



Aquatic Vegetation, Litter and Debris Rule Making Vegetation and Debris Management Plan

South Florida Water Management District

Public Workshop April 26, 2023

Rich Virgil, P.E., PMP Director - Field Operations

sfwmd.gov

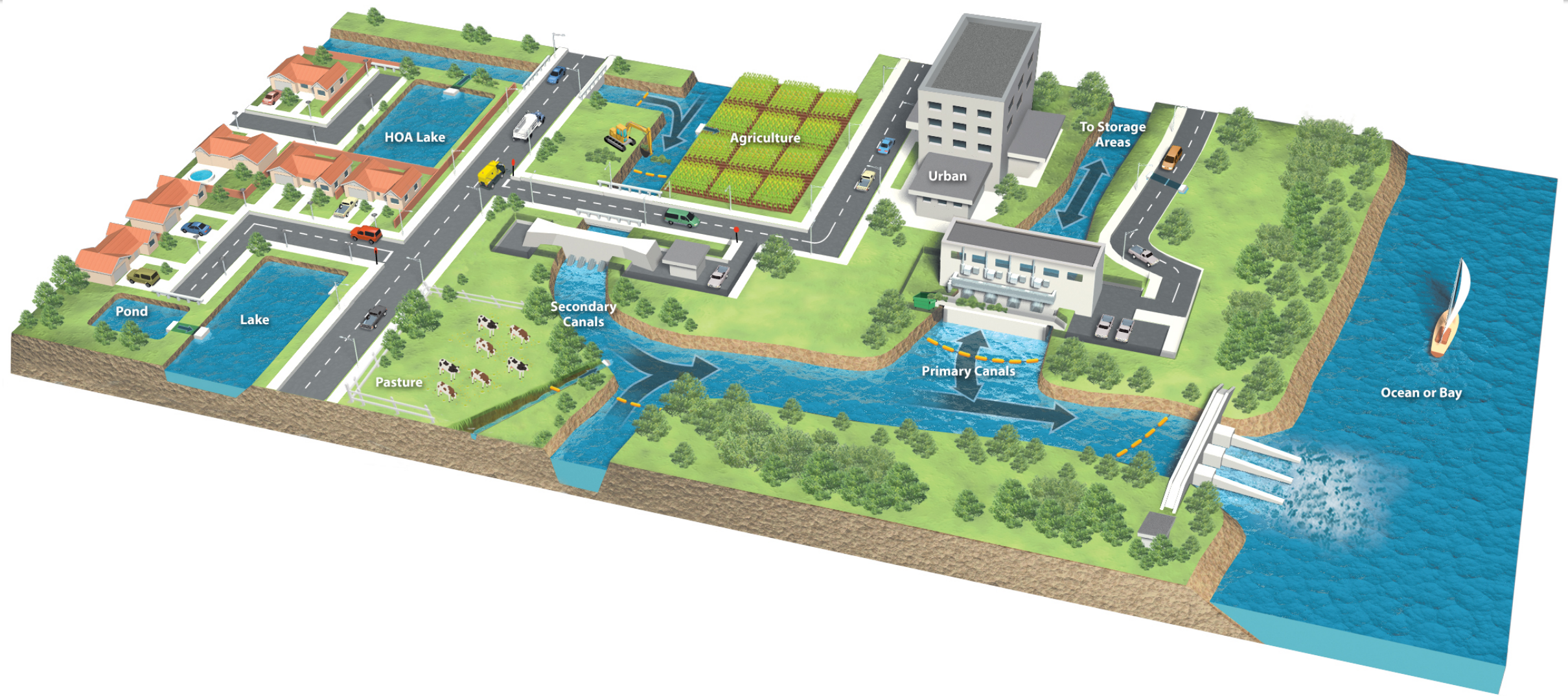


Vegetation and Debris Management Plan

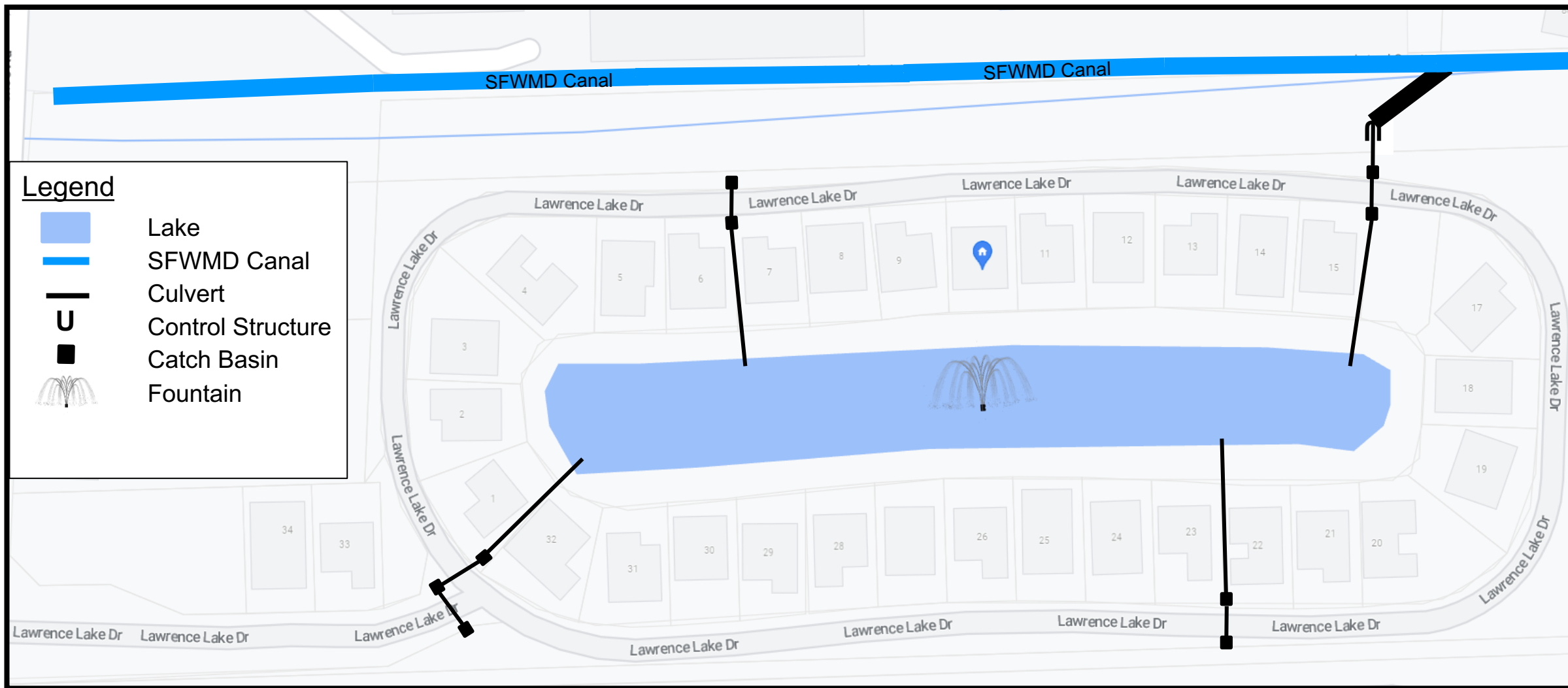
Example of Items that could be included in a Management Plan:

- **Site Plan of surface water management system identifying system features such as but not limited to:**
 - **Ditches, canals, laterals, water control structures, culverts, pump stations, lakes, vegetation and debris barriers, etc.**
 - **System connection point to the C&SF Flood control system.**
- **Best Management Plan Implementation schedule (new activities & features)**
- **Maintenance Plan**
- **Copies of Documents such as but not limited to:**
 - **Inspection Reports**
 - **Invoices for equipment, services, repairs, etc.**
 - **Contracts for services**

