



# 2015 ANNUAL INSPECTION REPORT

## ST. JOHNS RIVER POWER PARK BYPRODUCT STORAGE AREA B 2015 ANNUAL INSPECTION REPORT

**Submitted to:** St. Johns River Power Park  
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15-26356





## 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 15, 2015 and January 13, 2016, and this report area intended to meet the requirements of the 40 CFR §257.84. Golder's inspection team consisted of Samuel Stafford and Don Grigg.

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 15, 2015 and January 13, 2016, 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

This inspection was the first annual inspection performed on the BSA; therefore, changes in geometry of the structure from previous annual inspections cannot be evaluated.

## APPROXIMATE CCR VOLUME

The volume of CCR materials in the BSA-B at the time of the inspection is estimated to be approximately 1,370,000 cubic yards. A topographic survey of the BSA-B was completed in December 2015. 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 15, 2015 and January 13, 2016 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 exposed CCRs on portions of exterior slopes. According to SJRPP personnel, these areas of exposed CCRs are being monitored and will be covered with approximately 6-inches of soil and seeded to establish vegetative growth by the spring of 2016.

## CHANGES AFFECTING STABILITY OR OPERATIONS

This inspection was the first comprehensive annual inspection performed on the BSA-B; therefore, no comparisons to previous annual inspections can be made in accordance with §257.84(b)(1)(iv).

## CLOSING

Based on the review of the available information noted above and on the December 15, 2015 and January 13, 2016 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 standards with the limited exceptions regarding ongoing operation and maintenance activities relating to soil cover placement and seeding of exposed CCRs which is expected to be completed in the spring of 2016.

