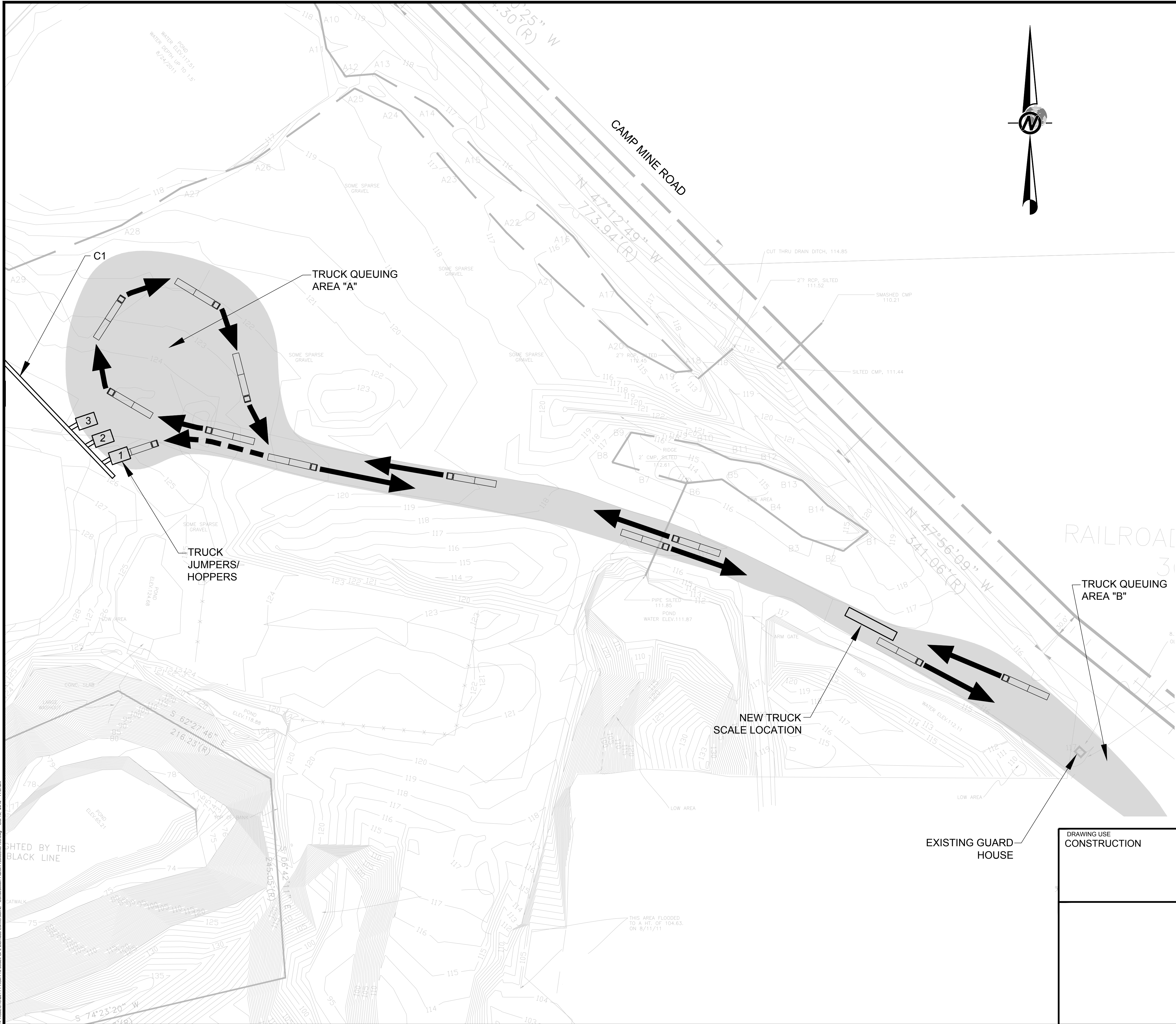
EXISTING CULVERT - D (D 8)
128' OF 24"
CMP @ 0.60%
IN = 112.61
OUT = 111.85

3	9/27/12		FDEP INFORMAL COMMENTS	BML	EKN	MHS
2	9/21/12		FDEP INFORMAL COMMENTS	BML	EKN	MHS
1	9/5/12		GRADING AND STRUCTURAL CHANGES PER CLIENT REQUEST	BML	EKN	MHS
REV	DATE	DES	REVISION DESCRIPTION	CADD	CHK	RVW

