



TOWN OF PALM BEACH

Town Manager's Office

TENTATIVE -
SUBJECT TO
REVISION

ORDINANCES, RULES AND STANDARDS COMMITTEE MEETING

AGENDA

Thursday, May 20, 2021
9:30 AM

Meeting Held Via Zoom

<https://zoom.us/j/91628805759>

- I. CALL TO ORDER AND ROLL CALL
 - Julie Araskog, Committee Chair
 - Ted Cooney, Committee Member
- II. PLEDGE OF ALLEGIANCE
- III. APPROVAL OF AGENDA
- IV. COMMUNICATIONS FROM CITIZENS
- V. REGULAR AGENDA
 - A. Old Business
 - 1. Review of Chapter 42 of the Town Code, Relative to Construction Hours
Jay Boodheshwar, Deputy Town Manager
 - B. New Business
 - 1. Discussion Regarding Regulations Pertaining to the use of Synthetic Turf
Wayne Bergman, Director of Planning, Zoning and Building
 - 2. Discussion Regarding Landscape Buffers
Wayne Bergman, Director of Planning, Zoning and Building

3. Review of Truck Study Report
Paul Brazil, Director of Public Works

VI. ANY OTHER MATTERS

VII. ADJOURNMENT

PLEASE TAKE NOTE:

The progress of this meeting may be monitored by visiting the Town's website (www.townofpalmbeach.com) and clicking on "Meeting Audio" in the left column. If you have questions regarding that feature, please contact the Office of Information Technology (561) 227-6315. The audio recording of the meeting will appear within 24 hours after the conclusion of the meeting.

Disabled persons who need an accommodation in order to participate in the meeting are requested to contact the Town Manager's Office at 838-5410 or through the Florida Relay Service by dialing 1-800-955-8770 for voice callers or 1-800-955-8771 for TDD callers, at least two (2) working days before this meeting.

TOWN OF PALM BEACH

Information for ORS Committee Meeting on: May 20, 2021

To: Ordinances, Rules & Standards Committee

From: Jay Boodheshwar, Deputy Town Manager

Re: Review of Chapter 42 of the Town Code, Relative to Construction Hours

Date: May 13, 2021

STAFF RECOMMENDATION

Staff recommends that the ORS Committee review the information provided below and the attached materials pertaining to Chapter 42 of the Town Code, relative to construction hours, and provide direction.

GENERAL INFORMATION

At the March 11, 2021, ORS Committee meeting, Chair Araskog provided an overview of previous committee discussions regarding construction hours and the committee's intent to strike a balance between the need for contractors to efficiently get projects completed, while ensuring the ability of residents to enjoy their properties with minimal construction noise.

After a lengthy discussion, which considered the input received from citizens in attendance, the ORS Committee deferred on the development of recommendations for Council consideration until staff had a chance to discuss ideas for partitioning the Town into various areas, which may have different regulations pertaining to interior work on Saturdays, along with gathering ideas for a more proactive approach on enforcement during the weekend hours.

Subsequent to the March 11 meeting, staff has discussed the idea of geographically partitioning the island to implement different regulations to avoid a "one-size fits all" approach to regulating Saturday construction hours. We discussed a year-round town-wide ban on Saturday construction, with the exception for properties located in R-AA or R-A areas, where neighbors may be further away from the indoor work occurring. This could present a code enforcement challenge unless an up to date list of properties permitted to have Saturday indoor work is provided to code staff. See attached zoning map, with parcel grids. Another approach could be to establish specific Saturday hours for various areas of the town (e.g. set of hours for all construction north of Worth Avenue and another set of hours or regulations south of Worth Ave). The attached communication from John David Corey suggests consideration for a complete ban on construction on Saturdays (year round), but to increase work hours during the week to offset the loss of time on Saturdays. This is another option to consider if the ORS Committee would like to convey recommended changes to the Code for Council consideration.

In terms of enforcement, we have begun supplementing the code enforcement team with a contractual site monitor on Saturdays. This effort began on May 1, so we have 2 weekends of information. On May 1 inspections began at 1:00pm, and included construction sites from Peruvian to the north end. The monitor did find a few sites that needed some cleaning up and some that needed to be properly secured. Notices were posted at these sites for corrective action. On May 8 the monitor started at 8:00am on the south side at Ibis Isle and went north. No sites were in violation of our ordinance. However, he did provide notice to some sites for appearance and not being properly secured. We will continue this practice in the near future to assist code enforcement on Saturdays.

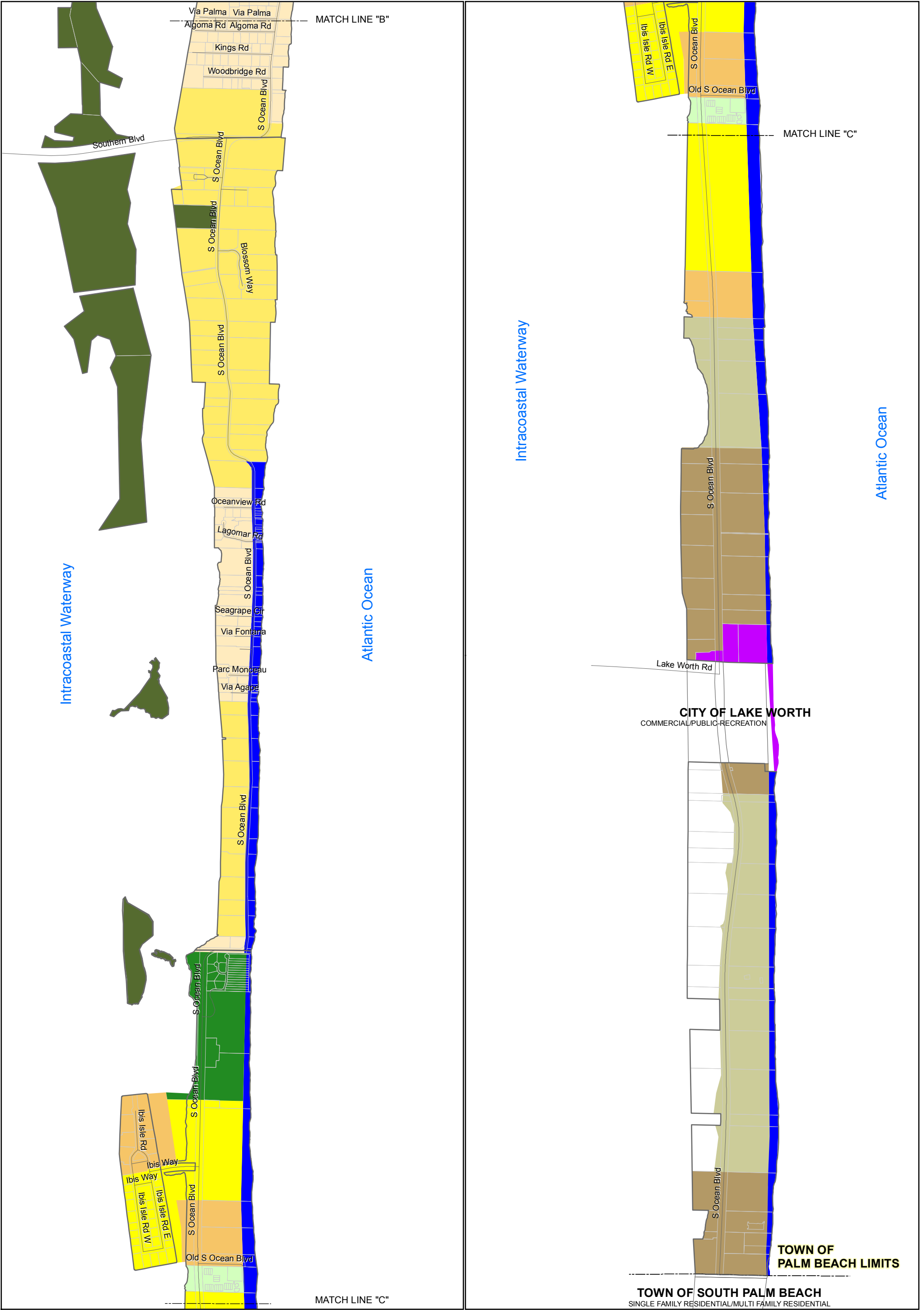
For historical context, please be reminded that Ordinance No. 03-2018 modified construction and landscaping hours and included the following amendments:

- An earlier end of the summer construction season
- Prohibition of loud work on Saturdays during the summer months (interior quiet work permitted like it was during the peak season)
- Consistency in the hours permitted for construction and landscape maintenance work

As reported at the March 11 ORS meeting, Code Enforcement has handled a total of 121 violations for construction hours over the past year. Of that, there were 45 total violations on Saturdays for construction hours. Compliance was gained by most through verbal warnings but fines had to be issued for some. Often times it is a sub-contractor committing the violation(s), but ultimately it is the general contractor who is responsible for their subs.

Attachments

cc: Wayne Bergman, Director of Planning, Zoning and Building
Nick Caristo, Police Chief
Ben Alma, Support Services Manager
John Randolph, Town Attorney



TOWN OF PALM BEACH ZONING MAP - 2017
Planning, Zoning & Building Department

- | | | |
|---------------------------------------|------------------------------------|---------------------------|
| R-AA (Large Estate Residential) | R-D(2) (Heavy Density Residential) | C (Conservation District) |
| R-A (Estate Residential) | C-OPI (Commercial Off, Prof, Inst) | PUD-A (Planned Unit Dev) |
| R-B (Low Density Residential) | C-PC (Commercial Planned Ctr) | PUD-B (Planned Unit Dev) |
| R-C (Medium Density Residential) | C-TS (Commercial Town Serving) | PUD-C (Planned Unit Dev) |
| R-D(1) (Moderate Density Residential) | C-WA (Commercial Worth Ave) | BA (Beach Area) |
| | C-B (Commercial Offices) | |



0 1,000 2,000 Feet

Map Created: May 4, 2016
Town of Palm Beach
Information Technologies GIS Department
Planning, Zoning & Building Department
(561)838-5430
Email: pzb@townofpalmbeach.com
Website: palmbeach.govoffice.com



From: [John David Corey](#)
To: [Jay Boodheshwar](#)
Cc: [Wayne Bergman](#); [Town Council](#)
Subject: Saturday Construction Hours - Palm Beach
Date: Saturday, March 13, 2021 3:00:34 PM

*****Note: This email was sent from a source external to the Town of Palm Beach. Links or attachments should not be accessed unless expected from a trusted source. Additionally, all requests for information or changes to Town records should be verified for authenticity.*****

Jay:

After hearing the discussion at ORS regarding Saturday construction hours, I wanted weigh in also to say that I feel that Saturday construction should be abandoned on the island of Palm Beach. We are a resort community and quiet enjoyment of our residences is paramount. This goes doubly on the weekend when most of us entertain or have extra time to spend at home. I know that the Planning, Zoning and Building department gets an earful on a daily basis from contractors about any restrictions, but the residents will just have to come first.

My home town of Boston has working hours standardized year round at 7am to 6pm Monday through Friday (and this is a city with immense construction labor union pressure). The rules do allow limited construction on Saturdays when pre-approved, but often is restricted to a special delivery of some type that can only be made on a weekend (e.g. use of a crane on a commuting street). If residents in a big city like Boston can have quiet weekends, then of course Palm Beach can and should as well.

How to bridge the gap when Saturday hours go away? Well, we currently start construction at 9am in season. Being in the business, even I find this rather draconian and just too late to be able to get a full day in. I would offer a compromise where the construction hours are adjusted to be 8am to 5pm Monday through Friday year round. Keep it simple. Most level-headed residents would opine that a 8am construction start is infinitely reasonable in exchange to not having construction on Saturdays. If this change were put into place, this would allow a *full 5 extra work hours per week*. Note that the 6th extra day on Saturday is inefficient as it forces a full mobilization of workers to and from the worksite and prep time at the beginning and ending of the day, while the extra 5 hours spread during the week are “full hours” with built in commuting and prep time. A win-win for all concerned.

I hope that you and the ORS Committee will consider this compromise suggestion.

Sincerely,
JDC

John David Corey
426 Australian Avenue
Palm Beach, FL 33480
H (561) 408-2880
C (617) 590-0886

TOWN OF PALM BEACH

Information for ORS Meeting on: May 20, 2021

To: ORS Members

Via: Jay Boodheshwar, Deputy Town Manager

From: Wayne Bergman, Director of Planning, Zoning & Building

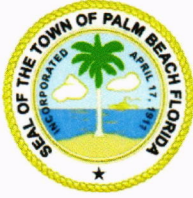
Re: Synthetic Turf

Date: May 10, 2021

GENERAL INFORMATION

At this time, synthetic turf is not directly regulated by the Town codes, but landscaping plans must be approved through a review process. Landscape plans for redevelopment are studied by either the Landmarks Preservation Commission (if a historically significant building or a landmarked property) or by the Architectural Review Commission (ARCOM) for all other properties. The current Arcom Project Designation Manual, attached, lists synthetic turf as a Minor Project Without Notice. Generally, the views of the advisory board members are against approving synthetic turf, although at times it has been approved in areas not visible from the street.

Attached: Arcom Project Designation Manual (rev. 8/13/2020)



Town of Palm Beach ARCOM PROJECT DESIGNATION MANUAL

All improvements contemplated in an application for a construction permit are subject to review by the Architectural Commission in accordance with Article III of Chapter 18 of the Town's Code of Ordinances, except as noted in Sec. 18-175(c) Exceptions. This ARCOM PROJECT DESIGNATION manual was adopted by the Town Council on April 15, 2015, amended on August 12, 2020, and summarizes the classification of projects in order to assist project consultants in determining the type of architectural review required for their project. The Notice requirements for each classification are contained in Chapter 18, Article III of the Town's Code of Ordinances.

Please consult the following list to determine what review will be required for your project. You may contact the Planning Division at (561) 838-5430 to verify the project designation category of your proposed work, or if you have any questions.

A. MAJOR PROJECTS

1. **NEW STRUCTURES** (Residential and Non-Residential)
 - a. New unattached covered primary or accessory structure (e.g. single family residence (SFR), commercial structure, guesthouse, cabana, pool house, garage, greenhouse, equipment building, chickee hut, staff quarters) whether or not visible from the street.
 - b. Outdoor kitchen (a permanently-placed room or area equipped for preparing and cooking food).
 - c. Tennis courts, tennis court lighting, awnings for all but 1- and 2-family structures.
2. **MAJOR ADDITIONS/MODIFICATIONS**
 - a. 2-story or 2nd-story attached covered structure (addition).
 - b. 1-story addition facing or visible from a public way.
 - c. Commercial or other non-single-family addition.
 - d. Unenclosed accessory structure visible from the street.
 - e. Addition requiring variance(s), special exception(s), or site plan approval.
 - f. Final landscape/hardscape/lighting improvements submitted in conjunction with new construction (or substantial change to same prior to C.O.)
 - g. New driveway gate(s).
 - h. Replacement of existing driveway gate(s) that require variance(s), special exception(s), or site plan approval.
 - i. Change in driveway material/design for non-SFR or SFR if not meeting LOS requirements.
 - j. Antennas, cell towers (see Sec. 134-2028).
3. **DEMOLITION**
 - a. Demolition of more than 20% of a structure.
 - b. Demolition of a multi-story accessory structure or any structure within a setback.
4. **OTHER**
 - a. Substantial change in roofing material (including downgraded material, example - changing a barrel tile roof to a flat tile roof).
 - c. Stair tower for commercial building or other non single-family structure.
 - d. Swimming pool in conjunction with new structure or as part of other changes.
 - e. PVC fencing which can be seen from the street.
 - f. Multiple items which are Minor projects when proposed individually, but which become Major projects when consolidated.
 - g. Significant revision(s) to previously approved ARCOM Major Project.
 - h. A project that has a reasonable potential to adversely impact a neighbor.

B. MINOR PROJECTS – WITH NOTICE

1. **DEMOLITION**
 - a. All structural demolition not designated as Major projects.
2. **OTHER**

- a. Any projects requiring administrative site plan review not designated as Major projects.
- b. New or relocated generator over 60 Kw.
- c. Any landscape / hardscape revisions to an existing or ARCOM-approved plan that will occur along or near property lines or public right of ways and which may impact neighbors or the public.
- d. Site wall installation and modifications that will occur along or near property lines or public right of ways and which may impact neighbors or the public.
- e. The installation or replacement of any generator, pool equipment, air conditioning or pool heating equipment, that is in conformance with 134-1728 or 134-1729, and may impact neighbors due to the size, location, or anticipated noise levels.
- f. New Fences, other than PVC fencing listed elsewhere, located along or near property lines or public right of ways.
- g. Replacement of existing driveway gates with gates that are substantially different in design.
- h. Change in roof design on any building (e.g. flat roof to hipped roof).

C. MINOR PROJECTS – NO NOTICE

1. MAJOR ADDITIONS/MODIFICATIONS

- a. 1-story addition not facing or not visible from a public way, not more than 400 sq ft in size.

2. OTHER

- a. Garage door material or design change, if visible from neighboring properties or public right of ways.
- b. Substantial fenestration changes to a residential structure, including front entry.
- c. All front entry/fenestration change to a commercial building or other non-single-family structure except the C-WA district (see Minor Projects With Notice).
- d. Solar roof panels.
- e. Change in material (e.g. roof tiles, windows, wall material) for commercial building or other non-single-family structure.
- f. Non-removable hurricane shutters (e.g. accordion shutters).
- g. Awning recover with substantial change in material or color.
- h. Residential Awning requiring variance(s), special exception(s), or site plan approval (combination projects already receive notice through zoning application).
- i. PVC fencing (other than that used at single-family homes and not visible from the public ROW).
- j. Multiple items which are Staff Approvals when proposed individually, but which become Minor projects when consolidated.
- k. Lighting on a commercial building or other non-single-family structure.
- l. Hanging signs in commercial areas (see Sec. 134-2436).
- m. Signage requiring variance(s), special exception(s), or site plan approval.
- n. Use of artificial turf when in conformance with landscaped open space requirements.
- o. Awning on a commercial building or other non single-family structure.
- p. Tennis court and tennis court fencing for a 1- and 2-family property which meets the requirements of 134-1759.

D. STAFF APPROVALS

1. MAJOR ADDITIONS/MODIFICATIONS

- a. Loggia (not covered) if located within the building envelope and not visible from the street.
- b. Gazebo, pergola, arbor, trellis, if located within the building envelope and not visible from the street.
- c. Outdoor shower.
- d. Landscape lighting or lighting on a residential structure when accompanied by executed Town of Palm Beach Exterior Lighting Requirements document.
- e. Pedestrian gates and replacement of existing driveway gates with similar look.
- f. Like for like replacement of driveway material.

2. DEMOLITION

- a. Removal of basketball & tennis courts and other impervious hardscape other than structures (to be replaced with landscaping).

3. OTHER

- a. Minor landscape/hardscape revisions to ARCOM-approved plans that will occur on the interior of a lot.

- b. Any landscape / hardscape revisions to an existing or ARCOM-approved plan that will occur along or near property lines or public right of ways and which may impact neighbors or the public shall be considered a Minor Project – With Notice.
- c. Site wall modifications that will occur on the interior of a lot. Site wall modifications that will occur along or near property lines or public right of ways and which may impact neighbors or the public shall be considered a Minor Project – With Notice.
- d. Air conditioning and swimming pool heaters that meet all requirements of Sec. 134-1728 where the installation or replacement of such equipment will not impact neighbors.
- e. Minor fenestration changes to a home, including some door/entry changes.
- f. Statues or fountains that meet code.
- g. Like for like garage door change.
- h. Addition (to match existing) or deletion of windows.
- i. Gutters and downspouts.
- j. Hurricane shutters (replacement and removable).
- k. Awnings on 1- or 2-family residential structures which meet all zoning requirements.
- l. Awning recover with similar material and color.
- m. Fences other than PVC fencing listed elsewhere, located within the interior of a lot.
- n. 60 kW generators (or smaller) and swimming pool equipment that meet all requirements of Sec. 134-1729 where the installation or replacement of such equipment will not impact neighbors.
- o. Signage not requiring variance(s), special exception(s), or site plan approval.
- p. Roof replacement – like for like, color for color material change.
- q. Fence replacement – like for like, same height and location.

These descriptions are provided as examples only, and are not intended to be all-inclusive. The Director of the Planning, Zoning and Building Department or his or her designee may determine that the particular characteristics of a proposed project may warrant notice and/or additional review of the Architectural Commission.

All requests for approval, authorization, interpretation or direction under the requirements of Sec. 18-175 of the Town Code of Ordinances shall be submitted to the Planning, Zoning and Building Department in writing. All work which is the subject of such application may only proceed in conformance with and after receipt of written authorization by the Planning, Zoning and Building Department Director or his or her designee.

TOWN OF PALM BEACH

Information for ORS Meeting on: May 20, 2021

To: ORS Members

Via: Jay Boodheshwar, Deputy Town Manager

From: Wayne Bergman, Director of Planning, Zoning & Building

Re: Removal of Landscape Buffers

Date: May 10, 2021

STAFF RECOMMENDATION

Staff recommends that the ORS Committee review and consider possible changes to the code to addresses the removal of landscape buffers on a property.

