TOWN COUNCIL WORKSHOP ON MARS WAY AGENDA

January 08, 2024 at 3:00 PM

Council Chambers – 340 Ocean Drive and Zoom

Join Zoom Meeting

https://us06web.zoom.us/j/86534119533?pwd=vOCX6oh70huPL8doLaxIiRakHAPGo6.1

Meeting ID: 865 3411 9533

Passcode: 951651

CALL TO ORDER

PRESENTATIONS

Presentation by Resident Jane Le Clainche

Overview of the Traffic Diversion Study for Mars Way by Town's Traffic Engineer Bryan Kelley, P.E.

COMMENTS FROM THE PUBLIC

Anyone wishing to speak is asked to complete a comment card with their name and address prior to the start of the meeting as well as state their name and address for the record when called upon to speak (prior to addressing the Town Council). All comments are limited to three (3) minutes.

DISCUSSION ITEMS

1. Discussion on Mars Way

ADJOURNMENT

AGENDA ITEM

Meeting Name: Town Council Workshop

Meeting Date: January 8, 2024

Prepared By: D. Dyess

Item Title: Presentation by Resident Jane Le Clainche

DISCUSSION:

Residents of Mars Way have made multiple complaints about traffic issues. Several previous meetings and discussions on the issue resulted in some changes, however the residents do not feel that the issues have been resolved.

After discussions with Council, staff was directed to establish a workshop to listen to additional information.

Jane Le Clainche (property owner on Mars Way) will present the issues.

RECOMMENDATION:

Listen to presentation

Mars Way Safety Concerns

Narrow Road

Mars Way is a residential street. The road is very narrow (20' wide with each traffic lane slightly over 9') and cannot safely accommodate large trucks, a lot of traffic, parked vehicles, pedestrians and bicyclists in the street.

Many vehicles drive in the middle of the road to avoid parked cars, pedestrians or simply because their vehicles are too large for the 10' lane. Many parked cars encroach into the driving lane.

In addition, the road has an incline which creates line of site issues for drivers that can't adequately see what they are about to encounter.

The FDOT standard for a 2 way roadway is 24'(12' travel lanes) to allow for reasonable separation of vehicles.

Pedestrians

Residents and visitors of Mars Way do not have safe passage to get to the beach or for a walk along Ocean Drive. They have to traverse a narrow busy two-way street with no sidewalks and line of site issues. This is a hazardous situation for residents, their children and grandchildren.

A 2020 traffic study showed over 700 vehicles per day during the work week travel on this road and speeding is a major issue.

Many trades, trucks and other service personnel use Mars Way as the thoroughfare into and out of Town. Many of their vehicles are too large for such a narrow residential street.

Pedestrians (cont.)

Pedestrians (cont.)

Trucks

Although the Town adopted a No Truck Ordinance for Mars Way there are large trucks constantly driving on the street, as shown in the pictures. Truck drivers also use the road for parking to make deliveries to Oceanfront (see top right picture of the parked Zephyrhills Water Truck at the end of the street). The car hauler in another picture is not servicing a Mars Way resident.

The 'No Truck' signage is ineffective and there has been no tickets issued and negligible enforcement.

Trucks

This is another slide of trucks that have recently been on the street. This is a common occurrence.

Many of these trucks encroach on the other lane, which is indicative that they are too large for such a narrow residential street with no sidewalk.

And More Trucks…

Speed Concerns

- Many of the drivers on Mars Way speed. The street is rarely policed and as such, no one worries about being ticketed for speeding.
- The speed trailer has been used sparingly, and is placed just above the incline on the west side of the street and does not capture the vehicles true speed (vehicles are turning onto the street from US-1 and driving up the incline, which is not their maximum speed). The Police tell the residents there is no significant speeding on the street and that is simply not correct.
- Empty patrol vehicles have infrequently been placed on the street but typically only when the matter is brought up at a Town Council meeting.
- The last traffic study indicated that a significant number of vehicles were going well above the speed limit. It is our belief that the speed levels have not changed since the study and since the speed limit was lowered to 20MPH.

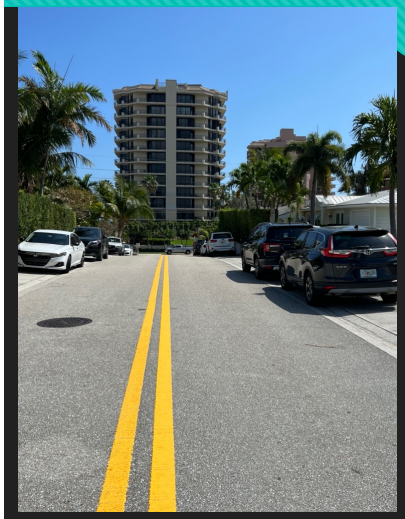
Parking

Much of the time, cars are parked all along the first half of the street. Many of these vehicles do not belong to Mars Way residents. The parked cars belong to people servicing the Oceanfront condominium and beach visitors. Mars Way residents have to deal with poor to zero visibility pulling out of their driveways, lack of parking for their own visitors and trades and no where to go to avoid oncoming traffic when walking to Ocean Drive.

No other condominium sends their service vehicles to neighboring residential side streets. Why is it acceptable for Mars Way?

Note the picture at the lower left. The signage is in front of the Oceanfront gate and states "All service & vendors park outside gate."

Parking (Cont.)







Over the years, service vehicles parking on Mars Way loiter, litter and are a nuisance to the residents.
At times landscapers have to park in the road because Oceanfront service vehicles are using the available spaces. This creates a safety issue for the landscapers, pedestrians and other vehicles.

Parking Permit Program

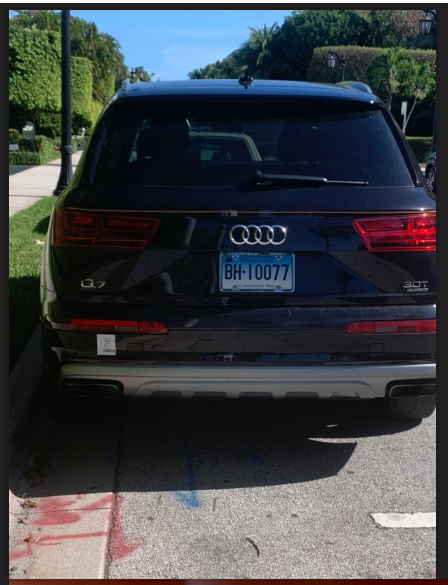
A residential parking permit program for Mars Way could be implemented.

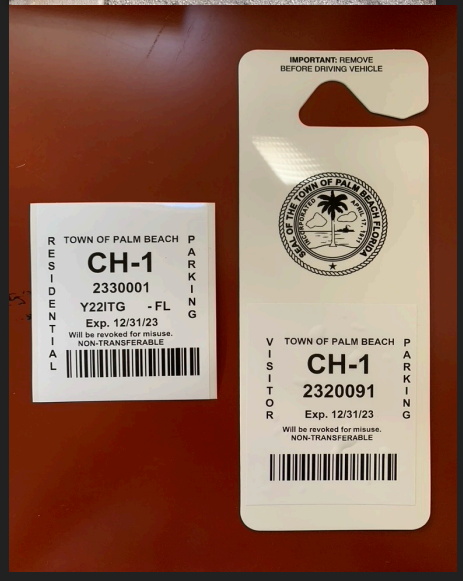
The picture on the right top corner shows a vehicle in Palm Beach with a Residential Parking permit on the left bumper. The picture on the top left corner shows a visitor permit hanging on the rearview mirror of a vehicle in Palm Beach. The lower picture shows signage in Palm Beach and a sample resident sticker and visitor placard.

This program allows the vehicles to be easily identified for compliance.

Palm Beach has over 20 years of experience in creating legally defensible parking permit programs.

The program is easy to administer and enforce for the 17 homes on the street. Enforcement can be done with civilian Town employees or police officers.





Safety Concerns and Options
Pedestrian and Bicycle Safety

- Pedestrian and Bicycle Safety
  - Nowhere to walk except the narrow road
  - Bicycles have to share a very narrow road with large trucks and cars
  - Residents do not have safe passage to the beach and Ocean Drive
- Options
  - Make Mars Way a one-way East to West
    - Eliminate east bound traffic
    - The road could be narrowed by adding a bike lane
    - Should not be an issue for FDOT, PBC or PBCFR based on recent traffic study
  - Close the Median at US1
    - Reduce amount of traffic coming onto Mars Way
    - Should not be an issue for FDOT, PBC or PBCFR based on recent traffic study

Safety Concerns and Options
Trucks

- Mars Way is being used as a Truck Route
  - Large Trucks are using the street to access the Town.
  - The narrow residential street is not appropriate as a truck route
  - Google Maps directs drivers to Mars Way to access the Town
  - The No Truck Ordinance is not enforced
- Options
  - Make Mars a one-way East to West
    - Would eliminate the truck traffic coming into Town using Mars Way
    - Visible Signage at Ocean Dr – NO Trucks Strictly Enforced
  - Close the Median at US1 and Mars Way
    - Would eliminate the truck traffic coming into the Town from the North using Mars Way
    - Visible Signage at US1 and Ocean Dr – NO Trucks Strictly Enforced

Safety Concerns and Options

- Speeding Vehicles
- Options
  - Speed Limits should be as strictly enforced as they are on Ocean Drive

- Parking by non-Mars Way vehicles
  - Service Vehicles for Oceanfront and Beachgoers use the street for parking
  - Palm Beach County population is increasing and there are only a finite number of public beaches. This issue is only going to become worse
- Options
  - Resident Permit Parking should be adopted for the Street
    - A Permit Program would reduce number of vehicles parked on street
    - The Beach Permit would NOT be negatively impacted
    - Enforcement can be done by civilian Town employees and/or Police officers
    - Town can legally charge a fee and increase fine amounts to pay for any additional costs

Summary of Options to Improve Safety

- Make Mars Way a one-way street east to west.
  - Low cost option and would eliminate incoming truck traffic and two-way traffic
  - Could add a bike lane to narrow the road
  - Visible signage stating NO Trucks strictly enforced at Ocean Drive with enforcement, should significantly reduce truck traffic
  - Shouldn't be an issue for FDOT, PBC or PBCFR based on recent traffic study
- Close the Median at US1 and Mars Way
  - Reduce amount of traffic coming onto Mars Way
  - Shouldn't be an issue for FDOT, PBC or PBCFR based on recent traffic study
  - Would reduce the truck traffic on Mars Way coming into the Town from the North
  - Visible Signage at US1 and Ocean Dr – NO Trucks Strictly Enforced
  - We have been told FDOT would pay the cost for closure
- Enforce the speed limits on Mars Way
- Adopt a Resident Parking Permit Program for Mars Way

Conclusion

- The quantity of traffic, type of traffic, speed of traffic, line of site issues, narrowness of the road and lack of sidewalks are the main issues facing the residents of Mars Way.
- Making Mars Way a One-Way street will significantly reduce the traffic and will eliminate all truck traffic coming into Town from the North using Mars Way.
- Traffic Study showed for closing the median: *The redistribution of traffic from Mars Way will only have a minimal impact to each of the study intersections and will not result in any detrimental impact.*
- As the Palm Beach County population grows, the traffic and parking issues will only grow
- The severity of the problem is getting worse
- Now is the time to make changes before someone gets hurt
- The decision is between safety or convenience
  - Residents can adapt to new traffic patterns if an one-way is implemented and use Donald Ross to enter the Town instead of Mars Way slightly increasing their travel time
- Resident safety should always come first!

AGENDA ITEM

Meeting Name: Town Council Workshop on Mars Way

Meeting Date: January 8, 2024

Prepared By: C. Copeland-Rodriguez, Town Clerk

Item Title: Overview of the Traffic Diversion Study for Mars Way by Town's Traffic Engineer Bryan Kelley, P.E.

DISCUSSION:

Town Traffic Engineer, Bryan Kelley, will be conducting an overview of the Traffic Diversion Study for Mars Way.

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TRAFFIC DIVERSION STUDY

MARS WAY
TOWN OF JUNO BEACH, FLORIDA

Prepared for:

Town of Juno Beach
340 Ocean Drive
Juno Beach, Florida 33408

Job No. 19-004.8

Date: February 6, 2023

Bryan Kelley
Digitally signed by Bryan Kelley
Date: 2023.02.24 08:29:22 -05'00'

Bryan G. Kelley, P.E.
FL Reg. No. 74006

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APPENDICES

1.0 INTRODUCTION

Simmons & White, Inc. at the request of the Town of Juno Beach conducted a traffic calming study on Mars Way in February, 2020. The traffic study concluded that both speeding and cut through traffic was occurring on Mars Way. After an evaluation of several traffic calming alternatives, the recommendation made to the Town was to install speed humps or speed tables on Mars Way. The Town Council ultimately decided against the speed humps/tables due to the majority of residents on Mars Way not desiring the speed humps/tables primarily due to noise concerns. Instead, the Town Council chose the option to install striping improvements and "No Through Truck" signage to help reduce speeding and cut through traffic. Additionally, the Town Council commissioned a traffic study to be conducted to determine if the FDOT would permit a closure of the median on Mars Way at US-1. The purpose of this study is to provide a traffic analysis of the surrounding area and the traffic impact if the median modification were to be constructed.

2.0 DATA COLLECTION

The study area for the traffic analysis consisted of US-1 from Donald Ross Road to the north and to Olympus Drive to the south. Figure 1 attached to this report depicts the study area. Mars Way currently consists of a convenient cut-through option for vehicles traveling from west of Donald Ross Road or north of US-1 to Ocean Drive/A1A within the Town of Juno Beach. With the potential elimination of the southbound left turn movement on US-1 at Mars Way, the majority of diverted traffic will utilize Donald Ross Road or Olympus Drive to travel to Ocean Drive. The elimination of the westbound left turn movement on Mars Way at Ocean Drive will cause residents of Mars Way to make a right turn on US-1 and then a U-turn at Park Street to travel south.

Turning movement counts were collected from 7:00-9:00 A.M. and from 4:00-6:00 P.M. on January 23, 2023 and January 24, 2023 at the following locations:

- US-1 at Park Street
- US-1 at Mars Way
- US-1 at U-turn location just south of Mars Way
- US-1 at Olympus Drive

Additionally, turning movement counts at US-1 at Donald Ross Road obtained from the Palm Beach County Traffic Division and collected on April 12, 2022 were utilized in the traffic study.

The impact of a median closure on US-1 at Mars Way would result in several turning movement diversions at the above stated intersections. The traffic diversions may be summarized as follows:

1. US-1 at Donald Ross Road
    - Additional eastbound throughs
    - Reduced eastbound right turns
2. US-1 at Park Street
    - Additional northbound U-turns
    - Reduced southbound throughs
3. US-1 at Mars Way
    - Elimination of southbound left turns
    - Elimination of westbound left turns
    - Additional southbound throughs
    - Additional northbound right turns
4. US-1 at U-Turn median opening south of Mars Way
    - Additional southbound U-turns
    - Additional southbound throughs
5. US-1 at Olympus Drive
    - Additional southbound left turns

3.0 TRAFFIC ANALYSIS

The existing traffic counts at each of the study intersections along with the diverted traffic volumes are attached to this report. Synchro 10 software with Highway Capacity Manual (HCM) methodologies were utilized for the traffic operational analysis. Note HCM 6th Edition was utilized for the unsignalized intersections and HCM 2000 was utilized for the signalized intersection of Donald Ross Road at US-1. HCM 6th Edition was not used for this signalized intersection since it operates under split phasing which HCM 6th Edition does not support. The existing signal timing from Palm Beach County was also obtained and utilized. The results of the analysis under the existing conditions and the build conditions (with closure of US-1 at Mars Way center median opening) are attached to the report and may be summarized as follows:

Table 1
Existing Conditions Operational Analysis

Intersection	Peak Hour	Delay (sec/veh)	LOS	95th Percentile Queue* (ft)	Turn Lane Length (ft)
Donald Ross Road at US-1	AM	32.3	C	N/A	N/A
	PM	39.0	D	N/A	
US-1 at Park Street (Northbound Left Turn)	AM	10.8	A	25	160 ft + 160 ft taper
	PM	9.9	A	25	
US-1 at Mars Way (Southbound Left Turn)	AM	9.8	A	25	150 ft + 150 ft taper
	PM	11.8	B	25	
US-1 at U-Turn S. of Mars Way (Southbound Left Turn)	AM	9.6	A	25	100 ft + 160 ft taper
	PM	11.2	B	25	
US-1 at Olympus Drive (Southbound Left Turn)	AM	9.3	A	25	130 ft + 80 ft taper
	PM	11.5	B	25	

*95th percentile queue rounded up to the nearest 25 feet.

Table 2
Build Conditions (Closure of US-1 at Mars Way Center Median)
Operational Analysis

Intersection	Peak Hour	Delay (sec/veh)	LOS	95th Percentile Queue* (ft)	Turn Lane Length (ft)
Donald Ross Road at US-1	AM	32.4	C	N/A	N/A
	PM	39.1	D	N/A	
US-1 at Park Street (Northbound Left Turn)	AM	10.8	A	25	160 ft + 160 ft taper
	PM	9.8	A	25	
US-1 at Mars Way (Southbound Left Turn)	AM	N/A			
	PM				
US-1 at U-Turn S. of Mars Way (Southbound Left Turn)	AM	9.7	A	25	100 ft + 160 ft taper
	PM	11.4	B	25	
US-1 at Olympus Drive (Southbound Left Turn)	AM	9.4	A	25	130 ft + 80 ft taper
	PM	11.7	B	25	

*95th percentile queue rounded up to the nearest 25 feet.

As shown above, there is currently minimal vehicular delay and queueing at each of the subject left turn lanes. The redistribution of traffic from Mars Way will only have a minimal impact to each of the study intersections and will not result in any detrimental impact. Additionally, each of the existing left turn lanes has sufficient storage to accommodate the increase in traffic. However, it should be noted that the existing turn lanes do not meet current FDOT standards in regards to turn lane length design. Current FDOT standards would require a minimum of 160

feet in full storage plus an additional 50-foot taper. This is based on a 45 mph roadway with a 95th percentile queue of 25 feet.

4.0 CONCLUSION

The purpose of this traffic study was to determine the traffic impacts if the center median on US-1 at Mars Way was closed preventing southbound left turns and westbound left turns. The data collection along with the corresponding traffic operational analysis demonstrated that redistribution of traffic would have minimal impacts to the surrounding roadway network and no reduction in Level of Service or queue spillover would occur at the impacted intersections. It should be noted that while the center median modification is feasible from a traffic operations perspective, additional factors are worth considering. The center median modification would come at a significant cost and additional turn lane modifications could be required by the FDOT to bring up to current standards. Further, the additional cut through traffic on Olympus Drive could revert speeding issues on Mars Way to Olympus Drive.

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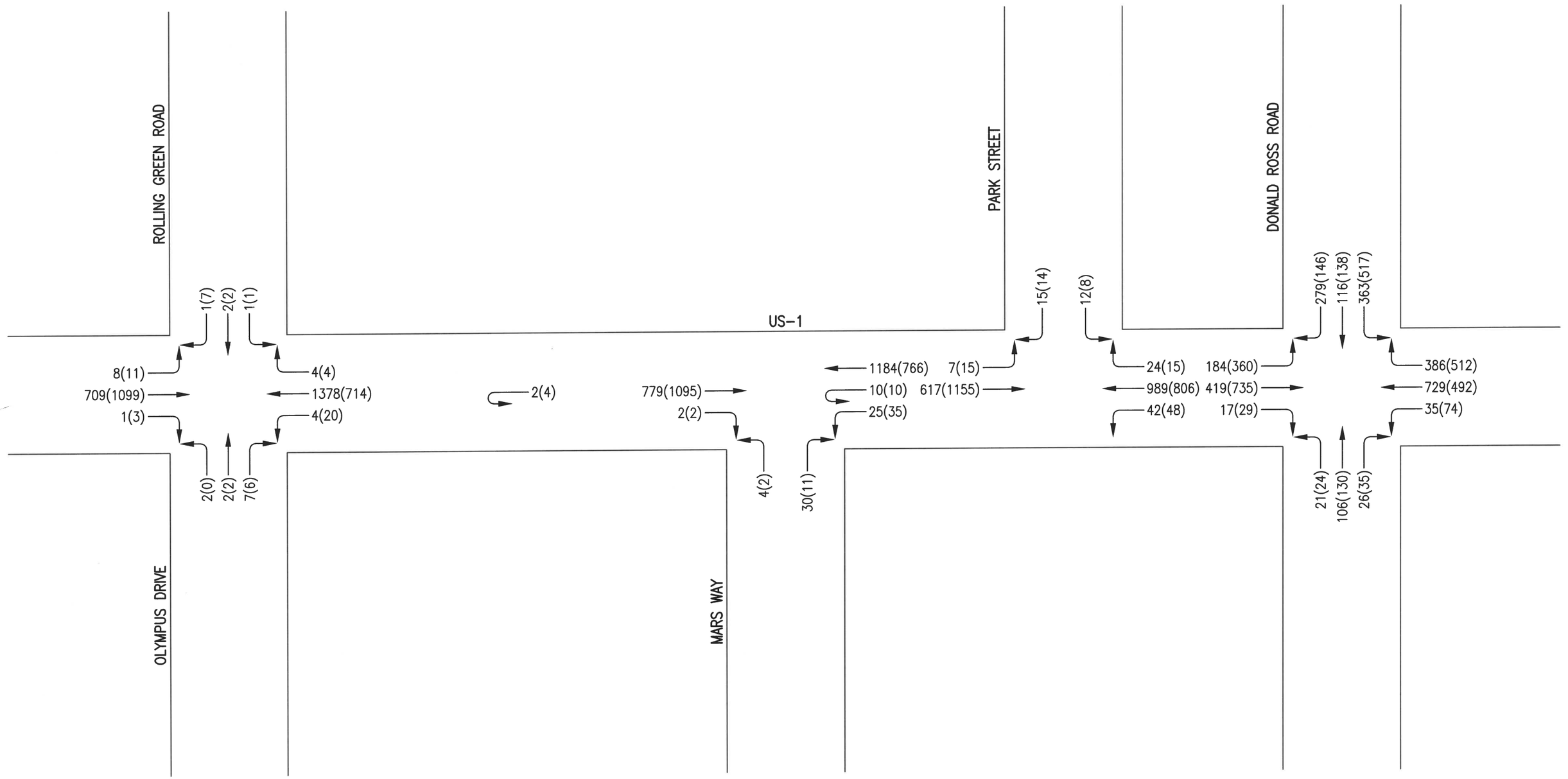

EXISTING TRAFFIC VOLUMES

LEGEND

14 A.M. PEAK HOUR TURNING MOVEMENT
(18) P.M. PEAK HOUR TURNING MOVEMENT

MARS WAY
19-004.8 BK 02-01-23

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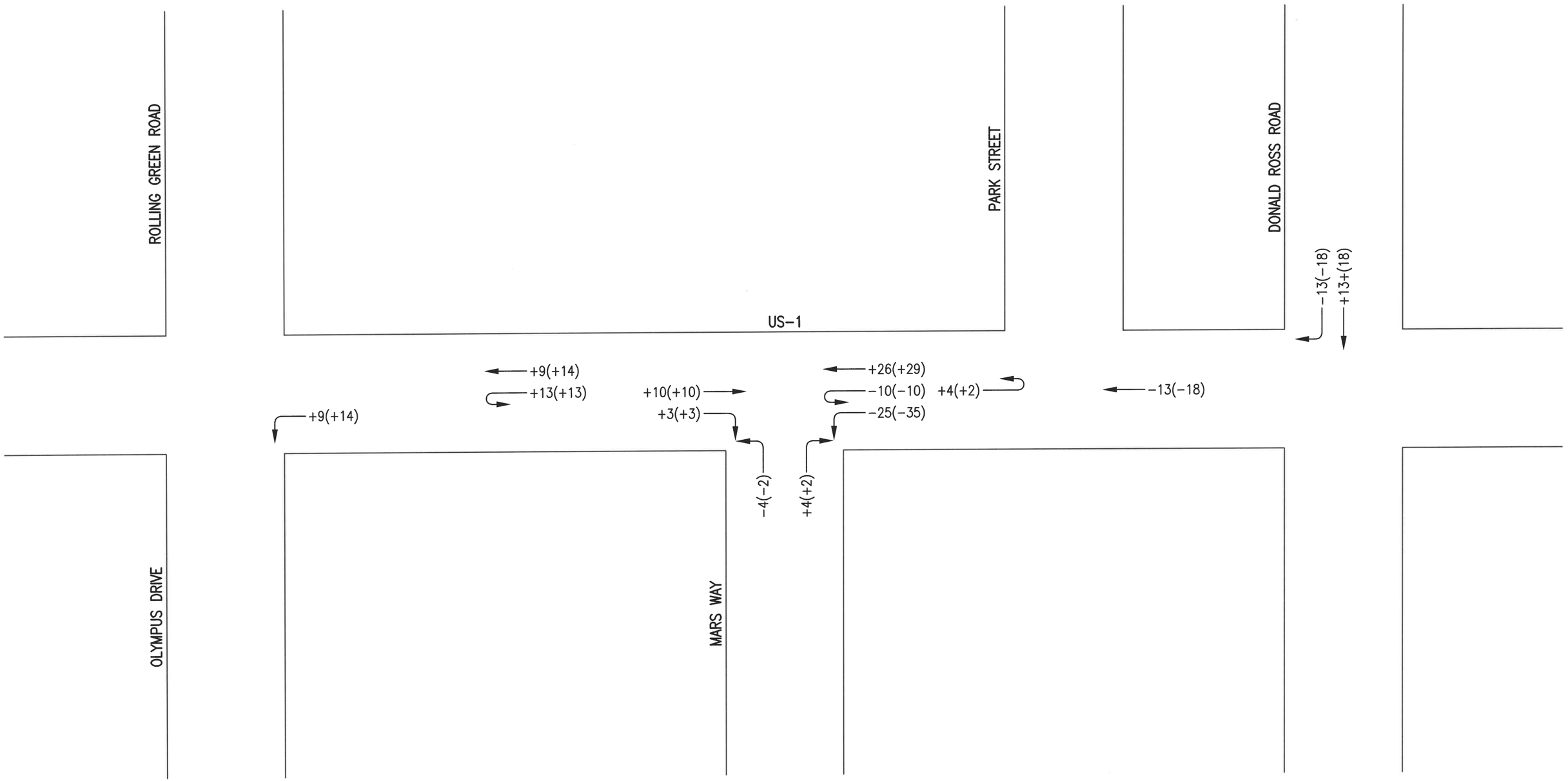

DIVERTED TRIPS WITH MARS WAY MEDIAN CLOSURE

LEGEND

14 A.M. PEAK HOUR TURNING MOVEMENT
(18) P.M. PEAK HOUR TURNING MOVEMENT

MARS WAY
19-004.8 BK 02-01-23

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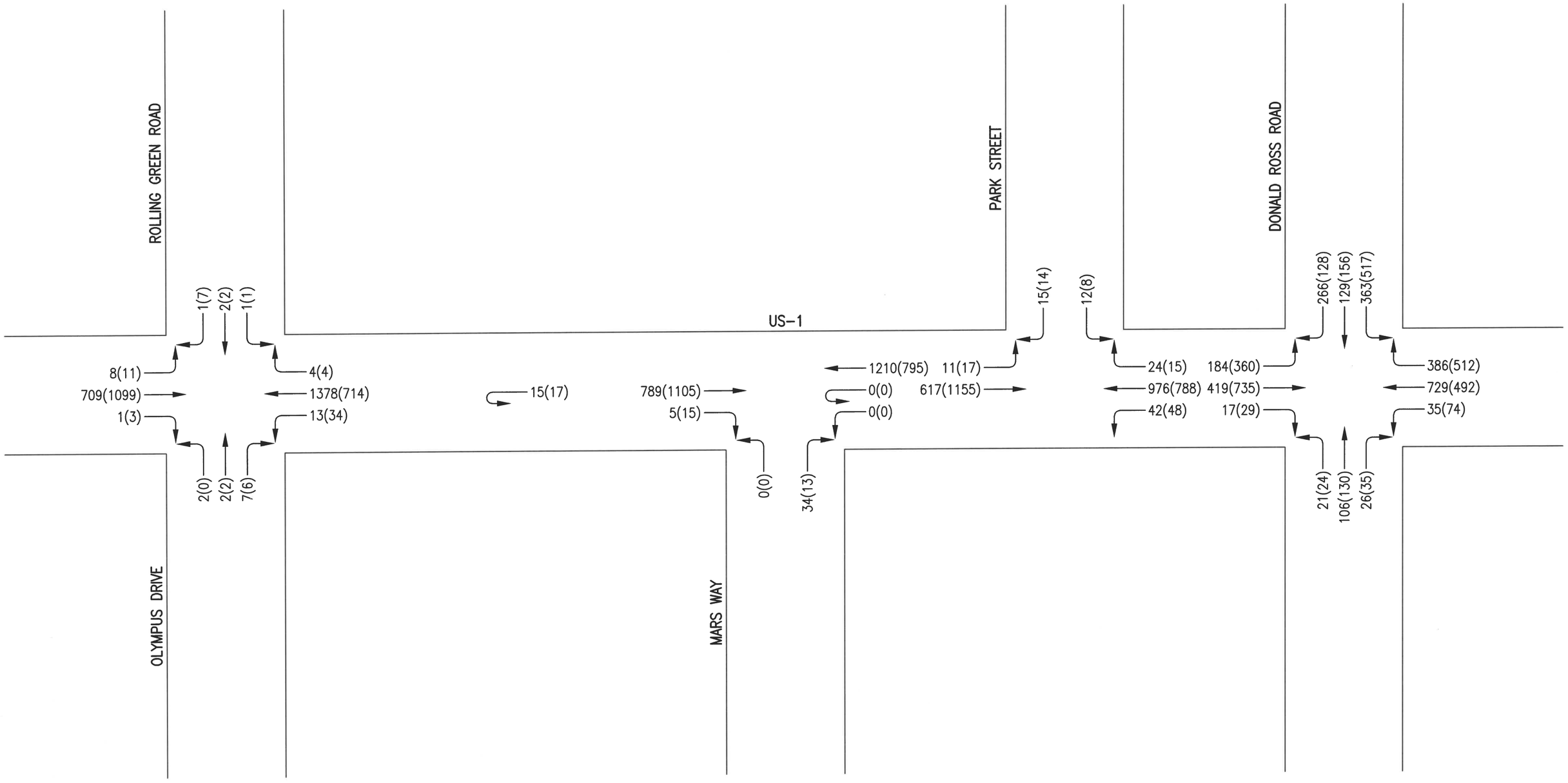


TOTAL TRAFFIC VOLUMES WITH MARS WAY MEDIAN CLOSURE

LEGEND

14 A.M. PEAK HOUR TURNING MOVEMENT
(18) P.M. PEAK HOUR TURNING MOVEMENT

MARS WAY
19-004.8 BK 02-01-23

APPENDIX A

TRAFFIC COUNTS

Manual Traffic Count - All Traffic
US1 and Park St
Juno Beach, FL

File Name : US1-PARK
Site Code : SW2304
Start Date : 1/23/2023
Page No : 1

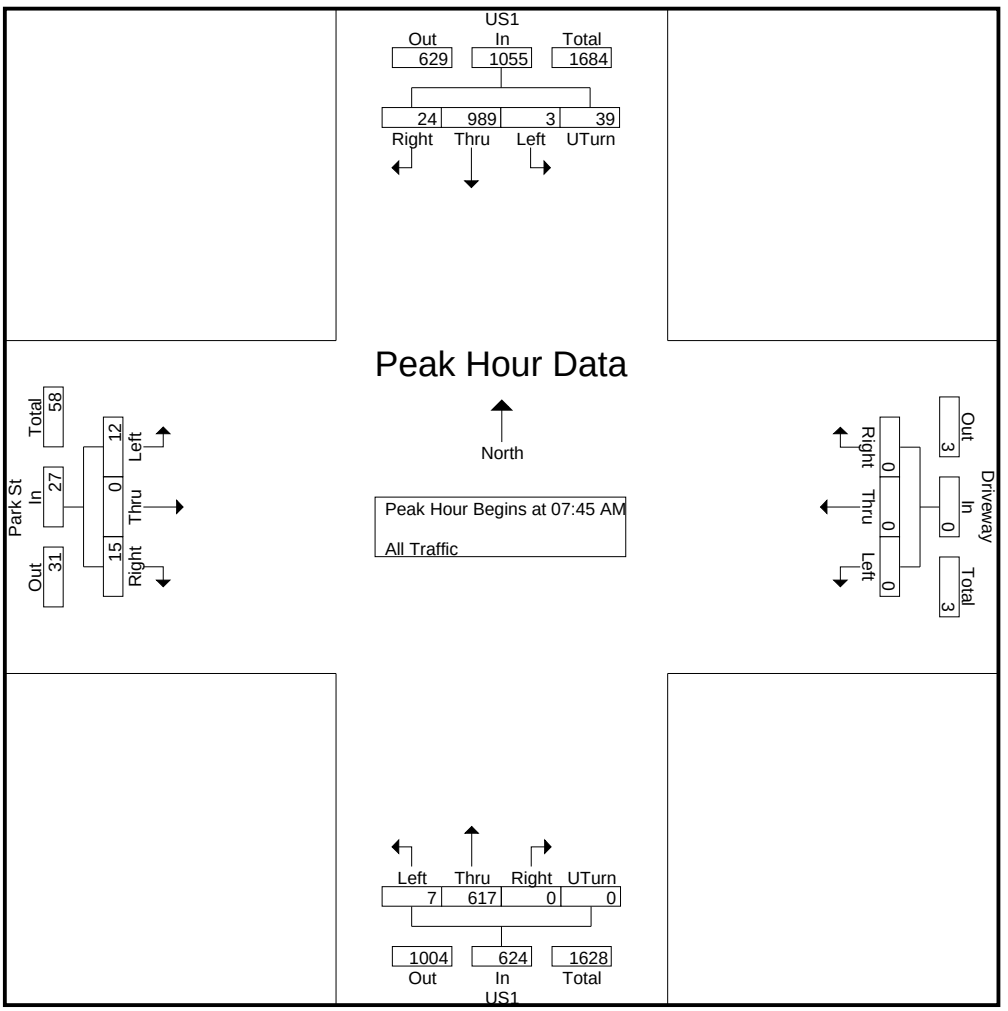
Groups Printed- All Traffic

	US1 NB				US1 SB				Park St EB			Driveway WB			
Start Time	Left	Thru	Right	UTurn	Left	Thru	Right	UTurn	Left	Thru	Right	Left	Thru	Right	Int. Total
07:00 AM	1	111	1	0	0	146	0	4	0	0	2	0	0	0	265
07:15 AM	0	108	0	1	0	160	0	3	2	0	2	1	0	0	277
07:30 AM	3	142	0	0	0	218	3	11	2	0	3	0	0	0	382
07:45 AM	1	162	0	0	0	230	3	9	3	0	2	0	0	0	410
Total	5	523	1	1	0	754	6	27	7	0	9	1	0	0	1334
08:00 AM	0	155	0	0	3	294	4	8	2	0	3	0	0	0	469
08:15 AM	2	156	0	0	0	247	16	12	3	0	3	0	0	0	439
08:30 AM	4	144	0	0	0	218	1	10	4	0	7	0	0	0	388
08:45 AM	12	163	0	1	0	219	1	7	3	0	2	0	0	0	408
Total	18	618	0	1	3	978	22	37	12	0	15	0	0	0	1704
*** BREAK ***															
04:00 PM	2	264	0	0	0	196	14	7	3	0	1	0	0	0	487
04:15 PM	1	276	0	1	0	220	5	15	1	0	2	0	0	1	522
04:30 PM	2	284	0	1	0	192	3	11	4	0	0	0	0	1	498
04:45 PM	2	288	0	1	0	205	3	8	0	0	3	0	0	0	510
Total	7	1112	0	3	0	813	25	41	8	0	6	0	0	2	2017
05:00 PM	6	307	0	1	0	189	4	14	3	0	9	0	0	0	533
05:15 PM	4	275	0	0	0	202	3	10	4	0	1	0	0	0	499
05:30 PM	4	321	0	0	0	154	10	7	5	0	2	0	0	0	503
05:45 PM	6	223	0	2	0	160	3	8	7	1	6	0	0	0	416
Total	20	1126	0	3	0	705	20	39	19	1	18	0	0	0	1951
Grand Total	50	3379	1	8	3	3250	73	144	46	1	48	1	0	2	7006
Apprch %	1.5	98.3	0	0.2	0.1	93.7	2.1	4.1	48.4	1.1	50.5	33.3	0	66.7	
Total %	0.7	48.2	0	0.1	0	46.4	1	2.1	0.7	0	0.7	0	0	0	

Manual Traffic Count - All Traffic
US1 and Park St
Juno Beach, FL

File Name : US1-PARK
Site Code : SW2304
Start Date : 1/23/2023
Page No : 2

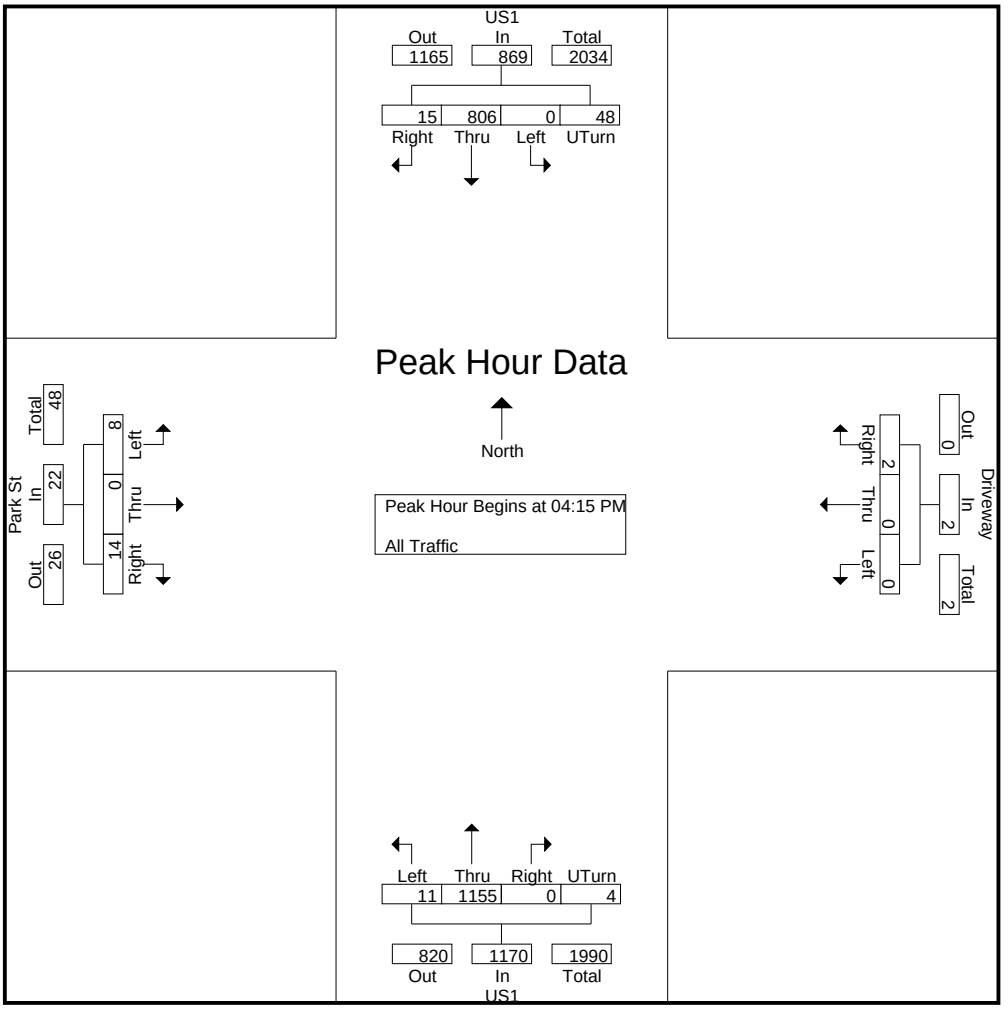
	US1 NB					US1 SB					Park St EB				Driveway WB				
Start Time	Left	Thru	Right	UTurn	App. Total	Left	Thru	Right	UTurn	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 07:45 AM																			
07:45 AM	1	162	0	0	163	0	230	3	9	242	3	0	2	5	0	0	0	0	410
08:00 AM	0	155	0	0	155	3	294	4	8	309	2	0	3	5	0	0	0	0	469
08:15 AM	2	156	0	0	158	0	247	16	12	275	3	0	3	6	0	0	0	0	439
08:30 AM	4	144	0	0	148	0	218	1	10	229	4	0	7	11	0	0	0	0	388
Total Volume	7	617	0	0	624	3	989	24	39	1055	12	0	15	27	0	0	0	0	1706
% App. Total	1.1	98.9	0	0		0.3	93.7	2.3	3.7		44.4	0	55.6		0	0	0		
PHF	.438	.952	.000	.000	.957	.250	.841	.375	.813	.854	.750	.000	.536	.614	.000	.000	.000	.000	.909



Manual Traffic Count - All Traffic
US1 and Park St
Juno Beach, FL

File Name : US1-PARK
Site Code : SW2304
Start Date : 1/23/2023
Page No : 3

	US1 NB					US1 SB					Park St EB				Driveway WB				
Start Time	Left	Thru	Right	UTurn	App. Total	Left	Thru	Right	UTurn	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 04:15 PM																			
04:15 PM	1	276	0	1	278	0	220	5	15	240	1	0	2	3	0	0	1	1	522
04:30 PM	2	284	0	1	287	0	192	3	11	206	4	0	0	4	0	0	1	1	498
04:45 PM	2	288	0	1	291	0	205	3	8	216	0	0	3	3	0	0	0	0	510
05:00 PM	6	307	0	1	314	0	189	4	14	207	3	0	9	12	0	0	0	0	533
Total Volume	11	1155	0	4	1170	0	806	15	48	869	8	0	14	22	0	0	2	2	2063
% App. Total	0.9	98.7	0	0.3		0	92.8	1.7	5.5		36.4	0	63.6		0	0	100		
PHF	.458	.941	.000	1.00	.932	.000	.916	.750	.800	.905	.500	.000	.389	.458	.000	.000	.500	.500	.968



Manual Traffic Count - All Traffic
US1 and Mars Way
Juno Beach, FL

File Name : US1-MARS
Site Code : SW2304
Start Date : 1/24/2023
Page No : 1

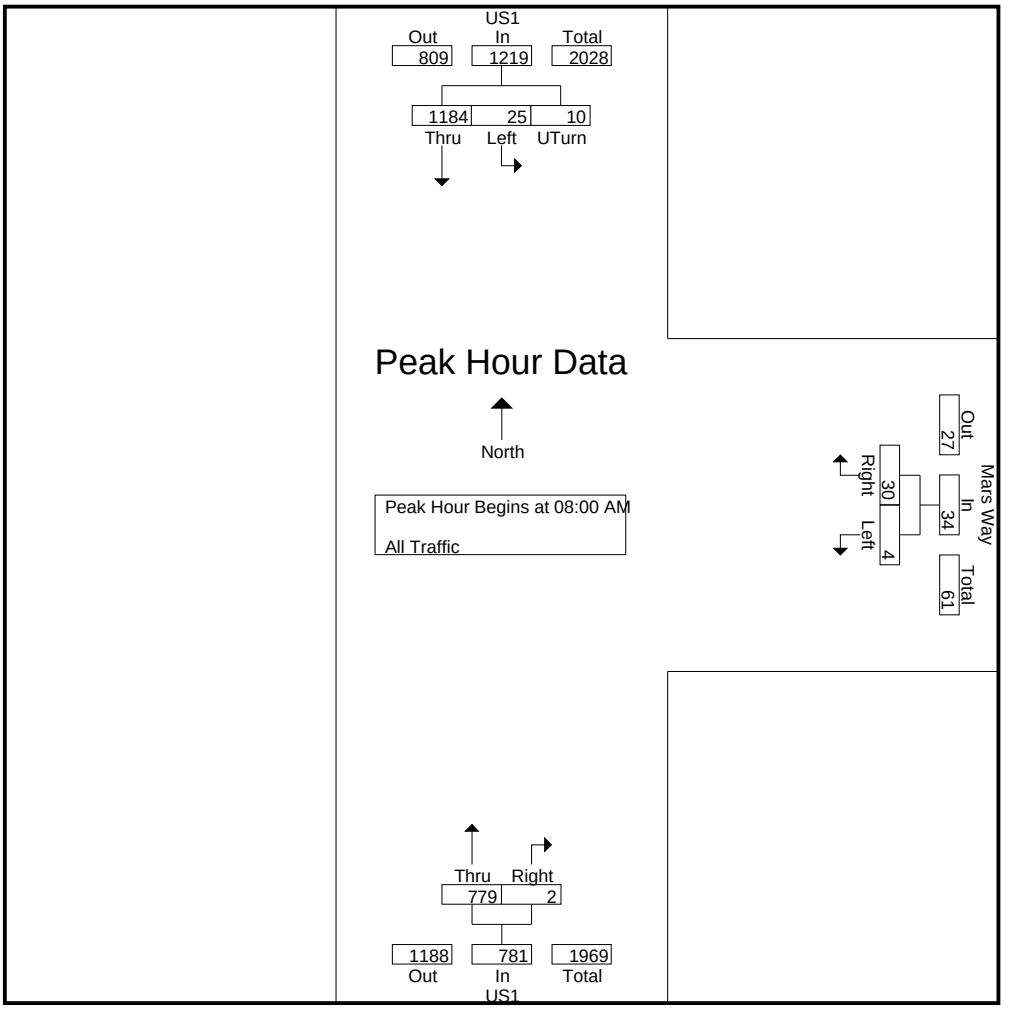
Groups Printed- All Traffic

	US1 NB		US1 SB			Mars Way WB		
Start Time	Thru	Right	Left	Thru	UTurn	Left	Right	Int. Total
07:00 AM	99	0	3	142	1	0	2	247
07:15 AM	128	1	3	197	4	0	4	337
07:30 AM	163	0	4	234	8	0	4	413
07:45 AM	182	0	4	315	8	1	8	518
Total	572	1	14	888	21	1	18	1515
08:00 AM	199	0	6	275	2	1	9	492
08:15 AM	153	0	8	339	5	2	9	516
08:30 AM	202	1	5	283	0	1	5	497
08:45 AM	225	1	6	287	3	0	7	529
Total	779	2	25	1184	10	4	30	2034
*** BREAK ***								
04:00 PM	292	1	9	203	1	1	6	513
04:15 PM	277	2	5	184	3	0	5	476
04:30 PM	258	1	6	188	1	1	3	458
04:45 PM	238	1	12	207	5	0	5	468
Total	1065	5	32	782	10	2	19	1915
05:00 PM	271	0	7	181	1	1	1	462
05:15 PM	328	0	10	190	3	0	2	533
05:30 PM	262	0	7	170	3	1	3	446
05:45 PM	248	1	12	164	0	1	2	428
Total	1109	1	36	705	7	3	8	1869
Grand Total	3525	9	107	3559	48	10	75	7333
Apprch %	99.7	0.3	2.9	95.8	1.3	11.8	88.2	
Total %	48.1	0.1	1.5	48.5	0.7	0.1	1	

Manual Traffic Count - All Traffic
US1 and Mars Way
Juno Beach, FL

File Name : US1-MARS
Site Code : SW2304
Start Date : 1/24/2023
Page No : 2

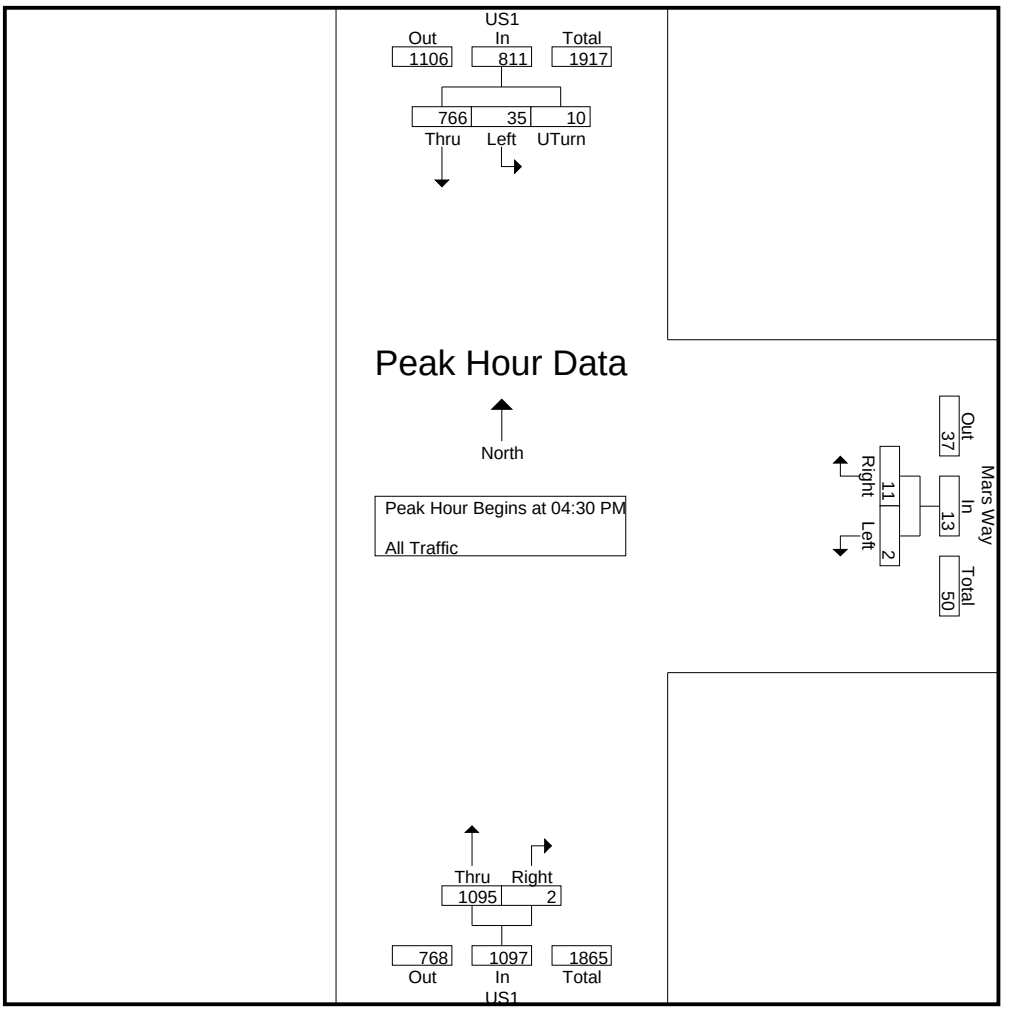
	US1 NB			US1 SB				Mars Way WB			
Start Time	Thru	Right	App. Total	Left	Thru	UTurn	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 08:00 AM											
08:00 AM	199	0	199	6	275	2	283	1	9	10	492
08:15 AM	153	0	153	8	339	5	352	2	9	11	516
08:30 AM	202	1	203	5	283	0	288	1	5	6	497
08:45 AM	225	1	226	6	287	3	296	0	7	7	529
Total Volume	779	2	781	25	1184	10	1219	4	30	34	2034
% App. Total	99.7	0.3		2.1	97.1	0.8		11.8	88.2		
PHF	.866	.500	.864	.781	.873	.500	.866	.500	.833	.773	.961



Manual Traffic Count - All Traffic
US1 and Mars Way
Juno Beach, FL

File Name : US1-MARS
Site Code : SW2304
Start Date : 1/24/2023
Page No : 3

	US1 NB			US1 SB				Mars Way WB			
Start Time	Thru	Right	App. Total	Left	Thru	UTurn	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 04:30 PM											
04:30 PM	258	1	259	6	188	1	195	1	3	4	458
04:45 PM	238	1	239	12	207	5	224	0	5	5	468
05:00 PM	271	0	271	7	181	1	189	1	1	2	462
05:15 PM	328	0	328	10	190	3	203	0	2	2	533
Total Volume	1095	2	1097	35	766	10	811	2	11	13	1921
% App. Total	99.8	0.2		4.3	94.5	1.2		15.4	84.6		
PHF	.835	.500	.836	.729	.925	.500	.905	.500	.550	.650	.901



Start Date:	1/23/2023
Start Time:	7:00:00 AM
Site Code:	SW2303
Comment 1:	Manual Traffic Count - All Traffic
Comment 2:	Midblock NB and SB Uturns
Comment 3:	Juno Beach, FL

	US1 NB	US1 SB
Start Time	UTurn	UTurn
7:00:00 AM	0	1
7:15:00 AM	0	0
7:30:00 AM	1	0
7:45:00 AM	0	1
8:00:00 AM	1	0
8:15:00 AM	0	0
8:30:00 AM	0	0
8:45:00 AM	0	0
4:00:00 PM	0	0
4:15:00 PM	0	1
4:30:00 PM	0	2
4:45:00 PM	0	0
5:00:00 PM	0	1
5:15:00 PM	0	0
5:30:00 PM	0	0
5:45:00 PM	0	0

KMF Traffic Group, LLC
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Manual Traffic Count - All Traffic
US1 and Olympus Dr
Juno Beach, FL

