RESOLUTION NO. 2011- 075

A RESOLUTION OF THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA, RELATING TO THE PROVISION OF SOLID WASTE SERVICES, FACILITIES AND PROGRAMS TO RESIDENTIAL PROPERTIES IN THE TOWN OF SOUTHWEST RANCHES, FLORIDA; PROVIDING AUTHORITY FOR SOLID WASTE SERVICES ASSESSMENTS; PROVIDING PURPOSE AND DEFINITIONS; PROVIDING FINDINGS; INCORPORATING THE SOLID WASTE SPECIAL ASSESSMENT METHODOLOGY REPORT; DIRECTING THE PREPARATION OF AN ASSESSMENT ROLL; AUTHORIZING A PUBLIC HEARING AND DIRECTING THE PROVISION OF NOTICE THEREOF; AND PROVIDING AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF SOUTHWEST RANCHES, FLORIDA:

Section 1. Authority. This resolution is adopted pursuant to the provisions of Ordinance No. 2002-8 as codified and as may have been amended, sections 166.021 and 166.041, Florida Statutes, and other applicable provisions of law.

Section 2. Purpose and Definitions. This resolution constitutes the Initial Assessment Resolution as defined in the Ordinance (codified as Sections 16-108 through 16-173 in the Town of Southwest Ranches Code of Ordinances, hereinafter "Code"). All capitalized words and terms not otherwise defined herein shall have the meanings set forth in the Ordinance. Unless the context indicates otherwise, words imparting the singular number include the plural number, and vice versa. As used in this resolution, the following terms shall have the following meanings, unless the context hereof otherwise requires:

"Assessed Parcel" means those parcels with one or more Dwelling Units which are specially benefitted by the provision of solid waste collection and disposal services and which are subject to the Solid Waste Assessments authorized by this Initial Resolution.

"Bulk Waste" means materials including yard trash, white goods, and clean debris, as such terms are defined in §16-108 of the Code, as may be amended, generated from residential activities and those materials generally outlined in §16-19 of the Code as acceptable for bulk trash pickup.

"Commercial Property" or "Non-residential Property" means collectively those Parcels with DOR Codes or Use Codes indicating uses other than single-family

residential uses and that have no Dwelling Units present on the parcel. Commercial Property or Non-residential Property, for the purposes of this Resolution, includes commercial, institutional, industrial, vacant/agricultural and other all uses, except for Residential Property as defined in this Initial Resolution. As Non-residential Properties are billed directly for services by the Town's Solid Waste Provider, such parcels are not subject to the Assessments authorized by this Initial Resolution.

"DOR Code" means a property land use code established in Rule 12D-8.008, Florida Administrative Code, assigned by the Property Appraiser to Parcels within the Town. Additionally, the Broward County Property Appraiser assigns property Use Codes to parcels and structures. DOR Codes and associated Use Code descriptions are used in the development of the Solid Waste Assessments set forth in this Resolution and in preparation of the Assessment Roll.

'**Dwelling Unit**" means (1) a building, or portion thereof, available to be used for residential purposes, consisting of one or more rooms arranged, designed, used, or intended to be used as living quarters for one family only, or (2) the use of land in which lots or spaces are offered for rent or lease for the placement of mobile homes or the like for residential purposes. A mobile home is an individual Dwelling Unit. For purposes of this Resolution and imposition of the Solid Waste Assessment, a Dwelling Unit, as defined herein, may be located on parcels other than residential property under the Town's zoning and development regulations.

"Estimated Solid Waste Assessment Rate Schedule" means that rate schedule as specified in the Report set forth in Appendix A, attached hereto and incorporated herein by reference, specifying the Solid Waste Assessed Costs and the estimated Solid Waste Assessments.

"Household Waste" means and includes garbage, rubbish, and recovered materials, as those terms are defined in §16-108 of the Code, as may be amended, and recyclable materials as defined in §16-24 of the Code, as may be amended, generated from residential activities and excluding Bulk Waste.

"Report" or **"Town of Southwest Ranches Solid Waste Assessment Report"** means the report detailing the development of the Solid Waste Assessment Rates for Fiscal Year 2011-12 documented by the report in Appendix A, attached hereto and incorporated herein, prepared by New Community Strategies.

"Residential Property" means those Assessed Parcels with a DOR Code number on the following list or range: 1 - 9, 63 used as residential, 66 - 69 used as residential, 71 used as residential, or otherwise designated as residential property under the DOR Codes and Use Codes. Residential Property includes single family/duplex as well as single family developed property with multiple dwelling units. Residential Property, for purposes of this Resolution and imposition of Solid Waste Assessments,

shall include all parcels with one or more Dwelling Units present on the parcel regardless of the DOR Code number or Use Code assigned to the parcel. All Residential Property shall be assessed based on the number of Dwelling Units for Household Waste and based on parcel size for Bulk Waste according to the rate schedule in the attached Report, as may be modified in the Final Resolution adopted after the September 12, 2011 Public Hearing.

"Vacant/Agricultural Property" means those Assessed Parcels designated as vacant or agricultural in the Property Appraiser's Data Base and that have no dwelling units on the parcel. For purposes of this Resolution, Vacant/Agricultural Property is treated as Commercial or Non-residential Property.

Section 3. Provision and Funding of Solid Waste Services.

A. Upon the imposition of a Solid Waste Assessment for solid waste collection and disposal services, facilities, or programs against Assessed Property located within the Town, solid waste collection and disposal services shall be provided to such Assessed Property. It is the Town's intent to fully fund residential solid waste services, facilities, or programs from proceeds of the Solid Waste Assessments. Any costs not funded by the Solid Waste Assessments or costs related to Property on which Solid Waste Assessments are not collected, for example due to the difficulties of collection from property owned by governmental entities or pursuant to a policy decision of the Town Council, shall be paid by the Town from lawfully available funds of the Town and shall not be paid out of Solid Waste Assessment revenues.

B. It is hereby ascertained, determined, and declared that each parcel of Assessed Property located within the Town will be benefitted by the Town's provision of solid waste services, facilities, and programs in an amount not less than the Solid Waste Assessment imposed against such parcel, computed in the manner set forth in this Initial Assessment Resolution.

Section 4. Imposition and Computation of Solid Waste Assessments. Solid Waste Assessments shall be imposed against all Assessed Parcels according to the applicable property size rate classification. Solid Waste Assessments shall be computed and imposed in the manner set forth in this Initial Assessment Resolution, more specifically as presented in the Report attached as Appendix A.

Section 5. Legislative Determination of Special Benefit and Fair Apportionment. It is hereby ascertained, determined, and declared that the solid waste services to be funded by the Solid Waste Assessments provide special benefit to the Assessed Property based upon the following legislative determinations.

A. Upon the adoption of this Initial Assessment Resolution determining the Solid Waste Assessed Costs and identifying the Assessed Property to

be included in the Assessment Roll, the legislative determinations of special benefit ascertained and declared in Sections 16-109 and 16-110 of the Code are hereby ratified and confirmed.

B. It is fair and reasonable to use the DOR Codes, Use Codes, number of Dwelling Units, and parcel size data maintained by the Property Appraiser in the apportionment methodology because: (1) the Tax Roll database employing the use of such property use codes is the most comprehensive, accurate, and reliable information readily available to determine the property use and acreage for property within the Town, and (2) the Tax Roll database employing the use of such property use codes is maintained by the Property Appraiser and is thus consistent with parcel designations on the Tax Roll. This compatibility permits the development of an Assessment Roll in conformity with the requirements of the Uniform Method of Collection.

C. Where data available from the Property Appraiser was insufficient, the Town has verified and/or supplemented such data as needed for use in the determination of the Cost Apportionment and the Parcel Apportionment. It is fair and reasonable to use such additional data provided by the Town because such data provides a more accurate and complete record of property use and the structures on property.

D. Apportioning Solid Waste Assessed Costs among residential property based upon studies of demand for service and waste generation quantities by type of waste stream and by service areas within the Town is fair and reasonable and proportional to the special benefit received.

E. The value of Residential Property does not determine the scope of the required solid waste collection and disposal services. The Town has determined that the special benefit to Assessed Parcels and the demand for solid waste services varies by the type of waste stream. Household Waste has been determined to relate primarily to the number of Dwelling Units on Assessed Parcels. Bulk Waste has been determined to relate primarily to the size of the parcel. Based upon studies conducted for the Town, the relative potential demand for solid waste services to residential properties is driven by the number of dwelling units for Household Waste and the size of the assessed parcel for Bulk Waste.

F. The Report, attached as Appendix A to this Resolution, analyzed waste generation by type of waste and incorporates findings of several studies of waste generation in the Town. Based on such studies, it has been determined that nearly half of the Town's waste stream results from Bulk Waste, which primarily consists of vegetative debris. Given the high rate of Bulk Waste generation in the Town, it is fair and reasonable to separately analyze the costs of and

demand for solid waste services by the following types of waste: Household Waste and Bulk Waste.

G. Household Waste is generated relatively consistently on a per dwelling unit basis. Therefore, it is fair and reasonable to assess for costs related to Household Waste based on the number of Dwelling Units on each Assessed Parcel. Such per dwelling unit rates for Household Waste are fair and reasonable and do not exceed the special benefit to Assessed Parcels.

H. Bulk Waste, including but not limited to vegetative debris and livestock waste, generation rates are generally proportionate to the size of the parcel. Waste generation studies have concluded that areas of the town with larger lots generate substantially greater tonnage of Bulk Waste per parcel than areas of the Town with smaller parcels.

I. It is fair and reasonable to create assessment rate classes for Bulk Waste based on lot square footage ranges identified through analysis of solid waste generation and collection studies performed for the Town. It is fair and reasonable to allocate Bulk Waste assessed costs to each rate class in a manner that increases the share of costs on the assessed parcel as the parcel size increases. Therefore, the proposed Bulk Waste services assessment rates presented in the Report are fair and reasonable and do not exceed the special benefit to Assessed Parcels.