Attached: October 17, 2019 Memo
 December 27, 2019 Memo
 January 9, 2020 ORS Minutes

TOWN OF PALM BEACH

Information for Town Council Meeting on: November 13, 2019

To: Mayor and Town Council

Via: Kirk Blouin, Town Manager

From: Josh Martin, Director of Planning, Zoning & Building

Re: Revision to Sec. 66-236 to Require Town Approval of Removing Landscape Buffers

Date: October 17, 2019

STAFF RECOMMENDATION

Staff recommends Town Council consider and forward to the Ordinances, Rules and Standards (ORS) Committee for their review, the attached proposed code change, which addresses the removal of landscape buffers on a property. The proposed code change will require Architectural Commission or Landmarks Preservation Commission (if applicable) approval to remove any landscape material that is 30 inches or higher, and within 10 feet of a property line; the code revision also requires a vegetation removal permit for the removal of this landscape buffer material.

GENERAL INFORMATION

Over the past several years there have been instances in the Town where a property owner has removed a hedge or other landscape material along their property line, and thereby eliminated the privacy enjoyed by both property owners. While this is a somewhat rare occurrence, it has occurred with enough frequency to become an issue that Town staff would like to address.

To better ensure that the privacy between property owners is maintained within the Town, staff has drafted a succinct code revision that requires a vegetation removal permit to remove a landscape buffer, or a portion of a landscape buffer. Prior to the vegetation removal permit being issued, a property owner must obtain approval for the removal of the vegetation from the Architectural Commission or the Landmarks Preservation Commission (if applicable). Staff will require the normal notice for the Commission application so that any affected neighbor will have an opportunity to address the Commission regarding the removal of the vegetation. In limited cases, staff may administratively approve the removal of the vegetation on behalf of the Commission if replacement material of the same size and opacity is also proposed.

cc: Wayne Bergman, Asst. Director of Planning, Zoning & Building
John C. Randolph, Town Attorney

TOWN OF PALM BEACH

Information for ORS Meeting on: January 9, 2020

To: ORS Members

Via: Jay Boodheshwar, Deputy Town Manager

Via: Josh Martin, Director of Planning, Zoning & Building

From: Wayne Bergman, Asst. Director of Planning, Zoning & Building

Re: Revision to Sec. 66-236 to Require Town Approval of Removing Landscape Buffers

Date: December 27, 2019

STAFF RECOMMENDATION

Staff recommends that the ORS Committee review and consider the attached proposed code change, which addresses the removal of landscape buffers on a property. The proposed code change will require Architectural Commission or Landmarks Preservation Commission approval (or administrative / staff approval, if applicable) to remove any landscape material that is 30 inches or higher, and within 10 feet of a property line; the proposed code change also requires a vegetation removal permit for the removal of this landscape buffer material.

GENERAL INFORMATION

Over the past several years there have been instances in the Town where a property owner has removed a hedge or other landscape material along their property line, and thereby eliminated the privacy enjoyed by both property owners. While this is a somewhat rare occurrence, it has occurred with enough frequency to become an issue that Town staff would like to address.

To better ensure that the privacy between property owners is maintained within the Town, staff has drafted a succinct code revision that requires a vegetation removal permit to remove a landscape buffer, or a portion of a landscape buffer. Prior to the vegetation removal permit being issued, a property owner must obtain approval for the removal of the vegetation from the Architectural Commission or the Landmarks Preservation Commission (or by Arcom staff approval or LPC administrative approval, if applicable). Staff will require the normal notice for any Commission applications (large vegetation projects) so that any affected neighbor will have an opportunity to address the Commission regarding the removal of the vegetation. In many cases, staff may administratively approve the removal of the vegetation on behalf of the Commissions if the landscape projects are minor and if replacement material of the same size and opacity is proposed.

The Town Council briefly reviewed this matter at their November 13, 2019 Development Review meeting. The consensus of the Town Council was that they supported the concept of preventing an owner from removing a vegetative buffer that served as privacy screening, as long as the new regulation was not onerous to the owner, that staff approvals be permitted for minor changes to landscaping, and to be reasonable regarding the removal of invasive materials currently found in utility easements. They approved this matter to be heard by the ORS Committee.

Attached: Proposed amendment to Chapter 66, Natural Resource Protection, Article IV, Vegetation, Section 66-236

Sec. 66-236. - Application procedure for vegetation removal permit.

(a) *Removal permits.* Vegetation removal permits, not sought in conjunction with building permits, shall be obtained by making application prior to removal, relocation or replacement to the building official or his designee, at least ten working days prior to the proposed date of removal.

(b) *Circumstances justifying issuance.* Vegetation removal permits shall be issued in the following circumstances:

- (1) Where a tree, due to natural circumstances, is no longer viable, is in danger of falling, is too close to existing structures so as to endanger such structures, interferes with utility services, creates unsafe vision clearance, or constitutes a health hazard;
- (2) Where the affected vegetation will be relocated, replaced with a suitable substitute tree, or otherwise preserved, with the exception of mangroves, which are regulated elsewhere in this chapter; or
- (3) Where tree removal is part of a plan to restore or encourage native shoreline species, either on the coastal strand, as described in section 66-81 et seq., resolution number 37-89, or along Lake Worth, as described in article III of this chapter.
- (4) Where vegetation buffers (hedges and/or trees) that are 30 inches in height or greater, and are within 10 feet of any side, rear, street-side or street-rear property line, are removed and result in the loss of opacity of the existing screening. Approval from the Architectural Commission or Landmarks Preservation Commission (if applicable) for the removal of the vegetation buffer or buffers must be obtained prior to the issuance of a vegetation removal permit. In limited cases, administrative or "staff" level approval may be done when equal or greater replacement landscape material is proposed to replace the vegetation removed, and thereby maintaining the landscape buffer or buffers opacity.

(c) *Permit issuance and time limitations.* Upon approval of an application, the building official or his designee shall issue a permit. Permits shall expire and become null and void if work is not commenced within 90 days from the date of permit issuance.

(Code 1982, § 11.5-21)



TOWN OF PALM BEACH

Ordinances, Rules and Standards Committee

REPORT OF THE ORDINANCE, RULES AND STANDARDS MEETING HELD ON THURSDAY, JANUARY 9, 2020

I. CALL TO ORDER AND ROLL CALL

The Ordinances, Rules and Standards Committee (ORS) meeting was called to order on Thursday, January 9, 2020, at 9:30 a.m. in the Town Council Chambers. On roll call, all committee members were found to be present.

II. PLEDGE OF ALLEGIANCE

Chair Araskog led the Pledge of Allegiance.

III. APPROVAL OF AGENDA

Motion was made by Committee Member Crampton, and seconded by Chair Araskog, to approve the Agenda. On roll call, the motion passed unanimously.

IV. COMMUNICATIONS FROM CITIZENS - None.

V. REGULAR AGENDA

A. Old Business

1. Proposed Modification to Chapter 106, Article VII, to Establish Town Council Approval Criteria for Walks/Runs Events on Public Property
Jay Boodheshwar, Deputy Town Manager

Chair Araskog made comments regarding Town residents' quality of life and the burden walks/runs put on our residents who are construction weary and traffic fatigued. She discussed the Council's goals for the modifications to Chapter 106, Article VII and stated that it is her opinion that these modifications must be specific and detailed to give the Council the ability to protect our residents from disruptions to their quality of life and quiet enjoyment of their property or other safety issues.

Jay Boodheshwar, Deputy Town Manager, provided a brief background on the Special Events Ordinance with regards to Walk/Run events and clarified the objective of bringing this item before the Committee was to develop some criteria

1 for Council to reference when considering applications for new walk/run events. He
2 presented a review of the proposed modifications by staff to Chapter 106, Article VII
3 of the Town Code. The goal was to find a middle ground by reducing the
4 modifications presented at the October 24, 2019, ORS meeting and to eliminate
5 redundancies.

6
7 Chair Araskog stressed the importance of having criteria that will allow the Council
8 to approve or disapprove of an event. She commented that if the criteria is too broad
9 or too narrow, the Council would not have the criteria necessary to approve or
10 disapprove an event. Chair Araskog opined that something in the middle would
11 probably be best and discussed changes to specific sections that she thought would
12 be appropriate to give the Council clarity and passed out her recommendations for
13 changes.

14
15 Chair Araskog and Deputy Town Manager Boodheshwar suggested changing
16 number one to add "as well as the walk/run route." It was agreed that number two
17 would stay the same and that the new material would be discussed.

18
19 **It was the consensus of the ORS Committee that the following quote be added to item number**
20 **one of the existing criteria, "as well as the walk/run route."**

21
22 **It was the consensus of the ORS Committee that no change will be needed to item number two**
23 **of the criteria.**

24
25 Extensive discussion ensued regarding capping the amount of participants, limiting
26 the number of times the same route can be used, and establishing a maximum number
27 of events per year on the same route and other criteria. Committee Member Crampton
28 agreed that quiet enjoyment of resident property was very important as our brand is
29 a sought after commodity.

30
31 Discussion regarding how many events per year ensued. Chair Araskog stated she
32 would like all of the Council to weigh in on what they think the appropriate number
33 should be, but when asked to make a recommendation she stated that her preference
34 would be three in season, which would include the Turkey Trot and the Walk of
35 Hope.

36
37 Deputy Town Manager Boodheshwar recommended that there also be the limitation
38 of one event per month so the events do not occur in the same month creating a tough
39 situation for the residents every weekend. Chair Araskog recommended one every
40 two months. In response to a question from Committee Member Crampton, Chair
41 Araskog clarified that this was three if using the same or a similar route. This would
42 not pertain to other areas; each area would have a maximum of three in season and
43 not to exceed every other month.

44
45 **It was a consensus of the ORS Committee that three walk/run events occur in season and must**
46 **be every other month if in the same route area, with the Walk of Hope and the Turkey Trot**
47 **being included in that number for that specific route.**

1
2 Chair Araskog stated her opinion that additional criteria could prove important to
3 allow the Council to give relief to an area that has had disruption to their quiet
4 enjoyment of their property due to heavy construction in the area or other
5 maintenance issues. Deputy Town Manager Boodheshwar stated the Council and the
6 Staff currently have the authority in Special Events Ordinance to deny an event based
7 upon disruption of the community.
8

9 Chair Araskog proposed adding a cap to the number for other walks/runs, but felt it
10 was random at this point to pick a number. She thought 300 to 350 should be the
11 maximum. Committee Member Crampton was more inclined to 500. Deputy Town
12 Manager Boodheshwar in reply to Chair Araskog's question advised that the total
13 number of participants in the Turkey Trot was about 1300. Mr. Crampton was fine
14 with a number based on the Walk of Hope, which is about 500, that he said was a
15 feel good and charitable organization that he could approve. Deputy Town Manager
16 Boodheshwar stated that in lieu of the larger events in that route area, limiting the
17 third walk/run to a smaller participant number would be fine. Chair Araskog stated
18 her concern that in one route area there were 1300 in November, In February, there
19 would be 500-800 people and that it is appropriate to have a much smaller number
20 of participants for the third walk/run.
21

22 The Committee agreed that 350 people would be the maximum allowed. Deputy
23 Town Manager Boodheshwar informed the Committee that the two grandfathered
24 events would **not** have the cap of 350, unless the Council chose to require this
25 maximum number of participants.
26

27 Chair Araskog also asked that the Ordinance provide a cap on the maximum amount
28 to include volunteers and organization members so as not to have an adverse effect
29 on parking. It was recommended by Deputy Town Manager Boodheshwar that we
30 pick 400 instead of 350 people in number 5 to include vendors, volunteers, walk/run
31 participants, spectators, and workers from the organization sponsoring the walk/run
32 event. He recommended we add the words "and all others" to include all participants,
33 volunteers and the like. The Committee agreed.
34

35 **It was the consensus of the Committee that 400 people should be the maximum number of**
36 **participants allowed, including all volunteers, and the two grandfathered events would not**
37 **have the cap of 400 participants, unless the Council chose to change this requirement.**
38

39 Chair Araskog requested that the ordinance add that the event will not begin setup or
40 clean up before 8 a.m. in the morning if near any residential living unless approved
41 by Town Council. Committee Member Crampton agreed. Deputy Town Manager
42 Boodheshwar gave his opinion that the best time to have such events is earlier in the
43 morning to get the walk/race in and out before residents start their day. Chair Araskog
44 preferred that start times for setup be brought to Town Council and not just be staff
45 approved to give residents the ability to weigh in on whether the time is too early and
46 was detrimental to their quality of life, safety etc. Deputy Town Manager
47 Boodheshwar pointed out that this is already coming to Council, but Chair Araskog

1 wanted this to be added to the criteria to give the Council a reason to say no that is
2 clearly stated and to have resident participation. She explained she is looking for
3 extra layers of protection and specificity. It was decided to add "and will not
4 adversely affect the adjacent residential neighborhoods" to an existing clause.
5

6 **It was the consensus of the ORS Committee to make the addition of the following quote to the**
7 **existing criteria, "and will not adversely affect the adjacent residential neighborhoods."**
8

9 Discussion ensued on the maximum time for the event, which is already addressed
10 in the Special Event Ordinance.
11

12 Discussion ensued about sections in the originally proposed changes at the last ORS
13 Committee meeting that Deputy Town Manager Boodheshwar found were
14 redundant. The Committee approved the removal of such redundancies in number 5,
15 6, 9 and others.
16

17 **It was the consensus of the ORS Committee to remove the redundancies in the criteria that**
18 **were discussed.**
19

20 On the proposed number 10, Chair Araskog recommended staff provide a copy of
21 the noise ordinance to each applicant and that they be reminded that they must abide
22 by all noise ordinances.
23

24 Chair Araskog requested no events on Sundays as this is the only day that
25 construction and landscape work are not allowed. She stated that this is important
26 when considering our resident's frustration with the overwhelming construction and
27 traffic issues during the week and even on Saturdays. It was pointed out that Kathleen
28 Dominguez had included this in her version of the proposed ordinance discussed in
29 October 24, 2019, ORS Committee meeting.
30

31 **It was the consensus of the ORS Committee to not allow events to take place on Sundays.**
32

33 Chair Araskog asked that criteria be written to provide Council with a mechanism to
34 not allow amplified music or amplified speaking before 9 a.m. An example was a
35 warm up that occurred in one of the walk/runs that had a 7 a.m. warm up with music
36 and amplified discussions. A resident of the towers came with a noise reader and was
37 furious about being awakened on a Sunday to amplified music and talking. Chair
38 Araskog asked that this be brought to Council for their comments.
39

40 **It was the consensus of the ORS Committee to recommend to Council for discussion that**
41 **criteria be provided to not allow amplified music or talking before 9 a.m.**
42

43 Committee Member Crampton when asked stated that he was fine with Chair
44 Araskog's recommendations.
45

1 Chair Araskog asked if Council could advise on the different areas where she thought
2 they needed guidance and more input before this went into ordinance form, but it
3 was pointed out that it could be changed on the first reading at the February meeting.
4

5 **It was the consensus of the ORS Committee to recommend Council have further discussion on**
6 **several criteria that was not decided upon.**
7

8 **It was the consensus of the ORS Committee to approve the changes as discussed, not as the**
9 **document provided by Chair Araskog. Additionally, staff was directed to prepare an**
10 **Ordinance for review by the Town Council at the February 11, 2020, meeting.**
11

12 B. New Business
13

- 14 1. Proposed Modification to Section 66-236 – Application Procedure for
15 Vegetation Removal Permit, to Require Town Approval for Removing
16 Landscape Buffers

17 *Wayne Bergman, Assistant Director of Planning, Zoning & Building*
18

19 Committee Member Crampton requested background information regarding the
20 presentation. His concern was regarding the property rights and requiring owners to
21 keep hedges on their own property to afford privacy to a neighbor.
22

23 Wayne Bergman, Assistant Director of Planning, Zoning & Building, provided a
24 brief background on why the proposed modifications to Section 66-236 are being
25 brought before the Committee and asked for direction from the Committee to have
26 staff review and consider the section in depth. Mr. Bergman discussed instances in
27 the Town where a property owner has removed a privacy hedge. It is a rare
28 occurrence, but there have been enough coming forward that staff believed it merited
29 a discussion to see if there was direction to fill the void.
30

31 Committee Member Crampton requested more specific examples to understand the
32 problems. Mr. Bergman stated he was happy to bring the examples forward and
33 clarified that the instances involved landscape plans that had been approved by the
34 LPC or ARCOM and that in these instances, part of the approved package was to put
35 the perimeter buffering in certain places. He stated that as soon as the Certificate of
36 Occupancy was issued, or shortly thereafter, owners decided to remove the
37 landscaping and to replace it or not replace it. Mr. Bergman explained those were the
38 types of situations he is talking about.
39

40 Committee Member Crampton stated that his examples are a different issue of not
41 following the ARCOM approved plans. Chair Araskog explained that in the ARCOM
42 Ordinance there were criteria involving protecting neighbor's privacy and that
43 ARCOM often requires certain hedging and landscape materials to protect the
44 neighbors from windows or other aspects of the architecture that could remove the
45 neighbor's privacy in their yards or homes.
46

1 Chair Araskog recommended that this be brought to Town Council for a decision on
2 if there should be some mechanism to prevent hedge or landscape removal when it
3 is implemented by ARCOM or LPC to protect the privacy of the neighbors or to hide
4 garages, cars, or mechanical equipment from the public and neighbors. Chair
5 Araskog expressed the importance of this particular issue as people have complained
6 about the fact that they took the time to attend the LPC or ARCOM quasi-judicial
7 hearing to request privacy protection and ARCOM worked extensively on the plans
8 to protect their privacy and all agreed on the plans and then all of a sudden the privacy
9 landscape/ hedging that was agreed upon is gone six months later. Chair Araskog
10 stated that she has seen this occur and believes it is not fair that there is not currently
11 any regulation requiring the landscape plans be followed once installed.
12

13 Committee Member Crampton asked why this is not a code issue. Chair Araskog
14 explained that this is not a code issue because there is nothing in the current code
15 pertaining to limiting the removal of ARCOM or LPC approved landscaping. Chair
16 Araskog thanked Mr. Bergman for bringing this to the attention of the Council and
17 the ORS Committee.
18

19 Chair Araskog stressed the extensive work put in by ARCOM on the landscape plans.
20 Committee Member Crampton agreed that this was important if it was agreed to and
21 issued a permit based by an ARCOM finding and they remove it that is a different
22 issue to him. The Committee agreed an ordinance should be drafted to protect this.
23 Chair Araskog used an example of a woman who attended several meetings to be
24 certain a hedge would be used to protect her privacy from a larger building being
25 built next door and then they changed it to trees, which did not give her the privacy
26 she was promised at the ARCOM Meetings.
27

28 Chair Araskog also talked about possible unintended consequences if someone
29 wanted to remove a ficus benjamina hedge or both neighbors have agreed to remove
30 the landscape barrier, they probably should not have to go to LPC or ARCOM.
31

32 Chair Araskog stated that she thought Mr. Bergman's idea is great and asked that he
33 come back with an Ordinance that holds the property owner to the plans unless they
34 go to ARCOM or LPC for the changes if it affects privacy, mechanical equipment
35 and garages or other potential blights on the neighborhood. If this was the intent, then
36 code should require that it go to ARCOM or LPC unless both neighbors agree. The
37 Committee asked Mr. Bergman to come back with an ordinance that takes the issues
38 discussed into consideration.
39

40 **It was the consensus of the ORS Committee to direct staff to make revisions to Section 66-236**
41 **and bring it back to ORS Committee for additional review.**
42

- 43 2. Proposed Modification to Section 66-311 – Prohibited Plants, to Prohibit
44 the Planting of Non-Native Ficus
45 *Jay Boodheshwar, Deputy Town Manager*
46

1 Chair Araskog made comments in regard to Ficus Nitida and ARCOM, especially
2 John David Corey, changing Nitida to another species. She discussed other types of
3 non-native ficus that attract White Fly and require all the chemicals that are being
4 currently sprayed. She mentioned Kathy Bleznak who spoke recently to Town
5 Council regarding a time extension request. Resident Bleznak had put in a Ficus
6 Nitida hedge to eliminate the heavy spraying the Ficus Benjamina required and
7 thought she would not run the risk of having White Fly. Her neighbor did not spray
8 for White Fly and it infested his Ficus Benjamina. Then the White Fly moved to her
9 property, infested her Ficus Nitida and then was required to use harmful chemicals
10 on her Ficus Nitida.

11
12 Chair Araskog stated there are two important factors: white fly and spraying
13 chemicals, both of which were factors as to why the Council decided to enact a
14 prohibition on Ficus Benjamina. This addition is meant to capture all ficus that
15 attracts white fly. She discussed that at one point some Council Members believed
16 Nitida was a good replacement for Ficus Benjamina, but that Ficus Nitida is equally
17 susceptible to White Fly in nearby areas or from infested Ficus Benjamina. She
18 pointed out that the White Fly will move from infested Ficus Benjamina to the Ficus
19 Nitida. Chair Araskog discussed instances at ARCOM where members asked Ficus
20 Nitida to be replaced because of this issue. Chair Araskog discussed the fact that the
21 spraying required to prevent White Fly is the strongest in our Town and that
22 therefore, it was recommended by Bobbie Lindsay and her that maybe only native
23 ficus be allowed.

24
25 Deputy Town Manager Boodheshwar provided a brief background on the changes
26 last year to Section 66-311 dealing with prohibited plants and detailed that the
27 Council had imposed a prohibition on any new planting of Ficus Benjamina. He
28 reiterated Chair Araskog's point in stating that what they were seeing around town,
29 and what they expect to keep seeing, is a movement from the White Fly's favorite
30 dish, Ficus Benjamina, to its second favorite dish, Ficus Nitida. Based on the
31 conversation at Council and the facts mentioned above, he recommended that the
32 next step of banning the planting of any non-native ficus would probably be the cure
33 for the White Fly jumping to their next favorite dish. He then reviewed proposed
34 revisions to the language in the code.

