

**COQUINA WATER MANGEMENT  
DISTRICT  
OKEECHOBEE COUNTY, FLORIDA**

**Water Control Plan  
Second Amendment  
February 2017**

**PREPARED BY:**



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**EXHIBITS**

**Location Map**

**Exhibit "A"**

**Jurisdictional Boundary Map and outs**

**Exhibit "B"**

**Coquina Drainage System Access Roads**

**Exhibit "C"**

**Coquina Drainage System**

**Exhibit "D"**

*SECOND AMENDMENT TO THE CWMD WCP  
FEBRUARY 2017*

This document is a copy and is being provided at the request of **Coquina Water Management District** for informational purposes only. The signed and sealed original of this document was filed with **Coquina Water Management District**, 504 NW Fifth Avenue, Okeechobee, FL 34972.

**ENGINEER'S CERTIFICATION**

**I HEREBY CERTIFY**, as a Professional Engineer in the State of Florida, that the information in this **Second Amendment to the Water Control Plan for Coquina Water Management District** was assembled under my direct responsible charge. The information provided herein was based on the information that was available and obtained from opinions, information and documentation prepared or supplied by others, which may have included: public officials, public entities, individuals or entities having an interest in some or all of the real property. The certifying Engineer cannot be responsible for added or deleted information once distributed. This report is not intended or represented to be suitable for any reuse without specific verification or adoption by the Engineer. This verification is provided in accordance with the Florida Board of Professional Engineers' Rule on Certification under Chapter 61G15-18.011(4).

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Alvin Bryan Clemons  
FL P.E. Number: 62492

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Date

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[Reproductions are not valid unless signed, dated and  
Embossed with an Engineer's seal]

**SECTION A.            INTRODUCTION**

**I.            GENERAL**

The Coquina Water Management District (formerly known as the Southern Lake Drainage District and herein referred to as “Coquina”) was established pursuant to Chapter 298, Florida Statutes, on June 23, 1971 by a Circuit Court Order entered in the Nineteenth Judicial Circuit, in and for Okeechobee County, Florida. See exhibit “A” for a location map.

A three-member Board of Supervisors, each member of which holds office for a three-year term, governs the District. The terms of the Board Members are staggered so that no more than one Supervisor is elected at the Annual Landowner’s Meeting held each year. At the Annual Landowner’s Meeting, any landowner owning an acre or fraction thereof of real property within Coquina’s jurisdictional boundary is entitled to vote, on an owned acreage basis, for the Supervisor position then subject to election.

Coquina’s Board of Supervisors meets regularly on the second Friday of each month.

**II.           AUTHORIZATION**

Coquina’s Board of Supervisors pursuant to Chapter 298, Florida Statutes, authorized the preparation of this Second Amendment to the District’s Water Control Plan.

**III.          PURPOSE AND SCOPE**

The purpose of this Second Amendment to the Water Control Plan (hereinafter referred to as the “Second Amendment”) is to present and where applicable revise and amend the nature and extent of maintenance, works, services, activities and public improvements which may be funded, provided, constructed, installed or implemented by Coquina for and on behalf of the real property comprising Coquina, which improvements will thereafter be owned, operated and/or maintained by Coquina.

This Second Amendment is not intended to be used for exact representation or for construction purposes since detailed maintenance or construction plans and specifications have not been prepared pending approval of this Second Amendment.

**IV.          LANDS IN COQUINA**

The land area contained within Coquina’s jurisdictional boundary is depicted in Exhibit “B” which is attached and made a part hereof.

**SECTION B.           EXISTING CONDITIONS AND FACILITIES**

In accordance with its Water Control Plan, Coquina currently provides limited surface water management on behalf of the lands located within Coquina, including approximately 8304 residential lots that are between 0.33 and 3 acres and 86 parcels that are in excess of 3 acres by means of various water management facilities, including 36 primary water control structures, 2 water retention areas comprising approximately 788± acres, maintenance of access roadways, collector swales and canals as more generally depicted on Exhibits “C” and “D”, which is attached hereto and made a part hereof.

**SECTION C.           SECOND AMENDMENT TO WATER CONTROL PLAN**

**I.       FLORIDA STATUTE 298.225(3)**

In compliance with the provisions of Florida Statute 298.225(3) Coquina’s current Water Control Plan and its Facility Reports, if any, are incorporated by this reference and made a part hereof except to the extent herein amended or modified.