Section 6. Determination of Solid Waste Assessed Costs; Establishment of Initial Solid Waste Assessment Rates.

A. The Solid Waste Assessed Costs to be assessed and apportioned among benefitted parcels for Fiscal Year 2011-2012 commencing October 1, 2011, is the amount determined in the Solid Waste Assessment Schedule as described in the Report, attached as Appendix A to this Resolution. The approval of the Estimated Solid Waste Assessment Rate Schedule by the adoption of this Initial Assessment Resolution determines the amount of the Solid Waste Assessed Costs. The remainder, if any, of such Fiscal Year budget for solid waste services, facilities, and programs shall be funded from available Town revenue other than Solid Waste Assessment proceeds.

B. The estimated Solid Waste Assessments specified in the Estimated Solid Waste Assessment Rate Schedules as described in the Report are hereby established to fund the specified Solid Waste Assessed Costs determined to be assessed in Fiscal Year 2011-2012 commencing on October 1, 2011.

C. The estimated Solid Waste Assessments established in this Initial Assessment Resolution for Fiscal Year 2011-2012 shall be the estimated assessment rates applied by the Town Administrator in the preparation of the preliminary Assessment Roll for the Fiscal Year commencing October 1, 2011, as provided in Section 7 of this Initial Assessment Resolution.

Section 7. Preliminary Assessment Roll. The Town Administrator is hereby directed to prepare, or cause to be prepared, a preliminary Assessment Roll for the Fiscal Year commencing October 1, 2011, in the manner provided in the Code. The Assessment Roll shall include all Residential Assessed Parcels within the Assessment Rate Categories. The Town Administrator shall apportion the estimated Solid Waste Assessed Cost to be recovered through Solid Waste Assessments in the manner set forth in this Initial Assessment Resolution and the Report.

A. A copy of this Initial Assessment Resolution, documentation related to the estimated amount of the Solid Waste Assessed Cost to be recovered through the imposition of Solid Waste Assessments, and the preliminary Assessment Roll shall be maintained on file in the Office of the Town Clerk and open to public inspection. The foregoing shall not be construed to require that the preliminary Assessment Roll be in printed form if the amount of the Solid Waste Assessment for each parcel of property can be determined by the use of a computer terminal available to Town staff.

B. It is hereby ascertained, determined, and declared that the method of determining the Solid Waste Assessments for residential solid waste services as set forth in this Initial Assessment Resolution and the Report attached as Appendix A is a fair and reasonable method of apportioning the Solid Waste Assessed Cost among parcels of Assessed Property located within the Town.

Section 8. Authorization of Public Hearing. There is hereby established a public hearing to be held at 7:00 p.m. on September 12, 2011, in the Council Chambers in Southwest Ranches Town Hall, 6591 SW 160 Avenue, Southwest Ranches, Florida, at which time the Town Council will receive and consider any comments on the Solid Waste Assessments from the public and affected property owners and consider imposing Solid Waste Assessments and collecting such assessments on the same bill as ad valorem taxes.

Section 9. Notice by Publication. The Town Administrator shall publish a notice of the public hearing authorized by Section 8 hereof in the manner and time provided in Section 16-143 of the Code. The notice shall be published no later than August 23, 2011.

Section 10. Notice by Mail. The Town Administrator shall also provide notice by first class mail to the Owner of each parcel of Assessed Property, as required by Section 16-144 of the Code. Such notices shall be mailed no later than August 23, 2011. The Town Administrator may direct that such notices be combined with the TRIM notices prepared and mailed by the Property Appraiser.

Section 11. Application of Assessment Proceeds. Proceeds derived by the Town from the Solid Waste Assessments shall be deposited into the Solid Waste Assessment Fund and used for the provision of solid waste services, facilities, and programs. In the event there is any fund balance remaining at the end of the Fiscal Year, such balance shall be carried forward and used only to fund solid waste services, facilities, and programs.

Section 12. This Resolution shall take effect immediately upon its adoption.

PASSED AND ADOPTED by the Town Council of the Town of Southwest Ranches, Florida, this 1ST day of August, 2011, on a motion by Breitkreuz and seconded by Jablonski.

Nelson	YES
Fisikelli	YES
Breitkreuz	YES
Jablonski	YES
McKay	YES

Ayes	5
Nays	0
Absent	0
Abstaining	0

Jeff Nelson, Mayor

ATTEST:

Erika Gonzalez - Santamaria, CMC, Town Clerk

Approved as to Form and Correctness:

Keith Poliakoff, Town Attorney
ACTIVE: 3445827_1

APPENDIX A

TOWN OF SOUTHWEST RANCHES, FLORIDA

SOLID WASTE SERVICES SPECIAL ASSESSMENT REPORT

by

NEW COMMUNITY STRATEGIES

Town of Southwest Ranches, Florida
Solid Waste Special Assessment
Methodology Report

Prepared for the
Town of Southwest Ranches
Southwest Ranches, Florida

July 14, 2011

Prepared by:
New Community Strategies
Davie, Florida 33328

Introduction

The Town of Southwest Ranches ("the Town") has levied and collected a Solid Waste Assessment against benefitted residential properties within the Town to fund the provision of Solid Waste Services since 2002. The Town is considering the continuance of a residential assessment program for Solid Waste Services (the "Solid Waste Services").

The Town is conducting a new residential assessment study. Though waste generation rates and property data do not tend to vary significantly from year-to-year, additional information can lead to different apportionment methods. Subsequent to the originally levied residential assessment, the Town has had conducted waste management studies. As part of those studies, the Town has become aware that certain areas of the Town generate more solid waste tonnage than do other parts of the Town. As part of the commission of this report, the Town seeks to more fairly distribute the cost of solid waste collection, disposal, and management to benefitted properties.

The Town has previously determined that the owners of property specially benefited by the proposed Solid Waste Services should share in funding these services by imposition of non-ad valorem special assessments. The Town has levied special assessments only on developed residential property. Other developed properties in the Town also derive special benefit from the solid waste services; however, those properties are billed directly by the service provider and collection of a special assessment is not necessary. The Town plans to fund through special assessments up to 100% of the residential Solid Waste Services costs, estimated to be $1,678,654 in fiscal year 2012, as noted in Table B, *Costs of Residential Solid Waste Assessed.* The costs of residential Solid Waste Service include a solid waste franchise agreement that establishes a cost for the collection and disposal services, facilities, or programs; costs of managing and enforcing the agreement; costs of preparing assessment methodologies; costs of advertisements and notices; costs associated with the billing and collection, including costs and discounts associated with the uniform method of levy and collection of non ad valorem special assessments; contingencies or other necessary allowances; and any other cost associated with the cost of residential Solid Waste Services.

Procedural Requirements

The Florida Statutes contain a number of procedural requirements that define the process for adoption of the proposed Solid Waste Services Special Assessments. Additionally, the Town has adopted Ordinance Number 2002-8 to provide general procedures and standards for the imposition of annual residential Solid Waste Assessments.

The Town may collect the residential special assessments by direct mailing of bills to each assessed property or, if additional statutory requirements are or have been fulfilled, may collect the special assessments on the annual property tax bill under the Uniform Assessment Collection Act, Section 197.3632, Florida Statutes. Regardless of the method of collection the Town may use, the adoption of the Final Assessment Roll and Final Assessment Resolution shall place a lien equal to the amount of the total assessment, including interest, on each assessed property. Such lien is equal in rank and dignity to the lien of all state, county, district, and municipal taxes and other non-ad valorem assessments.

Estimated Cost of Solid Waste Services

The Town contracts for residential solid waste disposal and collection services ("the Services") with Waste Management (WM) through an exclusive franchise agreement ("the Agreement"). The Agreement for the Services provides for how the total cost of those Services will be determined. The Agreement provides for annual adjustments for cost of living increases and for changes in the disposal costs at approved disposal sites. Additionally, the Town estimates its own costs of management of residential solid waste activities for fiscal year 2012 at $328,718 directly. Appendix B, *Costs of Residential Solid Waste Assessed,* details the anticipated fiscal year 2012 costs the Town is expected to incur related to the provision of residential Solid Waste Services.

The annual residential solid waste services costs can include, but are not limited to:

1. The cost, whether direct or indirect, of all services, programs or facilities provided by the town, or through contractual arrangements with the town relating to waste management and disposal activities;
2. The cost of any indemnity or surety bonds and premiums for insurance;
3. The cost of salaries, volunteer pay, workers' compensation insurance, or other employment benefits;
4. The cost of computer services, data processing, and communications;
5. The cost of training, travel and per diem;
6. The recovery on unpaid or delinquent fees or charges advanced by the town and due for solid waste management and disposal services, programs or facilities allocable to specific parcels;
7. The cost of engineering, financial, legal, and other professional services;
8. All costs associated with the structure, implementation, collection, and enforcement of the solid waste service assessments or a prior year's assessment for a comparable service, facility or program, including any service charges of the tax collector or property appraiser;
9. All other costs and expenses necessary or incidental to the acquisition, provision, or delivery of the services, programs or facilities funded by the solid waste service assessment, and such other expenses as may be necessary or incidental to any related financing authorized by the town council;
10. A reasonable amount for contingency and anticipated delinquencies and uncollectible solid waste service assessments; and
11. Reimbursement to the town or any other person for any monies advanced for any costs incurred by the town or such person in connection with any of the items of solid waste cost set forth in this definition.

12. Any other cost that can be attributed to the provision of residential solid waste services within the Town.

The Town may choose to include all or only some of these costs so long as the total cost assessed does not exceed the actual cost of providing the service.

