CITY OF SANTA BARBARA

TRASH AND RECYCLING ENCLOSURE DESIGN GUIDE

This guide will help you to design trash enclosures to City standards while meeting fire codes, accessibility requirements, and recycling requirements. The information in this guide will help you design a space efficient trash enclosure that has sufficient capacity for your proposed development.

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City Trash & Recycling
SantaBarbaraCA.gov/Trash

Contents

Definitions

Container: Can, cart, dumpster, or barrel.

Material: Each one of these types is considered a material and collected in a separate color coded bin: trash, blue bin recycling, greenwaste, and foodscraps (Figure 1).

Refuse or Waste: Any combination of trash, blue bin recycling, greenwaste, and foodscraps.

Trash: Landfilled trash placed in a brown container.

Recycling: Any material that is diverted from the landfill: blue bin recycling (blue bin), greenwaste (green bin), and foodscraps (yellow bin).

Blue Bin Recycling: Plastics, paper, cardboard, glass containers, and metal that are placed in a blue container.

Greenwaste: Grass, branches, plant material placed in a green container.

Foodscraps: Vegetable trimmings, plate scrapings, raw and cooked food, meat, bones, and fish waste placed in a yellow container.

Enclosure: A walled structure for trash and recycling containers, with one or more gates for access.

Screening: A visual barrier between the public and trash and recycling containers. Screening includes fences, walls, vegetated barriers, and enclosures.

Hauler: The trash and recycling company that empties waste containers, i.e. MarBorg.

Truck Access Point: The place where the trash truck stops and picks up the dumpster or cart. This may or may not be in front of the enclosure.

Weekend Loading: Waste production is higher on weekends than weekdays.

Yd^3: Cubic yards

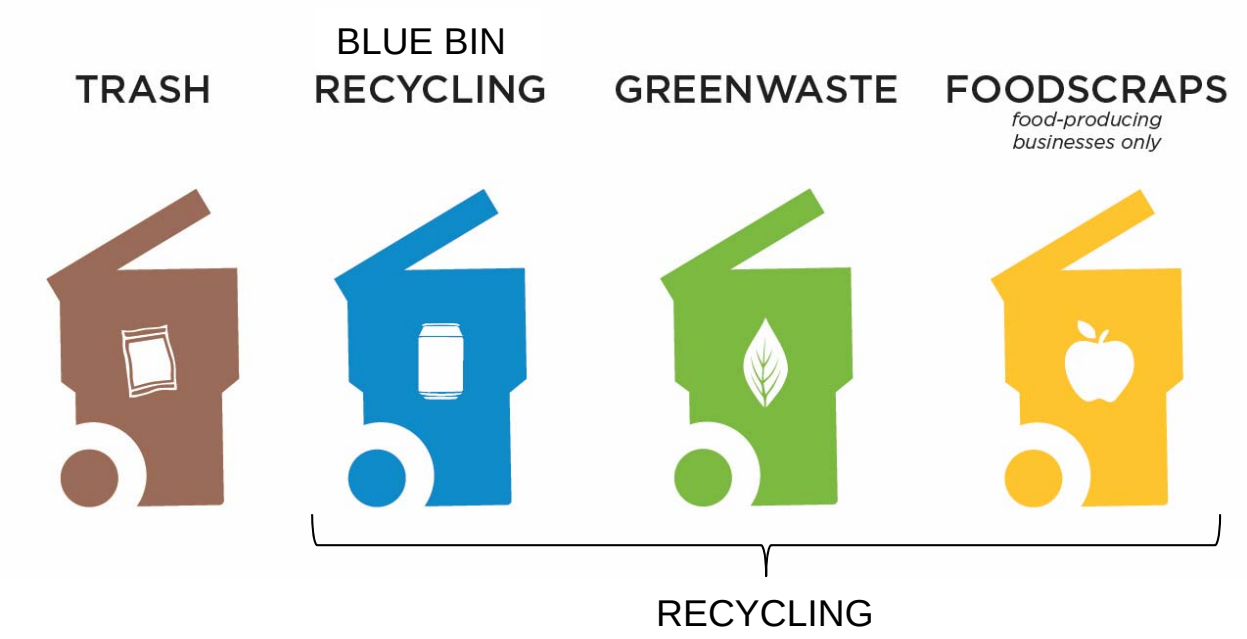


Figure 1: Material Types

When Screening is Required

Per Santa Barbara Municipal Code (SBMC) §7.16.060, when in a position exposed to public view from streets, alleys, walkways or public parking lots, all refuse, bins, containers or bundles on commercial, institutional, and multi-family residential premises shall be screened from such public view in a manner compatible with adjacent architecture. The screening may take different forms including fences, vegetated barriers, and enclosures. The term “Public Parking Lots” in SBMC §7.16.060 refers to any parking lot that is provided for the public as clients, guests, or employees. It is not defined solely as a City-owned or municipal parking lot. All waste containers in all commercial and multi-family parking lots are required to be screened. Most construction on a commercial or multi-family lot requires design review approval, and the Design Review boards (ABR/HLC) will determine if the trash receptacles are “screened from public view in a manner compatible with adjacent architecture”. The Design Review boards may require improvements to enhance the level of screening and overall appearance. Contact City Planning and Zoning, located at 630 Garden Street (805) 564-5578, for more information on Design Review.

Current Enclosure Standards

Some existing commercial and multi-family developments were constructed without consideration of modern trash and recycling space needs. In these cases, existing trash locations may be determined to be non-conforming with respect to location, size, and screening. If an existing enclosure does **not** meet the following requirements, it may have to be modified or rebuilt.

- All waste containers are screened from view in a manner compatible with existing architecture. This includes food or blue bin recycling containers and grease barrels that may be currently outside enclosures due to lack of space.
- Equal space is provided in the enclosure for trash and recycling. 50% of the enclosure space must be designated for trash while the other 50% can be designated for blue bin recycling or any other combination of recycling; for example, 25% blue bin recycling and 25% foodscraps, or 25% blue bin recycling and 25% greenwaste, etc.
- The enclosure shall be accessible, including an accessible path of travel provided to the enclosure.
- Space is provided for foodscraps containers for food producing or serving businesses.

