



**RFP 2018-02
DRAINAGE OUTFALL
DESIGN AND PERMITTING**

Mandatory Meeting for Proposers

August 15, 2015

IMPORTANT DATES

- August 15th, 2:00pm Mandatory Meeting for Proposers
- August 17th, 5:00pm Deadline for Questions
- August 22nd, 5:00pm Response to Questions Posted
- September 5th, 2:00pm Deadline for Submissions
- September 12th, 4:30pm Planning Commission review of proposals
- October 23rd, 6:00pm City Council considers recommendation of award

OBJECTIVES OF PROJECT

- Improve three major outfalls at on the Intracoastal Waterway side of the island adjacent to 30th Avenue, 3605 Waterway Boulevard and 41st Avenue to seal the system from tidal intrusion, but allow stormwater to exit
- Infrastructure will need to be sized and designed for future improvement to flow through
- The ultimate design should be to a level that would have kept flood waters associated with Hurricane Joaquin from damaging houses

SCOPE OF WORK

- Analyze the drainage basins associated with each of the three outfalls to determine the appropriate size and location of the future outfalls
- Survey all ditches and structures associated with the three outfalls from the Intracoastal Waterway to a point 100 feet inland (southwest) from Waterway Boulevard
- Provide several conceptual project alternatives to several City boards/commissions including costs and different levels of service
- After review of the different concepts, the City will provide direction of which alternative to pursue

SCOPE OF WORK (CONTINUED)

- Develop finalized engineering design to meet the identified objectives
- Secure all necessary permits through all applicable agencies including OCRM, US Army Corps of Engineers, Charleston County, SCDOT, and the City
- Provide final budget estimates to aid the City in assembling adequate funding
- Identify potential grant opportunities
- Advise on prioritizing work, if smaller, less costly projects could be undertaken to provide immediate relief while funding for the larger project is assembled
- Alternate#1- prepare all bidding documentation
- Alternate#2- provide construction administration services

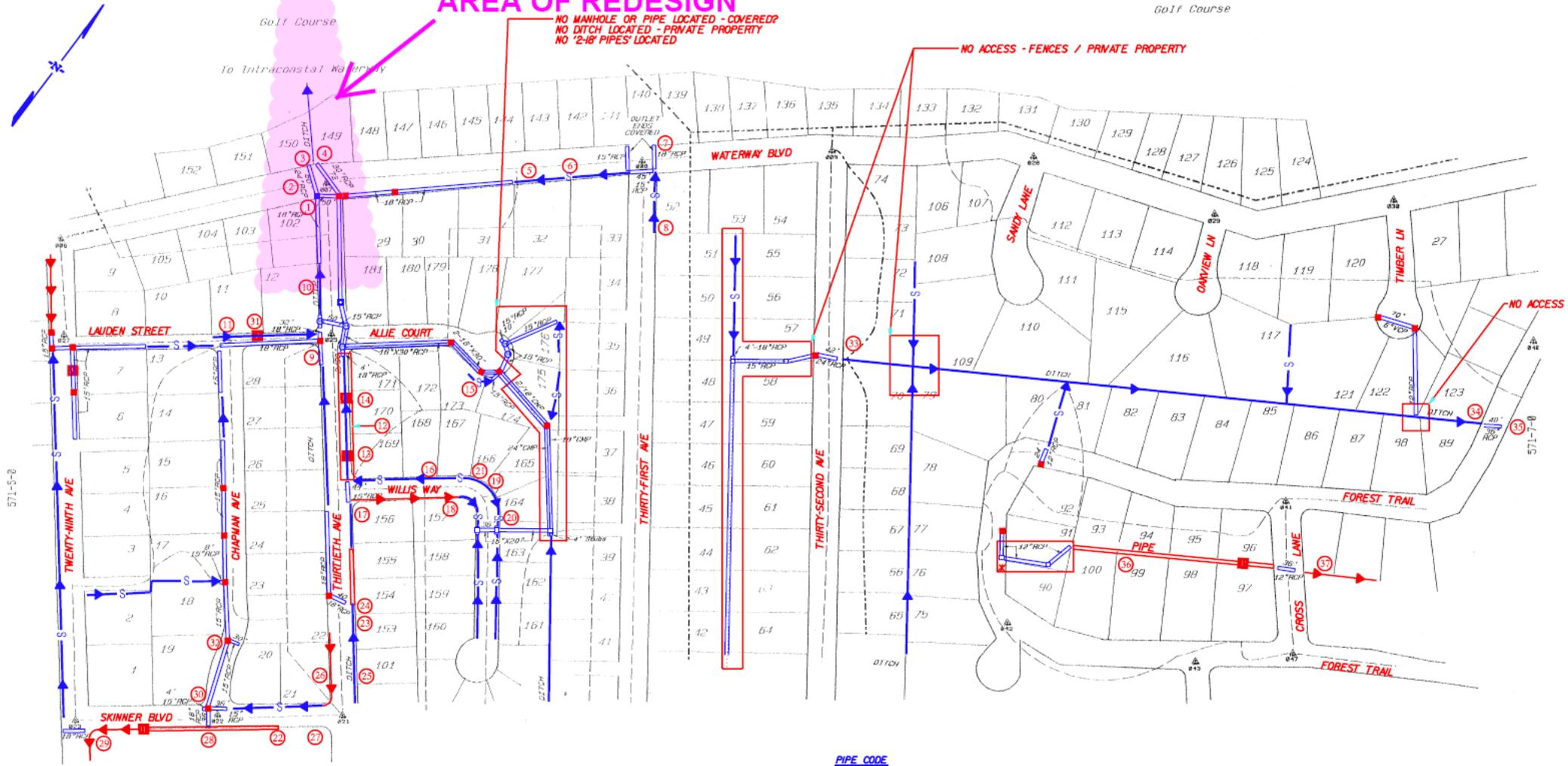
DATE	REV.	BY	DESCRIPTION
3		SC	CHARLESTON