DRAWING USE
CONSTRUCTION

PROJECT		FLORIDA POWER DEVELOPMENT, LLC BIOMASS CONVERSION																				
TITLE		PROPOSED GRADING PLAN																				
MICHAEL H. SCOTT, P.E. FL PE NO. 72475 GOLDER ASSOCIATES INC. FL CA NO. 1670 5100 W. LEMON ST SUITE 208 TAMPA, FL 33609		<table><tr><td colspan="2">PROJECT No. 113-89534</td><td colspan="2">FILE No. 11389534D111</td></tr><tr><td>DESIGN</td><td>MHS</td><td>9/16/11</td><td>SCALE As Shown</td></tr><tr><td>CADD</td><td>JCB</td><td>9/16/11</td><td>REV. 3</td></tr><tr><td>CHECK</td><td>MHS</td><td>9/16/11</td><td rowspan="2">07</td></tr><tr><td>REVIEW</td><td>KHE</td><td>9/16/11</td></tr></table>		PROJECT No. 113-89534		FILE No. 11389534D111		DESIGN	MHS	9/16/11	SCALE As Shown	CADD	JCB	9/16/11	REV. 3	CHECK	MHS	9/16/11	07	REVIEW	KHE	9/16/11
PROJECT No. 113-89534		FILE No. 11389534D111																				
DESIGN	MHS	9/16/11	SCALE As Shown																			
CADD	JCB	9/16/11	REV. 3																			
CHECK	MHS	9/16/11	07																			
REVIEW	KHE	9/16/11																				





LEGEND



REFERENCES:

- 1. SURVEY PROVIDED & PERFORMED BY US SURVEYOR BETWEEN 08/01/11 AND 08/24/11.
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REV	DATE	DES	REVISION DESCRIPTION				CADD	CHK	RVW
PROJECT									
FLORIDA POWER DEVELOPMENT, LLC BIOMASS CONVERSION									
TITLE									
TRAFFIC PLAN									
			PROJECT No. 113-89534				FILE No. 11389534D105		
			DESIGN	MHS	9/16/11	SCALE	As Shown	REV.	----
			CADD	JCB	9/16/11	12			
			CHECK	MHS	9/16/11				
			REVIEW	KHE	9/16/11				

ATTACHMENT D
REVISED TOPOGRAPHIC AND WETLAND SURVEY

VICINITY MAP

NOT TO SCALE

Scale: 1" = 400'

North Arrow

North Index Map

Map Labels: CAMP HILL RD., COBBLE RD., PONCE DE LEON BLVD., TOWN BL., ROBERTS RD., COB RD.

Site Location: A red shaded area labeled "SITE" is located at the intersection of Camp Hill Rd. and Cobble Rd.

SOME AREAS INACCESSIBLE BY STEEP GRADES OR WATER BARRIERS HAVE BEEN ESTIMATED BY OBSERVATION
MANY EROSION AREAS HAVE BEEN LOCATED
ELEVATIONS (AS NOTED ON AREAS OF PONDING AND WATER HAVE BEEN TAKEN AND OBSERVED ON DIFFERENT SURVEY DATES FROM 8/1 TO 8/15 & 8/24
NO MONUMENTS SET BY REQUEST OF CLIENT ON PROJECT BOUNDARY, AND NOT REQUIRED AS THE PROJECT BOUNDARY IS A LEASE AREA
CONTROL POINTS:

[illegible]

Commencing at the South East corner of Section 8 at a railroad spike in the center of Volz Road, from said Commencement point, reference is made to a distance of 3289.41 feet, Reference from that point to a 3" vertical pipe with 11.237 feet of 2" pipe, and as looked at from the North East corner of said Section 8, there is a distance of 11.237 feet to the center of said pipe, and a distance of 2868.88 feet, thence from the Commencement point South 67 Degrees 56 minutes 56 seconds East 111.237 feet to the center of said pipe, and a distance of 11.237 feet to the place of beginning at the South East corner of said Pipe Area.

