

# S F W M D

## VOLUME V PERMIT INFORMATION MANUAL



### Criteria Manual for Use of Works of the District

*September 15, 1999*

# TABLE OF CONTENTS

PAGES

---

<b>I.</b>	<b>INTRODUCTION</b>	
	Policy and Objective-----	1
<b>II.</b>	<b>RULES - UTILIZATION OF WORKS OF THE DISTRICT</b>	
	Policy & Purpose (40E-6.011)-----	4
	Definitions (40E-6.021)-----	6
	Implementation (40E-6.031)-----	8
	Consent Required (40E-6.041)-----	8
	Exemptions (40E-6.051)-----	9
	Publications Incorporated by Reference (40E-6.091)-----	10
	<b>SUBPART A - NOTICE GENERAL PERMITS</b>	
	Content of Application (40E-6.101)-----	10
	Conditions for Issuance of Notice General Permits (40E-6.121)-----	11
	<b>SUBPART B - STANDARD PERMITS</b>	
	Content of Application (40E-6.201)-----	12
	Conditions for Issuance of Standard Permits (40E-6.221)-----	14
	<b>SUBPART C - GENERAL PROVISIONS</b>	
	Access to Works and Lands of the District; Closures (40E-6.311)-----	15
	Duration of Permits (40E-6.321)-----	16
	Modification of Permits (40E-6.331)-----	16
	Revocation of Permits (40E-6.341)-----	17
	Transfer of Permits and Transfer Fees (40E-6.351)-----	18
	Financial Assurances and Insurance (40E-6.361)-----	19
	Limiting Conditions (40E-6.381)-----	20
	Emergency Authorizations (40E-6.451)-----	23
	Emergency Measures (40E-6.481)-----	23
	Unlawful Use and Civil Penalties (40E-6.501)-----	24
	Self Help (40E-6.521)-----	25
	Permit Application Processing Fees (40E-6.601)-----	25
<b>III.</b>	<b>OPERATIONAL ZONES AND STAGING AREAS</b>	
	Definition of Operational Zones-----	28
	Definition of Staging Areas-----	28
<b>IV.</b>	<b>PERMIT INDEX</b> -----	29
	Notice to Applicants -----	32
<b>V.</b>	<b>APPLICATION PROCESSING FEE SCHEDULE</b> -----	33
<b>VI.</b>	<b>EXEMPTIONS</b> -----	38
	(Includes List of Acceptable Groundcover Plantings)	
<b>VII.</b>	<b>REQUIREMENTS FOR DRAWINGS</b> -----	49
<b>VIII.</b>	<b>CRITERIA – NOTICE GENERAL PERMITS</b>	
	Access (temporary)-----	50
	Bridges-----	52
	Culvert Connections-----	55
	Docks and Associated Facilities-----	57
	Fence Encroachments-----	64
	Filming/Motion Picture Production-----	66
	Fire Hydrants-----	68
	Gazebos/Chickees-----	70
	Monitoring Wells-----	71

# TABLE OF CONTENTS

PAGES

---

Patio Stones, Walkways and Other Similar At-Grade Installations-----	72
Signs – Regulatory-----	73
Storage (temporary)-----	74
Utility Crossings and Installations-----	76
Vegetation Clearing/Removal-----	85
<b>IX. BASIS OF REVIEW – STANDARD PERMITS</b>	
A. Bridge Crossing Criteria-----	86
Bridge Designs Must be Certified-----	86
Safety Standards-----	86
Load Ratings-----	86
Headloss Through Bridges-----	86
Bridges Must Have Centerspan-----	86
Piles Must Align with Canal Flows-----	87
Canal Sideslope Stabilization-----	87
Private Bridges-----	87
Future Bridge Alteration/Relocation-----	87
Cross-Sections-----	87
B. Bridge Design Criteria	
Coastal Canals-----	87
Dade County Area Canals-----	88
Everglades Agricultural Area-----	89
Kissimmee River Basin-----	89
West Palm Beach Canal (C-51)-----	90
Other Canals-----	91
Bridges Crossing Over Project Levees-----	91
Trestle Type Bridges-----	91
Guardrailing of Bridge Approaches-----	92
Establishing Low Member Elevations/Future Bridge Widening -----	92
Crossings Over Open Channel Connections-----	85
Excavation Required in Conjunction with Bridge Construction-----	93
Culverts Installed in Lieu of Bridges-----	93
C. Access Requirements-----	94
D. Access Features-----	95
Berm Ramps-----	95
Curbs and Sidewalks-----	95
Guardrail-----	96
Medians-----	96
Land Acquisition/Additional Right of Way-----	96
Relocations and Relocation Notification-----	96
E. Use of or Connection to Project Culverts (Inlet Structures)-----	97
Method of Allocation of Benefits Derived From Inlet Structures-----	97
F. Culvert Connections	
Connections to Canals-----	98
Connections to Borrow Canals Through Project Levees-----	99
Skimmer Requirements-----	99
G. Boat Docks and Associated Facilities-----	101
H. Pump Connections-----	105
I. Open Channel Connections-----	106

# TABLE OF CONTENTS

	PAGES
J. Wastewater Treatment Plant Effluent-----	107
K. “Air Space” Encroachment-----	108
L. Utility Crossings and Installations-----	109
M. Access-----	114
N. Permanent and Semi-Permanent Above-Ground Structures or Uses-----	115
O. Water Conservation Area Lands-----	116
P. Marinas-----	117
Q. Signs – Regulatory-----	119
R. Fence and Gates-----	120
S. Mitigation in Environmentally Sensitive Areas-----	122
T. Seawalls and Bulkheads-----	123
U. Ramps – Boat and Watercraft Launching-----	124
V. Filming/Motion Picture Production-----	125
W. Landscaping, Linear Parks, Greenways-----	127
X. Fire Hydrants-----	130
Y. Project Culverts (Inlet Structures)-----	131
Z. Spoil Material-----	132
<b>X. STORMWATER TREATMENT AREAS-----</b>	<b>133</b>
<b>XI. NON-ALLOWABLE USES-----</b>	<b>135</b>
<b>XII. BIG CYPRESS BASIN CRITERIA-----</b>	<b>140</b>
Pile-Supported Docks and Piers-----	141
A. Bridge Crossing Criteria	
Bridge Designs Must be Certified-----	142
Safety Standards-----	142
Load Ratings-----	142
How to Obtain Water Elevations-----	142
Bridges Must Have Center Span-----	142
Piles Must Align with Canal Flows-----	143
Canal Sideslope Stabilization-----	143
Guardrailing of Bridge Approaches-----	143
Establishing a Low Member Elevation/Future Bridge Widening Considerations--	143
Bridge Design with Regard to Hydraulics and Maintenance-----	143
Crossings Over Open Channel Connections-----	144
Excavation Required in Conjunction with Bridge Construction-----	144
Culvert Bridges-----	144
Private Bridges-----	145
Cross-Sections-----	145
Future Bridge Alteration/Relocation-----	145
B. Access Requirements-----	145
C. Access Features-----	145
Berm Ramps-----	146
Curbs and Sidewalks-----	146
Guardrail-----	147
Medians-----	147
Land Acquisition/Additional Right of Way-----	147
D. Bridge Design Criteria-----	148
Quick Reference Table for Bridge Crossing Criteria (Big Cypress Basin)-----	156

# TABLE OF CONTENTS

PAGES

---

<b>XIII.</b>	<b>LIST OF WORKS AND LANDS OF THE DISTRICT-----</b>	<b>161</b>
<b>XIV.</b>	<b>SAMPLE ILLUSTRATIVE DRAWINGS</b>	
	A-1 Pile-Supported Utility or Roadway Bridge Construction over Canals	
	A-2 Pile-Supported Utility or Roadway Bridge Construction over Levees	
	B-1 Culvert Connection to Canal	
	B-2 Pump Connection	
	C-1 Bulkhead/Seawall	
	D-1 Pile-Supported Dock	
	D-2 Dock Attached to Seawall	
	D-3 Free-Standing Dock	
	E-1 Minimum Wire Vertical Clearances	
	E-1A Minimum Wire Vertical Clearances Applicable to Stormwater Treatment Areas	
	E-2 Aerial/Pole Supported Utility Crossing	
	E-3 Bridge Attachment	
	E-4 Subaqueous Crossing	
	F-1 Irrigation Line and Fire-Fighting Draft Line	
	G-1 Quick Reference Table for Pile-Supported Crossings	
	Application Form NGP-1	
	Application Form SP-1	
	District's Approved Species List for Plantings Within Rights of Way	

## I. INTRODUCTION

### 1. Policy Statement

It is the policy of the South Florida Water Management District to allow adjacent owners, governmental entities and utilities to utilize Works and Lands of the District provided that the use does not adversely impact or interfere with the District's ability to utilize these lands in any manner it sees fit in furtherance of the District's missions. In order that the District can determine that a use of the right of way will not interfere with the District's objectives, unless specifically exempt under the District's Rules, the District requires that an individual or entity desiring to utilize the District's rights of way first obtain approval **before any activity begins within the District's rights of way**. (Please refer to the "Exemptions" section of this manual for information on exempt uses of the right of way and related criteria).

It is the District's position that construction on, or use of, the District's rights of way without obtaining prior approval is an act of bad faith which will be taken into consideration in the review of any request the user may subsequently make or in such compliance action as the District make elect to initiate.

### 2. Objective

The purpose of this manual is to provide information which describes the Rules and criteria which relates to the utilization of Works and Lands of the District.

This manual is used as a guideline by the District staff in reviewing proposals for the issuance of permits. The Rules and criteria contained herein are subject to change by the Governing Board of the District.

The criteria in this manual has been developed and refined over a period of 50 years. This criteria has been established to allow the most liberal use of the right of way possible by members of the public without interfering with the District's missions. The criteria represents the minimum allowable conditions acceptable to the District. Please do not consider it as the starting point or a basis for negotiations in an effort to have an unacceptable use or facility approved.

The reader will note that the criteria is based on the District's need to access, operate and maintain its canal and levee system. In order to do this, the District has made conscious decisions on the width of the right of way necessary to perform various functions and has acquired land or obtained sufficient property rights to perform its duties. Please keep in mind that the South Florida Water Management District, and its predecessors (the Central and Southern Florida Flood Control District and the Everglades Drainage District) have, since 1915, gained an expertise in the amount of right of way which is necessary to efficiently perform a variety of tasks.

While the amount or width of right of way varies somewhat depending on field conditions and the types of equipment employed, it has been determined that an unencumbered strip

of land 40 feet in width is necessary in order to perform the majority of the maintenance operations in the most expeditious and cost effective manner.

Many individuals have commented that they have never seen a piece of District maintenance equipment working on the right of way behind their home. This may be true. In some areas, the District has determined that routine maintenance, such as mowing, is not needed on certain stretches of right of way. In these cases the only type of routine maintenance which may be required is control of aquatic weeds and spraying of emergent vegetation by means of boats. However, the District must maintain the operational flexibility of being able to access and travel the right of way to perform certain emergency activities such as removing sunken boats, trees or other storm debris which have blown into the canal during a hurricane or other severe storm. Activities such as these cannot be performed from boats, particularly during storms when canal levels can fluctuate greatly and the canal is flowing rapidly.

# **CHAPTER 40E-6 WORKS OR LANDS OF THE DISTRICT**

## **PART I**

- 40E-6.011 Policy and Purpose**
- 40E-6.021 Definitions**
- 40E-6.031 Implementation**
- 40E-6.041 Consent Required**
- 40E-6.051 Exemptions**
- 40E-6.091 Publications Incorporated by Reference**

## **PART II – PERMITS**

### **SUBPART A – NOTICE GENERAL PERMITS**

- 40E-6.101 Content of Application**
- 40E-6.121 Conditions for Issuance of Notice General Permits**

### **SUBPART B –STANDARD PERMITS**

- 40E-6.201 Content of Application**
- 40E-6.221 Conditions for Issuance of Standard Permits**

### **SUBPART C – GENERAL PROVISIONS**

- 40E-6.311 Access to Works and Lands of the District; Closures**
- 40E-6.321 Duration of Permits**
- 40E-6.331 Modification of Permits**
- 40E-6.341 Revocation of Permits**
- 40E-6.351 Transfer of Permits**
- 40E-6.361 Financial Assurances and Insurance**
- 40E-6.381 Limiting Conditions**

## **PART III - EMERGENCIES**

- 40E-6.451 Emergency Authorization**
- 40E-6.481 Emergency Measures**

## **PART IV - VIOLATIONS**

- 40E-6.501 Unlawful Use and Civil Penalties**
- 40E-6.521 Self Help**

## **PART V – PROCESSING FEES**

- 40E-6.601 Permit Application Processing Fees**

## PART I

### 40E-6.011 Policy and Purpose.

(1) This chapter governs the use of or connection to works or lands of the District. Conditions and criteria are established to ensure that uses are compatible with the construction, operation, and maintenance of such works or lands.

(2) Due to the critical importance of works and lands of the District in providing flood protection and other benefits, it is considered essential that the District retain complete dominion and control over the use of such works or lands, including those subject to right of way occupancy permits. The District acts in a proprietary capacity in acquiring lands or interests therein for utilization as works of the District. These rules are based upon proprietary concepts of property law. A "permit" to utilize works or lands of the District is a contract between the District and the "permittee," whereby the permittee obtains a license which is revocable at will, except as otherwise provided herein. All risk of loss regarding expenditures in furtherance of the permitted use is borne by the permittee. The District retains complete discretion as to the manner, if any, in which works or lands of the District shall be utilized, and nothing in these rules is intended to limit that discretion.

(3) An exception to subsection (2), above, is made for governmental entities and utilities, which may have their consent to utilize District works or lands revoked only for cause, pursuant to the criteria set forth in this chapter.

(4) The District has determined that an unencumbered 40 foot wide strip of right of way, measured from the top of bank landward, is required in order for the District to perform the required routine and emergency operations and maintenance activities necessary to insure flood protection to the entire community. In this 40 foot right of way, subject only to limited exceptions provided in this rule, the District shall not authorize any above ground facilities or other encroachments.

(5) The requirement for the unencumbered 40 foot right of way shall be applicable regardless of the District's quality of title to the right of way and regardless of the width of the overbank right of way.

(6) In the past, the District has authorized certain above ground facilities and uses on its rights of way within a 40 foot wide area adjacent to the top of bank, as set forth in subsection (4), above. However, over time and with experience gained in disaster preparation, operation and recovery, the District has determined that these previously authorized above ground facilities and uses are now inconsistent with the current and future operation and maintenance needs of the District. These facilities and uses have also been determined by the District to increase the operation and maintenance costs (for both routine and emergency operation and maintenance activities) and pose a significant additional physical burden on District staff. Subject to those uses specifically allowed in the criteria (Basis of Review), no future authorizations by the District shall allow above ground facilities or uses within that 40 foot wide area adjacent to the top of bank within the right of way, and all previous authorizations for facilities and uses shall be expressly limited to minimize their adverse impact on District operations and maintenance. Specifically, such authorizations shall not be modified or transferred, and shall be subject to the revocation provisions set forth herein as

determined necessary by the District in order to meet its current and future operation and maintenance responsibilities to provide adequate flood protection to the community.

(7) In order to effectively and efficiently evaluate proposed installations of above ground facilities and uses, the District has segmented the canal and rights of way into five (5) operational zones shown on the diagram below:

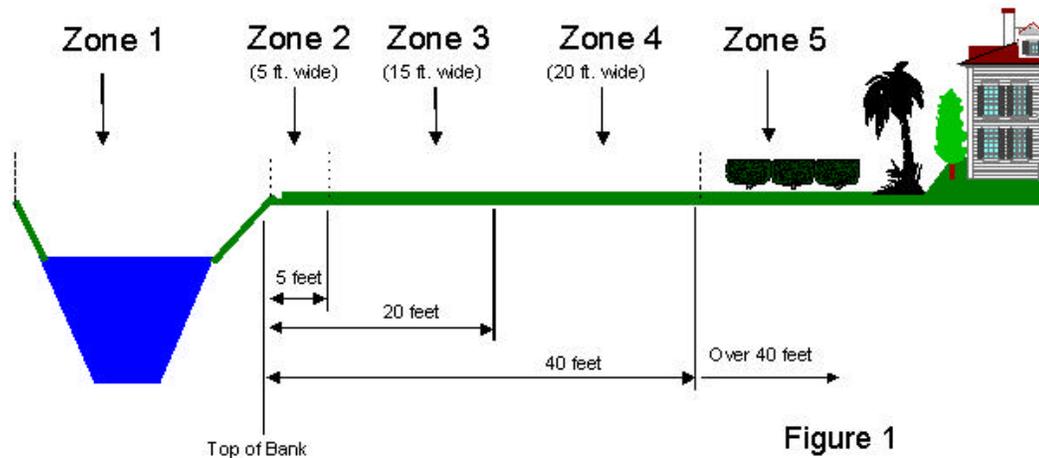


Figure 1

\*The District's rights of way vary in width, and may be either less than forty feet or more than forty feet in width. Accordingly, in those cases when the right of way is less than forty feet, only those zones depicted above would be applicable to the actual width of the right of way.

The specific above ground facilities and uses which are consistent with the District's operation and maintenance needs, and which will generally be authorized are set forth in Rules 40E-6.121 and 40E-6.221, F.A.C.. Those facilities and uses not specifically identified as being consistent with the District's operation and maintenance needs for the respective zones have been determined by the District to be inconsistent with District operation and maintenance needs and no District authorization shall be granted.

(8) Due to the varying widths and physical limitations of the rights of way obtained by the District for the canals of the Big Cypress Basin, maintenance of the Basin canals is currently performed with different equipment than is utilized throughout the remainder of the District. Based on the differing maintenance needs of the Big Cypress Basin, application of the five operational zones, as set forth in subsection (7), above, will be reviewed on a case by case basis taking into account the width of overbank right of way, the accessibility of the right of way to land-based maintenance equipment and any site specific conditions that would impact the Basin's ability to operate and maintain the canal which is the subject of a particular application.

(9) The District reserves sole authority to make a determination that portions of the District's rights of way are inaccessible for routine maintenance activities due to a variety of physical limitations. While a determination that a certain segment of right of way is presently unusable for routine land-based maintenance activities and relaxation of the restrictions in zones 2, 3, 4, and 5 may be allowed, such determination shall be at the sole discretion of the District and does not obviate the need for individuals with proposed or existing facilities within these areas to obtain permits from the District.

Further, the District reserves the right to enter these areas to conduct emergency operations or to require the removal of any encroachments that are inconsistent with these rules at such time as maintenance access is perfected through the area.

(10) The District has further determined that certain facilities and uses meeting specific minimum criteria for various right of way zones shall more efficiently be granted authorization with a limited review by District staff, since these specific facilities and uses do not adversely impact the District's ability to operate and maintain the District's right of way and works of the District. Such authorizations shall be administered by the provisions of Rules 40E-6.101 and 40E-6.121, F.A.C., as a notice general permit. The District will incur less expense in the review of notice general permit applications, and, therefore the application processing fee associated with such facilities and uses shall reflect accordingly, as set forth herein.

(a) If multiple uses are being requested and any of those uses require a standard permit, all authorizations shall be requested under the standard permit application and a notice general permit will not be required.

(11) It is further the policy of the District to allow, without charge for admission or use, public, passive recreational uses of District owned rights of way, given legally sufficient District property interests. However, nothing contained herein shall limit the District's ability to, either temporarily or permanently, limit or otherwise preclude public access to certain portions of District works and lands, such as structures and associated facilities.

(12) In managing its canal and levee system the District must, from time to time, change its criteria and permit requirements based on regional and site specific conditions. Applicants are cautioned that the information provided by District staff is based on the best available information at the time the information is conveyed, but is subject to change. This is particularly true when applicants delay months or years in submitting an application for permit. Therefore the rules, criteria and requirements in effect at the time a formal application is received for review will be applied to the permit application.

Specific Authority 373.113 F.S. Law Implemented 373.085, 373.086, 373.118, 373.129, 373.1395 F.S.  
History—New 9-3-81, Amended 12-29-86, 9-15-99. Formerly 16K-5.01(1).

#### **40E-6.021 Definitions.**

(1) The term "above ground facilities" when used in these rules is intended to mean any and all physical improvements or uses, whether man-made or natural (e.g. vegetation), that are extended above the existing surface of the ground.

(2) The term "change of ownership" when used in these rules is intended to mean the sale, purchase, or transfer of beneficial ownership of property adjacent to the District's right of way relative to a right of way occupancy permit; or in the case of utilities, bridges, or other such public facilities, the sale, purchase, or transfer of responsibility.

(3) The term "easement" when used in these rules is intended to mean the District's legal interest in the land for a specific limited use, such as construction, operation and maintenance of a canal or levee, access, stock piling of spoil material, or flowage of the land of another.

(4) The term “fee” ownership when used in these rules is intended to mean absolute and unconditional ownership by the District.

(5) The term “financial assurances” when used in these rules is intended to mean a cash bond to be held by the District in a non-interest bearing account, a performance bond issued by a licensed bonding company, a letter of credit issued by a financial institution authorized to do business in the State of Florida, or other such instrument approved by the District.

(6) The term “marina” when used in these rules is intended to mean a docking facility for four (4) or more watercraft.

(7) The term “modification” when used in these rules is intended to mean the addition or deletion of any facilities or uses not specifically authorized by the original permit.

(8) The term “notice general permit” when used in these rules is intended to mean a revocable license to occupy the works or lands of the District for specific types of proposed uses, with limited review by District staff, as set forth herein, and not requiring Governing Board approval.

(9) The term “owner” when used in these rules is intended to mean the individual or entity legally responsible for the ownership and control of the proposed facility or authorized use.

(10) The term “passive recreational use” when used in these rules is intended to mean conventional leisure activities, with minimal land or water resource impacts, which include such uses as walking, jogging, hiking, bicycling, fishing, nature appreciation, and equestrian use. Passive recreational use shall not include the use of motorized vehicles, with the exception of motorized wheelchairs necessary for use by disabled persons.

(11) The term “permit transfer” when used in these rules is intended to mean the changing of responsibility for the permit authorization from one person or entity to another.

(12) The term “right of way” when used in these rules is intended to mean those lands acquired by the District in fee, easement, or other type of grant, for the purpose of operations and maintenance of the District’s canal and levee system, spoil areas, Stormwater Treatment Area’s (STA’s), and access and other easements.

(13) The term “right of way occupancy permit” when used in these rules is intended to mean a revocable license to occupy the works or lands of the District, either by a notice general permit or a standard permit.

(14) The term “STA” when used in these rules is intended to mean the District’s Evergaldes Nutrient Removal Project (“ENR”), as well as those areas currently, or in the future, designated by the District as Stormwater Treatment Area’s.

(15) The term “standard permit” when used in these rules is intended to mean a revocable license to occupy the works or lands of the District for all uses not covered by a notice general permit, with a full review by District staff, as set forth herein, and requiring Governing Board approval.

(16) The term “top of bank” when used in these rules is intended to mean the point at which the flat or nearly level ground surface transitions down to the channel along the side slope of the canal bank.

(17) The term “tree” when used in these rules is intended to mean not only the trunk of the tree, but the farthest part of the canopy of the tree at maturity as well.

(18) The term “utility” when used herein means companies actually providing essential water, electric, telephone, sewer, or natural gas services. All other services shall be considered non-essential.

(19) The term “violator” when used in these rules is intended to mean any persons or entities acting contrary to the provisions of Chapter 373, F.S., these rules, as well as the provisions of any permit issued pursuant to these rules.

(20) The term “Works of the District” when used in these rules is intended to mean the canals, levees, structures, lands, water bodies, and other associated facilities which have been adopted as such by the District’s Governing Board.

(21) The term “Zone 1” when used in these rules is intended to mean the canal channel from the top of bank to the opposite top of bank, as depicted in Figure 1.

(22) The term “Zone 2” when used in these rules is intended to mean the point on the right of way from the top of bank to a point five (5) feet landward, as depicted in Figure 1.

(23) The term “Zone 3” when used in these rules is intended to mean the point on the right of way from a point five (5) feet landward from top of bank to a point twenty (20) feet landward, as depicted in Figure 1.

(24) The term “Zone 4” when used in these rules is intended to mean the point on the right of way from a point twenty (20) feet landward from top of bank to a point forty (40) feet landward, as depicted in Figure 1.

(25) The term “Zone 5” when used in these rules is intended to mean any right of way located further than forty (40) feet from the top of bank, as depicted in Figure 1.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085, 373.086 F.S. History—New 9-15-99.

#### **40E-6.031 Implementation.**

(1) The effective date for the program established in this chapter is September 15, 1999.

(2) All permits issued prior to the effective date of these rules shall remain in effect, except as provided herein.

(3) All applications, and permit application processing fees, for permits received by the District prior to the effective date of these rules shall be processed using the criteria set forth in Volume V, Criteria Manual for Use of Works of the District - Permit Information Manual, adopted September 15, 1999.

(4) All applications, and permit application processing fees, received by the District on or after the effective date of these rules shall be subject to the provisions of these rules and the criteria adopted pursuant to these rules as set forth in Rule 40E-6.091, F.A.C.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085, 373.086 F.S. History—New 9-3-81, Amended 12-29-86, 9-15-99.

#### **40E-6.041 Consent Required.**

(1) Unless expressly exempt by law or District rule, a right of way occupancy permit, either a notice general permit or a standard permit, must be obtained prior to

connecting with, placing structures in or across, discharging into or making use of the works of the District and any additional lands or real property interest owned by the District, including the Stormwater Treatment Areas (STA's). Works or lands of the District subject to this requirement appear in the document listed in Rule 40E-6.091, F.A.C.

(2) All other use and occupancy of District works or lands must be consistent with the purposes and objectives of Ch. 373, F.S. and Title 40E, F.A.C.

(3) These rules do not apply to property managed by the District pursuant to either Chapter 40E-7, Part V, F.A.C., or the District's Real Estate Policy, except as otherwise limited by Rule 40E-6.221(8), F.A.C.

(4) These rules do not apply to the Seminole Tribe of Florida at such time as there exists a District approved agreement specifically addressing the use and management of District rights of way between the District and the Seminole Tribe of Florida.

(5) Except when works or lands of the District have been affirmatively opened to public vehicular use, a right of way occupancy permit must be obtained prior to traveling on or across such works or lands.

(6) A conceptual approval for the use of works of the District may be obtained by processing a right of way occupancy permit application in conjunction with the request for a letter of conceptual approval only if the letter of conceptual approval is requested pursuant to section 380.06(9)(b), F.S.

Specific Authority 373.044, 373.113, F.S. Law Implemented 373.085, 373.086, 380.06(9)(b), 373.118 F.S. History—New 9-3-81, Amended 2-29-86, 12-24-91, 9-15-99.

#### **40E-6.051 Exemptions.**

(1) The following uses are exempt from permitting under this chapter where such facilities and uses comply with the criteria contained in the document listed in Rule 40E-6.091(1), F.A.C.:

(a) the planting or maintenance of native or drought and insect resistant turf grasses;

(b) drain lines (pool, roof, air-conditioning);

(c) low lying groundcover in certain zones;

(d) irrigation lines, flush or pop-up sprinklers, draft lines;

(e) not-for-profit, organized boat races, regattas and similar activities;

and

(f) passive recreational use.

(2) An exemption from these rules shall not relieve any person or entity from compliance with other District permit requirements and any applicable permit requirements of federal, state and local government.

(3) The District is not responsible for the repair of or claims of damage to any facilities and uses which may incur damage resulting from the District's utilization of its rights of way or use by third parties. Improvements placed within the right of way are done so at the sole risk of the owner.

(4) The District is not responsible for any personal injury or property damage which may directly or indirectly result from the use of water from the District's canal or any activities which may include use or contact with water from the District's canal,

since the District periodically sprays its canals for aquatic weed control purposes and uses substances which may be harmful to human health or plant life.

Specific Authority 373.044, 373.113, F.S. Law Implemented 373.085, 373.086, F.S. History—New 12-24-91, Amended 9-15-99.

#### **40E-6.091 Publications Incorporated by Reference.**

(1) The “Basis of Review for Use or Occupancy of the Works or Lands of the District Permit Applications within the South Florida Water Management District – September 15, 1999”, which includes separate and distinct criteria developed to address the unique characteristics and operational needs of the respective areas for the Okeechobee Basin, the Big Cypress Basin, and the STA’s, is hereby published by reference and incorporated into this Chapter.

(2) District lands and works subject to this Chapter are adopted by the Governing Board in accordance with the provisions of section 373.086, F.S. The District’s lands and works are listed in the document referenced in subsection (1) and are hereby published by reference and incorporated into this Chapter.

(3) The document listed in subsection (1) is published by the District and available upon request.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085, 373.086, 403.0877 F.S. History—New 9-3-81, Amended 12-29-86, 12-24-91 , 9-15-99 Formerly 16K-5.01(3).

## **PART II – PERMITS**

### **SUBPART A - NOTICE GENERAL PERMITS**

#### **40E-6.101 Content of Application.**

(1) Applications for permits required by this Subpart shall be filed with the District. The application shall contain the following information:

(a) Form NGP-1 “Application to the South Florida Water Management District for Right of Way Notice General Permit” effective date September 15, 1999, which is hereby incorporated by reference and which may be obtained at the South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, Florida, 33406;

(b) The applicant’s name and address including zip code and phone number;

(c) All owner’s names, as appearing on the tax rolls, and complete address’ and phone numbers if applicant or user is other than the owner(s);

(d) The project location relative to County, Section, Township and Range; Lot, Block and Subdivision; or a metes and bounds description;

(e) Whether the proposed use is a modification, an existing use, or is a new use;

(f) A description of the portion of the works or lands of the District to be used;

(g) A description of the proposed use of or encroachment on works or lands of the District and in which zone, as depicted in Figure 1, the proposed use will be located;

(h) Six copies of a scaled or fully dimensioned 8 ½" x 11" drawing, reflecting the proposed use in plan and elevation views, related to the applicable work of the District, and tied to a known reference point in the immediate area of the proposed use. Larger drawings and aerial photographs shall be required, if necessary to adequately show the location and nature of the proposed use. A property survey, indicating the location of the District right of way boundary line shall also be provided.

1. All drawings shall utilize English units of measure or a combination of both English and metric units of measure. Vertical datum shall be National Geodetic Vertical Datum (1929), North American Vertical Datum (1988), or Mean Sea Level and the datum utilized shall be specified on the drawing(s).

2. All drawings for seawalls or bulkheads and subaqueous or pile-supported crossings shall be supported with cross sections of the existing channel. Unless waived or modified by the District pursuant to prior written request by the applicant, soundings for the cross sections shall be taken at 10 foot intervals from top of bank to top of bank and shall be tied to both canal/levee right of way lines. For subaqueous or pile supported crossings a minimum of 3 cross sections shall be supplied by the applicant; one at the point where the proposed crossing crosses the centerline of the canal; and one each upstream and downstream of the crossing at points determined by the District. For seawall or bulkhead projects the District shall determine the number of cross sections required but said cross sections will be no more frequent than one cross section per every 25 feet of proposed bulkheading. Cross sections shall be plotted to the same horizontal and vertical scale using standard 10 x 10 cross section paper or similar CAD format. The cross sections shall have superimposed upon them the design section for the canal at the location and existing cross sectional area below the design water surface shall be accurately calculated by the applicant and printed on or adjacent to each cross section.

3. Except where exempt pursuant to section 471.003, F.S., drawings for bridge crossings, bulkheads, seawalls, retaining walls, hard shoreline stabilization and revetment installations shall be signed and sealed by a Florida registered professional engineer.

(i) Information sufficient to demonstrate that the proposed use meets the criteria established in the document referred to in Rule 40E-6.091, F.A.C.; and

(j) The estimated length of time needed for completion of the proposed work once construction has begun.

(2) Applications shall be signed by both the owner(s) and authorized agent, if applicable.

(3) Applications shall not be considered complete until such time as all required information as set forth in subsections (1) and (2), above, and insurance and financial assurances in accordance with Rule 40E-6.361, F.A.C., have been received by the District.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085(1), 373.086, 373.117, 373.118, 471.003 F.S. History—New 9-3-81, Amended 12-1-82, 12-29-86, 12-24-91, 9-15-99.

#### **40E-6.121 Conditions for Issuance of Notice General Permits.**

(1) The District has determined that certain uses shall be authorized under a notice general permit when the proposed location is in an authorized operational zone

and the criteria established in the Basis of Review, incorporated by reference in 40E-6.091, F.A.C., have been met. These uses are set forth in the Permit Index Chart included in the Basis of Review. Any facilities currently existing cannot be authorized by a notice general permit and must receive authorization through the standard permit application process or be promptly removed from the District's right of way.

(2) Due to the nature of the projects, the following facilities and uses cannot be authorized by a Notice General Permit:

- (a) Roadway and highway projects;
- (b) Marinas and public boat launching facilities;
- (c) Linear Parks;
- (d) Permanent buildings and other above-ground structures;
- (e) Crude oil and petroleum product pipelines;
- (f) Other such facilities or uses.

(3) The District has determined that the proposed activity fully complies with all of the criteria set forth in Rule 40E-6.091, F.A.C.

(4) Except for utilities, both essential and non-essential, an applicant must own or lease the land adjacent to or served by the portion of the works or lands of the District involved.

(5) In addition to the requirements and restrictions set forth in subsections (1) to (4), the District, due to its proprietary interest in its lands and works, possesses and exercises all the rights and remedies available to owners of real property through statutory and common law.

(6) Any and all above ground facilities located within the clear 40 foot wide right of way, as set forth in Rule 40E-6.011(4), F.A.C., or within the right of way at locations where the right of way is less than 40 feet wide, as measured from the top of the canal bank, are prohibited.

(7) The notice general permit provisions of this rule are not intended to apply to the notice general permit provisions in District Chapter 40E-62, F.A.C.

(8) The limiting conditions set forth in Rule 40E-6.361, F.A.C., shall be incorporated into every Notice General Permit issued.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.016, 373.085, 373.086, 373.118 F.S. History - New 9-15-99.

## **SUBPART B - STANDARD PERMITS**

### **40E-6.201 Content of Application.**

(1) Applications for permits required by this Subpart shall be filed with the District. The standard permit application shall contain the following information:

(a) Form SP-1 "Application to the South Florida Water Management District" effective date September 15, 1999, which is hereby incorporated by reference and which may be obtained at the South Florida Water Management District, 3301 Gun Club Road, West Palm Beach, Florida, 33406;

(b) The applicant's name and address including zip code and phone number;

(c) All owner's names, as appearing on the tax rolls, and complete address if applicant or user is other than the owner;

(d) The project location relative to County, Section, Township and Range; Lot, Block and Subdivision; or a metes and bounds description;

(e) A description of the portion of the works or lands of the District to be used;

(f) Whether the proposed use is a modification of an existing use, or is a new use;

(g) A description of the proposed use of or encroachment on works or lands of the District and in which zone, as depicted in Figure 1, the proposed use will be located;

(h) Six copies of a scaled or fully dimensioned 8 ½" x 11" drawing, reflecting the proposed use in plan and elevation views, related to the applicable work of the District, and tied to a known reference point in the immediate area of the proposed use. Larger drawings or aerial photographs shall be required, if necessary to adequately show the location and nature of the proposed use. A property survey, indicating the location of the District right of way boundary line shall also be provided.

1. All drawings shall utilize English units of measure or a combination of both English and metric units of measure. Vertical datum shall be National Geodetic Vertical Datum (1929), North American Vertical Datum (1988), or Mean Sea Level and the datum utilized shall be specified on the drawing(s).

2. All drawings for seawalls or bulkheads and subaqueous or pile-supported crossings shall be supported with cross sections of the existing channel. Unless waived or modified by the District pursuant to prior written request by the applicant, soundings for the cross sections shall be taken at 10 foot intervals from top of bank to top of bank and shall be tied to both canal/levee right of way lines. For subaqueous or pile supported crossings a minimum of 3 cross sections shall be supplied by the applicant; one at the point where the proposed crossing crosses the centerline of the canal; and one each upstream and downstream of the crossing at points determined by the District. For seawall or bulkhead projects the District shall determine the number of cross sections required but said cross sections will be no more frequent than one cross section per every 25 feet of proposed bulkheading. Cross sections shall be plotted to the same horizontal and vertical scale using standard 10 x 10 cross section paper or similar CAD format. The cross sections shall have superimposed upon them the design section for the canal at the location and existing cross sectional area below the design water surface shall be accurately calculated by the applicant and printed on or adjacent to each cross section.

3. Except where exempt pursuant to section 471.003, F.S., drawings for bridge crossings and bulkhead or seawall installations shall be signed and sealed by a Florida registered professional engineer.

(i) Information sufficient to demonstrate that the proposed use meets the criteria established in the document referred to in Rule 40E-6.091, F.A.C.; and

(j) The estimated length of time needed for completion of the proposed work once construction has begun.

(2) Applications shall be signed by both the owner(s) and authorized agent, if applicable.

(3) Applications shall not be considered complete until such time as all required information as set forth in subsections (1) and (2), above, and insurance and

financial assurances in accordance with Rule 40E-6.361, F.A.C., have been received by the District.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085(1), 373.086, 373.117, 471.003 F.S.  
History—New 9-15-99.

#### **40E-6.221 Conditions for Issuance of Standard Permits.**

(1) The District has determined that certain uses shall be authorized under a standard permit when located in an authorized zone and when they comply with the criteria established in the Basis of Review, incorporated by reference in Rule 40E-6.091, F.A.C. These uses are set forth in the Permit Index Chart included in the Basis of Review.

(2) In determining whether a standard permit should be issued, the District shall consider whether the proposed activity unduly burdens the District's interests. In making this decision, the District shall weigh the following critical factors:

(a) interferes with the present or future construction, alteration, operation or maintenance of the works or lands of the District;

(b) is consistent with the policy and objectives of Chapter 373, F.S., including the legislative declaration of policy contained in section 373.016, F.S.

(c) has an actual or potential negative impact upon environmentally sensitive areas, which include: wetlands; endangered or threatened species habitat; aquatic preserves; Outstanding Florida Waters; Class I or Class II waters; federal, state and privately owned parks and wildlife management areas; designated areas of critical state concern; lands purchased by federal, state and local governments for the purpose of environmental protection, water resource protection and aesthetics; and lands which contain native terrestrial plant species in significant amounts. Environmentally sensitive areas include areas on and off-site that are affected by activities which occur on, or are initiated from, the works of the District;

(d) degrades water quality within the receiving water body or fails to meet the provisions of Ch. 373, F.S., the state water policy, and Title 40E, F.A.C.;

(e) involves a discharge of wastewater from a new wastewater source or an increased discharge from an existing wastewater source;

(f) will discharge debris or aquatic weeds into works of the District or cause erosion or shoaling within the works of the District;

(g) is supported by financial assurances, which will ensure that the proposed activity will be conducted in accordance with Chapter 373, F.S. and Chapter 40E-6, F.A.C.;

(h) interferes with scientific activities;

(i) presents an increased liability risk to the District;

(j) meets the general and specific criteria in the Basis of Review which is incorporated by reference in Rule 40E-6.091, F.A.C.;

(k) interferes with actual or potential public use of the District's works or lands, including public recreational or other facilities not within the District's works;

(l) meets applicable criteria in Chapters 40E-61 and 40E-62; F.A.C.;

(m) the nature of the District's property interest.

(3) The District shall consider a permit applicant's past and present violation of any District rules or permit conditions, including enforcement action, when

determining whether the applicant has provided reasonable assurances that District standards will be met.

(4) Activities which can be carried out through the District's real property acquisition and disposal policy will not be eligible for a permit under this chapter.

(5) The District shall also consider the cumulative impact of allowing the proposed use. Based upon the cumulative impact of allowing similar uses in the affected area, the District shall deny uses which appear insignificant with regard to the above criteria if the cumulative impact is significant.

(6) The structural integrity of bridges across District works or lands shall be certified by a professional engineer registered in the State of Florida, except as provided in section 471.003, F.S.

(7) In those instances where the District does not own the underlying fee simple title, applicants may be required to show the necessary legal interest from the owner of the underlying fee. The District does not, however, assume any duty to protect the legal rights of the underlying fee owner.

(8) No commercial uses will be allowed on District rights of way. There shall, however, be no presumption against allowing commercial use of the District right of way by utilities.

(9) Except for utilities, both essential and non-essential, an applicant must own or lease the land adjacent to or served by the portion of the works or lands of the District involved.

(10) In addition to the requirements and restrictions set forth in Subsections (1) through (9), the District, due to its proprietary interest in its lands and works, possesses and exercises all the rights and remedies available to owners of real property through statutory and common law.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.016, 373.085, 373.086, 373.117, 471.003 F.S. History-New 9-15-99.

## **SUBPART C GENERAL PROVISIONS**

### **40E-6.311 Access to Works and Lands of the District; Closures.**

(1) Consistent with the District's policy to allow for public access, without charge, to publicly owned lands, access to Works and Lands of the District by the public is generally allowed for passive recreational uses.

(2) Works and Lands of the District shall be closed to public use temporarily under the following conditions:

(a) when necessary for public safety during wildfires or prescribed burns;

(b) when necessary for scientific activities;

(c) when necessary for construction, operation or maintenance activities;

(d) when necessary during emergency conditions such as floods, severe weather events, or wildfire danger for public safety and the protection of the natural resources; and

(e) when there is an insufficient District property interest to allow for such public use or access by the general public.

(3) When necessary on a permanent basis to protect natural, historic or archaeological resources, or for ongoing scientific activities, such closures shall require advance public notice and approval by the Governing Board.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.016, 373.085, 373.086, 373.119, 373.1395 F.S. History New 9-15-99.

#### **40E-6.321 Duration of Permits.**

(1) Permits issued prior to the effective date of September 15, 1999 and which do not comply with the Basis of Review incorporated by reference in Rule 40E-6.091, F.A.C., shall expire upon the change of ownership of the property, unless transferred pursuant to Rule 6.351, F.A.C., below. These authorizations shall not be transferred to a new property owner and must be immediately removed from the District's right of way unless a new permit application has been submitted and approved by the District.

(2) Unless revoked or otherwise modified the duration of a right of way occupancy permit is:

(a) as set forth in the permit, including the special conditions to the permit; or

(b) after construction is complete, perpetual, unless revoked.

(3) Permits authorizing construction expire automatically on the date indicated on the face of the permit, unless a written request for extension is received by the District on or before the expiration date. If an extension has not been requested prior to the expiration of the permit, a new application, including the application processing fee, must be submitted. Upon the expiration of a permit, all construction activities must cease until the new permit has been issued. Extensions of the construction period may be granted administratively, or in cases involving litigation, environmental, water resource, or other impact, shall be referred to the Governing Board for final action. The District shall decline to extend a permit authorizing construction if the proposed use is no longer consistent with the objectives of the District or other provisions of these rules.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085, 373.086 F.S. History—New 9-3-81, Amended 12-29-86, 9-15-99 Formerly 16K-5.07, 40E-6.321.

#### **40E-6.331 Modification of Permits.**

(1) Applications for permit modifications required by this Chapter shall be filed by formal application, including the permit modification application fee, with the District.

(2) Applications for modification to permitted uses shall be reviewed using the same criteria as new applications, pursuant to Rules 40E-6.091, 40E-6.121, and 40E-6.221, F.A.C.

(3) Letter modifications may be issued by District staff, provided the requested modification:

(a) does not substantially alter the permit authorization;

(b) does not interfere with construction, operation and maintenance of District lands or works; and

(c) is otherwise consistent with the purposes and policies of Chapter 373, F.S. and Chapter 40E-6, F.A.C.

(4) Under sections 373.083 and 373.085, F.S., the District is authorized to modify a permit when it determines that the currently permitted use has become inconsistent with the factors and conditions enumerated in Rules 40E-6.121 and 40E-6.221, F.A.C.

(5) Permit modifications may be initiated by the District in accordance with the provisions of Chapter 40E-1, F.A.C.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.016, 373.085, 373.086 F.S. History-New 9-3-81, Amended 12-29-86, 12-24-91, 9-15-99 Formerly 16K-5.11(1).

#### **40E-6.341 Revocation of Permits.**

(1) Under sections 373.083 and 373.085, F.S., the District is authorized to revoke a right of way occupancy permit under any of the following circumstances:

(a) the permittee or his agent has committed any of the acts enumerated in Rule 40E-1.609, F.A.C.;

(b) the permitted use interferes or will interfere with the construction, alteration, operation, or maintenance of present or proposed works or lands of the District;

(c) the permittee has failed to immediately comply with an emergency or other order issued pursuant to Rules 40E-1.611 and 28-107.005, F.A.C.;

(d) the permitted use is no longer consistent with the factors and conditions enumerated in Rules 40E-6.121 and 40E-6.221, F.A.C., the provisions of Chapter 373, F.S., Title 40E, F.A.C., and the state water policy, Chapter 62-40, F.A.C.;

(e) the permitted use is inconsistent with any provision of this rule, or any subsequent revisions to this rule, including any provision of the Basis of Review, incorporated by reference in Rule 40E-6.091, F.A.C.; or

(f) the permitted use is no longer consistent with District policy, based upon a change in District policy.

(2) Right of Way Occupancy permits are subject to immediate revocation by the District's Executive Director with the concurrence of the Governing Board if an emergency condition exists and the continued exercise of the permit might endanger lives, human safety or property.

(3) Revocations for reasons specified in subsection (1) shall be conducted in accordance with the procedures specified in Rules 40E-1.609 and 28-107.004, F.A.C. Emergency revocations under subsection (2) shall be conducted in accordance with the procedures specified in Rule 28-107.005, F.A.C.

(4) The provisions herein shall take precedence over the general revocation provisions set forth in 40E-1.609(1) (a) through (e), F.A.C., as the permit program governing use of works and lands of the District is a proprietary based program. To the extent there is any conflict between the general provisions of Chapter 40E-1, F.A.C., the specific provisions of Chapter 40E-6, F.A.C., shall prevail.

Specific Authority 373.044, 373.113 F.S. Law Implemented 120.60(5), 373.085, 373.086, 373.129 F.S. History—New 9-3-81, Amended 12-29-86, 12-24-91, 9-15-99 Formerly 16K-5.07(3), (4).

#### **40E-6.351 Transfer of Permits.**

(1) As the District has no control over the sale or transfer of real or personal property, it is the sole obligation of a permittee to disclose the existence of a Right of Way Occupancy Permit, its terms and conditions, to prospective purchasers.

(2) Right of Way Occupancy Permits shall be transferred when:

(a) The request is otherwise consistent with the provisions of these rules and Chapter 373, F.S.

(b) The applicant demonstrates that the permitted use still qualifies for a permit under Rules 40E-6.121 or 40E-6.221, F.A.C.

(c) The applicant agrees to abide by the provisions of Chapter 373, F.S., this chapter, and the terms and conditions of the permit, including these rules, including the standard limiting conditions, and criteria which are applicable at the time of the request for transfer.

(d) The adjoining land use has not changed.

(e) The request for transfer is accompanied, when required, with the correct fee.

(f) The applicant agrees to record a Notice of Permit in the official records of the county clerk's office as specified by the District.

(g) In cases where unauthorized facilities or uses have been added that are not included in the permit authorization, a permit transfer request must also be accompanied by a request for modification pursuant to Rule 40E-6.331, F.A.C.

(3) Right of Way Occupancy Permits will be transferred without a fee when the request for transfer is received within twelve (12) months from the change of ownership, as evidenced by the date of transfer of ownership appearing in the deed or other instrument of conveyance.

(4) Requests for transfer of Right of Way Occupancy Permits shall be assessed a fifty (\$50.00) dollar processing fee when the request is received by the District more than twelve (12) months from the date of change of ownership but prior to eighteen (18) months from the change of ownership, as evidenced by the date of transfer of ownership appearing in the deed or other instrument of conveyance.

(5) Transfers requested more than 18 months from the date of change of ownership shall be denied and require the submission of an application and the appropriate application processing fee.

(6) All transfers require a field inspection and shall not become effective until such inspection is conducted and confirms all existing facilities are permitted and all uses comply with the criteria in Rule 40E-6.091, F.A.C., and the conditions of issuance in Rules 40E-6.121 or 40E-6.221, F.A.C. If additional facilities are present, no transfer will be allowed unless the unauthorized facility or use is removed immediately and the right of way restored. Applicants must submit a new standard permit application, along with the appropriate application processing fee, for all additional facilities not removed and not currently authorized by a Right of Way Occupancy Permit.

(7) The District staff shall not issue transfers until all financial assurance and insurance requirements, if any, have been provided and accepted by the District staff.

Specific Authority 373.044, 373.109, 373.113 F.S. Law Implemented 373.085, 373.086, 373.109 F.S. History—New 9-3-81, Amended 12-29-86, 9-15-99 Formerly 16K-5.10, 16K-5.11(2), 16K-5.12.

#### **40E-6. 361 Financial Assurances and Insurance.**

(1) The District shall require the applicant requesting a right of way occupancy permit to provide and maintain financial assurances to the District and its successors, in the form of a cash bond to be held by the District in a non-interest bearing account, a performance bond issued by a licensed bonding company, a letter of credit issued by a financial institution authorized to do business in the State of Florida, or other such instrument approved by the District to ensure full compliance with terms of the permit, including the proper construction, operation, and maintenance of the facility. The amount and type of financial assurance shall be determined by the District.

(a) In instances where the District authorizes use of its rights of way as a temporary haul or access road, which does not include crossing over District structures or associated facilities, the amount of the financial assurance shall be Five Thousand (\$5,000.00) Dollars per half mile or multiple thereof, with a minimum amount of Five Thousand (\$5,000.00) Dollars.

(b) In instances where the District authorizes the construction of a private bridge on or across the District's right of way, the amount of the financial assurance shall be based upon a professional engineer's or certified demolition company's itemized estimate, to be provided by and paid for by the applicant, of the cost of the demolition of the bridge, removal of the debris, and restoration of the right of way. Such estimates shall be reviewed and approved by District staff.

(c) In instances where the District authorizes the installation of a water or sewer force main installation on or across the District's right of way other than those constructed by governmental entities, the amount of the financial assurance shall be based upon a professional engineer's or certified demolition company's itemized estimate, to be provided by and paid for by the applicant, of the cost of the demolition of the water or sewer force mains, removal of the debris, and restoration of the right of way. Such estimates shall be reviewed and approved by District staff. Upon acceptance by the governmental entity of the facility and the issuance of a permit transfer by District staff, such financial assurances shall be released.

(d) Any other uses of the District's right of way authorized by the District are subject to adequate financial assurances as determined necessary and reasonable by District staff based upon a complete review of the unique circumstances and the potential liability, both personal injury and property damage, and environmental risks involved with the specific authorized use.

(2) In addition to the provision for financial assurances as provided in subsection (1), above, the District shall require liability insurance, naming the District as an additional insured, in such amount and type as the District staff determines necessary. All insurance must be written by a company duly authorized to do business in the State of Florida or provided pursuant to a self insurance program consistent with the requirements of Florida law.

(3) Any applicable financial assurance or insurance requirement set forth above shall be maintained as a condition of the continued validity of the right of way occupancy permit.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085, 373.086, 373.103 F.S. History—New 9-15-99.

#### **40E-6.381 Limiting Conditions.**

The District's authorization to utilize lands and other works constitutes a revocable license (including both notice general permits and standard permits). In consideration for receipt of that license, permittees shall agree to be bound by the following standard limiting conditions, which shall be included within all permits issued pursuant to this chapter:

(1) All structures on District works or lands constructed by permittee shall remain the property of permittee, who shall be solely responsible for ensuring that such structures and other uses remain in good and safe condition. Permittees are advised that other federal, state and local safety standards may govern the occupancy and use of the District's lands and works. The District assumes no duty with regard to ensuring that such uses are so maintained and assumes no liability with regard to injuries caused to others by any such failure.

(2) Permittee solely acknowledges and accepts the duty and all associated responsibilities to incorporate safety features, which meet applicable engineering practice and accepted industry standards, into the design, construction, operation and continued maintenance of the permitted facilities/authorized use. This duty shall include, but not be limited to, permittee's consideration of the District's regulation and potential fluctuation, without notice, of water levels in canals and works, as well as the permittee's consideration of upgrades and modifications to the permitted facilities/authorized use which may be necessary to meet any future changes to applicable engineering practice and accepted industry standards. Permittee acknowledges that the District's review and issuance of this permit, including, but not limited to, any field inspections performed by the District, does not in any way consider or ensure that the permitted facilities/authorized use is planned, designed, engineered, constructed, or will be operated, maintained or modified so as to meet applicable engineering practice and accepted industry standards, or otherwise provide any safety protections. Permittee further acknowledges that any inquiries, discussions, or representations, whether verbal or written, by or with any District staff or representative during the permit review and issuance process, including, but not limited to, any field inspections, shall not in any way be relied upon by permittee as the District's assumption of any duty to incorporate safety features, as set forth above, and shall also not be relied upon by permittee in order to meet permittee's duty to incorporate safety features, as set forth above.

(3) Permittee agrees to abide by all of the terms and conditions of this permit, including any representations made on the permit application and related documents. This permit shall be subject to the requirements of Chapter 373, F.S., and Chapter 40E-6, F.A.C., including all subsequent rule and criteria revisions. Permittee agrees to pay all removal and restoration costs, investigative costs, court costs and reasonable attorney's fees, including appeals, resulting from any action taken by the District to obtain compliance with the conditions of the permit or removal of the permitted use. If District legal action is taken by staff counsel, "reasonable attorney's fees" is understood to mean the fair market value of the services provided, based upon what a private attorney would charge.

(4) This permit does not create any vested rights, and except for governmental entities and utilities, is revocable at will upon reasonable prior written notice. Permittee bears all risk of loss as to monies expended in furtherance of the

permitted use. Upon revocation, the permittee shall promptly modify, relocate or remove the permitted use and properly restore the right of way to the District's satisfaction. In the event of failure to so comply within the specified time, the District may remove the permitted use and permittee shall be responsible for all removal and restoration costs.

(5) This permit does not convey any property rights nor any rights or privileges other than those specified herein and this permit shall not, in any way, be construed as an abandonment or any other such impairment or disposition of the District's property rights. The District approves the permitted use only to the extent of its interest in the works of the District. Permittee shall obtain all other necessary federal, state, local, special district and private authorizations prior to the start of any construction or alteration authorized by the permit. Permittee shall comply with any more stringent conditions or provisions which may be set forth in other required permits or other authorizations. The District, however, assumes no duty to ensure that any such authorizations have been obtained or to protect the legal rights of the underlying fee owner, in those instances where the District owns less than fee.

(6) Unless specifically prohibited or limited by statute, Permittee agrees to indemnify, defend and save the District (which used herein includes the District and its past, present and future employees, agents, representatives, officers and Governing Board members and any of their successors and assigns) from and against any and all lawsuits, actions, claims, demands, losses, expenses, costs, attorneys fees (including but not limited to the fair market value of the District's inhouse attorneys' fees based upon private attorneys' fees/rates), judgments and liabilities which arise from or may be related to the ownership, construction, maintenance or operation of the permitted use or the possession, utilization, maintenance, occupancy or ingress and egress of the District's right of way which arise directly or indirectly and are caused in whole or in part by the acts, omissions or negligence of the District or of third parties. Permittee agrees to provide legal counsel acceptable to the District if requested for the defense of any such claims.

