



2016 ANNUAL INSPECTION REPORT

ST. JOHNS RIVER POWER PARK BYPRODUCT STORAGE AREA B 2016 ANNUAL INSPECTION REPORT

Submitted to: St. Johns River Power Park
11201 New Berlin Road
Jacksonville, FL 32226 USA

Submitted by: Golder Associates Inc.
9428 Baymeadows Road, Suite 400
Jacksonville, FL 32256 USA

January 2017

15-26356

**A world of
capabilities
delivered locally**





INTRODUCTION

Golder Associates Inc. (Golder) conducted the initial coal combustion residual (CCR) landfill annual inspection for the Byproduct Storage Area B (BSA-B) at the St. Johns River Power Park (SJRPP) in Jacksonville, Florida. The inspection, conducted on December 16, 2016 and January 12, 2017, and this report are intended to meet the requirements of the 40 CFR §257.84. Golder's inspection was performed by Samuel Stafford.

The Phase I development of BSA-B is located approximately 1.5 miles northeast of the main entrance to SJRPP in northeastern Duval County, Jacksonville, Florida (see Figure 1).

REVIEW OF AVAILABLE INFORMATION

In accordance with §257.84(b)(1), Golder's inspection team reviewed available information regarding the status and condition of BSA-B including operating record documents. The documents reviewed included:

- Technical Submittal, Hydrogeological and Geotechnical Site Evaluation, Conceptual Design Drawings, April 2007, Golder Project No. 043-2650 (including associated responses to comments).
- Area B Byproduct Storage Area Phase I Operations Plan, September 2014, Golder Project No. 113-82588.
- Airspace and Remaining Life Calculations, Byproduct Storage Area B, October 2013, Golder Project No. 113-82588.2.
- Operating records: SJRPP weekly inspection results and compaction test results.

INSPECTION SUMMARY

Golder's inspection team conducted a visual inspection of BSA-B on December 16, 2016 and January 12, 2017, which considered cover conditions, exterior slope conditions, erosional conditions, vegetative conditions, stormwater management conditions, placement of CCRs, slope stability, and any other signs of distress or malfunction.

CHANGES IN GEOMETRY

Changes in geometry of BSA-B were evaluated by comparing the December 2015 topographic survey with the December 2016 topographic survey. The primary changes in geometry of BSA-B are due to side-slope grading activities completed by SJRPP in 2016 and CCR placement in the central portion of BSA-B.

APPROXIMATE CCR VOLUME

The volume of CCR materials in the BSA-B at the time of the inspection is estimated to be approximately 1,470,000 cubic yards. A topographic survey of the BSA-B was completed in December 2016. This survey was compared to the as-built base grade survey.



STRUCTURAL WEAKNESS AND DISRUPTING CONDITIONS

No indications of actual or potential structural weakness were noted during the December 16, 2016 and January 12, 2017 inspection or during the review of the available information.

Existing conditions which may have the potential to disrupt the operations of the BSA-B include: the erosion of intermediate cover and exposed CCRs on portions of exterior slopes, sediment accumulation in stormwater management features, and contact water pump station inlet piping. According to SJRPP personnel, these conditions will be remedied in the 1st quarter of 2017.

CHANGES AFFECTING STABILITY OR OPERATIONS

Based on the December 16, 2016 inspection and review of the available information, no other changes from the previous inspection conducted on December 15, 2015 that may affect the operations or stability of the BSA were observed.

CLOSING

Based on the review of the available information noted above and on the December 16, 2016 and January 12, 2017 field observations, Golder concludes that the design, construction, operation, and maintenance of the BSA-B appears to be consistent with recognized and generally accepted good engineering.

GOLDER ASSOCIATES INC.