When the Trash Area Must be Upgraded to Current Enclosure Standards

Many building permits require upgrading the trash enclosure. Upgrades can be required for both building shell and tenant improvement permits. Only minor improvements will be exempted from current enclosure standards. Enclosure upgrades may also be required if a complaint is received by the City for unscreened, overflowing, or inappropriately sited waste containers. Note that Design Review approval and a building permit is required for all new commercial and multi-family trash and recycling enclosures, even those that result from enforcement cases.

Enclosure upgrades will be required for the following types of improvements:

- Building shell and site improvements. Any new development or comprehensive site improvement plan that includes some or all of the following components: building upgrades, parking, landscaping, and other site infrastructure.
- Alterations to existing outdoor areas or parking areas, such as: reconfiguring a parking lot, adding or removing parking spaces (not including a like-for-like restripe or ADA upgrades), and significant alterations to the site configuration and yard areas.

- Any change to an existing trash enclosure, construction of a new trash enclosure, or a change in enclosure location.
- Food establishments, especially if new or increasing to outdoor seating.
- Change to building use, type, size, or occupancy space.

Where to Site the Enclosure

In Relation to the Buildings

The path between the building and the enclosure will be used by those that empty the waste containers in the building. Consider the hours of operation, type of business, and how waste will be brought to the enclosure. Make sure that the path of travel works for the building occupants. If the enclosure must be handicapped accessible, an accessible route of travel from the building will be required.

Minimum Distance from Building
Dumpsters cannot be placed within 5 feet of combustible walls, openings, or combustible roof eave lines unless the enclosure is protected by an approved automatic fire sprinkler system. This restriction does not apply to carts or cans. Containers cannot be placed under stairways unless the stairway is fire rated for 1 hour or protected by automatic fire sprinklers.

Maximum Distance from Building Served
Commercial waste enclosures must be located a maximum of 250' from the nearest point of the building served. For residential complexes where occupants empty their own trash and recycling, 150' is the maximum.

Setbacks
Trash and recycling enclosures may not be located within any required zoning setback, the front yard, or required open yard areas for lots developed with residential uses.

Offsite Enclosure
Trash enclosures generally must be located on the parcel on which the waste is generated. An enclosure located on a separate parcel from the proposed development will be considered an offsite enclosure, even if both parcels are owned by the same person. The owners of both parcels will have to record an easement created by the City that binds both properties regardless of ownership or sale. A lot tie agreement can also be accepted if it specifies that an offsite trash agreement is required when the lots separate in the future.

Information to include on plans:

- Show all enclosure parts to scale.
- Show and label all enclosures and include gates.
- Show containers to scale inside enclosures and indicate size.
- Indicate height of walls.
- If accessibility is required, show accessible path of travel.
- Show slope and distance from enclosure or waste area to truck access point (TAP).
- Show curb cuts between enclosure and truck access point.
- Show how enclosure drains to landscaping, vegetated swales, permeable pavement, or bio retention basins.
- For indoor enclosures, show floor drains and connection to sanitary sewer. Show ventilation system.
- For shared enclosures, list all businesses that will share each enclosure, indicate business type and gross square footage of each. Business types are listed in Appendix B. Include offsite businesses that will be sharing the enclosure.
- For multi-family complexes, list total bedrooms of units assigned to each enclosure.

Accessibility
The requirements only apply to enclosures that must be accessible as required by the California Building Code. There must be an accessible path of travel from building to enclosure. The following restrictions address some of the most common problems for path of travel to a trash enclosure, but are not comprehensive:

- Maximum slope is 5% in the direction of travel and maximum 2% cross slope
- Path of travel cannot be behind parked cars
- Crossing the vehicle path of travel is okay, but detectable warnings are required
- Compliant doors and level landing are required

Public or Customer Areas
Trash and recycling should not be transported by employees through public or customer areas. Waste may be taken out multiple times per day, especially in restaurants. Waste carry out may result in litter or liquid waste (trash juice) on the path of travel.

In Relation to the Truck Access Point (TAP)

The TAP is where the trash truck stops and lifts the trash and recycling containers into the truck. Ideally, the truck access point is the concrete apron in front of the enclosure, but this is not always possible. Dumpsters and carts can be pushed by the truck driver to the TAP. The access point must be engineered to withstand up to 20,000 lbs. of direct force from a single truck axle, multiple times per week. The path between the enclosure and the truck access point will be traveled by the waste haulers, moving the trash and recycling containers. Design this route for heavy dumpsters.

Maximum Distance from the TAP
The enclosure should be located no more than 25’ from the TAP with a maximum distance of 50’. For distances longer than 25’, additional charges apply for servicing.

Maximum Slope
Slope from the enclosure to the TAP must not exceed 2% when dumpsters are used. If dumpster must be pushed down (and up) a curb cut to the TAP, maximum dumpster size is 3yd^3. There is no restriction for carts.

Surface
The entire path of travel must be paved with asphalt, concrete, or smooth pavers, free of detectable warnings, and have curb cuts to the TAP. Degraded surfaces must be repaved.

Overhead Clearance
Allow for overhead clearance of 20’ where bin is serviced. The driver will typically move the container about 8’ away from the enclosure before dumping.

Public or Customer areas
Trash and recycling should not be transported through public or customers areas by the hauler to the TAP. Hauler may need to collect waste during business hours and waste collection may result in litter or liquid waste (trash juice) on the path of travel.

Multi-Family Residential Carts and Cans
If the waste hauler cannot drive up to the enclosure where *carts* are located, a 30% In Place Service charge will be added to the bill. There is no extra charge for 32 gallon *cans*, but they are less space efficient than 95 gallon carts.

Siting Considerations for Driveways and Parking Lots

Trash and recycling enclosures may not displace any required parking spaces.

