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DRAFT -EAH Housing -DRAFT 330 Distel Circle Los Altos, CA Trash Management Plan

Task: Design a waste and recycling system for an affordable housing project with 90 residential units that minimizes costs, staffing requirements and environmental impacts, while providing convenient trash disposal for the building's residents. Please note the word "trash" when used in this plan covers waste, recycling, and compost.

Waste and Recycling Removal: The City of Los Altos has granted Mission Trail Waste System a license to provide residential and commercial Waste and Recycling services to residents and businesses located within the city and county. This license is a de facto exclusive franchise for trash removal for any property located within city limits. Mission Trail provides three types of service: waste, commingled recycling and compost collection. Garbage rates includes an appropriate level of recycling and organics service for no additional charge. Adequate garbage service is required.

State and Local Recycling Mandates: Statewide the passage of AB341 (July 1st, 2012) and subsequent AB1826 required all business that have more than 5 residential units or generate more than 4 cubic yards of municipal solid waste to separate recyclable and compostable materials from the waste stream. Finally, AB 1383 — although not fully implemented by all local governments — will lead to mandatory food waste diversion from residential, multi-family and commercial business by 2022. These laws directs local jurisdictions to implement recycling and composting regulations and programs.

Los Altos Ordinance No. 2015-417, Chapter 6 states:

6.12.050 Mandatory commercial and multi-family recycling and organic recycling.

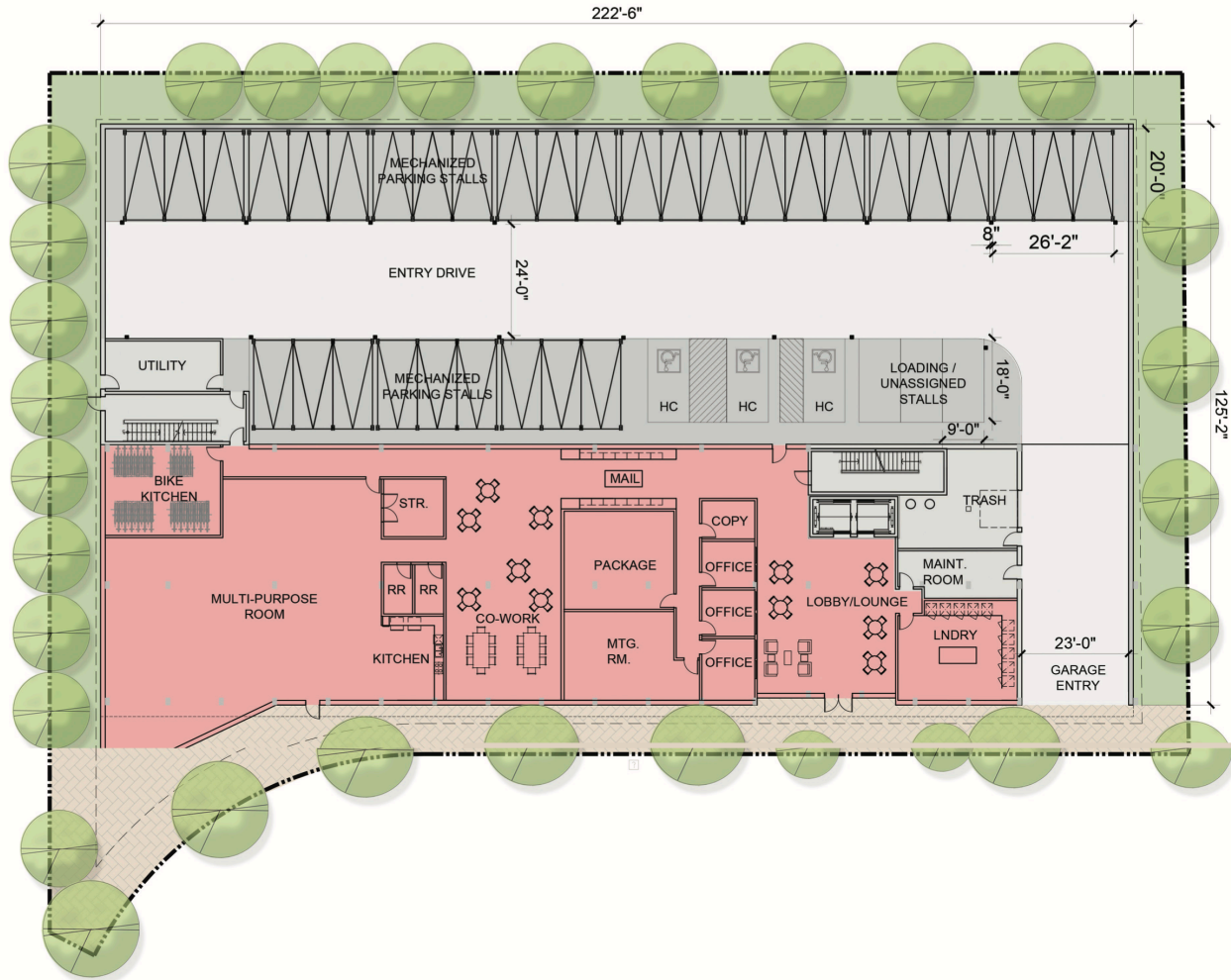
- A. Commercial generators responsible for compliance. Each commercial generators, as defined in Section 6.12.010.E, shall be responsible for ensuring and demonstrating its compliance with the requirements of this chapter, including all multi-family dwellings if four units or more, and also including all multi-family dwellings under four units that shared solid waste collection containers and service under one subscription with the franchised hauler.
- B. Commercial recycling and organics collection required. Each commercial generator shall subscribe to a level of service with the franchised hauler that is sufficient to handle all volume of recycle materials and organic materials generated or accumulated on the premises, or complete and retain on-site self hauling form certifying that all self-hauling activities will be completed in accordance with Section 6.12.100.C. or any other applicable law or regulation. The commercial generator shall make a copy of such form avail to the city manager upon request. Additionally, each commercial generator shall ensure the proper separation of solid waste, as established by the franchised hauler, by placing each type of material in designated receptacles or containers, and ensure that employees, contractors, volunteers, customers, visitors, and other persons on-site conduct proper separation of solid waste.



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Site Plan:





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Specific Project Design Summary:

First, trash will be collected in 3 streams (waste, recycling, and compost) to meet the State requirements of AB341, AB 1826 and SB 1383 and the local Recycling and Composting Ordinance.