File Name : US1-0LYMPUS
Site Code : SW2304
Start Date : 1/23/2023
Page No : 1

Groups Printed- All Traffic

	US1 NB				US1 SB				Rolling Green Rd EB			Olympus Dr WB			
Start Time	Right	Thru	Left	UTurn	Right	Thru	Left	UTurn	Right	Thru	Left	Right	Thru	Left	Int. Total
07:00 AM	0	81	4	0	1	160	2	0	0	0	0	1	0	0	249
07:15 AM	0	121	3	0	2	214	2	0	1	0	0	2	0	0	345
07:30 AM	1	117	2	0	1	278	1	0	0	0	0	1	0	1	402
07:45 AM	1	113	4	1	0	232	2	0	0	1	1	2	0	0	357
Total	2	432	13	1	4	884	7	0	1	1	1	6	0	1	1353
08:00 AM	0	173	0	1	3	317	2	0	0	1	0	4	2	1	504
08:15 AM	0	208	1	0	1	354	0	0	1	0	0	0	0	1	566
08:30 AM	0	215	1	0	0	475	0	0	0	0	0	1	0	0	692
08:45 AM	1	168	5	2	1	175	0	0	0	0	0	1	1	0	354
Total	1	764	7	3	5	1321	2	0	1	1	0	6	3	2	2116
*** BREAK ***															
04:00 PM	0	296	3	2	0	169	5	0	3	0	0	2	0	0	480
04:15 PM	2	284	1	2	0	188	10	0	0	2	0	0	1	0	490
04:30 PM	1	251	1	0	3	187	1	0	2	0	1	3	0	0	450
04:45 PM	0	268	1	1	1	170	4	0	2	0	0	1	1	0	449
Total	3	1099	6	5	4	714	20	0	7	2	1	6	2	0	1869
05:00 PM	0	283	0	3	0	169	3	2	0	0	1	4	0	0	465
05:15 PM	0	253	1	4	0	200	1	0	2	0	0	4	0	0	465
05:30 PM	1	287	3	2	0	146	3	0	0	0	0	2	0	0	444
05:45 PM	1	238	1	1	0	143	3	0	1	0	0	1	0	0	389
Total	2	1061	5	10	0	658	10	2	3	0	1	11	0	0	1763
Grand Total	8	3356	31	19	13	3577	39	2	12	4	3	29	5	3	7101
Apprch %	0.2	98.3	0.9	0.6	0.4	98.5	1.1	0.1	63.2	21.1	15.8	78.4	13.5	8.1	
Total %	0.1	47.3	0.4	0.3	0.2	50.4	0.5	0	0.2	0.1	0	0.4	0.1	0	

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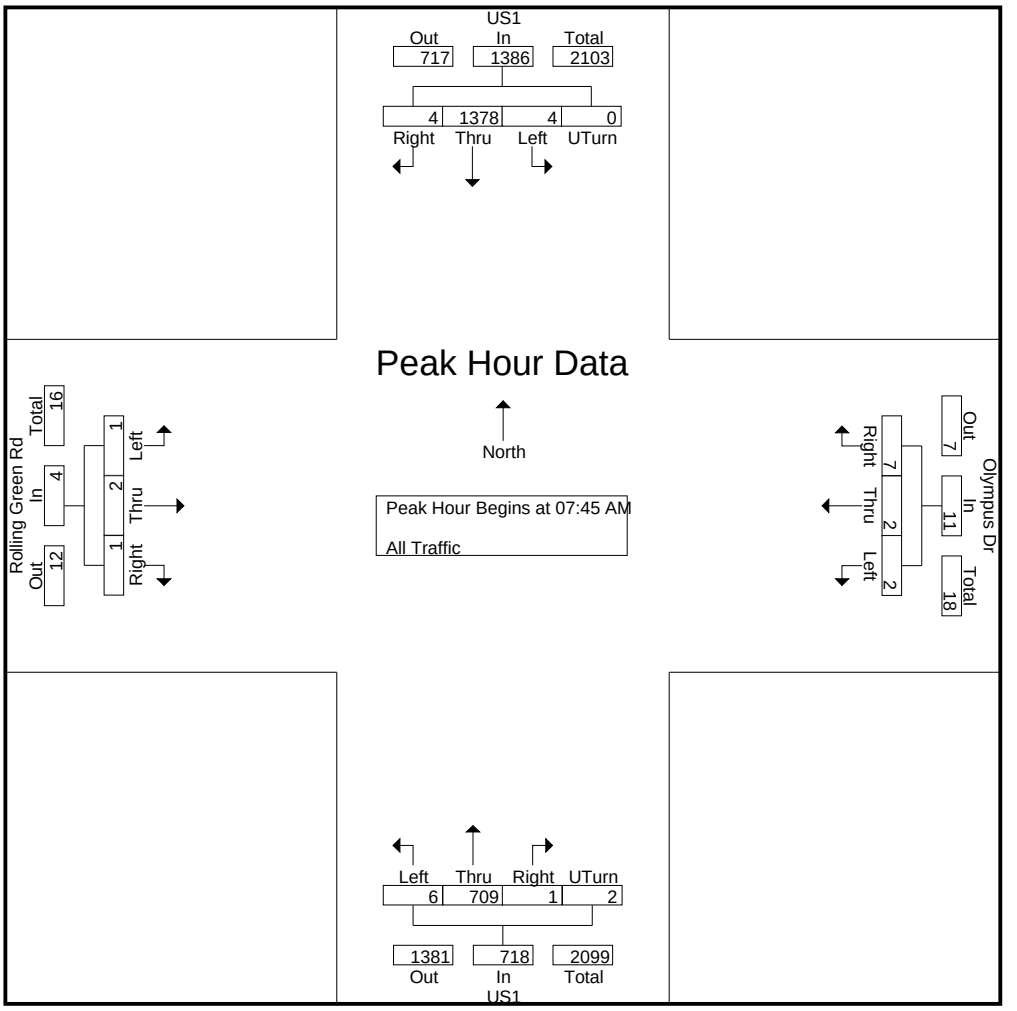
Manual Traffic Count - All Traffic
US1 and Olympus Dr
Juno Beach, FL

File Name : US1-0LYMPUS
Site Code : SW2304
Start Date : 1/23/2023

	US1 NB					US1 SB					Rolling Green Rd EB				Olympus Dr WB				
Start Time	Right	Thru	Left	UTurn	App. Total	Right	Thru	Left	UTurn	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 07:45 AM																			
07:45 AM	**1**	113	**4**	**1**	119	0	232	**2**	0	234	0	**1**	**1**	**2**	2	0	0	2	357
08:00 AM	0	173	0	1	174	**3**	317	2	0	322	0	1	0	1	**4**	**2**	**1**	**7**	504
08:15 AM	0	208	1	0	209	1	354	0	0	355	**1**	0	0	1	0	0	1	1	566
08:30 AM	0	**215**	1	0	**216**	0	**475**	0	0	**475**	0	0	0	0	1	0	0	1	**692**
Total Volume	1	709	6	2	718	4	1378	4	0	1386	1	2	1	4	7	2	2	11	2119
% App. Total	0.1	98.7	0.8	0.3		0.3	99.4	0.3	0		25	50	25		63.6	18.2	18.2		
PHF	.250	.824	.375	.500	.831	.333	.725	.500	.000	.729	.250	.500	.250	.500	.438	.250	.500	.393	.766



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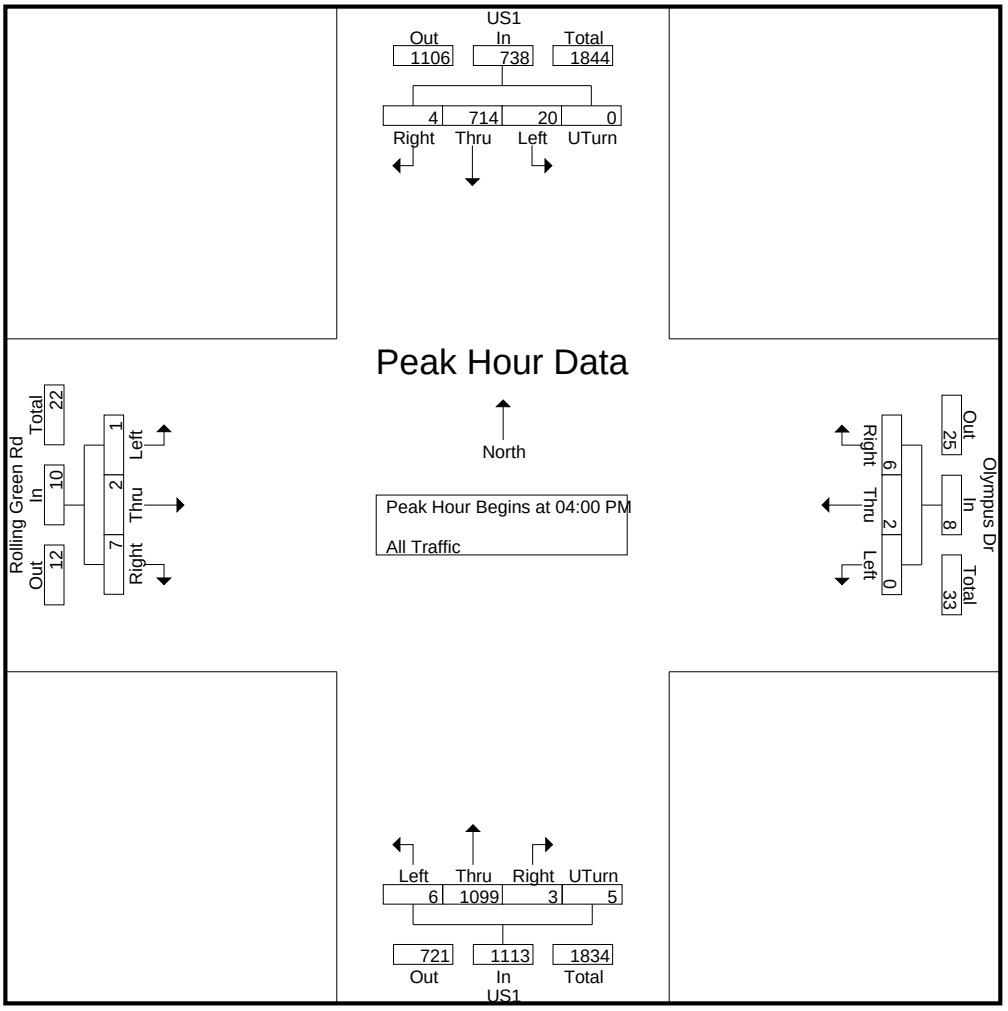
Manual Traffic Count - All Traffic
US1 and Olympus Dr
Juno Beach, FL

File Name : US1-0LYMPUS
Site Code : SW2304
Start Date : 1/23/2023
Page No : 3

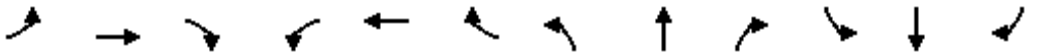
	US1 NB					US1 SB					Rolling Green Rd EB				Olympus Dr WB				
Start Time	Right	Thru	Left	UTurn	App. Total	Right	Thru	Left	UTurn	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																			
Peak Hour for Entire Intersection Begins at 04:00 PM																			
04:00 PM	0	**296**	**3**	**2**	**301**	0	169	5	0	174	**3**	0	0	**3**	2	0	0	2	480
04:15 PM	**2**	284	1	2	289	0	**188**	**10**	0	**198**	0	**2**	0	2	0	**1**	0	1	**490**
04:30 PM	1	251	1	0	253	**3**	187	1	0	191	2	0	**1**	3	**3**	0	0	**3**	450
04:45 PM	0	268	1	1	270	1	170	4	0	175	2	0	0	2	1	1	0	2	449
Total Volume	3	1099	6	5	1113	4	714	20	0	738	7	2	1	10	6	2	0	8	1869
% App. Total	0.3	98.7	0.5	0.4		0.5	96.7	2.7	0		70	20	10		75	25	0		
PHF	.375	.928	.500	.625	.924	.333	.949	.500	.000	.932	.583	.250	.250	.833	.500	.500	.000	.667	.954



SIGNAL ID	E-W STREET	N-S STREET	DATE	TIME	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
8907	Donald Ross Rd	Parkside Dr	12/13/2021	5:00 PM	4	344	121	73	0	150	63	251	0	314	1777	212	10	34	1390	101	4844
8907	Donald Ross Rd	Parkside Dr	2/3/2020	7:30 AM	2	172	43	48	2	127	37	345	0	245	1849	208	3	14	818	90	4003
8907	Donald Ross Rd	Parkside Dr	2/3/2020	12:00 PM	3	142	83	71	0	126	44	135	2	134	995	83	11	33	844	89	2795
8907	Donald Ross Rd	Parkside Dr	2/3/2020	5:00 PM	0	253	119	68	1	127	73	395	13	310	1199	156	2	27	1659	122	4524
8930	Donald Ross Rd	Prosperity Farms Rd/P	3/24/2022	7:30 AM	0	136	52	135	0	164	73	20	3	23	1323	178	3	116	771	40	3037
8930	Donald Ross Rd	Prosperity Farms Rd/P	3/24/2022	12:15 PM	0	140	70	159	0	64	44	29	5	27	772	173	2	160	822	61	2528
8930	Donald Ross Rd	Prosperity Farms Rd/P	3/24/2022	4:45 PM	0	168	101	166	0	81	49	20	2	38	846	194	0	141	1196	95	3097
8930	Donald Ross Rd	Prosperity Farms Rd/P	2/11/2020	7:30 AM	0	130	47	125	0	172	78	35	0	24	1342	129	0	115	737	64	2998
8930	Donald Ross Rd	Prosperity Farms Rd/P	2/11/2020	12:15 PM	0	146	72	199	0	71	47	23	3	29	811	145	7	161	825	142	2681
8930	Donald Ross Rd	Prosperity Farms Rd/P	2/11/2020	4:45 PM	0	190	108	187	0	58	60	27	6	33	857	165	3	190	1440	125	3449
8930	Donald Ross Rd	Prosperity Farms Rd/P	1/14/2019	7:30 AM	0	121	44	148	0	173	52	29	6	19	1296	171	1	125	762	45	2992
8930	Donald Ross Rd	Prosperity Farms Rd/P	1/14/2019	12:15 PM	0	150	60	197	0	68	54	30	4	18	823	134	2	171	787	76	2574
8930	Donald Ross Rd	Prosperity Farms Rd/P	1/14/2019	4:45 PM	0	211	96	206	0	78	48	20	3	27	842	167	1	167	1295	140	3301
8950	Donald Ross Rd	US-1	4/12/2022	7:45 AM	0	184	419	17	17	28	729	386	1	363	116	279	0	21	106	26	2692
8950	Donald Ross Rd	US-1	4/12/2022	12:15 PM	3	256	494	29	34	81	546	483	9	456	161	205	0	20	100	44	2921
8950	Donald Ross Rd	US-1	4/12/2022	4:45 PM	1	359	735	29	17	57	492	512	7	510	138	146	0	24	130	35	3192
8950	Donald Ross Rd	US-1	2/20/2020	7:45 AM	1	229	431	11	12	28	851	529	3	411	101	356	0	18	94	20	3095
8950	Donald Ross Rd	US-1	2/20/2020	12:15 PM	6	255	668	25	49	67	591	558	16	571	208	284	0	47	111	40	3496
8950	Donald Ross Rd	US-1	2/20/2020	4:45 PM	3	354	935	17	59	56	667	739	17	588	190	275	0	27	162	26	4115
20405	Dyer Bl	Military Tr	4/16/2019	7:30 AM	1	46	1685	5	0	0	1080	179	0	203	1	43	0	0	0	0	3243
20405	Dyer Bl	Military Tr	4/16/2019	12:15 PM	5	49	965	6	2	0	913	182	0	141	0	56	0	1	2	4	2326
20405	Dyer Bl	Military Tr	4/16/2019	4:30 PM	6	43	1331	4	0	0	1722	261	0	208	0	82	0	3	0	8	3668
53290	E Atlantic Ave	A1A/Ocean Ave	1/30/2019	8:15 AM	0	75	133	0	0	0	352	89	0	56	0	87	0	0	0	0	792
53290	E Atlantic Ave	A1A/Ocean Ave	1/30/2019	12:00 PM	0	103	191	0	0	0	212	105	0	136	0	193	0	0	0	0	940
53290	E Atlantic Ave	A1A/Ocean Ave	1/30/2019	4:00 PM	0	139	297	0	0	0	248	101	0	125	0	146	0	0	0	0	1056
53255	E Atlantic Ave	US-1 NB (NE 6th Ave)	1/30/2019	7:45 AM	0	53	579	73	0	0	0	0	0	98	261	0	0	0	189	78	1331
53255	E Atlantic Ave	US-1 NB (NE 6th Ave)	1/30/2019	12:00 PM	0	104	803	115	0	0	0	0	0	53	424	0	0	0	298	178	1975
53255	E Atlantic Ave	US-1 NB (NE 6th Ave)	1/30/2019	4:30 PM	0	66	1072	60	0	0	0	0	0	73	288	0	0	0	329	209	2097
53250	E Atlantic Ave	US-1 SB (NE 5th Ave)	1/30/2019	7:45 AM	0	0	0	0	0	75	795	25	0	0	281	38	0	58	166	0	1438
53250	E Atlantic Ave	US-1 SB (NE 5th Ave)	1/30/2019	12:00 PM	0	0	0	0	0	102	682	80	0	0	365	41	0	60	238	0	1568
53250	E Atlantic Ave	US-1 SB (NE 5th Ave)	1/30/2019	4:30 PM	0	0	0	0	0	104	920	79	0	0	274	46	0	80	305	0	1808
28199	Elmhurst Rd	Haverhill Rd	5/3/2022	7:30 AM	0	16	659	296	0	105	567	23	0	35	28	30	0	129	6	106	2000
28199	Elmhurst Rd	Haverhill Rd	5/3/2022	12:00 PM	0	17	485	126	0	62	514	29	0	18	9	16	0	122	7	165	1570
28199	Elmhurst Rd	Haverhill Rd	5/3/2022	5:00 PM	0	40	669	266	0	114	1072	50	0	37	21	17	2	274	23	231	2816
28199	Elmhurst Rd	Haverhill Rd	5/1/2019	7:30 AM	0	26	705	233	0	78	496	14	0	24	28	44	0	117	1	73	1839
28199	Elmhurst Rd	Haverhill Rd	5/1/2019	5:00 PM	0	54	681	162	0	85	889	41	0	25	38	29	0	245	39	164	2452

APPENDIX B

EXISTING CONDITIONS – SYNCHRO PRINTOUTS

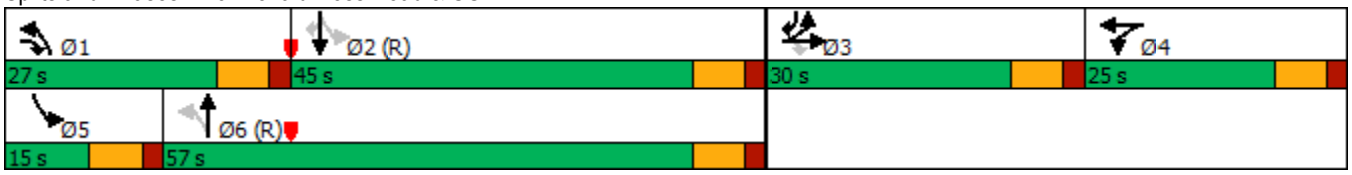


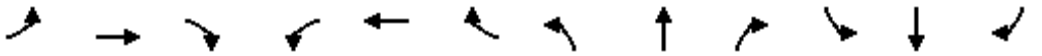
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	363	116	279	21	106	26	184	419	17	35	729	386
Future Volume (vph)	363	116	279	21	106	26	184	419	17	35	729	386
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.971			0.994				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	1809	0	1770	3518	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.210			0.481		
Satd. Flow (perm)	3433	1863	1583	1770	1809	0	391	3518	0	896	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			303		8			4				374
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		637			666			706			389	
Travel Time (s)		14.5			15.1			16.0			8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	395	126	303	23	115	28	200	455	18	38	792	420
Shared Lane Traffic (%)												
Lane Group Flow (vph)	395	126	303	23	143	0	200	473	0	38	792	420
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3	1	4	4		1	6		5	2	3
Permitted Phases			3				6			2		2
Detector Phase	3	3	1	4	4		1	6		5	2	3
Switch Phase												
Minimum Initial (s)	6.0	6.0	4.0	6.0	6.0		4.0	20.0		4.0	20.0	6.0
Minimum Split (s)	25.0	25.0	25.0	13.0	13.0		25.0	27.0		12.0	27.0	25.0
Total Split (s)	30.0	30.0	27.0	25.0	25.0		27.0	57.0		15.0	45.0	30.0
Total Split (%)	23.6%	23.6%	21.3%	19.7%	19.7%		21.3%	44.9%		11.8%	35.4%	23.6%
Maximum Green (s)	23.0	23.0	20.0	18.0	18.0		20.0	50.0		8.0	38.0	23.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	None
Act Effct Green (s)	21.0	21.0	34.4	14.3	14.3		70.1	59.4		57.0	50.3	78.3
Actuated g/C Ratio	0.17	0.17	0.27	0.11	0.11		0.55	0.47		0.45	0.40	0.62
v/c Ratio	0.70	0.41	0.47	0.12	0.68		0.55	0.29		0.08	0.57	0.38
Control Delay	56.7	51.1	4.2	50.2	66.9		21.5	23.1		16.3	33.8	3.2

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	56.7	51.1	4.2	50.2	66.9		21.5	23.1		16.3	33.8	3.2
LOS	E	D	A	D	E		C	C		B	C	A
Approach Delay		36.5			64.6			22.6			23.0	
Approach LOS		D			E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 127			
Actuated Cycle Length: 127			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 29.1		Intersection LOS: C	
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Donald Ross Road & US-1

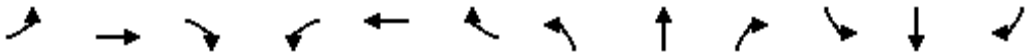




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	363	116	279	21	106	26	184	419	17	35	729	386
Future Volume (vph)	363	116	279	21	106	26	184	419	17	35	729	386
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1583	1770	1808		1770	3519		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.21	1.00		0.48	1.00	1.00
Satd. Flow (perm)	3433	1863	1583	1770	1808		391	3519		896	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	395	126	303	23	115	28	200	455	18	38	792	420
RTOR Reduction (vph)	0	0	221	0	7	0	0	2	0	0	0	164
Lane Group Flow (vph)	395	126	82	23	136	0	200	471	0	38	792	256
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3	1	4	4		1	6		5	2	3
Permitted Phases			3				6			2		2
Actuated Green, G (s)	21.0	21.0	34.4	14.3	14.3		70.7	58.1		55.9	50.3	71.3
Effective Green, g (s)	21.0	21.0	34.4	14.3	14.3		70.7	58.1		55.9	50.3	71.3
Actuated g/C Ratio	0.17	0.17	0.27	0.11	0.11		0.56	0.46		0.44	0.40	0.56
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	567	308	428	199	203		363	1609		432	1401	975
v/s Ratio Prot	c0.12	0.07	0.02	0.01	c0.08		c0.06	0.13		0.00	0.22	0.04
v/s Ratio Perm			0.03				c0.25			0.03		0.12
v/c Ratio	0.70	0.41	0.19	0.12	0.67		0.55	0.29		0.09	0.57	0.26
Uniform Delay, d1	50.0	47.4	35.6	50.7	54.1		17.1	21.6		20.3	29.8	14.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.7	0.9	0.2	0.3	8.1		1.8	0.5		0.1	1.7	0.1
Delay (s)	53.7	48.3	35.8	50.9	62.2		18.9	22.0		20.4	31.5	14.5
Level of Service	D	D	D	D	E		B	C		C	C	B
Approach Delay (s)		46.3			60.6			21.1			25.4	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	127.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	0	15	0	0	0	7	617	0	42	989	24
Future Volume (vph)	12	0	15	0	0	0	7	617	0	42	989	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.926									0.996	
Flt Protected		0.978					0.950			0.950		
Satd. Flow (prot)	0	1687	0	0	0	0	1770	3539	0	1770	3525	0
Flt Permitted		0.978					0.950			0.950		
Satd. Flow (perm)	0	1687	0	0	0	0	1770	3539	0	1770	3525	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		505			418			540			706	
Travel Time (s)		11.5			9.5			12.3			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	0	16	0	0	0	8	671	0	46	1075	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	0	0	8	671	0	46	1101	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.8%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	15	0	0	0	7	617	0	42	989	24
Future Vol, veh/h	12	0	15	0	0	0	7	617	0	42	989	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	16	0	0	0	8	671	0	46	1075	26

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1532	1867	551	1101	0	0	671	0	0
Stage 1	1180	1180	-	-	-	-	-	-	-
Stage 2	352	687	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	107	72	478	630	-	-	915	-	-
Stage 1	254	262	-	-	-	-	-	-	-
Stage 2	683	446	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	100	0	478	630	-	-	915	-	-
Mov Cap-2 Maneuver	100	0	-	-	-	-	-	-	-
Stage 1	238	0	-	-	-	-	-	-	-
Stage 2	683	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	29.2	0.1	0.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	630	-	-	178	915	-	-
HCM Lane V/C Ratio	0.012	-	-	0.165	0.05	-	-
HCM Control Delay (s)	10.8	-	-	29.2	9.1	-	-
HCM Lane LOS	B	-	-	D	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.2	-	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	4	30	779	2	35	1184
Future Volume (vph)	4	30	779	2	35	1184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.880			0.850		
Flt Protected	0.995				0.950	
Satd. Flow (prot)	1631	0	3539	1583	1770	3539
Flt Permitted	0.995				0.950	
Satd. Flow (perm)	1631	0	3539	1583	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	520		600			540
Travel Time (s)	11.8		13.6			12.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	33	847	2	38	1287
Shared Lane Traffic (%)						
Lane Group Flow (vph)	37	0	847	2	38	1287
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 42.7%		ICU Level of Service A	
Analysis Period (min) 15			

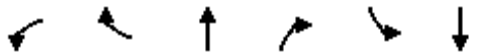
Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	30	779	2	35	1184
Future Vol, veh/h	4	30	779	2	35	1184
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	33	847	2	38	1287

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1567	424	0	0	849	0
Stage 1	847	-	-	-	-	-
Stage 2	720	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	102	579	-	-	785	-
Stage 1	381	-	-	-	-	-
Stage 2	443	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	97	579	-	-	785	-
Mov Cap-2 Maneuver	97	-	-	-	-	-
Stage 1	363	-	-	-	-	-
Stage 2	443	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	365	785	-
HCM Lane V/C Ratio	-	-	0.101	0.048	-
HCM Control Delay (s)	-	-	16	9.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0.2	-



Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	781	0	2	1186
Future Volume (vph)	0	0	781	0	2	1186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	3539	0	1770	3539
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	3539	0	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	346		575			600
Travel Time (s)	7.9		13.1			13.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	849	0	2	1289
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	849	0	2	1289
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.1%		ICU Level of Service A	
Analysis Period (min) 15			

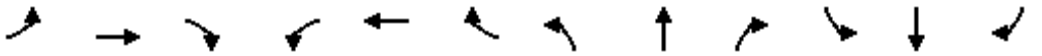
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	781	0	2	1186
Future Vol, veh/h	0	0	781	0	2	1186
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	849	0	2	1289

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	425	0	-	849	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	578	-	0	785	-
Stage 1	0	-	-	0	-	-
Stage 2	0	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	578	-	-	785	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	785	-
HCM Lane V/C Ratio	-	-	0.003	-
HCM Control Delay (s)	-	0	9.6	-
HCM Lane LOS	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	2	1	2	2	7	8	709	1	4	1378	4
Future Volume (vph)	1	2	1	2	2	7	8	709	1	4	1378	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.966			0.910							0.850
Flt Protected		0.988			0.992		0.950			0.950		
Satd. Flow (prot)	0	1778	0	0	1682	0	1770	3539	0	1770	3539	1583
Flt Permitted		0.988			0.992		0.950			0.950		
Satd. Flow (perm)	0	1778	0	0	1682	0	1770	3539	0	1770	3539	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		187			446			254			575	
Travel Time (s)		4.3			10.1			5.8			13.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	2	1	2	2	8	9	771	1	4	1498	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	12	0	9	772	0	4	1498	4
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.1%		ICU Level of Service A	
Analysis Period (min) 15			

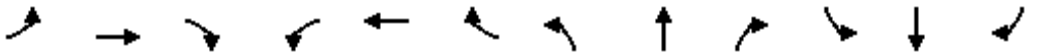
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	1	2	2	7	8	709	1	4	1378	4
Future Vol, veh/h	1	2	1	2	2	7	8	709	1	4	1378	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	2	1	2	2	8	9	771	1	4	1498	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1911	2296	749	1548	2300	386	1502	0	0	772	0	0
Stage 1	1506	1506	-	790	790	-	-	-	-	-	-	-
Stage 2	405	790	-	758	1510	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	41	38	354	78	38	612	442	-	-	839	-	-
Stage 1	127	182	-	350	400	-	-	-	-	-	-	-
Stage 2	593	400	-	365	181	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	38	37	354	73	37	612	442	-	-	839	-	-
Mov Cap-2 Maneuver	38	37	-	73	37	-	-	-	-	-	-	-
Stage 1	124	181	-	343	392	-	-	-	-	-	-	-
Stage 2	571	392	-	358	180	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	87.3	38.9	0.1	0
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	442	-	-	48	118	839	-	-
HCM Lane V/C Ratio	0.02	-	-	0.091	0.101	0.005	-	-
HCM Control Delay (s)	13.3	-	-	87.3	38.9	9.3	-	-
HCM Lane LOS	B	-	-	F	E	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0	-	-

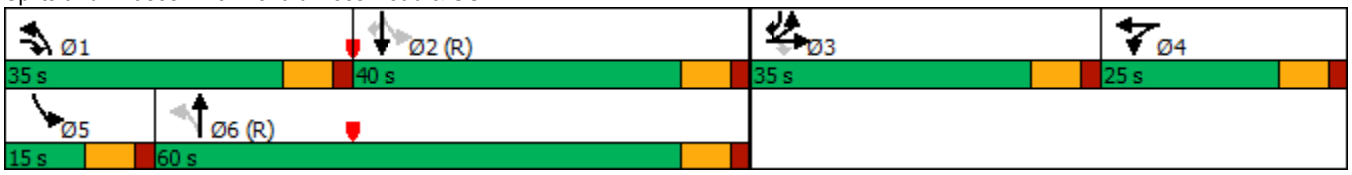


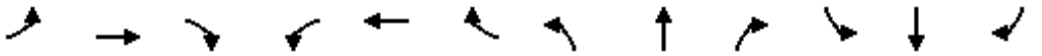
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	517	138	146	24	130	35	360	735	29	74	492	512
Future Volume (vph)	517	138	146	24	130	35	360	735	29	74	492	512
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.968			0.994				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	1803	0	1770	3518	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.283			0.320		
Satd. Flow (perm)	3433	1863	1583	1770	1803	0	527	3518	0	596	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			159		8			3				231
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		637			666			706			389	
Travel Time (s)		14.5			15.1			16.0			8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	562	150	159	26	141	38	391	799	32	80	535	557
Shared Lane Traffic (%)												
Lane Group Flow (vph)	562	150	159	26	179	0	391	831	0	80	535	557
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3	1	4	4		1	6		5	2	3
Permitted Phases			3				6			2		2
Detector Phase	3	3	1	4	4		1	6		5	2	3
Switch Phase												
Minimum Initial (s)	6.0	6.0	4.0	6.0	6.0		4.0	20.0		4.0	20.0	6.0
Minimum Split (s)	25.0	25.0	25.0	13.0	13.0		25.0	27.0		12.0	27.0	25.0
Total Split (s)	35.0	35.0	35.0	25.0	25.0		35.0	60.0		15.0	40.0	35.0
Total Split (%)	25.9%	25.9%	25.9%	18.5%	18.5%		25.9%	44.4%		11.1%	29.6%	25.9%
Maximum Green (s)	28.0	28.0	28.0	18.0	18.0		28.0	53.0		8.0	33.0	28.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	None
Act Effct Green (s)	27.2	27.2	50.8	16.3	16.3		70.5	56.0		47.4	39.9	74.1
Actuated g/C Ratio	0.20	0.20	0.38	0.12	0.12		0.52	0.41		0.35	0.30	0.55
v/c Ratio	0.81	0.40	0.23	0.12	0.80		0.79	0.57		0.29	0.51	0.57
Control Delay	61.8	50.2	2.6	53.3	79.5		33.2	32.7		22.8	43.3	14.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	61.8	50.2	2.6	53.3	79.5		33.2	32.7		22.8	43.3	14.6
LOS	E	D	A	D	E		C	C		C	D	B
Approach Delay		49.0			76.2			32.9			28.2	
Approach LOS		D			E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 37.9		Intersection LOS: D	
Intersection Capacity Utilization 83.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Donald Ross Road & US-1

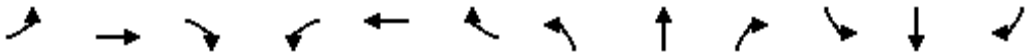




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	517	138	146	24	130	35	360	735	29	74	492	512
Future Volume (vph)	517	138	146	24	130	35	360	735	29	74	492	512
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1583	1770	1803		1770	3519		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.28	1.00		0.32	1.00	1.00
Satd. Flow (perm)	3433	1863	1583	1770	1803		526	3519		595	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	562	150	159	26	141	38	391	799	32	80	535	557
RTOR Reduction (vph)	0	0	99	0	7	0	0	2	0	0	0	116
Lane Group Flow (vph)	562	150	60	26	172	0	391	829	0	80	535	441
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3	1	4	4		1	6		5	2	3
Permitted Phases			3				6			2		2
Actuated Green, G (s)	27.2	27.2	50.8	16.3	16.3		70.5	56.0		47.4	39.9	67.1
Effective Green, g (s)	27.2	27.2	50.8	16.3	16.3		70.5	56.0		47.4	39.9	67.1
Actuated g/C Ratio	0.20	0.20	0.38	0.12	0.12		0.52	0.41		0.35	0.30	0.50
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	691	375	595	213	217		492	1459		274	1045	868
v/s Ratio Prot	c0.16	0.08	0.02	0.01	c0.10		c0.14	0.24		0.02	0.15	0.10
v/s Ratio Perm			0.02				c0.28			0.09		0.18
v/c Ratio	0.81	0.40	0.10	0.12	0.79		0.79	0.57		0.29	0.51	0.51
Uniform Delay, d1	51.5	46.8	27.3	53.0	57.7		21.9	30.2		29.8	39.5	22.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	7.3	0.7	0.1	0.3	17.7		8.6	1.6		0.6	1.8	0.5
Delay (s)	58.7	47.5	27.4	53.2	75.4		30.6	31.9		30.4	41.3	23.3
Level of Service	E	D	C	D	E		C	C		C	D	C
Approach Delay (s)		51.1			72.6			31.4			32.0	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	39.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	0	14	0	0	0	15	1155	0	48	806	15
Future Volume (vph)	8	0	14	0	0	0	15	1155	0	48	806	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.916									0.997	
Flt Protected		0.982					0.950			0.950		
Satd. Flow (prot)	0	1676	0	0	0	0	1770	3539	0	1770	3529	0
Flt Permitted		0.982					0.950			0.950		
Satd. Flow (perm)	0	1676	0	0	0	0	1770	3539	0	1770	3529	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		505			418			540			706	
Travel Time (s)		11.5			9.5			12.3			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	0	15	0	0	0	16	1255	0	52	876	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	0	0	0	0	16	1255	0	52	892	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	14	0	0	0	15	1155	0	48	806	15
Future Vol, veh/h	8	0	14	0	0	0	15	1155	0	48	806	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	15	0	0	0	16	1255	0	52	876	16

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1648	2275	446	892	0	0	1255	0	0
Stage 1	988	988	-	-	-	-	-	-	-
Stage 2	660	1287	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	90	40	560	756	-	-	550	-	-
Stage 1	321	323	-	-	-	-	-	-	-
Stage 2	476	233	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	80	0	560	756	-	-	550	-	-
Mov Cap-2 Maneuver	80	0	-	-	-	-	-	-	-
Stage 1	284	0	-	-	-	-	-	-	-
Stage 2	476	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.6	0.1	0.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	756	-	-	176	550	-	-
HCM Lane V/C Ratio	0.022	-	-	0.136	0.095	-	-
HCM Control Delay (s)	9.9	-	-	28.6	12.2	-	-
HCM Lane LOS	A	-	-	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.3	-	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	2	11	1095	2	45	766
Future Volume (vph)	2	11	1095	2	45	766
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.884			0.850		
Flt Protected	0.993				0.950	
Satd. Flow (prot)	1635	0	3539	1583	1770	3539
Flt Permitted	0.993				0.950	
Satd. Flow (perm)	1635	0	3539	1583	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	520		600			540
Travel Time (s)	11.8		13.6			12.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	12	1190	2	49	833
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	1190	2	49	833
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 46.9%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	11	1095	2	45	766
Future Vol, veh/h	2	11	1095	2	45	766
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	12	1190	2	49	833

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1705	595	0	0	1192	0
Stage 1	1190	-	-	-	-	-
Stage 2	515	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	82	447	-	-	581	-
Stage 1	251	-	-	-	-	-
Stage 2	565	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	75	447	-	-	581	-
Mov Cap-2 Maneuver	75	-	-	-	-	-
Stage 1	230	-	-	-	-	-
Stage 2	565	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	254	581	-
HCM Lane V/C Ratio	-	-	0.056	0.084	-
HCM Control Delay (s)	-	-	20	11.8	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.2	0.3	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	1097	0	4	764
Future Volume (vph)	0	0	1097	0	4	764
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	3539	0	1770	3539
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	3539	0	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	346		575			600
Travel Time (s)	7.9		13.1			13.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1192	0	4	830
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1192	0	4	830
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.7%		ICU Level of Service A	
Analysis Period (min) 15			

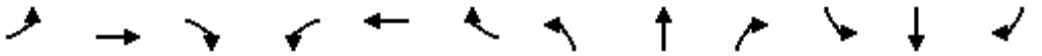
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1097	0	4	764
Future Vol, veh/h	0	0	1097	0	4	764
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	1192	0	4	830

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	596	0	-	1192	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	447	-	0	581	-
Stage 1	0	-	-	0	-	-
Stage 2	0	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	447	-	-	581	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	581	-
HCM Lane V/C Ratio	-	-	0.007	-
HCM Control Delay (s)	-	0	11.2	-
HCM Lane LOS	-	A	B	-
HCM 95th %tile Q(veh)	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	2	7	0	2	6	11	1099	3	20	714	4
Future Volume (vph)	1	2	7	0	2	6	11	1099	3	20	714	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.902			0.895							0.850
Flt Protected		0.995					0.950			0.950		
Satd. Flow (prot)	0	1672	0	0	1667	0	1770	3539	0	1770	3539	1583
Flt Permitted		0.995					0.950			0.950		
Satd. Flow (perm)	0	1672	0	0	1667	0	1770	3539	0	1770	3539	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		187			446			254			575	
Travel Time (s)		4.3			10.1			5.8			13.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	2	8	0	2	7	12	1195	3	22	776	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	0	9	0	12	1198	0	22	776	4
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	7	0	2	6	11	1099	3	20	714	4
Future Vol, veh/h	1	2	7	0	2	6	11	1099	3	20	714	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	2	8	0	2	7	12	1195	3	22	776	4

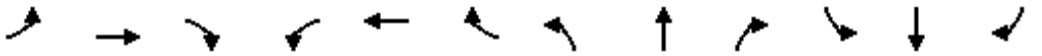
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1443	2042	388	1654	2045	599	780	0	0	1198	0	0
Stage 1	820	820	-	1221	1221	-	-	-	-	-	-	-
Stage 2	623	1222	-	433	824	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	93	56	611	65	55	445	833	-	-	578	-	-
Stage 1	335	387	-	191	251	-	-	-	-	-	-	-
Stage 2	440	250	-	571	385	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	85	53	611	60	52	445	833	-	-	578	-	-
Mov Cap-2 Maneuver	85	53	-	60	52	-	-	-	-	-	-	-
Stage 1	330	372	-	188	247	-	-	-	-	-	-	-
Stage 2	424	247	-	539	370	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	28.5	29.8	0.1	0.3
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	833	-	-	164	154	578	-	-
HCM Lane V/C Ratio	0.014	-	-	0.066	0.056	0.038	-	-
HCM Control Delay (s)	9.4	-	-	28.5	29.8	11.5	-	-
HCM Lane LOS	A	-	-	D	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0.1	-	-

APPENDIX C

BUILD CONDITIONS (CLOSURE OF CENTER MEDIAN ON US-1 AT MARS WAY – SYNCHRO PRINTOUTS

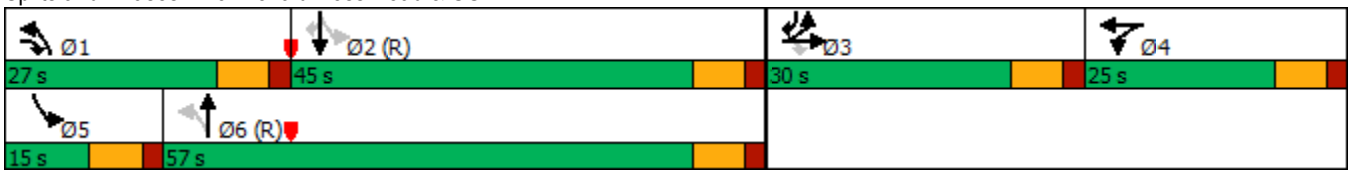


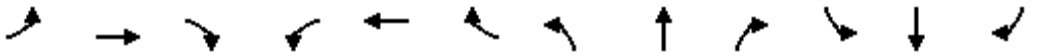
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	363	129	266	21	106	26	184	419	17	35	729	386
Future Volume (vph)	363	129	266	21	106	26	184	419	17	35	729	386
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.971			0.994				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	1809	0	1770	3518	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.211			0.481		
Satd. Flow (perm)	3433	1863	1583	1770	1809	0	393	3518	0	896	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			289		8			4				374
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		637			666			706			389	
Travel Time (s)		14.5			15.1			16.0			8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	395	140	289	23	115	28	200	455	18	38	792	420
Shared Lane Traffic (%)												
Lane Group Flow (vph)	395	140	289	23	143	0	200	473	0	38	792	420
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3	1	4	4		1	6		5	2	3
Permitted Phases			3				6			2		2
Detector Phase	3	3	1	4	4		1	6		5	2	3
Switch Phase												
Minimum Initial (s)	6.0	6.0	4.0	6.0	6.0		4.0	20.0		4.0	20.0	6.0
Minimum Split (s)	25.0	25.0	25.0	13.0	13.0		25.0	27.0		12.0	27.0	25.0
Total Split (s)	30.0	30.0	27.0	25.0	25.0		27.0	57.0		15.0	45.0	30.0
Total Split (%)	23.6%	23.6%	21.3%	19.7%	19.7%		21.3%	44.9%		11.8%	35.4%	23.6%
Maximum Green (s)	23.0	23.0	20.0	18.0	18.0		20.0	50.0		8.0	38.0	23.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	None
Act Effct Green (s)	21.0	21.0	34.2	14.3	14.3		70.1	59.4		57.2	50.5	78.5
Actuated g/C Ratio	0.17	0.17	0.27	0.11	0.11		0.55	0.47		0.45	0.40	0.62
v/c Ratio	0.70	0.45	0.45	0.12	0.68		0.56	0.29		0.08	0.56	0.37
Control Delay	56.7	52.3	4.2	50.2	66.9		21.5	23.1		16.2	33.6	3.1

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	56.7	52.3	4.2	50.2	66.9		21.5	23.1		16.2	33.6	3.1
LOS	E	D	A	D	E		C	C		B	C	A
Approach Delay		37.5			64.6			22.7			22.8	
Approach LOS		D			E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 127			
Actuated Cycle Length: 127			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 29.3		Intersection LOS: C	
Intersection Capacity Utilization 71.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Donald Ross Road & US-1

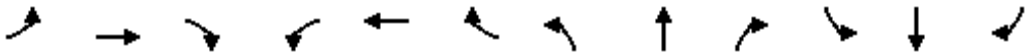




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	363	129	266	21	106	26	184	419	17	35	729	386
Future Volume (vph)	363	129	266	21	106	26	184	419	17	35	729	386
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1583	1770	1808		1770	3519		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.21	1.00		0.48	1.00	1.00
Satd. Flow (perm)	3433	1863	1583	1770	1808		393	3519		896	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	395	140	289	23	115	28	200	455	18	38	792	420
RTOR Reduction (vph)	0	0	211	0	7	0	0	2	0	0	0	163
Lane Group Flow (vph)	395	140	78	23	136	0	200	471	0	38	792	257
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3	1	4	4		1	6		5	2	3
Permitted Phases			3				6			2		2
Actuated Green, G (s)	21.0	21.0	34.2	14.3	14.3		70.7	58.1		56.1	50.5	71.5
Effective Green, g (s)	21.0	21.0	34.2	14.3	14.3		70.7	58.1		56.1	50.5	71.5
Actuated g/C Ratio	0.17	0.17	0.27	0.11	0.11		0.56	0.46		0.44	0.40	0.56
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	567	308	426	199	203		361	1609		434	1407	978
v/s Ratio Prot	c0.12	0.08	0.02	0.01	c0.08		c0.06	0.13		0.00	0.22	0.04
v/s Ratio Perm			0.03				c0.25			0.03		0.12
v/c Ratio	0.70	0.45	0.18	0.12	0.67		0.55	0.29		0.09	0.56	0.26
Uniform Delay, d1	50.0	47.8	35.7	50.7	54.1		17.1	21.6		20.2	29.7	14.2
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	3.7	1.1	0.2	0.3	8.1		1.8	0.5		0.1	1.6	0.1
Delay (s)	53.7	48.9	35.9	50.9	62.2		18.9	22.0		20.3	31.3	14.4
Level of Service	D	D	D	D	E		B	C		C	C	B
Approach Delay (s)		46.6			60.6			21.1			25.3	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	127.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	0	15	0	0	0	11	617	0	42	976	24
Future Volume (vph)	12	0	15	0	0	0	11	617	0	42	976	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.926									0.996	
Flt Protected		0.978					0.950			0.950		
Satd. Flow (prot)	0	1687	0	0	0	0	1770	3539	0	1770	3525	0
Flt Permitted		0.978					0.950			0.950		
Satd. Flow (perm)	0	1687	0	0	0	0	1770	3539	0	1770	3525	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		505			418			540			706	
Travel Time (s)		11.5			9.5			12.3			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	0	16	0	0	0	12	671	0	46	1061	26
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	29	0	0	0	0	12	671	0	46	1087	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 44.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	0	15	0	0	0	11	617	0	42	976	24
Future Vol, veh/h	12	0	15	0	0	0	11	617	0	42	976	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	0	16	0	0	0	12	671	0	46	1061	26

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1526	1861	544	1087	0	0	671	0	0
Stage 1	1166	1166	-	-	-	-	-	-	-
Stage 2	360	695	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	108	72	483	638	-	-	915	-	-
Stage 1	259	266	-	-	-	-	-	-	-
Stage 2	677	442	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	101	0	483	638	-	-	915	-	-
Mov Cap-2 Maneuver	101	0	-	-	-	-	-	-	-
Stage 1	241	0	-	-	-	-	-	-	-
Stage 2	677	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.9	0.2	0.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	638	-	-	180	915	-	-
HCM Lane V/C Ratio	0.019	-	-	0.163	0.05	-	-
HCM Control Delay (s)	10.8	-	-	28.9	9.1	-	-
HCM Lane LOS	B	-	-	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.2	-	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	34	789	5	0	1210
Future Volume (vph)	0	34	789	5	0	1210
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.865			0.850		
Flt Protected						
Satd. Flow (prot)	1611	0	3539	1583	1863	3539
Flt Permitted						
Satd. Flow (perm)	1611	0	3539	1583	1863	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	520		600			540
Travel Time (s)	11.8		13.6			12.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	37	858	5	0	1315
Shared Lane Traffic (%)						
Lane Group Flow (vph)	37	0	858	5	0	1315
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 43.4%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	34	789	5	0	1210
Future Vol, veh/h	0	34	789	5	0	1210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	37	858	5	0	1315

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1516	429	0	0	863	0
Stage 1	858	-	-	-	-	-
Stage 2	658	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	110	574	-	-	775	-
Stage 1	376	-	-	-	-	-
Stage 2	477	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	110	574	-	-	775	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	376	-	-	-	-	-
Stage 2	477	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	574	775	-
HCM Lane V/C Ratio	-	-	0.064	-	-
HCM Control Delay (s)	-	-	11.7	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	781	0	15	1198
Future Volume (vph)	0	0	781	0	15	1198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	3539	0	1770	3539
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	3539	0	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	346		575			600
Travel Time (s)	7.9		13.1			13.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	849	0	16	1302
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	849	0	16	1302
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 36.4%		ICU Level of Service A	
Analysis Period (min) 15			

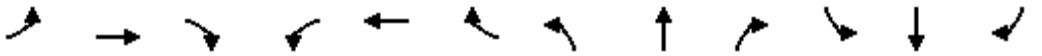
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	781	0	15	1198
Future Vol, veh/h	0	0	781	0	15	1198
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	849	0	16	1302

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	425	0	-	849	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	578	-	0	785	-
Stage 1	0	-	-	0	-	-
Stage 2	0	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	578	-	-	785	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	785	-
HCM Lane V/C Ratio	-	-	0.021	-
HCM Control Delay (s)	-	0	9.7	-
HCM Lane LOS	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	2	1	2	2	7	8	709	1	13	1378	4
Future Volume (vph)	1	2	1	2	2	7	8	709	1	13	1378	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.966			0.910							0.850
Flt Protected		0.988			0.992		0.950			0.950		
Satd. Flow (prot)	0	1778	0	0	1682	0	1770	3539	0	1770	3539	1583
Flt Permitted		0.988			0.992		0.950			0.950		
Satd. Flow (perm)	0	1778	0	0	1682	0	1770	3539	0	1770	3539	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		187			446			254			575	
Travel Time (s)		4.3			10.1			5.8			13.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	2	1	2	2	8	9	771	1	14	1498	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	4	0	0	12	0	9	772	0	14	1498	4
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.1%		ICU Level of Service A	
Analysis Period (min) 15			

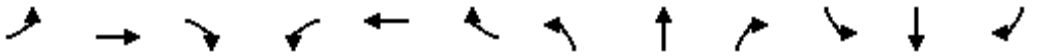
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	1	2	2	7	8	709	1	13	1378	4
Future Vol, veh/h	1	2	1	2	2	7	8	709	1	13	1378	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	2	1	2	2	8	9	771	1	14	1498	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1931	2316	749	1568	2320	386	1502	0	0	772	0	0
Stage 1	1526	1526	-	790	790	-	-	-	-	-	-	-
Stage 2	405	790	-	778	1530	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	40	37	354	75	37	612	442	-	-	839	-	-
Stage 1	123	178	-	350	400	-	-	-	-	-	-	-
Stage 2	593	400	-	355	177	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	37	36	354	69	36	612	442	-	-	839	-	-
Mov Cap-2 Maneuver	37	36	-	69	36	-	-	-	-	-	-	-
Stage 1	121	175	-	343	392	-	-	-	-	-	-	-
Stage 2	571	392	-	344	174	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	89.3	39.9	0.1	0.1
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	442	-	-	47	115	839	-	-
HCM Lane V/C Ratio	0.02	-	-	0.093	0.104	0.017	-	-
HCM Control Delay (s)	13.3	-	-	89.3	39.9	9.4	-	-
HCM Lane LOS	B	-	-	F	E	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.3	0.1	-	-

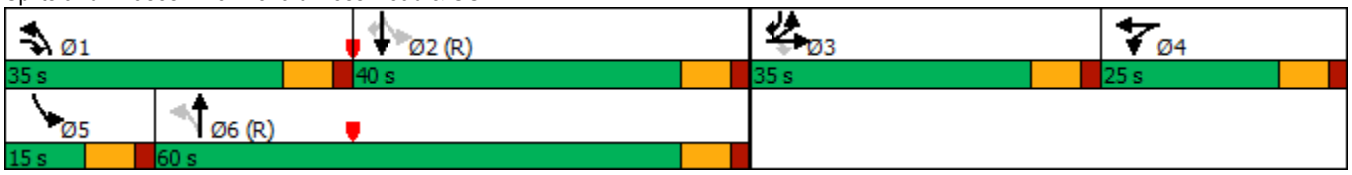


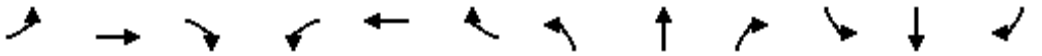
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	517	156	128	24	130	35	360	735	29	74	492	512
Future Volume (vph)	517	156	128	24	130	35	360	735	29	74	492	512
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850		0.968			0.994				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	1863	1583	1770	1803	0	1770	3518	0	1770	3539	1583
Flt Permitted	0.950			0.950			0.283			0.320		
Satd. Flow (perm)	3433	1863	1583	1770	1803	0	527	3518	0	596	3539	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			139		8			3				231
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		637			666			706			389	
Travel Time (s)		14.5			15.1			16.0			8.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	562	170	139	26	141	38	391	799	32	80	535	557
Shared Lane Traffic (%)												
Lane Group Flow (vph)	562	170	139	26	179	0	391	831	0	80	535	557
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3	1	4	4		1	6		5	2	3
Permitted Phases			3				6			2		2
Detector Phase	3	3	1	4	4		1	6		5	2	3
Switch Phase												
Minimum Initial (s)	6.0	6.0	4.0	6.0	6.0		4.0	20.0		4.0	20.0	6.0
Minimum Split (s)	25.0	25.0	25.0	13.0	13.0		25.0	27.0		12.0	27.0	25.0
Total Split (s)	35.0	35.0	35.0	25.0	25.0		35.0	60.0		15.0	40.0	35.0
Total Split (%)	25.9%	25.9%	25.9%	18.5%	18.5%		25.9%	44.4%		11.1%	29.6%	25.9%
Maximum Green (s)	28.0	28.0	28.0	18.0	18.0		28.0	53.0		8.0	33.0	28.0
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag		Lead	Lag		Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	None
Act Effct Green (s)	27.2	27.2	50.8	16.3	16.3		70.5	56.0		47.4	39.9	74.1
Actuated g/C Ratio	0.20	0.20	0.38	0.12	0.12		0.52	0.41		0.35	0.30	0.55
v/c Ratio	0.81	0.45	0.20	0.12	0.80		0.79	0.57		0.29	0.51	0.57
Control Delay	61.8	51.5	2.7	53.3	79.5		33.2	32.7		22.8	43.3	14.6

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	61.8	51.5	2.7	53.3	79.5		33.2	32.7		22.8	43.3	14.6
LOS	E	D	A	D	E		C	C		C	D	B
Approach Delay		50.4			76.2			32.9			28.2	
Approach LOS		D			E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 135			
Actuated Cycle Length: 135			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 38.3		Intersection LOS: D	
Intersection Capacity Utilization 83.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 3: Donald Ross Road & US-1