35
36 Discussion ensued regarding Bobbie Lindsay's knowledge of all non-native ficus
37 and the potential for white fly to be attracted to them. Deputy Town Manager
38 Boodheshwar stated that there was potential for all non-native ficus to attract White
39 Fly as per his understanding.

40
41 Chair Araskog approved of his language adding non-native instead of Ficus
42 Benjamina, but stated that she was fine to just have Ficus Nitida versus all ficus. The
43 Committee agreed to have Bobbie Lindsay opine at Council on non-native ficus in
44 the Council Meeting to assist in understanding if all non-native ficus should be
45 prohibited. Committee Member Crampton expressed his concern that we were being
46 too broad without the knowledge or research necessary to an all-out ban of ficus.
47 Chair Araskog agreed with Committee Member Crampton. Deputy Town Manager

1 Boodheshwar found that in the country there are 850 ficus species and perhaps more
2 research is needed to realize which are used in Florida that attract white fly. The
3 Committee agreed.
4

5 **It was the consensus of the ORS Committee to recommend to Council more discussion**
6 **regarding prohibition of all non-native ficus species.**
7

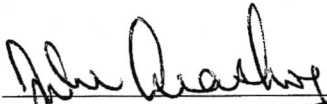
8 **It was the consensus of the ORS Committee to direct staff to make revisions to Section 66-311**
9 **to include Ficus Nitida as a prohibited plant and bring a draft Ordinance to Town Council on**
10 **February 11, 2020 for revision.**
11

12 VI. ANY OTHER MATTERS - None
13

14 VII. ADJOURNMENT
15

16 With no further business to discuss, the Ordinance, Rules and Standards Committee Meeting
17 of Thursday, January 9, 2020, adjourned at 10:29 a.m.
18

19
20 APPROVED:

21
22 
23
24 Julie Araskog, Committee Chair
25

26 ATTEST:

27 
28
29 Patricia Gayle Gordon, Acting Town Clerk
30

TOWN OF PALM BEACH

Information for ORS Committee Meeting: May 20, 2021

TO: Ordinances, Standards & Rules Committee
FROM: H. Paul Brazil, P.E., Director of Public Works
RE: Town of Palm Beach Truck Regulation Study
DATE: May 11, 2021

STAFF RECOMMENDATION

Kimley-Horn and Associates, Inc. will make a presentation of the Truck Regulation Study.

GENERAL INFORMATION

At the September 10, 2019, the Town Council authorized a purchase order for Engineering Services to Kimley-Horn and Associates, Inc. (KHA) for the study and development of a truck traffic regulation plan. This action was the culmination of years of discussions about the challenges of large trucks trying to navigate safely without causing property damage or traffic impacts. The draft report is attached excluding the appendices which are available at Public Works.

The report provides an analysis of truck volumes and circulation patterns within the Town. A review of Florida municipalities that have implemented truck restrictions is also included. Based on these analyses, a truck restriction plan was developed and outlined in the report along with recommendations for codification, education, and enforcement to allow for limiting large trucks to enter restricted areas.

The draft report was presented to the Public Works Committee at the October 22, 2020 meeting. Modifications were made and the report was finalized. At this meeting, the recommendation was made to move the report to the ORS committee. For reference, the Public Works Committee minutes are attached.

Attachments

cc: Kirk W. Blouin, Town Manager
Jay Boodheshwar, Deputy Town Manager
Eric B. Brown, P.E., Assistant Director of Public Works
Patricia Strayer, P.E., Town Engineer

TRUCK REGULATION STUDY

TOWN OF PALM BEACH, TRUCK STUDY PALM BEACH, FL

PREPARED FOR:
TOWN OF PALM BEACH

Kimley»Horn

March 2020
Revised May 2020
Kimley-Horn Project #044063244
CA 00000696
Kimley-Horn and Associates, Inc.
1920 Wekiva Way
West Palm Beach, Florida 33411
561/845-0665 TEL

TRUCK REGULATION STUDY

TOWN OF PALM BEACH, TRUCK STUDY PALM BEACH, FL

Prepared by:
Kimley-Horn and Associates, Inc.
West Palm Beach, Florida

Kimley»Horn

March 2020
Revised May 2020
Kimley-Horn Project #044063244
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Kimley-Horn and Associates, Inc.
1920 Wekiva Way
West Palm Beach, Florida 33411
561/845-0665 TEL

Adam B. Kerr, P.E.
Florida Registration Number 64773

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INTRODUCTION

The Town of Palm Beach currently allows unrestricted movement of all legal vehicles on all streets within the Town. As such, larger vehicles have been observed to damage private property when they cannot adequately maneuver narrow streets and can cause congestion and unsafe conditions when they have to make multi-point turns at Town intersections.

The Town of has therefore requested an analysis of truck volumes and circulation patterns within the Town to assist in the determination if the restriction of certain large vehicles on certain streets should be enacted. In addition, if a restriction is enacted, the framework for implementation and enforcement of the restriction is included in this document. The goal of any restriction is to change the behaviors to force deliveries with smaller vehicles. Although any restriction will not completely eliminate property damage and congestion, the goal of implementing the restrictions is to substantially reduce the frequency of occurrences.

Traffic counts were collected along various roadways and at certain intersections within the Town to determine the location and circulation patterns of large vehicles. Truck movements for several types and lengths of trucks were then analyzed at several intersections representative of typical conditions throughout the Town to determine which, if any, trucks can maneuver local streets without encroaching on private property.

A review was performed to identify Florida municipalities that have implemented truck restrictions. Based on these analyses, a truck restriction plan was developed, identifying streets that should have truck restrictions.

IDENTIFICATION OF ISSUE

Town residents have raised concern to Town staff that certain trucks have caused property damage when navigating local streets, including damage to turf, vegetation and minor structures. Additionally, trucks have been observed to cause congestion when attempting to turn onto and from local streets; especially with large trucks, multiple-point turns have been observed to be required, often also creating property damage.

Enforcement of trucks causing the damage and congestion is challenging, because by the time the incident is reported and responded to, the truck has moved to a different location within the Town or has left the Town entirely. Furthermore, truck drivers may not be aware that they are driving into parts of Town that are difficult to navigate, and may find themselves trapped, requiring them to damage property to maneuver and leave the Town.

This study has been limited to Town-maintained roadways only. The Town does not have jurisdiction to control vehicular movement on State Roads, such as County Road and all three bridges to the Town. State roads are also typically designed and constructed to accommodate larger vehicles, and the known problem areas are in residential districts in the north end and midtown.

Nonetheless, it is important to consider the need for large trucks to occasionally circulate even on narrow neighborhood streets. Events such as residential construction or delivery of large items must be allowed as matter of course for the Town. Therefore, a system of permitting and monitoring are required.

CASE STUDY REVIEW

A review of municipalities which have implemented truck restrictions was performed. In general, it was determined that many municipalities have developed plans and implemented enforcement of truck *parking* and *loading*, but very few have implemented restriction plans for the movement of trucks through neighborhoods and on specific streets. In some areas, truck routes have been developed to direct trucks around certain areas, but no actual restriction is established. A summary of a few relevant examples is included.

City of Tampa

The City of Tampa has established truck routes throughout the central part of the City. Truck routes were approved by Ordinance in 2011 and updated in 2016. The purpose of the truck route study was, similar to the intent of the Town, to balance the needs of commerce and truckers with the desire to be sensitive to certain land uses and neighborhoods.

Truck routes were established in the City. Any truck driver that is determined to be in violation of using designated truck routes (i.e. by using a local neighborhood street) is subject to a civil violation, similar to a parking ticket, if the driver cannot provide evidence of need for travelling off of designated truck routes.

Per Tampa's Code of Ordinances:

All regulated trucks within the city shall be operated only over and along the designated truck routes established in subsection (a) above.

Enforcement is also established in the Code:

...[T]he driver of a regulated truck may travel over and along a street not designated as a truck route only as necessary whereto perform its business its destination lies on or within in a manner that minimizes the distance traveled over and along the non-truck route street, or as necessary to perform its business, in a manner that minimizes the distance traveled over and along the non-truck route street.

An advantage of this type of restriction plan is that government resources are not burdened by pre-approving certain types of trucks, or types of trucks for certain events; a truck driver must simply convince an officer that they are required to circulate on local streets to perform their duties. A disadvantage of this system is that there is little incentive for trucking companies to change their routing or types of trucks to accommodate the nature of the street network, and little can be done

to prevent damage to private property if officers allow large trucks to continue to operate. Once a truck enters a neighborhood with narrow streets, it may have to physically damage private property to turn and exit the neighborhood.

City of Jacksonville

The City of Jacksonville recently adopted a truck routing ordinance in 2019. Much like Tampa, the City adopted a map identifying truck routes, does not specifically prohibit trucks from any roadway, and establishes the ability to ticket truck drivers not using designated routes. Deliveries are still allowed on local streets.

City streets are designated as Blue (preferred truck route), Gray (non-regulated) and Red (restricted for trucks except deliveries). Jacksonville's Code regulates trucks on red routes:

The driver of a regulated truck may travel on a Restricted Road (Red) for the primary purpose of delivery and pickup. The driver of the regulated truck must return to the Preferred (Blue) or non-regulated (Gray) truck route network by the shortest possible distance after completion of the delivery and/or pickup.

If the driver is observed on the Red route by an officer, the following Code applies:

Any person driving or in charge or control of any regulated truck operating on a Restricted Road (Red) shall be prepared to present for the inspection to the Jacksonville Sheriff's Office ("JSO") officers, the truck's log book, weight slips, delivery slips, or other written records of the regulated truck's origin and destination to justify the operation on the Restricted Road (Red).

Like Tampa's truck routing system, the decision to enforce truck routing falls to police enforcement, and only once a truck has travelled on restricted road.

City staff indicated that they would not sign each individual street or neighborhood discouraging trucks but would assess the situations on individual bases based on resident complaints.

St. Augustine

The City of St. Augustine has a truck restriction plan in place in their downtown historic district. This plan expressly prohibits trucks on certain roadways. Unlike Tampa and Jacksonville, certain streets are expressly prohibited for use by trucks, without exception for local deliveries; all trucks can be cited. Any truck needing to travel the prohibited streets must get a permit to do so. The City's Code specifically states:

It shall be unlawful for any person to operate any motor vehicle having a greater length than twenty-four (24) feet or greater width than eight (8) feet or greater height than eight (8) feet upon any of the following designated narrow streets or portions thereof of the city without a permit from the chief of police as hereinafter provided; provided that this section shall not be applicable to any authorized public service vehicle, nor shall the same be applicable to any franchised sight-seeing motor vehicles.

St. Augustine's restriction was based on physical constraints of the City's narrow streets, with limited turning ability for larger vehicles, whereas most other truck restriction plans were developed to reduce cut-through trips, or trips within residential areas. Much like St. Augustine, the Town has narrow streets in the residential areas with limited ability for larger vehicles to turn. Based on observation, the trucking industry has adapted to the restriction, since no vehicles larger than a delivery van were observed in the area. Furthermore, this area serves a large tourist population, with many restaurants and retail shops; therefore, deliveries occur in this area on a consistent basis.

The City of St. Augustine allows the Chief of Police to issue permits as necessary to allow larger trucks in the restriction area:

The chief of police is hereby authorized to issue special permits, in writing, under the provisions of F.S. § 316.550 and shall charge therefor such fees as shall have been set by the city manager pursuant to the provisions of section 2-74 and as shall be consistent with the provisions of F.S. § 316.550.



Figure 1: Narrow Street with Truck Restriction in St. Augustine



Figure 2: Example of Truck Restriction Sign in St. Augustine



Figure 3: Truck Restriction Informational Sign

DATA AND ANALYSIS

Review of Existing Conditions

A field review was performed to confirm that large vehicles are creating physical damage to private property. Below are photos confirming the effects of the large vehicles unable to make turns within the roadway.

Jamaica Lane & North Ocean Boulevard

The intersection of Jamaica Lane & North Ocean Boulevard was observed to have damage to grassy areas adjacent to the intersection. This is consistent with large vehicles being unable to turn with the paved surface area.



Figure 4: Jamaica Lane & North Ocean Boulevard

Arabian Road & North Ocean Boulevard

The curb at the intersection of Arabian Road & North Ocean Boulevard was observed to be cracked and broken. This is indicative of heavy vehicles mounting the curb, most likely as a result of not being able to navigate the intersection. The drainage inlet at this location was also observed to be damaged. It should be noted that several intersections throughout town were observed to have cracked and broken curbing; it was not limited to this intersection.



Figure 5: Arabian Road & North Ocean Boulevard

Debra Lane & North Lake Way

Damage to the landscaped area outside of the paved area at the intersection of Debra Lane & North Lake Way was observed. Furthermore, damage to the turn on the west side of the T intersection was observed, indicating that large vehicles are not able to maneuver without exiting the paved intersection.



Figure 6: Debra Lane & North Lake Way



Figure 7: Debra Lane & North Lake Way

Truck Counts

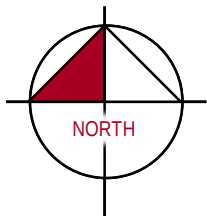
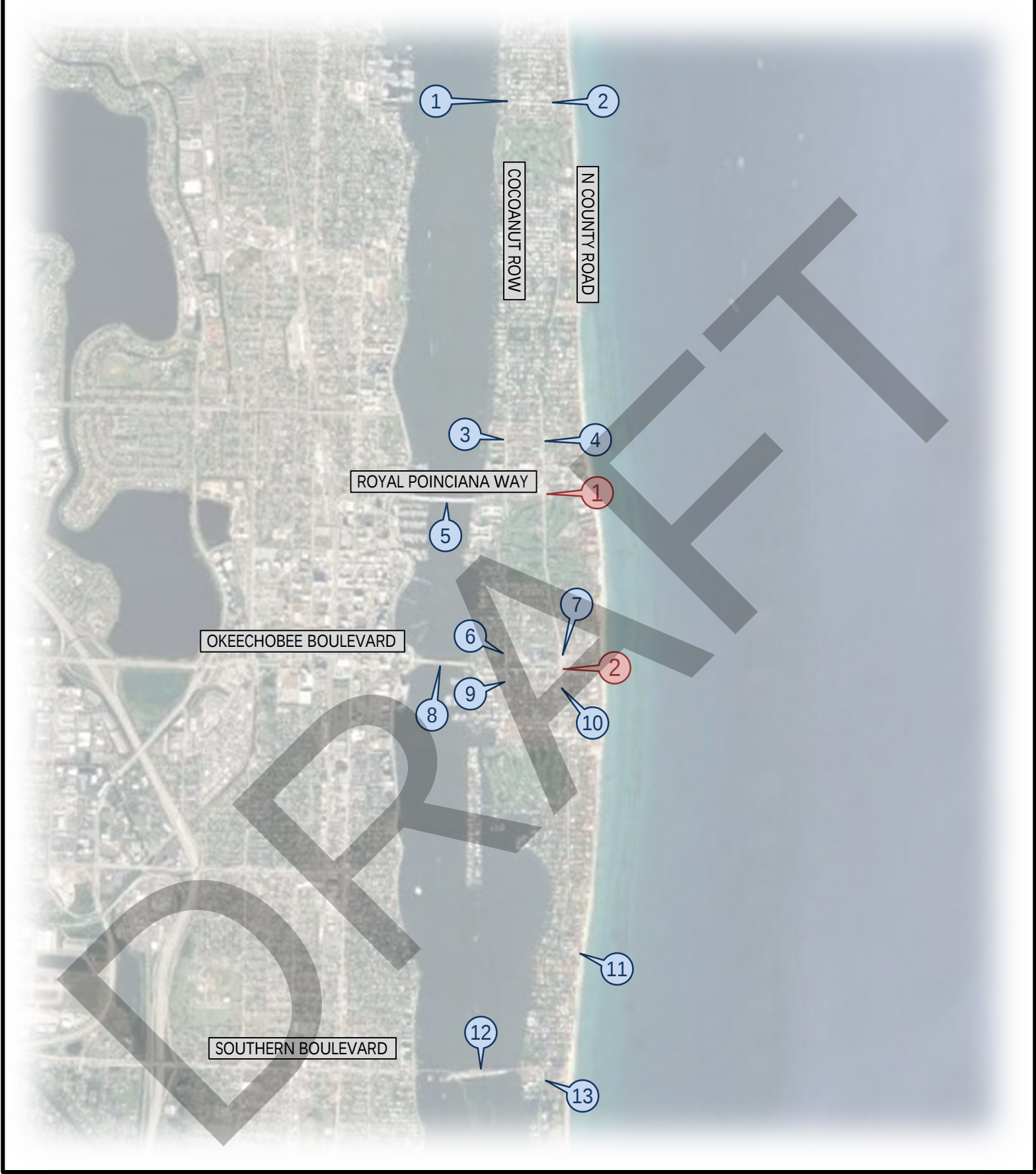
Vehicle classification counts were performed at several locations through the Town to provide an understanding of the number of trucks, types of trucks, and overall number of vehicles.

Figure 8 illustrates the locations of data collection. The locations were chosen to provide an understanding of where the trucks circulate within the town, and the overall impact of truck traffic.

Data was collected on four consecutive weekdays and two weekend days in January 2020. This represents peak season in the Town and represents the peak amount of truck traffic. It should be noted that some truck traffic is consistent throughout the year (such as landscaping vehicles), but deliveries and service trucks increase in the peak season due to increased population.

The data was summarized for each of the 13 count locations, to determine what percentage of trucks are present on each of the study roads throughout the day. The counts were averaged over a 96-hour period to determine an average weekday daily volume, and the counts were averaged over a 48-hour period to determine an average weekend daily volume.

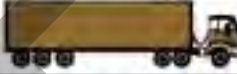
Truck data was summarized into three categories, single-unit (SU) trucks, SU articulated trucks (SU artic.), and any trucks larger than the SU articulated truck (Large). Figure 9 illustrates the types of trucks expected for each class. For this analysis SU trucks are comprised of classes 3-7, SU articulated trucks are class 8, and classes 9-13 comprise the Large truck class. The data is summarized for each location by truck type in the following pages. Percentages represent percent of total traffic for that time period.



LEGEND

-  MACHINE COUNT LOCATIONS
-  TMC LOCATIONS

FIGURE 8
PALM BEACH TRUCK PROHIBITION
KH #044063244
DATA COLLECTION LOCATIONS

Class 1 Motorcycles		Class 7 Four or more axle, single unit	
Class 2 Passenger cars			
			
		Class 8 Four or less axle, single trailer	
			
Class 3 Four tire, single unit		Class 9 5-Axle tractor semitrailer	
			
			
Class 4 Buses		Class 10 Six or more axle, single trailer	
			
		Class 11 Five or less axle, multi trailer	
Class 5 Two axle, six tire, single unit		Class 12 Six axle, multi-trailer	
			
		Class 13 Seven or more axle, multi-trailer	
Class 6 Three axle, single unit			
			
			

Source: Traffic Survey Specialists, Inc.