Further, pursuant to the provisions of Florida Statute 298.225(3) the following information is provided, namely:

- (A)    There are approximately 14,000 acres of land located within Coquina of which the following are used for Coquina purposes:
  - i.       21.86±miles of canals,
  - ii.      355.75±miles of general swales,
  - iii.     156.04±miles of maintenance access roadways,
  - iv.      41.08± miles of canal access roads
  - v.       788± acres of water retention area
  
- (B)    Attached hereto and identified as Exhibit “D” are engineering drawings, maps and/or narratives, sufficient to describe the current capacity of Coquina’s improvements used for the management and storage of surface water.
  
- (C)    Coquina currently provides limited water management services for the approximately 8390 parcels located within Coquina’s jurisdictional boundaries.

**II. SECOND AMENDMENT WORKS, SERVICES AND ACTIVITIES**

This Second Amendment is to authorize but not require implementation of the following maintenance, replacement, upgrade, construction and installation projects, works, services and/or activities, namely:

- A. The hereinafter-identified maintenance access roads may be improved for access for maintenance and inspection of drainage infrastructure as well as safety purposes in order to enhance Coquina's water control structures, culverts and ditches.

The of roads classified as "primary" (38.26 miles) and "secondary" (117.78) on attached Exhibit "C" may be improved in order to provide the necessary access for maintenance and inspection of drainage infrastructure as well as safety purposes, which improvements, may include but are not limited to expansion, widening, provision of shell rock and/or paving.

Each road right-of-way may be surveyed prior to the improvement to establish that the road is properly located.

- B. Reconstruction of Canals A, B, C, D and F to allow for proper maintenance access to the canals. Reconstruction of the canal will typically involve narrowing and deepening of the canals to allow for an access road along each side of the canal for future maintenance activities. Deeping of the canal should reduce maintenance requirements through excessive depth which reduces vegetation establishment.
- C. There are approximately 361 culverts crossings as indicated on Exhibit "D" along the main north-south drainage canals that are to be replaced typically with 18" pipes 30 feet in length that have an 18" high riser with a fixed plate and 4" x 4" orifice located at the invert of pipe as required by the South Florida Water Management District permit. Should it be determined that the permitted system of roadside swales associated with these pipes or the pipes themselves will not function satisfactorily then alternative designs may be permitted and constructed to meet the general intentions of the existing permit.
- D. The acquisition of a supply of shell rock or fill dirt, whether by purchase of either the shell rock or fill dirt material or the real property within which the shell rock or fill dirt is located, to be used for Coquina's maintenance and improvement to such maintenance access roads as are appropriate and necessary, in Coquina's reasonable judgment, in order for Coquina to have safe, unobstructed and reliable access to its surface water management systems, structures, works and facilities.
- E. Either reestablish the previously permitted surface water management system associated with Section 33, Township 34S, Range 33E that was temporarily modified as a result of the mining in the area or redesign, permit and construct an alternative surface water management system for this section.

- F. Cleaning and sloping of the roadside swales to allow the drainage system to function as permitted with the South Florida Water Management District. Sloping of the swales will involve surveying the existing swales, excavating as required to have the proper gradient, resetting and/or replacement of existing driveway pipes to be consistent with the South Florida Water Management District permit. Should it be determined that the permitted system of roadside swales will not function satisfactorily then alternative designs may be permitted and constructed to meet the general intentions of the existing permit.
- G. Either permit the removal or reinstall structures S4, S10, S12, 1-1 and 2-8 per the permit issued by the South Florida Water Management.
- H. Installation of guardrail as Coquina sees fit to protect people from drainage features such as canals, ditches and swales that pose a danger to vehicles.

**SECTION D.            RIGHTS-OF-WAY/PROPERTY INTERESTS**

Coquina may have to acquire additional real property interests, including fee simple title, rights-of-way, easements and access as necessary for the implementation, installation, operation and maintenance of its surface and storm water management system.

**SECTION E.            MAINTENANCE RESPONSIBILITIES**

As it determines in its reasonable judgment, Coquina shall provide maintenance and operation for its works, systems and facilities.

