



# TOWN COUNCIL AGENDA

## REGULAR MEETING

July 15, 2019 @ 6:00 p.m.

\*Asterisks indicate documentation is included in agenda packet

Call to Order – Mayor Bloszinsky

Invocation & Pledge of Allegiance – Pastor Chris Howell

### APPROVAL OF CONSENT AGENDA ITEMS

1. \*Accept Dan Lockwood's resignation from the Marketing Committee
2. \*Accept Retha Deaton's resignation from the P&Z Commission and approve moving alternate David Garceau to full member
3. \*Minutes:
  - June 17, 2019 Regular
  - June 17, 2019 Special
  - June 17, 2019 Closed

### ADOPTION OF THE AGENDA

### DISCUSSION AND CONSIDERATION OF PERSONS TO ADDRESS COUNCIL

1. \*CWMTF grant feasibility study result by Jonathan Hinkle of LDSI, Inc. and Lauren Kolodij, Deputy Director Of Coastal Federation

### DISCUSSION AND CONSIDERATION OF COMMITTEE BUSINESS

1. Community Center Committee
2. Marketing Committee
3. Shoreline Access and Beach Protection
4. Non town Committee Reports
5. Planning & Zoning Commission

### DISCUSSION AND CONSIDERATION OF DEPARTMENT HEAD BUSINESS

1. Administration
2. Building Inspections Department
3. Finance Department
4. Fire Department
5. Police Department



# TOWN COUNCIL AGENDA

## REGULAR MEETING

July 15, 2019 @ 6:00 p.m.

6. Public Works Department

7. Recreation Department

## DISCUSSION AND CONSIDERATION OF OLD BUSINESS

1. \*Social Media Policy (Sanders)
2. \*Storm Water Study Scope Document for Bid Requests (Heglar)

## DISCUSSION AND CONSIDERATION OF NEW BUSINESS

1. Sponsorship of the CB Bike Rodeo hosted by the CBPD (Whitley)

MAYOR UPDATES (no action required)

COMMISSIONER ITEMS (no action required)

## CLOSED SESSION

Closed session for consultation on a personnel matter as per N.C.G.S. 143-318.11(a)(6)

## ADJOURNMENT

# CONSENT

**Debbie Elliott**  
President  
**Talk, Inc.**  
290 Seawatch Way  
Kure Beach, NC 28449  
910-471-3181  
[www.talkinc.com](http://www.talkinc.com)  
*Public Relations • Marketing • Crisis Management*

Begin forwarded message:

**From:** Dan Lockwood <[danielpdlockwood@gmail.com](mailto:danielpdlockwood@gmail.com)>  
**Subject:** Kure Beach Marketing Committee  
**Date:** June 17, 2019 at 9:54:29 AM EDT  
**To:** Debbie Elliot <[debbie@talkinc.com](mailto:debbie@talkinc.com)>

Hi Debbie,

I hope you're doing well.

I'm saddened to inform you that I will no longer be participating in the Kure Beach Marketing Committee as we're relocating back to Miami, FL at the end of the month.

We have loved our time here in Kure Beach, and I have really enjoyed being part of the committee. You're doing a great job leading the committee and I wish you all the best.

Please feel free to reach out if I can help in any way remotely.

Best regards,  
Dan

Dan Lockwood  
Mobile: 786.918.3577

Retha O Deaton  
749 Settlers Lane  
Kure Beach, North Carolina 28449  
June 21, 2019

The Honorable Craig Bloszinsky  
Mayor of Kure Beach  
117 Settlers Lane  
Kure Beach, North Carolina 28449

Dear Mayor Bloszinsky:

Please accept this letter as official notice of my resignation from the Town of Kure Beach Planning and Zoning Commission, effective June 30, 2019. While I indicated in my application that I am not available in July and August due to travel to Harsens Island, Michigan, this travel will generally span not only the months July and August but also early September. In addition, I will also be spending the months of January through March in St. Augustine, Florida. These residency changes place me over the limit of three absences within a given 12-month period.

I have learned much about the Kure Beach community while a member of the Planning and Zoning Commission and appreciate the opportunity to serve my town.

Yours very truly,

Retha O. Deaton

Cc: Commissioner Joseph Whitley  
Mr. Craig Galbraith, Chairman of the Planning and Zoning Commission

# PRESENTATIONS



# MEMO

TO: Town Council  
FROM: Nancy Avery, Town Clerk  
RE: Presentations  
DATE: July 11, 2019

## ***Topic***

Result of Clean Water Management Trust Fund (CWMTF) grant feasibility study regarding installation of storm water infiltration systems at beach accesses at J, I, H, G, F Avenues and Davis Road. This was a collaborative effort with NC State University Biological and Engineering Department, NC DOT Hydraulics Engineering Division, LDSI Engineering and NC Coastal Federation.

## ***Status***

Two members of the grant team, LDSI Engineering and Coastal Federation, will give a presentation on the results and recommendations of the feasibility study that found that the dune areas at these accesses are capable of holding systems without negatively impacting water tables or dune structure. Part of the study was to look at capturing and treating more than the first ½ inch of storm water that the other systems between K and L are capable of to help protect the integrity of the outfalls during heavier rainfalls, divert and retain more water in the dunes and allow more of the water released into the ocean to be treated to be environmentally safe for swimmers.

## ***Funding required***

The grant team will talk about possible funding streams to reduce the cost to the Town:

- Environmental Enhancement Grant (EEG) - provides funds up to \$500k to governmental entities to preserve and enhance state natural resources – application cycle opens in July
- CWMTF grant cycle opens in February 2020
- FEMA's Interagency Recovery funds – we have already sent a letter of interest
- NC DOT is offering funding from their retrofit budget – I believe this is something we should strongly consider

When we built the Ocean Front Park, we had several grants and were able to use the Town's cash and in-kind payments to meet the requirements of all grants, which is very helpful in keeping the Town's cost lower.

## ***Next step***

Should Council wish to continue with this project, I suggest requesting a proposal from both LDSI and Coastal Federation for cost associated with them applying for grants and other funding options to design and install systems at all 6 locations. Once funding options and the Town's contribution amount are known, Council could then decide whether to proceed with installation or not.



# SOLUTIONS FOR A CHANGING WORLD

TOWN OF KURE BEACH  
STORMWATER INFILTRATION FEASIBILITY STUDY FOR  
CLEAN WATER MANAGEMENT TRUST FUND PLANNING GRANT  
NANCY AVERY | TOWN CLERK  
KURE BEACH TOWN HALL, 117 SETTLERS LANE, KURE BEACH, NC 28449 | N.AVERY@TOKB.ORG

FINAL REPORT  
NOT FOR CONSTRUCTION  
PLANNING DOCUMENT ONLY



2019-06-12

DocuSigned by:  
*Jonathan Hinkle*  
E85B93F0A62C4EE...



## Contents

1. Executive Summary .....	3
2. Background and Purpose .....	4
2.1 Introduction .....	4
2.2 Purpose and Need .....	4
2.3 Goals and Objectives .....	5
3. Water Quality Analysis .....	5
4. Hydrology Modeling .....	6
5. Hydraulic Modeling & Sizing of Infiltration Systems .....	8
6. Multi-Criteria Decision Matrix .....	9
7. Monitoring Plan .....	10
8. Funding Opportunities .....	10
8.1 NC's Clean Water Management Trust Fund (CWMTF) .....	11
8.2 EPA Section 319 Grant Program .....	11
8.3 Water Resource Development Grant .....	11
8.4 Clean Water State Revolving Fund (CWSRF) Loan .....	12
8.5 Stormwater Utility Fee .....	12
9. Conclusion and Recommendations .....	12

LDSI, Inc prepared this report for:



Town of Kure Beach  
Partners



North Carolina  
Coastal Federation

North Carolina Coastal Federation  
[www.nccoast.org](http://www.nccoast.org)



North Carolina State University  
Biological & Agricultural Engineering  
Department  
[www.bae.ncsu.edu](http://www.bae.ncsu.edu)

Cover photo Davis Road outfall taken January 2019.

## 1. Executive Summary

LDSI, Inc assisted the Town of Kure Beach with a Clean Water Management Trust Fund Planning Grant which analyzed the feasibility of installing stormwater infiltration at the following outfalls:

- E – Avenue (no outfall the team switched to the Davis Road Outfall)
- F – Avenue
- G – Avenue
- H – Avenue
- I – Avenue
- J – Avenue

The project tasks included:

- Identify feasibility of stormwater infiltration system installation at alternative locations, such as between the dunes and the end of the beach access parking areas,
- Develop a typical infiltration system schematic,
- Develop a monitoring plan,
- Develop cost opinions for installation of the infiltration systems,
- Compile a list of funding sources.

The design team consisted of LDSI as the lead designer, with consulting assistance from the NCSU Biological and Agricultural Engineering Department, NC DOT Hydraulics Engineering Division, and the NC Coastal Federation. The team analyzed site conditions, soils data, topographic information, water quality data, ground water data, and recommended alternatives at each site. LDSI will prepare preliminary designs and cost estimates for each site. All six outfall locations were analyzed and deemed feasible for installation of stormwater infiltration system. As explained below within the multi-criteria design matrix, some of the sites are more feasible than others. The highest ranking and targeted outfall selected by the team was located at G-Avenue. It is the expectation that the Town will use the feasibility study to determine whether to pursue one or more of the sites and pursue funding for the final design and construction of the infiltration systems. LDSI and the other partners on the project would like to draw attention that this is a feasibility study only; further analysis is needed prior to the development of construction documents.



*Photo 1: Davis Road Stormwater Outfall During Discharge Event*

## 2. Background and Purpose

### 2.1 Introduction

LDSI, Inc was contracted by the Town of Kure Beach to perform a feasibility analysis on six (6) of their stormwater outfalls. It should be noted that the figures and values within this report are to a feasibility study level and more analysis needs to be done during the design phase of this project. This phase intends to provide an assessment of the physical parameters at each of the six outfalls and the feasibility to infiltration the stormwater similar to what was done at L, M, and K. The team plans to expand on the results that were achieved at the previously installed outfalls and the results reported within the ASCE technical paper *Feasibility of a Dune Infiltration System to Protect North Carolina Beaches From Fecal Bacteria Contaminated Stormwater*.



Photo 2: Showing location of underground storm drain.

*Storm water ocean outfalls discharging into recreational waters pose a human health threat because of increased potential exposure to bacteria and other pathogens. The dune infiltration system (DIS) was designed and implemented at two ocean outfall sites in response to concerns by the North Carolina Department of Transportation and the town of Kure Beach, North Carolina. The systems were designed to divert storm water runoff from 1.9 ha (4.7 acre) and 3.2 ha (8.0 acre) watersheds into the beach dunes. Following construction, data were collected from 25 storms during March through October 2006. The systems captured a combined total of nearly 1,800 m<sup>3</sup> (63,500 ft<sup>3</sup>), or 95% of the influent storm water runoff—a significant reduction of runoff volume and peak flow discharging directly onto the beach ( $p < 0:0001$ ). Fecal coliform and enterococci concentrations were measured in the inflowing storm water runoff and groundwater downslope of the systems. Both groundwater bacteria concentrations near the systems were significantly lower than the bacteria concentrations in the inflowing storm water ( $p < 0:001$ ). Furthermore, groundwater fecal coliform concentrations after implementing the DISs were statistically similar to preconstruction levels ( $p < 0:05$ ). The initial results are promising, and the system should be considered for more widespread use. However, further comprehensive research is recommended to more thoroughly understand the viability of the DIS as a stormwater best management practice and the fate and transport of the bacteria within the dunes. (T. Bright, M. Burchell, W. Hunt, and W. Price)*



Photo 3: Erosion from overflow area after Hurricane Florence

### 2.2 Purpose and Need

Tourism, beach and swimming activities along the Atlantic Ocean are the mainstays of Kure Beach as a recreation destination and are integral to the town's economic health. According to the State of North Carolina, 600,000 tourists visited Kure Beach between March and November of 2014. The population of New Hanover County, including Kure Beach, is projected to double by 2025; this will bring increased

tourism and development. These factors will lead to increased potential for bacterial contaminants and other stormwater pollutants to enter the recreational beach areas following a rain event. For instance, on 9.29.2016, NCDEQ issued a swimming alert for two Kure Beach locations south of the Avenue K pier. Water quality officials found bacteria levels in the ocean water that exceeded the state's and EPA recreational water quality standards. According to the press release, officials believed that the stormwater runoff from heavy rainfall, as well as extreme tidal conditions, contributed to the high bacteria counts. With increased population, climate change, and aging infrastructure, it is imperative that Kure Beach and other coastal towns work to divert bacterial pollutants from the beach and the Atlantic Ocean.

## 2.3 Goals and Objectives

The goal is to reduce the frequency and duration that stormwater with high levels of bacteria enters the recreational beach area, thus protecting Kure Beach's greatest environmental and economic asset – recreational beach areas along the Atlantic Ocean. The installation of stormwater infiltration systems is proven to:

- Reduce stormwater discharge.
- Reduce bacteria discharged.
- Reduce the potential of human contact with polluted stormwater runoff.
- Complement existing stormwater infrastructure.

Having already shown to be successful at L, M, & K Avenues the goal of the infiltration project is to analyze the expansion of the footprint of these success stories.

## 3. Water Quality Analysis

A small number of water quality samples were collected from 1) the Kure Beach stormwater system to provide a snapshot of bacteria concentrations currently discharged from the outfalls and compare that to 2) the groundwater surrounding the three existing dune infiltration systems (DISs). Samples were collected and transported on ice to Environmental Chemists, Inc. in Wilmington N.C. While this provided some valuable information of the quality of the stormwater and a glimpse of how the existing DISs continue to perform, a much more rigorous sampling regime similar to what was used in our previous studies and described in Price et al. (2013) and Burchell et al. (2013) would be required to make more defensible comparisons.

Enterococcus indicator bacteria concentrations in the stormwater sampled was above the NC single sample maximum threshold of 104 MPN/100mL for recreational contact waters at K avenue that drains to one of the existing DISs, and was even higher at J Avenue and I Avenue that drains to two of the outfalls targeted for new systems in this study. These values are similar to those obtained during continuous pre- and post-construction stormwater sampling as part of the original DIS study (Price et al., 2013; Burchell et al., 2013). Note, the flow at M avenue is continuous from infiltration from an unknown source with low bacteria content.



Photo 4: NC DOT signage at completed dune infiltration system at K – Avenue.  
(Photo courtesy of Town of Kure Beach )

Location	Enterococcus (MPN/100mL)		
	4/11/2019	4/11/2019	5/9/2019
M Ave	2	13	3
K Ave	30	291	----
J Ave	>2420	>2420	>2420
I Ave	----	1120	----

Table 1: Enterococcus concentrations measured in surface water in the stormwater system leading to outfalls at M avenue, K avenue, J avenue, and I Avenue.

Groundwater samples were collected from original wells used to determine the performance of the original DISs. Samples were collected just down slope of the systems to intercept the groundwater moving toward the ocean (- MID locations, Table 2). Wells located 25 m down slope of the systems (-25 locations, Table 2) were at the dune/beach interface. Unfortunately, many had been destroyed during beach erosion and were not sampled. Samples were collected using sterile disposable bailers.

With one exception, (M-25 on 5/9/2019), groundwater *Enterococcus* values were below the recreational water quality contact standard. Although these values were just a snapshot of groundwater bacterial concentrations, they were similar to those obtained in our original more rigorous study. These are the values we would expect to see surrounding new systems that could be installed at Kure Beach.

Location	Enterococcus (MPN/100mL)	
	4/11/2019	5/9/2019
K-MID	36*	5.5*
K-25	4	29.5
L-MID	1*	1*
L-25	----	----
M-MID	1.5*	8.5*
M-25	5*	192*
Control-MID	1	3
Control-25	----	----

Table 2 Enterococcus concentrations measured in groundwater at (-MID) and 25 m downslope (-25) of the existing dune infiltration systems at K avenue, L Avenue, M avenue, and within the Control dunes. Note \* indicates the average of two wells sampled.