Determination of Benefit & Delineation of Benefit Area

An important step in the special assessment process is the determination of special benefit and delineating the geographic area that will benefit from the planned improvements (the "Benefit Area"). The proposed residential solid waste services will service all residential properties within the Town of Southwest Ranches, as generally delimited in Map A, *Town of Southwest Ranches Residential Solid Waste Service Area Map*. These residential solid waste services will, by their nature, provide direct and special benefit to the properties that will have these services. Non-residential improved properties are provided solid waste services through the exclusive solid waste franchise agreement, but are billed directly by the service provider due to the frequent changes in types and frequency of services. Unimproved residential lands that are not otherwise non-residential customers have not been found to benefit from Solid Waste Services because insufficient evidence exists to demonstrate such a benefit.

The Benefit Area for the Town of Southwest Ranches solid waste services special assessments includes all such developed residential properties within the Town. The parcels are identified by the unique Folio Number assigned by the Broward County Property Appraiser (BCPA) for purposes of the ad valorem property tax roll, as shown on the Preliminary Assessment Roll and more fully described below.

Cost Allocation Methodology

Parcel Identification

Using the BCPA's tax roll data, benefited parcels were identified using the various categories of land use codes within that data set. Additionally, and to keep the proposed apportionment categories as close to the existing categories as possible, we relied upon the Solid Waste District codes currently maintained by the BCPA. The BCPA has previously identified and coded the improved residential properties by type and assigned each parcel an appropriate Solid Waste District Code. From that data, we obtained further information regarding parcel size from the BCPA. We reviewed consistency in this data and it was determined to be of high accuracy. The Solid Waste Class code thus used was as follows:

Garbage District 9

There were 3,226 unique parcels or folio numbers within the Town of Southwest Ranches provided to us by the BCPA for the 2010 property tax year. After eliminating all parcels except those that have an improvement on a developed residential land use, we were left with 2,381 parcels that benefit from residential solid waste collection and disposal services, as listed in the BCPA solid waste file (SW_Ranches_July_14.xlsx). All of those had previously been coded with Garbage District 9 by the BCPA. None of the identified parcels were exempt for purposes of this solid waste special assessment and the data quality was judged to be extremely high.

Solid Waste Demand

The Town has previously commissioned studies on solid waste demand. In July 2008, the Town accepted the RW Beck Waste Generation Study Final Report ("Beck" or "the Beck Report", Attachment "A"). In August 2009, the Town accepted the T.F. Hunt and Associates Collection System Evaluation Study" ("Hunt" or "the Hunt Report", Attachment "B"). Beck documented that 46%[1] of the Town's waste stream results from bulk waste collection, while 54% results from household garbage. The average setout weight was found to be approximately 500 pounds[2]. Bulk waste is set out for collection by 30%[3] of homes each collection opportunity. Homes in all areas commingle their bulk waste setouts and very little of the bulk waste is non-vegetative (or conversely stated, almost all of the bulk waste is vegetative or yard waste)[4]. Horse boarders and small farms set out much larger quantities of solid waste[5] and that there were noticeable differences in the tonnage collected in Area 1 of the Town (Flamingo Road west to Interstate 75) than of Areas 2 (Interstate 75 west to 185th Avenue) or 3 (185th Avenue west to US-27)[6] (See Map A). Area 1 had 415 pounds per month per home collected, Area 2 had 293 pounds per month per home, and Area 3 had 255 pounds per month per home. The parcel sizes in Area 1 are noticeably larger than in Areas 2 and 3 and both reports noted the disparity in the amount of solid waste collected[7]. The Hunt report reinforced this data and noted many reasons the Town significant bulk waste tonnage being collected[8]. Both reports attributed the tonnage to vegetative and livestock waste, principally. Both of these sources of bulk waste disposal are noted to be generally in proportion to the size of the parcel. This was the genesis of the Town's desire to re-examine how it apportioned solid waste costs to its residents.

---

1 R.W. Beck, Waste Generation Study Final Report, July 22, 2008, page 8.

2 Beck, page 8.

3 Beck, page 8.

4 Timothy F. Hunt, Jr., & Associates, Collection System Evaluation Report, August 20, 2009, page 6.

5 Hunt, page 5.

6 Hunt, page15, with tonnage recalculated to pounds per home.

7 Hunt, pages 4-6.

8 Hunt, pages 5-7.

Apportionment Methodology

After discussing several methods of apportionment, the Town Council directed the study to examine varying the assessment with the size of the parcel. The initial study of this methodology resulted in fairly unique assessments for each parcel, but also produced a wide tail in its frequency distribution that had exceptional and likely indefensible costs of solid waste services at the high end. The Town Council felt that the method needed to be compressed to be less unwieldy and generally more equitable across various ranges or tranches of parcel size. After reviewing the parcel size data of the benefitted properties, an assessment schedule of 6 similar ranges or tranches of parcel sizes with approximately 400 parcels per range or tranche were developed. We massaged the ranges or tranches to fit them more neatly into more or less logical parcel size cutoff points, each of which is noted in Table A, Solid Waste Assessment Schedule By Parcel Size. The assessment for each successive range or tranches was then made 20% to 100% greater than the initial range or tranche of the smallest size range. The total assessable costs of solid waste services, as detailed in Table B, Costs of Solid Waste Services Assessed, were then distributed to each range or tranche according to the number of parcels in each tranche. This resulted in a range of assessments of between $468.64 and $994.76, as noted in Table A, *Solid Waste Assessment Schedule By Parcel Size.*

Having presented the final results to the Town Council and having met with their satisfaction, they directed the assessment methodology be accepted.

Table A

Solid Waste Assessment Schedule By Parcel Size

Assessment Range Title	Lot Square Footage Range		Number of Parcels In Range	Number of Sold Waste Units In Range	Percent of Total	Amount Collected In Range	Cost Per Unit	Current Rate	Difference
A	-	41,200	398	401	16.72%	186,517.11	468.64	687.00	(218.36)
B	41,201	46,999	407	407	17.09%	223,820.53	549.93	687.00	(137.07)
C	47,000	62,999	394	400	16.55%	261,123.96	662.75	687.00	(24.25)
D	63,000	95,999	406	421	17.05%	298,427.38	735.04	687.00	48.04
E	96,000	106,999	401	411	16.84%	335,730.80	837.23	687.00	150.23
F	107,000	>107,000	375	401	15.75%	373,034.22	994.76	687.00	307.76
			2,381	2,441	100.00%	1,678,654.00			

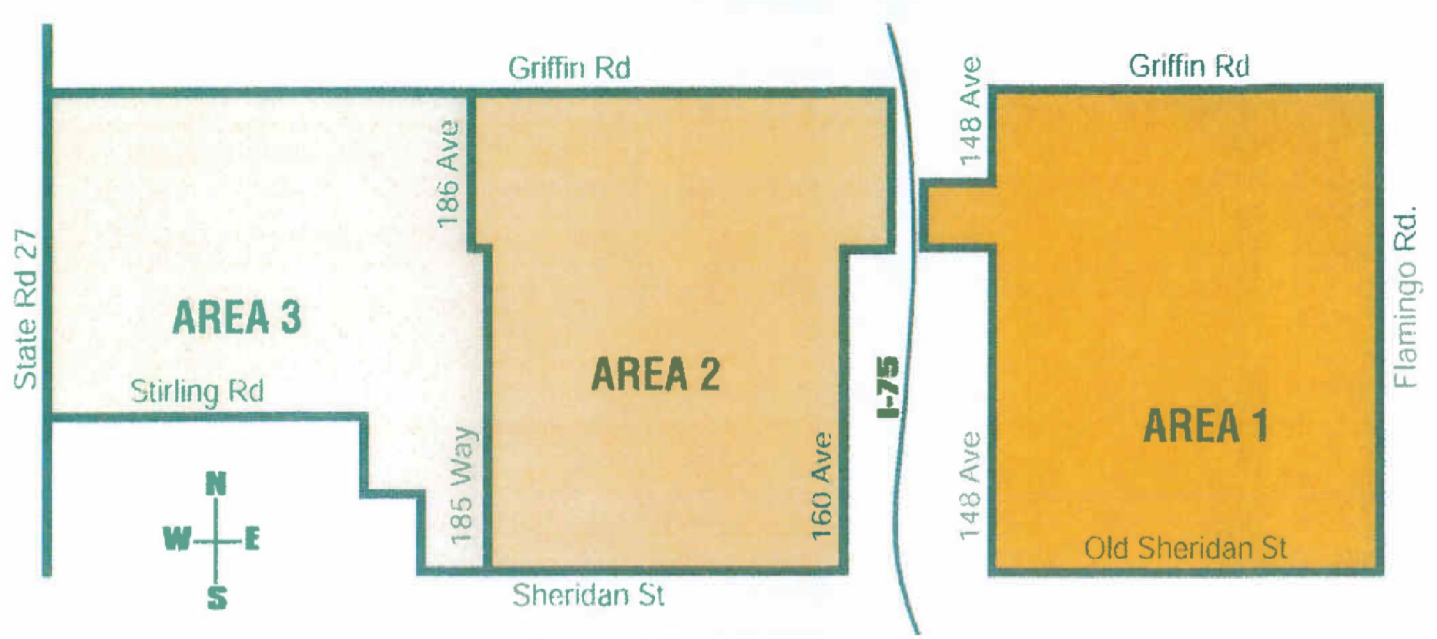
Table B

Costs of Residential Solid Waste Services Assessed

FY2012 Waste Management Residential Contract Costs, Estimated at 7/13/2011		$1,270,000
Costs of Town of Southwest Ranches Residential Solid Waste Management Services:		
Contractual Code Enforcement Costs	80,000	
Southwest Ranches Allocated Salaries	136,160	216,160
Costs of Assessment Methodology and Legal Fees		25,000
Costs of Advertisements and Notices		5,000
Broward County Property Appraiser and Tax Collector's Fees		1,409
Discounts Allowed For Early Payment On Tax Bill		81,149
Contingencies @5%		79,936
Total Assessable Costs		$1,678,654

MAP A

Town of Southwest Ranches Residential Solid Waste Service Area Map



Weekly SOLID (GARBAGE) Waste Days

AREA 3	AREA 2	AREA 1
WEDNESDAY & SATURDAY	TUESDAY & FRIDAY	MONDAY & THURSDAY

BULK Collection Service Dates by Area

Area 3 (Wednesday only)	Area 2 (Tuesday only)	Area 1 (Monday only)

ATTACHMENT A

RW Beck Waste Generation Study Final Report

July 22, 2008

July 22, 2008

Ms. Malini Siew-Narine
Supervisor, Public Works Division
Town of Southwest Ranches
6589 SW 160th Avenue
Southwest Ranches, FL 33331

Mr. Jim Veach
Manager
Waste Management of FL, Inc.
2700 NW 48 Street
Pompano Beach, FL 33073

Subject: Waste Generation Study Final Report

Dear Ms. Siew-Narine and Mr. Veach:

This report provides the results of the waste generation study (Study) that R. W. Beck conducted in the Town of Southwest Ranches from January 2008 to July 2008. The purpose of the study was to determine the amount of Garbage, Rubbish, and Yard Trash generated by Southwest Ranches residential customers. Garbage, Rubbish, and Yard Trash is collected from each customer twice per week and Bulk Waste is collected twice per month. In this study data were gathered for both Garbage, Rubbish, and Yard Trash, and Bulk Waste collections.