These South 65 degrees 56 minutes 05 seconds past a distance of 1898.94 feet.
Thence North 55 degrees 12 minutes 03 seconds past a distance of 631.07 feet.
Thence North 67 degrees 21 minutes 41 seconds past a distance of 1389.22 feet.
Thence North 67 degrees 21 minutes 41 seconds past a distance of 1389.22 feet.
Thence North 67 degrees 21 minutes 41 seconds past a distance of 413.37 feet.
Thence North 67 degrees 21 minutes 41 seconds past a distance of 413.37 feet.
Thence along an arc to the right having a radius of 580.94 feet, a distance of
13.89 feet to the point where the line crosses the center line of the road,
thereafter by a chord of North 38 degrees 18 minutes 13 seconds past a distance
of 1008.61 feet.
Thence South 65 degrees 56 minutes 05 seconds past a distance of 1238.97 feet.
Thence South 73 degrees 52 minutes 06 seconds past a distance of 1023.96 feet.
Thence South 73 degrees 52 minutes 06 seconds past a distance of 1023.96 feet.
Thence South 47 degrees 36 minutes 37 seconds past a distance of 1879.11 feet.
Thence South 47 degrees 36 minutes 37 seconds past a distance of 1879.11 feet.
Thence South 41 degrees 54 minutes 47 seconds past a distance of 610.06 feet.
Thence South 41 degrees 54 minutes 47 seconds past a distance of 610.06 feet.
Thence South 42 degrees 05 minutes 05 seconds past a distance of 472.41 feet.
Thence South 42 degrees 05 minutes 05 seconds past a distance of 472.41 feet.
Thence South 42 degrees 05 minutes 05 seconds past a distance of 650.48 feet.
Thence South 42 degrees 05 minutes 05 seconds past a distance of 650.48 feet.
Thence South 62 degrees 48 minutes 55 seconds past a distance of 755.47 feet.
Thence South 62 degrees 48 minutes 55 seconds past a distance of 755.47 feet.

To the Place of Beginning, Containing 720590.57 square feet (165.480 Acres) more or less.

Witness My Hand & Seal, Michael F. Feldbach, PS&A, Florida Registration Number 4615 Dated
March 27, 2013

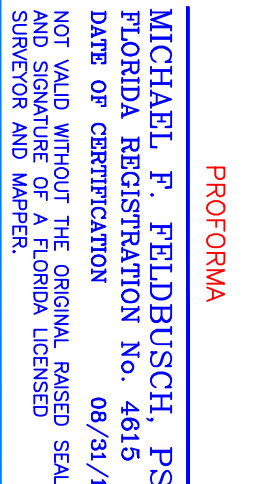
SURVEYOR'S CERTIFICATION (A SPECIAL PURPOSE SURVEY)

