



Street Sweeping Program

The City sweeps all public streets, garages and parking lots within its jurisdiction. CRA parking lots are swept as well. Three different sweepers (#695, #696 and #697) are currently in use. Roadways without curb and gutter, and roadways not owned/maintained by subdivisions with privately owned streets, are not included in the program. The frequency of sweeping is daily.

The areas swept most frequently are the priority areas. Documentation of volume of street sweeping collection is kept in a log book by date and is summarized for reporting each year in the PW SW Monthly Report.

An estimate of the total phosphorus and total nitrogen collected by the street sweeping is performed based on the Florida Stormwater Association's determinations of street sweeping removal rates project. For this calculation, the land use of the area swept and the amount of material collected is used.

All street sweeping collection is properly disposed of in accordance with DEP's "Guidance For The Management Of Street Sweepings, Catch Basin Sediments and Stormwater System Sediments."

Schedules for the three sweepers are listed here.

Florida Stormwater Association Street Sweeping Nutrient Removal Rates

Based on the May 31, 2011 Final Report “Quantifying Nutrient Loads Associated with Urban Particulate Matter (PM), and Biogenic/Litter Recovery Through Current MS4 Source Control and Maintenance Practices” and Table 8 in the report (pg.41), the following values may be used to estimate nutrient removal values from street sweeping activity:

Median Value of Nutrient Removal per Unit of Material Collected	
Total Phosphorus	Total Nitrogen
0.000361	0.000563

Example Calculations:

In fiscal year 2010, Palm Beach County collected 1,915 cubic yards of material with the street sweeping program. Assuming the average density of the street sweeping material is 2,295 pounds per cubic yard,* then 4,394,925 pounds were collected. Using the table above, the total phosphorus removed would be estimated at $(4,394,925)(0.000361) = 1,587$ pounds. The total nitrogen removed would be estimated at $(4,394,925)(0.000563) = 2,474$ pounds.

Last year the Town of Jupiter collected 35.8 dry tons (71,600 pounds) of street sweeping material from residential areas. The estimated nutrient removal rates for total phosphorous and total nitrogen would be $(71,600 \text{ pounds})(0.000361) = 26$ pounds, and $(71,600)(0.000563) = 40$ pounds, respectively.

* *This assumption is based on information from the study referenced above.*

Clean Safe Sweeping Schedule Mon/Wed/Fri (5:00AM-1:00PM)

MONDAY / WEDNESDAY / FRIDAY	MAINTENANCE ISSUES	Date & Time Completed
City Hall / Parking Lot M/W/F		
Community Center / Parking Lot M/W/F		
Tennis Center / Parking Lot M/W/F		
Old School Square / Parking Lot M/W/F		
Hands / Parking Lot M/W/F		
NE 2nd Ave. Atlantic to NE 4th St. M/W/F		
NW 5th Ave./ Parking Lot M/W/F		
Gladida / Parking Lot M/W/F		
Veterans / Parking Lot M/W/F		
DB City Garage (Entrance on NE 1st St.)		
#434 South Swinton (Compound) M/W/F		
Delray Beach Golf Course (Friday)		
<i>Available Personnel To Cover As Needed</i>		
Other Areas Swept Or Requested (Note Below)		
Revised 3/16/2009 RWH		

Sweeper #695 Unless Otherwise Noted

Sweeping Schedule Tues. Thurs. (5:00AM-1:00PM)

TUESDAY	Maintenance Issues	Date & Time Completed
<i>Palm Ave.</i> Tues.		
<i>Bronson Ave.</i> Tues.		
<i>Salia Ave.</i> Tues.		
<i>Knowles Parking Lot</i> Tues.		
<i>Chamber Of Commerce Lot</i> Tues.		
<i>Sandoway Parking Lot</i> Tues.		
<i>Ingraham Parking Lot</i> Tues.		
<i>Anchor Parking Lot</i> Tues.		
<i>Dunes Parking Lot</i> Tues.		
<i>Bankers Row</i> Tues.		
Thursday		
<i>Barwick Park / Lot</i> (Thurs.)		
<i>Pompey Park / E&W Lots</i> (Thurs.)		
<i>Delray Beach Golf Course</i> (Thurs.)		
<i>Lakeview Golf Course</i> (Thurs.)		
<i>Miller Park</i> (Thurs.)		
<i>Lakeview Park</i> (Thurs.)		
<i>Water Treatment / Lot</i> (Thurs.)		
<i>Bankers Row</i> (Thurs.)		
<i>DBPD Lot</i> (Thurs.)		
Other Sweeping Request Note Below		
<i>Revised 11/10/2008 RWH</i>		