Analysis of the data indicate that Southwest Ranches households generated on average:

- 2.13 tons per household per year of Garbage, Rubbish, and Yard Trash (MSW); and
- 1.82 tons per household per year of Bulk Waste.

The town of Southwest Ranches has a contract with Waste Management, Inc. of Florida ("Waste Management") for the curbside collection of the solid waste generated by the Town's residential customers. The Town's contract with Waste Management is based on an initial solid waste generation rate of 1.80 tons per year of Garbage, Rubbish, and Yard Trash (MSW) and 1.00 tons per year of Bulk Waste per residential customer per year. The data collected by R. W. Beck indicate that the waste generation rate for Garbage, Rubbish, and Yard Trash for the average customer is 18 percent more than the initial waste generation rate used in the Town's contract with Waste Management. Likewise, the data collected by R. W. Beck indicate that the waste generation rate for Bulk Waste for the average customer is 82 percent more than the initial waste generation rate used in the Town's contract with Waste Management.

R:\Orlando\005796-Southwest Ranches\05-01400-10101 SOUTHWEST RANCHES -WA \Work Products\ Waste Gen Final Report.doc
1000 Legion Place, Suite 1100 Orlando, FL 32801 Phone (407) 422-4911 Fax (407) 648-8382

ATTACHMENT A

RW Beck Waste Generation Study Final Report

July 22, 2008

Methodology

Sampling Plan Development

Sampling plan development began with a review of Waste Management collection routes and schedules, historical monthly solid and Bulk Waste collection tonnages, and historical monthly 30-year temperature and rainfall averages. That information was considered in developing the methodology and for selecting normal and representative months for data collection.

Residential solid waste collection services are provided twice per week to single family homes in the Town. Bulk waste collection service is provided twice per month to each home. Town residents are required to segregate their Bulk Waste into bulk yard trash, white goods (appliances), and other bulk waste.

A review of the above information indicated that waste generation may vary between the warmer/wetter part of the year and the cooler/drier part of the year. The methodology that was developed therefore provided for collecting waste generation data during two separate times of the year: once during the cooler/drier part of the year, and once during the warmer/wetter time of the year. The frequency of data collection chosen for this Study provides a sufficient balance between the amount of data to be collected, Study cost, and disruption to Waste Management's normal operations during the period of the Study.

Because of the small size of the Town, data was collected from one hundred percent of Garbage, Rubbish, and Yard Trash collection routes and one hundred percent of Bulk Waste collection routes during the two data collection periods. The Town is divided into three collection areas. Waste Management operates one route each for Garbage, Rubbish, and Yard Trash collection in Areas 1 and 3. Two routes are operated for Garbage, Rubbish, and Yard Trash collection in Area 2. Waste Management uses a subcontractor, Inner City Disposal, to collect Bulk Waste – up to five bulk waste collection trucks are typically used each day of collection. Waste Management's standard operating procedure was to hand load small piles of Bulk Waste into its regular waste collection trucks that collect Garbage, Rubbish, and Yard Trash, mixing the two types of waste. During the periods when Bulk Waste data was collected for this Study, Waste Management provide an additional rear-load refuse truck and crew to collect hand-loadable Bulk Waste separately from Garbage, Rubbish, and Yard Trash.

Figure 1 shows the Garbage, Rubbish, and Yard Trash and Bulk Waste collection map and schedule for the first year of Waste Management's contract extension.

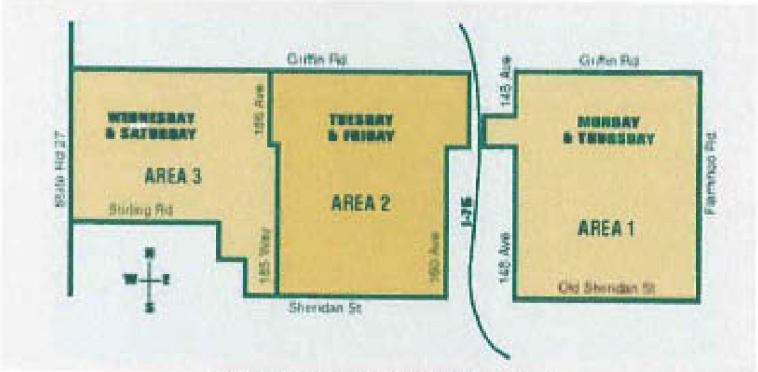
ATTACHMENT A

RW Beck Waste Generation Study Final Report

July 22, 2008

Ms. Malini Siew-Narine
Mr. Jim Veach
July 22, 2008
Page 3

Figure 1
Solid Waste Collection Map and Schedule



Bulk Waste Collection Service Dates by Area

	Area 3 (Wednesday only)		Area 2 (Tuesday only)		Area 1 (Monday only)	
Oct-07	10/3/2007	10/17/2007	10/2/2007	10/16/2007	10/1/2007	10/15/2007
Nov-07	11/7/2007	11/21/2007	11/6/2007	11/20/2007	11/5/2007	11/19/2007
Dec-07	12/5/2007	12/19/2007	12/4/2007	12/18/2007	12/3/2007	12/17/2007
Jan-08	1/9/2008	1/23/2008	1/8/2008	1/22/2008	1/7/2008	1/21/2008
Feb-08	2/6/2008	2/20/2008	2/5/2008	2/19/2008	2/4/2008	2/18/2008
Mar-08	3/5/2008	3/19/2008	3/4/2008	3/18/2008	3/3/2008	3/17/2008
Apr-08	4/9/2008	4/23/2008	4/8/2008	4/22/2008	4/7/2008	4/21/2008
May-08	5/7/2008	5/21/2008	5/6/2008	5/20/2008	5/5/2008	5/19/2008
Jun-08	6/4/2008	6/18/2008	6/3/2008	6/17/2008	6/2/2008	6/16/2008
Jul-08	7/9/2008	7/23/2008	7/8/2008	7/22/2008	7/7/2008	7/21/2008
Aug-08	8/6/2008	8/20/2008	8/5/2008	8/19/2008	8/4/2008	8/18/2008
Sep-08	9/3/2008	9/17/2008	9/2/2008	9/16/2008	9/1/2008	9/15/2008

After reviewing route and collection service schedules, collections operations procedures, and the other information discussed above, target periods for data collection that were chosen were: (1) the period from Thursday, January 24, 2008 to Wednesday, February 6, 2008; and (2) the period from Thursday, July 10, 2008 to Wednesday July 23, 2008. At the Town's request, and with the agreement of Waste Management, the second period of data collection was moved forward by several days to the period from Monday July 7, 2008 to Saturday July 12. The change was made so as to have final Study results in sufficient time for the Town to go through its budget, comment and approval process for the proposed property tax millage increases due by August 4, 2008.

Within each period of data collection, the study protocol that was developed called for data to be collected from a single one-week Garbage, Rubbish, and Yard Trash collection cycle (each

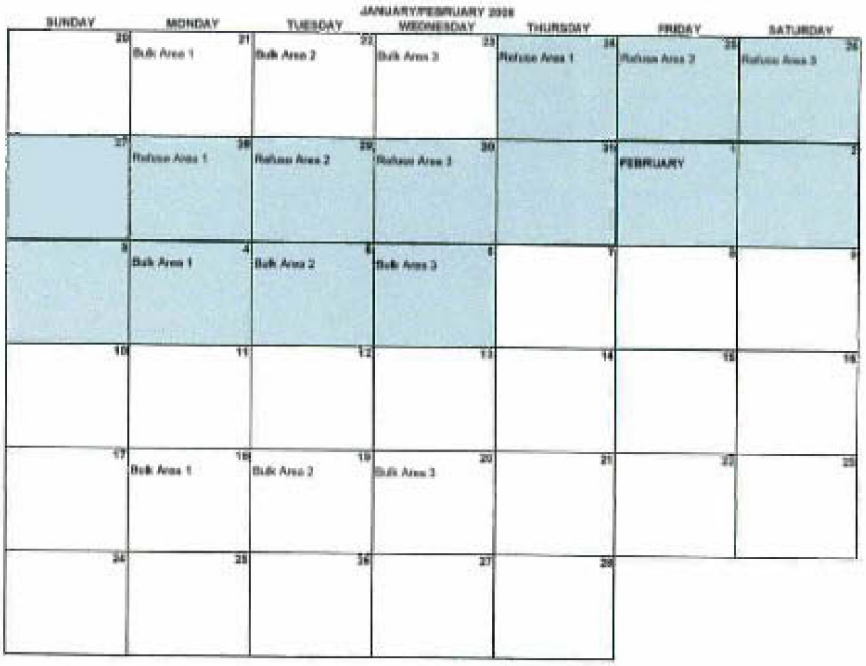
ATTACHMENT A

RW Beck Waste Generation Study Final Report

July 22, 2008

of the two solid waste collection days per week provided to a residential service unit) and a single Bulk Waste collection cycle that encompasses either two or three weeks of Bulk Waste accumulation, depending on the specific month chosen. The periods chosen for data collection in this Study are depicted in Figures 2 and 3. The shading on the calendar illustrates the period of Bulk Waste accumulation, which overlaps with the schedule over which Garbage, Rubbish, and Yard Trash collection data were to be obtained.