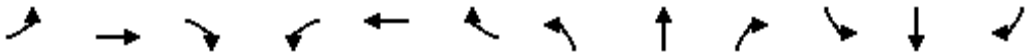




Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	517	156	128	24	130	35	360	735	29	74	492	512
Future Volume (vph)	517	156	128	24	130	35	360	735	29	74	492	512
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Lane Util. Factor	0.97	1.00	1.00	1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1863	1583	1770	1803		1770	3519		1770	3539	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.28	1.00		0.32	1.00	1.00
Satd. Flow (perm)	3433	1863	1583	1770	1803		526	3519		595	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	562	170	139	26	141	38	391	799	32	80	535	557
RTOR Reduction (vph)	0	0	87	0	7	0	0	2	0	0	0	116
Lane Group Flow (vph)	562	170	52	26	172	0	391	829	0	80	535	441
Turn Type	Split	NA	pm+ov	Split	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	3	3	1	4	4		1	6		5	2	3
Permitted Phases			3				6			2		2
Actuated Green, G (s)	27.2	27.2	50.8	16.3	16.3		70.5	56.0		47.4	39.9	67.1
Effective Green, g (s)	27.2	27.2	50.8	16.3	16.3		70.5	56.0		47.4	39.9	67.1
Actuated g/C Ratio	0.20	0.20	0.38	0.12	0.12		0.52	0.41		0.35	0.30	0.50
Clearance Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	691	375	595	213	217		492	1459		274	1045	868
v/s Ratio Prot	c0.16	0.09	0.02	0.01	c0.10		c0.14	0.24		0.02	0.15	0.10
v/s Ratio Perm			0.02				c0.28			0.09		0.18
v/c Ratio	0.81	0.45	0.09	0.12	0.79		0.79	0.57		0.29	0.51	0.51
Uniform Delay, d1	51.5	47.4	27.2	53.0	57.7		21.9	30.2		29.8	39.5	22.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	7.3	0.9	0.1	0.3	17.7		8.6	1.6		0.6	1.8	0.5
Delay (s)	58.7	48.2	27.2	53.2	75.4		30.6	31.9		30.4	41.3	23.3
Level of Service	E	D	C	D	E		C	C		C	D	C
Approach Delay (s)		51.7			72.6			31.4			32.0	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	135.0	Sum of lost time (s)	28.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	0	14	0	0	0	17	1155	0	48	788	15
Future Volume (vph)	8	0	14	0	0	0	17	1155	0	48	788	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.916									0.997	
Flt Protected		0.982					0.950			0.950		
Satd. Flow (prot)	0	1676	0	0	0	0	1770	3539	0	1770	3529	0
Flt Permitted		0.982					0.950			0.950		
Satd. Flow (perm)	0	1676	0	0	0	0	1770	3539	0	1770	3529	0
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		505			418			540			706	
Travel Time (s)		11.5			9.5			12.3			16.0	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	9	0	15	0	0	0	18	1255	0	52	857	16
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	24	0	0	0	0	18	1255	0	52	873	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 48.6%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	14	0	0	0	17	1155	0	48	788	15
Future Vol, veh/h	8	0	14	0	0	0	17	1155	0	48	788	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	16979	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	0	15	0	0	0	18	1255	0	52	857	16

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1633	2260	437	873	0	0	1255	0	0
Stage 1	969	969	-	-	-	-	-	-	-
Stage 2	664	1291	-	-	-	-	-	-	-
Critical Hdwy	6.84	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	5.84	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.84	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	92	40	567	768	-	-	550	-	-
Stage 1	329	330	-	-	-	-	-	-	-
Stage 2	474	232	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	81	0	567	768	-	-	550	-	-
Mov Cap-2 Maneuver	81	0	-	-	-	-	-	-	-
Stage 1	291	0	-	-	-	-	-	-	-
Stage 2	474	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.3	0.1	0.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	768	-	-	178	550	-	-
HCM Lane V/C Ratio	0.024	-	-	0.134	0.095	-	-
HCM Control Delay (s)	9.8	-	-	28.3	12.2	-	-
HCM Lane LOS	A	-	-	D	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.3	-	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	13	1105	5	0	795
Future Volume (vph)	0	13	1105	5	0	795
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt	0.865			0.850		
Flt Protected						
Satd. Flow (prot)	1611	0	3539	1583	1863	3539
Flt Permitted						
Satd. Flow (perm)	1611	0	3539	1583	1863	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	520		600			540
Travel Time (s)	11.8		13.6			12.3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	14	1201	5	0	864
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	0	1201	5	0	864
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	13	1105	5	0	795
Future Vol, veh/h	0	13	1105	5	0	795
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	14	1201	5	0	864

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1633	601	0	0	1206	0
Stage 1	1201	-	-	-	-	-
Stage 2	432	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	92	443	-	-	574	-
Stage 1	248	-	-	-	-	-
Stage 2	622	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	92	443	-	-	574	-
Mov Cap-2 Maneuver	92	-	-	-	-	-
Stage 1	248	-	-	-	-	-
Stage 2	622	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	443	574	-
HCM Lane V/C Ratio	-	-	0.032	-	-
HCM Control Delay (s)	-	-	13.4	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	1097	0	17	764
Future Volume (vph)	0	0	1097	0	17	764
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	0.95
Frt						
Flt Protected					0.950	
Satd. Flow (prot)	0	1863	3539	0	1770	3539
Flt Permitted					0.950	
Satd. Flow (perm)	0	1863	3539	0	1770	3539
Link Speed (mph)	30		30			30
Link Distance (ft)	346		575			600
Travel Time (s)	7.9		13.1			13.6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1192	0	18	830
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	1192	0	18	830
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	0		12			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Sign Control	Stop		Free			Free

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 33.7%		ICU Level of Service A	
Analysis Period (min) 15			

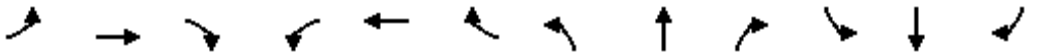
Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	1097	0	17	764
Future Vol, veh/h	0	0	1097	0	17	764
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	1192	0	18	830

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	596	0	-	1192	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.94	-	-	4.14	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	0	447	-	0	581	-
Stage 1	0	-	-	0	-	-
Stage 2	0	-	-	0	-	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	-	447	-	-	581	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	0.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	581	-
HCM Lane V/C Ratio	-	-	0.032	-
HCM Control Delay (s)	-	0	11.4	-
HCM Lane LOS	-	A	B	-
HCM 95th %tile Q(veh)	-	-	0.1	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	2	7	0	2	6	11	1099	3	34	714	4
Future Volume (vph)	1	2	7	0	2	6	11	1099	3	34	714	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt		0.902			0.895							0.850
Flt Protected		0.995					0.950			0.950		
Satd. Flow (prot)	0	1672	0	0	1667	0	1770	3539	0	1770	3539	1583
Flt Permitted		0.995					0.950			0.950		
Satd. Flow (perm)	0	1672	0	0	1667	0	1770	3539	0	1770	3539	1583
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		187			446			254			575	
Travel Time (s)		4.3			10.1			5.8			13.1	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	2	8	0	2	7	12	1195	3	37	776	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	11	0	0	9	0	12	1198	0	37	776	4
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

Intersection Summary			
Area Type:	Other		
Control Type: Unsignalized			
Intersection Capacity Utilization 40.5%		ICU Level of Service A	
Analysis Period (min) 15			

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	2	7	0	2	6	11	1099	3	34	714	4
Future Vol, veh/h	1	2	7	0	2	6	11	1099	3	34	714	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	2	8	0	2	7	12	1195	3	37	776	4

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1473	2072	388	1684	2075	599	780	0	0	1198	0	0
Stage 1	850	850	-	1221	1221	-	-	-	-	-	-	-
Stage 2	623	1222	-	463	854	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	88	53	611	61	53	445	833	-	-	578	-	-
Stage 1	322	375	-	191	251	-	-	-	-	-	-	-
Stage 2	440	250	-	548	373	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	79	49	611	55	49	445	833	-	-	578	-	-
Mov Cap-2 Maneuver	79	49	-	55	49	-	-	-	-	-	-	-
Stage 1	317	351	-	188	247	-	-	-	-	-	-	-
Stage 2	424	247	-	503	349	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	30.1	31	0.1	0.5
HCM LOS	D	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	833	-	-	154	147	578	-	-
HCM Lane V/C Ratio	0.014	-	-	0.071	0.059	0.064	-	-
HCM Control Delay (s)	9.4	-	-	30.1	31	11.7	-	-
HCM Lane LOS	A	-	-	D	D	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0.2	-	-

AGENDA ITEM

Meeting Name: Town Council Mars Way Workshop

Meeting Date: January 8, 2024

Prepared By: C. Copeland-Rodriguez, Town Clerk

Item Title: Discussion on Mars Way

DISCUSSION:

Council will be receiving comments and input from residents, Town's Traffic Engineer, and Town Staff on Mars Way.

Attached are backup materials from prior Town Council discussions on Mars Way from 2020-current:

1) February 26, 2020, Town Council Discussion Item – Goal Setting Workshop Item #1 – MARS WAY;
2) October 27, 2021, Town Council Discussion Item – 2019 Goal Setting Workshop Item – MARS WAY;
3) June 22, 2022, Town Council Discussion Item – Discussion on Mars Way;
4) September 28, 2022, Town Council Discussion Item – Discussion on Mars Way Parking; and
5) October 26, 2022, Town Council Discussion Item – Discussion on Creating Metered and Resident Park and Beach Parking; and Creating Mars Way Resident Parking.

February 26, 2020 **Approved Motion**: *Lyons/Wheeler made a motion to approve the Town Manager and Staff starting the process of conducting a meeting/workshop with the residents of Mars Way and the Town Engineer.* ***(Unanimous)***

October 27, 2021 **Consensus:** *Council gave consensus to implement staff's list of recommendations to address the issues as well as look into reducing the speed to 20mph; and include an article in the next newsletter notifying residents about stricter speed enforcement on Mars Way.*

June 22, 2022 **Consensus**: *Council gave consensus to conduct a traffic study in January before having a workshop with the stakeholders.*

September 28, 2022 **Consensus**: *Council gave consensus to have staff look into parking options and work on a pilot parking program throughout the Town; and have staff look into a secondary sign for the "No Trucks" signs.*

October 26, 2022 **– No Action from Council on this item.**

This item will be discussed by Council at the January 24, 2024, Town Council Meeting.

Memorandum

From the Town of Juno Beach Planning and Zoning Department

To: Town Council; Joseph F. Lo Bello, CPA, Town Manager
From: Frank Davila, Director of Planning & Zoning
Date: February 14, 2020
Subject: Goal Setting Workshop Item #1 – MARS WAY

Background

At the May 8, 2019 Goal Setting Workshop, Town Council requested "staff to conduct a study of residents on Mars Way as to their preference in dealing with the issues and to contact traffic engineers to get their input as to options to deal with the issue". At the Goal Setting Workshop, Council expressed their concerns of Mars Way and the speed and number of vehicles traveling through.

At the November 13, 2019 Town Council Meeting, staff informed Council that the Traffic Engineer recommended staff to conduct a volume and speed data study on Mars Way and to include Olympus Drive during the peak of the season.

A volume and speed data study was conducted at Mars Way and Olympus Drive by the Town's Engineer on January 31st, February 1st and February 2nd *(See attachment #1)*. The Town Engineer's findings are attached for Council's review *(See attachment #2)*.

Discussion

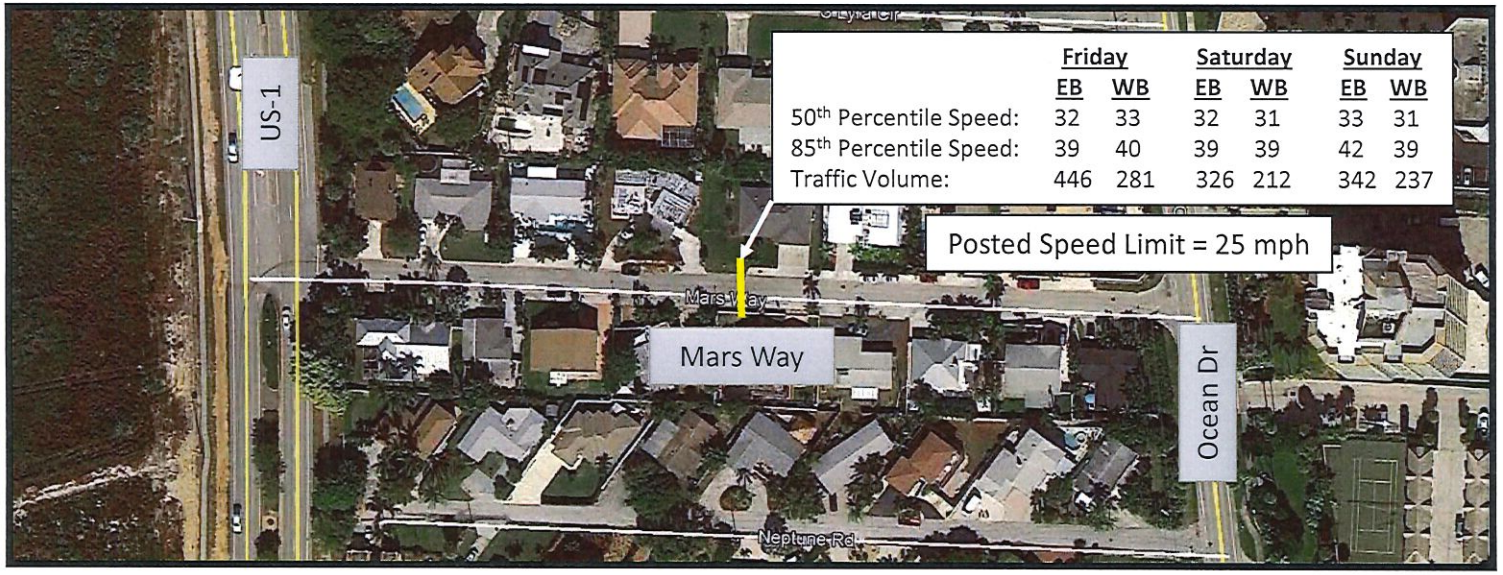
At this time, staff would like to conduct a meeting/workshop with the residents of Mars Way, where the Town Engineer would present the positives and negatives of multiple traffic calming devices. At the same meeting/workshop, staff will conduct a survey with each resident attendee of Mars Way to see if they are interested in proceeding with installing such devices. Staff will then report to Town Council with the results of the survey and for Council to direct staff on how to move forward.

Staff Recommendation

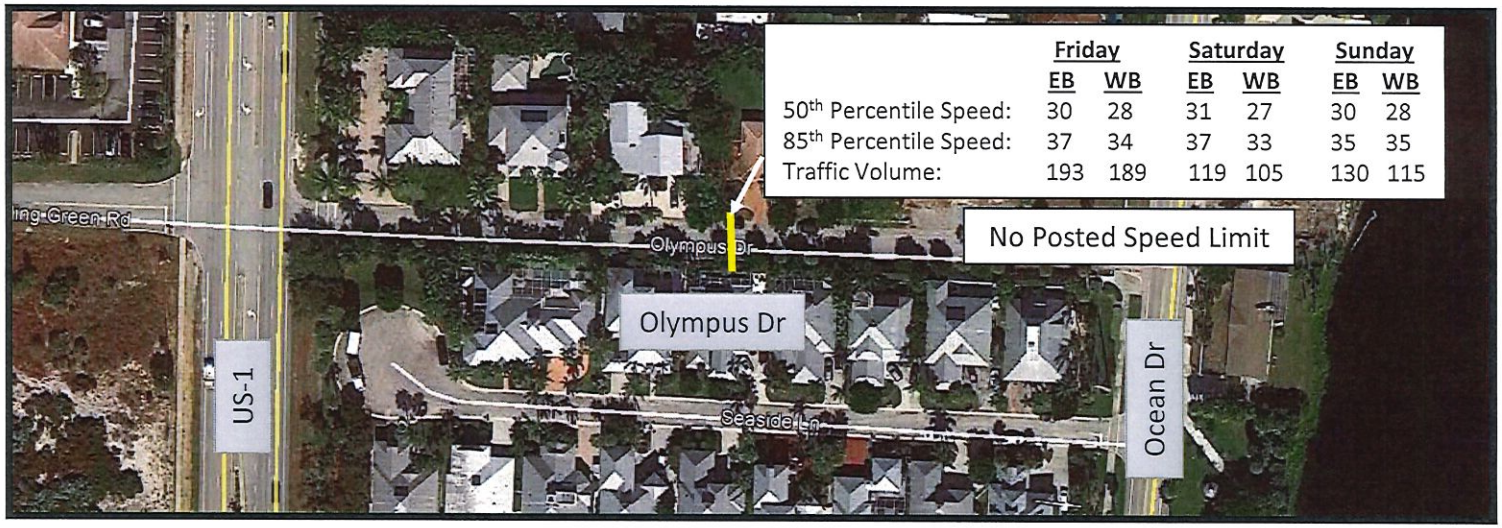
Staff recommends Town Council approve of the Town Manager and Staff to start the process of conducting a meeting/workshop with the residents of Mars Way and the Town Engineer.

ATT. # 1

N



	Friday		Saturday		Sunday	
	EB	WB	EB	WB	EB	WB
50th Percentile Speed:	32	33	32	31	33	31
85th Percentile Speed:	39	40	39	39	42	39
Traffic Volume:	446	281	326	212	342	237



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	EB	WB	EB	WB	EB	WB
50th Percentile Speed:	30	28	31	27	30	28
85th Percentile Speed:	37	34	37	33	35	35
Traffic Volume:	193	189	119	105	130	115

Figure 1 – Traffic Data
Town of Juno Beach

SIMMONS&WHITE

ATT. # 2

Frank Davila

From: Bryan Kelley <bryan@simmonsandwhite.com> on behalf of Bryan Kelley
Sent: Wednesday, February 12, 2020 4:20 PM
To: Frank Davila
Cc: Paul Buri
Subject: Mars Way traffic calming
Attachments: Traffic Data.pdf

Frank,
I am attaching a quick exhibit that documents the data we collected for both Mars and Olympus. The key data that we typically use to evaluate speed is the 85th percentile. This speed is on the upper end of the spectrum with only 15% of vehicles traveling faster than this speed. The 85th percentile speed ranged from 39-42 mph for Mars Way and 33-37 mph for Olympus Dr. The posted speed limit on Mars is 25 mph whereas Olympus does not have a posted speed limit at least that I could find on google street view. Note that by State Law, the posted speed limit is 30 mph if no speed limit is posted.

So what do the numbers mean? It is important to note that with traffic calming, it's not black and white as to when calming should be implemented. With that said, most jurisdictions that have a traffic calming policy consider implementing calming once the 85th percentile speeds exceed 10 mph over the speed limit, which is what is occurring on Mars. I agree with this general approach of 10 mph or greater as a rule of thumb. Therefore, I would recommend traffic calming on Mars with a big caveat. There are negatives to traffic calming and the property owners should want it. Most jurisdictions requires between 51-70% of impacted residents (those along Mars Way in this case) to agree to the traffic calming.

As for what type of calming, I am working on some exhibits for you guys but my preliminary recommendations will be either a speed table or hump. A speed table is longer (22 feet) and allows vehicles to drive a little faster over it. A speed hump is a little shorter (12 feet) and requires a slower vehicle speed. I am going to show 2 options for each – just one in the middle or Mars Way or two tables/humps along Mars. Studies have shown that they should be spaces between 250-500 feet to be effective. Also, they should not be placed too close to the intersection. Speed humps are effective. However, the down sides include driver discomfort, noise, not atheistically pleasing, and potentially slow down emergency rescue times.

Another option I am going to present is a solar powered speed flasher that alerts motorists of their speed if speeding. These don't carry the same negatives as speed humps but also aren't quite as effective. They tend to be most effective when periodically enforced with police.

I considered other options such as chicanes but the problem is two-fold. One the road is already narrow at around 20 feet wide. Second, I don't feel comfortable having the road narrow to one lane with the large elevation change on the road.

As for Olympus Drive, at this point my recommendation would be to simply post a speed limit sign. 25mph would certainly be appropriate at this location.

Please review and when you get a chance, feel free to give me a call and I can give you more info.

Thanks,

Bryan G. Kelley, P.E.
Senior Traffic Engineer

Simmons & White, Inc.
2581 Metrocentre Blvd., Suite 3
West Palm Beach, FL 33407

Office: 561.478.7848 x112
Cell: 561.371.2285
simmonsandwhite.com

Memorandum

From the Town of Juno Beach Planning & Zoning Department

To: Town Council; Joseph Lo Bello, Town Manager
From: Frank Davila, Director of Planning & Zoning
Date: October 14, 2021
Subject: 2019 Goal Setting Workshop Item - MARS WAY.

Background

At the 2019 Goal Setting Workshop, Town Council directed staff to conduct a study of residents on Mars Way as to their preference in dealing with the issue and to contact traffic engineers to get their input as to options to deal with the issue. At that same Workshop, Council expressed their concerns of Mars Way in regards to the speed and an increased number of vehicles traveling through.

Staff contacted Palm Beach County Fire Rescue and received recommendations for adding potential traffic calming devices on Mars Way. The Town's Traffic Engineer recommended the Town to conduct a traffic study to identify if there truly is a speed concern on Mars Way.

Per the recommendation of the Town's Traffic Engineer along with the Town Council's approval, a volume and speed data study was conducted at Mars Way and Olympus Drive by the Town's Engineer on January 31st, February 1st and February 2nd. *(See attachment #1)*

As indicated in attachment #1, the 85th percentile or 15% of travelers are driving through Mars Way at an excess speed of 39-42 mph, the 50th percentile or 50% (average) of travelers are driving through Mars Way at a speed of 31-33 mph. The data used by traffic engineers to determine if traffic calming measures are needed is *if the 85th percentile speeds exceed **10 mph** over the posted speed limit* (Posted speed limit for Mars Way is 25mph). The speed data study revealed that the 85th percentile of travelers on Mars Way are exceeding the posted speed limit by an average of **17 mph**.

The results of the study supported speeding concerns on Mars Way and the Town's Traffic Engineer recommend installing traffic calming devices. However, there are pros and cons to adding the proposed traffic calming devices.

At the February 26, 2020, Town Council meeting, Council approved staff starting the process of conducting a workshop with the residents of Mars Way and the Town Engineer. Due to the COVID-19 Pandemic, staff postponed the previously scheduled workshops for the year 2020. In 2021, Staff reached out to the residents of Mars Way and agreed to conduct a hybrid meeting (in-person and virtual) so that everyone would be able to participate.

On June 9, 2021, staff conducted the 1st Mars Way Workshop in which staff discussed the findings from the Volume and Speed Data study and proposed options for possible traffic calming devices. The options included speed humps, speed tables, and speed signs.

During the workshop, the residents of Mars Way provided staff with additional traffic calming options to investigate.

Discussion

On September 9, 2021, staff conducted a second (2nd) Mars Way Workshop to discuss the findings and recommendations received by the Florida Department of Transportation (FDOT), Palm Beach County Fire Rescue, Palm Beach County Traffic and Palm Beach County Engineering for the traffic calming options that were recommended by the residents of Mars Way. (*See attachment #2)*

During the workshop, the residents in attendance requested that the following options be considered by staff and Town Council:

- Solid Double Yellow Line Stripping down the entirety of Mars Way;
- The installation of additional "No Truck" signs on US Highway 1 and Ocean Drive;
- Code text amendment of Article IV.- Truck Routes to include additional enforcement language to aid the Police Department in enforcing the "No Truck" signs. Newly proposed language should be reviewed by staff, Town Attorney and Traffic Engineer;
- Elevated Police enforcement on Mars Way;
- Installation of temporary Speed Table(s) on Mars Way;
- Communicate with mapping software companies (Google Maps, Apple, and others) to reroute drivers to use other streets;
- Include speed and traffic concerns of Mars Way on the Town's newsletter to help other residents adhere to the posted speed limit; and
- Conduct a follow-up assessment of the effectiveness of the traffic calming options and share them with the Mars Way residents.

Following the 2nd Mars Way Workshop, staff received an updated signed petition from 9 out of the 17 Mars Way homeowners that indicated the following: *"the undersigned residents are opposed to the speed humps or tables due to the noise they will cause which will reduce the value of our properties"*. (See attachment #3)

In recent weeks, staff received an additional petition dated October 6th which was signed by 9 out of the 17 Mars Way homeowners that indicated the following: "*We are presenting an additional petition to the Town requesting that the Town Council and staff further consider closing off the left turn median entrance from US Highway 1 onto Mars Way. We are requesting that additional traffic study be done as well as any other necessary action required"*. (See attachment #4)

With all the information received from the outside agencies, residents of Mars Way, Senior Staff and the Town's Traffic Engineer, Town Staff recommends the following options for Council's consideration:

- Adding a Solid Double Yellow Line Striping down the entirety of Mars Way;

- Installing additional "No Truck" signs on US Highway 1 and Ocean Drive;
- Making a code text amendment change of Article IV.- Truck Routes to include additional enforcement language to aid the Police Department in enforcing the "No Truck" signs. Newly proposed language should be reviewed by staff, Town Attorney and Traffic Engineer; and
- Elevating Police enforcement on Mars Way.

Staff Recommendation

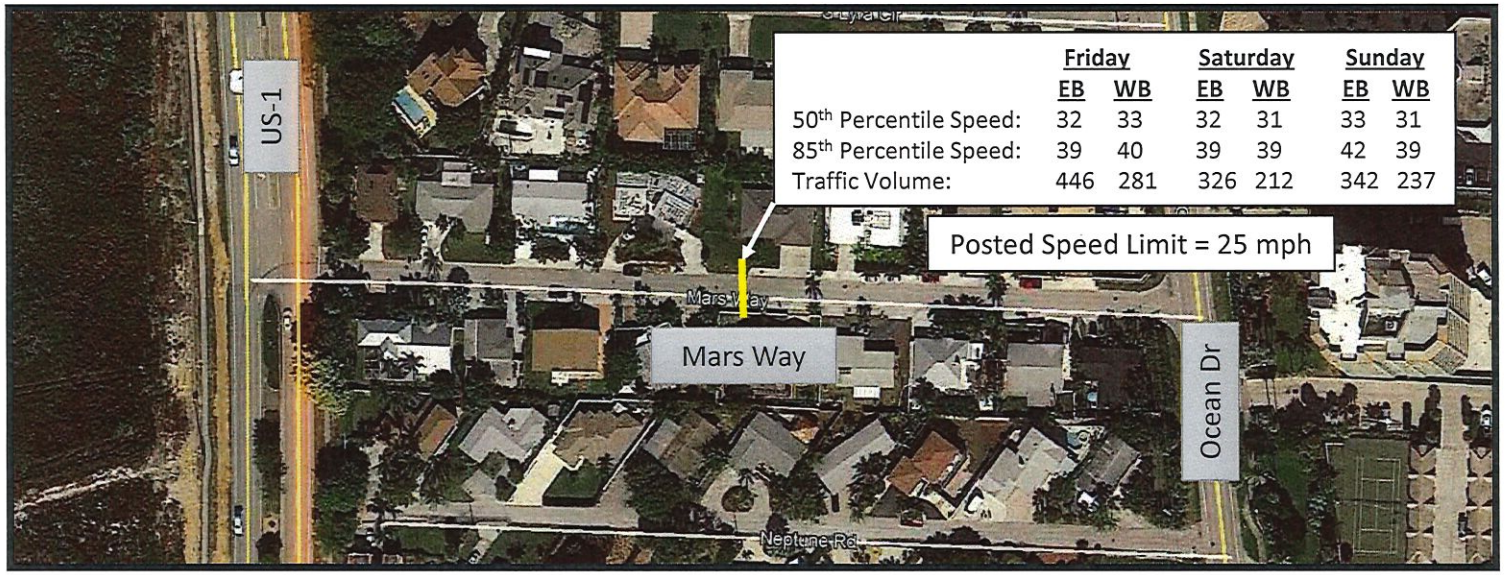
Staff recommends Town Council direct staff on which traffic calming options shall be implemented.

Attachment(s):

- Attachment #1 – Speed and Volume Traffic Study
- Attachment #2 – Letter to Mars Way Residents w. staff recommendation
- Attachment #3 – Mars Way Residents Petition (dated September 9, 2021)
- Attachment #4 – Mars Way Residents Petition (dated October 6, 2021)

Attachment # 1

N



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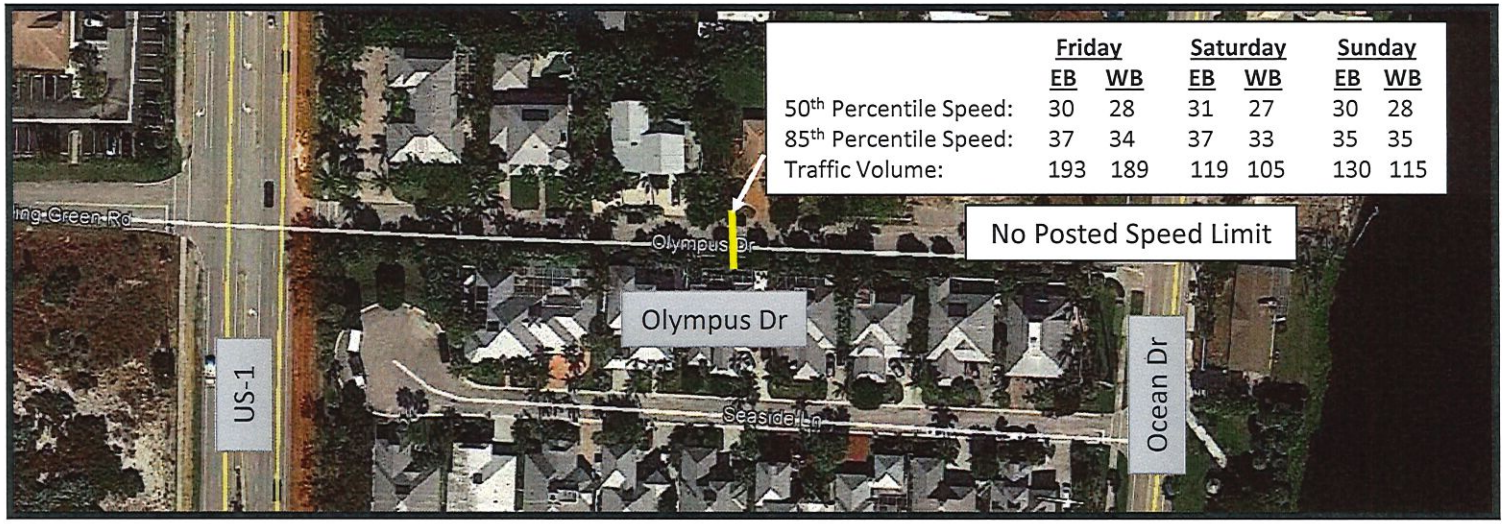

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Figure 1 – Traffic Data
Town of Juno Beach

SIMMONS&WHITE

ATTACHMENT # 2

TOWN OF JUNO BEACH

340 OCEAN DRIVE
JUNO BEACH, FL 33408
PHONE: 561.626.1122 • FAX: 561.775.0812
WEBSITE: www.juno-beach.fl.us
E-MAIL: junobeach@juno-beach.fl.us

Dear Mars Way residents,

Following the June Mars Way Workshop, Staff had been conducting meetings with other governmental agencies that have jurisdiction over the proposed traffic calming option(s) that were discussed.

At the next workshop, staff will be seeking a consensus from the majority of Mars Way residents for the proposed traffic calming option(s) to review and deliberate along with the Town's Traffic Engineer and provide a recommendation to the Town Council at a future meeting.

The information provided below is a collection of responses that staff received from outside governmental agencies as well as other Town Departments that have jurisdiction over proposed traffic calming option(s). Based on those responses, **Town staff recommends the following options**:

Adding additional No Truck signs on US Highway 1 (FDOT, PBC, and Juno Beach);

- Florida Department of Transportation (FDOT), no objections as long as proposed locations meet sight visibility regulations and the Town assumes responsibility for its maintenance.
- Palm Beach County Traffic and Engineering (PBC), no concerns.
- **Juno Beach, has no concerns and recommends this option to mitigate truck traffic.**

Additional Police Enforcement on Mars Way (Juno Beach);

- **Juno Beach Police Department will continue with elevated enforcement on Mars Way.**

Adding Speed Table(s) (Juno Beach);

- **PBC, preferred option, especially if starting as trial basis.**
- **Palm Beach County Fire Rescue (PBCFR), preferred option.**
- **Juno Beach, temporary installation is the preferred option (either 1 or 2 tables)**

Code text amendment to "Truck Route" section of the Code of Ordinance;

- **Juno Beach, recommends that the language be reviewed by the Town Attorney to assure that any new proposed language allows for enforcement measures.**

For the purpose of full transparency, the following responses were also provided to staff by outside governmental agencies as well as other Town Departments that have jurisdiction over the proposed traffic calming option(s). Based on the additional responses that were provided, **Town staff does not recommend the following options**:

Closing off Mars Way on the west end;

- FDOT, no objections if the Town of Juno Beach (TOJB) is able to confirm that Donald Ross Road and Olympus Way will not be adversely impacted (additional trips past threshold of road).
- **PBC, does not approve of the option as there is no turn-around possibilities for vehicles, much less emergency vehicles at the end of Mars Way. PBC has a policy not to have vehicles back into oncoming traffic (Ocean Drive).**
- PBCFR, no concerns if the method of closing the road is via a motorized gate that gives emergencies vehicles the ability to open it up. Unsure if the installation of the gate is possible since it needs to slide open and there is lack of right-of-way area.
- Juno Beach, does not recommend this option as it would reduce the emergency response time for emergency vehicles.

Making Mars Way a one-way street;

- FDOT, no objections if the Town is able to confirm that Donald Ross Road and Olympus Way will not be adversely impacted (additional trips past threshold of road).
- PBC, no recommendation, they need traffic studies (trip generation study) for Donald Ross Road, and Olympus Drive prior to making a recommendation.
- PBCFR, same comment as PBC as this will require them to review and create new routes.
- **Juno Beach, does not recommend this option as it would reduce the emergency response time for emergency vehicles and it may increase vehicular speed.**

Close off the left turn median entrance from US Highway 1 (FDOT, PBC, PBCFR, and Juno Beach);

- FDOT, no objections if TOJB is able to confirm that Donald Ross Road and Olympus Way will not be adversely impacted (additional trips past threshold of road).
- PBC, no recommendation, they need traffic studies (trip generation study) for Donald Ross Road, and Olympus Drive prior to making a recommendation.
- PBCFR, same comment as PBC as this will require them to review and create new routes.
- **Juno Beach, serious concerns with traffic being diverted to Olympus Drive and Donald Ross Road and as it would reduce the emergency response time for emergency vehicles.**

Reducing the width of Mars Way (Juno Beach);

- **Juno Beach, is <u>not viable option</u> nor would it be of any benefit as the current width of Mars Way is already 22 ft. and the minimum road width per PBC regulations is 20 ft.**

Adding a chicane on Mars Way (Juno Beach);

- **Juno Beach, chicanes are <u>not viable options</u> due to engineering design standards as they would have to be placed at dangerous locations (blind spots) due to the topography of the road.**

Adding a choke on Mars Way (Juno Beach);

- **Juno Beach, chokes are <u>not viable options</u> due to engineering design standards as they would have to be placed at dangerous locations (blind spots) due to the topography of the road.**

Adding Speed Hump(s) (Juno Beach);

- PBC, no concerns.
- **PBCFR, does not recommend, it slows down response time.**
- Juno Beach, this option would be effective in reducing speed, however, it is not recommended as it will reduce emergency response time and create an uncomfortable driving experience.

Adding an Electronic Speed Sign (Juno Beach);

- **Juno Beach, with the elevated enforcement by the Police Department the signs are an effective traffic calming option to reduce vehicular speed, not traffic volume. Staff recommends this option as a secondary method if the first options are not sufficient.**

Reducing the Speed Limit to 20 mph

- **Town Staff does not recommend this option as all public roads/streets should have the same speed limit for consistency.**

**Please be aware that any given information, such as input and/or opinion(s), received from the agencies above, does not automatically constitute as an endorsement or recommendation towards a specific proposed option(s) by the Town's Traffic Engineer or Town Staff.*

The next workshop is tentatively scheduled for September 9th between 4pm and 6pm (similar to the previous workshop). Please note that due to the current uptick in COVID-19 cases, there will be a limited amount of seating, however, you will be able to participate virtually via zoom. Due to the limited amount of seating, please RSVP with me by Monday September 6th if you plan on attending either in-person or via zoom so I can reserve you a seat or provide you with a Zoom invitation.

In the meantime, if you have any additional questions or concerns, please do not hesitate to contact me directly at 561-656-0306. Also, please feel free to share this information with your neighbors that were unable to attend the previous workshop.

Respectfully,

Frank Davila
Director of Planning and Zoning

Petition from the Residents/Owners of Property on Mars Way, Juno Beach, FL

September 9, 2021

Honorable Mayor and Town Council
Town of Juno Beach, Florida

Re: Traffic Calming on Mars Way

On June 9, 2021, the Town of Juno Beach held a workshop to discuss the Mars Way Traffic issues. The Town's traffic engineer provided the results of the traffic volume and speed study and provided a few options for traffic calming for resident consideration. The options included speed tables, speed humps and speed monitoring signs. All owners and residents except one that attended voiced their opposition to speed tables and speed humps/bumps and provided staff with other options for consideration such as:

- Closing off Mars Way on the west end
- Making Mars Way a one-way street
- Closing off the left turn entrance from US Highway 1
- Adding additional No Truck signs on US Highway one and Ocean
- Additional Police Enforcement on Mars Way
- Adding chicanes or chokes on Mars Way

Staff has indicated that they will be seeking a consensus from a majority of Mars Way residents on traffic calming option(s), then provide a recommendation to the Town Council for consideration.

The undersigned residents are opposed to speed humps or tables due to the noise they will cause which will reduce the value of our properties. The Town Manager said at the May 8, 2019 goal setting workshop that "residents do not like speed humps more complain than like them because of the noise, it might make one or two happy, but the rest are not happy. Even residents that want them said how noisy they are."

We have all invested in our neighborhood and we are extremely concerned about the negative effects the noise would have on our quality of life and our property values. We do not want to exchange one problem, traffic, for another problem, more noise. The street has enough noise due to the acceleration of cars and trucks up both sides of the hill.

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 9th day of September, 2021, requesting the Town Council refrain from approving the installation of speed humps speed tables on Mars Way and choose another options.

Petition from the Residents/Owners of Property on Mars Way, Juno Beach, FL

September 9, 2021

Honorable Mayor and Town Council
Town of Juno Beach, Florida

Re: Traffic Calming on Mars Way

On June 9, 2021, the Town of Juno Beach held a workshop to discuss the Mars Way Traffic issues. The Town's traffic engineer provided the results of the traffic volume and speed study and provided a few options for traffic calming for resident consideration. The options included speed tables, speed humps and speed monitoring signs. All owners and residents except one that attended voiced their opposition to speed tables and speed humps/bumps and provided staff with other options for consideration such as:

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The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 9th day of September, 2021, requesting the Town Council refrain from approving the installation of speed humps speed tables on Mars Way and choose another options.

Signed:

Name	Address	Signature

Mary Peterson 481 Mars Way 9/8/21 Juno Beach FL 33408

Signed:

Name	Address	Signature
BARRY M RUSSO	491 Mars Way	Barry M Russo
JEREMY LE CLAINCHE	401 Mars Way	Jeremy Le Clainche
William Vijjiano	420 Mars Way	William Vijjiano
Tim Langlois	400 Mars Way	Tim Langlois
Virginia Langlois	400 Mars Way	
Gino Bologna	571 Ocean Drive	
Gino Bologna	451 MARS Way	

Cc: Joseph Lo Bello, Town Manager
Mr. Len Rubin, Town Attorney

Signed:

Name	Address	Signature
Andrea Erickson	480 Mars Way	A. Erickson

Cc: Joseph Lo Bello, Town Manager
Mr. Len Rubin, Town Attorney

Petition from the Residents/Owners of Property on Mars Way, Juno Beach, FL

September 9, 2021

Honorable Mayor and Town Council
Town of Juno Beach, Florida

Re: Traffic Calming on Mars Way

On June 9, 2021, the Town of Juno Beach held a workshop to discuss the Mars Way Traffic issues. The Town's traffic engineer provided the results of the traffic volume and speed study and provided a few options for traffic calming for resident consideration. The options included speed tables, speed humps and speed monitoring signs. All owners and residents except one that attended voiced their opposition to speed tables and speed humps/bumps and provided staff with other options for consideration such as:

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- Adding additional No Truck signs on US Highway one and Ocean
- Additional Police Enforcement on Mars Way
- Adding chicanes or chokes on Mars Way

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The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 9th day of September, 2021, requesting the Town Council refrain from approving the installation of speed humps speed tables on Mars Way and choose another options.

Signed:

Name Address Signature		

Karen & Robert Chaprnka
471 Mars Way, Juno Beach FL
Karen Chrpka
Robert J. Chaprnka

Attachment # 4

Petition from the Residents/Owners of Property on Mars Way, Juno Beach, FL

October 6, 2021

Honorable Mayor and Town Council
Town of Juno Beach, Florida

Re: Traffic Calming on Mars Way

On June 9, 2021, the Town of Juno Beach held a workshop to discuss the Mars Way Traffic issues. The Town's traffic engineer provided the results of the traffic volume and speed study and provided a few options for traffic calming for resident consideration. The options included speed tables, speed humps and speed monitoring signs. All owners and residents except one that attended voiced their opposition to speed tables and speed humps and provided staff with other options for consideration such as:

- Closing off Mars Way on the west end
- Making Mars Way a one-way street
- Closing off the left turn entrance from US Highway 1
- Adding additional No Truck signs on US Highway one and Ocean
- Additional Police Enforcement on Mars Way
- Adding chicanes or chokes on Mars Way

On September 9, 2021, an additional workshop was held and staff reviewed the details of their findings from discussions with FDOT, Palm Beach County and Palm Beach County Fire-Rescue. Staff indicated at that meeting that if a majority of Mars Way residents were in opposition to speed humps they would not be recommended to the Town Council. Signatures of 9 residents/owners on a petition have been provided to the Town equaling a majority. In addition, staff indicated that they planned to recommend to Town Council moving the no truck signage onto Ocean and US 1, striping the road, increasing police enforcement, and increasing the use of the speed trailer in order to improve the conditions on Mars Way.

We are presenting an additional petition to the Town requesting that the Town Council and staff further consider closing off the left turn median entrance from US Highway 1 onto Mars Way. We are requesting that the additional traffic study be done as well as any other necessary action required.

We believe that the closing of the median will reduce traffic on Mars Way by at least 50%. This, along with better placement of the no truck signage, striping the road, additional police enforcement, use of speed trailers and potential speed monitoring signs, the street can become safer and more pedestrian friendly for the residents.

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 6th day of October, 2021, requesting the Town Council consider closing off the left turn entrance on Mars Way. We are requesting that staff and consultants complete the additional traffic study and any other necessary action for the Town Council to fully consider the closing of the left turn entrance off US 1 on Mars Way.

Signed:

Name	Address	Signature
① Karen Chapman	471 Mars Way JUNO	
① Robert J. Chapman	471 MARS Way JUNO Beach FL	

Cc: Joseph Lo Bello, Town Manager
Mr. Len Rubin, Town Attorney

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 6th day of October, 2021, requesting the Town Council consider closing off the left turn entrance on Mars Way. We are requesting that staff and consultants complete the additional traffic study and any other necessary action for the Town Council to fully consider the closing of the left turn entrance off US 1 on Mars Way.

Signed:

Name	Address	Signature
(2) Andrea Erickson	480 Mars Way	A. Erickson

Cc: Joseph Lo Bello, Town Manager
Mr. Len Rubin, Town Attorney

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 6th day of October, 2021, requesting the Town Council consider closing off the left turn entrance on Mars Way. We are requesting that staff and consultants complete the additional traffic study and any other necessary action for the Town Council to fully consider the closing of the left turn entrance off US 1 on Mars Way.

Signed:

	Name	Address	Signature
(3)	Kevin Lunny	470 ~~740~~ Mars Way	KL
(4)	William Viggiano	420 Mars Way	William Viggiano

Cc: Joseph Lo Bello, Town Manager
Mr. Len Rubin, Town Attorney

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 6th day of October, 2021, requesting the Town Council consider closing off the left turn entrance on Mars Way. We are requesting that staff and consultants complete the additional traffic study and any other necessary action for the Town Council to fully consider the closing of the left turn entrance off US 1 on Mars Way.

Signed:

Name	Address	Signature
(5) Jane & Jeremy LeClaire	401 Mars Way	Jane LeClaire

Cc: Joseph Lo Bello, Town Manager
Mr. Len Rubin, Town Attorney

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 6th day of October, 2021, requesting the Town Council consider closing off the left turn entrance on Mars Way. We are requesting that staff and consultants complete the additional traffic study and any other necessary action for the Town Council to fully consider the closing of the left turn entrance off US 1 on Mars Way.

Signed:

Name	Address	Signature
Virginia Langloss	400 Mars Way	
Timothy Langloss	400 Mars Way	

(6)
(0)

Cc: Joseph Lo Bello, Town Manager
Mr. Len Rubin, Town Attorney

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 6th day of October, 2021, requesting the Town Council consider closing off the left turn entrance on Mars Way. We are requesting that staff and consultants complete the additional traffic study and any other necessary action for the Town Council to fully consider the closing of the left turn entrance off US 1 on Mars Way.

Signed:

Name	Address	Signature
(1) RICHARD HAGGER	450 MARS WAY	

Cc: Joseph Lo Bello, Town Manager
Mr. Len Rubin, Town Attorney

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 6th day of October, 2021, requesting the Town Council consider closing off the left turn entrance on Mars Way. We are requesting that staff and consultants complete the additional traffic study and any other necessary action for the Town Council to fully consider the closing of the left turn entrance off US 1 on Mars Way.

Signed:

Name	Address	Signature
(8) Piera & Gino Bologna	571 Ocean Dr	Piera Bologna
(9) Piera & Gino Bologna	451 Mars Way	Piera Bologna

Cc: Joseph Lo Bello, Town Manager
Mr. Len Rubin, Town Attorney

MEMORANDUM

TO: Joseph F. Lo Bello, CPA, Town Manager

FROM: Per the request of Mayor Halpern

DATE: June 15, 2022

SUBJECT: Discussion on Mars Way

Background
Mayor Halpern requested to have Mars Way placed on the agenda for discussion.

Recommendation
Staff recommends Council discuss this item with staff and direct staff on how to proceed.

Attachment(s):

1) Copy of email & signed petition from resident Jane LeClainche.

Gmail

Caitlin Copeland <ccopeland@juno-beach.fl.us>

Mars Way Traffic and Parking Matters

1 message

Jane LeClainche <JLeClainche@townofpalmbeach.com> Mon, Jun 13, 2022 at 1:41 PM
To: Joseph Lo Bello <jlobello@juno-beach.fl.us>, Frank Davila <fdavila@juno-beach.fl.us>, Caitlin Copeland <ccopeland@juno-beach.fl.us>
Cc: Karen Chaprnka <karen.chaprnka@gmail.com>, "skidaddle7@yahoo.com" <skidaddle7@yahoo.com>, "laurardgrs@yahoo.com" <laurardgrs@yahoo.com>

Joe and Frank,

Please see the email below that we would like forwarded to the Mayor and Council and attached petition signed by a majority of the residents/owners of Mars Way for the removal of the reflectors. We are requesting a Mars Way item be added to the June 22nd, Town Council meeting. There are residents that would like to address the Council regarding Mars Way. Some may come in person and others would like the opportunity to speak via zoom or other video communication method you have for public participation.

Thanks,

Jane

Dear Mayor Halpern and Council Members,

We the residents and property owners of Mars Way have enclosed a petition requesting the removal of the reflectors on Mars Way. As you may recall, this issue was raised at the March 2022 council meeting and it was requested by Council that we obtain signatures from a majority of the residents and property owners. We have obtained a majority as detailed in the attached petitions and as such request that Town Council direct Town staff to remove the reflectors.

Also in March 2022, then council member Halpern met with some of the residents and homeowners of Mars Way and we also discussed some of the more serious safety issues. The below items, which were also raised at the workshop meeting with Town staff in 2021, were proposed by residents to improve the safety of the street:

- Enforcement/ticketing of vehicles speeding on Mars Way and the use of speed trailers, possibly every other week, to discourage speeding.

- Close US-1 median at Mars Way to decrease traffic by preventing south bound US-1 traffic from turning onto Mars Way. This could be done on a temporary basis to determine the results before permanent implementation.

- Study the street to determine if chicanes can be installed as a traffic calming device. Temporary chicanes can be installed initially.

• Perform traffic study of adjacent through streets (Donald Ross and Olympus) to determine traffic volumes compared t capacity.

Since the October 2021 Council meeting where a few other measures to improve the street were approved, the residents have not noticed ANY improvements on the street from a safety perspective and in fact have noticed even greater traffic. This is very concerning. There is two way traffic (500 to 700+ vehicles per day) on a narrow (20' wide) street where there aren't any pedestrian sidewalks for the residents and thus residents have to walk on the road and traverse traffic. Additionally, residents have to back out of their driveways into oncoming traffic and whose line of sight is blocked by the likes of utility vehicles etc that are parked on the sidewalks servicing the Oceanfront condominium.

In years past, Mars Way was a small neighborhood street, however, due to the growing population in Palm Beach County, the street is now a major cut through street without any protections for the residents. Complicating matters further is the fact that the topography of the street at both ends doesn't allow residents to see oncoming traffic until it's potentially too late. Homeowners are selling their homes due to safety and traffic concerns such as Donna Love (490 Mars Way), Kevin Lunny (470 Mars Way), Anthony Allogia (421 Mars Way) and Timothy Row (400 Mars Way). Many of the residents of Juno Beach that use Mars Way are very aggressive drivers and sling shot onto Mars Way from US-1 making it very dangerous for the residents who live on the west side of Mars Way. In addition, many trades/service personnel with their pickup trucks, trailers etc. use the street for access to the Town. In the past, there was concern from a council member that closing the median would inconvenience the residents of the entire community. We ask what's more important, minimal inconvenience or Mars Way residents safety? The fact that it may take drivers anywhere from 30 seconds to two minutes more to get home by circumventing Mars Way vs putting the owners of 17 homes in harm's way seems to us an obvious choice.

The residents of Mars Way would like the Town Council to direct staff to arrange with the County for the temporary closing of the median at US-1 and Mars Way in order to perform a traffic study of Donald Ross Road. The study would determine if there was a capacity issue from the re-routing of traffic and if not, then the Town could request the permanent closure of the median. This study should be done during the upcoming season (2022/2023) when traffic is significantly higher.

The Town Council proposed having another Mars Way traffic study completed this upcoming season to determine the impact of the adopted changes, however, we instead request that the funds be used for the study for temporarily closing the median at US-1 and Mars Way and the impact of its effect on Donald Ross Road.

We would also like the Town Council to consider making Mars Way a Resident Only parking street. Mars Way is a unique street due to the above mentioned issues. In addition, the Oceanfront Condo is sending all their trade and worker traffic onto our street to park and is causing a huge safety issue for residents as mentioned above. This is an accident waiting to happen and many near misses have already occurred.

Thank you for your consideration of these matters and we are available to meet with any of you to discuss these issues and viable solutions.

Signed:

Karen and Bob Chaprnka

Bill Viggiano

Laura and John Rodgers

Jane and Jeremy Le Clainche

Andrea Erickson

Please be advised that under Florida law, e-mails and e-mail addresses are public records. If you do not want your e-mail address released in response to a public records request, do not send electronic mail to this entity. Instead, contact the Town of Palm Beach by phone at (561) 838-5400, or in writing: 360 S. County RD, Palm Beach, FL 33480.

petition attachment.pdf
211K

Petition from the Residents/Owners of Property on Mars Way, Juno Beach, FL

May 6, 2022

Honorable Mayor and Town Council
Town of Juno Beach, Florida

Re: Reflectors on Mars Way

To date improvements on Mars Way have included the installation of new 20 mph speed limit signage on the street and the adoption of the updated truck ordinance.

This petition is the result of the installation of reflectors on Mars Way. The residents of Mars Way were not consulted and did not anticipate reflectors being installed when the road was striped.

The purpose of having the street striped was to try and keep cars in their defined lane or as close to their defined lane as possible and reduce the number of drivers using the full width of the street and thus speeding.

The difficulty of having cars stay comfortably in their lane is that Mars Way is a very narrow two-way street, only 20' wide, with each lane two feet narrower than a standard lane. Making matters worse, cars are parked on the sidewalk area further create the feeling for drivers that the lane is narrower than it already is. The Oceanfront condo at the bottom of the street constantly sends its trades and other service providers to park on our street, creating congestion with their vans, trucks and other vehicles. Mars Way is one of two through streets in the town with more and more trades using this street as a cut-through to service the broader community of Juno Beach. All of this adds to the fact that the majority of the time vehicles are running over the reflectors throughout the day and night (500 to 725 vehicles per day) and creating a significant noise issue and thus a nuisance to the residents on the street.

On March 16, 2022, several residents met with council member, now Mayor Halpern on our street to discuss various ways to improve the street and for one and a half hours all witnessed the noise of cars running over the reflectors. This issue was brought up at the council meeting on March 23, 2022, and Mayor Halpern said she witnessed the constant noise from the cars running over the reflectors, that the noise was annoying and that the lanes are too narrow to avoid running over the reflectors.

The reflectors are not required and should not have been installed on a street with 17 homes, especially considering the unique circumstances of the street. The residents signed a petition last year asking the Town to not install speed humps because of the added noise that they would produce, and speed humps were not installed. The Town Manager and Town's traffic engineer acknowledged the issues of noise that speed humps would create but now we have a worse situation with the noise from cars running over reflectors all day and night long. The street has streetlights and is very well lit at night so that reflectors are not needed to delineate the lines on the street for visibility at night. This is not a safety issue for the street. If the residents had known that reflectors would be installed with striping, we would not have been in favor of the striping, since we are against any additional noise on the street. We would kindly ask

the Town to remove the reflectors so that residents do not have to be burdened with the additional noise. We already have significant noise due to the volume of traffic, pitch on the road and degree of truck and trade traffic servicing the Town.