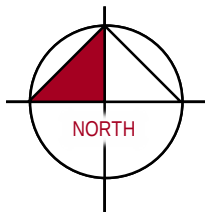


FIGURE 9
PALM BEACH TRUCK PROHIBITION
KH #044063244
VEHICLE CLASSIFICATION CHART

Location 1: Lake Way, north of Tradewinds Drive

Continuous tube counts were collected along Lake Way, just north of Tradewinds Drive on the north side of the Palm Beach Country Club. It was determined that weekday total truck volumes make up about 2.8% of total vehicle traffic. The average weekend total truck percentages are about half of that on weekends, at 1.5% of the total vehicle traffic. Table 1 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 1: Location 1 Truck Percentage Summary

Weekday					Weekend				
Time Period	SU			Large	Time Period	SU			Large
	SU	Artic.	Large			SU	Artic.	Large	
AM	0:00-1:00	0.0%	0.0%	0.0%	AM	0:00-1:00	0.0%	0.0%	0.0%
	1:00-2:00	0.0%	0.0%	0.0%		1:00-2:00	0.0%	0.0%	0.0%
	2:00-3:00	0.0%	0.0%	0.0%		2:00-3:00	0.0%	0.0%	0.0%
	3:00-4:00	0.0%	0.0%	0.0%		3:00-4:00	0.0%	0.0%	0.0%
	4:00-5:00	0.0%	0.0%	0.0%		4:00-5:00	0.0%	0.0%	0.0%
	5:00-6:00	0.0%	0.0%	0.0%		5:00-6:00	0.0%	0.0%	0.0%
	6:00-7:00	1.1%	0.0%	0.0%		6:00-7:00	0.0%	0.0%	0.0%
	7:00-8:00	1.1%	0.0%	0.0%		7:00-8:00	2.9%	0.0%	0.0%
	8:00-9:00	3.8%	0.0%	0.0%		8:00-9:00	3.6%	0.0%	0.0%
	9:00-10:00	4.1%	0.1%	0.0%		9:00-10:00	1.4%	0.0%	0.0%
	10:00-11:00	3.4%	0.1%	0.0%		10:00-11:00	1.2%	0.0%	0.0%
	11:00-12:00	3.7%	0.0%	0.0%		11:00-12:00	2.7%	0.0%	0.0%
PM	12:00-1:00	3.3%	0.0%	0.0%	PM	12:00-1:00	2.3%	0.0%	0.0%
	1:00-2:00	3.8%	0.0%	0.0%		1:00-2:00	1.8%	0.0%	0.0%
	2:00-3:00	2.7%	0.1%	0.0%		2:00-3:00	1.8%	0.0%	0.0%
	3:00-4:00	3.1%	0.1%	0.0%		3:00-4:00	0.8%	0.0%	0.0%
	4:00-5:00	2.2%	0.1%	0.0%		4:00-5:00	0.9%	0.0%	0.0%
	5:00-6:00	1.3%	0.0%	0.0%		5:00-6:00	0.9%	0.0%	0.0%
	6:00-7:00	0.4%	0.0%	0.0%		6:00-7:00	0.9%	0.0%	0.0%
	7:00-8:00	0.3%	0.0%	0.0%		7:00-8:00	2.9%	0.0%	0.0%
	8:00-9:00	0.6%	0.0%	0.0%		8:00-9:00	0.0%	0.0%	0.0%
	9:00-10:00	0.4%	0.0%	0.0%		9:00-10:00	0.0%	0.0%	0.0%
	10:00-11:00	1.3%	0.0%	0.0%		10:00-11:00	3.3%	0.0%	0.0%
	11:00-12:00	1.3%	0.0%	0.0%		11:00-12:00	0.0%	0.0%	0.0%
Total 24-hour		2.7%	0.1%	0.0%	Total 24-hour		1.5%	0.0%	0.0%

Location 2: Ocean Boulevard, north of Jamaica Lane

Continuous tube counts were collected along Ocean Boulevard, just north of Jamaica Lane on the north side of the Palm Beach Country Club. It was determined that weekday total truck volumes make up about 3.2% of total vehicle traffic. The average weekend total truck percentages are about half of that on weekends, at 1.6% of the total vehicle traffic. Table 2 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 2: Location 2 Truck Percentage Summary

Weekday					Weekend				
Time Period	SU				Time Period	SU			
	SU	Artic.	Large			SU	Artic.	Large	
AM	0:00-1:00	14.3%	0.0%	0.0%	AM	0:00-1:00	0.0%	0.0%	0.0%
	1:00-2:00	0.0%	0.0%	0.0%		1:00-2:00	0.0%	0.0%	0.0%
	2:00-3:00	5.6%	0.0%	0.0%		2:00-3:00	0.0%	0.0%	0.0%
	3:00-4:00	0.0%	0.0%	0.0%		3:00-4:00	0.0%	0.0%	0.0%
	4:00-5:00	0.0%	0.0%	0.0%		4:00-5:00	25.0%	0.0%	0.0%
	5:00-6:00	1.5%	0.0%	0.0%		5:00-6:00	0.0%	0.0%	0.0%
	6:00-7:00	1.8%	0.0%	0.0%		6:00-7:00	2.7%	0.0%	0.0%
	7:00-8:00	2.0%	0.1%	0.2%		7:00-8:00	2.4%	0.0%	0.0%
	8:00-9:00	4.2%	0.1%	0.1%		8:00-9:00	1.4%	0.0%	0.0%
	9:00-10:00	4.4%	0.1%	0.1%		9:00-10:00	1.1%	0.5%	0.0%
	10:00-11:00	3.9%	0.2%	0.1%		10:00-11:00	3.2%	0.4%	0.0%
	11:00-12:00	3.9%	0.1%	0.1%		11:00-12:00	2.2%	0.0%	0.0%
PM	12:00-1:00	3.4%	0.1%	0.0%	PM	12:00-1:00	1.6%	0.0%	0.0%
	1:00-2:00	3.7%	0.1%	0.1%		1:00-2:00	1.3%	0.0%	0.0%
	2:00-3:00	3.5%	0.1%	0.1%		2:00-3:00	1.6%	0.0%	0.0%
	3:00-4:00	3.9%	0.0%	0.0%		3:00-4:00	1.6%	0.0%	0.0%
	4:00-5:00	2.4%	0.1%	0.0%		4:00-5:00	1.4%	0.0%	0.0%
	5:00-6:00	1.2%	0.0%	0.0%		5:00-6:00	0.7%	0.0%	0.0%
	6:00-7:00	0.7%	0.0%	0.0%		6:00-7:00	1.0%	0.0%	0.0%
	7:00-8:00	0.4%	0.0%	0.0%		7:00-8:00	0.6%	0.0%	0.0%
	8:00-9:00	0.5%	0.0%	0.0%		8:00-9:00	0.9%	0.0%	0.0%
	9:00-10:00	0.3%	0.0%	0.0%		9:00-10:00	1.2%	0.0%	0.0%
	10:00-11:00	0.4%	0.0%	0.0%		10:00-11:00	1.2%	0.0%	0.0%
	11:00-12:00	0.9%	0.0%	0.0%		11:00-12:00	2.4%	0.0%	0.0%
Total 24-hour		3.1%	0.1%	0.0%	Total 24-hour		1.5%	0.1%	0.0%

Location 3: Bradley Place, south of Seminole Avenue

Continuous tube counts were collected along Bradley Place, just south of Seminole Avenue on the west side of the island. It was determined that weekday total truck volumes make up about 2.3% of total vehicle traffic. There were a number of large trucks that were counted at this location and is due to the commercial land uses in the vicinity of the count site. The average weekend total truck percentages are more than half of that on weekends, at 1.5% of the total vehicle traffic. Table 3 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 3: Location 3 Truck Percentage Summary

Weekday					Weekend				
		SU					SU		
Time Period		SU	Artic.	Large	Time Period		SU	Artic.	Large
AM	0:00-1:00	0.0%	0.0%	0.0%	AM	0:00-1:00	3.8%	0.0%	0.0%
	1:00-2:00	0.0%	0.0%	0.0%		1:00-2:00	0.0%	0.0%	0.0%
	2:00-3:00	0.0%	0.0%	0.0%		2:00-3:00	0.0%	0.0%	0.0%
	3:00-4:00	0.0%	0.0%	0.0%		3:00-4:00	0.0%	0.0%	0.0%
	4:00-5:00	2.2%	0.0%	0.0%		4:00-5:00	7.7%	0.0%	0.0%
	5:00-6:00	0.9%	0.0%	0.0%		5:00-6:00	4.0%	0.0%	0.0%
	6:00-7:00	0.7%	0.0%	0.0%		6:00-7:00	2.1%	0.0%	0.0%
	7:00-8:00	1.5%	0.1%	0.0%		7:00-8:00	1.5%	0.0%	0.0%
	8:00-9:00	2.8%	0.0%	0.1%		8:00-9:00	2.6%	0.0%	0.0%
	9:00-10:00	2.9%	0.1%	0.0%		9:00-10:00	1.8%	0.0%	0.0%
	10:00-11:00	2.6%	0.1%	0.0%		10:00-11:00	1.7%	0.0%	0.0%
11:00-12:00	2.5%	0.0%	0.0%	11:00-12:00	2.1%	0.0%	0.0%		
PM	12:00-1:00	2.5%	0.0%	0.0%	PM	12:00-1:00	1.7%	0.0%	0.0%
	1:00-2:00	2.4%	0.1%	0.0%		1:00-2:00	1.0%	0.0%	0.0%
	2:00-3:00	2.2%	0.0%	0.0%		2:00-3:00	1.2%	0.0%	0.0%
	3:00-4:00	2.5%	0.1%	0.1%		3:00-4:00	1.1%	0.0%	0.0%
	4:00-5:00	2.4%	0.1%	0.7%		4:00-5:00	1.1%	0.3%	0.0%
	5:00-6:00	1.1%	0.1%	0.1%		5:00-6:00	1.1%	0.0%	0.0%
	6:00-7:00	0.7%	0.0%	0.2%		6:00-7:00	0.9%	0.0%	0.0%
	7:00-8:00	0.8%	0.0%	0.1%		7:00-8:00	1.7%	0.0%	0.4%
	8:00-9:00	0.9%	0.2%	0.2%		8:00-9:00	1.8%	0.0%	0.0%
	9:00-10:00	1.0%	0.0%	0.2%		9:00-10:00	1.3%	0.0%	0.0%
	10:00-11:00	0.6%	0.0%	0.3%		10:00-11:00	2.5%	0.0%	0.0%
11:00-12:00	0.0%	0.0%	0.0%	11:00-12:00	2.6%	0.0%	0.0%		
Total 24-hour		2.1%	0.1%	0.1%	Total 24-hour		1.5%	0.0%	0.0%

Location 4: County Road, south of Seminole Avenue

Continuous tube counts were collected along County Road, just south of Seminole Avenue located in the center of the island. It was determined that weekday total truck volumes make up about 3.5% of total vehicle traffic. The average weekend total truck percentages are more than half of that on weekends, at 1.9% of the total vehicle traffic. Table 4 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 4: Location 4 Truck Percentage Summary

Weekday					Weekend				
Time Period	SU				Time Period	SU			
	SU	Artic.	Large			SU	Artic.	Large	
AM	0:00-1:00	6.7%	0.0%	0.0%	AM	0:00-1:00	0.0%	0.0%	0.0%
	1:00-2:00	0.0%	0.0%	0.0%		1:00-2:00	3.2%	0.0%	0.0%
	2:00-3:00	0.0%	0.0%	0.0%		2:00-3:00	0.0%	0.0%	0.0%
	3:00-4:00	0.0%	0.0%	0.0%		3:00-4:00	0.0%	0.0%	0.0%
	4:00-5:00	0.0%	0.0%	0.0%		4:00-5:00	10.0%	0.0%	0.0%
	5:00-6:00	1.0%	0.0%	0.0%		5:00-6:00	5.0%	0.0%	0.0%
	6:00-7:00	2.1%	0.0%	0.0%		6:00-7:00	3.1%	0.0%	0.0%
	7:00-8:00	3.3%	0.1%	0.1%		7:00-8:00	2.3%	0.5%	0.0%
	8:00-9:00	4.8%	0.2%	0.1%		8:00-9:00	1.6%	0.0%	0.0%
	9:00-10:00	4.7%	0.1%	0.1%		9:00-10:00	2.1%	0.2%	0.0%
	10:00-11:00	4.2%	0.1%	0.1%		10:00-11:00	2.8%	0.0%	0.0%
	11:00-12:00	4.1%	0.1%	0.1%		11:00-12:00	2.9%	0.0%	0.0%
PM	12:00-1:00	3.8%	0.1%	0.1%	PM	12:00-1:00	2.1%	0.2%	0.0%
	1:00-2:00	3.7%	0.1%	0.1%		1:00-2:00	1.7%	0.0%	0.2%
	2:00-3:00	3.6%	0.1%	0.1%		2:00-3:00	1.5%	0.2%	0.2%
	3:00-4:00	3.6%	0.1%	0.1%		3:00-4:00	2.0%	0.0%	0.2%
	4:00-5:00	2.7%	0.1%	0.2%		4:00-5:00	1.4%	0.0%	0.0%
	5:00-6:00	1.6%	0.0%	0.0%		5:00-6:00	1.3%	0.0%	0.0%
	6:00-7:00	0.8%	0.0%	0.0%		6:00-7:00	1.2%	0.0%	0.0%
	7:00-8:00	0.6%	0.0%	0.0%		7:00-8:00	0.6%	0.0%	0.0%
	8:00-9:00	0.4%	0.0%	0.0%		8:00-9:00	1.4%	0.0%	0.0%
	9:00-10:00	0.4%	0.0%	0.0%		9:00-10:00	1.4%	0.0%	0.0%
	10:00-11:00	0.3%	0.0%	0.0%		10:00-11:00	1.0%	0.0%	0.0%
	11:00-12:00	0.8%	0.0%	0.0%		11:00-12:00	1.1%	0.0%	0.0%
Total 24-hour					Total 24-hour				
3.3%					1.8%				
0.1%					0.1%				
0.1%					0.0%				

Location 5: Royal Poinciana Way, west of Coconut Row (North Bridge)

Continuous tube counts were collected on the northern bridge, Royal Poinciana Way. It was determined that weekday total truck volumes make up about 2.6% of total vehicle traffic. The average weekend total truck percentages are similar on weekends, at 2.1% of the total vehicle traffic. Table 5 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 5: Location 5 Truck Percentage Summary

Weekday					Weekend				
Time Period	SU				Time Period	SU			
	SU	Artic.	Large			SU	Artic.	Large	
AM	0:00-1:00	4.2%	0.0%	0.0%	AM	0:00-1:00	1.1%	0.0%	0.0%
	1:00-2:00	1.8%	0.0%	0.0%		1:00-2:00	1.3%	0.0%	0.0%
	2:00-3:00	3.4%	0.0%	0.0%		2:00-3:00	0.9%	0.0%	0.0%
	3:00-4:00	3.1%	0.0%	0.0%		3:00-4:00	1.9%	0.0%	0.0%
	4:00-5:00	4.0%	0.4%	0.4%		4:00-5:00	4.5%	0.0%	0.0%
	5:00-6:00	2.4%	0.2%	0.3%		5:00-6:00	5.2%	0.0%	0.0%
	6:00-7:00	3.2%	0.1%	0.1%		6:00-7:00	3.5%	0.0%	0.0%
	7:00-8:00	3.2%	0.1%	0.1%		7:00-8:00	2.0%	0.0%	0.0%
	8:00-9:00	3.4%	0.1%	0.1%		8:00-9:00	1.2%	0.0%	0.0%
	9:00-10:00	3.3%	0.1%	0.1%		9:00-10:00	1.8%	0.3%	0.0%
	10:00-11:00	3.1%	0.2%	0.1%		10:00-11:00	1.8%	0.2%	0.2%
	11:00-12:00	2.9%	0.1%	0.1%		11:00-12:00	2.4%	0.1%	0.1%
PM	12:00-1:00	2.9%	0.1%	0.1%	PM	12:00-1:00	2.0%	0.1%	0.1%
	1:00-2:00	2.8%	0.1%	0.2%		1:00-2:00	2.3%	0.2%	0.2%
	2:00-3:00	2.5%	0.2%	0.1%		2:00-3:00	1.7%	0.1%	0.1%
	3:00-4:00	2.7%	0.1%	0.1%		3:00-4:00	2.4%	0.1%	0.1%
	4:00-5:00	2.2%	0.1%	0.1%		4:00-5:00	2.1%	0.2%	0.1%
	5:00-6:00	1.5%	0.0%	0.0%		5:00-6:00	2.2%	0.3%	0.2%
	6:00-7:00	0.9%	0.0%	0.0%		6:00-7:00	1.4%	0.1%	0.0%
	7:00-8:00	0.8%	0.1%	0.0%		7:00-8:00	1.3%	0.0%	0.0%
	8:00-9:00	0.8%	0.0%	0.0%		8:00-9:00	1.3%	0.0%	0.0%
	9:00-10:00	0.9%	0.0%	0.0%		9:00-10:00	1.8%	0.0%	0.0%
	10:00-11:00	0.6%	0.0%	0.0%		10:00-11:00	1.7%	0.0%	0.0%
	11:00-12:00	0.6%	0.0%	0.0%		11:00-12:00	1.5%	0.0%	0.0%
Total 24-hour		2.4%	0.1%	0.1%	Total 24-hour		1.9%	0.1%	0.1%

Location 6: Coconut Row, north of Seaview Avenue

Continuous tube counts were collected along Coconut Row, just north of Seaview Avenue. It was determined that weekday total truck volumes make up about 1.6% of total vehicle traffic. The average weekend total truck percentages are greater on weekends, at 1.8% of the total vehicle traffic. This was found to be one of only two locations where weekend truck percentages exceed that found on weekdays. Table 6 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 6: Location 6 Truck Percentage Summary

Weekday					Weekend				
Time Period	SU			Large	Time Period	SU			Large
	SU	Artic.	Large			SU	Artic.	Large	
AM	0:00-1:00	0.0%	0.0%	0.0%	AM	0:00-1:00	2.1%	0.0%	0.0%
	1:00-2:00	2.6%	0.0%	0.0%		1:00-2:00	0.0%	0.0%	0.0%
	2:00-3:00	5.6%	0.0%	0.0%		2:00-3:00	4.5%	0.0%	0.0%
	3:00-4:00	0.0%	0.0%	0.0%		3:00-4:00	7.1%	0.0%	0.0%
	4:00-5:00	1.4%	0.0%	1.4%		4:00-5:00	4.2%	0.0%	4.2%
	5:00-6:00	1.7%	0.0%	1.1%		5:00-6:00	2.3%	0.0%	0.0%
	6:00-7:00	1.6%	0.2%	0.0%		6:00-7:00	4.0%	0.0%	0.0%
	7:00-8:00	1.8%	0.1%	0.1%		7:00-8:00	2.1%	0.3%	0.0%
	8:00-9:00	2.6%	0.0%	0.0%		8:00-9:00	2.8%	0.0%	0.0%
	9:00-10:00	2.3%	0.0%	0.0%		9:00-10:00	2.3%	0.2%	0.2%
	10:00-11:00	2.2%	0.1%	0.0%		10:00-11:00	2.1%	0.0%	0.1%
PM	11:00-12:00	1.8%	0.0%	0.0%	PM	11:00-12:00	1.8%	0.0%	0.0%
	12:00-1:00	1.5%	0.0%	0.0%		12:00-1:00	1.5%	0.0%	0.0%
	1:00-2:00	1.7%	0.0%	0.1%		1:00-2:00	1.6%	0.0%	0.2%
	2:00-3:00	1.6%	0.1%	0.1%		2:00-3:00	1.1%	0.2%	0.0%
	3:00-4:00	1.9%	0.1%	0.1%		3:00-4:00	1.1%	0.0%	0.2%
	4:00-5:00	1.5%	0.1%	0.2%		4:00-5:00	1.3%	0.0%	0.2%
	5:00-6:00	0.8%	0.0%	0.1%		5:00-6:00	1.6%	0.0%	0.2%
	6:00-7:00	0.4%	0.0%	0.0%		6:00-7:00	1.6%	0.0%	0.2%
	7:00-8:00	0.4%	0.0%	0.0%		7:00-8:00	0.7%	0.0%	0.0%
	8:00-9:00	0.3%	0.0%	0.0%		8:00-9:00	0.9%	0.0%	0.0%
	9:00-10:00	0.2%	0.0%	0.0%		9:00-10:00	1.0%	0.0%	0.0%
	10:00-11:00	0.3%	0.0%	0.0%		10:00-11:00	0.5%	0.0%	0.0%
	11:00-12:00	0.6%	0.0%	0.0%		11:00-12:00	2.2%	0.0%	0.0%
Total 24-hour					Total 24-hour				
1.5%					1.7%				

Location 7: County Road, north of Seaview Avenue

Continuous tube counts were collected along County Road, just north of Seaview Avenue. It was determined that weekday total truck volumes make up about 2.8% of total vehicle traffic. The average weekend total truck percentages are about half of that on weekends, at 2.0% of the total vehicle traffic. Table 7 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 7: Location 7 Truck Percentage Summary

Weekday					Weekend				
	Time Period	SU				Time Period	SU		
		SU	Artic.	Large			SU	Artic.	Large
AM	0:00-1:00	2.1%	0.0%	0.0%	AM	0:00-1:00	0.6%	0.0%	0.0%
	1:00-2:00	1.1%	0.0%	0.0%		1:00-2:00	1.0%	0.0%	0.0%
	2:00-3:00	0.0%	0.0%	0.0%		2:00-3:00	3.2%	0.0%	0.0%
	3:00-4:00	1.1%	0.0%	0.0%		3:00-4:00	0.0%	0.0%	0.0%
	4:00-5:00	1.4%	0.0%	0.0%		4:00-5:00	2.4%	0.0%	0.0%
	5:00-6:00	1.9%	0.0%	0.0%		5:00-6:00	4.2%	0.0%	0.0%
	6:00-7:00	3.5%	0.0%	0.0%		6:00-7:00	3.2%	0.5%	0.0%
	7:00-8:00	4.1%	0.1%	0.1%		7:00-8:00	3.7%	0.3%	0.3%
	8:00-9:00	5.3%	0.2%	0.0%		8:00-9:00	4.5%	0.2%	0.2%
	9:00-10:00	4.2%	0.1%	0.0%		9:00-10:00	2.9%	0.0%	0.0%
	10:00-11:00	4.0%	0.2%	0.1%		10:00-11:00	3.0%	0.1%	0.1%
PM	11:00-12:00	3.3%	0.1%	0.1%	PM	11:00-12:00	2.0%	0.1%	0.1%
	12:00-1:00	2.9%	0.1%	0.0%		12:00-1:00	1.5%	0.0%	0.0%
	1:00-2:00	2.9%	0.1%	0.1%		1:00-2:00	1.3%	0.1%	0.1%
	2:00-3:00	2.5%	0.1%	0.1%		2:00-3:00	1.7%	0.1%	0.0%
	3:00-4:00	2.8%	0.1%	0.1%		3:00-4:00	1.7%	0.0%	0.2%
	4:00-5:00	1.9%	0.1%	0.1%		4:00-5:00	1.7%	0.2%	0.1%
	5:00-6:00	1.3%	0.0%	0.0%		5:00-6:00	0.8%	0.1%	0.1%
	6:00-7:00	0.7%	0.0%	0.0%		6:00-7:00	1.0%	0.0%	0.0%
	7:00-8:00	0.5%	0.0%	0.0%		7:00-8:00	0.8%	0.2%	0.0%
	8:00-9:00	0.4%	0.1%	0.0%		8:00-9:00	0.9%	0.2%	0.0%
	9:00-10:00	0.5%	0.0%	0.0%		9:00-10:00	1.4%	0.0%	0.0%
	10:00-11:00	0.4%	0.0%	0.0%		10:00-11:00	0.9%	0.0%	0.0%
	11:00-12:00	0.6%	0.0%	0.0%		11:00-12:00	1.1%	0.0%	0.0%
Total 24-hour		2.6%	0.1%	0.1%	Total 24-hour		1.8%	0.1%	0.1%