Sweeper #695 Unless Otherwise Noted

For use by
#696 & 697

MONDAY

Sweeping Route

Odometer Start : _____ Sweeper # _____
Odometer Finish: _____ Routine Maintenance: _____
Total Miles: _____ Greased _____ Washed _____
Debris Weight: _____ Ticket # _____

5:00 AM Atlantic Ave. "DOWNTOWN" SWEEPING" Scheduled

A-1-A (N&S Bound) (Atlantic To Casuarina To N. Beach)	Curbside miles	1.75	Completed: _____
Ingraham Ave. W/Bound (A-1-A To Gleason)	Curbside miles	.10	Completed: _____
Vista Del Mar / E&W Bound (A-1-A To A-1-A)	Median	.50	Completed: _____
	Valley Gutter	.70	Completed: _____
Thomas St. / E&W Bound (Andrews Ave. To Seabreeze Ave.)	Valley Gutter	.20	Completed: _____
Seabreeze Ave. / N&S Bound (Atlantic Ave. To Dead End)	Valley Gutter	.50	Completed: _____
Basin Dr. / E&N Bound (Seabreeze To Lowery)	Valley Gutter	.20	Completed: _____
Cemetery	Street / Curbside miles	4.00	Completed: _____
8 th Ave. / S Bound (Outside Cemetery)	Curbside miles	.20	Completed: _____

TOTAL CURB MILES COMPLETED _____

If Not Completed Please Supply Reason _____

OPERATOR SIGNATURE _____

For use by
#696 & #697

Monday

Sweeping Route

Odometer Start: _____
Odometer Finish: _____
Total Miles: _____
Debris Weight: _____

Sweeper # _____
Routine Maintenance: _____
Greased _____ Washed _____
Ticket # _____

5:00 AM Atlantic Ave. "Down Town" Sweeping Scheduled

SE 2 nd Street (E&W Bound) (Swinton Ave. to SE 6 th Ave.)	Curbside miles	0.60	Completed: _____
SE 1 st Street (E&W Bound) (Swinton Ave. to SE 6 th Ave.)	Curbside miles	0.80	Completed: _____
S. Swinton Ave. (N&S Bound) (South 10 th St. To Atlantic Ave.)	Street/Curb miles	2.00	Completed: _____
N. Swinton Ave. (N&S Bound) (Atlantic Ave. to NE 22 nd St.)	Street/Curb miles	3.20	Completed: _____
Lake Ida Rd. (NE 6th Ave. To Military Tr.)	Curbside miles Median miles	6.80 5.40	Completed: _____ Completed: _____
NE 1 st Street (West Bound)	Curbside miles	0.70	Completed: _____
3 rd Ave. (N&S Bound) (Atlantic Ave. to SE 2 nd Street)	Curbside miles	0.20	Completed: _____
4 th Ave. (N&S Bound) (SE 2 nd St. to NE 2 nd St.)	Curbside miles	0.40	Completed: _____
5 th Ave. (N&S Bound) (Atlantic Ave. to NE 2 nd St.)	Curbside miles	0.20	Completed: _____
Alley N. Bound (Between 4 th & 5 th Ave.) (Atlantic Ave. to NE 2 nd St.)	Curbside miles	0.20	Completed: _____
Alley Between 5 th & 6 th Ave. (Atlantic Ave. To SE 2 nd St.)	Curbside miles	0.20	Completed: _____
Alley Between 6 th & 7 th Ave. (Atlantic Ave. To SE 3 rd St.)	Curbside miles	0.30	Completed: _____