AREA OF REDESIGN

NO MANHOLE OR PIPE LOCATED - COVERED
NO DITCH LOCATED - PRIVATE PROPERTY
NO 2'-18" PIPES LOCATED

NO ACCESS - FENCES / PRIVATE PROPERTY

NO ACCESS



LEGEND

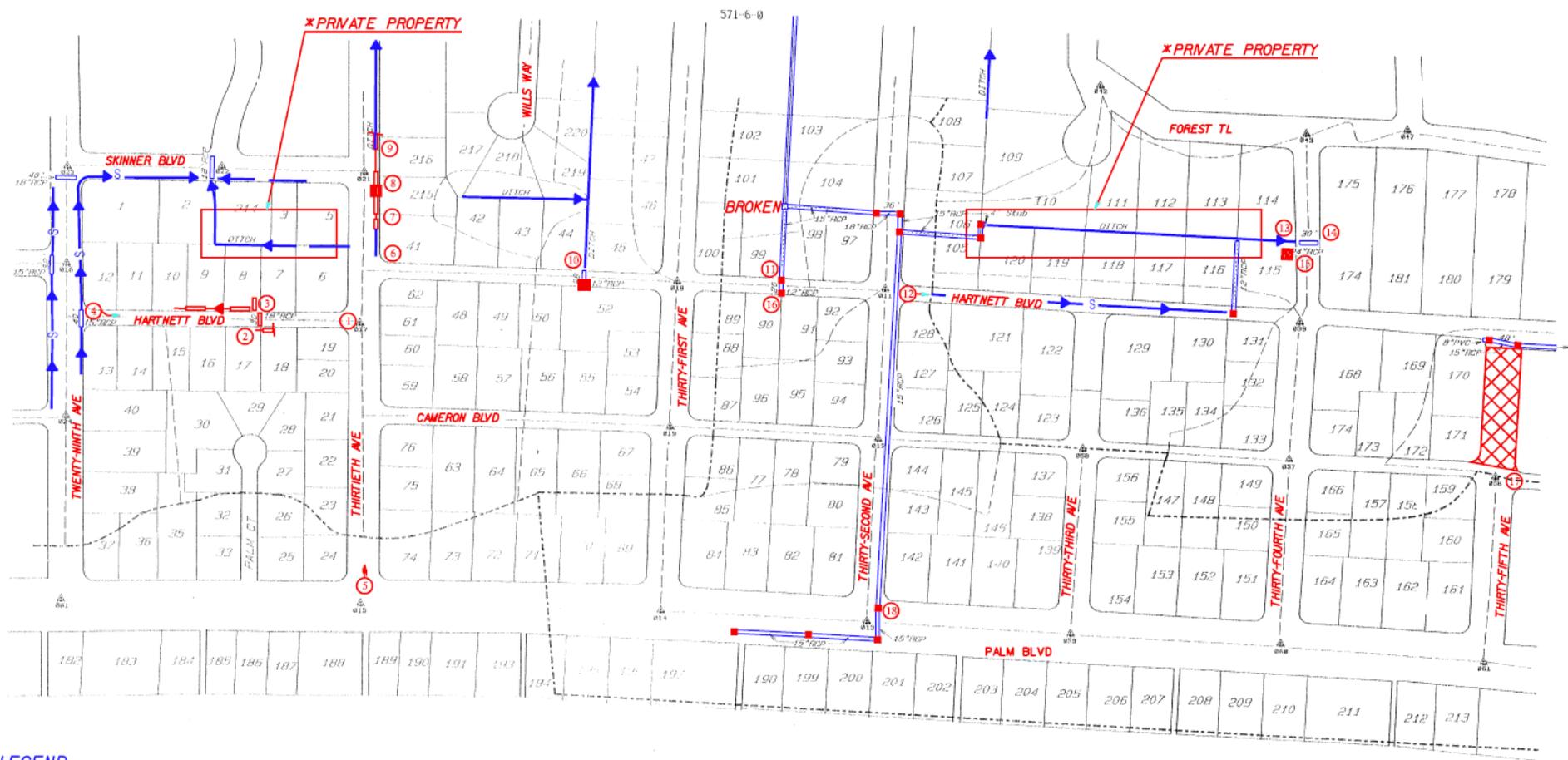
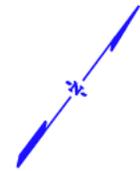
- | | | | |
|--|-----------------------------|--|-----------------------|
| | Storm Drain Pipe | | Manhole |
| | Hydrologic Watershed Divide | | Curb and Gutter Inlet |
| | Drop Inlet | | Open Ditch |
| | Junction Box | | Swale Ditch |
| | Drop Inlet w/ Grate | | Temporary Bench Mark |
| | | | Unable To Locate |

- PIPE CODE**
- RCP Reinforced Concrete Pipe
 - CMP Corrugated Metal Pipe
 - BFP Bituminous Fiber Pipe
 - DIP Ductile Iron Pipe
 - PVC Plastic Pipe
 - VCP Vitrified Clay Pipe



6				COUNTY OF CHARLESTON DEPARTMENT OF PUBLIC WORKS ISLE OF PALMS DRAINAGE INVENTORY SHEET 14 SCALE 100' = 1"
5				
4				
3				
2				
1				
REV. NO.	BY	DATE	DESCRIPTION OF REVISION	

DIST.	REV.	DATE	BY	DESCRIPTION
3	SC	CHARLESTON		



LEGEND

- RCP Storm Drain Pipe
- Hydrologic Watershed Divide
- Drop Inlet
- Junction Box
- Drop Inlet w/ Grate
- Manhole
- Curb and Gutter Inlet
- Open Ditch
- Swale Ditch
- Temporary Bench Mark
- Unable To Locate