Figure 2
Waste Generation Data Collection Schedule for the Cooler-Drier Period

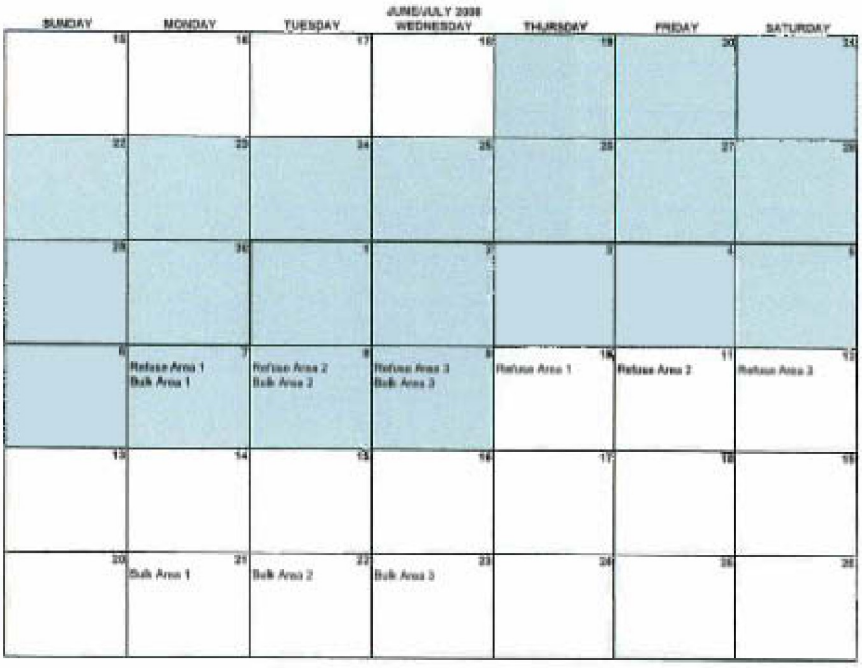


ATTACHMENT A

RW Beck Waste Generation Study Final Report

July 22, 2008

Figure 3
Waste Generation Data Collection Schedule for the Warmer-Wetter Period



Field Monitoring

R. W. Beck staff monitored each waste collection vehicle during the period when data were collected. Prior to Waste Management or its subcontractor beginning the collection of Garbage, Rubbish, and Yard Trash or Bulk Waste, the R. W. Beck staff person assigned to monitor the collection vehicle verified that it started empty. R. W. Beck's monitor then followed the collection vehicle for the entire day, including the drive to the disposal facility. At the disposal facility (Broward County Resource Recovery System's South and/or North waste-to-energy plants, for processible waste) the truck was weighed going in full and weighed again going out empty, at which time a weigh ticket was to be obtained by the driver. R. W. Beck recorded the disposal ticket number and net disposal weight on a data collection form and returned the disposal ticket to the driver. Monitoring of Bulk Waste collection followed the same procedure, except that Bulk Waste was delivered to Delta Recycling of Davie (a Waste Management company).

ATTACHMENT A

RW Beck Waste Generation Study Final Report

July 22, 2008

The purpose of continually following and monitoring trucks was to ensure that:

- Trucks started empty;
- Only waste from Southwest Ranches residential service units was collected;
- Bulk Waste and Garbage, Rubbish, and Yard Trash were not collected together and mixed; and
- Prohibited waste (e.g., contractor waste, demolition debris, commercial waste) and Bulk Waste in excess of the collection limit was not collected.

When monitoring Garbage, Rubbish, and Yard Trash collection, the number of homes on a route (i.e., not the number of homes setting out waste) was counted and recorded. When monitoring Bulk Waste collection, the number of homes setting out Bulk Waste was recorded. The Garbage, Rubbish, and Yard Trash collection home count was collected during both data collection periods to ensure that growth in the number of homes over the course of the study was accounted for.

Because of the Town's Bulk Waste quantity setout restrictions, Waste Management's standard operating procedure is to tag and leave the entire pile of Bulk Waste when the pile size exceeds twelve cubic yards. Waste Management's normal procedure is to return to collect the Bulk Waste from the home at a later time, after the home pays an additional charge for collection of the excess material. During the Study period, if a home set out more than twelve cubic yards of Bulk Waste, Waste Management collected only twelve cubic yards and then tagged and left the remaining additional material. Because collection and disposal fees for the excess material are paid for by homeowners directly to Waste Management and are not part of Waste Management's collection services agreement with the Town, excess quantities of Bulk Waste were not to be counted or included in the data collected by this Study.

Data Analysis

Raw field data were analyzed by R. W. Beck to arrive at annualized waste generation rates for each data collection period. First, the weight of all Garbage, Rubbish, and Yard Trash that was collected during the first data collection period was totaled. That value was then divided by the total of the number of homes "passed by" the collection trucks, yielding a value of pounds per week of Garbage, Rubbish, and Yard Trash per residential service unit. That figure was then multiplied by 52 to produce an annualized total. In like manner, the Bulk Waste that was hand loaded into the separate rear-load residential waste collection truck (which normally is collected mixed with Garbage, Rubbish, and Yard Trash by Waste Management and disposed at the Broward County Resource Recovery System's waste to energy plants) was summed and divided by the number of days since the last bulk collection (i.e., number of days of accumulation). That weight was then multiplied by 365 days to provide an annualized total weight, which was also divided by the number of residential service units. Finally, all Bulk

ATTACHMENT A

RW Beck Waste Generation Study Final Report

July 22, 2008

Waste collected by the Bulk Waste collection trucks in the Town was summed and divided by the number of days since the last bulk collection (i.e., number of days of accumulation). That weight was then multiplied by 365 days to provide an annualized total weight, which was also divided by the number of residential service units to form the first data collection period generation rate for Bulk Waste.

The same method of data analysis was followed for the second data collection period. The waste generation rates obtained from the two data collection periods were then averaged to produce an annual estimate of average waste generation for each residential service unit, with separately reported values: (1) Garbage, Rubbish, and Yard Trash; (2) Bulk Waste disposed at the Broward County Resource Recovery System's waste to energy plants, and (3) Bulk Waste disposed at Delta Recycling.

Results

Table 1 shows the results of R. W. Beck's analysis of the Study data on an annual basis. Data are presented on a monthly basis in Table 2.

Table 1
Seasonal and Average Solid Waste Generation – Annual Basis
(tons per home per year)

	January/February 2008	July 2008	Annual Average
Garbage, Rubbish, and Yard Trash	*2.04*	*2.03*	*2.04*
Bulk Waste Disposed with MSW	*0.08*	*0.11*	*0.10*
Total Garbage, Rubbish, and Yard Trash	2.13	2.14	2.13
Bulk Waste	1.81	1.82	1.82
Total Waste Generation	**3.94**	**3.97**	**3.95**

Table 2
Seasonal and Average Solid Waste Generation – Monthly Basis
(tons per home per month)

	January/February 2008	July 2008	Annual Average
Garbage, Rubbish, and Yard Trash	*0.1703*	*0.1696*	*0.1699*
Bulk Waste Disposed with MSW	*0.0070*	*0.0089*	*0.0080*
Total Garbage, Rubbish, and Yard Trash	0.1773	0.1785	0.1779
Bulk Waste	0.1512	0.1519	0.1516
Total Waste Generation	**0.3285**	**0.3304**	**0.3295**

ATTACHMENT A

RW Beck Waste Generation Study Final Report

July 22, 2008

The waste generation rates shown in Tables 1 and 2 are higher than the Residential Waste Generation Factors found in the Collection Services Agreement of 0.1500 tons per month (1.80 tons per year) of Solid Waste/White Goods and 0.0833 tons per month (1.00 tons per year) of Bulk Yard Trash.

The waste generation rates shown above were derived from data from 100 percent of the homes in the Town during two different parts of the year, which included a full week's generation of MSW and a full collection cycle accumulation of Bulk Waste (two weeks in January/February and three weeks in July, 2008). We monitored collection as agreed to in the Waste Generation Study Methodology document dated January 22, 2008. It is our opinion that data were collected under normal and representative conditions.

R. W. Beck gathered data on the number of Bulk Waste set-outs that were collected with bulk waste collection trucks as part of this Study, which allowed for additional analysis of Bulk Waste disposal characteristics. Bulk Waste constitutes 46 percent of the total waste generated. On average, Bulk Waste was set out by 30 percent of service units on each collection opportunity. The average weight of each Bulk Waste set-out was 500 pounds.

Please contact me at (407) 422-4911 should you have any questions about this interim report or the revisions made to the original figures that were reported.

Sincerely,

R. W. BECK, INC.

Timothy M. Buwalda

Timothy M. Buwalda
Project Manager

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

TIMOTHY F. HUNT JR & ASSOCIATES
1401 CLYDESDALE AVENUE, WELLINGTON, FLORIDA 33414
PHONE 561-798-6378, FAX 561-798-6403

TO: CHARLES LYNN
FROM: TIM HUNT
SUBJECT: **COLLECTION SYSTEM EVALUATION**
DATE: AUGUST 20, 2009
CC: BERT WRAINS

This Residential Waste Collection System Evaluation (RWCSE) was undertaken for the express purpose of identifying potential options for reducing the cost of this service for the Town and its residents. The residential customer rate for collection service is the highest in Broward County, over $250.00 per year per unit higher than the average service rate. Service rates per residential unit are composed of the following components for FY 2010.