The driveway must be paved with asphalt, concrete, or pavers and be able to withstand trucks weighing up to 62,000 lbs. The drive must have a minimum width of 11'6'' in one direction and must be free of storm drain grills. Curves must be designed with a turning radius of 34' as shown in Figure 2. The approach must be designed to minimize backing situations since trash trucks cannot back around curves. Trash truck access should not conflict with parked cars or delivery trucks. The driveway must have an overhead clearance of 16' that is free from obstructions or overhanging tree branches.

If dumpsters will be pushed to a pickup point in the roadway, the roadway will endure 20,000 lbs. of direct force each time the dumpster is emptied, and it may be several times per week. For new construction, the roadway must be designed to accommodate this. Sharp turns will grind and weaken roadways due to the truck weight and frequency of servicing. When dumpsters are used, do not site the enclosure on a hill. Dumpsters are heavy and easily turn into runaways on a slope.

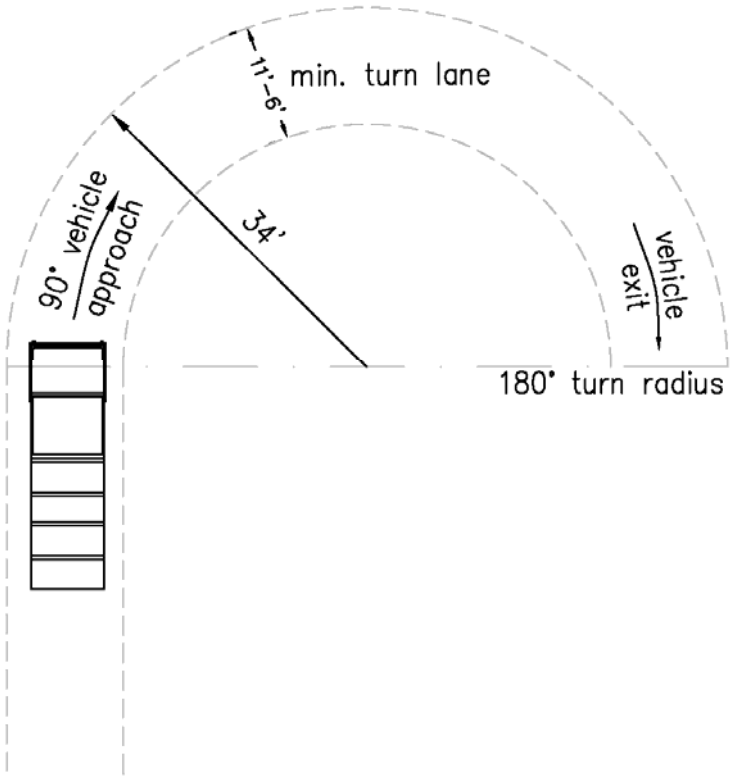


Figure 2: Truck Turning Radius

Requirements for Parking Garages and Indoor Locations

The waste hauler will not be able to empty dumpsters in parking garages unless ceiling height exceeds 20'. They must be pulled to the street by hand and are subject to the limits on slope and distance for path of travel from enclosure to TAP. If dumpsters must be pushed on narrow paths adjacent to cars, 8" concrete curbs must be used to prevent collisions.

Haulers must have access to parking garages or locked gates without restriction or prior notification. The building occupants may bring out containers for collection, but they must stay within the development or on a back street or alley. Building occupants may not bring out dumpsters and leave them out on public streets on collection day.

For indoor locations where there will be food in the trash or foodscraps bins, the trash/recycling area requires these additional features for sanitation:

- Fully enclosed room (including ceiling) within the parking garage/building
- Walls and floor constructed with a smooth finish that can be easily cleaned
- Mechanical ventilation, or with screened vent openings to the outdoors
- Floor drain with proper drainage slope that connected to the sanitary sewer
- Spigot with hose for cleaning

An indoor trash/recycling area that serves any of the following occupancies will require the additional features:

- Caterer or food production facility
- Coffee shop or restaurant
- Day care, preschool, and/or K-12 school
- Grocery store or market with perishable items
- Homeless shelter
- Residential
- Nursing care facility
- Any facility with a commercial kitchen
- Any similar facility that has the same potential for odor and/or nuisance

Enclosure Parts and Specifications

Floor

The container must rest on a flat, level concrete surface, or slightly sloped one when floor drains are used. Floor drains can only be used in roofed or interior enclosures, and they must drain to the sanitary sewer. A concrete apron measuring the width of the enclosure and extending out 8' from the front will join the enclosure pad to the surrounding pavement. The apron surface must be the same elevation as the enclosure pad threshold and the surrounding surfaces, with a slope of 1/8 inch per foot away from the enclosure pad. It must be engineered to withstand up to 20,000 lbs. of direct force from a single truck axle. If the concrete apron transitions to asphalt, sufficient subsurface preparation is required to prevent dimpling or breakdown of the asphalt over time.

Walls and Interior Curbs

Walls must generally be constructed of masonry or wood, with finishes and colors that are compatible with the adjacent architecture. No chain link fencing is allowed. Minimum wall height is 6'6" for dumpsters, 5' for carts only. For enclosures within the El Pueblo Viejo Landmark District, the architectural style of details may require enhancement of materials or finishes.

For enclosures with dumpsters, provide interior curb bumpers that are 8" high and 6" wide along each wall to prevent damage to the interior walls as shown in Figure 3. The curb must be high enough to stop the body of the dumpster, not the wheels. Use curbs for dumpster placement when multiple dumpsters are used.