We have all invested in our neighborhood and we are extremely concerned about the negative effects the noise would have on our quality of life and our property values. We do not want additional noise on the street.

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 6th day of May 2022, requesting Town staff and/or the Town Council approve the removal of the reflectors from Mars Way.

Signed:

Name	Address	Signature
Jane LeClaire	401 Mars Way	Jane LeClaire
William Viggiano	420 Mars Way	William Viggiano
[illegible]	571 Ocean Drive	[illegible]
Gino Bellora	451 MARS WAY	[illegible]
Virginia Gregoss	400 Mars Way	[illegible]
Latonya Rodgers	421 Marsway	[illegible]
Billy Johnston	480 Mars Way	[illegible]
Andrea Erickson	480 Mars Way	[illegible]

William Viggiano

Cc: Joseph Lo Bello, Town Manager

the Town to remove the reflectors so that residents do not have to be burdened with the additional noise. We already have significant noise due to the volume of traffic, pitch on the road and degree of truck and trade traffic servicing the Town.

We have all invested in our neighborhood and we are extremely concerned about the negative effects the noise would have on our quality of life and our property values. We do not want additional noise on the street.

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 6th day of May 2022, requesting Town staff and/or the Town Council approve the removal of the reflectors from Mars Way.

Signed:

Name	Address	Signature
Jane LeClaire	401 Mars Way	Jane LeClaire
William Viggiano	420 Mars Way	William Viggiano
[illegible]	571 Ocean Drive	[illegible]
[illegible]	451 MARS WAY	[illegible]
[illegible]	471 Mars Way	[illegible]

Cc: Joseph Lo Bello, Town Manager

suggesting this option to try and reduce the speed of cars traveling on the street. We would kindly ask the Town to remove the reflectors so that residents do not have to be burdened with the additional noise. We already have significant noise due to the volume of traffic, pitch on the road and degree of truck and trade traffic servicing the Town.

We have all invested in our neighborhood and we are extremely concerned about the negative effects the noise would have on our quality of life and our property values. We do not want additional noise on the street.

The undersigned below, property owners and residents of Mars Way, are filing this petition, dated this 26th day of March 2022, requesting Town staff and/or the Town Council approve the removal of the reflectors from Mars Way.

Signed:

Name	Address	Signature
~~Jane + Jeremy LeClaire~~	~~401 Mars Way~~	~~Jane LeClaire~~
Kevin Lunney	470 Mars Way	

MEMORANDUM

TO: Town Council; Joseph F. Lo Bello, Town Manager

FROM: Mayor DD Halpern

DATE: September 21, 2022

SUBJECT: Discussion on Mars Way Parking

BACKGROUND

Mayor Halpern requested to have the Mars Way Parking placed on the agenda for discussion.

Attachment(s):

1) Copy of Resident Jane Le Clainche's Email & Attachments that were sent to Council on August 16, 2022.

Item #1.

Gmail

Caitlin Copeland <ccopeland@juno-beach.fl.us>

Fwd: Mars Way Parking matters

1 message

Caitlin Copeland <ccopeland@juno-beach.fl.us> Tue, Aug 16, 2022 at 3:44 PM
To: "Alexander R. Cooke" <alexander@alexander-cooke.com>, DD Halpern <dd_halpern@yahoo.com>, Elaine Cotronakis <ecotronakis@gmail.com>, Jason Haselkorn <jason3072661@gmail.com>, Joseph Lo Bello <jlobello@juno-beach.fl.us>, Len Rubin <len@torcivialaw.com>, Peggy Wheeler <cambriancorp@aol.com>, Yasmin Hamel <yhamel@juno-beach.fl.us>, Andrea Dobbins <adobbins@juno-beach.fl.us>, Anthony Meriano <ameriano@juno-beach.fl.us>, Brian Smith <bsmith@junobeachpd.com>, Frank Davila <fdavila@juno-beach.fl.us>, Matthew Pazanski <mpazanski@juno-beach.fl.us>, Paul Fertig <pfertig@junobeachpd.com>, STEVEN HALLOCK <shallock@juno-beach.fl.us>

Good Afternoon:

Please see the email below from resident Jane Le Clainche along with the attachments.

Do Not Reply to All. Only Reply to Me.

Caitlin E. Copeland-Rodriguez, MMC
Town Clerk
Town of Juno Beach
340 Ocean Drive
Juno Beach, FL 33408
ccopeland@juno-beach.fl.us
Phone: (561)656-0316

---------- Forwarded message ---------
From: **Caitlin Copeland** <ccopeland@juno-beach.fl.us>
Date: Tue, Aug 16, 2022 at 3:42 PM
Subject: Re: Mars Way Parking matters
To: Jane LeClainche <JLeClainche@townofpalmbeach.com>
Cc: Joseph Lo Bello <jlobello@juno-beach.fl.us>, Frank Davila <fdavila@juno-beach.fl.us>, Jeremy <jeremyleclainche@gmail.com>, skidaddle7@yahoo.com <skidaddle7@yahoo.com>, Karen Chaprnka <karen.chaprnka@gmail.com>, laurardgrs@yahoo.com <laurardgrs@yahoo.com>, junogrl56@gmail.com <junogrl56@gmail.com>, gino451@aol.com <gino451@aol.com>

Good Afternoon Mrs. Le Clainche:

The Town is in receipt of your email below and please know that it has been forwarded to the Town Council and Senior Staff.

Caitlin E. Copeland-Rodriguez, MMC
Town Clerk
Town of Juno Beach
340 Ocean Drive
Juno Beach, FL 33408
ccopeland@juno-beach.fl.us
Phone: (561)656-0316
Please note: Florida has a very broad public records law. Most written communications to or from local officials regarding town business are public records available to the public and media upon request. Your e-mail communications may therefore be subject to public disclosure.

Item #1.

On Tue, Aug 16, 2022 at 3:35 PM Jane LeClainche <JLeClainche@townofpalmbeach.com> wrote:

---------- Forwarded message ---------
From: **Jane LeClainche** <JLeClainche@townofpalmbeach.com>
Date: Tue, Aug 16, 2022 at 3:35 PM
Subject: Mars Way Parking matters
To: Joseph Lo Bello <jlobello@juno-beach.fl.us>, Frank Davila <fdavila@juno-beach.fl.us>, Caitlin Copeland <ccopeland@juno-beach.fl.us>
Cc: Jeremy <jeremyleclainche@gmail.com>, skidaddle7@yahoo.com <skidaddle7@yahoo.com>, Karen Chaprnka <karen.chaprnka@gmail.com>, laurardgrs@yahoo.com <laurardgrs@yahoo.com>, junogrl56@gmail.com <junogrl56@gmail.com>, gino451@aol.com <gino451@aol.com>

Joe and Frank,

As you are aware, we recently requested copies of the development agreement for the Oceanfront condominium. A copy of the Minutes from the May 16, 1990 Juno Beach Town Council meeting are attached. These minutes show that the developer received a Special Exception in the RH Zoning District to allow for a density bonus of up to 2 dwelling units per acre provided that a minimum of 6 foot wide beach access easement is dedicated to the Town for public use. I mention this because the representatives from the Oceanfront Condominium brought this easement up as a gesture of their benevolence to the Town when in fact it was for the developer to secure additional units.

In the Findings of Fact for the special exception application for the condominium, item number 4 (a) and (b) indicate that satisfactory provisions and arrangements have been made concerning the following where applicable: a) Ingress and Egress to the property and structures, with particular reference to automotive and pedestrian safety and convenience, traffic flow, and access in case of fire or catastrophe. b) Off street parking and loading areas, refuse and service areas, with particular attention to item a above and to affects on surrounding property.

This indicates that they were required to provide arrangements for off street parking for the condominium and shouldn't send their workers up to Mars Way to park creating a safety hazard for the residents of the street.

I have also attached a copy of the FY19/20 Local Government Funding Request Beach Projects Application for Juno Beach. This application details the parking spaces allocated for eligibility for funding for the Juno Beach renourishment projects. These parking areas include:

Double Roads access	106 Parking Spaces allocated - Secondary
Ocean Cay/Juno Beach Parks	538 Parking Spaces allocated - Primary
Loggerhead Beach Park	218 Parking Spaces allocated - Primary
Mercury Road Access	97 Parking Spaces allocated - Secondary
Total allocation	**959 Total spaces allocated for 12,770 feet of shoreline**

The application does not list any residential side streets that have been allocated for the funding agreement. The parks and Mercury Rd. provide sufficient spaces for the beach renourishment project funding agreement.

Also attached is a copy of a section of the Town of Palm Beach Code of Ordinances. The Residential Parking Permit section lays out the process and policies for residential parking requirements. The Town of Juno could adopt a version of this code to implement restricted parking on Mars Way on an incremental basis. Mars Way may be the only street in

Town that would qualify since it is the only street that is impacted by commuter vehicles and parking issues. Parking be restricted, on an incremental basis moving westward toward US1 to the crest of the hill where most of the parking issues occur. The Town can charge a small fee for their services to issue the permits and signage, and enforcement can be done by residents by issuing a complaint to code enforcement or the police department that a non-permitted vehicle is parked on the street. A few parking tickets should stop repeat offenders.

The residents have laid out their case for a traffic study and also for parking restrictions. The need to protect the residents on Mars Way is eloquently stated on page 1 of the Town of Palm Beach Residential Parking code which reads:

It is in the public interest to:

Reduce hazardous traffic conditions resulting from the use of streets located within congested residential areas for the parking of vehicles by persons using such residential areas to gain access to other places;

Protect those areas from excessive noise;

Protect the residents of those areas from unreasonable burdens in gaining access to their residences;

Preserve the character of those areas as residential districts;

Promote efficiency in the maintenance of these streets in a clean and safe condition;

Preserve the value of the property in those areas;

Preserve the safety of children and other pedestrians; and

Promote traffic safety, clean air and the comfort, health, convenience and welfare of the inhabitants of the town.

It is for all of these reasons that the Town of Juno Beach should enact residential parking restrictions on Mars Way. Please forward this email and the related attachments to the Mayor and Town Council members.

Thank you,

Jane Le Clainche

Co-owner of 401 Mars Way and Resident of 506 Sea Oats Dr. D3

Jane Le Clainche, CPA

Finance Director

Town of Palm Beach

360 S County Rd.

Palm beach, FL 33480

561-227-6330

www.townofpalmbeach.com

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3 attachments

FY1920-NCCSPP-segment-3-lgfr-signed application.pdf
859K

Palm Beach, FL Code of Ordinances - Residential Parking Permits.pdf
3179K

Approved Town Council Meeting Minutes - May 16 1990 - Oceanfront.pdf
597K

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
FY2019/20 Local Government Funding Request
Beach Projects Application

PART I: GENERAL INFORMATION

Local Sponsor: Palm Beach County

Local Sponsor Federal ID Number (FEID): 59-6000785

Contact Name: Andy Studt

Title: Senior Environmental Analyst

Mailing Address Line 1: 2300 N. Jog Road, 4th Floor

Mailing Address Line 2:

City: West Palm Beach Zip: 33411

Telephone: 561-233-2539

Email Address: astudt@pbcgov.org

Additional Contact Information: Julie Mitchell, Environmental Program Supervisor, 561-233-2437

PART II: CERTIFICATION

I hereby certify that all information provided with this application is true and complete to the best of my knowledge.

Signature of Local Sponsor (Electronic/scanned signature accepted)	Date	Printed Name
[signature]	7/31/18	Deborah Drum

FY 2019/20 Local Government Funding Request
Beach Projects Application

PART III: EVALUATION CRITERIA

1. **Project Name:** (as listed in the Strategic Beach Management Plan)

Juno Beach
North County Comprehensive Shore Protection Project Segment 3

2. **Project Description:** (Include county, location with reference to range monuments, brief project history and description of proposed activities)

(Attach additional documentation as needed)

The Juno Beach portion (Segment 3) of the North County Comprehensive Shore Protection Project is located in Palm Beach County, approximately 2.2 miles south of the Jupiter Inlet, from R-26 to R-38. This 2.42 mile long section of beach was first nourished in 2001 and subsequently impacted by two hurricanes and a tropical storm in 2004, 2005 and 2008, respectively. The first re-nourishment of this beach was completed in March 2010.

Planning, engineering and design for a second re-nourishment is complete. The investigation of a proposed borrow area, approximately 2 miles northeast of the Jupiter Inlet, is complete with identification of approximately 5.1 million cy of beach compatible material. A Major Permit Modification to the existing Jupiter-Carlin JCP permit was granted June 8, 2018, which incorporated the Juno Beach project into the North County Comprehensive Shore Protection Project (FDEP JCP Permit# 0303863-006-JM). Proposed activities include construction, during the winter of 2019/2020 with post-construction permit required physical and biological monitoring planned thereafter.

FY 2019/20 Local Government Funding Request
Beach Projects Application

3. **Use of Requested Program Funds:** (Specify phase – Feasibility, Design, Construction, and/or Monitoring – and provide a brief description of work in each phase listed. Indicate which tasks are cost reimbursement for work that has been completed.)

Funds are requested for post-construction monitoring following the second re-nourishment planned for winter 2019/2020. Anticipated monitoring will include post-construction engineering survey profiles and biological monitoring as required by the recently issued major permit modification for this project (FDEP JCP# 0303863-006-JM).

4. **Mapping:** Prepare and attach a map or maps of the project area formatted at a minimum of 1" = 200' scale. (Maps must be provided as attachments with this application.)

Map elements must include:

- Compass rose with North arrow, scale and legend.
- Project boundary showing length of critically eroded shoreline
- FDEP range monuments
- Beach access and parking locations (indicate Primary and Secondary accesses, including access widths)
- Width of access for public lodging establishments fronting the project shoreline (for commercial/recreational ranking points and eligibility determination)
- Width of access for public lodging establishments within one-quarter mile walking distance of a secondary public access point (must show length of street-side frontage for eligibility determination)
- Comprehensive plan or current land use designations of properties within the project shoreline (for commercial/recreational ranking points)
- Bus stops and bike rack locations within one-quarter mile walking distance of a public access point (if claiming for eligibility determination)

5. **Length of Project Boundary in Feet** (Total restored project length in the critically eroded area):

The total restored project length in the critically eroded area is approximately 12,800 feet.

FY 2019/20 Local Government Funding Request
Beach Projects Application

6. Eligibility: Public Beach Access and Public Lodging Establishments:

- The eligibility table must be completed for all beach projects.
- For Location/Name, use the official name of the park or the name of the street end that is associated with the public access.
- For R-Mon, select a DEP Range Monument that is closest to the main public access point.
- For Type of Access, indicate "Primary" or "Secondary" beach access in accordance with the definitions given in Rule 62B-36 F.A.C.
- For Width of Access/Frontage, give the length of the legal boundary (in feet) of the public access location along the beach. For public lodging establishments that are not located on the beach, indicate the street-side length of the legal property boundary (in feet) that is used as the main access to the establishment.
- For the Total Public Units in a public lodging establishment, write in the number of rooms available for use by the public divided by the total number of rooms in the establishment. For Parking Spaces, give the total number of public parking spaces that are available for use at the public access location. See Rule 62B-36 F.A.C. for additional details.
- For Additional Width from Eligibility Units, give the total distance added to the shoreline width of a public access location. If there are various kinds of eligibility units used for this calculation, provide the names of the eligibility units and show the calculation on a separate page or below the table.
- For Eligible Shoreline, calculate the sum of the distances for Width of Access and the Additional Width from Eligibility Units columns.
- Eligible Shoreline can't overlap.
- For the DBPR License, provide the website link to the Department of Business and Professional Regulation (DBPR) proof of licensure documentation for any public lodging establishments used for eligibility or Commercial/Recreational designation.
- Check the DBPR link from last year to verify that it is current.

Location/Name	R- Mon	Type of Access	Width of Access/ Frontage	Total Public Units or Parking Spaces	Additional Width from Eligibility Units	Eligible Shoreline (feet)	DBPR License
Double Roads access	R-28	Secondary	2980	106	1100	4080	N/A
Ocean Cay/ Juno Beach Parks	R-31	Primary	1330	538	2900	4230	N/A
Loggerhead Beach Park	R-34	Primary	1130	218	2640	3770	N/A
Mercury Road access	R-38	Secondary	0	97	690	690	N/A
Total			5440	959	7330	12770	

(Attach additional documentation as needed)

FY 2019/20 Local Government Funding Request
Beach Projects Application

7. **Schedule and Budget**

a. **Cost Reimbursement:** (Specify eligible costs incurred three years prior to the current application's fiscal year which have not been reimbursed. Eligible costs will be included in the funding request of the current application.)

Year	Proposed Phase	Description	Total Estimated Cost	Federal Cost Share	State Cost Share	Local Cost Share
2016/ 2017						
2017/ 2018						
2018/ 2019						

(Attach additional documentation as needed)

b. **Current and Future Costs:**
(Specify eligible costs for the current application's fiscal year which have not been reimbursed. Include the proposed phases for the next 10 years and the estimated costs for the next 5 years.)

Year	Proposed Phase	Description	Total Estimated Cost	Federal Cost Share	State Cost Share	Local Cost Share
2019/ 2020	Monitoring	physical, reef, sea turtle, shorebird	$500,000		$250,000	$250,000
	PED	LRR	$150,000	$75,000	$37,500	$37,500
2020/ 2021	Monitoring	physical, reef, sea turtle, shorebird	$500,000		$250,000	$250,000
2021/ 2022	Monitoring	physical, reef, sea turtle, shorebird	$500,000		$250,000	$250,000
2022/ 2023	Monitoring	physical, reef, sea turtle, shorebird	$500,000		$250,000	$250,000
2023/ 2024	Monitoring	physical, reef, sea turtle, shorebird	$500,000		$250,000	$250,000
2024/ 2025	Monitoring	physical, reef, sea turtle, shorebird	$500,000		$250,000	$250,000
2025/ 2026	Monitoring	pre physical, reef, sea turtle, shorebird	$500,000		$250,000	$250,000
	PED	sand search, permitting				

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Beach Projects Application

2026/ 2027	Construction	Dredge and fill	$15,000,000		$7,500,000	$7,500,000
2027/ 2028	Monitoring	physical, reef, sea turtle, shorebird	$500,000		$250,000	$250,000
2028/ 2029	Monitoring	physical, reef, sea turtle, shorebird	$500,000		$250,000	$250,000

(Attach additional documentation as needed)

8. **Severity of erosion: Criterion will be calculated by the Department.**
Additional information may be provided for consideration.

The entire project area is designated as critically eroded by the Department, with a historical erosion rate of -2 ft/yr.

9. **Threat to Upland Structures: Criterion will be calculated by the Department.**
Additional information may be provided for consideration.

N/A

10. **Recreational and Economic Benefit:**
Provide the percentage of linear footage of properties within the project boundaries zoned commercial, recreational or Public Lodging Establishment (hotel, motel or vacation rental condo) as zoned in current local government land use maps.

The percentage of linear footage of properties within the project boundaries zoned commercial, recreational, or Public Lodging Establishment, or the equivalent, in the current local government land use map is 54%.

11. **Availability of Federal Funds:**
Is the project Federally authorized by WRDA (Y/N)? No
AUTHORIZATION YEAR: EXPIRATION YEAR:

Does this project have a Project Cooperative Agreement or other Federal funding agreement? No
If so, attach a copy of the document.

What is the federal cost share percentage provided for this project? 0% (use decimal numbers)

Is this project funded through FEMA for storm repairs (Y/N)? No
If so, attach a copy of the signed Project Worksheet.

FY 2019/20 Local Government Funding Request
Beach Projects Application

12. Local Sponsor Financial and Administrative Commitment:
Is funding for the project in the local sponsor's 10-year comprehensive financial plan (Y/N)? Yes
Attach a copy or provide web link to the plan.

Is funding provided through a source established by referendum (Y/N)? Yes
Attach a copy or provide web link to the referendum.

Is funding provided by a third-party other than the federal government (Y/N)? No
What is the percentage of total project costs provided by the third party? 0%
Attach a copy of the interlocal agreement or cost sharing agreement.

Quarterly Report Compliance – For projects that are currently funded through the program or have historically been funded, the Local Sponsor may give the dates quarterly progress reports were submitted within the last fiscal year per terms of the agreement (for consideration of additional ranking points):

Quarter	Due Date	Report Remit Date	Compliant (yes/no)
July-September	October 30	10/30/17	Yes
October-December	January 31	1/31/18	Yes
January-March	April 30	4/30/18	Yes
March-June	July 31	7/31/18	Yes

Is there an active state permit for the project (Y/N)? Yes Permit #: 0303863-006-JM

AUTHORIZATION DATE: 6/8/18 EXPIRATION DATE: 6/8/33

Is there an active federal permit for the project (Y/N)? No Permit #:

AUTHORIZATION DATE: EXPIRATION DATE:

Have local funds been secured for the project (Y/N)? Yes
Explain: Yes, page 105 of the County's 2017-2021 Capital Improvement Program Budget identifies the fu

Has a copy of the resolution been drafted and attached to this application (Y/N)? Yes
In order to acquire state funding, the Local Sponsor must provide a resolution from the governing board which declares:

- Support from the Local Sponsor for the project
- Willingness to serve as the Local Sponsor
- Ability to provide the full local cost share
- Identification of the source of funding

A draft resolution must be provided with the application. The signed resolution must be received by September 28, 2018.

13. Previous State Commitment:
Has the Department previously reviewed, approved and cost-shared on a feasibility or design phase for this project (Y/N)? Yes

Provide most recent phase and state cost share percentage: Design and Permitting 50%

Will this project enhance or increase the longevity of a previously-constructed project (Y/N)? No
Explain:

FY 2019/20 Local Government Funding Request
Beach Project s Application

Will this project nourish a previously restored shoreline (Y/N)? Yes
(Full beach nourishment only. Dune maintenance projects do not apply)

Has a previously approved appropriation for this project phase been released in its entirety by the Local Sponsor due to delays in the project timelines (Y/N)? No

14. Project Performance:

What is the nourishment interval (in years)? 6 years

15. Mitigation of Inlet Effects: Criterion is calculated by the Department.
Additional information may be provided for consideration.

16. Use of Innovative Applications of existing technologies:

Does the project address erosion in a method that is economically competitive with nourishment, that will not adversely affect the conservation of fish and wildlife, including endangered or threatened species, or their habitats, and that is designed to demonstrate an innovative application of existing technologies (Y/N)? Explain: (Attach additional documentation as needed)

N/A

Has the project been documented to be effective and demonstrated technologies previously untried in Florida(Y/N)?
Explain:

N/A

17. Regionalization:
Is this project being planned or constructed in cooperation with another local government to reduce contracting costs (Y/N)? No

Explain and attach a signed copy of the interlocal agreement.

18. Significance:

What is the volume (cy) of advanced nourishment lost since the last sand placement event of a beach restoration or nourishment project as measured landward of the Mean High Water Line? (Information should be consistent with annual post-construction monitoring reports)

>60%

Has the project eroded into the design template (Y/N)? Yes
If so, provide the eroded segments by listing the R-monuments.

Erosion into design template has occurred throughout project shoreline.

For construction projects, what is the proposed sand placement volume (cy)? 600,000

FY 2019/2020 LGFR Juno Beach Web Links:

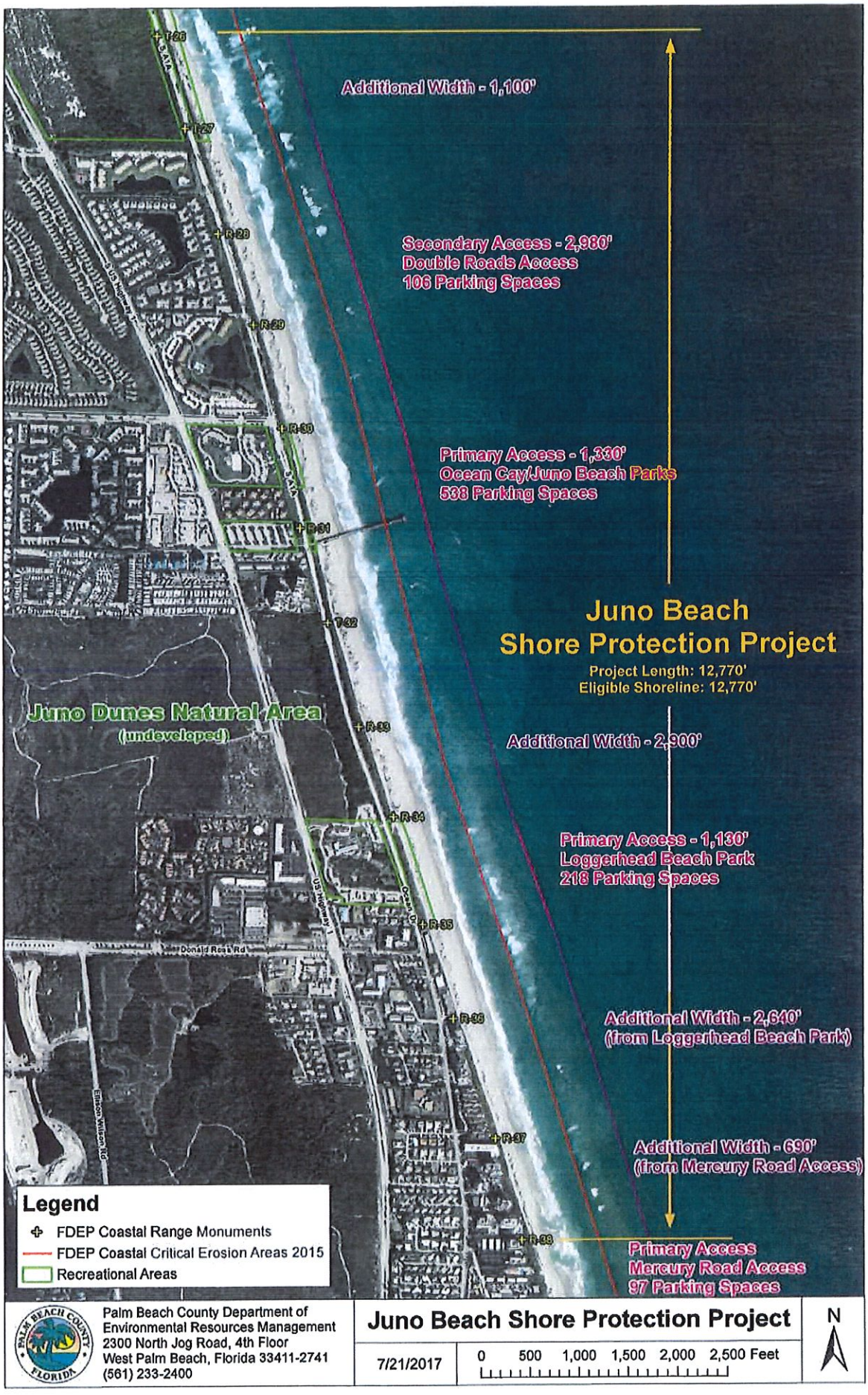
Is funding for the project in the local sponsor's 10-year comprehensive financial plan? The project is part of the County's 5-year comprehensive financial plan, which is available at http://discover.pbcgov.org/ofmb/budget/PDF/CIP/FY-2017-CIP.pdf. The project is also included in the County's 30-year Shore Protection Plan, which is available at http://discover.pbcgov.org/erm/Publications/BeachesProtectionPlan.pdf

Is funding provided through a source established by referendum?

Chapter 17 of the Palm Beach County Code defines the tourist development plan (Ord. No. 95-30, § 7, 8-15-95), which identifies specific projects/special uses of tourist development tax revenue in accordance with Florida Statutes, § 125.0104(5). This chapter further specifies how the tax revenues shall be allocated to each category of use. A percentage of the 2nd and 3rd cent collected shall be used to fund *Category C:* "Provide for beach improvement, maintenance, renourishment, restoration, and erosion control with an emphasis on dune restoration where possible." http://www.pbcgov.com/touristdevelopment/ordinances.htm

Have local funds been secured for the project?

Yes, page 105 of the County's 2017-2021 Capital Improvement Program Budget identifies the funds to be allocated to the project (**Attachment 2**). The complete report can be found at http://discover.pbcgov.org/ofmb/budget/PDF/CIP/FY-2017-CIP.pdf.


Additional Width - 1,100'
Secondary Access - 2,960'
Double Roads Access
106 Parking Spaces
Primary Access - 1,330'
Ocean Cay/Juno Beach Parks
538 Parking Spaces
Juno Beach
Shore Protection Project
Project Length: 12,770'
Eligible Shoreline: 12,770'
Juno Dunes Natural Area
(undeveloped)
Additional Width - 2,900'
Primary Access - 1,130'
Loggerhead Beach Park
218 Parking Spaces
Additional Width - 2,640'
(from Loggerhead Beach Park)
Additional Width - 690'
(from Mercury Road Access)
Primary Access
Mercury Road Access
97 Parking Spaces
R-26
R-27
R-28
R-29
R-30
R-31
R-32
R-33
R-34
R-35
R-36
R-37
R-38
A1A
US Highway 1
Donald Ross Rd
Ellison Wilson Rd
Legend
FDEP Coastal Range Monuments
FDEP Coastal Critical Erosion Areas 2015
Recreational Areas
Palm Beach County Department of
Environmental Resources Management
2300 North Jog Road, 4th Floor
West Palm Beach, Florida 33411-2741
(561) 233-2400
Juno Beach Shore Protection Project
7/21/2017
0 500 1,000 1,500 2,000 2,500 Feet
N

Palm Beach County Capital Improvement Program
FY 2018 - FY 2022 ($ in 1,000)
Capital Project Proposal

Project Title: Juno Beach Shore Protection **Fund #:** 3652 **Unit #:** M028

Description: This project includes design, engineering, permitting, construction, and monitoring of a beach restoration project in the vicinity of Juno Beach. Construction includes offshore dredging, placement of fill, and planting of native salt-tolerant vegetation. The funding sources used in the "Other" category include Tourist Development Tax, interest earnings, and reserves.

COST PROJECTIONS:

Element	Spending Prior FY's	FY 2017 Current	FY 2018 Request	FY 2019	FY 2020	FY 2021	FY 2022	Beyond 2022	Total
Acquisition	0	0	0	0	0	0	0	0	0
Construction	4,787	4,446	1,850	1,478	1,000	500	700	0	14,761
Design	24,513	709	0	0	0	0	0	0	25,222
Other	1	1	0	0	0	0	0	0	2
Total	**29,301**	**5,156**	**1,850**	**1,478**	**1,000**	**500**	**700**	**0**	**39,985**

Comprehensive Plan

Comp Plan Element	CME
Policy Number	1.2a-h
Project Category	1
Project Location	2
Special Y/N	N
High Hazard Area Y/N	Y

FUNDING PROJECTIONS:

Category	Funding Prior FY's	FY 2017 Current	Funded FY 2018 Request	Unfunded FY 2019	FY 2020	FY 2021	FY 2022	Beyond 2022	Total
Ad Valorem	0	0	0	0	0	0	0	0	0
Bonds	0	0	0	0	0	0	0	0	0
Grants	11,835	0	0	0	0	0	0	0	11,835
Impact Fees	0	0	0	0	0	0	0	0	0
Operating	0	0	0	0	0	0	0	0	0
Other	20,472	2,150	1,850	1,478	1,000	500	700	0	28,150
SurTax	0	0	0	0	0	0	0	0	0
Total	**32,307**	**2,150**	**1,850**	**1,478**	**1,000**	**500**	**700**	**0**	**39,985**

Operating Cost Projections

	1st Year	Annual Ongoing
F/Y		
Staff		
O & M		
Equipment		
Other		
Total	0	0
# of Positions		

RESOLUTION NO. 2018-_____

A RESOLUTION OF THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA, REQUESTING THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION SUPPORT APPROPRIATION OF FUNDS WITHIN THE BEACH MANAGEMENT FUNDING ASSISTANCE PROGRAM FOR FISCAL YEAR 2019/2020; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners of Palm Beach County (the "Board") is committed to a program of coastal restoration and preservation; and

WHEREAS, Palm Beach County wishes to effectively address beach erosion through construction of shore protection projects and restoration of its dunes; and

WHEREAS, Palm Beach County has a need to perform engineering design, environmental studies and monitoring of shore protection projects; and

WHEREAS, Palm Beach County has developed and funded a Shore Protection Program to act as the local sponsor for coastal projects; and

WHEREAS, the projects listed below are consistent with the coastal element of the Palm Beach County's Comprehensive Plan; and

WHEREAS, Palm Beach County has the ability and intention of providing the local cost share of eligible coastal projects using a combination of tourist development taxes, interest and reserve funds; and

WHEREAS, the Florida Department of Environmental Protection's Beach Management Funding Assistance Program is preparing their Beach Erosion Control Long-Range Budget Plan to develop the Fiscal Year 2019/2020 prioritized list of beach erosion control projects; and

WHEREAS, the public work projects listed below are eligible within the State of Florida's Beach Erosion Control Assistance Program under the provisions of Section 161.101, Florida Statutes; and

WHEREAS, Palm Beach County is requesting the Florida Department of Environmental Projection support and appropriate funding for shoreline restoration projects within its Fiscal Year 2019/2020 Beach Management Funding Assistance Program for the following County projects: $500,000 for the Coral Cove Park Dune Restoration Project, $100,000 for Segment 1 of the North County Comprehensive Shore Protection Project (NCCSPP), $83,293 for Segment 2 of the

NCCSPP, $287,500 for Segment 3 of the NCCSPP, $647,109 for the Singer Island Shore Protection Project, $5,625,000 for the Southern Palm Beach Island Comprehensive Shore Stabilization Project, $234,000 for the South Lake Worth Inlet Management Plan, and $125,650 for the Ocean Ridge Shore Protection Project.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF PALM BEACH COUNTY, FLORIDA, that:

Section 1: The foregoing recitals are hereby adopted and ratified and incorporated herein by reference.

Section 2: The Board of County Commissioners hereby requests the Florida Department of Environmental Protection to support and appropriate funding for County shoreline restoration projects within its Fiscal Year 2019/2020 Beach Management Funding Assistance Program for the following projects: $500,000 for the Coral Cove Park Dune Restoration Project, $100,000 for Segment 1 of the North County Comprehensive Shore Protection Project (NCCSPP), $83,293 for Segment 2 of the NCCSPP, $287,500 for Segment 3 of the NCCSPP, $647,109 for the Singer Island Shore Protection Project, $5,625,000 for the Southern Palm Beach Island Comprehensive Shore Stabilization Project, $234,000 for the South Lake Worth Inlet Management Plan, and $125,650 for the Ocean Ridge Shore Protection Project.

Section 3: Severability. If any section, sentence, paragraph, clause or word of this Resolution is for any reason held by a Court to be unconstitutional, inoperative or void, such holding shall not affect the remainder of this Resolution.

Section 4: Effective Date. This Resolution shall become effective upon adoption.

The foregoing Resolution was offered by Commissioner _____, who moved its adoption. The motion was seconded by Commissioner _____, and upon being put to a vote, the vote was as follows:

District 6	COMMISSIONER Melissa McKinlay, Mayor	_____
District 7	COMMISSIONER Mack Bernard, Vice Mayor	_____
District 1	COMMISSIONER Hal R. Valeche	_____
District 2	COMMISSIONER Paulette Burdick	_____
District 3	COMMISSIONER Dave Kerner	_____
District 4	COMMISSIONER Steven L. Abrams	_____
District 5	COMMISSIONER Mary Lou Berger	_____

The Mayor thereupon declared the Resolution duly passed and adopted this _____ day of _____, 2018.

APPROVED AS TO FORM
AND LEGAL SUFFICIENCY

By:_____
Assistant County Attorney

PALM BEACH COUNTY, FLORIDA BY ITS
BOARD OF COUNTY COMMISSIONERS

Sharon R. Bock, Clerk & Comptroller

By:_____
Deputy Clerk

ARTICLE X. - ON-STREET PARKING PERMITS

Footnotes:
*--- **(16)** ---*
***Cross reference**— Parking, stopping and standing generally, § 118-86 et seq.*

DIVISION 1. - GENERALLY

Secs. 134-2266—134-2290. - Reserved.

DIVISION 2. - RESIDENTIAL DISTRICTS

Sec. 134-2291. - Findings.

For the purpose of this division, the town council finds and declares as follows:

(1) It is in the best interests of the residents of the town to reduce vehicular congestion on residential streets and to facilitate the efficient movement of traffic by providing for residential parking preference during certain hours of the day within certain areas meeting the criteria set forth in this article;

(2) Residential permit parking regulation is necessary to promote the health, safety and welfare of the residents of the town by providing adequate parking spaces adjacent to or close by their places of residence;

(3) It is in the public interest to:

a. Reduce hazardous traffic conditions resulting from the use of streets located within congested residential areas for the parking of vehicles by persons using such residential areas to gain access to other places;

b. Protect those areas from excessive noise;

c. Protect the residents of those areas from unreasonable burdens in gaining access to their residences;

d. Preserve the character of those areas as residential districts;

e. Promote efficiency in the maintenance of these streets in a clean and safe condition;

f. Preserve the value of the property in those areas;

g. Preserve the safety of children and other pedestrians; and

h. Promote traffic safety, clean air and the comfort, health, convenience and welfare of the inhabitants of the town.

(Ord. No. 2-74, § 6.64(1), 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94)

Sec. 134-2292. - Definitions.

The following words, terms and phrases, when used in this division, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Commuter vehicle means a motor vehicle parked in a residential area by a person who is not a resident of the designated residential area.

Controlled parking residential area means a contiguous or nearly contiguous area containing streets or parts thereof primarily abutted by property that has a specific residential zone designation on the official zoning map of the town and that is designated for restricted residential parking by the town manager or his designee, pursuant to criteria and procedures established in this division.

Calendar year means the period beginning January 1 and ending December 31 of the same year.

Resident means a person who owns or leases real property within a residential area and who maintains either a voting residence or bona fide occupancy or both at that address.

Residential parking permit means a special permit issued under this division for the privilege of parking on a street designated as a controlled parking residential area.

(Ord. No. 2-74, § 6.64(2), 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94; Ord. No. 001-2022 , § 1, 3-8-22)

Cross reference— Definitions generally, § 1-2.

Sec. 134-2293. - Reserved.

Editor's note— Ord. No. 2-2014, § 1, adopted May 14, 2014, repealed § 134-2293, which pertained to designation of controlled parking residential areas, and derived from Ord. No. 2-74, § 6.64(3), 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94.

Sec. 134-2294. - Eligibility and criteria for establishing controlled parking residential areas.

(a) A residentially zoned area shall be deemed eligible for designation as a controlled parking residential area for residential permit parking if parking therein is impacted by commuter vehicles between 8:00 a.m. and 5:30 p.m. of any day.

(b) The following objective criteria are established to be used in evaluating the need for restricted parking in a residentially zoned area in accordance with this division. For an area, however big or small, to be eligible for residential permit parking, that area must meet the following criteria:

(1) During any period between the hours of 8:00 a.m. and 5:30 p.m., the number of vehicles

parked or standing, legally or illegally, on the streets in the area is equal to 50 percent or more of the legal on-street parking capacity of the area. For purposes of this criterion, a legal parking space shall be 20 linear feet measured parallel to the curb or pavement edge.

(2) During the same period as in subsection (b)(1) of this section, 25 percent or more of the vehicles parking or standing on the streets in the area are not registered in the name of a person residing in the area. For purposes of this criterion, the latest available information from the state department of motor vehicles regarding registration of motor vehicles shall be used.

(3) In determining whether an area identified as impacted and eligible for residential permit parking shall be designated as a controlled parking residential area, the following factors shall be considered:

a. The local needs with respect to clean air and environment in residential areas.

b. The possibility of a reduction in total vehicle miles driven in the town.

c. The likelihood of alleviating traffic congestion, illegal parking and related health and safety hazards.

d. The proximity of public transportation to the residential area.

e. The desire and need of the residents for residential permit parking.

f. The need for parking regulation to maintain the residential character of neighborhoods.

(Ord. No. 2-74, § 6.64(4), 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94)

Sec. 134-2295. - Procedure for determining controlled parking residential areas.

(a) In order to determine whether a particular area should be designated as a controlled parking residential area, the town council can request or the town manager may conduct, upon his own initiative or upon a petition of a majority of the households on a proposed residential block addressed to the town manager, a study to determine if the proposed area meets the criteria set forth in section 134-2294. Following the study, the town manager shall determine whether to designate the proposed area under consideration as a controlled parking residential area or to remove the designation of a previously established controlled parking residential area. The town council may also request the town manager to designate an area as a controlled parking residential area based upon a study previously conducted, if the criteria set forth in section 134-2294 are met.

(b) When the town manager finds the criteria to designate have been met in a controlled parking residential area, he shall cause the regulation to be recorded upon an appropriate map of the town and retained permanently in the office of the town clerk. The town clerk shall also keep an updated residential area parking map, or reasonable facsimile thereof, in an appropriate location

on the town's website. In addition, the town manager shall cause parking signs to be erected upon public streets in the area, indicating the times, locations and conditions upon which parking shall be by permit only. When an area has been approved, designated and posted as a controlled parking residential area, it shall be unlawful and a violation of this division to park a commuter vehicle in an area restricted to residential permit parking only without having a valid residential parking permit affixed on the left rear bumper of the vehicle, or in the case of a residential visitor parking permit, appropriately displayed within the vehicle.

(Ord. No. 2-74, § 6.64(5), 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94; Ord. No. 2-2014, § 2, 5-14-14)

Sec. 134-2296. - Issuance of special parking permits upon application.

(a) Following the official designation of a controlled parking residential area, the finance department shall issue appropriate residential parking permits. Upon application a permit shall be issued only to the owner or operator of a motor vehicle who resides in the controlled parking residential area in which he resides.

(b) The application for a permit shall contain the name of such owner or operator of the motor vehicle; residential address; and the motor vehicle's make, model and registration number. The motor vehicle's registration may, at the discretion of the finance department, be required to be presented at the time of making the application in order to verify the contents thereof. If the vehicle is registered at an address other than the local residence, the applicant shall provide other sufficient proof, acceptable to the finance department, showing residency within the controlled residential parking area. The permit shall be valid for a calendar year, as defined in section 134-2292, and shall be renewed for each successive calendar year. A fee, as determined by resolution of the town council shall be charged for the annual permit and shall be payable at the finance department. After the initial permit has been issued, any renewal shall be affixed to the vehicle no later than January 15 of the applicable current year.

(c) *Visitor/service permits.* In addition to the decals issued pursuant to section 134-2295(b) above, upon application by owner, owner may be issued visitor/service permits, which permits may be used by such owner for the sole purpose of providing parking on a temporary basis to service vehicles which are conducting work at such owner's premises or for visitors of such owner's residence. The permits shall be used only for the period of time during which business is to be conducted by the service vehicles or for the duration of stay of a visitor to the residence for which the permit is issued. No more than a total of eight permits, including decals and visitor/service permits, shall be issued for each property.

The application for a visitor/service permit or permits shall be filed by such owner. The permit or permits shall be valid for a calendar year as defined in section 134-2292 and may be renewed each successive calendar year. A fee, as determined by resolution of the town council shall be charged for each visitor/service permit and shall be payable at the finance department. These permits shall not be affixed to the vehicle, but shall be placed in a clearly visible place on the inside of the visitor's or service vehicle observable through the front windshield of the vehicle. The permits shall be valid only for the period of time during which the service vehicle is conducting work at the premises or for the period of time a visitor is at the premises.

(d) Temporary group permits. A temporary group permit may be issued on application of any resident of the district for only one day and for no more than four hours on that day upon a showing by the applicant that during the hours for which the permits are to be issued his or her residence will be used for an assemblage of persons in a way consistent with its residential character and other provisions of law and that such visitors would not be able to park their vehicles without violating the law. However such permits for such an assemblage of persons shall only be issued upon a finding of the facts stated in this section and a further finding that the issuance of such permits will not impair public safety during the time of their validity, and in this connection such permits may be limited as to the streets or portions of streets on which they shall be valid. Finally, the number of such permits issued shall not at any time exceed 50 percent of the number of spaces available in the area in which they are valid.

The application for a temporary group permit shall be filed by the resident seeking the permit. A fee as determined by resolution of the town council shall be charged for each temporary group permit. The permits shall not be affixed to the vehicle, but shall be placed in a clearly visible place on the inside of the visitor's vehicle observable through the front windshield of the vehicle.

(Ord. No. 2-74, § 6.64(6), 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94; Ord. No. 9-08, § 1, 5-12-08; Ord. No. 26-10, § 29, 12-15-10; Ord. No. 1-2014, § 1, 5-14-14; Ord. No. 13-2019 , § 1, 4-9-19; Ord. No. 40-2019 , § 1, 1-14-20; Ord. No. 001-2022 , § 1, 3-8-22)

Sec. 134-2297. - Privileges and restrictions.

(a) The holder of a residential parking permit shall be permitted to stand or park a motor vehicle displaying the permit and operated by him in any designated residential controlled parking area during such times and places as the parking of motor vehicles therein is permitted. While a vehicle for which a residential parking permit has been issued is so parked, such permit shall be permanently affixed on the left rear bumper of the vehicle. A residential parking permit shall not guarantee or reserve to the holder of the permit a parking space within a designated controlled parking residential area.

(b) A residential parking permit shall not authorize the holder thereof to stand or park a motor

vehicle in such places or during such times as the stopping, standing or parking a motor vehicle is prohibited or set aside for specified types of vehicles, nor shall it exempt the holder from the observance of any traffic regulation within the controlled parking residential area.

(c) No person other than the permittee named thereon shall use the residential parking permit or display it on a vehicle operated or parked, and any such use or display by a person other than the permittee shall constitute a violation of this division by the permittee and by the person who so uses or displays such parking permit.

(d) Any permit issued hereunder is nontransferable to another person or another vehicle.

(Ord. No. 2-74, § 6.64(7), 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94)

Sec. 134-2298. - Unlawful acts.

Under this division, it shall be unlawful for any person to:

(1) Represent that he is entitled to a permit under this division when he is not so entitled;

(2) To furnish any false information in an application to the finance department to obtain a residential parking permit;

(3) Fail to surrender a permit to which he is no longer entitled; or

(4) Park a vehicle displaying such a permit at any time when the holder of such permit is not entitled to hold it.

(5) Park a vehicle without a properly displayed and valid residential parking permit issued pursuant to this division.

(6) Park a vehicle displaying a counterfeit residential parking permit.

(7) Modify or alter in any way a current or previously issued residential parking permit.

(8) Give to another person or sale to another person a residential parking permit. Temporarily providing a visitor permit to a person legally entitled to use such under this division shall not be construed as being unlawful.

(9) Provide a residential parking permit to any person or vehicle not legally entitled to possess or display such permit.

(Ord. No. 2-74, § 6.64(7)d, 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94; Ord. No. 9-08, § 2, 5-12-08; Ord. No. 3-2014, § 1, 5-14-14)

Editor's note— Ord. No. 3-2014, § 1, adopted May 14, 2014, changed the title of § 134-2298 from "False representation" to "Unlawful acts."

Sec. 134-2299. - Revocation.

The finance department is authorized to revoke the residential parking permit of any permittee found to be in violation of this division and, upon written notification thereof, the permittee shall surrender such permit to the finance department. Failure, when so requested, to surrender a residential parking permit so revoked shall constitute a violation of this division.

(Ord. No. 2-74, § 6.64(7)e, 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94; Ord. No. 9-08, § 3, 5-12-08)

Sec. 134-2300. - Reserved.

Editor's note— Ord. No. 9-08, § 4, adopted May 12, 2008, repealed § 134-2300 in its entirety, which pertained to temporary visitor permits, and derived from Ord. No. 2-74, § 6.64(7)g, adopted March 26, 1974; Ord. No. 1-88, § 3, adopted February 8, 1988, and Ord. No. 1-94, § 4(e), adopted February 7, 1994.

Sec. 134-2301. - Penalties.

Any person illegally parked pursuant to this division shall be fined in the manner provided for illegal parking and his/her vehicle may be towed and stored at his/her expense.

(Ord. No. 2-74, § 6.64(8), 3-26-74; Ord. No. 1-88, § 3, 2-8-88; Ord. No. 1-94, § 4(e), 2-7-94; Ord. No. 3-2014, § 2, 5-14-14)

Sec. 134-2302. - Revocation of decal/permit.

(a) The public safety director or his/her designee is authorized to revoke the residential parking area decal/permits of any decal/permit holder based upon evidence that the decal/permit holder has violated the provisions of this article. The holder shall be served notice by certified mail or hand delivery of the proposed revocation and, upon request, shall have an opportunity to present to the town council evidence as to why the decal/permit should not be revoked. The decal/permit holder must request such a hearing in writing and pay an appeal fee set by resolution of the town council within ten days after the notice of proposed revocation is delivered or mailed. If the town council finds in favor of the decal/permit holder, the appeal fee shall be refunded. The holder of revoked decal/permits must return the decal/permits to the town manager or his/her designee and shall not be allowed to reapply for another decal/permit for one year from the date of revocation.

(b) Revocation under subsection (a) is in addition to any other available remedy provided by this Code for violations of this article.

(Ord. No. 3-2014, § 3, 5-14-14)

Secs. 134-2303—134-2325. - Reserved.

DIVISION 3. - RESIDENTIAL DISTRICTS ADJACENT TO COMMERCIAL DISTRICTS

Sec. 134-2326. - Restrictions on parking.

Whenever the town manager or his designee, which may include the building official and the chief of police or their subordinates, shall determine that the streets of a particular district or discrete portion of the district in which residential uses are permitted and commercial uses are not permitted are being used for parking by the operators of vehicles while the operators of those vehicles are using districts in which commercial uses are permitted and the average number of vehicles parking in such a manner is in excess of 25 percent of the number of parking spaces on such streets and the total number of spaces actually occupied by any vehicles exceeds 75 percent of the number of spaces on such streets on the weekdays of any month, as disclosed by an engineering study, the town manager or his designee shall prohibit parking during the hours when such use has been found on these streets of those districts or portions of districts found by the study or survey to have been so affected. In such cases the town manager shall cause appropriate signs giving notice of the prohibition to be posted on those streets or portions of those streets restricting all parking, except parking by the holders of permits, to be granted only under the conditions in this division.

(Ord. No. 2-74, § 6.63(1), 3-26-74; Ord. No. 6-78, § 1, 3-31-78; Ord. No. 6-81, § 5(b), 3-31-81; Ord. No. 7-82, § 5(e), 3-31-82; Ord. No. 1-89, § 4(g), 2-6-89)

Sec. 134-2327. - Issuance.

Under this division, parking permits may be granted to persons as follows:

(1) *Resident permits.* To persons who are residents of any particular area in which parking is so restricted, to be limited to that particular area in which parking is so restricted for every vehicle owned by those persons.

(2) *Visitor/service permits.* In addition to the Resident permits provided under (1) above, upon application by owner, owner may be issued visitor/service permits, which permits may be used by such owner for the sole purpose of providing parking on a temporary basis to service vehicles which are conducting work at such owner's premises or for visitors of such owner's residence. These permits shall be used only for the period of time during which business is to be conducted by the service vehicles or for the duration of stay of a visitor to the residence for which the permit is issued. No more than a total of eight permits, including decals and visitor/service permits, shall be issued for each property.

The application for a visitor/service permit or permits shall be filed by such owner. A fee is hereby authorized for issuance of said permit payable to the finance department for each visitor/service permit. The amount of the fee shall be established by resolution of the town council and may be amended from time to time by resolution of the town council. These permits shall not be affixed to the vehicle, but shall be placed in a clearly visible place on the inside of the visitor's or service vehicle observable through the front windshield of the vehicle. The permits shall be valid only for the period of time during which the service vehicle is conducting work at the premises or for the period of time a visitor is at the premises.

(3) *Temporary group permits.* To residents as provided in section 134-2328.

(4) *Adjacent resident permits.* To persons who are residential users in a commercially zoned area immediately adjacent and contiguous to the residential area in which parking is restricted, to be limited to that particular area in which parking is so restricted, for not more than two vehicles owned by that person and upon proof shown that on-site parking is not available to that person on the property in which he resides within the commercially zoned area.

(Ord. No. 2-74, § 6.63(1)a—c, f, 3-26-74; Ord. No. 6-78, § 1, 3-31-78; Ord. No. 6-81, § 5(b), 3-31-81; Ord. No. 7-82, § 5(e), 3-31-82; Ord. No. 1-89, § 4(g), 2-6-89; Ord. No. 16-09, § 12, 11-12-09; Ord. No. 16-2016 , § 9, 12-14-16; Ord. No. 13-2019 , § 1, 4-9-19; Ord. No. 40-2019 , § 1, 1-14-20)

Sec. 134-2328. - Temporary group permits.

Under this division, on application of any resident of the district, permits, to be valid for only one day and for no more than four hours on that day, may be issued upon a showing by the applicant that during the hours for which the permits are to be issued his residence will be used for an assemblage of persons in a way consistent with its residential character and other provisions of law, and that such visitors would not be able to park their vehicles without violating the law. However, such permits for such an assemblage of persons shall only be issued upon a finding of the facts stated in this section and a further finding that the issuance of such permits will not impair public safety during the time of their validity, and in this connection such permits may be limited as to the streets or portions of streets on which they shall be valid. Finally, the number of such permits issued shall not at any time exceed 50 percent of the number of spaces available in the area in which they are valid.

The application for a temporary group permit shall be filed by the resident seeking the permit. A fee as determined by resolution of the town council shall be charged for each temporary group permit. The permits shall not be affixed to the vehicle, but shall be placed in a clearly visible place on the inside of the visitor's vehicle observable through the front windshield of the vehicle.

(Ord. No. 2-74, § 6.63(1)e, 3-26-74; Ord. No. 6-78, § 1, 3-31-78; Ord. No. 6-81, § 5(b), 3-31-81; Ord. No. 7-82, § 5(e), 3-31-82; Ord. No. 1-89, § 4(g), 2-6-89; Ord. No. 1-2014, § 2, 5-14-14)

Sec. 134-2329. - Fees.

(a) *Annual parking permit fees.* An annual fee is hereby authorized for issuance of said permit, payable at the town finance department, for each annual permit issued under this division. The amount of the annual fee shall be established by resolution of the town council and may be amended from time to time by resolution of the town council.

(b) *Visitor/service permits.* An annual fee is hereby authorized for issuance of said permit, payable to the finance department each visitor/service permit. The amount of the annual fee shall be established by resolution of the town council and may be amended from time to time by resolution of the town council.