#### 4. Hydrology Modeling

LDSI analyzed all watersheds to the various outfalls utilizing GIS, stormwater inventory, LiDAR, and zoning information. The team utilized the Department of Environmental Quality (DEQ) approved “Simple Method” to size the volume of infiltration basins.

$$Design\ Volume = 3,630 \times R_D \times R_V \times A$$

$$R_D = Design\ Storm\ Depth\ (in) = 1\ inch\ for\ this\ project$$

$$A = Watershed\ Area\ (acres)$$

$$R_V\ (Runoff\ coefficient\ (unitless)) = 0.05 + 0.9 \times I_A$$

$$I_A = Impervious\ Fraction\ (unitless)$$

The following table summarizes the findings of the hydrology modeling.

Outfall Location	Area (Acres)	Design Volume (CuFt)
Davis Road	8.1	17,348
F – Avenue	8.6	18,419
G – Avenue	2.6	5,568
H – Avenue	7.8	16,705
I – Avenue	6.8	14,564
J – Avenue	8.3	17,776

Table 3: Summary of Hydrology Modeling

Groundwater elevations beneath the dune are a critical component to determine whether infiltration systems are a feasible option at Kure Beach and other locations. Based on the proximity to the other locations, the team felt that the data from the K Avenue site would be sufficient to provide reference information for the other locations for the feasibility study. Figure 1 shows hourly water table elevations from upslope and downslope of the K avenue DIS during February-May 2019. Two locations were monitored to 1) show the general slope of groundwater flow at this location from the bulkhead that protects Atlantic Avenue (Figure 1 – Blue line) and just downslope of the DIS (Figure 1, Green Line), and 2) determine the average elevation of the groundwater at this location in the dunes as a proxy to where the new infiltration systems will be installed.

Monitoring does show a slight a gradient of groundwater flow towards the ocean, as indicated by the higher elevation of the groundwater near the bulkhead compared to the groundwater near the DIS. Also evident, is the increased tidal influence of the groundwater near the DIS, which is closer to the ocean. This tidal fluctuation slows the groundwater flow through the dunes, and during infiltration events, increases residence time and improves water quality treatment potential.

Mean groundwater elevations in the mid dunes was 2.6 feet above MSL, with a maximum depth of 6 feet following an infiltration event, and a minimum level of 1.3 ft. These values are consistent to prior monitoring at the site.

The higher above the mean water table the system is installed, the more efficient it will be in infiltrating stormwater and removing bacteria. However, the invert of the existing stormwater pipe entering the dunes drives the elevation of where the system can be installed. The Site K DIS was installed with an invert elevation of 7.5 feet above MSL, which for this site allowed for 4.5 – 5 feet of sand beneath the dunes for infiltration. While Kure Beach has high dune elevations and low water table elevations within the dunes to accommodate infiltration systems, the feasibility for infiltration future systems at Kure Beach will be strongly tied to the invert elevations of the stormwater pipes at each location evaluated.

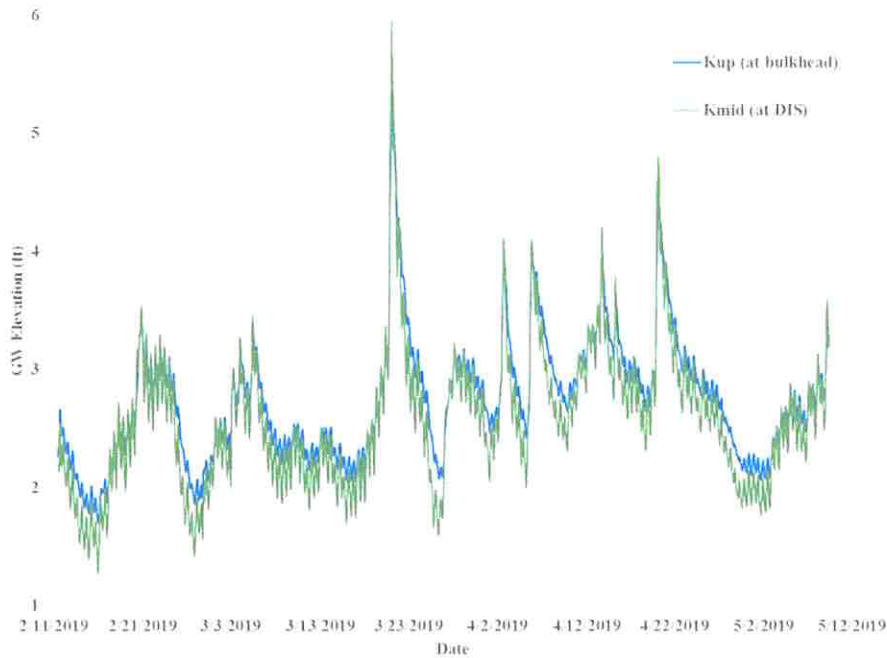


Figure 1: Groundwater elevations around the existing DIS at K avenue, to be used as a guide for conditions expected in the dunes at other locations in Kure Beach under consideration for new infiltration systems

## 5. Hydraulic Modeling & Sizing of Infiltration Systems

The LDSI team utilized a continuous simulation model to analyze the impacts of the installation of a dune infiltration system at the various outfalls. These simulations included a study period of 1995 to 2005. The simulations are based on one-hour steady state snapshots throughout the time period. The team utilized these modeling efforts to size the systems and check the effects on the existing infrastructure.



Photo 5: By-pass structure within existing infrastructure.

It should be noted that the sixth parameter as shown in Table 5 *Summary of Decision Matrix*, “Depth of Pipe at Dune” is the depth of the existing stormwater system. The base of the infiltration systems was modeled at 3.5 FT to 4.5 FT (NAVD), this is to allow drainage from the existing system into the infiltration system. The groundwater during the modeled period had an average elevation of approximately 2.6 FT (NAVD), providing a separation between the system of approximately one foot. Based on analysis there are periods of time that groundwater would be within the infiltration system and other times that the separation between the system and groundwater exceeds the modeled one foot. The team would like to draw attention that additional modeling would be required during the design phase as this was ground water extrapolated from monitoring data conducted by NCSU at the K – Avenue monitoring site, site specific data will be required during the design of each site.

Outfall	Area Available	# of Hours Analyzed	# of Hours with Infiltration	% of Time with Infiltration	# of Hours in By-pass	% of Time in Bypass
Davis Road	0.04	96,335	12,301	13%	238	0.25%
F – Avenue	0.09	96,335	10,818	11%	237	0.25%
G – Avenue	0.03	96,335	8,759	9%	22	0.02%
H – Avenue	0.05	96,335	10,838	11%	297	0.31%
I – Avenue	0.05	96,335	11,017	11%	165	0.17%
J – Avenue	0.08	96,335	10,991	11%	235	0.24%

Table 4: Summary of Continuous Modeling Efforts

The team analyzed not only the proposed infiltration system, but the affect the system would have on the existing stormwater infrastructure. The freeboard at Fort Fisher Blvd. was used as a control when evaluating the system, with the limited area for infiltration and watershed characteristics a by-pass box will be necessary at each outfall. The sizing of a by-pass weir at each outfall is dependent these parameters and necessary to minimize flooding potential on Fort Fisher Blvd. as well as ensure the infiltration area is not overloaded. All of the outfalls were analyzed with by-pass weirs in order to ensure capacity during large storm events for the safety of Fort Fisher Blvd. After discussion with NCSU, LDSI developed a concept of being able to manage the height of this weir which would allow for maintenance as well as ensure that there are no detorments to the integrity of the dunes. Therefore, within the weir inside of the by-pass box there will be a series of flashboard riser style adjustments that can be made in order to allow for this management and maintenance.

## 6. Multi-Criteria Decision Matrix

Following the analysis and sizing, the team developed a decision matrix to analyze the project against themselves in order to prioritize funding/priorities.

Multi-Criteria Decision							
	Davis	F Avenue	G Avenue	H Avenue	I Avenue	J Avenue	Multiplier
Watershed Size	8.1	8.6	2.6	7.8	6.8	8.3	5
Area Required/Available for Infiltration	0.04	0.09	0.03	0.05	0.05	0.08	11
Hours to Infiltrate the Design Storm	83.9	33.4	32.3	54.7	46.0	37.8	9
Percent of time with Infiltration	12.8%	11.2%	9.1%	11.3%	11.4%	11.4%	3
Percent of time with By-Pass	0.2%	0.2%	0.0%	0.3%	0.2%	0.2%	10
Depth of Ex Pipe at Dune (FT)	3.7	6.0	6.5	7.6	7.8	6.2	8
Depth of Ex Pipe to Groundwater (assume GW@ 2 MSL) (FT)	3.9	5.0	5.1	3.9	3.8	5.1	2
Depth of Pipe Below Fort Fisher BLVD	7.1	6.2	6.4	6.3	6.9	6.8	1
Percent of Storms By-Passed	4.0%	4.0%	0.4%	5.0%	2.8%	4.0%	4
Freeboard at Fort Fisher Blvd	0.76	0.48	5.68	0.09	1.90	1.45	6
Project Cost (PLANNING LEVEL)	\$ 83,480.59	\$143,996.17	\$84,965.50	\$102,814.90	\$104,241.24	\$148,788.18	7
<b>Ranking</b>	<b>4</b>	<b>6</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>5</b>	

\*\*All values are based on 1-hour rainfall and continuous simulation model with a data range from 1995 to 2005

Table 5: Summary of Decision Matrix

Note: Depth of Pipe at Dune is the depth of the existing pipe infrastructure below the average dune surface, depth to groundwater is the depth of the existing pipe infrastructure to the GW assumed at 2 MSL.

As shown by several of the ranking questions the importance of being able to be implemented within the existing infrastructure were key components within the evaluation. The G – Avenue outfall ranked first within the matrix due to the watershed size, the existing topography characteristics, as well as depth of existing infrastructure.



## 7. Monitoring Plan

Conditions at each of the site locations we evaluated were somewhat different than the original sites. Most notably, the first row of houses in these locations are not separated from the dunes like they were by Atlantic Avenue at sites K, L, and M avenue. Additionally, the infiltration systems will likely be installed lower in the dunes, closer to the groundwater, than at the original sites, because the elevations of the existing stormwater pipes entering the dunes are lower. Therefore, post-construction monitoring of these sites will remain an important component of these projects.

As at the previous sites, continuous stormwater flow monitoring during the first year in the diversion chambers will be important to check our watershed runoff models, and provide estimates of the amount of runoff treated and the percentage of time overflow events occurred. This type of monitoring was used in our previous work to show that 97% of the stormwater from the watersheds that drained to L and M, and 80% of the stormwater that drained to K, was captured in the DIS. Storm event *Enterococcus* sampling of water entering the system should also be employed to determine runoff characteristics, and could be used for source tracking.

Groundwater monitoring wells equipped with continuous water level dataloggers will be critical since the system will be installed deeper and the beachfront properties are not as isolated as at the previous sites. A transect of 3-4 wells perpendicular to each new system installed will provide the data needed to evaluate how the groundwater responds, particularly closest to the beachfront houses, following infiltration events. We have investigated the potential of use of real-time water level measurements like those employed by USGS to remotely observe changes in groundwater during rainfall events. If adjustable weirs are employed in the diversion boxes, this type of data could allow the Town to make real-time decisions to divert water away from the infiltration systems in the unlikely event that groundwater levels are too high.

## 8. Funding Opportunities

There are several potential funding options for implementing the Town's stormwater outfall infiltration projects. Some of these are included in the table below.

Name	Funding Cycle	Application Deadline(s)
North Carolina's Clean Water Management Trust Fund (CWMTF)	1 – per year	Early February
EPA Section 319 Grant Program	1 – per year	Early May
Water Resource Development Grant	2 – per year	Late June, Late December
Clean Water State Revolving Fund (CWSRF) Loan	NA	NA
Stormwater Utility Fee	NA	NA

Table 6 Summary of funding opportunities.

The following sources were utilized for this list of funding opportunities: The Environmental Finance Center at the University of North Carolina, Chapel Hill Methods and Strategies for Financing Green Infrastructure, and Individual web sites from funding sources.

## 8.1 NC's Clean Water Management Trust Fund (CWMTF)

Overview: This funding source was established by the General Assembly in 1996 as a non-regulatory organization with a focus on protecting and restoring the State's land and water resources. Grants are awarded to non-profit and governmental organizations to protect land for natural, historical and cultural benefit, limit encroachment on military installations, restore degraded streams, and develop and improve stormwater treatment technology.

According to the Environmental Finance Center at the University of North Carolina, Chapel Hill the available resources for this program are greatly reduced and can no longer fund conventional stormwater or wastewater projects but this makes the fund a good opportunity for green infrastructure projects like the dune infiltration systems.

Award Decision Range: Annual award ranges vary with the total funding statewide at approximately 25 million. Innovative stormwater projects are generally awarded less than acquisition projects.

Cycles: CWMTF has one grant cycle per year. The application form is available in early December through the Online Grants Management System. For example, the application deadline for 2019 was February 4th, and final award decisions will be made in the fall of 2019.

Information: <https://cwmtf.nc.gov/>

## 8.2 EPA Section 319 Grant Program

Overview: Through Section 319(h) of the Clean Water Act, the U.S. Environmental Protection Agency provides states with funding to reduce nonpoint source pollution. Funds may be used to conduct watershed restoration projects such as stormwater and agricultural best management practices and restoration of impaired streams. Section 319 grant projects must be used to help restore waterbodies currently impaired by nonpoint source pollution in areas with approved watershed restoration plans. It is recommended that the Town of Kure Beach consider development of a watershed restoration plan to become eligible for the Section 319 funding.

Award Decision Range: North Carolina typically receives around \$1 million for competitive funding of watershed restoration projects

Cycles: Late January: Request for Proposals released, Early May: 319 Grant Application deadline, Early June: Applicants notified whether they will be invited for in-person interviews, Late June: Notified applicants interviewed in Raleigh; selected projects announced, January of following year: Projects may start (estimated, depending on grant award date to NCDEQ and time for contract preparation)

Information: <https://deq.nc.gov/about/divisions/water-resources/water-planning/nonpoint-source-planning/319-grant-program/recent-319>

## 8.3 Water Resource Development Grant

Overview: This grant program provides cost-share grants and technical assistance to local governments. Applications for grants are accepted for seven eligible project types: general navigation, recreational navigation, water management, stream restoration, water-based recreation, Natural Resources Conservation Service Environmental Quality Incentives Program (EQIP) stream restoration projects and feasibility/engineering studies. The non-navigation projects are collectively referred to as state and local projects.

Award Decision: Range \$10,000 ~ \$200,000

Cycles: There are two grant application cycles per fiscal year for state and local projects. The current spring 2019 grant cycle began Jan.1 and applications are due by June 30. The second cycle is from July 1 – December 31.

Contact: Amin Davis amin.davis@ncdenr.gov

Information:

[https://files.nc.gov/ncdeq/Water%20Resources/documents/WRDG%20WSN%20New%20Bern%20102317\\_A%20Davis.pdf](https://files.nc.gov/ncdeq/Water%20Resources/documents/WRDG%20WSN%20New%20Bern%20102317_A%20Davis.pdf)

## 8.4 Clean Water State Revolving Fund (CWSRF) Loan

The North Carolina State Water Infrastructure Authority (SWIA) oversees a number of water and wastewater loan and grant programs including the joint state/federal (EPA) funded Clean Water State Revolving Fund (CWSRF). According to the UNC Environmental Finance Center report entitled Methods and Strategies for Financing Green Infrastructure, local governments can obtain loans at rates as low as 0% for 20 years to fund eligible projects including stormwater projects.

## 8.5 Stormwater Utility Fee

Under North Carolina law, stormwater fees can be used to cover a wide range of stormwater quality and quantity programs. Kure Beach currently implements a stormwater utility fee.

## 9. Conclusion and Recommendations

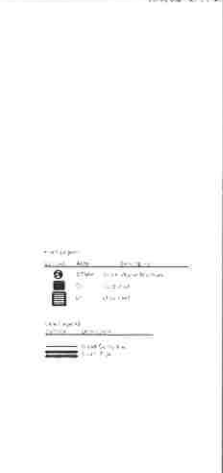
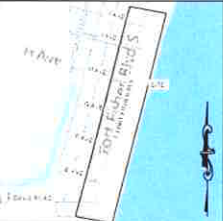
LDSI evaluated the all six (6) outfalls and deemed them feasible for the installation of an infiltration system. The recommendation is for the Town to seek funding for installation and design of all six. It is the belief of LDSI that the installation of these systems will add to the resiliency of the Town and improve water quality for its residents, tourists, and aquatic species within the area. During the design of each outfall infiltration system it is highly recommended that the following occur:

- Installation of monitoring wells at each planned dune location,
- A groundwater hydrology be conducted to estimate impact of design,
- Soils analysis,
- Monitoring of installed system,
- Re-evaluation of infrastructure following hurricane events.