Vegetation and Debris Management Plan










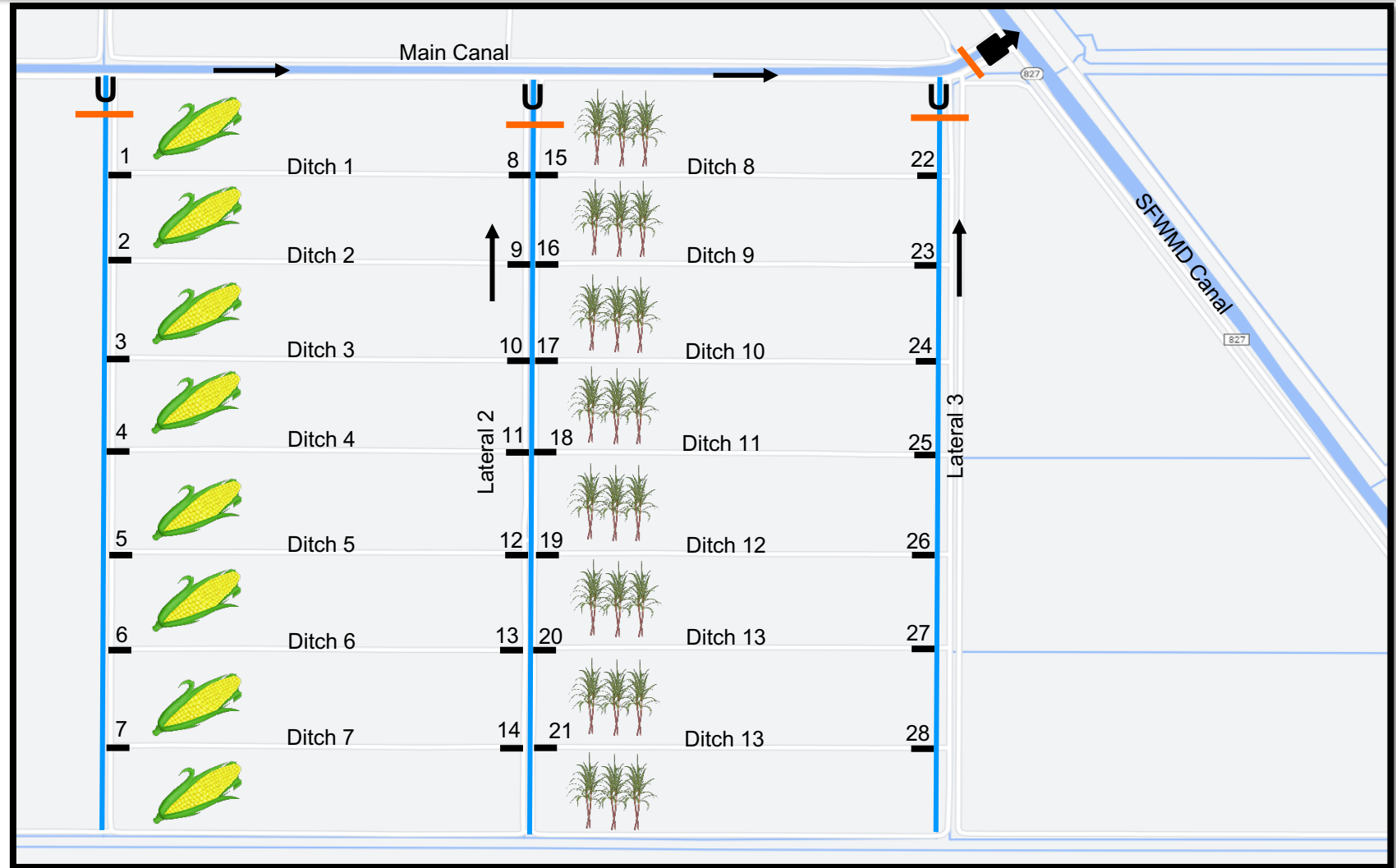
HOA Site Plan Example



Farm Site Plan Example