FIELD SURVEY: Michael F. Feldbusch, PLS, 8/1/11 THRU 8/15/11 & 8/23 THRU 8/26

1-800-TO-SURVEY

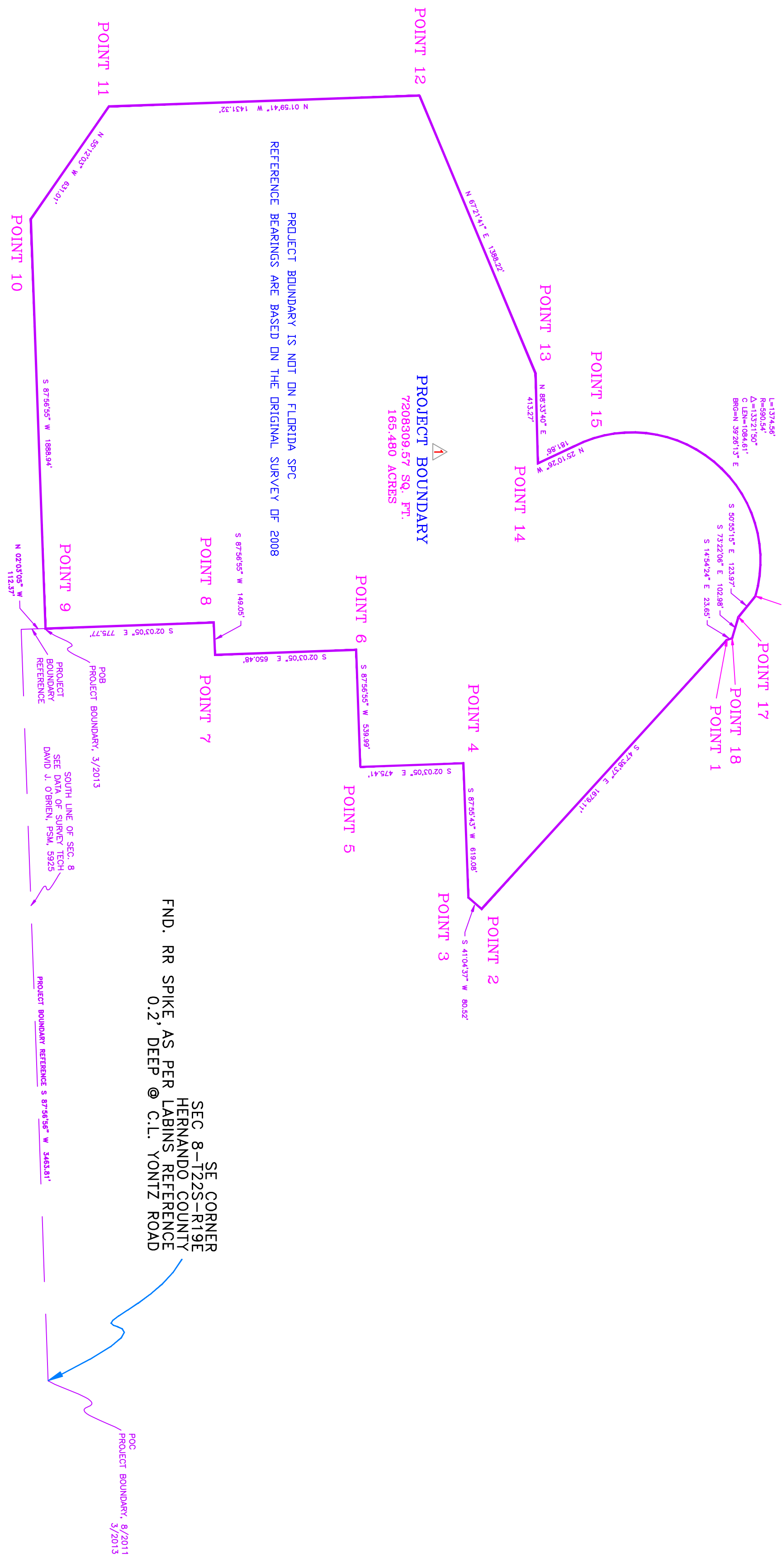
CENTRAL POWER
& LIME

PROJECT ADDRESS: 11430 CAMP MINE ROAD BROOKSVILLE, FL 34601	PROJECT TYPE: WATERSHED SURVEY
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Inverse with Area Wed Mar 06 14:30:05 2014

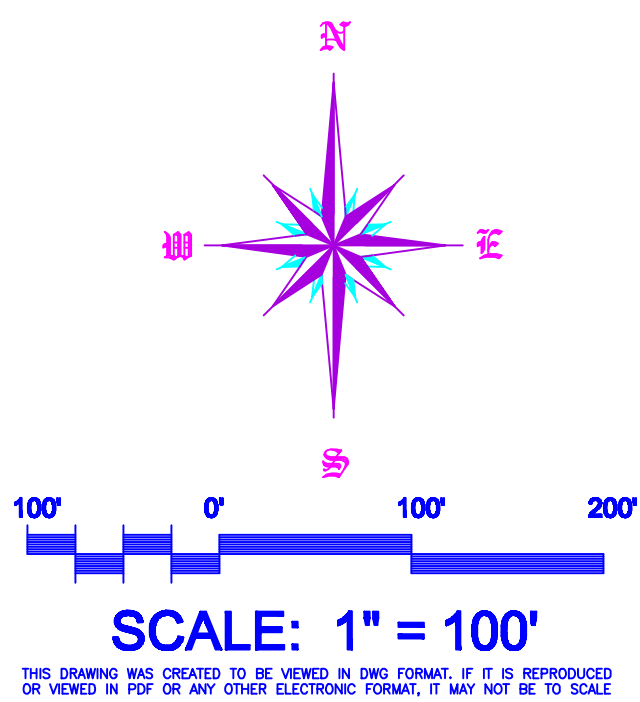
	Pytho	Brig	Distance	No-Pytho	Eastro
16	S 50°55'15" E	12.37	133.66714	500.91168	
17	S 73°25'06" E	102.08	133.61899	500.3136	
18	S 14°54'14" E	23.65	135.58952	501.1259	
1	S 47°48'37" E	47.931	135.56646	501.1847	
2	S 41°43'37" E	30.52	135.93348	502.3538	
3	S 07°55'47" E	61.08	135.95746	502.0657	
4	S 02°03'5" E	47.51	135.95262	502.04790	
5	S 87°56'55" W	53.99	134.67722	502.04791	
6	S 02°03'5" E	45.04	134.65787	501.6527	
7	S 57°56'55" W	14.05	134.82081	501.18836	
8	S 02°03'5" E	45.04	134.82081	500.93360	
9	S 02°03'5" E	77.57	133.44720	500.6727	
10	S 87°56'55" W	188.94	133.35958	499.91264	
11	N 50°12'4" W	43.01	133.31770	498.66184	
12	N 01°59'41" W	41.32	133.51065	498.61162	
13	N 67°21'41" E	120.82	135.66450	499.95136	
14	N 88°33'40" E	41.37	135.66450	500.20306	
15	N 20°02'0" E	181.86	135.67022	500.20306	
16	Length 139.545	Chert 10.841	135.67022	500.20306	
17	Length 139.545	Chert 12.975	135.67022	500.20306	
18	Length 139.545	Chert 13.975	135.67022	500.20306	
19	Length 139.545	Chert 14.975	135.67022	500.20306	
20	Length 139.545	Chert 15.975	135.67022	500.20306	
21	Length 139.545	Chert 16.975	135.67022	500.20306	
22	Length 139.545	Chert 17.975	135.67022	500.20306	
23	Length 139.545	Chert 18.975	135.67022	500.20306	
24	Length 139.545	Chert 19.975	135.67022	500.20306	
25	Length 139.545	Chert 20.975	135.67022	500.20306	
26	Length 139.545	Chert 21.975	135.67022	500.20306	
27	Length 139.545	Chert 22.975	135.67022	500.20306	
28	Length 139.545	Chert 23.975	135.67022	500.20306	
29	Length 139.545	Chert 24.975	135.67022	500.20306	
30	Length 139.545	Chert 25.975	135.67022	500.20306	
31	Length 139.545	Chert 26.975	135.67022	500.20306	
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98	Length 139.545	Chert 93.975	135.67022	500.20306	
99	Length 139.545	Chert 94.975	135.67022	500.20306	
100	Length 139.545	Chert 95.975	135.67022	500.20306	



IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE ALL WHETHER SHOWN ON THIS SURVEY OR NOT PRIOR TO COMMENCEMENT OF WORK. THIS SURVEY HAS BEEN PREPARED USING ONLY THE UTILITY DATA THIS SURVEYOR DOES NOT MAKE STATEMENTS OF ACCURACY BASED UPON MAPS AND UTILITY LOCATES OF OTHERS.

DATE OF ORIGINAL: AUGUST 31, 2011
 REVISION: Δ UPDATE PROJECT BOUNDARY DATE: MARCH 7, 20
 REVISION: DATE: 20
 REVISION: DATE: 20

CERTIFICATION IS ONLY TO THE PARTIES HEREIN NAMED.
THIS SURVEY IS NOT VALID FOR ANY FUTURE TRANSACTIONS OF THIS PROPERTY.



PROJECT BOUNDARY
L=1374.56'
R=590.54'
 $\Delta=133^{\circ}21'50''$
C LEN=1084.61'
BRG=N 39°26'13" E

CONTROL POINT 2

APPROX. LOCATION
LEASE AREA

WEST
649.67'(R)

50'x50'
SUBSTATION EASEMENT
NOT LOCATED

END OF BARRIER CONC. WALL

ENTRANCE/ACCESS ROAD

ACCESS ROADS
NOT COVERED BY EASEMENT

ACCESS ROADS
NOT COVERED BY EASEMENT

THIS SURVEY WAS CONDUCTED WITHOUT BENEFIT OF A
TITLE COMMITMENT AND MAY AFFECT SURVEY MATTERS

POND LOCATION FROM AERIAL DATA

PROJECT BOUNDARY
8/2011

7713530.13 SQ. FT.
177.078 ACRES

For inquiries, questions or concerns about this survey contact Inquiries@ussurveyor.com or call 1-800-867-8783 ext. 209

U.S. SURVEYOR®
4929 Riverwind Pointe Drive
Evansville, Indiana 47715
"America's Land Surveyor"

1-800-TO-SURVEY

PROJECT LOCATION: HERNANDO COUNTY, STATE OF FLORIDA		© COPYRIGHT 2015 U.S. SURVEYOR This drawing, style and format is protected by copyright and all rights are reserved; this may not be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the written consent and permission of U.S. SURVEYOR
PROJECT ADDRESS: 11430 CAMP MINE ROAD BROOKSVILLE, FL 34601	PROJECT TYPE: WATERSHED SURVEY	
SHEET 2 OF 3 JOB NUMBER: S847862.DWG_MFF		

APPENDIX 8.7.6
SITE SURVEY

VICINITY MAP

NOT TO SCALE

The map shows the intersection of Camp Hill Rd and Corb Rd. The site is located on Camp Hill Rd, near the intersection with Corb Rd. The map includes a scale bar (0 to 800 feet) and a north arrow.