### GOLDER ASSOCIATES INC.

Samuel F. Stafford, PE  
Project Engineer

Don E. Grigg, PE (Pennsylvania)  
Senior Engineer

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

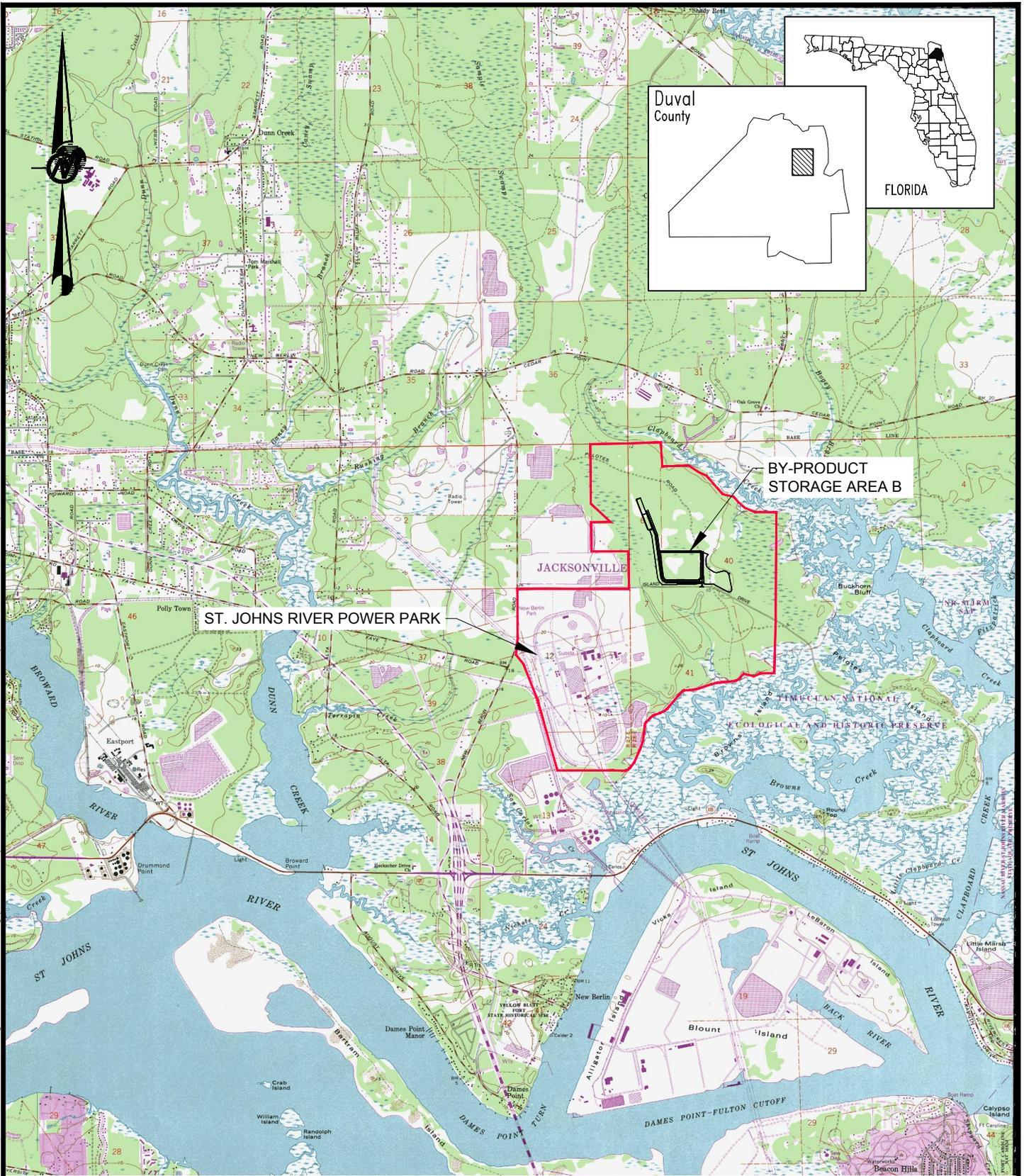
SFS/DEG/GMP/ams

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

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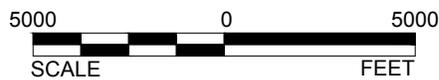
## FIGURES

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



## REFERENCES

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

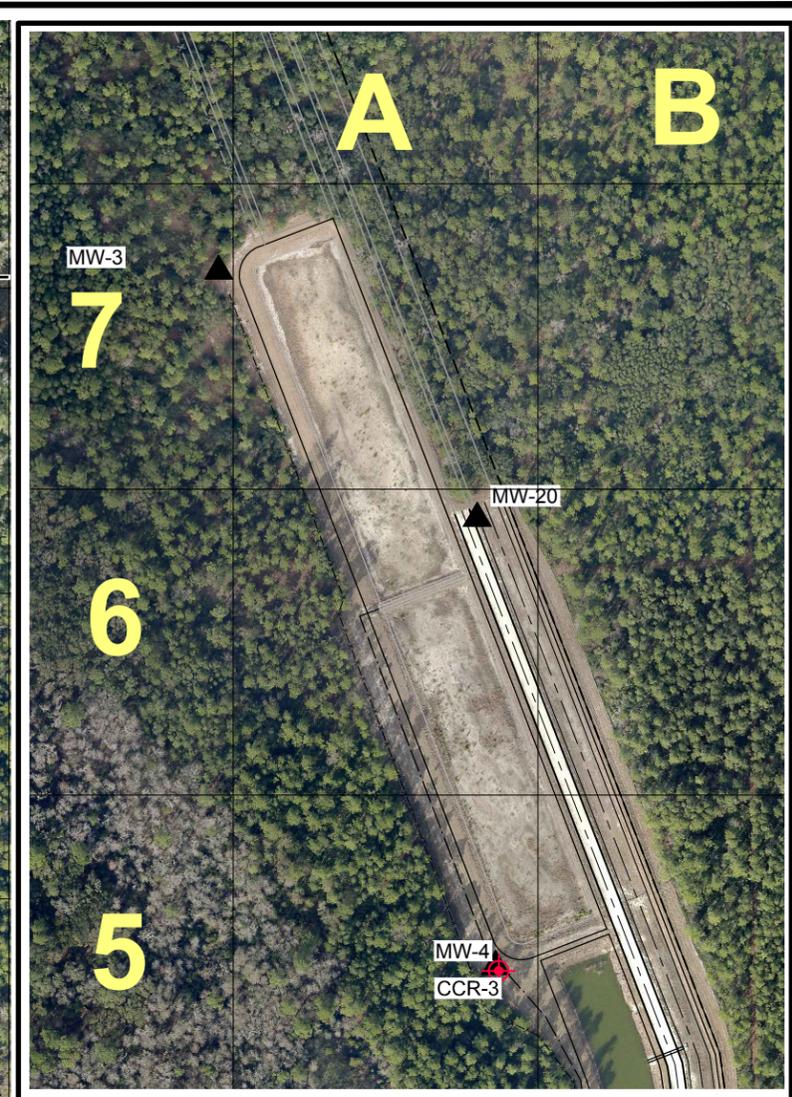
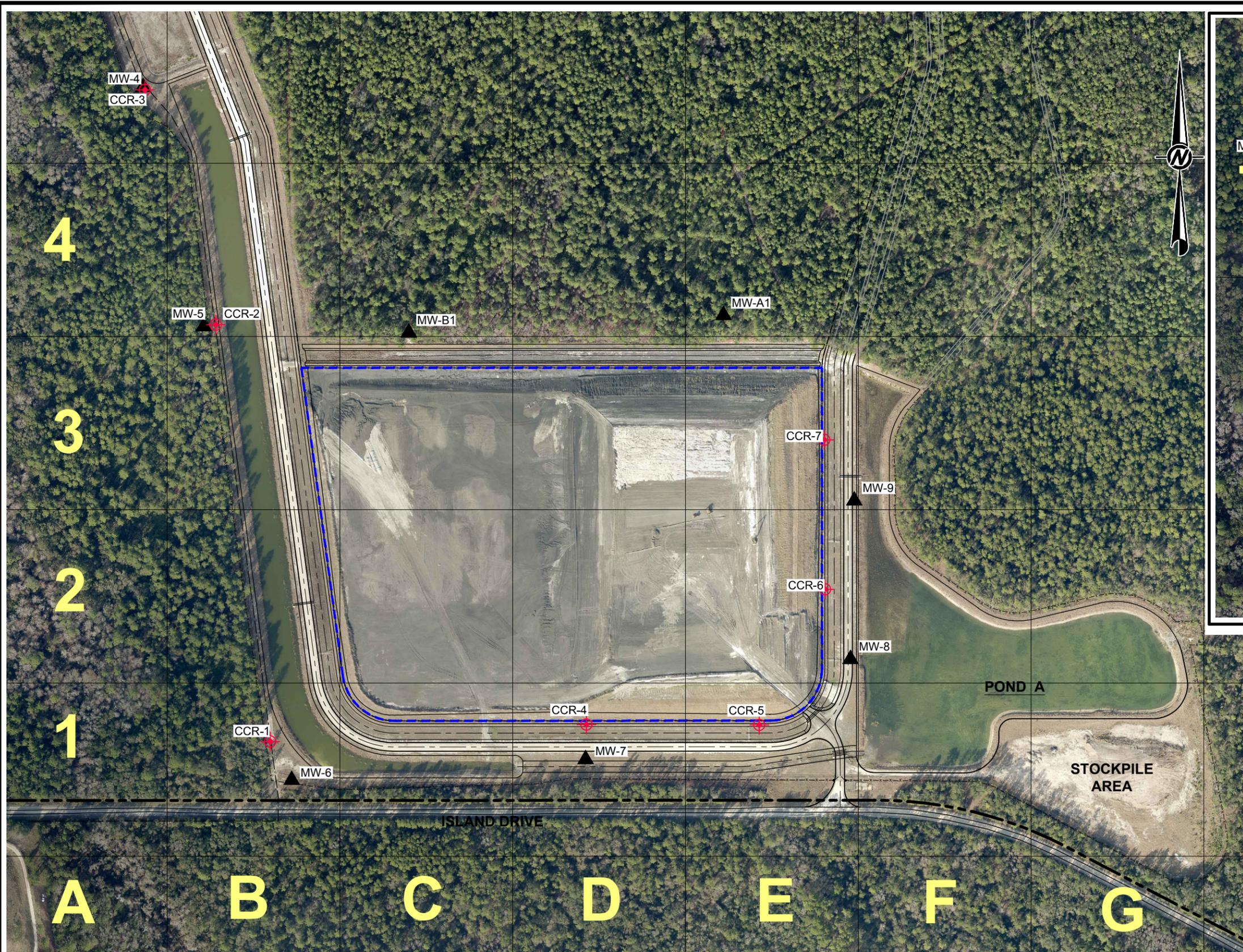