(7) The District does not waive sovereign immunity in any respect.

(8) The permittee shall not engage in any activity regarding the permitted use which interferes with the construction, alteration, maintenance or operation of the works of the District, including:

- (a) discharge of debris or aquatic weeds into the works of the District;
- (b) causing erosion or shoaling within the works of the District;
- (c) planting trees or shrubs or erecting structures which limit or prohibit access by District equipment and vehicles, except as may be authorized by the permit.

Permittee shall be responsible for any costs incurred by the District resulting from any such interference, as set forth in (a), (b), and (c), above;

- (d) leaving construction or other debris on the District's right of way or waterway;
- (e) damaging District berms and levees;
- (f) the removal of District owned spoil material;
- (g) removal of or damage to District locks, gates, and fencing;
- (h) opening of District rights of way to unauthorized vehicular access;

or

(i) running or allowing livestock on the District's right of way.

(9) The District is not responsible for any personal injury or property damage which may directly or indirectly result from the use of water from the District's canal or any activities which may include use or contact with water from the District's canal, since the District periodically sprays its canals for aquatic weed control purposes and uses substances which may be harmful to human health or plant life.

(10) Permittee shall allow the District to inspect the permitted use at any reasonable time.

(11) Permittee shall allow, without charge or any interference, the District, its employees, agents, and contractors, to utilize the permitted facilities before, during and after construction for the purpose of conducting the District's, routine and emergency, canal operation, maintenance, and construction activities. To the extent there is any conflicting use, the District's use shall have priority over the permittee's use.

(12) This permit is a non-exclusive revocable license. Permittee shall not interfere with any other existing or future permitted uses or facilities authorized by the District.

(13) The District has the right to change, regulate, limit, schedule, or suspend discharges into, or withdrawals from, works of the District in accordance with criteria established by the Big Cypress Basin, the District, or the U. S. Army Corps of Engineers for the works of the District.

(14) If the use involves the construction of facilities for a non exempt water withdrawal or surface water discharge, the applicant must apply for and obtain a water use or surface water management permit before or concurrently with any activities which may be conducted pursuant to the right of way occupancy permit.

(15) The District shall notify the local ad valorem taxing authority of the lands affected by the permitted use, where the permittee owns the underlying fee and derives a substantial benefit from the permitted use. The taxing authority may reinstate such lands on the tax roll. Failure to pay all taxes in a timely manner shall result in permit revocation. Such permit revocation shall not alleviate the responsibility of the permittee to pay all taxes due and payable.

(16) Permittee shall provide prior written notice to their successors in title of the permit and its terms and conditions.

(17) Permittee shall record a Notice of Permit through filing the appropriate notice agreed to by the District in the public records of the county or counties where the project is located and by providing the District with proof of filing or through an equivalent procedure. All costs associated with this requirement shall be the responsibility of the permittee. Governmental entities and utilities are not subject to this provision.

(18) This permit is contingent upon compliance with the recording of the Notice of Permit. Failure to provide proof of the recording of the Notice of Permit will result in the permit becoming invalid on its own terms, the removal of any existing facilities within the right of way, restoration of the right of way to the District's satisfaction, at the permittee's expense, and the possible assessment of civil penalties.

(19) Permittee shall be responsible for the repair or replacement of any existing facilities located within the District's right of way which are damaged as a result of the installation or maintenance of the authorized facility.

(20) All obligations under the terms of this permit authorization and any subsequent modifications hereto shall be joint and several as to all owners.

(21) It is the responsibility of the permittee to make prospective bidders aware of the terms and conditions of this permit. It shall be the responsibility of the permittee's contractors to understand the terms and conditions of this permit and govern themselves accordingly.

(22) It is the responsibility of the permittee to bring to the attention of the District any conflict in the permit authorization or permit conditions in order that they may be resolved prior to the start of construction. In resolving such conflicts the District's determination will be final.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085(1), 373.086, 373.103, 373.109, 373.129, 373.1395, 373.603, 373.609, 373.613 F.S. History—New 9-3-81, Amended 5-30-82, 12-29-86, 12-24-91, 9-15-99 Formerly 16K-5.01(2), 16K-5.02(2), 16K-5.03(2), 16K-5.04(4), 16K-5.05, 40E-6.381.

### **PART III – EMERGENCIES**

#### **40E-6.451 Emergency Authorization.**

(1) Permission to begin use of works or lands of the District prior to the issuance of a permit shall be granted pursuant to Rule 40E-1.6115 and 40E-0.108, F.A.C.

(2) All requests for emergency authorizations must be submitted with both the emergency application processing fee set forth in Rule 40E-6.601(2)(h), F.A.C., in addition to the applicable standard permit application processing fee set forth in Rules 40E-6.601(2)(d) through (g), F.A.C.

(3) In order to be eligible for an emergency permit authorization the applicant must have already filed a standard permit application with the District or simultaneously file a standard permit application with the District.

(4) In addition to the required standard permit application contents, the applicant must also file a written statement with the District which fully explains the basis and circumstances which support and justify the request for emergency authorization.

(5) Mere carelessness or lack of planning on the part of the applicant shall not be sufficient grounds to warrant the granting of an emergency authorization.

(6) The Executive Director may grant an emergency authorization pursuant to section 373.119(2), F.S.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085, 373.086, 373.119, 373.439 F.S. History—New 9-3-81, Amended 12-29-86, 7-1-98, 9-15-99 Formerly 16K-5.09, 40E-6.451.

#### **40E-6.481 Emergency Measures**

(1) In addition to the provisions of Rule 40E-6.521, F.A.C., permitted uses are also subject to immediate alteration, repair or removal if an emergency condition exists and the continued exercise of the permitted use might endanger lives or property.

(2) In such event the permittee shall immediately comply with any written or oral instructions from the District regarding alteration, repair or removal of the permitted use.

(3) If the permittee fails to remove, alter or repair a permitted use when so ordered by the District, the District may repair, alter or remove it at the permittee's expense.

(4) Permittee may request an administrative hearing regarding the emergency order in accordance with the procedures set forth in Rule 28-107.004, F.A.C.

(5) In addition to the provision of Rule 40E-6.521, F.A.C., unpermitted uses are also subject to the provisions of this section.

(6) In no circumstances shall the District be responsible for any claims or damages caused in whole or in part, from any necessary emergency removal, alteration, or repair of any permitted or unpermitted use.

(7) All permitted and unpermitted uses are subject to the specific terms of an Emergency Order(s) which may be issued by the District.

Specific Authority 373.044, 373.113 F.S. Law Implemented 373.085, 373.086, 373.119, 373.439, F.S.  
History—New 9-3-81, Amended 12-29-86, 7-1-98, 9-15-99 Formerly 16K-5.08, 40E-6.481.

## **PART IV - VIOLATIONS**

### **40E-6.501 Unlawful Use and Civil Penalties.**

(1) It shall be unlawful to connect with, place structures in or across, or otherwise make use of works or lands of the District without a Right of Way Occupancy Permit. The District may use any remedy available to it under Florida common law and statutory law and the District's rules, to remove or cause the unpermitted use to be removed, as well as the assessment of civil penalties pursuant to this rule.

(2) It shall be unlawful for any permittee to violate the provisions of Chapter 373, F.S., Chapter 40E-6, F.A.C., or the terms and conditions of a Right of Way Occupancy Permit. The District shall use any remedy available to it under Florida common law and statutory law and the District's rules, to remove or cause the unpermitted use to be removed, as well as the assessment of civil penalties pursuant to this rule. The District shall, at its discretion, in furtherance of the purposes of Chapter 373, F.S., allow the permitted use to be brought into compliance with the permit by means of a permit modification if the unlawful use complies with the criteria set forth in Rule 40E-6.091, F.A.C.

(3) Damage to works or lands of the District resulting from the violations specified in subsections (1) and (2), above, shall, within the timeframes and in a manner consistent with the District's requirements, be repaired by the violator to the satisfaction of the District, however, the District reserves the right to make any and all necessary repairs, the full cost of which shall be the responsibility of the violator.

(4) Violators shall be responsible for payment of civil penalties up to \$10,000.00 per day, per violation, pursuant to section 373.129, F.S., investigative costs and the District's attorney's fees (including appeals).

(5) Factors considered in the assessment of civil penalties shall be:

- (a) habitual violator;
- (b) threat to health, safety, and welfare (flooding);
- (c) immediacy of threat;
- (d) severity of impact (size of drainage basin);
- (e) potential for damage to surrounding property;

- (f) threat to District staff if self-help used
- (g) exposure of District to other liabilities;
- (h) environmental impact;
- (i) water quality; and
- (j) unusual circumstances.

(6) Vessels which are being occupied or used as a temporary or permanent residence or business, or other vessels which have an adverse impact on the District's ability to construct, operate, and maintain its canals and structures, will not be permitted within District works or lands. However, this limitation shall not be construed to prohibit vessels which are actively navigating from place to place.

(7) The planting of any non-native vegetation not included on the District's designated plant list or specifically authorized by District permit within District works or lands will not be permitted.

(8) The abandonment of personal property within District works or lands will not be permitted.

(9) Use of the works or lands of the District as a temporary or permanent place of residence or shelter will not be permitted.

(10) It shall be unlawful for any person or entity to remove any spoil, without authorization from the District, and the District specifically reserves any and all rights to pursue such violations in both criminal and civil proceedings, in addition to the provisions contained herein.

Specific Authority 373.044, 373.113 , 373.129 F.S. Law Implemented 373.085, 373.086, 373.603, 373.609, 373.613 F.S. History—New 9-15-99 Formerly 16K-5.06, 40E-6.491.

#### **40E-6.521 Self Help.**

(1) Unlawful uses or facilities placed within the works or lands of the District are subject to removal and restoration at the District's discretion with no guarantee of salvageability. In no circumstances shall the District be responsible for any claims or damages caused, in whole or in part, from any self help removal and restoration of any unlawful uses or facilities.

(2) When employing self help, the District is not required to provide any notice of its intended action.

(3) The District may seek to recover removal and restoration costs, investigative costs, and attorneys fees and costs (including appeals) incurred in carrying out self help done to resolve the unlawful use of District works and lands.

Specific Authority 373.044, 373.113 , 373.129 F.S. Law Implemented 373.085, 373.086, 373.603, 373.609, 373.613 F.S. History—New 9-15-99

### **PART V – PROCESSING FEES**

#### **40E-6. 601 Permit Application Processing Fees.**

(1) A permit application processing fee is required and shall be paid to the District when applications are filed pursuant to District rules to connect with and make use of the works and lands of the District. An application is not deemed complete and shall not be processed until the appropriate application fee is submitted. These fees are

assessed in order to defray the cost of evaluating, processing, and mailing required in connection with consideration of such applications. Fees are non-refundable in whole or part unless the activity for which an application is filed is determined by the District to be exempt or the fee submitted is determined by the District to be incorrect.

(2) Based upon years of experience in reviewing applications for District right of way occupancy permits, the District has determined that applications for existing facilities or uses require additional staff time and resources (as compared to proposed facilities) in order to thoroughly review and inspect, and this differential shall be reflected in the application processing fees for all right of way occupancy permit authorizations as set forth herein.

(3) The fee for permit applications reviewed pursuant to Chapter 40E-6, F.A.C., are as follows:

- (a) Notice General Permit Application, Notice General Permit Modification Application relating to a single family residential use (Category NGP-1) . . . . . No Fee
- (b) Notice General Permit Application, Notice General Permit Modification Application for uses proposed by homeowners associations and condominium associations relating to more than one individual lot or dwelling unit (Category NGP-2) . . . . . \$150.00
- (c) Notice General Permit Application, Notice General Permit Modification Application for uses proposed by developers, builders, corporate entities, utilities, county, state, or local entities (Category NGP-3) . . . . . \$300.00
- (d) Notice General Permit Application, Notice General Permit Modification Application relating to bridges, excluding culvert bridges (Category NGP-4) . . . . . \$900.00
- (e) Standard Permit Application, Standard Permit Modification Application relating to a single family residential use which does not meet Notice General Permit Criteria (Category SP-1) . . . . . \$75.00
- (f) Standard Permit Application, Standard Permit Modification Application relating to uses by homeowners associations and condominium associations and do not meet Notice General Permit Criteria (Category SP-2) . . \$300.00
- (g) Standard Permit Application, Standard Permit Modification Application relating to uses by developers, builders, corporate entities, utilities, county, state, or local entities, as well as all other uses not covered in Categories SP-1, SP-2 and SP-4 (Category SP-3) . . . . . \$625.00
- (h) Standard Permit Application, Standard Permit Modification Application relating to uses involving bridges, linear parks, greenways, similar park and recreation projects, marinas and associated facilities (Category SP-4) . . . . . \$1750.00
- (i) Application for emergency authorization pursuant to Rule 40E-6.401, F.A.C. . . . . \$275.00
- (j) Transfer Fees are set forth in Rule 40E-6.351, F.A.C., above.

(4) Notwithstanding the provisions set forth in this rule, upon request, the District shall waive any and all right of way occupancy permit application processing fees for right of way occupancy permit applications submitted by the governing body of a governmental entity only if provided with a resolution or other documentation as to the reciprocity commitment of the respective governmental entity applying for the right of

way occupancy permit and clearly establishing that governmental entity's reciprocal waiver of any and all fees required for the District to carry out canal operation, maintenance, and construction activities for the District.

(5) Notwithstanding the provisions set forth in this rule, no permit application processing fee will be required from utilities or other necessary service providers, where the permitted facility or use of the works or lands of the District is required to supply utility or other necessary service to an existing or proposed District facility.

(6) The above permit application processing fees shall not apply to either the Seminole Tribe of Florida or the Miccosukee Tribe of Indians of Florida for facilities and uses located exclusively within the boundaries of their respective reservations or included in leases with the District.

Specific Authority 373.044, 373.109, 373.113 F.S. Law Implemented 373.109, 373.083(1), 373.085, 373.086 F.S. History—New 9-15-99 Formerly 40E-1.607(6), F.A.C.

## OPERATIONAL ZONES

In order to effectively and efficiently evaluate proposed installations of above-ground facilities and uses, the District has segmented the canal and rights of way into five (5) operational zones:\*

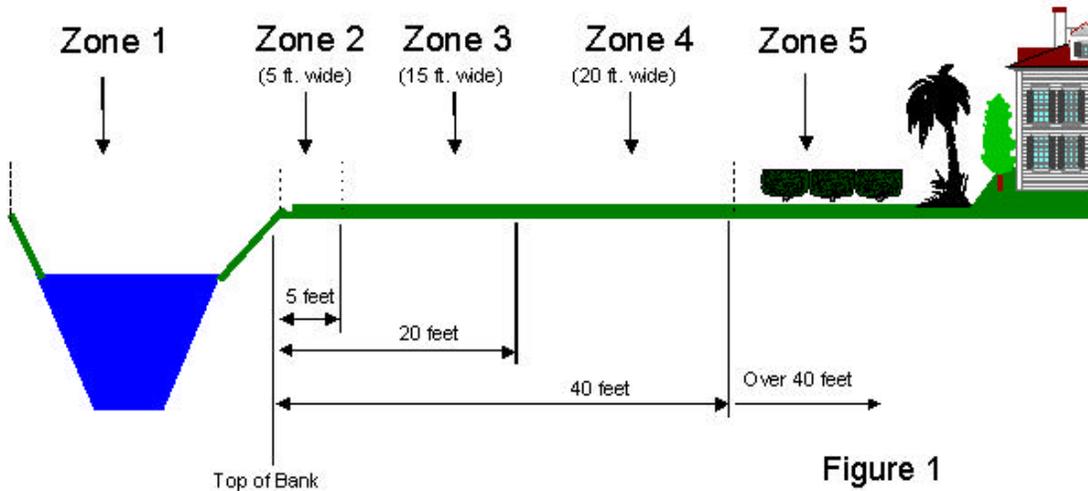


Figure 1

- ZONE 1 is the canal channel from the top of bank to the opposite top of bank.
- ZONE 2 is the point on the right of way from a point five (5) feet landward.
- ZONE 3 is the point on the right of way from a point five (5) feet landward from top of bank to a point twenty (20) feet landward.
- ZONE 4 is the point on the right of way from a point twenty (20) feet landward from top of bank to a point forty (40) feet landward.
- ZONE 5 is any right of way located further than forty (40) feet landward.

\* The District's rights of way vary in width, and may be either less than forty feet or more than forty feet in width. Accordingly, in those cases when the right of way is less than forty feet, only those zones depicted above would be applicable to the actual width of the right of way.

## **STAGING AREAS**

In order to provide adequate areas to set up and operate equipment, particularly for the purposes of removing and temporarily stockpiling storm debris that accumulate on pilings, the District will set aside and preserve staging areas at bridge and pile-supported utility crossings. These staging areas will be 100' in length and will be located on the upstream and downstream sides of all bridge and utility crossings. No docks or above-ground structures that have the potential to interfere with District maintenance activities will be allowed within these staging areas.

## PERMIT INDEX CHART

**Abbreviations: E = exempt      NA = non-applicable      NGP = notice general permit**  
**RD = recommend denial      SP = standard permit**

FACILITY	ZONE 1 (Channel)	ZONE 2 (5' wide)	ZONE 3 (20' wide)	ZONE 4 (40' wide)	ZONE 5 (Beyond 40')
Access:					
Permanent	NA	RD	RD	RD	RD
Temporary	NA	RD	NGP	NGP	NGP
Agriculture Use:					
Farming	NA	RD	RD	RD	RD
Grazing	NA	RD	RD	RD	RD
Attachments to District Water Control Structures, Seawall/Bulkhead & Miscellaneous Facilities	RD	RD	RD	RD	RD
Bank/Berm Reshaping	SP	SP	SP	SP	SP
Bee Hives	RD	RD	RD	RD	RD
Bridges					
Culvert	SP	SP	NA	NA	NA
Free Span	NGP	NGP	NA	NA	NA
Golf Cart	NGP	NGP	NA	NA	NA
Pedestrian	NGP	NGP	NA	NA	NA
Pile-Supported	NGP	NGP	NA	NA	NA
Private	NGP	NGP	NA	NA	NA
Culvert Connections	NGP	NGP	NA	NA	NA
Dock & Docking Facilities					
Attached to Privately-Owned Seawall/Bulkhead	NGP	RD	NA	NA	NA
Boat Lift/Davit Attached to Privately-Owned Facility	NGP	RD	NA	NA	NA
Cleats/Whips Attached to Privately-Owned Facility	NGP	RD	NA	NA	NA
Security or Decorative Lights	NGP	NA	NA	NA	NA
Floating Docks/In Tidal Water	NGP	RD	NA	NA	NA
Pile-Supported Docks	NGP	RD	NA	NA	NA
Storage Boxes on Docks	NGP	NGP	NA	NA	NA
Utility Services to Docks					
Drain Lines (Pool, Roof, Air-Condition)	E	E	E	E	E
Dredging	SP	NA	NA	NA	NA
Fencing:					
Enclosures	NA	RD	RD	RD	NGP
Cross-Fence	NA	RD	RD	RD	RD
Gate Requirements	NA	NA	NA	NA	NA
District Lock Requirements	NA	NA	NA	NA	NA
Filming/Motion Picture Production	NGP	NGP	NGP	NGP	NGP
Fire Hydrants	NA	RD	RD	RD	NGP
Gazebos/Chickees	RD	RD	RD	RD	NGP
Grass/Sod	E	E	E	E	E
Hunting Camps and Camping	NA	RD	RD	RD	RD
Impoundment(s) Inside R/W	RD	RD	RD	RD	RD
Irrigation/Sprinkler Systems	E	E	E	E	E

**Zone 1 is the canal channel from the top of bank to the opposite top of bank.**

**Zone 2 is the area on the right of way between top of bank and a point 5' landward of top of bank.**

**Zone 3 is the area on the right of way from a point 5' landward of top of bank to a point 20' landward of top of bank.**

**Zone 4 is the area on the right of way from a point 20' landward of top of bank to a point 40' landward of top of bank.**

**Zone 5 is the area on the right of way located further than 40' landward of top of bank.**

## PERMIT INDEX CHART

**Abbreviations: E = exempt    NA = non-applicable    NGP = notice general permit**  
**RD = recommend denial    SP = standard permit**

FACILITY	ZONE 1 (Channel)	ZONE 2 (5' Wide)	ZONE 3 (20' Wide)	ZONE 4 (40' Wide)	ZONE 5 (Beyond 40')
Landscape Plans: Linear Park, Greenway, etc.	SP	SP	SP	SP	SP
Low-Lying Groundcover	E	E	E	E	E
Marina & Associated Facilities	SP	SP	NA	NA	NA
Mitigation in Environmental Sensitive Area	SP	SP	SP	SP	SP
Monitoring Wells	NA	NGP	NGP	NGP	NGP
Non-Profit, Organized Recreational Events	E	E	E	E	E
Open Channel Connection	RD	RD	RD	RD	RD
Parking: Temporary Permanent	NA NA	RD RD	RD RD	RD RD	RD RD
Passive Recreation (fishing, hiking, equestrian, etc.)	E	E	E	E	E
Patio Stones, Walkway and Other Similar At-Grade Installations	NA	NGP	NGP	NGP	NGP
Petroleum, Petroleum Products & Pipeline Crossings	SP	SP	SP	SP	SP
Planting of Trees	RD	RD	RD	RD	RD
Public Roadway/Highway, Guardrailing, Sidewalks, Handicap Ramps, etc.	NA	RD	RD	RD	RD
Ramps: Public Boat Launching Private/Residential Boat Launching	SP SP	SP SP	NA NA	NA NA	NA NA
Satellite Dishes/Communication Towers	NA	RD	RD	RD	RD
Seawall/Bulkhead	SP	NA	NA	NA	NA
Shrubs (Low Lying - 2 feet or less)	NA	NGP	RD	RD	NGP
Signs: Airspace Encroachment Commercial Informational/Regulatory	RD RD NGP	RD RD NGP	RD RD RD	RD RD RD	NGP RD NGP
Storage: Temporary Sheds Permanent Sheds Construction Office/Trailer Construction Material Construction Equipment Hazardous Material	NA NA NA NA NA	RD RD RD RD RD	RD RD RD RD RD	RD RD NGP NGP RD	NGP RD NGP NGP RD
Trash Piles/Burn Pits	RD	RD	RD	RD	RD
Use of, or Connect to, Project Culverts	SP	SP	SP	SP	SP

**Zone 1 is the canal channel from the top of bank to the opposite top of bank.**

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**Zone 4 is the area on the right of way from a point 20' landward of top of bank to a point 40' landward of top of bank.**

**Zone 5 is the area on the right of way located further than 40' landward of top of bank.**

## PERMIT INDEX CHART

**Abbreviations:** E = exempt      NA = non-applicable      NGP = notice general permit  
 RD = recommend denial      SP = standard permit

FACILITY	ZONE 1 (Channel)	ZONE 2 (5' Wide)	ZONE 3 (20' Wide)	ZONE 4 (40' Wide)	ZONE 5 (Beyond 40')
Utility CATV, Communications Crossing Installation:					
Bridge attachment	NGP	NA	NA	NA	NA
Buried in Road Embankment	NGP	NA	NA	NA	NA
Pole Supported Aerial Crossing	NGP	NGP	NGP	NGP	NGP
Pile Supported & Arched Crossing	NGP	NA	NA	NA	NA
Subaqueous (Buried Beneath Canal section) Crossing	NGP	NGP	NGP	NGP	NGP
Utility Parallel Run Installation:					
Pole Supported/Aerial	RD	RD	RD	NGP	NGP
Buried/Underground	RD	RD	RD	NGP	NGP
Vegetation Removal:					
Brush/Growth	NGP	NGP	NGP	NGP	NGP
Trees	NGP	NGP	NGP	NGP	NGP
Waste Water Treatment Plant/Effluent	RD	RD	RD	RD	RD
<b><i>FACILITY</i></b>	<b><i>ZONES DO NOT APPLY</i></b>				
Stormwater Treatment Areas	SP	SP	SP	SP	SP
Use of Water Conservation Area Lands	RD	RD	RD	RD	RD

**Zone 1 is the canal channel from the top of bank to the opposite top of bank.**

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**Zone 5 is the area on the right of way located further than 40' landward of top of bank.**



## South Florida Water Management District

### NOTICE TO APPLICANTS

At its April, 1989 Meeting the Governing Board of the South Florida Water Management District adopted amendments to Rule 40E-6, F.A.C., governing fees associated with the processing of certain applications for permits. This Rule requires that affected applications for permits to utilize the District's rights of way and Lands be accompanied by an application fee to defray the costs associated with the processing of an Application. This rule is contained in Chapter 40E-6.601 of the Florida Administrative Code.

### **PLEASE NOTE:**

- ❖ Fees are non-refundable unless it is determined that the use is exempt from District Rules.
- ❖ Permit applications will not be processed without the simultaneous submittal of the correct fee. [Overpayment of a fee will not delay application processing and the amount of over-payment will be refunded].
- ❖ In cases where applications for Right of Way Occupancy Permits cover uses that all within more than one category, the higher fee will be charged.
- ❖ Future applications submitted to modify existing permits will require the submittal of another fee. Therefore, it is in the applicant's best interest to submit a completed application covering all anticipated uses of the right of way in the initial submittal.
- ❖ Applications for a SFWMD Water Use or Surface Water Management Permit also require a fee. Please refer to Chapter 40E-1.607, F.A.C. for fee information or contact the District's Regulation Department at (561) 686-8800 or 1-800-432-2045.
- ❖ In cases where more than one type of permit is required, a fee will be assessed for each permit application.
- ❖ Checks are preferred and should be made payable to the South Florida Water Management District. Do not send cash through the mail.
- ❖ Should you elect to deliver the application in person and intend to pay your fee in cash, please bring the exact amount.
- ❖ Questions on fees for Right of Way Occupancy Permits may be directed to the District's Right of Way Division at (561) 686-8800 or 1-800-432-2045.

### **EXEMPT FROM PAYMENT OF APPLICATION PROCESSING FEES**

The Seminole Tribe of Florida or the Miccosukee Tribe of Indians of Florida for facilities and uses located exclusively within the boundaries of their respective reservations or included in leases with the District.

Governmental applicants requesting a Waiver or reduction of the Application Processing Fee pursuant to Section 218.075, Florida Statutes in accordance with the submittal of Certification of Waiver of Permit Application Processing Fee (District Form Number 889).

Utilities or other necessary service providers, where the permitted facility or use of the Works or Lands of the District is required to supply utility or other necessary service to an existing or proposed District facility.

# **NOTICE GENERAL PERMIT FEE SCHEDULE**

**NOTE: Existing facilities or uses are not eligible for Notice General Permits**

Notice General Permit Application or Modification (40E-6)  
*Category "NGP-1" – NO FEE*

This Category covers the following types of uses of the right of way which are proposed by individual lot owners in conjunction with adjacent domestic, single family residential land use:

1. Fence (Enclosure Only).
2. Non-Public Docks, Mooring Facilities and Associated Appurtenances.
3. Utility Services to Docks.
4. Gazebos/Chickees.
5. Walkways, Patio Stones and Similar At-Grade Installations.
6. Brush/Growth/Tree Removal.
7. Landscaping Consistent with Governing Board Approved Landscape Plan.
8. Temporary Sheds.

Notice General Permit Application or Modification (40E-6)  
Category "NGP-2" - \$150.00

This Category covers the following types of uses of the right of way which are proposed by homeowner associations and condominium associations which are adjacent to more than one individual lot or dwelling unit.

1. Fence (Enclosure Only).
2. Non-Public Docks, Mooring Facilities and Associated Appurtenances.
3. Utility Services to Docks.
4. Gazebos/Chickees.
5. Walkways, Patio Stones and Similar At-Grade Installations.
6. Brush/Growth/Tree Removal.
7. Landscaping Consistent with Governing Board Approved Landscape Plan.
8. Temporary Sheds.

Notice General Permit Application or Modification (40E-6)  
Category "NGP-3" - \$300.00

This Category covers the following types of proposed facilities and uses of the right of way which are proposed by developers, builders, corporate entities, utilities, county, state or local entities, as well as other uses not covered in Categories NGP-1, NGP-2 and NGP-4.

1. Fence (Enclosure Only).
2. Docks, Mooring Facilities and Associated Appurtenances.
3. Utility Services to Docks.
4. Gazebos/Chickees.
5. Walkways, Patio Stones and Similar At-Grade Installations.
6. Brush/Growth/Tree Removal.
7. Landscaping Consistent with Governing Board Approved Landscape Plan.
8. Temporary Sheds.
9. Pipe and Culvert Connections for Irrigation and/or Drainage.
10. Utility/Communication Installations (Aerial, Subaqueous, Pile-Supported, Parallel Runs, Underground Feeds, Poles, Anchors, Down Guys, Attachment to Bridges).
11. Temporary Use of Right of Way for Access.
12. Filming/Motion Picture Production.
13. Monitoring Wells.
14. Signs (Informational/Regulatory).
15. Temporary Construction Office/Trailer.
16. Temporary Storage of Construction Material and/or Equipment.
17. All other uses not covered in Categories NGP-1, NGP-2 and NGP-4.

Notice General Permit Application or Modification (40E-6)  
Category "NGP-4" - \$900.00

This Category covers the following types of uses of the right of way, which are proposed relating to:

1. Bridges – vehicular (Private and Public), Golf Cart, Pedestrian (Pile-Supported and Free-Span Only). Excludes Culvert Bridges.

## **STANDARD PERMIT FEE SCHEDULE**

**NOTE:** ISSUANCE OF A RIGHT OF WAY OCCUPANCY PERMIT IS PARTLY CONTINGENT UPON SITE SPECIFIC CONDITIONS AND THEIR IMPACT ON THE DISTRICT'S ABILITY TO OPERATE AND MAINTAIN THE CANAL SYSTEM. LACK OF SUFFICIENT WIDTH OF RIGHT OF WAY TO PROVIDE FOR ALL FIVE (5) ZONES AS INDICATED IN THE DISTRICT'S CRITERIA IS TAKEN INTO CONSIDERATION DURING THE APPLICATION REVIEW PROCESS AND MAY NOT NECESSARILY BE GROUNDS FOR DENIAL OF A PERMIT.

### Standard Permit Application or Modification (40E-6) Category "SP-1" – \$75.00

This Category covers the following types of uses of the right of way by individual lot owners in conjunction with adjacent domestic, single family residential land use which do not meet Notice General Permit Criteria.

1. Fences.
2. Non-Public Docks, Launching Ramps, Mooring Facilities and Associated Appurtenances.
3. Utility Services to Docks.
4. Seawalls/Bulkheads.
5. Gazebos/Chickees.
6. Walkways, Patio Stones and Similar At-Grade Installations.
7. Brush/Growth/Tree Removal.
8. Temporary Sheds.
9. Bank/Berm Reshaping.
10. Landscaping

### Standard Permit Application or Modification (40E-6) Category "SP-2" - \$300.00

This Category covers the following types of uses of the right of way by homeowner associations and condominium associations that are adjacent to more than one individual lot or dwelling unit and do not meet Notice General Permit Criteria.

1. Fences.
2. Non-Public Docks, Launching Ramps, Mooring Facilities and Associated Appurtenances.
3. Utility Services to Docks.
4. Seawalls/Bulkheads.
5. Gazebos/Chickees.
6. Walkways, Patio Stones and Similar At-Grade Installations.
7. Brush/Growth/Tree Removal.
8. Temporary Sheds.
9. Bank/Berm Reshaping.
10. Landscaping

Standard Permit Application or Modification (40E-6)  
Category "SP-3" - \$625.00

This Category covers the following types of uses of the right of way by developers, builders, corporate entities, utilities, county, state or local entities, as well as other uses not covered in Categories SP-1, SP-2 and SP-4.

1. Fences.
2. Docks, Launching Ramps, Mooring Facilities and Associated Appurtenances.
3. Utility Services to Docks.
4. Seawalls/Bulkheads.
5. Gazebos/Chickees.
6. Walkways, Patio Stones and Similar At-Grade Installations.
7. Brush/Growth/Tree Removal.
8. Temporary Sheds.
9. Bank/Berm Reshaping.
10. Landscaping
11. Pipe and Culvert Connections for Irrigation and/or Drainage.
12. Utility/Communication Installations (Aerial, Subaqueous, Pile-Supported, Parallel Runs, Underground Feeds, Poles, Anchors, Down Guys, Attachment to Bridges).
13. Petroleum, Petroleum Product and Pipeline Crossings.
14. Temporary Use of Right of Way for Access.
15. Filming/Motion Picture Production.
16. Monitoring Wells.
17. Signs (Informational/Regulatory).
18. Temporary Construction Office/Trailer.
19. Temporary Storage of Construction Material and/or Equipment.
20. Bank/Berm Reshaping.
21. Dredging.
22. Mitigation in Environmental Sensitive Area.
23. Use of or Connection to, Project Culverts.
24. Waste Water Treatment Plant/Effluent.
25. All other uses not covered in Categories SP-1, SP-2 and SP-4.

Standard Permit Application or Modification (40E-6)  
Category "SP-4" - \$1750.00

This Category covers the following types of uses of the right of way which do not meet Notice General Permit Criteria.

1. Bridges – vehicular (Private and Public), Golf Cart, Pedestrian (Pile-Supported, Free-Span or Culvert).
2. Linear Parks, Greenways and Similar Public Parks and Recreation Projects.
3. Marinas and Associated Facilities.

Emergency Authorization Application (40E-6) - \$275.00

This category is for those uses of the right of way which are listed in Categories "SP-1", "SP-2", "SP-3" or "SP-4", but where the applicant is requesting issuance of an Emergency Authorization prior to Governing Board consideration for issuance of a routine Right of Way Occupancy Permit. This fee is in addition to the required processing fee, as described in Categories "SP-1", "SP-2", "SP-3" or "SP-4" of this schedule.

# **EXEMPTIONS**

Utilization of the District's rights of way for certain uses and facilities, in conformance with the District's criteria, are considered "exempt" from the issuance of a Notice General Permit or Standard Right of Way Occupancy Permit from this District. However, sole responsibility for ensuring that the use of or installation placed on the District's rights of way meet District criteria is borne by the users of the District's rights of way. Should you desire the District will provide you with a Letter Of Exemption, please contact us to discuss your proposed use or installation. Please contact the Right of Way Division of the Construction and Land Management Department, South Florida Water Management District.

## **UNDERSTANDING EXEMPTIONS UNDER THE DISTRICT'S RIGHT OF WAY PERMITTING RULES (40E-6, F.A.C.)**

Owners of facilities and users of the District's rights of way seeking to qualify exemption under District Rule acknowledge that:

- A. The owner of the proposed encroachment or use of the right of way/user must be the owner or lessee of the property (except those covered in Items E. and F.), lying adjacent to the District's Works, where improvement/use is proposed.
- B. An exemption, pursuant to District Rules, does not relieve the owner/user from compliance with other District permitting requirements and any applicable permit/zoning requirements of federal, state and local governmental entities.
- C. The District is not responsible for repair of any improvements which may incur damage resulting from the District's utilization of its rights of way/or use by third parties. Improvements placed within the right of way are at the sole risk of the owner.
- D. Uses/facilities placed within the District's rights of way not meeting the District's criteria are subject to **removal, modification or alteration** at the District's discretion at the sole expense of the owner/user without notice and with no guarantee of salvageability.

## **EXEMPT FACILITIES AND USES**

### **A. DRAIN LINES (Pool, Roof, Air-Condition):**

The installation and maintenance of pool or roof drain lines, AC heat exchanger, withdrawal and water return lines is exempt from permitting under this chapter when:

1. That portion of the line crossing the right of way is buried to provide a minimum of 18 inches of cover as measured from the existing ground elevation.
2. That portion of the line located within the sideslope of the canal bank is buried in the sideslope a minimum of 12 inches and stabilized with grass/sod.
3. The line projecting into the channel is a minimum of 36 inches below the normal water surface of the canal.
4. The line does not extend more than 24 inches into the channel.
5. The drain line is not for discharge of chemically contaminated or bio-hazardous substances. (The discharge of chlorinated swimming pool water is acceptable).
6. The proposed use does not adversely affect a previously-authorized use(s) of the right of way.
7. The proposed use is not located within an environmentally sensitive area.\*
8. The proposed use will not encroach within a Water Control Structure site or compound.

### **B. GRASS/SOD:**

The planting and maintenance of grass/sod is exempt from permitting under this chapter when:

1. The grass/sod does not involve the re-shaping or alteration of levees, banks, berms or other ground surfaces lying within the District's Lands.
2. Grass species are limited to bahia or other drought-tolerant species only.
3. The proposed use does not adversely affect a previously-authorized use(s) of the right of way.
4. The proposal is not located within an environmentally sensitive area.\*
5. The proposed use will not encroach within a Water Control Structure site or compound.

### **C. LOW-LYING GROUNDCOVER:**

**[Exhibit 1 provides a list of acceptable, native species of groundcover]**

The planting/maintenance of low-lying groundcovers is exempt from permitting under this chapter when:

1. The proposal does not involve the re-shaping or alteration of banks, berms or other ground surfaces lying within the District's Lands.
2. The proposed landscape plan of low-lying groundcover is comprised of native species that is 2' or lower in height or maintained to a maximum height of 2'.
3. The proposed use does not adversely affect a previously-authorized use(s) of the right of way.
4. The proposal is not located within an environmentally sensitive area.\*
5. The proposed use will not encroach within a Water Control Structure site or compound.

## **EXEMPT FACILITIES AND USES (Cont'd.)**

### **D. IRRIGATION LINES, SPRINKLERS, FIRE FIGHTING DRAFT LINES: (Residential and Non-Residential)**

The installation and maintenance of irrigation lines and associated sprinkler systems are exempt from permitting under this chapter when:

1. That portion of the line crossing the right of way is buried to allow a minimum of 18 inches as measured from the existing ground elevation.
2. That portion of the line located within the sideslope of the canal bank is buried in the sideslope a minimum of 12 inches and stabilized with grass/sod.
3. The line projecting into the channel is a minimum of 36 inches below the normal water surface of the canal.
4. The line does not extend more than 24 inches into the channel.
5. No portion of a pump or a pumphouse is located within the District's rights of way.
6. If used, sprinkler heads must be set flush with ground or be of the pop-up variety.
7. Concrete doughnuts, edging or similar materials are not placed around the sprinklers.
8. Sprinklers are not placed at or near the top of the canal bank (to preclude wash-outs or erosion of the bank and sideslope of the canal).
9. A rain sensor, soil moisture sensor, soil moisture controller, tensionometer or similar switch device is installed, which will over-ride the irrigation cycle of the sprinkler system when an adequate rainfall has occurred.
10. The system is operated in compliance with water use restrictions during water emergencies or declared water shortages. The line does not leak or otherwise waste water.
11. The irrigation system is properly designed, operated and maintained to preclude leaks or ponding that could lead to erosion.
12. Proposed use does not adversely affect a previously-authorized use(s) of the right of way.
13. Proposed use is not located within an environmentally sensitive area.\*
14. If not exempt from the District's Water Use Permit Permitting Rules, a Water Use Permit has been obtained. (Certain types of water withdrawals require permits under the provisions of Rule 40E-20, F.A.C. For this reason, it is recommended that you contact the Water Use Division of the District's Regulation Department).
15. The proposed use will not encroach within a Water Control Structure site or compound.

### **E. NON-PROFIT, ORGANIZED RECREATIONAL EVENTS:**

Boat races, regattas, sponsored walks or runs and other similar recreational activities are exempt from permitting under this chapter when:

1. The proposed use is a non-profit activity, or is a benefit for a charity.
2. The proposed use does not include the placement of permanent or semi-permanent above-ground structures within the District's right of way.
3. The proposed use does not interfere with District operations and maintenance activities.
4. The proposed activity does not impede or interfere with canal flows.
5. The proposed activity does not preclude the public's access to the District's rights of way.
6. The proposed use does not adversely affect a previously-authorized use(s) of the right of way.

7. The proposed use is not located within an environmentally sensitive area.\*
8. The proposed use does not involve access to a Water Control Structure site or compound.

**NOTICE:** In those areas where the right of way is not solely owned by the SFWMD, be advised that the owner of the land (underlying fee owner) has the right to prohibit or limit use of that land for recreational activities.

**F. PASSIVE RECREATION:**

Fishing, hiking, bicycling, equestrian and other similar passive recreational activities are exempt from this chapter when:

1. The proposed use does not include the use of motorized vehicles within District rights of way.
2. The proposed use does not adversely affect a previously-authorized use(s) of the right of way.
3. The proposed use is not located within an environmentally sensitive area.\*
4. The use is proposed by an established Not-For-Profit (501(c)(3)) organization.

**NOTICE:** In those areas where the right of way is not solely owned by the SFWMD, be advised that the owner of the land (underlying fee owner) has the right to prohibit or limit use of that land for passive recreational activities.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

# **ACCEPTABLE NATIVE SPECIES OF GROUNDCOVER FOR EXEMPTION**



## **Introduction:**

The following list of native groundcovers is considered acceptable for use on District rights of way. Properly sited, these native groundcovers provide soil stabilization, environmental, and aesthetic benefits, without interfering with the District's operation and maintenance activities. Rather than planting just one species of groundcover, a mixture of species is suggested because it is difficult to predict how well a groundcover may grow in a particular area. In addition to improving the chance of success, mixed plantings also provide diversity for greater environmental benefits. It should be noted that wildflowers may bloom only at certain periods of the year and re-seed themselves – another reason for diversification of your plantings. The list is divided into the following categories.

## **Categories:**

- Wildflowers
- Grasses
- Ferns
- Vines
- Herbaceous
- Woody

## DEFINITIONS AND KEY TO ABBREVIATIONS

### EXAMPLE:

COMMON NAME Scientific name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIREMENT	SOIL REQUIREMENT	GROWTH RATE	FEATURES AND USES	CLIMAT E ZONE
<b>GROUNDCOVERS</b>								
Beach Sunflower <i>Helianthus debilis</i>	U	6 – 12"	H	H, M	S, WD	F	FL, A	S, SC

### **Planting Zone**

Relative elevation where optimum growth is expected. Closely related to moisture preference.

**U** = Upland

Elevated and generally drier soils; soil not water saturated. Typical of most residential lots. Upper canal bank slope and canal overbank.

**T** = Transitional

Lower elevations where soil tends to be wetter; sometimes saturated. Lower portions of canal bank slope.

**W** = Wetland

Littoral shelf or intertidal areas where soil is periodically inundated. Saturated soil conditions. Lowest portion of canal slope and waterward.

### **Average Height**

Height of average specimen expressed in inches or feet.

### **Salt Tolerance**

Ability of plant to withstand exposure to salt.

**H** = High

High or exceptional tolerance to salt. Seaside/shoreline conditions.

**M** = Moderate

Moderate tolerance to salt exposure. Some seaward protection required.

**L** = Low

Low tolerance to salt exposure.

### **Light Requirement**

Light conditions conducive to optimum growth.

**H** = High

Full sun.

**M** = Moderate

Partial sun. Shaded during part of the day.

**L** = Low

Low light levels. Shade to deep shade during most of the day.

## **DEFINITIONS AND KEY TO ABBREVIATIONS (continued)**

**Soil Requirement**            General soil characteristics conducive to optimum growth.

**A** = Acidic                      **W** = Wide range of soil types                      **WD** = Well -Drained  
**S** = Sandy                      **M** = Moist  
**MF** = Moderately Fertile      **FD** = Flooded/Saturated

**Growth Rate**            Relative growth rate under average or generally favorable conditions of soil, light, moisture, etc.

**F** = Fast                      **M** = Moderate                      **S** = Slow

**Features & Uses**            Features of notable interest of uses in landscaping.

**FL** = Flowers                      **A** = Accent                      **FO** = Foliage                      **SP** = Specimen  
**BK** = Bark                      **SH** = Shade Tree                      **FR** = Fruits                      **SCR** = Screen  
**WV** = Wildlife Value                      **HG** = Hedge

**Climate Zone**            Region of state where climate will support long-term survival and growth of plant; often corresponds to a natural range of plant. Closely related to resistance to cold temperatures.

**All** = All portions of the District. From Orlando area south, through the Florida Keys.  
**S** = Southern Portions of the state. From Lake Okeechobee area southward.  
**SC** = Southern coastal areas. Same approximate latitude as Lake Okeechobee southward.  
**C** = Coastal areas.

## NATIVE GROUNDCOVERS

COMMON NAME Scientific Name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIRED	SOIL REQUIRED	GROWTH RATE	FEATURES & USES	CLIMATE ZONE
<b>WILDFLOWERS</b>								
<b>Asters</b> Aster spp.	U, T	VARIES	L, M	H, M	W	M, F	FL, WV	ALL
<b>Beach Verbena</b> Verbena maritima	U	6 - 12"	H	H, M	S, WD	F	FL	S, SC
<b>Beach Sunflower</b> Helianthus debilis	U	6 - 12"	H	H, M	S, WD	F	FL, A	S, SC
<b>Black-Eyed Susan</b> Rudbeckia hirta	U	2'	L	H, M	W	F	FL	ALL
<b>Blanket Flower</b> Gaillardia pulchella	U	6 - 12"	M, H	H	S	F	FL	ALL
<b>Blue-Eyed Grass</b> Sisyrinchium atlanticum	U, T	1'	L	H, M	M, MF	M	FL	ALL
<b>Blue Mistflower</b> Conoclinium coelestinum	U, T	1 - 2'	L	H, M	M, MF	F	FL, WV	ALL
<b>Blue Porterweed</b> Stachytarpheta jamaicensis	U	6 - 12"	M	H, M	W	M	FL, WV	S, SC
<b>Blue Spiderwort</b> Tradescantia ohiensis	U	1 - 2'	L	H, M	MF, S	M, F	FO, FL	ALL
<b>Horsemint</b> Monarda punctata	U	2 - 3'	M	H, M	WD	F	FL, WV	ALL
<b>Partridge Pea</b> Chamaecrista fasciculata	U	2'	M, H	H, M	S, WD	F	FL	ALL
<b>Pencil Flower</b> Stylosanthes hamata	U	1 - 6"	H	H, M	WD, W	F	FL, FO	ALL
<b>Pineland Heliotrope</b> Heliotropium polyphyllum	U	1 - 2'	M	H, M	W	M	FL	S, SC
<b>Sage (Blue, Tropical, Lyre-Leaf)</b> Salvia spp.	U	1 - 3'	M, H	H, M	WD	M, F	FL, WV	ALL
<b>Scorpion Tail</b> <i>Heliotropium angiospermum</i>	U	2 - 3'	M	H, M	W	M, F	FL, WV	ALL

COMMON NAME Scientific Name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIRED	SOIL REQUIRED	GROWTH RATE	FEATURES & USES	CLIMATE ZONE
<b>WILDFLOWERS (continued)</b>								
<b>Tickseed</b> Coreopsis leavenworthii	U, T	1 - 2'	L	H, M	M, MF	M, F	FL	ALL
<b>GRASSES</b>								
<b>Bluestem</b> Schizachyrium spp.	U	1-2'	M	H, M	S, W	M	FO	ALL
<b>Broom Sedge</b> Andropogon spp.	T, U	2 - 4'	L, M	H, M	W, M	M, F	A, FO	ALL
<b>Cordgrass (Smooth)</b> Spartina alterniflora	W, S	2 - 4'	H	H	FD	F	FO, WV	ALL
<b>Cordgrass (Sand)</b> Spartina bakeri	T, U	2 - 3'	L, M	H	S	M	A, FO, WV	ALL
<b>Eastern Gamagrass</b> Tripsacum dactyloides	T, U	2 - 4'	L, M	H, M	M, MF	M	FO, WV, A	ALL
<b>Florida Gamagrass</b> Tripsacum floridanum	U	1 - 2'	L, M	H, M	W	M	FO, WV, A	S, SC
<b>Muhly Grass</b> Muhlenbergia capillaris	U, T	2'	M	H	S	M	A, FO, FL	ALL
<b>Purple Lovegrass</b> Eragrostis spectabilis	U	1- 2'	M	H, M	S	M	FL	ALL
<b>Saltmeadow Cordgrass</b> Spartina patens	T	2'	H	H, M	S, M	M	FO, WV	ALL
<b>Seashore Dropseed</b> Sporobolus virginicus	T	1'	H	H, M	S, M	M	FO	ALL
<b>Seashore Paspalum</b> Paspalum vaginatum	T	6 - 12"	H	H, M	S, M	M	FO	ALL
<b>Wiregrass</b> Aristida beyrichiana	U	1'	L	H, M	W	M	FO	ALL

COMMON NAME Scientific Name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIRED	SOIL REQUIRED	GROWTH RATE	FEATURES & USES	CLIMATE ZONE
<b>FERNS</b>								
<b>Fern, Leather</b> Achrostichum spp.	W, T	2 – 5'	M, H	W	M, MF, FD	F	A	S, SC
<b>Fern, Shield</b> Thelypteris spp.	T, U	1– 3'	L	M, L	M, MF	S, M	A, FO	ALL
<b>Fern, Swamp</b> Blechnum serrulatum	T, U	1 – 3'	L	M, L	M, MF	M, F	A, FO	ALL
<b>VINES</b>								
<b>Coral Honeysuckle</b> Lonicera sempervirens	U	Vine	M	H, M	MF	M	FL, WV	ALL
<b>Corky-Stemmed Passionflower</b> Passiflora suberosa	U	Vine	M, H	W	W	M, F	WV	S, SC
<b>Mimosa Vine</b> Mimosa strigillosa	U, T	1 – 6"	M	H, M	W	M, F	FL	ALL
<b>Railroad Vine</b> Ipomea pes-capre	U	1'	H	H	S, WD	F	FL, FO	SC, S
<b>HERBACEOUS</b>								
<b>Matchweed</b> Phyla nodiflora	U, T	1 - 6"	M, H	H, M	W	M, S	FO	ALL
<b>Peperomia</b> Peperomia spp.	U	6"	M	M, L	WD, MF	S, M	FO	ALL
<b>Alligator Lily</b> Hymenocallis palmeri	W, T	2'	M	W	FD, M, MF	M	A, FO	ALL
<b>Spider Lily</b> Hymenocallis latifolia	U	2'	M, H	H, M	WD, S	M, F	A, FO	ALL
<b>String, Swamp Lily</b> Crinum americanum	W, T	2'	M	W	M, F, FD	M	FO, FL	ALL
<b>Wild Petunia</b> Ruellia caroliniensis	U	6"	M	W	W	M	FL	ALL

COMMON NAME Scientific Name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIRED	SOIL REQUIRED	GROWTH RATE	FEATURES & USES	CLIMATE ZONE
<b>WOODY</b>								
<b>Golden Creeper</b> Ernodea littoralis	U	1'	H	H	S, WD	M	FO	SC, S
<b>Gopher Apple</b> Licania michauxii	U	6 - 12"	M, H	H, M	S, WD	M	FR, WV	ALL
<b>Snowberry, Pineland</b> Chiococca pinetorum	U	2'	M	H, M	MF, S, WD	M	FR	SC, S
<b>St. John's Wort</b> Hypericum spp.	T, U	2'	L	H, M	M, S, A	M	FL	ALL
<b>Quail Berry</b> Crossopetalum ilicifolium	U	1 - 6"	M	H, M	MF	S	FO, WV	S, SC
<b>Sea Oxeye Daisy</b> Borrichia frutescens	T, U	2'	H	H, M	W	M, F	FL, FO	C
<b>Yaupon Holly, Dwarf</b> Ilex vomitoria cv. "Schellings"	U	1 - 2'	M, H	H, M	W	S, M	FO, A	ALL

## **DISTRICT REQUIREMENTS FOR DRAWINGS ACCOMPANYING APPLICATIONS**

### **APPLICATION DRAWINGS:**

For preliminary review purposes, the District will accept drawings larger than 8 ½" x 11". When submitting drawings larger than 8 ½" x 11", a minimum of 6 sets of drawings must be submitted.

For permit file purposes, the application must provide a drawing (or drawings) not larger than 8 ½" x 11". This drawing(s) must be reproducible by common photocopy techniques. The use of colors is discouraged, unless the applicant is willing to submit multiple copies. Reduced "E Size" or other large drawings rarely result in legible 8 ½" x 11" drawings. Such illegible drawings are unacceptable.

Application drawings must:

1. Utilize English units of measurement or a combination of English/Metric.
2. Be drawn to scale or fully-dimensioned.
3. Provide both plan and profile (section) views.
4. Include a north arrow showing the orientation of the plan view of the drawing.
5. Must be accompanied by a recent property or boundary survey depicting the lot or boundary lines of the adjacent owner/applicant; the lot, block and subdivision (if applicable) must appear on the survey or the survey must be accompanied by a metes and bounds description.
6. Depict the location of the top of the canal bank and edge of water.
7. Identify all existing encroachments and uses.
8. Identify all proposed facilities and uses.
9. Be certified by a Professional Engineer, registered in the State of Florida, when a vehicular bridge is proposed.
10. If applicable, vertical datum must be indicated on profile views.

### **CROSS-SECTIONS:**

Cross-sections of canals and District rights of way are required for certain types of application review. Applicants are encouraged to discuss the District's cross-section requirements, (number of sections, locations, etc.), for a particular project before planning any field survey work.

Where cross-sections are required by the District, the applicant will provide cross-sections which meet the following requirements:

1. Elevations (soundings) taken and plotted at 10 foot intervals from right of way line to right of way line, with the right of way lines shown on the each section.
2. Sections shall be plotted to the same horizontal and vertical scale (preferably 1" = 10') with the design section overlaid on the existing cross-section. (CAD drawings having similar characteristics are acceptable).
3. Show datum, utilizing NGVD.
4. Show north arrow showing orientation.
5. The number and locations of cross-sections needed to evaluate a proposal is based on a number of site specific characteristics. Please contact the District's Right of Way Permitting staff to discuss cross-section requirements and obtain canal design section information.

**ACCESS-TEMPORARY FOR CONSTRUCTION OR HAULING (Allowable Zone 3, 4, 5)**

In order to be eligible for use of the District's right of way for temporary access purposes to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

**NOTES:**

1. The applicant is cautioned that the District's approval of such a request will be limited to its interest in the right of way. Where the District owns less than a fee simple interest in the right of way, it is the individual applicant's responsibility to obtain any additional approvals that may be required.
2. Where access to the right of way is controlled by District-owned locked gates, the applicant must also obtain a Key Permit and pay any applicable fees or deposits as specified by the District.
3. Applicants are advised that the review of applications for this type of use of the District's rights of way are often complex and time consuming, due to the need to obtain necessary information and assurances. Applicants should anticipate delays in obtaining a permit for this type of use and submit the request as early as possible. Further, the applicant should also clearly understand that failure to maintain the right of way on a daily basis in accordance with the terms and conditions of the permit is grounds for immediate permit revocation. In this regard, permittees are responsible for the repair, replacement and restoration of any damage to the District's rights of way, which may result from the permitted use. Such restoration shall be to original or better condition and to the satisfaction of the District.

**Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District rights of way lines.
  - b. The location of access route tied into a well-known landmark(s).
  - c. The precise locations of ingress and egress.
3. Narrative addressing:
  - a. The length of time use of the right of way is being requested.
  - b. An outline of other alternate routes which are available and why they can not be used.
  - c. The type and size of vehicles to utilize right of way and frequency (in round trips per day) that each type of vehicle would be using the right of way.
4. The measures to be taken by applicant which will preclude the vehicular use of the right of way by the general public.
5. The posting of financial assurance in the form of a bond or other surety in an amount satisfactory to the District.
6. A Certificate of Insurance to the limits and amounts specified by the District.