PIPE CODE

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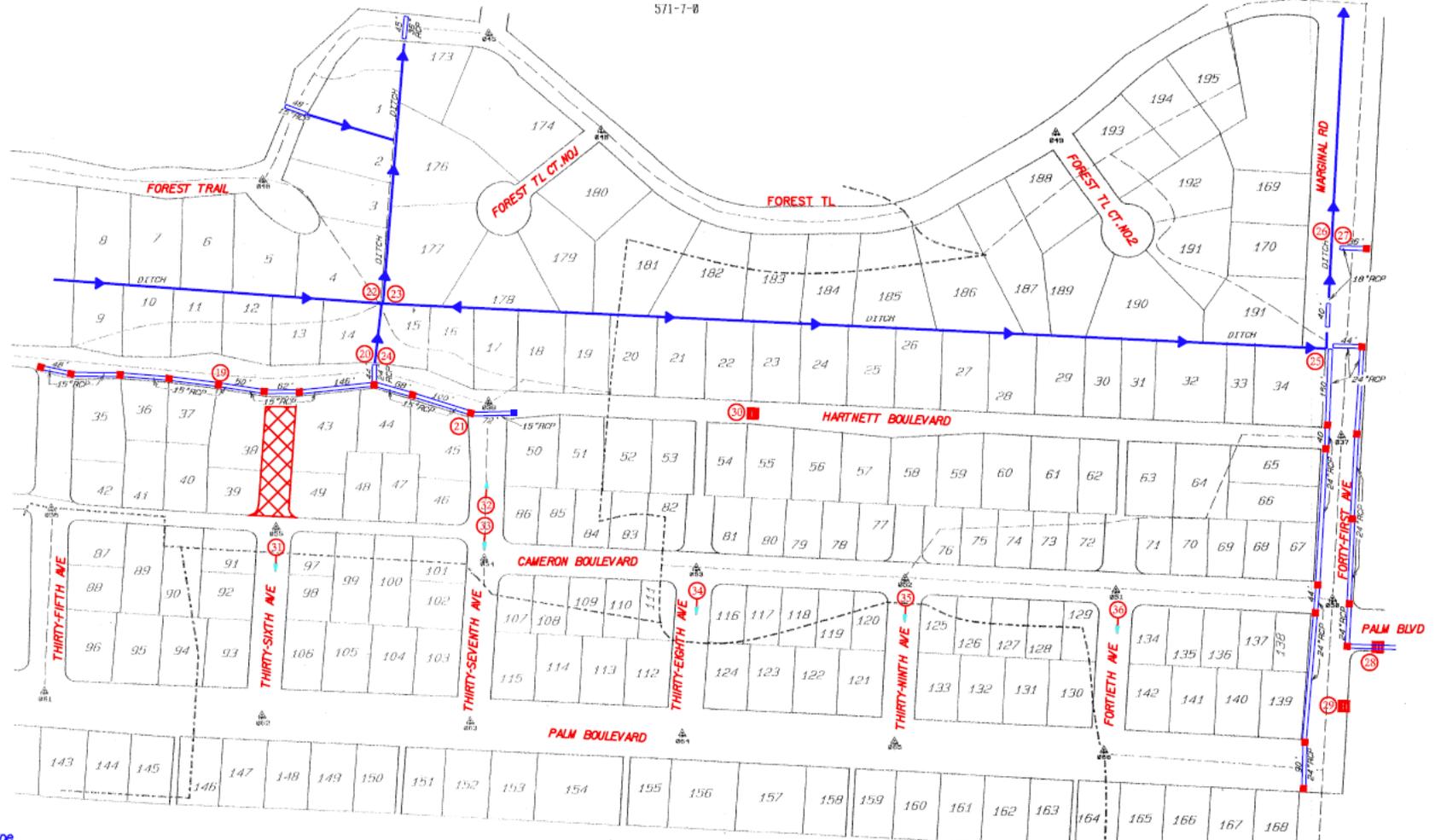


8				
5				
4				
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2				
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REV. NO.	BY	DATE	DESCRIPTION OF REVISION	