Samuel F. Stafford, PE
Project Engineer

Gregory M. Powell, PhD, PE
Practice Leader and Principal

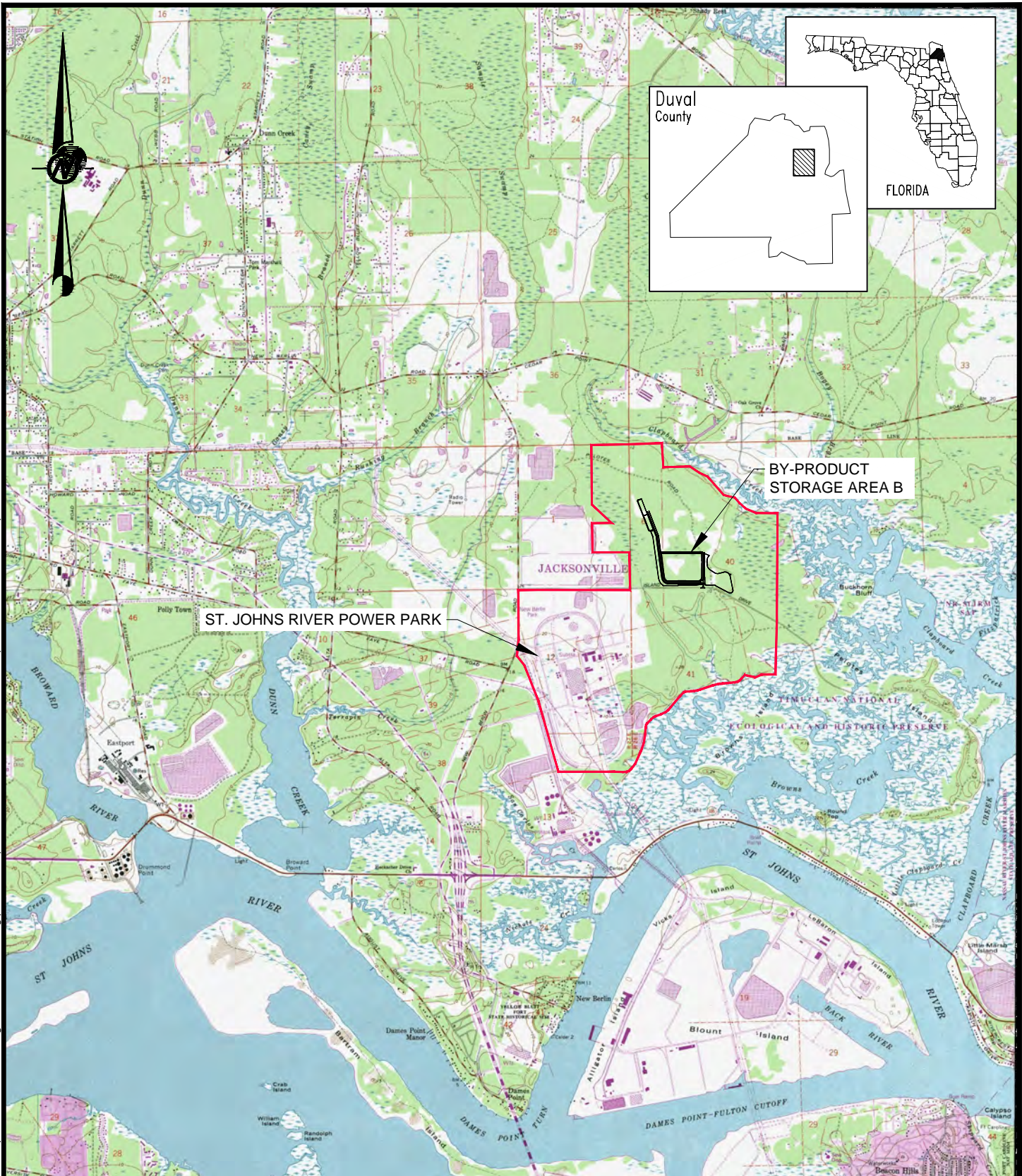
SFS/GMP/ams

Attachments: Figure 1 - Site Location Map
Figure 2 - Byproduct Storage Area B Grid Location Map

FN: G:\Projects\15-\15-26356\Task 1000 Inspection\2016\Final\SJRPP Area B Annual Inspection 2016-Final.docx

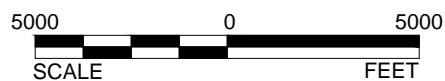
FIGURES

N:\File\2015\15-26356 HGS SJRPP CCRIC - Annual Inspection\Active Drawings\1526356-C001.dwg | FIGURE 1 | Modified: buzero 01/07/2016 5:09 PM | Plotted: buzero 01/13/16 Jacksonville, FL



REFERENCES

- 1.) USGS TOPOGRAPHIC MAP, 7.5 MIN. QUADRANGLE MAP SERIES: EASTPORT QUADRANGLE, DUVAL COUNTY, FLORIDA.