The summary of planning-level cost information and estimated design cost is shown below.

Outfall Location	Design Costs	Construction Costs
Davis Street	\$20,870	\$83,480
F - Avenue	\$35,999	\$143,996
G - Avenue	\$21,241	\$84,965
H - Avenue	\$25,703	\$102,814
I - Avenue	\$26,060	\$104,241
J - Avenue	\$37,197	\$148,788
<b>Total</b>	<b>\$167,072</b>	<b>\$668,287</b>

Table 7: Summary of Future Costs



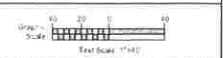
**NOT FOR CONSTRUCTION**  
ISSUED FOR PRELIMINARY REVIEW

Clean Water Management Trust Fund (CWMTF)  
Dune Infiltration Exhibit  
prepared for  
**Town of Kure Beach**

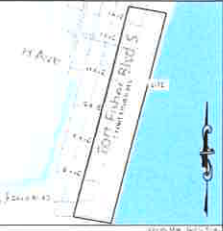
DATE	DESCRIPTION



**LBI**  
1308 HWY 268 S  
Kinston, NC 28564  
Phone: (252) 337-5229  
Fax: (252) 337-1153  
License No. C-1925  
www.lbi-nc.com



DATE: 05/10/2018 10:00 AM  
PROJECT NUMBER: 2570343  
DRAWN BY: JH  
REVIEWED BY: JH  
SCALE BY: JH  
DATE: 05/10/2018 10:00 AM

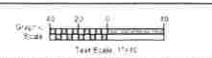


**NOT FOR CONSTRUCTION**  
ISSUED FOR PRELIMINARY REVIEW

Clean Water Management Trust Fund (CWMTF)  
Dune Infiltration Exhibit  
prepared for:  
**Town of Kure Beach**

DATE	DESCRIPTION	BY

13115 HWY 258 S  
Kinston, NC 28504  
Phone: (704) 331-4329  
Fax: (704) 338-3153  
License No: C19125  
www.lsci-nc.com



FILE: 4515242-1.DWG	PLT DATE: 2/16/2021
PROJECT NUMBER: 4517043	
DRAWN BY: DM	
REVIEWED BY:	
DATE:	



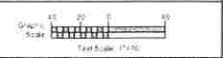


**NOT FOR CONSTRUCTION**  
ISSUED FOR PRELIMINARY REVIEW

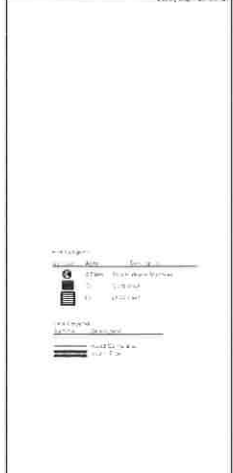
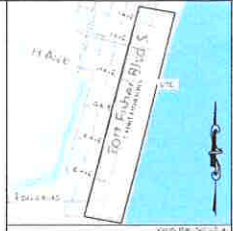
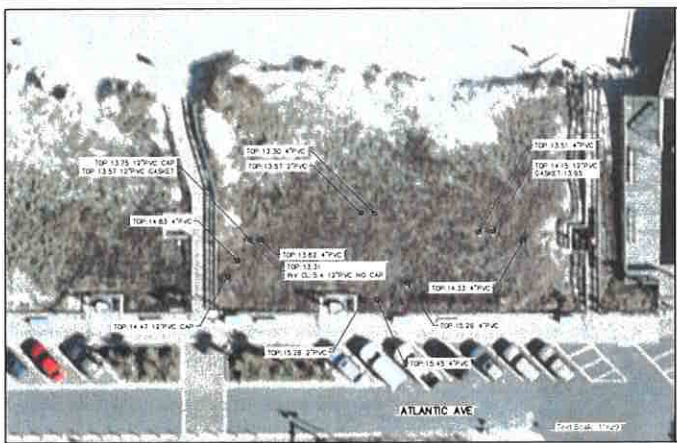
Clean Water Management Trust Fund [CWMTF]  
Dune Infiltration Exhibit  
prepared for:  
**Town of Kure Beach**

NOV 11 2010	11:30 AM	11/11/10
NOV 11 2010	11:30 AM	11/11/10
NOV 11 2010	11:30 AM	11/11/10
NOV 11 2010	11:30 AM	11/11/10

1308 HWY 248 S  
Kinston, NC 28504  
Phone: (704) 337-8329  
Fax: (704) 308-3152  
License No.: C-1925  
www.lbsi-nc.com



File: 45780467.DWG	Plot Date: 2010/11/11
Project Number: 4578046	
Drawn By: JKH	
Reviewed By:	
Scale:	Sheet 4 of 7



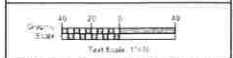
**NOT FOR CONSTRUCTION**  
ISSUED FOR PRELIMINARY REVIEW

Clean Water Management Trust Fund (CWMTF)  
Dune Infiltration Exhibit

prepared for:  
**Town of Kure Beach**

DATE	DESCRIPTION

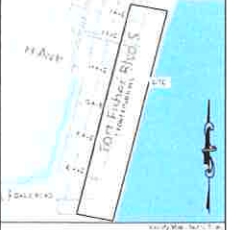
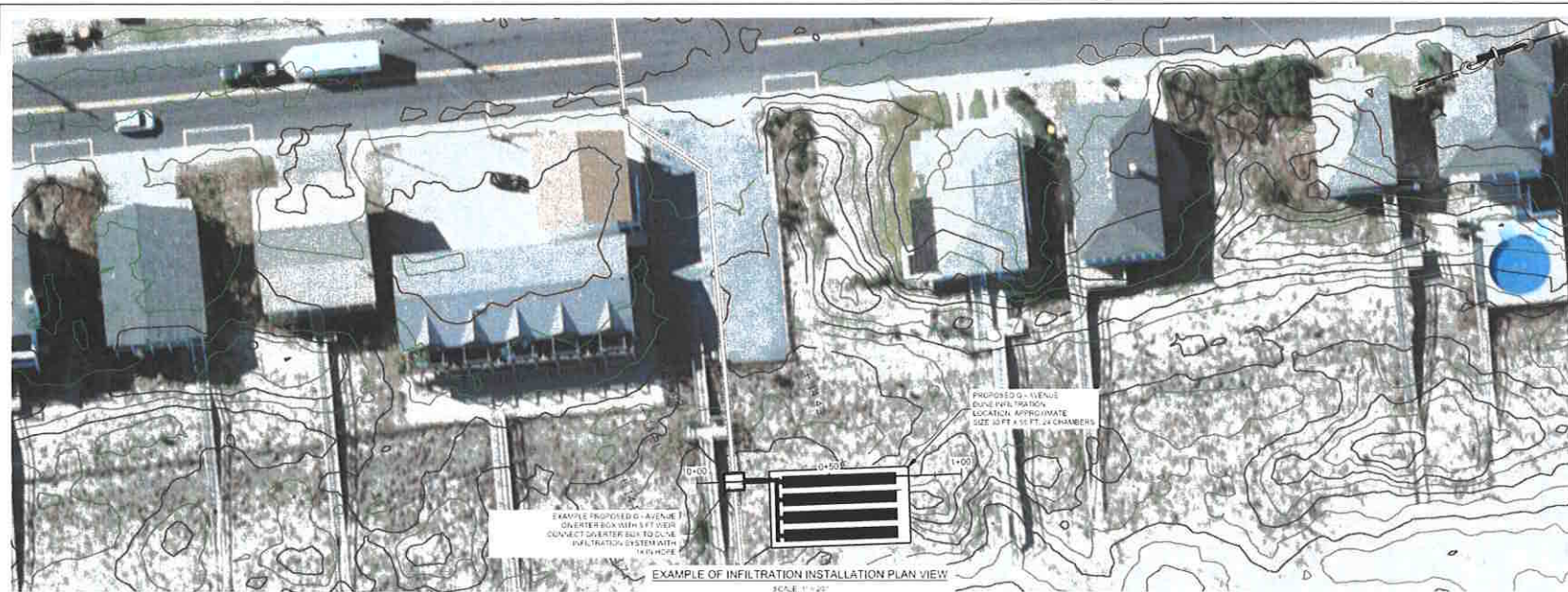
1308 HWY 258 S  
WINSTON, NC 28684  
PHONE: (704) 337-8229  
FAX: (704) 337-3153  
LICENSE NO. C-1925  
WWW.LBI-NC.COM



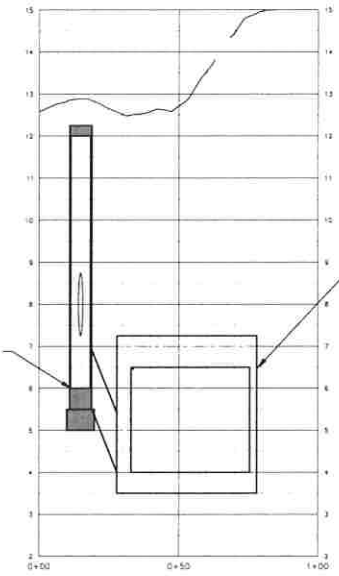
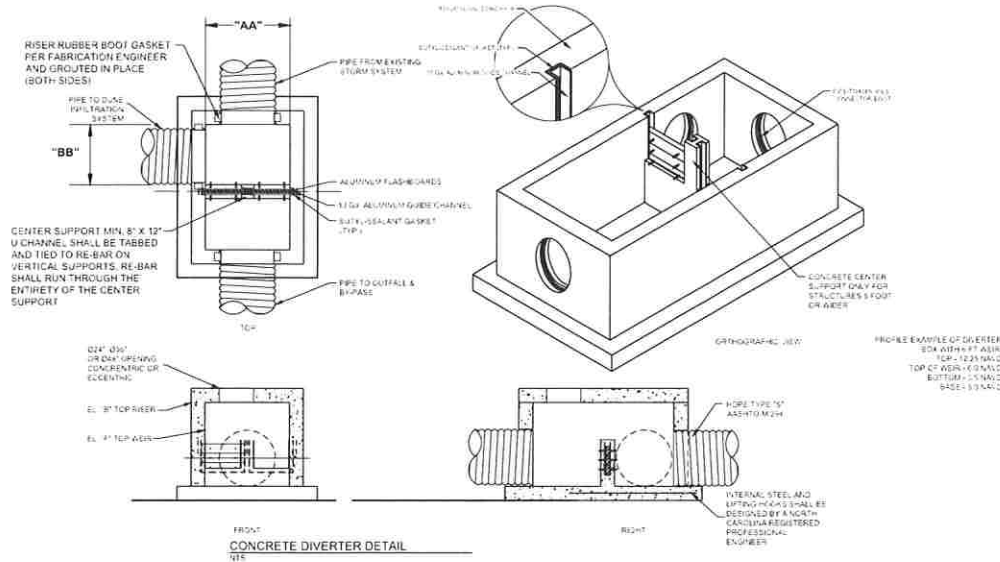
DATE: 8/15/2016	PROJECT: 2116-0611
PROJECT NUMBER: 2116061	DATE: 08
DRAWN BY: JH	DESIGNED BY:
CHECKED BY:	

Sheet 5 of 7





EXAMPLE OF INFILTRATION INSTALLATION PLAN VIEW  
SCALE: 1"=100'



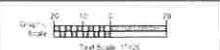
EXAMPLE OF INFILTRATION INSTALLATION PROFILE VIEW  
SCALE: 1"=20' (H), 1"=15' (V)

**NOT FOR CONSTRUCTION**  
ISSUED FOR PRELIMINARY REVIEW

Clean Water Management Trust Fund (CWMTF)  
Dune Infiltration Exhibit  
prepared for:  
Town of Kure Beach

DATE	DESCRIPTION

1308 HWY 258 S.  
Winston, NC 28658  
Phone: (704) 337-5129  
Fax: (704) 338-3153  
License No: C-19125  
www.lbsi-nc.com



DATE: 04/25/2014 (DAI)	PROJECT: 2013-05-01
PROJECT NUMBER: 217563	
DATE: 04/25/14	
PROJECT: 2013-05-01	
SCALE: 1/32"	

**NOTE:**  
ALL DIMENSIONS SHOWN ARE MINIMUM. FABRICATION ENGINEER SHALL SIZE STRUCTURES IN ACCORDANCE WITH THEIR CALCULATIONS, MAINTAINING THE WEIR LENGTH SPECIFIED WITHIN THE TABLE BELOW.

**STORMTECH CHAMBER SPECIFICATIONS**

1. MANUFACTURE TO SPECIFICATION
2. CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
3. CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
4. THE STRUCTURAL DESIGN SHALL BE IN ACCORDANCE WITH THE STRUCTURAL DESIGN CODES AND STANDARDS APPLICABLE TO THE PROJECT AND SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.
5. CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
6. CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
7. CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
8. CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
9. CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
10. CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE

**INSPECTION & MAINTENANCE**

- A. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
- B. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
- C. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
- D. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
- E. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
- F. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
- G. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
- H. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
- I. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
- J. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE

**NOTES**

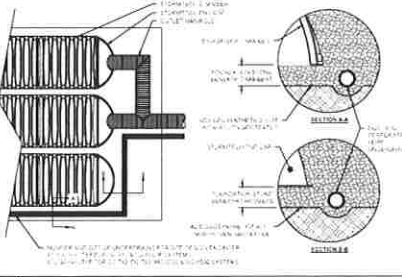
1. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
2. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
3. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE

**IMPORTANT NOTES FOR THE DESIGN AND INSTALLATION OF THE DC-780 CHAMBER SYSTEM**

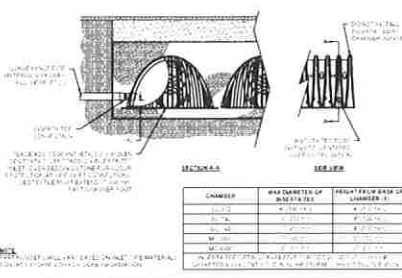
1. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
2. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
3. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
4. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
5. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
6. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
7. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
8. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
9. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
10. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE

**NOTES FOR CONSTRUCTION EQUIPMENT**

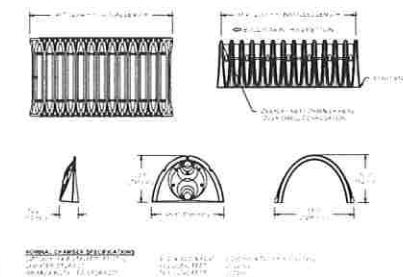
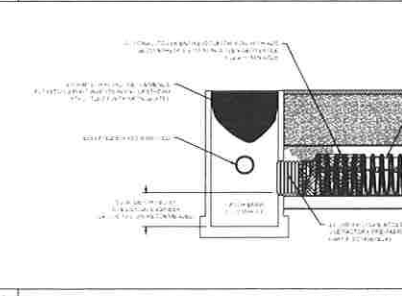
1. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
2. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
3. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE



**5 UNDERDRAIN DETAIL**



**6 INSERTA-TEE SIDE INLET DETAIL**

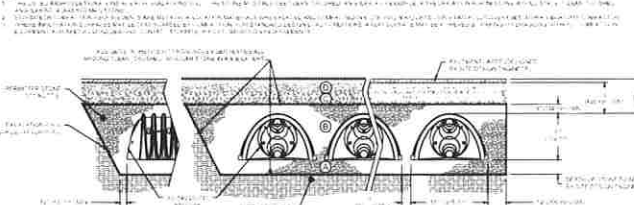


**2 DC-780 TECHNICAL SPECIFICATIONS**

PART #	STUB	A	B	C
1	1	1	1	1
2	1	1	1	1
3	1	1	1	1
4	1	1	1	1
5	1	1	1	1
6	1	1	1	1
7	1	1	1	1
8	1	1	1	1
9	1	1	1	1
10	1	1	1	1

**ACCEPTABLE FILL MATERIALS: STORMTECH DC-780 CHAMBER SYSTEMS**

MATERIAL LOCATION	DESCRIPTION	ASH-TO MATERIAL CLASSIFICATION	COMPACTION/DENSITY REQUIREMENT
1. FILL MATERIALS BETWEEN CHAMBER SYSTEMS	1. FILL MATERIALS BETWEEN CHAMBER SYSTEMS	1. FILL MATERIALS BETWEEN CHAMBER SYSTEMS	1. FILL MATERIALS BETWEEN CHAMBER SYSTEMS
2. FILL MATERIALS UNDER CHAMBER SYSTEMS	2. FILL MATERIALS UNDER CHAMBER SYSTEMS	2. FILL MATERIALS UNDER CHAMBER SYSTEMS	2. FILL MATERIALS UNDER CHAMBER SYSTEMS
3. FILL MATERIALS AROUND CHAMBER SYSTEMS	3. FILL MATERIALS AROUND CHAMBER SYSTEMS	3. FILL MATERIALS AROUND CHAMBER SYSTEMS	3. FILL MATERIALS AROUND CHAMBER SYSTEMS
4. FILL MATERIALS INSIDE CHAMBER SYSTEMS	4. FILL MATERIALS INSIDE CHAMBER SYSTEMS	4. FILL MATERIALS INSIDE CHAMBER SYSTEMS	4. FILL MATERIALS INSIDE CHAMBER SYSTEMS