**SECTION F.            METHOD OF FUNDING**

Several alternative methods of funding the implementation of works, services, activities and/or improvements authorized in this Second Amendment are available to Coquina in accordance with past policy and applicable state statutes. These are generally as follows:

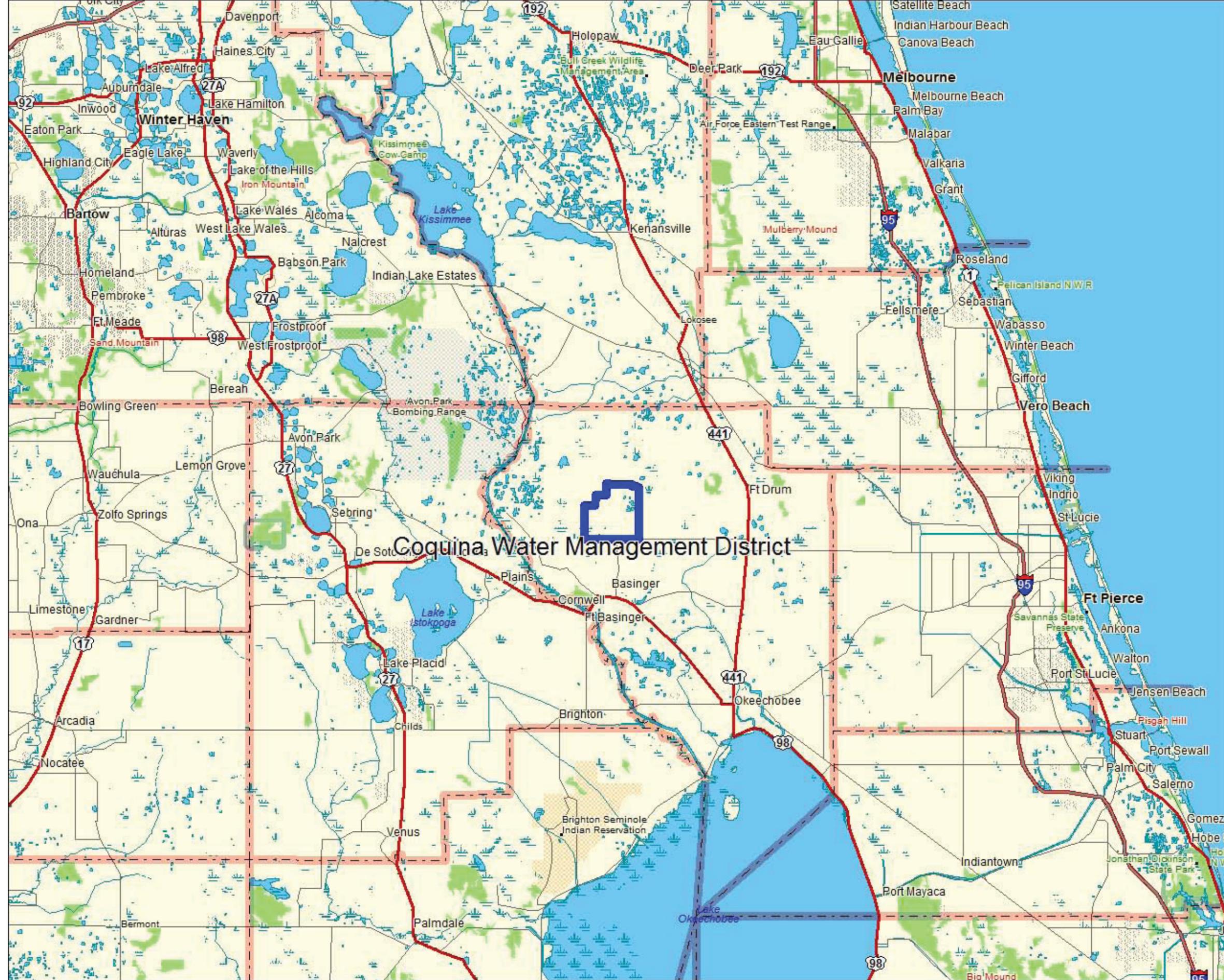
- (1) Donation of constructed improvements provided such improvements were constructed in accordance with plans and specifications approved by the Coquina Engineer.
- (2) Donation of funding for Coquina's provision of services or installation of improvement.
- (3) Utilization of non-ad valorem assessments, or through loan or bond proceeds, with such loans or bonds to be repaid from Coquina's levy of annual non-ad valorem assessments upon the benefited lands within Coquina.