Location 8: Royal Palm Way, west of Lake Drive (Middle Bridge)

Continuous tube counts were collected on the middle bridge, Royal Palm Way. It was determined that weekday total truck volumes make up about 1.7% of total vehicle traffic. The average weekend total truck percentages are greater on weekends, at 1.9% of the total vehicle traffic. This was found to be one of only two locations where weekend truck percentages exceed that found on weekdays. Table 8 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 8: Location 8 Truck Percentage Summary

Weekday					Weekend				
Time Period	SU			Time Period	SU				
	SU	Artic.	Large		SU	Artic.	Large		
AM	0:00-1:00	2.4%	0.0%	0.0%	AM	0:00-1:00	1.1%	0.3%	0.0%
	1:00-2:00	1.1%	0.0%	0.6%		1:00-2:00	0.6%	0.0%	0.6%
	2:00-3:00	2.5%	0.0%	0.0%		2:00-3:00	1.4%	0.0%	0.0%
	3:00-4:00	0.9%	0.0%	0.0%		3:00-4:00	1.8%	0.0%	1.8%
	4:00-5:00	1.3%	0.0%	0.3%		4:00-5:00	2.8%	0.0%	0.0%
	5:00-6:00	0.9%	0.3%	0.1%		5:00-6:00	1.8%	0.6%	0.0%
	6:00-7:00	1.6%	0.1%	0.1%		6:00-7:00	2.6%	0.3%	0.0%
	7:00-8:00	1.8%	0.1%	0.1%		7:00-8:00	2.2%	0.1%	0.2%
	8:00-9:00	2.5%	0.1%	0.2%		8:00-9:00	2.9%	0.1%	0.0%
	9:00-10:00	2.4%	0.1%	0.3%		9:00-10:00	2.3%	0.3%	0.2%
	10:00-11:00	2.3%	0.1%	0.2%		10:00-11:00	2.0%	0.2%	0.2%
	11:00-12:00	1.9%	0.1%	0.1%		11:00-12:00	1.8%	0.3%	0.1%
PM	12:00-1:00	1.7%	0.1%	0.1%	PM	12:00-1:00	1.7%	0.2%	0.1%
	1:00-2:00	1.9%	0.1%	0.1%		1:00-2:00	1.4%	0.2%	0.1%
	2:00-3:00	1.7%	0.1%	0.1%		2:00-3:00	1.4%	0.2%	0.1%
	3:00-4:00	1.5%	0.1%	0.0%		3:00-4:00	1.4%	0.1%	0.1%
	4:00-5:00	1.2%	0.1%	0.1%		4:00-5:00	1.3%	0.2%	0.1%
	5:00-6:00	1.0%	0.1%	0.2%		5:00-6:00	1.7%	0.3%	0.2%
	6:00-7:00	0.5%	0.1%	0.0%		6:00-7:00	1.0%	0.1%	0.1%
	7:00-8:00	0.4%	0.1%	0.1%		7:00-8:00	0.9%	0.2%	0.0%
	8:00-9:00	0.4%	0.0%	0.0%		8:00-9:00	1.0%	0.0%	0.1%
	9:00-10:00	0.3%	0.0%	0.0%		9:00-10:00	0.8%	0.2%	0.0%
	10:00-11:00	0.5%	0.0%	0.0%		10:00-11:00	0.6%	0.0%	0.0%
	11:00-12:00	0.3%	0.0%	0.0%		11:00-12:00	1.4%	0.0%	0.0%
Total 24-hour		1.5%	0.1%	0.1%	Total 24-hour		1.6%	0.2%	0.1%

Location 9: Coconut Row, south of Royal Palm Way

Continuous tube counts were collected along Coconut Row, just south of Royal Palm Way on the southern side of the island. It was determined that weekday total truck volumes make up about 2.6% of total vehicle traffic. The average weekend total truck percentages are greater than half of that on weekends, at 1.9% of the total vehicle traffic. Table 9 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 9: Location 9 Truck Percentage Summary

Weekday					Weekend				
Time Period	SU				Time Period	SU			
	SU	Artic.	Large			SU	Artic.	Large	
AM	0:00-1:00	0.0%	0.0%	0.0%	AM	0:00-1:00	1.5%	0.0%	0.0%
	1:00-2:00	0.0%	0.0%	0.0%		1:00-2:00	0.0%	0.0%	0.0%
	2:00-3:00	0.0%	0.0%	0.0%		2:00-3:00	0.0%	0.0%	0.0%
	3:00-4:00	0.0%	0.0%	0.0%		3:00-4:00	0.0%	0.0%	0.0%
	4:00-5:00	5.3%	0.0%	0.0%		4:00-5:00	0.0%	0.0%	0.0%
	5:00-6:00	2.1%	0.0%	0.0%		5:00-6:00	0.0%	0.0%	0.0%
	6:00-7:00	1.7%	0.0%	0.0%		6:00-7:00	2.6%	0.0%	0.0%
	7:00-8:00	3.0%	0.0%	0.0%		7:00-8:00	3.5%	0.0%	0.0%
	8:00-9:00	4.5%	0.0%	0.0%		8:00-9:00	4.3%	0.0%	0.0%
	9:00-10:00	4.8%	0.0%	0.0%		9:00-10:00	2.3%	0.0%	0.0%
	10:00-11:00	4.1%	0.2%	0.1%		10:00-11:00	2.8%	0.0%	0.0%
	11:00-12:00	3.4%	0.2%	0.1%		11:00-12:00	3.0%	0.0%	0.0%
PM	12:00-1:00	2.8%	0.1%	0.0%	PM	12:00-1:00	2.8%	0.0%	0.0%
	1:00-2:00	2.3%	0.1%	0.1%		1:00-2:00	1.4%	0.0%	0.0%
	2:00-3:00	2.7%	0.1%	0.2%		2:00-3:00	2.4%	0.0%	0.0%
	3:00-4:00	3.2%	0.0%	0.0%		3:00-4:00	1.9%	0.0%	0.0%
	4:00-5:00	2.3%	0.1%	0.1%		4:00-5:00	2.5%	0.4%	0.0%
	5:00-6:00	1.9%	0.1%	0.1%		5:00-6:00	0.7%	0.0%	0.0%
	6:00-7:00	1.1%	0.0%	0.0%		6:00-7:00	2.0%	0.0%	0.0%
	7:00-8:00	0.6%	0.0%	0.0%		7:00-8:00	1.1%	0.0%	0.0%
	8:00-9:00	0.4%	0.0%	0.0%		8:00-9:00	0.7%	0.0%	0.0%
	9:00-10:00	0.5%	0.0%	0.0%		9:00-10:00	0.7%	0.0%	0.0%
	10:00-11:00	0.6%	0.0%	0.0%		10:00-11:00	0.7%	0.0%	0.0%
	11:00-12:00	0.4%	0.0%	0.0%		11:00-12:00	1.0%	0.0%	0.0%
Total 24-hour		2.5%	0.1%	0.0%	Total 24-hour		1.9%	0.0%	0.0%

Location 10: County Road, south of Royal Palm Way

Continuous tube counts were collected along County Road, just south of Royal Palm Way on the southern side of the island. It was determined that weekday total truck volumes make up about 3.3% of total vehicle traffic. The average weekend total truck volumes are slightly less on weekends, at 2.8% of the total vehicle traffic. Table 10 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 10: Location 10 Truck Percentage Summary

Weekday					Weekend				
Time Period	SU				Time Period	SU			
	SU	Artic.	Large			SU	Artic.	Large	
AM	0:00-1:00	0.0%	0.0%	0.0%	AM	0:00-1:00	1.1%	0.0%	0.0%
	1:00-2:00	0.0%	0.0%	0.0%		1:00-2:00	0.0%	0.0%	1.7%
	2:00-3:00	0.0%	0.0%	0.0%		2:00-3:00	0.0%	0.0%	0.0%
	3:00-4:00	2.1%	0.0%	0.0%		3:00-4:00	6.3%	0.0%	0.0%
	4:00-5:00	5.4%	0.0%	0.0%		4:00-5:00	4.5%	0.0%	0.0%
	5:00-6:00	2.7%	0.0%	0.0%		5:00-6:00	4.2%	0.0%	0.0%
	6:00-7:00	3.6%	0.0%	0.0%		6:00-7:00	3.1%	0.0%	0.0%
	7:00-8:00	4.7%	0.1%	0.0%		7:00-8:00	3.2%	0.0%	0.0%
	8:00-9:00	5.1%	0.1%	0.1%		8:00-9:00	3.9%	0.4%	0.0%
	9:00-10:00	4.9%	0.1%	0.2%		9:00-10:00	3.0%	0.0%	0.0%
	10:00-11:00	5.1%	0.1%	0.2%		10:00-11:00	2.9%	0.2%	0.2%
PM	11:00-12:00	4.1%	0.2%	0.1%	PM	11:00-12:00	3.7%	0.2%	0.2%
	12:00-1:00	3.6%	0.1%	0.2%		12:00-1:00	2.5%	0.1%	0.1%
	1:00-2:00	3.3%	0.2%	0.2%		1:00-2:00	2.3%	0.1%	0.1%
	2:00-3:00	3.2%	0.2%	0.2%		2:00-3:00	2.8%	0.1%	0.1%
	3:00-4:00	3.5%	0.1%	0.2%		3:00-4:00	2.9%	0.3%	0.1%
	4:00-5:00	2.9%	0.1%	0.1%		4:00-5:00	2.8%	0.1%	0.0%
	5:00-6:00	1.9%	0.1%	0.1%		5:00-6:00	2.1%	0.3%	0.2%
	6:00-7:00	1.2%	0.1%	0.1%		6:00-7:00	1.7%	0.0%	0.2%
	7:00-8:00	0.8%	0.0%	0.0%		7:00-8:00	2.1%	0.0%	0.0%
	8:00-9:00	0.9%	0.0%	0.0%		8:00-9:00	1.4%	0.0%	0.0%
	9:00-10:00	1.0%	0.0%	0.0%		9:00-10:00	1.9%	0.0%	0.0%
	10:00-11:00	1.0%	0.0%	0.0%		10:00-11:00	2.5%	0.0%	0.0%
	11:00-12:00	1.0%	0.0%	0.0%		11:00-12:00	2.7%	0.0%	0.0%
Total 24-hour		3.1%	0.1%	0.1%	Total 24-hour		2.6%	0.1%	0.1%

Location 11: Ocean Boulevard, north of Via Bellaria

Continuous tube counts were collected along Ocean Boulevard, just north of Via Bellaria on the southern side of the island. It was determined that weekday total truck volumes make up about 2.3% of total vehicle traffic. The average weekend total truck volumes are slightly less on weekends, at 1.5% of the total vehicle traffic. There was not a discernable number of trucks larger than the single-unit truck. Table 11 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 11: Location 11 Truck Percentage Summary

Weekday					Weekend				
	Time Period	SU				Time Period	SU		
		SU	Artic.	Large			SU	Artic.	Large
AM	0:00-1:00	4.3%	0.0%	0.0%	AM	0:00-1:00	0.0%	0.0%	0.0%
	1:00-2:00	0.0%	0.0%	2.5%		1:00-2:00	0.0%	0.0%	0.0%
	2:00-3:00	0.0%	0.0%	0.0%		2:00-3:00	3.0%	0.0%	0.0%
	3:00-4:00	0.0%	0.0%	0.0%		3:00-4:00	0.0%	0.0%	0.0%
	4:00-5:00	2.4%	0.0%	0.0%		4:00-5:00	9.1%	0.0%	0.0%
	5:00-6:00	1.1%	0.0%	0.0%		5:00-6:00	2.3%	0.0%	0.0%
	6:00-7:00	1.5%	0.0%	0.0%		6:00-7:00	0.9%	0.0%	0.0%
	7:00-8:00	2.9%	0.0%	0.0%		7:00-8:00	2.1%	0.0%	0.0%
	8:00-9:00	3.6%	0.1%	0.0%		8:00-9:00	2.8%	0.0%	0.0%
	9:00-10:00	3.2%	0.1%	0.1%		9:00-10:00	1.8%	0.0%	0.0%
	10:00-11:00	3.2%	0.1%	0.1%		10:00-11:00	1.8%	0.0%	0.0%
PM	11:00-12:00	2.9%	0.1%	0.1%	PM	11:00-12:00	2.0%	0.0%	0.0%
	12:00-1:00	2.6%	0.0%	0.1%		12:00-1:00	1.4%	0.1%	0.1%
	1:00-2:00	2.6%	0.1%	0.0%		1:00-2:00	1.7%	0.1%	0.0%
	2:00-3:00	2.2%	0.1%	0.0%		2:00-3:00	1.7%	0.1%	0.1%
	3:00-4:00	3.0%	0.0%	0.0%		3:00-4:00	1.7%	0.1%	0.0%
	4:00-5:00	2.0%	0.0%	0.1%		4:00-5:00	1.4%	0.0%	0.1%
	5:00-6:00	1.0%	0.0%	0.0%		5:00-6:00	1.3%	0.0%	0.1%
	6:00-7:00	0.6%	0.0%	0.0%		6:00-7:00	0.8%	0.0%	0.0%
	7:00-8:00	0.4%	0.0%	0.0%		7:00-8:00	0.5%	0.0%	0.0%
	8:00-9:00	0.4%	0.0%	0.0%		8:00-9:00	0.6%	0.0%	0.0%
	9:00-10:00	0.5%	0.0%	0.0%		9:00-10:00	0.7%	0.0%	0.0%
	10:00-11:00	0.7%	0.0%	0.0%		10:00-11:00	0.8%	0.0%	0.0%
	11:00-12:00	0.4%	0.0%	0.0%		11:00-12:00	0.8%	0.0%	0.0%
Total 24-hour		2.3%	0.0%	0.0%	Total 24-hour		1.5%	0.0%	0.0%

Location 12: Southern Boulevard, west of Ocean Boulevard (Southern Bridge)

Continuous tube counts were collected along the southern bridge, Southern Boulevard. It was determined that weekday total truck percentages make up about 2.4% of total vehicle traffic. The average weekend total truck percentages are greater than half of that on weekdays, at 1.7% of the total vehicle traffic. Table 12 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 12: Location 12 Truck Percentage Summary

Weekday					Weekend				
Time Period		SU	Artic.	Large	Time Period		SU	Artic.	Large
AM	0:00-1:00	3.6%	0.0%	0.0%	AM	0:00-1:00	1.2%	0.0%	0.0%
	1:00-2:00	2.4%	0.0%	2.4%		1:00-2:00	0.0%	0.0%	0.0%
	2:00-3:00	0.0%	0.0%	0.0%		2:00-3:00	0.0%	0.0%	0.0%
	3:00-4:00	0.0%	0.0%	0.0%		3:00-4:00	0.0%	0.0%	0.0%
	4:00-5:00	0.0%	0.0%	0.0%		4:00-5:00	5.3%	0.0%	0.0%
	5:00-6:00	0.3%	0.0%	0.0%		5:00-6:00	1.4%	0.0%	0.0%
	6:00-7:00	0.9%	0.0%	0.0%		6:00-7:00	1.7%	0.0%	0.0%
	7:00-8:00	2.5%	0.1%	0.0%		7:00-8:00	2.2%	0.3%	0.0%
	8:00-9:00	3.2%	0.1%	0.1%		8:00-9:00	2.1%	0.0%	0.0%
	9:00-10:00	2.7%	0.1%	0.1%		9:00-10:00	2.0%	0.0%	0.0%
	10:00-11:00	2.9%	0.1%	0.1%		10:00-11:00	2.4%	0.0%	0.0%
11:00-12:00	2.9%	0.1%	0.1%	11:00-12:00	2.0%	0.1%	0.0%		
PM	12:00-1:00	2.6%	0.1%	0.1%	PM	12:00-1:00	1.5%	0.0%	0.0%
	1:00-2:00	2.5%	0.1%	0.1%		1:00-2:00	2.1%	0.0%	0.1%
	2:00-3:00	2.1%	0.1%	0.2%		2:00-3:00	1.3%	0.0%	0.1%
	3:00-4:00	3.2%	0.1%	0.1%		3:00-4:00	1.8%	0.0%	0.0%
	4:00-5:00	2.3%	0.1%	0.1%		4:00-5:00	2.0%	0.0%	0.0%
	5:00-6:00	1.3%	0.0%	0.1%		5:00-6:00	1.3%	0.0%	0.0%
	6:00-7:00	0.7%	0.0%	0.0%		6:00-7:00	1.2%	0.0%	0.0%
	7:00-8:00	0.5%	0.0%	0.0%		7:00-8:00	0.7%	0.0%	0.0%
	8:00-9:00	0.6%	0.0%	0.0%		8:00-9:00	1.2%	0.0%	0.0%
	9:00-10:00	0.6%	0.0%	0.0%		9:00-10:00	0.9%	0.0%	0.0%
	10:00-11:00	0.6%	0.0%	0.0%		10:00-11:00	1.4%	0.0%	0.0%
11:00-12:00	0.8%	0.0%	0.0%	11:00-12:00	0.7%	0.0%	0.0%		
Total 24-hour		2.2%	0.1%	0.1%	Total 24-hour		1.7%	0.0%	0.0%

Location 13: Ocean Boulevard, south of Regents Park Road

Continuous tube counts were collected along Ocean Boulevard, just south of Regents Park Road on the southern end of the island. It was determined that weekday total truck percentages make up about 1.4% of total vehicle traffic. The average weekend total truck percentages are about equal on weekends, at 1.3% of the total vehicle traffic. Table 13 summarizes the hourly truck volumes at this location as a percentage of total vehicle traffic.

Table 13: Location 13 Truck Percentage Summary

Weekday					Weekend				
Time Period	SU			Large	Time Period	SU			Large
	SU	Artic.	Large			SU	Artic.	Large	
AM	0:00-1:00	0.0%	0.0%	0.0%	AM	0:00-1:00	0.0%	0.0%	0.0%
	1:00-2:00	3.6%	0.0%	0.0%		1:00-2:00	0.0%	0.0%	0.0%
	2:00-3:00	0.0%	0.0%	0.0%		2:00-3:00	0.0%	0.0%	0.0%
	3:00-4:00	0.0%	0.0%	0.0%		3:00-4:00	0.0%	0.0%	0.0%
	4:00-5:00	0.0%	0.0%	0.0%		4:00-5:00	0.0%	0.0%	0.0%
	5:00-6:00	0.9%	0.0%	0.0%		5:00-6:00	0.0%	0.0%	0.0%
	6:00-7:00	1.5%	0.0%	0.0%		6:00-7:00	2.7%	0.0%	0.0%
	7:00-8:00	1.9%	0.0%	0.1%		7:00-8:00	2.6%	0.0%	0.0%
	8:00-9:00	2.2%	0.1%	0.0%		8:00-9:00	1.8%	0.4%	0.0%
	9:00-10:00	2.0%	0.0%	0.0%		9:00-10:00	1.4%	0.0%	0.0%
	10:00-11:00	2.3%	0.0%	0.0%		10:00-11:00	2.1%	0.0%	0.0%
	11:00-12:00	1.7%	0.1%	0.0%		11:00-12:00	1.4%	0.0%	0.0%
PM	12:00-1:00	1.6%	0.0%	0.0%	PM	12:00-1:00	1.5%	0.0%	0.1%
	1:00-2:00	1.7%	0.0%	0.0%		1:00-2:00	1.3%	0.0%	0.3%
	2:00-3:00	1.7%	0.0%	0.0%		2:00-3:00	1.1%	0.0%	0.0%
	3:00-4:00	1.8%	0.0%	0.0%		3:00-4:00	1.3%	0.1%	0.0%
	4:00-5:00	1.1%	0.0%	0.0%		4:00-5:00	1.2%	0.0%	0.0%
	5:00-6:00	0.7%	0.0%	0.0%		5:00-6:00	0.9%	0.0%	0.2%
	6:00-7:00	0.5%	0.0%	0.0%		6:00-7:00	0.7%	0.0%	0.0%
	7:00-8:00	0.4%	0.0%	0.0%		7:00-8:00	0.6%	0.0%	0.0%
	8:00-9:00	0.5%	0.1%	0.0%		8:00-9:00	0.7%	0.0%	0.0%
	9:00-10:00	0.5%	0.0%	0.0%		9:00-10:00	0.4%	0.0%	0.0%
	10:00-11:00	0.3%	0.0%	0.0%		10:00-11:00	0.5%	0.0%	0.5%
	11:00-12:00	0.0%	0.0%	0.0%		11:00-12:00	0.0%	0.0%	0.0%
Total 24-hour		1.4%	0.0%	0.0%	Total 24-hour		1.2%	0.0%	0.1%

Analysis of Truck Counts

The locations of the traffic counts were selected to determine if trucks are circulating within residential areas. The counts performed indicate that large vehicles are circulating throughout the Town, including within residential areas. The majority of the observed trucks were single unit trucks, which are non-articulated trucks, such as moving vans, furniture delivery trucks, and general delivery trucks. These trucks were observed throughout the Town, accounting for 2.1 to 3.3 percent of the traffic in the north end, 1.5 to 3.1 percent in the central part of town, including the business district, and 1.4 percent in the south part of Town on weekdays. The percentage of truck traffic on the roadway is illustrated in Figure 10. It is interesting to note that the percentage of trucks in the central part of town is not significantly different than in residential areas and is actually lower as a percentage of overall trips compared to the north end. This is notable because business districts typically see more truck deliveries than residential areas.