For use by
#696 & #697

Tuesday

Sweeping Route

Odometer Start: _____
Odometer Finish: _____
Total Miles: _____

Date: _____
Routine Maintenance: Greased: _____
Washed: _____

U.S. 1 (North & Southbound) Gulfstream Blvd. to Linton Blvd	Curbside & Median	14.4 Completed: _____
Banyan Tree Ln. (East & Westbound) U.S. 1 to Dead End	Curbside & Median	.15 Completed: _____
SE 1st St. (One Way Eastbound) Swinton to SE 6 th Ave	Curb Miles	.80 Completed: _____
SE 4th St. (North Side) SE 7 th Ave to SE 5 th Ave.	Curb	.10 Completed: _____
SE 5th St. (East & Westbound) SE 4 th Ave to Dead End	Median Miles	.30 Completed: _____
SE 7th St. (Single Curb) Between SE 5 th & SE 6 th Ave.	Curb	.10 Completed: _____
SE 8th St. (Double Curb) Between SE 5 th , SE 6 th , & SE 7 th Ave.	Curb Median	.30 Completed: _____
SE 9th St. (Single Curb) Between SE 5 th & SE 6 th Ave.	Curb	.10 Completed: _____
SE 10th St. (Double Curb) Between SE 5 th & SE 6 th Ave.	Curb	.20 Completed: _____
Palm Trail (North & Southbound) From NE 8 th St.	Curb & Median	.30 Completed: _____
Dixie Hwy. (Southbound) Behind I Hop	Curb	.20 Completed: _____
NE 8th St. (East & Westbound) NE 3 rd Ave. To NE 2 nd Ave.	Curb	.30 Completed: _____
Linton Blvd. (East & Westbound) A1A to Catherine Dr.	Curb & Median	8.00 Completed: _____
SW 4th St. (North & Southbound) Linton Blvd. To Miller Park	Curb	.25 Completed: _____
Lavers Ave. (North & Southbound) Linton Blvd. To Lavers Circle	Median	.25 Completed: _____
NE 1st, 2nd, 4th, 5th, 6th, 7th, 8th St. Between NE 5 th & NE 6 th Ave.	Curb	.60 Completed: _____

Signature : _____

TOTAL ROUTE MILES SWEPT: 26.35

18824
49
18877

For use by
#696 & #697

Wednesday

Sweeping Route

Odometer Start: _____
Odometer Finish: _____
Total Miles: _____
Debris Weight _____

Sweeper # _____
Routine Maintenance:
Greased _____ Washed _____
Ticket # _____

West Atlantic Ave. /East & West Bound (From Swinton Ave. To Military Trail)	Curbside miles 6.0 Median miles 6.0	Completed _____ Completed _____
Barwick Road /North Bound (From Atlantic Ave. To End Of Curb)	Curbside miles 0.2	Completed _____
U.S. 1 /North & South Bound (From Linton Blvd. South To C-15 Canal)	Curbside miles 2.4 Median miles 2.4	Completed _____ Completed _____
SE 10th Street & Dixie Hwy (Intersection)	Curbside miles 0.2	Completed _____
Tropic Isle Drive /East & West Bound (From U.S. 1 East Bound To End)	Median miles 0.3	Completed _____
Spanish Circle /East & West Bound	Median miles 0.4	Completed _____
Tropic Blvd. /East & West Bound (From U.S. 1 To Spanish Trail)	Median miles 0.25	Completed _____
Lamat Ave. / East & West Bound (From U.S. 1 To Florida Blvd.)	Curbside miles 0.6 Median miles	Completed _____
SW 4th Ave. & SW 10th Street (Intersection)	Curbside miles .25	Completed _____
Lake Ida Road (NE 6 th Ave to Military Trail)	Curbside miles 6.80 Median miles 5.40	Completed _____ Completed _____
5th Ave. / North & South Bound (From Atlantic Ave. To NW 2 nd Street)	Curbside miles 0.5	Completed _____
Lake Ida Road (NE 6 th Ave. To Military Trail)	Curbside miles 6.80 Median miles 5.40	Completed _____ Completed _____

Total Route Miles Swept 32.60

Incomplete Route (Explain Problem) _____
Additional Sweeping Requested _____
Operators Signature _____ Date: _____