- (4) Any combination of 1, 2 and 3 above.

**SECTION G.           RECOMMENDATIONS**

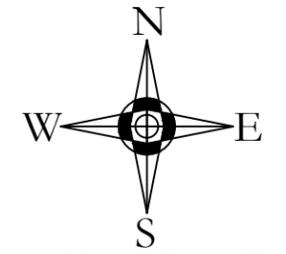
Based on the information presented in this Plan, the following recommendations are made:

- (1) That Coquina's Board of Supervisors approve this Second Amendment to the Water Control Plan.
- (2) That all lands, rights-of-way or easements required for the Water Control Plan, as amended by this Second Amendment, be obtained, if not currently owned by Coquina.
- (3) That the provisions of Chapter 298, Florida Statutes, be used for the determination, assessment, apportionment, levy and collection of such non-ad valorem assessments, as the Board of Supervisors deems appropriate in order to implement the Water Control Plan, as amended by this Second Amendment.
- (4) That the improvements and services presented in this Second Amendment to the Water Control Plan be implemented and upon the completion of an improvement, thereafter maintained and operated for the benefit of the lands within Coquina.
- (5) That Coquina continues to provide maintenance for such roadways, as it deems reasonably necessary and appropriate for continued access to its works, facilities and property interests.

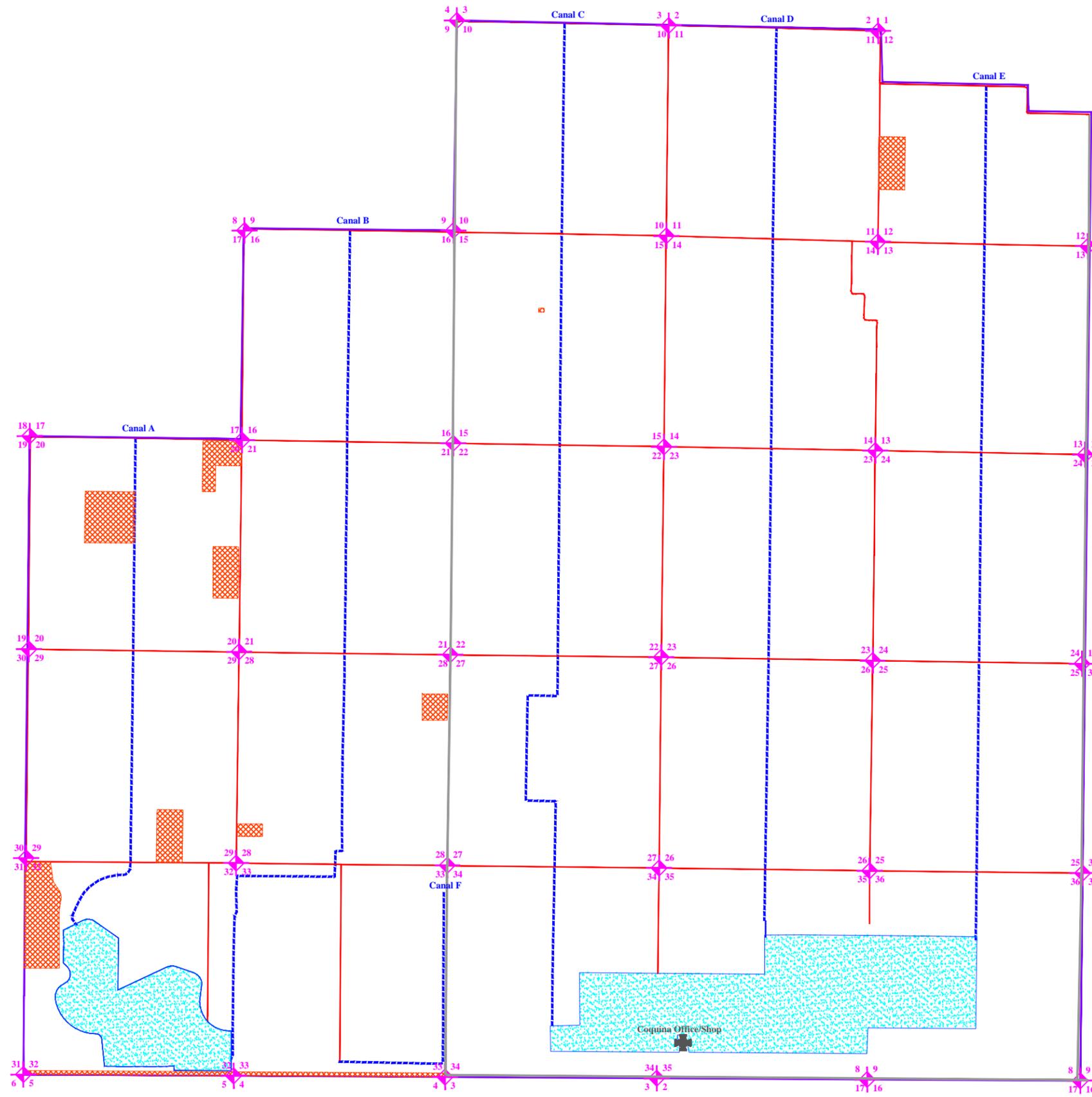


3-D TopoQuads Copyright © 1999 DeLorme Yarmouth, ME 04096 | 4 mi Scale: 1: 750,000 Detail: 8-0 Datum: WGS84

Exhibit A



- LEGEND:**
- Coquina Boundary —
  - Road Primary —
  - Road County —
  - Canal - - -
  - Section Corner ◆
  - Coquina Outs
  - Reservoir



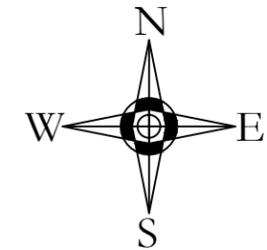
PREPARED FOR:  
**COQUINA WATER MANAGEMENT DISTRICT**  
 17429 NW 242nd STREET  
 OKEECHOBEE, FLORIDA 34972

No.	DATE	DESCRIPTION OF REVISION	BY

**CLEMONS ENGINEERING**  
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 E-MAIL: CLEMONSENGINEERING@YAHOO.COM  
 CERTIFICATE OF AUTHORIZATION No. 29505

EXHIBIT B - JURISDICTIONAL BOUNDARY AND OUTS  
 WATER CONTROL PLAN - AMENDMENT 2  
 OKEECHOBEE COUNTY, FLORIDA

DATE	DRAWN	SEC./TWP./RNG.	SCALE
8 FEBRUARY 2017	ABC	00-16, 20-29 AND 32-36/34/33	1" = 3000'



**LEGEND:**

- Coquina Boundary —
- Road Primary —
- Road Secondary —
- Road County —
- Road Canal —
- Canal - - -
  