Collection	$305.64
Disposal	$292.08
Hauler	$597.72
Administrative	$ 66.37
Total	$664.09

In order to identify options for rate reduction the focus of this evaluation is on the collection and disposal components of the service. Elements of this evaluation included a review of applicable documents; Collection Service Agreement and modifications, applicable Town code, R.W. Beck generation study, Broward County Interlocal Agreement, quarterly tonnage reports, service invoices and comparables primarily within the County.

The evaluation also included a thorough inspection of each collection route (Service Area) during the week of July 27 – August 1, 2009 in order to record set outs by number and size of container (cans and bags) as well as bulk waste (vegetative and other). This one week route inspection effort proved to be the most revealing of the evaluation effort.

Applicable provisions of each document and service route inspection are summarized below:

Town Code:
Prohibits placement of any waste on or into any swale in the Town unless it is generated by the resident on the property adjacent to the swale and is non-business generated waste.

The Code recognizes that non-residential establishments have masqueraded their waste as residential waste. [This is still a common practice]. Additionally the Code recognizes that contract service providers have placed their waste into swales to be collected by the franchise service firm. [Still a common practice]

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

Town Newsletter: August 2009 Trash Talk:
"Vegetative waste should not be placed out as household garbage."…put your vegetative debris out on your bulk day and the clamshell services your yard waste. Some residents try to beat the system and bag all of their vegetative debris to pass it off as household waste to get bulk service weekly." A few palm fronds are okay. [Message is confusing. The practice of containerizing vegetative debris for bi-weekly collection is quite prevalent and it is collected]

Solid Waste Collection Brochure

- Bulk Waste and Bulk Yard Waste defined
  - — must be generated by "the customer" at the residential unit where it is generated. Does not include contractor generated waste. [Contractor generated waste is still set out: often by individual labor hired by the resident for general property maintenance]
  - — Bulk Trash must be separated from Bulk Yard Trash. [Both are commonly mixed and picked up by the Contractor]
  - — 12 cubic yard limit [Exceeded and collected]
- Solid Waste (Garbage)
  - — Cans must be 40 gallons or smaller and have handles [Most common size is 45 gallons with handles and 20/32/34 gallons some without handles]
- Construction Contractors and Landscape Maintenance Providers must dispose of debris generated by their work [Not always practiced]

Collection Franchise Agreement as Modified:

- Renewed through 9/30/2012,
- Bulk Trash: household furniture, homeowner generated improvement debris, household goods, appliances must not be generated by a contractor (i.e. someone paid to do the work),
- Bulk Yard Trash: vegetation from normal yard maintenance activities not generated by a contractor,
- Business: retail, professional, wholesale, industrial, religious, or offering goods or services. [Does this include: boarding stables, equestrian training facilities, home nurseries etc.? Many place garbage, bulk trash and bulk yard trash out for residential collection],
- Disposal Facility: Wheelabrator Broward for processible bulk and household solid waste Town designated facility for non-processible bulk waste,
- Residence: a living unit of 4 or less units. Mobile homes in a licensed MHP or one that adjoins a business,
- Residential Level of Service
  - — unlimited containerized household garbage 2/wk
  - — bulk waste maximum of 12 cubic yards 2/mo.
- Applicability: "…in no event shall a business use the Residential Solid Waste Collection Service
- Conditions of service: bulk yard trash must be separated from all other bulk waste into an unobstructed pile. Separation is imperative and commingled piles will not be collected. [Bulk yard trash piles are commonly commingled with non-vegetative Trash and are collected].

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

Interlocal Agreement with Broward County:

- Disposal obligation: delivery of all solid waste generated in the contract community to the resource recovery system disposal facility,
- Disposal facility(ies): the resource recovery system per the plan of operation (Wheelabrator)
- Processible waste: everything that is collected under the Town collection contract that is not unprocessible,
- Unprocessible waste: non-combustible waste (such as bulk waste including anything exceeding six feet in length as is bulk yard trash),
- Article 4 (4.13): solid waste segregation programs are not prohibited by this agreement for purposes of reuse or recycling (such as yard trash i.e. vegetation)

R.W. Beck Waste Generation Study (2008):
This study focused exclusively on the amount of solid waste (garbage) and bulk waste generated in the Town. For two weeks (one winter, one summer) Beck representatives rode in each collection vehicle to verify that only properly set out waste was collected and delivered for disposal. Weight records for each truck were collected at Wheelabrator and Delta to determine actual generated tonnage.

The study concluded that Town households generated on average:
2.13 tons per household per year of MSW
1.82 tons per household per year bulk waste
3.95 tons total per household per year.

This compares to an original collection franchise agreement waste generation rate per household average:
1.80 tons per household per year of MSW
1.00 tons per household per year bulk waste
2.80 tons total per household per year.

Results represent an 18% increase in MSW and 82% increase of bulk waste generated per household.

One rear load packer was used in both Areas 1 and 3 while two were used in Area 2 for collection of household waste, up to five (5) grapple trucks were used daily for bulk waste collection in each Area. Bulk waste was noticeably higher in Area 1 than the other two Areas even though it has the fewest number of residential units.

Tonnage Reports for MSW and Bulk Waste Disposed:
Reports for all four quarters of 2008 and the first seven months of 2009 are presented in the attached summary tables (1 and 2) for MSW and Bulk tonnage. These data show the following generation rates on a per unit basis.

	2008 (12 months)	2009 (7 months)
MSW	1.92 tons (0.16/mo.)	.99 tons (0.1416/mo.)
Bulk	2.10 tons (0.175/mo.)	1.39 tons (0.1985/mo.)
	3.12 tons	2.38 tons

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

If the seven (7) months of 2009 are used to project the full 12 month period the following would be the per unit waste generation:

2009 (12 month projection)
MSW 1.70 tons (0.1416/mo.)
Bulk 2.38 tons (0.1983/mo.)
4.08 tons

These data suggest that there has been some measure of success in dealing with non-residential MSW by requiring dumpsters at all nurseries in Town. The same cannot be said for bulk waste the majority of which is bulk yard waste and there is more that can be done with non-residential MSW.

Route Survey Findings:
During the week of July 27th through August 1st, 2009 each service area was surveyed ahead of collection vehicles. The survey included recording every set out for size (gallons) and number of garbage containers (cans and bags) as well as estimating the quantity of all bulk trash and yard waste in cubic yards. Containers were ultimately converted to cubic yards and pounds. Bulk waste was converted from cubic yards to weight using fairly standard conversion factors. Calculated weights differ from the actual tonnage reports. See Exhibit I for explanation.

With this memorandum are summary inspection forms for each service area 1, 2 and 3. With twice weekly MSW collection typically the first cycle has the highest set out rate as well as the largest quantity of waste per set out. This was true for all three service areas, however Area 1 was by far the highest in both set outs and quantity of MSW as well as Bulk waste. Size containers in use range from 20 gallons to 48 gallons with the most common used being 32, 34 and 45 gallon.

A summary of all three service areas is presented in Table 3. For purposes of this evaluation a total residential unit count for the Town of 2275 billing units was used as follows: Area 1: 505, Area 2: 989, Area 3: 781. Area 1 had an 80% set out rate on the first cycle compared to 68% and 67% respectively for Areas 2 and 3. In Area 1, 86% of set outs were of 1 to 3 average of 32 gallon containers whereas Areas 2 and 3 respectively were 79% of 1 to 2 average 32 gallon and 82% of 1 – 2 average 38 gallon containers. Set outs for the second cycle were similar for Areas 1 and 2 53% and 51% respectively both with an average 1 to 2 cans set out. A notable difference was larger capacity containers in Area 2 at 37 gallon. Area 3 had a much lower set out rate of 41% although with larger capacity containers of 42 gallons.

Bulk waste set outs in all three service Areas were characterized by being commonly commingled yard waste and trash. Another notable piece of data is the set out rate (% of all units) of bulk waste: Area 1-33%, Area 2-28% and Area 3-27%.

Area 1 not only had the largest set out rate for Bulk waste but also the largest average quantity of 6.8 cubic yards while Areas 2 and 3 averaged 5.6 cubic yards per set out.

The most notable data from this route (area) utilization survey includes the following:

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

MSW
- 70% to 85% of residents set garbage out on the first collection cycle,
- 40% - 55% set MSW out on the second collection cycle,
- the average number of containers set out for 80+% of residents is 2 averaging 35 gallons.
- A wide range of container sizes are used by residents and most use a mix of sizes,
- the average weight of a container used (can or bag) is between 33 and 36 pounds with larger containers and weights of up to 41 pounds in western Area 2 and Area 3.

Bulk
- on a typical Bulk collection day 30% of all residents set Bulk waste out for collection,
- the vast majority of set outs average 6.0 cubic yards with more in Area 1 and less in Areas 2 and 3.