Legend

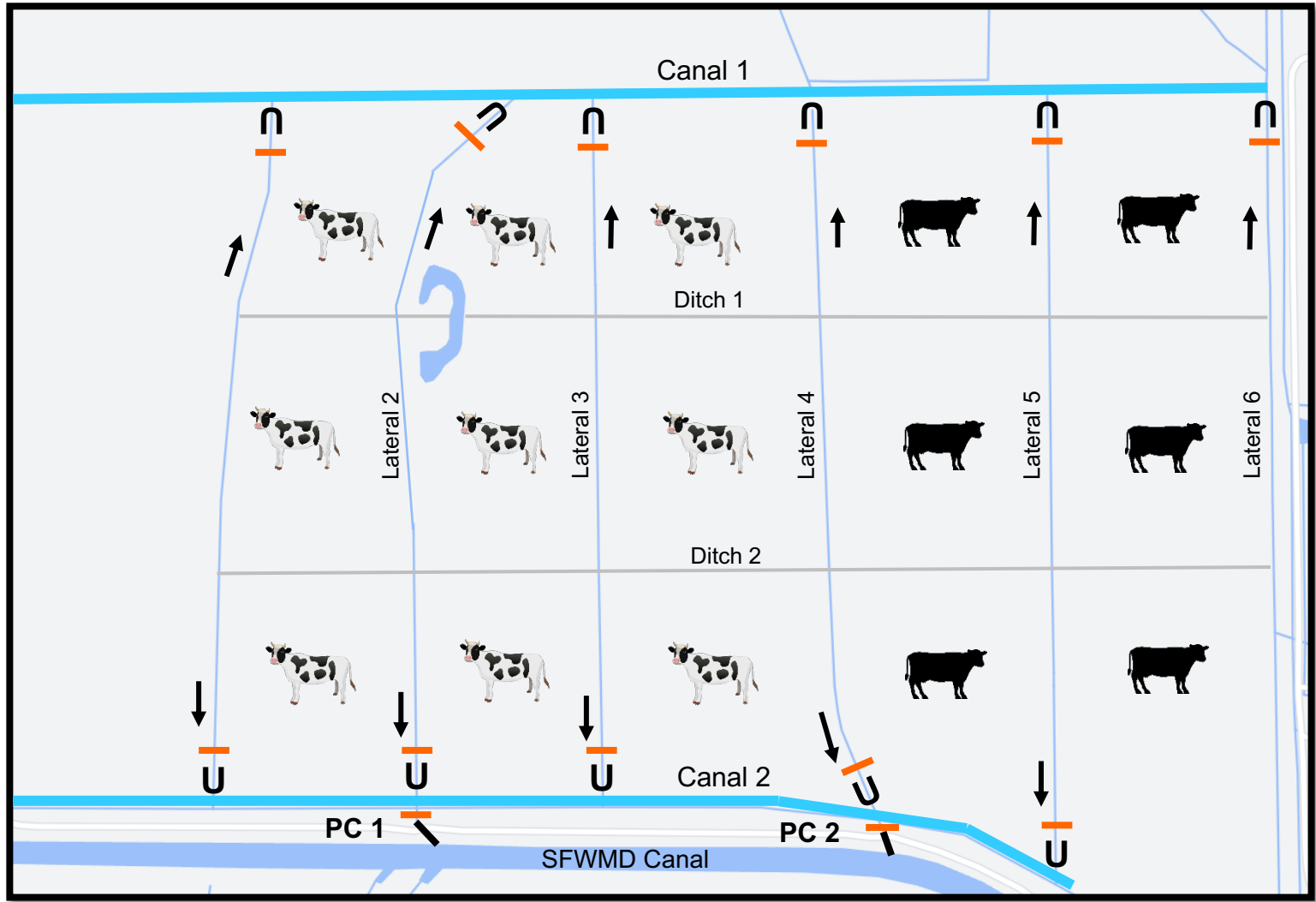
-  Ditch
-  Lateral
-  Canal
-  Culvert
-  Control Structure
-  Pump Station
-  Vegetation Barrier