(Ord. No. 2-74, § 6.63(1)g, h, 3-26-74; Ord. No. 6-78, § 1, 3-31-78; Ord. No. 6-81, § 5(b), 3-31-81; Ord. No. 7-82, § 5(e), 3-31-82; Ord. No. 1-89, § 4(g), 2-6-89; Ord. No. 16-09, § 13, 11-12-09; Ord. No. 26-10, § 30, 12-15-10)

Sec. 134-2330. - Issuance criteria; surrender on termination of conditions.

All permits issued under this division shall be based on satisfactory evidence that the applicant fulfills all the required conditions for such permit. Whenever the required conditions no longer exist, a person holding a permit issued under subsection 134-2327(1) or (3) shall surrender it to the town manager or his authorized representative.

(Ord. No. 2-74, § 6.63(2), 3-26-74; Ord. No. 6-78, § 1, 3-31-78; Ord. No. 6-81, § 5(b), 3-31-81; Ord. No. 7-82, § 5(e), 3-31-82; Ord. No. 1-89, § 4(g), 2-6-89)

Sec. 134-2331. - Term.

No parking permit issued under this division shall be valid for more than one year but may be renewed upon expiration, provided the condition for issuance exists. The special limited permits issued under such sections 134-2327(2) and 134-2328, being limited on their face to a short period of time, are not required to be surrendered upon expiration but may be turned in by the holder.

(Ord. No. 2-74, § 6.63(2), 3-26-74; Ord. No. 6-78, § 1, 3-31-78; Ord. No. 6-81, § 5(b), 3-31-81; Ord. No. 7-82, § 5(e), 3-31-82; Ord. No. 1-89, § 4(g), 2-6-89)

Sec. 134-2332. - Exceptions.

(a) *Service vehicles.* The parking limitation or prohibition of this division shall not apply to service or delivery vehicles being used to provide services or to make deliveries to dwellings in the affected district or area.

(b) *Metered parking areas.* Wherever metered parking is in effect in any portion of a district that becomes subject to the restrictions of this division, the parking spaces controlled by meters may

be excepted from this division so long as the control by meters continues.

(Ord. No. 2-74, § 6.63(1)d, (4), 3-26-74; Ord. No. 6-78, § 1, 3-31-78; Ord. No. 6-81, § 5(b), 3-31-81; Ord. No. 7-82, § 5(e), 3-31-82; Ord. No. 1-89, § 4(g), 2-6-89)

Sec. 134-2333. - Signs.

The signs placed in parking areas subject to this division shall be of such character as to inform readily an ordinarily observant person of the existence of the rules and regulations imposing the restrictions of this division. It shall be unlawful for any person to violate such rules or regulations.

(Ord. No. 2-74, § 6.63(3), 3-26-74; Ord. No. 6-78, § 1, 3-31-78; Ord. No. 6-81, § 5(b), 3-31-81; Ord. No. 7-82, § 5(e), 3-31-82; Ord. No. 1-89, § 4(g), 2-6-89)

Sec. 134-2334. - Unlawful acts.

Under this division, it shall be unlawful for any person to:

(1) Represent that he is entitled to a permit under this division when he is not so entitled;

(2) To furnish any false information in an application to the finance department to obtain a residential parking permit;

(3) Fail to surrender a permit to which he is no longer entitled; or

(4) Park a vehicle displaying such a permit at any time when the holder of such permit is not entitled to hold it.

(5) Park a vehicle without a properly displayed and valid residential parking permit issued pursuant to this division.

(6) Park a vehicle displaying a counterfeit residential parking permit.

(7) Modify or alter in any way a current or previously issued residential parking permit.

(8) Give to another person or sale to another person a residential parking permit. Temporarily providing a visitor permit to a person legally entitled to use such under this division shall not be construed as being unlawful.

(9) Provide a residential parking permit to any person or vehicle not legally entitled to possess or display such permit.

(Ord. No. 2-74, § 6.63(2), 3-26-74; Ord. No. 6-78, § 1, 3-31-78; Ord. No. 6-81, § 5(b), 3-31-81; Ord. No. 7-82, § 5(e), 3-31-82; Ord. No. 1-89, § 4(g), 2-6-89; Ord. No. 3-2014, § 4, 5-14-14)

Sec. 134-2335. - Penalties.

Any person illegally parked pursuant to this division shall be fined in the manner provided for illegal parking and his/her vehicle may be towed and stored at his/her expense.

(Ord. No. 3-2014, § 5, 5-14-14)

Sec. 134-2336. - Revocation of decal/permit.

(a) The public safety director or his/her designee is authorized to revoke the residential parking area decal/permits of any decal/permit holder based upon evidence that the decal/permit holder has violated the provisions of this article. The holder shall be served notice by certified mail or hand delivery of the proposed revocation and, upon request, shall have an opportunity to present to the town council evidence as to why the decal/permit should not be revoked. The decal/permit holder must request such a hearing in writing and pay an appeal fee set by resolution of the town council within ten days after the notice of proposed revocation is delivered or mailed. If the town council finds in favor of the decal/permit holder, the appeal fee shall be refunded. The holder of revoked decal/permits must return the decal/permits to the town manager or his/her designee and shall not be allowed to reapply for another decal/permit for one year from the date of revocation.

(b) Revocation under subsection (a) is in addition to any other available remedy provided by this Code for violations of this article.

(Ord. No. 3-2014, § 6, 5-14-14)

Secs. 134-2337—134-2370. - Reserved.

TOWN OF JUNO BEACH, FLORIDA
TOWN COUNCIL

Public Hearing/Regular Meeting
May 16, 1990 5:30 p.m.
Juno Beach Municipal Facility

PRESENT: Bill Kollmer, Mayor
Jim Lyons, Vice Mayor
Roxanne Manning, Councilmember
Dan Corbett, Councilmember
Charles Burns, Councilmember

ABSENT: Gail F. Nelson, Town Manager

ALSO PRESENT: Preston Mighdoll, Town Attorney
Jack Horniman, Planning Consultant
Susan Guffey, Town Planner
Karen B. Duchane, Town Clerk

PUBLIC HEARING MINUTES

CALL TO ORDER: 5:35 p.m.

PLEDGE OF ALLEGIANCE

BEACHFRONT AT JUNO-REQUEST FOR DENSITY BONUS

The purpose of the public hearing was to consider a request from Shepherd, Legan, Aldrian, Ltd. agent for Eastern Harbor Associates, for a Special Exception in the Residential Multiple Family High Density (RH) Zoning District to allow a density bonus of up to two (2) dwelling units per acre provided that a minimum six (6) foot wide beach access easement is dedicated to the Town for public use

A. Presentation by developer

Joe Legan, Architect for Shepherd, Legan, Aldrian, reviewed the site plan and the request for a density bonus. He stated they were requesting a bonus of 5 units with the dedication of a beach access on the south side of the property.

B. Presentation by Town Planner

Town Planner, Susan Guffey, reviewed the criteria for the Special Exception and the stated that the project met the requirements as outlined in the Comprehensive Zoning Ordinance. Ms. Guffey also reviewed the recommendation from the Planning and Zoning Board and the conditions attached to their recommendation.

C. Comments in opposition

Sheri Hyman - representing Admirals Cove - concerned for the value of their property which is directly north of the proposed development and the marketability of the proposed project.

Joanna Remay - Juno Beach resident

D. Comments in favor

Richard Salter - 400 Neptune Road
Dave Lockwood - Apollo Drive
John Buchanan - Sunset Way
Darlene Nowicien - Apollo Drive

ADJOURN PUBLIC HEARING: 6:05 p.m.

REGULAR MEETING MINUTES

CALL TO ORDER: 6:05 p.m.

THE FOLLOWING ITEMS WERE PLACED ON THE CONSENT AGENDA

MINUTES

Move to approve the following sets of minutes as submitted.

April 18, 1990 - Regular Meeting
May 9, 1990 - Workshop Meeting

RESOLUTION 90 - 11

Move to approve Resolution 90 - 11: "A RESOLUTION OF THE TOWN COUNCIL OF JUNO BEACH, FLORIDA, SUPPORTING THE INSTALLATION OF A VEHICLE ACTIVATED TRAFFIC LIGHT AT THE INTERSECTION OF DONALD ROSS ROAD AND SEA OATS DRIVE."

RESOLUTION 90 - 12

Move to approve Resolution 90 - 12: "A RESOLUTION OF THE TOWN COUNCIL OF JUNO BEACH, FLORIDA, DECLARING THE ACQUISITION OF NEPTUNE DRIVE, A PRIVATE ROAD FOR PUBLIC PURPOSES TO BE A PUBLIC NECESSITY; AUTHORIZING EMPLOYMENT OF APPRAISES; AND AUTHORIZING THE FILING OF EMINENT DOMAIN PROCEEDINGS."

MOTION

Councilmembers Manning/Burns moved to approve the items on the consent agenda.

The motion passed unanimously.

********END CONSENT AGENDA********

BEACHFRONT AT JUNO - SPECIAL EXCEPTION & SITE PLAN

SPECIAL EXCEPTION

Mayor Kollmer explained that a public hearing was held and comments from the public have been heard. He stated that now it was time for the council to discuss the location of the beach access and the appropriateness of the use for the site. Town Attorney, Preston Mighdoll, stated two motions would be required. One for the special exception use and the other for the site plan. Town Planner, Susan Guffey, said the date on the proposed motion should be change from April 16, 1990 to May 2, 1990. Councilmember Manning expressed concern for traffic flow and had questions concerning the landscaping along the sidewalk. Councilmember Burns also expressed concern for traffic flow and the marketability of the project. Vice Mayor Lyons stated he was disappointed with the developer for proposing a highrise building. He said he was not in favor of the project, but admitted that it met the conditions for approval; therefore, he would vote for the project. Mayor Kollmer agreed with Mr. Lyons. Planning consultant, Jack Horniman requested adding a condition regarding vesting for traffic performance standards. Mike Fesser, attorney for the developer, state that when the project goes for permitting a traffic study will be done at that time.

MOTION

Councilmembers Corbett/Lyons moved to approve the Planning and Zoning Board recommendation for approval of the Special Exception Request with the following conditions:

1. A ten (10) foot wide beach access easement on the south property line be dedicated to the Town for public use and maintained by the property owner.

2. A six (6) foot wide concrete walkway with brick paver accents built to Town standards be provided along the entire east-west length of the beach access easement.

3. A four (4) foot wide landscape strip and irrigation be provided on the southside of the beach walkway within the 10 foot easement.

4. A six (6) foot wide dunewalkover with gazebo built to Town standards be provided in the public access easement to the beach.

5. Lighting shall be provided along the beach accessway, per Town approval; however, no lighting shall be placed on the dunewalkover.

6. All of the improvements described above in items 1, 2, 3, 4, 5 shall be appropriately bonded in an amount acceptable to the Town Manager and the bond shall be due within ninety (90) days from the date of approval of the Special Exception and prior to the issuance of any building permits.

7. If building permits are not secured within two (2) years from the date of the approval of the Special Exception, then said project's approval shall become null and void.

The motion passed 3 to 2 with councilmembers Burns/Manning opposed.

SITE PLAN

Town Planner, Susan Guffey, reviewed the recommendation and conditions for the site plan approval. Sheri Hyman, representing Ocean Lodge asked the council to postpone approval of the site plan till all questions are answered regarding the traffic studies and the coastal construction line.

MOTION

Councilmember Burns/Manning moved to table approval of the site plan for thirty (30) days in order to answer questions concerning the traffic study, the impact the project will have on Mars Way and U.S. Highway 1 and the other concerns by the representative from Ocean Lodge.

Town Attorney, Preston Mighdoll, expressed concern regarding the motion since staff reviewed the project and found it in compliance with town standards.

The motion failed 2 to 3 with councilmembers Lyons, Corbett and Kollmer opposed.

MOTION

Councilmember Corbett/Lyons moved to approve the Planning and Zoning Boards recommendation for approval of the Site Plan submitted to and received by the Town on March 12, 1990 with revisions on March 26, 1990, April 9, 1990 and May 2, 1990 with the following conditions:

1. Review and approval of utility and engineering plans by Town Utilities Director and Town Engineer.

2. A six (6) foot wide concrete pedestrian walkway with brick paver accents built to Town standards shall be provided along Ocean Drive, extending the length of the property.

3. Trees shall be planted along Ocean Drive and the beach access easement, extending the length of the property, per Town standards to minimize obstruction of view to ocean from Ocean Drive. Along Ocean Drive trees shall provide shade along the walkway.

4. Sod shall be planted within Right-of-Way per Town standards.

5. Review and approval of Homeowner Association Documents by Town Attorney. Assurance that the facilities and improvements within 10 foot beach access easement will be maintained in a timely manner and in perpetuity. Assurance that cabanas shall be owned or leased only by residents within the development. Assurance that these provisions within the Homeowners documents shall not be altered without prior approval from the Juno Beach Town Council.

6. The dune walkover within the 50 foot setback from the Coastal Construction Control Line (CCCL) shall be subject to approval under Section 5.120 Protection of Coastal Ridge of the Zoning Code. Dune walkover shall be accessible to the handicapped down the beach.

The motion passed 3 to 2 with councilmembers Manning/Burns opposed.

ORDINANCE ON SECOND AND FINAL READING

A. ORDINANCE NO. 389

Town Attorney, Preston Mighdoll, read Ordinance No. 389 by title only on second and final reading: "AN ORDINANCE

OF THE TOWN OF JUNO BEACH, PALM BEACH COUNTY, FLORIDA, AMENDING THE TOWN'S COMPREHENSIVE ZONING ORDINANCE AT CHAPTER 2.00, DEFINITIONS, AND AT CHAPTER 5.00, SUPPLEMENTARY REGULATIONS, SECTION 5.60, SIGNS; PROVIDING A SEVERANCE CLAUSE; PROVIDING THAT ORDINANCES IN CONFLICT SHALL BE REPEALED; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE."

MOTION

Councilmembers Burns/Corbett moved to approve Ordinance No. 389 on second and final reading.

The motion passed unanimously.

B. ORDINANCE NO. 390

Town Attorney, Preston Mighdoll, read Ordinance No. 390 by title only on second and final reading: "AN ORDINANCE OF THE TOWN OF JUNO BEACH PALM BEACH COUNTY, FLORIDA, AMENDING THE TOWN'S COMPREHENSIVE ZONING ORDINANCE AT CHAPTER 5.00 SUPPLEMENTARY REGULATIONS, BY THE ADDITION OF SECTION 5.150, SPECIAL EVENTS (GRAND OPENINGS, SIDEWALK SALES, ETC.); PROVIDING A SEVERANCE CLAUSE; PROVIDING THAT ORDINANCES IN CONFLICT SHALL BE REPEALED; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE."

MOTION

Councilmembers Lyons/Burns moved to approve Ordinance No. 390 on second and final reading.

The motion passed unanimously.

C. ORDINANCE NO. 391

Town Attorney, Preston Mighdoll, read Ordinance No. 391 by title only on second and final reading: "AN ORDINANCE OF THE TOWN OF JUNO BEACH, PALM BEACH COUNTY, FLORIDA AMENDING CHAPTER 4, BUILDINGS, OF THE TOWN OF JUNO BEACH CODE; PROVIDING A SEVERANCE CLAUSE; PROVIDING THAT ORDINANCES IN CONFLICT SHALL BE REPEALED; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE."

MOTION

Councilmembers Manning/Burns moved to approve Ordinance No. 391 on second and final reading.

The motion passed unanimously.

D. ORDINANCE NO. 392

Town Attorney, Preston Mighdoll, read Ordinance No. 392 by title only on second and final reading: "AN ORDINANCE OF THE TOWN OF JUNO BEACH, PALM BEACH COUNTY, FLORIDA, AMENDING THE TOWN'S COMPREHENSIVE ZONING ORDINANCE AT CHAPTER 5.00, SUPPLEMENTARY REGULATIONS, SECTION 5.70, LANDSCAPE SUBMISSION AND APPROVAL AND SECTION 5.75, INSTALLATION, MAINTENANCE AND PLANT MATERIAL STANDARDS; PROVIDING A SEVERANCE CLAUSE; PROVIDING THAT ORDINANCES IN CONFLICT SHALL BE REPEALED; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE."

MOTION

Councilmembers Burns/Corbett moved to approve Ordinance No. 392 on second and final reading.

The motion passed unanimously.

E. ORDINANCE NO. 393

Town Attorney, Preston Mighdoll, read Ordinance No. 393 by title only on second and final reading: "AN ORDINANCE OF THE TOWN OF JUNO BEACH, PALM BEACH COUNTY, FLORIDA, AMENDING THE TOWN'S COMPREHENSIVE ZONING ORDINANCE AT CHAPTER 2.00, DEFINITIONS; CHAPTER 4.00, DEFINITIONS AND ESTABLISHMENT OF ZONING DISTRICTS, AT SECTIONS 4.13, 4.23, 4.33, 4.43, 4.53, AND 4.143 BY ADDING LIMITED HOME OCCUPATIONS AS AN ACCESSORY USE; AMENDING CHAPTER 5.00, SUPPLEMENTARY REGULATIONS, AT SECTION 5.18 AND BY ADDING SECTION 5.160, LIMITED HOME OCCUPATIONS; PROVIDING A SEVERANCE CLAUSE; PROVIDING THAT ORDINANCES IN CONFLICT SHALL BE REPEALED; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE."

MOTION

Councilmembers Lyons/Burns moved to approve Ordinance No. 393 on second and final reading.

The motion passed unanimously.

F. ORDINANCE NO. 394

Town Attorney, Preston Mighdoll, read Ordinance No. 394 by title only on second and final reading: "AN ORDINANCE

OF THE TOWN OF JUNO BEACH, PALM BEACH COUNTY, FLORIDA, AMENDING CHAPTER 9, OFFENSES-MISCELLANEOUS, BY THE ADDITION OF SECTION 9-10, TRESPASS AND LODGING; PROVIDING A SEVERANCE CLAUSE; PROVIDING THAT ORDINANCES IN CONFLICT SHALL BE REPEALED; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE."

MOTION

Councilmembers Lyons/Burns moved to approve Ordinance No. 394 on second and final reading.

The motion passed unanimously.

COMMENTS FROM AUDIENCE

John Williamson - 911 Ocean Drive - questions regarding Ward buildings on Ocean Drive. Stated he wanted the town to move forward with the removal of both buildings.

Roy Wubker - Saturn Lane - questions regarding access to Saturn Lane from Loggerhead Park. Mayor Kollmer instructed Susan Guffey to call Bill Wilshire of the Palm Beach County Parks and Recreation Department.

Dave Lockwood - Apollo Drive - questions regarding towns' plans for the beach access on Mercury Road.

COMMENTS FROM COUNCIL

Councilmember Manning asked Ms. Guffey to have the Planning and Zoning Board review the Special Exception criteria.

COMMENTS FROM STAFF

Town Attorney, Preston Mighdoll, and Planning Consultant, Jack Horniman, reviewed the status of the Town's Comprehensive Plan. They stated that DCA will be supplying language for the mangrove areas. Mr. Mighdoll reviewed the letter from DCA and Mr. Horniman reviewed the sections of the plan DCA wants the town to delete.

ADJOURNMENT: 7:50 p.m.

MAYOR

ATTEST:
Karen L. Duchaine
TOWN CLERK

A recording was made of the foregoing and is on file with the Town Clerk.

FINDINGS OF FACT AS TO SPECIAL EXCEPTION APPLICATION FOR BEACHFRONT AT JUNO LOCATED AT 530 Ocean Drive with the Ocean Lodge to the North and Brigadoon Condominium to the South

A Public Hearing was held on May 16, 1990 before the Town Council of the Town of Juno Beach on the Applicant's request for a special exception to allow a density bonus of up to two (2) dwelling units per acre providing that a minimum of a six (6) foot wide beach access easement is dedicated to the Town for public use under sections 4.54 (4) and 10.00 of the Juno Beach testimony presented at the public hearing the Town Council has made the following findings of fact and imposed the following conditions:

1. The granting of the special exception will not adversely effect the public interest.

2. There is compliance with the specific rules governing the special exception of the type applied for.

3. The proposed development, with the conditions and safeguards set forth herein, will be generally compatible with adjacent properties and other property in the district.

4. Satisfactory provisions and arrangements have been made concerning the following where applicable:

   a. Ingress and Egress to the property and structures, with particular reference to automotive and pedestrian safety and convenience, traffic flow, and access in case of fire or catastrophe.

   b. Off street parking and loading areas, refuse and service areas, with particular attention to item a above, and to affects on surrounding property.

   c. Screening and buffering, type, dimensions and locations.

   d. Signs, if any, and proposed lighting.

   e. Required yard and other open space.

5. A ten (10) foot wide beach access easement on the south property line be dedicated to the Town for public use and maintained by the owner.

6. A six (6) foot wide concrete walkway with brick paver accents built to Town standards be provided along the entire east-west length of the beach access easement.

7. A four (4) foot wide landscape strip and irrigation be provided on the southside of the beach walkway within the 10 foot easement.

8. A six (6) foot wide dunewalkover with gazebo built to Town standards be provided in the public access easement to the beach.

9. Lighting shall be provided along the beach accessway, per Town approval; however, no lighting shall be placed on the dune walkover.

10. All of the improvements described above in items 5, 6, 7, 8, and 9 shall be appropriately bonded in an amount acceptable to the Town Manager and the bond shall be due within ninety (90) days from the date of approval of the Special Exception and prior to the issuance of any building permits.

11. If building permits are not secured within two (2) years form the date of the approval of the Special Exception, then said project's approval shall become null and void.

Adopted this 16th day of May, 1990, by the Town Council of Juno Beach, Florida.

MAYOR WILLIAM KOLLMER

Attest:

Karen B. Duchane
Town Clerk

MEMORANDUM

TO: Town Council; Joseph F. Lo Bello, Town Manager

FROM: Mayor DD Halpern

DATE: October 19, 2022

SUBJECT: Discussion on Creating Metered and Resident Park and Beach Parking, and Creating Mars Way Resident Parking

BACKGROUND

While speaking to Juno Beach residents during my 2021 election campaign, many people expressed their frustration with not being able to find parking at Kagen Park, particularly during the snowbird season.

In June 2021, I began researching the process for creating free resident-only parking at Kagen Park from approximately November 15 - April 15.

To start researching this topic I spoke with Town Manager Lo Bello who stated that maintaining public access at Kagen Park is a condition of the grants the town has received for playground equipment and other amenities at the park. Thus, if the town were to *restrict public access*, we would be required to repay the grant(s). The public funds through which the grants are created must be used for the public good.

At a 2021 Town Council meeting, then Vice Mayor Jim Lyons suggested creating resident-only parking in the Town Center parking lot. He stated that people were parking there to go to the beach or walk around Pelican Lake, which resulted in a lack of parking for Town Staff and others needing to do business at Town Center. It has been observed that when Mercury Road beach parking spaces are full, people will park in the Town Center parking lot.

The residents of Mars Way have requested resident-only parking due to traffic concerns.

In the months since, I have had ongoing communications with Palm Beach County Environmental Management staff who are in charge of managing the County and Town beach nourishment funding calculations. Receipt of beach nourishment/restoration is contingent on our beaches having public access, as it is public funds that are used to fund the restoration projects.

My email communications with the County are attached as backup and further explain what parking conditions are allowable.

Note: These parking issues are primarily a problem during the winter months, however, there are times throughout the year when beach parking is in high demand and at full capacity at Mercury Road, Kagen Park, and Town Center.

DISCUSSION

1) Council to consider making separate motions to create paid metered parking at Kagen Park and Mercury Road.
2) Council to consider providing Juno Beach residents a free resident parking pass/sticker for "ALL TOWN PARKS/BEACHES."

3) Council to consider what criteria will be considered as proof of residency:
A) Proof of property ownership, or B) proof of homestead?

The four areas being addressed are - from south to north:

1) Kagen Park

GOAL: Resident parking and/or metered parking: While residents have asked for exclusive parking privileges, due to grants received this location may not be a good candidate for metered parking.

Beach Funding Status: Metered parking would not affect funding eligibility since the spaces remain open to the public at large.

Amenity Funding Criteria: This site has received state grants that would need to be repaid if parking were to be restricted to resident-only. Need to evaluate grant criteria to create metered parking.

2) Town Center

GOAL: Designate 5-6 parking spaces as "Town Business Only," during business hours on Monday - Friday.

Beach Funding Status: Confirmed with FDEP's BFMA program staff that a reduction in 5-6 public parking spaces for use by Town staff will not impact our ranking score in the funding process.

Amenity Funding Criteria: TBD by Town Staff.

3) Mercury Road

GOAL: Discuss metered public parking and free resident parking pass

Beach Funding Status from PBC: As long as the spaces remain available to the public, installation of meters would not conflict with funding eligibility. We have this same scenario at a number of other publicly eligible projects in Palm Beach, Boynton Beach, Delray Beach, and Boca Raton. As long as the spaces remain publicly accessible, metering with the option for Town resident passes shouldn't impact funding eligibility.

Amenity Funding Criteria: TBD by Town Staff

4) Mars Way

GOAL: Create resident-only parking.

Beach Funding Status from PBC: Mars Way isn't used in funding calculations because the Mercury Road and Loggerhead Park accesses provide enough shoreline coverage for 100% eligibility by State rule.

Town Amenity Funding Criteria: TBD by Town Staff

REQUEST FROM PBC:

If the Town does move forward with paid parking meters, I would ask that the County be permitted to park for free during our regular beach assessments as is typical at other municipalities with fee requirements.

Attachment(s):

1) Copy of Email Chain between Mayor Halpern and LMC President & CEO Andy DeHart dated October 7, 2022;
2) Copy of 2022 Florida Statutes Chapter 161;
3) Copy of FDEP's Chapter 62B-36 - Beach Management Funding Assistance Program; and
4) Copy of Email Chain between Mayor Halpern and PBC ERM Deputy Director Mike Stahl dated October 7, 2022.

ATTACHMENT #1

Item #1.

Gmail

Caitlin Copeland <ccopeland@juno-beach.fl.us>

BACKUP 1 - Parking and Nourishment Funding Juno Beach

1 message

DD Halpern <dd_halpern@yahoo.com> Fri, Oct 7, 2022 at 12:48 PM
Reply-To: DD Halpern <dd_halpern@yahoo.com>
To: Caitlin Copeland <ccopeland@juno-beach.fl.us>

Hi Caitlin,
I'd also like to add this item to the October 26 agenda.
Draft Memo attached, as well as two documents from ERM.

Please use this email chain as well. I have a second email chain as backup, that I'll send in a seprate email "Backup 2."

Thank you,
DD Halpern
Mayor, Town of Juno Beach

----- Forwarded Message -----
From: Andy Studt <astudt@pbcgov.org>
To: DD Halpern <dd_halpern@yahoo.com>
Sent: Monday, October 3, 2022 at 02:28:59 PM EDT
Subject: RE: Parking and Nourishment Funding Juno Beach

DD,

I received confirmation from the State that as long as the spaces remain publicly accessible, metering with the option for Town resident passes shouldn't impact funding eligibility. The State funding rule is attached for reference if needed.

Best Regards,

-Andy

From: Andy Studt
Sent: Monday, October 3, 2022 2:07 PM
To: 'DD Halpern' <dd_halpern@yahoo.com>
Subject: RE: Parking and Nourishment Funding Juno Beach

Good Afternoon DD,

Please see below responses as noted in red.

Hope you had a good weekend,

-Andy

Item #1.

From: DD Halpern <dd_halpern@yahoo.com>
Sent: Monday, October 3, 2022 10:30 AM
To: Andy Studt <AStudt@pbcgov.org>
Subject: Re: Parking and Nourishment Funding Juno Beach

Hi Andy,

This IS great news on both topics.

I agree that last year's beach nourisment had a significant positive impact in protecting our shores.

Regarding the parking/funding topic, I have two further questions:

1) Has Mars Way ever been used as one of the streets figured into the parking calculations? (Residents of that stree are asking that it be made resident-nly parking.)

Mars Way isn't used in funding calculations because the Mercury Road and Loggerhead Park accesses provide enough shoreline coverage for 100% eligibility by State rule.

2) Regarding Mercury Road (a Secondary Access on the Eligibility List):

Can the Town of Juno Beach create **paid-meter parking for the public**, in addition to a **free resident parking permit** - while still keeping the road as as a funding-eligible location?

As long as the spaces remain available to the public, installation of meters would not conflict with funding eligibility. We have this same scenario at a number of other publicly eligible projects in Palm Beach, Boynton Beach, Delray Beach, and Boca Raton. I'll follow up with our FDEP funding contact on any potential conflict with issuance of free resident parking permits, but I don't think it will impact eligibility so long as the spaces remain publicly available.

If the Town does move forward with paid parking meters, I would ask that the County be permitted to park for free during our regular beach assessments as is typical at other municipalities with fee requirements.

Thank you!

DD Halpern
Mayor, Town of Juno Beach

On Monday, September 26, 2022 at 04:35:54 PM EDT, Andy Studt <astudt@pbcgov.org> wrote:

Good Afternoon DD,

Good news on multiple fronts. We completed our pre-storm staff-level beach assessments this morning as a typical precautionary measure prior to potential storm impacts, and the Town's shoreline within the County Shore Protection Protect area remains in excellent condition following the recent FY2021 nourishment project (aerial photos attached).

I was also able to confirm with FDEP's BFMA program staff that a reduction in 5-6 public parking spaces for use by Town staff as described below will not impact our ranking score in the funding process. We strive to keep as much public accessibility available for residents and visitors to our beautiful beaches, and greatly

appreciate your coordination to ensure the Town's needs don't negatively impact the all-important fundi eligibility.

Best Regards,

-Andy

From: DD Halpern <dd_halpern@yahoo.com>
Sent: Monday, September 26, 2022 3:58 PM
To: Andy Studt <AStudt@pbcgov.org>
Subject: Re: Parking and Nourishment Funding Juno Beach

Hi Andy,

So what did you find out? Please let me know before close of business on September 28, as I'd like to report on this during our council meeting that afternoon.

Thank you,

DD Halpern
Mayor, Town of Juno Beach

561-972-1644

On Thursday, September 22, 2022 at 11:33:38 AM EDT, Andy Studt <astudt@pbcgov.org> wrote:

Good Morning DD,

I have a meeting scheduled with FDEP's Beach Management Funding Assistance Program staff (who actually process and rank our funding applications as exemplified in your attachment) this afternoon and should be able to nail down the parking situation with more clarity. I'll follow up with you tomorrow and let you know where we land. As previously described, the County understands and supports the Town's position here, we just want to make sure we're aware of any potential impacts to funding application ranking and availability.

Best Regards,

Andy Studt

Program Supervisor, Coastal Resources Management

Department of Environmental Resources Management

Palm Beach County

2300 North Jog Road, 4th Floor

West Palm Beach, FL 33411

(561) 233-2539

Item #1.

From: DD Halpern <dd_halpern@yahoo.com>
Sent: Wednesday, September 21, 2022 2:00 PM
To: Michael Stahl R. <MStahl@pbcgov.org>; Andy Studt <AStudt@pbcgov.org>
Subject: Parking and Nourishment Funding Juno Beach

Hi Mike/Andy,

I'd like to circle back on this issue of parking as it relates to counting toward Juno Beach's access to beach nourishment projects.

Attached is a document that one of our homeowners was able to find. It doesn't appear that our Town Center parking spaces contribute toward the funding formula count.

My goal is to get several (4-6) parking spaces at the Town Center designated as "Town Business Only," during business hours on Monday - Friday.

I believe we need this designation because during "snowbird season" beachgoers park in our town parking lot, making it sometimes impossible for our town staff to find parking after they return from lunch. It also prevents contractors, members of clubs and boards that use our library, and others who are doing business with the town from having easy access to parking.

Please let me know your thoughts on this.

Thank you,

DD Halpern
Mayor, Town of Juno Beach

561-972-1644

3 attachments

Chapter 161.pdf
473K

62B-36 (3).doc
111K

Beach Parking and Funding - Summary Memo October 2022.docx
193K

The 2022 Florida Statutes

Title XI
COUNTY ORGANIZATION AND INTERGOVERNMENTAL RELATIONS

Chapter 161
BEACH AND SHORE PRESERVATION

View Entire Chapter

CHAPTER 161
BEACH AND SHORE PRESERVATION

PART I
REGULATION OF CONSTRUCTION, RECONSTRUCTION, AND OTHER PHYSICAL ACTIVITY
(ss. 161.011-161.242)

PART II
BEACH AND SHORE PRESERVATION DISTRICTS
(ss. 161.25-161.45)

PART III
COASTAL ZONE PROTECTION
(ss. 161.52-161.58)

PART IV
OCEANS AND COASTAL RESOURCES ACT
(ss. 161.70-161.76)

PART I
REGULATION OF CONSTRUCTION, RECONSTRUCTION, AND OTHER PHYSICAL ACTIVITY

161.011 Short title.—Parts I and II of this chapter may be known and cited as the "Dennis L. Jones Beach and Shore Preservation Act."

History.—s. 1, ch. 65-408; s. 1, ch. 2012-65.

161.021 Definitions.—In construing these statutes, where the context does not clearly indicate otherwise, the word, phrase, or term:

(1) "Access" or "public access" as used in ss. 161.041, 161.052, and 161.053 means the public's right to laterally traverse the sandy beaches of this state where such access exists on or after July 1, 1987, or where the public has established an accessway through private lands to lands seaward of the mean high tide or water line by prescription, prescriptive easement, or any other legal means, development or construction shall not interfere with such right of public access unless a comparable alternative accessway is provided.

(2) "Beach and shore preservation," "erosion control, beach preservation and hurricane protection," "beach erosion control" and "erosion control" includes, but is not limited to, erosion control, hurricane protection, coastal flood control, shoreline and offshore rehabilitation, and regulation of work and activities likely to affect the physical condition of the beach or shore.

(3) "Beach nourishment" means the maintenance of a restored beach by the replacement of sand.

(4) "Beach restoration" means the placement of sand on an eroded beach for the purposes of

restoring it as a recreational beach and providing storm protection for upland properties.

(5) "Board of trustees" means the Board of Trustees of the Internal Improvement Trust Fund.

(6) "Coastal construction" includes any work or activity which is likely to have a material physical effect on existing coastal conditions or natural shore and inlet processes.

(7) "Department" means the Department of Environmental Protection.

(8) "Emergency" means any unusual incident resulting from natural or unnatural causes which endangers the health, safety, or resources of the residents of the state, including damages or erosion to any shoreline resulting from a hurricane, storm, or other such violent disturbance.

(9) "Inlet sediment bypassing" includes any transfer of sediment from an inlet or beach to another stretch of beach for the purpose of nourishment and beach erosion control.

(10) "Local government" means a county, municipality, community development district, or independent special taxing district.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 43, ch. 71-377; s. 1, ch. 78-257; s. 1, ch. 86-138; s. 11, ch. 87-97; s. 17, ch. 94-356; s. 2, ch. 2000-346; s. 1, ch. 2007-99.

161.031 Personnel and facilities.—The Department of Environmental Protection may call to its assistance temporarily, any engineer or other employee in any state agency or department or in the University of Florida or other educational institution financed wholly or in part by the state, for the purpose of devising the most effective and economical method of averting and preventing erosion, hurricane, and storm damages. These employees shall not receive additional compensation, except for actual necessary expenses incurred while working under the direction of the department.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 18, ch. 94-356; s. 4, ch. 2000-197.

161.041 Permits required.—

(1) If a person, firm, corporation, county, municipality, township, special district, or public agency desires to make any coastal construction or reconstruction or change of existing structures, or any construction or physical activity undertaken specifically for shore protection purposes, or other structures and physical activity including groins, jetties, moles, breakwaters, seawalls, revetments, artificial nourishment, inlet sediment bypassing, excavation or maintenance dredging of inlet channels, or other deposition or removal of beach material, or construction of other structures of a solid or highly impermeable design upon state sovereignty lands below the mean high-water line of any tidal water of the state, a coastal construction permit must be obtained from the department before the commencement of such work. The department may exempt interior tidal waters of the state from the permit requirements of this section.

(a) Except during construction, such development may not interfere with the public use of any area of a beach seaward of the mean high-water line unless the department determines that the interference is unavoidable for purposes of protecting the beach or an endangered upland structure. As a condition of granting permits under this section, the department may require the provision of alternative access if interference with public access along the beach is unavoidable. The width of such alternate access may not be required to exceed the width of the access that will be obstructed as a result of the permit being granted.

(b) Except for the deepwater ports identified in s. 403.021(9)(b), the department shall not issue a permit for the construction of a coastal inlet jetty or the excavation or maintenance of such an inlet if the activity authorized by the permit will have a significant adverse impact on the sandy beaches of this state without a mitigation program approved by the department. In evaluating the mitigation program, the department shall consider the benefits of the long-term sand management plan of the permittee and the overall public benefits of the inlet activity.

(2) The department may authorize an excavation or erection of a structure at any coastal location upon receipt of an application from a property or riparian owner and upon consideration of facts and circumstances, including:

(a) Adequate engineering data concerning inlet and shoreline stability and storm tides shoreline topography;

(b) Design features of the proposed structures or activities; and

(c) Potential effects of the location of such structures or activities, including potential cumulative effects of any proposed structures or activities upon such beach-dune system or coastal inlet, which, in the opinion of the department, clearly justify such permit.

(3) The department may require engineer certifications as necessary to assure the adequacy of the design and construction of permitted projects. Reasonable assurance is demonstrated if the permit applicant provides competent substantial evidence based on plans, studies, and credible expertise that accounts for naturally occurring variables that might reasonably be expected.

(4) The department may, as a condition to granting a permit under this section, require mitigation, financial, or other assurances acceptable to the department as necessary to assure performance of the conditions of a permit or enter into contractual agreements to best assure compliance with any permit conditions. Biological and environmental monitoring conditions included in the permit must be based upon clearly defined scientific principles. The department may also require notice of the required permit conditions and the contractual agreements entered into pursuant to this subsection to be filed in the public records of the county in which the permitted activity is located.

(5) Notwithstanding any other provision of law, the department may issue a permit pursuant to this part in advance of the issuance of an incidental take authorization as provided under the Endangered Species Act and its implementing regulations if the permit and authorization include a condition requiring that such authorized activities not begin until the incidental take authorization is issued.

(6) The department shall adopt rules to address standard mixing zone criteria and antidegradation requirements for turbidity generation for beach management and inlet bypassing permits that involve the excavation and placement of sediment in order to reduce or eliminate the need for variances. In processing variance requests, the department must consider the legislative declaration that, pursuant to s. 161.088, beach nourishment projects are in the public interest.

(7) Application for permits shall be made to the department upon such terms and conditions as set forth by rule.

(a) If, as part of the permit process, the department requests additional information, it must cite applicable statutory and rule provisions that justify any item listed in a request for additional information.

(b) The department may not issue guidelines that are enforceable as standards for beach management, inlet management, and other erosion control projects without adopting such guidelines by rule.

(8) The Legislature intends to simplify and expedite the permitting process for the periodic maintenance of previously permitted and constructed beach nourishment and inlet management projects under the joint coastal permit process. A detailed review of a previously permitted project is not required if there have been no substantial changes in project scope and past performance of the project indicates that the project has performed according to design expectations. The department shall amend chapters 62B-41 and 62B-49, Florida Administrative Code, to streamline the permitting process for periodic beach maintenance projects and inlet sand bypassing activities.

(9) Joint coastal permits issued for activities falling under this section and part IV of chapter 373 must allow for two maintenance or dredging disposal events or a permit life of 15 years, whichever is greater.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 2, ch. 78-257; s. 1, ch. 83-247; s. 12, ch. 87-97; s. 19, ch. 94-356; s. 3, ch. 2000-346; s. 2, ch. 2012-65; s. 2, ch. 2012-205.

161.0415 Citation of rule.—In addition to any other provisions within this chapter or promulgated hereunder, the permitting agency shall, when requesting information for a pe application pursuant to this chapter or such rules promulgated hereunder, cite a specific rule or provision of the Florida Building Code. If a request for information cannot be accompanied by a rule citation, failure to provide such information cannot be grounds to deny a permit.

History.—s. 1, ch. 79-161; s. 4, ch. 2000-141; s. 34, ch. 2001-186; s. 3, ch. 2001-372.

161.042 Coastal construction and excavation in barrier beach inlets.—The department is authorized to direct any person, or any public body or agency, responsible for the excavation of sandy sediment as a result of any activity conducted to maintain navigable depths within or immediately adjacent to any coastal barrier beach inlet within sovereignty lands, after the department considers any limitations under chapters 253 and 403 on the deposition of spoil material from the excavation, and upon issuance of water quality certification by the department, to use such sediment for beach nourishment as prescribed by the department. For any construction or excavation within or immediately contiguous to any coastal barrier beach inlet which has been permitted pursuant to s. 161.041, the department may require the permittee to supply beach profiles and conduct hydrographic monitoring of the impacted area.

History.—s. 3, ch. 78-257; s. 1, ch. 80-183; s. 20, ch. 94-356; s. 4, ch. 2000-346.

161.051 Coastal construction by persons, firms, corporations, or local authorities.—Where any person, firm, corporation, county, municipality, township, special district, or any public agency shall construct and install projects when permits have been properly issued, such works and improvements shall be the property of said person, firm, corporation, county, municipality, township, special district, or any public agency where located, and shall thereafter be maintained by and at the expense of said person, firm, corporation, county, municipality, township, special district, or other public agency. No grant under this section shall affect title of the state to any lands below the mean high-water mark, and any additions or accretions to the upland caused by erection of such works or improvement shall remain the property of the state if not previously conveyed. The state shall in no way be liable for any damages as a result of erections of such works and improvements, or for any damages arising out of construction, reconstruction, maintenance, or repair thereof, or otherwise arising on account of such works or improvements.

History.—s. 1, ch. 65-408.

161.052 Coastal construction and excavation; regulation.—

(1) No person, firm, corporation, municipality, county, or other public agency shall excavate or construct any dwelling house, hotel, motel, apartment building, seawall, revetment, or other structure incidental to or related to such structure, including but not limited to such attendant structures or facilities as a patio, swimming pool, or garage, within 50 feet of the line of mean high water at any riparian coastal location fronting the Gulf of Mexico or Atlantic coast shoreline of the state, exclusive of bays, inlets, rivers, bayous, creeks, passes, and the like. In areas where an erosion control line has been established under the provisions of ss. 161.141-161.211, that line, or the presently existing mean high-water line, whichever is more landward, shall be considered to be the mean high-water line for the purposes of this section.

(2) A waiver or variance of the setback requirements may be authorized by the department in the following circumstances:

(a) The department may authorize an excavation or erection of a structure at any riparian coastal location as described in subsection (1) upon receipt of an application from a riparian owner and upon the consideration of facts and circumstances, including adequate engineering data concerning shoreline stability and storm tides related to shoreline topography, which, in the opinion of the department, clearly and unequivocally justify such a waiver or variance.

(b) If in the immediate contiguous or adjacent area a number of existing structures have established a reasonably continuous and uniform construction line closer to the line of mean high water than the foregoing, and if said existing structures have not been unduly affected by erosion, a proposed structure may be permitted along such line on written authorization from the department if such proposed structure complies with the Florida Building Code and the rules of the department. However, the department shall not contravene setback requirements established by a county or municipality which are equal to, or more strict than, those setback requirements provided herein.

(c) The department may authorize the construction of pipelines or piers extending outward from the shoreline, unless it determines that the construction of such projects would cause erosion of the beach in the area of such structures.

(3) The provisions of this section shall not apply to structures intended for shore protection purposes which are regulated by s. 161.041 or to structures existing or under construction on June 27, 1970.

(4) The department may by regulation exempt specifically described portions of the coastline from the provisions of this section whenever in its judgment such portions of coastline, because of their nature, are not subject to erosion of a substantially damaging effect to the public.

(5) The setback requirements as defined herein shall not apply to any riparian coastal locations fronting the Atlantic Ocean or Gulf of Mexico which have vegetation-type nonsandy shores.

(6) The setback requirements defined in subsection (1) shall not apply to any modification, maintenance, or repair to any existing structure within limits of the existing foundation which does not require, involve, or include any additions to, or repair or modification of, the existing foundation of that structure. Specifically excluded from this exemption are seawalls and any additions or enclosures added, constructed, or installed below the first dwelling floor or lowest deck of the existing structure.

(7) Any coastal structure erected, or excavation created, in violation of the provisions of this section is hereby declared to be a public nuisance, and such structure shall be forthwith removed or such excavation refilled after written notice by the department directing such removal or filling. In the event that the structure is not removed or the excavation refilled as directed within a reasonable time, the department may remove such structure or fill such excavation at its own expense. The cost thereof shall become a lien upon the property of the upland owner upon which such unauthorized structure or excavation is located.

(8) Any person violating any provision of this section is guilty of a misdemeanor of the first degree, punishable as provided in s. 775.083. Such person shall be deemed guilty of a separate offense for each month during any portion of which any violation of this section is committed or continued.

(9) The secretary of the department may make recommendations to the Board of Trustees of the Internal Improvement Trust Fund concerning the purchase of the fee or any lesser interest in any lands seaward of the setback requirement as environmentally endangered lands or as outdoor recreation lands.

(10) A coastal county or municipality fronting on the Gulf of Mexico or the Atlantic Ocean shall advise the department within 5 days after receipt of any permit application for construction or other activities proposed to be located within 50 feet of the line of mean high water. Within 5 days after receipt of such application, the county or municipality shall notify the applicant of the requirements for state permits.

(11) The department is authorized to adopt rules for the implementation of the following provisions of this section: excavation and construction; setback requirements; waivers or variances; exemptions; the removal of unauthorized structures or refilling of unauthorized excavations; and violations and penalties.

(12) In accordance with ss. 553.73 and 553.79, and upon the effective date of the Florid Code, the provisions of this section which pertain to and govern the design, construction, e alteration, modification, repair, and demolition of public and private buildings, structures, and facilities shall be incorporated into the Florida Building Code. The Florida Building Commission shall have the authority to adopt rules pursuant to ss. 120.536 and 120.54 in order to implement those provisions. This subsection does not limit or abrogate the right and authority of the department to require permits or to adopt and enforce environmental standards, including but not limited to, standards for ensuring the protection of the beach-dune system, proposed or existing structures, adjacent properties, marine turtles, native salt-resistant vegetation, endangered plant communities, and the preservation of public beach access.

History.—s. 1, ch. 70-231; s. 82, ch. 71-136; s. 1, ch. 75-87; s. 4, ch. 78-257; s. 2, ch. 80-183; s. 66, ch. 81-259; s. 21, ch. 94-356; s. 1, ch. 98-131; s. 5, ch. 2000-141; s. 34, ch. 2001-186; s. 3, ch. 2001-372.

161.053 Coastal construction and excavation; regulation on county basis.—

(1)(a) The Legislature finds and declares that the beaches in this state and the coastal barrier dunes adjacent to such beaches, by their nature, are subject to frequent and severe fluctuations and represent one of the most valuable natural resources of Florida and that it is in the public interest to preserve and protect them from imprudent construction which can jeopardize the stability of the beach-dune system, accelerate erosion, provide inadequate protection to upland structures, endanger adjacent properties, or interfere with public beach access. In furtherance of these findings, it is the intent of the Legislature to provide that the department establish coastal construction control lines on a county basis along the sand beaches of the state fronting on the Atlantic Ocean, the Gulf of Mexico, or the Straits of Florida. Such lines shall be established so as to define that portion of the beach-dune system which is subject to severe fluctuations based on a 100-year storm surge, storm waves, or other predictable weather conditions. However, the department may establish a segment or segments of a coastal construction control line further landward than the impact zone of a 100-year storm surge, provided such segment or segments do not extend beyond the landward toe of the coastal barrier dune structure that intercepts the 100-year storm surge. Such segment or segments shall not be established if adequate dune protection is provided by a state-approved dune management plan. Special siting and design considerations shall be necessary seaward of established coastal construction control lines to ensure the protection of the beach-dune system, proposed or existing structures, and adjacent properties and the preservation of public beach access.

(b) As used in this subsection:

1. When establishing coastal construction control lines as provided in this section, the definition of "sand beach" shall be expanded to include coastal barrier island ends contiguous to the sand beaches of the state fronting on the Atlantic Ocean, the Gulf of Mexico, or the Straits of Florida.

2. "Coastal barrier island ends" means those areas on the ends of barrier islands fronting the Atlantic Ocean, the Gulf of Mexico, or the Straits of Florida, which are subject to severe fluctuations based on a 100-year storm surge, storm waves, or other predictable weather conditions.

3. "Coastal barrier islands" means geological features which are completely surrounded by marine waters that front upon the open waters of the Atlantic Ocean, the Gulf of Mexico, or the Straits of Florida and are composed of quartz sands, clays, limestone, oolites, rock, coral, coquina, sediment, or other material, including spoil disposal, which features lie above the line of mean high water. Mainland areas which were separated from the mainland by artificial channelization for the purpose of assisting marine commerce shall not be considered coastal barrier islands.

(c) Coastal construction control lines shall be set on coastal barrier island ends only in conjunction with the resetting of the coastal construction control line throughout the entire county within which the barrier island end is located, and shall not be established on reaches of coastal barrier island ends where the shore is vegetated with mangroves.

(2)(a) Coastal construction control lines shall be established by the department only af been determined from a comprehensive engineering study and topographic survey that the establishment of such control lines is necessary for the protection of upland properties and the control of beach erosion. No such line shall be set until a public hearing has been held in each affected county. After the department has given consideration to the results of such public hearing, it shall, after considering ground elevations in relation to historical storm and hurricane tides, predicted maximum wave uprush, beach and offshore ground contours, the vegetation line, erosion trends, the dune or bluff line, if any exist, and existing upland development, set and establish a coastal construction control line and cause such line to be duly filed in the public records of any county affected and shall furnish the clerk of the circuit court in each county affected a survey of such line with references made to permanently installed monuments at such intervals and locations as may be considered necessary. However, no coastal construction control line shall be set until a public hearing has been held by the department and the affected persons have an opportunity to appear. The hearing shall constitute a public hearing and shall satisfy all requirements for a public hearing pursuant to s. 120.54(3). The hearing shall be noticed in the Florida Administrative Register in the same manner as a rule. Any coastal construction control line adopted pursuant to this section shall not be subject to a s. 120.56(2) rule challenge or a s. 120.54(3)(c)2. drawout proceeding, but, once adopted, shall be subject to a s. 120.56(3) invalidity challenge. The rule shall be adopted by the department and shall become effective upon filing with the Department of State, notwithstanding the provisions of s. 120.54(3)(e)6. Upon such filing with the Department of State, no person, firm, corporation, or governmental agency shall construct any structure whatsoever seaward thereof; make any excavation, remove any beach material, or otherwise alter existing ground elevations; drive any vehicle on, over, or across any sand dune; or damage or cause to be damaged such sand dune or the vegetation growing thereon seaward thereof, except as hereinafter provided. Control lines established under the provisions of this section shall be subject to review at the discretion of the department after consideration of hydrographic and topographic data that indicate shoreline changes that render established coastal construction control lines to be ineffective for the purposes of this act or at the written request of officials of affected counties or municipalities. Any riparian upland owner who feels that such line as established is unduly restrictive or prevents a legitimate use of the owner's property shall be granted a review of the line upon written request. After such review, the department shall decide if a change in the control line as established is justified and shall so notify the person or persons making the request. The decision of the department shall be subject to judicial review as provided in chapter 120.

(b)1. The department shall exempt construction proposed for a location seaward of a coastal construction control line and landward of existing armoring from certain siting and design criteria of this chapter, provided the armoring is capable of protecting the proposed construction from the effects of erosion from a 100-year storm surge. The exemption shall apply to proposed structures involving the foundation, siting, and excavation criteria of this section, except such structures shall be:

a. Sited a sufficient distance landward of the armoring to allow for maintenance of the armoring.

b. Located up to or landward of the established line of construction.

c. Designed to comply with the windload requirements of this section.

d. Sited and designed to protect marine turtles.

2. The applicant shall provide scientific and engineering evidence that the armoring has been designed, constructed, and maintained to survive the effects of the design storm and provide protection to existing and proposed structures from the erosion associated with that event. Evidence shall include a report with data and supporting analysis, and shall be certified by a professional engineer registered in this state, that the armoring was designed and constructed and is in adequate

condition to meet the following criteria:

a. The top must be at or above the still water level, including setup, for the design storm breaking wave calculated at its highest achievable level based on the maximum eroded beach profile and highest surge level combination, and must be high enough to preclude runup overtopping.

b. The armoring must be stable under the design storm including maximum localized scour, with adequate penetration and toe protection to avoid settlement, toe failure, or loss of material from beneath or behind the armoring.

c. The armoring must have sufficient continuity or return walls to prevent flanking under the design storm from impacting the proposed construction.

d. The armoring must withstand the static and hydrodynamic forces of the design storm.

(3) A coastal county or coastal municipality may establish coastal construction zoning and building codes in lieu of the provisions of this section if such zones and codes are approved by the department as being adequate to preserve and protect the beaches and coastal barrier dunes adjacent to such beaches, which are under the jurisdiction of the department, from imprudent construction that will jeopardize the stability of the beach-dune system, accelerate erosion, provide inadequate protection to upland structures, endanger adjacent properties, or interfere with public beach access. Exceptions to locally established coastal construction zoning and building codes may not be granted unless previously approved by the department. The intent of this subsection is to provide for the local administration of established coastal construction control lines through approved zoning and building codes if desired by local interests and where such local interests have, in the judgment of the department, sufficient funds and personnel to adequately administer the program. Should the department determine at any time that the program is inadequately administered, the department may revoke the authority granted to the county or municipality.

(4) Except in those areas where local zoning and building codes have been established pursuant to subsection (3), a permit to alter, excavate, or construct on property seaward of established coastal construction control lines may be granted by the department as follows:

(a) The department may authorize an excavation or erection of a structure at any coastal location as described in subsection (1) upon receipt of an application from a property or riparian owner and upon the consideration of facts and circumstances, including:

1. Adequate engineering data concerning shoreline stability and storm tides related to shoreline topography;

2. Design features of the proposed structures or activities; and

3. Potential effects of the location of the structures or activities, including potential cumulative effects of proposed structures or activities upon the beach-dune system, which, in the opinion of the department, clearly justify a permit.