Second, **we recommend eliminating the proposed compost chute and collecting compost on each residential floor in Rubbermaid 'Slim Jim' containers.** These containers will be emptied by staff into toter carts for collection by Mission Trails. Alternative compost options include: 2-chute system with a bisorter in the waste chute, or a 3-chute system.

Third, due to the projected trash volumes and ground floor resident for the building, **waste and recycling will be collected in compacted 2CY bins on the Level 01. Compost will be collected in a 64 gallon toter cart.**

Fourth, **we recommend replacing the proposed double-swing doors at the entry/exit to the trash room with a roll-up door and separate egress door.** While this is a more expensive option at the outset, it is ATM's experience that in the long run this design change saves money and prevents maintenance problems. Due to the weight of the bins moving in and out of the trash room, a double door cannot have a threshold. Door sweeps will eventually degrade and let in bugs and vermin. Additionally, the doors will be damaged from getting hit by the unwieldy trash bins and will require repair or replacement long before a roll-up door will.

Fifth, **the residential trash waste and recycle chutes should be 30" diameter with automatic opening 15"x18" hopper-type intake doors.** NFPA 82 minimum required 24" chutes have a higher probability of chute jams due to large objects (super-size pizza boxes, Costco boxes, ironing boards, crutches, etc.) being thrown down the chute. NFPA 82 also requires that chutes vent at full diameter at least 36" above the finished roof.

Sixth, the chute core wall is shared with residential units. **We recommend installing double walls, sound dampening coating, or sound isolation padding to reduce sounds, vibration, and odors.**

Seventh, a safe and accessible location for staging needs to be determined. We recommend identifying a location on Distel Circle. **The waste hauler, Mission Trail has in the past, moved loose bins from the temporary staging area to the street at no additional cost, however we will need to confirm if they are able to move compacted bins.**

Eighth, **add 1 CFM/SF mechanical ventilation per CBC, floor drain, hose bib and odor control to the trash collection rooms.**

Ninth, due to the number of units, **this building is projected to generate about 315 cardboard boxes per week. To reduce the potential for chute jams, we recommend considering designating a convenient space for residents to place their flattened cardboard boxes.** These boxes will then be moved by building staff to the mixed recycling bin.



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Projected Residential Waste and Recycling Levels: The following metrics were used to project residential waste and recycling levels:

Residential Waste: 0.16 Cubic Yard (32 gallon) per week/unit. **NOTE: This is the equivalent of over 2 large kitchen garbage cans per unit week (~2.8 - 13 gallon bags).**

Residential Recycling: 0.16 Cubic Yard (32 gallon) per week/unit. **NOTE: This is the equivalent of 2 large kitchen garbage cans per unit week (~2.8 - 13 gallon bags).**

Residential Compost: 0.012 Cubic Yard (2.4 gallon) per week/unit. **NOTE: This is the equivalent of small compost pail per unit week.**

Below is a summary of projected LOOSE trash volumes. See detailed analysis on page 19.

Units	Loose Waste Volume CY/WK	Loose Recycle Volume CY/WK	Loose Compost Volume CY/WK	Loose 3CY Waste Bins/WK	Loose 3CY Recycle Bins/WK	Total # of Compost Carts/WK
90	14.4	14.4	1.08	5	5	4

Below is a summary of projected COMPACT trash volumes. See detailed analysis on page 19.

Units	Loose Waste Volume CY/WK	Loose Recycle Volume CY/WK	Loose Compost Volume CY/WK	COMPACT 2CY Waste Bins/WK	COMPACT 2CY Recycle Bins/WK	Total # of Compost Carts/WK
90	3.6	3.6	1.08	2	2	4

Proposed Residential Trash handling system:

To comply with City ordinances, the project’s residential trash will be collected in 3 different streams: Waste, Mixed Recyclables (paper, cardboard & containers) and Compost (organic materials).

Chutes for Waste & Recycling. The single trash chute core per building can handle the volume of trash generated by the project. Residential waste and mixed recycling streams will be deposited by tenants on upper floors into dedicated gravity chutes. Compost will be collected in 64 G toter carts.

We recommend the trash core have two (2) 30” diameter trash chutes per core with 15 x 18 automatic opening (pneumatic) intake doors. Increasing the chute size to 30” will slightly increase the chute system cost but it will reduce the possibility of chute jams due to large objects (Amazon, super-size pizza and “Costco” boxes) being thrown down the chute and thereby reduce ongoing maintenance cost while increasing tenant convenience.

The chutes should be 16 gauge galvaneal or aluminized steel and be isolated from the building structure using Mason BR mounts or equivalent. The chute should be coated with a sound dampening compound (Soundcoat GP-1 or equivalent) equal to the thickness of the metal.



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Compactors. We recommend all residential waste and recycling be collected in 2CY chute fed compactors. Compactors will reduce disposal costs and on-site staffing requirements while minimizing property truck traffic thereby lowering the projects overall environmental impact. All compactor bins will incorporate locks on the lids and compactor opening so the containers cannot be accessed by vagrants. Compactor bins will be moved using an electric pallet jack.

Service	Compaction Ratio	Monthly Fee
3-CY loose bins 5 times per week	N/A	\$2,286.54
2-CY compacted bin 2 times per week	4:1	\$760.70

Lower Waste Disposal costs. Front-load compaction is less expensive than front-load loose waste services. (See cost benefit analysis on page 19).

Lower labor costs. A 3-cubic yard loose waste bins serviced Monday-through-Saturday must be moved from the trash chute to the trash staging locations 5x per week. Comparable compacted service is one 2-cubic yard bin picked up 2x per week. That represents 50% fewer times to move the bins from the trash areas to the street for pickup. More importantly compacted bins reduce the truck trips and thereby reducing the noise impact on the project’s neighbors. Compactors also eliminate the need to rake or rotate loose bins and solve the problem of Sundays (one of the heaviest trash days of the week). (See cost benefit analysis on page 19).

Lower environmental costs. Less truck trips and less bin emptying results in cleaner air and quieter neighborhood.

Residential Compost. Food scrap diversion is not currently required for multi-family properties however, compost will be required in 2022 by SB1383. Compost can be handled in three ways:

Option 1: Eliminate the proposed compost chute. Residential compost can be collected in Rubbermaid ‘Slim Jim’ containers placed in each chute vestibule. The Slim Jim’s should be emptied by building staff into a 64G toter cart for emptying by the trash hauler.

Advantage: Lowest upfront equipment cost.

Disadvantage: A full-time janitorial staff is typically required for this option hence, the long term labor costs are much higher. Compost should be emptied on a regular basis to prevent sanitation and odor issues.