Observations Made on Area Route Surveys:

1. 50% or more of bulk yard waste piles contained non-yard waste Bulk waste and it is collected,
2. Many residents put vegetation in cans and bags on both collection days and it is picked up,
3. non-vegetative Bulk waste represents a small fraction of total Bulk waste set out and collected,
4. small "homeowner" nurseries with dumpsters place large quantities of Bulk yard waste out for collection as residential waste,
5. equestrian boarding as well as training properties set out much larger quantities of MSW for collection than non-boarding and training properties. Properties with farm animals set out more MSW waste than residential properties without such animals. [Feed and care waste as well as non-resident waste at boarding and training properties]
6. very little non-vegetative Bulk waste is composed of large items such as furniture or appliances which are unprocessible,
7. large acreage equestrian facilities place vegetation out for collection and it is picked up,
8. Bulk yard waste piles exceeding the 12 cubic yard limit, some much larger, are collected although the number of these set outs is small as a % of units.
9. construction waste from new construction sites was set out for collection and removed (one each in Area 1 and Area 3)

Comparables:

- Level of service – Bulk trash collection
  - — 15 municipalities in Broward receive monthly or less frequent bulk service
- 2008 Annual Residential Fee
  - — Southwest Ranches highest at $561.00
  - — Broward average $300.29
  - — Area municipalities
    - Cooper City $437.64
    - Davie $295.29
    - Pembroke Pines (1/3 lower disposal fee) $230.52
    - Miramar $296.16
    - Westin $276.05

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

- Level of service – two nearby municipalities
  - — Pembroke Pines: 2x wk garbage 1 – 95-gal. cart extra cost $3.00/mo in 2007
    1 / mo bulk (unknown quantity) [Note: lower disposal fee]
  - — Miramar: 2x wk garbage and bundled yard waste – 8 container limit 32 – 39 gallons each
    1 / mo bulk – 6cy limit

Findings:

1. Solid Waste Collection Program lacks application of control over the program by all parties: residents, Town and hauling contractor.
   - — Residents: as previously noted residential customers frequently commingle bulk waste, fill cans and bags with yard waste for collection as garbage and occasionally place much more than 12 cy Bulk waste out for collection. Also residents with on site non-residential activities use the residential collection service for non-residential waste collection to include allowing their contractors to place Bulk waste out for collection.
   - — Town: largely relies on the hauling contractor to identify and deal with the issues noted above and informing the Town at the end of each day. A review of these reports provided by the Town for the week of the survey suggests this approach does not work – it makes the hauling contractors truck drivers the trash policeman for the Town.
   - — Hauling contractor: like most solid waste collection contractors prefer to minimize citizen complaints even if the citizen is at fault. They get paid to pick up 100% of residential units even though there is never 100% set outs and often only 50%. Disposal costs are essentially a pass through expense. Thus there is little to no incentive to put this policing or code enforcement burden on the garbage truck driver. In addition, the subcontractor providing (grapples) are paid by the ton of disposed waste which encourages collecting everything.

   The bottom line is the program lacks any enforcement of contract and Town code terms and conditions which appears to be a primary reason for very high residential waste generation rates and disposal charges.
2. Invoices and Tonnage Reports:
   - — Monthly invoice has two line items; one for curb solid waste and bulk collection and disposal and one for recycling collection with no detail.
   - — Tonnage reports are provided quarterly even though disposal is charged monthly.

   There is little, if any ability, to timely reconcile monthly charges especially disposal or provide any trend analysis useful for identifying needed corrective action, for future service related policy decisions or bidding of collection service.
3. There is an apparent lack of comprehensive comparable information available in the public sector in Broward County. Cost is just a number. It does not tell you specific levels of services provided, waste generation factors, unit densities, etc. All of these factors are used to develop cost of service rates.
4. There are no actual collection routes provided to the Town only entire service areas. Route maps identify where a truck begins and the path followed to the end of the route. Route maps provide the Town with information about when a truck should have

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

completed a street or area or where it should be within the service area at some point in time.

5. As implied in 1) above some landscape contractors, building contractors, nurseries and other non-residential activities are utilizing residential collection services without paying appropriate fees for such waste removal thereby raising the cost for all residential units.
6. The Town originally piggybacked a collection contract from another municipality then approved assignment to another contractor and finally renewed the contract. The level of service has decreased and cost of service has continually increased. The Town has no base cost derived from a competitive process to evaluate where it should be for waste collection services.

Options for Consideration:

1. Do nothing: waste quantities will continue to rise as will cost of service at least through 9.30.12.
2. For the balance of the contract term 9.30.12: Reduce service as follows and negotiate a rate adjustment:
    - Limit bulk collection to once per month with a 6 to 12 cubic yard limit for yard waste only,
    - Non-yard waste bulk provided on-call at a negotiated rate,
    - Limit 2x week garbage collection to a maximum of 3 containers per service day not to exceed 45 gallons of capacity each.
    - Negotiate a rate for those that need extra capacity.
3. Prohibit any activity that produces income from using residential waste collection service and further require that these activities contract for commercial container services appropriate for their needs.
4. Town assume risk of paying all residential disposal invoices directly i.e. Wheelabrator and Delta. Requiring supporting documentation for each load by date, truck number, time, net tons disposed.
5. Require the Contractor to provide a list of all equipment used in the Town by type, fleet number, disposal decal number (if any) and assigned routes / service area. Any changes during a month require same data for replacement vehicle and days in service.
6. Require the Contractor to provide complete list of all non-residential customers in the Town to include; service location address, size of container, in cubic yards and frequency of service. List to be provided monthly.
7. Prohibit any Contractor or his subcontractor's rear loaders or grapples from collecting any non-residential customers on area residential service day. Confirmed violations should carry a large penalty.
8. The Town should take a more active roll in verifying waste conditions on its streets, educating its residents as to set out requirements, pursuing questionable practices and staying knowledgeable of collection practices and costs throughout Broward County.
9. The Town should spend 2010 getting control of its current waste collection program, considering what kind of collection program might best meet its needs in the future (post 9/30/12) such as automation and commence planning for rebidding in mid 2011 for award by 4/1/2012 for start of service 10/1/2012.
10. Establish some type of annual permit requirement for yard maintenance, landscaper and tree service contractors at minimal expense. They would complete a simple

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

application that contains the prohibition on placement of their generated waste out for collection subject to loss of permit.

There are almost unlimited variations to most of the above options that the Town might want to consider.

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

Table 1
Summary Tonnage Reports – MSW

Quarter Units	Mon / Thurs 505	Tues / Fri 989	Wed / Sat 781	Total Tons
Jan - Mar 08	351.44	493.48	304.02	1149.00
Tons / mo.	117.15	164.49	101.34	383.00
Lbs / Unit / Wk	107.15	76.82	59.93	77.76
Lbs / Unit / Set	53.57	38.41	29.96	38.88
Apr - Jun 08	325.14	452.46	315.2	1092.8
Tons / mo.	108.38	150.82	105.07	364.27
Lbs / Unit / Wk	99.13	70.44	62.14	73.96
Lbs / Unit / Set	49.56	35.22	31.07	36.98
Jul - Sept 08	334.75	441.01	308.3	1084.1
Tons / mo.	111.58	147.00	102.8	361.4
Lbs / Unit / Wk	102.05	68.65	60.80	73.37
Lbs / Unit / Set	51.03	34.33	30.40	36.69
Oct - Dec 08	316.6	420.77	312.77	1050.1
Tons / mo.	105.5	140.26	104.26	350.0
Lbs / Unit / Wk	96.49	65.51	61.66	71.06
Lbs / Unit / Set	48.25	32.75	30.83	35.53
2008				
Total tons	1327.93	1807.72	1240.29	4376.0
Avg Tons / Mo	110.66	150.64	103.36	364.7
	2008 Average Tons / Year / Unit [1.92]			
Jan - Mar 09	273.15	388.29	281.57	943.01
Tons / mo.	91.05	129.43	93.85	341.33
Lbs / Unit / Wk	83.28	60.45	55.5	69.3
Lbs / Unit / Set	41.64	30.22	27.75	34.65
Apr - Jun 09	293.16	407.05	272.94	973.15
Tons / mo.	97.72	135.68	90.98	384.38
Lbs / Unit / Wk	89.38	63.37	53.81	65.86
Lbs / Unit / Set	44.69	31.68	26.9	32.93
July 09				
Tons / mo.	98.78	148.82	102.66	350.26
Lbs / Unit / Wk	90.35	69.5	60.71	71.11
Lbs / Unit / Set	45.17	34.75	30.36	35.55
09 • 7 month total	665.09	944.16	657.17	2266.42
09 Projection				
Tons: 12 mos.	1140.15	1618.56	1126.58	3885.29
Avg / Tons / Mo	95.01	134.88	93.88	323.77
	Projected 2009 Average Tons / Year / Unit [1.71]			

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

Table 2
Summary Tonnage Reports – Bulk

Quarter	Monday	Tuesday	Wednesday	Total
Units	505	989	781	2275
Jan - Mar 08	323.27	362.8	286.46	972.53
Tons / Mo.	107.75	120.93	95.48	324.17
Lbs/Unit/Mo	426.73	244.56	244.52	284.99
Lbs/unit/pu	213.36	122.28	122.26	142.49
Apr - Jun 08	434.01	433.69	454.98	1322.68
Tons / Mo.	144.67	144.56	151.66	440.89
Lbs/Unit/Mo	572.95	292.34	388.37	387.59
Lbs/unit/pu	286.47	146.17	194.19	193.8
Jul - Sept 08	402.73	468.04	396.68	1267.45
Tons / Mo.	134.24	156.01	132.22	422.48
Lbs/Unit/Mo	531.64	315.5	338.6	371.41
Lbs/unit/pu	265.82	157.75	169.3	185.71
Oct - Dec 08	420.83	451.33	346.72	1218.88
Tons / Mo.	140.27	150.44	115.57	406.29
Lbs/Unit/Mo	555.52	304.55	295.95	357.18
Lbs/unit/pu	277.76	152.11	147.98	178.59
2008				
Total Tons	1580.84	1715.86	1484.84	4781.54
Avg Tons/Mo	131.73	142.99	123.73	398.46
	2008 Tons / Unit / Year		[2.10]	
Jan - Mar 09	350.58	407.79	336.3	1094.67
Tons / Mo.	116.86	135.93	112.1	364.89
Lbs/Unit/Mo	462.81	274.88	287.07	320.78
Lbs/unit/pu	231.41	137.44	143.53	160.39
Apr - Jun 09	447.81	573.04	438.7	1459.55
Tons / Mo.	149.27	191.01	146.23	486.52
Lbs/Unit/Mo	591.17	386.27	374.48	427.71
Lbs/unit/pu	295.58	193.14	187.24	213.85
July 2009	218.95	212.97	169.71	601.63
Lbs/unit/pu	433.56	215.34	217.3	264.45
09 - 7 mos. Total	1017.34	1193.8	944.71	3155.85
Projected 12 mos.	1774.01	2046.51	1619.5	5410.03
Avg / Tons / Mo.	145.33	170.54	134.96	450.83
	Projected 2009 Avg. Tons / Unit / Year		[2.38]	