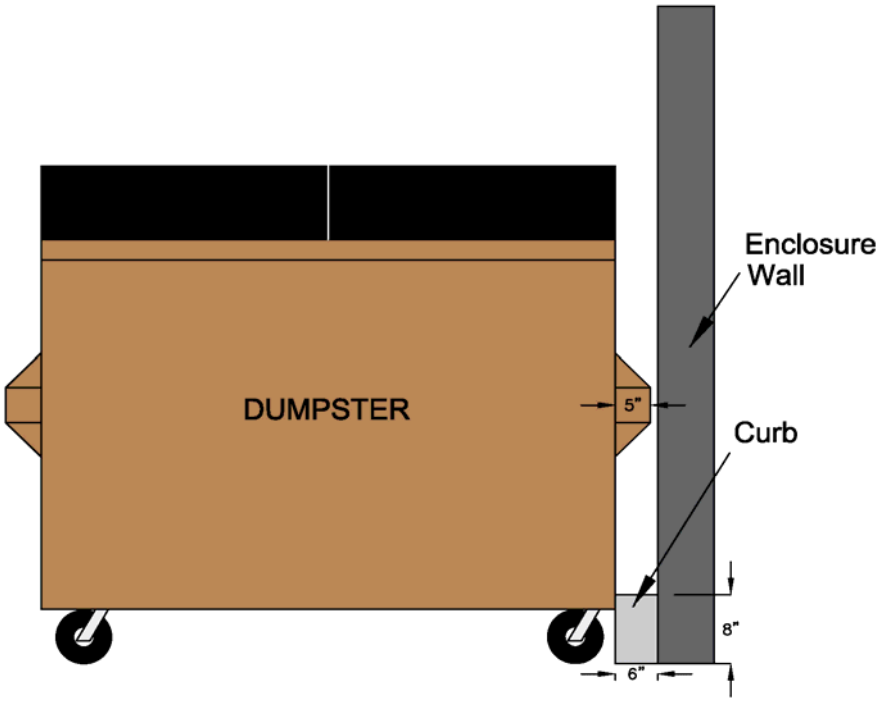


Figure 3: Curb Detail

Gates

Dumpster enclosures require two gates, an accessible one for the building occupants to use, and a large, industrial gate for the haulers to bring out the containers. Enclosures for carts can have one gate. Place gate posts between containers so that they can be easily removed.

Pedestrian/Accessible Entrance
There must be an accessible latch on the gate. If there is no gate, the opening must not be visible from a street, alley, or parking lot. The pedestrian gate must be 36' wide, with a 32" clearance of all hardware.

Hauler Gate
Hinged doors that swing outward, or sliding doors that move side to side are acceptable. Gates may not open onto sidewalks or the public right of way. Sliding gates may be more appropriate for enclosures facing the public right of way. When using sliding gates, the guide cannot sit above the floor because the dumpster will not be able to roll over it. Either use a recessed guide, or a top mounted guide. Hauler gates must lead to the driveway, not to parking spaces or the handicapped safety zone.

Doors can be made of metal or wood. Hardware must be of sufficient strength to accommodate repetitive swinging, and individuals with gloves must be able to open them. Provide means to secure gate doors both opened and closed, e.g. cane bolt w/sleeve and slide latch between doors and sleeve in pavement. The bolts should be a minimum ½ inch in diameter and the sleeves for both should be a minimum of 1 inch or double the size of the bolt to allow flexibility. Be sure to have bolt drop in the ground a minimum of 4 inches into the ground. Use bolts, not screws, to secure gate to the poles or walls.

Gates must be of sufficient size and quantity so that it is not necessary to remove one dumpster to service another (trash, blue bin recycling, food, and greenwaste dumpsters are emptied on different schedules). Gates must be 2" off the ground and hung on the outside. Gates must open to at least 120° as shown in Figure 4. Opening dimensions must be clear of doors edges, hinges, or other obstructions. Openings must be sized for the largest dumpster in the enclosure. Gate openings are as follows:

3 - 4 cubic yard dumpsters
Dumpsters pulled out sideways: 79"
Dumpsters pulled out straight: 105"

1.5 - 2 cubic yard dumpsters
Dumpsters pulled out sideways: 64"
Dumpsters pulled out straight: 105"

Dumpsters are not very maneuverable. It is difficult to remove them from a restricted opening, and difficult to replace them so that the aisle between dumpsters is maintained. Do not block removal of dumpsters by putting pillars or gate posts in the middle of the hauler gates. If you need support, attach wheels to bottom of gates where they meet. Use bolts and sleeves to secure gate, with optional hardware on top of gates to secure them to each other. Design gates for the full width of the opening.