Option 2: 3 Chute design system.

Advantage: Low upfront equipment cost.

Disadvantage: ATM does not recommended collecting apartment compostable materials using a gravity chutes due to the sanitation issues, the collection issues, the corrosive properties of the material, and odorous nature of putrefying household food waste, which is the primary component of organic waste from apartments

Option 3: Design a 30’ stainless steel chute for waste with a bi-sorter to dispose of compost.



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Advantage: This option has lower labor costs.

Disadvantage: The additional piece of equipment increases upfront costs.

We recommend food scrap compost be collected in each chute vestibule in Rubbermaid “Slim Jim” containers. These containers would then need to be emptied by building staff into the collection container (typically a 64- or 96-gallon toter cart).

We recommend eliminating the proposed compost chute, and collecting compost in Rubbermaid ‘Slim Jims’ containers placed in each chute vestibule. The Slim Jims should be emptied by building staff into a 64G toter cart for emptying by the trash hauler.

ATM does not recommended collecting apartment compostable materials using a gravity chutes due to the sanitation issues, the collection issues, the corrosive properties of the material, and odorous nature of putrefying household food waste, which is the primary component of organic waste from apartments. The compostable materials will adhere to the sides of the chutes and require frequent chute wash downs. This will increase the project water usage and sewage loads. The acidic nature of fermenting compost will cause the chute to rust prematurely unless they are made of 304 stainless steel. It is important that proper sanitation protocols are followed since the compostable material that will adhere on the chutes wall is an excellent medium to grow fruit flies, maggots, molds, fungus, yeast and bacteria which can cause insect infestations, allergic reactions and malodors.

Cardboard. Multi-family dwellings generate a tremendous amount of cardboard due to online shopping and food delivery. Typically, half of the units will receive a delivery in a cardboard box every day. This building is projected to receive around **315** cardboard boxes per week. A space should be designated for residents to place flattened cardboard that will not fit in the mixed recycle chute to avoid chute jams. This cardboard will need to be moved by building staff to the recycling bin for disposal.

Odor Control. To mitigate malodors in the trash room(s), a four-pronged approach is recommended including cleaning, proper ventilation, and installing a deodorizer system.

1. Mechanical Exhaust of Trash Collection Room. The mechanical ventilation required rate is 1 CFM/SF, however, ATM recommends increasing this rate as needed, especially in areas with warmer climate. Exhaust should vent through the roof. ATM does not recommend a chilled/refrigerated trash room. A cooled space will not delay decomposition, and will have minimal impacts on odorous trash.
2. Cleaning the Trash Room. Trash rooms should be swept clean of debris on a weekly basis. Trash room wash-downs should be scheduled quarterly. These should include cleaning any trash equipment such as compactors, as well as floors and the walls. If possible, bins or compactor receiver containers should be cleaned at the same time, assuming the containers are empty.(Bins should be cleaned by onsite staff. If hauler-provided dumpsters become especially dirty, they should be replaced by the hauler.)
3. Cleaning the Trash Chute. Almost all trash chutes are equipped with deodorizing and sanitizing (D&S) units, located on the top floor behind an access door. These should be operated on a WEEKLY basis, for ~5 minutes. Trash chutes that are designed for a high level of food wastes often also have a “Chute Janitor” built-in wash down system. These should be operated less often, such as 1x per month. When turned on, they should be allowed to run through their normal Rinse-Wash-Rinse cycle. Even with the presence of the D&S and Chute Janitor systems, all trash chutes should be pressured washed at least once a year to clean materials that adhere to the sides of the chutes. In areas with warmer climate we recommend quarterly wash downs. The chute wash down service should include cleaning the trash discharge room, specifically the floors, walls and the trash compactor.

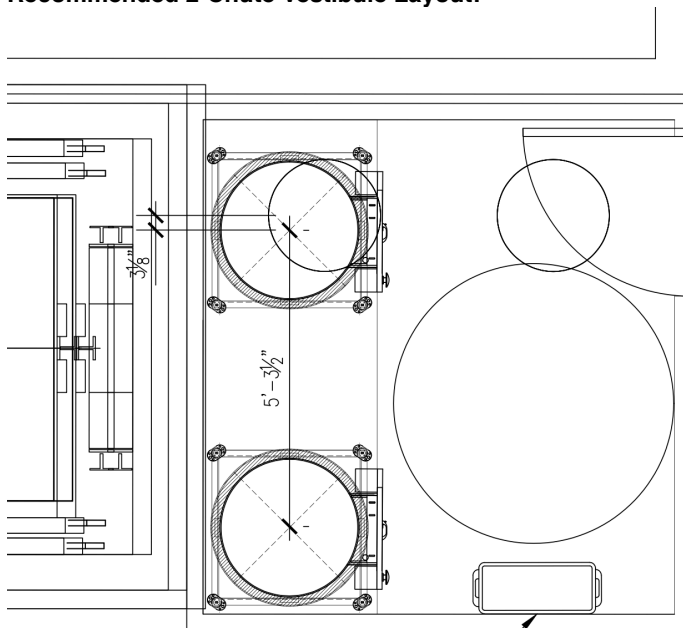
4. Odor Control Systems. Odor control systems can be helpful in controlling odors, but most have limited effectiveness or create other problems. Popular low-cost systems that spray a masking agent into the air, only serve to hide odors in the trash room and not eliminate them. Ozone generators are more effective, but the odor-destroying product they create — ozone — can have deleterious effect on human health and can also destroy compactor hoses and seals. One odor control system that avoids these problems is the Piiian Mini Vaporizer. It creates a very fine 50-micron mist that bonds with — and ultimately destroys — odor causing molecules. And unlike ozone, the entirely natural blend of plant extracts, essential oils and emulsifiers which is safe and does not damage equipment.

Recommended Residential Trash System-Equipment:

Below is a summary of the recommended trash system equipment for compacted service.