## **ACCESS - TEMPORARY FOR CONSTRUCTION OR HAULING (CONT'D.)**

### **Criteria To Be Met:**

1. The use must be proposed.
2. The proposed use must not be in any way adverse to the District's operation and maintenance programs, policies and goals.
3. The proposal does not involve crossing a District Water Control Structure service bridge.
4. The project associated with the request has obtained all necessary permits, licenses or other forms of approval.
5. The proposed use does not adversely affect a previously-authorized use(s) of the right of way.
6. Assurance that no vehicular maintenance/repair activities, substances or parts associated with the repair or maintenance of vehicles/equipment will take place, be used, stored or discarded within the right of way.
7. The proposed use will not interfere with the District's continuous, interrupted vehicular access along either canal berm.
8. The proposed use is not intended to provide permanent access to owners of private land that is otherwise "land-locked".
9. The proposed use is not located in an area which the District has designated as an area where temporary use of the right of way in the manner proposed is prohibited.
10. The proposed use is not located within an environmentally sensitive area.\*

### **A Notice General Permit will not be issued:**

Requests for temporary access which do not strictly adhere to the criteria as outlined above will not be eligible for consideration of issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

**BRIDGES (FREE-SPAN AND PILE-SUPPORTED) INCLUDING HIGHWAY, PEDESTRIAN, BICYCLE AND GOLF CART, ETC.** (Allowable Zone 1)

In order to be eligible for a bridge crossing to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

**NOTES:**

1. Please refer to the Pile-Supported Utility Crossing section in this manual for utility crossing installations.
2. For bridge located in Collier County, please refer to the Big Cypress Basin section in this manual.
3. Applicants are cautioned that pile-supported bridge crossings have the potential to adversely impact canal flow characteristics and limit District maintenance access capabilities. Therefore, the designer is encouraged to take these factors into consideration in the design stage and develop a proposal that will minimize these impacts.
4. The owner of the bridge is responsible for meeting any applicable safety standards for structures of this type, either existing or as may be developed in the future.

**Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District rights of way lines.
  - b. The location tied into a well-known landmark.
3. A certified cross-section of the canal as it exists taken at:
  - centerline of the bridge (assuming no skew).
  - at the upstream face of the proposed bridge.
  - 25 and 50 feet upstream of the upstream face of the proposed bridge face.
  - at the downstream face of the proposed bridge.
  - 25 and 50 feet downstream of the downstream face of the proposed bridge face.Soundings shall be taken at 10 foot intervals from top of bank to top of bank and be plotted on standard cross-section paper utilizing NGVD as datum and the same horizontal and vertical scale preferably 1 inch = 10 feet, super-imposed over the ultimate design section.
4. A Certificate of Insurance or evidence of self-insurance indemnification to the amounts and limits specified by the District.
5. If the bridge proposed is to be a private bridge, the applicant must provide a detailed cost analysis of the cost to remove and dispose of the bridge and restore the District's right of way.
6. If the bridge proposed is to be a private bridge, the applicant must post financial assurance in favor of the District equal to the detailed cost analysis of removal and disposal of the bridge, including restoration of the District's right of way.
7. If the bridge proposed is a private bridge, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

## **BRIDGES (FREE-SPAN AND PILE-SUPPORTED) CONT'D.**

8. Verification that provisions have been made for all utility and other relocations.
9. Evidence that applicant has applied for and obtained a Surface Water Management Permit from the District's Regulation Department.

### **Design Criteria To Be Met:**

1. The facility must be proposed.
2. The proposed structure must be designed and certified by a professional engineer registered in the State of Florida.
3. The proposed design must not exceed the maximum allowable headloss through the structure, 0.1', (one-tenth foot) in most places.
4. The structure meets or exceeds the applicable minimum clear horizontal center span and minimum clear approach spans criteria (as measured from the face of the piles). (The minimum clear center and horizontal spans vary depending on the location of the bridge. See "Criteria for Basis of Review" in this manual).
5. The proposed structure meets or exceeds the minimum low member elevation. (Low member elevations are site specific. Please contact the District's Right Of Way Permitting staff for requirements).
6. The proposed design includes measures for right of way erosion control and bank stabilization acceptable to the District.
7. The piles of proposed structure must align with pile bents of adjacent structures, (if applicable).
8. The proposed installation is designed in such a way that it can be constructed without the use of dams, fills or other constrictions or impediments to canal flows.
9. The proposed facility is designed and constructed to provide for continuous, uninterrupted access for District maintenance equipment and vehicles along both canal berms located inside the District's rights of way.
10. The proposed plans provide required access features, such as but not limited to, drop curbs, reinforced sidewalk sections, ramps, guardrail gaps and median gaps as directed by the District.
11. The proposed facility is not located within a staging area or other area which the District has designated as an area where installations such as proposed are prohibited.
12. The proposed facility is not located within an environmentally sensitive area.\*
13. The proposed project does not adversely affect a previously authorized use(s) of the right of way.
14. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

### **Construction Criteria To Be Met:**

1. At no time will the canal be blocked or flows otherwise restricted or impeded. This shall include a prohibition on dams or fills being placed in the canal during all phases of construction and maintenance.

## **BRIDGES (FREE-SPAN AND PILE-SUPPORTED) CONT'D.**

2. Where the District determines that excavation of the canal to the design section is required, the Permittee will perform such excavation to the limits specified by the District.
3. At no time will the District's continuous vehicular access, along either canal berm be blocked, restricted or impeded during all phases of construction and maintenance.
4. Maintenance or recreational access will not be blocked during construction.
5. Excavated material from the canal shall not be stockpiled in the canal; permittee will remove all excess material from the right of way.
6. Turbidity screens must be used during excavation and trench backfilling operations.
7. As-built certification that the excavated canal section meets or exceeds the canal section specified by the District prior to the driving of piles (except for 1 test pile).

### **A Notice General Permit will not be issued:**

Requests for installation of bridge crossings which do not strictly adhere to the Criteria outlined above will not be eligible for consideration of issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **CULVERT CONNECTIONS**

**(Allowable Zone 1, 2)**

In order to be eligible for a culvert connection to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

### **NOTES:**

In order to prevent the discharge of aquatic weeds into the District's canal system, all culverts 36 inches in diameter or larger that serve to connect an open ditch or canal system to the Works of the District will be equipped with a skimmer or baffle which effectively precludes the discharge of aquatic weeds into the District's canal system. The skimmer or baffle will be designed to be effective through a range of water surface conditions from:

#### **Lower Limit:**

One (1) foot below either the District's canal design water surface elevation or seasonal low optimum water control elevation (whichever produces the lower elevation) to:

#### **Upper Limit:**

Two (2) feet above either the District's canal design water surface elevation or seasonal high optimum water surface elevation (whichever produces the higher elevation). In cases where a riser is attached to the culvert, the top of the skimmer or baffle will be equal to the top of the riser.

Maintenance of the skimmer or baffle is the responsibility of the permittee.

This requirement will not be applied where the applicant utilizes a pumped discharge system and that system employs a functional trash rack (or other effective means of blocking the discharge of aquatic weeds) on the intake side of the pump station.

The discharge of aquatic weeds into District Works is grounds for permit cancellation and removal of the culvert facilities.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 1/2" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
  - c. The pipe size, material of pipe, invert elevation, controls, risers, burial depth at crown of pipe, width of cover and if applicable, forebay.
  - d. The distance pipe extends into canal.
3. A property/boundary survey.
4. Evidence that applicant has applied for and obtained a Water Use or Surface Water Management Permit from the District's Regulation Department.

## **CULVERT CONNECTIONS (CONT'D.)**

### **Design Criteria To Be Met:**

1. The facility must be proposed.
2. The invert elevation is acceptable to the District and produces a crown elevation ½ foot below the design water surface or optimum water control elevation, whichever produces the lower installation. (Information for establishing invert elevations is site specific and can be obtained by contacting the District's Right of Way Permitting staff).
3. The proposal incorporates a right of way erosion control and bank stabilization method that is acceptable to the District.
4. The length of the pipe is sufficient to provide a minimum 15' top width maintenance roadway across pipe connection.
5. Where required, the top of rip-rap headwall must match elevation of existing grade.
6. Where used, end/headwalls include adequate returns to prevent erosion.
7. The proposed design utilizes an effective skimmer to preclude the discharge of aquatic weeds.
8. The proposed facility is not located within an area which the District has designated as an area where culvert connections are prohibited.
9. A flap gate or similar device is placed on the discharge end of the proposed facility (applies to those installations located downstream of a District Salinity Control Structure (brackish/saltwater)).
10. The proposed facility is not located within an environmentally sensitive area.\*
11. The proposed facility does not adversely affect a previously authorized use(s) of the right of way.
12. The proposed facility does not interfere with the District's maintenance and operations activities.
13. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

### **A Notice General Permit will not be issued:**

Requests for culvert installations which do not strictly adhere to the Criteria outlined above will not be eligible for consideration of issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **DOCK AND ASSOCIATED FACILITIES - PILE-SUPPORTED (Allowable Zone 1)**

In order to be eligible for a pile-supported docking facility to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide complete information sufficient to the District which insures the following criteria will be met:

### **NOTES:**

1. For boat docks located in Collier County and specific criteria regarding required low member elevations, please refer to the Big Cypress Basin section of this manual.
2. Applicants for boat docks are advised that permits will be required from the Department of Environmental Protection (DEP), whose criteria may be more stringent than the Water Management District's. Additionally, approvals or permits are normally required from the local building and zoning departments of the community. For this reason, it is suggested that proposals for boat docks be first discussed with the DEP and other entities to determine the permissibility potential of the project, prior to filing an application with the District.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee, if applicable.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
3. A recent boundary/property survey.
4. The type/size and location of associated facilities such as boat lifts, davits, whips, mooring piles, etc.
5. The low member elevation of the proposed dock.

### **Criteria To Be Met:**

1. The facility must be proposed.
2. The proposed dock is located adjacent to the landowner's lot within the extension of the lot lines, as extended perpendicular from the centerline of the canal.
3. The proposed docking facilities, including associated mooring facilities and vessels moored thereto must not extend more than 25% of the entire width of the canal. (As measured from either mean high water or bulkhead line, whichever applies).
4. The minimum low member elevation requirement is met. (Low member elevations are site specific, please contact the District's Right of Way Permitting staff for information).
5. The proposed dock is not within an area 250' upstream of the centerline of a District Water Control Structure or 250' downstream of the discharge end of a District Water Control Structure.
6. The dock is not proposed within 100' of a bridge or pile-supported utility crossing.
7. The proposed facility must not be located within a staging area or other area where the District has designated as an area where docks are prohibited.
8. The dock is not proposed inside an area where the District has installed cables or booms across the canal.
9. The proposed facility is not located within an environmentally sensitive area.\*
10. The proposed docking spaces accommodate no more than 3 watercraft.
11. The proposed dock space will not be rented or leased.

## **DOCKS AND ASSOCIATED FACILITIES - PILE-SUPPORTED (CONT'D)**

12. The proposed dock or any portion will not be used as either a temporary or permanent place of residence or for the mooring of houseboats or other vessels being used for either a temporary or permanent place of residence.
13. The proposed dock is not attached to a District owned bulkhead.
14. The proposed dock does not incorporate walls or other similar enclosures, whether solid, partly solid, screened or transparent, regardless of the type of material to be used.
15. If the dock proposal includes a roof or other cover, the design must be supported by a Florida professional engineer's or architect's certification that the structure conforms to the Standard Building Code.<sup>1</sup>
16. The proposed facility does not interfere with District access, operations or maintenance activities.
17. The proposed use does not adversely affect a previously-authorized use(s) of the right of way.
18. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

## **UTILITY SERVICES TO BOAT DOCKS**

1. The utility service must be proposed.
2. The proposed utility service is not providing service to vessels being used temporarily or permanently as "live-aboards".
3. The proposed utility service is supported by a Florida professional engineer or architect's, or supported by a Florida licensed electrical contractor or plumbing contractor's certification that the proposed installation(s) conform to the Standard Building Code.<sup>1</sup>
4. The applicant agrees to provide as-built certifications from a Florida professional engineer or architect or supported by a Florida licensed electrical contractor or plumbing contractor's certification that the project was constructed in accordance with the design permitted by the District.<sup>1</sup>
5. If a water line is proposed, the water supply line, valves and appurtenances must not leak or otherwise waste water.
6. The proposed utility service is not located within an area in which the District has designated as an area where such proposals are prohibited.
7. The proposed utility service is not located within an environmentally sensitive area.\*
8. The proposed utility service does not adversely affect a previously authorized use(s) of the right of way.
9. The proposed utility service will not interfere with the District's access, operation or maintenance activities.
10. The proposed utility service is of sufficient burial depth (18" or greater for water service, 24" or greater for electrical service) to withstand the weight of the District's heavy maintenance equipment and vehicles.
11. The plans of the proposed utility service do not incorporate above-ground facilities.
12. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

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<sup>1</sup> In lieu of a Florida licensed engineer, architect, licensed electrical contractor or plumbing contractor's certification, verification in the form of final approval from the local building department verifying that the installation meets the local building code requirement is acceptable.

## **DOCKS AND ASSOCIATED FACILITIES - PILE-SUPPORTED (CONT'D)**

### **DECORATIVE OR SECURITY LIGHTS ON BOAT DOCKS:**

1. The lights must be proposed.
2. The proposed decorative or security lighting shall be of a shielded, cut-off design that minimizes light pollution to the surrounding areas.
3. The proposed electrical service is of sufficient burial depth, 24" or greater, to withstand the weight of the District's heavy maintenance equipment and vehicles.
4. The proposed utility service is supported by a Florida professional engineer or architect, or supported by a Florida licensed electrical contractor's certification that the proposed installation(s) conform to the Standard Building Code.<sup>1</sup>
5. The applicant agrees to provide as-built certifications from a Florida professional engineer or architect, or supported by a Florida licensed electrical contractor's certification that the project was constructed in accordance with the design permitted by the District.<sup>1</sup>
6. The proposed lighting is not used in conjunction with a dock facility being used either temporarily or permanently as a "live-aboard".
7. The proposed lighting is not located within an area in which the District has designated as an area where such proposals are prohibited.
8. The proposed lighting is not located within an environmentally sensitive area.\*
9. The proposed lighting does not adversely affect a previously authorized use(s) of the right of way.
10. The proposed lighting will not interfere with the District's access, operation or maintenance activities.
11. The plans of the proposed lighting do not incorporate above-ground facilities.
12. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

### **BOAT DOCK STORAGE-LOCKERS/BOXES**

1. The dock storage locker or box is proposed.
2. The proposed storage facility is not being used to accommodate vessels either being used temporarily or permanently as a "live aboard".
3. The storage is limited to fishing or boat-related equipment. Contents must not include pesticides, fuel oils, or other petroleum products, including paints, thinners and solvents.
4. The facility is not proposed to be located within an area which the District has designated as an area where installations of this nature are prohibited.
5. The facility is not proposed to be located within an environmentally sensitive area.\*
6. The proposed use does not adversely affect a previously authorized use(s) of the right of way.
7. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

## **DOCKS AND ASSOCIATED FACILITIES - PILE-SUPPORTED (CONT'D)**

### **A Notice General Permit will not be issued:**

Requests for placement of pile-supported docks and associated facilities, such as decorative or security lighting, lockers/boxes on docks or utility services to docks which do not strictly adhere to the criteria outlined above will not be eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **DOCK AND ASSOCIATED FACILITIES - FLOATING**

**(Allowable Zone: 1)**

In order to be eligible for consideration of a Notice General Permit for floating docking facilities, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide complete information sufficient to the District which insures the following criteria will be met:

### **NOTES:**

1. For boat docks located in Collier County and specific criteria regarding required low member elevations, please refer to the Big Cypress Basin section in this manual.
2. Applicants for boat docks are advised that permits will be required from the Department of Environmental Protection (DEP), whose criteria may be more stringent than the Water Management District's. Additionally, approvals or permits are normally required from the local building and zoning departments of the community. For this reason, it is suggested that proposals for boat docks be first discussed with the DEP and other entities to determine the permissibility potential of the project, prior to filing an application with the District.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee, if applicable.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
3. A recent boundary/property survey.
4. The type/size and location of associated facilities such as boat lifts, davits, whips, mooring piles, etc.

### **Criteria To Be Met:**

1. The facility must be proposed.
2. The proposed dock is located adjacent to the landowner's lot within the extension of the lot lines, as extended perpendicular from the centerline of the canal.
3. The proposed docking facilities, including associated mooring facilities and vessels moored thereto must not extend more than 25% of the entire width of the canal. (As measured from either mean high water or bulkhead line, whichever applies).
4. The proposed dock is not located upstream of a District Water Control Structure or within an area 250' downstream of the discharge end of a District Water Control Structure.
5. The proposed dock is not located within 100' of a bridge or pile-supported utility crossing.
6. The proposed dock is not located inside an area where the District has installed cables or booms across the canal.
7. The proposed facility must not be located within a staging area or other area which the District has designated as an area where docks are prohibited.
8. The proposed facility is not located within an environmentally sensitive area.\*
9. The proposed docking spaces accommodate no more than 3 watercraft.
10. The proposed dock space will not be rented or leased.
11. The proposed dock, or any portion thereof, will not be used either as a temporary or permanent place of residence or for the mooring of houseboats or other vessels being used for either a temporary or permanent place of residence.
12. The proposed dock is not attached to a District-owned bulkhead.

### **DOCK AND ASSOCIATED FACILITIES – FLOATING (CONT'D).**

13. The proposed dock does not incorporate walls or other similar enclosures, whether solid, partly solid, screened or transparent, regardless of type of material to be used.
14. If the dock proposal includes a roof or other cover, the design must be supported by a Florida professional engineer's or architect's certification that the structure conforms to the Standard Building Code.<sup>1</sup>
15. The proposed facility does not interfere with District access, operations or maintenance activities.
16. The proposed use does not adversely affect a previously-authorized use(s) of the right of way.
17. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

### **UTILITY SERVICES TO BOAT DOCKS**

1. The utility service must be proposed.
2. The proposed utility service is not providing service to a dock facility being used either temporarily or permanently as a "live-aboard".
3. The proposed utility service is supported by a Florida professional engineer or architect, or supported by a Florida licensed electrical contractor or plumbing contractor's certification that the proposed installation(s) conform to the Standard Building Code.<sup>2</sup>
4. The applicant agrees to provide as-built certifications from a Florida professional engineer or architect, or supported by a Florida licensed electrical contractor or plumbing contractor's certification that the project was constructed in accordance with the design permitted by the District.<sup>1</sup>
5. If a water line is proposed, the water supply line, valves and appurtenances must not leak or otherwise waste water.
6. The proposed utility service is not located within an area in the District has designated as an area where such proposals are prohibited.
7. The proposed utility service is not located within an environmentally sensitive area.\*
8. The proposed utility service does not adversely affect a previously authorized use(s) of the right of way.
9. The proposed utility service will not interfere with the District's access, operation or maintenance activities.
10. The proposed utility service is of sufficient burial depth (18" or greater for water service, 24" or greater for electrical service) to withstand the weight of the District's heavy maintenance equipment and vehicles.
11. The plans of the proposed utility service do not incorporate above-ground facilities.
12. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

### **DECORATIVE OR SECURITY LIGHTS ON BOAT DOCKS:**

1. The lights must be proposed.
2. The proposed decorative or security lighting shall be of a shielded, cut-off design that minimizes light pollution to the surrounding areas.

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<sup>2</sup> In lieu of a Florida licensed engineer, architect, licensed electrical contractor or plumbing contractors' certification, verification in the form of final approval from the local building department verifying that the installation meets the local building code requirement is acceptable.

**DECORATIVE OR SECURITY LIGHTS ON BOAT DOCKS (CONT'D):**

3. The proposed electrical service is of sufficient burial depth, 24" or greater, to withstand the weight of the District's heavy maintenance equipment and vehicles.
4. The proposed utility service is supported by a Florida professional engineer or architect, or supported by a Florida licensed electrical contractor's certification that the proposed installation(s) conform to the Standard Building Code.<sup>1</sup>
5. The applicant agrees to provide as-built certifications from a Florida professional engineer or architect, or supported by a Florida licensed electrical contractor's certification that the project was constructed in accordance with the design permitted by the District.<sup>1</sup>
6. The proposed lighting is not used in conjunction with a dock facility being used either temporarily or permanently as a "live-aboard".
7. The proposed lighting is not located within an area which the District has designated as an area where such proposals are prohibited.
8. The proposed lighting is not located within an environmentally sensitive area.\*
9. The proposed lighting does not adversely affect a previously authorized use(s) of the right of way.
10. The proposed lighting will not interfere with the District's access, operation or maintenance activities.
11. The plans of the proposed lighting do not incorporate above-ground facilities.
12. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

**BOAT DOCK STORAGE-LOCKERS/BOXES**

1. The dock storage locker or box is proposed.
2. The proposed storage facility is not being used to accommodate vessels being used either temporarily or permanently as a "live aboard".
3. The storage is limited to fishing or boat-related equipment. Contents must not include pesticides, fuel oils, or other petroleum products, including paints, thinners and solvents.
4. The facility is not proposed to be located within an area which the District has designated as an area where installations of this nature are prohibited.
5. The proposed facility is not located within an environmentally sensitive area.\*
6. The proposed use does not adversely affect a previously authorized use(s) of the right of way.
7. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

**A Notice General Permit will not be issued:**

Requests for placement of floating docks and associated facilities, such as decorative or security lighting, lockers/boxes on docks or utility services to docks which do not strictly adhere to the Criteria outlined above will not be eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **FENCE ENCROACHMENT**

**(Allowable Zone: 5)**

In order to be eligible for placement of fencing to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide complete information sufficient to the District which insures the following criteria will be met:

### **NOTES:**

1. The applicant is advised that obtaining a permit from the District for placement of fencing within the right of way does not preclude the need to obtain approvals for improvements within the fenced area.
2. If the installation of vehicular access gates is required for the District's access, said gates shall be a minimum of 16 feet wide clear opening and located within the right of way at locations acceptable to the District.
3. Where fencing is approved with the requirement of installation of gates to allow for District access, and locks are desired by the applicant, a District padlock will be supplied by the District at the applicant's (permittee's) expense.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee, if applicable.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
  - c. The size (height), type of material and location and width of gates, etc.
3. A recent boundary/property survey.
4. A narrative documenting why fencing cannot be placed at right of way/common property line or within applicant's lot.

### **Criteria To Be Met:**

1. The facility must be proposed.
2. The proposed fencing is located adjacent to the landowner's lot within the extension of the lot lines, as extended perpendicularly from the centerline of the canal.
3. The proposed fencing is constructed of acceptable material commonly used for fence construction.
4. No permanent above-ground facilities are proposed to be placed inside the fenced area.
5. If the proposed fencing is proposed parallel to the canal, this portion of the fence must align with existing, adjacent authorized fences.
6. The proposed fence will not be placed within 100' of a bridge or pile-supported utility crossing.
7. The proposed fence will not be located within a staging area or other area which the District has designated as an area where fencing is prohibited.
8. The proposed fencing will not be located within an environmentally sensitive area.\*

**FENCE ENCROACHMENT (CONT'D.)**

9. The proposed fencing will not interfere with District access, operations or maintenance activities.
10. The proposed fencing will not adversely affect a previously authorized use(s) of the right of way.
11. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

**A Notice General Permit will not be issued:**

Requests for placement of fencing which do not strictly adhere to the criteria outlined above will not be eligible for consideration for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **FILMING/MOTION PICTURE PRODUCTION**

**(Allowable Zone: 1, 2, 3, 4, 5)**

In order to be eligible for filming and motion picture production activities for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide complete information sufficient to the District which insures the following criteria will be met:

### **Applicant Must Provide:**

1. A completed application for permit, include signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
3. A complete and detailed description of the action to be filmed including specific information on any stunts which may be proposed.
4. An accurate schedule of the filming date(s) including any rain delay dates.
5. A detailed security plan covering what persons will be authorized to participate in the filming and how spectators will be kept out of the area.
6. A detailed emergency services plan including which entity will respond to requests for fire, paramedic and police services.

### **Criteria To Be Met:**

1. The filming must be proposed.
2. The applicant agrees to immediately restore any facilities damaged by the filming activities.
3. The applicant agrees to abide by any special provisions established by the District based on the type of use activities proposed.
4. The proposed use does not involve the use of explosives or pyrotechnics.
5. The applicant agrees to pay for any costs incurred of District personnel assigned to monitor the filming activities, including but not limited to, time and mileage and further agrees to abide by any directives issued by District personnel.
6. The applicant agrees to provide a certificate of insurance to the limits and amounts specified, naming the South Florida Water Management District as an additional insured, based on the type of use activities proposed, as may be set by the District's Risk Management Division.
7. The applicant agrees to post financial assurances with the District in the amount which will be specified by the District, based on the type of use activities proposed. Said financial assurance will not be released until such time as all terms and conditions of the permit are met to the satisfaction of the District.
8. The proposed use is not located within an environmentally sensitive area.\*
9. The proposed use does not interfere with the District's access, operations and maintenance activities.

## **FILMING/MOTION PICTURE PRODUCTION (CONT'D.)**

10. The proposed use does not adversely affect a previously-authorized use(s) of the right of way.
11. The applicant agrees to take all necessary measures to preclude the vehicular use of the right of way by the general public.

### **A Notice General Permit will not be issued:**

Requests for filming and motion picture production which do not strictly adhere to the criteria outlined above will not be eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **FIRE HYDRANTS**

**(Allowable Zone 5)**

In order to be eligible for placement of a fire hydrant to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met.

### **NOTES:**

1. If the applicant is a developer, requiring the transfer of the project over to a government or municipal entity, the applicant must provide a letter from that entity stating their intentions with regard to the facility to be located within the District's rights of way.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.

### **Criteria To Be Met:**

1. The facility must be proposed.
2. The location of the fire hydrant does not interfere with District ingress/egress routes.
3. The buried portion of the proposed water line is of sufficient burial depth (18" or greater) to withstand the weight of the District's heavy maintenance equipment and vehicles.
4. The proposed facility is not located within 100' of a bridge or pile-supported utility crossing.
5. The proposed facility is not located within a staging area or other area which the District has designed as an area where fire hydrants are prohibited.
6. The proposed facility is not located within an environmentally sensitive area.\*
7. The proposed facility does not adversely affect a previously-authorized use(s) of the right of way.
8. If not exempt from the District's Water Use Permitting Rules, a Water Use Permit has been obtained. (Certain types of water withdrawals require permits under the provisions of Rule 40E-20, F.A.C. For this reason, it is recommended that you contact the Water Use Division of the District's Regulation Department).
9. If applicable, applicant agrees to record a copy of the permit in the County records prior to utilization of the District's rights of way

## **FIRE HYDRANTS (CONT'D)**

### **A Notice General Permit will not be issued:**

Requests for placement of a fire hydrant which do not strictly adhere to the criteria outlined above will not be eligible for consideration of issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **GAZEBOES/CHICKEE**

**(Allowable Zone 5)**

In order to be eligible for placement of a non-permanent gazebo or chickee to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

### **NOTES:**

1. Where water or electric service is proposed, the District's applicable criteria must also be met.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee, if applicable.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
3. A recent boundary/property survey.
4. Documentation that the proposed structure complies with Standard Building Code or local codes and ordinances.

### **Criteria To Be Met:**

1. The facility must be proposed.
2. The facility must be temporary in nature, readily and easily dismantled by manpower and hand tools.
3. The proposed slab/foundation, if applicable, must be flush with existing grade.
4. The proposed facility is not located within 100' of a bridge or pile-supported utility crossing.
5. The proposed facility is not located within a staging area or other area which the District has designated as an area where temporary structures, such as chickees or gazebos are prohibited.
6. The facility is not located within an environmentally sensitive area.\*
7. The proposed use does not adversely affect a previously authorized use(s) of the right of way.
8. The proposed use does not interfere with the District's maintenance and operations activities.
9. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

### **A Notice General Permit will not be issued:**

Requests for placement of a chickee or gazebo which does not strictly adhere to the criteria outlined above will not be eligible for consideration of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **MONITORING WELLS**

**(Allowable Zone 2, 3, 4, 5)**

In order to be eligible for a monitoring well(s) to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
  - c. A narrative explaining why the well is necessary, why it must be placed on a District right of way, what data will be gathered from the well and where it will be stored.
  - d. If the well is installed for the purpose of monitoring a non-exempt water use of water, the applicant must provide evidence that a Water User Permit has been applied for and obtained from the District's Regulation Department.

### **Criteria To Be Met:**

1. The facility must be proposed.
2. The proposed monitoring well must be flush with surrounding ground, or if above ground, is placed in locations determined to be acceptable by the District.
3. The location of the proposed installation does not interfere with District ingress/egress routes;
4. If below grade, the installation must be constructed so as to withstand the weight of the District's heavy maintenance equipment and vehicles.
5. The proposed facility is appropriately staked or otherwise marked, as directed by the District.
6. The proposed facility is not located within a staging area or other area which the District has designated as an area where a monitoring well(s) installations is prohibited.
7. The proposed facility is not located within an environmentally sensitive area.\*
8. The proposed facility does not adversely affect a previously authorized use(s) of the right of way.
9. The application is supported by a "Well Abandonment Plan" that is acceptable to the District.
10. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

### **A Notice General Permit will not be issued:**

Requests for placement of monitoring wells which do not strictly adhere to the Criteria as outlined above will not be eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

**PATIO STONES, WALKWAYS AND OTHER SIMILAR AT-GRADE INSTALLATIONS**  
**(Allowable Zone 2, 3, 4, 5)**

In order to be eligible for installation of a patio, slab, walkway or similar installations to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

**Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee, if applicable.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
3. A recent property/boundary survey.

**Criteria To Be Met:**

1. The facility must be proposed.
2. The proposed installation is at existing ground/grade level.
3. The proposed installation is constructed so as to withstand the weight of the District's heavy maintenance equipment and vehicles.
4. The location of the proposed installation does not interfere with District access and ability to perform routine and emergency maintenance operations.
5. The proposed facility is not located within an area which the District has designated as an area where such installations are prohibited.
6. The proposed facility is not located within an environmentally sensitive area.\*
7. The proposed installation does not adversely affect a previously authorized use(s) of the right of way.
8. If applicable, applicant agrees to record the permit in the County records prior to utilization of the District's rights of way.

**A Notice General Permit will not be issued:**

Requests for placement of a patio, slab or walkway which does not strictly adhere to the criteria outlined above will not be eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **SIGNS**

## **(Allowable Zone 5)**

In order to be eligible for the placement of signage within the right of way to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.

### **Criteria To Be Met:**

1. The facility must be proposed.
2. The applicant must be a governmental or municipal entity.
3. The proposed sign is of a regulatory informational or directional nature (no advertising signs).
4. The location of the proposed sign (nor any portion of a sign that overhangs the District's right of way) does not interfere with the District's ingress/egress routes or its ability to perform canal operation and maintenance activities.
5. The proposed sign is not located within 100' of a bridge or pile-supported utility crossing.
6. The proposed facility is not located within a staging area or other area which the District has designated as an area where regulatory/informational signs are prohibited.
7. The proposed facility is not located within an environmentally sensitive area.\*
8. The proposed facility does not adversely affect a previously authorized use(s) of the right of way.

### **A Notice General Permit will not be issued:**

Requests for placement of signs which do not strictly adhere to the criteria outlined above will not be eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **STORAGE-OFFICE TRAILER/CONSTRUCTION EQUIPMENT/MATERIALS**

**(Allowable Zone 4, 5)**

In order to be eligible for an office trailer or temporary storage of construction materials to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

### **NOTES:**

1. Approval of use of the District's right of way for the temporary placement of office trailers or for equipment or material storage is not an approval of electric, telephone or other utility service to the trailer. Utility service providers must also obtain a permit for their use of the right of way and must meet all applicable criteria.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
3. A narrative explaining why the right of way must be utilized, rather than private owned land located off of the District's rights of way.
4. The time limit of use of right of way.
5. The location of any fencing.
6. The type of materials to be stored.
7. The posting of financial assurance in an amount satisfactory to the District.
8. A Certificate of Insurance to the limits and amounts specified by the District.

### **Criteria To Be Met:**

1. The facility or use must be proposed.
2. If the proposal is for an office trailer or for the storage of construction equipment or materials the request must be in conjunction with an authorized construction project within the District's right of way.
3. The proposed use is for a term of 2 years or less.
4. The proposed location of trailer does not interfere with District ingress/egress routes therefore, allowing district maintenance vehicles to perform routine and emergency field maintenance operations.
5. Evidence that provisions have been made to provide for rest room/sanitary facilities which conform to local codes/ordinances.
6. The proposed facility is not located within 100' of a bridge or pile-supported utility crossing.
7. The proposed facility is not located within a staging area or other area which the District has designated that temporary storage/trailers are prohibited.
8. The proposed facility does not involve an environmentally sensitive area.\*

## **STORAGE-OFFICE TRAILER/CONSTRUCTION EQUIPMENT/MATERIALS (CONT'D.)**

9. The proposed facility does not adversely affect a previously authorized use(s) of the right of way.
10. The proposed facility does not interfere with the District's access, operation or maintenance activities.
11. If applicable, applicant agrees to record a copy of the permit in the County records prior to utilization of the District's rights of way.
12. District's rights of way is restored (graded, re-sodded with Bahia grass and stabilized) after use of right of way is completed to the satisfaction of the District.

### **A Notice General Permit will not be issued:**

Requests for temporary storage/trailer which do not strictly adhere to the Criteria as outlined above are not eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

**UTILITY CROSSING-AERIAL/POLE SUPPORTED (Allowable Zone: 1, 2, 3, 4, 5)**  
**NOTE: Includes CATV and communications, etc.**

In order to be eligible for aerial/pole supported utility crossings to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

**Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines;
  - b. The location tied into a well-known landmark;
  - c. The minimum vertical clearance above the highest elevation of the berm or levee as measured from the point of maximum sag.

**Criteria To Be Met:**

1. The facility must be proposed.
2. The facilities may not be located directly overhead of a water control structure or project culvert.
3. All proposed poles, down guys, anchors, etc. are located either outside or within one (1) foot of the rights of way lines (or in other locations acceptable to the District).
4. The proposed facility is not located within 100' of a bridge or pile-supported utility crossing.
5. The proposed facility is not located within a staging area or other area which the District has designated as an area where such installations are prohibited.
6. The proposed facility is not located within an environmentally sensitive area.\*
7. The proposed facility does not adversely affect a previously authorized use(s) of the right of way.
8. The proposed facility does not interfere with District access, operations or maintenance activities
9. \*\*Meets the minimum vertical clearance criteria as depicted below:

**Telephone & Other Low-Voltage Carrying Lines & Span Guys or Other Non-Voltage Carrying Lines**

- 40' or higher above the highest berm elevation as measured at the point of maximum sag; or,
- 25' above levee crown or higher as measured from the point of maximum sag

## **UTILITY CROSSING-AERIAL/POLE SUPPORTED (CONT'D.)**

### Powerline Crossings

- 69 kV 45' or higher above the highest berm elevation, as measured at the point of maximum sag, or 20' above the levee crown or higher, as measured at the point of maximum sag.
- 113kV 45'8" or higher above the highest berm elevation, as measured at the point of maximum sag, or 25' above the levee crown or higher, as measured at the point of maximum sag.
- 130kV 46'2" or higher above the highest berm elevation, as measured at the point of maximum sag, or 25' above the levee crown or higher, as measured at the point of maximum sag.
- 240kV 48' or higher above the highest berm elevation, as measured at the point of maximum sag, or 25' above the levee crown or higher, as measured at the point of maximum sag.
- 500kV 54' or higher above the highest berm elevation, as measured at the point of maximum sag, or 35' above the levee crown or higher, as measured at the point of maximum sag.

**NOTE:** The **minimum** permissible elevation of the low wire will be governed by whichever of the above requirements produces the **maximum** low wire elevation.

### **A Notice General Permit will not be issued:**

Requests for aerial/pole supported crossings which do not strictly adhere to the Criteria outlined above will not be eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **UTILITY CROSSING-PILE-SUPPORTED OR ARCHED**

**(Allowable Zone 1)**

**NOTE: Includes CATV and communication, etc.**

In order to be eligible for a pile-supported utility crossing to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

### **NOTES:**

1. The applicant is cautioned that pile-supported crossings have the potential to adversely impact canal flow characteristics and limit District maintenance access capabilities. Therefore, the applicant should strive to design installations which are subaqueous or attached to existing installations.
2. The designer is responsible for meeting any applicable safety standards for structures of this type, either existing or as may be developed in the future.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. Location tied into a well-known landmark.
3. A certified cross-section of the canal as it exists, taken at the location of the proposed crossing, super-imposed over the ultimate design section.
4. Documentation of reason installation is pile-supported in lieu of subaqueous or bridge attachment design.
5. Certificate of Insurance or evidence of self-insurance indemnification to the amounts and limits specified by the District.

### **Design Criteria To Be Met:**

1. The facility must be proposed.
2. The proposed structure meets or exceeds the applicable minimum clear horizontal center span and minimum clear approach spans criteria. The minimum clear center and horizontal spans vary depending on the location of the bridge. See "Criteria for Basis of Review" section of this manual.
3. The proposed facility meets or exceeds the minimum applicable minimum low member elevation. Low member elevations are site specific. (Please contact the District's Right of Way Permitting staff for requirements).
4. The proposed design includes measures for right of way erosion control and bank stabilization acceptable to the District.
5. The piles of proposed facility must align with pile bents of adjacent structures, (if applicable).
6. The proposed structure does not exceed the maximum allowable headloss through the structure of 0.1' (one-tenth foot).

## **UTILITY CROSSING -PILE-SUPPORTED (CONT'D.)**

7. The proposed placement of additional piles in the canal do not have an adverse impact on the canal's ability to flow water or on the movement of District floating maintenance equipment.
8. The proposed installation is designed in such a way that it can be constructed without the use of dams, fills or other constrictions or impediments to canal flows.
9. The proposed facility is not located within a staging area or other area which the District has designated as an area where such installations are prohibited.
10. The proposed facility is not located within an environmentally sensitive area.\*
11. The proposed facility does not adversely affect a previously authorized use(s) of the right of way.
12. The buried portion of the proposed facility within the right of way, if applicable, shall have a minimum of 2 feet of cover below existing ground elevation.

### **Construction Criteria To Be Met:**

1. At no time will the canal be blocked or flows otherwise restricted or impeded; no dams or fills will be placed in the canal during any phase of construction or maintenance.
2. Where the District determines that excavation of the canal to the design section is required, the Applicant will perform such excavation to the limits specified by the District.
3. Maintenance or recreational access will not be blocked during construction, except with U.S. Coast Guard approval.
4. Excavated material from the canal shall not be stockpiled in the canal. The applicant will remove all excess material from the right of way.
5. Turbidity screens shall be used during excavation operations.
6. Above the water surface, the trench shall be backfilled in 6 inch compacted lifts.
7. No piles shall be driven until the District has been provided with certified cross-sections, prepared by a professional land surveyor or professional engineer, registered in the State of Florida, showing the canal section has been excavated to the ultimate section as prescribed by the District.

### **A Notice General Permit will not be issued:**

Requests for installation of pile-supported utility crossings which do not strictly adhere to the Criteria outlined above will not be eligible for consideration of issuance of Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **UTILITY-INSTALLED AS BRIDGE ATTACHMENT**

**(Allowable Zone: 1)**

### **NOTE: Includes CATV and communications, etc.**

In order to be eligible for a bridge attached utility installation to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met.

### **NOTES:**

1. The designer is responsible for meeting any applicable safety standards for structures of this type, either existing or as may be developed in the future.
2. The applicant is responsible for obtaining the approval of the owner of the bridge or crossing prior to performing the installation.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully-dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
  - c. The low member elevation of proposed utility attachment and low member elevation of existing bridge structure.

### **Criteria To Be Met:**

1. The facility must be proposed.
2. The low member elevation of the proposed installation is higher than or at a minimum, equal to the low member elevation of the bridge to which it is attached.
3. The buried portion of proposed installation within the right of way, if applicable, has a minimum of 2 feet of cover below existing ground elevation.
4. Bank stabilization measures acceptable to the District are employed to limit slope erosion.
5. The proposed facility will not interfere with the District's access nor operations and maintenance activities of the canal.
6. The proposed facility will not be located within an environmentally sensitive area.
7. The proposed facility does not adversely affect a previously authorized use(s) of the right of way.

### **A Notice General Permit will not be issued:**

Requests for a bridge attached utility installation which do not strictly conform to the Criteria outlined above will not be eligible for consideration of issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **UTILITY-BURIED (UNDERGROUND) CROSSING**

**(Allowable Zone 1)**

**NOTE: Includes CATV and conventional utility lines.**

In order to be eligible for a buried utility installation crossing within a road/culvert/bridge embankment to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

### **NOTES:**

1. The designer should be cognizant during the design stage of this type installation that future road and bridge widening/replacement/improvement may effect the subject installation; In this regard, designers should provide adequate accommodations to avoid future relocation costs.

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark or section line.
  - c. The burial depth of installation within right of way.
  - d. The locations where facility enters and exits the right of way.

### **Design Criteria To Be Met:**

1. The facility must be proposed.
2. The burial depth of the proposed installation should provide for a minimum of 2 feet of cover below existing ground within right of way.
3. No above-ground facilities are proposed.
4. The proposed facility is designed in such a manner as to allow for the future replacement or improvement of the bridge and roadway without disrupting service.
5. The proposed facility is not located within an environmentally sensitive area.\*
6. The proposed facility does not adversely affect a previously authorized use(s) of the right of way.
7. Bank stabilization measures necessary to restore (grade, re-sod with Bahia grass, stabilized) to the District's satisfaction.

### **A Notice General Permit will not be issued:**

Requests for placement of buried utility crossing which do not strictly adhere to the Criteria outlined above will not be eligible for consideration of issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

**UTILITY CROSSING-SUBAQUEOUS  
(BURIED BENEATH CANAL SECTION):**

**(Allowable Zone 1)**

**NOTE: Includes CATV and communications, etc.**

In order to be eligible for a subaqueous utility installation to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. If your proposal does not meet the following criteria you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

**Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
3. A certified cross-section of the canal as it exists taken at the location of the proposed crossing, super-imposed over the ultimate design section.

**Design Criteria To Be Met:**

1. The facility must be proposed.
2. The proposed subaqueous installation is laid a minimum of 2 feet below the canal design section, ultimate design section or existing section whichever produces the lowest installation. (Please contact the District's Right of Way Permitting staff for information).
3. The portion of the proposed crossing that is buried within the right of way and sideslope must be buried a minimum of 36" below existing ground.
4. The proposed design must employ rip-rap or alternative erosion control measures on canal side-slope acceptable to the District.
5. The proposed facility is not located within an area which the District has designated as an area where subaqueous installations are prohibited.
6. The proposed facility is not located within an environmentally sensitive area.\*
7. The proposed facility does not adversely affect a previously authorized use(s) of the right of way.
8. The proposed facility will not interfere with the District access, operation or maintenance activities.

**Construction Criteria To Be Met:**

1. At no time will the canal be blocked or flows otherwise restricted or impeded; no dams or fills may be placed in the canal during any phases of construction or maintenance.
2. Excavated material from the canal shall not be stockpiled in the canal. Applicant will remove all excess material from the right of way.
3. Turbidity screens will be used during construction activity in conformance with applicable regulations.
4. Above the water surface, trench shall be compacted in 6 lifts.

## **UTILITY CROSSING-SUBAQUEOUS (CONT'D.)**

5. Restoration/sodding with bahia grass of all disturbed areas located within the right of way.

### **A Notice General Permit will not be issued:**

Requests for subaqueous utility installations which do not strictly adhere to the Criteria outlined above will not be eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **UTILITY-AERIAL PARALLEL RUN INSTALLATIONS**

(Allowable Zone 4, 5)

**NOTE: Includes CATV and communications, etc.**

In order to be eligible for an aerial parallel run utility installation to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded, in their entirety. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

### **Applicant Must Provide:**

1. Completed application for permit, including signature(s) and processing fee, if applicable.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
  - c. The vertical clearance above the elevation of the surface below the pole line as measured from the point of maximum sag.
  - d. All existing facilities within the right of way.
  - e. Any associated facilities to be located within the right of way.
  - f. Documentation why it is not feasibly possible for the installation to be located within a platted utility easement or adjacent landowners' property.

### **Criteria To Be Met:**

1. The facility must be proposed.
2. The proposed installation is a distribution line and not a transmission line.
3. Installation is located within a strip no wider than 10' parallel to and adjacent to the right of way line.
4. Installation must provide a sufficient vertical clearance to allow District maintenance vehicles to ingress/egress and traverse right of way to perform routine and emergency field maintenance operations.
5. Facility is not located within an area which the District has designated as an area where aerial parallel utility installations are prohibited.
6. Facility is not located within an environmentally sensitive area.\*
7. Facility does not adversely affect a previously authorized use(s) of the right of way.
8. Restoration/re-sodding with bahia grass of all disturbed areas within the right of way to the District's satisfaction.

### **A Notice General Permit will not be issued:**

Requests for aerial parallel run utility installations which do not strictly adhere to the Criteria outlined above will not be eligible for consideration of issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

## **VEGETATION CLEARING/REMOVAL**

**(Allowable Zone 1, 2, 3, 4, 5)**

In order to be eligible for the removal/clearing of vegetation to be considered for issuance of a Notice General Permit, each of the following items listed below must be met or exceeded in their entirety. If your proposal does not meet the following criteria, you must apply for a Standard Permit. Responsibility is borne by the applicant to provide information sufficient to the District which insures the following criteria will be met:

### **Applicant Must Provide:**

1. A completed application for permit, including signature(s) and processing fee.
2. Legible 8 ½" x 11" plan view and profile drawings, either drawn to scale or fully dimensioned depicting:
  - a. The District's rights of way lines.
  - b. The location tied into a well-known landmark.
  - c. The existing elevation and proposed elevation of the right of way shown in profile (cross-sectional) form.
3. A recent boundary/property survey.

### **Criteria To Be Met:**

1. The clearing/removal of vegetation must be proposed.
2. The proposed clearing/removal is limited to exotic species; the removal of native or protected species must not be part of the proposal.
3. The applicant agrees that all stumps will be cut at or below existing grade.
4. The applicant agrees that all debris generated by the activity will be properly disposed of off-site.
5. The applicant agrees that any sections of the rights of way disturbed during clearing must be seeded/re-sodded with bahia, argentine or other species acceptable to the District and recognized and being drought tolerant.
6. The proposed site to be cleared is not located within an area which the District has designed as an area where tree and vegetation clearing/removal is prohibited.
7. The proposed site to be cleared is not located within an environmentally sensitive area.\*
8. The proposed clearing does not adversely affect a previously authorized uses(s) of the right of way.
9. If applicable, applicant agrees to record a copy of the permit in the County records prior to utilization of the District's rights of way.

### **A Notice General Permit will not be issued:**

Requests for vegetation/tree removal which do not strictly adhere to the Criteria outlined above will not be eligible to be considered for issuance of a Notice General Permit.

\* Environmentally sensitive areas are defined as wetlands, areas dominated by native vegetation, mitigation areas, environmental restoration or enhancement areas, gopher tortoise preserves, areas utilized by protected or listed species, and the reach of Canal 18 downstream of Water Control Structure 46.

**BASIS OF REVIEW FOR PERMIT APPLICATIONS FOR  
USE OR OCCUPANCY OF THE WORKS OR LANDS  
WITHIN THE SOUTH FLORIDA WATER MANAGEMENT DISTRICT**

**Notice General Permit:**

Certain bridge proposals are eligible for issuance of a Notice General permit. Please refer to that section of this manual for information and criteria.

**A. BRIDGE CROSSING CRITERIA**

This section addresses the installation of pile-supported, free-span and culvert bridges, including highway, pedestrian, bicycle and golf cart bridges.

**Please note:** In order to provide adequate areas to set up and operate equipment, particularly for the purposes of removing and temporarily stockpiling storm debris that accumulate on pilings, the District will set aside and preserve staging areas at bridge and pile-supported utility crossings. These staging areas will be 100 feet in length and will be located on the upstream and downstream sides of all bridge and utility crossings. Likewise, no above-ground structures that have the potential to interfere with District maintenance activities will be allowed within these staging areas.

**1. Bridge Designs Must Be Certified**

All bridges within District rights of way must be designed and certified by a professional engineer, registered in the State of Florida.

**2. Safety Standards**

The criteria contained in this manual for bridge and pile-supported crossings is established based on the District's ability to move floating maintenance equipment and the ability of the canal to convey water. The criteria is not established for recreational navigation.

Designers of bridges and other crossings are responsible for meeting any applicable safety standards for structures of this type, either existing or as may be developed in the future.

**3. Load Ratings**

Except where specified in the criteria below, the type of construction as well as loading or capacity is optional with the applicant, except where the bridge is being constructed to provide the District with access. (Please refer to the section of this manual entitled "Crossings Over Open Channel Connections").

**4. Headloss Through Bridges**

Except for those canals listed in the section of this manual entitled "Big Cypress Basin Bridges" the maximum allowable headloss through a bridge structure will be one-tenth foot (0.1').

**5. Bridges Must Have A Center Span**

Bridges crossing over District canals must utilize a design having an odd number of spans. Designs using a center pier or pile bent will not be authorized.

## **6. Piles Must Align With Canal Flows**

Piles in bridge pile bents shall be parallel with the centerline of the channel in order to minimize impacts on canal flows and minimize the accumulation of floating debris and aquatic weeds.

## **7. Canal Side Slope Stabilization**

Designers of bridges must incorporate bank stabilization methods into the design of the structure that are appropriate to the on-site soil conditions.

## **8. Private Bridges**

Due the problem of abandonment of bridges by insolvent entities, the District will not approve requests for private bridges unless the applicant is willing to post and maintain financial assurance. Said financial assurance must be equal to the amount of the cost of removal of the bridge, disposal of the bridge materials and restoration of the channel and right of way to original or better condition. In addition, it will be the responsibility of the owner of a private bridge crossing to post and maintain insurance coverage, naming the SFWMD as an additional insured to the limits and amounts deemed acceptable to the District.

Developers are encouraged to make arrangements with the various county road and bridge departments to accept bridge installations and serve as applicant for such requests, thereby negating the need for the developer to maintain insurance coverage and financial assurance for the life of the facility.

## **9. Future Bridge Alteration/Relocation**

All costs related to any future bridge alteration or relocation which is necessary to accomplish the missions of the District will be borne by the owner of the bridge.

## **10. Cross-Sections**

Certified cross-sections of the canal shall be taken at the centerline of the proposed work and at locations specified by the District, showing the entire canal, from top of bank to top of bank as it exists shall be submitted to the District either at the time of submittal of the application or in pre-application status. Soundings shall be taken at 10 feet intervals and submitted on standard cross-section paper, drawn to the same horizontal and vertical scale, preferably 1" = 10' and tied to the District's rights of way lines. The ultimate canal section shall be super-imposed over the existing cross-section. (CAD drawings with similar characteristics will also be acceptable.)

# **B. BRIDGE DESIGN CRITERIA**

## **1. Coastal Canals:**

A coastal section of a canal is defined as the reach of the waterway which is located in saline water and is downstream of a salinity control structure.

The minimum horizontal and vertical clearances will be determined by the District on an individual application basis for all bridges over coastal canals. Applicants are advised that

the U.S. Coast Guard and U.S. Army Corps of Engineers may set more stringent requirements than those of the District.

## **2. Dade County Area Canals:**

### Canals having only one (1) Water Control Structure:

Bridges crossing over canals having only one (1) water control structure shall meet the following minimum and vertical clearance requirements:

- Horizontal:
- 1) Center Span - 25 feet clear bent spacing, measured perpendicular to the channel.
  - 2) Approach bents - 20 feet between faces of bents.

Vertical:

6 feet above the seasonal high optimum water control elevation, or 2 feet above the design water surface, whichever produces the higher low member elevation.

### Canals having two (2) or more Water Control Structures:

Bridges crossing over canals having two (2) or more water control structures shall conform to the same minimum horizontal and vertical clearance requirements:

- Horizontal:
- 1) Center Span - 25 feet clear bent spacing, measured perpendicular to the channel.
  - 2) Approach bents - 20 feet between bent faces.

Vertical:

In the reach between the salinity control structure (eastern-most structure) and the second water control structure, the requirements are the same as those specified for canals having only one (1) water control structure - except the east side of U.S. Highway Number 1 shall be the upstream limits of the 6 feet vertical clearance requirement where the Highway lies east of the second water control structure - on those canals lying south of the Snapper Creek Canal, C-2.

In the reach upstream of the second water control structure or the east side of U.S. Highway Number 1, whichever applies, the minimum vertical clearance shall provide 4.5 feet above the seasonal high optimum water control elevation or 2 feet above the design water surface, whichever produces the higher low member elevation.

The 6 feet, 4.5 feet vertical clearances are based on District maintenance navigational access needs. In areas where existing structures already limit the vertical clearance, or it is not feasible for economic reasons to obtain these clearances, the District may give consideration to a reduction. However, in no case will an elevation less than 2 feet above the design high water elevation be allowed.

### **Miami Canal (C-6)**

This canal is a special exception to the above stated criteria. Minimum horizontal and vertical clearances on this canal will be determined on individual application basis.

### **Tamiami Canal (C-4)**

A portion of the Tamiami Canal, C-4, requires a special exception to the previously specified vertical clearances, as follows:

- 1) From the F.E.C. Rail Road easterly to the east side of Red Road, a minimum low member elevation of 9 feet MSL is required.
- 2) From the east side of Red Road easterly to LeJeune Road, a minimum low member elevation of 13 feet MSL is required.

Removable center spans are not required for bridges over Dade County Area canals.

### **3. Everglades Agricultural Area**

The canals located within this area are as follows:

- ❖ West Palm Beach Canal (L-10 and L-12) from Lake Okeechobee to Pump Station S-5A.
- ❖ Hillsboro Canal (L-14 and L-15) from Lake Okeechobee to Pump Station S-6.
- ❖ North New River Canal (L-18, L-19 and L-20) from Lake Okeechobee to Pump Station S-7.
- ❖ Miami Canal (L-23, L-24 and L-25) from Lake Okeechobee to Pump Station S-8.
- ❖ Cross Canal (L-13).
- ❖ Bolles Canal (L-16 and L-21).

Bridges crossing over these canals shall meet the following minimum horizontal and vertical clearance requirements:

- Horizontal:
- 1) Center Span - 29 feet clear bent spacing, measured perpendicular to channel.
  - 2) Approach Spans - 20 feet between faces of bents.

Vertical:

4.5 feet above the seasonal high optimum water control elevation or 2 feet above the design water surface elevation, whichever produces the higher low member elevation.

A removable center span is no longer required for bridges crossing over Project Canals in the Everglades Agricultural Area.

### **4. Kissimmee River Basin**

The following canals are subject to the current navigation requirements of the U.S. Coast Guard regarding all horizontal and vertical clearances and thereby require a Department of Transportation (Federal) Permit in addition to a District permit.