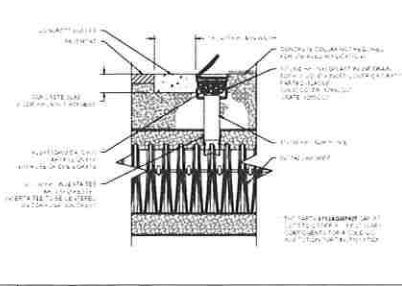


**NOTES:**

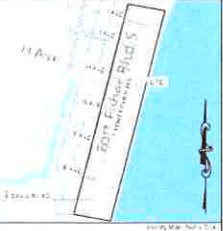
1. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
2. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
3. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
4. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
5. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
6. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
7. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
8. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
9. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE
10. THE CHAMBER SHALL BE MADE OF 1500mm x 1500mm x 150mm PRECAST CONCRETE

**1 DC-780 CROSS SECTION DETAIL**

**3 DC-780 ISOLATOR ROW DETAIL**



**4 DC-780 6" (150 mm) INSPECTION PORT DETAIL**



**NOT FOR CONSTRUCTION**  
ISSUED FOR PRELIMINARY REVIEW

Clean Water Management Trust Fund (CWMTF)  
Dune Infiltration Exhibit

prepared for:  
**Town of Kure Beach**

1305 HWY 258 E  
Winston, NC 28554  
Phone: (704) 337-8329  
Fax: (704) 338-3153  
License No.: C-1925  
www.lbsi.com

Scale: 1" = 10'-0"

File: 01/10/2014  
Drawn By: JLD  
Checked By: JLD  
Scale: 1" = 10'-0"



# **OLD BUSINESS**

# **SOCIAL MEDIA POLICY**



## **TOWN OF KURE BEACH SOCIAL MEDIA POLICY**

The Town of Kure Beach will employ the use of social media websites to reach citizens it might not otherwise reach. The Town, through the Authorized Personnel, may operate Facebook, Twitter and other social media accounts as deemed necessary by the approval of the Town Council. Authorized Personnel is defined as the Town Clerk, Department Heads and their designees.

### **GENERAL PROVISIONS**

Information posted to any Town of Kure Beach social media site must be approved by the Town Authorized Personnel and must be consistent with the mission and community activities of the Town of Kure Beach government. For the Town's primary social networking sites, such as its official Facebook page, content will be posted by the Authorized Personnel in accordance with its practices for disseminating other forms of public information. Typically, that involves securing approval from affected departments (department heads or their designees) and appropriate management. Content posted to social media sites may include news releases, approved photos and videos, agendas, announcements, promotional tools, and similar material.

### **GUIDELINES**

- The Town Clerk or Authorized Personnel will create and maintain the Town's official Social Media accounts. All account activity will be reviewed and uploaded to the account.
- Under certain circumstances, a Town Department may want to create and maintain social media applications that are separate from those maintained by the Town Council or Authorized Personnel. Departments are required to get approval from the Town Council before implementing departmental specific social media applications.
- Some avenues to allow user comments may be turned off, including discussion boards, "walls" and comment sections.
- Unless a social media site has been authorized to accept comments, unofficial or public comments may not be posted.
- If the public is allowed to post comments to a social media account or page, the Town reserves the right to delete content that is:
  - off subject or out of context
  - contains obscenity or material that appeals to the prurient interest
  - contains personal identifying information or sensitive personal information
  - contains offensive terms that target protected classes

- is threatening, harassing or discriminatory
- incites or promotes violence or illegal activities
- contains information that reasonably could compromise individual or public safety
- advertises or promotes a commercial product or service, or any entity or individual
- promotes or endorses political campaigns or candidates

## **NOTIFICATION OF THIRD PARTY**

All social media sites must have the following verbiage clearly posted:

### Moderation of Third Party Content

This agency social media site serves as a limited public forum and all content published is subject to monitoring. User-generated posts will be rejected or removed (if possible) when the content is:

- off subject or out of context
- contains obscenity or material that appeals to the prurient interest
- contains personal identifying information or sensitive
- personal information
- contains offensive terms that target protected classes
- is threatening, harassing or discriminatory
- incites or promotes violence or illegal activities
- contains information that reasonably could compromise individual or public safety
- advertises or promotes a commercial product or service, or any entity or individual
- promotes or endorses political campaigns or candidates

### Public Records Law

Agency social media sites are subject to applicable public records laws. Any content maintained in a social media format related to agency business, including communication posted by the Agency and communication received from citizens, is a public record. The Department maintaining the site is responsible for responding completely and accurately to any public records request for social media content.

Representatives of Town of Kure Beach communicate via this Web site. Consequently any communication via this site (whether by a government employee or the general public) may be subject to monitoring and disclosure to third parties.

Please note that the comments expressed on social networking sites (Facebook, Twitter, YouTube, etc.) by others do not reflect the opinions and position of the Town of Kure Beach or its employees.

# **STORMWATER**



## SCOPE OF WORK

### Storm Water Study – Town of Kure Beach

The purpose of this document is to define the scope of work for a comprehensive review of the Town of Kure Beach, NC stormwater system for consideration of system upgrades or modifications based on citizen concerns following Hurricane Florence issues.

**Background:** At the April 2019 Town Council meeting – Denise Hubbard presented concerns regarding storm water issues following Hurricane Florence. The Council presentation is in Appendix 1 – KB Flooding Kure Village Way – Denise Hubbard.pdf. Appendix 2 contains the current stormwater flood maps that have the GIS documents to the Kure Beach Storm Water System. Appendix 3 is the list of current storm water permits that are active in the town of Kure Beach. Appendix 4 is the detailed list of properties that were reported impacted by the Hurricane Florence event during the April presentation both by reports to the Town Building Inspections Department and as presented by Mrs. Hubbard in her April presentation – categorized as how reported.

**PROJECT PURPOSE:** To evaluate the stormwater systems that are identified by the town staff for (1) initial design flows, (2) compare the initial design to current best practice design and (3) to highlight opportunities for improvement by identifying the current limiting factor in each evaluated system. Review will include non-Town owned portions of serving systems (HOA owned ponds, external outfalls through MOTSU) that serve the identified areas of concern. This will be the beginning phase of a multi-stage project to review the entire town's stormwater system.

## **SCOPE OF WORK**

Provide pricing and timing for each option separately to allow Town Council to prioritize the project scheduling and funding.

- Inventory the existing storm drainage collection system, at the Owner specified locations, and discharge points from surveys, drawings, and discussions with the Town staff to document the current as designed system. Additionally – from this review highlight the system flow restrictions and provide recommendations on improvements.
- Identify components that are under capacity and provide recommendation for component sizes for peak stormwater inflows to achieve current Stormwater Best Practices as defined by State of North Carolina.
- Provide recommendations for proposed stormwater drainage improvements with descriptions and cost estimates.
- Review grant and low interest funding options with the state and federal programs.
- Review existing ordinances, drainage studies, flood hazard studies, and topography to develop an understanding of the existing conditions in the area.

# Storm Water Permits in Kure Beach

Data was generated from the Active State Stormwater Permit List updated 6/2019 at the following website:


<https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-data/stormwater-maps-gis-resources>

<https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-data/stormwater-maps-gis-resources>

Home Permits & Rules Outreach & Education Energy & Climate Conservation News About

## Stormwater Maps & GIS Resources

[Stormwater Permitting Interactive Map](#)



The State maintains an interactive web-based map to help the public determine whether development activities are subject to the post-construction stormwater permitting program or other stormwater permitting requirements. Please read the information below about using the results of this map viewer. While we do our best to make the map as accurate as possible, this viewer is only a tool to help in making final determinations about your responsibilities for permit coverage.

[Information about this Website](#)

[Additional Regulatory Resources](#)

[How to Use this Website](#)

For assistance with the interactive map, please contact [gis@deq.nc.gov](mailto:gis@deq.nc.gov)

### Active Permits

The following are provided for informational purposes only and are accurate as of the date of posting.

[State NPDES Stormwater Permit List](#) - updated 6/2019

[Local State Stormwater Permit List](#) - updated 6/2019

[Other Stormwater Permits](#)

- Yellow dots indicate NPDES Individual Permits and NPDES General Permits
- Purple dots indicate NPDES Air Emission Detention
- Green dots indicate Post-Construction Permits

#### Reference Maps for Determining Permitting Requirements

City	Permit Number	Regulated Activity	Permit Type	Facility Name	Address 1	Permit
Kure Beach	SW8000929	- State Stormwater - Exempted	- State Stormwater	- Fort Fisher State Park Boardwalk Improvement	- US 421	Active
	SW8060806	- State Stormwater - HD - Infiltration	- State Stormwater	- Sea View Townhomes	- 637 Fort Fisher Blvd N	Active
	SW8061220	- State Stormwater - Redevelopment	- State Stormwater	- Sea View Townhomes	- 637 Fort Fisher Blvd N	Active
	SW8071035	- State Stormwater - Exempted	- State Stormwater	- Kure Beach Pier	- 100 Atlantic Ave	Active
	SW8071224	- State Stormwater - HD - Infiltration	- State Stormwater	- 110 Camp Wyatt Drive	- 110 Camp Wyatt Dr	Active
	SW8080611	- State Stormwater - HD - Infiltration	- State Stormwater	- Lund Residence	- 744 Fort Fisher Blvd	Active
	SW8080612	- State Stormwater - HD - Infiltration	- State Stormwater	- 1055 Fort Fisher Boulevard	- 1055 S Fort Fisher Blvd	Active
	SW8081102	- State Stormwater - HD - Infiltration	- State Stormwater	- 310 Avenue H	- 310 Avenue H	Active
	SW8090305	- State Stormwater - HD - Infiltration	- State Stormwater	- 633 3rd Avenue South Smith Residence	- 633 3rd Ave S	Active
	SW8090307	- State Stormwater - HD - Infiltration	- State Stormwater	- 1017 S Fort Fisher Boulevard	- 1017 S Fort Fisher Blvd	Active
	SW8090413	- State Stormwater - HD - Sand filters	- State Stormwater	- Ginsberg Residence	- 805 Mississippi Ave	Active
	SW8110225	- State Stormwater - HD - Wetlands	- State Stormwater	- Federal Point Boating Access Area Improvements	- Federal Point	Active
	SW8120409	- State Stormwater - Exclusion	- State Stormwater	- Kure Beach Ocean Front Park	- Atlantic Ave	Active
	SW8140503	- State Stormwater - Redevelopment	- State Stormwater	- Kure Beach Ocean Front Park	- Atlantic Ave	Active
	SW8140610	- State Stormwater - Exempted	- State Stormwater	- Fort Fisher Recreational Area Drinking Water System	- Fort Fisher Recreational Area	Active
	SW8151012	- State Stormwater - Redevelopment	- State Stormwater	- Fort Fisher Air Force Recreational Facility Phase I	- 118 Riverfront Rd	Active
	SW8171106	- State Stormwater - Exempted	- State Stormwater	- Fort Fisher Air Force Recreational Facility Phase I	- 118 Riverfront Rd	Active
	SW8180619	- State Stormwater - Alternative Design	- State Stormwater	- Kure Beach Coastal Storm Damage Reduction Project	- Oceanfront Shoreline	Active
	SW8890508	- State Stormwater - Low Density	- State Stormwater	- Snipes Property 110 Stormy Petrel	- 110 Stormy Petrel	Active
	SW8890519	- State Stormwater - Low Density	- State Stormwater	- Snipes Property 110 Stormy Petrel	- 110 Stormy Petrel	Active
	SW8891121	- State Stormwater - Exempted	- State Stormwater	- Town of Kure Beach Town Hall Renovations	- Sixth Ave	Active
	SW8910307	- State Stormwater - Redevelopment	- State Stormwater	- Town of Kure Beach Town Hall Renovations	- Sixth Ave	Active
	SW8920807	- State Stormwater - HD - Infiltration	- State Stormwater	- The Cove at Kure Beach Stormwater	- 858 Fort Fisher Blvd	Active
	SW8920904	- State Stormwater - Redevelopment	- State Stormwater	- The Cove at Kure Beach Stormwater	- 858 Fort Fisher Blvd	Active
	SW8940217	- State Stormwater - Low Density	- State Stormwater	- Kure By The Sea	- Fort Fisher Blvd	Active
	SW8940822	- State Stormwater - Low Density	- State Stormwater	- Kure By The Sea Phase II	- Hwy 421	Active
	SW8950709	- State Stormwater - Off-site	- State Stormwater	- NC Aquarium at Fort Fisher - Kure Beach	- 900 Loggerhead Rd	Active
	SW8960518	- State Stormwater - Exempted	- State Stormwater	- Ocean Dunes Forest Subdivision	- US Hwy 421	Active
	SW8961234	- State Stormwater - Low Density	- State Stormwater	- Kure Dunes Phase II	- Kure Dune Lanes	Active
	SW8981130	- State Stormwater - HD - Infiltration	- State Stormwater	- Kure Dunes Phase II	- Kure Dune Lanes	Active
	SW8990413	- State Stormwater - Off-site	- State Stormwater	- Hearne Tracts 1 And 2	- Kure Village Way	Active
	SW8990835	- State Stormwater - Exempted	- State Stormwater	- The Keys Of Kure Beach and Kure Beach Village Project	- 701 Sailor Ct	Active
	SW8990835	- State Stormwater - Low Density	- State Stormwater	- Fort Fisher State Historic Site	- 1610 Fort Fisher Blvd S	Active
	SW8990835	- State Stormwater - Off-site	- State Stormwater	- Kure Dunes Phase III	- Sandman Dr	Active
	SW8990835	- State Stormwater - HD - Detention Pond	- State Stormwater	- Beachwalk @ Kure Beach	- Dow Rd	Active
	SW8990835	- State Stormwater - HD - Detention Pond	- State Stormwater	- Kure Dunes Phase IV	- US Hwy 421	Active
	SW8990835	- State Stormwater - Infiltration System	- State Stormwater	- Kure Dunes Phase IV	- US Hwy 421	Active
	SW8990835	- State Stormwater - Infiltration System	- State Stormwater	- NC Aquarium at Fort Fisher - Kure Beach	- 900 Loggerhead Rd	Active
	SW8990835	- State Stormwater - Alternative Design	- State Stormwater	- NC Aquarium at Fort Fisher - Kure Beach	- 900 Loggerhead Rd	Active
	SW8990835	- State Stormwater - HD - Detention Pond	- State Stormwater	- NC Aquarium at Fort Fisher - Kure Beach	- 900 Loggerhead Rd	Active
	SW8990835	- State Stormwater - Infiltration System	- State Stormwater	- NC Aquarium at Fort Fisher - Kure Beach	- 900 Loggerhead Rd	Active
SW8990835	- State Stormwater - HD - Detention Pond	- State Stormwater	- Kure Estates Phase III	- Kure Village Way	Active	
SW8990835	- State Stormwater - HD - Detention Pond	- State Stormwater	- Seawatch At Kure Beach	- US Hwy 421 S	Expired	
SW8990835	- State Stormwater - Infiltration System	- State Stormwater	- Seawatch At Kure Beach	- US Hwy 421 S	Expired	