The locations of the observations in the north end were specifically chosen to capture truck traffic within the residential area (i.e., Publix delivery trucks are not included in these counts). The only significant commercial activities in this area are the Sailfish Club and the Palm Beach Country Club; therefore, delivery trucks should be minimal as a percentage of overall traffic. Nonetheless, the number of trucks ranged from 2.1 percent to 3.3 percent in this area, which is not significantly different than at other locations within the Town. Articulated trucks and large semi-trucks account for a small percentage of overall traffic in the north end; however, there is evidence of these trucks circulating based on the counts.

Truck counts were performed at several intersections throughout the Town to further analyze truck circulation. Turning movement counts provide the data necessary to determine circulation patterns, such as potential origins and destinations. The turning movement counts are illustrated in Figure 11. Based on review of the turning movements, the following patterns were observed.

At the intersection of County Road & Royal Poinciana Way, the majority of trucks were observed to be in the northbound through movement. This indicates that trucks are serving the north end and are originating at a location south of the north bridge. Another large movement is the eastbound left and southbound right movement. This indicates that trucks entering the Town at the north bridge are accessing the north end at this intersection.

Truck Type	Weekday	Weekend
Single Unit	2.7%	1.5%
SU Articulated	0.1%	0.0%
Large	0.0%	0.0%

Truck Type	Weekday	Weekend
Single Unit	2.1%	1.5%
SU Articulated	0.1%	0.0%
Large	0.1%	0.0%

Truck Type	Weekday	Weekend
Single Unit	2.4%	1.9%
SU Articulated	0.1%	0.1%
Large	0.1%	0.1%

Truck Type	Weekday	Weekend
Single Unit	1.5%	1.7%
SU Articulated	0.0%	0.0%
Large	0.1%	0.1%

Truck Type	Weekday	Weekend
Single Unit	1.5%	1.6%
SU Articulated	0.1%	0.2%
Large	0.1%	0.1%

Truck Type	Weekday	Weekend
Single Unit	2.5%	1.9%
SU Articulated	0.1%	0.0%
Large	0.0%	0.0%

Truck Type	Weekday	Weekend
Single Unit	2.2%	1.7%
SU Articulated	0.1%	0.0%
Large	0.1%	0.0%

Truck Type	Weekday	Weekend
Single Unit	3.1%	1.5%
SU Articulated	0.1%	0.1%
Large	0.0%	0.0%

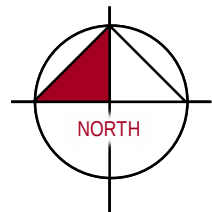
Truck Type	Weekday	Weekend
Single Unit	3.3%	1.8%
SU Articulated	0.1%	0.1%
Large	0.1%	0.0%

Truck Type	Weekday	Weekend
Single Unit	2.6%	1.8%
SU Articulated	0.1%	0.1%
Large	0.1%	0.1%

Truck Type	Weekday	Weekend
Single Unit	3.1%	2.6%
SU Articulated	0.1%	0.1%
Large	0.1%	0.1%

Truck Type	Weekday	Weekend
Single Unit	2.3%	1.5%
SU Articulated	0.0%	0.0%
Large	0.0%	0.0%

Truck Type	Weekday	Weekend
Single Unit	1.4%	1.2%
SU Articulated	0.0%	0.0%
Large	0.0%	0.1%

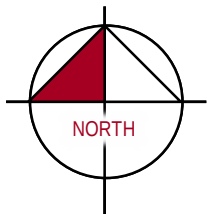
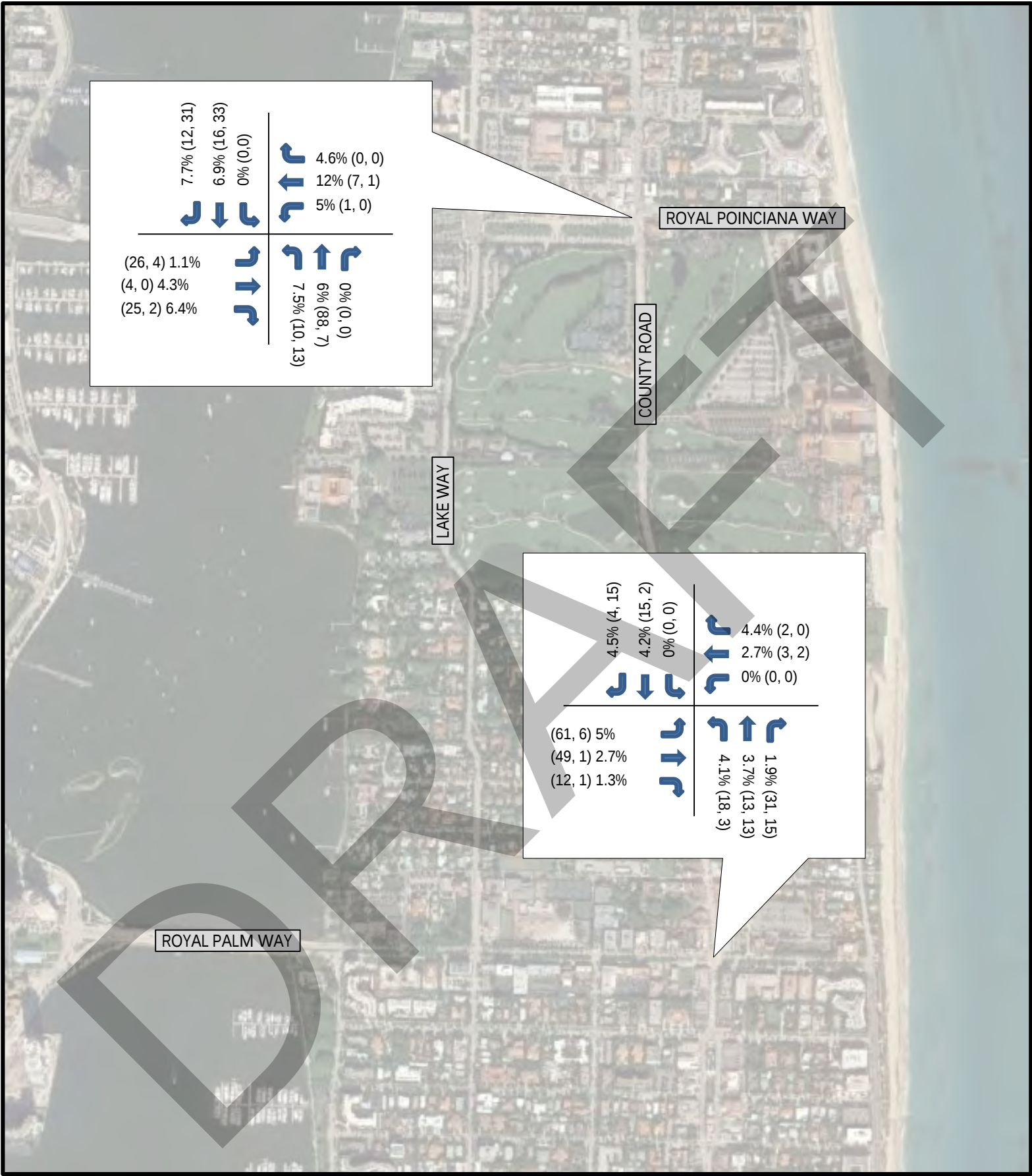


LEGEND



MACHINE COUNT LOCATIONS

FIGURE 10
PALM BEACH TRUCK PROHIBITION
KH #044063244
PERCENT TRUCK VOLUMES



LEGEND

 % TRUCKS
 (XX/XX) (AM VOLUME/PM VOLUME)

FIGURE 11
PALM BEACH TRUCK PROHIBITION
 KH #044063244
 AVERAGE PEAK HOUR TRUCK PERCENTAGES

Although some commercial activity is present north of Royal Poinciana Way, the number of trucks for these movements is not consistent with the small amount of commercial activity. Therefore, it is reasonable to conclude, based on these turning movements and on the link data described above, that that trucks in the north end are arriving from locations south of Royal Poinciana Way as well as via the north bridge.

Truck circulation patterns at the intersection of Royal Palm Way & South County Road were less conclusive. The movement with the highest truck volume is the eastbound left-turn movement. A substantial amount of truck traffic is destined for locations east of this intersection as well. Based on this data, no clear patterns were determined with respect to truck impacts on residential streets.

Turning Movement Analysis

An analysis of truck turns was performed at twenty-four intersections throughout the Town. These intersections were chosen to represent typical truck routes, based on observations and conversations with Town staff and residents. The focus of the intersection selection was to capture truck turns from the main arterials (such as County Road and North Lake Way) with narrower residential streets. Based on observation, these are the locations where trucks have damaged property. Figure 12, Figure 13, and Figure 14 illustrate the locations of the turning analyses.

Three truck types were analyzed for each of the turning movements at the twenty-four intersections. The trucks analyzed are summarized as follows:

- Single Unit Box Truck
 - o 30 feet in length, 8 feet wide, with a 42-foot curb to curb turning radius
 - o Similar to food delivery trucks, moving vans, mail delivery trucks
- Intermediate Semi-Trailer
 - o 45.5 feet in length, 8 feet wide, with a 40-foot curb to curb turning radius
 - o Similar to large delivery trucks and furniture delivery vehicles
- Interstate Semi-Trailer
 - o 73.5 feet in length, 8.5 feet wide, with a 45-foot curb to curb turning radius
 - o Similar to long distance freight vehicles

The intersections analyzed are further defined based on their roadway characteristics and locations below:

Mediterranean

Mediterranean Road is a narrow two-lane undivided residential road. It is the furthest north roadway analyzed in this study and intersects with Lake Way to the west and Ocean Boulevard to the east. Both of these intersections were analyzed.

La Puerta

La Puerta Way is a two-lane undivided residential road. It intersects with Lake Way to the west and Ocean Boulevard to the east. Both of these intersections were analyzed.

Orange Grove

Orange Grove Road is a two-lane undivided residential road. It intersects with Lake Way to the west and Ocean Boulevard to the east. Both of these intersections were analyzed.

List

List Road is a narrow two-lane undivided residential road. It intersects with Lake Way to the west and Ocean Boulevard to the east. Both of these intersections were analyzed. It is located just south of Orange Grove Road.

Windsor

Windsor Court is a two-lane undivided residential road. It intersects with Cherry Lane to the south and County Road to the east. Both of these intersections were analyzed.

Cherry

Cherry Lane is a narrow two-lane undivided residential road. It intersects with Lake Way to the west and County Road to the east. Both of these intersections were analyzed.

Atlantic

Atlantic Avenue is a two-lane undivided road. It intersects with Lake Way to the west and County Road to the east. Both of these intersections were analyzed. Further east Atlantic Avenue intersects with Ocean Boulevard.

Everglade

Everglade Avenue is a two-lane undivided eastbound one-way road. It intersects with Lake Way to the west and County Road to the east. Both of these intersections were analyzed. Further east Everglade Avenue intersects with Ocean Boulevard.

Seabreeze

Seabreeze Avenue is a two-lane undivided residential road. It intersects with Lake Way to the west and County Road to the east. Further east Seabreeze Avenue intersects with Ocean Boulevard. All three intersections were analyzed.

El Brillo

El Brillo Way is a two-lane undivided residential road. It intersects with County Road to the west and Ocean Boulevard to the east. Both of these intersections were analyzed.

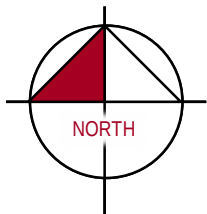
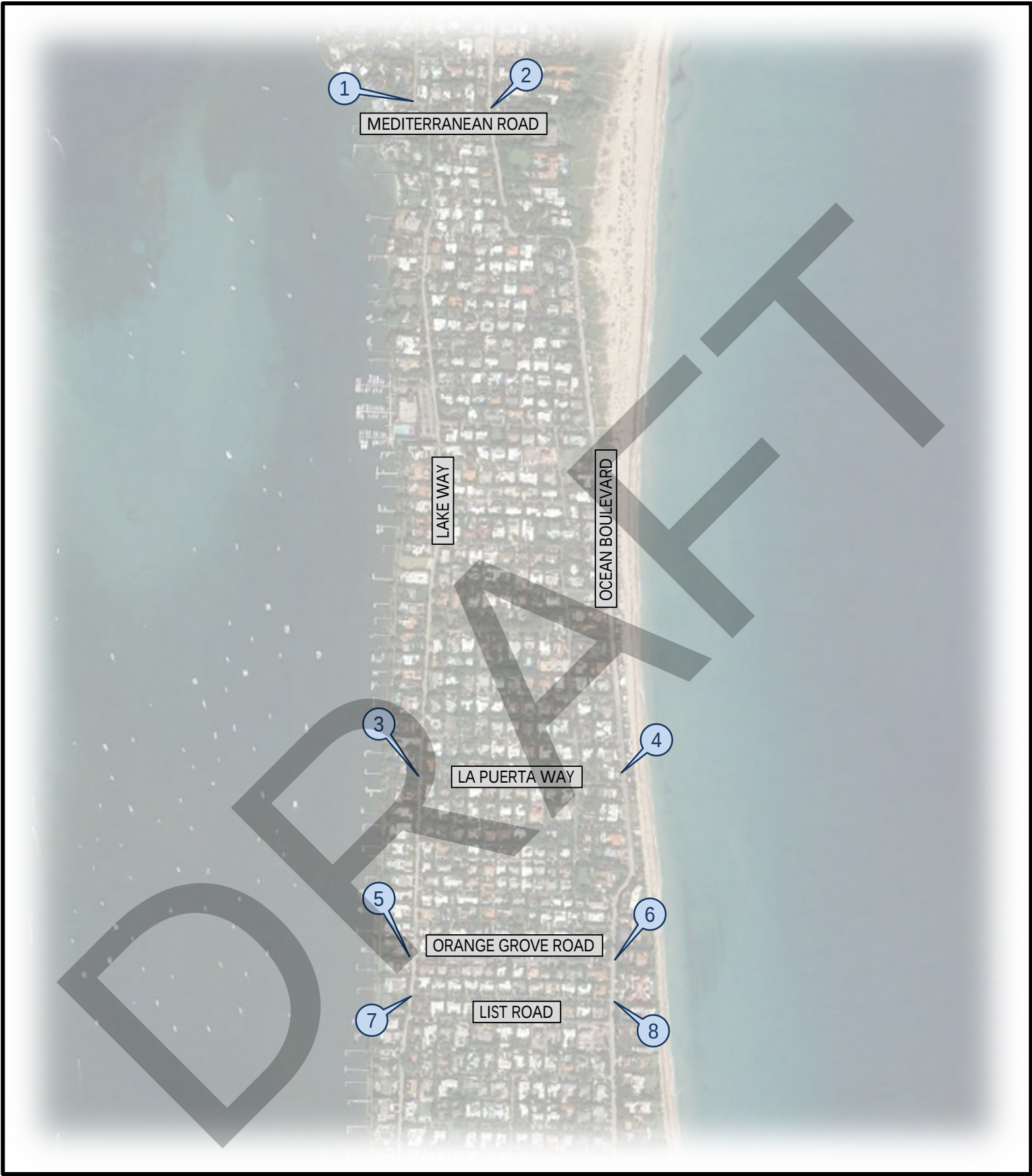
Jungle

Jungle Road is a two-lane undivided residential road. It intersects with County Road to the west and Ocean Boulevard to the east. Both of these intersections were analyzed

Clarendon

Clarendon Avenue is a two-lane undivided residential road. It intersects with Vita Serena to the west and Ocean Boulevard to the east. The intersection of Clarendon Avenue and Ocean Boulevard was analyzed.

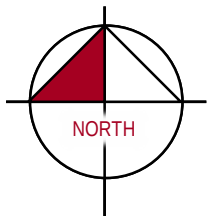
Individual plots for each movement are attached in Appendix C.



LEGEND

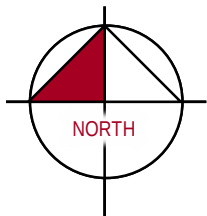
AUTOTURN LOCATIONS

FIGURE 12
PALM BEACH TRUCK PROHIBITION
KH #044063244
AUTOTURN ANALYSIS LOCATIONS - 1



LEGEND
AUTOTURN LOCATIONS

FIGURE 13
PALM BEACH TRUCK PROHIBITION
KH #044063244
AUTOTURN ANALYSIS LOCATIONS - 2



LEGEND
AUTOTURN LOCATIONS

FIGURE 14
PALM BEACH TRUCK PROHIBITION
KH #044063244
AUTOTURN ANALYSIS LOCATIONS - 3

RECOMMENDATIONS

Based on our review of truck volumes, the ability of trucks to maneuver local streets, observed damage to private property, and a review of Florida municipalities with similar street networks, it is recommended to restrict trucks on certain Town streets. This recommendation is intended to mitigate damage to private property, eliminate congestion due to the inability of certain trucks to maneuver certain streets, and provide a mechanism for permit and enforcement of truck traffic in certain areas of Town. The data collected confirms that trucks are circulating within residential areas of Town, as noted by high numbers of trucks north of Royal Poinciana Way in comparison with expected volumes for a residential area. Truck volume percentages in the residential areas of the north end are higher than in the commercial parts of Town. Review of the specific turning movement counts indicates that many of the trucks in the north end are arriving via the north bridge.

Florida Statute provides guidance on establishing restriction of trucks on local roads. Per FS 316.008:

(1) The provisions of this chapter shall not be deemed to prevent local authorities, with respect to streets and highways under their jurisdiction and within the reasonable exercise of the police power, from:

(n) Prohibiting or regulating the use of heavily traveled streets by any class or kind of traffic found to be incompatible with the normal and safe movement of traffic.

Description of the Recommended Restriction

Figure 15 illustrates the recommended physical boundaries of the truck restriction. It is recommended to implement broad area-wide restrictions rather than street-by-street restrictions; if only certain streets in a part of Town are restricted, trucks would use the non-restricted streets in larger numbers. In residential areas such as the north end, certain residents would see an increase in trucks on their street if their street was the non-restricted street. Area-wide restrictions also require less signage and are easier to understand by truckers. Without an area-wide restriction, individual streets would have to be signed restricting trucks, leading to sign clutter. It should be noted that the following roads will have NO Town-imposed restrictions:

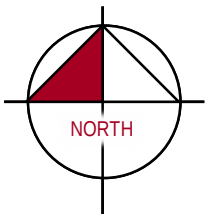
- Royal Poinciana Way west of North County Road
- County Road between Royal Poinciana Way and South Ocean Boulevard

- South Ocean Boulevard between Barton Avenue and South Municipal Limits
- Barton Avenue east of South County Road
- Royal Palm Way west of South County Road
- Southern Boulevard
- Coconut Row

The exclusion of these roads from truck restrictions allows trucks entering the Town to be able to circulate onto and off of the island without the need for U-turns or dangerous turning maneuvers.

It should be noted that areas between Worth Avenue and Royal Poinciana Way were excluded from truck restrictions. This is due to the nature of the land uses in this area, with the majority of the Town's commercial operations occur in this area. Fewer single-family residential units are located in this part of town. Furthermore, the streets are generally wider in this area, accommodating larger trucks.

Based on the turning movement analysis, restrictions should be placed on larger trucks. Delivery trucks, such as those operated by postal and package delivery services, have been shown to be able to maneuver residential streets without encroaching on private property. Larger box trucks (two-axle) are also generally able to maneuver most residential streets. Truck-trailer combinations, however, of any size, have been shown to not be able to maneuver the residential streets, and should be restricted. Also, trucks longer than 30 feet should be restricted. It should be noted that although combination vehicles can make some movements (especially left-turns) on some streets, they are not generally able to make right-turns without impacting private property. Therefore, a restriction should be placed on all combination vehicles.



LEGEND



PROHIBITION BOUNDARY

FIGURE 15
PALM BEACH TRUCK PROHIBITION
 KH #044063244
TRUCK RESTRICTION BOUNDARIES

Permitting of Exceptions

In certain cases, there may be a need for restricted vehicles to utilize the restricted streets. An example of this would be the need for a construction crane to access a private residence on a residential street. Another example could be a small combination truck that is needed to access a commercial property to deliver items that are too large for smaller delivery trucks. The Town should establish a permitting process to allow for special circumstances. As part of the process, the applicant should provide:

- Explanation/Narrative of the request
- Explanation of why smaller trucks cannot be used. The applicant must demonstrate that smaller, more frequent trucks cannot be used due to the nature of the delivery or equipment, or that more frequent trips will negatively impact the neighborhood.
- A routing plan that demonstrates that the truck movements will not impact private property.
- A plan for restoration of private property in case of damage.

The Town could then issue a permit listing types and numbers of vehicles allowed, allowable times and days of operations, and expiration (if any). The applicant will be required to pay for staff burden costs, any citations for operating outside of the conditions of the permit and restoration of private property.

Codification

Based on a review of other municipalities in Florida, the truck restrictions should be placed in the Town's Code of Ordinances by means of Resolution. The Code should include the following elements:

- Definition of the restriction, including types of trucks (defined by length) that are restricted.
- A map of the restricted area.
- Any exclusions to the restriction; possible exclusions to the restriction include emergency vehicles and municipal services vehicles.
- Mechanism for citation
- Permitting process for exceptions

The Code update will be subject to the Town's process for amending the Code of Ordinances.

Education

The Town should develop an educational campaign to educate stakeholders, including residents, business, and trucking companies, of proposed restrictions. The goal should be to reach the widest range of potential drivers. It should be noted that the input from stakeholders is imperative to determining if restrictions should be enacted, and what scope the ultimate restrictions should encompass.