- C-29 - (Hart-Mary Jane Canal)
- C-30 - (Myrtle-Mary Jane Canal)
- C-31 - (St. Cloud Canal)
- C-32B - (Joel-Myrtle Canal)

- C-32C - (Trout-Joel Canal)
- C-32D - (Lost-Trout Canal)
- C-32F - (Lizzie-Lost Canal)
- C-32G - (Alligator-Lizzie Canal)
- C-33 - (Alligator-Gentry Canal)
- C-34 - (Canoe Creek)
- C-35 - (South Port Canal)\*
- C-36 - (Cypress-Hatchineha Canal)\*
- C-37 - (Hatchineha-Kissimmee Canal)\*
- C-38 - (Kissimmee River)\*

\*Bridge crossings over these canals shall satisfy the following minimum District horizontal and vertical clearance requirements.

- Horizontal:
- 1) Center Span - 40 feet clear bent spacing, measured perpendicular to channel.
  - 2) Approach Spans - 20 feet between faces of bents.

Vertical:

12 feet above the seasonal high optimum water control elevation or 2 feet above the design water surface elevation, whichever produces the higher low member elevation.

All other bridges crossing Project canals in the Kissimmee River Basin will satisfy the following minimum horizontal and vertical clearance requirements.

- Horizontal:
- 1) Center Span - 25 feet clear bent spacing, measured perpendicular to channel.
  - 2) Approach Spans - 20 feet between faces of bents.

Vertical:

6 feet above the seasonal high optimum water control elevation or 2 feet above the design water surface elevation, whichever produces the higher low member elevation.

A removable center span is no longer required for bridges crossing over Project Canals in the Kissimmee River Basin.

#### **5. West Palm Beach Canal (C-51):**

Bridges crossing over this canal shall meet the following minimum horizontal and vertical clearance requirements:

- Horizontal:
- 1) Center Span - 29 feet clear bent spacing, measured perpendicular to channel.
  - 2) Approach Spans - 20 feet between faces of bents.

Vertical:

6 feet above the seasonal high optimum water control elevation or 2 feet above the design water surface elevation, whichever produces the higher low member elevation.

A removable center span is no longer required for bridges crossing over C-51.

#### **6. Other Canals:**

All bridges crossing Project waterways not previously covered shall meet the following minimum horizontal and vertical clearance requirements:

- Horizontal:
- 1) Center Span - 25 feet clear bent spacing, measured perpendicular to channel.
  - 2) Approach Spans - 20 feet between faces of bents.

Vertical:

6 feet above the seasonal high optimum water control elevation or 2 feet above the design water surface elevation, whichever produces the higher low member elevation.

A removable center span is not required for bridges crossing these canals.

**(Please refer to the Big Cypress Basin Section of this manual for bridge crossing criteria applicable to the canals of the Big Cypress Basin (Collier County)).**

#### **7. Bridges Crossing Over Project Levees:**

These bridges must meet the minimum requirements for bridges crossing Project Canals, but the vertical clearance may be governed by the elevation of the crown of the levee. The deck elevation must be sufficient height to maintain the integrity of the levee.

That portion of the right of way used as approaches to the bridges must be surfaced or properly stabilized to provide for proper protection to the levee crown and be properly graded and drained to prevent erosion of the levee section.

Bridge approaches shall be designed and constructed in such a manner as to not interfere with the passage of the District's maintenance equipment along the canal right of way, which shall include draglines, tractor trailers and similar types of large maintenance equipment.

As all plans must be signed and sealed by a professional engineer registered in the State of Florida, the type of construction as well as loading or capacity are optional with the applicant.

#### **8. Trestle Type Bridges:**

Spacing of bents for all trestle type crossings must be consistent with hydraulic and maintenance requirements of the District. Bents and piers are required to be so located that they will not catch debris or interfere with the normal flow of water. The locating of the center bent in the center of the channel will not be approved. Exceptions to this

requirement will be entertained, if not contrary to the District's hydraulic and maintenance requirements.

All piles must be placed parallel to the major axis of the channel and properly protected so that future clean-out can be accomplished without endangering the construction.

Bridge approaches shall be properly graded, shaped or otherwise treated to prevent erosion of the District's levees, mounds, berms and canal banks.

This District recognizes that in present day design practice, more economical crossings can be constructed, in many instances, by using uniform spacing which provide horizontal clearances of less than 25 feet. It is not the intention of these requirements to be inflexible to the degree that more economical bridge designs can not be utilized, which will still be consistent with the District's hydraulic and maintenance requirements.

#### **9. Guardrailing of Bridge Approaches:**

Where bridges and their roadway approaches cross District rights of way, particularly where the rights of way have a canal maintenance berm, bridge and roadway designs must make accommodations for uninterrupted, continuous District access along the berm. Therefore, designs which propose guardrailing, raised medians or lane dividers must be adapted to meet the District's access requirements. (Please refer to the section of the manual entitled "Access Requirements" for additional criteria).

#### **10. Establishing Low Member Elevation and Future Bridge Widening Considerations:**

To determine the proper low member elevation of a bridge, the applicant must consider the possibility of future bridge widening to accommodate the addition of extra lanes. Due to the crown in most bridges, the low member elevation will be reduced if additional lanes are added to the structure. Should a bridge be designed to just meet the District's minimum vertical clearance requirements, future widening of the structure would possibly necessitate raising of the entire structure or designing a more complicated and expensive span in order to continue to meet District criteria.

Engineers designing highway bridges are encouraged to take into consideration the maximum number of lanes the highway will ultimately require, and based on that information plan for a structure which exceeds the District's minimum vertical clearance requirements.

#### **11. Crossings Over Open Channel Connections:**

Bridges constructed on District rights of way for the primary use of providing access for District vehicles and equipment over open channel connections to District Projects and facilities must meet the following requirements:

- 1) Provide a minimum roadway width of 14 feet.
- 2) Designed for the standard H-20 loading or better.

Should other than concrete construction be considered, applicant must provide the District with acceptable financial assurance guaranteeing maintenance of the bridge.

**12. Excavation Required In Conjunction With Bridge Construction:**

Improper and incomplete excavation to required cross-section after piles are in place is a recurring problem. Therefore, excavation required by the District to conform to the design canal section in conjunction with bridge construction shall be performed by the permittee and approved by the District, prior to the commencement of construction of the bridge. In this regard, no piles shall be driven (with the exception of 1 test pile, if desired) until all excavation is complete, and if applicable, the removal of existing piles from the water column, and certified cross-sections have been accepted in writing, by the District. The District is not responsible for the permittee neglecting to inform the contractor of this requirement when writing bid documents, orders of work or similar construction specifications.

In cases where the applicant proposes to widen an existing bridge, especially where traffic flow is to be maintained during construction, the applicant must provide at least one proposal containing an order of work that addresses how the excavation will be performed to the required section without impacting canal flows. Deferring this requirement to the contractor is not an acceptable option.

In cases where a bridge crossing is proposed over a canal which, as determined by the District, has not been dug to its ultimate section, the District will require excavation of the canal beneath the bridge, extending upstream and downstream 25 feet from the proposed bridge faces, (plus adequate transitions), to the required ultimate section. In the alternative, applicants must design the proposed bridge to accommodate future enlargement of the canal to the ultimate section. In the latter case, the applicant must perform geologic studies to determine what type of rock or other non-dredgeable strata exists. If non-dredgeable material is encountered, the permittee will be required to either blast that material in order that it can be removed mechanically at a later date at the permittee's sole expense, or the permittee must be willing to remove the structure in its entirety from the District right of way in order that the U.S. Army Corps of Engineers, the South Florida Water Management District or their contractor may remove the material at Project expense. In such a case, the bridge owner shall assume all relocation and reconstruction costs.

**13. Culverts Installed In Lieu of Bridges:**

Note: The following criteria does not apply to the canals located in the Big Cypress Basin. Please refer to the section entitled "Big Cypress Basin Bridges" for criteria for culvert bridges located in the Basin.

Due to problems associated with the installation of culvert bridges, adverse impacts on canal conveyance and District operations and maintenance activities, culvert bridges are discouraged. However, the District will consider culvert bridges in lieu of pile-supported bridges, where:

1. The maximum headloss through the proposed culvert bridge is one-tenth foot (0.1') or less.
2. The installation can be accomplished without interfering with canal flows during or after construction. Under no circumstances will the District allow construction or installation techniques (such as earthen fill plugs or sheet pile dams), that block or interfere with canal flows. Note: Should a culvert bridge be authorized, it is the responsibility of the permittee to inform prospective contractor of all construction restrictions and requirements.
3. In order to pass floating debris (drift clearance) the crown elevation of round, elliptical or structural plate arch culvert bridges will be no less than the low member specified in this criteria manual for conventional pile-supported bridges at the location of the proposed crossing. Similarly, concrete box culvert installations must conform with the low member requirements for conventional pile-supported bridges.
4. In order to allow the District's floating maintenance equipment to pass, culvert bridges must be set in such a manner so as to allow for the passage of a boat having an 8 foot wide deck, with the deck being 2 feet above the seasonal high optimum water surface elevation of the canal, with a minimum of 2 feet of clearance from the boat to the culvert walls on either side. Further, the invert of the culvert must provide for a minimum water depth of 5 feet as measured from the seasonal low water elevation.
5. The bottom of the culvert must be a minimum of one-half foot above the design canal bottom to minimize loss of culvert capacity due to the accumulation of silt in the bottom of the culvert.
6. Where culvert bridges are acceptable, the permittee must clean out the canal to the design section for a minimum distance of 50 feet upstream and downstream of the ends of the culvert plus provide suitable transition sections.
7. Culvert bridge installations must not interfere with the District's maintenance access from the roadway to the canal maintenance berm. (Please refer to the section in this manual entitled "Bridges Blocking District Access" and "Access Features").

### **C. ACCESS REQUIREMENTS**

With few exceptions, all bridges crossing District canals must provide for continuous, uninterrupted access for District maintenance equipment and vehicles along both canal berms located inside the District's rights of way. Normally, this will be accomplished by the applicant providing drop curbs, reinforced sidewalk sections, ramps, guardrail gaps and median gaps (if applicable), where road crossings are at or near berm grade. Therefore, bridge designs must be submitted so that guardrailings, raised medians or lane dividers do not interfere with the District's access requirements.

Bridge approaches shall be designed and constructed in such a manner as to not interfere with the passage of the District's maintenance equipment along the right of way. In

designing roadway approaches to bridges, engineers should consider the following guidelines:

1. In cases where the District determines access is undesirable for employee safety or due to site specific conditions, such as differences in berm and roadway grades, available road and canal rights of way width or configuration (such as in the case of expressways or other high level or high speed crossings), the applicant must satisfy the intent of these access requirements by securing alternate access easements in the District's favor, or design bridge configurations which allow for District access beneath the bridge.
2. When the District has determined that access beneath the bridge upon the berm is preferable, the applicant must design an installation which provides a minimum vertical clearance of 15 feet, as measured from the highest elevation of the stabilized required berm elevation to the lowest horizontal member of the bridge where it crosses the berm. Depressing the berm elevation below District/U.S. Army Corps of Engineers' requirements is not an acceptable alternative to achieving the required 15 foot clearance requirement.
3. In cases where road beds or embankments are allowed to encroach within the District's rights of way in order to reduce the length of bridge structures, a minimum berm width of no less than 15 feet as measured from the useable ultimate top of bank will be constructed and maintained by the permittee. The berm and road embankment end slope must be stabilized or paved. The berm must be backsloped landward and acceptable berm drainage system provided to preclude overbank stormwater flows.

Unless specifically accepted for operations and maintenance by the District, all facilities provided by the permittee for the purpose of providing the District with alternate access or access beneath bridges shall be the permittee's responsibility for operation and maintenance for the life of the permit (existence of the bridge structure).

#### **D. ACCESS FEATURES**

##### **1. Berm Ramps:**

Where there is a difference between the proposed road grade and the District's berm, the applicant must provide berm ramps, which incorporate the following criteria:

- a. Ramps must be constructed of suitable, compacted material or paved.
- b. The minimum top width of 15 feet and stable side slopes.
- c. A slope not steeper than 10 horizontal to 1 vertical is required.
- d. Any curves must have a minimum radius of 50 feet, as measured at the centerline of the ramp.
- e. Berm ramps (including side slopes) must be constructed fully within the District's rights of way.

##### **2. Curbs and Sidewalks:**

Where curbs and sidewalks will be part of the roadway design, drop curbs and reinforced sidewalk sections must be provided at the berm access point. Length of drop curb section

shall be determined by the District based on site specific conditions, but shall not be less than 15 feet.

**3. Guardrailing:**

Guardrailing must not block or interfere with District access. Although, guardrailing designs tend to be site specific, applicants should consider the following in their proposals:

- a. Continuous guardrailing that blocks access to berms will not be allowed.
- b. The District may, at its discretion, require that the applicant design, install and maintain a gate having a minimum clear horizontal opening of 16 feet; Gate shall be designed to be secured with a District lock.
- c. The gate must be designed so that it can be opened without the use of tools or equipment. Designs which necessitate the removal of posts or unbolting of panels are not acceptable.
- d. Gates and guardrails must be constructed so as to enable equipment to pull out of traffic to stop to open the gate. This will frequently require the guardrail alignment to be moved away from the roadway.

Design of all guardrailing installations to meet both the District requirements and highway standards is the responsibility of the applicant.

**4. Medians:**

Where divided highways are proposed, gaps in medians shall be provided to allow for continuous access by District equipment and vehicles from one side of the roadway to the other.

**5. Land Acquisition/Additional Right of Way:**

It is incumbent upon the applicant to accommodate District access requirements into plans when determining right of way requirements for road and highway projects. Any additional land acquisition which may be necessary to provide for District access is the applicant's sole responsibility. Thus, this requirement should be carefully considered particularly prior to the land acquisition phase of any roadway widening project.

**6. Relocations and Relocation Notification:**

The District assumes no responsibility for any relocations of existing facilities which may have to be modified to accommodate proposed construction activities. The various entities involved in construction/relocation projects shall determine responsibility for any expenses associated with the project, including costs which may be related to the improvement of an existing canal section which impacts existing installations. Under no circumstances shall the District assume responsibility for relocation of facilities which are located within District Project Works.

Upon request, the District will make available to interested parties, any information it has on existing installations located within the Project Works rights of way. However, the District assumes no responsibility or obligation to notify the owners of encroaching installations of the need to modify their installations, as that responsibility rests with the entity whose proposed installation impacts the existing uses.

## **E. USE OF OR CONNECTION TO PROJECT CULVERTS (INLET STRUCTURES)**

Under the Central & Southern Florida Flood Control Project, inlet structures (Project Culverts) are provided during the course of existing channel or levee improvements or new channel or levee construction. These inlet structures are provided at the cost of that Project. They are generally installed at points of existing artificial and natural inflow into the Project improved or constructed facility. In certain instances, they are installed at points where no inflow exists, but where future inflow is planned to enter.

At those locations where a pre-existing on-the-land facility providing drainage discharge connections to a District facility by means of a Project inlet structure, this connection shall be placed under District Right of Way Occupancy Permit. This permit would be for the connection to and use of the Project inlet structure only and will not obligate the permittee for maintenance of the inlet structure itself.

At those locations where an inlet structure has been installed by the Project at a point of no pre-existing inflow, the subsequent connection of an on-the-land drainage facility to that inlet structure will require the connection to be placed under District Right of Way Occupancy Permit. This permit would be for the connection of the upland ditch or channel to and use of the Project inlet only and will not obligate the permittee for maintenance of the inlet structure itself.

At those locations where a pre-existing on-the-land facility providing positive drainage discharge connects to a District facility by means of an open channel; this connection shall be placed under District Right of Way Occupancy Permit.

Regardless of the status of previous connection(s) prior to Project construction, the landowner is obligated and required by law to apply for a Right of Way Occupancy Permit for any connection, whether culverted or open channel, made in conjunction with or subsequent to Project improvement of the canal or levee.

### **1. Method Of Allocation Of Benefits Derived From Project-Provided Inlet Structures**

Inlet structures so installed are designed to serve specific areas tributary thereto. These areas may, and often do, contain several ownerships. Therefore, each ownership, if more than one, accrues a use benefit in direct proportion to the individual ownership of the entire area to be served.

When one ownership, which would normally share in the benefits from the Project installed inlet structure, wishes to connect to the Project by other means or at other locations, the landowner, in a written statement, must first relinquish all rights to the Project inlet structure before permission can be granted to connect otherwise.

## **F. CULVERT CONNECTIONS**

Notice General Permit:

Certain requests for culvert connections within the District's Lands and rights of way are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

### **1. Connections to Canals**

Drainage culvert connections must be sized to conform with the inflow limitation criteria of the District.

Maximum pipe crown elevation shall be 0.5 foot below design water surface.

That portion of any line crossing District rights of way must have sufficient cover in order to prevent damage from District maintenance equipment and vehicles.

Proper erosion control measures must be provided at the outfall end.

Permittee will be required to adequately identify culverts with a permanent type marker which is to be placed in a position so as not to prohibit vehicular access along the canal. This does not apply where visible headwalls are used.

Connections for withdrawal of water for irrigation or other purposes shall be sized and invert elevations established in conformity with the criteria of the Project for water withdrawals. Where the District has established Basin Rules, setting minimum water withdrawal elevations, pipe inverts which due to their invert elevation, would enable the withdrawal of water from District canals below the canal's established minimum elevation, will not be allowed. This restriction applies to culverts utilized for gravity irrigation, as well as pump tubes for pumped irrigation systems or other similar systems.

In each instance, the length of the pipe will be sufficient to provide a minimum of a fifteen feet top width roadway over the connection.

A flapgate or similar device is placed on the discharge end of the proposed facility (applies to those installations located downstream of a District Salinity Control Structure (brackish/saltwater)).

A gate of approved type and design or stop-log structure shall be a part of the installation of all culverts if required for compliance with Project Specifications.

Installations may require further erosion control measures such as rip-rap or retaining walls.

Each permittee shall be required to take all feasible measures acceptable to the District to prevent the discharge of debris or aquatic weeds into any Project Works by the permitted use.

## **2. Connections to Borrow Canals Through Project Levees**

The general conditions stated prior apply to this type of connection with the exception of the roadway requirements.

Culverts through levees such as tie-back levees which are designed to define pumped drainage basins will not be authorized.

Culverts through L-31E (Levee 31 East) will not be authorized.

The width of the levee crown at the point of connection will be no less than fifteen feet or equal to that required by Project specifications.

Sloping and grassing, if normally required, will also be equal to or better than the Project minimum.

The construction of lips or similar erosion control features is a required part of such a connection.

Where culverts do not extend to the bank line, access ramps from the berms up to and over the culvert must be provided. Generally, ramps of well-stabilized materials not less than fifteen feet wide and constructed on a 1 vertical to a 10 horizontal (1:10) slope will be accepted. Adequate erosion control provisions for the ramps are also required. The District shall require barricades on either side of the channel leading from the end of the culvert to the bank line. On-going repair and maintenance of these facilities is the responsibility of the permittee.

Each permittee shall be required to take all feasible measures acceptable to the District to prevent the discharge of debris or aquatic weeds into any Project Works by the permitted use.

## **3. Culverts to be Equipped with Skimmers**

All culverts 36 inches in diameter or larger that serve to connect an open ditch or canal system to the Works of the District will be equipped with a skimmer or baffle which effectively precludes the discharge of aquatic weeds into the District's canal system. The skimmer or baffle will be designed to be effective through a range of water surface conditions from:

### **Lower Limit:**

One (1) foot below either the District canal's design water surface elevation or seasonal low optimum water control elevation (whichever produces the lower elevation) to

### **Upper Limit:**

Two (2) feet above either the design water surface elevation or seasonal high optimum water surface elevation (whichever produces the higher elevation). In cases where a riser is attached to the culvert, the top of the skimmer or baffle will be equal to the top of the riser.

Maintenance of the skimmer or baffle is the responsibility of the permittee.

This requirement will not be applied where the applicant utilizes a pumped discharge system and that system employs a functional trash rack (or other effective means of blocking the discharge of aquatic weeds) on the intake side of the pump station.

The discharge of aquatic weeds into District Works is grounds for permit cancellation and removal of the culvert facilities.

## **G. BOAT DOCKS**

### Notice General Permit:

Certain dock proposals are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

Applicants for boat docks are advised that permits will be required from the Department of Environmental Protection (DEP), whose criteria may be more stringent than the Water Management District's. Additionally, approvals or permits are normally required from the local building and zoning departments of the community. For this reason, it is suggested that proposals for boat docks be first discussed with the DEP and other entities to determine the permissibility potential of the project, prior to filing an application with the District.

Construction of boat docks which do not involve environmentally sensitive areas, or areas designated as restricted by the District; and, is not prejudicial to the Project may be authorized under District permit. Each application will be judged on its merits and shall meet the Project requirements of the specific location.

### Floating Docks:

Issuance of permits for floating docks upstream of all salinity control structures will not be authorized.

Due to the danger of floating docks breaking loose during hurricanes and other severe weather conditions and becoming caught in District Water Control Structures, floating docks are acceptable only in tidal reaches of the District's canals. However, in designing and installing floating docks, applicants should bear in mind that high water velocities and great differences in water stages can be experienced in storm surges; should a floating dock break loose and damage other docks or boats, the permittee is liable for all damages which may result.

### Maximum Projection of Docks Into District Waterways:

No dock or mooring facility (including pilings, moored vessels) shall extend into the waterway more than 25% of the distance of the width of the waterway. This distance is measured at mean high water or bulkhead line, whichever applies, in saltwater reaches of canals and at optimum water elevation in fresh water reaches of canals.

### Minimum Low Member Elevation of Docks Shall Be:

#### If Located Upstream of a Water Control Structure:

Two (2) feet above design high water or two (2) feet above seasonal high optimum water elevation (whichever is higher).

#### If Located Downstream of a Water Control Structure:

Two (2) feet above mean high tide or design water surface (whichever produces the higher elevation).

Applicants in areas downstream of water control structures should realize that in a few areas extremely high tides combined with structure discharges may cause docks to be inundated. The applicant may want to consider building the dock to a higher elevation in such cases.

#### As-Built Certifications on Boat Dock Low Member Elevations:

In the absence of existing elevation benchmark, or if the applicant disagrees with the existing elevation benchmark established by the District, the District shall require the applicant to certify the as-built low member elevation of the dock installation. The certification will consist of the permittee engaging the services of a professional engineer or land surveyor, who is registered in the State of Florida. The professional engineer or land surveyor shall determine the low member elevation of the dock and certify, in writing, as to the dock's low member elevation. The certification should be in the form of a copy of the approved permit drawing with the dock's low member elevation (using NGVD as datum) clearly shown. Said drawing must be signed and sealed by the professional engineer or land surveyor performing the work.

#### Proximity of District Water Control Structures:

The construction of boat docks within an area from 250 feet upstream as measured from the water control structure centerline to a point 250 feet downstream of the discharge end of the water control structure is prohibited. Additionally, in cases where the District has installed cables or booms across canals, no docking facilities may be constructed within these areas.

#### Dock Storage Boxes or Lockers:

Docks may be equipped with lockers or storage boxes; however, storage shall be limited to fishing or boat-related equipment such as floatation devices, rope and line, first aid articles and fire extinguishers. The storage of fuel oil or other pesticides, petroleum products or paints, solvents and thinners will not be authorized. If found to be on-site during inspections, the presence of such items will be grounds for permit revocation.

#### Utility Services to Docks:

Utility services such as electricity and water are allowable provided they are not installed to service vessels being used either temporarily or permanent as "live aboards".

The District's approval of utility services to docks shall be limited to those which are supported by a Florida Professional engineer or architect's or Florida licensed electrical contractor or plumbing contractor's certification that the structure's proposed design conforms to the Standard Building Code. The inability or failure of

the applicant to provide this information shall result in the denial of the application. Applicants/Permittees must also provide as-built certifications from a Florida Professional engineer or architect's or Florida licensed electrical contractor or plumbing contractor's certification that the project was constructed in accordance with the design permitted by the District. In lieu of the referenced certifications, the District will accept written verification from authorized local government representatives, that the construction meets the Standard Building Code or another more stringent local government building code.

Water supply lines to mooring facilities must not leak or otherwise waste water. Leaking water supply lines, valves and appurtenances; or, otherwise failing to maintain permitted facilities, are grounds for permit revocation.

Decorative or security lighting shall be a shielded, cut-off design that minimizes light pollution to surrounding areas.

**Live Aboards:**

The mooring of any vessel in a District waterway, being used either permanently or temporarily as a "live aboard" or residence, is prohibited.

**Construction of Boat Docks on Speculation:**

Construction of docks on speculation by builders or developers is not permitted.

Should an applicant wish to request a waiver of this prohibition, the applicant must:

1. Agree, in writing, to inform buyers of the existence of a permit and the need to request a transfer of the permit.
2. Agree, in writing, to remove the dock(s) and restore the District's right of way in the event the buyer fails or refuses to transfer the permit.
3. Demonstrate the financial ability to remove the dock(s) in their entirety and restore the District's right of way, if the permit is not transferred.

Consideration of requests for Waiver of criteria will be limited to:

1. Detached single family residences or single lots.
2. Construction of a maximum of (1) one dock for each home immediately adjacent to the canal.
3. The proposed project otherwise meets the requirements of the Basis of Review, Chapter 40E-6., F.A.C. and Chapter 373, F.S.
4. Documentation is provided which demonstrates that meeting the District's criteria would:
  - 1) Create a "substantial hardship" or,
  - 2) Violate "principles of fairness";

The District has no objection to builders or developers filing applications on behalf of prospective buyers, as long as the property is under contract. However, the District must be supplied with a copy of the contract when the application is submitted.

#### Boat Houses and Boat Docks With Roofs:

The District's approval of boat houses or docks with roofs shall be limited to those which are supported by a Florida licensed, professional engineer or architect's certification that the structure's proposed design conforms to the Standard Building Code. The inability or failure of the applicant to provide this information shall result in the denial of the application. Permittees must also provide as-built certifications from a Florida licensed, professional engineer or architect that the structure was constructed in accordance with the design permitted by the District. In lieu of the referenced certifications, the District will accept written verification from authorized local government representatives, that the construction meets the Standard Building Code or another more stringent local government building code.

The District will not authorize the construction of docks or boat houses that incorporate walls or other similar enclosures, whether solid, partly solid, screened or transparent, regardless of the type of materials used in construction.

#### Boat Docks May Be Prohibited in Certain Areas:

Construction of docks in areas, where in the District's opinion, wakes attributable to boat operation in District canals, combined with geologic and other conditions contribute to bank slope erosion, resulting in diminished canal maintenance berm widths and shoaling in canals, will be prohibited. In areas where unacceptable rates of bank erosion are occurring, the District reserves the right to deny or revoke permits for boat access facilities such as boat ramps, boat docks and open channel connections.

#### Boat Dock Permits Will Be Revoked for Certain Unauthorized Activities:

These unauthorized activities include, but are not limited to:

1. The dock or any portion of it is being used either permanently or temporarily as a place of residence.
2. The dock is being used for the mooring of houseboats; or, other vessels are being used either permanently or temporarily as a place of residence.
3. The permittee is renting or leasing "dock space".

## **H. PUMP CONNECTIONS**

Such a connection to Project Works usually involves a permanent or semi-permanent installation. Since no permanent pumping stations are allowed on Project rights of way, a culvert connection is the usual means by which a pump connection is made. The standards applicable to culvert connections found previously in this manual shall be the criteria used in such installations.

The settling basin or forebay shall be located clear of Project rights of way. Under certain conditions, where Project levees are involved, the forebay may be constructed on the land side of the levee within Project rights of way. Such conditions include the amount of available right of way not needed for District operations and maintenance, future canal enlargement or levee expansion and the applicant's property interests.

Levees surrounding forebays shall be constructed with a crown elevation one-half foot or lower, below the required elevation of the adjacent District levee.

Each applicant shall be required to take all feasible measures, acceptable to the District, to prevent discharge of debris or aquatic weeds into any Project Works by the permitted use. The discharge of aquatic weeds into the Works of the District is grounds for permit revocation.

Every installation must incorporate adequate erosion and anti-shoaling measures in the design and construction.

When pumps are connected directly to the culverts, thereby eliminating the usual forebay, flanged type connections will be required rather than bands.

All other specifications governing connection of culverts, both directly and through levees, apply.

Pump capacities must comply with limitations in keeping with District criteria. Please refer to Chapter 40E-2., F.A.C. for the permitting of water use, which can be obtained by calling the District's Regulation Department.

## **I. OPEN CHANNEL CONNECTIONS**

Open channel connections disrupt continuous access along the canal by District maintenance equipment and vehicles. Therefore, open channel drainage connections shall not be permitted. Waiver of this provision requires Governing Board approval. In order to apply for a waiver, applicants must:

1. Provide documentation demonstrating that meeting the District's criteria would:
  - 1) Create a "substantial hardship" or,
  - 2) Violate "principles of fairness";

(Please refer to Chapter 120, Florida Statutes for complete waiver requirements).

2. Provide inflow control devices that effectively regulate the amount of water discharged into the canal in conformance with applicable discharge limitations.
3. Provide alternate access, such as easements or a bridge over the new channel connection.
4. Provide all feasible measures acceptable to the District to prevent discharge of debris or aquatic weeds into any Project Works by the permitted use; and,
5. Demonstrate that the use is otherwise consistent with the provisions of Chapter 373, F.S. and Chapter 40E-6., F.A.C.

## **J. WASTEWATER TREATMENT PLANT EFFLUENT**

It is the intention of the District to urge the removal of existing treatment plant effluent discharge from surface waters under its jurisdiction. Consideration should be given to this goal when alterations to existing wastewater treatment plants are proposed. Owners and operators of sewage facilities are encouraged to investigate, plan and develop wastewater re-use systems in the communities which they serve.

In this regard, no permit shall be granted for the discharge of wastewater from a new wastewater source into any waterway under the jurisdiction of the South Florida Water Management District.

Permits will not be issued to existing wastewater sources which now discharge into waterways under the jurisdiction of the South Florida Water Management District, and which desire to increase the volume of wastewater discharged. Such would be considered only under conditions that the total BOD and suspended solids load contributed to the receiving waterway, as a minimum requirement, not be increased. Existing BOD and suspended solids load shall be based on the present minimum requirement of the State of Florida, Department of Environmental Protection of 90% BOD and suspended solids removal.

Applications for District permits for an existing wastewater treatment plant will not be considered unless the plant has a valid Permit To Operate or Temporary Permit To Operate as issued by the State of Florida, Department of Environmental Protection. However, possession of such a permit does not ensure the issuance of a permit by this District.

The permit issued by the District for a wastewater treatment plant discharge shall be for the physical works and not for the action of discharging effluent into the waterway. All criteria for construction standards found elsewhere in this manual shall be applicable.

## **K. "AIR SPACE" ENCROACHMENTS**

### Permanent Facilities:

Signs, roofs and other installations which overhang the District's rights of way are considered encroachments and are subject to District right of way permitting rules. As many of these installations are permanent structures (particularly roof eaves or overhangs), District staff will recommend denial of applications for encroachments of this type, due to the prohibition against placement of permanent facilities within the District's rights of way.

## **L. UTILITY INSTALLATIONS**

Notice General Permit:

Certain requests for placement of subaqueous utility installations are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

For crossings in the Big Cypress Basin, please refer to the Big Cypress Basin section of the manual.

Requests for construction of utility crossings must be submitted by an established utility company, governmental or other similar entity. Requests for construction of utility facilities submitted by private or individual developers or other entities will be denied, unless:

1. The applicant demonstrates financial assurance to ensure compliance with permit conditions;
2. The applicant provides insurance coverage to the amounts and limits specified by the District;
3. The applicant provides signed verification from the utility company or governmental entity who will be accepting the facility, once constructed and accepted, for ultimate operation and maintenance; and,
4. The use is otherwise consistent with the provisions of Chapter 373, F.S. and Chapter 40E-6., F.A.C.

### **1. Subaqueous (Buried Beneath Canal Section) Crossings**

Subaqueous crossings of any nature such as electric or communications cables, water or fuel (gas or liquid petroleum products) lines, etc. shall be laid to a pre-determined depth and cross-section that will provide for a minimum of two (2) feet of cover below the existing canal bottom, the design section or, if known, the ultimate section, whichever produces the lowest installation. This depth and section will be furnished by the District for each crossing.

A certified cross-section of the canal must be submitted along with the application. The cross-section must be taken of the canal as it exists, from right of way line to right of way line, taken at ten (10) foot intervals at the centerline of proposed work, drawn to the same horizontal and vertical scale, preferably 1" = 10', using NGVD as datum, plotted on standard cross-section paper and super-imposed over the ultimate canal design section. (CAD drawings having similar characteristics are also acceptable).

It should be noted that during construction of a subaqueous crossing, no sheet piling, earthen dams or fills (except backfilling of the trench dug to install the crossing) or other installations that would restrict canal flows shall be allowed to be placed in the wetted canal section. The applicant should bear this requirement in mind when planning or designing such an installation. The applicant is responsible for advising potential bidders or contractors on the project of the requirement in order that costly delays do not result.

## **2. Pile-Supported and Arched Utility Crossings**

Notice General Permit:

Certain requests for placement of pile-supported utility crossings are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

### **SAFETY OF DESIGN NOT DISTRICT RESPONSIBILITY**

The criteria contained in this manual for bridge and pile-supported crossings is established based on the District's ability to move floating maintenance equipment and the ability of the canal to flow water. This criteria is NOT established to provide for recreational navigation. Designers of bridges and other crossings are responsible for meeting any and all applicable safety standards for structures of the type that is being proposed.

When designing utility line crossings, applicants must strive to attach the proposed line to existing installations, design arched crossings or install subaqueous crossings, as the proliferation of individual utility crossings can interfere with the operation and maintenance of the canal system and can expose the District to unnecessary litigation resulting from careless boat operation.

### **DISTRICT MAY REQUIRE CROSSINGS TO BE SUBAQUEOUS**

When the existence of a pile-supported crossing will conflict with the provisions of Chapter 373, F.S. and Chapter 40E-6., F.A.C. subaqueous crossings will be required in areas which have a proliferation of existing pile-supported crossings which have a potential adverse impact in canal flow characteristics or where right of way constraints or other elements, in the opinion of the District, have limited District maintenance access capabilities to a few maintenance platforms or sites.

When the construction of utility lines is supported on pilings or free-span, the required clearance (both horizontal and vertical) for bridge crossings are in effect. Should installations be made adjacent to an existing bridge, pilings of the proposed installation must align with bridge pilings, so that a minimum of obstruction to the flow of water by accumulation of debris is assured.

A certified cross-section of the canal must be submitted along with the application. The cross-section must be taken of the canal as it exists, from right of way line to right of way line, taken at ten (10) feet intervals at the centerline of proposed work, drawn to the same horizontal and vertical scale, preferably 1" = 10', plotted on standard cross-section paper and super-imposed over the ultimate canal design section. (The ultimate canal design section may be obtained by contacting the District's Right of Way Division). (CAD drawings with similar characteristics are also acceptable).

### 3. Overhead, Pole Supported (Aerial) Crossings

Notice General Permit:

Certain requests for placement of overhead, pile supported aerial utility crossings are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

Overhead lines crossing directly over District Water Control Structures or Project Culverts will not be permitted.

Overhead telecommunications lines and span guy crossings of District rights of way and Project Works shall have the following minimum vertical clearance to the elevation of the low wire(s):

Telephone & Similar Low-Voltage Utility Line Crossings and Span Guys  
40' or higher above the highest berm elevation as measured at the point of maximum sag;  
or,  
25' above levee crown or higher as measured from the point of maximum sag

Overhead electrical distribution and transmission lines shall meet the minimum vertical clearance requirements as listed in Appendix "E-1" of this manual.

#### Powerline Crossings:

69kV -	45' or higher above the highest berm elevation as measured at the point of maximum sag, or; 20' above levee crown or higher as measured at the point of maximum sag.
113kV -	45'8" or higher above the highest berm elevation as measured at the point of maximum sag, or; 25' above levee crown or higher as measured at the point of maximum sag.
130kV -	46'2" or higher above the highest berm elevation as measured at the point of maximum sag, or; 25' above levee crown or higher as measured at the point of maximum sag.
240kV -	48' or higher above the highest berm elevation as measured at the point of maximum sag, or; 25' above levee crown or higher as measured at the point of maximum sag.
500kV -	54' or higher above the highest berm elevation as measured at the point of maximum sag, or; 35' above levee crown or higher as measured at the point of maximum sag.

The minimum permissible elevation of the lowest wire will be governed by whichever of the above requirements produces the maximum low wire elevation.

In all cases, the vertical clearance of aerial lines must be calculated from the elevation of the point of maximum sag to the highest ground elevation in the vicinity of the crossing.

#### **4. Parallel Buried Utility Line Runs or Utility Crossings in Road Embankment**

Notice General Permit:

Certain requests for placement of buried parallel utility lines or crossings are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

Buried water, gas, sewage, petroleum products line or cable installed on District rights of way in a manner generally paralleling the right of way or the canal must be installed in such a manner that will not limit the District's use of its rights of way.

When designing utility lines which run parallel to District rights of way, utility companies should strive to make use of platted utility easements or adjacent landowners' properties. The District should not be approached for authorization to place a utility run within its canal/levee rights of way simply because an adjacent utility easement already has other existing installations; or, because adjacent landowners' have encumbered the utility easements with encroachments. Dealing with these types of problems is the responsibility of the utility desiring to provide service and not the District's.

Utility companies designing buried parallel runs should bear in mind the time it takes to process their permit application and govern themselves accordingly when setting work schedules or promising service to customers. This is especially true in dealing with non-essential services such as cable TV installations.

Burial depth for installations such as those described above should be two (2) feet or greater. The District offers no objections, if the applicant believes a deeper installation would be more advantageous.

Installations crossing Water Conservation Areas or other areas where subsidence is a problem or in environmentally sensitive areas will be reviewed on a case by case basis.

The specific requirements controlling the manner of installation in any given reach will be determined by examination of the proposal in light of the District's needs and the existing authorized uses in the area.

When permits are issued for uses in this category, it is with the understanding that the permittee is responsible for any alterations, repairs or relocations required by the District.

For designers of utility crossings in road embankments in particular, the designer should be cognizant during the design stage of this type installation that future road or bridge widening/replacement/improvement may effect the subject installation; In this regard, designers must provide adequate accommodations to facilitate future projects.

## **Transmission Lines:**

The use of the District's Works or Lands for the construction, operation, and maintenance of transmission lines has the potential to interfere with the District's operation, maintenance and allied purposes. Applicants should acquire their own right of way and should not look to the District to utilize District-controlled Works or Lands, which were acquired for water management and other allied purposes.

This policy should not be construed as a prohibition against the construction of distribution or transmission line crossings, nor is it a prohibition against use of short segments of District's right of way for the construction of local distribution facilities when such facilities will not interfere with operations and maintenance and are otherwise acceptable to the District.

## **5. Bridge Attachment**

Notice General Permit:

Certain requests for attaching utilities to bridges are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

When the District authorizes the attachment of crossings of any nature, such as electric or communications cables, water or fuel (gas or liquid petroleum products) lines, etc., the low member elevation of the proposed installation must be set higher than, or at a minimum, equal to the low member of the bridges to which it is attached.

The buried portion of the proposed installation located within the District's rights of way, if applicable, must provide a minimum of two (2) feet of cover below the existing ground elevation and include bank stabilization measures acceptable to the District.

Where roadway bridges incorporate cable raceways or duct banks into the design of the bridge structures, these facilities shall meet or exceed the bridge low member elevation requirements.

Individual utility companies must apply for and obtain a Right of Way Occupancy Permit from the District prior to installing cables or lines within cable raceways or ducts.

## **6. Crossings Within Stormwater Treatment Areas**

Please refer to that section of this manual.

## **M. ACCESS**

### Notice General Permit:

Certain requests for temporary access are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

The use of the District's rights of way, on a temporary basis, for access to construction sites or for the removal of fill material is strictly prohibited, unless:

1. Such use is in no way adverse to the District's operation and maintenance programs, policies or goals;
2. The District has sufficient proprietary interest in the right of way to allow its use by third parties;
3. The project associated with the request has obtained all necessary permits, licenses or other forms of approval;
4. No previously authorized use of the rights of way is adversely affected.
5. The applicant demonstrates financial assurance to ensure compliance with permit conditions;
6. The applicant provides insurance coverage to the amounts and limits specified by the District; and,
7. Where applicable, the applicant provides necessary deposits associated with Key Permits which may be required.
8. Assurance is given that no vehicular maintenance/repair activities or substances or parts associated with the repair or maintenance of vehicles/equipment will take place, be used, stored or discarded within the right of way.
9. The use is otherwise consistent with the provisions of Chapter 373, Florida Statutes and Chapter 40E., Florida Administrative Code.

Applicants are advised that the review of applications for this type of use of the District's rights of way are often complex and time consuming, due to obtaining necessary information and assurances. Applicants should anticipate delays in obtaining a permit for this type of use and submit the request as early as possible.

Applicants should be prepared to provide information to the District, which includes but is not limited to:

1. The length of time use of the right of way is being requested.
2. What other alternate routes were investigated; why does the applicant believe they are unsuitable.
3. The type and size of vehicles to utilize right of way.
4. The frequency of vehicle usage in round trips per day.
5. What measures will be taken by the applicant which will preclude the vehicular use of the right of way by the general public.

The applicant should also clearly understand that failure to maintain the right of way on a daily basis in accordance with the terms and conditions of the permit is grounds for immediate permit revocation. In this regard, permittees are responsible for the repair, replacement and restoration of any damage to the District's rights of way which may result from the permitted use. Such restoration shall be to original or better condition and to the satisfaction of the District.

## **N. PERMANENT AND SEMI-PERMANENT STRUCTURES OR USES**

### Notice General Permit

Certain requests for kit-type sheds are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

The District will not issue permits for uses which, in its judgement, will impose hardships on or otherwise interfere with its present or future ability to operate and maintain the Project Work. Therefore, staff will not recommend approval of the following types of encroachments (entirely or partially) within its rights of way:

1. Buildings of any type (commercial or residential).
2. Garages, storage or other permanent out-buildings (commercial or residential).
3. Swimming pools or associated screened enclosure and decking.
4. Transmission or receiving towers, etc.
5. The storage of, or repair of, equipment, automobiles or materials.
6. Rubbish, trash piles or burn pits.
7. Nursery operations.

Small temporary storage sheds may be permitted under certain circumstances. In order to be considered for approval by the District, sheds must be:

1. Small, temporary, of kit-type or similar simplified construction, which may readily be dismantled with manpower and hand tools, but without the use or erection of machinery or equipment.
2. A maximum size of 100 square feet of floor space.
3. Conform with local codes and ordinances; and,
4. The shed will not be used for the storage of pesticides, fuel oils, or other petroleum products, including solvents, paints and thinners.

When requesting a permit for such a structure, the applicant should keep in mind that under emergency circumstances it may be necessary to have the shed removed on short notice under adverse weather conditions. While the District will attempt to notify owners of such structures that immediate removal of their shed and its contents is necessary, conditions may require immediate removal by District forces without prior notice. Under such circumstances, the District cannot guarantee salvageability of the shed or its contents. The District assumes no responsibility for damage to these installations.

### **At-Grade Patios or Slabs**

Above-grade patios or slabs will not be authorized.

When the District authorizes uses such as patios or slabs constructed at grade, to be placed within the right of way, the owner should be cognizant of the fact that District equipment may at sometime traverse the slab. The District assumes no responsibility for any damage which may result from this or any other activity.

## **O. WATER CONSERVATION AREA LANDS**

Under Executive Order Number 88-25, the Everglades System, including the District's three (3) Water Conservation Areas have been recognized for their unique values including:

- Water storage and water quality improvement capabilities.
- Scenic and aesthetic values; and,
- An ecosystem which is home to many endangered and threatened plant and animal species.

Economic benefits supporting agriculture and the tourist industry are an integral part of the Kissimmee-Okeechobee-Everglades ecological system; To protect these valuable qualities, it has been determined that uses in the Water Conservation Areas will only be allowed for the purposes of:

1. Enhancing and managing water supply;
2. Flood control; and,
3. Natural resources protection and restoration.

Therefore proposals which do not conform with these purposes will be recommended for denial.

Proposals for hunting camps within Water Conservation Areas 2 and 3 will be processed consistent with the provisions of Section 253.037(7)(d), Florida Statutes.

## **P. MARINAS**

For purposes of this criteria, the District considers marinas to be a public or private boat docking facility with spaces for (4) four or more watercraft.

### **1. Commercial Marinas:**

The construction of commercial marinas offering services to the general public is normally not allowed. However, in some instances, the District shall consider allowing such use, provided that the proposed facilities:

1. Are not adverse to the District's interests.
2. Serve the public interest.
3. Meet the requirements of the Basis of Review, Chapter 40E-6., F.A.C. and Chapter 373, F.S.

In cases where the marina is to be constructed within Lands owned in fee title by the District, the District requires that the applicant enter into a lease or other similar arrangement, whereby the District is paid for the use of the right of way.

### **2. Private Marinas:**

Private marinas intended for the use of adjacent property owner(s) or unit owners in a condominium or homeowners association will not be authorized by the District, unless the applicant can demonstrate:

1. The existence of a marina is not being used to increase the value of the units in the project. While the District has no objection to the developer or builder recovering the cost of the construction of the marina facility, from all or a portion of the unit owners, it is the District's policy to not allow a developer or builder to benefit from the existence of adjacent District waterways. This policy is intended to protect the buyer from misrepresentation and the developer and the District from claims of reliance in the event the District denies the applicant's request for a permit or later revokes, suspends or modifies a permit.

All developers, builders and homeowners are cautioned that in performing its function as a regional water manager, the District may need to fill-in or relocate waterways, construct or relocate water control structures or other works and these activities may necessitate the removal of permitted facilities or, may render them unusable. The District may also determine that for policy reasons certain activities once authorized must be terminated and not reinstated. Applicants should carefully consider these facts before applying for permits. Developers in particular, should be careful to make no representations to prospective buyers that by living in a particular development, they will have any particular rights with regard to the District's waterways.

In evaluating applications for marinas, the District will take into account ownership and quality of title to the right of way upon which the waterway is

situated. Where the District is the fee simple owner, the District, in exercising its proprietary rights, dictates to what extent the right of way can be used, including the number of boat slips or mooring spaces which may be built. A lease agreement will be required and an annual lease fee paid to the District by commercial marinas meeting District criteria, for the privilege of running a commercial operation on the District's Lands.

In cases where the applicant can prove underlying fee ownership of a District easement, the District will be governed by its proprietary interests established in the deed by which the District took title to the right of way, and the provisions of Chapter 40E-6., F.A.C. and Chapter 373, F.S. There shall be no presumption against the District requiring mitigation as part of any approvals, as may be given.

Where marinas are considered acceptable, density will be limited to not more than (4) four slips or mooring spaces per (100) one hundred feet of frontage on the District's waterways.

Where marinas are proposed, it will be the applicant's responsibility to show that no adverse impacts will result from the construction or operation of a marina facility.

## **Q. SIGNS**

Notice General Permit:

Certain requests for placement of signage within the District's Lands and rights of way are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

No advertising or commercial signs will be authorized to be located within the District's rights of way.

The District may authorize by permit, the placement of regulatory informational or directional signs upon its Works and Lands. Such authorization will only be considered for approval when:

1. Such use is not adverse to the District's operations and maintenance programs, including encroachment into air space above the Project Works rights of way.
2. The request is from a federal, state, county, city or other governmental entity.

As with any other facility constructed or placed on District Lands or rights of way, signs are subject to immediate removal by the permittee upon notice by the District.

Unauthorized signs placed on District ownership are subject to immediate removal by the District, without notice and without guarantee of salvageability of materials.

## **R. FENCES AND GATES**

### Notice General Permit:

Certain requests for fencing or gates to be placed within the District's Lands and rights of way are eligible for issuance of a Notice General Permit. Please refer to that section of the manual for information and criteria.

The District's rights of way were acquired at taxpayers' expense, and because it is the policy of the District to encourage passive recreational use of the various waterways and adjacent District rights of way, the erection of fencing which would preclude public access along the bank will not normally be authorized. However, in those cases where the applicant can demonstrate that he/she is the underlying fee simple owner to a District easement, the District will consider fence installations that block public access.

### Fence Encroachment:

In certain areas, the District will allow fences to encroach within, but not block the right of way. The District's pre-determined set-back requirements must be met and the applicant must agree to be responsible for the maintenance of the right of way within the fenced area and for the area 5 to 15 feet in width immediately outside of the fence. Applicants should realize that obtaining District authorization (permit) for fencing does not obviate the need for obtaining District approval for any facilities to be placed within the fenced area.

### Gate Requirements:

Unless otherwise specified, gates required in fences, walls, hedges and similar installations shall be equipped with a gate or gates having a minimum clear horizontal opening of 16 feet and situated within the District's right of way. The applicant is encouraged to discuss the District's gate requirements with the appropriate Field Station director prior to submitting the application and drawings. Gate locations must be clearly shown on all application drawings.

Gates adjacent to roadways must be set back sufficiently from the edge of pavement of the roadway in order that District vehicles may safely pull out of traffic in order to stop to unlock and open the gates. Where gates are provided in the form of hinged guardrail sections, the gate design must be capable of being opened readily without the need for unbolting panels, removing posts and without the use of tools. Designs that do not meet this requirement are not acceptable and are grounds for denial of the application.

### Maintenance:

Maintenance of, and repairs to, gate installations are the responsibility of the permittee.

## **District Locks Required on Gates**

Authorized fencing with gates installed for the passage of District vehicles and equipment will be locked with a District padlock, purchased from the District. Charges for padlocks will be based on the District's cost for the padlock at the time the permit is issued.

The District will not accept keys for padlocks supplied by the permittee. It should be obvious that if the District were to use the permittee's padlock and key, it would take several dozen keys to travel certain portions of the right of way. In addition, several District employees need to have the ability to access the rights of way, necessitating duplicate keys for each lock, resulting in the District trying to keep track of hundreds of keys. Partially in an effort to eliminate this problem, the District utilizes special keyed-alike padlocks for various geographical areas of the District. With this system each District employee is able to gain access to a certain area.

## **S. MITIGATION IN ENVIRONMENTALLY SENSITIVE AREAS**

Where not inconsistent with District operations and maintenance needs, voluntary mitigation plans are encouraged.

### **Upstream and Downstream of District Salinity Control Structures:**

The District requires mitigation based upon the project's actual or potential adverse impact on existing desirable wetland and upland plant and animal communities; and, the extent of the project's actual or potential for shoaling and erosion.

**In all locations where mitigation is required, mitigation will consist of activities which include:**

- Providing wildlife habitat;
- Reducing erosion;
- Removal and preventing the spread of exotic vegetation;
- Installation of natural limerock rip-rap;
- Planting of native freshwater or brackish wetland and drought tolerant upland vegetation;  
and,
- Mitigation will not interfere with District's operations and maintenance activities.

## **T. SEAWALLS AND BULKHEADS**

Prospective applicants for bulkhead or seawall construction are advised that permits will also be required from the Department of Environmental Protection (DEP), whose criteria may be more stringent than the Water Management District's. For this reason, it is suggested that proposals for seawalls or bulkheads be first discussed with DEP to determine the permissibility potential of the project prior to filing an application with the South Florida Water Management District.

Due, in part, to the forces acting on seawalls and bulkheads, the District will only consider those requests for seawalls or bulkheads (including those which are constructed to satisfy revertible easement requirements or are subject to surcharges imposed by buildings placed on or adjacent to the seawall), which are:

1. Designed by a professional engineer, registered in the State of Florida.
2. To be constructed within an existing man-made canal and the shoreline of said canal is currently occupied in whole or in part by vertical seawalls.

Applications for seawalls and bulkheads shall be supported with cross-sections of the existing channel. Soundings for the cross-sections shall be taken at 10 foot intervals from top of bank to top of bank and shall be tied to both canal/levee rights of way lines. The District shall determine the number of cross-sections required, but said cross-sections will be no more frequent than one cross-section per every 25 feet of proposed bulkhead. Cross-sections shall be plotted to the same horizontal and vertical scale, using standard 10 x 10 cross-sectional paper or similar CAD format. The cross-sections shall have superimposed upon them the design section for the canal at the location and existing cross-sectional area below the design water surface shall be accurately calculated by the applicant and printed on or adjacent to each cross-section.

In designing a seawall or bulkhead, the applicant should bear in mind that the proposed structure must:

1. Align with adjacent seawalls.
2. Incorporate adequate return ends,
3. Attach securely to adjacent seawalls; and.
4. Be capable of withstanding the forces acting on it through a wide range of water elevations.
5. The toe of the seawall shall be faced with natural limerock rip-rap on filter fabric along tidal (saline) reaches of Project canals.

The District assumes no responsibility for the failure of seawalls or bulkheads or any damage or loss related thereto.

## **U. LAUNCHING RAMPS**

Applicants for launching ramps are advised that permits will be required from the Department of Environmental Protection (DEP) whose criteria may be more stringent than the Water Management District's. Additionally, approvals or permits are normally required from the local building and zoning departments of the community. For this reason, it is suggested that proposals for launching ramps be first discussed with the DEP and other entities to determine the permissibility potential of the project, prior to filing an application with the District.

Construction of launching ramps, which do not involve environmentally sensitive areas, or areas designated as restricted by the District and are prejudicial to the Project may be authorized under District permit. Each application will be judged on its merits and shall meet the Project requirements of the specific location.

Entities proposing public boat ramps need to be aware of the long term maintenance obligations associated with such facilities, including, but not limited to, litter removal, parking area maintenance, maintenance of the ramp itself and repairs to launching piers (if applicable).

Ramps are prohibited in areas where such a facility:

1. Is adverse to the District's operation and maintenance of the Project Works, especially where increased boat usage has the potential to accelerate slope erosion damage.
2. Is located where adverse environmental impacts may occur due to boating activity.
3. Would interfere with or sever the District's access.
4. Present an unusual liability risk to the District.

Private boat ramps permitted to individuals, homeowner associations, condominium associations and similar entities must be gated, chained or otherwise barricaded when not in use to preclude users other than the permittee from using the ramps. The Permittee is responsible for placement of signage, conspicuously displayed at the ramp notifying "Ramp Not Open For Use By General Public".

## **V. FILMING/MOTION PICTURE PRODUCTION**

Notice General Permit:

Certain requests for filming of motion pictures within District Lands and rights of way are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

There is no prohibition against taking photographs, filming or video taping for private use where the Works or Lands of the District are open to the public for recreational use.

Motion picture production companies desiring to utilize the Works and Lands of the District are advised that permits are required prior to filming; In this regard, production companies desiring to use District property must allow for the time needed to apply for and obtain a permit in setting their schedules.

Due to the vast number of variables involving in filming motion pictures on the Works and Lands of the District, applications will be evaluated on a case by case basis. The District will evaluate the application on, as a minimum:

1. Is the proposed use is not located within an environmentally sensitive area?
2. Does the applicant have a history of violation of District Rules and criteria?
3. Does the proposed use does not interfere with the District's access, operations and maintenance?
4. Does the proposal expose the District to any unnecessary risk or hazard?