Pasture Site Plan Example








Legend

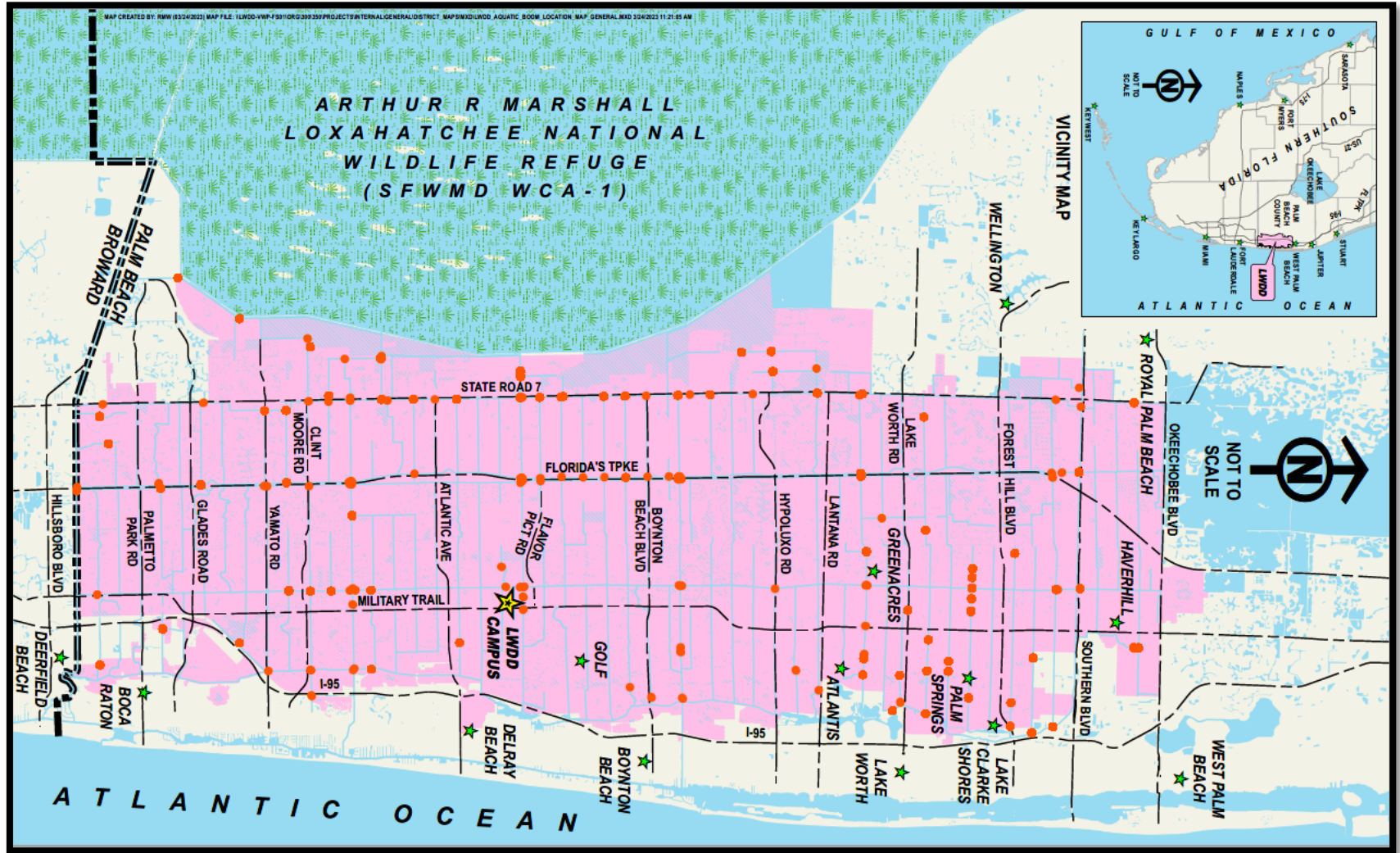
-  Ditch
-  Lateral
-  Canal
-  Project Culvert
-  Control Structure
-  Vegetation Barrier