COUNTY OF CHARLESTON DEPARTMENT OF PUBLIC WORKS ISLE OF PALMS DRAINAGE INVENTORY	
SHEET 8	
SCALE 100' = 1"	

DATE	REV.	BY	DESCRIPTION
3	SC	CHARLESTON	

571-7-8



571-10-8

571-12-0

LEGEND

- RCP Storm Drain Pipe
- Hydrologic Watershed Divide
- Drop Inlet
- Junction Box
- Drop Inlet w/ Grate
- Manhole
- Curb and Gutter Inlet
- Open Ditch
- Swale Ditch
- Temporary Bench Mark
- Unable To Locate

PIPE CODE

- RCP Reinforced Concrete Pipe
- CMP Corrugated Metal Pipe
- BFP Bituminous Fiber Pipe
- DIP Ductile Iron Pipe
- PVC Plastic Pipe
- VCP Vitrified Clay Pipe



REV. NO.	BY	DATE	DESCRIPTION OF REVISION

COUNTY OF CHARLESTON DEPARTMENT OF PUBLIC WORKS	
ISLE OF PALMS DRAINAGE INVENTORY	
SHEET 9	
SCALE 100' = 1"	

DATE	REV.	BY	DESCRIPTION
3		SC	CHARLESTON

LEGEND

- RCP Storm Drain Pipe
- Hydraulic Watershed Divide
- Drop Inlet
- Junction Box
- Drop Inlet w/ Grate
- Manhole
- Curb and Gutter Inlet
- Open Ditch
- Swale Ditch
- Temporary Bench Mark
- Unable To Locate