Additionally, the applicant can anticipate having to:

1. Agree to immediately restore any facilities damaged by the filming activities.
2. Agree to abide by any special provisions established by the District based on the type of use activities proposed.
3. Agree to pay for any District personnel assigned to monitor the filming activities and abide by any directives they may issue.
4. Provide a certificate of insurance to the limits and amounts specified, naming the South Florida Water Management District as an additional insured, based on the type of use activities proposed, as may be set by the District's Risk Management Division.
5. Post financial assurances with the District in the amount which will be specified by the District, based on the type of use activities proposed. Said financial assurance will not be released until such time as all terms and conditions of the permit are meet to the satisfaction of the District.
6. Provide information on what measures will be taken by the applicant which will preclude the use of the right of way by the general public.

Proposals to film on District rights of way or Lands must be accompanied with:

- 1) Suitable drawings clearly showing the shoot location.
- 2) A shooting schedule.
- 3) A comprehensive listing of the number of people and vehicles that will be on-site and the reason for them being there.
- 4) A listing of security and emergency service providers.
- 5) A detailed description of any proposed stunts to be performed or pyrotechnics to be used.

Film producers are cautioned that changes in schedules, locations, etc. will cause delays in permit processing.

## **W. LANDSCAPING:**

Notice General Permit:

Certain requests for landscaping within District Lands and rights of way are eligible for issuance of a Notice General Permit or may be considered exempt under District Rule. Please refer to those sections of this manual for information and criteria.

The South Florida Water Management District encourages the creation of well designed and maintainable planting schemes utilizing species native to Florida and xeriscape principles within the various rights of way where the plantings will not interfere with the District's ability to operate and maintain its canal system or become a liability to the District.

The planting of grass or low lying groundcover, (height not to exceed 2 feet at maturity), which are on the District's approved planting list, has been determined to have minimal impact on the District's ability to operate and maintain its system. It is permissible to plant approved low lying groundcover species without benefit of a permit on that portion of the right of way lying adjacent to the individual owners property provided the planting conforms with the applicable exemption criteria. (Please refer to the Exemptions section of this manual). However, individuals proposing to plant grass or groundcover are advised that such plantings may be damaged by District equipment traversing the right of way. The District assumes no responsibility for damage to any improvements placed within its rights of way.

Individuals wishing to pursue individual beautification proposals that are inconsistent with the 40 foot set back requirements (or are otherwise inconsistent with District policy and rule) may submit individual permit applications but are not eligible for Notice General Permits. Should an individual permit be obtained for beautification the applicant must be aware that such improvements are made at the risk and peril of the permittee and is subject to prompt removal by permittee at his expense upon notification by the District. Failure of the permittee to respond to the District's request for removal of such improvements will result in the District removing same without liability or responsibility and with no guarantee of responsibility. The permittee shall also be aware that in the event the District must remove plantings that are protected by local ordinances, any mitigation requirements shall be the responsibility of the permittee and that the District may not allow the mitigation to take place within the right of way.

### **1. Linear Parks and Greenways**

As it is the policy of the District to allow the public to utilize publicly-owned rights of ways for passive recreational purposes, the District supports the development of linear parks and greenways.

Due to the ongoing expense of maintaining plantings the District desires that only financially responsible entities such as local governmental entities and homeowner

## **Linear Parks and Greenways (Cont'd).**

associations make application for linear park or greenway related beautification proposals. Prior to making an application for trees and other plantings within the right of way the applicant should consider the long term financial impact that accompanies the routine maintenance and possible emergency removal associated with a planting proposal. By filing an application for a linear park or greenway, particularly where trees are proposed, the applicant is making a commitment that it:

- 1) Is willing and financially capable of maintaining the landscaping to the District's satisfaction for the life of the permit.
- 2) Understands the implications that fallen trees/debris represents with regard to the District's ability to perform its flood control mission and the financial responsibility of the permittee should a loss occur.
- 3) Will remove and trim any landscaping in a timely manner when requested to do so by the District.
- 4) Will assume the responsibility for complying with any applicable tree ordinances and not attempt to use such ordinances as a means to keep trees which the District determines must be removed.

In reviewing requests from Governmental entities the District may request that the application be supported with a resolution acknowledging the four areas of responsibility outlined above.

Entities proposing such facilities should bear in mind that their designs must accommodate the District's on-going need to traverse the right of way and access the canal for maintenance operations.

As the responsibility for routine maintenance of linear parks is the responsibility of the permittee, the District may relax its standard of not allowing plantings within forty feet of the top of the canal bank. This can occur when:

- 1) A clear access pathway is preserved for District maintenance equipment and vehicles;
- 2) Suitable set-up and operation areas are provided along the canal bank to enable District equipment to perform emergency debris removal operations;
- 3) Plantings within the right of way are spaced intermittently along the right of way in such a manner so as to provide areas to temporarily stockpile debris;
- 4) At least 98% of all plantings used are on the District's approved plant list and no noxious or undesirable species are used. Should individuals wish to use exotic species, these plantings must be installed within the limits of their own lot and not within the District's rights of way.
- 5) Taller plants and trees are set back from the top of bank in order that they do not fall into the canal if they topple during a hurricane or windstorm.
- 6) District staging areas are not impacted.

### **Linear Parks and Greenways (Cont'd).**

- 7) No encroachment of permanent structures (pools, screen enclosures, garages, etc.) are proposed; and,
- 8) If fencing is proposed, it does not interfere with the District's access or passive recreational access along the canal.

Due to the complexity and site specific nature of linear park and greenway proposals, they will not be eligible for Notice General Permits and will be reviewed as Individual Permit applications.

Designers of linear parks should refer to the various parts of this manual covering the uses of the rights of way to be incorporated into the park plans.

Governmental entities proposing linear parks are encouraged to work closely with area residents to obtain the residents' support for the linear park project. In designing linear parks, governmental entities are encouraged to develop designs that are economical to maintain and to be prepared to adequately fund maintenance of the improvements in perpetuity.

Nothing in this section shall be construed to mean that the District accepts any responsibility for damages which may be caused by trees planted by a permittee. As the permittee is responsible for his/her improvements, the permittee assumes all liability associated with the tree(s) and plantings, including encroachments in air space pursuant to applicable sections of this rule and criteria.

## **X. FIRE HYDRANTS**

Notice General Permit:

Certain requests for placement of fire hydrants within District Lands and rights of way are eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria.

Ideally, the District prefers that a governmental or municipal entity be the applicant. However, in cases where the applicant is a developer, thereby requiring the transfer of the project over to a government or municipal entity once constructed and accepted, the District will require that the applicant provide a letter from that entity stating their intentions with regard to the facility(ies) to be located within the District's rights of way.

### **1. District Access**

The fire hydrant must be located so as not interfere with the District's access or canal maintenance, operations, District ingress/egress routes.

### **2. Associated Water Line**

The buried portion of the proposed water line shall be installed so as to withstand the weight of the District's heavy maintenance equipment and vehicles and adhere to criteria applicable to utility parallel run installations.

### **3. Other Approval**

As certain types of water withdrawals require permits under the provisions of Rule 40E-20, F.A.C., (if not exempt from the District's Water Use Permitting Rules), the applicant may be required to obtain a District Water Use Permit. For this reason, it is recommended that you contact the Water Use Division of the District's Regulation Department.

## **Y. PROJECT CULVERTS (INLET STRUCTURES)**

In cases where Project Culvert installations exist and serve a single piece of property, attachments to District Project Culverts such as the addition or attachment of weir plates, gates or other control shall be authorized, if requested by the property owner, under the following circumstances which the property owner agrees to:

- A. Assume full responsibility and full expenses for the replacement of the entire culvert when the culvert, in the opinion of the District, reaches a state of disrepair and must be replaced.
- B. Pay the District the depreciated value of the culvert (if any), since the applicant will assume control and derive the sole benefit of the culvert (The depreciated value can be obtained from the District); and,
- C. Ensure the use is otherwise consistent with the provisions of Chapter 373, F.S. and Chapter 40E-6, F.A.C.

In cases where the Project Culvert installations serve a single piece of property and are no longer needed for irrigation or drainage of the property, the owner may request permission to remove the non-functional culvert. Such removal shall be authorized under the following circumstances:

- A. The applicant agrees to remove the culvert in good and useable condition and deliver the culvert to the District.
- B. The applicant agrees that in the event the culvert cannot be removed in a good and useable condition, the applicant will pay the District the depreciated value of the culvert (if any), and dispose of the debris. (The depreciated value can be obtained from the District).
- C. The applicant agrees to restore the berms, banks, levees and rights of way to original or better condition to the satisfaction of the District; and,
- D. The use is other consistent with the provisions of Chapter 373, F.S. and Chapter 40E-6, F.A.C.

The applicant/permittee is advised to obtain all other necessary permits and approvals, such as a Water Use or Surface Water Management Permit, etc. from the District's Regulation Department.

## **Z. SPOIL MATERIAL**

The disposition and sale of District-owned spoil is not handled through the issuance of a Right of Way Occupancy Permit or a Notice General Permit.

All inquiries concerning the disposition and sale of District-owned spoil material should be directed to the District's General Services Manager of the District's Management Services Department.

The public is warned that the unauthorized removal of District-owned spoil is considered as theft of State-owned property. The theft of spoil will be punished to the fullest extent of the law.

Where removal of spoil material results in damage to the required levee section of a Project Work of the District, the individual or entity may also be liable for prosecution under Federal Statutes.

## Criteria Applicable to Stormwater Treatment Areas

Criteria in this section shall apply to each of the District’s Stormwater Treatment Areas (STAs) and the Everglades Nutrient Removal Project impoundments. These facilities include, but are not limited to, STA-1East, STA-1West, STA-2, STA-3, STA-4, STA-5, STA-6 and the Everglades Nutrient Removal Project and such other similar facilities as the District may construct or designate from time to time. The criteria contained in these rules shall be deemed in effect at the time the Governing Board of the South Florida Water Management District adopts such facilities as Works of the District pursuant to Chapter 373.085, F.S.

### **1. Aerial Electrical Power Transmission Line Crossings**

Overhead electrical power transmission lines crossing Stormwater Treatment Areas shall have a minimum vertical clearance as shown in the table below. While these clearances are calculated from the top of the levee, they are intended to:

1. Provide sufficient clearance for District equipment to travel along the top of the levee, and
2. To provide sufficient clearance for floating District maintenance equipment to operate beneath them when working within the impoundment bounded by the STAs levee system.

Clearance shall be calculated from the elevation of the top of the STA levee confining the water body in questions to the point of maximum sag of the lowest line of the transmission line. In determining the levee elevation to be used for vertical clearance calculations, the District shall use the design levee elevation or as-built levee elevation, whichever produces the greater clearance.

<b>Voltage of Crossing Circuit</b>						
Guys	69kV	115kV	138kV	240kV	500kV	PHASE TO PHASE
(Grounded)	50kV and under	67kV	80kV	138kV	289kV	
20'	20'	25'	25'	25'	35'	CLEARANCE ABOVE LEVEE

### **2. Culvert Connections to Stormwater Treatment Areas and Appurtenant Works**

Connections to STAs or their seepage, intake or discharge canals by culverts or other means is strictly prohibited and will not be authorized.

### **3. Use of Stormwater Treatment Areas for Access**

Except where access provisions have been negotiated during the acquisition of the lands needed for the STA projects, the use of the perimeter levees, intake and discharge canals rights of way for vehicular or other access to adjacent properties will not be authorized.

## **STORMWATER TREATMENT AREAS (CONT'D.)**

Access rights secured, or otherwise specifically reserved, during the land acquisition will obviate the need to secure a right of way use permit pursuant to Chapter 373.085, F.S.

### **4. Public Utilization**

As the STAs have been established to improve water quality and to provide scientific data which is necessary to conform with the provisions of Everglades Forever Act, public access to, or any use of, the interiors of the impoundments (e.g., internal canals, internal levees and retention areas) can not be allowed during the construction, vegetation and initial testing phases of the project. Until such time as the STAs are operational and studies are available to show that specific types of public utilization are not adverse to the efficient functioning of the STAs, public utilization of STAs shall be specifically limited to the following suitable activities:

1. Hiking along the external levees;
2. Bicycling along the external levees;
3. Equestrian use of external levees;
4. Canoeing, kayaking and use of non-motorized vessels in the external canals and in internal borrow canals immediately adjacent to the external levee;
5. Fishing from external levee in external and internal canals;
6. Birdwatching and nature appreciation from external levees and,
7. Picnicking on external levees.

All other activities are specifically prohibited, including, but not limited to:

1. Sailboats/sailboating;
2. Hang gliding;
3. Motorized vehicles such as but not limited to: Motor boats, airboats, jet skis, off-road vehicles, motorcycles, motor bikes, etc.
4. Hunting or shooting;
5. Access to internal works of the project of any kind.

### **5. Boat Ramps**

The installation or use of any boat ramps which provide boat access to the STAs is specifically prohibited. Any boat ramps installed or used by the District for purposes of construction, operation or maintenance of the STAs shall not be open for public use or access.

### **6. Other Uses of Stormwater Treatment Areas**

Due to the nature of the STAs and the purposes for which they were acquired, no other uses of these areas are anticipated at this time.

## **NON-ALLOWABLE USES OF THE DISTRICT'S RIGHTS OF WAY**

### **1. ATTACHMENTS TO DISTRICT STRUCTURES, PROJECT CULVERTS AND FACILITIES**

#### **Water Control Structures**

Due to the potential to interfere with District Water Control Structure operations and maintenance, attachments to these structures will not be authorized.

Aerial powerline or other utility crossings over District Structures or Project Culverts will not be authorized. There shall be no prohibition, however, on utility drops or service to structures when such is requested by the District.

#### **Bulkheads (Seawalls)**

Attachments to District bulkheads will not be authorized due to the potential for damage to the bulkhead. In particular, mooring cleats, whips, ladders, lifting davits, hoists and docks will not be allowed to attach to bulkheads due to the loading which may be placed on the bulkhead and the damage which may result therefrom.

### **2. BEE HIVES**

This District is required by Florida Statute 44.056 to adopt and use methods and processes reasonably adequate to render any place of employment safe; and, to protect the well-being of its employees. Therefore, bee hives will not be permitted on District Lands and rights of way.

### **3. HUNTING CAMPS AND CAMPING**

Camping or any other form of temporary extended residence on Project Works and Lands of the District is not allowed except in those areas designated as "Wildlife Management Areas". Camping is only allowed then when rules promulgated by the Florida Game and Fresh Water Fish Commission makes provisions for camping.

Due to the fact that many of the camps have no means of identifying the owner or owners of the facility, any camps found on the rights of way outside of "Wildlife Management Areas" are subject to summary removal without notice. Within "Wildlife Management Areas" any camps remaining on the right of way seven (7) days after the close of hunting season will be considered abandoned property and may be removed to such locations as the District deems appropriate or taken to a landfill or salvage yard.

## **NON-ALLOWABLE USES OF THE DISTRICT'S RIGHTS OF WAY (CONT'D.)**

In the event the District can identify the owner of an abandoned hunting camp, the District may pursue enforcement to cause the removal of the camp or payment to the District of expenses associated with the cost of the removal activities.

Proposals for hunting camps within Water Conservation Areas 2 and 3 will be processed consistent with the provisions of Section 253.037(7)(d), Florida Statutes.

### **4. IMPOUNDMENTS AND EXCAVATIONS**

#### **Within District Rights of Way and Lands**

The use of the District's rights of way to provide impoundment areas, retention/detention facilities or borrow pits by adjacent property owners, developers or in association with road and highway projects will not be authorized.

The District has acquired its various rights of way for purposes which include, but are not limited to, operation and maintenance of its canal and levee system and future canal widening/improvement purposes.

Designers of impoundment areas, reservoirs, retention/detention facilities and borrow pits are responsible for designing their project in such a manner so as to contain all facilities (including sideslopes) within the boundaries of their own property. In the event the District needed to utilize all of its right of way for some future project improvement or if the right of way were encumbered by a drainage system, the filling or other alterations to that drainage system which would be required would alter the operational characteristics of that system, possibly to the point where it could no longer perform as authorized by the covering Surface Water Management Permit.

It should be clearly noted that this prohibition only deals with impoundment areas, reservoirs, retention/detention ponds, borrow pits and similar facilities. It is not intended to apply to outfall facilities such as forebays, channels, culverts and similar facilities used to connect surface water management systems to District canals.

#### **Adjacent to District Rights of Way**

The District requires that designers of ponds or borrow pits, which are proposed adjacent to the District's canals and levees, demonstrate that their excavations will have no impact on the stability of the land within the right of way.

Designers of such facilities must take into account the lateral stability and need for lateral support of the mounds, berms, bands and levees located along the various canals and impoundment areas of the District, where the possibility of extreme head differentials exist.

## **NON-ALLOWABLE USES OF THE DISTRICT'S RIGHTS OF WAY (CONT'D.)**

### **5. GRAZING**

Due to the potential of damage to the District's canal banks, berms, levees and impacts on water quality, the use of the District's rights of way for grazing, herding or running of cattle or livestock will not be authorized by permit.

### **6. PARKING AND AIRCRAFT LANDING SITES**

Since the use of motorized vehicles within the District's rights of way is contrary to the District's Rules and criteria, and parking within the District's rights of way implies the use of motor vehicles and could expose the District to unnecessary liability, use of the District's rights of way for parking purposes will not be considered for approval. This is especially true where the request for parking is being made to provide parking to comply with zoning and building department requirements. Similarly, the use of the District's rights of way for landing aircraft will not be authorized.

### **7. USE OF DISTRICT RIGHTS OF WAY FOR PUBLIC ROADWAY PURPOSES**

The use of the District's rights of way for the construction of roads and highways within and parallel to the right of way alignment will not be authorized.

In cases where roads or highways already encroach within the right of way, and where proposals are made to widen or otherwise modify the roadway from its current configuration, the District will dictate whether such modification will be allowed or if removal of the roadway facility from the right of way is required.

Designers of highways must bear the foregoing in mind when initiating road improvement projects, as failure to secured needed road right of way for a proposed road project is not sufficient cause for the District to waive this Rule and allow for either road construction or improvement within its rights of way.

Nothing in this rule shall, however, be construed to be a prohibition of bridge and roadways crossing the various rights of way, provided the crossings meet applicable District requirements and criteria.

### **8. PERMANENT ACCESS TO PRIVATE PROPERTY**

As the majority of the District's canal and levee rights of way were neither intended or designed for use as roadways and such use would expose the District to unnecessary maintenance and liability problems, the use of District rights of way for permanent access will not be permitted.

## **NON-ALLOWABLE USES OF THE DISTRICT'S RIGHTS OF WAY (CONT'D.)**

Similarly, the majority of the District's water control structures or their service bridges were not designed for use by the public. The uses of these structures for temporary local access will not be considered for issuance of a permit, unless:

- A. The bridge was designed specifically to be used as a public roadway; and,
- B. The District and other governmental entities enter into an agreement, which addresses, among other concerns, the on-going maintenance of the bridge structure and indemnification of the District.

### **9. STORAGE OF HAZARDOUS MATERIALS / VEHICLE SERVICING, REPAIRS AND MAINTENANCE**

Due to the hazard of ground and surface water degradation, the District will not authorize uses which may have a potentially adverse impact on the resource. Therefore, the following types of uses are prohibited:

- A. Storage of gasoline or other liquid fuel oils, paints, thinners, solvents or other petroleum distillates;
- B. Underground or above-ground fuel storage tanks (either permanent or temporary);
- C. Storage of lead, batteries, or other articles containing heavy metals;
- D. Vehicle, truck or engine maintenance activities;
- E. Pesticides;
- F. Explosives.

### **10. COMMERCIAL OR ADVERTISING SIGNS**

No commercial or advertising signs will be authorized within the District's rights of way.

### **11. ENCROACHMENTS INTO STAGING AREAS**

In order to provide adequate areas to set-up and operate equipment, particularly for the purposes of removing and temporarily stockpiling storm debris that accumulate on pilings, the District will set aside and preserve staging areas at bridge and pile-supported utility crossings. These staging areas will be 100 feet in length and will be located on the upstream and downstream sides of all bridge and utility crossings. No docks or above-ground structures that will have the potential to interfere with the District's maintenance activities will be allowed within these staging areas.



# **BIG CYPRESS BASIN (COLLIER COUNTY)**

The criteria contained in this section of the manual is specific to the canals of the Big Cypress Basin. For those facilities, uses or activities not listed below, please refer to the Basis of Review section of this manual for applicable criteria.

## **Specific Facilities, Uses or Activities Addressed in This Section:**

1. Pile-Supported Docks and Piers.
2. Pile-Supported Utility Crossings.
3. Pile-Supported Vehicular Roadway Bridge Crossing Installations.
4. Pile-Supported Pedestrian/Golf Cart Bridge Crossing Installations.
5. Culvert Bridge Crossing Installations.

# **CRITERIA APPLICABLE TO DOCK AND PIER INSTALLATIONS ON CANALS LOCATED WITHIN THE BIG CYPRESS BASIN (COLLIER COUNTY)**

## **A. LOW MEMBER ELEVATIONS**

This section addresses how to determine the minimum required low member elevations of pile-supported docking facilities located within the canals of the Big Cypress Basin.

## **B. LOW MEMBER ELEVATION CRITERIA**

### **1. Minimum Low Member Elevations of Docks Shall Be:**

If located upstream of a Control Structure:

Two (2) feet above the design water surface or two (2) feet above seasonal high optimum water surface elevation, whichever is higher. In cases where the design water surface elevation is higher than the berm elevation (the canal overtops the canal bank), the District will consider waiving the 2 foot clearance requirement, on a case by case basis and based upon field conditions at the site of the proposed installation.

If located downstream of a Control Structure:

Two (2) feet above mean high tide.\*

\*Downstream of control structures floating docks are permissible.

# **BRIDGE CROSSING CRITERIA APPLICABLE TO CANALS LOCATED WITHIN THE BIG CYPRESS BASIN (COLLIER COUNTY)**

Notice General Permit:

Certain requests for the construction of bridges may be eligible for issuance of a Notice General Permit. Please refer to that section of this manual for information and criteria

## **A. BRIDGE CROSSING CRITERIA**

This section addresses the installation of pile-supported, free-span and culvert bridges, including vehicular, pedestrian, bicycle and golf cart.

### **1. Bridge Designs Must Be Certified.**

All bridges crossing District rights of way must be designed and certified by a professional engineer, registered in the State of Florida.

### **2. Safety Design Must be Certified.**

Designers of bridges and other crossings are responsible for meeting any applicable safety standards for structures of this type, either existing or proposed.

The criteria contained in this manual for bridge and pile-supported crossings is established based on the District's ability to move floating maintenance equipment and the ability of the canal to flow water. The criteria is not established for recreational navigation.

### **3. Load Ratings.**

Except where specified in the criteria below, the type of construction as well as loading or capacity is optional with the applicant, except where the bridge is being constructed to provide the District with access. (Please refer to the section entitled "Crossings Over Open Channel Connections").

### **4. How To Obtain Water Elevations.**

Because design water surface profile tables are unavailable for the Big Cypress Basin canals, designers of structures crossing Big Cypress Basin canals are advised to contact the Basin Engineer at (941) 597-1505 to obtain the most current information on the maintained water surface and design water surface elevations applicable to the location of a proposed crossings.

### **5. Bridges Must Have A Center Span.**

Bridges crossing over District canals must utilize a design having an odd number of spans. Designs using a center pile will not be authorized.

**6. Piles Must Align With Canal Flows.**

Piles in bridge pile bents shall be parallel with the centerline of the channel in order to minimize impacts on canal flows and minimize the accumulation of floating debris and aquatic weeds.

**7. Canal Side Slope Stabilization.**

Designers of bridges must incorporate bank stabilization methods into the design of the structure that are appropriate to the on-site soil conditions.

**8. Guardrail of Bridge Approaches:**

Where bridges and their roadway approaches cross District rights of way, particularly where the rights of way have a canal maintenance berm, bridge and roadway designs must make accommodations for uninterrupted, continuous District access along the berm. Therefore, designs must be submitted so that guardrail, raised medians or lane dividers do not interfere with the District's access requirements. (Please refer to the Section entitled "Bridges Blocking District Access" for additional criteria).

**9. Establishing Low Member Elevation and Future Bridge Widening Considerations:**

To determine the proper low member elevation of a bridge, the applicant must consider the possibility of future bridge widening to accommodate the addition of extra lanes. Due to the crown in most bridges, the low member elevation will be reduced if additional lanes are added to the structure. Should a bridge be designed to just meet the District's minimum vertical clearance requirements, future widening of the structure would possibly necessitate raising of the entire structure or designing a more complicated and expensive span in order to continue to meet District criteria.

Engineers designing highways bridges are encouraged to take into consideration the maximum number of lands the highway will ultimately require, and based on that information plan for a structure which exceeds the District's minimum vertical clearance requirements.

**10. Bridge Design With Regard To Hydraulics and Maintenance:**

Spacing of bridge bents must be consistent with hydraulic and maintenance requirements of the District. Bents and piers are required to be so located that they will not catch debris or interfere with the normal flow of water. Piling should be placed parallel to the major axis of the canal and properly protected so that future clean out can be accomplished without endangering the construction. Bridges must meet the 0.1 foot (one-tenth) maximum headloss requirement, unless otherwise noted.

## **11. Crossings Over Open Channel Connections:**

Bridges constructed on District rights of way for the primary use of providing access for District vehicles and equipment over open channel connections to District Projects and facilities must meet the following requirements:

- 1) Provide a minimum roadway width of 15 feet.
- 2) Designed for the standard H-20 loading or better.

Should other than concrete construction be considered, applicant must provide the District with acceptable financial assurance guaranteeing maintenance of the bridge.

## **12. Excavation Required In Conjunction With Bridge Construction:**

Improper and incomplete excavation to required cross-section after piles are in place is a recurring problem. Therefore, excavation required by the District to conform to Project Design in conjunction with bridge construction shall be performed by the permittee and approved by the District, prior to the commencement of construction of the bridge. In this regard, no piles shall be driven (with the exception of 1 test pile, if desired), until all excavation is complete, and if applicable, the removal of existing piles from the water column, and certified cross-sections have been accepted, in writing, by the District. The District is not responsible for the permittee neglecting to inform the contractor of this requirement when writing bid documents, orders of work or similar construction specifications.

In cases where a bridge crossing is proposed over a canal which, as determined by the District, has not been dug to its ultimate section, the District will require excavation of the canal beneath the bridge, extending upstream and downstream 25 feet from the proposed bridge faces, (plus adequate transitions), to the required ultimate section. In the alternative, applicants must design the proposed bridge to accommodate future enlargement of the canal to the ultimate section. In the latter case, the applicant must perform geologic studies to determine what type of rock or other non-dredgeable strata exists. If non-dredgeable material is encountered, the permittee will be required to either blast that material in order that it can be removed mechanically at a later date at the permittee's sole expense, or the permittee must be willing to remove the structure in its entirety from the District right of way in order that the U.S. Army Corps of Engineers, the South Florida Water Management District or their contractor may remove the material at Project expense. In such a case, the bridge owner shall assume all relocation and reconstruction costs.

## **13. Culvert Bridges.**

Where culvert bridges are permissible, the installations shall be limited to concrete box culverts or "conspan"-type installations (or, in some locations only conspan-type installations). Conventional corrugated metal pipes or reinforced concrete pipes are not an acceptable substitute for concrete box culverts or conspan-type installations.

It is not the intention of these requirements to be inflexible to the degree that more economical bridge designs can not be utilized which will still be consistent with the District's hydraulic and maintenance requirements.

#### **14. Private Bridges.**

Due to the problem of abandonment of bridges by insolvent entities, the District will not approve requests for private bridges unless the applicant is willing to post and maintain financial assurance. Said financial assurance must be equal to the amount of the cost of removal of the bridge, disposal of the bridge materials and restoration of the channel and right of way to original or better condition. In addition, it will be the responsibility of the owner of a private bridge crossing to post and maintain insurance coverage, naming the SFWMD as an additional insured to the limits and amounts deemed acceptable to the District.

Developers are encouraged to make arrangements with the various county road and bridge departments to accept bridge installations and serve as applicant for such requests, thereby negating the need for the developer to maintain insurance coverage and financial assurance for the life of the facility.

#### **15. Cross-sections**

Certified cross-sections of the canal shall be taken at the centerline of the proposed work and at locations specified by the District, showing the entire canal, from top of bank to top of bank as it exists shall be submitted to the District either at the time of submittal of the application or in pre-application status. Soundings shall be taken at 10 feet intervals and submitted on standard cross-section paper, drawn to the same horizontal and vertical scale, preferably 1" = 10' and tied to the District's rights of way lines. The ultimate canal section shall be super-imposed over the existing cross-section. (CAD drawings with similar characteristics will also be acceptable).

#### **16. Future Bridge Alteration/Relocation**

All costs related to any future bridge alteration or relocation which is necessary to accomplish the missions of the District will be borne by the owner of the bridge.

### **B. ACCESS REQUIREMENTS**

With few exceptions, all bridges crossing District canals must provide for continuous, uninterrupted access for District maintenance equipment and vehicles along both canal berms located inside the District's rights of way. Normally, this will be accomplished by the applicant providing drop curbs, reinforced sidewalk sections, ramps, guardrail gaps and median gaps (if applicable), where road crossings are at or near berm grade. Therefore, bridge designs must be submitted so that guardrailing, raised medians or lane dividers do not interfere with the District's access requirements.

Bridge approaches shall be designed and constructed in such a manner as to not interfere with the passage of the District's maintenance equipment along the right of way. In designing roadway approaches to bridges, engineers should consider the following guidelines:

1. In cases where the District determines access is undesirable for employee safety or due to site specific conditions, such as differences in berm and roadway grades, available road and canal rights of way width or configuration (such as in the case of expressways or other high level or high speed crossings), the District will require that the applicant secure alternate access easements in the District's favor, or design bridge configurations which allow for District access beneath the bridge.
2. When the District has determined that access beneath the bridge upon the berm is preferable, the applicant must design an installation which provides a minimum vertical clearance of 15 feet, as measured from the highest elevation of the stabilized berm elevation to the lowest horizontal member of the bridge where it crosses the berm.
3. In cases where road beds or embankments are allowed to encroach within the District's rights of way in order to reduce the length of bridge structures, a minimum berm width of no less than 15 feet, as measured from the point of stabilized, useable ultimate top of bank will be constructed and maintained by the permittee. The berm and road embankment end slope must be stabilized or paved. The berm must be backsloped landward and acceptable berm drainage system provided to preclude overbank stormwater flows.

Unless specifically accepted for operations and maintenance by the District, all facilities provided by the permittee for the purpose of providing the District with alternate access or access beneath bridges shall be the permittee's responsibility for operation and maintenance for the life of the permit (existence of the bridge structure).

## **C. ACCESS FEATURES**

### **1. Berm Ramps:**

Where there is a difference between the proposed road grade and the District's berm, the applicant must provide berm ramps, which incorporate the following criteria:

- a. Constructed of suitable, compacted material.
- b. Minimum top width of 15 feet and stable side slopes.
- c. A slope not steeper than 10 horizontal to 1 vertical.
- d. Curves must have a minimum radius of 50 feet, as measured at the centerline of the ramp.
- e. Berm ramps including side slopes must be constructed fully within the District's rights of way.

## **2. Curbs and Sidewalks:**

Where curbs and sidewalks will be part of the roadway design, drop curbs and reinforced sidewalk sections must be provided at the berm access point.

## **3. Guardrailing:**

Guardrailing must not block or interfere with District access. Although, guardrailing designs tend to be site specific, applicants should consider the following in their proposals:

- a. Continuous guardrailing that blocks access to berms will not be allowed.
- b. The District may, at its discretion, require that the applicant design, install and maintain a gate having a minimum clear horizontal opening of 16 feet; Gate shall be designed to be secured with a District lock.
- c. The gate must be designed so that it can be opened without the use of tools or equipment. Designs which necessitate the removal of posts or unbolting of panels are not acceptable.
- d. Gates and guardrails must be constructed so as to enable equipment to pull out of traffic to stop to open the gate. This will frequently require the guardrail alignment to be moved away from the roadway.

## **4. Medians**

Where divided highways are proposed, gaps in medians shall be provided to allow for continuous access by District equipment and vehicles from one side of the roadway to the other.

## **5. Land Acquisition/Additional Right of Way:**

The District assumes no responsibility for any relocations of existing facilities which may have to be modified to accommodate proposed construction activities. The various entities involved in construction/relocation projects shall determine responsibility for any expenses associated with the project, including costs which may be related to the improvement of an existing canal section which impacts existing installations. Under no circumstances shall the District assume responsibility for relocation of facilities which are located within District Project Works.

Upon request, the District will make available to interested parties, any information on existing installations located within the Project Works rights of way. However, the District assumes no responsibility or obligation to notify the owners of encroaching installations of the need to modify their installations, as that responsibility rests with the entity whose proposed installation impacts the existing uses.

## **D. BRIDGE DESIGN CRITERIA**

### **1. Airport Road Canal North of Pine Ridge Road:**

*Pile-supported, Conspan-type or box culvert bridges only. No round, elliptical or other culverts.*

#### Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.  
Approach Bents – Determined on a case by case basis.

#### Vertical:

Pile-Supported Vehicular Roadway Bridges – Determined on a case by case basis.  
Pile-Supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.  
Conspan-type Bridges – Determined on a case by case basis.  
Crown of Box Culvert Bridges – Determined on a case by case basis.

Concrete Box culverts or Conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more 0.1' headloss through the proposed structure.

### **2. Airport Road Canal South of Pine Ridge Road:**

*Pile-Supported, Conspan-type bridges only. No box, CMP or RCP culverts.*

#### Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.  
Approach Bents – Determined on a case by case basis.

#### Vertical:

Pile-Supported Vehicular Roadway Bridges – 2 feet above design high water surface elevation.  
Pile-supported Utility Crossings, Bicycle and Pedestrian bridges – 8 feet above design high water surface elevation.  
Conspan-type Bridges – 4 feet above design high water surface elevation.  
Conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more 0.1' headloss through the proposed structure.

### **3. C-1 Connector Canal:**

*Pile-Supported or Conspan-type bridges only. No box, CMP or RCP culverts.*

#### Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.  
Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 4 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type Bridges – 4 feet above design high water surface elevation.

Conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more than 0.1' headloss through the proposed structure.

**4. Cocohatchee Canal (Immokalee Road Canal) West of Curry Canal:**

*Pile-Supported or Conspan-type bridges only. No box, CMP or RCP culverts.*

Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 2 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type Bridges – 2 feet above design high water surface elevation.

Conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more than 0.05' headloss through the proposed structure.

**5. Cocohatchee Canal (Immokalee Road Canal) East of Curry Canal:**

*Pile-Supported or Conspan-type bridges only. No box, CMP or RCP culverts.*

Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 2 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type Bridges – 2 feet above design high water surface elevation.

Conspan-type bridges are acceptable alternatives to pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more than 0.1' headloss through the proposed structure.

## **6. Corkscrew Canal:**

*Pile-Supported, Conspan-type or box culvert bridges only. No round, elliptical or other culverts.*

### Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

### Vertical:

Pile-Supported Vehicular Roadway Bridges – 2 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type Bridges – 2 feet above design high water surface elevation.

Crown of Box Culvert Bridges – 2 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more than 0.1' headloss through the proposed structure.

## **7. County Road 951 Canal:**

*Pile-Supported, Conspan-type or box culvert bridges only. No round, elliptical or other culverts.*

### Horizontal:

Center Span - 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

### Vertical:

Pile-Supported Vehicular Roadway Bridges – 2 feet above design water surface.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type Bridges – 2 feet above design high water surface elevation.

Crown of Box Culvert Bridges – 2 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more 0.1' headloss through the proposed structure.

## **8. Curry Canal:**

*Pile-Supported, Conspan-type or box culvert bridges only. No round, elliptical or other culverts.*

### Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

### Vertical:

Pile-Supported Vehicular Roadway Bridges – 2 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type Bridges – 2 feet above design high water surface elevation.

Crown of Box Culvert Bridges – 2 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more than 0.1' headloss through the proposed structure.

## **9. Cypress Canal:**

*Pile-Supported or Conspan-type bridges only. No box, CMP or RCP culverts.*

### Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

### Vertical:

Pile-Supported Vehicular Roadway Bridges – 4 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type Bridges – 4 feet above design high water surface elevation.

Conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more than 0.1' headloss through the proposed structure.

## **10. Faka Union Canal:**

*Pile-Supported bridges only. No other type bridges.*

### Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 4 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are not acceptable alternatives for pile-supported structures on this canal.

**11. Golden Gate Main Canal:**

*Pile-Supported bridges only. No other type bridges.*

Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 2 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are not acceptable alternatives for pile-supported structures on this canal

**12. Henderson Creek Canal**

*Pile-Supported, Conspan-type or box culvert bridges only. No round, elliptical or other culverts.*

Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 2 feet above the design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requires and must not impose more than 0.1' headloss through the proposed structure.

### **13. I-75 Canal North of Vanderbilt Beach Road:**

*Pile-Supported, Conspan-type bridges only. No box, CMP or RCP culverts.*

#### Horizontal:

Center Span – 20' clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

#### Vertical:

Pile-Supported Vehicular Roadway Bridges – 4 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirement and must not impose more than 0.1' headloss through the proposed structure.

### **14. I-75 Canal South of Vanderbilt Beach Road:**

*Pile-Supported bridges only. No other type bridges.*

#### Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

#### Vertical:

Pile-Supported Vehicular Roadway Bridges – 4 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are not acceptable alternatives for pile-supported structures on this canal.

### **15. Merritt Canal:**

*Pile-Supported bridges only. No other type bridges.*

#### Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

#### Vertical:

Pile-Supported Vehicular Roadway Bridges – 4 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are not acceptable alternatives for pile-supported structures in this canal.

**16. Miller Canal North of I-75:**

*Pile-Supported or Conspan-type bridges only. No box, CMP or RCP culverts.*

Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 4 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and must not impose more than 0.05' of headloss through the proposed structure.

**17. Miller Canal South of I-75:**

*Pile-Supported bridges only. No other type bridges.*

Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 4 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridge – 8 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are not acceptable alternatives for pile-supported structures on this canal.

**18. Orangetree Canal:**

*Pile-Supported, Conspan-type or box culvert bridges only. No round, elliptical or other culverts.*

Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 2 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Conspan-type Bridges – 2 feet above design high water surface elevation.

Crown of Box Culvert Bridges – 2 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are acceptable alternatives for pile-supported structures, but must meet the above horizontal and vertical clearance requirements and not impose more than 0.1' headloss through the proposed structure.

**19. Prairie Canal:**

*Pile-Supported bridges only. No other type bridges.*

Horizontal:

Center Span – 20 feet clear bent spacing, measured perpendicular to the channel.

Approach Bents – Determined on a case by case basis.

Vertical:

Pile-Supported Vehicular Roadway Bridges – 4 feet above design high water surface elevation.

Pile-supported Utility Crossings, Bicycle and Pedestrian Bridges – 8 feet above design high water surface elevation.

Concrete box culverts or conspan-type bridges are not acceptable alternatives for pile-supported structures on this canal.

# BIG CYPRESS BASIN

## QUICK-REFERENCE TABLE FOR BRIDGE CROSSING CRITERIA

CANAL NAME	CONSPAN-TYPE BRIDGES ALLOWED?	CULVERT BRIDGES ALLOWED?	MINIMUM VERTICAL CLEARANCE (CONSPAN-TYPE BRIDGES)	MINIMUM VERTICAL CLEARANCE-CROWN OF CULVERT (CULVERT BRIDGE)	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED ROADWAY BRIDGES)*	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED NON-ROAD)**	HORIZONTAL CLEARANCE (BENT SPACING FOR PILE-SUPPORTED STRUCTURES)
AIRPORT ROAD CANAL (NORTH OF PINE RIDGE ROAD)	YES. (MAXIMUM HEADLOSS 0.1')  <i>CONVEYANCE CAP WILL BE AS PER "COLLIER CO. 4 - LANING PLAN" RECOMMENDATIONS.</i>	BOX ONLY  NO ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	DETERMINED ON A CASE BY CASE BASIS.	DETERMINED ON A CASE BY CASE BASIS.	DETERMINED ON A CASE BY CASE BASIS.	8 FEET ABOVE DESIGN WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
AIRPORT ROAD CANAL (SOUTH OF PINE RIDGE ROAD)	YES. (MAXIMUM HEADLOSS 0.1').	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	4 FEET ABOVE DESIGN WATER SURFACE ELEVATION.	NON-APPLICABLE	2 FEET ABOVE DESIGN WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
C-1 CONNECTOR CANAL	YES. (MAXIMUM HEADLOSS 0.1').	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	NON-APPLICABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.

# BIG CYPRESS BASIN

**QUICK-REFERENCE TABLE FOR BRIDGE CROSSING CRITERIA**

CANAL NAME	CONSPAN-TYPE BRIDGES ALLOWED?	CULVERT BRIDGES ALLOWED	MINIMUM VERTICAL CLEARANCE (CONSPAN-TYPE BRIDGES)	MINIMUM VERTICAL CLEARANCE- CROWN OF CULVERT (CULVERT BRIDGES)	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED ROADWAY BRIDGES)*	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED NON-ROADWAY)**	HORIZONTAL CLEARANCE (BENT SPACING FOR PILE-SUPPORTED STRUCTURES)
COCOHATCHEE CANAL (IMMOKALEE ROAD CANAL) WEST OF CORKSCREW CANAL	YES. (MAXIMUM HEADLOSS 0.05').	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	NON-APPLICABLE	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
COCOHATCHEE CANAL (IMMOKALEE ROAD CANAL) EAST OF CORKSCREW CANAL	YES. (MAXIMUM HEADLOSS 0.1').	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERTS ARE NOT ACCEPTABLE	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	NON-APPLICABLE	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
CORKSCREW CANAL	YES. (MAXIMUM HEADLOSS 0.1')	BOX ONLY.  ROUND, ELLIPTICAL OR OTHER CULVERT SIZES ARE NOT ACCEPTABLE	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
COUNTY ROAD (CR) 951 CANAL	YES. (MAXIMUM HEADLOSS 0.1')	BOX ONLY  ROUND, ELLIPTICAL OR OTHER CULVERT SIZES ARE NOT ACCEPTABLE	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.

# BIG CYPRESS BASIN

## QUICK-REFERENCE TABLE FOR BRIDGE CROSSING CRITERIA

CANAL NAME	CONSPAN-TYPE BRIDGES ALLOWED?	CULVERT BRIDGES ALLOWED?	MINIMUM VERTICAL CLEARANCE (CONSPAN-TYPE BRIDGES)	MINIMUM VERTICAL CLEARANCE-CROWN OF CULVERT (CULVERT BRIDGES)	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED ROADWAY BRIDGES)*	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED NON-ROAD)**	HORIZONTAL CLEARANCE (BENT SPACING FOR PILE-SUPPORTED STRUCTURES)
CURRY CANAL	YES. (MAXIMUM HEADLOSS 0.1')	BOX ONLY  ROUND, ELLIPTICAL OR OTHER CULVERT SIZES ARE NOT ACCEPTABLE	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
CYPRESS CANAL	YES. (MAXIMUM HEADLOSS 0.1')	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	NON-APPLICABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
FAKA UNION CANAL	NO.	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	NON-APPLICABLE	NON-APPLICABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
GOLDEN GATE MAIN CANAL	NO.	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	NON-APPLICABLE	NON-APPLICABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.

# BIG CYPRESS BASIN

## QUICK-REFERENCE TABLE FOR BRIDGE CROSSING CRITERIA

CANAL NAME	CONSPAN-TYPE BRIDGES ALLOWED?	CULVERT BRIDGES ALLOWED?	MINIMUM VERTICAL CLEARANCE (CONSPAN-TYPE BRIDGES)	MINIMUM VERTICAL CLEARANCE-CROWN OF CULVERT (CULVERT BRIDGES)	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED ROADWAY BRIDGES)*	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED NON-ROAD)**	HORIZONTAL CLEARANCE (BENT SPACING FOR PILE-SUPPORTED STRUCTURES)
HENDERSON CREEK CANAL	YES. (MAXIMUM HEADLOSS 0.1')	BOX ONLY.  ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
I-75 CANAL (NORTH OF VANDERBILT BEACH ROAD)	YES. (MAXIMUM HEADLOSS 0.1')	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT SIZES ARE NOT ACCEPTABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION	NON-APPLICABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
MERRITT CANAL	NO.	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT SIZES ARE NOT ACCEPTABLE	NON-APPLICABLE.	NON-APPLICABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
MILLER CANAL (NORTH OF I-75)	NO.	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT SIZES ARE NOT ACCEPTABLE	NON-APPLICABLE	NON-APPLICABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING  APPROACH SPAN: DETERMINED ON A CASE BY CASE BASIS

# BIG CYPRESS BASIN

## QUICK-REFERENCE TABLE FOR BRIDGE CROSSING CRITERIA

CANAL NAME	CONSPAN-TYPE BRIDGES ALLOWED?	CULVERT BRIDGES ALLOWED?	MINIMUM VERTICAL CLEARANCE (CONSPAN-TYPE BRIDGES)	MINIMUM VERTICAL CLEARANCE-CROWN OF CULVERT (CULVERT BRIDGES)	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED ROADWAY BRIDGES)*	MINIMUM VERTICAL CLEARANCE (PILE-SUPPORTED NON-ROAD)**	HORIZONTAL CLEARANCE (BENT SPACING FOR PILE-SUPPORTED STRUCTURES)
MILLER CANAL (SOUTH OF I-75)	NO.	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT SIZES ARE NOT ACCEPTABLE	NON-APPLICABLE	NON-APPLICABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPANS: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
ORANGE TREE CANAL	YES. (MAXIMUM HEADLOSS 0.1')	BOX ONLY.  ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	2 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.
PRAIRIE CANAL	NO.	NO.  BOX, ROUND, ELLIPTICAL OR OTHER CULVERT PIPES ARE NOT ACCEPTABLE	NON-APPLICABLE	NON-APPLICABLE	4 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	8 FEET ABOVE DESIGN HIGH WATER SURFACE ELEVATION.	CENTER SPAN: 20' (MIN.) CLEAR OPENING.  APPROACH SPANS: DETERMINED ON A CASE BY CASE BASIS.

\* THIS CRITERIA IS APPLICABLE TO ROAD AND HIGHWAY BRIDGE CROSSINGS.

\*\* THIS CRITERIA IS APPLICABLE TO UTILITY CROSSINGS, PEDESTRIAN AND BICYCLE BRIDGES.

(WHERE MINIMUM AESTHETIC IMPACTS ARE DESIRED, SUBAQUEOUS CROSSINGS SHOULD BE CONSIDERED).

1. WHERE CULVERT BRIDGES ARE PERMISSIBLE, THEY WILL BE ALLOWED ONLY FOR ROAD AND HIGHWAY CROSSINGS. PEDESTRIAN OR BICYCLE BRIDGES AND ABOVE-GROUND UTILITY CROSSINGS OVER THE CANALS OF THE BIG CYPRESS BASIN MUST BE BY MEANS OF PILE-SUPPORTED CROSSINGS. (SUBAQUEOUS UTILITY CROSSINGS ARE ENCOURAGED).
2. THE TERM "CULVERT BRIDGES" AS USED IN THE CONTEXT OF THIS CRITERIA REFERS TO CONCRETE BOX CULVERTS AND CONSPAN-TYPE BRIDGE INSTALLATIONS. ROUND AND ELLIPTICAL SECTION METAL OR CONCRETE PIPES OR ARCH SPAN BRIDGES ARE NOT AN ACCEPTABLE SUBSTITUTE.
3. WHERE CULVERT BRIDGES ARE PERMISSIBLE, THE APPLICANT MAY BE REQUIRED TO PROVIDE MAINTENANCE BOAT RAMPS ON EITHER SIDE OF THE CULVERT BRIDGE CROSSING. IT WILL BE THE APPLICANT'S RESPONSIBILITY TO PROVIDE THE DISTRICT WITH SUCH ADDITIONAL RIGHT OF WAY AS MAY BE REQUIRED TO ACCESS THE MAINTENANCE RAMPS. SPECIFICATIONS FOR SUCH RAMPS WILL BE DETERMINED ON A CASE BY CASE BASIS.

# WORKS OF THE DISTRICT

PROJECT DESIGNATION	RESOLUTION NUMBER	LOCAL OR COMMON NAME AND OTHER INFORMATION
<b>CANALS</b>		
C-1	538	Black Creek Canal
C-1N	873	Black Creek, North Leg
C-1W	91-01	Black Creek, West Leg
C-2	538	Snapper Creek Canal
C-4	538	Tamiami Canal
C-6	538	Miami Canal
C-7	538	Little River Canal
C-7 Extension	538	C-7 Extension
C-8	873	Biscayne Canal
C-8 Extension	873	C-8 Extension
C-9	538	Snake Creek Canal
C-9 Extension	91-01	C-9 Extension
C-10	538	Hollywood Canal
C-10 Spur	91-01	C-10 Spur Canal
C-11	538	South New River Canal
C-11 South	91-01	C-11 South Leg
C-12	538	Plantation Canal
C-13	538	Middle River Canal
C-14	538	Cypress Creek Canal
C-15	873	Hidden Valley Canal
C-16	538	Boynton Beach Canal
C-17	538	Earman River Canal
C-18	538	Hungaryland Slough <i>aka</i> Limestone Canal, SW Fork or Loxahatchee River
C-19	538	West Boundary Newhall Drainage District Canal
C-19 Extension	91-01	C-19 Extension
C-20	91-01	Nine Mile Canal
C-21	91-01	Nine Mile Stub Canal
C-23	873	Bessey Creek Canal <i>aka</i> Martin-St. Lucie County Line Canal

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
C-23A	538	North Fork St. Lucie Canal
C-24	538	North St. Lucie Drainage District Canal <i>aka</i> Rim Ditch Diversion Canal
C-25	538	Belcher Canal
C-25 Extension	538	C-25 Extension <i>aka</i> C-25 North Leg
C-29	920	Hart-Mary Jane Canal
C-29A	91-01	Ajay-Hart Canal
C-29B	91-01	Ajay-East Tohopekaliga Canal
C-30	920	Myrtle-Mary Jane Canal Project
C-31	538	St. Cloud Canal <i>formerly East Tohopekaliga Canal</i>
C-32B	91-01	Joel-Myrtle Canal
C-32C	91-01	Trout-Joel Canal
C-32D	91-01	Lost-Trout Canal
C-32F	91-01	Lizzie-Lost Canal
C-32G	91-01	Alligator-Lizzie Canal
C-33	873	Alligator-Gentry Canal
C-34	873	Canoe Creek
C-35	538	South Port Canal <i>aka</i> Tohopekaliga Cypress Canal
C-36	873	Cypress-Hatchineha Canal
C-37	873	Hatchineha-Kissimmee Canal
C-38	91-01	Kissimmee River Canal
C-38, Secs. 1, 2, 3	873	Kissimmee River Canal
C-39A	538	State Road 70 Borrow Ditch
C-40	538	Indian Prairie Canal
C-41	538	Harney Pond Canal
C-41A	538	Slough Ditch <i>or</i> Stub Canal <i>aka</i> Brighton Canal
C-42	538	West Hollywood Canal
C-51	538	West Palm Beach Canal
C-54, Section 1	873	C-54, Section 1
C-59	91-01	Nubbin Slough
C-60	91-01	S-140 Outlet Canal
C-100	91-01	Cutler Drain Canal
C-100A	873	Cutler Drain Canal
C-100B	873	Cutler Drain Canal

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
C-100C	873	Cutler Drain Canal
C-102	873	Princeton Canal
C-102N	873	C-102, North Leg
C-103	873	Mowry Canal
C-103N	873	C-103, North Leg
C-103S	873	C-103, South Leg
C-107	91-01	Model Land Canal
C-108	91-01	Card Sound Canal
C-111	873	Aerojet Canal
C-111E	873	C-111 East
C-113	873	C-113
C-113 Remainder	920	C-113 Remainder
C-120	91-01	Shingle Creek
C-121	91-01	Boggy Creek
C-123	91-01	Conveyance Canal, WCA 3A
C-304	91-01	Miami Canal, WCA 3B
Arch Creek	Public Law 685	Arch Creek
Bel-Aire Canal	91-01	Part of C-1 System
Big Mound Canal	538	Big Mound Canal
Cross Canal	538	Connects Ocean Canal to Hillsboro Canal (L-14/L-15)
Istokpoga Canal	538	Between Lake Istokpoga and Kissimmee River
Lateral A	538	
Lateral B	538	
Miami River	538	Miami River
Middle River	538	Middle River Canal
New River	538	New River Canal
North Fork Middle River	538	North Fork Middle River Canal
South Fork Middle River	538	South Fork Middle River Canal
North Fork New River	538	North Fork New River Canal

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
South Fork New River	538	South Fork New River Canal
Taylor Creek	538	Taylor Creek Water Shed Area
Arch Creek	538	Dug under Public Law 685
Dania Cut-Off Canal	538	Formerly Everglades Drainage District Canal (SR 7 to Intracoastal Waterway)
Hillsboro Canal	538	Formerly Everglades Drainage District Canal (L-36 to U.S. #1)
North New River Canal <i>aka</i> G-15	538	Formerly Everglades Drainage District Canal (L-35 to U.S. #1)
Pompano Canal	538	From U.S. #1 to junction with C-14
Flamingo Canal	91-01	Flamingo Road Canal, Old Snake Creek Canal, C-11S Extension
<b>LEVEES</b>		
L-1	74-28	From end of Section 1 to Flaghole Road
L-1E	91-01	L-1 East (Alignment D)
L-1, Section 1	538	Westerly Rim of Everglades Agricultural Area
L-1W	91-01	L-1, West
L-2	538	Westerly Rim of Everglades Agricultural Area
L-2W	91-01	L-2, West
L-3	538	Westerly Rim of Everglades Agricultural Area
L-4	538	Southerly Rim of Everglades Agricultural Area
L-5	538	Southerly Rim of Everglades Agricultural Area, Northerly Rim of WCA 3A
L-6	538	Northerly Boundary of WCA 2A
L-7	538	Westerly Rim of WCA 1
L-7 Extension	91-01	Northwest Boundary of WCA 1
L-8	538	Northerly Rim of Everglades Agricultural Area
L-8 Tie-backs	91-01	Part of L-8 Project
L-10	538	Levee Along West Palm Beach Canal
L-12	538	Levee Along West Palm Beach Canal
L-13 (Cross Canal)	920	Levee Along Cross Canal
L-14	538	Levee Along Hillsboro Canal
L-15	538	Levee Along Hillsboro Canal
L-18	538	Levee Along North New River Canal

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
L-19	538	Levee Along North New River Canal
L-20	538	Levee Along North New River Canal
L-23	538	Levee Along Miami Canal
L-24	538	Levee Along Miami Canal
L-25	538	Levee Along Miami Canal
L-28I, N & W Feeders	873	L-28 Interceptor, North and West Feeders
L-28, Section 1	538	L-28, Section 1
L-28, Section 2	538	L-28, Section 2
L-28, Section 2 Rem	538	L-28, Section 2 Remainder
L-28, Section 5	538	L-28, Section 5
L-28 Tie-back	873	L-28 Tie-Back
L-29	538	Tamiami Trail Canal
L-30	538	Eastern Boundary of WCA 3
L-31E, Section 1	538	L-31E, Section 1
L-31E, Section 2	873	L-31E, Section 2
L-31E, Section 3	873	L-31E, Section 3
L-31N	538	L-31N
L-31N Remainder	873	L-31N Remainder
L-31W	91-01	Eastern Boundary of Everglades National Park
L-33	538	Eastern Boundary of WCA 3
L-35	538	
L-35A	538	Southeast Boundary of WCA 2
L-35B	538	Within WCA 2
L-36	538	Eastern Boundary of WCA 2
L-37	538	Eastern Boundary of WCA 3A
L-38, Sections 1, 2, 3, 4, 5, 6	91-01	Levee Along North New River Canal
L-38, Section 1 East	538	Levee Along North New River Canal
L-38, Section 2	538	Levee Along North New River Canal

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
L-38 South 3C (E&W)	538	
L-38W	873	
L-39	538	Southerly Boundary of WCA 1
L-40	538	Eastern Boundary of WCA 1
L-41	538	Protective Levee Newhall Drainage District
L-42	538	Protective Levee Newhall Drainage District
L-47 Borrow Canal	873	Lake Okeechobee Rim Canal.
L-48 Borrow Canal	538	Lake Okeechobee Rim Canal.
L-49 Borrow Canal	538	Lake Okeechobee Rim Canal.
L-50 Borrow Canal	538	Lake Okeechobee Rim Canal.
L-59	538	Interceptor Levee from C-38 southwesterly to C-40
L-60	538	Interceptor Levee from C-40 southwesterly to C-41.
L-61	538	Interceptor Levee from C-41 southwesterly to L-50.
L-62	91-01	Upland Interceptor Levee for LD-4.
L-63N	91-01	NE Shore Interceptor – Lake Okeechobee.
L-63S	91-01	NE Shore Interceptor – Lake Okeechobee.
L-64	91-01	Upland Interceptor Levee for L-47.
L-65	91-01	Upland Interceptor Levee for L-47.
L-67	91-01	Interior Levee, WCA 3.
L-67A	538	Interior Levee, WCA 3.
L-67C	873	Interior Levee, WCA 3.
L-67 Extension	873	Interior Levee, WCA 3.
L-68A	538	Hendry County Interceptor Canal.
<b>STRUCTURES</b>		
S-2	538	Alignment of Lake Okeechobee South Shore Levee at intersection of Hillsboro and North New River Canals with Lake Okeechobee in western section of Palm Beach County.
S-3	538	Alignment of Lake Okeechobee South Shore Levee at intersection of Miami Canal with lake Okeechobee in the western section of Palm Beach County.