298 District Site Plan Example








Legend

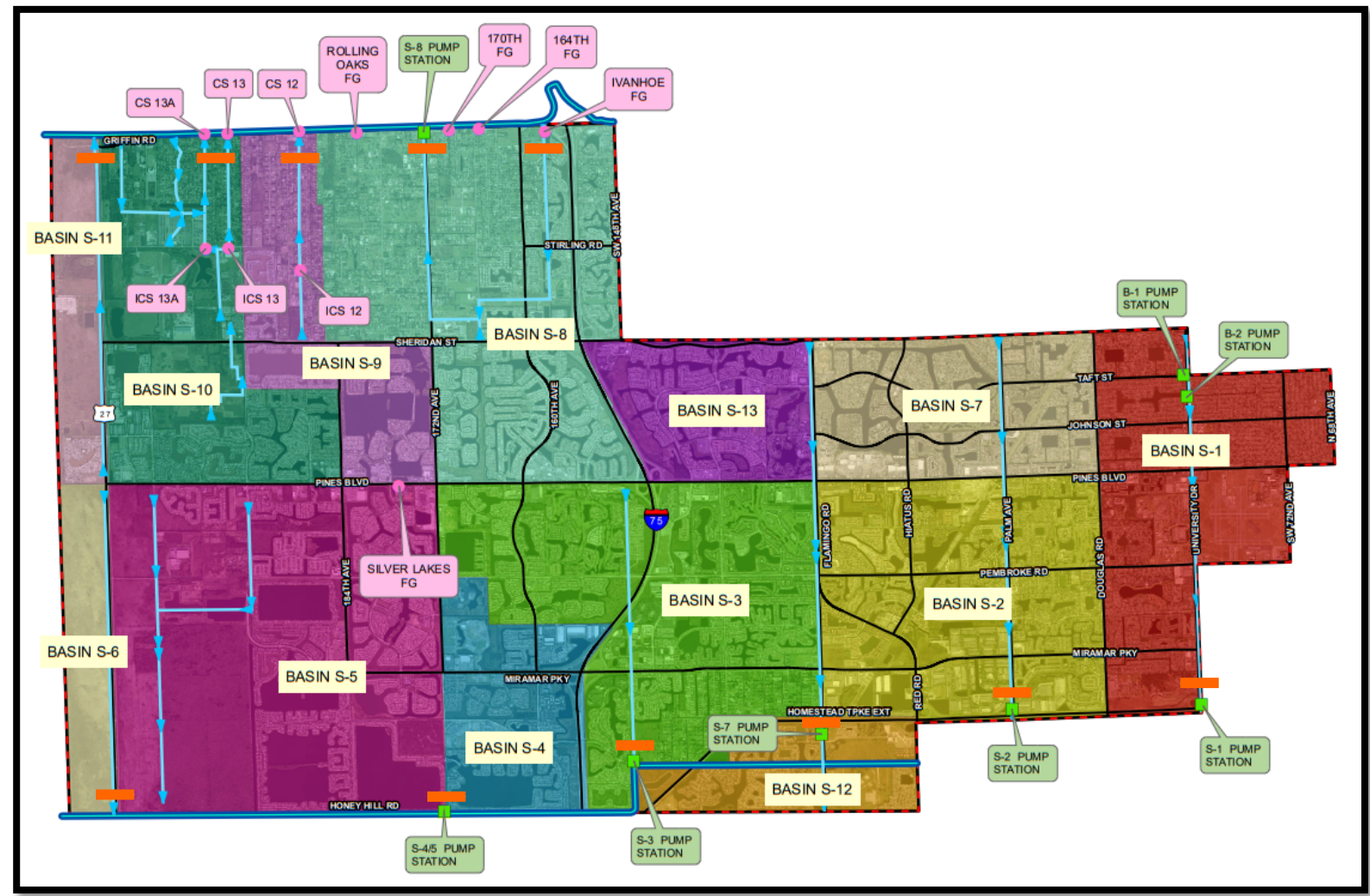
-  Ditch
-  Lateral
-  Canal
-  Culvert
-  Control Structure
-  Pump Station
-  Vegetation Barrier



298 District Site Plan Example

Legend

-  Ditch
-  Lateral
-  Canal
-  Culvert
-  Control Structure
-  Pump Station
-  Vegetation Barrier



Types of Best Management Practices

- **Installation and periodic inspection of barriers at all discharge points to the C&SF Flood Control System or other Works of the District.**
- **Periodic maintenance of the barrier including mechanical removal of vegetation and debris to minimize discharges to the C&SF Flood Control System or other Works of the District.**
- **Periodic maintenance of drainage infrastructure including mechanical removal of vegetation and debris to minimize discharges to the C&SF Flood Control System or other Works of the District.**
- **Use of herbicides to minimize to development and accumulation of vegetation which could discharge to the C&SF Flood Control system or other works of the District.**