Chutes	Size	Material	Bin Type	Bin Size Cubic Yards	# of Bins/ Carts
2	(2) 30"	(2) Galvaneal or Aluminized	Front Load	2CY waste 2CY recycle 64G compost	2 waste 2 recycle 4 compost

Recommended 2-Chute Vestibule Layout:

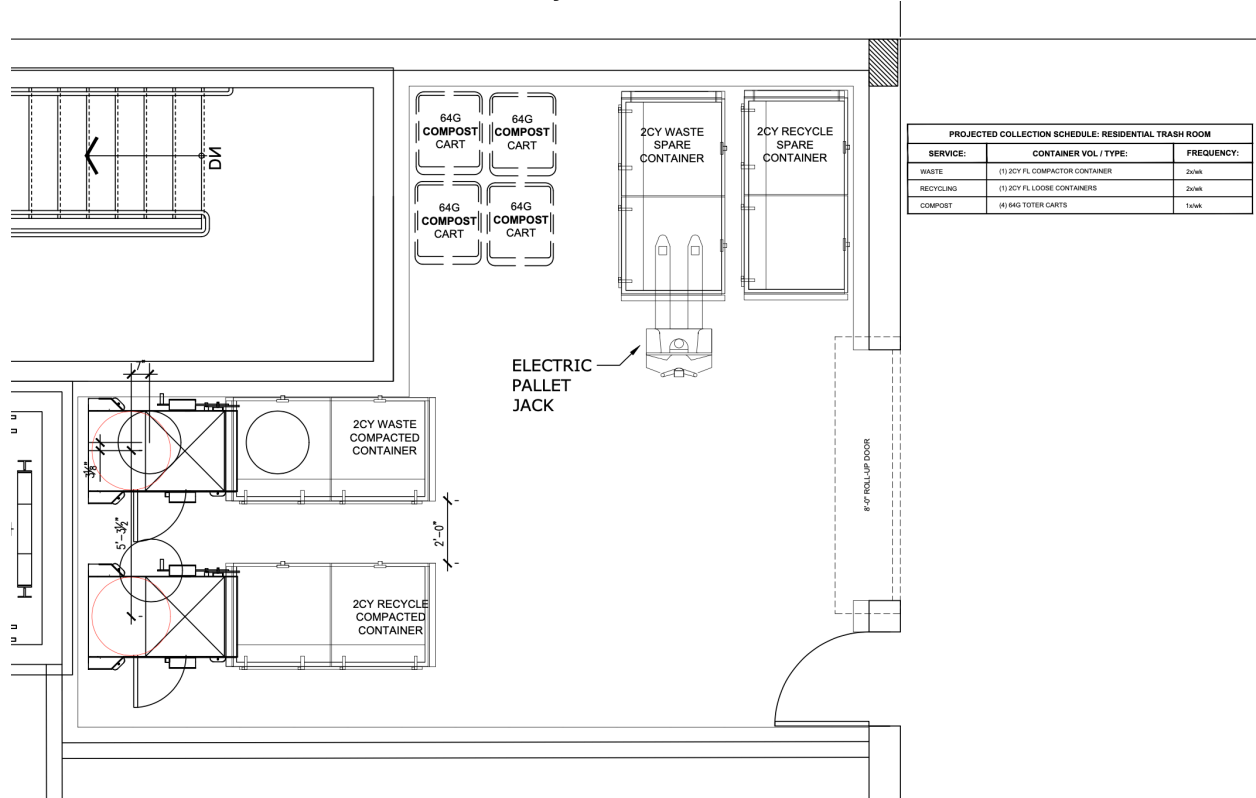


RUBBERMAID SLIM JIM
 FOR COMPOST. TO BE
 EMPTIED DAILY INTO
 TRASH COLLECTION
 ROOM COMPOST
 CONTAINER.



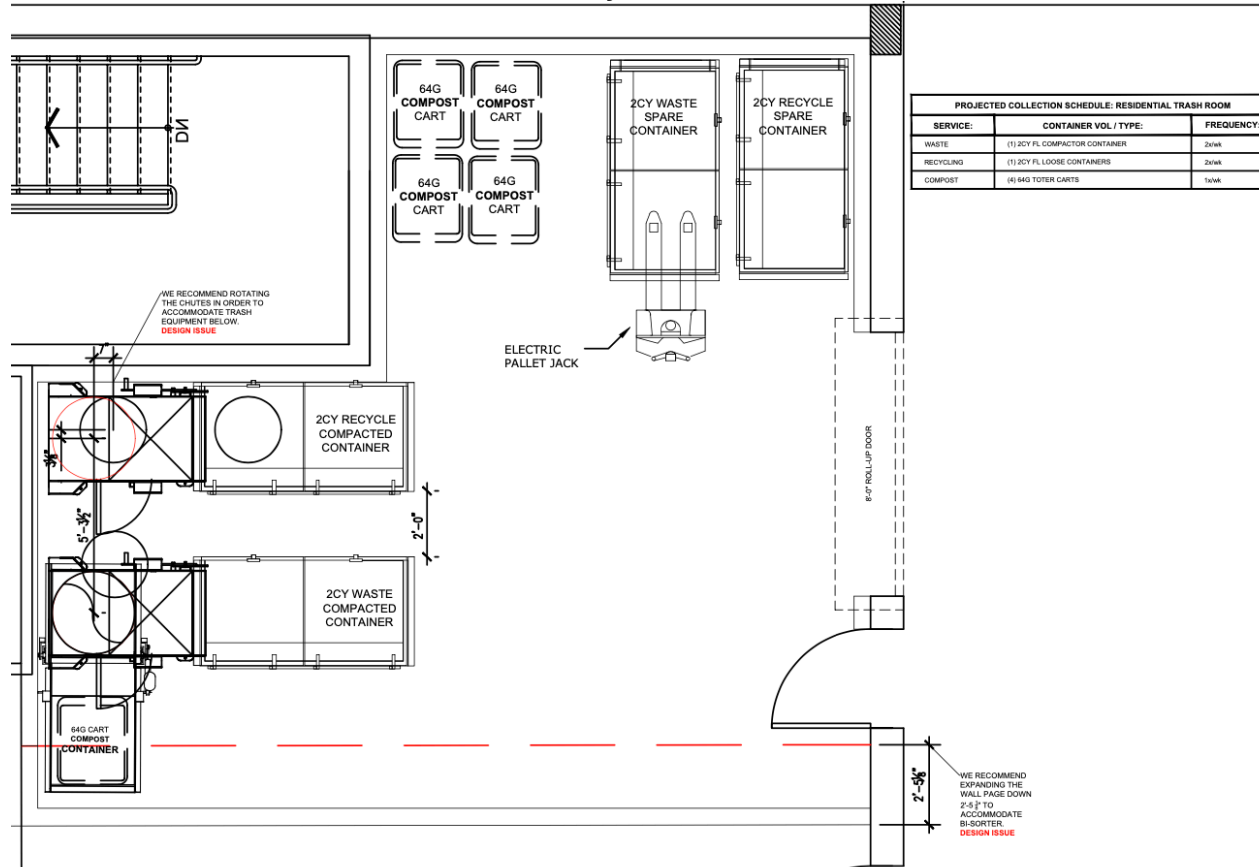
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Recommended Residential Trash Room Layout:

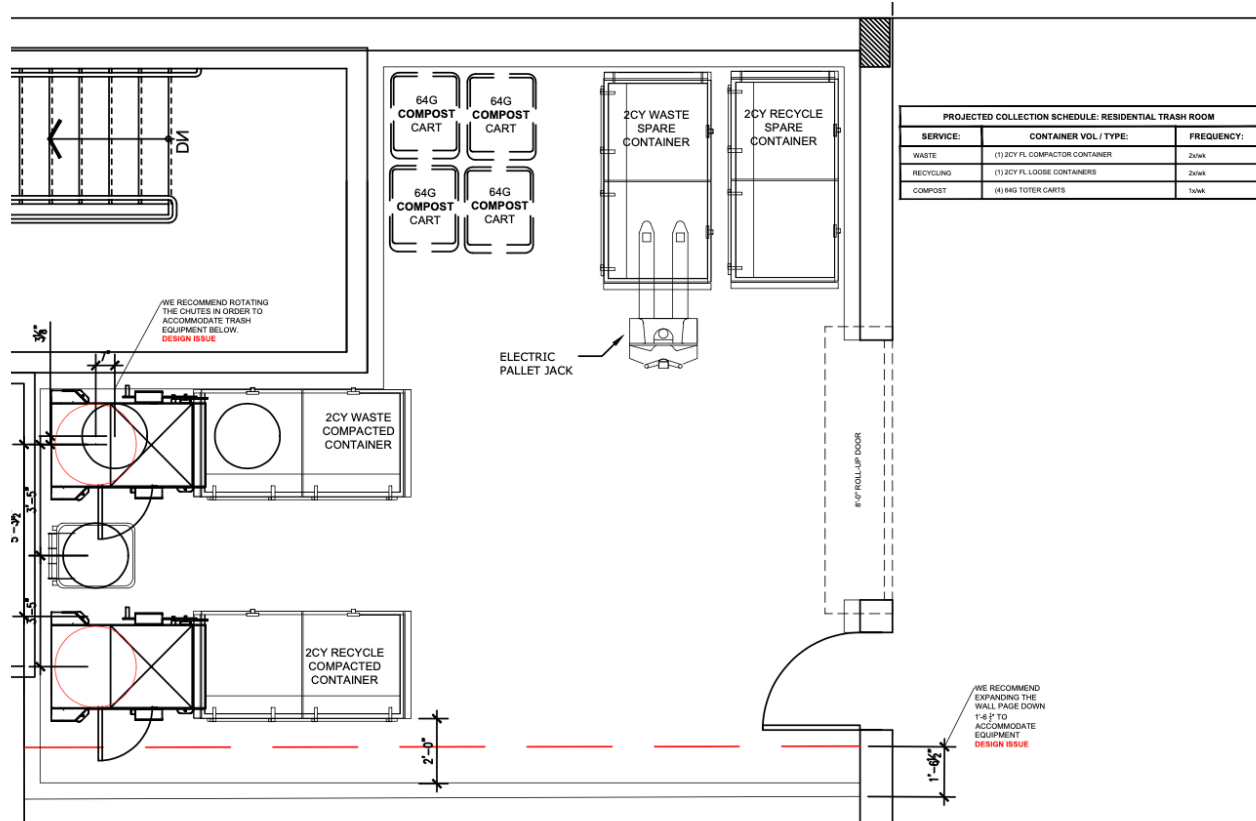


PROJECTED COLLECTION SCHEDULE- RESIDENTIAL TRASH ROOM		
SERVICE:	CONTAINER VOL. / TYPE:	FREQUENCY:
WASTE	(1) 2CY FL COMPACTOR CONTAINER	2x/wk
RECYCLING	(1) 2CY FL LODGE CONTAINERS	2x/wk
COMPOST	(4) 64G TOTE CARTS	1x/wk

2-Chutes w/Bisorter Residential Trash Room Layout:



3-Chute Layout Residential Trash Room Layout:





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**Residential Trash Systems:
 Automatic Opening (Pneumatic) Chute Intake Door Recommended to meet Housing Accessibility
 Section 1138A.4.4.**

Manual Chute Intake Door	Air Assist Recycling Chute Intake Door

Chute Intake Doors and the Americans' with Disabilities Act of 1990 (ADA)

This is a summary of the current state as we understand it. This is not intended to be legal advice and should not be relied upon with out seeking advice of an ADA expert and your legal counsel.

Per most building codes and FHA requirements, “common use” building areas and building elements, such as a trash rooms and trash chutes are required to be accessible. Specifically, the trash chute door is required to comply with accessibility requirements:

- Clear floor space for a wheel chair at the chute door
- Chute door hardware within reach range
- Chute door hardware complying with operability requirements.

The operability requirements mandate that the chute door hardware must not involve any of the following:

- Two handed operation (such as depressing a button while turning a door handle)
- Tight grasping or pinching
- Twisting of the wrist
- Force to activate the hardware that exceeds 5.0 pounds.

The majority of manual chute intake chute door installations do not comply with the accessibility requirements. Lower quality chute doors require grasping, twisting of the wrist and more than 5 pounds of force to open the chute door. Regardless of what has been installed for the chute door, the chute door is still required by both Code and FHA requirements to comply with accessibility requirements. In the cases where non-compliant chutes have been installed, the building Owner has made management decision to handle the accessibility requirement using other means.

Residential and other buildings are subject to the progressively revised provisions of Federal and Local ADA laws and regulations. To meet the current ADA Standards as they apply to Gravity Trash Chute Intake Doors, the person using the door must not have to grasp, twist, or pinch the control mechanism in



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order to operate the intake door. ADA Standards also limits the maximum operating force required to open an interior door (without specificity to size) to 5 pounds of force. The maximum allowable mounting height of the operating mechanisms (i.e. door handle, etc) of an ADA compliant device is 48" (for side reach revised as of July 1, 2012 from 54") or 48" (for front reach when hopper door is open). The maximum allowable projection of an ADA compliant device is 4" off the projection surface of the wall.

The Wilkinson Signature Series and IDC-2000 Recycling Manually operated doors require the person operating the door to push a membrane selector switch (waste, recycling or compost) and grasp the u-shaped handle, push down on the thumb latch with a finger and pull open the door. This type of intake doors meets the mounting height, the projection, the twist and the pinch requirements but it does not meet the pulling force or the grasp requirement.