SOME AREAS INACCESSIBLE BY STEEP GRADES OR WATER BARRIERS HAVE BEEN ESTIMATED BY OBSERVATION
MANY EROSION AREAS HAVE BEEN LOCATED
ELEVATIONS (AS NOTED ON AREAS OF PONDS AND WATER HAVE BEEN TAKEN AND OBSERVED ON DIFFERENT SURVEY DATES FROM 8/1 TO 8/15 & 8/24
NO MONUMENTS SET BY REQUEST OF CLIENT ON PROJECT BOUNDARY, AND NOT REQUIRED AS THE PROJECT BOUNDARY IS A LEASE AREA
CONTROL POINTS:

[illegible]

Commencing at the South East corner of Section 8 at a railroad spike in the center of Volz Road, from said Commencement point, reference is made to a distance of 3289.41 feet, Reference from that point to a 3" vertical pipe with 11.237 feet of 2" pipe, and as looked at from the North East corner of said Section 8, there is a distance of 11.237 feet to the center of said pipe, and a distance of 2868.88 feet, thence from the Commencement point South 67 Degrees 56 minutes 56 seconds East 111.237 feet to the center of said pipe, and a distance of 11.237 feet to the place of beginning at the South East corner of said Pipe Area.

These South 55 degrees 56 minutes 55 seconds past a distance of 1389.04 feet, these North 55 degrees 12 minutes 03 seconds past a distance of 651.01 feet, these North 56 degrees 56 minutes 55 seconds past a distance of 1389.04 feet, these North 57 degrees 21 minutes 41 seconds past a distance of 1389.22 feet, these North 58 degrees 33 minutes 40 seconds past a distance of 413.37 feet, these North 59 degrees 33 minutes 40 seconds past a distance of 413.37 feet, these North 60 degrees 33 minutes 40 seconds past a distance of 413.37 feet, these along an arc to the right having a radius of 580.94 feet, a distance of 1389.04 feet, these along an arc to the right having a radius of 580.94 feet, a distance of 1389.04 feet, these by a chord of North 38 degrees 13 minutes 13 seconds past a distance of 1008.61 feet, these 55 degrees 55 minutes 15 seconds past a distance of 1238.97 feet, these South 73 degrees 52 minutes 06 seconds past a distance of 1023.96 feet, these North 73 degrees 52 minutes 06 seconds past a distance of 1023.96 feet, these South 47 degrees 36 minutes 37 seconds past a distance of 1879.11 feet, these South 47 degrees 36 minutes 37 seconds past a distance of 1879.11 feet, these South 41 degrees 56 minutes 47 seconds past a distance of 810.06 feet, these South 42 degrees 56 minutes 47 seconds past a distance of 810.06 feet, these South 42 degrees 56 minutes 05 seconds past a distance of 472.41 feet, these South 42 degrees 56 minutes 05 seconds past a distance of 472.41 feet, these South 42 degrees 03 minutes 06 seconds past a distance of 650.48 feet, these South 42 degrees 03 minutes 06 seconds past a distance of 650.48 feet, these South 62 degrees 48 minutes 55 seconds past a distance of 755.47 feet, these South 62 degrees 48 minutes 55 seconds past a distance of 755.47 feet, these to the place of Beginning, Containing 720580.57 square feet (165.480 Acres) more or less.

Witness My Hand and Seal, this 15th day of March, A.D. 1913.

_____, Michael F. Feltovich, PS&A, Florida Registration Number 4615 (Deed Clerk)

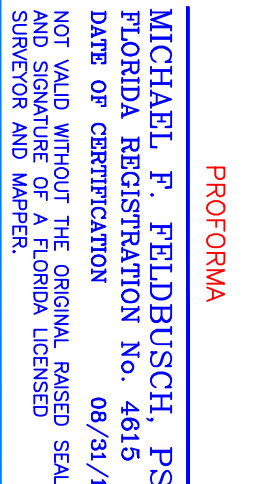
SURVEYOR'S CERTIFICATION (A SPECIAL PURPOSE SURVEY)