The Town should publicly notice proposed restrictions in visible locations to drivers throughout Town prior to implementation. Although it is recognized that not every truck driver entering the Town will know in advance of new restrictions, every effort should be made to educate the highest number of drivers as possible. Nonetheless, a grace period between adoption of a Code and initial citations should be considered.

CONCLUSION

The Town of Palm Beach currently allows unrestricted movement of all legal vehicles on all streets within the Town. However, larger vehicles have been observed to damage private property when they cannot adequately maneuver narrow streets and can cause congestion and unsafe conditions when they have to make multi-point turns at Town intersections. To mitigate the damage to private property, and to minimize congestion due to the maneuvering of larger vehicles, the Town is considering a restriction on certain streets of larger vehicles. The goal of any restriction is to change the behaviors to force deliveries with smaller vehicles. Although any restriction will not completely eliminate property damage and congestion, the goal of implementing the restrictions is to substantially reduce the frequency of occurrences.

This study analyzed truck volumes, circulation patterns, and their ability to maneuver intersections without impacting private property. Furthermore, a review of other municipalities throughout Florida which have implemented truck routing Ordinances was performed. Based on this analysis, it is recommended to restrict movement of larger trucks on certain streets, as defined throughout this study. Codification, education, and enforcement are also discussed. To allow for unique circumstances where large trucks must enter the recommended restricted area, a permit process should be implemented to identify the types of trucks, routing, and process for assessing damages to private property should it occur.

TOWN OF PALM BEACH

Information for Public Works Committee Meeting: October 22, 2020

TO: Public Works Committee

FROM: H. Paul Brazil, P.E., Director of Public Works

RE: Ongoing Construction Projects Update 2020

DATE: August 20, 2020

STAFF RECOMMENDATION

Town staff will make a presentation providing an update of the 2020 construction projects.

GENERAL INFORMATION

Below is a list of ongoing construction projects within the Town of Palm Beach. Staff will present an overall summary of the status of these projects.

Current Town Construction Projects for 2020

- D16/D18 Stormwater Pumpstation
- Seminole Avenue Drainage Improvements
- Crescent Drive Stormwater Improvements
- Sand Transfer Plant Rehabilitation
- South Fire Station Chiller Replacement
- Undergrounding Phase 2 North Paving
- City of West Palm Beach Paving Repairs – Watermain Related Repairs
- Town Marina– on going
- Undergrounding – on going

cc: Kirk W. Blouin, Town Manager
Jay Boodheshwar, Deputy Town Manager
Eric B. Brown, P.E., Assistant Director of Public Works
Patricia Strayer, P.E., Town Engineer
Jason Debrincat, P.E., Senior Project Engineer
Jane Le Clainche, Director of Finance

TOWN OF PALM BEACH

Information for Public Works Committee Meeting: October 22, 2020

TO: Public Works Committee

FROM: H. Paul Brazil, P.E., Director of Public Works

RE: Green Initiative Update

DATE: August 18, 2020

STAFF RECOMMENDATION

Town staff is providing an update on the progress pertaining to the Town's Green Initiative Program and requests the Public Works Committee members to provide any direction deemed necessary.

GENERAL INFORMATION

Green Initiative Update:

The items outlined below are topics which the Public Works Committee discussed previously and which Staff will continue to watch closely, track, and provide updates at future Committee meetings.

1. Pesticides

The Town currently treats for lethal yellowing, Royal Palm bug, and white fly utilizing synthetics. All other pests are treated with environmentally friendly applications on an as-needed-basis. All applications are applied at or below label rates, are applied using Best Management Practices (BMP), and according to Town ordinances.

2. Fertilizers

The Town currently has a quarterly fertilization program for the green spaces in the medians and at large turf areas such as Bradley Park, Lakeside Park, and Wrightsman/Dean Park. These areas are utilizing 0-0-20, a nitrogen and phosphorus free product in the 'black-out' period. The Worth Avenue turf and plantings are fertilized monthly. Staff also utilizes nitrogen and phosphorus-free products during the blackout period. Due to the limited green space adjacent to the palms, the trees are treated via deep root injections which provides proper nutrients to the palms. All applications are applied at or below label rates and are applied using Best Management Practices (BMP), and according to Town ordinances.

3. Lethal Yellowing

Lethal Yellowing (LY) is a fatal but preventable disease caused by bacteria. LY currently affects 40% of palm species, most common is Coconut and Date Palms. This disease affects the vascular system of the palms by clogging its vessels, not allowing nutrients to migrate through the tree. It is spread by a palm sap feeding leafhopper.

Treatment for LY consists of drilling a small hole in the tree and inserting a valve. The valve is then penetrated with a syringe. The chemical injected is a water-soluble antibiotic, oxytetracycline hydrochloride (OTC). Because it is water based, as is the palm, it dissipates over a short period of time, requiring treatment three (3) times per year to maintain effective control. An average size coconut palm would be injected with 4 grams of OTC per tree, per year. All applications are applied at or below label rates and are applied using Best Management Practices (BMP), and according to Town ordinances.

4. Ficus Replacement Program

As previously reported, ficus hedges have been removed in Lakeside Park at Brazilian and Australian dock parking lots, replaced with turf, and added low flow irrigation. Staff anticipates removing ficus hedges at the Peruvian Dock this fiscal year. Native hedge material will be installed as part of the Marina Project. Additionally, staff anticipates replacing hedges at D-9 (Mediterranean), Phipps Ocean Park, and the Town owned property near Crescent Drive. In addition, staff was able to remove a diseased ficus tree located near Crescent Drive. This is an on-going project which staff will continue with the efforts. Staff will continually review, modify, and update the list to include replacement totals and species types in an effort to avoid establishing a mono-culture of hedge materials and to promote species diversity.

The following is a brief summary of the collection and disposal of ficus hedge material from private properties.

The first sign up began on December 16, 2019 and by May 15, 2020, nineteen (19) residents were on a scheduling list. The program was scheduled for residents to begin removal starting May 2020, however due to the pandemic, the Town delayed the start of the program to July. At that time the list decreased to eight (8) properties.

The program collected and disposed of approximately 45 tons of material involving ten (10) trips/loads for a total cost of roughly \$9,700. This was accomplished over four (4) Saturdays totaling 114 labor hours.

Currently there are no new confirmed collection requests.

5. Other Issues

- a. The treatment of the North County Road ficus canopy treatments continue at the reduced rate of two (2) treatments per year, Altus (a non-neonicotinoid systemic) is used for the alternate treatments. This has reduced our neonicotinoid exposure in the area by 50%. Unfortunately, staff needed to remove four (4) trees from the canopy since the last Committee meeting. All of the trees removed had structural damage unrelated to white fly but from hypoxylon canker.

Public Works has begun researching the existing Town codes relating to insect infestation and tree diseases to see if hypoxylon canker (HC) is enforceable by Code Enforcement.

- b. Staff continues to work with the Town's arborist for alternate treatments or reduced traditional treatments, for the Royal Palm bug. This testing is currently being performed at the Town's nursery. Once staff has sustainable results, they will be shared with the Committee.

- c. The Town's bee removal program has had great results. Staff is excited to report that the Town has not eradicated any bees since the last Committee meeting. Our vendor sets up an alternative hive and relocates the queen, or introduces a new one, and the worker bees follow into the alternate hive. A recent hive in the canopy has been set-up for relocation.
- d. There has been a Nematode activity at Town Hall and Staff has been trying to control them for several months. Nematodes are microscopic worms that live in the soil. While there are many kinds that are beneficial, feeding on fungi, bacteria, and other organisms, some harmful nematodes feed on plants. These plant-parasitic nematodes damage root systems and reduce a plant's ability to get water and nutrients from the soil. When nematode populations are large, you may see signs of their damage on the plants like yellowing and wilting. If planted into beds that already have high numbers of nematodes, plants may become stunted and slowly die. Transplants may not grow at all after planting.
- e. There is also an issue with Pythium root rot. In the past few years, there has been occasional outbreaks at Bradley Park and at the Living Wall turf area. Pythium root rot is a persistent problem in areas that are poorly drained. The disease can also occur in well-drained areas following extended periods of rainfall. Pythium root rot can occur at any time of the year as long as the soil remains saturated for several days or weeks. We are addressing the areas with improved cultural practices, which include soil remediation, aerification and verticutting.
- f. The Town has assembled a Green Initiative Team (GIT) to further provide structure and focus on policies and initiatives in order to successfully enhance the Town. This team consist of Town staff and consultants. There are two (2) new members of the team, Town staff, Project Coordinator, Alisa Cox. Alisa worked previously in Wyoming supervising a similar initiative as well as a plant native movement. Tammy Cook of Calvin Giordano & Associates has worked with local municipalities assisting them in policy review, and implementation of enhanced environmentally-friendly, non-toxic, native programs, as well as a comprehensive tree maintenance and cataloging software which keeps a log of all tree attributes. Exhibit A attached is a list of what the team has been working on.

Attachment

cc: Kirk W. Blouin, Town Manager
Jay Boodheshwar, Deputy Town Manager
Eric B. Brown, P.E., Assistant Director of Public Works
Paul Colby, Facility Maintenance Division Manager
John Lawrence, Grounds Supervisor

Town of Palm Beach **Green Initiatives:**

Guiding Principles:

The Green Initiative Plan provides structure and focus to policies and initiatives in order to successfully enhance community sustainability. The following principles are intended to serve as an overarching theme and basis for the plan and provide a framework within which to execute sustainability planning:

- The Town of Palm Beach will lead by example.
- Healthy natural systems are the basis for sustainable communities and economies.
- Local decisions and policies have regional and global impacts.
- Policies and programs that enhance, protect and restore our natural resources, such as our airshed, waterways, shorelines, vegetation, wildlife, and greenspaces, support the sustainability of our community.
- Policies and programs that improve environmental regulatory compliance support the sustainability of our community.
- An educated community acting as a steward of the environment supports the sustainability of our community.

Assessing and Reporting Progress

The Green Initiative Plan was developed as a first step in creating a comprehensive green sustainability master plan for the Town. The intent is to develop a baseline report and an implementation plan. Baseline data is the point from which all future measurable outcomes will be compared and ultimately assessed.

Natural Resource and Ecosystem Management

Implementing natural resource and ecosystem management will also:

- Restore, enhance and protect natural resources, which increases the biodiversity and resiliency the city's ecosystems.
- Increase canopy coverage and reduce stormwater runoff, improve air quality, beautify neighborhoods and provide shade for pedestrians.
- Decrease heat island effect, which reduces energy costs.

Goals:

- Enhance, restore and protect natural resources and ecosystems.
- Increase compliance with regulations governing natural resources.

<u>Indicators</u>	<u>Baseline</u>	<u>Targets</u>
Landscaping		
Review Chemical Applications	Downward Trend	Inventory all chemicals & Products used In Municipal operations
Reduce Ficus Hedges	Upward Trend	Monitor # of ficus on municipal lands Native Hedge replacements
System-wide landscape	Upward Trend	Review soils on municipal lands Provide aeration, soil amendments, improve nutrient levels
Tree Canopy	Evaluate Software	Initiate Tree & Palm Master Plan Inventory Tree & Palm Locations Track Pruning Schedules Track Tree & Palm Replacement Schedule Inventory Historic and Specimen trees
Coconut Palm Treatment	Chemicals Required	No Alternative for Lethal Yellow Treatment
Ficus Tree Treatment	Downward Trend	Testing less treatments reducing #
Ficus Tree Replacements	Upward Trend	Replace nitida/benjamina with altissima
Nitrogen and Phosphorus ban	Upward Trend	No “N” or “P” June 1 - September 30th
Water Conservation	Upward Trend	Smart Irrigation system installation

Green Philosophy

Almost everything created or purchased has a life cycle that impacts the environment from the moment of production to the final disposal stage. By practicing and encouraging the purchasing of environmentally-friendly or non-toxic products, the Town will reduce the amount of toxic or hazardous material introduced into neighborhoods, waterways, and landfills.

TOWN OF PALM BEACH

Information for Public Works Committee Meeting: October 22, 2020

TO: Public Works Committee

FROM: H. Paul Brazil, P.E., Director of Public Works

RE: Cistern Utilization

DATE: August 20, 2020

STAFF RECOMMENDATION

Town staff recommends Committee members' direction concerning further investigation of the potential use of cisterns to meet water use demands.

GENERAL INFORMATION

The Town has retained Kimley-Horn (KHA) to perform a Water Supply Feasibility Study which will evaluate the feasibility of alternative potable water service providers. As part of this study, KHA is currently in the process of examining potential options that may be available to provide potable water service to the residents and property owners within the Town. The Town currently receives potable water service from the City of West Palm Beach (the City). The City owns and operates a potable water supply system, which also supplies water to the City, the Town, and South Palm Beach. Potable water service is provided to the Town by the City pursuant to a thirty (30) year franchise agreement executed in 1999. According to this agreement, the City owns and maintains all the water facilities throughout the Town through the duration of the agreement. The Town receives approximately ten (10) MGD of potable water (maximum daily demand) through a series of pipelines that cross the Lake Worth Lagoon.

At the time Town Council approved the award of this study, members of Town Council suggested an investigation of the use of cisterns to offset the water use demands within the Town. Attached is an article that the former Director of Planning, Zoning, and Building Department distributed regarding the use of cisterns in historic neighborhoods confronting increased sea levels.

While staff has not initiated a study, they have researched existing codes to determine if there are any restrictions in place in Town codes that would interfere with the use of cisterns. There are three (3) Town codes that actually reference cisterns. They are briefly referenced below:

Sec. 42-127. - Breeding Places Enumerated:

1. Code of Ordinances
2. Chapter 42 - ENVIRONMENT
3. ARTICLE III. - MOSQUITO CONTROL

ditches, ponds, pools, excavations, holes, depressions, open cesspools, fountains, cisterns, tanks, shallow wells, barrels, troughs, urns, cans, boxes, bottles, tubs, buckets.

Sec. 66-212. - Purpose and Intent:

1. Code of Ordinances
2. Chapter 66 - NATURAL RESOURCE PROTECTION
3. ARTICLE IV. - VEGETATION
4. DIVISION 1. - GENERALLY

Encourage the use of rain harvesting systems, such as cisterns, as a means to conserve water by reducing overwatering of landscapes.

Sec. 88-16. - Exterior Property Areas:

1. Code of Ordinances
2. Chapter 88 - PROPERTY MAINTENANCE CODE
3. ARTICLE III. - GENERAL REQUIREMENTS

Water pollution. The pollution of any public well or cistern, stream, lake, canal, or body of water by sewage, dead animals, commercial wastes

Attachment

cc: Kirk W. Blouin, Town Manager
Jay Boodheshwar, Deputy Town Manager
Eric B. Brown, P.E., Assistant Director of Public Works
Wayne Bergman, Director of Planning, Zoning, and Building
Patricia Strayer, P.E., Town Engineer
Craig Hauschild, P.E., Civil Engineer

'We Cannot Save Everything': A Historic Neighborhood Confronts Rising Seas

Colonial-era homes line the streets of The Point in Newport, R.I. Climate change is forcing experts to reimagine the future of historic preservation here.

By Cornelia Dean

July 8, 2019

NEWPORT, R.I. — The Point, a waterfront neighborhood here, is one of the largest, best preserved and most important Colonial-era communities in the United States. Its grid of 18th-century streets contains scores of houses built before the American Revolution, and dozens more that are almost as old.

"It's incredible to walk around a neighborhood like this that is so intact," Mark Thompson said one morning this spring as he strolled along Washington Street, past the Jahleel Brenton Counting House, the 200-year-old home of a prosperous merchant. "There is a very organic feel to the neighborhood."

Mr. Thompson heads the Newport Restoration Foundation, one of the organizations that in recent decades have purchased and restored many of Newport's historic properties, saving them from the tourism development that has overtaken much of the city's waterfront.

Today, the neighborhood faces a new threat. The Point sits only a few feet above sea level, and because of climate change, the ocean is rising. So people have been thinking again about how to preserve the neighborhood.

Similar efforts are underway in many communities on the East Coast, where European colonists settled centuries ago. The task is complicated, and success is far from assured.

[Read about efforts to protect the Farnsworth House, a midcentury marvel in Plano, Ill., from rising floodwaters.]

According to a 2014 report by the Union of Concerned Scientists, sea level rise threatens sites ranging from Faneuil Hall, where the Sons of Liberty planned the Boston Tea Party, to the launchpads of Cape Canaveral.

The National Park Service says a quarter of its properties are on or near the coast, and most of them contain historic structures — many of them Civil War forts vulnerable to sea level rise.

In 2016, the N.R.F. organized a conference, "Keeping History Above Water," to address the problem of historic properties being threatened by sea level rise. The Point was its case study.

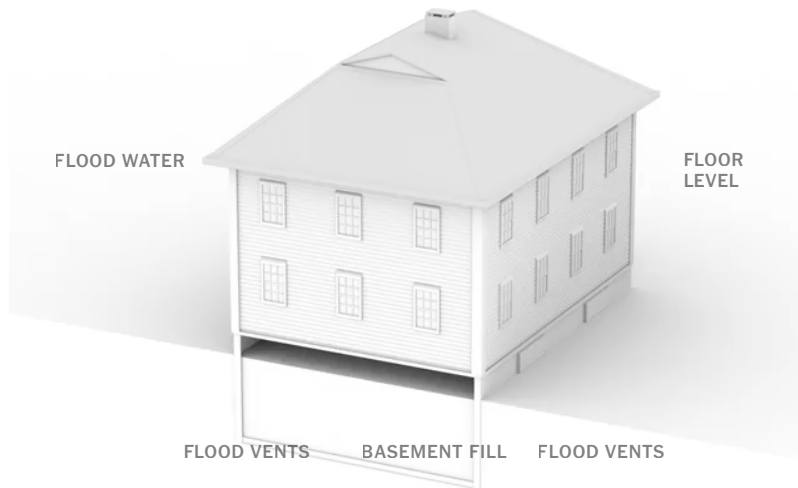
Since then, experts in preservation have gathered in Annapolis, Md., whose Colonial Annapolis Historic District is threatened; in St. Augustine, Fla., where the Castillo de San Marcos, a 17th-century fort built of light and porous coquina limestone, is highly vulnerable; and last month in Nantucket. That entire island is designated a National Historic District, and much of it is subject to flooding and erosion.

Wherever the threat occurs, the underlying problem is much the same: Tactics used in ordinary contexts — building sea walls, raising buildings on stilts, or even moving them to higher ground — are of limited utility in historic neighborhoods. They can destroy the very characteristics that make the properties worth saving.

So architects, planners and engineers are devising novel approaches, such as allowing water to flow through threatened structures; turning basements into cisterns; installing building-size flotation systems; or re-plumbing entire neighborhoods to direct storm water and high tides out of the way.

Flowing Through

Flood vents on cellar walls open automatically. Water is allowed to flow through, reducing the risk of water pressure damaging the foundation. The basement has been filled above the water table, and utilities have been relocated to higher floors.



By Mika Gröndahl

“There is a definite urgency,” said Mr. Thompson. “We certainly don’t feel we have a luxury of time.”

A historic home, a modern experiment

The tobacco heiress Doris Duke, who inherited a Gilded Age estate as a young woman in 1925 and kept it until her death in 1993, created the N.R.F. in 1968. Since then, the foundation has acquired and restored scores of Colonial-era properties, which it rents to “stewards” who agree to care for them according to foundation standards.

The aim is to preserve the buildings not as silent relics or museum exhibits, but as vital parts of vibrant communities. More than two dozen foundation properties, including the Jahleel Brenton Counting House, are in The Point.

The Point was settled in the 17th century by Quaker refugees from Massachusetts. Then, it was little more than a spit of land sticking out into what became Newport Harbor. Soon, as its edges were filled in, a marsh became Marsh Street, and a wet area became Water Street; the path of a span that once linked The Point to the rest of Newport turned into Bridge Street.

Newport grew prosperous through trading, including a substantial slave trade. The city — and The Point — supported a vibrant class of artisans, one of whom was Christopher Townsend, a member of a prominent family of furniture makers. In 1725, he built a two-story house at 74 Bridge Street; the restoration foundation acquired it in 2013.



The Christopher Townsend House at 74 Bridge Street. The home has been a test case for architects and engineers searching for ways to rescue Colonial-era buildings from rising seas. Kayana Szymczak for The New York Times

To prepare for the 2016 conference, Union Studio, an architecture and community planning concern in Providence, R.I., conducted an “adaptation workshop” that considered an array of possible approaches to the preservation of historic structures in general — and 74 Bridge Street in particular.

The ideas included so-called “dry flood-proofing,” more complicated “wet flood-proofing,” altering the grade of the surrounding landscape, and making structures buoyant.

So far, 74 Bridge Street, which is unoccupied, relies on dry flood-proofing, a combination of relatively simple steps. Sandbags and door barriers are deployed when floods threaten, and its water heater, furnace and other mechanical equipment have been moved from the cellar to the first floor. (There is a space heater in the cellar, but it is bolted to the ceiling.)

Techniques for Protecting Historic Structures

Basements can be turned into cisterns to collect floodwater and slowly release it into the stormwater system once the flood has passed. Entire neighborhoods can be equipped with larger capacity storm water pipes, or houses can be made to float on the rising floodwater.

Cistern

Replumbing

Flotation

Source: Historyabovewater.org • By Mika Gröndahl

It helps that 74 Bridge Street was built in a fashion common in Colonial-era New England, with heavy, vertical planks attached to the building's wooden frame. This plank-on-frame construction is relatively resilient to minor flooding, preservationists say. Plus, its interior walls were finished with lime plaster, a sand-lime-aggregate material in use since ancient times that is durable and mold-resistant.