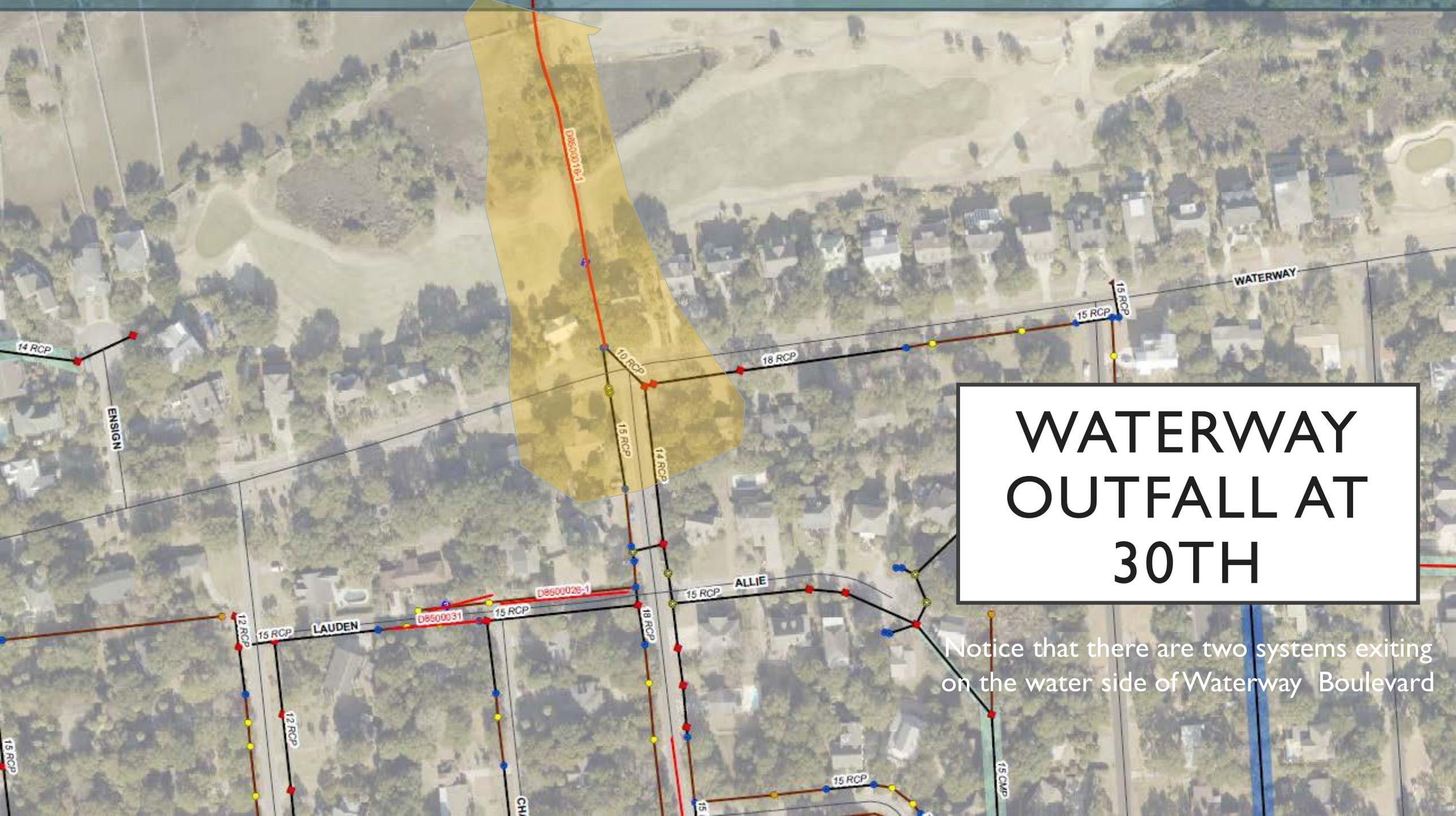
PIPE CODE

RCP	Reinforced Concrete Pipe
CMP	Corrugated Metal Pipe
BFP	Bituminous Fiber Pipe
DIP	Ductile Iron Pipe
PVC	Plastic Pipe
VCP	Vitrified Clay Pipe



REV. NO.	BY	DATE	DESCRIPTION OF REVISION

COUNTY OF CHARLESTON	
DEPARTMENT OF PUBLIC WORKS	
ISLE OF PALMS DRAINAGE INVENTORY	
SHEET 10	
SCALE 100' = 1"	



WATERWAY OUTFALL AT 30TH

Notice that there are two systems exiting on the water side of Waterway Boulevard



**WATERWAY
OUTFALL AT 30TH
AVE**

NOTICE SMALLER PIPE ON
RIGHT BELOW THE LEVEL
OF LOW TIDE AND SILTED
IN. PIPE ON LEFT WAS
UPGRADED SEVERAL
YEARS AGO



**WATERWAY
OUTFALL AT 30TH
AVE**

TAKEN FROM THE SAME
POINT AS PREVIOUS
PICTURE LOOKING
TOWARD THE
INTRACOASTAL