PROJECT

ST. JOHNS RIVER POWER PARK
JACKSONVILLE, DUVAL COUNTY, FLORIDA

TITLE

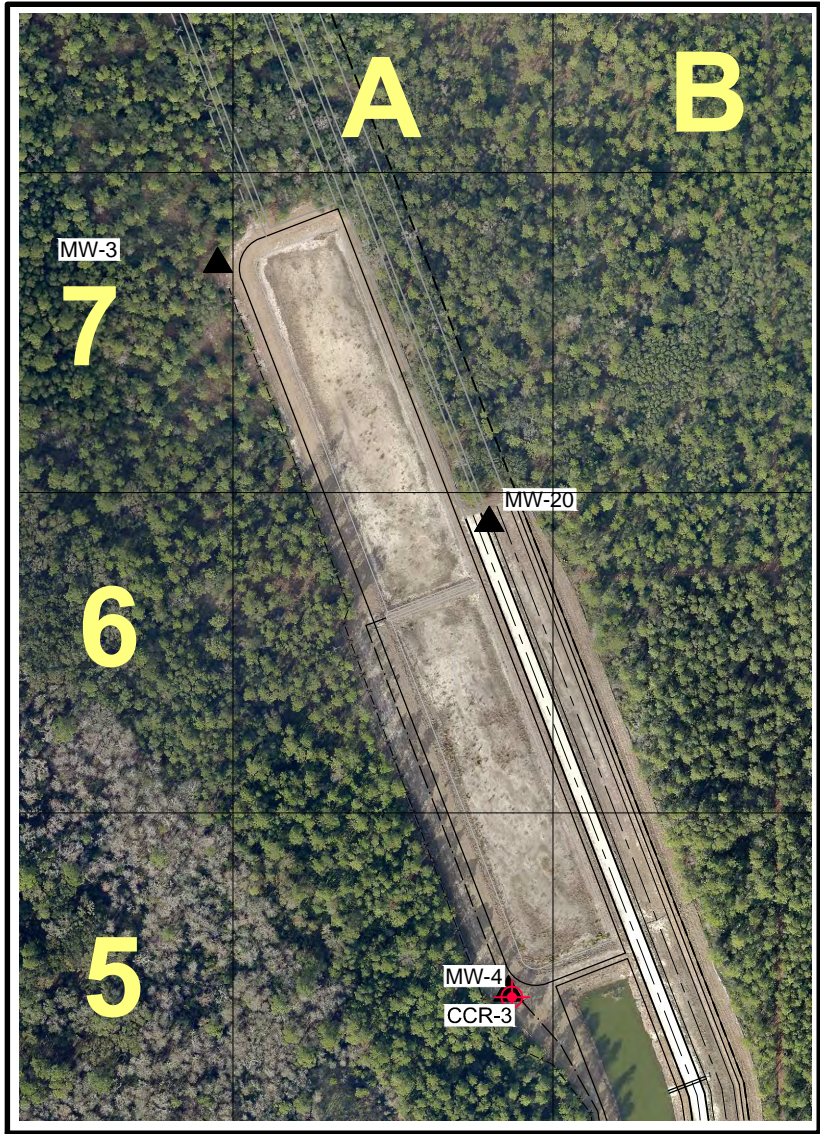
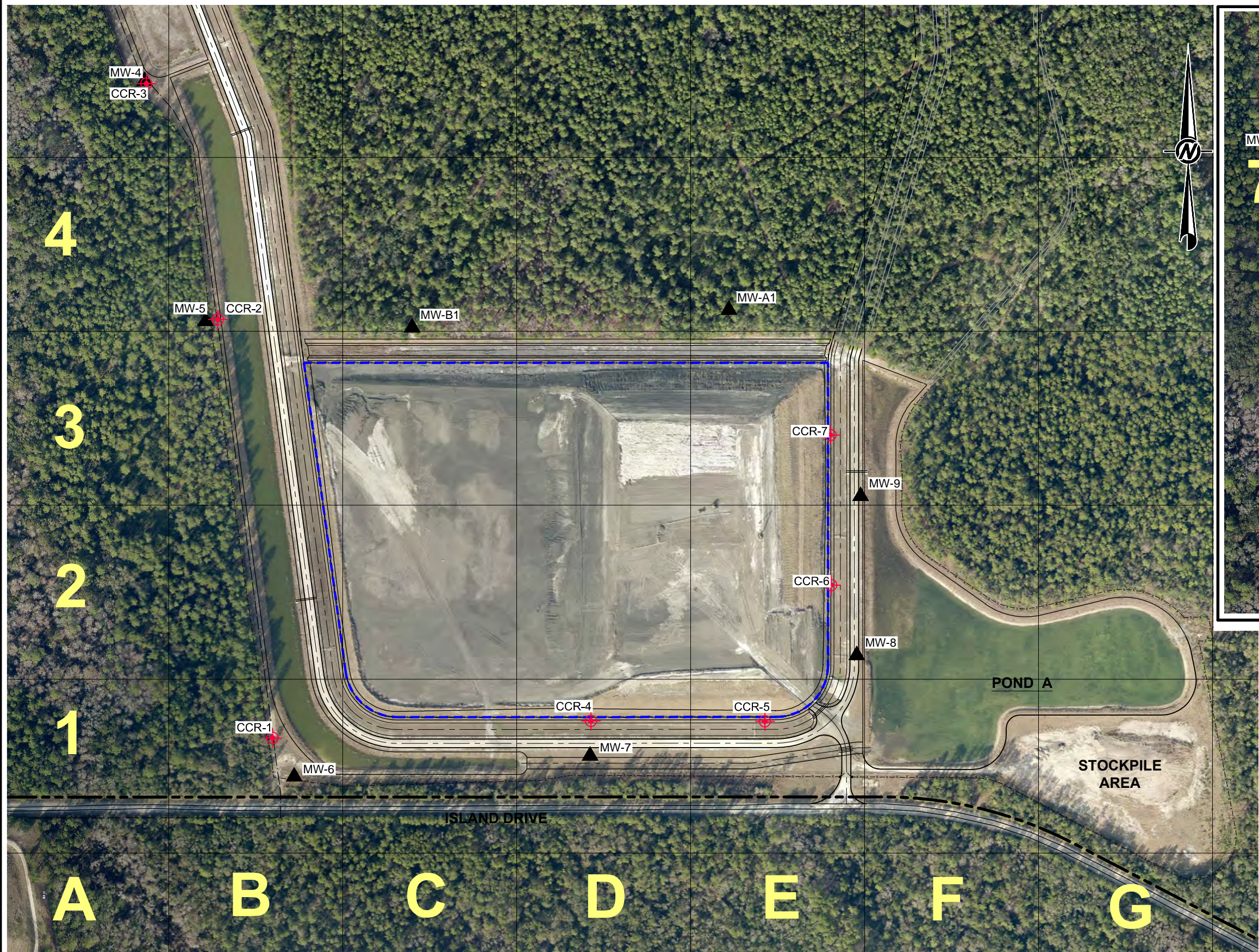
SITE LOCATION MAP