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

Exhibit I

Tonnage Calculations vs. Tonnage Reports

For the purpose of this evaluation it was necessary to develop conversion factors for estimating the weight of garbage cans and bags which are sized in gallons and for bulk waste which estimated in cubic yards. Calculating weight from some other measurement is more art than science. This is why all professional conversion factors are provided as ranges. Selected for this report were the following conversion factors in order to be consistent:

MSW: 1.04 lbs. per gallon
Bulk: 245 per cubic yard

Comparing our projections to tonnage reports submitted for the survey period demonstrates that our factor for MSW was on the side compared to the actual as shown below:

Area 1	7.27.09	7.30.09
Projection	14.8 tons (1.04)	8.1 tons (1.04)
Ton Report	11.8 tons (.95)	7.2 tons (.95)
Area 2	7.28.09	7.31.09
Projection	21.4 (1.04)	16.04 (1.04)
Ton Report	19.6 (.96)	12.34 (.80)
Area 3	7.29.09	8.1.09
Projection	18.08 (1.04)	10.3 (1.04)
Ton Report	13.53 (.68)	7.2 (.74)

Note that each of six days of actual tonnage figures have a different conversion factor ranging from a low of .68 to a high of .96. Three were .95 or above close to our estimate but three were much lower. The average conversion factor of the range based upon actual weight would be .85. A lot of containerized yard waste may explain the wide variations.

As for converting bulk waste from estimated cubic yards to weight compared to actual weight our factor was 245 lbs/cy based upon a range of 200 to 500 lbs/cy. Actual tons of bulk converted as follows:

Area 1	7.27.09
Projected	139.9 tons @ 245 lbs/cy
Actual	116.6 tons @ 204 lbs/cy
Area 2	7.28.09
Projected	187.8 tons @ 245 lbs/cy
Actual	80.5 tons @ 104 lbs/cy
Area 3	7.30.09
Projected	147.6 tons @ 245 lbs/cy
Actual	79.4 tons @ 132 lbs/cy

An explanation for the wide range of differences in these conversion factors is lighter weight Bulk Trash mixed in with denser yard waste. Even though there is only a small quantity of Bulk Trash in the total Bulk Waste quantity it consumes more volume with less weight.

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

Area 1
Summary Route Survey
Monday – July 27, 2009 505 Units

No. of Set outs Units	Avg. No. Cans/bags Set outs	Avg. Size Of Container	Avg. Quantity Per set out	% Set out rate
404	2.2	32 gal.	73.1 lbs.	80%
28.471 gals., 29,609.8 lbs.		Total container tons:	14.8 tons / Report 11.86 tons	

No. of Container Set Out % / Set Out %

1 = 151	2 = 130	3 = 67	4 = 25	5 = 10	More = 21
37 % / 29%	32 % / 25 %	17 % / 13 %	14 % / 11 %		

Bulk (Grapple) Collection

No. of Set outs (Bulk)	Avg. Size of Set out	No. of Set outs 0 – 3cy	No. of Set outs 4 – 8cy	No. of Set outs 9 – 12cy	No. of Set outs Over 12cy
166	6.8cy	46	61	52	7
1142.25 cy		Total grapple tons:	139.9 tons / Report 116.6 tons		

% of Set Outs / % of Total Units

% of Units Set out Rate	% of Units 0 – 3cy Rate	% of Units 4 – 8cy Rate	% of Units 9 – 12cy Rate	% of Units Over 12cy Rate
33%	28% / 9%	37% / 12%	31% / 10%	4% / 1%

Thursday – July 30, 2009

No. of Set outs (Units)	Avg. No. Cans/bags Set out	Avg. Size of Container	Avg. Quantity Per set out	% Set out Rate
268	1.8	31	60.5 lbs.	53%
15,580 gals., 16,203.2 lbs		Total container tons:	8.10 tons / Report 7.23 tons	

No. of Containers Set Out % / Set Out %

1 = 158	2 = 71	3 = 20	4 = 7	5 = 5	More = 7
59 % / 31 %	26 % / 14 %	7 % / 4 %	7 % / 4 %		

Notes: Container hand collection: .005cy / gal, 200 lbs / cy, 1.04 lbs / gal
Grapple collection: 245 lbs / cy

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

Area 2
Summary Route Survey
Tuesday – July 28, 2009 989 Units

No. of Set outs Units	Avg. No. Cans/bags Set outs	Avg. Size Of Container	Avg. Quantity Per set out	% Set out rate
674	1.9	32	63.61 lbs.	68%
41,225 gals., 42,874 lbs. Total container tons: 21.43 tons / Report 19.66 tons				

No. of Container Set Out % / Set Out %

1 = 342	2 = 190	3 = 70	4 = 35	5 = 19	More = 18
51% / 35 %	28 % / 19 %	10 % / 7 %	11 % / 7 %		

Bulk (Grapple) Collection

No. of Set outs (Bulk)	Avg. Size of Set out	No. of Set outs 0 – 3cy	No. of Set outs 4 – 8cy	No. of Set outs 9 – 12cy	No. of Set outs Over 12cy
276	5.6cy	101	116	48	10
1549.5cy Total grapple tons: 189.8 tons / Report 80.5 tons					

% of Set Outs / % of Total Units

% of Units Set out Rate	% of Units 0 – 3cy Rate	% of Units 4 – 8cy Rate	% of Units 9 – 12cy Rate	% of Units Over 12cy Rate
28 %	37% / 10%	42% / 12%	17% / 5%	4% / 1%

Friday – July 31, 2009

No. of Set outs (Units)	Avg. No. Cans/bags Set out	Avg. Size of Container	Avg. Quantity Per set out	% Set out Rate
504	1.7	37 gals.	63.67 lbs.	51%
30,858 gals., 32092.3 lbs. Total container tons: 16.04 tons / Report 12.34 tons				

No. of Containers Set Out % / Set Out %

1 = 311	2 = 122	3 = 42	4 = 12	5 = 7	More = 10
62 % / 31 %	24 % / 12 %	8 % / 4 %	5 % / 3%		

Notes: Container hand collection: .005cy / gal, 200 lbs /cy, 1.04 lbs. / gal.
Grapple collection: 245 lbs /cy

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

Area 3
Summary Route Survey
Wednesday – July 29, 2009 781 Units

No. of Set outs Units	Avg. No. Cans/bags Set outs	Avg. Size Of Container	Avg. Quantity Per set out	% Set out rate
527	1.89	38 gal.	68.6 lbs.	67%
34,773 gals., 36,163.9 lbs. Total container tons: 18.08 / Report 13.53 tons				

No. of Container Set Out % / Set Out %

1 = 269	2 = 166	3 = 63	4 = 18	5 = 5	More = 6
51 %	31 %	12 %	6 %		

Bulk (Grapple) Collection

No. of Set outs (Bulk)	Avg. Size of Set out	No. of Set outs 0 – 3cy	No. of Set outs 4 – 8cy	No. of Set outs 9 – 12cy	No. of Set outs Over 12cy
216	5.6cy	72	109	29	6
1205 cy Total grapple tons 147.6 / Report 79.4 tons					

% of Set Outs / % of Total Units

% of Units Set out Rate	% of Units 0 – 3cy Rate	% of Units 4 – 8cy Rate	% of Units 9 – 12cy Rate	% of Units Over 12cy Rate
27%	33% - 9%	50% - 14%	13% - 4%	4% - 1%

Saturday – August 1, 2009

No. of Set outs (Units)	Avg. No. Cans/bags Set out	Avg. Size of Container	Avg. Quantity Per set out	% Set out Rate
314	1.6	42 gal.	65.6 lbs.	41%
19,812 gals., 20,604.5 lbs. Total container tons: 10.30 tons / Report 7.17 tons				

No. of Containers Set Out % / Set Out %

1 = 204	2 = 66	3 = 28	4 = 10	5 = 2	More = 4
65 % / 26 %	21 % / 8 %	9 % / 3 %	5 % / 2 %		

Notes: Container hand collection: .005cy / gal, 200 lbs / cy, 1.04 lbs. / gal.
Grapple collection: 245 lbs / cy

ATTACHMENT B

Timothy F. Hunt, Jr., & Associates Collection System Evaluation Report

August 20, 2009

Table 3
Summary of Area Route Surveys
MSW and Bulk

	Area 1 (505)		Area 2 (989)		Area (781)	
MSW	Monday	Thursday	Tuesday	Friday	Wednesday	Saturday
No. of set outs	404	268	674	504	527	314
% of area units	80%	53%	68%	51%	67%	41%
Avg. container size	32 gal.	31 gal.	32 gal.	37 gal.	38 gal.	42 gal.
Avg. no. set out	2.2	1.8	1.9	1.7	1.9	1.6
Avg. most set out	1 – 3	1 – 2	1 – 2	1 – 2	1 – 2	1 – 2
% of most set outs	348 / 86%	229 / 85%	532 / 79%	433 / 86%	435 / 82%	270 / 86%
Est. tons generated	14.8	8.1	21.4	16.04	18.1	10.3
Actual tons generated	13.5	7.2	19.6	12.34	11.86	7.2
Bulk						
No. of set outs	166		275		216	
% of area units	33%		28%		27%	
Avg. size of set out	6.8cy		5.6cy		5.6cy	
0 – 6cy set out	83/50% \ 63%		169/61% \ 79%		147/68% \ 83%	
7 – 8 cy set out	21/32% /		49/18% /		33/15% /	
9 – 12cy set out	53/32%		47/17%		30/14%	
+12 cy set out	7/4%		10/4%		7/3%	
Est. tons generated	139.9		189.8		147.6	
Actual tons generated	116.6		80.5		79.4	

Notes: See Exhibit 1 for explanation of projected versus actual tonnage.