Kure Beach Total

Appendix 2 – Storm Water Map – North to South

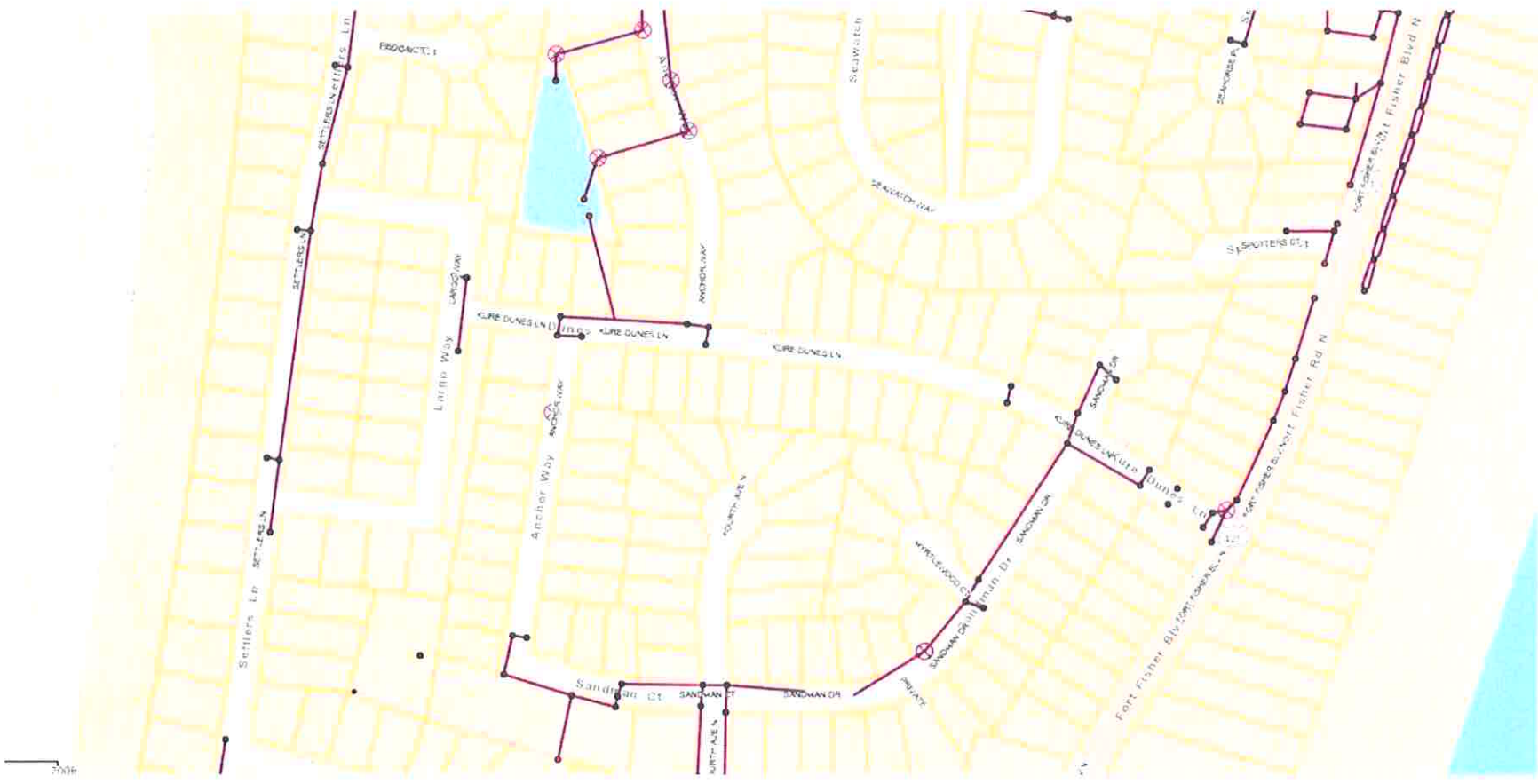
Legend	
Inlets	•
Storm Water Manholes	⊗
PipeIO	•
SwaleIO	•
Ditches	---
Flumes	---
Pipes	—
Swales	---
Parcels	---

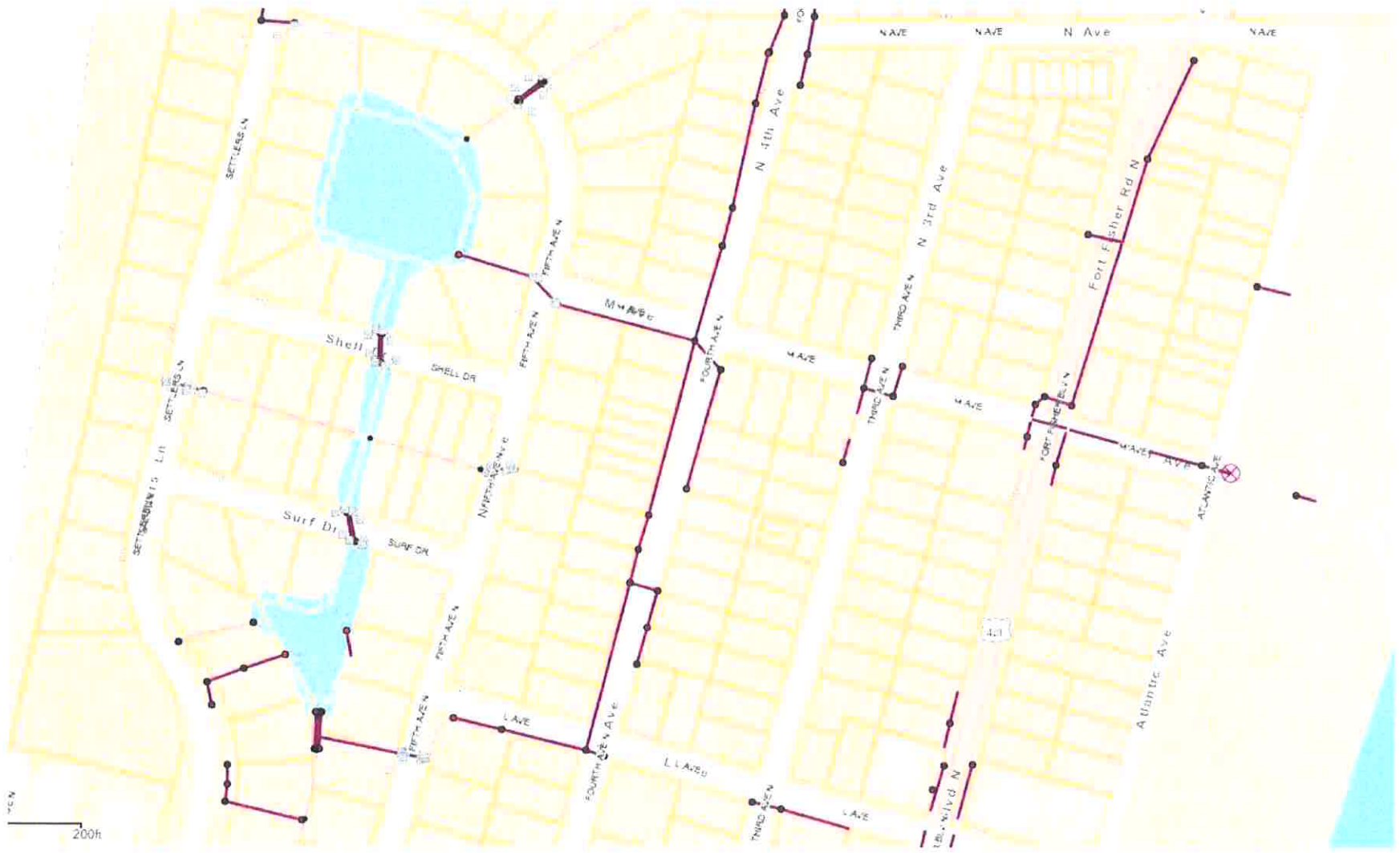










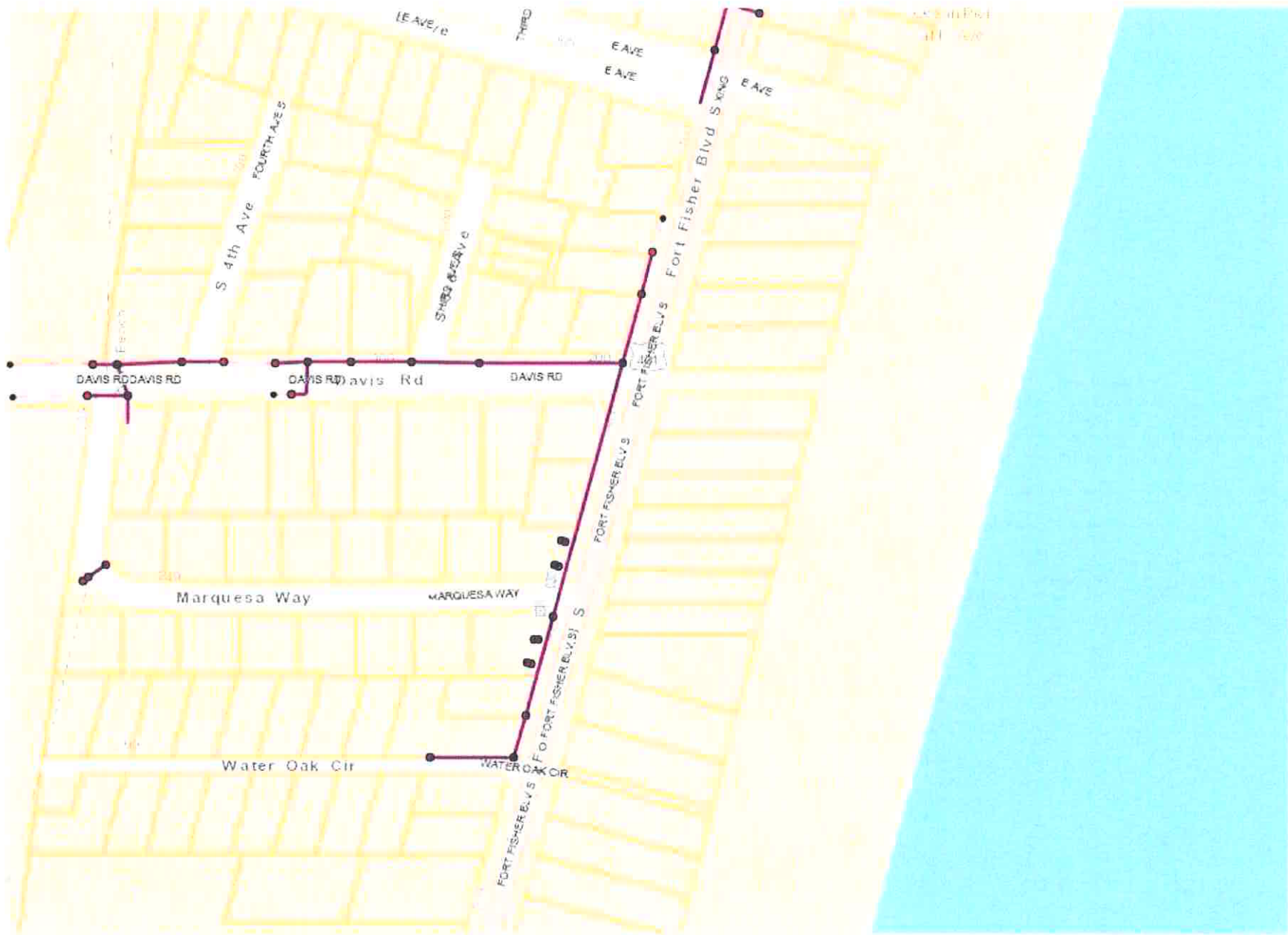




















200ft





# MINUTES



# TOWN COUNCIL MINUTES

## SPECIAL MEETING

**Monday, June 17, 2019 @ 12:00 pm**

The Kure Beach Town Council held a special meeting on Monday, June 17th, 2019 beginning at 12:00 pm. There was a quorum of Council and the Town Attorney was present.

### COUNCIL MEMBERS PRESENT

Mayor Craig Bloszinsky  
(MPT) David Heglar  
Commissioner Joseph Whitley  
Commissioner Allen Oliver  
Commissioner John Ellen

### COUNCIL MEMBERS ABSENT

None

### STAFF PRESENT

Town Clerk – Nancy Avery

Mayor Bloszinsky called the meeting to order at 12:00 pm.

The purpose of this special meeting is to conduct a closed session per N.C.G.S. 143-318.11(a)(6), to conduct Department Head evaluations.

MOTION- MPT Heglar made a motion to go into closed session at 12:01 p.m. as per N.C.G.S. §143-318.11 (a) (6) to conduct Department Head Evaluations.

SECOND- Commissioner Whitley

VOTE- Unanimous

MOTION- Commissioner Oliver made a motion to return to open session at 4:30 p.m.

SECOND- Commissioner Whitley

VOTE- Unanimous

MOTION- MPT Heglar made a motion to adjourn the meeting at 4:31 p.m.

SECOND- Commissioner Oliver

VOTE- Unanimous

ATTEST: \_\_\_\_\_  
Nancy Avery, Town Clerk

\_\_\_\_\_  
Craig Bloszinsky, Mayor

NOTE: These are action minutes reflecting items considered and actions taken by Council. These minutes are not a transcript of the meeting. A recording of the meeting is available on the town's website under government>council.



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

The Kure Beach Town Council held its regular meeting on Monday, June 17th, 2019 beginning at 6:00 pm. There was a quorum of Council and the Town Attorney was present.

### COUNCIL MEMBERS PRESENT

Mayor Craig Bloszinsky  
(MPT) David Heglar  
Commissioner Joseph Whitley  
Commissioner Allen Oliver  
Commissioner John Ellen

### COUNCIL MEMBERS ABSENT

None

### STAFF PRESENT

Town Clerk – Nancy Avery  
Finance Officer (FO) – Arlen Copenhaver  
Building Inspector – John Batson  
Police Chief – Mike Bowden  
Recreation Director – Nikki Keely  
Public Works Director – Jimmy Mesimer  
Fire Chief – Ed Kennedy

Mayor Bloszinsky called the meeting to order at 6:00 pm. Reverend Williams gave the invocation and led in the Pledge of Allegiance.

### APPROVAL OF CONSENT AGENDA ITEMS

1. Adoption of 2019 NC Records Retention and Disposition Schedule for Local Government Agencies
2. Approval of engagement letter with Bernard Robinson & Company, LLP for required audit of pension data at an estimated cost of \$5,000
3. Approve Budget Amendment 19-08 for Hurricane Florence related expenses for Administration, Police, Fire, and Public Works
4. Increase Shoreline Access and Beach Protection committee regular membership from 7 to 8 members
5. Appoint Ann Hughes to the Shoreline Access and Beach Protection Committee as a full member
6. Appoint John Kiwaha to the Shoreline Access and Beach Protection Committee as a full member
7. Minutes:
  - May 20, 2019 Regular
  - May 20, 2019 Public Hearing
  - May 20, 2019 Closed Session



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

May 31, 2019 Special Meeting

June 10, 2019 Public Hearing on proposed FY19-20 budget

MOTION- Commissioner Oliver made a motion to approve the consent agenda as presented

SECOND- Commissioner Whitley

VOTE- Unanimous

## ADOPTION OF THE AGENDA

MOTION- MPT Heglar made a motion to remove item number one under old business and approve the agenda as amended

SECOND- Commissioner Ellen

VOTE- Unanimous

## DISCUSSION AND CONSIDERATION OF PERSONS TO ADDRESS COUNCIL

Resident Pam Jones stated:

- Lives at 145 Seawatch Way
- Has lived in Seawatch for the last 8 years as a part time resident
- Residents in Seawatch over the last few years have created their own 4<sup>th</sup> of July fireworks display
- It has grown into quite the show and has become highly dangerous
- Wanted to bring this forward to Council's attention so Police and Fire can pay special attention to this area

## DISCUSSION AND CONSIDERATION OF COMMITTEE BUSINESS

### 1. Community Center Committee

Mayor Bloszinsky stated the August BBQ event is coming up and it's an event you won't want to miss.

### 2. Planning & Zoning Commission

- Recommendation from P&Z Commission to designate the P&Z Commission as the Kure Beach Historic Preservation Commission (HPC) in order to start examining the possibility of pursuing a Local Historic District Designation for part of the B1 District

Mayor Bloszinsky stated the recommendation from the P&Z commission is to designate the P&Z commission as the Historic Preservation Commission in order to start examining the possibility of pursuing a Local Historic District Designation for portions of the B1 District. This is a temporary request so that the commission can start setting up the process.





# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

P&Z Member Retha Deaton stated the P&Z commission will be the legal contact and do the study.

Commissioner Whitley commented this is for the commission to start the process of researching and gathering information as the commission doesn't know what they will be regulating.

MOTION- Commissioner Whitley made a motion to designate the P&Z commission as the Kure Beach Historic Preservation Commission

SECOND- Commissioner Ellen

VOTE- Unanimous

## DISCUSSION AND CONSIDERATION OF DEPARTMENT HEAD BUSINESS

### 1. Administration

MOTSU lease renewal for JE Park and Assembly Water Tower

- a. Combine leases- \$13,400 cash annually/ \$67,000 over 5 year term
- b. Separate leases - \$1,050 cash annually (park) /\$5,250/ 5 years  
\$16,100 in-kind annually (tower)/ \$80,500/5 year –must spend first year

Town Clerk Avery stated:

- In the Agenda packet is a memo regarding the renewal of two leases
- Was informed by Sunny Point that the Town could combine these two leases and save the Town \$3,750 a year
- Sunny Point referred the Town to pay using the in-kind service
- Was recently informed if the Town does the combined leases it won't be able to do the in-kind service
- Needs to know if she should continue with the combine lease payment or do the separate leases?
- Does Town Council want to try to do the in-kind service?

MPT Heglar asked did they say what the in-kind service could be? How much could be labor from the Public Works Department? His recommendation is for the Town to combine the leases for the savings. A lot of citizens don't prefer the fences and will not want in them in their backyard. Council wants to work with MOTSU but need to take the least expensive option for the Town.

Town Clerk Avery stated MOTSU is looking at fencing for the in-kind service.

Commissioner Whitley stated from the previous meeting with MOTSU they want a fence in the buffer zone area. The Town would pay for the fence and start South of K or around the water towers as they want those more secured. The Town needs to continue to build the relationship with MOTSU.



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

Mayor Bloszinsky stated there are two options in front of Council. The Town can either pay more over the 5 years to better improve Kure Beach or have the leases combined and save.

MOTION- MPT Heglar made a motion to approve the combined lease for JE Park and Assembly Ave Water Tower of \$13,400 cash annually/ \$67,000 over a 5 year term

SECOND- Commissioner Oliver

VOTE- Unanimous

### 2. Fire Department

MPT Heglar stated Council needs to discuss the fireworks as July 4th will happen before the next Council meeting. This is not the first citizen who has brought this concern forward to him.

Fire Chief Kennedy stated:

- As far as fire is concerned two injuries in the last 5 years
- Every year we always have brush fires because of the fireworks and have to clean up after it
- Defers to the Police Chief in regards to legal issues
- But as far as medical and fire we do have issues each year

Police Chief Bowden commented it might be a good idea for HOA communities to send out a letter to the residents.

### 3. Police Department

Mayor Bloszinsky asked did the Police Department have an active week on parking tickets? Do you believe the bumpers and enforcement are working for the visitors?

Police Chief Bowden stated:

- Not sure how many have been written this past week but 95 parking tickets have already been written for the year
- Last year was 107 for the whole year so already have surpassed last year
- Believes the bumpers are working but room for improvement and has a few ideas to help with that



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

### 4. Public Works Department

Public Works Director Mesimer stated:

- Bring to Council attention the boardwalk down Atlantic is due for repairs after this summer season
- Might need to take into consideration hiring a contractor to replace the whole walkway as it needs major repairs
- Spoke with Engineer Brian Cox regarding the storm water assessment
- Engineer Brian Cox needs a better understanding of the scope of work that Council wants done
- Once the scope is received he can receive prices by the July Council meeting

MPT Heglar stated he has spoken with Public Works Director Mesimer and he will be sending Council a scope of work next week. Start with the presentation from Denise Hubbard and then Public Works Mesimer will add in areas he is concerned about.

### 5. Recreation Department

Recreation Director Keely stated:

- The Town online merchandise store has earned \$340 in commission for May
- The online store will have a special of 15% off this coming weekend

## DISCUSSION AND CONSIDERATION OF OLD BUSINESS

### 1. Town owned property at Sandman

MPT Heglar stated:

- He is going to discuss the HOA positions of Kure Dunes and Beachwalk
- Provide the options based on the discussions with both HOAs
- At the 2014 retreat – issues regarding MOTSU allowing the town to use the buffer zone area for the parking of town equipment on H avenue drove a discussion on town owned property and how it could satisfy the town's requirements.
- Town Council directed me to investigate the issues with the following directive:
  - The Town Council wants to determine and document the issues around the undeveloped town property on Sandman Drive that was formerly a retention pond. Issues around this property have occurred numerous times in the past – and the goal of this investigation is to document the issues around this property from the Town's perspective, the Kure Dunes HOA's perspective and the Beachwalk HOA's perspective to allow current and future Town Councils to make decisions regarding this land.



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

- While the council has taken no action on the Sandman property regarding final disposition – discussions at the 2014 retreat initiated by concerns around MOTSU actions highlighted the following:
  - The property does not make sense for any public buildings – it is in a residential community removed from all other Town buildings. The town is taking action to ensure that it has adequate town owned property for any future issues on properties adjacent to the existing Public Works building. These actions are not dependent on a quick resolution regarding this property.
  - The council discussions saw no future path to making it a town park – with the existence of two parks owned and maintained by the town.
  - The Stormwater permits that were modified to close the pond and re-route the stormwater – support the sale of this property and conversion of it to residential properties. This would result in sales revenues to the town as well as ongoing tax revenues of the property.
  - The Council recognizes that there are concerns from both Beachwalk and Kure Dunes and wants to fully understand the issues to determine if there is a path forward that supports all concerned parties.

### Kure Dunes Position:

- The Kure Dunes HOA is concerned about liabilities to Beachwalk regarding the sale/development of the town properties – and emphasizes that the release/indemnity agreement executed by the town is in full force. Putting aside the indemnity agreement, it is Kure Dunes' understanding that it paid the town for the run-off responsibilities at issue (by giving the town the detention pond parcel), that Beachwalk's developer assumed these responsibilities from the town, and that the issue of the Beachwalk's HOA responsibility for this runoff was one of the subjects of a lawsuit and settlement in 2003.
- The Kure Dunes HOA wants to ensure that any sale/development of the town lots would be subject to or at least consistent/compatible with the covenants and restrictions of the Kure Dunes Homeowners Association – as the land is in the KDHOA neighborhood.
- Kure Dunes has an interest in the property and wants to be involved in the decisions regarding the property.
- The Kure Dunes HOA does not, itself, yet have a firm, final, fully developed position regarding the development of Beachwalk's adjoining interior common element. However, it must be noted that most, if not all, of Kure Dunes' residents (and, the KDHOA believes – in good faith – MOST of the residents of the Town of Kure Beach overall, INCLUDING many Beachwalk residents) are presently VERY MUCH opposed to the town's granting an easement over taxpayer land to permit development of Beachwalk's interior common element, as they all have grave concerns that such an interior development scenario would NOT be safe (as any proposed access road would be hazardous to playing children and other pedestrians, and potentially inaccessible to



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

emergency vehicles), would NOT be fiscally prudent (as it would require the sacrifice of a valuable town/taxpayer lot to enable an interior project which appears destined to cost more to develop than it could possibly garner in ensuing lot sales), would NOT be compatible with responsible stormwater runoff practices (as it would be replacing wet/low-lying porous soil with impermeable surfaces, in an already challenged district), and would NOT be consistent with the overall continuity of the Kure Dunes community (as it would thrust directly into the side of the neighborhood).

### Beachwalk Position:

The sale and development of the property is seen as a potential problem to Beachwalk:

- Stormwater runoff from the previous pond represents a significant load on the currently permitted Beachwalk retention pond – which is the responsibility of Beachwalk. An estimate of 50% of the water going through the BW pond is from the previous pond was stated during discussions.
- BeachWalk had to spend significant money on maintenance of its Stormwater system – which supports a portion of the Kure Dunes community with no cost sharing from the Town or Kure Dunes.
- BeachWalk highlights that there is no agreement for cost sharing and does not see that this is fair or equitable treatment of the costs for managing the stormwater.
- Beachwalk property owners are being impacted by the issues with the current system. The permit was done based on capacity. The issue is not capacity – it is velocity during a large event – causing damage (erosion) of the pond.
- Our position has evolved from a better understanding our current Stormwater System (SWS). For the SWS, pond retention volume ("capacity") is sized to treat the first one inch (1") of runoff from impervious surfaces (roofs, driveways, roads etc.); please note that this amount of rain is time independent. However, the permit specifications were written 20 years ago--before most of the houses were built in Kure Dunes and Beachwalk. The unanswered question is whether Beachwalk's stormwater system is still properly sized for the as-built development. In other words, is our recently renovated stormwater system in compliance with the as-built structures around it? This should be determined before more impervious surfaces are created by five to eight (5-8) new houses. Secondly, the capacity of the stormwater system to handle high volumes of water from major storms is not even mentioned in our permit. The velocity of water flow through the system is slow, even at high water levels, because the downstream gradient is low. It is now Beachwalk's opinion that most of the erosion is triggered by the filling and draining of the ponds and ditches which cause the banks to collapse. When the banks crumble (or slough-off or slump) a slow current moves the debris downstream.
- Believe that there are issues with the current lots regarding subsurface water flows – the land may not be buildable based on the fill used to close the detention pond. The type of



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

soil used to fill the pond was inadequate. There are homeowners that are saying that there is subsurface water flows from these lots. Surface water run-off issues.

- Sale and/or development of these lots potentially disrupts Stormwater permits for Beachwalk and Kure Dunes.
- If the property is sold – what covenants and restrictions will be placed on the properties that would satisfy the needs of both Beachwalk and Kure Dunes.
- Our current position now includes only the Sandman Lots as given in the written proposal and concept sketch defining the six (6) general parameters below:
- They are:
  1. No monies are paid/received by any of the three participants;
  2. TOKB retains maintenance of underground storm water piping systems and swale at rear of the Sandman Lot;
  3. Beachwalk retains collection of storm water runoff at Ditch D-1;
  4. Beachwalk provides HOA amenities to all eight (8) five (5) Sandman lots;
  5. TOKB retains engineering responsibilities for Sandman lots development;
  6. Only single family, multi-story structures are permitted to be built.

### Investigation conclusions:

- Town has the right to sell/develop properties
- Both HOA's have expressed that they have serious concerns and potentially would take legal action to prevent sale
  - While this is a possibility – the town's position based on the facts is strong and current facts support that the town would prevail in a legal challenge
- Beachwalk HOA has property adjacent to the Town's property that is currently undevelopable – it only has a 10 ft easement from the South making it undevelopable
  - Beachwalk HOA has expressed interest in an easement – including working with town to have 5 vs 4 developable lots from the town's property based on facts
  - Currently the Beachwalk HOA does not have approval for development or easement request from its members
- Multiple individual property owners adjacent to the property have stormwater, safety and other concerns regarding any development
- Stormwater concerns that the town will be investigating could potential need this property for any proposed solutions
- Recommendation is that the town council make no decisions regarding this property until the Stormwater study that Public Works is requesting is completed and the town is sure that this property is not needed for any recommended upgrades to the stormwater system.

Commissioner Ellen asked is there a timeframe for this completed study?



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

MPT Heglar commented he has to write the scope and then receive the bid. He hopes it have by the July meeting. The study will happen in the late fall and he believes it will take about 3 to 4 months. As he writes the scope Council will look at Settlers lane and the issues Denise Hubbard brought forward at a previous Council meeting.

Public Works Director Mesimer stated the survey may take up to 6 months.

Julie Ferris resident at 508 Fifth Ave N stated:

- The survey that will be conducted that includes the HOA ponds
- Will the surveyors look to see if the ponds are able to observe the amount of water necessary?
- In the budget for FY 19-20 it listed a storm water fund
- Is this what the money is used for?
- Can the Town include in the survey leaving the lot as a green space
- There are many health and environment benefits to keeping green spaces

MPT Heglar stated during the survey they will look into most of the North part of Town and look at the maintenance records for the ponds. The HOA's are responsible for the maintenance for the ponds and if issues come up they're required to report it to the state. The survey will look at existing system and is it suitable for what we have now.

Mayor Bloszinsky stated the Town doesn't know what the surveyors will tell Council. They may say the current system is fine at 1 1/2 inches and that no system is capable of handling hurricane overflow. The Town Council assumes the Town will be able to improve the system in certain areas. The surveyors could provide a variety of solutions and recommendations.

Bill Bryan, President of Beachwalk HOA stated thank you for allowing me the time to address you regarding the sale of the Sandman lot. Beachwalk's Board of Directors will support the sale of the Sandman lot only if the following conditions are met. We want to be assured the actual imperious areas located in Town of Kure Beach roads and Kure Dunes do not exceed that as delineated in our stormwater permit. We are concerned about the additional runoff water into our stormwater system, especially in view of Hurricane Florence we all experienced last September. The stormwater permits for Beachwalk and the neighborhoods to our north were written over 20 years ago before most of the houses were built in Kure Dunes and Beachwalk. We support the Town of Kure Beach in conducting a certified engineering analysis of the as built structures in the offsite areas our north. Again, we want to be assured the actual imperious areas located in TOKB's roads and Kure Dunes do not exceed that as delineated in our stormwater permit. We want any and all new homes built on the Sandman lot to be under the jurisdiction of Beachwalk HOA and subject to our dues. In the past 20 years, Beachwalk has received no monetary



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

compensation for handling stormwater runoff from the TOKB or Kure Dunes. I believe the legal term is “unjust enrichment.” As stated in Beachwalk’s stormwater permit, more than half of the stormwater that flows through our system comes from other areas than our own: Kure Beach Dunes II and III contributes 40% and then TOKB contributes 13%, for a total of 53%. Less than half of the water we, Beachwalk convey comes from our own community. Two years ago, Beachwalk spent over \$335,000 to bring our stormwater system into compliance with NC State regulations. Each of our 85 homeowners paid \$4,000 for our stormwater system to be repaired. During the repair to our system, the TOKB contributed parts and labor which helped us immensely, and we thank you for this. We have a much better stormwater system because of your help. Conversely, and unfortunately, Kure Beach Dunes contributed nothing to us for the repair of our stormwater system. Needless to say, our homeowners are tired of paying the full burden for conveying everyone else’s stormwater. To be blunt, we are fed up with the freeloading. If new homes are built on the Sandman lot, Beachwalk strongly believes that these new homes should be under the jurisdiction of Beachwalk HOA. Dues paid to our HOA will provide us a minimum compensation for our expenses. If the TOKB awards the Sandman lot HOA rights to Kure Dunes, or if the TOKB withholds the HOA rights from Beachwalk, and we have to fund the additional stormwater from the Sandman lot, this would be tantamount to rubbing salt into our wounds. In conclusion, Beachwalk’s Board of Directors will support the sale of the Sandman lot only if the above two concerns are met by the Town of Kure Beach. The two concerns are 1. Stormwater runoff from the sandman Lot and 2. Beachwalk securing the HOA rights from the Sandman lot for us to offset the cost burden of handling additional stormwater runoff.

### 2. MOTSU and Storm Water Drainage

Commissioner Whitley stated the MOTSU land use plan will be held here next Monday night at Town Hall.

### 3. Resolution R19-07 Adopting Local Water Supply Plan

MPT Heglar commented this plan is required to be updated regularly. It captures all of the Towns water sources and shows the prior 12 months average usages.

MOTION- MPT Heglar made a motion to approve the Resolution R19-07 adopting the Local Water Supply Plan

SECOND- Commissioner Oliver

VOTE- Unanimous

### 4. Water Conservation

Mayor Bloszinsky stated:

- The Town recently had volunteer water conservation notices sent out on the website





# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

- It is this Town Council's view to follow the Cape Fear Public Utility Authority's direction on shortages and droughts
- It is a good practice during the summer when the Town has a higher population to pay attention to your usage
- In the future if Cape Fear Public Utility Authority issues a notice the Town will follow suit

### 5. Adoption of the FY19-20 Proposed Budget Ordinance and Fee Schedule

Financial Officer Copenhaver stated:

- In the Agenda packet is the proposed FY 19-20 fee schedule and budget ordinance
- No changes made to the budget since the May Council meeting
- The general fund is \$5,559,748
- The water & Sewer fund is \$2,424,390
- The storm water fund is \$335,225
- The Powell fund is \$66,450
- Total budget amount of \$8,477,733

Mayor Bloszinsky stated the Town has held four budget meetings and held a public hearing. The budget was published on the website for viewing.