(b) If in the immediate contiguous or adjacent area a number of existing structures have established a reasonably continuous and uniform construction line closer to the line of mean high water than the foregoing, and if the existing structures have not been unduly affected by erosion, a proposed structure may be permitted along such line on written authorization from the department if the structure is also approved by the department. However, the department may not contravene setback requirements or zoning or building codes established by a county or municipality which are equal to, or more strict than, the requirements provided in this subsection. This paragraph does not prohibit the department from requiring structures to meet design and siting criteria established in paragraph (a) or in subsection (1) or subsection (2).

(c) The department may condition the nature, timing, and sequence of construction of permitted activities to provide protection to nesting sea turtles and hatchlings and their habitat, pursuant to s. 379.2431, and to native salt-resistant vegetation and endangered plant communities.

(d) The department may require engineer certifications as necessary to ensure the adequacy of

the design and construction of permitted projects.

(e) The department shall limit the construction of structures that interfere with public access along the beach. However, the department may require, as a condition of granting permits, the provision of alternative access if interference with public access along the beach is unavoidable. The width of the alternate access may not be required to exceed the width of the access that will be obstructed.

(f) The department may, as a condition of granting a permit, require mitigation, financial, or other assurances acceptable to the department to ensure performance of conditions of a permit or enter into contractual agreements to best assure compliance with any permit conditions. The department may also require notice of the permit conditions required and the contractual agreements entered into to be filed in the public records of the county in which the permitted activity is located.

(5)(a) As used in this subsection, the term:

1. "Frontal dune" means the first natural or manmade mound or bluff of sand which is located landward of the beach and which has sufficient vegetation, height, continuity, and configuration to offer protective value.

2. "Seasonal high-water line" means the line formed by the intersection of the rising shore and the elevation of 150 percent of the local mean tidal range above local mean high water.

(b) After October 1, 1985, and notwithstanding any other provision of this part, the department, or a local government to which the department has delegated permitting authority pursuant to subsections (3) and (15), may not issue a permit for any structure, other than a coastal or shore protection structure, minor structure, or pier, meeting the requirements of this part, or other than intake and discharge structures for a facility sited pursuant to part II of chapter 403, which is proposed for a location that, based on the department's projections of erosion in the area, will be seaward of the seasonal high-water line within 30 years after the date of application for the permit. The procedures for determining such erosion shall be established by rule. In determining the area that will be seaward of the seasonal high-water line in 30 years, the department may not include any areas landward of a coastal construction control line.

(c) If the application of paragraph (b) would preclude the construction of a structure, the department may issue a permit for a single-family dwelling for the parcel if:

1. The parcel was platted or subdivided by metes and bounds before the effective date of this section;

2. The owner of the parcel does not own another parcel immediately adjacent to and landward of the parcel for which the dwelling is proposed;

3. The proposed single-family dwelling is located landward of the frontal dune structure; and

4. The proposed single-family dwelling will be as far landward on its parcel as is practicable without being located seaward of or on the frontal dune.

(d) In determining the land areas that will be below the seasonal high-water line within 30 years after the permit application date, the department shall consider the effect on erosion rates of an existing beach nourishment or restoration project or of a beach nourishment or restoration project for which all funding arrangements have been made and all permits have been issued at the time the application is submitted. The department shall consider each year there is sand seaward of the erosion control line whether erosion took place that year. However, the seaward extent of the beach nourishment or restoration project beyond the erosion control line may not be considered in determining the applicable erosion rates. This subsection does not prohibit the department from requiring structures to meet the criteria established in subsection (1), subsection (2), or subsection (4) or to be further landward than required by this subsection based on the criteria established in subsection (1), subsection (2), or subsection (4).

(e) The department shall annually report to the Legislature the status of this program, including any changes to the previously adopted procedures for determining erosion projections.

(6) Any coastal structure erected, or excavation created, in violation of this section is declared to be a public nuisance and such structure shall be removed or such excavation shall be refilled after written notice by the department directing such removal or filling. If the structure is not removed or the excavation refilled within a reasonable time as directed, the department may remove such structure or fill such excavation at its own expense and the costs thereof shall become a lien on the property of the upland owner upon which the unauthorized structure or excavation is located.

(7) Any person, firm, corporation, or agent thereof who violates this section commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083, except that a person driving a vehicle on, over, or across a sand dune and damaging or causing to be damaged such sand dune or the vegetation growing thereon in violation of this section commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083. A person, firm, corporation, or agent thereof commits a separate offense for each day during any portion of which a violation of this section is committed or continued.

(8) This section does not apply to structures intended for shore protection purposes which are regulated by s. 161.041 or to structures existing or under construction before the establishment of the coastal construction control line if the structures are not materially altered except as provided in subsection (4). Except for structures that have been materially altered, structures under construction at the time of the establishment or reestablishment of the coastal construction control line are exempt from the provisions of this section. However, unless such an exemption has been judicially confirmed to exist before April 10, 1992, the exemption shall last only for a period of 3 years from the date of the determination of the exemption or April 10, 1992, whichever occurs later. The department may extend the exemption period for structures that require longer periods for completion if construction during the initial exemption period is continuous. For purposes of this subsection, the term "continuous" means following a reasonable sequence of construction without significant or unreasonable periods of work stoppage.

(9) The department may exempt specifically described portions of the coastline from the provisions of this section if, in its judgment, such portions of coastline because of their nature are not subject to erosion of a substantially damaging effect to the public.

(10) Pending the establishment of coastal construction control lines as provided herein, the provisions of s. 161.052 shall remain in force. However, upon the establishment of coastal construction control lines, or the establishment of coastal construction zoning and building codes as provided in subsection (3), s. 161.052 shall be superseded by the provisions of this section.

(11)(a) The coastal construction control requirements defined in subsection (1) and the requirements of the erosion projections in subsection (5) do not apply to any modification, maintenance, or repair of any existing structure within the limits of the existing foundation which does not require, involve, or include any additions to, or repair or modification of, the existing foundation of that structure. Specifically excluded from this exemption are seawalls or other rigid coastal or shore protection structures and any additions or enclosures added, constructed, or installed below the first dwelling floor or lowest deck of the existing structure. The Florida Building Commission may not adopt any rule having the effect of limiting any exceptions or exemptions contained within this paragraph.

(b) Activities seaward of the coastal construction control line which are determined by the department not to cause a measurable interference with the natural functioning of the coastal system are exempt from the requirements of subsection (4).

(c) The department may establish exemptions from the requirements of this section for minor activities determined by the department not to have an adverse effect on the coastal system.

Examples of such activities include, but are not limited to:

1. Boat moorings;
2. Maintenance of existing beach-dune vegetation;
3. The burial of seaweed, dead fish, whales, or other marine animals on the unvegetated beach;
4. The removal of piers or other derelict structures from the unvegetated beach or seaward of mean high water;
5. Temporary emergency vehicular access, if the affected area is immediately restored;
6. The removal of any existing structures or debris from the upland, if there is no excavation or disturbance to the existing topography or to beach-dune vegetation;
7. Construction of a new roof overhang extending no more than 4 feet beyond the confines of the existing foundation during modification, renovation, or reconstruction of a habitable structure within the confines of the existing foundation of that structure which does not include any additions to or modification of the existing foundation of that structure;
8. Minor and temporary excavation for the purpose of repairs to existing subgrade residential service utilities (e.g., water and sewer lines, septic tanks and drainfields, electrical and telephone cables, and gas lines), if there is minimal disturbance and the grade is restored with fill compatible in both coloration and grain size to the onsite material and any damaged or destroyed vegetation is restored using similar vegetation; and
9. Any other minor construction that has an effect similar to the above activities.

(12)(a) Notwithstanding the coastal construction control requirements defined in subsection (1) or the erosion projection determined pursuant to subsection (5), the department may issue a permit for the repair or rebuilding within the confines of the original foundation of a major structure pursuant to subsection (4). Alternatively, the department may also issue a permit for a more landward relocation or rebuilding of a damaged or existing structure if such relocation or rebuilding would not cause further harm to the beach-dune system, and if, in the case of rebuilding, the rebuilding complies with subsection (4) and otherwise complies with this subsection.

(b) The department may not permit repairs or rebuilding that expands the capacity of the original structure seaward of the 30-year erosion projection established pursuant to subsection (5).

(c) In reviewing applications for relocation or rebuilding, the department shall specifically consider changes in shoreline conditions, the availability of other relocation or rebuilding options, and the design adequacy of the project sought to be rebuilt.

(d) Permits issued under this subsection are not considered precedential as to the issuance of subsequent permits.

(13) Concurrent with the establishment of a coastal construction control line and the ongoing administration of this chapter, the secretary of the department shall make recommendations to the Board of Trustees of the Internal Improvement Trust Fund concerning the purchase of the fee or any lesser interest in any lands seaward of the control line pursuant to the state's Save Our Coast, Conservation and Recreation Lands, or Outdoor Recreation Land acquisition programs; and, with respect to those control lines established pursuant to this section before June 14, 1978, the secretary may make such recommendations.

(14) A coastal county or municipality fronting on the Gulf of Mexico, the Atlantic Ocean, or the Straits of Florida shall advise the department within 5 days after receipt of any permit application for construction or other activities proposed to be located seaward of the line established by the department pursuant to this section. Within 5 days after receipt of such application, the county or municipality shall notify the applicant of the requirements for state permits.

(15) In keeping with the intent of subsection (3), authority for permitting certain types of activities that have been defined by the department may be delegated by the department to a coastal county or coastal municipality. Such partial delegation shall be narrowly construed to those

particular activities specifically named in the delegation and agreed to by the affected county or municipality. The delegation may be revoked by the department at any time if it is determined that the delegation is improperly or inadequately administered.

(16) The department may, at the request of a property owner, contract with the property owner for an agreement, or modify an existing contractual agreement regulating development activities landward of a coastal construction control line, if the contractual agreement is consistent with the design and siting provisions of this section. The contractual agreement may not bind either party for a period longer than 5 years following its date of execution. Before beginning a construction activity covered by the agreement, the property owner must obtain the necessary authorization required by the agreement. The agreement may not authorize construction for:

(a) Major habitable structures that require construction beyond the expiration of the agreement, unless such construction is above the completed foundation; or

(b) Nonhabitable major structures or minor structures, unless such construction is authorized at the same time as the habitable major structure.

(17) The department may grant areawide permits to local governments, other governmental agencies, and utility companies for special classes of activities in areas under their general jurisdiction or responsibility or for the construction of minor structures, if these activities or structures, due to the type, size, or temporary nature of the activity or structure, will not cause measurable interference with the natural functioning of the beach-dune system or with marine turtles or their nesting sites. Such activities or structures must comply with this section and may include, but are not limited to: road repairs, not including new construction; utility repairs and replacements, or other minor activities necessary to provide utility services; beach cleaning; dune restoration; on-grade walkovers for enhancing accessibility or use in compliance with the Americans with Disabilities Act; and emergency response. The department shall adopt rules to establish criteria and guidelines for permit applicants. The department shall consult with the Fish and Wildlife Conservation Commission on each proposed areawide permit and must require notice provisions appropriate to the type and nature of the activities for which the areawide permits are sought.

(18)(a) The department may grant general permits for projects, including dune restoration, dune walkovers, decks, fences, landscaping, sidewalks, driveways, pool resurfacing, minor pool repairs, and other nonhabitable structures, if the projects, due to type, size, or temporary nature, will not cause a measurable interference with the natural functioning of the beach-dune system or with marine turtles or their nesting sites. Multifamily habitable structures do not qualify for general permits. However, single-family habitable structures and swimming pools associated with such single-family habitable structures that do not advance the line of existing construction and satisfy all siting and design requirements of this section, and minor reconstruction for existing coastal armoring structures, may be eligible for a general permit.

(b) The department shall adopt rules to establish criteria and guidelines for permit applicants.

(c) Persons wishing to use the general permits must, at least 30 days before beginning any work, notify the department in writing on forms adopted by the department. The notice must include a description of the proposed project and supporting documents depicting the proposed project, its location, and other pertinent information as required by rule, to demonstrate that the proposed project qualifies for the requested general permit. Persons who undertake projects without proof of notice to the department, but whose projects would otherwise qualify for general permits, shall be considered to have undertaken a project without a permit and are subject to enforcement pursuant to s. 161.121.

(d) Persons wishing to use a general permit must provide notice as required by the applicable local building code where the project will be located. If a building code does not require notice, a person wishing to use a general permit must, at a minimum, post a sign describing the project on the

property at least 5 days before commencing construction. The sign must be at least 88 square inches with letters no smaller than one-quarter inch.

(19)(a) The department may suspend or revoke the use of a general or areawide permit for good cause, including: submission of false or inaccurate information in the notification for use of a general or areawide permit; violation of law, department orders, or rules relating to permit conditions; deviation from the specified activity or project indicated or the conditions for undertaking the activity or project; refusal of lawful inspection; or any other act by the permittee which results or may result in harm or injury to human health or welfare, or which causes harm or injury to animal, plant, or aquatic life or to property.

(b) The department shall have access to the permitted activity or project at reasonable times to inspect and determine compliance with the permit and department rules.

(20) The department may adopt rules related to the establishment of coastal construction control lines; activities seaward of the coastal construction control line; exemptions; property owner agreements; delegation of the program; permitting programs; and violations and penalties.

(21) In accordance with ss. 553.73 and 553.79, and upon the effective date of the Florida Building Code, the provisions of this section which pertain to and govern the design, construction, erection, alteration, modification, repair, and demolition of public and private buildings, structures, and facilities shall be incorporated into the Florida Building Code. The Florida Building Commission may adopt rules pursuant to ss. 120.536 and 120.54 to administer those provisions. This subsection does not limit or abrogate the right and authority of the department to require permits or to adopt and enforce environmental standards, including, but not limited to, standards for ensuring the protection of the beach-dune system, proposed or existing structures, adjacent properties, marine turtles, native salt-resistant vegetation, endangered plant communities, and the preservation of public beach access.

History.—s. 1, ch. 71-280; s. 2, ch. 75-87; s. 1, ch. 77-12; s. 5, ch. 78-257; s. 29, ch. 79-164; s. 3, ch. 80-183; s. 67, ch. 81-259; s. 2, ch. 83-247; s. 33, ch. 85-55; s. 1, ch. 86-191; s. 13, ch. 87-97; s. 1, ch. 88-106; s. 1, ch. 88-349; s. 11, ch. 89-175; s. 9, ch. 91-224; s. 1, ch. 92-191; s. 22, ch. 94-356; s. 1437, ch. 95-147; s. 1, ch. 96-371; s. 21, ch. 96-410; s. 2, ch. 98-131; s. 6, ch. 2000-141; s. 5, ch. 2000-346; s. 34, ch. 2001-186; s. 3, ch. 2001-372; s. 186, ch. 2008-247; s. 39, ch. 2010-102; s. 2, ch. 2011-222; s. 16, ch. 2013-14; s. 12, ch. 2014-151.

161.0531 Development agreements.—

(1) At the request of the property owner, the department is authorized to enter into a development agreement with such property owner, or modify or extend an existing development agreement, for activities seaward of a coastal construction control line. All such agreements must further the conservation, preservation, and protection of the beach-dune system and cause no measurable interference with marine turtles or their nesting sites.

(2) For purposes of this section, "development agreement" means contractual agreements between property owners and the department concerning siting and design criteria and the permitting requirements and environmental enhancements required by this chapter for a proposed construction activity seaward of the coastal construction control line.

(3) A development agreement shall include the following:

(a) A legal description of the land subject to the agreement, and the names of the legal and equitable owners of the land.

(b) The duration of the agreement.

(c) A description of the siting and design features of the proposed development or activity.

(d) Adequate engineering data concerning inlet and shoreline stability and storm tides related to shoreline topography.

(e) A description of the permitting requirements and environmental enhancements of the development.

(f) A description of any conditions, terms, restrictions, or other requirements determined

necessary by the department for the protection of the environment.

(g) A finding that the development permitted or proposed is consistent with the local government's comprehensive plan and land development regulations.

(h) A statement that all filing, processing, administration, and issuance fees have been paid.

(4) A development agreement shall not authorize construction for a period longer than 5 years from the date of execution.

(5) The department shall inspect land subject to a development agreement at least once every 12 months to determine that the project is in compliance with the terms of the development agreement, unless the department determines a lesser standard meets the intent of the terms of the development agreement.

(6) Within 14 days after the date for a request for a chapter 120 hearing has passed, or after a hearing has been held and a decision has been rendered, the developer shall record the development agreement with the clerk of the circuit court in the county where the development is located. A development agreement shall not be effective until it is properly recorded in the public records of the county.

(7) The department's approval of a development agreement, or modification or extension of an existing development agreement, pursuant to this section constitutes final agency action subject to the provisions of chapter 120. However, the property owner may not challenge the department's refusal to enter into a development agreement or modification or extension of an existing agreement.

History.—s. 2, ch. 96-371.

161.0535 Permits; fees, costs.—The department may establish by rule a fee schedule and may assess fees for the filing, processing, and issuance of permits issued under ss. 161.041 and 161.053. The fee schedule must contain categories of permits based on the varying costs of evaluating applications for different types of proposed construction. The fee schedule must be based on the actual costs of administering these permitting programs. Moneys from fees assessed under this section must be deposited into the Florida Permit Fee Trust Fund. The department may also assess the applicant for the costs of public notice by publication prior to the consideration of these permit applications; alternatively, the department may require an applicant to publish, at the applicant's expense, in a newspaper of general circulation within the affected area, a notice of receipt of the application and a notice of the intended agency action.

History.—s. 2, ch. 83-247; s. 34, ch. 85-55; s. 14, ch. 87-97; s. 486, ch. 94-356; s. 2, ch. 96-321.

161.054 Administrative fines; liability for damage; liens.—

(1) In addition to the penalties provided for in ss. 161.052, 161.053, and 161.121, any person, firm, corporation, or governmental agency, or agent thereof, refusing to comply with or willfully violating s. 161.041, s. 161.052, or s. 161.053, or any rule or order prescribed by the department thereunder, shall incur a fine for each offense in an amount up to $15,000 to be fixed, imposed, and collected by the department. Each day during any portion of which such violation occurs constitutes a separate offense.

(2) Whenever any person, firm, corporation, or governmental agency, or agent thereof, knowingly or by gross negligence violates any of the provisions of s. 161.041, s. 161.052, or s. 161.053 so that damage is caused to sovereignty lands seaward of mean high water or to beaches, shores, or beach-dune systems, including animal, plant, or aquatic life thereon, such violator shall be liable for such damage. If two or more persons, firms, corporations, or governmental agencies, or their agents, cause damage, and if liability for such damage cannot be apportioned, each violator shall be jointly and severally liable for the damage. If, however, liability for such damage can be apportioned, each violator is liable only for that portion of the damage and subject to that portion of the fine attributable to his or her violation.

(3) The imposition of a fine or an award of damages pursuant to this section shall creat upon the real and personal property of the violator, enforceable by the department as are statutory liens under chapter 85. The proceeds of such fines and awards of damages shall be deposited in the Florida Coastal Protection Trust Fund.

(4) Fines imposed by the department or damages awarded shall be of such amount so as to ensure immediate and continued compliance with the provisions of ss. 161.041, 161.052, and 161.053.

(5) Any applicant for a permit pursuant to s. 161.041, s. 161.052, or s. 161.053 shall be denied a permit if a lien imposed upon the property pursuant to the provisions of this section is outstanding against the applicant; however, the department may authorize a permit after the fact in accordance with s. 161.041, s. 161.052, or s. 161.053, conditioned upon a resolution of the violation.

History.—s. 4, ch. 80-183; s. 3, ch. 83-247; s. 35, ch. 85-55; s. 2, ch. 86-138; s. 15, ch. 87-97; s. 30, ch. 91-45; s. 894, ch. 95-147; s. 3, ch. 96-321; s. 6, ch. 2015-229; s. 4, ch. 2020-158.

161.055 Concurrent processing of permits.—

(1) When an activity for which a permit is required under this chapter also requires a permit, authorization, or approval described in paragraph (2)(b), including a port conceptual permit pursuant to s. 373.4133, the department may, by rule, provide that the activity may be undertaken only upon receipt of a single permit from the department called a "joint coastal permit," as provided in this section.

(2) The department may adopt rules requiring concurrent application submittal and establishing a concurrent review and permitting procedure for any activity regulated under this chapter that also requires one or more of the permits, authorizations, or approvals described in paragraph (a) or paragraph (b). The rules must establish concurrent procedures for processing applications under this part with one or more of the permits, authorizations, or approvals described in paragraph (a) or paragraph (b). An applicant that proposes such an activity must submit, as part of the permit application under this chapter, all information necessary to satisfy the requirements for issuance of any required:

(a) Proprietary authorization under chapters 253 and 258 to use submerged lands owned by the Board of Trustees of the Internal Improvement Trust Fund; and

(b) Environmental resource permit or dredge and fill permit under part IV of chapter 373.

The timeframes for license approval or denial set forth in s. 120.60(1) do not commence until all required information is received. The rules authorized under this section may also require submittal of such information as is necessary to determine whether the proposed activity will occur on submerged lands owned by the Board of Trustees of the Internal Improvement Trust Fund, and shall contain provisions for permit processing and issuance of orders which are consistent with s. 373.427 and provisions for providing notice of applications which are consistent with s. 373.413. Authorization under this subsection may not be issued unless the requirements for issuance of any additional required authorizations, permits, waivers, variances, and approvals described in paragraph (a) or paragraph (b) are also satisfied.

(3) The review of agency action on an application for issuance of a joint coastal permit must be as provided in s. 373.4275.

History.—s. 485, ch. 94-356; s. 22, ch. 96-410; s. 6, ch. 2010-201.

161.061 Coastal construction serving no public purpose, endangering human life, health, or welfare, or becoming unnecessary or undesirable.—

(1) Any coastal construction, or any structure including groins, jetties, moles, breakwaters, seawalls, revetments, or other structures if of a solid or highly impermeable design upon sovereignty lands of Florida, below the mean high-water line of any tidal water of the state, regardless of date of construction or whether a permit has been issued in accordance with this part, which serves n

purpose, which is dangerous to or in any way endangers human life, health, or welfare, or which proves to be undesirable or becomes unnecessary, as determined by the department, shall be adjusted, altered, or removed by the abutting upland property owner after written notice by the division. Request for hearing must be filed by the owner with the department within 15 days after such notice. Adjustments, alterations, or removals required by this section shall be accomplished at no cost to the state. The decision of the department as to whether to adjust, alter, or remove such coastal construction or structure shall be final, and the department shall set a reasonable time within which the adjustment, alteration, or removal shall be accomplished.

(2) In the event that the upland property owner does not adjust, alter, or remove any coastal construction, or other structure including groins, jetties, moles, breakwaters, seawalls, revetments, or other structures if of a solid or highly impermeable design upon sovereignty lands of Florida, below the mean high-water line, when requested or directed by the department in accordance with subsection (1) of this section, the department may alter, adjust, or remove such coastal construction or structures at its own expense, and the costs thereof shall become a lien upon the property of said abutting upland property owner.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 23, ch. 78-95; s. 23, ch. 94-356.

161.071 Prosecuting officers to assist enforcement of this part.—State attorneys, or other prosecuting officers of the state or county, and sheriffs and their deputies of the several counties of this state, shall assist the department in enforcement of this part. The officers and their deputies shall, upon information that any persons, firms, or corporations are violating any of the provisions of this part, report the same, together with the information in their possession relating thereto, to the department and shall cooperate with the department in carrying out the provisions of this part. The state attorneys and other prosecuting officers of the state or any county, upon the request of the department, shall institute and maintain such legal proceedings as may be necessary to carry out the enforcement of the provisions of this part.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 24, ch. 94-356.

161.081 Powers of Department of Legal Affairs.—When a permit is required under this part and has not been issued as provided herein, any such project or physical activity shall be considered a public nuisance and the Department of Legal Affairs may at the request of the Department of Environmental Protection institute proceedings to enjoin or abate such nuisance.

History.—s. 1, ch. 65-408; ss. 11, 25, 35, ch. 69-106; s. 1, ch. 95-150.

161.082 Review of innovative technologies for beach nourishment.—The department is directed to periodically review innovative technologies for beach nourishment and, on a limited basis, authorize, through the permitting process, experimental projects that are alternatives to traditional dredge and fill projects to determine the most effective and less costly techniques for beach nourishment.

History.—s. 2, ch. 93-8; s. 25, ch. 94-356; s. 6, ch. 2000-346.

161.085 Rigid coastal armoring structures.—

(1) The state recognizes the need to protect private structures and public infrastructure from damage or destruction caused by coastal erosion. Until such time as the state takes measures to reduce erosion on a regional basis, this section is the state's policy on rigid coastal armoring structures, pursuant to ss. 161.041 and 161.053, for protection of private property and public infrastructure.

(2) In order to allow state and federal agencies, political subdivisions of the state, and municipalities to preplan for emergency response for the protection of private structures and public infrastructure, the department, pursuant to s. 161.041 or s. 161.053, may issue permits for the present or future installation of rigid coastal armoring structures or other emergency response

measures to protect private structures, public infrastructure, and private and public prope

(a) Permits for present installations may be issued if it is determined that private structures or public infrastructure is vulnerable to damage from frequent coastal storms.

(b) Permits for future installations of coastal armoring structures may be issued contingent upon the occurrence of specified changes to the coastal system which would leave upland structures vulnerable to damage from frequent coastal storms. The department may assist agencies, political subdivisions of the state, or municipalities, at their request, in identifying areas within their jurisdictions which may require permits for future installations of rigid coastal armoring structures.

(c) Permits for present installations of coastal armoring may be issued where such installation is between and adjoins at both ends rigid coastal armoring structures, follows a continuous and uniform armoring structure construction line with existing coastal armoring structures, and is no more than 250 feet in length.

Structures built pursuant to permits granted under this subsection may be ordered removed by the department only if such structures are determined to be unnecessary or to interfere with the installation of a beach restoration project.

(3) If erosion occurs as a result of a storm event which threatens private structures or public infrastructure and a permit has not been issued pursuant to subsection (2), unless the authority has been revoked by order of the department pursuant to subsection (8), an agency, political subdivision, or municipality having jurisdiction over the impacted area may install or authorize installation of rigid coastal armoring structures, exclusive of those authorized under subsection (9), for the protection of private structures or public infrastructure, or take other measures to relieve the threat to private structures or public infrastructure as long as the following items are considered and incorporated into such emergency measures:

(a) Protection of the beach-dune system.

(b) Siting and design criteria for the protective structure.

(c) Impacts on adjacent properties.

(d) Preservation of public beach access.

(e) Protection of native coastal vegetation, nesting state or federally threatened or endangered species, and nesting marine turtles and their hatchlings.

(4) The agency, political subdivision, or municipality shall notify the department if it installs or authorizes the installation of any rigid coastal armoring structures pursuant to its authority under subsection (3).

(5) The department shall adopt rules to implement the provisions of this section.

(6) A rigid coastal armoring structure or other structure constructed under the authority of subsection (3) shall be temporary, and the agency, political subdivision, municipality, or private property owner shall remove the structure or submit a permit application to the department for a permanent rigid coastal armoring structure, pursuant to s. 161.041 or s. 161.053, within 60 days after the emergency installation of the structure or other measure to relieve the threat to private structures or public infrastructure. Construction debris shall not be used in the construction of a rigid coastal armoring structure.

(7) The term "public infrastructure" means, for purposes of this section, public evacuation routes, public emergency facilities, bridges, power facilities, water or wastewater facilities, other utilities, or hospitals, or structures of local governmental, state, or national significance.

(8) If a political subdivision or municipality installs or authorizes installation of a rigid coastal armoring structure that does not comply with subsection (3), and if the department determines that the action harms or interferes with the protection of the beach dune system, adversely impacts adjacent properties, interferes with public beach access, or harms native coastal vegetation or nesting marine turtles or their hatchlings, the department may revoke by order the authority

political subdivision or municipality under subsection (3) to install or authorize the installat[illegible] coastal armoring structures.

(9) The department may authorize dune restoration incorporating sand-filled geotextile containers or similar structures proposed as the core of a restored dune feature when the conditions of paragraphs (a)-(c) and the requirements of s. 161.053 are met.

(a) A permit may be granted by the department under this subsection for dune restoration incorporating geotextile containers or similar structures provided that such projects:

1. Provide for the protection of an existing major structure or public infrastructure, and, notwithstanding any definition in department rule to the contrary, that major structure or public infrastructure is vulnerable to damage from frequent coastal storms, or is upland of a beach-dune system which has experienced significant beach erosion from such storm events.

2. Are constructed using native or beach-quality sand and native salt-tolerant vegetation suitable for dune stabilization as approved by the department.

3. May include materials other than native or beach-quality sand such as geotextile materials that are used to contain beach-quality sand for the purposes of maintaining the stability and longevity of the dune core.

4. Are continuously covered with 3 feet of native or beach-quality sand and stabilized with native salt-tolerant vegetation.

5. Are sited as far landward as practicable, balancing the need to minimize excavation of the beach-dune system, impacts to nesting marine turtles and other nesting state or federally threatened or endangered species, and impacts to adjacent properties.

6. Are designed and sited in a manner that will minimize the potential for erosion.

7. Do not materially impede access by the public.

8. Are designed to minimize adverse effects to nesting marine turtles and turtle hatchlings, consistent with s. 379.2431.

9. Are designed to facilitate easy removal of the geotextile containers if needed.

10. The United States Fish and Wildlife Service has approved an Incidental Take Permit for marine turtles and other federally threatened or endangered species pursuant to s. 7 or s. 10 of the Endangered Species Act for the placement of the structure if an Incidental Take Permit is required.

(b) The applicant or successive property owners shall provide financial assurances in the form of surety or performance bonds or other financial responsibility mechanisms that the authorized geotextile containers will be removed if the requirements of this subsection and the permit conditions are not met. The permittee shall file a notice of formal permit conditions in the public records of the county where the permitted activity is located.

(c) The department shall order removal of the geotextile container if the conditions of subparagraph (a)4. are not met, if the project ceases to function due to irreparable damage, if the project is determined by the department to have caused a significant adverse impact to the beach-dune system, or if the United States Fish and Wildlife Service revokes the Incidental Take Permit required in subparagraph (a)10.

(d) The department may require any engineering certifications that are necessary to ensure the adequacy of the design and construction of the permitted project.

(e) Upon receipt of a permit application, the department must notify the applicant and agent of all the statutory provisions of this subsection.

(f) The department shall review, with third-party expert involvement, the performance of dune restoration incorporating geotextile sand-filled containers to determine whether such structures provide upland protection and to determine their impact on the beach-dune system and adjacent properties. Such structures shall continue to be evaluated to determine if they are a more effective form of dune restoration than beach-compatible sand and native vegetation. Based on such analysis

and peer review, the department shall recommend to the Governor, the President of the Senate, and the Speaker of the House of Representatives if the provisions of this subsection should be modified. It is the intent of the Legislature that until such recommendations are transmitted and considered by the Legislature, there shall be no changes in the requirements or conditions contained in this subsection.

(g) The department shall not include structures authorized under this subsection in the statewide comprehensive beach management plan or the annual list of local government funding requests submitted to the Legislature pursuant to ss. 161.091 and 161.161.

History.—s. 1, ch. 95-288; s. 4, ch. 99-247; s. 1, ch. 2006-68; s. 2, ch. 2007-99; s. 9, ch. 2009-21.

161.088 Declaration of public policy respecting beach erosion control and beach restoration and nourishment projects.—Because beach erosion is a serious menace to the economy and general welfare of the people of this state and has advanced to emergency proportions, it is hereby declared to be a necessary governmental responsibility to properly manage and protect Florida beaches fronting on the Atlantic Ocean, Gulf of Mexico, and Straits of Florida from erosion and that the Legislature make provision for beach restoration and nourishment projects, including inlet management projects that cost-effectively provide beach-quality material for adjacent critically eroded beaches. The Legislature declares that such beach restoration and nourishment projects, as approved pursuant to s. 161.161, are in the public interest; must be in an area designated as critically eroded shoreline, or benefit an adjacent critically eroded shoreline; must have a clearly identifiable beach management benefit consistent with the state's beach management plan; and must be designed to reduce potential upland damage or mitigate adverse impacts caused by improved, modified, or altered inlets, coastal armoring, or existing upland development. Given the extent of the problem of critically eroded beaches, it is also declared that beach restoration and nourishment projects shall be funded in a manner that encourages all cost-saving strategies, fosters regional coordination of projects, improves the performance of projects, and provides long-term solutions. The Legislature further declares that nothing herein is intended to reduce or amend the beach protection programs otherwise established in this chapter or to result in local governments altering the coastal management elements of their local government comprehensive plans pursuant to chapter 163.

History.—s. 3, ch. 86-138; s. 1, ch. 98-311; s. 7, ch. 2000-346.

161.091 Beach management; funding; repair and maintenance strategy.—

(1) Subject to such appropriations as the Legislature may make therefor from time to time, disbursements from the Land Acquisition Trust Fund may be made by the department in order to carry out the proper state responsibilities in a comprehensive, long-range, statewide beach management plan for erosion control; beach preservation, restoration, and nourishment; storm and hurricane protection; and other activities authorized for beaches and shores pursuant to s. 28, Art. X of the State Constitution. Legislative intent in appropriating such funds is for the implementation of those projects that contribute most significantly to addressing the state's beach erosion problems.

(2) The department shall develop a multiyear repair and maintenance strategy that:

(a) Encourages regional approaches to ensure the geographic coordination and sequencing of prioritized projects;

(b) Reduces equipment mobilization and demobilization costs;

(c) Maximizes the infusion of beach-quality sand into the system;

(d) Extends the life of beach nourishment projects and reduces the frequency of nourishment; and

(e) Promotes inlet sand bypassing to replicate the natural flow of sand interrupted by improved, modified, or altered inlets and ports.

(3) In accordance with the intent expressed in s. 161.088 and the legislative finding that of the beaches of this state is detrimental to tourism, the state's major industry, further ex state's highly developed coastline to severe storm damage, and threatens beach-related jobs, which, if not stopped, may significantly reduce state sales tax revenues, funds deposited into the State Treasury to the credit of the Land Acquisition Trust Fund shall be used to fund the development, implementation, and administration of the state's beach management plan, as provided in ss. 161.091-161.212 and as authorized in s. 28, Art. X of the State Constitution.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 1, ch. 71-182; s. 1, ch. 72-170; ss. 1-3, ch. 74-102; s. 1, ch. 75-288; s. 1, ch. 77-379; s. 6, ch. 78-257; s. 5, ch. 80-183; s. 4, ch. 86-138; ss. 16, 23, ch. 87-97; s. 1, ch. 91-79; s. 4, ch. 96-321; s. 1, ch. 97-187; s. 2, ch. 98-311; s. 5, ch. 99-247; s. 8, ch. 2000-346; s. 2, ch. 2008-114; s. 7, ch. 2015-229; s. 12, ch. 2016-10.

161.101 State and local participation in authorized projects and studies relating to beach management and erosion control.—

(1) The Legislature recognizes that beach erosion is a statewide problem that does not confine its effects to local governmental jurisdictions and that beach erosion can be adequately addressed most efficiently by a state-initiated program of beach restoration and beach nourishment. However, since local beach communities derive the primary benefits from the presence of adequate beaches, a program of beach restoration and beach nourishment should not be accomplished without a commitment of local funds to combat the problem of beach erosion. Accordingly, the Legislature declares that the state, through the department, shall determine those beaches which are critically eroded and in need of restoration and nourishment and may authorize appropriations to pay up to 75 percent of the actual costs for restoring and nourishing a critically eroded beach. The local government in which the beach is located shall be responsible for the balance of such costs.

(2) To carry out the beach and shore preservation programs, the department is hereby constituted as the beach and shore preservation authority for the state. In this capacity, the secretary of the department may at his or her own initiative take all necessary steps as soon as practicable and desirable to implement the provisions of this chapter.

(3) Whenever a beach erosion control project has been authorized by Congress for federal financial participation in accordance with any Act of Congress relating to beach erosion control in which nonfederal participation is required, it shall be the policy of the state to assist with an equitable share of such funds to the extent that funds are available, as determined by the department.

(4) The department, for itself or on behalf of any and all duly established beach and shore preservation districts and local governments within the state, may enter into cooperative agreements and otherwise cooperate with, and meet the requirements and conditions (including, but not limited to, execution of indemnification agreements) of, federal, state, and other local governments and political entities, or any agencies or representatives thereof, for the purpose of improving, furthering, and expediting the beach management program.

(5) The department is authorized, for and on behalf of the state, to accept such federal moneys for beach erosion control as are available and to sign all necessary agreements therefor and to do and perform all necessary acts in connection therewith to effectuate the intent and purposes of this act.

(6) The department is authorized to make application for federal participation in the cost of any beach and shore preservation project under any Acts of Congress and all amendments thereto.

(7) The department is authorized to implement regional components of the beach management plan pursuant to ss. 161.091 and 161.161 and, where appropriate, to enter into agreements with the Federal Government, inlet districts, port authorities, intercoastal waterway districts, and local governments to cost share and coordinate such activity.

(8) The department is authorized to sponsor or cosponsor demonstration projects of new or innovative technologies which have the potential to reduce project costs, conserve beach qual

sand, extend the life of beach nourishment projects, and improve inlet sand bypassing pur 161.091.

(9)(a) Because improved, modified, or altered inlets are a significant cause of beach erosion, it is the Legislature's intent to manage the erosive impacts of inlets under the state's beach management program. Accordingly, it is the further intent of the Legislature for the state to cost share those components of inlet projects that minimize the erosive effects of the inlet or cost-effectively provide for the placement of beach-quality material on adjacent eroded beaches.

(b) The department is authorized to enter into cooperative agreements with local governments, including cities, counties, and special districts, for inlet management activities and to cost share those components of inlet projects that minimize the erosive effects of the inlet or cost-effectively provide for the placement of beach-quality material on adjacent eroded beaches.

(10) The department is authorized to pay up to 100 percent of the costs of approved beach erosion control projects when construction and maintenance are on lands of which the state is the upland riparian owner.

(11) With regard to a project approved in accordance with s. 161.161, the department is authorized to pay from legislative appropriations specifically provided for these purposes an amount up to 75 percent of the costs of contractual services, including, but not limited to, the costs for:

(a) Feasibility and related planning studies.

(b) Design.

(c) Construction.

(d) Monitoring. The state shall cost share in all biological and physical monitoring requirements which are based upon scientifically based criteria.

(12) A project, in order to receive state funds, shall provide for adequate public access, protect natural resources, and provide protection for endangered and threatened species.

(13) The department shall not fund projects that provide only recreational benefits. All funded activities must have an identifiable beach erosion control or beach preservation benefit directed toward maintaining or enhancing sand in the system. Activities ineligible for cost sharing include, but are not limited to:

(a) Recreational structures such as piers, decks, and boardwalks.

(b) Park activities and facilities except for erosion control.

(c) Aesthetic vegetation.

(d) Water quality components of stormwater management systems.

(e) Experimental or demonstration projects unless favorably peer reviewed or scientifically documented.

(f) Hard structures unless designed for erosion control or to enhance beach nourishment project longevity or bypassing performance.

(g) Operations and maintenance, with the exception of nourishment.

(h) Maintenance and repair of over-walks.

(i) Navigation construction, operation, and maintenance activities, except those elements whose purpose is to place or keep sand on adjacent beaches.

(14) The intent of the Legislature in preserving and protecting Florida's sandy beaches pursuant to this act is to direct beach erosion control appropriations to the state's most severely eroded beaches and to prevent further adverse impact caused by improved, modified, or altered inlets, coastal armoring, or existing upland development. In establishing annual project funding priorities, the department shall seek formal input from local coastal governments, beach and general government interest groups, and university experts. The department shall implement a scoring system for annual project funding priorities that consists of criteria equally weighted within the following specified tiers:

(a) Tier 1 must account for 20 percent of the total score and consist of the tourism-rela on investment and the economic impact of the project. The return on investment of the pr ratio of the tourism-related tax revenues for the most recent year to the amount of state funding requested for the proposed project. The economic impact of the project is the ratio of the tourism-related tax revenues for the most recent year to all county tax revenues for the most recent year. The department must calculate these ratios using state sales tax and tourism development tax data of the county having jurisdiction over the project area. If multiple counties have jurisdiction over the project area, the department must assess each county individually using these ratios. The department shall calculate the mean average of these ratios to determine the final overall assessment for the multicounty project.

(b) Tier 2 must account for 45 percent of the total score and consist of all of the following criteria:

1. The availability of federal matching dollars, considering federal authorization, the federal cost-share percentage, and the status of the funding award.

2. The storm damage reduction benefits of the project based on the following considerations:

a. The current condition of the project area, including any recent storm damage impact, as a percentage of volume of sand lost since the most recent beach nourishment event or most recent beach surveys. If the project area has not been previously restored, the department must use the historical background erosion rate;

b. The overall potential threat to existing upland development, including public and private structures and infrastructure, based on the percentage of vulnerable shoreline that exists within the project boundaries; and

c. The value of upland property benefiting from the protection provided by the project and its subsequent maintenance. A property must be within one-quarter mile of the project boundaries to be considered under the criterion specified in this sub-subparagraph.

3. The cost-effectiveness of the project based on the yearly cost per volume per mile of proposed beach fill placement. The department shall also consider the following when assessing cost-effectiveness pursuant to this subparagraph:

a. The existence of projects with proposed structural or design components that could extend the beach nourishment interval;

b. Existing beach nourishment projects that reduce upland storm damage costs by incorporating new or enhanced dune structures or new or existing dune restoration and revegetation projects;

c. Proposed innovative technologies designed to reduce project costs; and

d. Regional sediment management strategies and coordination to conserve sand source resources and reduce project costs.

(c) Tier 3 must account for 20 percent of the total score and consist of all of the following criteria:

1. Previous state commitment and involvement in the project, considering previously funded phases, the total amount of previous state funding, and previous partial appropriations for the proposed project.

2. The recreational benefits of the project based on:

a. The accessible beach area added by the project; and

b. The percentage of linear footage within the project boundaries which is zoned:

(I) As recreational or open space;

(II) For commercial use; or

(III) To otherwise allow for public lodging establishments.

3. The extent to which the project mitigates the adverse impact of improved, modified, or altered inlets on adjacent beaches.

4. The degree to which the project addresses the state's most significant beach erosio[illegible]s as a function of the linear footage of the project shoreline and the cubic yards of sand placed per mile per year.

(d) Tier 4 must account for 15 percent of the total score and consist of all of the following criteria:

1. Increased prioritization of projects that have been on the department's ranked project list for successive years and that have not previously secured state funding for project implementation.

2. Environmental habitat enhancement, recognizing state or federal critical habitat areas for threatened or endangered species which may be subject to extensive shoreline armoring, or recognizing areas where extensive shoreline armoring threatens the availability or quality of habitat for such species. Turtle-friendly designs, dune and vegetation projects for areas with redesigned or reduced fill templates, proposed incorporation of best management practices and adaptive management strategies to protect resources, and innovative technologies designed to benefit critical habitat preservation may also be considered.

3. The overall readiness of the project to proceed in a timely manner, considering the project's readiness for the construction phase of development, the status of required permits, the status of any needed easement acquisition, the availability of local funding sources, and the establishment of an erosion control line. If the department identifies specific reasonable and documented concerns that the project will not proceed in a timely manner, the department may choose not to include the project in the annual funding priorities submitted to the Legislature.

If more than one project qualifies equally under the provisions of this subsection, the department shall assign funding priority to those projects shown to be most ready to proceed.

(15) Until the unmet demand for repairing Florida's damaged beaches and dunes is satisfied, it is the further intent of the Legislature to cost share such projects equally between the state and local sponsors.

(16) In order to encourage regional approaches that provide cost savings, and notwithstanding subsection (15), actual cost savings that can be documented as resulting from geographic coordination and sequencing of two or more discrete erosion control projects shall proportionally reduce each local sponsor's cost share as long as the state financial participation does not exceed 75 percent.

(17) The selection of a project engineer acceptable to the department by local government as project sponsor shall be on the basis of competitive negotiation as provided in chapter 287. The project sponsor shall assume full responsibility for all project costs in excess of the state cost limitation.

(18) A local government desiring to initiate and pay the entire cost of designing, constructing, and maintaining an erosion control project prior to the state's initiating such construction may be reimbursed from state funds on the basis of the procedures set forth in s. 161.161, provided the project is approved by the department before initiation of construction and based on legislative appropriations and whether it furthers the provisions of s. 161.161. Such local interests shall, as project sponsor, be responsible for obtaining federal reimbursement in the case of federal-aid projects.

(19) Twenty-five percent of any funds appropriated for implementation of this section shall be held by the department until the last quarter of the fiscal year for which the appropriation is made. This amount shall be used to meet emergencies prescribed in s. 161.111. If no such emergencies occur, then these funds may be released in the last quarter of the fiscal year in which the appropriation is made for projects.

(20) The department shall maintain active project lists, updated at least quarterly, on its website by fiscal year in order to provide transparency regarding those projects receiving funding and the funding amounts and to facilitate legislative reporting and oversight. In consideration of this ir

(a) The department shall notify the Executive Office of the Governor and the Legislature regarding any significant changes in the funding levels of a given project as initially requested in the department's budget submission and subsequently included in approved annual funding allocations. The term "significant change" means a project-specific change or cumulative changes that exceed the project's original allocation by $500,000 or that exceed 25 percent of the project's original allocation.

1. Except as provided in subparagraph 2., if there is surplus funding, the department must notify and provide supporting justification to the Executive Office of the Governor and the Legislature to indicate whether surplus dollars are intended to be used for inlet management projects pursuant to s. 161.143 or for beach restoration and beach nourishment projects, offered for reversion as part of the next appropriations process, or used for other specified priority projects on active project lists.

2. The department may use surplus funds for projects identified in subparagraph 1. that do not have a significant change. The department must post the uses of such funds on the project listing web page of its website. The department is not required to post any other notice or supporting justification before it uses the surplus funds for a project that does not have a significant change.

(b) The department shall prepare a summary of project activities, their funding status, and changes to annual project lists for the current and preceding fiscal year. The department shall include the summary with the department's submission of its annual legislative budget request.

(c) Funding for specific projects on annual project lists approved by the Legislature must remain available for such projects for 18 months. A local project sponsor may at any time release, in whole or in part, appropriated project dollars by formal notification to the department. The department shall notify the Executive Office of the Governor and the Legislature of such release and indicate in the notification how the project dollars are recommended to be used after such release.

(21) The department may adopt rules to implement this section.

(22) Notwithstanding subsections (1), (15), and (16), and for the 2021-2022 fiscal year, in the event that beaches are impacted by hurricanes or other storm events within communities with a per capita annual income that is less than the state's per capita annual income as shown in the most recent release from the United States Census Bureau of the United States Department of Commerce which includes both measurements, the department may waive or reduce the match requirements. This subsection expires July 1, 2022.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 7, ch. 78-257; s. 5, ch. 86-138; s. 17, ch. 87-97; s. 26, ch. 94-356; s. 1438, ch. 95-147; s. 5, ch. 96-321; s. 3, ch. 98-311; s. 9, ch. 2000-346; s. 3, ch. 2012-65; ss. 1, 2, ch. 2019-122; s. 46, ch. 2021-37.

161.111 Shore erosion emergency.—If a shore erosion emergency is declared by the Governor, the state, acting through the department, may spend whatever state funds are available to alleviate shore erosion.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 27, ch. 94-356; s. 10, ch. 2000-346.

161.121 Penalty.—Unless otherwise provided in this chapter, whoever shall fail to comply with the provisions of this part is guilty of a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083.

History.—s. 1, ch. 65-408; s. 83, ch. 71-136; s. 2, ch. 77-12; s. 10, ch. 91-224.

161.131 Construction of ss. 161.011-161.212.—The provisions of ss. 161.011-161.212 shall be liberally construed by all concerned in a manner to best accomplish the beach and shore preservation purposes and programs.

History.—s. 3, ch. 65-408; s. 6, ch. 86-138.

161.141 Property rights of state and private upland owners in beach restoration project areas.—The Legislature declares that it is the public policy of the state to cause to be fixed an

determined, pursuant to beach restoration, beach nourishment, and erosion control projec boundary line between sovereignty lands of the state bordering on the Atlantic Ocean, the Gulf of Mexico, or the Straits of Florida, and the bays, lagoons, and other tidal reaches thereof, and the upland properties adjacent thereto; except that such boundary line shall not be fixed for beach restoration projects that result from inlet or navigation channel maintenance dredging projects unless such projects involve the construction of authorized beach restoration projects. However, prior to construction of such a beach restoration project, the board of trustees must establish the line of mean high water for the area to be restored; and any additions to the upland property landward of the established line of mean high water which result from the restoration project remain the property of the upland owner subject to all governmental regulations and are not to be used to justify increased density or the relocation of the coastal construction control line as may be in effect for such upland property. The resulting additions to upland property are also subject to a public easement for traditional uses of the sandy beach consistent with uses that would have been allowed prior to the need for the restoration project. It is further declared that there is no intention on the part of the state to extend its claims to lands not already held by it or to deprive any upland or submerged land owner of the legitimate and constitutional use and enjoyment of his or her property. If an authorized beach restoration, beach nourishment, and erosion control project cannot reasonably be accomplished without the taking of private property, the taking must be made by the requesting authority by eminent domain proceedings. In any action alleging a taking of all or part of a property or property right as a result of a beach restoration project, in determining whether such taking has occurred or the value of any damage alleged with respect to the owner's remaining upland property adjoining the beach restoration project, the enhancement, if any, in value of the owner's remaining adjoining property of the upland property owner by reason of the beach restoration project shall be considered. If a taking is judicially determined to have occurred as a result of a beach restoration project, the enhancement in value to the owner's remaining adjoining property by reason of the beach restoration project shall be offset against the value of the damage, if any, resulting to such remaining adjoining property of the upland property owner by reason of the beach restoration project, but such enhancement in the value shall not be offset against the value of the property or property right alleged to have been taken. If the enhancement in value shall exceed the value of the damage, if any, to the remaining adjoining property, there shall be no recovery over against the property owner for such excess.

History.—s. 1, ch. 70-276; s. 1, ch. 79-233; s. 1, ch. 82-144; s. 7, ch. 86-138; s. 18, ch. 87-97; ss. 28, 487, ch. 94-356; s. 1439, ch. 95-147; s. 11, ch. 2000-346; s. 3, ch. 2007-99.

161.142 Declaration of public policy relating to improved navigation inlets.—The Legislature recognizes the need for maintaining navigation inlets to promote commercial and recreational uses of our coastal waters and their resources. The Legislature further recognizes that inlets interrupt or alter the natural drift of beach-quality sand resources, which often results in these sand resources being deposited in nearshore areas or in the inlet channel, or in the inland waterway adjacent to the inlet, instead of providing natural nourishment to the adjacent eroding beaches. Accordingly, the Legislature finds it is in the public interest to replicate the natural drift of sand which is interrupted or altered by inlets to be replaced and for each level of government to undertake all reasonable efforts to maximize inlet sand bypassing to ensure that beach-quality sand is placed on adjacent eroding beaches. Such activities cannot make up for the historical sand deficits caused by inlets but shall be designed to balance the sediment budget of the inlet and adjacent beaches and extend the life of proximate beach-restoration projects so that periodic nourishment is needed less frequently. Therefore, in furtherance of this declaration of public policy and the Legislature's intent to redirect and recommit the state's comprehensive beach management efforts to address the beach erosion caused by inlets, the department shall ensure that:

(1) All construction and maintenance dredgings of beach-quality sand are placed on the eroding beaches unless, if placed elsewhere, an equivalent quality and quantity of sand from an alternate location is placed on the adjacent eroding beaches.

(2) On an average annual basis, a quantity of beach-quality sand is placed on the adjacent eroding beaches which is equal to the natural net annual longshore sediment transport. The department shall, with the assistance of university-based or other contractual resources that it may employ or call upon, maintain a current estimate of such quantities of sand for purposes of prioritizing, planning, and permitting.

(3) Construction waterward of the coastal construction control line on downdrift coastal areas, on islands substantially created by the deposit of spoil, located within 1 mile of the centerline of navigation channels or inlets, providing access to ports listed in s. 403.021(9)(b), which suffers or has suffered erosion caused by such navigation channel maintenance or construction shall be exempt from the permitting requirements and prohibitions of s. 161.053(4) or (5); however, such construction shall comply with the applicable Florida Building Code adopted pursuant to s. 553.73. The timing and sequence of any construction activities associated with inlet management projects shall provide protection to nesting sea turtles and their hatchlings and habitats, to nesting shorebirds, and to native salt-resistant vegetation and endangered plant communities. Beach-quality sand placed on the beach as part of an inlet management project must be suitable for marine turtle nesting.

(4) The provisions of subsections (1) and (2) shall not be a requirement imposed upon ports listed in s. 403.021(9)(b); however, such ports must demonstrate reasonable effort to place beach-quality sand from construction and maintenance dredging and port-development projects on adjacent eroding beaches in accordance with port master plans approved by the Department of Economic Opportunity, and permits approved and issued by the department, to ensure compliance with this section. Ports may sponsor or cosponsor inlet management projects that are fully eligible for state cost sharing.

(5) The department shall ensure that any disposal of the beach-quality sand from federal projects in this state which involve dredging for the purpose of navigation is on, or in the nearshore area of, adjacent eroding beaches. The department may consider permitting nearshore or upland disposal of such beach-quality sand if emergency conditions exist. The state recognizes that due to the growing demand for beach-quality sand resources for beach restoration and nourishment projects, the limited supply of such sand resources, and the cost of such projects, beach or nearshore sand placement is the least-cost disposal method.

(6) If federal investigations and reports or state-approved inlet management plans do not specify the entity or entities responsible for the extent of erosion caused by an inlet, the department or local government, with the assistance of university-based or other contractual resources that they may employ or call upon, is encouraged to undertake assessments that aid in specifying the responsible entity or entities and in more accurately determining cost-sharing responsibilities for measures to correct such erosion. The entity that is responsible for maintenance dredging of an inlet may be deemed responsible for the erosion caused by the inlet if another responsible party is not specified in such an assessment, a shore protection project investigation or report, or a state-approved inlet management plan.