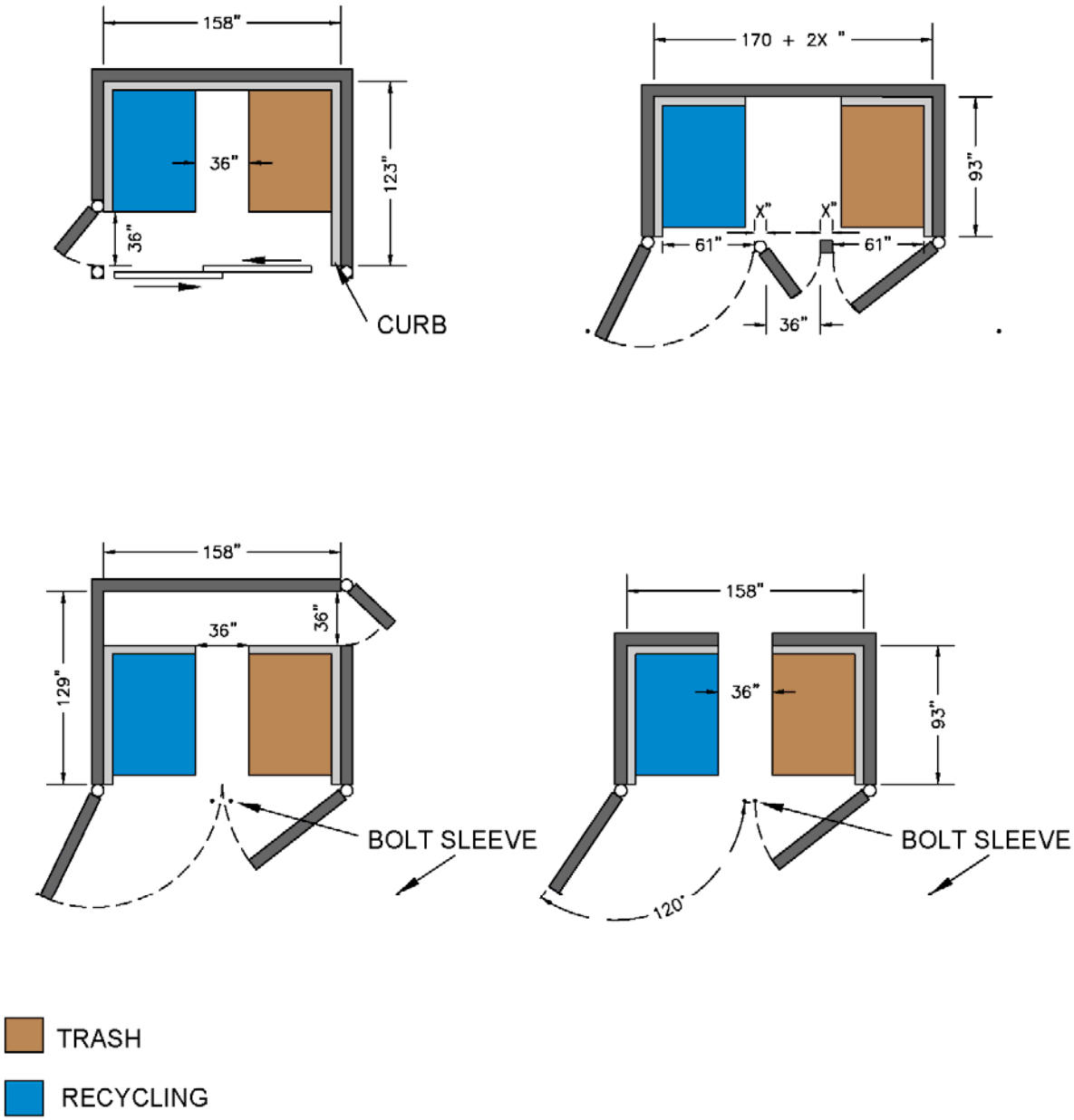


Figure 4: Curbs and Gates

Roof and Drainage

The enclosure must drain to landscaping, vegetated swales, permeable pavement, or bio retention basins, which must be sized to capture and treat the volume of runoff generated by one inch of rainfall every 24 hours. The enclosure may not drain into storm drains. The enclosure must be protected from run-on water with slopes or diversions. If fully roofed and protected from rainfall, the enclosure may have a drain to the sanitary sewer. Water connections in or adjacent to the enclosure will only be allowed if the enclosure is plumbed to the sanitary sewer or if the drainage area is sufficient to retain the wash water. The minimum clearance inside a roofed or partially roofed enclosure is 7'6" with a 6'8" high entryway for pedestrian access.

Sizing Trash and Recycling Containers

The enclosure must have equal sized trash and recycling containers. Each material is placed into separate containers and collected by separate trucks. Trash is in a brown container, blue bin recycling in blue, greenwaste in green, and foodscraps in yellow. All developments that include food producing or food serving elements must accommodate foodscraps containers. Restaurants or grease generating businesses must also include a grease bin in the enclosure. Businesses or multi-unit complexes with their own maintenance staff or gardeners may require greenwaste containers.

Figure 5: Container Sizes

Dumpsters vs. Carts. If trash is in a dumpster, blue bin recycling must also be in a dumpster. Design for the largest container possible, and do not substitute frequent collection of carts for a dumpster to save space. Carts overflow easily and become jammed with boxes and larger items. When dumpsters are required, design for 4 cubic yard dumpsters if you can afford the space. This makes the enclosure more flexible for the users.

In mixed use developments, residential waste should be separate from commercial. The maximum size for residential dumpsters is 3 cubic yards. The maximum size is 2 cubic yards for senior developments where the seniors, rather than paid staff, bring out their own trash and blue bin recycling. Container dimensions are detailed in Appendix A.

Design for the largest container possible. Businesses come and go, and the enclosure should be flexible enough to service most tenants barring a change of use. The *Santa Barbara Waste Profiles* in Appendix B provides information that can be used to calculate how much waste will be produced by the development. The figures provided for calculating waste are based on averages, but variation can be accommodated by increasing or decreasing frequency. To determine which containers are required, first calculate the total volume of each material that

will be produced, then figure out optimal container size and collection frequency. Details are provided below, with a sample calculation at the end. This process has been automated by the downloadable Waste Generation Calculator that can be used on computers with Microsoft Excel. (http://www.santabarbaraca.gov/civicax/filebank/blobdload.aspx?BlobID=173684)

Keep in mind that calculations are only a prediction of the amount of waste that will be generated. Waste generation is affected by where the business is located and their throughput. When evaluating waste enclosure capacity, the City may look at the records for other stores or restaurants if the proposed business is part of a chain and modify the capacity requirements accordingly. Some unique businesses are not in the *Santa Barbara Waste Profiles* in Appendix B due to insufficient sample size, but the City may have 1 or 2 records for a similar business.

Step 1: Calculate the total waste for each enclosure

The total waste is the sum of all trash and recycling for each business that shares the waste containers. It is measured in cubic yards. Look up all businesses that will use the enclosure in the Santa Barbara Waste Profiles in Appendix B, and multiply the units by the Waste per unit conversion factor. For most businesses, "units" is the gross square footage. The business types are defined in Appendix C since the groups are not always intuitive. **Always check the *Business Type Definitions* in Appendix C before deciding which business types are in the development.**

Total Waste (yd^3) = yd^3/unit x units

Step 2: Calculate the cubic yards of each material

Calculate the trash, blue bin recycling, greenwaste, and foodscraps for each business individually, then add like materials together. For each business in the enclosure, use the total waste calculated in step 1, then multiply it by the percentage of each material as shown in Appendix B.

Blue Bin Recycling (yd^3)	= Total Waste (yd^3) x Blue Bin Recycling %
Greenwaste (yd^3)	= Total Waste (yd^3) x Greenwaste %
Foodscraps (yd^3)	= Total Waste (yd^3) x Foodscraps %
Trash (yd^3)	= Total Waste (yd^3) x Trash %

Step 3: Determine the container size for each material type and calculate frequency.