MONDAY / WEDNESDAY / FRIDAY

Clean & Safe Sweeping Route Mileage & Time

Start Time: _____
 Finish Time: _____

Sweeper # _____
 Total Miles 14.6

NW/SW 12 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NW/SW 11 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NW/SW 10 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NW/SW 9 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NWSW 8 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NW/SW 7 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NW/SW 6 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NW/SW 5 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NW/SW 4 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NW 3 rd Ave. / North & South Bound	(Street Miles .2)	Completed _____
SW 2 nd Ave. / North & South Bound	(Street Miles .2)	Completed _____
NW 1 st Ave. / North & South Bound	(Street Miles .2)	Completed _____
SW 1 st Ave. / North & South Bound	(Street Miles .2)	Completed _____
(Atlantic Ave.)Swinton Ave. - NW 12 th Ave.	(Street Miles 1.4)	Completed _____
(Atlantic Ave.)SW 12 th Ave. - Swinton Ave.	(Street Miles 1.4)	Completed _____
Andrews Ave. / North & South Bound	(Street Miles .2)	Completed _____
Seabreeze Ave. / North & South Bound	(Street Miles .2)	Completed _____
Gleason St. / North & South Bound	(Street Miles .2)	Completed _____
East Road / North & South Bound	(Street Miles .2)	Completed _____
Venetian Dr. / North & South Bound	(Street Miles .2)	Completed _____
Palm Square / North & South Bound	(Street Miles .2)	Completed _____
NE/SE 7 th Ave. / North & South Bound	(Street Miles .4)	Completed _____
NE 4 th Ave. (2Blocks) N&S Bound	(Street Miles .4)	Completed _____
SE 4 th Ave. / North & South Bound	(Street Miles .2)	Completed _____
SE 3 rd Ave. / North & South Bound	(Street Miles .2)	Completed _____
Railroad Ave. / North & South Bound	(Street Miles .2)	Completed _____
NE 2 nd Ave. (4 Blocks) N&S Bound	(Street Miles .8)	Completed _____
SE 2 nd Ave. / North & South Bound	(Street Miles .2)	Completed _____
SE 1 st Ave. / North & South Bound	(Street Miles .2)	Completed _____
(Atlantic Ave.)Swinton Ave.- Ocean Blvd.	(Street Miles 1.8)	Completed _____
(Atlantic Ave.)Ocean Blvd.- Swinton Ave.	(Street Miles 1.8)	Completed _____

Route Problems (Specify) _____

For use by
696 & # 697

Thursday
Sweeping Route

Odometer Start: _____
Odometer Finish: _____
Total Miles: _____

Sweeper # _____
Routine Maintenance
Washed: _____ Greased: _____

Other Notes Of Interest: Debris Weight _____ Ticket # _____

Linton Blvd. / East & West Bound Median miles 3.60 Completed: _____
(From Congress Ave. to Military Trail) Curbside miles 3.60 Completed: _____

Fairways Of Delray Curbside miles 1.00 Completed: _____
(From Homewood Entire Community)

Homewood Blvd. / North & South Bound Curbside miles .50 Completed: _____
(From Linton Blvd. to Lawson Blvd.) Median miles 1.50 Completed: _____

Congress Ave. / North & South Bound Curbside miles 3.00 Completed: _____
(From Lawson Blvd. to South City Limits) Median miles 3.00 Completed: _____

U.S. 1 / North & South Bound Curbside miles 7.30 Completed: _____
(From Gulfstream Blvd. to Linton Blvd.) Median miles 7.30 Completed: _____

Cross Streets E/W (From Curbside miles
(Between 5th & 6th Aves.)

Streets SE 1st - SE 10th Curbside miles
(Between 5th & 6th Aves.)

Congress Ave. & Lawson Blvd. Curbside miles 0.35 Completed: _____
(Intersection)

Total Route Miles Swept 31.15

Incomplete Route (Explain Problem) _____

Additional Sweeping Requested _____

Operators Signature _____

Date: _____

Friday Sweeping Route

For use by
#696 & #697

Odometer Start: _____
Odometer Finish: _____
Total Miles: _____

Sweeper # _____
Routine Maintenance: _____
Grease: _____ Washed: _____

Debris Weight: _____ Ticket# _____

5:00 AM Atlantic Ave. "Down Town" Sweeping Scheduled

Other Notes Of Interest:

SE 3 rd Ave. / North & South Bound (From SE 1 st St. to SE 2 nd St.) <i>Extension off / C&S</i>	Curbside miles	0.2 Completed _____
SE 4 th Ave. / North & South Bound (From SE 2 nd St. to SE 1 st St.) <i>Extension off / C&S</i>	Curbside miles	0.2 Completed _____
NE 7 th Ave. / North & South Bound (From NE 1 st St. to NE 2 nd St.) <i>Extension off / C&S</i>	Curbside miles	0.2 Completed _____
Atlantic Ave. / East & West Bound (From 12 th Ave. to Military Tr.) <i>E/C&S</i>	Curbside miles Median miles	4.6 Completed _____ 4.6 Completed _____
NW 5 th Ave. / North & South Bound (From NW 1 st St. to NW 2 nd St.) <i>Extension off / C&S</i>	Curbside miles	0.2 Completed _____
Congress Ave. / North & South Bound (North City Line to South City Line)	Curbside miles Median miles	8.2 Completed _____ 8.2 Completed _____

TOTAL ROUTE MILES SWEPT 26.4

Incomplete Route (Explain Problem) _____
Additional Area Sweeping Request _____
Operator Signature _____ Date _____