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
S-4	91-01	Alignment of Lake Okeechobee South Shore Levee at intersection of LD-1 and C-20 in Glades County, approximately 3 miles northwest of Clewiston.
S-5A	538	On south side of U.S. 441 and C-51 between the canal and the borrow canals of L-7 and L-40, approximately 20 miles west of West Palm Beach.
S-5AE	538	In C-51 where L-8 crosses.
S-5AS	538	In L-40 Borrow Canal where L-7 crosses.
S-5AW	538	In C-51 where L-8 meets canal.
S-5AX	538	In Cross Canal between the Hillsboro Canal and C-51.
S-6	538	In alignment of the Hillsboro canal at its intersection by L-6 and L-7.
S-7	538	In alignment of North New River Canal at its intersection by L-5, L-6 and L-18, approximately 26 miles south of City of Belle Glade at Palm Beach/Broward County line.
S-7W	538	Connects L-8 to abandoned portion of Old North New River inside WCA 2A.
S-8	538	In alignment of Miami Canal at its intersection by L-4, L-5 and L-23, approximately 30 miles southwest of City of Belle Glade at the Palm Beach/Broward County line.
S-9	538	In C-11, approximately ½ mile west of U.S. #27.
S-10E	91-01	In L-39, approximately 2 miles south of S-6.
S-11A, B, C	Agreement with COE	Along U.S. #27 north to Sawgrass Fish Camp. A & B are located 2 miles north in L-38 between WCA 2 and WCA 3, approximately 20 miles west of Ft. Lauderdale.
S-12A, B, C, D, F	Agreement with COE	In L-29 (U.S. #41) on south perimeter of WCA 3A, approximately 30 miles west of Miami.
S-13	538	In C-11, approximately 300 feet west of U.S. #441 and 5½ miles southwest of Ft. Lauderdale.
S-13A	538	In C-11, approximately 5 miles upstream of Pump Station S-13.
S-14	538	In L-29, 42 miles west on U.S. #41 west of S-12A.
S-18C	873	In C-111, approximately 5.86 miles south of S-177.
S-20	873	In L-31E, approximately 3 miles from the shore of Biscayne Bay.
S-20A	873	In L-31E, approximately 2 miles from the shore of Biscayne Bay at the point where proposed C-106 would cross L-31E.
S-20F	873	Near the mouth of C-103 at its junction with L-31E, approximately 2000 feet from the shore of Biscayne Bay.
S-20G	873	Near the mouth of the Military Canal at its junction with L-31E.
S-21	538	Near the mouth of C-1 at its junction with L-31E, approximately 3500 feet from the

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
		shore of Biscayne Bay.
S-21A	873	Near the mouth of C-102 at its junction with L-31E, approximately 1 mile from the shore of Biscayne Bay.
S-22	538	Near the mouth of C-2, approximately 7000 feet from the shore of Biscayne Bay.
S-24	538	On U.S. #41, 635 feet east of L-31N downstream of S-336.
S-24A	538	In L-31, approximately 3½ miles south of U.S. #41.
S-25	91-01	At Northeast 27 <sup>th</sup> Avenue crossing C-5 (Comfort Canal) in Miami.
S-25A	91-01	At Northeast 45 <sup>th</sup> Avenue in Miami
S-25B	91-01	Immediately downstream of LeJeune Road crossing of C-4 in Miami.
S-26	91-01	At Northwest 36 <sup>th</sup> Street crossing of C-6 in Miami.
S-27	538	In the City of Miami near the mouth of C-7, approximately 700 feet from the shore of Biscayne Bay at Northeast 4 <sup>th</sup> Place and 82 <sup>nd</sup> Street.
S-28	538	In the City of Miami near the mouth of C-8, approximately 1 mile from the shore of Biscayne Bay.
S-29	538	In the City of North Miami Beach near the mouth of C-9, approximately 50 feet from the shore of Lake Maule, west of U.S. #1 at Northeast 165 <sup>th</sup> Street.
S-30	538	In C-9 at U.S. #27.
S-31	538	At U.S. #27 and C-6 where L-30 crosses the Miami Canal.
S-32	538	Connects the Miami Canal and the Borrow Pit of L-33.
S-32A	538	At the north end of L-30, approximately 19 miles northwest of Miami.
S-33	538	In C-12, approximately ½ mile east of S.R. #7.
S-34	538	¼ mile north of I-75 on east side of U.S. #27.
S-36	538	In C-13, west of Oakland Park Boulevard.
S-37A	538	In C-14, 150 feet east of Dixie Highway, 100 feet east of the F.E.C. Railroad.
S-37B	538	In C-14, 3300 feet south of the intersection of C-14 and the Pompano Canal.
S-38	538	At the western-most end of C-14 on L-36.
S-38A	91-01	In L-36 Borrow Canal on the east perimeter of WCA 2, just north of C-14, approximately 13 miles west of Pompano Beach.
S-38B	538	In L-36 Borrow Canal, approximately mid-way between S-38 and S-39, approximately 13½ miles southwest of Boca Raton.
S-38C	91-01	In L-36 Borrow Canal on the east perimeter of WCA 2, just south of C-14, approximately 13 miles west of Pompano Beach.
S-39	538	At west end of Loxahatchee Road on G-08 (Hillsboro Canal).

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
S-39A	91-01	In L-36 Borrow Canal at its junction with the Hillsboro Canal, approximately 13 miles west of Boca Raton.
S-41	873	In C-16, approximately 300 feet east of U.S. #1.
S-44	538	In C-17, approximately 250 feet downstream of U.S. #1/A-1-A bridge.
S-46	538	In C-18, 2400 feet east of Florida Turnpike.
S-47B	538	In C-19 at the downstream side of the A.C.L. Railroad crossing, approximately 1.7 miles north of U.S. #27 bridge.
S-47D	538	In C-19, just north of Lake Hicpochee, approximately 1.6 miles south of U.S. #27 bridge.
S-48	538	Near the mouth of C-23, approximately 2 miles east of Florida Turnpike.
S-49	538	In C-24, approximately 2400 feet west of Florida Turnpike.
S-50	538	Near the mouth of C-25, approximately ½ mile west of U.S. #27 bridge.
S-57	920	In C-30, approximately 6200 feet downstream from Lake Myrtle.
S-58	920	In C-32C, approximately 3700 feet downstream from Lake Trout.
S-59	538	In C-31 at the outlet of East Lake Tohopekaliga.
S-60	873	In C-33, approximately 1500 feet upstream from S.R. #534 and 3700 feet downstream from Alligator Lake.
S-61 and Lock	538	In C-35 at the outlet of Lake Tohopekaliga.
S-62	920	In C-29A at the outlet of Lake Hart.
S-63	873	In C-34, approximately 3300 feet east of S.R. #523 and 2000 feet downstream from Lake Gentry.
S-63A	873	In C-34, approximately 500 feet upstream from S.R. #523 and 2½ miles upstream from Cypress Lake.
S-65	873	In C-38 at the outlet end of Lake Kissimmee.
S-65A	873	In C-38, approximately 10½ miles downstream from Lake Kissimmee.
S-65B	873	In C-38, approximately 9 miles downstream from S-65A and 23 miles downstream from Lake Kissimmee.
S-65C	873	In C-38, approximately 8.6 miles downstream from S-65B, 32 miles downstream from Lake Kissimmee and 4½ miles north of U.S. #98.
S-65D	873	In C-38, approximately 9.3 miles downstream from S-65C, 41 miles downstream from Lake Kissimmee and 4 miles below the U.S. #98 bridge.
S-65E	873	In C-38, approximately 7.3 miles downstream from S-65D, 49 miles downstream from Lake Kissimmee.

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
S-68	538	In C-41A at the outlet of Lake Istokpoga.
S-70	538	In C-41, approximately 8½ miles upstream from S-71 and 10½ miles upstream from Lake Okeechobee.
S-71	538	In C-41, approximately 2 miles upstream from Lake Okeechobee.
S-72	538	In C-40, approximately 4 miles upstream from Lake Okeechobee.
S-75	538	In C-40, 10 miles upstream from S-72, 14 miles upstream from Lake Okeechobee.
S-76	538	In the Borrow Pit of L-8, approximately 2 miles east of Lake Okeechobee.
SL-76	91-01	
S-77	538	In C-43 at the outlet of Lake Okeechobee.
S-78	538	In C-43, approximately 16 miles downstream from Lake Okeechobee.
S-79	538	In C-43, approximately 30 miles east of S-78, 7 miles from tidewater.
S-82	538	In C-41, approximately 500 feet downstream from its junction with C-41A, 5 miles downstream from Lake Istokpoga.
S-83	538	In C-41A, approximately 500 feet downstream from its junction with C-51, 5 miles downstream from Lake Istokpoga.
S-84	538	In C-41A, approximately 12 miles downstream from S-83, approximately 1 mile upstream from the junction of C-41A and C-38.
S-97	538	In C-23, 3300 feet west of Florida Turnpike, approximately 2½ miles west of S-48.
S-99	538	In C-25, approximately ½ mile west of Florida Turnpike, 8½ miles west of S-50.
S-118	873	In C-100, approximately 200 feet east of U.S. #1.
S-119	873	In C-100C, approximately 1000 feet west of U.S. #1.
S-120	873	In C-100A at U.S. #1.
S-121	873	In C-100C at Kendall Drive (SW 88 <sup>th</sup> Street), near the junction of C-100C and C-2.
S-122	873	In C-100B at Franjo Road on the southerly out-skirts of the Town of Perrine.
S-123	873	Near the mouth of C-100 below the junction of C-100, C-100A and C-100, approximately 600 feet from the shore of Biscayne Bay.
S-124	873	In the Borrow Pit of L-35A, north of the junction of the Borrow Pit and the North New River Canal, 13 miles west of Ft. Lauderdale.
S-125	873	In C-42, south of the junction of C-42 and C-13, approximately 10 miles west of Ft. Lauderdale.
S-127 and Lock	538	On the northwest shore of Lake Okeechobee in the alignment of L-48.
S-129	538	On the northwest shore of Lake Okeechobee in the alignment of L-49.

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
S-131 and Lock	538	On the northwest shore of Lake Okeechobee in the alignment of L-50.
S-133	920	On the northeast shore of Lake Okeechobee landward of Herbert Hoover Dike in the alignment of LD-4.
S-135 and Lock	920	On the northeast shore of Lake Okeechobee in the alignment of L-47.
S-140	920	In L-28, approximately ¼ mile north of I-75.
S-141	538	In L-38W, ½ mile north of I-75.
S-142	538	In L-38W, approximately 1 mile north of I-7.
S-143	538	In L-38E, approximately 3 miles north of I-75 at entrance to Sawgrass Fish Camp.
S-144	538	In L-35B, 2 miles east of Sawgrass Fish Camp.
S-145	538	In L-35B, 2 miles east of S-144.
S-146	538	In L-35B, 2 miles east of S-145.
S-147	538	
S-148	538	In C-1, approximately 1800 feet west of U.S. #1.
S-149	538	In C-1N, approximately ¼ mile west of U.S. #1.
S-150	538/873	Through L-5 on the north perimeter of WCA 3, approximately 24 miles southeast of South Bay.
S-151	538	In L-67A, 6 miles west of Levee Gate at Holiday Park.
S-153	91-01	On the north side of the St. Lucie Canal, approximately 6.7 miles east of U.S. #441.
S-154	873	Through LD-4, approximately 5 miles west of Okeechobee.
S-154C	91-01	Through LD-4, approximately 5 miles west of Okeechobee.
S-155	91-01	In C-51 at U.S. #1.
S-164	873	
S-165	873	In C-102, approximately 1100 feet west of U.S. #1.
S-166	873	In C-103N, approximately 600 feet west of U.S. #1.
S-167	873	In C-103, approximately 1 mile west of U.S. #1.
S-169	91-01	At the east end of C-21 immediately north of City of Clewiston.
S-173	873	In L-31N Borrow Canal, approximately 9 miles northwest of Homestead.
S-174	91-01	In the L-31W Borrow Canal near its junction with C-111, approximately 5 miles west of Homestead.
S-175	91-01	In L-31W
S-176	873	In C-111, approximately 5 miles west of Homestead.
S-177	873	In C-111 just downstream from U.S. #27.
S-178	873	At the north end of C-111E at U.S. #27.

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
S-179	873	In C-103, approximately 650 feet west of Tallahassee Road in Southern Miami-Dade County.
S-190	873	In L-28I, 2 miles south of Snake Road on Big Cypress Seminole Reservation.
S-191	91-01	In C-59 at its junction with LD-4 on the north shore of Lake Okeechobee.
S-192	91-01	In L-63N at the natural channel of Taylor Creek, north of the City of Okeechobee.
S-193	91-01	At the mouth of Taylor Creek in LD-4, approximately 2½ miles southeast of the City of Okeechobee.
S-194	873	In C-102 at the junction of S.R. #9336.
S-195	538	In C-102N at Old Dixie Highway.
S-196	873	In C-103, approximately 350 feet upstream from Richards Road.
S-197	873/920	In C-111
S-235	91-01	In LD-3 Borrow Canal at C-43 at Moore Haven.
S-331	91-01	In L-31N Borrow Canal, approximately 9 miles north of Homestead.
S-332	91-01	In L-38W, approximately 2.54 miles north of S.R. #9336.
S-332D	97-49	At the junction of C-111 and L-31W.
S-333	91-01	In I-67 at U.S. #41, approximately 30 miles west of Miami.
S-334	91-01	At the east end of L-29 Borrow Canal on U.S. #41, approximately 20 miles west of Miami.
S-335	91-01	At the south end of the L-30 Borrow Canal, approximately 20 miles west of Miami.
S-336	91-01	In C-4, immediately east of the junction of L-30 and L-31N.
S-337	91-01	Off Krome Avenue where L-30 crosses the Miami Canal, approximately 15 miles west of Miami.
S-338	91-01	At the point where C-1 crosses Krome Avenue, approximately 12 miles north of Homestead.
S-339	91-01	In C-123, 6 miles north of I-75.
S-340	91-01	In C-123, 1.5 miles south of I-75.
S-342		At C-19 Extension through L-306.
S-343A	91-01	Near the junction of L-28 and L-29, approximately 35 miles west of Miami, 2½ miles from U.S. #41.
S-343B	91-01	Near the junction of L-28 and L-29, approximately 25 miles west of Miami, 1½ miles from U.S. #41.
S-344	91-01	In L-28, approximately 9 miles from U.S. #41.
S-346	91-01	At U.S. #41 and L-67 Extension.

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
<b>S-347</b>	<b>91-01</b>	<b>In L-67 Extension, approximately 2½ miles south of U.S. #41.</b>
Potato Farm Road Structure <i>(aka S-342S)</i>	<b>91-01</b>	<b>On C-19 Extension at Potato Farm Road, approximately 1 mile west of S.R. #78 and 2 miles north of S-47B.</b>
<b>G-36 Henry Creek Lock Structure</b>	<b>91-01</b>	<b>In L-47 on the northeast shore of Lake Okeechobee at Henry Creek, 9 miles south of the City of Okeechobee.</b>
<b>G-54</b>	<b>91-01</b>	<b>Replaced the Old Sewell Lock Structure in the North New River Canal, approximately ¾ mile west of Florida Turnpike.</b>
<b>G-56</b>	<b>91-01</b>	<b>Replaced the Old Deerfield Lock Structure in the Hillsboro Canal, approximately 2 miles west of Deerfield Beach.</b>
<b>G-57</b>	<b>91-01</b>	<b>In the Old Pompano Canal, just east of Cypress Creek Road.</b>
<b>G-58</b>	<b>91-01</b>	<b>In Arch Creek, immediately downstream of F.E.C. Railroad bridge.</b>
<b>G-64</b>	<b>91-01</b>	<b>On west side of U.S. #27 across from S-11C, 10 miles north of S.R. #84.</b>
<b>G-69</b>	<b>97-43</b>	<b>In L-29 across from Cooperstown on Tamiami Trail.</b>
<b>G-71</b>	<b>97-49</b>	<b>In L-67 Extension, approximately 7 miles south from Tamiami Trail.</b>
<b>G-72 C-7 Control Structure</b>	<b>91-01</b>	<b>At the west end of C-7 beneath Northwest 87<sup>th</sup> Avenue.</b>
<b>G-86N</b>	<b>91-01</b>	<b>On west side of U.S. #27, north of Griffin Road on northwest side of C-11.</b>
<b>G-86S</b>	<b>91-01</b>	<b>On west side of U.S. #27, south of Griffin Road on southwest side of C-11.</b>
<b>G-88 (L-3/L-4)</b>	<b>91-01</b>	<b>At the northwest corner of WCA 3A.</b>
<b>G-89 (L-3/L-28)</b>	<b>91-01</b>	<b>At the northwest corner of WCA 3A.</b>
<b>G-93 Coral Gables Control Structure</b>	<b>91-01</b>	<b>In the Coral Gables Coral at Red Road in the City of Miami.</b>
<b>G-94A, B, C</b>	<b>91-01</b>	<b>In L-40 Borrow Canal</b>
<b>G-96 Mills Culvert</b>	<b>91-01</b>	<b>In a plug in the L-1 Borrow Canal, approximately 3 miles east of Flaghole Road.</b>
<b>G-97</b>	<b>91-01</b>	
<b>G-103 Lake Rosalie Control Structure</b>	<b>91-01</b>	<b>In the Zipperer Canal at the northern outlet of Lake Rosalie in the Kissimmee State Park.</b>
<b>G-113 Lake Marion Control Structure</b>	<b>91-01</b>	<b>At the outlet of Lake Marion in the Prairie Lakes State Preserve.</b>
<b>G-123</b>	<b>91-01</b>	<b>On the east side of U.S. #27, ¼ mile north of I-75.</b>
<b>G-119 Trail Glades Culvert</b>	<b>91-01</b>	<b>In C-4, ¼ mile east of Krome Avenue.</b>

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
G-124 C-51 Control Structure	91-01	In C-51, approximately 3½ miles west of S.R. #7.
G-134 Montura Ranch Estates Culvert	91-01	1 mile below the outlet of Montura Ranch Estates Reservoir at the south end of Flaghole Road, approximately 1 mile south of L-1.
G-135 Flaghole Control Culvert	91-01	At the south boundary of the Flaghole Drainage District.
G-136	91-01	At the junction of L-1/L-1E, 3 miles north of C.R. #835.
G-150	91-01	At the divide line of L-1 and L-2.
G-151	91-01	Beneath C.R. #846 in the L-2W Canal.
G-155	91-01	At the northwest corner of WCA 3A.
G-192	91-01	
G-200, A, B	91-01	At the northwest corner of the Holey Land.
G-201	91-01	At the southeast corner of the Holey Land.
G-203	91-01	
G-204	91-01	Under L-5.
G-205	91-01	Under L-5.
G-206	91-01	Under L-5.
G-207	91-01	In C-41, approximately 2 miles upstream of Lake Okeechobee near S-71.
G-208	91-01	In C-40, approximately 2 miles upstream of lake Okeechobee near S-72.
G-209	91-01	
G-210	91-01	In L-7, along northwest boundary of WCA 1.
G-211	91-01	South of the point where L-31N joins C-1W.
Henry Creek Lock	920	In L-47 on the northeast shore of Lake Okeechobee at Henry Creek.
Istokpoga Spillway	91-01	In the Istokpoga Canal between Lake Istokpoga and the Kissimmee River, Pool C.
<b>LAKES</b>		
Clear Lake	538	
Lake Warren	538	
Hatchineha	538	
Marion	538	
Rosalie	538	
Tiger	538	

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
Warren	538	
Weohyakaphka	538	
Ajay	538	
Alligator	538	
Cypress	538	
East Tohopekaliga	538	
Gentry	538	
Hart	538	
Hicpochee	538	
Istokpoga	538	
Jackson	538	
Joel	538	
Kissimmee	538	
Lizzie	538	
Marian	538	
Mary Jane	538	
Myrtle	538	
Tohopekaliga	538	
Trout	538	
(Lost) Coon	538	
Okeechobee	538	
<b>WATER CONSERVATION AREAS</b>		
WCA #1	538	
WCA #2	538	
WCA #3	538	
<b>BIG CYPRESS BASIN</b>		
Airport Road Canal (aka C.R. 31 Canal)	90-05	
C-1 Connector Canal	84-2-1/93-8-3	Includes dedicated drainage easements lying within Sections 11 and 12, Township 49 South, Range 27 East.

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
<b>Cocohatchee Canal (aka Immokalee Road Canal)</b>	<b>86-19-1/88-10-3/ 89-11-2/90-05/ 93- 8-3</b>	<b>Includes dedicated drainage easements lying within Sections 23 and 24, Township 48 South, Range 26 East and Sections 19, 20, 21 and 22, Township 48 South, Range 27 East.</b>
<b>Corkscrew Canal and Side Branches</b>	<b>93-8-3</b>	<b>Includes the side branches and their dedicated drainage easements lying within Sections 9, 10, 15, 16, 22, 27 and 34, Township 48 South, Range 27 East.</b>
<b>C.R. 951 Canal</b>	<b>93-8-3</b>	<b>Includes dedicated drainage easements lying within Sections 26 and 35, Township 49 South, Range 26 East.</b>
<b>Curry Canal</b>	<b>93-8-3</b>	<b>Includes dedicated drainage easements lying within Sections 28 and 33, Township 48 South, Range 27 East.</b>
<b>Cypress Canal</b>	<b>90-9-3/91-03</b>	<b>Includes dedicated drainage easements lying within Sections 13, 14, 11, 12, 2 and 1, Township 49 South, Range 26 East and Sections 6, 5, 4 and 4, Township 49 South, Range 27 East and Sections 31, 32, 33 and 34, Township 48 South, Range 27 East.</b>
<b>Faka Union Canal</b>	<b>90-9-3/ 91-03/ 91- 9-1</b>	<b>Includes dedicated drainage easements and water control Structures FU-1, FU-2, FU-3, FU-4, FU-5 lying within Sections 28, 29, 32 and 33, Township 47 South, Range 28 East, Sections 4, 5, 8, 9, 16, 17, 20, 21, 28 and 29, Township 48 South, Range 28 East; Sections 28, 29, 32 and 33, Township 48 South, Range 28 East, Sections 4, 5, 8, 9, 16, 17, 20, 21, 28, 29, 32 and 33, Township 49 South, Range 28 East; Sections 4, 5, 8, 9, 16, 17, 20, 21, 28, 29, 32 and 33, Township 50 South, Range 28 East; Sections 4, 5, 8, 9, 16, 17, 20, 21, 28, 29, 33 and 34, Township 51 South, Range 28 East and Sections 3, 4, 9 and 10, Township 52 South, Range 28 East.</b>
<b>Golden Gate Main Canal</b>	<b>86-10-1/87-9-4/ 90-05/91-9-1</b>	<b>Includes dedicated drainage easements lying within Sections 25 and 36, Township 47 South, Range 27 East, Sections 30 and 31, Township 47 South, Range 28 East, Sections 1, 12, 13, 24 and 28, Township 48 South, Range 28 East.</b>
<b>Golden Gate Main Side Branch</b>	<b>90-05/93-8-3</b>	<b>Includes dedicated drainage easements and Golden Gate Structure No. 7 lying within Sections 11 and 12, Township 48 South, Range 27 East</b>
<b>Henderson Creek Canal</b>	<b>88-10-3/ 90- 9-3/91-03</b>	<b>Includes dedicated drainage easements and Henderson Creek Weir No. 1 lying within Sections 2, 11, 14, 23, 26 and 35, Township 50 South, Range 26 East and Section 2, Township 51 South, Range 26 East.</b>
<b>Merritt Canal</b>	<b>91-9-1/92-01</b>	<b>Includes dedicated drainage easements lying within Sections 2, 3, 10, 11, 14, 15, 22, 23, 26, 27, 34 and 35, Township 50 South, Range 28 East and Sections 2, 3, 10, 11, 14, 15, 22, 23, 26, 27, 34 and 35, Township 51 South, Range 28 East.</b>

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
Miller Canal	90-9-3/91-03	Includes dedicated drainage easements lying within Sections 1, 12 and 13, Township 49 South, Range 27 East, Sections 6, 7, 18, 19, 30 and 31, Township 49 South, Range 27 East, Sections 6, 7, 18, 19, 30 and 31, Township 50 South, Range 28 East and Sections 6, 7, 18, 19, 30 and 29, Township 51 South, Range 28 East.
OrangeTree Canal	93-8-3	Includes dedicated drainage easements lying within Sections 26 and 35, Township 48 South, Range 27 East.
Prairie Canal	91-9-1/92-01	Includes dedicated drainage easements lying within Sections 18, 19, 30 and 31, Township 50 South, Range 29 East; Sections 13, 24, 25 and 26, Township 50 South, Range 28 East, Sections 1, 12, 13, 23, 24 25 and 26, Township 51 South, Range 28 East and Sections 6, 7, 18 and 19, Township 51 South, Range 29 East.
Airport Road Canal North Weir (ARN)	90-05	1 mile south of the intersection of Immokalee Road and Airport-Pulling Road.
Airport Road Canal South Weir (ARS)	90-05	Adjacent to Airport-Pulling Road, approximately 2000 feet north of the intersection of Golden Gate Parkway and Airport-Pulling Road.
Cocohatchee Canal Weir No. 1 (CC1)	79-91/96-8-1/ 93-8-3	325 feet downstream from the Palm River Boulevard bridge at the intersection of Immokalee Road and Palm River Boulevard in Naples.
Cocohatchee Canal Weir No. 2 (CC2)	79-91/90-05/ 96-8-1	300 feet upstream of Lakeland Avenue on the north side of Immokalee Road in North Naples.
Cypress Canal Weir (4A-1)	79-9-1	Northerly terminus of 25 <sup>th</sup> Street NW, north of Golden Gate Boulevard in Golden Gate Estates.
Faka Union Canal Weir No. 1 (FU-1)	79-9-1/90-9-3/ 91-03	250 feet north of U.S. #41 bridge at Port of the Islands.
Faka Union Canal Weir No. 2 (FU-2)	90-9-3/91-03	150 feet south of the east end of 96 <sup>th</sup> Avenue SE in Golden Gate Estates.
Faka Union Canal Weir No. 3 (FU-3)	90-9-3/91-03	100 feet south of the east end of 54 <sup>th</sup> Avenue SE in Golden Gate Estates.
Faka Union Canal Weir No. 4 (FU-4)	90-9-3/91-03	600 feet south of the easterly terminus of 16 <sup>th</sup> Avenue SE, east of Everglades Boulevard in Golden Gate Estates.
Faka Union Canal Weir No. 5 (FU-5)	90-9-3/91-03	100 feet north of the east end of 22 <sup>nd</sup> Avenue NE, east of Everglades Boulevard in Golden Gate Estates.
Faka Union Canal Weir No. 6 (FU-6)	91-9-1	100 feet south of the east end of 39 <sup>th</sup> Avenue NE, east of Everglades Boulevard in Golden Gate Estates.

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
Faka Union Canal Weir No. 7 (FU-7)	91-9-1	100 feet north of the 56 <sup>th</sup> Avenue bridge over the Faka Union Canal in Golden Gate Estates.
Golden Gate Canal Weir No. 1 (GG-1)	79-9-1/91-9-1	2350 feet west of the Airport-Pulling Road bridge over the Golden Gate Main Canal. (The Airport Road Canal empties into the Golden Gate Main Canal upstream from the weir).
Golden Gate Canal Weir No. 2 (GG-2)	79-1-1/91-9-1	500 feet east from the southerly terminus of 64 <sup>th</sup> Street SW off Golden Gate Parkway.
Golden Gate Canal Weir No. 3 (GG-3)	79-9-1/91-9-1	6 miles upstream from Golden Gate Canal No. 2 at the eastern end of 17 <sup>th</sup> Avenue SW in Golden Gate Estates.
Golden Gate Canal Weir No. 4 (GG-4)	79-9-1/91-9-1	250 feet east of and approximately 1 mile north of the intersection of Golden Gate Boulevard and 8 <sup>th</sup> Street NE in Golden Gate Estates.
Golden Gate Canal Weir No. 5 (GG-5)	86-9-5/91-9-1	<i>(Formerly Randall Boulevard Weir, Weir No. 5)</i> 500 feet north of the Randall Boulevard bridge over the Golden Gate Main Canal in Golden Gate Estates.
Golden Gate Canal Weir No. 6 (GG-6)	91-9-1	2.75 miles north of Oil Well Road at the west end of 50 <sup>th</sup> Avenue NE from the intersection of Everglades Boulevard.
Golden Gate Canal Weir No. 7 (GG-7)	91-9-1	On a side branch of the Golden Gate Main Canal near the northerly terminus of 20 <sup>th</sup> Street NE off 47 <sup>th</sup> Avenue NE, approximately 1.6 miles east of Immokalee Road and 2 miles north of Oil Well Road in Golden Gate Estates.
Henderson Creek Weir No. 1	90-9-3/91-03	<i>(Formerly HCC-3)</i> North side of U.S. #41 approximately 4000 feet east of the intersection of U.S. #41 and SR #951. Two additional gated weirs on the east & west side ditches downstream of the main weir.
I-75 Canal Weir No. 2 (I-75-2)	93-1-1	<i>(formerly D2-8)</i> North side of Pine Ridge Road, approximately 200 feet east from the I-75 overpass.
Miller Canal Weir No. 1 (MIL-1)	90-9-3/91-03	West end of 98 <sup>th</sup> Avenue SE, west of Everglades Boulevard in Golden Gate Estates.
Miller Canal Weir No. 2 (MIL-2)	90-9-3/91-03	West end of 54 <sup>th</sup> Avenue SE, west of Everglades Boulevard in Golden Gate Estates.
Miller Canal Weir No. 3 (MIL-3)	90-9-3/91-03	200 feet north of the westerly terminus of 12 <sup>th</sup> Avenue NE, west of Everglades Boulevard in Northern Golden Gate Estates.
SR 29 Canal Weir No. 1 (SR29-1)	90-9-3/91-03	1.3 miles north of U.S. #41.

<b>PROJECT DESIGNATION</b>	<b>RESOLUTION NUMBER</b>	<b>LOCAL OR COMMON NAME AND OTHER INFORMATION</b>
SR 29 Canal Weir No. 2 (SR29-2)	90-9-3/91-03	2.45 miles north of U.S. #41.
SR 29 Canal Weir No. 7 (SR29-7)	79-9-1	12.62 miles north of U.S. #41.
SR 29 Canal Weir No. 8 (SR29-8)	79-9-1	15.25 miles north of U.S. #41.
1AG ( <i>aka BS-1</i> )	80-01	
2AG ( <i>aka BS-2</i> )	80-01	
3AG ( <i>aka BS-3</i> )	80-01	
4AG ( <i>aka BS-4</i> )	80-01	
5MC ( <i>aka BS-5</i> )	80-01	
6FC ( <i>aka BS-6</i> )	80-01	
7FC ( <i>aka BS-7</i> )	80-01	
8FC ( <i>aka BS-8</i> )	80-01	
9FC ( <i>aka BS-9</i> )	80-01	
10FC ( <i>aka BS-10</i> )	80-01	
11FC ( <i>aka BS-11</i> )	80-01	
12AG ( <i>aka BS-12</i> )	80-01	
13FC ( <i>aka BS-13</i> )	80-01	
14AG ( <i>aka BS-14</i> )	80-01	
15FCS ( <i>aka BS-15</i> )	80-01	
16FCS ( <i>aka BS-16</i> )	80-01	
17FCS ( <i>aka BS-17</i> )	80-01	
18FCS ( <i>aka BS-18</i> )	80-01	
19FCS ( <i>aka BS-19</i> )	80-01	
19FCD ( <i>aka BS-20</i> )	80-01	



QUICK REFERENCE TABLE FOR PILE-SUPPORTED FACILITIES CROSSING DISTRICT WORKS

NOTE: For pile-supported facilities crossing canals located in Collier County (Big Cypress Basin) please refer to the “Big Cypress Basin” section of this manual for information and criteria.

	DADE COUNTY AREA (except C-4 and C-6)			C-4	C-6 & SALINE (tidal) REACHES OF CANALS	EVERGLADES AGRICULTUR AL AREA	KISSIMMEE RIVER BASIN		C-51	ALL OTHER CANALS
	A	See Footnote B	C			See Footnote D	See Footnote E	F		
<b>Minimum Center Span (Clear Opening)</b>	25'	25'	25'	25'	Determined on a case by case basis	29'	40'	25'	29'	25'
<b>Minimum Approach Bents (Measured on Centers)</b>	20'	20'	20'	20'	Determined on a case by case basis	20'	20'	20'	20'	20'
<b>Minimum Low Member Elevation</b>	See Footnote 1 2	See Footnote 1	See Footnote	See Footnote 4	Determined on a case by case basis.	See Footnote 2	See Footnote 3 1	See Footnote	See Footnote 1	See Footnote 1

**FOOTNOTES:**

**A** applies to those canals with only one Water Control Structure.

**B** applies to those canals with two Water Control Structures – upstream of first Structure or east of U.S. #1.

**C** applies to those canals with two Water Control Structures – upstream of second Structure or west of U.S. #1.

**D** applies to the Borrow Canals for L-10, L-12, L-14, L-16, L-18, L-19, L-20, L-21, L-23, L-24 and L-25.

**E** applies to Canals C-35, C-36, C-37 and C-38.

**F** applies to Canals C-29, C-29A, C-29B, C-30, C-31, C-32B, C-32C, C-32D, C-32F and C-32G.

- 1 2' above design water surface elevation or 6' above seasonal high optimum water control elevation, whichever produces the higher low member elevation.
- 2 2' above design water surface elevation or 4.5' above seasonal high optimum water control elevation, whichever produces the higher low member elevation.
- 3 12' above seasonal high optimum water control elevation.
- 4 9' MSL/NGVD from the SCL Railroad easterly to the east side of Red Road.  
13' MSL/NGVD from the east side of Red Road easterly to LeJeune Road.

# **SOUTH FLORIDA WATER MANAGEMENT DISTRICT**

## **RIGHT OF WAY PLANTING CHOICES**



Due to the South Florida Water Management District's interest in eliminating invasive exotic or otherwise objectionable plant species from its rights of way, and in an effort to expand the use of native species in beautification or landscaping projects on the various rights of way when such projects can be accommodated without conflicting with District operation and maintenance programs or other efforts, the District has compiled the attached listing of desirable native species. This list was created, and will be used, as a guide in determining what types of vegetation may be used within the various rights of way of the District when making Application for a Right of Way Occupancy Permit. It should not be considered all inclusive, but rather as a guide in selecting species for beautification proposals. The District staff will consider requests to use native species not included on this list on a case by case basis, particularly those native species which are drought tolerant or are part of a planting scheme employing sound *Xeriscape* principles. (For more information on *Xeriscape*, you are encouraged to contact the District's Office of Government and Public Affairs.)

It should be understood that not all the plant species that appear on the attached list should be considered native to all areas throughout the District. Therefore, *the District reserves the right to specify which species may be used in a particular area.* The Applicant should also be aware that while the list contains a section on trees, the planting of trees on the District's rights of way by private individuals will not be permitted.

## DEFINITIONS AND KEY TO ABBREVIATIONS

**EXAMPLE:**

COMMON NAME Scientific name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIREMENT	SOIL REQUIREMENT	GROWTH RATE	FEATURES AND USES	CLIMAT E ZONE
<b>GROUNDCOVERS</b>								
Beach Sunflower <i>Helianthus debilis</i>	U	6 – 12”	H	H, M	S, WD	F	FL, A	S, SC

**Planting Zone**                      Relative elevation where optimum growth is expected. Closely related to moisture preference.

- U** = Upland                      Elevated and generally drier soils; soil not water saturated. Typical of most residential lots. Upper canal bank slope and canal overbank.
- T** = Transitional              Lower elevations where soil tends to be wetter; sometimes saturated. Lower portions of canal bank slope.
- W** = Wetland                    Littoral shelf or intertidal areas where soil is periodically inundated. Saturated soil conditions. Lowest portion of canal slope and waterward.

**Average Height**                      Height of average specimen expressed in inches or feet.

**Salt Tolerance**                      Ability of plant to withstand exposure to salt.

- H** = High                          High or exceptional tolerance to salt. Seaside/shoreline conditions.
- M** = Moderate                  Moderate tolerance to salt exposure. Some seaward protection required.
- L** = Low                            Low tolerance to salt exposure.

**Light Requirement** Light conditions conducive to optimum growth.

- H = High**                          Full sun.
- M = Moderate**                  Partial sun. Shaded during part of the day.
- L = Low**                            Low light levels. Shade to deep shade during most of the day.

## **DEFINITIONS AND KEY TO ABBREVIATIONS (continued)**

### **Soil Requirement**

General soil characteristics conducive to optimum growth.

**A** = Acidic

**W** = Wide range of soil types

**WD** = Well -Drained

**S** = Sandy

**M** = Moist

**MF** = Moderately Fertile

**FD** =

Flooded/Saturated

### **Growth Rate**

Relative growth rate under average or generally favorable conditions of soil, light, moisture, etc.

**F** = Fast

**M** = Moderate

**S** = Slow

### **Features & Uses**

Features of notable interest of uses in landscaping.

**FL** = Flowers

**A** = Accent

**FO** = Foliage

**SP** = Specimen

**BK** = Bark

**SH** = Shade Tree

**FR** = Fruits

**SCR** = Screen

**WV** = Wildlife Value

**HG** = Hedge

### **Climate Zone**

Region of state where climate will support long-term survival and growth of plant; often corresponds to a natural range of plant. Closely related to resistance to cold temperatures.

**All** = All portions of the District. From Orlando area south, through the Florida Keys.

**S** = Southern Portions of the state. From Lake Okeechobee area southward.

**SC** = Southern coastal areas. Same approximate latitude as Lake Okeechobee southward.

**C** = Coastal areas.

## NATIVE GROWDCOVERS

COMMON NAME Scientific Name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIRED	SOIL REQUIRED	GROWTH RATE	FEATURES & USES	CLIMATE ZONE
<b>WILDFLOWERS</b>								
<b>Asters</b> Aster spp.	U, T	VARIES	L, M	H, M	W	M, F	FL, WV	ALL
<b>Beach Verbena</b> Verbena maritima	U	6 - 12"	H	H, M	S, WD	F	FL	S, SC
<b>Beach Sunflower</b> Helianthus debilis	U	6 - 12"	H	H, M	S, WD	F	FL, A	S, SC
<b>Black-Eyed Susan</b> Rudbeckia hirta	U	2'	L	H, M	W	F	FL	ALL
<b>Blanket Flower</b> Gaillardia pulchella	U	6 - 12"	M, H	H	S	F	FL	ALL
<b>Blazing Star</b> Liatris spp.	U	2 - 3'	L	H	S, WD	M	FL, WV	ALL
<b>Blue-Eyed Grass</b> Sisyrinchium atlanticum	U, T	1'	L	H, M	M, MF	M	FL	ALL
<b>Blue Mistflower</b> Conoclinium coelestinum	U, T	1 - 2'	L	H, M	M, MF	F	FL, WV	ALL
<b>Blue Porterweed</b> Stachytarpheta jamaicensis	U	6 - 12"	M	H, M	W	M	FL, WV	S, SC
<b>Blue Spiderwort</b> Tradescantia ohiensis	U	1 - 2'	L	H, M	MF, S	M, F	FO, FL	ALL
<b>Goldenrods</b> Solidago spp.	U	2 - 4'	M	H, M	W	F	FL, WV	ALL
<b>Horsemint</b> Monarda punctata	U	2 - 3'	M	H, M	WD	F	FL, WV	ALL
<b>Lantana, Pineland</b> Lantana depressa	U	1'	M	H, M	W	F	FL, WV	S, SC

COMMON NAME Scientific Name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIRED	SOIL REQUIRED	GROWTH RATE	FEATURES & USES	CLIMATE ZONE
<b>WILDFLOWERS (continued)</b>								
<b>Partridge Pea</b> <i>Chamaecrista fasciculata</i>	U	2'	M, H	H, M	S, WD	F	FL	ALL
<b>Pencil Flower</b> <i>Stylosanthes hamata</i>	U	1 - 6"	H	H, M	WD, W	F	FL, FO	ALL
<b>Pineland Heliotrope</b> <i>Heliotropium polyphyllum</i>	U	1 - 2'	M	H, M	W	M	FL	S, SC
<b>Pluchea</b> <i>Pluchea</i> spp.	U, T	1 - 2'	M, H	H, M	W	M	FL	ALL
<b>Sage (Blue, Tropical, Lyre-Leaf)</b> <i>Salvia</i> spp.	U	1 - 3'	M, H	H, M	WD	M, F	FL, WV	ALL
<b>Scorpion Tail</b> <i>Heliotropium angiospermum</i>	U	2 - 3'	M	H, M	W	M, F	FL, WV	ALL
<b>Twinflower</b> <i>Dyschoriste oblongifolia</i>	U	1'	L	H, M	W, WD	F	FL	ALL
<b>Tickseed</b> <i>Coreopsis leavenworthii</i>	U, T	1 - 2'	L	H, M	M, MF	M, F	FL	ALL
<b>Yellowtop</b> <i>Flaveria linearis</i>	U, T	1'	M, H	H	W	M	FL	ALL (C)
<b>GRASSES</b>								
<b>Bluestem</b> <i>Schizachyrium</i> spp.	U	1-2'	M	H, M	S, W	M	FO	ALL
<b>Broom Sedge</b> <i>Andropogon</i> spp.	T, U	2 - 4'	L, M	H, M	W, M	M, F	A, FO	ALL
<b>Cordgrass (Smooth)</b> <i>Spartina alterniflora</i>	W, S	2 - 4'	H	H	FD	F	FO, WV	ALL
<b>Cordgrass (Sand)</b> <i>Spartina bakeri</i>	T, U	2 - 3'	L, M	H	S	M	A, FO, WV	ALL

COMMON NAME Scientific Name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIRED	SOIL REQUIRED	GROWTH RATE	FEATURES & USES	CLIMATE ZONE
<b>GRASSES</b> (continued)								
<b>Eastern Gamagrass</b> Tripsacum dactyloides	T, U	2 - 4'	L, M	H, M	M, MF	M	FO, WV, A	ALL
<b>Florida Gamagrass</b> Tripsacum floridanum	U	1 - 2'	L, M	H, M	W	M	FO, WV, A	S, SC
<b>Muhly Grass</b> Muhlenbergia capillaris	U, T	2'	M	H	S	M	A, FO, FL	ALL
<b>Purple Lovegrass</b> Eragrostis spectabilis	U	1- 2'	M	H, M	S	M	FL	ALL
<b>Saltmeadow Cordgrass</b> Spartina patens	T	2'	H	H, M	S, M	M	FO, WV	ALL
<b>Seashore Dropseed</b> Sporobolus virginicus	T	1'	H	H, M	S, M	M	FO	ALL
<b>Seashore Paspalum</b> Paspalum vaginatum	T	6 - 12"	H	H, M	S, M	M	FO	ALL
<b>Wiregrass</b> Aristida beyrichiana	U	1'	L	H, M	W	M	FO	ALL
<b>FERNS</b>								
<b>Fern, Leather</b> Achrostichum spp.	W, T	2 - 5'	M, H	W	M, MF, FD	F	A	S, SC
<b>Fern, Shield</b> Thelypteris spp.	T, U	1- 3'	L	M, L	M, MF	S, M	A, FO	ALL
<b>Fern, Swamp</b> Blechnum serrulatum	T, U	1 - 3'	L	M, L	M, MF	M, F	A, FO	ALL
<b>VINES</b>								
<b>Coral Honeysuckle</b> Lonicera sempervirens	U	Vine	M	H, M	MF	M	FL, WV	ALL

COMMON NAME Scientific Name	PLANTING ZONE	AVERAGE HEIGHT	SALT TOLERANCE	LIGHT REQUIRED	SOIL REQUIRED	GROWTH RATE	FEATURES & USES	CLIMATE ZONE
<i>Corky-Stemmed Passionflower</i> Passiflora suberosa	U	Vine	M, H	W	W	M, F	WV	S, SC
<b>Mimosa Vine</b> Mimosa strigillosa	U, T	1 - 6"	M	H, M	W	M, F	FL	ALL
<b>Railroad Vine</b> Ipomea pes-capre	U	1'	H	H	S, WD	F	FL, FO	SC, S
<b>HERBACEOUS</b>								
<b>Matchweed</b> Phyla nodiflora	U, T	1 - 6"	M, H	H, M	W	M, S	FO	ALL
<b>Peperomia</b> Peperomia spp.	U	6"	M	M, L	WD, MF	S, M	FO	ALL
<b>Alligator Lily</b> <b>Hymenocallis palmeri</b>	W, T	2'	M	W	FD, M, MF	M	A, FO	ALL
<b>Spider Lily</b> <b>Hymenocallis latifolia</b>	U	2'	M, H	H, M	WD, S	M, F	A, FO	ALL
<b>String, Swamp Lily</b> <b>Crinum americanum</b>	W, T	2'	M	W	M, F, FD	M	FO, FL	ALL
<b>Wild Petunia</b> Ruellia caroliniensis	U	6"	M	W	W	M	FL	ALL
<b>WOODY</b>								
<b>Golden Creeper</b> Ernodea littoralis	U	1'	H	H	S, WD	M	FO	SC, S
<b>Gopher Apple</b> Licania michauxii	U	6 - 12"	M, H	H, M	S, WD	M	FR, WV	ALL
<b>Snowberry, Pineland</b> Chiococca pinetorum	U	2'	M	H, M	MF, S, WD	M	FR	SC, S
<b>Quail Berry</b> Crossopetalum ilicifolium	U	1 - 6"	M	H, M	MF	S	FO, WV	S, SC

<b>COMMON NAME</b> Scientific Name	<b>PLANTING ZONE</b>	<b>AVERAGE HEIGHT</b>	<b>SALT TOLERANCE</b>	<b>LIGHT REQUIRED</b>	<b>SOIL REQUIRED</b>	<b>GROWTH RATE</b>	<b>FEATURES &amp; USES</b>	<b>CLIMATE ZONE</b>
<b>Sea Oxeye Daisy</b> <i>Borrichia frutescens</i>	T, U	2'	H	H, M	W	M, F	FL, FO	C
<b>St. John's Wort</b> <i>Hypericum spp.</i>	T, U	2'	L	H, M	M, S, A	M	FL	ALL
<b>Yaupon Holly, Dwarf</b> <i>Ilex vomitoria cv. "Schellings"</i>	U	1 - 2'	M, H	H, M	W	S, M	FO, A	ALL
<b><u>NATIVE SHRUBS</u></b>								
<b>Beauty Berry</b> <i>Callicarpa americana</i>	U	4 - 6'	M	W	W	F	FR, WV	ALL
<b>Buttonbush</b> <i>Cephalanthus occidentalis</i>	T, W	4 - 6'	L	H, M	M, MF, FD	F	FL, WV	ALL
<b>Cocoplum</b> <i>Chrysobalanus icaco</i>	T, U	5 - 8'	M, H	H, M	W	M	FO, WV HG, SCR	S, SC
<b>Cocoplum (horizontal)</b> <i>Chrysobalanus icaco</i> var. <i>icaco</i> cv. "horizontal"	U, T	1- 3'	M	H, M	W	S, M	FO, WV, FR	SC, S
<b>Firebush</b> <i>Hamelia patens</i>	U	4 - 8'	M	W	MF	F	FO, FL WV, SP	S, SC
<b>Florida Boxwood</b> <i>Schaefferia frutescens</i>	U	4 - 8'	M	H, M	MF, WD	M, S	FO	S, SC
<b>Florida Privet</b> <i>Forestiera segregata</i>	U	5 - 8'	M	H, M	W	M	FR, WV SCR, HG	ALL
<b>Holly, Yaupon</b> <i>Ilex vomitoria</i>	U	5 - 8'	M	H, M	W	M	FR, WV HG	ALL

<b>COMMON NAME</b> Scientific Name	<b>PLANTING ZONE</b>	<b>AVERAGE HEIGHT</b>	<b>SALT TOLERANCE</b>	<b>LIGHT REQUIRED</b>	<b>SOIL REQUIRED</b>	<b>GROWTH RATE</b>	<b>FEATURES &amp; USES</b>	<b>CLIMATE ZONE</b>
<b>SHRUBS (continued)</b>								
<b>Jamaican Caper</b> Capparis cynophallophora	U	6 - 10'	M	H, M	WD, MF	M	FO, FL SP	S, SC
<b>Lantana, Native White</b> Lantana involucrata	U	3 - 5'	M	H, M	W	F	FL, FR WV	S, SC
<b>Maidenbush</b> Savia bahamensis	U	4 - 6'	M	H, M	MF	M, S	FO	S, SC
<b>Marlberry</b> Ardisia escallonioides	U	5 - 8'	M	W	MF	M	FL, FR WV	S, SC
<b>Myrsine, Rapanea</b> Myrsine guianensis	U, T	6 - 10'	M, H	W	W	H	FO, HG	S, SC
<b>Randia, White Indigo Berry</b> Randia aculeata	U	3 - 5'	M, H	W	W	M, S	FO, HG	ALL
<b>Saw Palmetto</b> Serenoa repens	U	2 - 5'	M, H	H, M	W	S	FO, A, WV	ALL
<b>Silver Buttonwood</b> Conocarpus erectus var. sericeus	U, T	6 - 12'	M, H	H, M	M	M	FO, A HG	S, SC
<b>Saltbush, Sea Myrtle</b> Baccharis halimifolia	U, T	4 - 8'	M, H	H, M	W	F	FO	ALL
<b>Spicewood</b> Calyptranthes pallens	U	4 - 6'	L	H, M	M, MF, WD	M	FO, WV	S, SC
<b>Stopper, Red</b> Eugenia rhombea	U	4 - 6'	M	H, M	MF	M	FO, WV	S, SC
<b>Stopper, Simpson</b> Myrcianthes fragrans	U	5 - 10'	M	W	W	M	FR, B, WV, SCR, HG	S, SC



<b>COMMON NAME</b> Scientific Name	<b>PLANTING ZONE</b>	<b>AVERAGE HEIGHT</b>	<b>SALT TOLERANCE</b>	<b>LIGHT REQUIRED</b>	<b>SOIL REQUIRED</b>	<b>GROWTH RATE</b>	<b>FEATURES &amp; USES</b>	<b>CLIMATE ZONE</b>
<b><u>NATIVE TREES</u></b>								
<b>Bahama Strongback</b> Bourreria ovata	U	15 - 25'	M	M, H	MF, WD	M, F	FL, FR, WD	SC
<b>Black Ironwood</b> Krugiodendron ferreum	U	15 - 25'	M	M, H	MF, WD	S, M	A, FO, WV	S, SC
<b>Blolly</b> Guapira discolor	U	15 - 20'	M, H	M, H	MF, WD	M	FO, FR, WV	S, SC
<b>Buttonwood, Green</b> Conocarpus erectus	U, T	25 - 35'	M, H	M, H	M, W	M, F	FR, SCR	S, SC
<b>Cabbage Palm</b> Sabal palmetto	U, T	30 - 40'+	M, H	H, M	W	M	A, FO, WV	ALL
<b>Cinnamon Bark</b> Canella winterana	U	15 - 20'	M	M, H	MF, WD	M	A, FO, FR	S, SC
<b>Crabwood</b> Ateramnus lucidus	U	15 - 20'	M	H, M	MF	M	A, FO	S, SC
<b>Cypress (Bald, Pond)</b> Taxodium spp.	W, T	35 - 60'+	L	H	FD, M, MF	M	FO	ALL
<b>Dahoon Holly</b> Ilex cassine	T, U	12 - 20'	L	H, M	M	M	FR, WV	ALL
<b>Fiddlewood</b> Citharexylum fruticosum	U	15 - 20'	M	H, M	WD	M, F	FO, FR, FL, WV	ALL
<b>Geiger Tree</b> Cordia sebestena	U	15 - 20'	M, H	H, M	MF, WD	M, F	FL, FO	SC
<b>Gumbo Limbo</b> Bursera simaruba	U	25 - 40'	M	H, M	WD	F	SH, BK, SP	S, SC