FIELD SURVEY: Michael F. Feldbusch, PLS, 8/1/11 THRU 8/15/11 & 8/23 THRU 8/26

1-800-TO-SURVEY

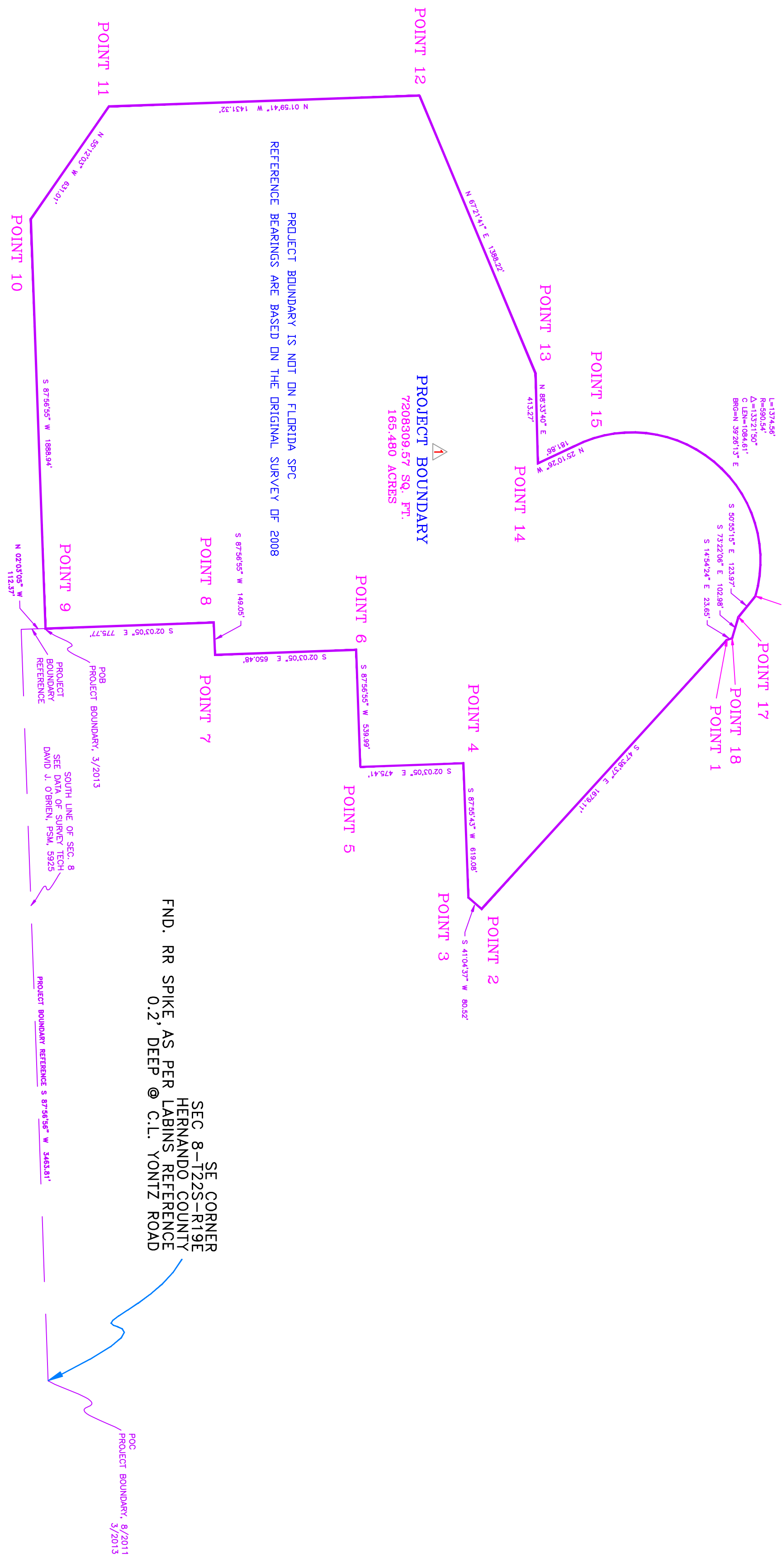
CENTRAL POWER
& LIME

PROJECT ADDRESS: 11430 CAMP MINE ROAD BROOKSVILLE, FL 34601	PROJECT TYPE: WATERSHED SURVEY
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Inverse with Area Wed Mar 06 14:30:05 2014