- Section Corner ◆
- Primary Structures ▶
  
- Coquina Outs
- Reservoir



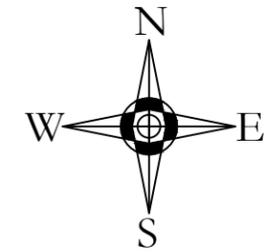
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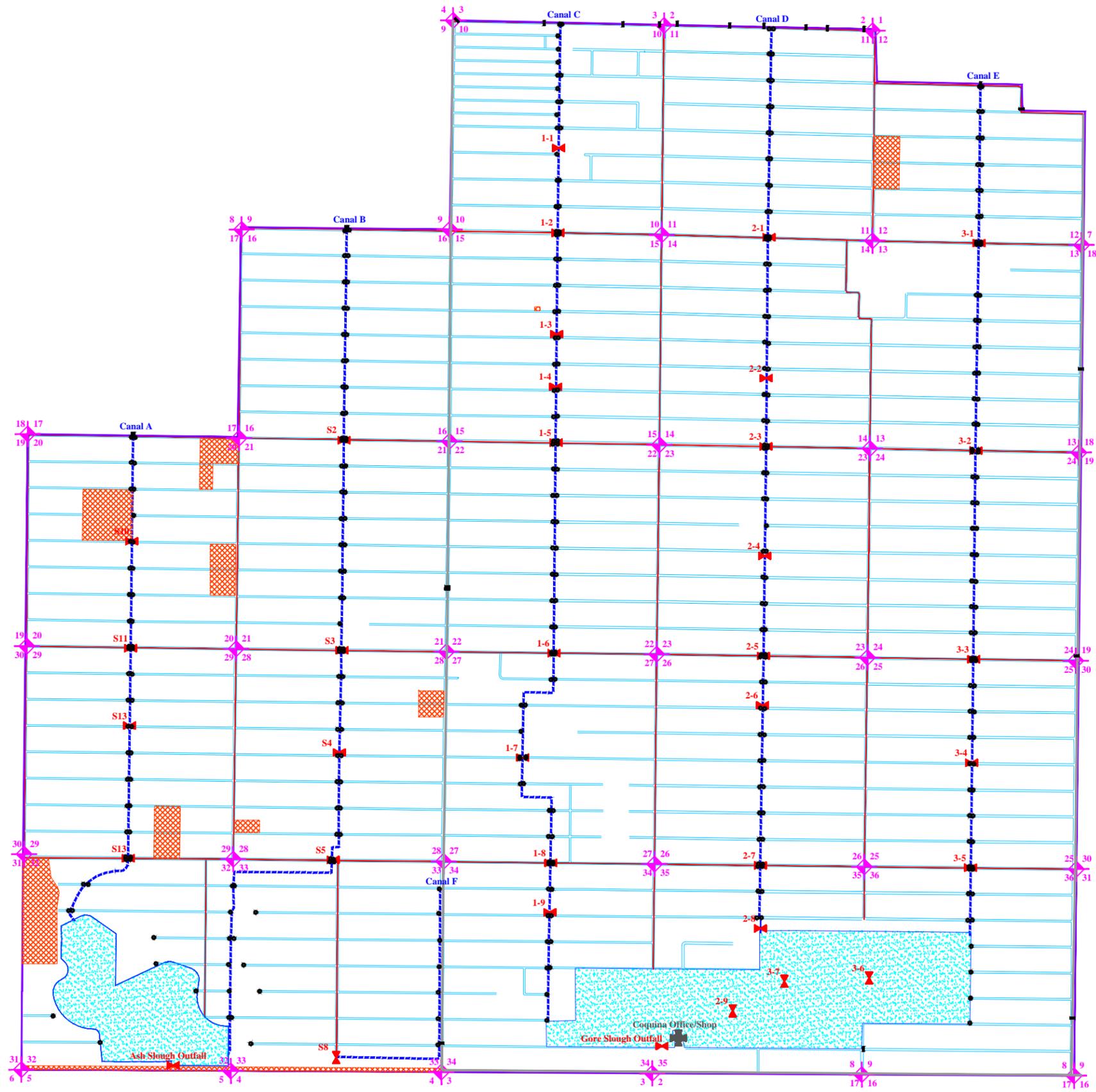
EXHIBIT C - COQUINA DRAINAGE SYSTEM ACCESS ROADS  
 WATER CONTROL PLAN - AMENDMENT 2  
 OKEECHOBEE COUNTY, FLORIDA

DATE	DRAWN	SEC/TWP/RNG	SCALE
2 MARCH 2017	ABC	00-16, 20-29 AND 32-36/34/33	1" = 3000'



**LEGEND:**

- Coquina Boundary —
- Road Primary —
- Swale —
- Road County —
- Canal —
- Section Corner ✦
- Structures Primary ✦
- 18" Pipe and Riser •
- Other Pipes |
- Coquina Outs
- Reservoir



PREPARED FOR:  
**COQUINA WATER MANAGEMENT DISTRICT**  
 17429 NW 242nd STREET  
 OKEECHOBEE, FLORIDA 34972

No.	DATE	DESCRIPTION OF REVISION	BY

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 CERTIFICATE OF AUTHORIZATION No. 29505

EXHIBIT D - COQUINA DRAINAGE SYSTEM  
**WATER CONTROL PLAN - AMENDMENT 2**  
 OKEECHOBEE COUNTY, FLORIDA

DATE	DRAWN	SEC/TWP/RNG	SCALE
8 FEBRUARY 2017	ABC	00-16, 20-29 AND 32-36/34-35	1" = 3000'