PROJECT No.			15-26356		FILE No.		1526356-C001	
DESIGN	SFS	01/05/16		SCALE		AS SHOWN		
CADD	BCL	01/05/16		FIGURE 1				
CHECK	SFS	01/13/16						
REVIEW	GMP	01/13/16						

FIGURE 1

N:\File\2015\15-26356 HGS SURPP CCR-C - Annual Inspection\Active Drawings\1526356-C002.dwg | FIGURE 2 | Modified: blucero 01/07/2016 5:07 PM | Plotted: blucero 01/13/16 Jacksonville, FL

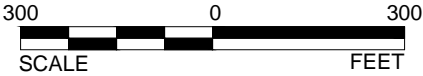


LEGEND

- PROPERTY BOUNDARY
- X — X — X — X — CHAIN LINK FENCELINE
- - - - - PHASE I LIMIT OF WASTE
- ▲ MW-8 MW-SERIES MONITORING WELL
- - - - - CONTACT WATER FORCEMAIN
- ⊕ CCR-1 CCR GROUNDWATER MONITORING WELL LOCATIONS

REFERENCES

- 1.) MW-SERIES MONITORING WELL AS-BUILT SURVEY PERFORMED BY POPPEL PUTNAL & ASSOCIATES, INC. ON NOVEMBER 13 AND 15, 2007.
- 2.) CCR-SERIES MONITORING WELL AS-BUILT SURVEY PERFORMED BY B.V. & ASSOCIATES, INC. ON NOVEMBER 17, 2015.
- 3.) AERIAL IMAGE TAKEN FROM FDEP BUREAU OF SURVEY AND MAPPING (LAND BOUNDARY INFORMATION SYSTEM), YEAR 2013.



PROJECT		ST. JOHNS RIVER POWER PARK JACKSONVILLE, DUVAL COUNTY, FLORIDA			
TITLE		BYPRODUCT STORAGE AREA B GRID LOCATION MAP			
PROJECT No.		15-26356		FILE No.	
DESIGN		SFS		01/05/16	
CADD		BCL		01/05/16	
CHECK		SFS		01/13/16	
REVIEW		GMP		01/13/16	
SCALE		AS SHOWN		FIGURE 2	