(7) If the beneficiaries of the inlet, the local governments having jurisdiction of lands adjacent to the inlet, or the owners of property adjacent to the inlet are involved in a dispute concerning how much sand should be bypassed, the department shall protect its monetary investment in beach nourishment projects within the inlet's physical zone of influence by taking all reasonable actions to balance the sediment budget of the inlet and adjacent beaches, including implementation of inlet sand bypassing and other inlet management projects.

History.—s. 8, ch. 86-138; s. 19, ch. 87-97; s. 1, ch. 2008-242; s. 184, ch. 2010-102; s. 56, ch. 2011-142.

161.143 Inlet management; planning, prioritizing, funding, approving, and implementing projects.—

(1) Studies, projects, and activities for the purpose of mitigating the erosive effects of inlets and balancing the sediment budget of the inlet and adjacent beaches must be supported by separately approved inlet management plans or inlet components of the statewide comprehensive beach management plan. Such plans in support of individual inlet projects or activities must, pursuant to s. 161.161(1)(b), evaluate each inlet to determine the extent of the inlet's erosive effect on adjacent beaches and, if significant, make recommendations to mitigate such ongoing erosive effects and provide estimated costs for such mitigation.

(2) The department shall establish annual funding priorities for studies, activities, or other projects concerning inlet management. Such inlet management projects constitute the intended scope of this section and s. 161.142 and consist of inlet sand bypassing, improvement of infrastructure to facilitate sand bypassing, modifications to channel dredging, jetty redesign, jetty repair, disposal of spoil material, and the development, revision, adoption, or implementation of an inlet management plan. Projects considered for funding pursuant to this section must be considered separate and apart from projects reviewed and prioritized in s. 161.101(14). The funding priorities established by the department under this section must be consistent with the requirements and legislative declaration in ss. 161.101(14), 161.142, and 161.161(1)(b). In establishing funding priorities under this subsection and before transmitting the annual inlet project list to the Legislature under subsection (4), the department shall seek formal input from local coastal governments, beach and general government associations and other coastal interest groups, and university experts concerning annual funding priorities for inlet management projects. In order to maximize the benefits of efforts to address the inlet-caused beach erosion problems of this state, the ranking criteria used by the department to establish funding priorities for studies, activities, or other projects concerning inlet management must include equal consideration of:

(a) An estimate of the annual quantity of beach-quality sand reaching the updrift boundary of the improved jetty or inlet channel.

(b) The severity of the erosion to the adjacent beaches caused by the inlet.

(c) The overall significance and anticipated success of the proposed project in mitigating the erosive effects of the inlet, balancing the sediment budget of the inlet and adjacent beaches, and addressing the sand deficit along the inlet-affected shorelines.

(d) The extent to which bypassing activities at an inlet would benefit from modest, cost-effective improvements when considering the volumetric increases from the proposed project, the availability of beach-quality sand currently not being bypassed to adjacent eroding beaches, and the ease with which such beach-quality sand may be obtained.

(e) The cost-effectiveness of sand made available by a proposed inlet management project or activity relative to other sand source opportunities that would be used to address inlet-caused beach erosion.

(f) The existence of a proposed or recently updated inlet management plan or a local-government-sponsored inlet study addressing the mitigation of an inlet's erosive effects on adjacent beaches.

(g) The degree to which the proposed project will enhance the performance and longevity of proximate beach nourishment projects, thereby reducing the frequency of such periodic nourishment projects.

(h) The project-ranking criteria in s. 161.101(14) to the extent such criteria are applicable to inlet management studies, projects, and activities and are distinct from, and not duplicative of, the criteria listed in paragraphs (a)-(g).

(3) The department may pay from legislative appropriations up to 75 percent of the construction

costs of an initial major inlet management project component for the purpose of mitigating erosive effects of the inlet to the shoreline and balancing the sediment budget. The remaining balance of such construction costs must be paid from other funding sources, such as local sponsors. All project costs not associated with an initial major inlet management project component must be shared equally by state and local sponsors in accordance with s. 161.101(15).

(4) The department shall annually provide an inlet management project list, in priority order, to the Legislature as part of the department's budget request.

(a) The department shall designate for projects on the current year's inlet management project list, in priority order, an amount that is at least equal to the greater of:

1. Ten percent of the total amount that the Legislature appropriates in the fiscal year for statewide beach management; or

2. The percentage of inlet management funding requests from local sponsors as a proportion of the total amount of statewide beach management dollars requested in a given year.

(b) The department shall include inlet monitoring activities ranked on the inlet management project list as one aggregated subcategory on the overall inlet management project list.

(5) The department shall update and maintain an annual report on its website concerning the extent to which each inlet project has succeeded in balancing the sediment budget of the inlet and adjacent beaches and in mitigating the inlet's erosive effects on adjacent beaches. The report must estimate the quantity of sediment bypassed, transferred, or otherwise placed on adjacent eroding beaches, or in such beaches' nearshore area, for the purpose of offsetting the erosive effects of inlets on the beaches of this state.

(6) The department shall adopt rules under ss. 120.536(1) and 120.54 to administer this section.

History.—s. 2, ch. 2008-242; s. 19, ch. 2013-41; s. 31, ch. 2014-53; s. 46, ch. 2015-222; s. 81, ch. 2016-62; s. 2, ch. 2018-111; s. 3, ch. 2019-122.

161.144 Policy guidance related to sand source management.—The Legislature recognizes that beach-quality sand for the nourishment of the state's critically eroded beaches is an exhaustible resource, in ever-decreasing supply, and must be carefully managed for the systemwide benefit of the state's beaches. Therefore, the Department of Environmental Protection, pursuant to s. 161.161 and in cooperation with federal and local government agencies, shall develop and maintain an inventory of identified offshore sand sources as part of the regional elements of its comprehensive long-term beach management plan. Offshore sand sources in state or federal waters which are identified for potential, proposed, or permitted use shall be clearly mapped or otherwise noted and readily available for public review. In addition, boards of county commissioners of coastal counties adjacent to sand sources proposed for use outside of the region or subregion shall be provided written notice by the department and an opportunity to comment during a specific project's planning and permitting stages. The department shall identify in its annual list of local government funding requests submitted to the Legislature, pursuant to s. 161.091, those projects that propose to use sand sources from another region or subregion at the time the list is submitted.

History.—s. 4, ch. 2007-99.

161.151 Definitions; ss. 161.141-161.211.—As used in ss. 161.141-161.211:

(1) "Board of trustees" means the Board of Trustees of the Internal Improvement Trust Fund.

(2) "Requesting authority" means any coastal county, municipality, or beach erosion control district which requests a survey by the board of trustees under the provisions of ss. 161.141-161.211.

(3) "Erosion control line" means the line determined in accordance with the provisions of ss. 161.141-161.211 which represents the landward extent of the claims of the state in its capacity as sovereign titleholder of the submerged bottoms and shores of the Atlantic Ocean, the Gulf of Mexico, and the bays, lagoons and other tidal reaches thereof on the date of the recording of the survey as authorized in s. 161.181.

(4) "Authorized beach restoration project" means a beach project authorized by the United States Congress or the department which involves a specific project engineering design and a project maintenance program for a period of not less than 10 years.

History.—s. 2, ch. 70-276; s. 1, ch. 70-439; s. 2, ch. 82-144.

161.161 Procedure for approval of projects.—

(1) The department shall develop and maintain a comprehensive long-term beach management plan for the restoration and maintenance of the state's critically eroded beaches fronting the Atlantic Ocean, Gulf of Mexico, and Straits of Florida. In developing and maintaining this plan, the department shall:

(a) Address long-term solutions to the problem of critically eroded beaches in this state.

(b) Evaluate each improved, modified, or altered inlet and determine whether the inlet is a significant cause of beach erosion. With respect to each inlet determined to be a significant cause of beach erosion, the plan shall include the extent to which such inlet causes beach erosion and recommendations to mitigate the erosive impact of the inlet, including, but not limited to, inlet sediment bypassing; improvement of infrastructure to facilitate sand bypassing; modifications to channel dredging, jetty design, and disposal of spoil material; establishment of feeder beaches; and beach restoration and beach nourishment.

(c) Evaluate criteria for beach restoration and beach nourishment projects, including, but not limited to, dune elevation and width and revegetation and stabilization requirements and beach profiles.

(d) Consider the establishment of regional sediment management alternatives for one or more individual beach and inlet sand bypassing projects as an alternative to beach restoration when appropriate and cost-effective, and recommend the location of such regional sediment management alternatives and the source of beach-compatible sand.

(e) Identify causes of shoreline erosion and change, determine erosion rates, and maintain an updated list of critically eroded sandy beaches based on data, analyses, and investigations of shoreline conditions.

(f) Assess impacts of development and coastal protection structures on shoreline change and erosion.

(g) Identify short-term and long-term economic costs and benefits of beaches to the state and individual beach communities.

(h) Study dune and vegetation conditions, identify existing beach projects without dune features or with dunes without adequate elevations, and encourage dune restoration and revegetation to be incorporated as part of storm damage recovery projects or future dune maintenance events.

(i) Identify beach areas used by marine turtles and develop strategies for protection of the turtles and their nests and nesting locations.

(j) Identify alternative management responses to preserve undeveloped beach and dune systems and to restore damaged beach and dune systems. In identifying such management responses, the department shall consider, at a minimum, beach restoration and nourishment, armoring, relocation, dune and vegetation restoration, and acquisition.

(k) Document procedures and policies for preparing poststorm damage assessments and corresponding recovery plans, including repair cost estimates.

(l) Identify and assess appropriate management measures for all of the state's critically eroded sandy beaches.

(2) The comprehensive long-term management plan developed and maintained by the department pursuant to subsection (1) must include, at a minimum, a strategic beach management plan, a critically eroded beaches report, and a statewide long-range budget plan. The long-range budget plan must include a 3-year work plan for beach restoration, beach nourishment, and inlet managem

projects that lists planned projects for each of the 3 fiscal years addressed in the work plan.

(a) The strategic beach management plan must identify and recommend appropriate m[illegible] all of the state's critically eroded sandy beaches and may incorporate plans prepared at the regional level, taking into account areas of greatest need and probable federal and local funding. Upon approval in accordance with this section, such regional plans, along with the 3-year work plan identified in subparagraph (c)1., must serve as the basis for state funding decisions. Before finalizing the strategic beach management plan, the department shall hold a public meeting in the region for which the plan is prepared or hold a publicly noticed webinar.

(b) The critically eroded beaches report must be developed and maintained based primarily on the requirements specified in paragraph (1)(e).

(c) The statewide long-range budget plan must include at least 5 years of planned beach restoration, beach nourishment, and inlet management project funding needs as identified, and subsequently refined, by local government sponsors. This plan must consist of two components:

1. A 3-year work plan that identifies beach restoration, beach nourishment, and inlet management projects viable for implementation during the next 3 fiscal years, as determined by available cost-sharing, local sponsor support, regulatory considerations, and the ability of the project to proceed as scheduled. The 3-year work plan must, for each fiscal year, identify proposed projects and their current development status, listing them in priority order based on the applicable criteria established in ss. 161.101(14) and 161.143(2). Specific funding requests and criteria ranking, pursuant to ss. 161.101(14) and 161.143(2), may be modified as warranted in each successive fiscal year, and such modifications must be documented and submitted to the Legislature with each 3-year work plan. Year one projects shall consist of those projects identified for funding consideration in the ensuing fiscal year.

2. A long-range plan that identifies projects for inclusion in the fourth and fifth ensuing fiscal years. These projects may be presented by region and do not need to be presented in priority order; however, the department should identify issues that may prevent successful completion of such projects and recommend solutions that would allow the projects to progress into the 3-year work plan.

(3) The secretary shall present the 3-year work plan to the Legislature annually. The work plan must be accompanied by a 3-year financial forecast for the availability of funding for the projects.

(4) Once a project is determined to be undertaken, a survey of all or part of the shoreline within the jurisdiction of the local government in which the beach is located shall be conducted in order to establish the area of beach to be protected by the project and locate an erosion control line. No provision of ss. 161.141-161.211 shall be construed as preventing a local government from participating in the funding of erosion control projects or surveys undertaken in accordance with the provisions of ss. 161.141-161.211. In lieu of conducting a survey, the board of trustees may accept and approve a survey as initiated, conducted, and submitted by the appropriate local government if said survey is made in conformity with the appropriate principles set forth in ss. 161.141-161.211.

(5) Upon completion of the survey depicting the area of the beach erosion control project and the proposed location of the erosion control line, the board of trustees shall give notice of the survey and the date on which the board of trustees will hold a public hearing for the purpose of receiving evidence on the merits of the proposed erosion control line and, if approval is granted, of locating and establishing such requested erosion control line. Such notice shall be by publication in a newspaper of general circulation published in the county or counties in which the proposed beach erosion control project shall be located not less than once a week for 3 consecutive weeks and by mailing copies of such notice by certified or registered mail to each riparian owner of record of upland property lying within 1,000 feet (radial distance) of the shoreline to be extended through construction of the proposed beach erosion control project, as his or her name and address appear

upon the latest tax assessment roll, in order that any persons who have an interest in the l such requested erosion control line can be present at such hearing to submit their views concerning the precise location of the proposed erosion control line. Such notice shall be in addition to any notice requirement in chapter 120.

(6) The board of trustees shall approve or disapprove the erosion control line for a beach restoration project. In locating said line, the board of trustees shall be guided by the existing line of mean high water, bearing in mind the requirements of proper engineering in the beach restoration project, the extent to which erosion or avulsion has occurred, and the need to protect existing ownership of as much upland as is reasonably possible.

(7) In no event shall the department undertake a beach restoration or beach nourishment project where a local share is required without the approval of the local government or governments responsible for that local share.

(8) The department may adopt rules to administer this section.

History.—s. 3, ch. 70-276; s. 1, ch. 70-439; s. 23, ch. 78-95; s. 2, ch. 79-233; s. 9, ch. 86-138; s. 20, ch. 87-97; s. 29, ch. 94-356; s. 1440, ch. 95-147; s. 6, ch. 96-321; s. 3, ch. 96-371; s. 4, ch. 98-311; s. 12, ch. 2000-346; s. 40, ch. 2010-102; s. 4, ch. 2019-122.

161.163 Coastal areas used by sea turtles; rules.—The department shall adopt by rule a designation of coastal areas which are utilized, or are likely to be utilized, by sea turtles for nesting. The department shall also adopt by rule guidelines for local government regulations that control beachfront lighting to protect hatching sea turtles.

History.—s. 15, ch. 86-138; s. 1, ch. 2000-211.

161.181 Recording of resolution and survey of board of trustees.—If no review is taken within the time prescribed from the decision of the board of trustees or, if review be timely taken, in the absence of a final decision of a court of competent jurisdiction preventing the implementation of a beach erosion control project or invalidating, abolishing, or otherwise preventing the establishment and recordation of the erosion control line as provided herein, the board of trustees shall file in the public records of the county or counties in which the erosion control line lies, a copy of its resolution approving the beach erosion control project and locating the erosion control line and shall also file and cause to be recorded in the book of plats of said county or counties a survey showing the area of beach to be protected and the location of the erosion control line.

History.—s. 5, ch. 70-276; s. 1, ch. 70-439; s. 3, ch. 79-233.

161.191 Vesting of title to lands.—

(1) Upon the filing of a copy of the board of trustees' resolution and the recording of the survey showing the location of the erosion control line and the area of beach to be protected as provided in s. 161.181, title to all lands seaward of the erosion control line shall be deemed to be vested in the state by right of its sovereignty, and title to all lands landward of such line shall be vested in the riparian upland owners whose lands either abut the erosion control line or would have abutted the line if it had been located directly on the line of mean high water on the date the board of trustees' survey was recorded.

(2) Once the erosion control line along any segment of the shoreline has been established in accordance with the provisions of ss. 161.141-161.211, the common law shall no longer operate to increase or decrease the proportions of any upland property lying landward of such line, either by accretion or erosion or by any other natural or artificial process, except as provided in s. 161.211(2) and (3). However, the state shall not extend, or permit to be extended through artificial means, that portion of the protected beach lying seaward of the erosion control line beyond the limits set forth in the survey recorded by the board of trustees unless the state first obtains the written consent of all riparian upland owners whose view or access to the water's edge would be altered or impaired.

History.—s. 6, ch. 70-276; s. 1, ch. 70-439; s. 3, ch. 79-233.

161.201 Preservation of common-law rights.—Any upland owner or lessee who by o[illegible] ss. 161.141-161.211 ceases to be a holder of title to the mean high-water line shall, nonetheless, continue to be entitled to all common-law riparian rights except as otherwise provided in s. 161.191(2), including but not limited to rights of ingress, egress, view, boating, bathing, and fishing. In addition the state shall not allow any structure to be erected upon lands created, either naturally or artificially, seaward of any erosion control line fixed in accordance with the provisions of ss. 161.141-161.211, except such structures required for the prevention of erosion. Neither shall such use be permitted by the state as may be injurious to the person, business, or property of the upland owner or lessee; and the several municipalities, counties and special districts are authorized and directed to enforce this provision through the exercise of their respective police powers.

History.—s. 7, ch. 70-276.

161.211 Cancellation of resolution for nonperformance by board of trustees.—

(1) If for any reason construction of the beach erosion control project authorized by the board of trustees is not commenced within 2 years from the date of the recording of the board of trustees' survey, as provided in s. 161.181, or in the event construction is commenced but halted for a period exceeding 6 months from commencement, then, upon receipt of a written petition signed by those owners or lessees of a majority of the lineal feet of riparian property which either abuts or would have abutted the erosion control line if the same had been located at the line of mean high water on the date the board of trustees' survey was recorded, the board of trustees shall forthwith cause to be canceled and vacated of record the resolution authorizing the beach erosion control project and the survey locating the erosion control line, and the erosion control line shall be null and void and of no further force or effect.

(2) If the state, county, municipality, erosion control district, or other governmental agency charged with the responsibility of maintaining the protected beach fails to maintain the same and as a result thereof the shoreline gradually recedes to a point or points landward of the erosion control line as established herein, the provisions of s. 161.191(2) shall cease to be operative as to the affected upland.

(3) In the event a substantial portion of the shoreline encompassed within the erosion control project recedes landward of the erosion control line, the board of trustees, on its own initiative, may direct or request, or, upon receipt of a written petition signed by the owners or lessees of a majority of the lineal feet of riparian property lying within the erosion control project, shall direct or request, the agency charged with the responsibility of maintaining the beach to restore the same to the extent provided for in the board of trustees' recorded survey. If the beach is not restored as directed or requested by the board of trustees within a period of 1 year from the date of the directive or request, the board of trustees shall forthwith cause to be canceled and vacated of record the resolution authorizing the beach erosion control project and the survey locating the erosion control line, and the erosion control line shall be null and void and of no further force or effect.

History.—s. 8, ch. 70-276; s. 1, ch. 70-439; s. 3, ch. 79-233.

161.212 Judicial review relating to permits and licenses.—

(1) As used in this section, unless the context otherwise requires:

(a) "Agency" means any official, officer, commission, authority, council, committee, department, division, bureau, board, section, or other unit or entity of state government.

(b) "Permit" means any permit or license required by this chapter.

(2) Any person substantially affected by a final action of any agency with respect to a permit may seek review within 90 days of the rendering of such decision and request monetary damages and other relief in the circuit court in the judicial circuit in which the affected property is located; however, circuit court review shall be confined solely to determining whether final agency action is an

unreasonable exercise of the state's police power constituting a taking without just compe
Review of final agency action for the purpose of determining whether the action is in accordance with existing statutes or rules and based on competent substantial evidence shall proceed in accordance with chapter 120.

(3) If the court determines the decision reviewed is an unreasonable exercise of the state's police power constituting a taking without just compensation, the court shall remand the matter to the agency which shall, within a reasonable time:

(a) Agree to issue the permit;

(b) Agree to pay appropriate monetary damages; however, in determining the amount of compensation to be paid, consideration shall be given by the court to any enhancement to the value of the land attributable to governmental action; or

(c) Agree to modify its decision to avoid an unreasonable exercise of police power.

(4) The agency shall submit a statement of its agreed-upon action to the court in the form of a proposed order. If the action is a reasonable exercise of police power, the court shall enter its final order approving the proposed order. If the agency fails to submit a proposed order within a reasonable time not to exceed 90 days which specifies an action that is a reasonable exercise of police power, the court may order the agency to perform any of the alternatives specified in subsection (3).

(5) The court shall award reasonable attorney's fees and court costs to the agency or substantially affected person, whichever prevails.

(6) The provisions of this section are cumulative and shall not be deemed to abrogate any other remedies provided by law.

History.—ss. 1, 2, 3, 4, 5, 6, ch. 78-85.

161.242 Harvesting of sea oats and sea grapes prohibited; possession prima facie evidence of violation.—

(1) The purpose of this section is to protect the beaches and shores of the state from erosion by preserving natural vegetative cover to bind the sand.

(2) It is unlawful for any purpose to cut, harvest, remove, or eradicate any of the grass commonly known as sea oats or *Uniola paniculata* and *Coccolobis uvifera* commonly known as sea grapes from any public land or from any private land without consent of the owner of such land or person having lawful possession thereof. Possession of either *Uniola paniculata* or *Coccolobis uvifera* by other than the owner of such land shall constitute prima facie evidence of violation of this section. However, licensed, certified nurserymen who grow any of the native plants listed in this section from seeds or by vegetative propagation are specifically permitted to sell these commercially grown plants and shall not be in violation of this section of the law if they do so, as it is the intent of the law to preserve and encourage the growth of these native plants which are rapidly disappearing from the state.

History.—s. 1, ch. 65-458; s. 1, ch. 67-150; s. 280, ch. 71-136; s. 1, ch. 71-153; s. 1, ch. 73-258; s. 16, ch. 85-234; s. 11, ch. 2000-197.

Note.—Former s. 370.041.

PART II
BEACH AND SHORE PRESERVATION DISTRICTS

161.25 County beach and shore preservation authority; board of county commissioners.—To carry out the beach and shore preservation program, the board of county commissioners of any county and its successors in office, as an ex officio duty, are hereby severally constituted as the beach and shore preservation authority for their county. In this capacity, any such board of county commissioners may at its own initiative take all necessary steps as soon as practicable and desirable to implement the provisions of this chapter.

History.—s. 1, ch. 65-408.

161.26 Expenses; use of county funds.—The board of county commissioners of any of the counties is authorized to use any available county funds to meet necessary expenses of its beach and shore preservation program. This may include, among other things, costs of studies, surveys, planning, engineering, coordination, negotiation, acquisition of lands, construction of works and facilities, operation and maintenance, and other activities incidental to acquisition and construction to the extent considered proper and desirable by the board of county commissioners.

History.—s. 1, ch. 65-408.

161.27 Personnel and facilities.—In carrying out the purposes of this part, the board of county commissioners may use to the extent feasible any personnel or facilities employed by or available to the county. In addition, the board of county commissioners may hire such personnel and contract for such services as may prove necessary or desirable.

History.—s. 1, ch. 65-408.

161.28 Comprehensive county beach and shore preservation program.—The board of county commissioners of any of the counties may, by assignments to legally qualified personnel, whose services are made available as provided in s. 161.27, initiate and carry on such studies and investigations as may be necessary to plan a logical and suitable program for comprehensive beach and shore preservation within its county. This program may incorporate all or part of the recommendations of the United States Army Corps of Engineers concerning beach and shore restoration and erosion control, if there be any, and may additionally provide to an appropriate extent for the other aspects of beach and shore preservation. In conducting its studies and making its plans for a beach and shore preservation program, the board of county commissioners shall hold sufficient public hearings to ascertain the views and feelings of affected property owners in the various localities of the county regarding the needs to be served and manner in which they should best be served. The board of county commissioners shall give proper and reasonable consideration to all evidence received in planning the beach and shore preservation program.

History.—s. 1, ch. 65-408.

161.29 Benefit categories or zones.—Upon adoption of a reasonably final plan of impro[illegible]t

for the beach and shore preservation program for the entire county, the board of county commissioners shall conduct, through the use of personnel competent and qualified in this field, an economic analysis of the proposed program, determining the nature and extent of benefits expected to accrue from the program and allocating these benefits to their proper recipients by categories or zones of comparable benefits, and place in the same zone areas of equal benefit, or follow such other method as may be deemed suitable for the purposes of this section. From time to time, the board of county commissioners shall conduct in the same or similar manner a new analysis to better determine and allocate actual or expected benefits.

History.—s. 1, ch. 65-408.

161.31 Establishment of districts.—

(1) Districts established under the provisions of this part shall constitute public bodies corporate and politic, exercising public powers and all other powers and duties incident to such bodies.

(2) The board of county commissioners shall serve as the governing body for all districts created under this authority and shall proceed as expeditiously as possible to determine and implement policy and program for each such district in accordance with the overall county program, except that the board of county commissioners may receive guidance in these matters for each district from an advisory group, consisting of not less than three nor more than five persons, which the board of county commissioners may appoint from any or each such district. Members of such advisory group shall have no definite term of office but shall serve at the pleasure of the board of county commissioners.

(3) To further provide for efficient administration of the district program, the board of county commissioners may hire such additional personnel or contract for such additional services as it considers necessary or desirable in each case.

(4) A uniform ad valorem tax not to exceed 1 mill per year on all nonexempt taxable property within the district may be levied for a period of not more than 2 years to defray organizational and administrative costs of said district.

History.—s. 1, ch. 65-408; s. 3, ch. 71-14.

161.32 Existing erosion prevention district.—This part shall not be construed to impair the existence, powers or functions of any existing erosion prevention, beach or shore preservation districts created by special or local act; provided, however, that any such existing district may re-create and reestablish itself under the provisions of this act as if originally created and established hereunder in all respects, by resolution of its governing body adopting the provisions of chapter 161, in their entirety and thereafter shall function as a beach and shore preservation district created and established under the provisions of this part.

History.—s. 1, ch. 65-408.

161.33 Cooperation with federal, state, and other governmental entities.—

(1) The board of county commissioners, for itself or on behalf of any and all duly established beach and shore preservation districts within the county, may enter into cooperative agreements and otherwise cooperate with, and meet the requirements and conditions of, federal, state and other local governments and political entities, or any agencies or representative thereof, for the purpose of improving, furthering and expediting the beach and shore preservation program.

(2) The board of county commissioners and the department, for and on behalf of each or any district created in accordance with parts I and II of this chapter, are authorized to receive and accept from any federal agency, grants for or in aid of any beach and shore preservation program contemplated by this part, and to receive and accept aid or contributions from any source, of money, property and other things of value. The board of county commissioners is authorized to make application for federal participation in the cost of any beach and shore preservation program

any Acts of Congress and all amendments thereto.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 30, ch. 94-356.

161.34 Coordination of county preservation activities.—The board of county commissioners shall coordinate the work and activity of all districts established hereunder within the county and, to further ensure harmony and consistency with the overall county beach and shore preservation plan, shall establish working liaison with each municipality and other agencies and groups involved in beach and shore preservation activity within the county.

History.—s. 1, ch. 65-408.

161.35 County shoreline; supervisory and regulatory powers of board of county commissioners.—

(1) With the consent of the department and of any municipality or other political authority involved, the board of county commissioners may regulate and supervise all physical work or activity along the county shoreline which is likely to have a material physical effect on existing coastal conditions or natural shore processes. This regulatory and supervisory authority shall specifically include, but not be limited to, installation of groins, jetties, moles, breakwaters, seawalls, revetments, and other coastal construction as defined herein. For this purpose, the board of county commissioners, with assistance as required from its professional personnel, may develop standards and criteria, issue permits and conduct inspections.

(2) All regulations and requirements prescribed by the board of county commissioners pursuant to this part may be enforced by mandatory injunction or other appropriate action in any court of competent jurisdiction. Such regulations and requirements shall in no way affect the regulatory authority of the department.

History.—s. 1, ch. 65-408; ss. 25, 35, ch. 69-106; s. 31, ch. 94-356.

161.36 General powers of authority.—In order to most effectively carry out the purposes of this part, the board of county commissioners, as the county beach and shore preservation authority and as the governing body of each beach and shore preservation district established thereby, shall be possessed of broad powers to do all manner of things necessary or desirable in pursuance of this end; provided, however, nothing herein shall diminish or impair the regulatory authority of the Department of Environmental Protection under part I of this chapter or the Board of Trustees of the Internal Improvement Trust Fund under chapter 253. Such powers shall specifically include, but not be limited to, the following:

(1) To make contracts and enter into agreements;

(2) To sue and be sued;

(3) To acquire and hold lands and property by any lawful means;

(4) To exercise the power of eminent domain;

(5) To enter upon private property for purposes of making surveys, soundings, drillings and examinations, and such entry shall not be deemed a trespass;

(6) To construct, acquire, operate and maintain works and facilities;

(7) To make rules and regulations; and

(8) To do any and all other things specified or implied in this part.

History.—s. 1, ch. 65-408; ss. 25, 27, 35, ch. 69-106; s. 32, ch. 94-356; s. 60, ch. 99-2; s. 5, ch. 2000-197.

161.37 Capital, operation and maintenance costs; district benefits tax levy.—

(1) To provide for the capital, operation and maintenance cost of the beach and shore preservation program, either by debt service or direct expenditure, the board of county commissioners as the governing body of each district created in accordance with this part may levy upon all taxable property within each district an ad valorem benefits tax in any amount necessary to meet the requirements of the program but not exceeding the reasonable ability of the district

(2) The tax shall be levied upon each taxable property in proportion to benefits said pr l receive as determined by the most recent economic analysis of the program as provided for under s. 161.29. General benefits shall be uniformly applied on an ad valorem basis to the entire assessed valuation of each district, while special benefits shall be assigned to groups of specific properties which shall constitute zones because of the equal or comparable benefits each included property will receive.

(3) Where the board of county commissioners levies any special benefits taxes, it shall consider the value of the property, its kind, susceptibility to improvement and the maximum annual benefits to be conferred thereon by the works or improvements in the district.

(4) The owner of lands where a special benefits tax is proposed to be levied shall be given written notice and an opportunity to be heard upon the amount of special benefits tax to be levied upon his or her lands. If the special benefits to all properties within any district are found to be equal or comparable, then the said district shall comprise only one tax zone. The proportional tax rate which each property within a district shall pay shall be determined by adding the general and special benefits assigned to its zone. The actual tax levy for any particular year shall depend on the revenue needs for that year.

(5) The board of county commissioners shall levy sufficient ad valorem and special benefits taxes to pay off debt service on any bonds issued. It shall be the duty of the board each year, sufficiently in advance of the preparation of the county tax roll, to establish the revenue requirements for each individual district for the fiscal year in question and certify this figure to the county property appraiser who shall then assign shares of this total to each zone within the respective district according to the proportion of total benefits previously assigned. The share of total required revenue assigned each zone shall then be collected by an ad valorem levy on each taxable property within the zone.

(6) All taxes provided for in this part shall be levied and collected by the county in the same manner as other county taxes, and while unpaid shall constitute a lien of equal stature and dignity with other county taxes.

History.—s. 1, ch. 65-408; s. 1, ch. 77-102; s. 895, ch. 95-147.

161.38 Issuance of bonds.—

(1) The board of county commissioners, for and on behalf of each or any district created in accordance with this part, is authorized to provide from time to time for the issuance of bonds to obtain funds to meet the costs of the beach and shore preservation program; provided, however, that such issuance shall have first been approved at a duly conducted referendum election by freeholders within the subject district as provided for by law. The bonds of each issue shall be dated, shall bear interest at rates not to exceed 7.5 percent which mature at such time not to exceed 40 years from the date of issuance as determined by the board of county commissioners, and at the option of the board of county commissioners may be made redeemable before maturity under such terms and conditions and at such prices as fixed by the board of county commissioners prior to issuance.

(2) The board of county commissioners shall determine the form of such bonds, including any interest coupons to be attached thereto, the denomination of the bonds, and the place of payment of principal and interest which may be at any bank or trust company within or without the state.

(a) The resolution authorizing the issue may further provide that such bonds may be executed manually or by engraved, lithographed or facsimile signature.

(b) The appropriate seal may be affixed or lithographed, engraved or otherwise reproduced in facsimile on such bonds and shall be attested by the manual or facsimile signature of the county clerk; provided, however, that at least one of the signatures of executing officials on the bonds shall be manual. Signatures, manual or facsimile, of executing officials shall continue to be valid for all purposes whatsoever regardless of whether or not signing officials are still in office at the time

are actually delivered.

(c) Bonds may be issued in coupon or registered form as the board of county commissioners may decide and provision may be made for the registration of any coupon bonds as to principal alone or as to principal and interest, and for the reconversion of coupon bonds or any bond registered as to principal and interest.

(d) No sale of bonds shall be made at a price so low as to require the payment of interest on money received therefor at a rate in excess of 6 percent per annum, computed with relation to the absolute maturity of the bonds in accordance with standard tables of bond values, excluding from such computation, however, the amount of any premium to be paid for the redemption of any bonds prior to maturity.

(e) Prior to the preparation or issuance of definitive bonds, the board of county commissioners may under like restrictions issue interim receipts or temporary notes or other forms of such temporary obligations with or without coupons, exchangeable for definitive bonds when such bonds have been executed and are available for delivery. Such bonds may be issued under the provisions of this part without obtaining the consent of any commission, board, bureau or agency of this state, and without any other proceeding or happening than specifically required by this chapter.

(3) All bonds issued under this part shall constitute, and have all the qualities and incidents of, negotiable instruments under the law merchant and the negotiable instruments law of Florida, and shall not be invalid for any irregularity or defect in the proceedings for the issuance and sale thereof and shall be incontestable in the hands of bona fide purchasers for value.

(4) The provisions of this part shall constitute an irrevocable contract between the board of county commissioners and the holders of such bonds or coupons thereof issued pursuant to the provisions hereof.

(5) Any holder of such bonds issued under the provisions of this part, and the trustee under any trustee agreement, except to the extent the rights herein given may be restricted by such trust agreement, may either at law or in equity, by suit, action, or mandamus, force and compel the performance of the duties required by this part or of any of the officers or persons herein mentioned in relation to said bonds, or the levy, assessment, collection and enforcement and application of the taxes pledged for the principal and interest thereof as provided for in s. 161.37.

(6) Bonds issued under the provisions of this part shall not be subject to the consent or approval of any state board, commission, or agency, but such bonds shall be validated in accordance with the provisions of chapter 75.

History.—s. 1, ch. 65-408; s. 11, ch. 73-302; s. 5, ch. 80-98.

161.39 Cooperation between two or more counties.—

(1) When two or more counties have created one or more beach preservation districts as provided for under this part or any other law with same or like intent, or desire to carry out programs of beach and shore preservation, and find it to be mutually beneficial, the boards of county commissioners of such counties may cooperate to any extent necessary or desirable to carry out the intent of this part or any other law with same or like intent, in the implementation of any beach or shore preservation plan or project as defined herein. This cooperation may include but shall not be limited to cooperative participation in the nonfederal costs of federally authorized projects affecting one or more of the cooperating counties, plans or projects resulting from investigation, or studies made by any or all such counties, or other such plans or projects, which by their nature would prove to be beneficial to each such cooperating county as determined by the boards of county commissioners of each such county.

(2) The costs of any such plan or project shall be borne by each of the cooperating counties in accordance with the benefits expected to accrue to each county as determined in accordance with s. 161.29, or as determined and agreed upon by the boards of county commissioners of each such

cooperating county.

(3) Any county may expend funds in any other county for the purposes provided herein if in the opinion of the board of county commissioners of one county such expenditure of its funds in other counties would be beneficial to the beaches and shores of that county.

History.—s. 1, ch. 65-408.

161.40 Tax exemptions.—All properties, revenues and other assets of the board of county commissioners acting as the beach and shore preservation authority, or of any of the districts created thereby, shall, by recognition of its essential public function, be exempt from all taxation by the state or any political subdivision, agency or instrumentality thereof. The exemption granted by this section shall not apply to any tax imposed by chapter 220 on interest, income, or profits on debt obligations owned by corporations.

History.—s. 1, ch. 65-408; s. 51, ch. 89-356.

161.41 Construction of ss. 161.25-161.40.—The provisions of ss. 161.25-161.40 shall be liberally construed by all concerned in a manner to best accomplish the beach and shore preservation purposes and programs.

History.—s. 3, ch. 65-408.

161.45 Effect of repeal of chapter 158 on districts created prior to repeal.—The county erosion districts created under the provisions of chapter 158, and presently in existence shall not be affected by the repeal of chapter 158.

History.—s. 2, ch. 65-126.

PART III
COASTAL ZONE PROTECTION

161.52 Short title.—Sections 161.52-161.58 may be cited as the "Coastal Zone Protection Act of 1985."

History.—s. 36, ch. 85-55.

161.53 Legislative intent.—

(1) The Legislature recognizes that coastal areas play an important role in protecting the ecology and the public health, safety, and welfare of the citizens of the state; that in recent years the coastal areas have been subjected to increasing growth pressures; and that unless these pressures are controlled, the very features which make coastal areas economically, aesthetically, and ecologically rich will be destroyed.

(2) The Legislature further recognizes that coastal areas form the first line of defense for the mainland against both winter storms and hurricanes, that the dunes of coastal areas perform valuable protective functions for public and private property, and that placement of permanent structures in these protective areas may lead to increased risks to life and property and increased costs to the public. Coastal areas often protect lagoons, salt marshes, estuaries, bays, marine habitats, and the mainland from the direct action of ocean waves or storm surges; absorb the forces of oceanic

on their seaward sides and protect calmer waters and stable shores to their landward sides; dynamic geologic systems with topography that is subject to alteration by waves, storm surge, flooding, or littoral currents.

(3) The Legislature further recognizes that these coastal areas are among Florida's most valuable resources and have extremely high recreational and aesthetic value which should be preserved and enhanced. Coastal areas provide a unique habitat for birds, wildlife, marine life, and plant life and protect waters that are vital to the food chain.

(4) The Legislature further recognizes that there is a tremendous cost to the state for postdisaster redevelopment in the coastal areas and that preventive measures should be taken on a continuing basis in order to reduce the harmful consequences of natural and manmade disasters or emergencies.

(5) It is, therefore, the intent of the Legislature that the most sensitive portion of the coastal area shall be managed through the imposition of strict construction standards in order to minimize damage to the natural environment, private property, and life.

History.—s. 36, ch. 85-55.

161.54 Definitions.—In construing ss. 161.52-161.58:

(1) "Coastal building zone" means the land area from the seasonal high-water line landward to a line 1,500 feet landward from the coastal construction control line as established pursuant to s. 161.053, and, for those coastal areas fronting on the Gulf of Mexico, Atlantic Ocean, Florida Bay, or Straits of Florida and not included under s. 161.053, the land area seaward of the most landward velocity zone (V-zone) line as established by the Federal Emergency Management Agency and shown on flood insurance rate maps.

(2) "Coastal barrier islands" means geological features which are completely surrounded by marine waters that front upon the open waters of the Gulf of Mexico, Atlantic Ocean, Florida Bay, or Straits of Florida and are composed of quartz sands, clays, limestone, oolites, rock, coral, coquina, sediment, or other material, including spoil disposal, which features lie above the line of mean high water. Mainland areas which were separated from the mainland by artificial channelization for the purpose of assisting marine commerce shall not be considered coastal barrier islands.

(3) "Beach" means the zone of unconsolidated material that extends landward from the mean low-water line to the place where there is marked change in material or physiographic form, or to the line of permanent vegetation, usually the effective limit of storm waves. "Beach" is alternatively termed "shore."

(4) "Dune" means a mound or ridge of loose sediments, usually sand-sized sediments, lying landward of the beach and deposited by any natural or artificial mechanism.

(5) "Construction" means the carrying out of any building, clearing, filling, excavation, or substantial improvement in the size or use of any structure or the appearance of any land. When appropriate to the context, "construction" refers to the act of construction or the result of construction.

(6)(a) "Major structure" means houses, mobile homes, apartment buildings, condominiums, motels, hotels, restaurants, towers, other types of residential, commercial, or public buildings, and other construction having the potential for substantial impact on coastal zones.

(b) "Minor structure" means pile-supported, elevated dune and beach walkover structures; beach access ramps and walkways; stairways; pile-supported, elevated viewing platforms, gazebos, and boardwalks; lifeguard support stands; public and private bathhouses; sidewalks, driveways, parking areas, shuffleboard courts, tennis courts, handball courts, racquetball courts, and other uncovered paved areas; earth retaining walls; and sand fences, privacy fences, ornamental walls, ornamental garden structures, aviaries, and other ornamental construction. It shall be a characteristic of minor structures that they are considered to be expendable under design wind, wave, and storm forces.

(c) "Nonhabitable major structure" means swimming pools; parking garages; pipelines; pie

canals, lakes, ditches, drainage structures, and other water retention structures; water and wastewater treatment plants; electrical power plants, and all related structures or facilities, transmission lines, distribution lines, transformer pads, vaults, and substations; roads, bridges, streets, and highways; and underground storage tanks.

(d) "Coastal or shore protection structure" means shore-hardening structures, such as seawalls, bulkheads, revetments, rubble mound structures, groins, breakwaters, and aggregates of materials other than beach sand used for shoreline protection; beach and dune restoration; and other structures which are intended to prevent erosion or protect other structures from wave and hydrodynamic forces.

The enumeration of types of structures in this subsection shall not be construed as excluding from the operation of ss. 161.52-161.58 any other structure which by its usage, design, dimensions, or structural configuration would require engineering consideration similar to the listed structures.

(7) "Building support structure" means any structure which supports floor, wall, or column loads and transmits such loads to the foundation, and includes beams, grade beams, or joists and the lowest horizontal structural member exclusive of piles, columns, or footings.

(8) "Breakaway wall" or "frangible wall" means a partition independent of supporting structural members that will withstand design wind forces, but will fail under hydrostatic, wave, and runup forces associated with the design storm surge. Under such conditions, the wall will fail in a manner such that it dissolves or breaks up into components that will not act as potentially damaging missiles.

(9) "Department" means the Department of Environmental Protection.

(10) "State land planning agency" means the Department of Economic Opportunity.

(11) "State minimum building codes" means the Florida Building Code as identified in s. 553.73.

(12) "Substantial improvement" means any repair, reconstruction, rehabilitation, or improvement of a structure when the actual cost of the improvement or repair of the structure to its pre-damage condition equals or exceeds 50 percent of the market value of the structure either:

(a) Before the improvement or repair is started; or

(b) If the structure has been damaged and is being restored, before the damage occurred.

The total cost does not include nonstructural interior finishings, including, but not limited to, finish flooring and floor coverings, base molding, nonstructural substrates, drywall, plaster, paneling, wall covering, tapestries, window treatments, decorative masonry, paint, interior doors, tile, cabinets, moldings and millwork, decorative metal work, vanities, electrical receptacles, electrical switches, electrical fixtures, intercoms, communications and sound systems, security systems, HVAC grills and decorative trim, freestanding metal fireplaces, appliances, water closets, tubs and shower enclosures, lavatories, and water heaters, or roof coverings, except when determining whether the structure has been substantially improved as a result of a single improvement or repair.

For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions or any alteration of a structure listed on the National Register of Historic Places or the State Inventory of Historic Places.

(13) When used in ss. 161.52-161.58, the terms defined in s. 177.27 have the same meanings as provided in that section.

History.—s. 36, ch. 85-55; s. 2, ch. 86-191; s. 1, ch. 91-56; s. 1, ch. 92-7; s. 33, ch. 94-356; s. 1, ch. 97-32; s. 1, ch. 98-269; s. 2, ch. 98-287; s. 1, ch. 99-211; s. 114, ch. 2000-141; s. 35, ch. 2001-186; s. 4, ch. 2001-372; s. 57, ch. 2011-142.

161.55 Requirements for activities or construction within the coastal building zon

following requirements shall apply beginning March 1, 1986, to construction within the coastal building zone and shall be minimum standards for construction in this area:

(1) REGULATION OF COASTAL MINOR STRUCTURES.—Minor structures shall be designed to produce the minimum adverse impact on the beach and the dune system and adjacent properties and to reduce the potential for water or wind blown material. Construction of a rigid coastal or shore protection structure designed primarily to protect a minor structure shall not be permitted.

(2) REGULATION OF COASTAL NONHABITABLE MAJOR STRUCTURES.—Nonhabitable major structures shall be designed to produce the minimum adverse impact on the beach and dune system. All sewage treatment plants and public water supply systems shall be flood proofed to prevent infiltration of surface water from a 100-year storm event. Underground utilities, excluding pad transformers and vaults, shall be flood proofed to prevent infiltration of surface water from a 100-year storm event or shall otherwise be designed so as to function when submerged by such storm event.

(3) LOCATION OF CONSTRUCTION.—Construction, except for elevated walkways, lifeguard support stands, piers, beach access ramps, gazebos, and coastal or shore protection structures, shall be located a sufficient distance landward of the beach to permit natural shoreline fluctuations and to preserve dune stability.

(4) APPLICATION TO COASTAL BARRIER ISLANDS.—All requirements of this part which are applicable to the coastal building zone shall also apply to coastal barrier islands. The coastal building zone on coastal barrier islands shall be the land area from the seasonal high-water line to a line 5,000 feet landward from the coastal construction control line established pursuant to s. 161.053, or the entire island, whichever is less. For coastal barrier islands on which a coastal construction control line has not been established pursuant to s. 161.053, the coastal building zone shall be the land area seaward of the most landward velocity zone (V-zone) boundary line fronting upon the Gulf of Mexico, Atlantic Ocean, Florida Bay, or Straits of Florida. All land area in the Florida Keys located within Monroe County shall be included in the coastal building zone. The coastal building zone on any coastal barrier island between Sebastian Inlet and Fort Pierce Inlet may be reduced in size upon approval of the Land and Water Adjudicatory Commission, if it determines that the local government with jurisdiction has provided adequate protection for the barrier island. In no case, however, shall the coastal building zone be reduced to an area less than a line 2,500 feet landward of the coastal construction control line. The Land and Water Adjudicatory Commission shall withdraw its approval for a reduced coastal building zone if it determines that 6 months after a local government comprehensive plan is due for submission to the state land planning agency pursuant to s. 163.3167 the local government with jurisdiction has not adopted a coastal management element which is in compliance with s. 163.3178.

(5) PUBLIC ACCESS.—Where the public has established an accessway through private lands to lands seaward of the mean high tide or water line by prescription, prescriptive easement, or any other legal means, development or construction shall not interfere with such right of public access unless a comparable alternative accessway is provided. The developer shall have the right to improve, consolidate, or relocate such public accessways so long as the accessways provided by the developer are:

(a) Of substantially similar quality and convenience to the public;

(b) Approved by the local government;

(c) Approved by the department whenever improvements are involved seaward of the coastal construction control line; and

(d) Consistent with the coastal management element of the local comprehensive plan adopted pursuant to s. 163.3178.

History.—s. 36, ch. 85-55; s. 3, ch. 86-191; s. 8, ch. 2000-141; s. 34, ch. 2001-186; s. 3, ch. 2001-372.

161.551 Public financing of construction projects within the coastal building zone.—

(1) As used in this section, the term:

(a) "Coastal structure" means a major structure or nonhabitable major structure within the coastal building zone.

(b) "Public entity" means the state or any of its political subdivisions, or any municipality, county, agency, special district, authority, or other public body corporate of the state which is demonstrated to perform a public function or to serve a governmental purpose that could properly be performed or served by an appropriate governmental unit.

(c) "SLIP study" means a sea level impact projection study as established by the department pursuant to subsection (3).

(d) "State-financed constructor" means a public entity that commissions or manages a construction project using funds appropriated from the state.

(e) "Substantial flood damage" means flood, inundation, or wave action damage resulting from a single event, such as a flood or tropical weather system, where such damage exceeds 25 percent of the market value of the coastal structure at the time of the event.

(2) Beginning 1 year after the date the rule developed by the department pursuant to subsection (3) is finalized and is otherwise in effect, a state-financed constructor may not commence construction of a coastal structure without:

(a) Conducting a SLIP study that meets the requirements established by the department;

(b) Submitting the study to the department; and

(c) Receiving notification from the department that the study was received and that it has been published on the department's website pursuant to paragraph (6)(a) for at least 30 days. The state-financed constructor is solely responsible for ensuring that the study submitted to the department for publication meets the requirements under subsection (3).

(3) The department shall develop by rule a standard by which a state-financed constructor must conduct a SLIP study and may require that a professional engineer sign off on the study. The rule must be effective 1 year after the date it is finalized and applies only to projects not yet commenced as of the date the rule is finalized. The rule may not apply retroactively to projects that commenced before the date the rule is finalized. At a minimum, the standard must require that a state-financed constructor do all of the following:

(a) Use a systematic, interdisciplinary, and scientifically accepted approach in the natural sciences and construction design in conducting the study.

(b) Assess the flooding, inundation, and wave action damage risks relating to the coastal structure over its expected life or 50 years, whichever is less.

1. The assessment must take into account potential relative local sea-level rise and increased storm risk during the expected life of the coastal structure or 50 years, whichever is less, and, to the extent possible, account for the contribution of sea-level rise versus land subsidence to the relative local sea-level rise.

2. The assessment must provide scientific and engineering evidence of the risk to the coastal structure and methods used to mitigate, adapt to, or reduce this risk.

3. The assessment must use and consider available scientific research and generally accepted industry practices.

4. The assessment must provide the mean average annual chance of substantial flood damage over the expected life of the coastal structure or 50 years, whichever is less.

5. The assessment must analyze potential public safety and environmental impacts resulting from damage to the coastal structure, including, but not limited to, leakage of pollutants, electrocution and explosion hazards, and hazards resulting from floating or flying structural debris.

(c) Provide alternatives for the coastal structure's design and siting, and how such alter would impact the risks specified in subparagraph (b)5. as well as the risk and cost associate maintaining, repairing, and constructing the coastal structure.

If multiple coastal structures are to be built concurrently within one project, a state-financed constructor may conduct and submit one SLIP study for the entire project for publication by the department.

(4) If a state-financed constructor commences construction of a coastal structure but has not complied with the SLIP study requirement under subsection (2), the department may institute a civil action in a court of competent jurisdiction to:

(a) Seek injunctive relief to cease further construction of the coastal structure or enforce compliance with this section or with rules adopted by the department pursuant to this section.

(b) If the coastal structure has been completed or has been substantially completed, seek recovery of all or a portion of state funds expended on the coastal structure.

(5) This section may not be construed to create a cause of action for damages or otherwise authorize the imposition of penalties by a public entity for failure to implement what is contained in the SLIP study.

(6) The department:

(a) Shall publish and maintain a copy of all SLIP studies submitted pursuant to this section on its website for at least 10 years after receipt. However, any portion of a study containing information that is exempt from s. 119.07(1) and s. 24(a), Art. I of the State Constitution must be redacted by the department before publication.

(b) Shall adopt rules as necessary to administer this section.

(7) The department may enforce the requirements of this section.

History.—s. 1, ch. 2020-119.

161.56 Establishment of local enforcement.—

(1) Nothing in ss. 161.52-161.58 shall be construed to limit or abrogate the right and power of the department to require permits or to adopt and enforce standards pursuant to s. 161.041 or s. 161.053 for construction seaward of the coastal construction control line that are as restrictive as, or more restrictive than, the requirements provided in s. 161.55 or the rights or powers of local governments to enact and enforce setback requirements or zoning or building codes that are as restrictive as, or more restrictive than, the requirements provided in s. 161.55.

(2) To assist local governments in the implementation and enforcement of s. 161.55, the state land planning agency shall develop and maintain a biennial coastal building zone construction training program for the local enforcement agencies specified in subsection (1). The state land planning agency shall provide an initial training program not later than April 1, 1987, and on a recurring biennial basis shall provide a continuing education program beginning July 1, 1989. Registration fees, as determined appropriate by the state land planning agency, may be charged to defray the cost of the program if general revenue funds are not provided for this purpose.

History.—s. 36, ch. 85-55; s. 4, ch. 86-191; s. 1, ch. 89-249; s. 3, ch. 98-287; ss. 9, 10, ch. 2000-141; s. 14, ch. 2000-158; s. 2, ch. 2000-211; s. 34, ch. 2001-186; s. 3, ch. 2001-372.

161.57 Coastal properties disclosure statement.—

(1) The Legislature finds that it is necessary to ensure that the purchasers of interests in real property located in coastal areas partially or totally seaward of the coastal construction control line as defined in s. 161.053 are fully apprised of the character of the regulation of the real property in such coastal areas and, in particular, that such lands are subject to frequent and severe fluctuations.

(2) At or prior to the time a seller and a purchaser both execute a contract for sale and purchase of any interest in real property located partially or totally seaward of the coastal construction

line as defined in s. 161.053, the seller must give a written disclosure statement in the following form to the prospective purchaser which may be set forth in the contract or in a separate writing:

> The property being purchased may be subject to coastal erosion and to federal, state, or local regulations that govern coastal property, including the delineation of the coastal construction control line, rigid coastal protection structures, beach nourishment, and the protection of marine turtles. Additional information can be obtained from the Florida Department of Environmental Protection, including whether there are significant erosion conditions associated with the shoreline of the property being purchased.

(3) Unless otherwise waived in writing by the purchaser, at or prior to the closing of any transaction where an interest in real property located either partially or totally seaward of the coastal construction control line as defined in s. 161.053 is being transferred, the seller shall provide to the purchaser an affidavit, or a survey meeting the requirements of chapter 472, delineating the location of the coastal construction control line on the property being transferred.

(4) A seller's failure to deliver the disclosure, affidavit, or survey required by this section does not impair the enforceability of the sale and purchase contract by either party, create any right of rescission by the purchaser, or impair the title to any such real property conveyed by the seller to the purchaser.

History.—s. 36, ch. 85-55; s. 22, ch. 87-224; s. 1, ch. 2006-273.

161.58 Vehicular traffic on coastal beaches.—

(1) Vehicular traffic, except that which is necessary for cleanup, repair, or public safety, and except for traffic upon authorized local or state dune crossovers, is prohibited on the dunes or native stabilizing vegetation of the dune system of coastal beaches. Except as otherwise provided in this section, any person driving any vehicle on, over, or across any dune or native stabilizing vegetation of the dune system shall be guilty of a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083.