WATERWAY



**WATERWAY
OUTFALL AT 30TH
AVE**

TAKEN 50 YARDS
DOWNSTREAM AT LOW
TIDE- WATER IS NOT
FLOWING AT THIS POINT.
STORMWATER MEETING
TIDAL WATER MAY CAUSE
BUILD-UP



WATERWAY OUTFALL AT 30TH AVE

TAKEN FROM OTHER SIDE OF BRIDGE-
THIS AREA IS WHERE EADIE'S
CLEARING OF THE DITCH HAS
HISTORICALLY STOPPED



WATERWAY OUTFALL AT 30TH AVE

TAKEN ANOTHER 50 YARDS
DOWNSTREAM FROM GOLF COURSE-
WATER IS NOT FLOWING AT THIS
POINT. NOTICE LACK OF CHANNEL.
THIS AREA WAS CLEARED ONCE BY
THE COUNTY SEVERAL YEARS AGO.



WATERWAY OUTFALL AT 30TH AVE

CLOSE TO THE ULTIMATE OUTFALL
INTO THE INTRACOASTAL WATERWAY



WATERWAY OUTFALL AT 30TH AVE

TAKEN AT THE ULTIMATE DISCHARGE-
WATER IS FLOWING WELL AT THIS
POINT BUT ALL TIDAL

QUESTIONS?