Use the largest container suitable for each waste type. Divide the cubic yards of each material by the container size (in cubic yards) as shown in Appendix A. The resulting number is the number of times the container must be emptied each week to accommodate the amount of material.

Foodscraps are picked up a minimum of twice per week, so adjust the container size if necessary. The ideal and most cost effective pickup frequency is once per week for trash, blue bin recycling, and greenwaste. Maximum pickup frequency for design review is 3 times per week for businesses with weekend loading, and 4 times per week for businesses with heavier week day production. Pickup is not available on Sunday, so this will allow for a 2 day accumulation of waste. Since not every business conforms to the average waste generated, lower frequencies allow for both variation from the norm, change of business, or growth. Small containers can overflow in 1 day if business waste generation varies from day to day. Design for

the largest container possible. If frequency exceeds 4 times per week, design for an additional container for the material type.

Example 1: Large Mixed Use Development

A mixed use development is proposed with the following businesses: winery 3,194 ft^2; brewery 3,666 ft^2; storage 1,358 ft^2; architecture studio 2,194 ft^2; computer graphics shop 698 ft^2; retail 2,011 ft^2; personal training 523 ft^2; restaurant 1,965 ft^2; coffee shop 700 ft^2; and eight 2-bedroom residential apartments.

Steps 1 & 2: Calculate the total waste and cubic yards of each material

a) Assign a type to each business. According to Appendix C, both the brewery and restaurant are considered *Restaurants, full service* because the brewery serves food; the architecture studio is type *Office and Education,* the computer graphics shop is *Services* because the products are electronic design files, and personal training *is Gym and Fitness.* The storage area will not produce appreciable waste, so it is left out of the calculations. The coffee shop, retail, and residential are their own types.

b) Find yd^3/unit from Appendix B for each Business Type, and use the units to calculate total waste.

c) Apply the percentages of blue bin recycling, foodscraps, trash, and greenwaste from Appendix B to break down the total Waste into cubic yards for each material type.

d) Sum the cubic yards of each material type.

Results are shown below. None of these businesses produce a significant amount of greenwaste, so it is not in the table.

Business	Business Type (a)	yd^3 / unit (b)	Units	Total Waste (yd^3) (b)	Food %	Food (yd^3) (c)	Blue Recycle %	Blue Recycle (yd^3) (c)	Trash %	Trash (yd^3) (c)
Personal Training	Gym and Fitness	0.0006	523	0.31	-	-	20%	0.19	40%	0.13
Computer Graphics	Services	0.0010	698	0.70	-	-	50%	0.35	50%	0.35
Restaurant	Restaurant	0.0036	5631	20.27	20%	4.05	40%	8.11	40%	8.11
Brewery										
Coffee Shop	Coffee Shop	0.0076	700	5.32	10%	0.53	50%	2.66	40%	2.13
Residential Apartment	Multi-Family Residential	0.3021	16	4.83	-	-	50%	2.42	50%	2.42
Retail	Retail	0.0012	2011	2.41	-	-	50%	1.21	50%	1.21
Winery	Winery or Tasting	0.0006	3194	1.92	-	-	50%	0.96	50%	0.96
Architecture Studio	Office & Education	0.0005	2194	1.10	-	-	50%	0.55	505	0.55
Total (yd^3)				**36.8**		**4.6**		**16.5**		**15.9**

Step 3: Determine the container size for each material type and calculate frequency.
Using the total cubic yards for each material type calculated in Step 2, pick the largest possible container size and calculate the frequency by dividing the total amount of each material by the proposed container size. Frequency must be a whole number. Frequency is rounded up if the decimal is .3 or more, rather than the customary .5 or more.

All Businesses	Food (yd^3)	Blue Recycle (yd^3)	Trash (yd^3)
Total (yd^3)	4.6	16.5	15.9
Container Size (yd^3)	2	4	4
Frequency (pickups per week)	3	4	4

The collection frequency of foodscraps is fine, but the frequency is too high for blue bin recycling and trash. From Appendix B we can see that the restaurant, brewery, and winery are subject to weekend loading, and they produce a large portion of the total waste. If only one 4 yd^3 dumpster is used for each, the blue bin recycling and trash will overflow on Sunday when there is no collection service. A second dumpster is required for the blue bin recycling and trash. It makes sense to provide two enclosures, but it is not required. If using two enclosures, one is allocated to the food serving businesses, and the second for all other uses. When divided into two enclosures, the waste looks like this:

Enclosure 1: Food Serving

Business	Food (yd^3)	Blue Recycle (yd^3)	Trash (yd^3)
Restaurant	4.05	8.11	8.11
Brewery			
Coffee Shop	0.53	2.66	2.13
Total (yd^3)	**4.6**	**10.8**	**10.2**
Container Size (yd^3)	2	4	4
Frequency (pickups per week)	3	3	3

Enclosure 2: Non Food Serving

Business	Blue Recycle (yd^3)	Trash (yd^3)
Personal Training	0.19	0.13
Computer Graphics	0.35	0.35
Residential Apartment	2.42	2.42
Retail	1.21	1.21
Winery	0.96	0.96
Architecture Studio	0.55	0.55
Total (yd^3)	**5.7**	**5.6**
Container Size (yd^3)	4	4
Frequency (pickups per week)	2	2

As an alternative to these steps, a Waste Generation Calculator is available. For help with the steps, call City Trash & Recycling at **805-564-5631**. Please be prepared to provide the business types and gross square footages (or units) when you call or email.

Container Layout in the Enclosure

The users must be able to access all of the containers with a full trash bag in hand without moving containers or brushing against them. Trash, blue bin recycling, foodscraps, and greenwaste containers are picked up by different trucks on different days. The hauler should not be required to remove a blue recycling bin from the enclosure to get the trash bin out. When designing the layout, don't rely on perfect placement of dumpsters. The haulers will put them back, but are not responsible for maintaining aisle widths. Use interior curbs if you need to place the dumpster precisely in the center of an enclosure. Allow 6" width for curbs in the layout, and allow for 6" between containers or between containers and gates.