<b>COMMON NAME</b> Scientific Name	<b>PLANTING ZONE</b>	<b>AVERAGE HEIGHT</b>	<b>SALT TOLERANCE</b>	<b>LIGHT REQUIRED</b>	<b>SOIL REQUIRED</b>	<b>GROWTH RATE</b>	<b>FEATURES &amp; USES</b>	<b>CLIMATE ZONE</b>
<b>Inkwood</b> Exothea paniculata	U	20 - 30'	M	H, M	MF, WD	M	FO	S, SC
<b>Krug's Holly</b> Ilex krugiana	U	15 - 25'	M	W	W	M	FO, BK, WV	S, SC
<b>Lancewood</b> Nectandra coriacea	U	20 - 30'	M	H, M	MF, WD	M	FR, WV	S, SC
<b>Laurel Oak</b> Quercus laurifolia	T, U	30 - 50'+	L	H, M	M	M, F	SH, WV	ALL
<b>Live Oak</b> Quercus virginiana	U	30 - 50'	M, H	H, M	W	M	SH, BK, WV	ALL
<b>Loblolly Bay</b> Gordonia lasianthus	T, U	25 - 40'	L	H, M	M, MF	M	SP, FL	ALL
<b>Magnolia, Southern</b> Magnolia grandiflora	U	35 - 50'+	M	H, M	MF, A	M	FL, FO	ALL
<b>Mahogany</b> Swietenia mahogani	U	25 - 35'	M	H	MF	M	SH	S, SC
<b>Mangrove, Red</b> Rhizophora mangle	W	15 - 25	H	H, M	FD	M	FO, WV	ALL (C)
<b>Mangrove, Black</b> Avicennia germinans	W	15 - 30'	H	H, M	FD	M	FO, WV, AC	ALL (C)
<b>Mangrove, White</b> Laguncularia racemosa	W	20 - 30'	H	H, M	M, FD	F	WV	SC
<b>Mastic Tree</b> Mastichodendron foetidissimum	U	30 - 45'	M	H, M	MF, WD	M	FR, WV, SH	S, SC
<b>Paradise Tree</b> Simarouba glauca	U	25 - 35'	M	H, M	MF, WD	M	SH, FO, FR, WV	S, SC

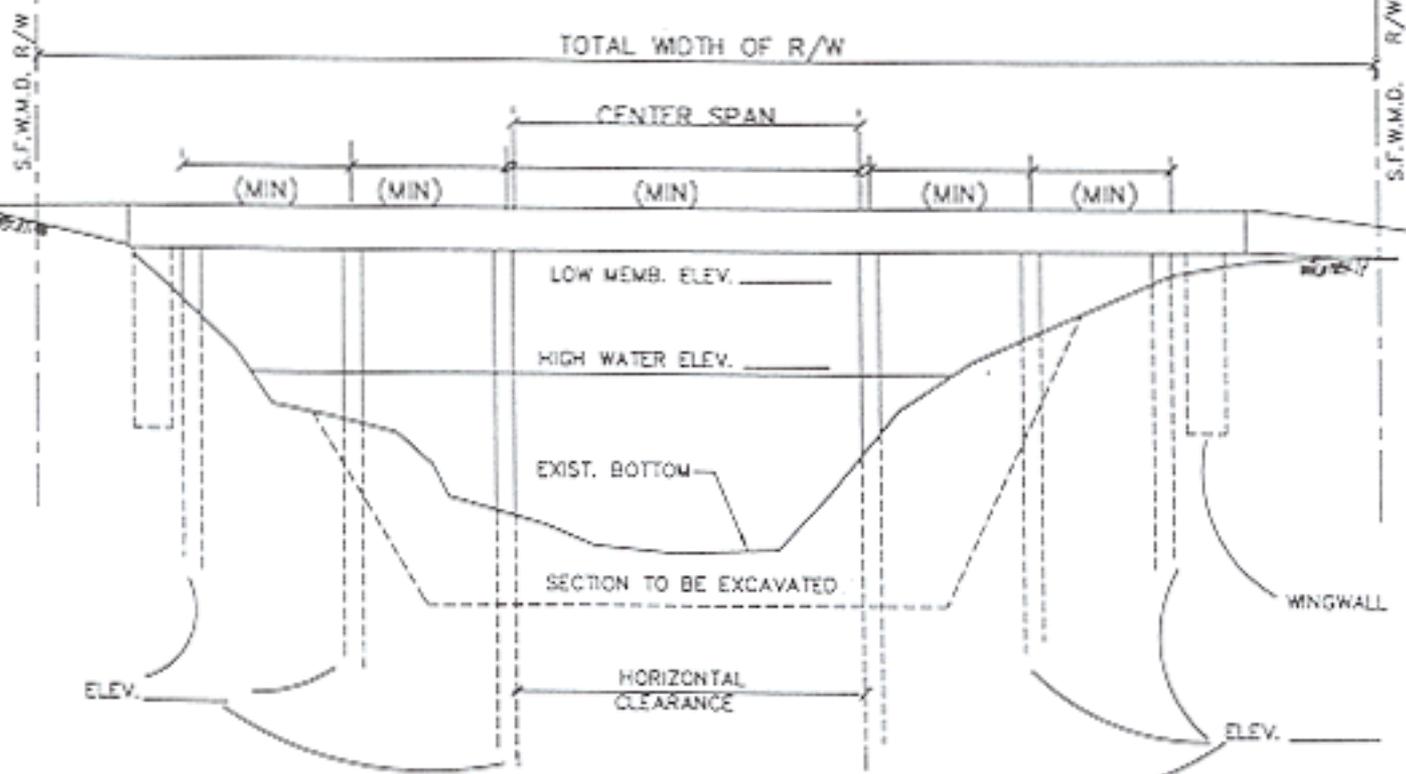
<b>COMMON NAME</b> Scientific Name	<b>PLANTING ZONE</b>	<b>AVERAGE HEIGHT</b>	<b>SALT TOLERANCE</b>	<b>LIGHT REQUIRED</b>	<b>SOIL REQUIRED</b>	<b>GROWTH RATE</b>	<b>FEATURES &amp; USES</b>	<b>CLIMATE ZONE</b>
TREES (continued)								
<b>Paurotis Palm</b> Acoelorrhaphe wrightii	U, T	15 - 20'	M	H, M	M, MF, FD	M, S	AC, FO	ALL (C)
<b>Persimmon</b> Diospyros virginiana	U	20 - 30'	L	H, M	W	M	FR, WV	ALL
<b>Pigeon Plum</b> Coccoloba diversifolia	U	25 - 30'	M	W	MF	M	FO, SP, WV	S, SC
<b>Pitch Apple</b> Clusia rosea	U	20 - 30'	M, H	H	W	M	FL, FO	S, SC
<b>Pond Apple</b> Annona glabra	W, T	12 - 20'	M	H, M	M, MF, FD	M, F	FO, FR, WV	S, SC
<b>Pop Ash</b> Fraxinus caroliniana	T, U	15 - 25'	L	W	M, MF, FD	M	FO, WV	ALL
<b>Red Bay</b> Persea borbonia	U, T	20 - 35'	M	H, M	W	M	WV	ALL
<b>Red Maple</b> Acer rubrum	T, U	35 - 45'	L	H	M, MF, FD	F	FO, SH, WV	ALL
<b>Red Mulberry</b> Morus rubra	U	25 - 35'	M	H, M	MF	F	FO, SH, WV	ALL
<b>Redberry Stopper</b> Eugenia confusa	U	15 - 25'	M	H, M	MF, WD	M	FO, WV	S, SC
<b>Royal Palm</b> Roystonea elata	U	50 - 60'+	M	H, M	M, MF	M	SP, FO	S, SC
<b>Satinleaf</b> Chrysophyllum oliviforme	U	20 - 30'	M	H, M	M, MF	M	FO, AC, WV	S, SC

<b>COMMON NAME</b> Scientific Name	<b>PLANTING ZONE</b>	<b>AVERAGE HEIGHT</b>	<b>SALT TOLERANCE</b>	<b>LIGHT REQUIRED</b>	<b>SOIL REQUIRED</b>	<b>GROWTH RATE</b>	<b>FEATURES &amp; USES</b>	<b>CLIMATE ZONE</b>
TREES (continued)								
<b>Seagrape</b> <i>Coccoloba uvifera</i>	U	20 - 30'	H	H, M	W	M	FO, BK, WV	S, SC
<b>Slash Pine</b> <i>Pinus elliotii</i> , var. <i>densa</i>	U	40 - 50'	M	H	W	M	FO, AC, WV	ALL
<b>Southern Red Cedar</b> <i>Juniperus silicicola</i>	U	25 - 30'	M, H	H	W	M	FO, SCR, WV	ALL
<b>Sugarberry</b> <i>Celtis laevigata</i>	U, T	25 - 35'+	L, M	H, M	M, MF	M	SH, WV	ALL
<b>Sweetbay Magnolia</b> <i>Magnolia virginiana</i>	T, U	25 - 35'	M	H, M	M, MF	M	SH, FL, FR, WV	ALL
<b>Thatch Palm</b> <i>Thrinax radiata</i> , <i>T. morrisii</i>	U	12 - 20'	M	H,M	MF, WD	M	FO, AC, FR, WV	S, SC
<b>West Indian Cherry</b> <i>Prunus myrtifolia</i>	U	20 - 35'	M	W	MF, WD	M	FO, SH, FR, WV	S, SC
<b>Wild Tamarind</b> <i>Lysiloma latisiliquum</i>	U	30 - 40'+	M	M, H	MF, WD	F	FO, FL, SH	S, SC
<b>Willow Busic</b> <i>Diphonlis salicifolia</i>	U	20 - 30'	M	H, M	W	M	FO, FR, WV	S, SC
<b>Winged Elm</b> <i>Ulmus alata</i>	U	20 - 35'	M	H, M	W	F	FO, SH, WV	ALL

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
PILE-SUPPORTED UTILITY OR ROADWAY BRIDGE  
CROSSING OVER A CANAL**

A-1

**SAMPLE ILLUSTRATION**



NOTE:

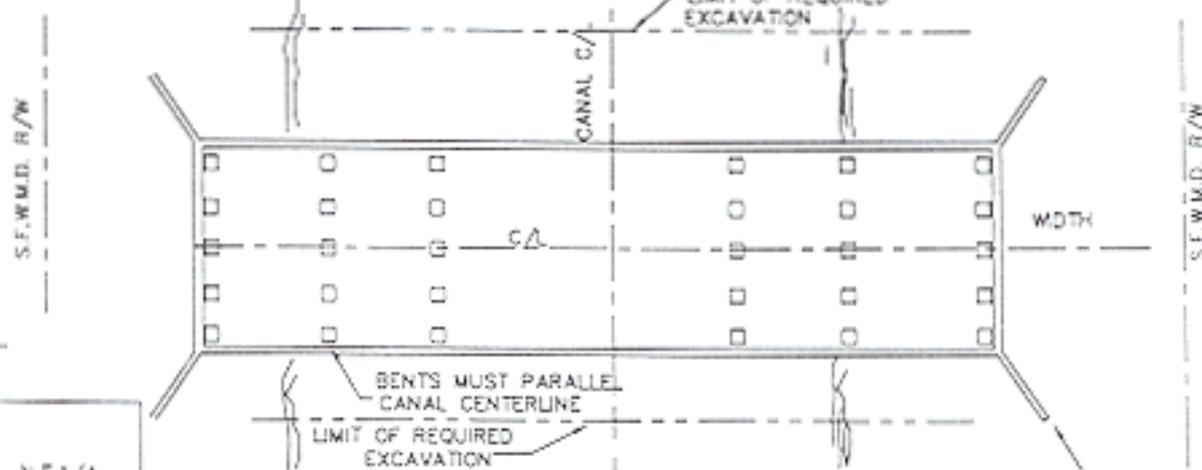
CANAL SECTION, LIMITS OF EXCAVATION & LENGTH OF TRANSITION TO EXISTING SECTION WILL BE FURNISHED TO APPLICANT WHEN APPLICABLE.

SECTION

NOTE:

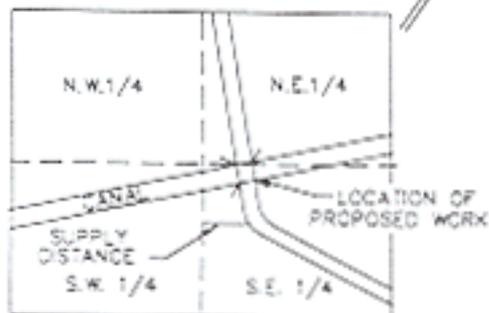
ALL ELEVATIONS REFER TO MEAN SEA LEVEL.

SEC \_\_\_\_\_  
TWP. \_\_\_\_\_  
RANGE \_\_\_\_\_  
COUNTY \_\_\_\_\_



PLAN

WINGWALL (DETAILS SHOWN ON SEPARATE SHEET)



VACINITY PLAN

DRAWING TO ACCOMPANY APPLICATION FOR CONSTRUCTION OF A \_\_\_\_\_ FT. BRIDGE OVER \_\_\_\_\_ CANAL.  
APPLICANTS NAME: \_\_\_\_\_

DATE \_\_\_\_\_ SIGNED: \_\_\_\_\_

NOTE:

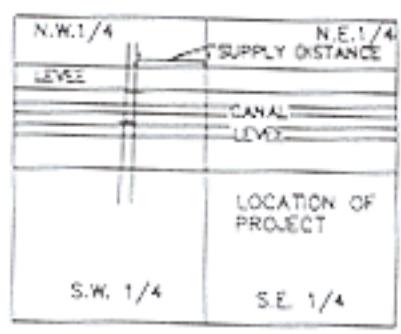
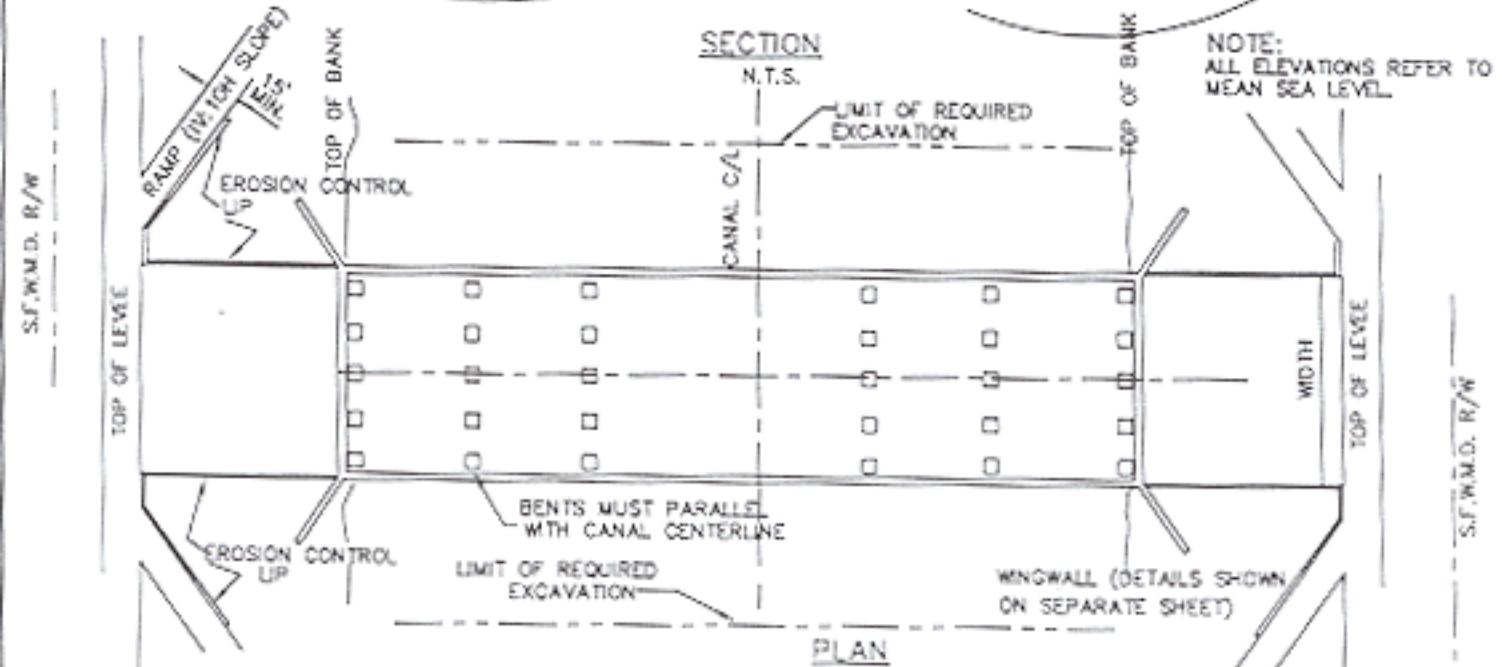
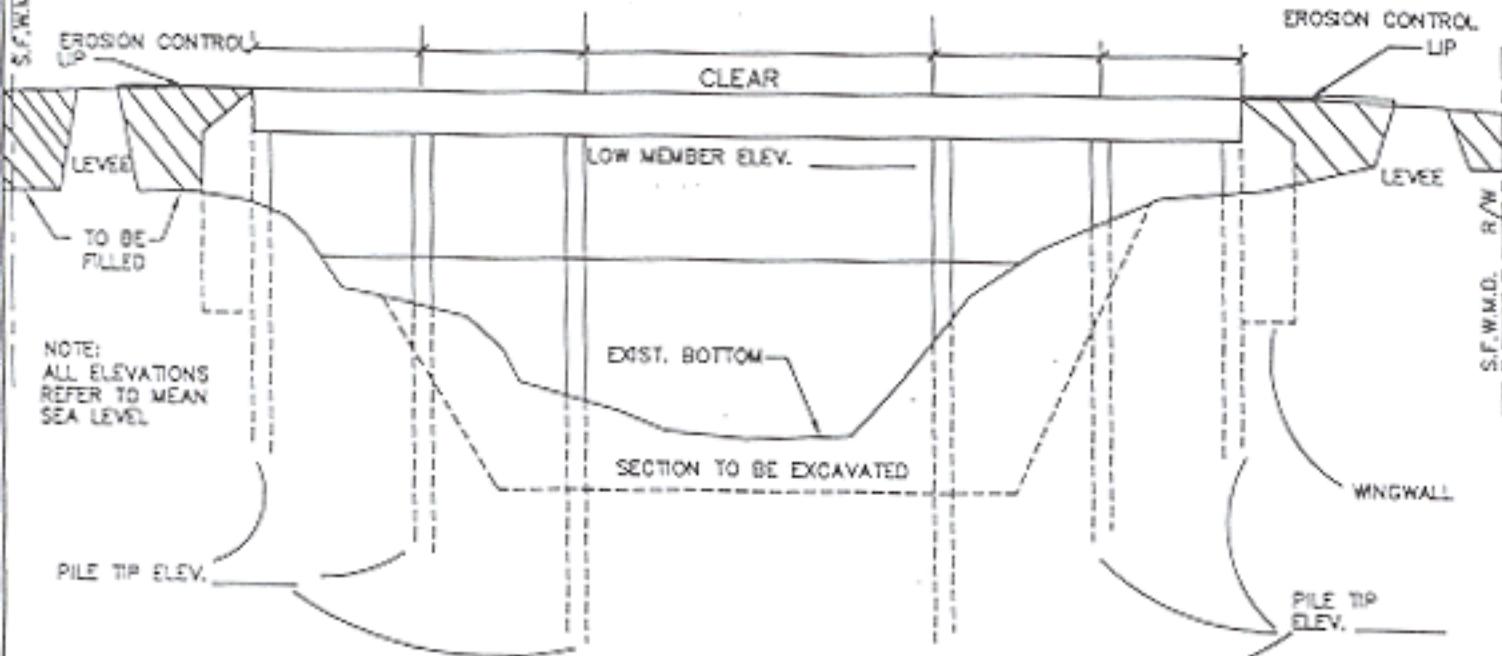
1. DRAWING MUST SHOW THE EXISTING CANAL SECTION AS ESTABLISHED FROM A RECENTLY TAKEN CROSS SECTION OF THE CANAL.
2. SECTION TO BE EXCAVATED MUST BE SHOWN ON SECTION VIEW AND LIMITS OF EXCAVATION MUST BE SHOWN ON PLAN VIEW.
3. SHOW LOCATION OF PILE BENTS AND SIZE OF PILES. (ALL PILE BENTS MUST BE PARALLEL TO THE CENTERLINE OF THE CANAL). INDICATE PROPOSED PILE TIP ELEVATIONS.
4. INDICATE THE PILE SPACING (SEE CRITERIA MANUAL FOR MINIMUM CRITERIA) AND BRIDGE LOW MEMBER ELEVATION AT THE LOWEST POINT OF EACH SPAN (IF DIFFERENT).
5. WHERE BRIDGE CROSSINGS SEVER DISTRICT MAINTENANCE ACCESS ON CANAL MAINTENANCE BERMS, RAMPS ARE REQ'D. RAMPS MUST BE A MINIMUM OF 15 FEET WIDE AND HAVE A MAXIMUM SLOPE OF 1 VERT. TO 10 HORIZONTAL.
6. SHOW ANY PROPOSED ATTACHMENTS TO THE BRIDGE (SUCH AS UTILITY LINES).

INSTRUCTIONS FOR COMPLETING DRAWING:

1. 8 1/2" X 11" SKETCH(S) ARE REQ'D.
2. PLAN AND PROFILE VIEWS ARE REQUIRED AND MUST DEPICT THE ITEMS IN THE NOTES SECTION (ABOVE).
3. PROVIDE A LOCATION SKETCH WHICH TIES IN THE PROPOSED BRIDGE TO A SECTION LINE OR KNOWN LANDMARK.
4. INSERT THE INDICATED INFORMATION IN THE BLOCK AT THE LOWER RIGHT CORNER OF THE DRAWING.
5. VEHICULAR BRIDGES MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENG. REGISTERED IN THE STATE OF FLA.

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
 PILE - SUPPORTED UTILITY OR ROADWAY BRIDGE  
 CROSSING OVER A LEVEE**

**A-2  
 SAMPLE ILLUSTRATION**



VACINITY PLAN

**NOTE:**  
 INSTRUCTIONS FOR COMPLETING DRAWING AND NOTES ON BACK.

DRAWING TO ACCOMPANY APPLICATION NO. \_\_\_\_\_  
 FOR CONSTRUCTION OF A \_\_\_\_\_ FT. BRIDGE OVER LEVEE \_\_\_\_\_  
 CROSSING: \_\_\_\_\_  
 APPLICANTS NAME: \_\_\_\_\_  
 DATE \_\_\_\_\_ SIGNED: \_\_\_\_\_

NOTE:

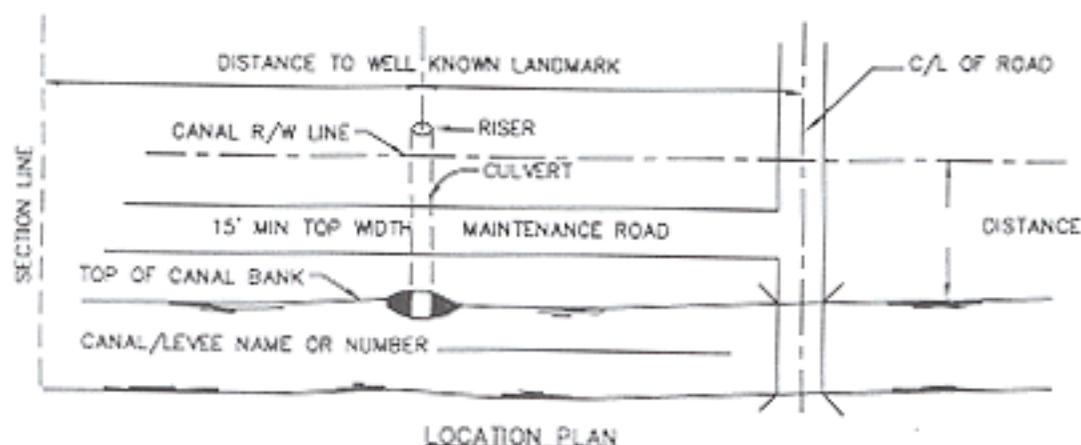
1. DRAWING MUST SHOW THE EXISTING CANAL SECTION AS ESTABLISHED FROM A RECENTLY TAKEN CROSS SECTION OF THE CANAL.
2. SECTION TO BE EXCAVATED MUST BE SHOWN ON SECTION VIEW AND LIMITS OF EXCAVATION MUST BE SHOWN ON PLAN VIEW.
3. SHOW LOCATION OF PILE BENTS AND SIZE OF PILES. (ALL PILE BENTS MUST BE PARALLEL TO THE CENTERLINE OF THE CANAL). INDICATE PROPOSED PILE TIP ELEVATIONS.
4. INDICATE THE PILE SPACING (SEE CRITERIA MANUAL FOR MINIMUM CRITERIA) AND BRIDGE LOW MEMBER ELEVATION AT THE LOWEST POINT OF EACH SPAN (IF DIFFERENT).
5. WHERE BRIDGE CROSSINGS SEVER DISTRICT MAINTENANCE ACCESS ON CANAL MAINTENANCE BERMS, RAMPS ARE REQ'D. RAMPS MUST BE A MINIMUM OF 15 FEET WIDE AND HAVE A MAXIMUM SLOPE OF 1 VERT. TO 10 HORIZONTAL.
6. SHOW ANY PROPOSED ATTACHMENTS TO THE BRIDGE (SUCH AS UTILITY LINES).

INSTRUCTIONS FOR COMPLETING DRAWING:

1. 8 1/2" X 11" SKETCH(S) ARE REQ'D.
2. PLAN AND PROFILE VIEWS ARE REQUIRED AND MUST DEPICT THE ITEMS IN THE NOTES SECTION (ABOVE).
3. PROVIDE A LOCATION SKETCH WHICH TIES IN THE PROPOSED BRIDGE TO A SECTION LINE OR KNOWN LANDMARK.
4. INSERT THE INDICATED INFORMATION IN THE BLOCK AT THE LOWER RIGHT CORNER OF THE DRAWING.
5. VEHICULAR BRIDGES MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENG. REGISTERED IN THE STATE OF FLA.

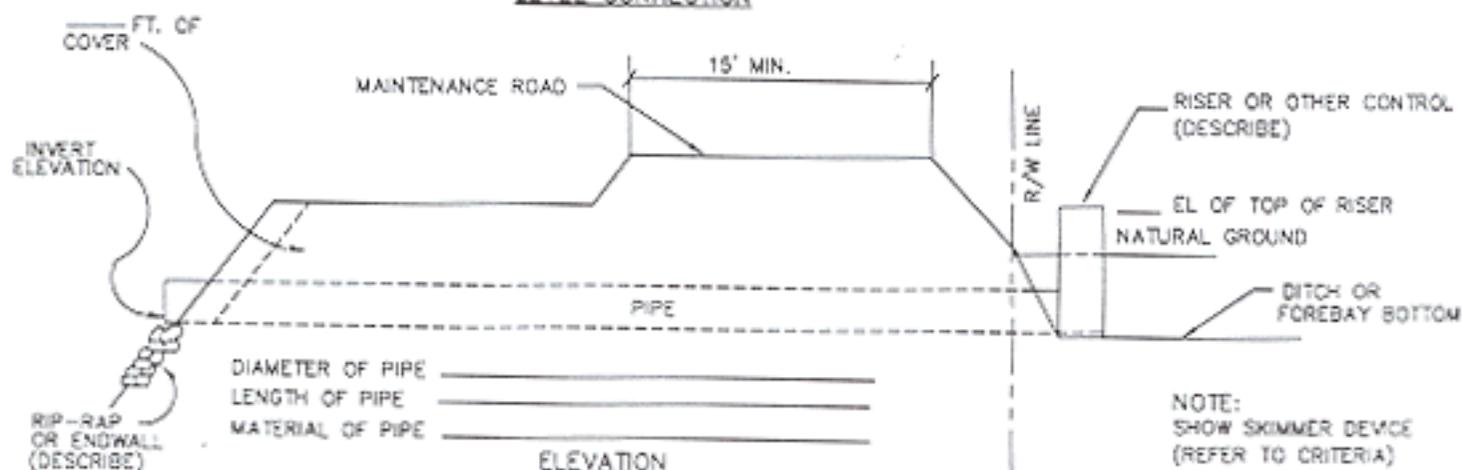
# SOUTH FLORIDA WATER MANAGEMENT DISTRICT SAMPLE CULVERT INSTALLATION ILLUSTRATION

B-1

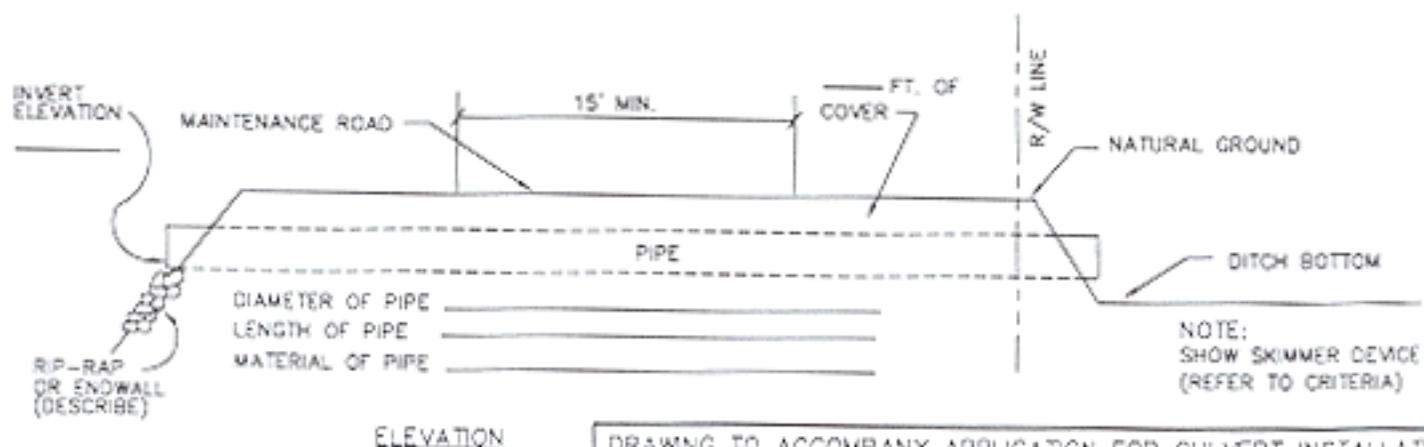


SECTION \_\_\_\_\_ TOWNSHIP \_\_\_\_\_ RANGE \_\_\_\_\_

## LEVEE CONNECTION



## CANAL CONNECTION



DRAWING TO ACCOMPANY APPLICATION FOR CULVERT INSTALLATION

APPLICANTS NAME: \_\_\_\_\_

DATE \_\_\_\_\_ SIGNED: \_\_\_\_\_

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
PUMP STATION CULVERT  
SAMPLE INSTALLATION ILLUSTRATION  
B-2**



WARNING POSTS 4"x4"x4" ABOVE  
GROUND (OR EQUAL) PAINTED  
OR SAFETY STRIPED

CANAL

RAMPS 15' WIDE MIN.

EROSION CONTROL LIP

RAMP SLOPE 1 ON 10 MAX

RAMP SLOPE 1 ON 10 MAX

TOP OF LEVEE

SECTION LINE

NEAREST LAND MARK  
OR SECTION LINE

FOREBAY

LEVEE R/W LINE

LOCATION PLAN

PUMP HOUSE

PROJECT MIN OR 15' WHICHEVER  
IS GREATER

DESIGN WATER SURFACE  
ELEVATION (FURNISHED BY DIST.)

INDICATE  
SLOPE

EROSION CONTROL  
LIP

LEVEE R/W LINE

FOREBAY

PUMP  
HOUSE

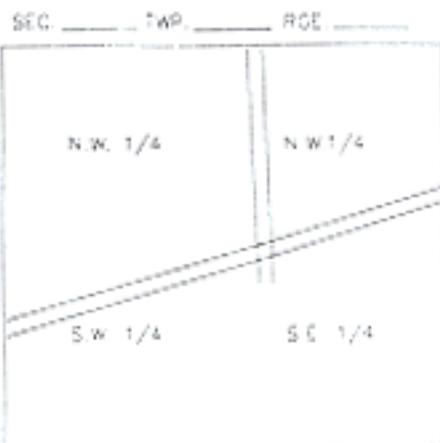
GROUND EL.

INVERT EL. \_\_\_\_\_ CULVERT DIA. \_\_\_\_\_ AND LENGTH \_\_\_\_\_

PLAN

NOTE:

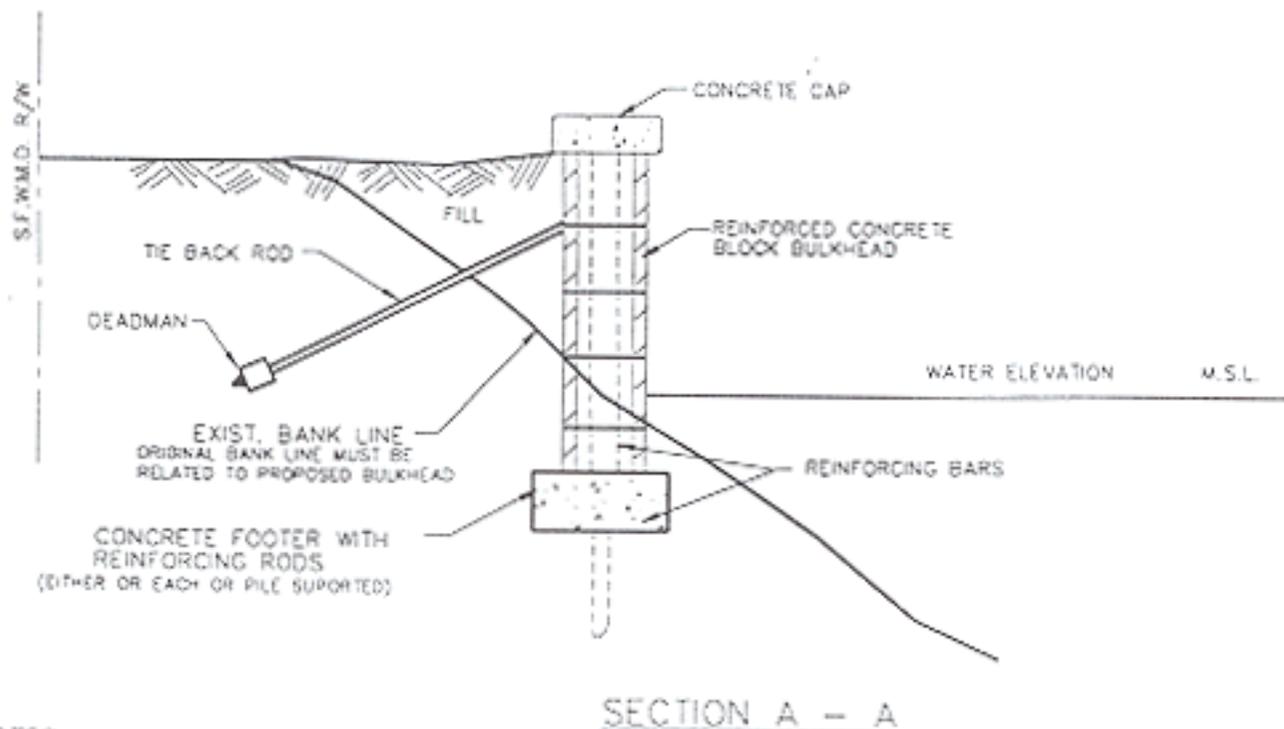
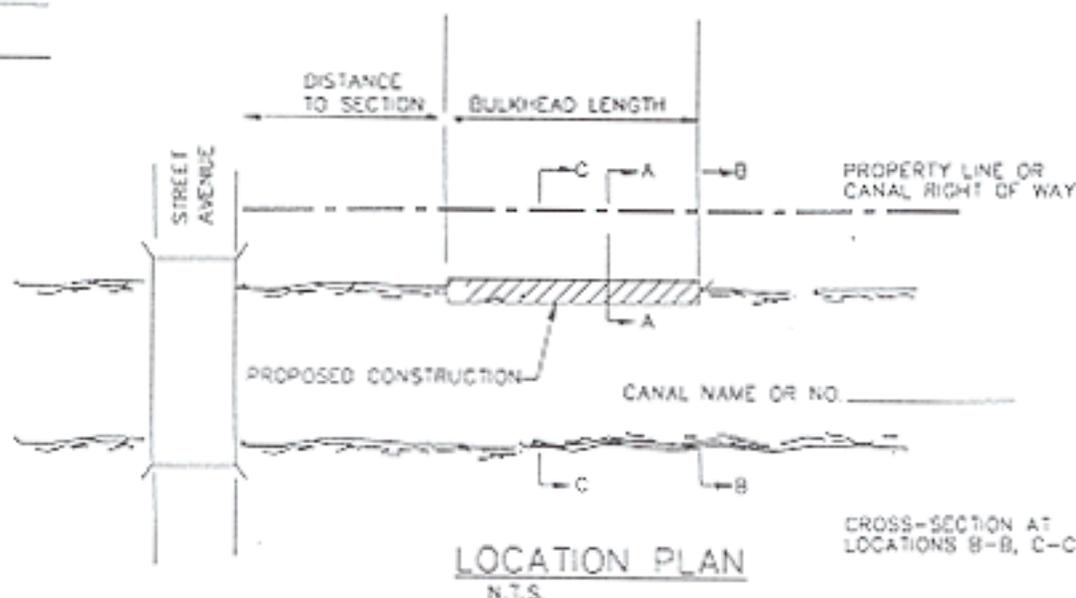
- 1 ALL ELEVATIONS REFER TO MEAN SEA LEVEL
- 2 ALL AREAS DISTURBED DURING PIPE  
INSTALLATION SHALL BE GRASSED IN KIND.



DRAWING TO ACCOMPANY  
APPLICATION NO. \_\_\_\_\_  
FOR PUMP STATION CULVERT CONNECTION TO \_\_\_\_\_  
APP. CANT'S NAME \_\_\_\_\_  
DATE \_\_\_\_\_ SIGNED \_\_\_\_\_

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
BULKHEAD INSTALLATION  
SAMPLE ILLUSTRATION C-1**

SEC. \_\_\_\_\_  
TWP: \_\_\_\_\_  
RGE: \_\_\_\_\_



**NOTES:**

SEE REVERSE SIDE OF THIS SHEET FOR LIST OF MATERIALS AND CONSTRUCTION DETAIL TO BE SUBMITTED WITH YOUR APPLICATION FOR PERMIT.

DRAWING TO ACCOMPANY  
APPLICATION FOR PROPOSED SUBAQUEOUS

CROSSING: CANAL \_\_\_\_\_  
OR LEVEE: \_\_\_\_\_  
APPLICANTS NAME: \_\_\_\_\_  
DATE \_\_\_\_\_ SIGNED: \_\_\_\_\_

PILE CAP

DIMENSIONS: \_\_\_\_\_ INCHES WIDE, \_\_\_\_\_ INCHES THICK \_\_\_\_\_

REINFORCING RODS: SIZE \_\_\_\_\_ NUMBER USED \_\_\_\_\_ SPACING \_\_\_\_\_

BLOCK

SIZE OF BLOCKS: \_\_\_\_\_

NUMBER OF COURSES: \_\_\_\_\_ (HOW MANY BLOCKS HIGH?)

SIZE AND LOCATIONS OF REINFORCING RODS: \_\_\_\_\_

FOOTER

DIMENSIONS: \_\_\_\_\_ INCHES WIDE: \_\_\_\_\_ INCHES THICK: \_\_\_\_\_  
(EXAMPLE 3/8" ROUND) (EXAMPLE 4" CENTERS)

REINFORCING RODS: \_\_\_\_\_ SIZE: \_\_\_\_\_ NUMBER USED \_\_\_\_\_ SPACING \_\_\_\_\_  
(EXAMPLE 3/8" ROUND) (EXAMPLE 4" CENTERS)

PILING

SIZE OR DIAMETER: \_\_\_\_\_ INCHES, LENGTH \_\_\_\_\_ FEET, NUMBER BEING USED \_\_\_\_\_

TIE BACK ROD

SIZE OF ROD: \_\_\_\_\_ INCH

LENGTH: \_\_\_\_\_ FEET

SPACING: \_\_\_\_\_ FEET BETWEEN EACH ROD.

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
PILE-SUPPORTED DOCK INSTALLATION  
SAMPLE ILLUSTRATION D-1**

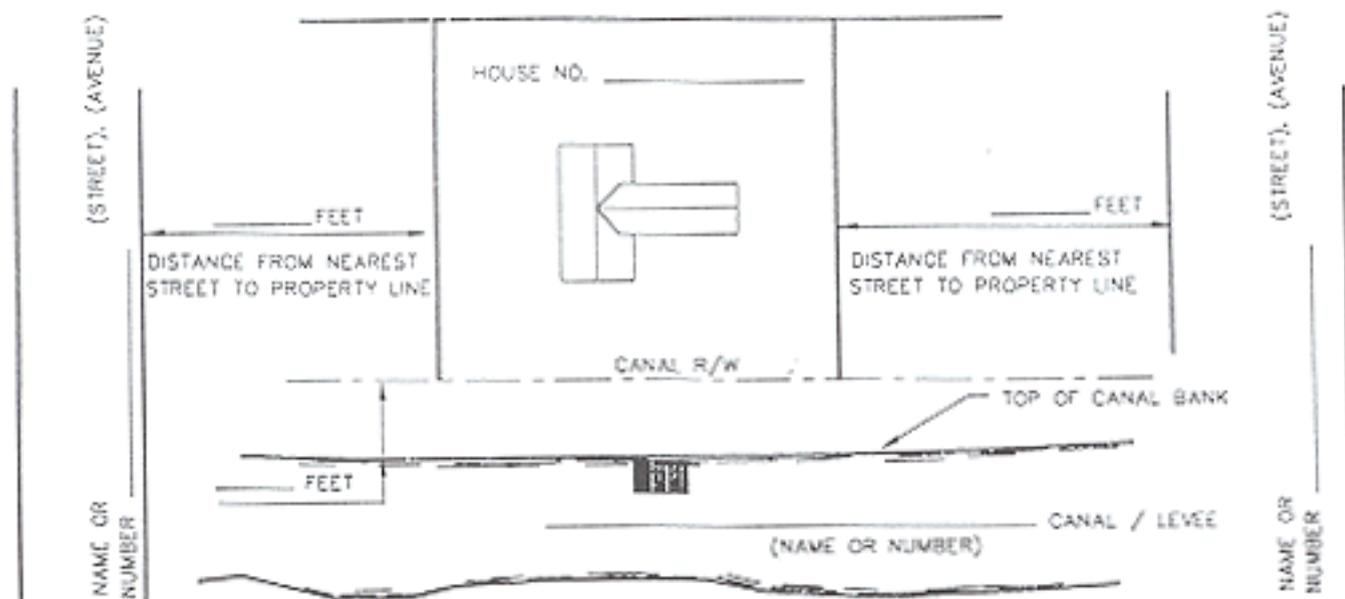
NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

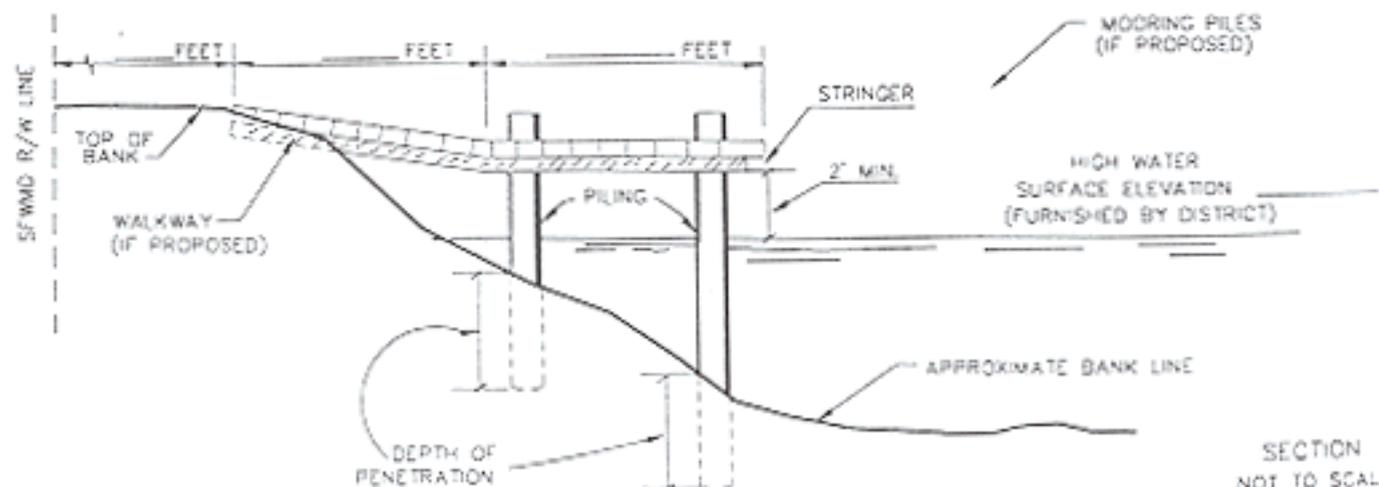
CITY, STATE \_\_\_\_\_ ZIP \_\_\_\_\_

SUBDIVISION \_\_\_\_\_ BLOCK NO. \_\_\_\_\_ LOT NO. \_\_\_\_\_

COUNTY: \_\_\_\_\_ SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RGE. \_\_\_\_\_



LOCATION PLAN  
NOT TO SCALE



SECTION  
NOT TO SCALE

SEE REVERSE SIDE OF THIS SHEET FOR LIST OF MATERIALS AND CONSTRUCTION DETAIL TO BE SUBMITTED WITH YOUR APPLICATION FOR PERMIT.

DRAWING TO ACCOMPANY APPLICATION FOR PILE SUPPORTED DOCK

APPLICANT'S NAME: \_\_\_\_\_

DATE \_\_\_\_\_ SIGNED: \_\_\_\_\_

PLEASE COMPLETE THE FOLLOWING:

WALKWAY - (IF REQUIRED)

\_\_\_\_\_ FEET LONG X \_\_\_\_\_ FEET WIDE

DOCK FINAL DIMENSION WILL BE \_\_\_\_\_ FEET PARALLEL WITH CANAL AND EXTEND \_\_\_\_\_ FEET INTO CANAL.

PILING- CHECK TYPE TO BE USED:

WOOD       STEEL       CONCRETE       PVC

HOW MANY WILL BE USED IN YOUR CONSTRUCTION? \_\_\_\_\_

WHAT SIZE WILL BE USED?

DIAMETER \_\_\_\_\_ INCHES

LENGTH \_\_\_\_\_ FEET

THE DEPTH OF PENETRATION OF THE FRONT PILING WILL BE \_\_\_\_\_ FEET.

THE DEPTH OF PENETRATION OF THE REAR PILING WILL BE \_\_\_\_\_ FEET.

DECK- CHECK TYPE TO BE USED:

WOOD       CONCRETE       OTHER

STATE SIZE OR DIMENSION:

EXAMPLE: \_\_\_\_\_  
(2" X 6" PINE)      (4' X 4' SLAB)      OTHER

THE DISTANCE OR CLEARANCE BETWEEN DOCK LOW MEMBER AND HIGH WATER ELEVATION WILL BE 2 FEET MINIMUM. (DISTRICT WILL FURNISH HIGH WATER SURFACE ELEVATION).

STRINGER- CHECK TYPE TO BE USED:

WOOD       CONCRETE       STEEL

STATE SIZE OR DIMENSION.

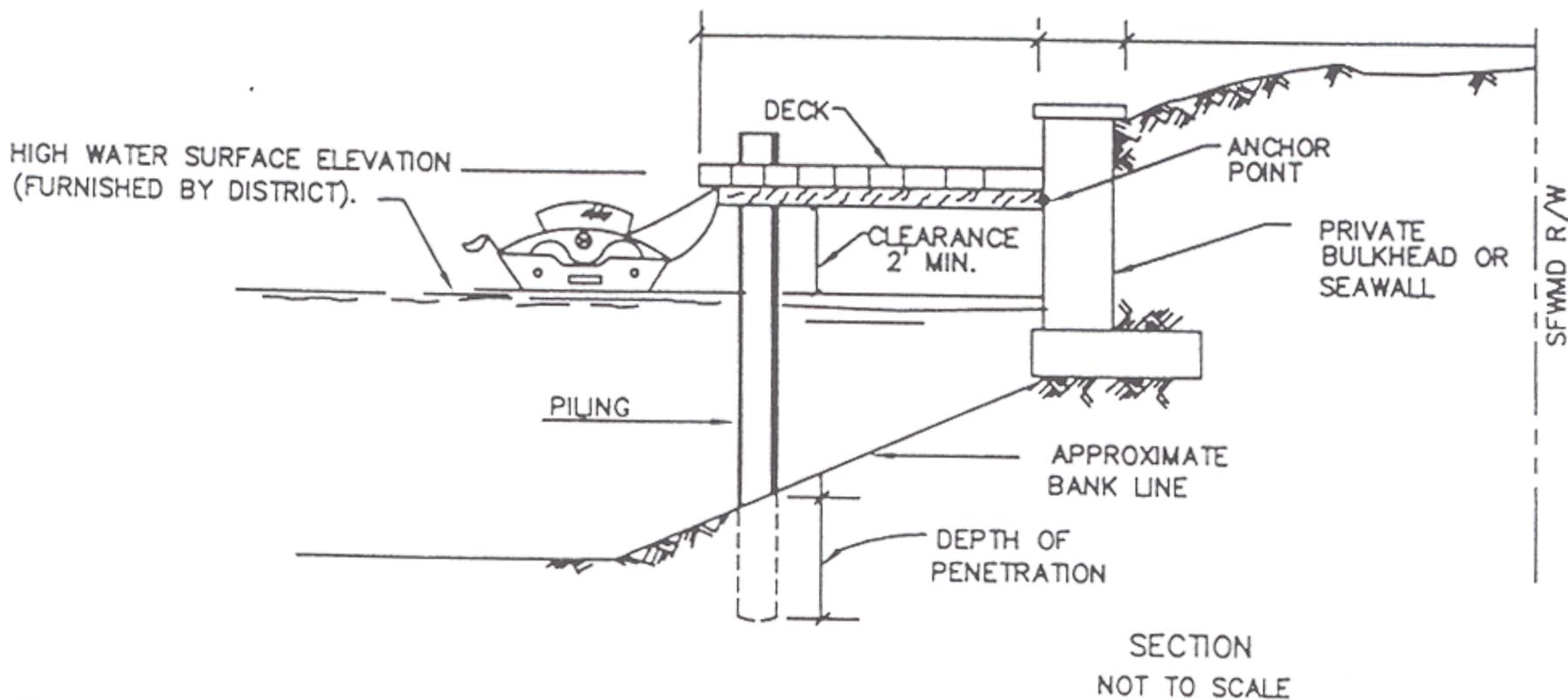
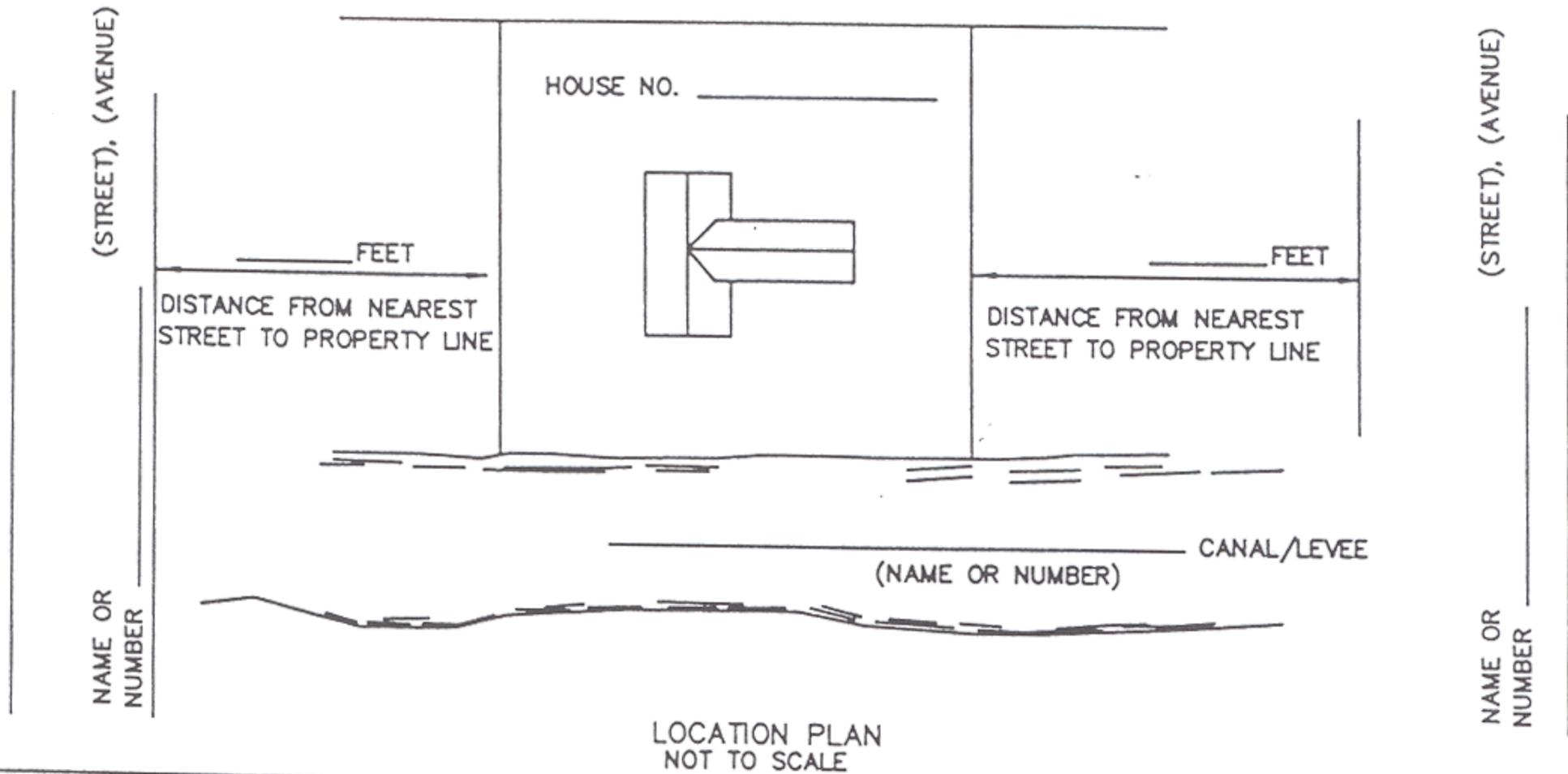
EXAMPLE: \_\_\_\_\_  
(4" X 4" PINE)      (4" H-BEAM)

ANCHOR POINT

IF DOCK IS TO BE BUILT AGAINST A BULKHEAD OR SEA WALL. DESCRIBE MANNER OF ANCHORING DOCK TO THE WALL OR BULKHEAD:

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
DOCK CONSTRUCTION ATTACHED TO SEAWALL  
SAMPLE ILLUSTRATION D-2**

NAME: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
 SUBDIVISION \_\_\_\_\_ BLOCK NO. \_\_\_\_\_ LOT NO. \_\_\_\_\_  
 COUNTY: \_\_\_\_\_ SEC. \_\_\_\_\_ TWP: \_\_\_\_\_ RGE: \_\_\_\_\_



SEE REVERSE SIDE OF THIS SHEET FOR LIST OF MATERIALS AND CONSTRUCTION DETAIL TO BE SUBMITTED WITH YOUR APPLICATION FOR PERMIT.