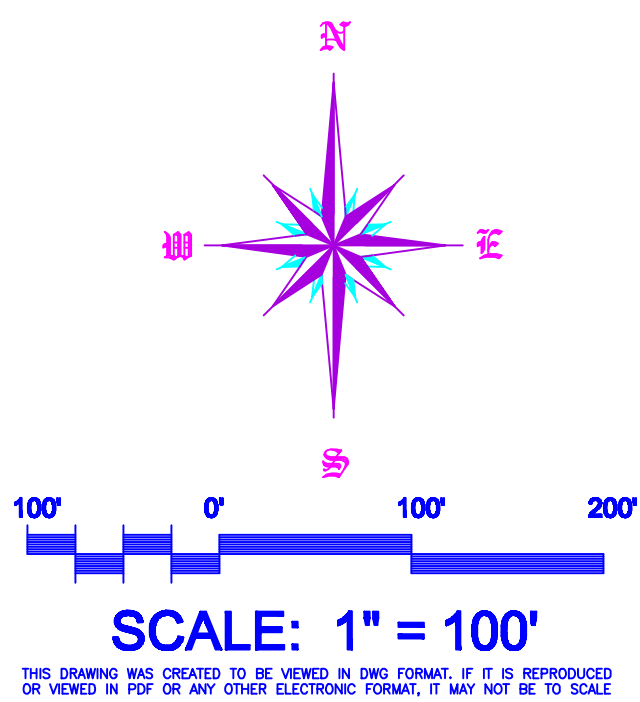
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16	Length 139.545	Chert 10.841	0.07202	15.0778
17	Length 139.545	Chert 12.975	0.08213	15.0778
18	Length 139.545	Chert 13.083	0.08213	15.0778
19	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
20	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
21	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
22	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
23	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
24	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
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56	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
57	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
58	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
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68	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
69	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
70	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
71	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
72	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
73	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
74	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
75	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
76	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
77	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
78	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
79	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
80	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
81	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
82	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
83	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
84	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
85	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
86	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
87	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
88	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
89	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
90	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
91	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
92	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
93	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
94	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
95	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
96	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
97	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
98	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
99	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537
100	Radius Profile Dist. No. 135.69191	0.0007537	0.0007537	0.0007537



IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE ALL WHETHER SHOWN ON THIS SURVEY OR NOT PRIOR TO COMMENCEMENT OF WORK. THIS SURVEY HAS BEEN PREPARED USING ONLY THE UTILITY DATA THIS SURVEYOR DOES NOT MAKE STATEMENTS OF ACCURACY BASED UPON MAPS AND UTILITY LOCATES OF OTHERS.

DATE OF ORIGINAL: AUGUST 31, 2011
 REVISION: Δ UPDATE PROJECT BOUNDARY DATE: MARCH 7, 20
 REVISION: DATE: 20
 REVISION: DATE: 20

CERTIFICATION IS ONLY TO THE PARTIES HEREIN NAMED.
THIS SURVEY IS NOT VALID FOR ANY FUTURE TRANSACTIONS OF THIS PROPERTY.



PROJECT BOUNDARY
L=1374.56'
R=590.54'
 $\Delta=133^{\circ}21'50''$
C LEN=1084.61'
BRG=N 39°26'13" E

CONTROL POINT 2

APPROX. LOCATION
LEASE AREA

WEST
649.67'(R)

50'x50'
SUBSTATION EASEMENT
NOT LOCATED

END OF BARRIER CONC. WALL

ENTRANCE/ACCESS ROAD

ACCESS ROADS
NOT COVERED BY EASEMENT

ACCESS ROADS
NOT COVERED BY EASEMENT

THIS SURVEY WAS CONDUCTED WITHOUT BENEFIT OF A
TITLE COMMITMENT AND MAY AFFECT SURVEY MATTERS

POND LOCATION FROM AERIAL DATA

PROJECT BOUNDARY
8/2011

7713530.13 SQ. FT.
177.078 ACRES

For inquiries, questions or concerns about this survey contact Inquiries@ussurveyor.com or call 1-800-867-8783 ext. 209

U.S. SURVEYOR®
4929 Riverwind Pointe Drive
Evansville, Indiana 47715
"America's Land Surveyor"

1-800-TO-SURVEY

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PROJECT ADDRESS: 11430 CAMP MINE ROAD BROOKSVILLE, FL 34601	PROJECT TYPE: WATERSHED SURVEY	
SHEET 2 OF 3 JOB NUMBER: S847862.DWG_MFF		