Lower quality manual chute intake doors from other manufacturers all use a T-handle or L-handle operating mechanism. These doors fail on 3 counts. They do not meet the pulling force, the grasp and twist requirements. These door are especially hard to operate for persons with arthritis due to the required simultaneously grasping, twisting and pulling motion.

The Wilkinson Signature Series and IDC 2000 Pneumatic Assist door meet all the above requirements since it is operated by pushing a palm button which opens the door automatically. The door closes after a set time and latches so it meets all the current fire code requirements. The air assist mechanism is designed to preclude the need to grasp, twist, or pinch the control mechanism in order to operate the intake door. The push button meets the height, projection and force requirements too. It is conceivable, however that certain disabled persons will still not be able to operate this type of door. ADA law requires one to accommodate all persons with disabilities.

The supra-majority of all new construction within the US still uses manually operated chute intake doors due to the extra upfront (~ \$900 per floor) and higher maintenance costs of the Pneumatic Assist Chute Intake type of doors. Many building owners have chosen to only install the pneumatic assist doors in facilities with a high senior or disabled population and in order to meet the above ADA requirements make it their policy to provide a staff person to assist any individual with disabilities who need assistance in operating the manual operated door.

Trash chute systems have been designed to meet the fire and life safety found within Building Codes. All trash chute intake doors are required to be behind a rated fire-barrier and any door in these walls is required to be a fire-rated door.

This fire-rated-door is required to be self-closing (or automatic-closing upon the detection of smoke), so it has a closer mechanism and positive latch. Because this door is designated as a "fire-door", per most codes and accessibility standards (including ANSI A117.1 used for FHA compliance), the door opening force for this door is exempt from typical accessibility requirements (maximum 5 pounds) and allowed to have a minimum opening force allowed by the authority having jurisdiction (typically a maximum of 15 pounds). The opening force for the required fire-rated doors in front of trash chute intake doors routinely exceeds 5 pounds and is more typically in the 14-18 pound range.

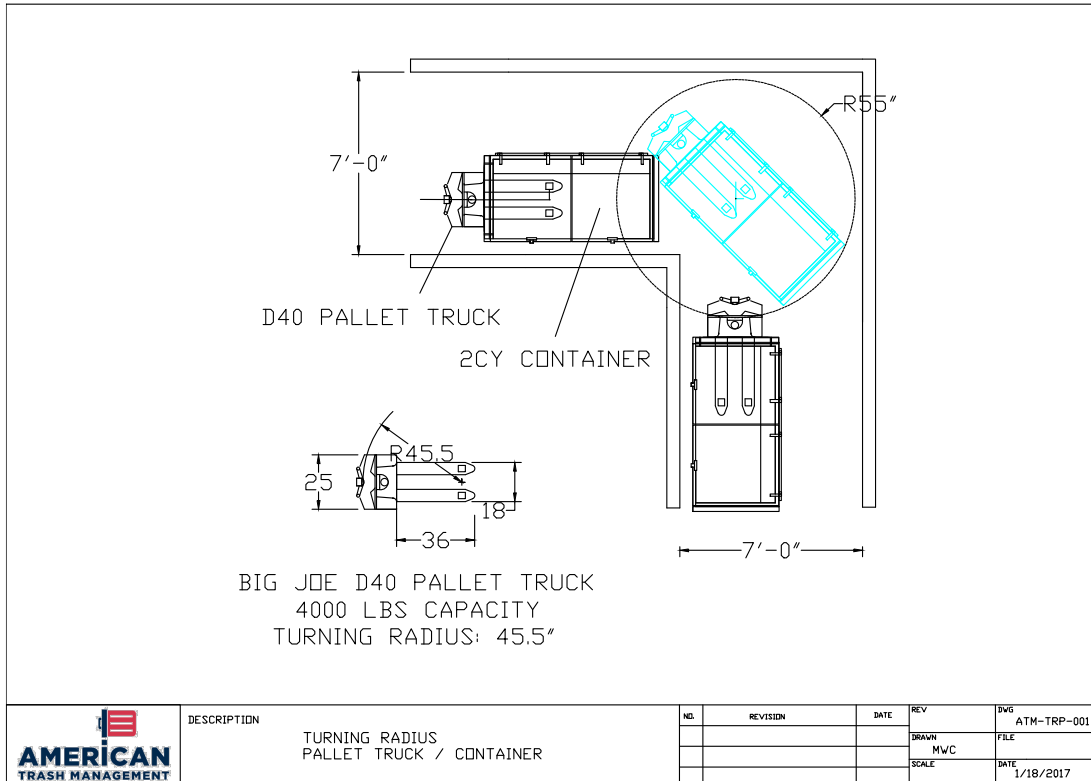
Requiring the chute intake door to meet accessibility requirements while allowing the fire-rated door in front of the trash chute intake door to not meet the pull force and grasp requirements is illogical. If an individual with accessibility needs cannot open the fire door in front of the trash chute intake then they will not be able to access the non compliant chute. Owners should always have a policy in place to provide assistance to any person who can not access the trash chute (with or without automatic opening doors).



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Bin Moving - Electric Pallet Jack





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Optional Rubbermaid "Slim Jim". If compost is collected in the trash vestibules.

3540 Slim Jim® Waste Container



Residential Trash System Equipment:

Note bins provided by Mission Trail are approximately the same dimensions.

Front Load Bins

1-yard



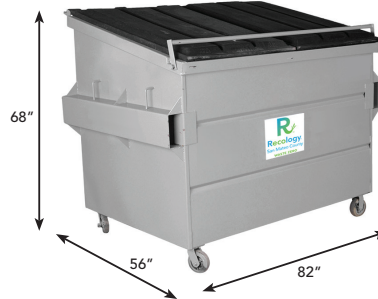
2-yard



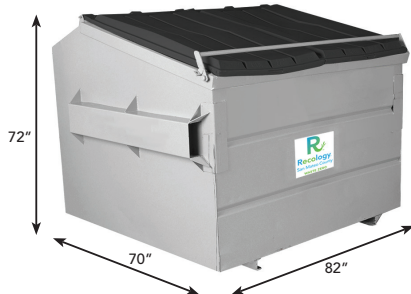
3-yard



4-yard



6-yard



8-yard



Dimensions may vary slightly. Measurements shown are exterior dimensions.
 Not all bins are available with wheels.