MOTION- MPT Heglar made a motion to approve the FY19-20 Budget Ordinance and Fee Schedule as presented

SECOND- Commissioner Oliver

VOTE- Unanimous

## DISCUSSION AND CONSIDERATION OF NEW BUSINESS

### 1. Discussion on the use of beach wheelchairs

Mayor Bloszinsky stated:

- The Town has free wheelchairs that are provided to handicap individuals
- Fire Department has 5 for the entire Town population
- Town Council has not provided the Fire Department with a set of guidelines on who may rent the wheelchairs

Ed Kennedy stated:

- Island Women and SLABP committee donated the wheelchairs



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

- Currently no time limit on the rental period
- Longest the department has rented one out was for 3 weeks
- Doesn't feel the department needs a policy
- Currently only need to provide a copy of a valid driver's license to rent a wheelchair
- Need better clarification on the website on the use of the wheelchairs
- In the summertime the wheelchairs are rented out 50% of the time
- Citizens are very grateful for this service

MOTION- MPT Heglar made a motion to make the term of renting the wheel chair to one week

SECOND- Commissioner Whitley

VOTE- Unanimous

2. Traffic changes at K and Fort Fisher Blvd
  - Golf cart entrance - eliminate parking spaces in front of right turn and replace the area with a yellow hatched smaller area marked for commercial unloading only
  - Paid parking use - open the second entrance and make it a right turn only exit FF
  - Remove the Trolley Stop sign
  - Move the parking space south to allow a clear view for the turn onto FF
  - Place a sign at 3rd and J Ave. that says 'No Left Turn' at 3rd and K

Mayor Bloszinsky stated:

- Reviewed the area with Police Chief Bowden to maximize safety
- Eliminate two parking spaces and replace the spaces with a hatched yellow space for commercial unloading
- Paid Parking use to keep down the dust at K and 3<sup>rd</sup> where you can only make a right hand turn creating confusion in traffic
- Open the second entrance and remove the Trolley stop sign
- Reduce one parking space from that area to easily be able to make the turn
- Recommend placing a sign at 3<sup>rd</sup> and J ave that states no left turn on 3<sup>rd</sup> and K to prevent people from going down 3<sup>rd</sup> street

Commissioner Ellen stated he suggest making the two turns out of the Kwik Mart right turns only.

Mayor Bloszinsky stated that isn't a bad idea but we would need to investigate it more and speak with the owner of the Kwik Mart.



# TOWN COUNCIL MINUTES

## REGULAR MEETING

June 17, 2019 @ 6:00 p.m.

MOTION- MPT Heglar made a motion to approve the 5 traffic changes and direct the Public Works Director Mesimer to paint the sign appropriately

SECOND- Commissioner Whitley

VOTE- Unanimous

### 3. Additional crosswalks at all beach accesses

Mayor Bloszinsky stated:

- Requires more study
- There have been traffic occurrences in neighboring Towns at the crosswalks
- How many crosswalks should we have in our Town
- Do they cause a false sense of security?
- Several in north and south part of Town
- Public Beach accesses in the south part of Town

Commissioner Oliver stated it would be smart to see what NCDOT will allow the Town to do and then decide on the crosswalks.

### Audience Comments:

A couple concerns regarding the Crosswalks. The Crosswalks in Carolina Beach have the flashing lights. Twice last week at the crosswalk in Kure Beach near the post office as she was waiting to cross the vehicles didn't stop. If you get flashing lights it will deter the vehicles to stop. The Town needs to improve the crosswalks we currently have.

Mayor Bloszinsky stated the Town needs to receive permission from the State and they're very expensive. The Town definitely has work to be done in this area.

## COMMISSIONER ITEMS

MPT Heglar stated does Council want to give guidance to the Fire and Police Departments on the Fireworks? Does Council want to advertise to citizens?

Commissioner Oliver commented it would be wise to send out a letter on the website to citizens.

Commissioner Ellen stated regarding Seawatch this is not an HOA sponsored event. It is one individual who invites friends over and set them off.

Mayor Bloszinsky stated he agrees he will write a letter to citizens defining the state statutes regarding the fireworks.



# TOWN COUNCIL MINUTES

**REGULAR MEETING**

**June 17, 2019 @ 6:00 p.m.**

MOTION- MPT Heglar made a motion to adjourn the meeting at 8:03pm

SECOND- Commissioner

VOTE- Unanimous

ATTEST: \_\_\_\_\_

Mandy Sanders, Deputy Town Clerk

\_\_\_\_\_

Craig Bloszinsky, Mayor

NOTE: These are action minutes reflecting items considered and actions taken by Council. These minutes are not a transcript of the meeting. A recording of the meeting is available on the town's website under government>council.

# **DEPARTMENT REPORTS**



## **Police Activity Reports for June – 2019**

- Page 1 Activity Log Event Summary Totals**
- Page 2 Arrest Status/Disposition Totals by Offense**
- Page 3 Citation Totals by Charge**
- Page 4 Civil Papers Summary Totals**
- Page 5 Criminal Papers Summary Totals**
- Page 6 Incident Status/Disposition Totals by Offense**

# Activity Log Event Summary (Totals)

## Kure Beach Police Department

(06/01/2019 - 06/30/2019)

---

911 Hangup	3	Alarm Activation	9
Animal Complaint	1	Assist Citizen	1
Assist Other Agency - Fire	2	Assist Other Agency - Law Enforcement	10
Assist Other Agency - Medical	19	BOLO	1
Check Welfare	6	Civil Ordinance Complaint	1
Disabled / Abandoned Vehicle	3	Dispute	7
Domestic	3	Fireworks	1
Found Property / Other	1	Indecent Exposure	2
Information	6	Internal Information - LEO Only	1
Intoxicated Subject	3	Larceny - No Report	1
Noise Complaint	2	Parking Complaint	1
Property Damage - No Report	1	Special Assignment	1
Suspicious Person/Vehicle	30	Trespassing	1

Total Number Of Events: 117

# Arrest Status/Disposition Totals by Offense

Kure Beach Police Department

(06/01/2019 - 06/30/2019)

Offense:	Further Invest.:	Inactive:	Closed/Cleared:	Arrest/No Supp.:	Arrest/No Invest.:	Felony:	Misd.:	Juvenile:	Adult:	Offense:
0790 - Motor Vehicle Theft - All Other Motor Vehicles	0	0	1	1	0	0	1	0	1	1
1810 - Drug Violations	0	0	1	1	0	0	1	0	1	1
2100 - DWI - Alcohol and/or Drugs	0	0	1	1	0	0	1	0	1	1
2450 - Drunk and Disruptive	0	0	1	1	0	0	1	0	1	1
2690 - All Other Offenses	0	0	1	0	1	1	0	0	1	1
<b>Totals:</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>5</b>



# Citation Totals by Charge

Kure Beach Police Department

(06/01/2019 - 06/30/2019)

Charge:	Number of Charges:
Speeding (Infraction)	2
DWI	1
No Operator License	1
Unsafe Movement	1
Failure To Stop (Stop Sign/Flashing Red Light)	3
No Insurance	2
Other (Misdemeanor)	4
Other (Infraction)	7
Other (2nd Charge - Misdemeanor)	3
Other (2nd Charge - Infraction)	2
Total:	26

# Civil Papers Summary Totals (by Paper Type)

Kure Beach Police Department

(06/01/2019 - 06/30/2019)

Type of Civil Paper:	Total Served:	Total Returned:	Total Ret. to Clerk:	Total Issued:	Total Issued Outstanding:
Subpoena	3	0	0	2	1
Totals:	3	0	0	2	1

# Incident Status/Disposition Totals (With Percentages) by Offense

## Kure Beach Police Department

### (06/01/2019 - 06/30/2019)

Primary Offense:	Total Reported:	Total Unfounded:	Actual Incidents:	% Unfounded:	Cleared Arrest:	Cleared Other:	% Cleared:	Active:	% Active:	Inactive:	% Inactive:
0510 - Burglary - Forcible Entry	1	0	1	0%	0	0	0%	1	100%	0	0%
0640 - Larceny - From Motor Vehicle	1	0	1	0%	0	0	0%	0	0%	1	100%
0690 - Larceny - All Other Larceny	3	0	3	0%	0	0	0%	3	100%	0	0%
1400 - Criminal Damage to Property (Vandalism)	1	0	1	0%	1	0	100%	0	0%	0	0%
1780 - Child Molestation (Non-Assaultive)	1	0	1	0%	0	0	0%	1	100%	0	0%
2410 - Disorderly Conduct	1	0	1	0%	1	0	100%	0	0%	0	0%
2690 - All Other Offenses	1	0	1	0%	0	0	0%	0	0%	1	100%
8011 - Runaway	1	0	1	0%	0	0	0%	0	0%	0	0%
<b>Totals:</b>	10	0	10	0%	2	0	20.0%	5	50.0%	2	20.0%

# Ordinance Violations Summary

Kure Beach Police Department

(06/01/2019 - 06/30/2019)

---

## Civil Citation

---

Parking in HandicapZone	1
-------------------------	---

---

Total Number Of Charges for Category: 1

## Parking Viol

---

Blocking Private Driveway	4
---------------------------	---

---

Obstructing Traffic Lane	39
--------------------------	----

---

To Close to Fire Plug	4
-----------------------	---

---

To close to Intersection	12
--------------------------	----

---

Total Number Of Charges for Category: 59

Total Number Of Charges: 60

**TOWN OF KURE BEACH  
REVENUE AND EXPENDITURE SUMMARY  
JULY 1, 2018 TO JUNE 30, 2019**

	<b>REVENUES</b>					<b>EXPENDITURES</b>			
	2019 Initial Bud.	2019 Amend. Bud.	Actual 6/30/2019	% Collected		2019 Initial Bud.	2019 Amend. Bud.	Actual 6/30/2019	% Spent
<b>GENERAL FUND</b>					<b>GENERAL FUND</b>				
Property Taxes (Cur. & PY)	\$ 2,920,300	\$ 2,920,300	\$ 2,941,148	100.7%	Governing Body	\$ 38,994	\$ 42,194	\$ 36,238	85.9%
Local Option Sales Tax	\$ 886,000	\$ 886,000	\$ 946,115	106.8%	Committees	\$ 100,115	\$ 100,115	\$ 87,290	87.2%
Garbage & Recycling	\$ 493,580	\$ 493,580	\$ 502,476	101.8%	Finance	\$ 157,937	\$ 157,937	\$ 141,717	89.7%
TDA Funds	\$ 235,000	\$ 235,000	\$ 254,579	108.3%	Administration	\$ 629,908	\$ 632,408	\$ 597,805	94.5%
Franchise & Utility Tax	\$ 225,000	\$ 225,000	\$ 244,684	108.7%	Community Center	\$ 23,300	\$ 23,300	\$ 21,032	90.3%
Communication Tower Rent	\$ 81,924	\$ 81,924	\$ 81,950	100.0%	Emergency Mgmt./Elections	\$ 1,100	\$ 1,100	\$ 9	0.8%
CAMA Grants - Beach Access Paving	\$ 78,523	\$ 78,523	\$ 81,466	103.7%	Tax Collections	\$ 28,800	\$ 28,800	\$ 25,029	86.9%
Bldg. Permit & Fire Inspect. Fees	\$ 74,050	\$ 74,050	\$ 119,840	161.8%	Legal	\$ 29,850	\$ 29,850	\$ 27,358	91.7%
Sales Tax Refund	\$ 59,000	\$ 59,000	\$ 71,533	121.2%	Police Department	\$ 1,372,757	\$ 1,391,927	\$ 1,345,650	96.7%
Com Ctr/Parks & Rec/St Festival	\$ 20,700	\$ 20,700	\$ 20,734	100.2%	Fire Department	\$ 740,482	\$ 763,652	\$ 723,454	94.7%
Town Facility Rentals	\$ 18,000	\$ 18,000	\$ 24,891	138.3%	Lifeguards	\$ 200,088	\$ 220,285	\$ 189,767	86.1%
ABC Revenue	\$ 15,900	\$ 15,900	\$ 24,318	152.9%	Parks & Recreation	\$ 187,268	\$ 187,268	\$ 171,868	91.8%
Motor Vehicle License Tax/Decals	\$ 14,250	\$ 17,450	\$ 24,859	142.5%	Bldg Inspection/Code Enforcement	\$ 139,165	\$ 139,165	\$ 131,762	94.7%
OPF - Bluefish Purchases	\$ 14,000	\$ 14,000	\$ 14,095	100.7%	Streets & Sanitation	\$ 902,561	\$ 1,047,255	\$ 984,230	94.0%
Beer & Wine Tax	\$ 9,300	\$ 9,300	\$ 9,610	103.3%	Debt Service	\$ 708,050	\$ 708,050	\$ 708,018	100.0%
All Other Revenues	\$ 19,505	\$ 149,236	\$ 355,030	237.9%	Transfer to Other Funds	\$ 9,807	\$ 9,807	\$ 9,807	100.0%
Other Financing Sources	\$ 115,000	\$ 195,000	\$ 154,084	79.0%	Contingency	\$ 9,850	\$ 9,850	\$ -	0.0%
<b>Total Revenues</b>	<b>\$ 5,280,032</b>	<b>\$ 5,492,963</b>	<b>\$ 5,871,412</b>	<b>106.9%</b>	<b>Total Expenses</b>	<b>\$ 5,280,032</b>	<b>\$ 5,492,963</b>	<b>\$ 5,201,034</b>	<b>94.7%</b>
<b>WATER &amp; SEWER FUND</b>					<b>WATER &amp; SEWER FUND</b>				
Water Charges	\$ 840,650	\$ 840,650	\$ 812,803	96.7%	Governing Body	\$ 17,994	\$ 17,994	\$ 15,864	88.2%
Sewer Charges	\$ 1,174,500	\$ 1,174,500	\$ 1,196,175	101.8%	Legal	\$ 29,850	\$ 29,850	\$ 27,358	91.7%
Tap, Connect & Reconnect Fees	\$ 67,500	\$ 67,500	\$ 102,470	151.8%	Finance	\$ 197,817	\$ 197,817	\$ 192,957	97.5%
All Other Revenues	\$ 19,435	\$ 19,435	\$ 107,116	551.1%	Administration	\$ 317,187	\$ 317,187	\$ 297,912	93.9%
Other Financing Sources	\$ 100,000	\$ 100,000	\$ 39,571	39.6%	Operations	\$ 1,639,237	\$ 1,639,237	\$ 1,534,258	93.6%
<b>Total Revenues</b>	<b>\$ 2,202,085</b>	<b>\$ 2,202,085</b>	<b>\$ 2,258,135</b>	<b>102.5%</b>	<b>Total Expenses</b>	<b>\$ 2,202,085</b>	<b>\$ 2,202,085</b>	<b>\$ 2,068,349</b>	<b>93.9%</b>
<b>STORM WATER FUND</b>					<b>STORM WATER FUND</b>				
<b>Total Revenues</b>	<b>\$ 358,380</b>	<b>\$ 623,360</b>	<b>\$ 535,067</b>	<b>85.8%</b>	<b>Total Expenses</b>	<b>\$ 358,380</b>	<b>\$ 623,360</b>	<b>\$ 607,032</b>	<b>97.4%</b>
<b>POWELL BILL FUND</b>					<b>POWELL BILL FUND</b>				
<b>Total Revenues</b>	<b>\$ 175,000</b>	<b>\$ 175,000</b>	<b>\$ 66,199</b>	<b>37.8%</b>	<b>Total Expenses</b>	<b>\$ 175,000</b>	<b>\$ 175,000</b>	<b>\$ 170,475</b>	<b>97.4%</b>
<b>SEWER EXPANSION RESERVE FUND (SERF)</b>					<b>SEWER EXPANSION RESERVE FUND (SERF)</b>				
<b>Total Revenues</b>	<b>\$ 16,250</b>	<b>\$ 16,250</b>	<b>\$ 24,067</b>	<b>148.1%</b>	<b>Total Expenses</b>	<b>\$ 16,250</b>	<b>\$ 16,250</b>	<b>\$ -</b>	<b>0.0%</b>
<b>BEACH PROTECTION FUND</b>					<b>BEACH PROTECTION FUND</b>				
<b>Total Revenues</b>	<b>\$ 13,397</b>	<b>\$ 13,397</b>	<b>\$ 15,161</b>	<b>113.2%</b>	<b>Total Expenses</b>	<b>\$ 13,397</b>	<b>\$ 13,397</b>	<b>\$ -</b>	<b>0.0%</b>
<b>FEDERAL ASSET FORFEITURE FUND</b>					<b>FEDERAL ASSET FORFEITURE FUND</b>				
<b>Total Revenues</b>	<b>\$ 50,000</b>	<b>\$ 75,000</b>	<b>\$ -</b>	<b>0.0%</b>	<b>Total Expenses</b>	<b>\$ 50,000</b>	<b>\$ 75,000</b>	<b>\$ 65,883</b>	<b>87.8%</b>