DRAWING TO ACCOMPANY APPLICATION FOR DOCK ATTACHED TO SEAWALL

APPLICANTS NAME: \_\_\_\_\_

DATE \_\_\_\_\_ SIGNED: \_\_\_\_\_

NOTE: DOCK ATTACHMENTS TO DISTRICT SEAWALLS WILL NOT BE AUTHORIZED

PLEASE COMPLETE THE FOLLOWING:

1. BE SURE TO GIVE THE NUMBER OR NAME OF STREETS OR AVENUES. IF AVENUE IS CORRECT, THEN STRIKE OUT THE WORD STREET.  
(EXAMPLE) N.W. 29TH AVENUE  
STREET)
2. GIVE YOUR LOT AND BLOCK NUMBER, AS INDICATED ON YOUR DEED.
3. FILL IN THE BLANKS BELOW. THEY ARE IMPORTANT.

DOCK - FINAL DIMENSIONS WILL BE \_\_\_\_\_ FEET LONG BY \_\_\_\_\_ FEET WIDE.

PILING -

CHECK TYPE TO BE USED  WOOD  STEEL  CONCRETE

HOW MANY WILL BE USED IN YOUR CONSTRUCTION? \_\_\_\_\_

WHAT SIZE WILL BE USED?

DIAMETER \_\_\_\_\_ INCHES

LENGTH \_\_\_\_\_ FEET

THE DEPTH OF PENETRATION OF THE FRONT PILING WILL BE \_\_\_\_\_ FEET.

THE DEPTH OF PENETRATION OF THE REAR PILING WILL BE \_\_\_\_\_ FEET.

MOORING PILES (IF PROPOSED) DEPTH OF PENETRATION WILL BE \_\_\_\_\_ FEET.

MOORING PILES (IF PROPOSED) WILL BE \_\_\_\_\_ FEET, FROM FACE OF SEAWALL.

DECK-

CHECK TYPE TO BE USED:

WOOD  CONCRETE  OTHER

STATE SIZE OR DIMENSION:

EXAMPLE: (2" X 6" PINE) (4' X 4' SLAB) \_\_\_\_\_

THE APPROXIMATE DISTANCE OR CLEARANCE BETWEEN THE LOW MEMBER AND KNOWN HIGH WATER ELEVATION WILL BE \_\_\_\_\_ FEET.

STRINGER - CHECK TYPE TO BE USED:

WOOD  CONCRETE  STEEL

STATE SIZE OR DIMENSION:

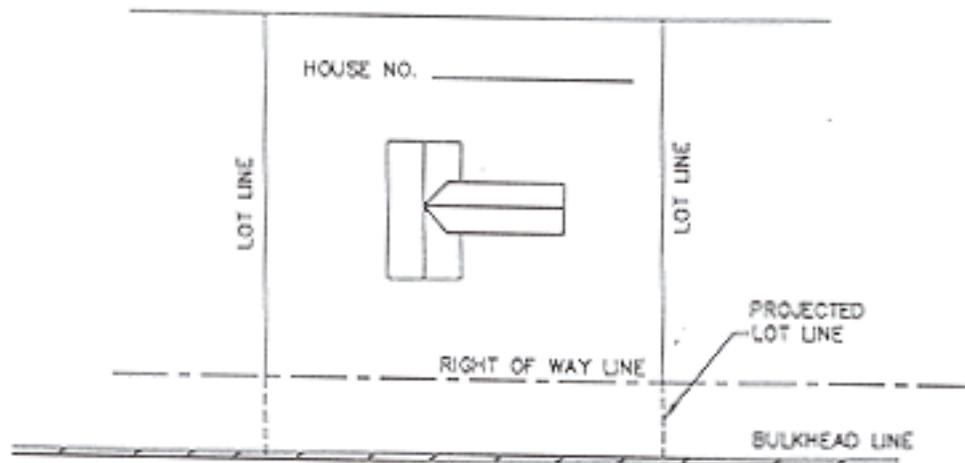
EXAMPLE: (4" X 4" PINE) \_\_\_\_\_ (4" H-BEAM)

ANCHOR POINT-

IF DECK IS TO BE BUILT AGAINST A BULKHEAD OR SEAWALL-DESCRIBE MANNER OF ANCHORING DECK TO THE WALL OR BULKHEAD.

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
 FREE-STANDING DOCK ADJACENT TO SEAWALL  
 (MOORING PILES OPTIONAL) SAMPLE ILLUSTRATION D-3**

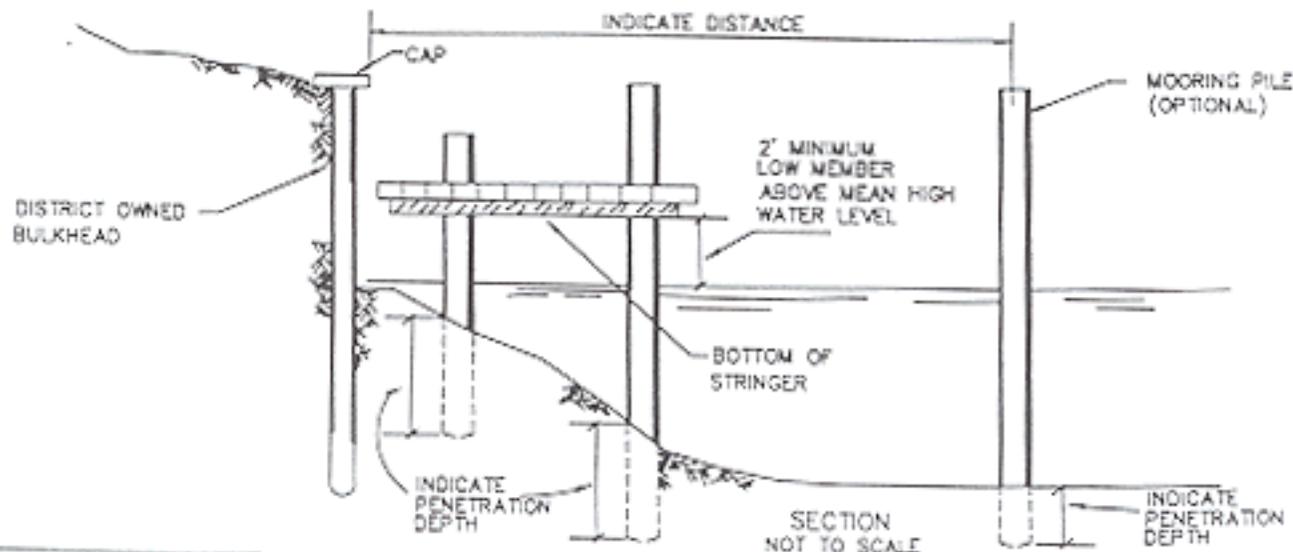
NAME: \_\_\_\_\_  
 ADDRESS: \_\_\_\_\_  
 CITY, STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
 SUBDIVISION \_\_\_\_\_ BLOCK NO. \_\_\_\_\_ LOT NO. \_\_\_\_\_  
 COUNTY: \_\_\_\_\_ SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RGE. \_\_\_\_\_



SKETCH PROPOSED DOCK AND/OR  
 MOORING PILE LAYOUT HERE

CANAL NAME OR NUMBER \_\_\_\_\_

LOCATION PLAN  
 NOT TO SCALE



SEE REVERSE SIDE OF THIS SHEET  
 FOR LIST OF MATERIALS AND CON-  
 STRUCTION DETAIL TO BE SUBMITTED  
 WITH YOUR APPLICATION FOR PERMIT.

DRAWING TO ACCOMPANY APPLICATION FOR FREE STANDING DOCK

APPLICANTS NAME: \_\_\_\_\_

DATE \_\_\_\_\_ SIGNED: \_\_\_\_\_

NOTE: DOCK ATTACHMENTS TO DISTRICT SEAWALLS WILL NOT BE AUTHORIZED

PLEASE COMPLETE THE FOLLOWING:

WALKWAY (IF REQUIRED)

\_\_\_\_\_ FEET LONG X \_\_\_\_\_ FEET WIDE

DOCK FINAL DIMENSION WILL BE \_\_\_\_\_ FEET PARALLEL WITH CANAL AND EXTEND \_\_\_\_\_ FEET INTO CANAL.

PILING CHECK TYPE TO BE USED:

WOOD       STEEL       CONCRETE       PVC

HOW MANY WILL BE USED IN YOUR CONSTRUCTION? \_\_\_\_\_

WHAT SIZE WILL BE USED?

DIAMETER \_\_\_\_\_ INCHES

LENGTH \_\_\_\_\_ FEET

THE DEPTH OF PENETRATION OF THE FRONT PILING WILL BE \_\_\_\_\_ FEET.

THE DEPTH OF PENETRATION OF THE REAR PILING WILL BE \_\_\_\_\_ FEET.

MOORING PILES (IF PROPOSED) WILL BE \_\_\_\_\_ FT FROM FACE OF SEAWALL.

MOORING PILES (IF PROPOSED) DEPTH OF PENETRATION WILL BE \_\_\_\_\_ FT.

DECK CHECK TYPE TO BE USED:

WOOD       CONCRETE       OTHER

STATE SIZE OR DIMENSION:

EXAMPLE: \_\_\_\_\_  
(2" X 6" PINE)      (4" X 4" SLAB)      \_\_\_\_\_

THE DISTANCE OR CLEARANCE BETWEEN DOCK LOW MEMBER AND HIGH WATER ELEVATION WILL BE 2 FEET MINIMUM. (DISTRICT WILL FURNISH HIGH WATER SURFACE ELEVATION).

STRINGER CHECK TYPE TO BE USED:

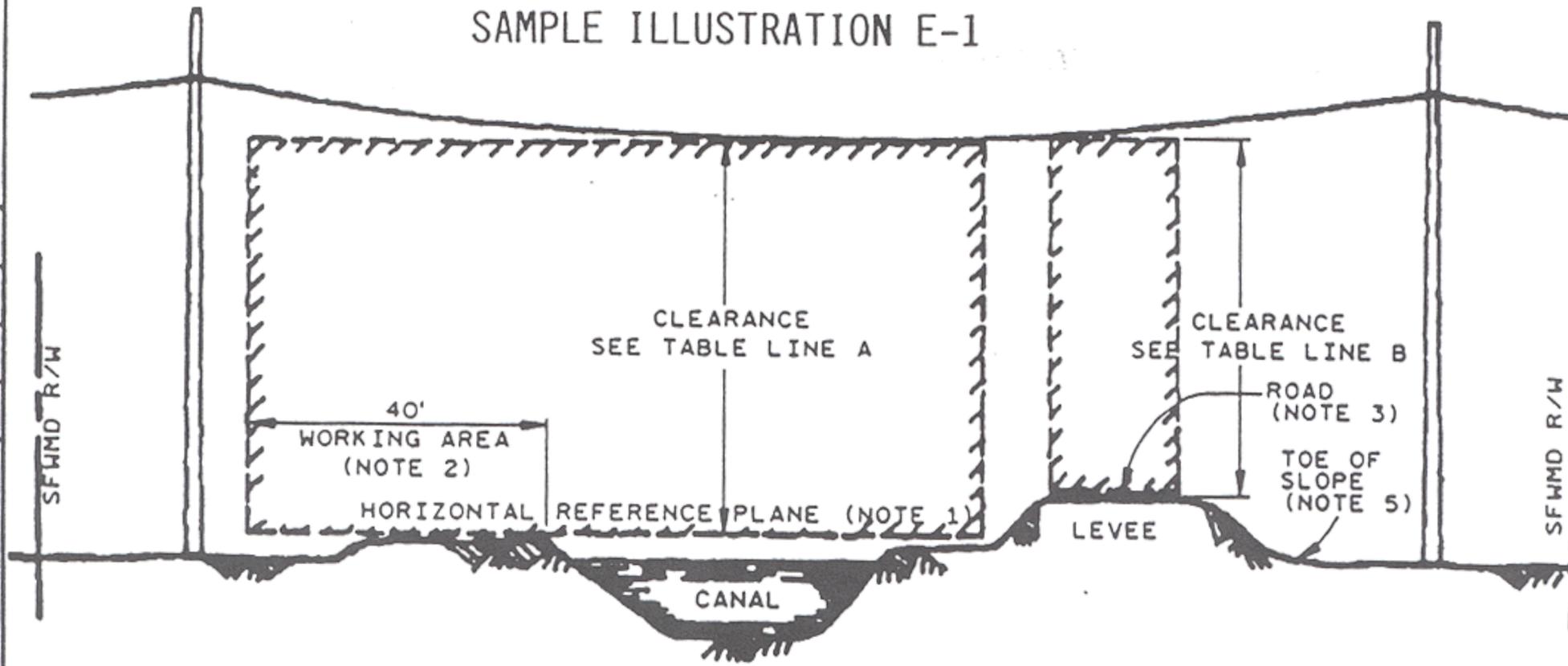
WOOD       CONCRETE       STEEL

STATE SIZE OR DIMENSION:

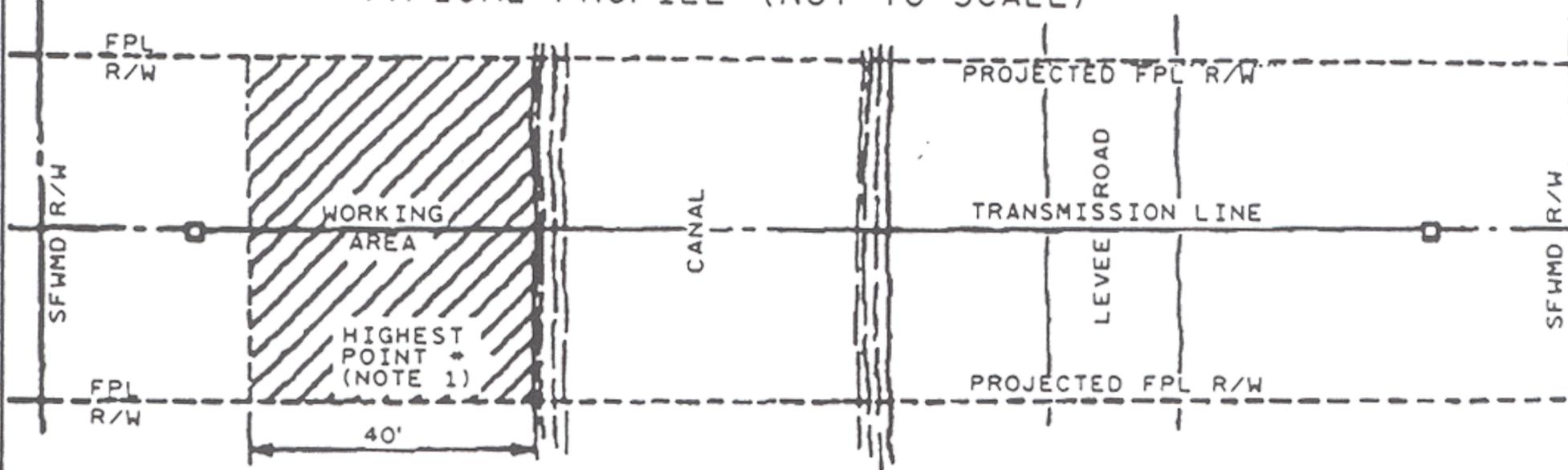
EXAMPLE: \_\_\_\_\_  
(4" X 4" PINE)      \_\_\_\_\_      (4" H-BEAM)

# MINIMUM WIRE CLEARANCES OVER SOUTH FLORIDA WATER MANAGEMENT DISTRICT FACILITIES CANALS & LEVEES OTHER THAN STA CANALS & LEVEES

SAMPLE ILLUSTRATION E-1



TYPICAL PROFILE (NOT TO SCALE)



TYPICAL PLAN (NOT TO SCALE)

CROSSING OVER	VOLTAGE OF CROSSING CHART						
	PHASE TO PHASE	GUYS (GROUNDED)	69kV	115kV	138kV	230kV	500kV
			50kV & UNDER	67kV	80kV	138kV	269kV
A. HORIZONTAL REFERENCE PLANE	40'-0"	40'-0"	45'-0"	45'-8"	46'-2"	48'-0"	54'-0"
B. TOP OF PROJECT LEVEE (OR ROAD)	20'-0"	20'-0"	20'-0"	25'-0"	25'-0"	25'-0"	35'-0"

**NOTES:**

1. THE HORIZONTAL REFERENCE PLAN IS DRAWN THROUGH THE HIGHEST POINT OF LAND BOUNDED BY 40' WORKING AREA AND FPL'S RIGHT-OF-WAY PROJECTED. (HIGHEST POINT NOT NECESSARILY UNDER TRANSMISSION LINE.)
2. NO FPL FACILITY MAY BE LOCATED WITHIN THE 40' WORKING AREA.
3. IF ROAD IS USED BY THE PUBLIC, REQUIRED CLEARANCE SHALL BE THE GREATER OF THAT SHOWN ON THE LINE "B" ABOVE OR THAT SPECIFIED ON A-88348.
4. CLEARANCES SHOWN SHALL BE WITH CONDUCTOR AT MAXIMUM, DESIGN TEMPERATURE AND FINAL SAG.
5. POLE AND/OR ANCHORS MAY BE SET AS CLOSE AS TOE OF SLOPE ON LANDWARD SIDE OF LEVEE.

SUPERSEDES 4-031105

## TRANSMISSION STRUCTURE STANDARDS

DATE:

APPROVED:

SECTION 4.0

SHEET 1 OF 3

A-88349-1

8-19-83

*[Signature]*

(TO SS -)

19992023 ADDED SHTS 2 & 3 FOR SPECS ON STORMWATER TREATMENT AREAS.

REVISION

1 6-2-41

**POWER DELIVERY**



# MINIMUM WIRE CLEARANCES & CRITERIA APPLICABLE TO STORMWATER TREATMENT AREAS (STAS)

## SAMPLE ILLUSTRATION E-1A

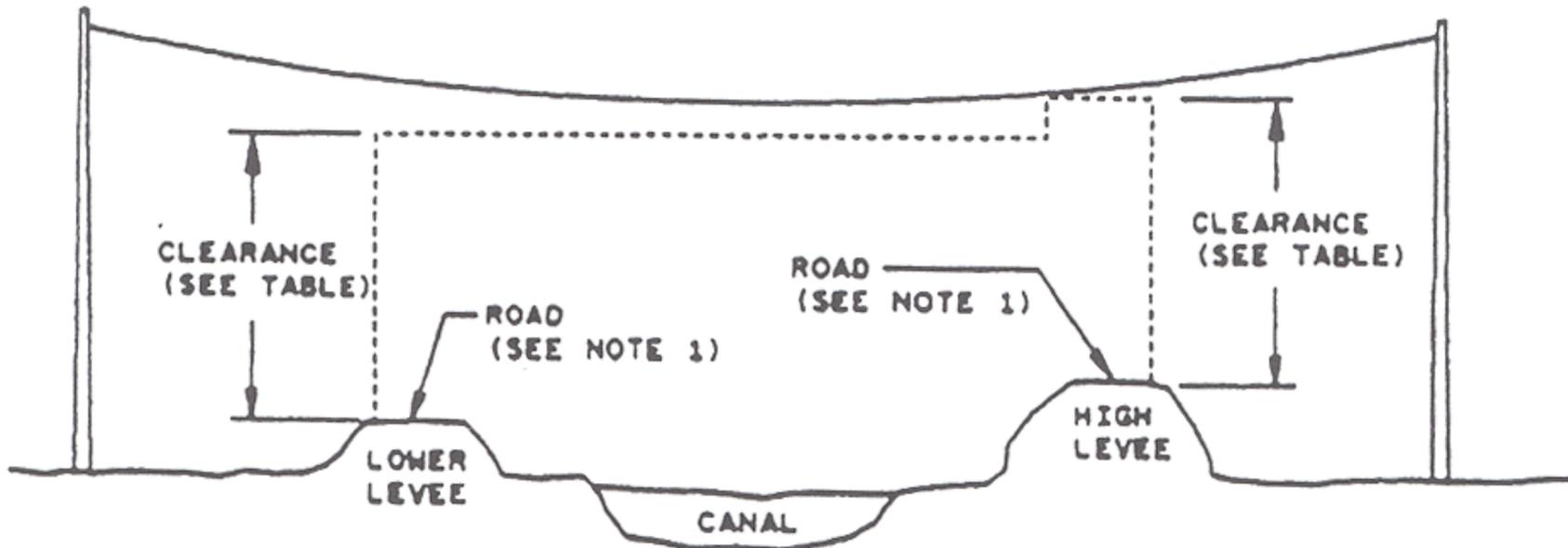
### AERIAL ELECTRICAL POWER TRANSMISSION LINE CROSSINGS

OVERHEAD ELECTRICAL POWER TRANSMISSION LINES CROSSING STORMWATER TREATMENT AREAS SHALL HAVE A MINIMUM VERTICAL CLEARANCE AS SHOWN IN THE TABLE BELOW. WHILE THESE CLEARANCES ARE CALCULATED FROM THE TOP OF THE LEVEE, THEY ARE INTENDED TO:

1. PROVIDE SUFFICIENT CLEARANCE FOR DISTRICT EQUIPMENT TO TRAVEL ALONG THE TOP OF THE LEVEE AND
2. TO PROVIDE SUFFICIENT CLEARANCE FOR FLOATING DISTRICT MAINTENANCE EQUIPMENT TO OPERATE BENEATH THEM WHEN WORKING WITHIN THE IMPOUNDMENT BOUNDED BY THE STAS LEVEE SYSTEM.

CLEARANCE SHALL BE CALCULATED FROM THE ELEVATION OF THE TOP OF THE STA LEVEE CONFINING THE WATER BODY IN QUESTION TO THE POINT OF MAXIMUM SAG OF THE LOWEST LINE OF THE TRANSMISSION LINE. IN DETERMINING THE LEVEE ELEVATION TO BE USED FOR VERTICAL CLEARANCE CALCULATIONS, THE DISTRICT SHALL USE THE DESIGN LEVEE ELEVATION FOR LEVEES NOT YET CONSTRUCTED, OR AS-BUILT LEVEE ELEVATION FOR EXISTING LEVEES.

VOLTAGE OF CROSSING CIRCUIT						
GUYS (GROUNDED)	69kV	115kV	138kV	230kV	500kV	PHASE TO PHASE
	50kV AND UNDER	67kV	80kV	138kV	289kV	PHASE TO GROUND
20'	20'	25'	25'	25'	35'	CLEARANCE ABOVE LEVEE



STORMWATER TREATMENT AREA TYPICAL PROFILE  
(NOT TO SCALE)

**NOTE:**

1. THE LOWEST LEVEE ROAD IS THE BASELINE REFERENCE ELEVATION AND WILL CONTROL CLEARANCE OVER WATER.

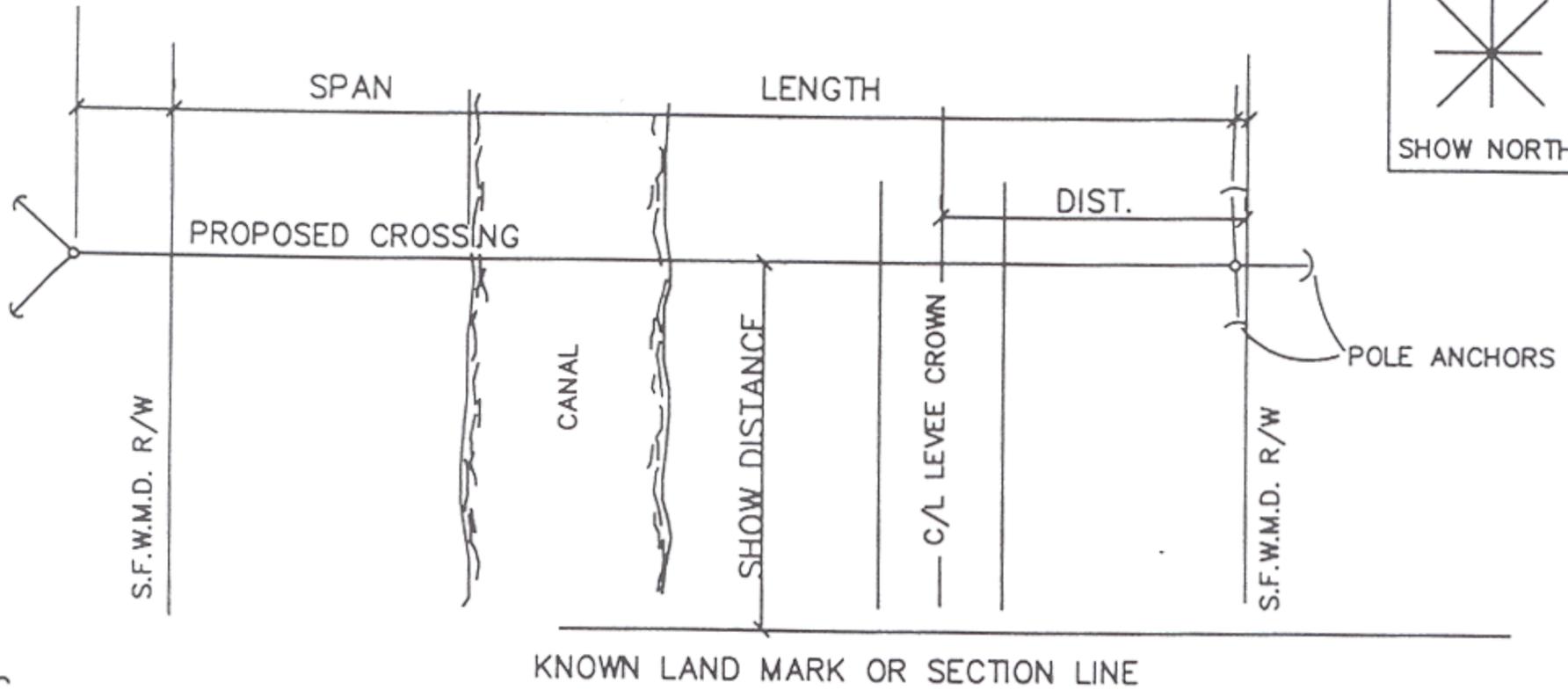
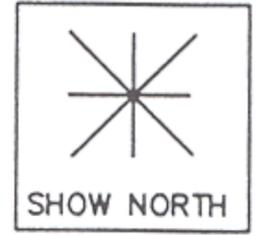
REVISION  
 NO. DATE  
 1 6-2-99  
 19992023 ADDED SHTS 2 & 3 FOR SPECS ON STORMWATER TREATMENT AREAS.  
 BY CH COR APP  
 DFS



TRANSMISSION STRUCTURE STANDARDS			
DATE: 8-19-83	APPROVED: R. CULBERSON	SECTION 4.0 (TR. SS. -)	SHEET 2 OF 3 A-88349-1

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
AERIAL/POLE SUPPORTED UTILITY CROSSING  
SAMPLE ILLUSTRATION**

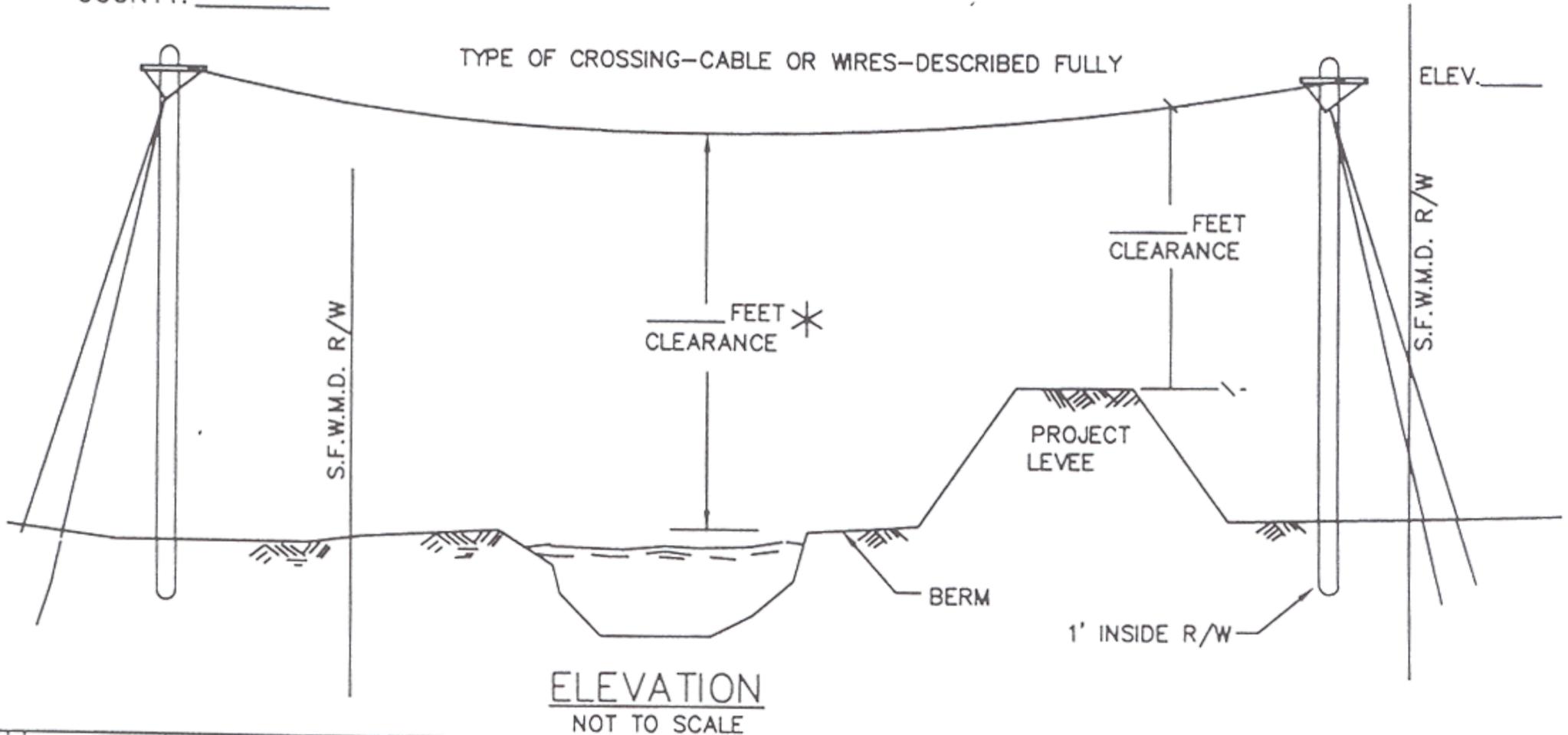
**E-2**



SEC. \_\_\_\_\_  
TWP: \_\_\_\_\_  
RGE: \_\_\_\_\_  
COUNTY: \_\_\_\_\_

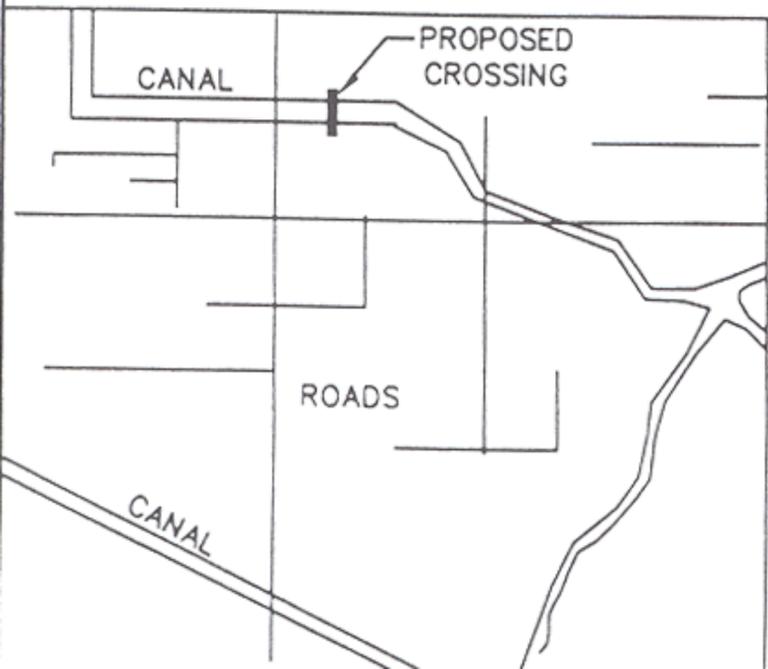
PLAN  
NOT TO SCALE

TYPE OF CROSSING—CABLE OR WIRES—DESCRIBED FULLY



NOTE: USE VERTICAL CLEARANCE MINIMUM THAT FURNISHES GREATER CLEARANCE

\* CLEARANCE MUST BE CALCULATED FROM POINT OF MAX. SAG TO THE HIGHEST BERM ELEVATION UNDER THE CROSSING.



DRAWING TO ACCOMPANY APPLICATION FOR PROPOSED OVERHEAD CROSSING OVER CANAL OR LEVEE \_\_\_\_\_

WITH \_\_\_\_\_ K.V. LINE OR \_\_\_\_\_ CABLE

APPLICANTS NAME: \_\_\_\_\_

SIGNED: \_\_\_\_\_

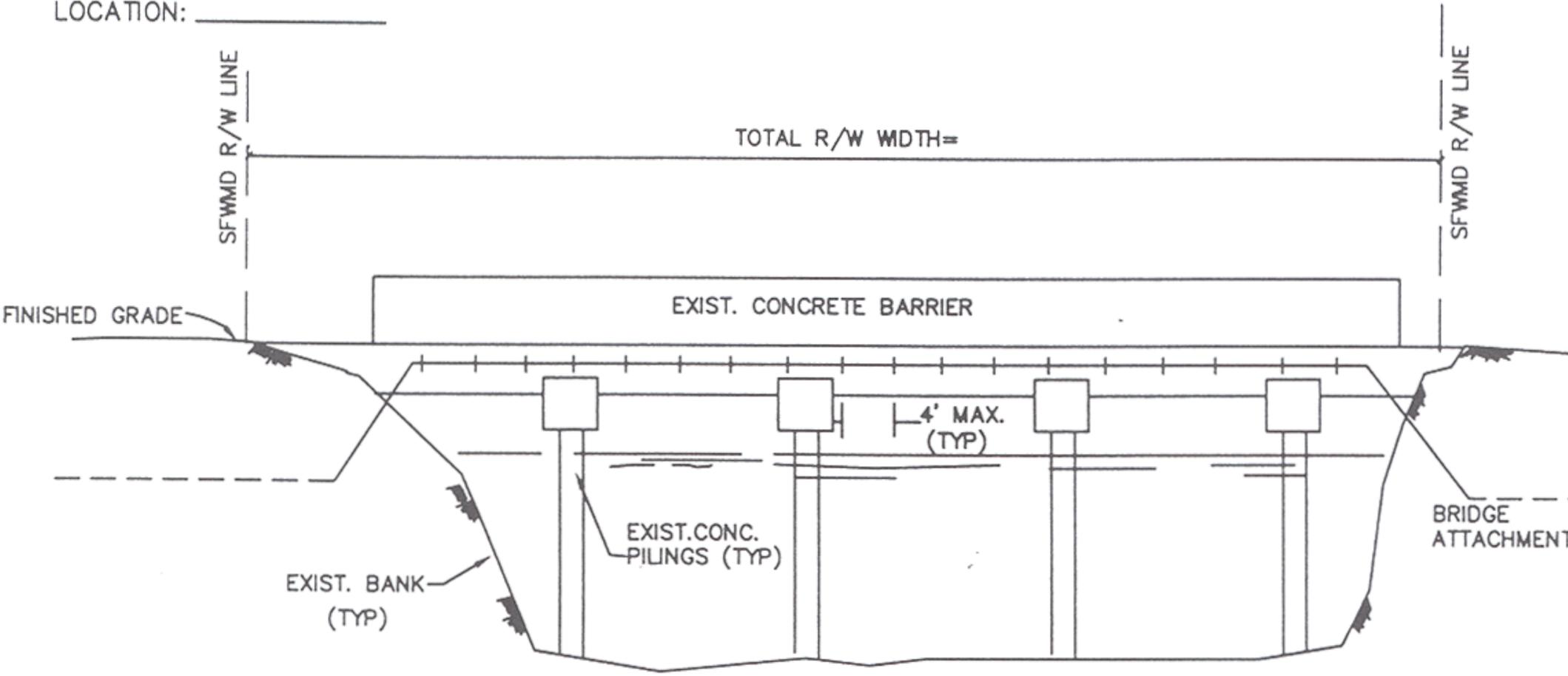
DATE \_\_\_\_\_

# SOUTH FLORIDA WATER MANAGEMENT DISTRICT BRIDGE ATTACHMENT SAMPLE ILLUSTRATION

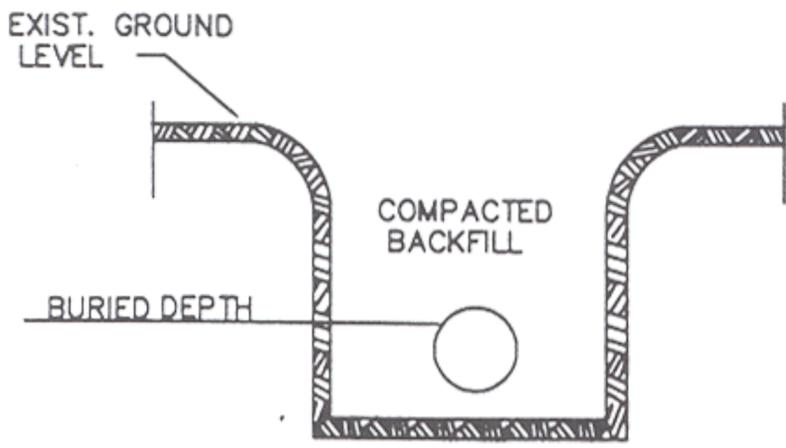
E-3



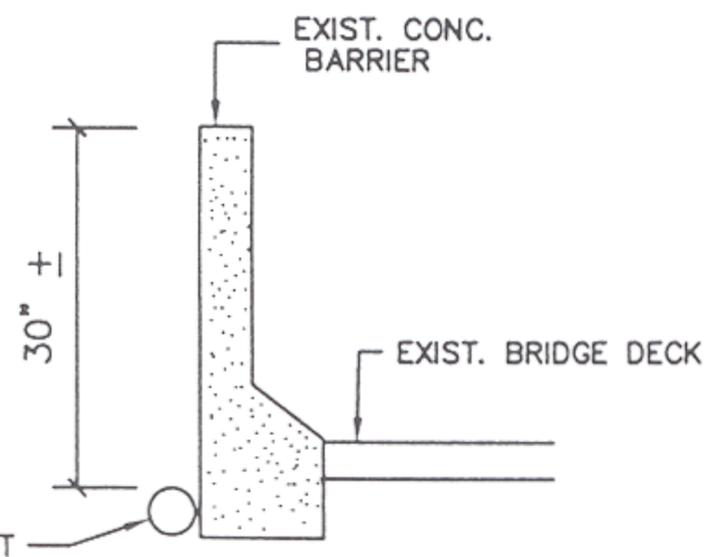
SEC. \_\_\_\_\_  
 TWP: \_\_\_\_\_  
 RGE: \_\_\_\_\_  
 COUNTY: \_\_\_\_\_  
 LOCATION: \_\_\_\_\_



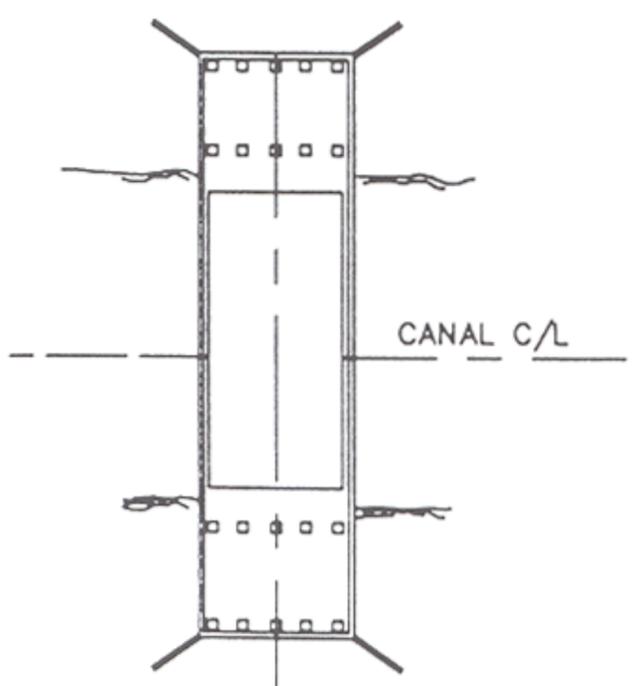
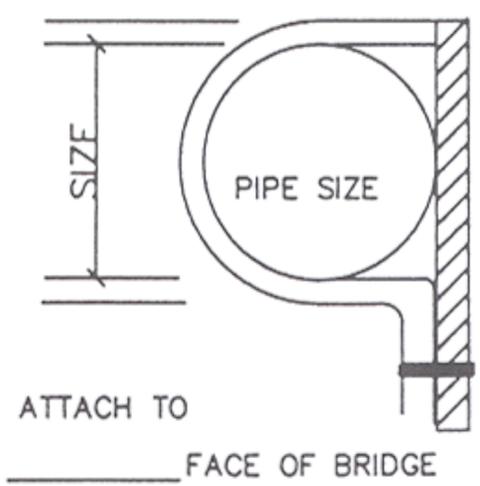
PROFILE VIEW  
NOT TO SCALE



TRENCH DETAIL  
NOT TO SCALE



END VIEW  
NOT TO SCALE



PLAN VIEW  
NOT TO SCALE

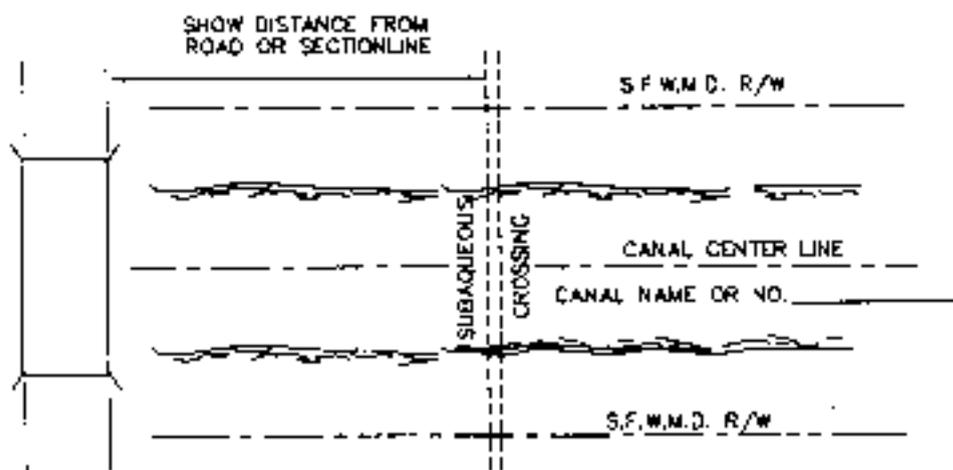
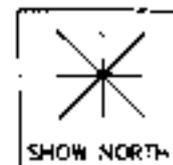
DRAWING TO ACCOMPANY APPLICATION FOR BRIDGE ATTACHMENT

APPLICANTS NAME: \_\_\_\_\_

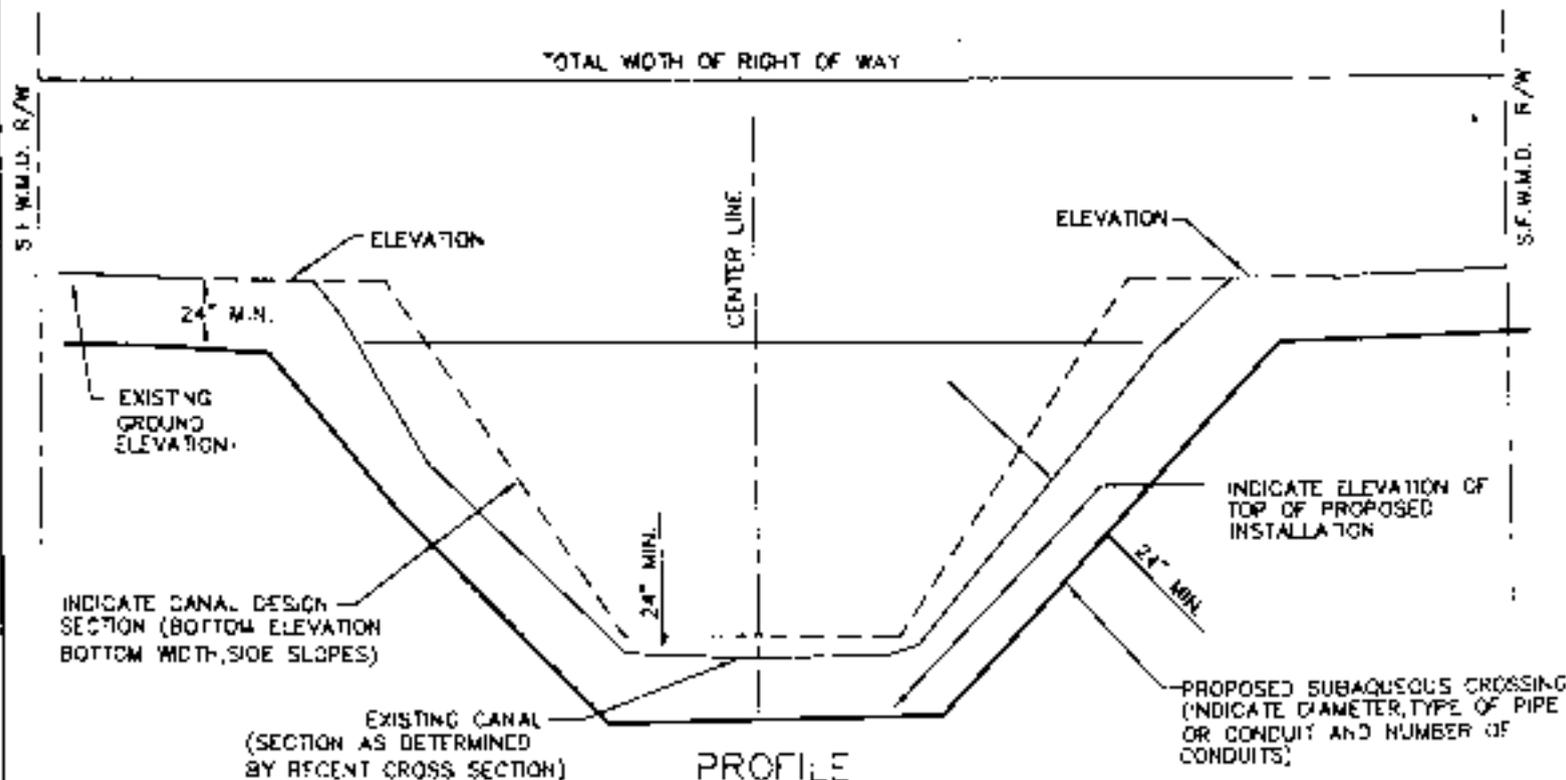
DATE \_\_\_\_\_ SIGNED: \_\_\_\_\_

**SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
SUBAQUEOUS CROSSING  
SAMPLE ILLUSTRATION  
E-4**

COUNTY \_\_\_\_\_  
SEC. \_\_\_\_\_  
TWP: \_\_\_\_\_  
RGE: \_\_\_\_\_



PLAN



PROFILE

**NOTES:**

1. DRAWING MUST SHOW THE EXISTING CANAL SECTION AS ESTABLISHED FROM A RECENTLY TAKEN CROSS SECTION OF THE CANAL.
2. SUBAQUEOUS CROSSING MUST HAVE A MIN. OF 2 FT. OF COVER AS MEASURED FROM THE DESIGN SECTION OR EXISTING SECTION, WHICHEVER PRODUCES THE LOWER INSTALLATION.
3. DRAWING SHOULD BE TO SCALE OF FULLY DIMENSIONED

DRAWING TO ACCOMPANY  
APPLICATION FOR SUBAQUEOUS CROSSING

CANAL: \_\_\_\_\_  
OR LEVEE: \_\_\_\_\_  
APPLICANTS NAME: \_\_\_\_\_  
DATE \_\_\_\_\_ SIGNED: \_\_\_\_\_

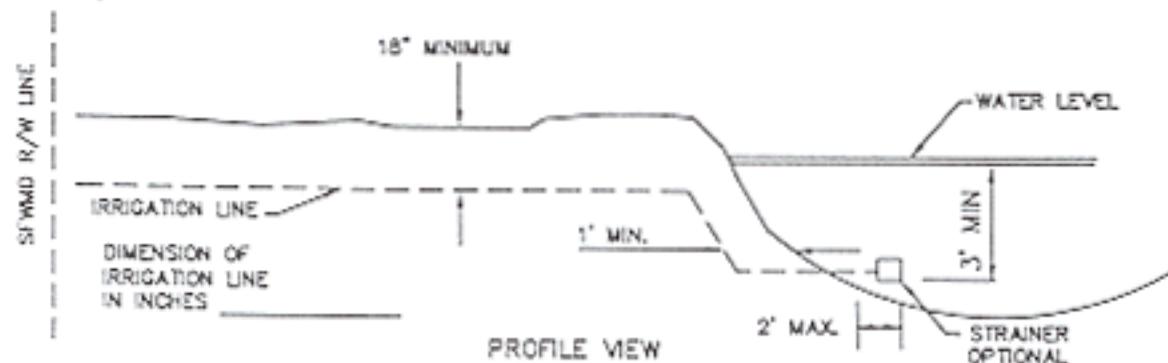
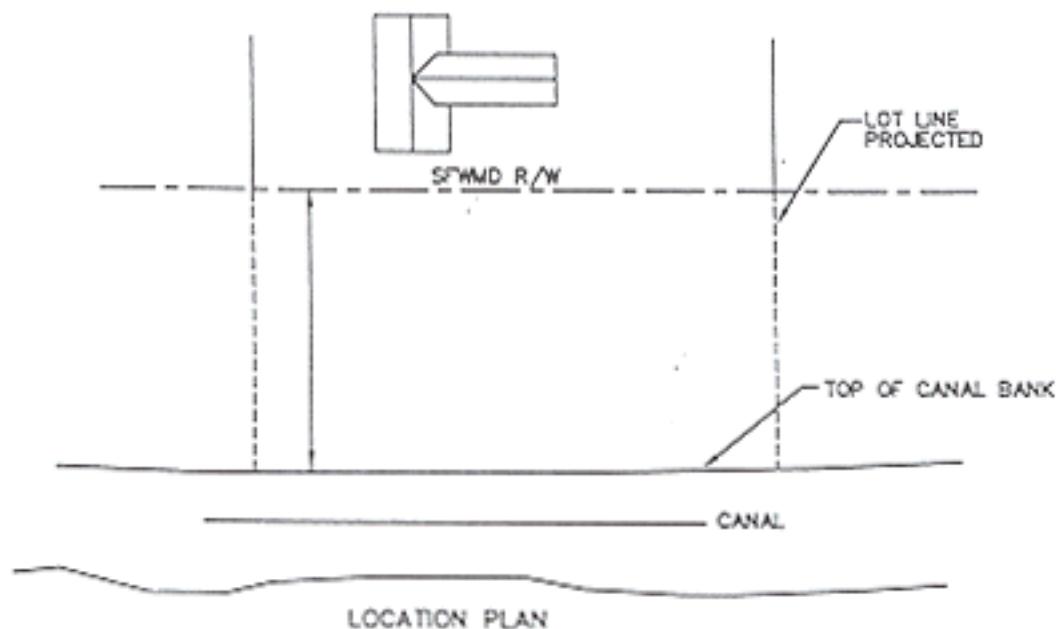
SOUTH FLORIDA WATER MANAGEMENT DISTRICT  
IRRIGATION INSTALLATION  
SAMPLE ILLUSTRATION F-1

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

SUBDIVISION \_\_\_\_\_ BLOCK \_\_\_\_\_ LOT \_\_\_\_\_

COUNTY: \_\_\_\_\_ SEC. \_\_\_\_\_ TWP. \_\_\_\_\_ RGE. \_\_\_\_\_



(INSTRUCTIONS FOR COMPLETING DRAWING AND NOTES ON BACK )

DRAWING TO ACCOMPANY APPLICATION FOR IRRIGATION LINE

APPLICANTS NAME: \_\_\_\_\_

DATE \_\_\_\_\_

SIGNED: \_\_\_\_\_

## INSTRUCTIONS FOR COMPLETING DRAWING

1. PLEASE FILL IN THE APPLICANTS NAME (THE OWNER OF THE LOT ADJACENT TO THE CANAL RIGHT OF WAY), THE PROPERTY ADDRESS, THE SUBDIVISION NAME, BLOCK AND LOT NUMBER, THE COUNTY, SECTION, TOWNSHIP AND RANGE IN THE SPACES PROVIDED.
2. INDICATE THE CANAL NAME OR NUMBER IN THE SPACE PROVIDED.
3. INDICATE WHICH DIRECTION IS NORTH WITH REGARD TO THE LOCATION PLAN.
4. ON THE LOCATION PLAN INDICATE THE DISTANCE YOUR PROPOSED IRRIGATION LINE WILL BE AS MEASURED FROM THE EXTENSION OF ONE OF YOUR LOT LINES.
5. ON THE LOCATION PLAN INDICATE THE DISTANCE FROM YOUR LOT LINE (WHICH SHOULD ALSO BE THE CANAL RIGHT OF WAY LINE) TO THE TOP OF THE CANAL BANK.
6. IF YOU ARE PROPOSING TO INSTALL SPRINKLERS WITHIN THE CANAL RIGHT OF WAY INDICATE THE PROPOSED LOCATIONS OF THE SPRINKLER HEADS.
7. INDICATE ON THE PROFILE VIEW THE DIAMETER OF THE PIPE OR IRRIGATION LINE YOU PROPOSE TO USE.
8. PRINT THE APPLICANT'S NAME, DATE AND SIGN THE APPLICANT'S NAME IN THE SPACES PROVIDED IN THE BOX IN THE LOWER RIGHT CORNER OF THE PAGE. (IF THE DRAWING IS BEING COMPLETED BY A CONTRACTOR THE PROPERTY OWNERS NAME SHOULD APPEAR AS THE APPLICANT).

### NOTE:

- A. IRRIGATION LINES MUST BE BURIED TO A MINIMUM DEPTH OF 18 INCHES BELOW GROUND ELEVATION WITHIN THE SFWMD'S RIGHT OF WAY.
- B. THE IRRIGATION LINE MUST BE BURIED A MINIMUM OF 1 FOOT IN THE SIDE OF SLOPE OF THE CANAL BANK; MUST ENTER THE CHANNEL A MINIMUM OF 3 FEET BELOW THE NORMAL WATER LEVEL AND MAY NOT EXTEND MORE THAN 2 FEET INTO THE CHANNEL.
- C. A FLOAT MUST BE PLACED IN THE CANAL MARKING THE LOCATION OF THE IRRIGATION LINE.
- D. THE PUMP MUST BE LOCATED OUTSIDE OF THE CANAL RIGHT OF WAY.
- E. ANY SPRINKLER HEADS PLACED WITHIN THE RIGHT OF WAY MUST BE FLUSH WITH THE GROUND SURFACE OR BE OF THE "POP-UP" TYPE. RAISED SPRINKLER HEADS ARE NOT ALLOWED.
- F. THE RIGHT OF WAY, INCLUDING THE BANK SLOPE, MUST BE BACK-FILLED AND RESTORED TO APPROXIMATE THE ORIGINAL CONDITION BEFORE INSTALLATION OF THE IRRIGATION LINE.