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Sample Residential Service Schedule (actual schedule to be determined by hauler and building management)

Recommended Compacted Sample Collection Schedule

Bin Type	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
2CY Compacted Waste	1				1	
2CY Compacted Recycle		1				1
64G Compost Cart					4	
Total Bins	1	1	0	0	1	1

Loose Sample Collection Schedule

Bin Type	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
3CY Loose Waste	2		1		2	
3CY Loose Recycle	2		1		2	
64G Compost Cart					4	
Total Bins	4	0	2	0	4	0

TRASH SYSTEM SPECIFICATIONS: Provided separately.

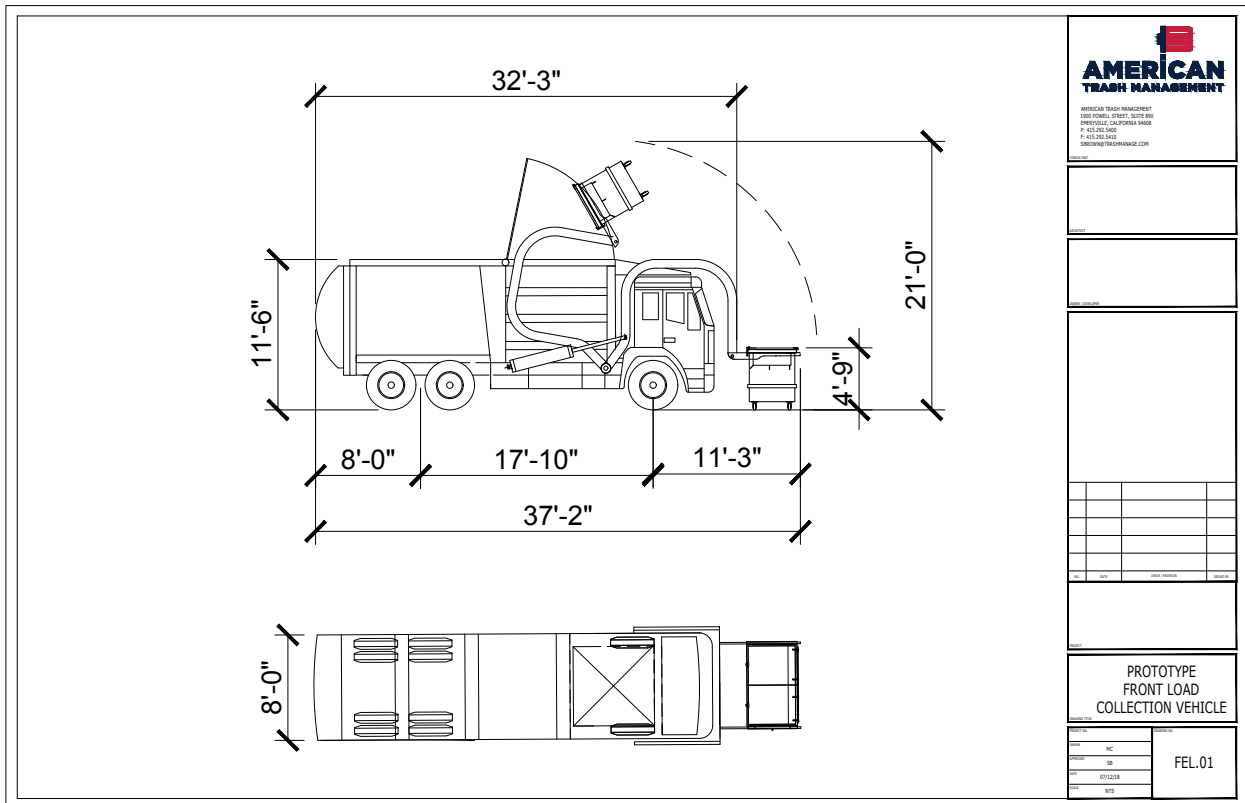
1. Section 14 91 82 - Trash Chutes & Intake Doors
2. Section 25 30 00 - Compactor Monitoring System (compacted option)
3. Section 44 31 00 - Odor Control



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Front Load Trash Truck Noise Levels

Location	Decibel Levels
Banging on Bins when Emptying	100
Behind Garbage Truck (while compacting)	89