**TOWN OF KURE BEACH  
CASH AND INVESTMENTS  
AS OF JUNE 30, 2019**

<u>FUND</u>	<u>CASH IN BANK</u>	<u>INVESTMENTS</u>	<u>TOTAL CASH &amp; INVESTMENTS</u>
General	\$3,033,422	\$352,553	\$3,385,975
Water/Sewer	\$1,431,926	\$603,203	\$2,035,129
Storm Water	\$25,516	\$247,850	\$273,366
SERF	\$59,130	\$124,810	\$183,940
Powell Bill	\$161,674	\$71,702	\$233,376
Beach Protection	\$42,897	\$308,700	\$351,597
Federal Asset Forfeiture	\$104,550	\$0	\$104,550
Capital Project Funds	(\$10,750)	\$0	(\$10,750)
TOTAL	<u>\$4,848,365</u>	<u>\$1,708,818</u>	<u>\$6,557,183</u>

<u>INSTITUTION</u>		
BB&T	\$4,848,365	\$0
First Bank - Certificates of Deposit	\$0	\$669,670
NCCMT Term Portfolio	\$0	\$559,467
NCCMT Governmental Portfolio	\$0	\$479,681
TOTAL	<u>\$4,848,365</u>	<u>\$1,708,818</u>

**TOWN OF KURE BEACH  
SUMMARY OF CONTINGENCY FUND AND COMMITTEE  
EXPENDITURE ACTIVITY  
07/01/2018 - 06/30/2019**

**CONTINGENCY FUND**

Fiscal Year 2019 Budget	\$9,850.00
Less:	
No activity	\$0.00
Remaining Budget as of 06/30/2019	\$9,850.00

**COMMITTEE (Shoreline Access and Beach Protection) EXPENDITURES**

Fiscal Year 2019 Budget	\$100,115.00
Less Expenditures:	
E & I Ave. Beach Access Parking Project - Capital Project	\$83,894.84
Beach Brochures	\$321.98
Beach Access Signs	\$2,708.24
Volunteer vests	\$364.93
Total Expenditures	\$87,289.99
Projects Approved By Council But Not Yet Expended:	
None	\$0.00
Total Approved, Not Expended	\$0.00
Remaining Budget as of 06/30/2019	\$12,825.01

**TOWN OF KURE BEACH  
DEBT LISTING  
JULY 15, 2019**

<u>LOAN PURPOSE/DESCRIPTION</u>	<u>FUND</u>	<u>LENDER</u>	<u>DATE OF LOAN</u>	<u>AMOUNT FINANCED</u>	<u>INTEREST RATE</u>	<u>LOAN TERM (YRS)</u>	<u>DATE PAID OFF</u>	<u>BALANCE AT 07/15/19</u>	<u>PAYMENT FREQUENCY</u>	<u>PAYMENT AMOUNT</u>	<u>NEXT PAY DATE</u>	<u>INT. EXPENSE LIFE OF LOAN</u>
Fire Station/Town Hall Project (a)	G, W/S	BB&T	12/11/2017	\$5,000,000	2.58%	15	12/11/2032	\$4,499,999.99	Semi-annual	\$224,716.67	12/11/2019	\$999,750.00
Sewer Rehabilitation Project (b)	W/S	Fed Gov	5/1/2010	\$432,660	0.00%	20	5/1/2030	\$116,112.88	Annual	\$10,555.72	5/1/2020	\$0.00
Ocean Front Park (development)	G	BB&T	7/12/2011	\$347,000	4.39%	17	7/12/2028	\$183,705.92	Annual	\$28,476.45	7/12/2020	\$137,099.64
Ocean Front Park (acquisition)	G	BB&T	12/19/2007	\$3,600,000	4.28%	20	12/19/2027	\$584,134.69	Annual	\$89,904.82	12/19/2019	\$690,135.16
Kure Beach Pump Station #1	W/S	1st Bank	6/28/2017	\$475,000	2.11%	10	6/28/2027	\$387,909.42	Semi-annual	\$26,507.64	12/28/2019	\$55,152.80
334 S. 4th, 402 H & 406 H Ave.	G	BB&T	3/12/2015	\$409,471	2.49%	10	3/12/2025	\$245,682.67	Annual	\$47,064.62	3/12/2020	\$56,077.07
Street Sweeper & Dump Truck (c)	G, SW	BB&T	10/30/2018	\$233,412	3.26%	5	10/30/2023	\$233,412.00	Annual	\$51,345.54	10/30/2019	\$23,315.68
2018 GMC Sierra 2500	W/S	BB&T	8/23/2018	\$39,571	3.68%	4	8/23/2022	\$39,571.00	Annual	\$10,819.32	8/23/2019	\$3,706.28
Water Tower & Well House & Town Hall Expansion (d)	G, W/S	BB&T	4/11/2007	\$1,187,187	3.92%	15	5/7/2022	\$295,687.93	Semi-annual	\$52,716.71	11/7/2019	\$394,314.33
2016 John Deere Backhoe (e)	W/S, SW	BB&T	11/9/2016	\$105,273	1.87%	5	11/9/2021	\$64,330.24	Annual	\$22,250.35	11/9/2019	\$5,978.75
2018 Police Dodge Durango	G	1st Bank	10/19/2017	\$31,668	1.95%	4	10/19/2021	\$23,978.85	Annual	\$8,312.14	10/19/2019	\$1,558.73
2017 Freightliner Garbage Truck	G	1st Bank	8/23/2016	\$179,756	1.70%	5	8/23/2021	\$109,666.34	Annual	\$38,303.62	8/23/2019	\$9,270.57
Compact Excavator (e)	W/S, SW	1st Bank	7/28/2017	\$63,915	1.80%	4	7/28/2021	\$48,361.26	Annual	\$16,714.37	7/28/2019	\$2,901.83
(2) 2016 Police Dodge Chargers	G	1st Bank	11/9/2016	\$63,500	1.60%	4	11/9/2020	\$32,253.94	Annual	\$16,524.00	11/9/2019	\$2,560.16
O'Brien 7065 HydroJetter (e)	W/S, SW	1st Bank	8/13/2015	\$81,485	1.70%	5	8/13/2020	\$33,420.33	Annual	\$17,149.28	8/13/2019	\$4,202.44
2016 Chevrolet Silverado	G	1st Bank	7/26/2016	\$36,867	1.60%	4	7/26/2020	\$18,726.07	Annual	\$9,593.55	7/26/2019	\$1,486.39
Cutter Court Drainage Project	SW	B of A	7/23/2005	\$875,000	4.40%	15	6/23/2020	\$78,222.72	Monthly	\$6,677.76	7/23/2019	\$326,995.49
FY 2016 Equipment & Vehicles (f)	G, W/S	BB&T	9/14/2015	\$186,000	2.01%	4	9/14/2019	\$47,897.14	Annual	\$48,859.87	9/14/2019	\$9,439.48

**FUND CODES**

G - General Fund  
W/S - Water/Sewer Fund  
SW - Storm Water Fund

**TOTAL OUTSTANDING DEBT AT 07/15/2019:**

General Fund	\$ 5,403,834.65
Water/Sewer Fund	\$ 1,408,600.03
Storm Water Fund	\$ 230,638.72
<b>Total</b>	<b>\$ 7,043,073.39</b>

**NOTES**

- (a) - 88% of loan is General Fund and 12% is Water/Sewer Fund.  
(b) - Total amount borrowed was \$432,660. As part of ARRA, the unpaid balance was immediately reduced by one-half of the loan amount.  
(c) - 66% of loan is General Fund and 34% is Storm Water Fund.  
(d) - 78% of loan is Water/Sewer Fund and 22% is General Fund.  
(e) - 50% of loan is Water/Sewer Fund and 50% is Storm Water Fund.  
(f) - 55.5% of loan is General Fund and 44.5% is Water/Sewer Fund.

**LOAN PAYMENTS DUE (Next 12 Months):**

07/16/2019 - 09/30/2019	\$ 161,473.29
10/01/2019 - 12/31/2019	\$ 512,311.15
01/01/2020 - 03/31/2020	\$ 67,097.90
04/01/2020 - 07/15/2020	\$ 360,856.47
<b>Total</b>	<b>\$ 1,101,738.81</b>



**TOWN HALL RENOVATION AND NEW FIRE STATION  
CAPITAL PROJECT FUND SUMMARY  
AS OF 06/30/2019 - COMPLETED**

	<u>APPROVED BUDGET</u>	<u>ACTUAL AS OF 06/30/19</u>	<u>% OF BUDGET</u>
<b><u>EXPENDITURES</u></b>			
<b><u>ARCHITECT</u></b>			
Oakley Collier Architects	<u>\$415,257</u>	<u>\$415,362.62</u>	100.0%
<b><u>OTHER PROJECT COSTS</u></b>			
Surveys	\$6,500	\$4,475.00	68.8%
Legal Fees	\$25,000	\$24,020.18	96.1%
LGC Loan Application Fee	\$1,250	\$1,250.00	100.0%
Bank Loan Fees	\$2,900	\$2,900.00	100.0%
Special Inspections	\$16,000	\$13,141.76	82.1%
Other	<u>\$500</u>	<u>\$150.00</u>	30.0%
Total Other Project Costs	<u>\$52,150</u>	<u>\$45,936.94</u>	88.1%
<b><u>PROJECT MANAGEMENT COSTS</u></b>			
Constructive Building Solutions	<u>\$100,000</u>	<u>\$91,219.94</u>	91.2%
<b><u>CONSTRUCTION</u></b>			
Town Hall	\$2,448,843	\$2,355,780.60	96.2%
Fire Station	<u>\$2,177,809</u>	<u>\$2,288,422.39</u>	105.1%
Total Construction Costs	<u>\$4,626,652</u>	<u>\$4,644,202.99</u>	100.4%
<b><u>FURNITURE &amp; FIXTURES</u></b>			
Town Hall	\$47,500	\$53,111.13	111.8%
Fire Station	<u>\$89,400</u>	<u>\$80,533.09</u>	90.1%
Total Furniture & Fixtures	<u>\$136,900</u>	<u>\$133,644.22</u>	97.6%
<b><u>GRAND TOTAL EXPENDITURES</u></b>	<b><u>\$5,330,959</u></b>	<b><u>\$5,330,366.71</u></b>	<b>100.0%</b>
<b><u>PROJECT REVENUE SOURCES</u></b>			
Transfer From General Fund	\$330,959	\$330,010.53	99.7%
Installment Financing	\$5,000,000	\$5,000,000.00	100.0%
Interest on Project Fund Bank Account	<u>\$0</u>	<u>\$356.18</u>	
<b><u>GRAND TOTAL PROJECT REVENUE SOURCES</u></b>	<b><u>\$5,330,959</u></b>	<b><u>\$5,330,366.71</u></b>	<b>100.0%</b>

**WATER METER REPLACEMENT  
CAPITAL PROJECT FUND SUMMARY  
AS OF 07/09/2019**

	<u>APPROVED BUDGET</u>	<u>ACTUAL AS OF 07/09/19</u>	<u>% OF BUDGET</u>
<b><u>EXPENDITURES</u></b>			
<b><u>ENGINEERING AND CONSTRUCTION ADMIN.</u></b>			
<b>ENGINEERING SERVICES, P.A.</b>			
Engineering Design Services - Specifications & Bid Documents	\$5,000	\$5,000.00	100.0%
Bidding Assistance Services	\$4,500	\$4,500.00	100.0%
Construction Administration	\$11,000	\$0.00	0.0%
Construction Observation	<u>\$11,000</u>	<u>\$0.00</u>	0.0%
Total Engineering Services, PA	<u>\$31,500</u>	<u>\$9,500.00</u>	30.2%
<b><u>OTHER PROJECT COSTS</u></b>			
LGC Loan Application Fee	<u>\$1,250</u>	<u>\$1,250.00</u>	100.0%
<b><u>CONSTRUCTION</u></b>			
VANGUARD UTILITY SERVICE, INC.	\$1,239,440	\$0.00	0.0%
Contingency	<u>\$61,975</u>	<u>\$0.00</u>	0.0%
Total Construction Costs	<u>\$1,301,415</u>	<u>\$0.00</u>	0.0%
<b><u>GRAND TOTAL EXPENDITURES</u></b>	<b><u>\$1,334,165</u></b>	<b><u>\$10,750.00</u></b>	0.8%
<b><u>PROJECT REVENUE SOURCES</u></b>			
Installment Financing	\$1,325,000	\$0.00	0.0%
Transfer From Water/Sewer Fund	<u>\$9,165</u>	<u>\$0.00</u>	0.0%
<b><u>GRAND TOTAL PROJECT REVENUE SOURCES</u></b>	<b><u>\$1,334,165</u></b>	<b><u>\$0.00</u></b>	0.0%

## RECREATION REPORT: Classes, Rentals, and Events Update

### Classes @ CC:

Mon	9:15-10:15am	Vinyasa Flow Yoga
Mon	10:30am-11:45am	Stretch & Restore Yoga
Mon	4-6pm	Luv 2 Act Youth Drama Program (Spring/Fall)
Mon	6:30-7:30pm	All Levels Yoga
Tues/Thurs	6-9pm	Aikido
Wed	9:15-10:15am	Classical Yoga
Wed	10:30-11:30am	Yoga Fundamentals
Wed	1-3pm	Knitting by the Sea (4 <sup>th</sup> Wed of Month)
Wed	6:30-7:30pm	Reggae Flow Yoga
Thurs	7:30-8:30am	Sunrise Flow Yoga (Moved outside/beach for summer)
Thurs	10-11am	Line Dance
Thurs	3:45-4:45pm	Stretch & Restore Yoga
Fri	9:15-10:15am	Beach Vibes Vinyasa

### Classes @ OFP:

Sun	8:30am	Beach Church (Kure Beach First Baptist Church)
-----	--------	--

### Classes @ JEP:

Sat	10am	PIDGC Workday (1 <sup>st</sup> Saturday of Month)
Sun	9:30am	PIDGC Monthly Tournament (2 <sup>nd</sup> Sunday of Month)

### Private Rentals:

CC	Sat, 7/20/2019	4 hours	Family Reunion
CC	Sat, 8/10/2019	7 hours	Reception
CC	Sat, 8/31/2019	All day	Wedding
CC	Sat, 9/7/2019	4 hours	Family Reunion
OFP	Sat, 9/21/2019	3 hours	Reception
CC	Sat, 9/21/2019	All day	Backup Wedding Site
OFP	Sat, 10/5/2019	3 hours	Ceremony
OFP	Sat, 10/12/2019	4 hours	Reception
CC	Sat, 10/19/2019	TBD	Reception
CC	Sat, 10/26/2019	All day	Reception
CC	Thurs, 11/28/2019	All Day	Family Reunion
OFP	Sat, 4/18/2020	3 hours	Ceremony
OFP	Sat, 4/18/2020	4 hours	Reception
CC	Sat, 5/2/2020	All Day	Reception
OFP	Sat, 5/9/2020	3.5 hours	Reception
OFP	Sat, 6/20/2020	7 hours	Wedding
OFP	Fri, 6/26/2020	5 hours	Family Reunion
OFP	Sat, 6/27/2020	3 hours	Ceremony

### Upcoming Events:

Red Cross Blood Drive	Fri, 7/26, 9/20, & 11/15/2019 from 10am-3pm, CC
Annual KBCC BBQ Fundraiser	Sat, 8/17/2019 from 4-8pm, CC
Farewell Summer Jazz Funeral	Fri, 10/4/2019 from 6-9pm, OFP
Halloween Story Time by the Sea	Sat, 10/26/2019 from 10-11:30am, OFP
Kure Beach Holiday Market	Sat, 11/23 & 11/30/2019 from 9am-3pm, OFP

Update as of 7/8/2019