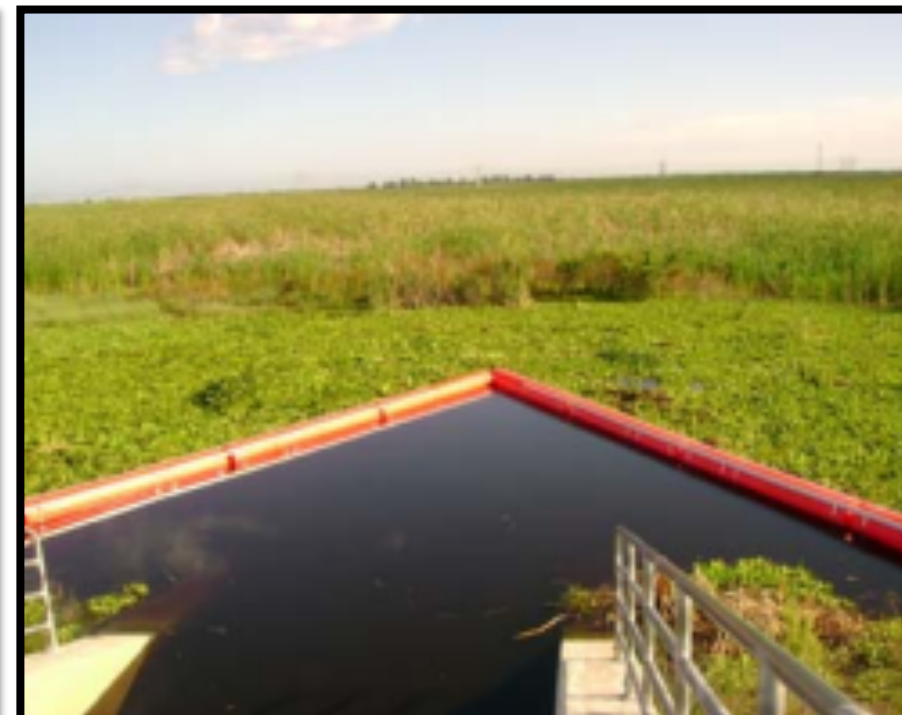
Types of Best Management Practices



Canal



Culvert



Water Control Structure

Typical Barrier Placement for Various Types of Connections

Maintenance Activities



Mechanical Removal of Vegetation From Barrier



Storm Drain Cleaning



Mechanical Removal of Debris From Barrier

Maintenance Plan Example

Maintenance Plan												
	Jan	Feb	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Inspections	X					X						
Ditches	X					X						
Laterals	X					X						
Canals	X					X						
Culverts	X					X						
Control Structures	X					X						
Pump Station	X					X						
Vegetation Barrier	X					X						
Mechanical Cleaning												
Ditches		X	X									
Laterals				X	X							
Canals						X	X					
Culverts								X				
Control Structures									X			
Pump Station										X		
Vegetation Barrier	X			X			X			X		
Herbicide Application												
Ditches		X					X					
Laterals		X					X					
Canals		X					X					
Culverts		X					X					
Control Structures												
Pump Station												
Vegetation Barrier												



Mechanical Ditch Cleaning

Equipment

■ Initial Investment:

Equipment

- Long Reach Excavator
- Trash Truck
- Conver Boat
- Tuff Booms



Trash Truck



Conver Boat



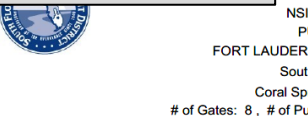


Long Reach Excavator



Tuff Booms

Copies of Documents


Inspection Reports

Lead Inspector:
Christine Finneran, Lead Inspector
SFWMD

Underwater P.E.:
Jeffrey O'Connor, Underwater Checklist
Underwater Engineering Services Inc.
Sep 01 2022 13:21:39

Contract Annual Lake Maintenance



WATERWAYS & ENVIRONMENTAL
(Quote is valid for 60 days)

Presentation Date: 05/24/2022
Job Description: Lake Maintenance

Property: Lawrence Lake Estates
Phone: 561.601.8895
Email: cvirgil@comcast.net
Address: 10 Lawrence Lake Dr, Boynton Beach, FL 33436

Monthly Lake Maintenance:

- Treatment to control submersed vegetation (F)
- Treatment to control Floating vegetation
- Treatment to control Algae
- Treatment to control Shoreline grasses and brush
- Small Trash Pickup
- Monthly on-line reporting

Invoice for Mech Harvester

PURCHASE ORDER:
THIS NUMBER MUST APPEAR ON ALL PACKING LISTS, INVOICES AND CORRESPONDENCE.
4500136359

PRICES QUOTED INCLUDE SHIPPING UNLESS OTHERWISE STIPULATED BELOW.