(2) Vehicular traffic, except that which is necessary for cleanup, repair, or public safety, or for the purpose of maintaining existing licensed and permitted traditional commercial fishing activities or existing authorized public accessways, is prohibited on coastal beaches except where a local government with jurisdiction over a coastal beach or portions of a coastal beach has:

(a) Authorized such traffic, by at least a three-fifths vote of its governing body, on all or portions of the beaches under its jurisdiction prior to the effective date of this act; and

(b) Determined, by October 1, 1989, in accordance with the rules of the department, that less than 50 percent of the peak user demand for off-beach parking is available. However, the requirements and department rulemaking authority provided in this paragraph shall not apply to counties that have adopted, prior to January 1, 1988, unified countywide beach regulations pursuant to a county home rule charter.

(3) A local government authorizing such vehicular traffic on all or portions of its beaches pursuant to subsection (2) may later prohibit, by a vote of at least three-fifths of its governing body, such vehicular traffic on all or portions of the beaches under its jurisdiction. Any such local government shall be authorized by a three-fifths vote of its governing body to charge a reasonable fee for vehicular traffic access. The revenues from any such fees shall be used only for beach maintenance; beach-related traffic management and parking; beach-related law enforcement and liability insurance; or beach-related sanitation, lifeguard, or other staff purposes. Except where authorized by the local government, any person driving any vehicle on, over, or across the beach shall be guilty of a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083.

History.—s. 36, ch. 85-55; s. 5, ch. 86-191; s. 23, ch. 87-224; s. 2, ch. 88-106; s. 2, ch. 89-249.

161.70 Short title.—This part may be cited as the "Oceans and Coastal Resources Act."
History.—s. 1, ch. 2005-166.

161.71 Definitions.—As used in this part, the term:

(1) "Commission" means the Fish and Wildlife Conservation Commission created in s. 9, Art. IV of the State Constitution.

(2) "Council" means the Florida Oceans and Coastal Council created by this act.

(3) "Department" means the Department of Environmental Protection.

(4) "Executive director" means the executive director of the Fish and Wildlife Conservation Commission.

(5) "Oceans" means those waters from the mean high-water line outward to the state's jurisdictional boundary and those United States waters in which this state has an interest.

(6) "Secretary" means the secretary of the Department of Environmental Protection.
History.—s. 1, ch. 2005-166.

161.72 Findings and intent.—

(1) The Legislature finds that:

(a) The oceans and coastal resources of the United States are of national importance;

(b) The United States Commission on Ocean Policy has made 212 recommendations, and the President has responded with an Ocean Action Plan to better protect and preserve our oceans;

(c) Florida's ocean and coastal resources contribute significantly to the state economy by supporting multiple beneficial uses and a wide range of economic value that requires balancing of competing considerations;

(d) Florida's oceans and coastal resources comprise habitats that support endangered and threatened species and extraordinary marine biodiversity;

(e) The coral reefs of southeast Florida and the barrier reef of the Florida Keys, the only barrier reef in the United States, are a national treasure and must continue to be protected;

(f) It is Florida's responsibility to be a national leader on oceans and coastal protection;

(g) It is in the state's best interest to ensure the productivity and health of our oceans and coastal resources;

(h) Florida's marine biodiversity at the species, natural community, seascape, and regional levels must be protected by restoring, rehabilitating, and maintaining the quality and natural function of oceans and coastal resources through an ecosystem-based management approach, as recommended by the United States Commission on Ocean Policy;

(i) The quality of our beaches and fisheries resources must be protected to ensure the public health;

(j) Protection must be provided to highly migratory marine species, such as sea turtles and sea birds;

(k) Opportunities must be increased to provide natural resource-based recreation and encourage responsibility and stewardship through educational opportunities;

(l) Oceans and coastal research must be prioritized to ensure coordination among researchers and

managers and long-term programs to observe, monitor, and assess oceans, and coastal res t be developed and implemented;

(m) Development of coastal areas should be both economically and environmentally sustainable, and inappropriate growth in ecologically fragile or hazard-prone areas should be discouraged; and

(n) Conservation and restoration of coastal habitat could be enhanced through the development of regional and local goals, the institution of a program dedicated to coastal and estuarine conservation, better coordination of the state's activities relating to habitat, and improved research, monitoring, and assessment.

(2) It is the intent of the Legislature to create the Oceans and Coastal Council to assist the state in identifying new management strategies to achieve the goal of maximizing the protection and conservation of ocean and coastal resources while recognizing their economic benefits.

(3) It is further the intent of the Legislature that the council shall encourage and support the development of creative public-private partnerships, pursue opportunities to leverage funds, and work in coordination with federal agencies and programs to maximize opportunities for the state's receipt of federal funds.

History.—s. 1, ch. 2005-166; s. 16, ch. 2006-1.

161.73 Composition.—The Florida Oceans and Coastal Council is created within the Department of Environmental Protection and shall consist of 18 members. The secretary, the executive director, and the commissioner of the Department of Agriculture and Consumer Services, or their designees, shall serve as ex officio members of the council. The council shall be jointly chaired by the secretary and the executive director. The 15 voting members of the council shall be appointed, within 60 days after this act becomes law, in the following manner:

(1) Five members shall be appointed by the secretary of the Department of Environmental Protection which will be comprised of one scientist specializing in each of the following fields: wetlands and watersheds; nearshore waters or estuaries; offshore waters or open oceans; hydrology and aquatic systems; and coastal geology or coastal erosion and shorelines.

(2) Five members shall be appointed by the executive director of the Fish and Wildlife Conservation Commission which will be comprised of one scientist specializing in each of the following fields: resource management; wildlife habitat management; fishery habitat management; coastal and pelagic birdlife; and marine biotechnology.

(3) Five members shall be appointed by the commissioner of the Department of Agriculture and Consumer Services. These appointments shall be selected from a list of at least eight individuals submitted to the commissioner by the Florida Ocean Alliance. The individuals selected by the Florida Ocean Alliance shall be chosen from the following disciplines or groups: sportfishing; ports; cruise industry; energy industry; ecotourism; private marine research institutes; universities; aquaculture; maritime law; commercial fisheries; socioeconomics; marine science education; and environmental groups.

(4) Appointments made by the secretary and executive director shall be to terms of 4 years each. Appointments made by the commissioner of the Department of Agriculture and Consumer Services shall be to terms of 2 years. Members shall serve until their successors are appointed. Vacancies shall be filled in the manner of the original appointment for the remainder of the term that is vacated.

(5) Members shall serve without compensation, but are entitled to reimbursement of travel and per diem expenses pursuant to s. 112.061, relating to completing their duties and responsibilities.

History.—s. 1, ch. 2005-166.

161.74 Responsibilities.—

(1) RESEARCH REVIEW.—Prior to the development of the research plan, the council shall review and compile the existing, ongoing, and planned ocean and coastal research and monitoring activities

relevant to this state. Included in this review shall be the "Florida's Ocean Strategies Final ... the Governor" by the Florida Governor's Oceans Committee dated June 1999. To aid the co... fulfilling this requirement, all public agencies must submit the information requested by the council, and private research institutes are encouraged to submit relevant information to the maximum extent practicable. Upon receiving the information required by this subsection, the council shall develop a library to serve as a repository of information for use by those involved in ocean and coastal research. The council shall develop an index of this information to assist researchers in accessing the information.

(2) RESEARCH PLAN.—The council must complete a Florida Oceans and Coastal Scientific Research Plan which shall be used by the Legislature in making funding decisions. The plan must recommend priorities for scientific research projects. Annual updates to the plan must be submitted to the President of the Senate and the Speaker of the House of Representatives by February 1 of each year. The research projects contained in the plan must meet at least one of the following objectives:

(a) Exploring opportunities to improve coastal ecosystem functioning and health through watershed approaches to managing freshwater and improving water quality.

(b) Evaluating current habitat conservation, restoring and maintaining programs, and recommending improvements in the areas of research, monitoring, and assessment.

(c) Promoting marine biomedical or biotechnology research and product discovery and development to enhance Florida's opportunity to maximize the beneficial uses of marine-derived bioproducts and reduce negative health impacts of marine organisms.

(d) Creating consensus and strategies on how Florida can contribute to sustainable management of ocean wildlife and habitat.

(e) Documenting through examination of existing and new research the impact of marine and coastal debris and current best practices to reduce debris.

(f) Providing methods to achieve sustainable fisheries through better science, governance, stock enhancements and consideration of habitat and secondary impacts such as bycatch.

(g) Documenting gaps in current protection strategies for marine mammals.

(h) Promoting research and new methods to preserve and restore coral reefs and other coral communities.

(i) Achieving sustainable marine aquaculture.

(j) Reviewing existing and ongoing studies on preventing and responding to the spread of invasive and nonnative marine and estuarine species.

(k) Exploring ocean-based renewable energy technologies and climate change-related impacts to Florida's coastal area.

(l) Enhancing science education opportunities such as virtual marine technology centers.

(m) Sustaining abundant birdlife and encouraging the recreational and economic benefits associated with ocean and coastal wildlife observation and photography.

(n) Developing a statewide analysis of the economic value associated with ocean and coastal resources, developing economic baseline data, methodologies, and consistent measures of oceans and coastal resource economic activity and value, and developing reports that educate Floridians, the United States Commission on Ocean Policy, local, state, and federal agencies and others on the importance of ocean and coastal resources.

(3) RESOURCE ASSESSMENT.—The council shall prepare a comprehensive oceans and coastal resource assessment that shall serve as a baseline of information to be used in assisting in its research plan. The resource assessment must include:

(a) Patterns of use of oceans and coastal resources;

(b) Natural resource features, including, but not limited to, habitat, bathymetry, surficial geology, circulation, and tidal currents;

(c) The location of current and proposed oceans and coastal research and monitoring infrastructure;

(d) Industrial, commercial, coastal observing system, ships, subs, and recreational transit patterns; and

(e) Socioeconomic trends of the state's oceans and coastal resources and oceans and coastal economy.

History.—s. 1, ch. 2005-166; s. 17, ch. 2006-1; s. 26, ch. 2020-2.

161.76 Preservation of authority.—This part does not restrict or limit the authority otherwise granted to the commission, or other state agencies by law.

History.—s. 1, ch. 2005-166.

CHAPTER 62B-36
BEACH MANAGEMENT FUNDING ASSISTANCE PROGRAM

62B-36.001 Purpose.

The Beach Management Funding Assistance Program works in concert with local sponsors to achieve protection, preservation, restoration, and nourishment of the sandy beaches fronting the Atlantic Ocean, the Gulf of Mexico and the Straits of Florida, and for the management of inlets to replicate the natural drift of sand interrupted by improved, modified, or altered inlets. Annually, the Department requests funding from the Legislature to implement the program and when appropriations are made by the legislature, enters into cost sharing agreements with local sponsors for the implementation of beach and inlet management projects. This rule chapter establishes funding request procedures, project ranking criteria, cost sharing procedures and project agreement requirements pursuant to sections 161.088, 161.091, 161.101, 161.142, 161.143, and 161.161, F.S.

Rulemaking Authority 161.101(21), 161.143(6) 161.161(7) FS. Law Implemented 161.088, 161.091(1), 161.101(1),(2), (8), (9), (11), (12), (14), (15), (16), (17), (18), (19), (20), 161.142(1), (2), (4), (5), (6), (7), 161.143(1), (2), (3), (4), (5), 161.161(1), (2), (6)FS. History–New 6-10-83, Formerly 16B-36.01, 16B-36.001, Amended 12-25-03, 8-5-13.

62B-36.002 Definitions.

(1) "Annual Funding Request" is the document submitted by a local sponsor which includes a detailed description for the next fiscal year's funding request and a schedule for the disbursement of funds to be requested for beach or inlet management projects or related activities over a given period of time. Only projects consistent with the Strategic Beach Management Plan will be considered for funding. These projects will be ranked and placed on either the beach or inlet management list submitted to the Legislature for funding consideration.

(2) "Area of Inlet Influence" is the distance along the adjacent sandy shorelines where sediment transfer and shoreline location are physically altered due to the presence of the inlet and any associated structures or improvements which alter the natural functioning of the inlet. The area of inlet influence will be determined using a feasibility or an inlet management study.

(3) "Beach Management" is protecting, maintaining, preserving, or enhancing Florida's beaches. Activities included are restoring or nourishing beach and dune systems, dune protection and restoration, restoration of natural shoreline processes, removal of derelict structures and obstacles to natural shoreline process in conjunction with restoration or nourishment, and construction of erosion control structures. These activities include feasibility, engineering, design and environmental studies, post-construction monitoring and mitigation to support such activities.

(4) "Contractual Services" are the provision of engineering, professional, or scientific services for eligible activities as otherwise described in this chapter. Such activities may be performed by a private company or individual, or, if approved by the Department, pursuant to subsection 62B-36.007(6), F.A.C., the local sponsor.

(5) "Critically Eroded Shoreline" is a segment of shoreline where natural processes or human activities have caused, or contributed to, erosion and recession of the beach and dune system to such a degree that upland development, recreational interests, wildlife habitat or important cultural resources are threatened or lost. Critically eroded shoreline may also include adjacent segments or gaps between identified critical erosion areas which, although they may be stable or slightly erosional now, their inclusion is necessary for continuity of management of the coastal system or for the design integrity of adjacent beach management projects.

(6) "Department" is the Department of Environmental Protection.

(7) "Inlet" is a coastal barrier waterway connecting a bay, lagoon, or similar body of water with the Gulf of Mexico, the Straits of Florida, or the Atlantic Ocean and all related flood and ebb tidal shoals and the inlet shorelines. Improved, altered or modified inlets are those where stabilizing rigid coastal structures have been constructed, or where inlet related structures or features such as

channels have been constructed or are actively maintained and the channel depth is greater than the inlet system would support in a natural state.

(8) "Inlet Management" is comprised of actions taken to minimize, eliminate, or mitigate the effects of the inlet on the adjacent shorelines including feasibility, engineering, design, environmental studies, construction, and post-construction monitoring to support such activities.

(9) "Local Sponsor" is any state, county, municipality, township, or special district created pursuant to part II, chapter 161, F.S., having authority and responsibility for preserving and protecting the coastal system, and any state, county, municipality, township, and inlet and navigational districts having authority and responsibility for management of an inlet. The local sponsor is responsible for the balance of the non-state cost share.

(10) "Local Long Range Budget Plan" is a document that projects the ten-year planning needs for federal, state, and local governments necessary to implement the strategies outlined in the Strategic Beach Management Plan for a specific project. The document lists five years of anticipated project costs followed by the next five years of anticipated planning phases. The document is submitted by local sponsors to the Department along with annual funding requests.

(11) "Project Agreement" is a contract executed between the Department and the local sponsor that explicitly defines the terms and conditions under which the project shall be conducted.

(12) "Project Boundary"for ranking purposes, means the sandy shoreline fronting the Atlantic Ocean, Gulf of Mexico, or the Straits of Florida, of the beach management project and the first row of residential or commercial development immediately landward of the beach vegetation line or beach erosion control line (ECL), whichever is further landward. The first row of development may be separated from the shoreline by recreational amenities, roadways or parking areas as long as there is dedicated public access. The area of inlet influence shall be the project boundary for inlet projects.

(13) "Project Length" is the along-shore length of shoreline in the project design, including tapers, or as otherwise delineated by the ECL.

(14) "Project Phase" is a step required in developing and implementing a project. The following phases will be considered for funding:

(a) "Feasibility" – is the characterization of the erosion problem and constraints on remediation alternatives, development and analysis of alternatives to address the problem, including taking no action, data collection in support of the analysis, and selection of the cost-effective, environmentally sound alternative that avoids or minimizes adverse impacts.

(b) "Design" – is the development of design studies, data collection, plans, specifications, permit applications, and financial planning for the project.

(c) "Construction" – is the execution of the selected project, including contractor services, contract management, construction oversight, and construction-related monitoring required by permit or contract.

(d) "Post-Construction Monitoring" – is the collection and analysis of physical and biological data required by state or federal permits on an annual or periodic basis following the completion of the construction phase.

(15) "Public Beach Access" is an entry zone and associated parking under public ownership or control which is specifically used for providing access to the adjacent sandy beach for the general public. The access must be signed, maintained and clearly visible from the adjacent roadway. The parking spaces counted for eligibility must be within one-quarter mile walking distance of a lateral entry zone and available to the general public. The types of public beach access sites are:

(a) "Primary Beach Access" is a site with at least 100 units, as defined in subsection 62B-36.007(1), F.A.C., and public restrooms;

(b) "Secondary Beach Access" is a site that may have parking and amenities, but does not qualify as a primary beach access.

(16) "Public Lodging Establishment" is any business currently licensed by the Department of Business and Professional Regulation in the classification of "hotel," "motel," or "vacation rental condominium" with six or more units as designated by the Department of Business and Professional Regulation, or campgrounds. Public Lodging Establishments must be located on the beachfront or within one-quarter mile walking distance of a public access.

(17) "Rank Score" is calculated by dividing a project's rank (n_i), or position of its value in a sequential list of all project values, by the total number of values included in the evaluation (N), then multiplying by the maximum points available for the metric, such that:

$$\underline{rank\ score = \frac{n_i}{N}\ x\ maximum\ points.}$$

The list of values shall be in an order (e.g., ascending or descending, depending on the metric) that assigns the value worth the most points as N. If two or more projects have an equal value, these projects will receive the same score.

(18) "Sediment Budget" is the mass balance between inputs and outputs of sediment in the inlet system, including all related flood and ebb tidal shoals, inlet shorelines and inland waterways, and the adjacent open coast beaches within the area of inlet influence.

(19) "Statewide Long Range Budget Plan" is the document produced by the Department that projects the ten-year planning needs for federal, state, and local governments necessary to implement the Strategic Beach Management Plan. The document lists five years of anticipated project costs followed by the next five years of anticipated planning phases for all beach and inlet management projects statewide. It is developed in coordination with local sponsors based on their Local Long Range Budget Plans and is submitted to the Legislature annually as a companion document to the Local Government Funding Request.

(20) "Strategic Beach Management Plan" is the Department's adopted plan for management of the critically eroded shoreline of the state and those components of feasibility or inlet management studies that minimize the erosive effects of inlets.

(21) "Threatened or endangered species" is an animal species that is identified as threatened or endangered by the United States Fish and Wildlife Service or National Marine Fisheries Service.

Rulemaking Authority 161.101(21), 161.143(6), 161.161(7) FS. Law Implemented 161.088, 161.091(1), 161.101(1), (2), (8), (9), (10), (11), (12), (14), (15), (16), (17), (18), (19), (20), 161.142(1), (2), (4), (5), (6), (7), 161.143(1), (2), (3), (4), (5), 161.161(1), (2), (6) FS. History–New 6-10-83, Formerly 16B-36.02, 16B-36.002, Amended 12-25-03, 8-5-13, 8-26-20.

62B-36.003 General.

(1) The Beach Management Program is established to develop and execute a comprehensive, long range, statewide beach management plan for erosion control, beach preservation, restoration, nourishment and storm protection for the critically eroded shoreline of the State of Florida. This comprehensive program includes the Strategic Beach Management Plan, the Critical Erosion Report, shoreline change reports, inlet management studies, state and federal feasibility and design studies, the Statewide Long Range Budget Plan, and other reports as the Department may find necessary for a multiyear maintenance and repair strategy. The comprehensive program is implemented through projects consistent with the Strategic Beach Management Plan and included in the Statewide Long Range Budget Plan.

(2) The Department shall annually review available information and revise the designations of critically eroded shoreline in the Critical Erosion Report. Local sponsors shall be notified of any proposed changes and be given an opportunity to submit additional information to justify or refute proposed revisions.

(3) Beach and inlet management projects funded by the Department shall be conducted in a manner that encourages cost-savings, fosters regional coordination of projects, optimizes management of sediments and project performance, protects the environment, and provides long-term solutions. Appropriate feasibility studies or analyses shall be required before design or construction of new projects.

(4) Beach and dune restoration and nourishment projects funded by the Department shall be accessible to the general public and access used to calculate eligibility shall be maintained for at least ten years following completion of each construction event. Shoreline segments shall be evaluated for public access as set forth in subsection 62B-36.007(1), F.A.C.

(5) Beach management projects will be evaluated on a case by case basis and may be cost shared, pursuant to Rules 62B-36.006 and 62B-36.007, F.A.C., when determined to avoid or minimize adverse impacts and be cost effective as demonstrated by feasibility and design studies.

(6) The goal of inlet management projects is to balance the sediment budget of the inlet system and the adjacent shorelines within the area of inlet influence. Inlet management projects will be evaluated based upon the criteria in Rules 62B-36.006 and 62B-36.007, F.A.C., and may be cost-shared with the local sponsor for up to 75 percent of the non-federal share.

(7) Activities primarily related to navigation or other infrastructure improvements at inlets are, generally, not eligible for cost sharing. However, components of projects which mitigate critically eroded shoreline caused by alterations, modifications or improvements to inlets, implement components of the Strategic Beach Management Plan, and which do not increase impacts, are eligible for cost sharing for those components which:

(a) Are designed to minimize the erosive effects to the downdrift shoreline caused by the inlet by improving or facilitating the efficiency of sand bypassing, such as the construction of sand bypassing facilities, sand traps and jetty alterations, or

(b) Cost effectively place beach quality sand on the adjacent eroded beaches, such as the incremental cost of placing sand on the

beach rather than in an offshore disposal area. The Department will cost share only in the incremental cost of placement of the material. The Department will not cost share in activities normal to the operation and maintenance of the inlet, such as mobilization of equipment and design studies.

(8) Local sponsors are encouraged to consider existing inlet navigation maintenance activities as potential sources of sand when developing beach restoration or nourishment projects.

(9) Non-federal beach management projects shall be cost shared up to 50 percent of the total project cost. Projects authorized by Congress for federal financial participation in the Civil Works program of the United States Army Corps of Engineers shall be cost shared up to 50 percent of the non-federal share. Beach management projects approved to receive Federal Emergency Management Agency Public Assistance funding (Category G or equivalent subsequent program for designed, constructed and routinely maintained beaches) shall be cost-shared up to 50 percent of the local share after state and federal emergency funds are applied. Local sponsors shall pursue federal appropriations to the maximum extent possible in order to proportionally reduce state and local project costs.

(10) Upon notification from the Department of the 60-day submittal period, local sponsors shall submit an updated Annual Funding Request and Local Long Range Budget Plan. Annual funding shall only be requested for projects expected to be initiated or continued in that fiscal year.

(11) The Department shall annually review and rank all projects requested by local sponsors for the next fiscal year on either the beach management or inlet management project lists, and maintain current project listings in priority order. As part of the review, the Department shall seek formal input from local coastal governments, beach and general government associations, and other coastal interest groups, and university experts. The project listings shall also identify funds needed for statewide and regional management activities, state sponsored or co-sponsored demonstration projects, new feasibility and design studies, and a consolidated category for post-construction monitoring required by state and federal permits. Funding that may become available due to savings or scheduling changes shall be made available to projects on approved inlet management lists and for emergency situations as determined by the Governor pursuant to Section 161.111, F.S.

(12) Local sponsors may design and construct beach management projects prior to the receipt of funding from the state and may subsequently apply for reimbursement from the Department pursuant to the procedure in subsection 62B-36.009(3), F.A.C.

Rulemaking Authority 161.101(13), (21), 161.143(6), 161.161(7) FS. Law Implemented 161.088, 161.091(1), 161.101(1), (2), (8), (9), (11), (12), (13), (14), (15), (16), (17), (18), (19), (20), 161.111, 161.142(1), (2), (4), (5), (6), (7), 161.143(1), (2), (3), (4), (5), 161.161(1), (2), (6), 216.181 FS. History–New 6-10-83, Formerly 16B-36.03, Amended 4-27-86, Formerly 16B-36.003, Amended 12-25-03, 8-5-13.

62B-36.005 Annual Funding Requests.

(1) Annual funding requests for cost sharing of beach management projects shall be submitted by the local sponsor to the Department. Projects previously submitted, but not funded, and projects with cost overruns may be included. Local sponsors who have received funding for projects in past fiscal years and who anticipate requesting funding in subsequent years shall update the Local Long Range Budget Plan as to costs and scheduling. The Local Long Range Budget Plan shall be consistent with the Strategic Beach Management Plan and have a 10-year minimum time frame. The annual funding request submittal shall be in electronic format and include:

(a) A detailed project description, including project boundaries by Department range monuments, methods used in conducting the project, and data or analysis to apply the ranking criteria required by Rule 62B-36.006, F.A.C.

(b) A map of the project area depicting the public beach access, public parking within one quarter mile of each beach access, public restroom facilities, public lodging establishments, comprehensive plan designations for current land use of commercial and recreational properties within the project boundary, and the one-quarter mile buffer and the values of properties that are enclosed or intersected by the buffer.

(c) Current license documentation on public lodging establishments within the project boundaries, including the number of units available, if used to document public access.

(d) A current or updated resolution from the local sponsor's governing board which includes statements of their support of the project, willingness to serve as the local sponsor, and a statement of the extent of their ability and willingness to provide the necessary local funding share to implement the project. For projects proposing regionalization, local sponsors must provide an executed interlocal agreement, or comparable documentation, outlining the nature of regionalization.

(e) A schedule of activities by project phase.

(f) The annual project cost estimates indicating the federal, state, and local cost share, with sufficient supporting detail depicting costs of project phases. For projects with federal involvement, documentation to verify authorization, cost share, and funding status must be provided. For projects proposing cost-effectiveness, a project design analysis must be provided.

(g) The estimated volume of advanced nourishment lost since the last sand placement event of a beach restoration or nourishment project as measured landward of the Mean High Water Line (MHWL), and for construction projects, the proposed volume of beach fill placement.

(2) Annual funding requests for cost sharing of inlet management projects shall be submitted by the local sponsor to the Department. Projects previously submitted, but not funded, and projects with cost overruns may be included. Local sponsors who have received funding for projects in past fiscal years and who anticipate requesting funding in subsequent years shall update the Local Long Range Budget Plan as to costs and scheduling. The Local Long Range Budget Plan shall be consistent with the Strategic Beach Management Plan and have a 10-year minimum time frame. The annual funding request submittal shall be in electronic format and include:

(a) A map depicting the inlet.

(b) A description of the sediment budget and area of inlet influence from an adopted Inlet Management Plan or feasibility-level study.

(c) A detailed project description, including project boundaries by Department range monuments, methods used in conducting the project, and data or analysis to apply the ranking criteria required by Rule 62B-36.006, F.A.C.

(d) A current or updated resolution from the local sponsor's governing board which includes statements of their support of the project, willingness to serve as the local sponsor, and a statement of the extent of their ability and willingness to provide the necessary local funding share to implement the project.

(e) A schedule of activities by project phase.

(f) The annual project cost estimates indicating the federal, state, and local cost share, with sufficient supporting detail depicting costs of project phases. For projects with federal involvement, documentation to verify funding status must be provided.

(g) For projects that propose cost-effectiveness for increased bypassing, a project design analysis to demonstrate the anticipated increase in bypassing must be provided. For projects that propose cost-effectiveness of using inlet sand, an opinion of probable cost per unit volume of the inlet and all other sand sources, certified by a licensed professional engineer must be provided.

(3) The Department shall evaluate projects submitted to determine consistency with the Strategic Beach Management Plan project ranking, and the extent of cost sharing. Upon completion of the evaluation process, all eligible projects will be incorporated into the Department's Statewide Long Range Budget Plan, which will be submitted to the Legislature along with the Department's Local Government Funding Request that annually prioritizes projects according to the criteria in Rule 62B-36.006, F.A.C.

(4) Funding requests shall be evaluated and ranked on the basis of information provided by the eligible governmental entity, except where such data is superseded by better quality information obtained by the Department. Local sponsors will be provided 21 days to review the project's proposed ranking and provide clarification to support their requested award of scores. Failure to provide all required information and documentation relating to eligibility and ranking criteria will result in the request being declared ineligible or receiving reduced ranking points. Failure to provide accurate information will lead to termination of the project's eligibility for funding for the requested fiscal year.

Rulemaking Authority 161.101(21), 161.143(6), 161.161(7) FS. Law Implemented 161.088, 161.091(1), 161.101(1), (2), (8), (9), (11), (12), (14), (15), (16), (17), (18), (19), (20), 161.142(1), (2), (4), (5), (6), (7), 161.143(1), (2), (3), (4), (5) 161.161(1), (2), (6) FS. History–New 6-10-83, Formerly 16B-36.05, Amended 4-27-86, Formerly 16B-36.005, Amended 12-25-03, 8-5-13, 8-26-20.

62B-36.006 Project Ranking Procedure.

(1) Beach Management Projects. Eligible projects will receive a total point score by the Department based on the following criteria, equally weighted within the following specified tiers:

(a) Tier 1 accounts for 20 percent of the total score and consists of the tourism-related return on investment and the economic impact of the project.

1. Return on investment. This criteria consists of the ratio of the sum of the county-wide tourist development tax and tourism-related sales tax revenue for the most recent calendar year to the amount of state funding requested for the proposed construction project. Tourist development tax and tourism-related sales tax data will be derived from the Department of Revenue for the county that has jurisdiction over the project area. Tourism-related sales tax revenue is defined as taxes on hotel/motel accommodations, rooming houses, camps, and other lodging places. The calculation includes the amount of state funds requested for the construction

and first year post-construction monitoring phases of the project. If the proposed project does not request construction funds, then the project is not eligible for points. The rank score shall be calculated using the ratios of all projects, for a maximum score of 10 points, with greater return on investment ratios receiving a higher score.

2. Economic impact. This criteria consists of the ratio of the sum of the county-wide tourist development tax and tourism-related sales tax revenue for the most recent calendar year to all county-wide sales tax revenues for the most recent calendar year. Tax data will be derived from the Department of Revenue for the county that has jurisdiction over the project area. Tourism-related sales tax revenue is defined as the taxes on hotel/motel accommodations, rooming houses, camps, and other lodging places. The rank score shall be calculated using the ratios of all projects, for a maximum score of 10 points, with greater economic impact ratios receiving a higher score.

(b) Tier 2 accounts for 45 percent of the total score and consists of the following criteria:

1. The availability of federal matching dollars, considering federal authorization, the federal cost-share percentage, and the status of the funding award.

a. Federal authorization. Projects with a United States Army Corps of Engineers (USACE) Civil Works congressional authorization for the requested project phase shall receive five points. Projects with a signed USACE Chief's report for authorization of the requested project phase shall receive three points.

b. Federal cost share. Projects with a federal cost share percentage by the USACE for the proposed project phase(s). The federal cost share percentage for each project shall be divided by the highest cost share percentage of all projects, and multiplied by five, for a maximum score of five points. Federal cost share percentages from the Flood Control and Coastal Emergency funds or Federal Emergency Management Agency (FEMA) funds are not included.

c. Federal funds available. Projects with a current USACE project agreement executed for the requested project phase, projects listed in a USACE work plan, or FEMA projects with an approved Project Worksheet shall receive five points. Projects that are included in the Congressional Appropriations Act shall receive two points.

2. The storm damage reduction benefits of the project based on the following considerations:

a. Current conditions. Projects where the volume of advanced nourishment lost since the most recent beach nourishment, as measured above the mean high water elevation, shall receive a score equal to the following: $-\log(1-L)\,x\,8$, where L = the fraction of advance fill loss, for a maximum score of eight points. If the project area has not been restored, the Department will use historical mean high water data files contained in the Department's Historic Shoreline Database to calculate the average rate of erosion during a representative period after 1972, but prior to any beach fill placement in the project area. Projects shall receive four points for one foot-per-year of erosion and one point for each additional half-foot of annual erosion up to a maximum score of eight points.

b. Threat to upland development. Projects where existing upland development is at or seaward of the projected erosion limit of a 25-year return interval storm event shall receive points based on the percentage of threatened properties within the project boundaries, multiplied by 10, for a maximum score of two points. Upland development on properties where the mean high water shoreline is seaward of the project design template, or where coastal armoring exists on a property, shall not be deemed threatened.

c. Value of upland property. The total value of all upland properties within one-quarter mile landward of the project's ECL or, if not available, the MHWL, or a proposed project boundary alternative. The values of properties that are enclosed or intersected by the one-quarter mile buffer shall be retrieved from the Department of Revenue's most current statewide database and the total value will be calculated in ArcGIS. Property values to be used are established by the property appraiser for ad valorem purposes (i.e., market value). The rank score shall be calculated using the total values of all projects, for a maximum score of five points, with greater total property value receiving a higher score.

3. The cost-effectiveness of the project based on the following considerations:

a. Cost-effectiveness as a function of cost per volume per mile per year. Cost calculations for the proposed construction event will include the construction phase costs of beach restoration or beach nourishment. Associated project mitigation and post-construction monitoring costs will not be included. The rank score shall be calculated using the costs for all projects requesting construction funds for the current funding year, for a maximum score of 10 points, with lower costs receiving a higher score.

b. Cost-effectiveness as a function of enhanced longevity; dune addition; innovative technology; and regionalization. Projects that have one of the following shall receive three points and projects that have two or more of the following shall receive five points: 1. propose structural or design components that could extend the beach nourishment interval; 2. incorporate new or enhanced dune structures or new or existing dune restoration and revegetation projects that reduce upland storm damage costs; 3. propose

innovative technologies designed to reduce project costs; or 4. two or more local sponsors manage their projects together to conserve sand resources or reduce contracting cost, or projects that propose regional sediment management strategies and coordinate to conserve sand source resources and reduce project costs for scheduled beach nourishment purposes. Projects permitted under Rule 62B-41.0075, F.A.C., for Experimental Coastal Construction will qualify for innovative technology points.

(c) Tier 3 accounts for 20 percent of the total score and consists of the following criteria:

1. Previous state commitment and involvement in the project:

a. Previously funded phases. Projects where the Department has previously cost shared, reviewed, and approved a feasibility or design phase shall receive one point.

b. Total amount of previous funding. The total amount of state funding appropriated for projects from the Department's Beach Management Funding Assistance Program through annual legislative and hurricane appropriations shall be summed for the previous 10 years. The rank score shall be calculated using the total amounts for all projects, for a maximum score of three points, with greater amounts of previous funding receiving a higher score.

c. Previous partial appropriation. Projects that have received a partial appropriation for the proposed project phase(s) within three years of completion shall receive one point.

2. The recreational benefits of the project based on the accessible beach area added by the project and public accessibility:

a. Accessible beach area. The accessible beach area (square feet) added or maintained by the project shall be defined as the alongshore length and cross-shore width, which are bound by the ECL along the landward edge and the MHWL contour along the seaward edge of the design profile. If the project does not incorporate a design profile, then the cross-shore width of accessible beach area shall be bound by the ECL along the landward edge and the historic pre-construction MHWL contour along the seaward edge. If an ECL does not exist, the pre-project MHWL used in the engineering and design of the beach restoration will be used as an alternative. Project area shall be divided by the average for all projects in their region (Gulf coast or Atlantic coast), multiplied by two, for a maximum score of two points.

b. Recreational benefits. The percentage of linear footage of property within the total project boundary that is zoned as recreational or open space, for commercial use, or to allow for public lodging establishment, or the equivalent, in the current local government land use map. Only properties fronting the project shoreline will be considered. Un-designated properties will be considered designated or zoned the same as the adjacent property designations. Street ends will be considered recreational if they provide access to the beach, in accordance with subsection 62B-36.002(15), F.A.C. The percentage shall be multiplied by three, for a maximum score of three points.

3. The extent to which the project mitigates the adverse impact of improved, modified, or altered inlets on adjacent beaches: Projects that provide supplemental nourishment to adjacent beaches needed to mitigate deficiencies in the annual target inlet sand bypassing quantity supplied by inlet management activities shall receive points based on the percent of the target quantity to be achieved by the supplemental nourishment, multiplied by five, for a maximum score of five points.

4. The degree to which the project addresses the state's most significant beach erosion problems as a function of the linear footage of the project shoreline and the cubic yards of sand placed per mile per year: The volume per mile per year for projects requesting construction funds in a given year shall be compared by project region (Gulf coast or Atlantic coast). The calculation includes the volume of sand placement for the proposed project, the project length, and nourishment interval. The rank score shall be calculated using all project values within a given region, for a maximum score of five points, with greater volume per mile per year receiving a higher score.

(d) Tier 4 accounts for 15 percent of the total score and consists of the following criteria:

1. Increased prioritization of projects that have been on the Department's ranked project list for successive years and that have not previously secured state funding for project implementation: Projects requesting funds for the same project phase(s) as the previous year, in which the request did not secure state funding, shall be awarded three points for the first successive request and five points for two or more years of successive requests, respectively. If the successive request adds the construction phase, then only one point shall be awarded.

2. Environmental habitat enhancement: Projects within designated critical habitat areas for threatened or endangered species that are subject to extensive shoreline armoring or non-designated areas where extensive armoring threatens the habitat of such species shall receive three points. Critical habitat areas shall include Endangered Species Act federally-designated critical habitat (including critical habitat units excluded from federal designation due to inclusion in a Habitat Conservation Plan) for threatened and endangered species pursuant to subsection 62B-36.002(21), F.A.C. Armoring along projects within designated critical habitat

areas shall be considered extensive if existing armoring and shoreline that is subject to armoring based on a 25-year storm threat is at least 30 percent of the project's length. Armoring along projects within non-designated areas shall be considered extensive if at least 50 percent of the project's length has existing armoring that threatens the habitat of such species. Projects that are eligible for three points as defined above may be eligible for an additional two points if the project exceeds best management practices to incorporate turtle-friendly designs and management strategies to protect resources or benefit critical habitat preservation.

3. The overall readiness of the project to proceed in a timely manner based on the following considerations:

a. Readiness to construct. Projects that have all of the following shall receive one point: active state and federal permits, acquired necessary easements, secured local funding, and an established ECL.

b. Active permits. Projects that have active state and federal permits as required for the proposed project phase(s) shall receive one point.

c. Easements acquired. Projects that have acquired all necessary easements for construction of the project shall receive one point.

d. Secured local funds. Projects that have secured the local funding necessary for the project shall receive one point.

e. Established ECL. Projects that have an established ECL shall receive one point.

If more than one project qualifies equally under the provisions of this subsection, the Department shall assign funding priority to those projects shown to be most ready to proceed.

(2) Inlet Management Projects. Local sponsors requesting funding for inlet management projects for the upcoming fiscal year will be ranked in priority order for the Department's Local Government Funding Request. Eligible projects will be assigned a total point score by the Department based on the following criteria:

a. Sand reaching the inlet. Estimate of the annual quantity of beach-compatible sand reaching the updrift boundary of the improved jetty or inlet channel, quantified at the rate of one point per 20,000 cubic yards per year for the Atlantic coast inlets and one point per 10,000 cubic yards per year for the Gulf coast inlets, for a maximum score of 10 points.

b. Severity of erosion. The target inlet sand bypassing quantity, as adopted in an Inlet Management Plan (IMP) or an inlet component of the statewide Strategic Beach Management Plan, is a volumetric estimate of the severity of erosion to the adjacent beaches caused by the inlet. Projects shall receive one point per 10,000 cubic yards per year of the target inlet sand bypassing quantity for Atlantic coast inlets and one point per 5,000 cubic yards for Gulf coast inlets, for a maximum score of 10 points.

c. Balancing the sediment budget. Annual average bypassing volume to be placed on the adjacent eroding shorelines, divided by the annual bypassing objective, as determined by the IMP or a Department-approved study, will be multiplied by 10, for a maximum score of 10 points.

d. Increased bypassing improvements. The proposed annualized increase in bypassing of material from within the inlet system divided by the unmet annual bypassing objective, will be multiplied by 10, for a maximum score of 10 points. The unmet annual bypassing objective is equal to the volume of the annual bypassing objective less the current annualized bypassing volume using material from within the inlet system. Projects requesting construction phase funds for modest, cost-effective improvements are eligible for points in this category.

e. Cost-effectiveness of a proposed project using inlet sand. Cost-effectiveness is the difference in the cost per unit volume of sand made available by a proposed inlet management project versus an alternative source (such as an offshore source, or an inland source, whichever costs less). The cost-effectiveness is equal to one minus the unit cost of the proposed project divided by the alternate source, multiplied by 15, for a maximum score of 10 points. Projects requesting construction phase funds for a major inlet management project component are eligible for points in this category.

f. Inlet Management Plan.

1. Existing IMP. Projects that have an existing IMP or a Department-approved local-government-sponsored inlet study addressing the mitigation of an inlet's erosive effects on adjacent beaches shall receive five points.

2. Updated IMP. Projects that have an updated IMP or Department-approved local-government-sponsored inlet study addressing the mitigation of an inlet's erosive effects on adjacent beaches within the last five years shall receive five points.

3. New IMP. Projects proposing to develop a new inlet management study to be submitted to the Department for adoption of an IMP shall receive 10 points.

g. Enhanced longevity of proximate beach projects. Projects that enhance and maintain the performance and longevity of proximate beach nourishment projects within the area of inlet influence shall receive points based on the percentage of the annualized beach nourishment volume supplied by the average annual volume of inlet sand bypassing, multiplied by 10, for a

maximum score of 10 points.

h. Criteria in 161.101(14) applicable to inlets.

1. Projects that have active state and federal permits as required for the proposed project activity shall receive one point.

2. Projects that have federal funds available for the proposed activities pursuant to the IMP shall receive three points.

3. The total amount of state funding appropriated for projects from the Department's Beach Management Funding Assistance Program through annual legislative appropriations shall be summed for the previous 10 years. The rank score shall be calculated using the total amounts for all projects, for a maximum score of four points, with greater amounts of previous funding receiving a higher score.

4. Projects that have secured the local funding necessary for the project shall receive two points.

i. Inlet management studies will be ranked using only the criteria listed in subsections (a), (f), and (h). Ranking of inlet management studies will be a normalization based on the total point value of the above referenced criteria.

Rulemaking Authority 161.101(21), 161.143(6), 161.161(7) FS. Law Implemented 161.088, 161.091(1), 161.101(1), (2), (8), (9), (11), (12), (14), (15), (16), (17), (18), (19), (20), 161.142(1), (2), (4), (5), (6), (7), 161.143(1), (2), (3), (4), (5), 161.161(1), (2), (6) FS. History–New 6-10-83, Formerly 16B-36.06, 16B-36.006, Amended 12-25-03, 8-5-13, 8-26-20.

62B-36.007 Project Cost Sharing.

(1) Until the unsatisfied demand for restoring and repairing Florida's beaches is met, the Department intends to share in the costs of beach management projects with local sponsors. Cost sharing will only be applied to the portion of the project necessary to benefit shoreline designated by the Department as critically eroded. The Department shall cost share up to 50 percent of the total costs for non-federal beach management projects. The Department shall cost share up to 50 percent of the non-federal share of U.S. Army Corps of Engineers Civil Works projects. The Department shall cost share up to 50 percent of the non-federal and state emergency fund share for projects approved to receive Federal Emergency Management Agency Public Assistance funding (Category G or equivalent subsequent program for designed, constructed and routinely maintained beaches). State cost share is subject to adjustment for the level of public accessibility calculated for beach management projects. Project shoreline lengths eligible for cost sharing are quantified at the rate of 100 units of eligibility per mile (5,280 feet) or 52.8 feet per unit. A unit is defined as one automobile parking space, one rental unit in a Public Lodging Establishment, one mass transit stop, or 4 bicycle parking spots. Eligible shoreline lengths are calculated using the following criteria:

(a) Primary beach access sites shall be granted eligibility for the shoreline length of the access site. Additional eligibility shall be granted at a rate of 52.8 linear feet per unit for one-half mile in each shore parallel direction for the following units;

1. Automobile parking spaces located within one quarter mile of a primary access site may be granted eligibility for that public access site at the rate of one unit, or 52.8 feet, per parking space.

2. Bicycle parking located within one quarter mile of a primary access site may be granted eligibility at the rate of one-quarter of a unit, or 13.2 feet, per designated bicycle parking spot. Bicycle parking spots used for eligibility may not exceed 211.2 feet per public access site.

3. Mass transit, such as buses or trolleys, may be granted eligibility at the rate of one unit, or 52.8 feet, per bus stop located within one quarter mile of the public access site. Bus stops used for eligibility may not exceed 211.2 feet per public access. In order to qualify, mass transit must be accessible to the general public and operational year round.

(b) Beachfront public lodging establishments shall be granted eligibility based upon 52.8 feet of shoreline eligibility per unit available to the public. Maximum eligibility may not exceed the beach front width of the property.

(c) Secondary beach access sites shall be granted eligibility for the shoreline length of the access site. Additional eligibility shall be granted at a rate of 52.8 linear feet per unit for up to one-quarter mile in either shore parallel direction, for the following units:

1. Public lodging establishments not located on the beach front but located within one quarter mile of a secondary public access point may contribute to the eligibility for that public access site at the rate of 52.8 feet of shoreline eligibility per rental unit available to the public. Maximum eligibility may not exceed the street-side frontal width of the property.

2. Bicycle parking located within one quarter mile of a secondary access site may be granted eligibility at the rate of 13.2 feet per designated bicycle parking spot. Bicycle parking spots used for eligibility may not exceed 211.2 feet per public access site.

3. Mass transit, such as buses or trolleys, may be granted eligibility for that public access site at the rate of one unit, or 52.8 feet, per bus stop located within one quarter mile of the public access site. Bus stops used for eligibility may not exceed 211.2 feet per public access. In order to qualify, mass transit must be accessible to the general public and operational year round.

4. Automobile parking spaces located within one quarter mile of a secondary access site may be granted eligibility for that public access site at the rate of one unit, or 52.8 feet, per parking space.

(d) Eligible shoreline lengths cannot overlap.

(e) The sum of the eligible shoreline lengths, as defined above, is divided by the total project length to determine the percentage of the total project that is eligible for cost sharing.

(f) The Department shall pay up to 100 percent of the costs of approved beach management projects when construction and maintenance are on lands with public beach access of which the state is the upland riparian owner and such lands are managed by the state.

(2) For inlet management projects, the Department shall cost-share 75 percent of the non-federal cost with the local sponsor for eligible components, pursuant to section 161.143(3), F.S.

(3) Cost savings which occur due to the planned geographic coordination or sequencing of two or more projects between local sponsors, may qualify for additional reimbursement. Geographic sequencing means combining two projects together for the purpose of contracting. In order to determine the increase in the state's cost share the projects shall demonstrate the cost savings of combining the projects and request reimbursement for the demonstrated cost savings following completion of the project phase. The cost share shall be adjusted not to exceed the state's maximum cost share amount of 75 percent of the eligible costs.

(4) All costs of physical and biological monitoring required by state and federal permits are eligible for cost sharing.

(5) A local sponsor may voluntarily agree at any time that an appropriation cannot be used and provide the Department with written agreement that such funds shall be available for reallocation.

(6) The Department will cost share for private contractual services necessary to conduct the project. Services may be contracted to a local sponsor if the Department is shown evidence that the local sponsor's proposal is cost effective, of sufficient professional quality, and otherwise in the general public interest. In determining whether contractual services are cost effective, the Department shall consider cost estimates provided by the local sponsor from fully qualified private companies or individuals. Specific contractual services performed by or for local governments shall be subject to specific accountability measures and audit requirements and be consistent with the principles of chapter 287, F.S., for competitive bidding and opportunity.

Rulemaking Authority 161.101(21), 161.143(6), 161.161(7) FS. Law Implemented 161.088, 161.091(1), 161.101(1), (2), (8), (9), (10), (11), (12), (14), (15), (16), (17), (18), (19), (20), 161.142(1), (2), (4), (5), (6), (7), 161.143(1)-(5), 161.161(1), (2), (6) FS. History–New 6-10-83, Formerly 16B-36.07, Amended 4-27-86, Formerly 16B-36.007, Amended 12-25-03, 8-5-13.

62B-36.009 Project Agreements.

(1) The Department and the local sponsor will execute a project agreement when funds are available and the project is ready to proceed. The project agreement shall include the following:

(a) The estimated costs for each eligible project item, including the amount of the local sponsor's share, the Department's share, and when applicable, the federal share;

(b) A scope of work and estimated date of completion for each eligible project item; and,

(c) A periodic reporting and billing schedule.

(2) The Department's annual financial obligation under the agreement shall be contingent upon a legislative appropriation and continued availability of funds. Funds not expended in a timely manner are subject to reversion or re-appropriation.

(3) Local sponsors may design and construct beach management projects which are consistent with this rule and chapter 161, F.S., prior to the receipt of funding from the state pursuant to sections 161.101 and 161.161, F.S., and may subsequently apply for reimbursement from the state within three years of the completion of the project pursuant to section 161.101, F.S., provided that:

(a) The local sponsor has obtained from the Department approval for cost-sharing for all scopes of work related to the project and has established the basis for reimbursement before the project phase commences. No reimbursement shall be granted for work accomplished prior to the date of the agreement unless specifically set forth in the agreement;

(b) The project has been subject to review by the Department in the design or construction phases and the project has been found to be consistent with the intent of chapter 161, F.S., for project eligibility and cost effectiveness;

(c) Reimbursement shall be limited to eligible project costs as specified in the written agreement referenced in paragraph (a), above, and this rule;

(d) The project has been prioritized as required in sections 161.101(14) and 161.143(2), F.S., and is subject to legislative appropriation; and,

(e) Documentation of costs are provided to the Department, pursuant to the requirements of the State's Auditor General.

Rulemaking Authority 161.101(21), 161.143(6), 161.161(7) FS. Law Implemented 161.088, 161.091(1), 161.101(1), (2), (8), (9), (10), (11), (12), (14), (15), (16), (17), (18), (19), (20), 161.143(2), (3), (4), 161.161(1), (2), (6), 216.181, 287.057 FS. History–New 6-10-83, Formerly 16B-36.09, 16B-36.009, Amended 12-25-03, 8-5-13.

ATTACHMENT #4

Item #1.

Gmail

Caitlin Copeland <ccopeland@juno-beach.fl.us>

BACKUP 2 - Question - Park Funding and Parking - June 22, 2021

1 message

DD Halpern <dd_halpern@yahoo.com> Fri, Oct 7, 2022 at 12:49 PM
Reply-To: DD Halpern <dd_halpern@yahoo.com>
To: Caitlin Copeland <ccopeland@juno-beach.fl.us>

Hi Caitlin,
Below is the second email chain to include as backup.

Thanks!
DD Halpern
Mayor, Town of Juno Beach

----- Forwarded Message -----
From: Michael Stahl R. <mstahl@pbcgov.org>
To: DD Halpern <dd_halpern@yahoo.com>
Cc: Joseph Lo Bello <jlobello@juno-beach.fl.us>
Sent: Tuesday, June 22, 2021 at 09:48:49 AM EDT
Subject: RE: Question - Park Funding and Parking

Good Morning DD,

I've reviewed the last 10 years of the County's Beach Management Funding Assistance (BMFA) applications for the Juno Project and do not see Kagen Park included in the public access calculations. Under the current criteria for State funding, Kagen Park would be considered a secondary beach access and given the access is a half-mile south of the current project boundary, would not have any influence on the existing project ranking. That said, the Park is the southern most public access until MacArthur Park and could be strategically significant (for funding) if this stretch of beach experiences substantial storm impacts that require emergency sand placement.

To summarize, under the current criteria for the BMFA, restricted parking at Kagen would not impact State funding for the Juno segment of the North County Comprehensive Shore Protection Project, but would limit the ability for the State or County to participate in any future sand placement along this stretch of beach.

Thanks,

Mike

Michael Stahl, Deputy Director

Environmental Resources Management

Palm Beach County

(561) 233-2433

From: DD Halpern [mailto:dd_halpern@yahoo.com]
Sent: Thursday, June 17, 2021 10:40 AM
To: Michael Stahl R. <MStahl@pbcgov.org>
Subject: Question - Park Funding and Parking

Hi Mike,

Regarding beach renourishment, could you tell me if this is contingent on Juno Beach having public parking at Kagel Park and/or other beach parking areas being public?

Beach access would always be public, it's the parking that I'm looking at - to see if the town can create some free resident-only parking without losing County funding for renourishment and other projects.

See my email below for more details.

Thank you,

DD Halpern

516-313-9541 (cell)

----- Forwarded Message -----

From: Jennifer Cirillo <jcirillo@pbcgov.org>

To: DD Halpern <dd_halpern@yahoo.com>

Cc: Michael Stahl R. <mstahl@pbcgov.org>

Sent: Monday, June 14, 2021, 4:32:58 PM EDT

Subject: RE: Question - Park Funding and Parking

Hi DD:

I am cc:ing Mike Stahl as Beach Renourishment falls under ERM.

But, generally speaking yes, if PBC Parks fund a municipal park project (through Bond funding for example) the park must be open to all County residents equally and not be discriminatory based on residency location. Therefor if a fee is charged for public use, it must be charged to all County residents equally. If it is free, it must be free to all County residents equally. This is true where County funding is used but may also be when another funding entity prevents the practice of different pricing for different people (some other grants/funders may require this as well).

If only Town funding is used for a park then the Town can dictate it's pricing strategy for both parking and programs.

Hope your well -

Jennifer

Jennifer Cirillo, MBA, CPRE

Assistant Director Parks & Recreation

Pronouns: she, her, hers (Why Pronouns Matter) [mypronouns.org]

Palm Beach County Parks and Recreation Department

2700 6th Avenue South | Lake Worth | Florida 33461

T: 561.963.6732 | F: 561.963.6734 | jcirillo@pbcgov.org

From: DD Halpern <dd_halpern@yahoo.com>
Sent: Monday, June 14, 2021 4:22 PM
To: Jennifer Cirillo <JCirillo@pbcgov.org>
Subject: Question - Park Funding and Parking

Hi Jennifer,

Regarding parking at Juno Beach's Kagen Park [google.com] - I've been researching whether it's possible to make this park "Resident Parking Only" for the winter season. During the Council election campaign many residents told me they are frequently unable to find beach parking in Juno and Jupiter during the winter, and asked for some resident-only parking in Juno.

When I spoke to our Town Manager he told me that if the town were to make Kagen Park a resident-only parking, the town would lose assistance it receives from the County. He stated that a stipulation of County-funded beach renourishment is that the park be public access because of the parking lot's proximity to the southern-most ocean beach access in town. He seemed to say that if the parking were made for Juno residents only, that funding would need to be paid back and, on a County level, it could make it difficult for the town to receive other funds as well, because funding for public projects is linked to access being available for the public.

My idea was to create free resident-only parking at Kagen Park from November 15 - April 15, however, the park facilities would be unrestricted, for anyone who arrived by bicycle or on foot. However, a cost-benefit analysis may not work for this location.

Am I understanding the project funding dynamic correctly?

Is this a topic you can help with? If not, please let me know who to contact.

Thank you,

DD Halpern

516-313-9541 (cell)