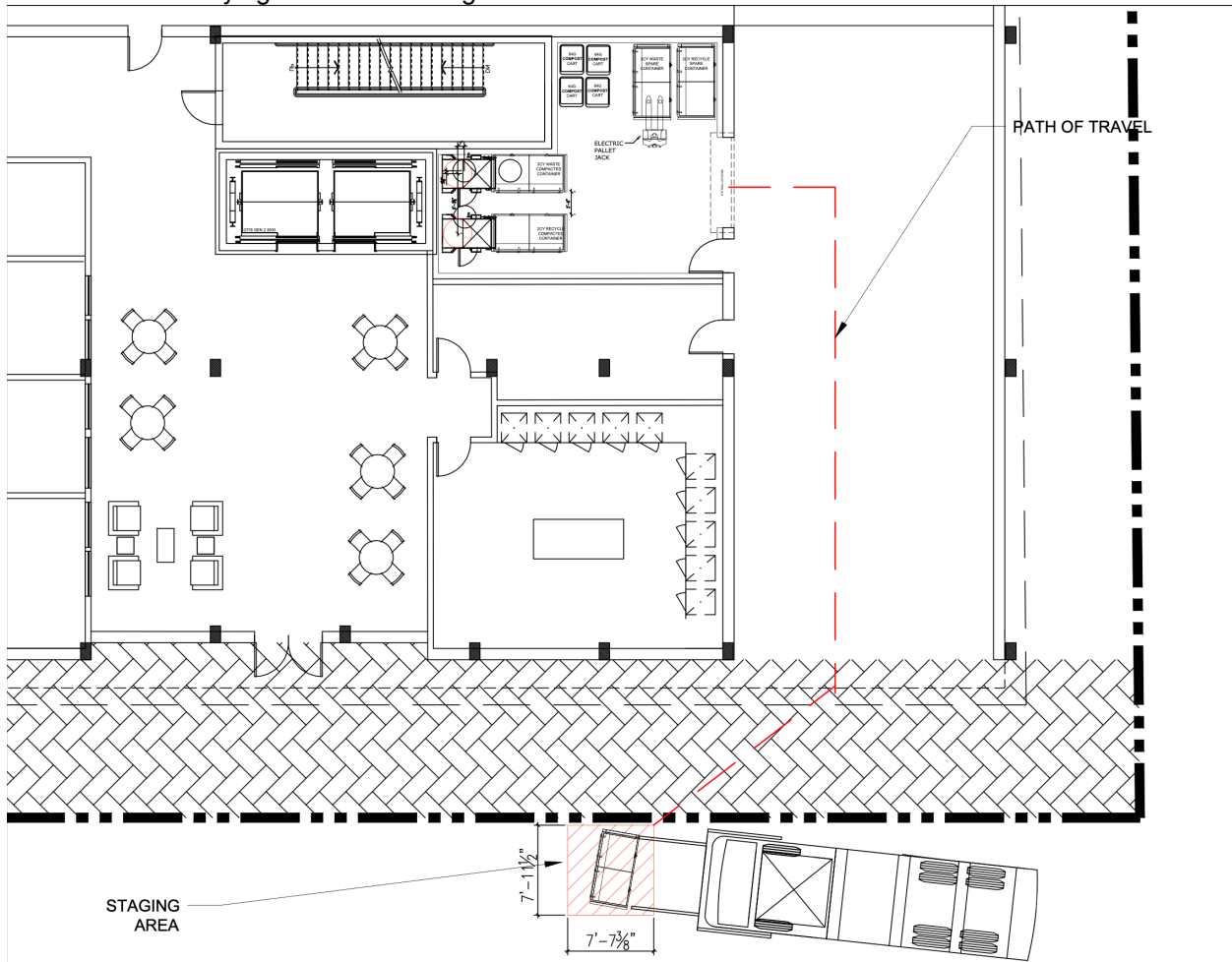




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Staging Area: Front load service front load bins requires 25' Clear height (no lights, sprinklers or other items within the service area. This is not possible within the building given the current FF to heights). We recommend identifying a location to stage and service the bins on Distel Circle.





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Waste, Recycling and Compost Analysis: (Rates reflect the rate increase effective July 1, 2020)
 Below is a comparative analysis of the disposal and labor costs of handling waste and recycling in loose versus compacted bins. We recommend installing gravity chute-fed compactors under the waste chutes and serious consideration should be given to compacting the recycling stream so as to reduce disposal costs, space requirements and onsite labor costs. The effective service life of a quality compactor can be over 10 years. Please note that the projections below are estimates derived from actual audits of comparable multifamily complexes in California. They are not guaranteed. They are to be used for planning purposes only and may be higher or lower than projected.

TOTAL RESIDENTIAL WASTE AND RECYCLING SYSTEM ANALYSIS

	Units:	90		
	Volume Waste:	0.16	cubic yard/week/unit	32.32
	Volume Recycling:	0.16	cubic yard/week/unit	32.32
	Volume Compost:	0.012	cubic yard/week/unit	2.424
	Compaction Ratio	4	to 1	
	Staff Labor Rate	\$20.00	per hour - 1 person	
	Time move bins	0.5	hr to move to unloading area & back	
	Rake-Rotate bins	0.15	hr to go to each bin rake or rotate	
ASSUMPTIONS:	# of Trash Rooms	1		
	Compacted Service	2	cubic yard front load bins	
	Loose Waste Service	3	cubic yard front load bins	
	Loose Recycling Service	3	cubic yard front load bins	
	Loose Compost Service	0.32	cubic yard carts (64 G Toter Carts)	

COST BENEFIT CALCULATIONS:	PROJECTED	PROJECTED	PROJECTED
	Loose	Compacted	Compacted
	Loose	Loose	Compacted
Loose Waste Volume - CY	14.4	3.6	
Compacted Waste Volume - CY			3.6
Loose Recycling Volume - CY	14.4	14.4	
Compacted Recycling Volume - CY			3.6
Loose Compost Volume - CY	1.1	1.1	1.1
Waste Bins/week	5	2	2
Recycling Bins/week	5	5	2
Compost carts/week	4	4	4
Containers/week/trash room	14	11	8
SYSTEM CAPITAL COST	\$0.00	\$25,000.00	\$50,000.00
WASTE COST/MONTH	\$2,286.54	\$760.70	\$760.70
RECYCLING COST/MONTH	\$0.00	\$0.00	\$0.00
COMPOST COST/MONTH	\$0.00	\$0.00	\$0.00
TRASH COST/MONTH	\$2,286.54	\$760.70	\$760.70
COMPACTION SAVINGS/MONTH	\$0.00	\$1,525.84	\$1,525.84
STAFF LABOR COST/MONTH	\$788.06	\$619.19	\$450.32
STAFF SAVINGS/MONTH	\$0.00	\$168.87	\$337.74
NET MONTHLY TRASH COSTS	\$3,074.60	\$1,379.89	\$1,211.02
Monthly Trash Cost per Unit	\$34.16	\$15.33	\$13.46
PAYBACK-MONTHS	N/A	15	27

CARDBOARD ANALYSIS

315 BOXES/WK



1900 Powell Street, Suite 220
 Emeryville, CA 94608
 (800) 488-7274 Toll Free USA
 (415) 292-5400
 (415) 292-5410 Fax
www.trashmanage.com

WASTE AND RECYCLING RATES (PARTIAL) CURRENT RATES - REFLECT CHANGES EFFECTIVE 1/2022

City:	Los Altos			
Franchise:	Mission Trail			
Multi-Family/Commercial Loose Front Load Waste Rates*:				
Frequency/Size: x/wk-CY Size		1	2	3
				64 Gallon
1 x Week		\$165.35	\$330.75	\$457.29
2 x Week		\$330.75	\$661.45	\$914.60
3 x Week		\$496.08	\$992.16	\$1,371.93
4 x Week		\$661.45	\$1,322.89	\$1,829.23
5 x Week		\$826.82	\$1,653.62	\$2,286.54
6 x Week		\$992.16	\$1,984.34	\$2,743.83
Bin Push Rates Up to 4CY loose	0-25 feet	Per month for each 25 feet over		
	No Charge	\$31.13		
*Rate includes an appropriate level of recycling and organics service for no additional charge.				
2018 Multi-family/Commercial Compacted Front Load Waste Volume*:				
Container Size-CY		2		
1 x Week		\$383.87		
2 x Week		\$760.70		
3 x Week		\$1,151.57		
4 x Week		\$1,535.43		
5 x Week		\$1,919.26		
6 x Week				
*There is no charge for compacted recycling.				
Chute Fed Compactor Cost	\$25,000.00	A500, 2-2CY Towable bins-Thru-wall intakes, tax, ship Ins		
Chute Fed Compactor Cost	\$25,000.00	A500, 2-3CY Towable bins-Thru-wall intake door, tax, shi		

Recommended Trash System Budget

Estimate \$TBD.

Trash System Equipment Specifications: - Provided separately, listed below:

- 4. Section 44 31 00 - Odor Control