ORDER DATE: 06/29/2022
JOB DESTINATION

SHIP TO:
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
THIS LOCATION ACCEPTS DELIVERY BETWEEN 7AM AND 3PM MONDAY thru THURSDAY ONLY
3875 City Gate Blvd. N.
Naples FL 34117

PURCHASING AGENT:
Sally Ramkhalawan 561-1682-6386

CONFIRMING-NO

PAYMENT TERMS:
within 30 days Due net

NOTE:
- Prices displayed govern the purchase order transaction.
- Early payment discount invoices receive priority handling
- The attached Purchase Order terms & conditions, pages 1 through 2 apply

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
Send all invoices in PDF format to APInvoice@sfwmd.gov
FL Sales Tax Exemption #65-501346859C-9
Federal Tax Exemption #65-74-072K

Vendor: 119122:
FLORIDA AQUATICS INC.
DBA FLORIDA AQUATIC LAKE MGMT
PO BOX 3438
NORTH WINDERS FL 33918
TEL 239-991-8972 FAX 239-991-9271
Attention: JOHN T FARRELL

Invoice for Vegetation Barrier

Treasa Hanzlik
Planner/Scheduler
SFWMD - West Palm Beach FS
801 Sansbury Way
West Palm Beach, FL 33411
Tel: 561-791-4100 ext 4189
Email: thanzik@sfwmd.gov

Quote Nbr.	Quote Date	Quote Expiration
MW220414-2	04/15/2022	05/15/2022

Boom Graphics	Shoring Safety Storage
No Safety Graphics	FEMA Signage Not Requested

Terms: Per GSA contract

Line No.	Description	Unit	Price
1	TUFFBOOM® 90-kip Waterway Barrier supplied with inter-connected	S373 A&B	
2	TUFFBOOM® Deflector panel kit w/ guides pre-mounted to boom		
3	TUFFBOOM®- 24' (610mm) Galvanized Screen with Mesh or R...		
4	TUFFBOOM-XLB 150-kip Waterway Barrier supplied with inter-co...	S370-C	

* Due to COVID disruptions to Worldwide steel supply, pricing on spot basis and final pricing will be confirmed at the time of order. steel markets are able to resume normal operation.

Not included in this quote: Unloading, final assembly, installation, anchors, engineering, anchor design, and detailed drawing.

Shipping/Freight

QUESTIONS? We're here to help.
Your personal contact: Melanie Whorton
Phone: T: (330) 452-7400
Email: melanie@tuffboom.com

1520 Wood Ave SE / East Canton, OH 44730-9591 | Tel: 330-452-7400

Quote for Contract Services

(772) 216-9931 Mobile

South Florida Water Management District
P.O. Box 24682
West Palm Beach, FL 33416-4682

Short stick trackhoe. (210 Komatsu)
\$150.00 per hour

60' long stick trackhoe. (326 Cat)
\$180.00 per hour

Grapple truck.
\$150.00 per hour

Dump fees.
\$250.00 per load

Push boat.
\$200.00 per hour

Thank you for the opportunity to Bid!

Invoice for Trash Truck

20,000 GVWR Cab & Cassis - DRW 4X2
- With Contract Options

Model: 2020 Peterbilt 567

Color: WHITE Interior:

Base Unit on Sheriff Contract - ITEM # 46 **\$71,916.00**

Code	Description	Cost
7001520	Tilt Telescopic Wheel	\$113.00
MODEL 348	Model Upgrade 348 20K Front / 46K Rear PX9 350HP, Allison 3000 RDS 425 FT Tires 11R22.5 Rear Tires Power Windows & Locks	\$42,561.00
7851780	Air Ride Cab	\$1,267.00
	NON-CONTRACT OPTIONS	
	Palfinger S260L130 See Specs on Quote	\$178,665.00
	Diff Locks - Rear Axle	\$1,739.00
	Discount	(\$1,369.00)
Total Options Cost		\$222,976.00
		\$294,892.00

All prices confirmed by Palm Peterbilt Truck Centers Inc.(As per Sheriff Association Contract # FSA17-VEH15.0)

By signing this form, I am agreeing with the contract and non-option specifications for the truck listed above. I understand the pricing may fluctuate and the vendor may change. If I want to make any changes, I will contact Fleet Management

Retention of Pertinent Documents

Aquatic Vegetation, Litter, and Debris Entering District Waterways

Discussion