|             |              |   |              |
|-------------|--------------|---|--------------|
| PROJECT     |              | ST. JOHNS RIVER POWER PARK<br>JACKSONVILLE, DUVAL COUNTY, FLORIDA |              |
| TITLE       |              | SITE LOCATION MAP   |              |
| PROJECT No. | 15-26356     | FILE No.  | 1526356-C001 |
| DESIGN      | SFS 01/05/16 | SCALE   | AS SHOWN     |
| CADD        | BCL 01/05/16 |   |              |
| CHECK       | SFS 01/13/16 |   |              |
| REVIEW      | GMP 01/13/16 |   |              |



**FIGURE 1**

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**LEGEND**

- PROPERTY BOUNDARY
- 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<br>JACKSONVILLE, DUVAL COUNTY, FLORIDA |              |          |
| TITLE       |          | BYPRODUCT STORAGE AREA B GRID<br>LOCATION MAP                     |              |          |
| PROJECT No. | 15-26356 | FILE No.  | 1526356-C002 |          |
| DESIGN      | SFS      | 01/05/16  | SCALE        | AS SHOWN |
| CADD        | BCL      | 01/05/16  |              |          |
| CHECK       | SFS      | 01/13/16  |              |          |
| REVIEW      | GMP      | 01/13/16  |              |          |



**FIGURE 2**