Still, a sump pump runs in the basement 24/7. The water table is now so high that without it, there would probably be a foot of standing water there at all times.

Dry flood-proofing is "low-hanging fruit," said Stephanie Zurek, an architect at Union Studio who studied the home. Other remedies, like wet flood-proofing, are more complex.

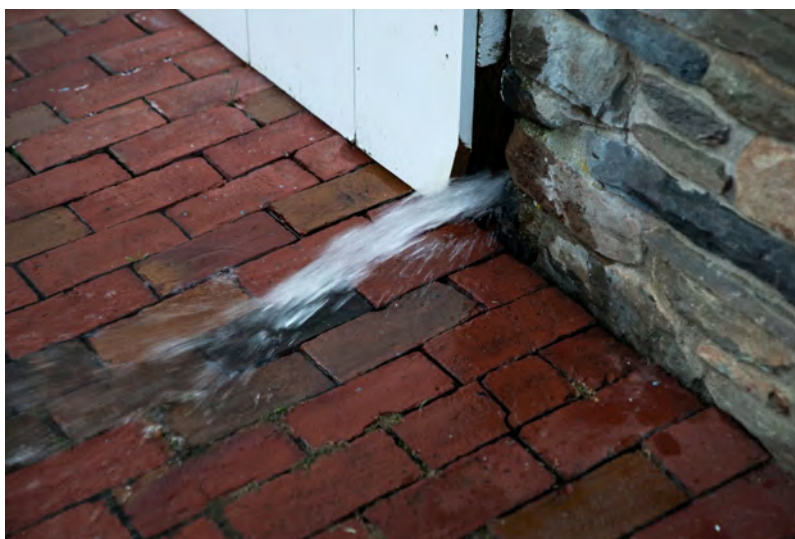
Wet flood-proofing does not involve making basement walls watertight because, the theory goes, foundation walls would be vulnerable to collapse if water pressure built up in the soil around them.

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Instead, basement walls are left permeable, like the stone foundation walls of 74 Bridge Street. If walls are already watertight, architects may propose flood vents, windowlike devices fitted into cellar walls that open automatically to let the building flood in a storm. Water can be pumped out later.

Or homeowners may install rain barrels or even cisterns in their cellars to store storm water till the threat has passed.

Mr. Thompson said the foundation is considering whether steps like these might be advisable at 74 Bridge Street, but he added that deliberations may take a while because the foundation hopes to develop techniques that may have wider use. "Whatever we do should inform the community at large," he said.



Water gushes from the Thomas Townsend House, built in 1735, during a recent high tide. Kayana Szymczak for The New York Times

'Lollipopping' and 'blue streets'

Sometimes, the site of a historic structure can be regraded so that water runs away from it. Unfortunately, this step is generally considered impractical on a neighborhood scale. Though visitors to The Point probably do not notice it, the neighborhood as a whole is "a little bit of a bowl," as Mr. Thompson put it, and its low point is almost exactly at 74 Bridge Street.

In many coastal districts, including The Point, there is an additional problem: storm sewers that run into nearby rivers or, in the case of Newport, the harbor. In a storm, these outlets can actually send seawater flooding into a historic community like The Point.

The Union Studio project put forward a few suggestions for dealing with the problem: setting up a tax district to raise money to redesign the storm sewers, installing tide gates in the outfall pipes, and installing permeable pavement to encourage better draining.

Architects at the Rhode Island School of Design took the idea further, suggesting that streets be designed so that storms can turn them into “a water feature,” said professor Liliane Wong, an architect whose specialty is the adaptive reuse of buildings. “The students called them ‘blue streets.’”

Elevating buildings has become a more common response to the threat of coastal flooding; often, building codes require it. But in historic neighborhoods, elevating individual structures is controversial. The process can turn a harmonious streetscape into an unsightly hodgepodge of rooflines, some far higher than others.

“We call it ‘lollipopping,’” said Ms. Wong. Post-Katrina New Orleans experienced “lollipopping at its extreme,” she added, with some buildings raised as much as 20 feet in the air.

“That’s exactly anti-historic-neighborhood,” she said.

In places like The Point, elevation raises another issue: access. Many structures there were built right up to their lot lines, with front doors opening onto the sidewalk. If a house is elevated, it can be hard to find space for the now-needed front stoop.

The owners of some elevated properties in The Point have solved the problem by building stairs running along the building’s facade to a landing at the new level of the front door. That’s what happened with the house at 70 Bridge Street, built in the 18th century by Christopher Townsend’s son, John.



The John Townsend House, which has been elevated for protection from sea level rise. Kayana Szymczak for The New York Times

A number of other houses in The Point have been elevated. “It is concerning to me,” said state Rep. Lauren Carson, who until recently lived in The Point. “I think we are going to lose the streetscape integrity.”

By far the most dramatic approach to preserving historic structures involves equipping them with devices to make them buoyant. They would sit on dry land — as long as the land is dry. Only when it is dangerously wet would the buildings be set afloat.

A leading advocate for the approach is Elizabeth C. English, an architectural theorist and engineer at the University of Waterloo in Canada and the founder of the Buoyant Foundation Project.

Dr. English believes making houses amphibious can maintain their important architectural features while keeping them dry. To “amphibiate” a structure, she said, it must be hoisted so that engineers can install buoyancy elements and supportive framing under the first floor.

Around the world, Dr. English said, empty barrels or even empty plastic water bottles have been used for buoyancy. In Louisiana, where she has tested the approach, she favors polystyrene foam blocks.

“And then you have a vertical guidance system,” she said, such as steel pipes driven into the ground near the building’s corners. The building’s frame is attached to these poles with sliding rings or sleeves so that the building remains positioned over its foundation, rising when a flood comes and sinking back into place as waters recede.

“We can do telescopic vertical guidance posts,” she said. “It works like the handle on a roll-aboard suitcase.” She added: “Anything that can be elevated can be amphibiated.”

Dr. English said the biggest barrier to the use of this technology is the lack of engineering standards, which she is working to develop, as well as a lack of building codes and other regulations.

Amphibiating historic structures has yet to find wide use (though it was used in a shotgun house in New Orleans rehabilitated through the efforts of the actor Brad Pitt). But experts like Dr. Wong say the notion must be considered: “We need to think about ideas that seem like they would be unfeasible in order to prepare for the future.”



The Jahleel Brenton Counting House, located in The Point. Kayana Szymczak for The New York Times

Let it ‘fall to ruin’?

If all else fails, endangered buildings can be moved. The practice has a long history on the coast, common on Cape Cod, the Outer Banks of North Carolina — and in Newport. Some of the houses in Queen Anne Square, in the city’s touristic heart, were moved there, at least one from a neighboring town.

In fact, the Jahleel Brenton Counting House is in The Point because the restoration foundation moved it there decades ago, literally hours ahead of its planned demolition. Few worried then that the neighborhood would ever be threatened by rising seas.

But moving a house or two is one thing. Relocating an entire neighborhood, especially a neighborhood whose significance derives in large part from its coastal position, is another matter. As Ms. Zurek, the Union Studio architect, put it: "Whatever the solutions they choose to make or not make, there are going to be huge financial repercussions."

Increasingly, experts and residents alike realize that it may not be possible to prevent rising seas from drowning treasured buildings, neighborhoods and landscapes.

The architects at the R.I.S.D. project developed a poignant response: a plan to cast the facades of threatened buildings in concrete. The casts would be used to create a kind of water garden "memory park," Ms. Wong said. Once the buildings washed away, the casts would remain, reminders of what had been lost.

"We cannot save everything," she said. "But we can have a memory of it."

In a memorandum issued in 2014, Jonathan B. Jarvis, then director of the National Park Service, wrote about the preservation of the nation's cultural heritage in an era of climate change. Done sensitively, adaptations of historic structures can preserve their integrity, said Mr. Jarvis, who retired in 2017.

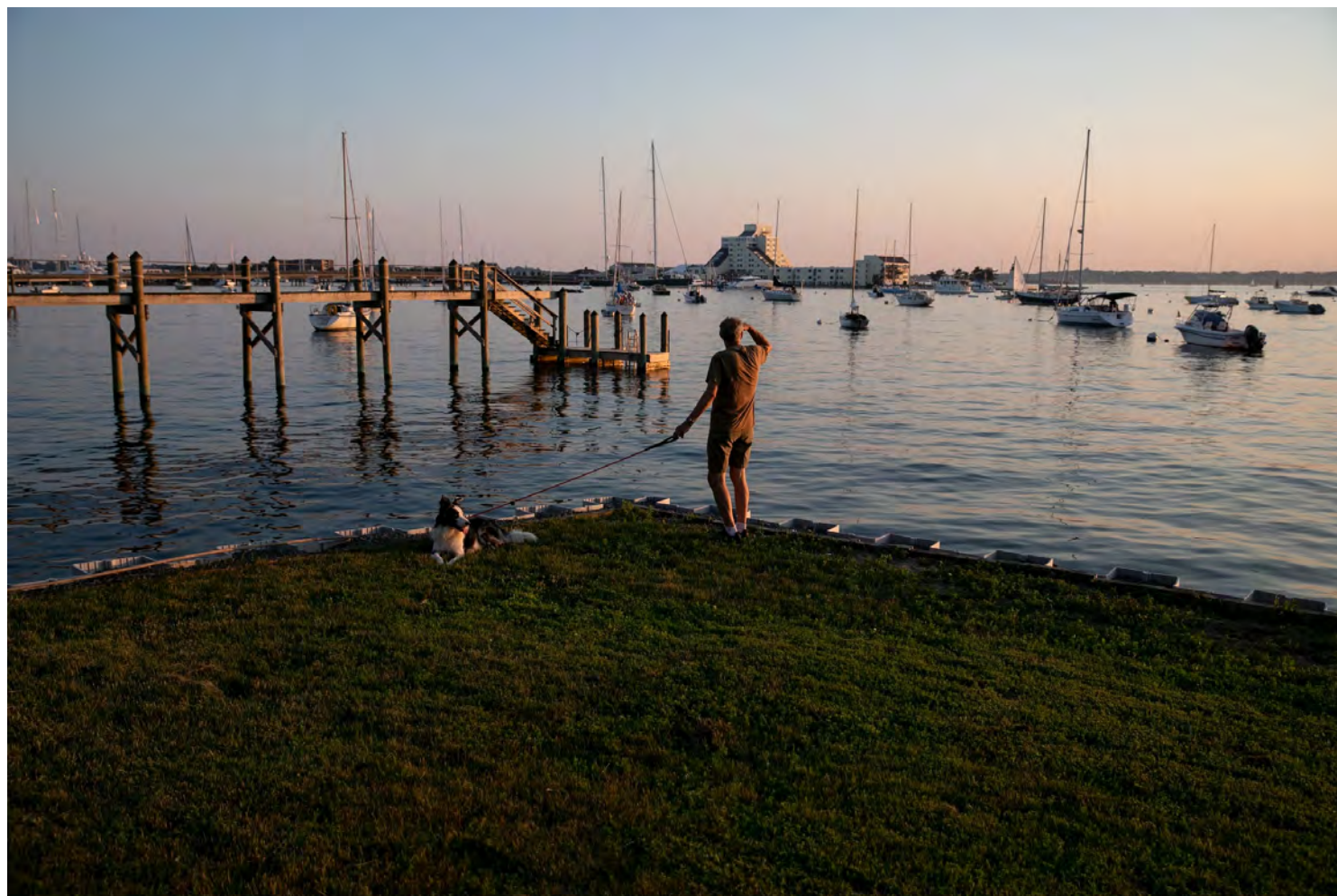
But, he added, managers must recognize the possibility that some historically or culturally important properties may be doomed.

"Funding temporary repairs for resources that cannot, because of their location or fragility, be saved for the long term demands careful thought," he wrote.

It may be better to document the properties — with photographs or charts, for example — and allow "them to fall into ruin rather than rebuilding after major storms."

Mr. Thompson of the restoration foundation said he could not agree.

"Doris Duke did a wonderful thing fifty-some years ago when she preserved these Colonial houses," he said. "Here we are 50 years later, and it is our responsibility to ensure that the work she did is not lost. To do for Newport a second time what she did for Newport the first time — to save these Colonial properties."



Ned Reynolds stands on his elevated backyard overlooking the ocean in Newport, R.I. Mr. Reynolds owns a colonial home built in 1720, which was moved from Providence, R.I., in 1965 and is now situated on the water. Kayana Szymczak for The New York Times



TOWN OF PALM BEACH

Town Clerk's Office

REPORT OF THE PUBLIC WORKS COMMITTEE MEETING HELD ON THURSDAY, OCTOBER 22, 2020

I. CALL TO ORDER AND ROLL CALL

The Public Works Committee meeting was called to order on October 22, 2020, at 9:30 a.m. in the Town Council Chambers. On roll call, all Committee members were found to be present.

II. PLEDGE OF ALLEGIANCE

Chair Moore led the Pledge of Allegiance.

III. APPROVAL OF AGENDA

Committee Member Lindsay added an item to the agenda under Any Other Matters, "Discuss the current condition of the median strips in the Landmarked Ficus Canopy Area."

It was the consensus of the Committee to approve the agenda with the amendments, as presented.

IV. COMMUNICATIONS FROM CITIZENS - *None*

V. TOWN OF PALM BEACH TRUCK REGULATION STUDY

Patricia Strayer, Town Engineer, provided background on the request from Town Council to complete a truck regulation study on how the large trucks access the Town. She explained Kimley-Horn & Associates completed the study and will present the information gathered.

Chris Heggen, P.E., Kimley-Horn, provided a presentation of the unrestricted movement of all legal vehicles on all streets within the Town and the issues that were created. Mr. Heggen elaborated in-depth on identifying the specific issues, the methodology and the data collected. He provided examples of other cities with truck restrictions and streets trucks should be using. In conclusion, Mr. Heggen provided

recommendations which touched on permitting of exceptions, codification, and education.

Discussion ensued regarding clarifications to be added to the study such as the following:

- specific numbers of trucks along with percentages,
- explanation of how certain intersections were selected for review,
- recommendation to consider the inclusion of one-way streets in the study,
- provide complete list of municipalities that were reviewed for similar ordinances or regulations,
- provide a potential cost of implementation.

In response to questions, Mr. Heggen provided clarification for the Committee on the data presented. Public Works Director Paul Brazil explained the next steps would be to make a recommendation to Town Council regarding the engineering, send the information to the Ordinance, Rules & Standards Committee (ORS) to discuss implantation, and subsequently staff would be able to provide an overall cost. Town Engineer Strayer explained the cities listed in the report were not the only cities reviewed, but are inclusive of the data that had regulations that would fit the Town's needs.

As a result of the discussion, Director Brazil provided direction to Kimley-Horn regarding revising the data to show volume in addition to the percentages starting on page 16 of their report and to list all the cities that were included in the case study review. He recommended that once the draft report was revised that the Committee accept the report, send it to Town Council for review and request review by ORS.

Committee Member Lindsay asked for clarification on the recommendation of the area north of Sunrise Avenue regarding truck prohibition.

In response, Director Brazil explained the recommendation is to regulate, not to prohibit.

Chair Moore requested that the Recommendation map used in the presentation be presented to Town Council in a landscape format for ease of understanding. Additionally, review again the one-way streets north of Royal Palm Way for restrictions of truck traffic.

It was the consensus of the Committee to send the Truck Regulation Study to Town Council, after the discussed revisions were completed and reviewed by each Committee member without holding another Public Works Committee Meeting.

VI. ONGOING CONSTRUCTION PROJECTS UPDATE 2020

Jason Debrincat, Senior Engineer, provided a brief PowerPoint summary on each active construction project within the Town as follows:

- D16/18 Stormwater Pumpstation – *challenging, ongoing*

- Seminole Avenue Drainage Improvements – *challenging, ongoing*
- Crescent Drive Stormwater Improvements – *kudos, complete*
- Sand Transfer Plant Rehabilitation – *started to pump sand, interior complete*
- South Fire Station Chiller Replacement - *complete*
- Undergrounding Phase 2 North Paving –*weather permitting, should stay on schedule for completion*
- City of West Palm Beach Paving Repairs – Watermain Related – *coordinating with Undergrounding Project & Marina Project, ongoing*
- Town Marina – *on schedule, maintaining public engagement, ongoing*
- Undergrounding – *ongoing*
- Pay-As-You-Go Capital Improvement Fund – *snapshot of projects*

Committee Members asked brief clarification questions, made comments and praised staff on some of the projects during the project summary provided by Mr. Debrincat.

Patricia Strayer, Town Engineer, reported additional information on the Undergrounding Phase 2 North Paving project. She explained the FPL telephone poles are currently being removed. They were set to be completed however, the wet weather conditions have delayed completion. Additionally, FPU has provided funds for 40% of the milling and resurfacing of the streets for the paving section of this project.

Committee Members requested the Town Marina Timelines document Mr. Debrincat presented to be included as part of the Marina back-up for Town Council.

VII. GREEN INITIATIVE/FICUS REMOVAL PROGRAM STATUS

Paul Colby, Facilities Maintenance Division Manager, provided an update on the progress pertaining to the Town's Green Initiative program. He explained the first four items of the memo in the back up are updates and specifically focused the review on the following:

- North County Road Ficus Canopy Treatments
- Alternate Treatments for Royal Palm Bug
- Bee Removal Program
- Nematode Activity at Town Hall
- Pythium Root Rot at Bradley Park
- Green Initiative Team

Division Manager Colby reported the Ficus Canopy continues to receive two treatments per year. Since the last Committee meeting, there were four trees removed from the canopy due to structural damage unrelated to white fly, but from hypoxylon canker. Staff is currently researching the existing Town Codes related to diseases to see if it is enforceable by Code Enforcement.

Discussion ensued regarding where the canker was coming from, how it is spread, how the trees are affected and how to remove it.

Division Manager Colby reported staff is currently working with the Town Arborist to look for alternate treatments of Royal Palm Bug and testing is being performed at the Town's nursery.

Division Manager Colby reported that staff has not had to eradicate any bees since the last Committee meeting and provided a description of how the removal process works.

Division Manager Colby reported there has been Nematode activity at Town Hall Square. Since no alternative treatment for Nematodes exists, staff treats this area with chemicals when needed and are responsible with treatments.

Division Manager Colby reported Bradley Park and the Living Wall are experiencing occasional outbreaks of the turf disease, Pythium Root Rot, due to drainage during heavy periods of rain. Currently, the Living Wall turf replacement project has been delayed due to the wet weather. After the Bradley Park renovation, there have been some issues. Staff plans to use extra fill from the Bradley Park Title Garden project to remedy the areas that need attention.

Division Manager Colby reported the Town has assembled a Green Initiative Team (GIT). He explained who is involved and the team's goals, which will be to provide structure and focus on policies and initiatives in order to successfully enhance the Town.

Discussion ensued briefly regarding the payment of the Tidal Garden project for Bradley Park from the Garden Club.

No additional questions or comments were discussed on these items.

VIII. CISTERN UTILIZATION

Town Engineer Strayer provided some background regarding our contract with West Palm Beach, the discussion of performing a Water Supply Feasibility Study looking for alternatives to a water supply to the Town and explained that staff has researched Town Code for information on cisterns.

Director Brazil briefly reviewed the research of our Town Codes regarding cisterns explaining that they are permissible, typically cisterns are located on private property, and currently the Town has zero on Town property.

Committee Member Lindsay added that there is one significant cistern on private property and commented on the wide use of them in island communities. She suggested that staff look for opportunities to identify properties where a cistern is applicable and educate residents to help with interest. She explained how useful cisterns are with irrigation, noting that 65% of the Town's water usage is irrigation.

Chair Moore suggested thinking about involving landscape architects to help raise awareness quickly.

Discussion ensued regarding where a cistern would be placed, how they work and how to maintain it.

IX. ANY OTHER MATTERS

A. East Coast Regional Treatment Plant

Chair Moore commented on receiving pollution notices from Palm Beach County in regard to the East Coast Regional Treatment Plant (ECR). She requested to add this item to the next agenda, a brief update on the plant and what the Town is responsible for.

Director Brazil provided background on the regional sewer treatment plant. He provided information on the ownership and the operator of the plant, the project challenges surrounding the plant, the structural decline and need for improvements.

Discussion ensued briefly on alternatives to the current contract, how to staff the plant, moral and retention among employees.

It was the consensus of the Committee to put an update of the East Coast Regional Treatment Plant on the next Public Works Committee agenda for further discussion.

B. Discussion Regarding the Current Condition of the Median Strips in the Landmarked Ficus Canopy Area

Committee Member Lindsay brought to the attention of the Committee the damage of truck tire marks to the median strips in the Landmarked Ficus Canopy area. She presented some photos of the damage to the Committee and staff to place in the record. Additionally, she requested that staff research alternatives to address this area besides using sod.

Discussion ensued regarding shade in the area, how to improve this area, shade loving plants, and possible drainage project when Undergrounding is in that area.

It was the consensus of the Committee to put an update regarding improvement possibilities and condition of the Median Strips on the Landmarked Ficus Canopy Area on the next Public Works Committee agenda for further discussion.

X. ADJOURNMENT

There being no further comments, the Public Works Committee meeting of October 22, 2020 was adjourned at 11:02 a.m.

APPROVED:

Danielle H. Moore, Chair

PREPARED BY:

Antonette Fabrizi, Board Clerk

ATTEST:

Queenester Nieves, MBA, CMC
Town Clerk

Date