Dumpsters

Dumpsters must be accessed by users from the long side. Designs that block or partially block access from the long side will not be approved since the dumpster will not be fully loaded on the blocked portion. There must be a minimum 36" aisle along the long side of the dumpsters. Square enclosures work well for two dumpsters, but where multiple containers are used, it is better to place containers in rows with aisles. See Figure 6 on the next page for details on dumpster layouts.

Keep in mind that dumpsters do not easily rotate on a fixed point. Unless the enclosure is large, dumpsters cannot turn 90° to get out of the gate. The clearances needed to rotate a dumpster 90° are shown in Figure 7. Values for the rotation clearance radius (r) are found in Appendix A.

The gates must span the full width of the enclosure so that dumpsters can be pulled straight out. Provide an aisle that is at least 12" wider than the dumpster for removal. The aisle must be free and clear of gate hardware, so do not minimize this dimension. This aisle must be maintained along the entire path of travel from the daily location to the truck access point, so ensure that each gate or restriction meets these requirements.

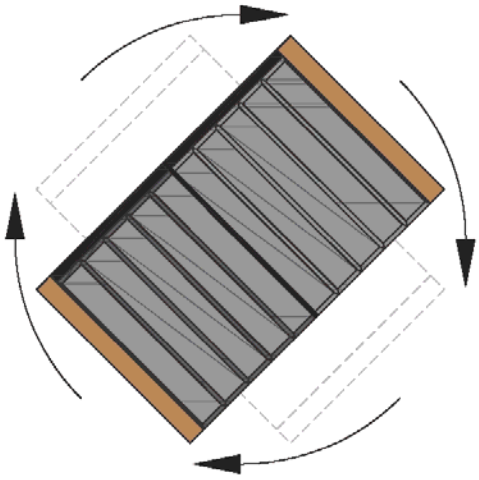
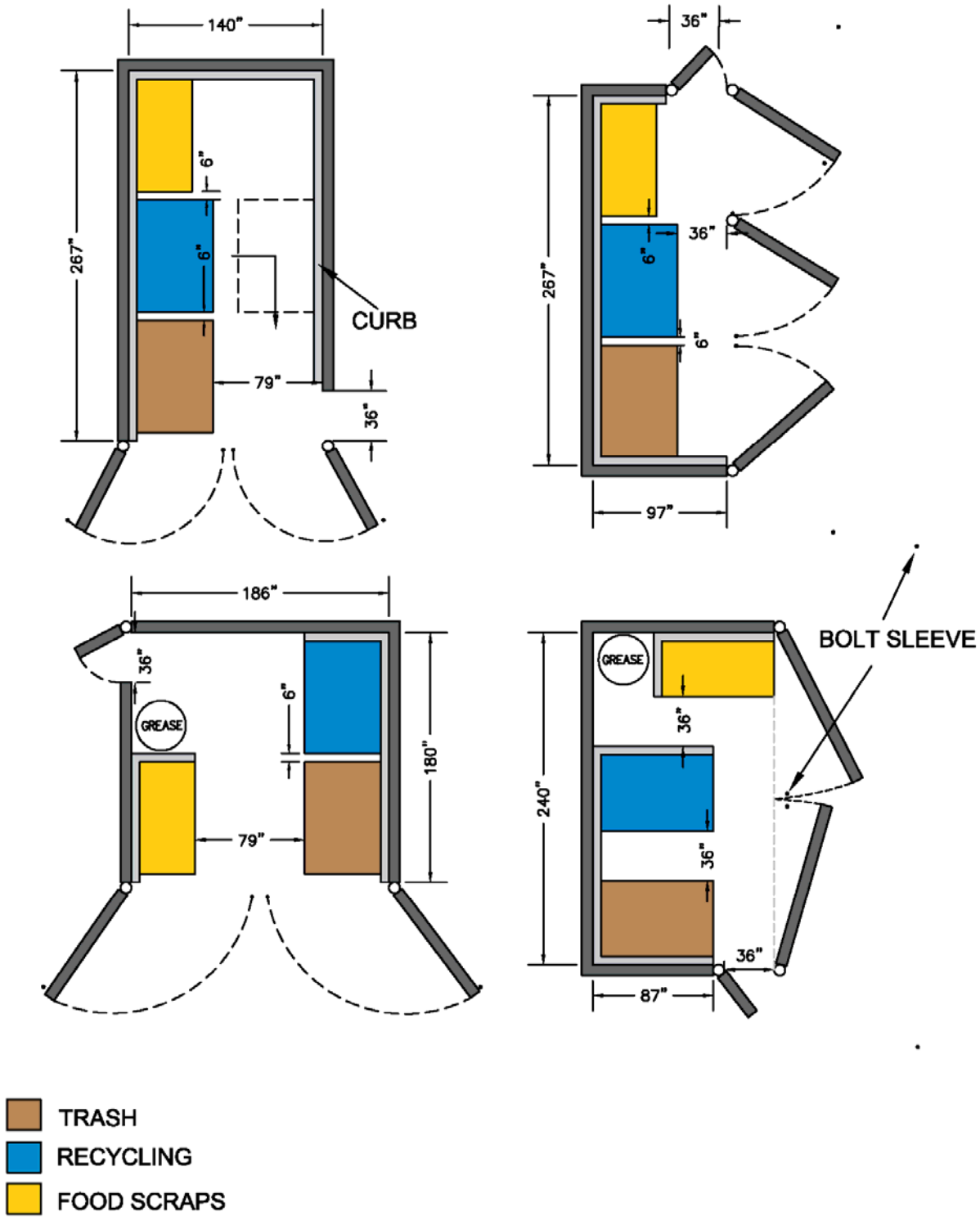


Figure 7: Dumpster Rotation Clearance

Grease Containers

Grease containers are required for restaurants that deep fry food or separate grease. Some grease containers have wheels, others don't, so design for immovable containers. They are emptied via a suction hose, so the truck must be able to drive up to enclosure and put a hose it in the container. Maximum distance from the truck access point to the grease container is 45'.



ALL FIGURES INCLUDE TWO 4 CUBIC YARD DUMPSTERS AND ONE 2 CUBIC YARD DUMPSTER. GREASE BARREL MEASURES 36" IN DIAMETER. DIMENSIONS TO INSIDE WALLS.

Figure 6: Multiple Dumpster Layouts

Carts
All of the carts must be accessible to a user with a trash bag in hand without moving the carts. Don't put carts in corners or behind other carts. See Figure 8 for effective and ineffective cart layouts.

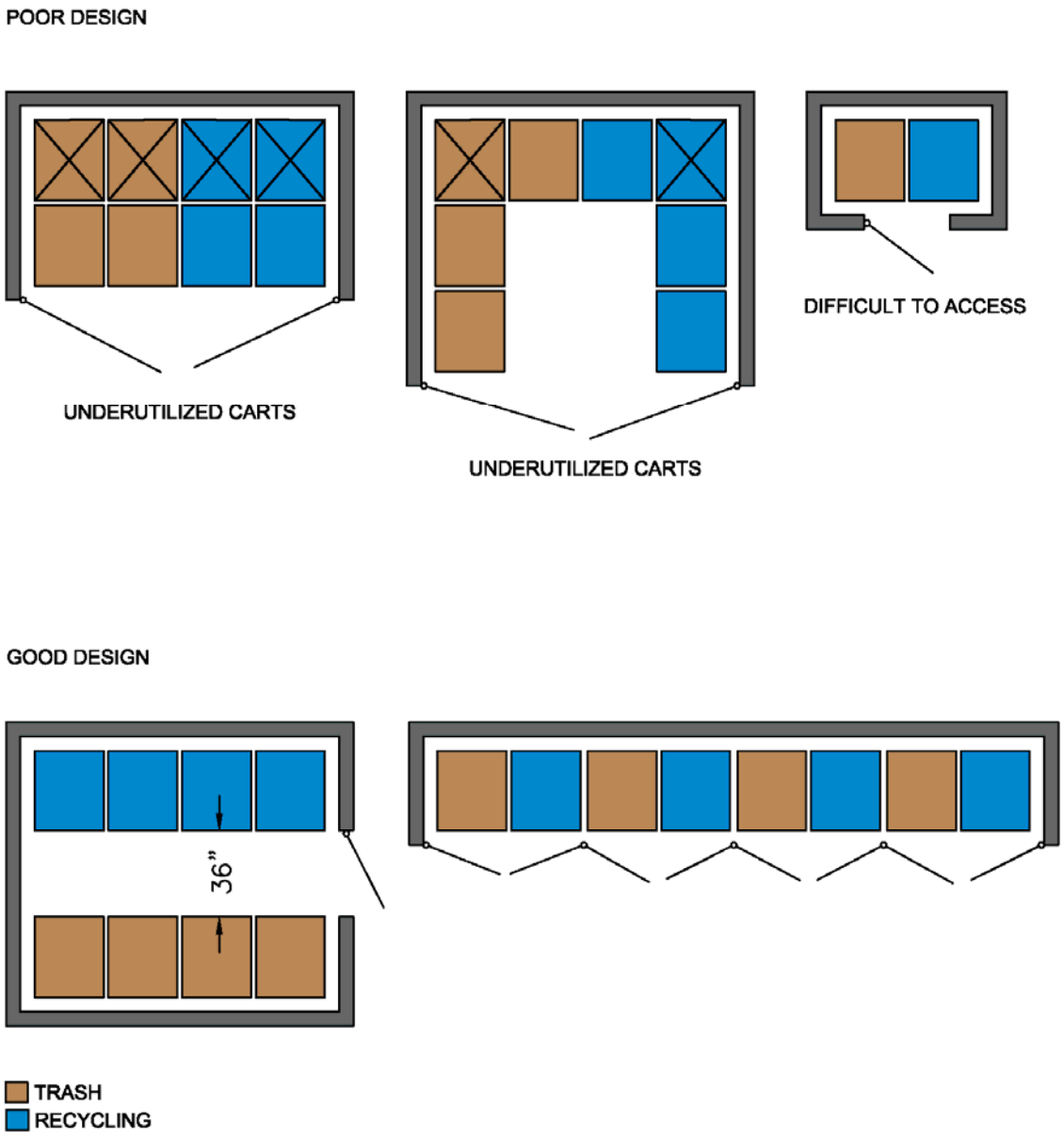


Figure 8: Cart Layouts

Indoor Design for Trash and Recycling

Residential
Allocate adequate indoor space for blue bin recycling to be located next to trash in kitchens. When chutes are used, locate trash and blue bin recycling chutes side by side. Chutes only work when there are onsite personnel to swap out empty dumpsters for full ones at the bottom of chutes.

Commercial Kitchens
For food generating businesses, plan for foodscraps bins to replace trash cans at prep stations, but trash and blue bin recycling in other areas should be side by side.

Large Medical Facilities
A foodscraps dumpster will be required for the diversion of table paper from exam rooms. The paper is composted along with the foodscraps. Large facilities may require a red dumpster for biohazard waste.

Businesses with Confidential Documents
For Financial Institutions, Medical Facilities, and other businesses that handle confidential information, allow indoor space for 65-95 gallon document destruction carts in addition to trash and recycling.

Special Considerations for Large Businesses

Supermarkets, malls, large hotels, and chain stores may have special considerations. Balers may be used for large cardboard generators, but stored bales are subject to the same storage restrictions (not within sight of street, alley, or parking lot) as other waste. Compactors will only be allowed for trash only if there is also a separate compactor for blue bin recycling. Supermarkets will require storage of pallets and reusable crates that must be kept out of site. Show this area on site plans in addition to dumpster enclosure. Some operations with permanent on-site personnel will maintain their landscaping instead of hiring a company that will haul the trimmings away. If this will occur onsite, provide greenwaste containers within the development. If designing for a large business, contact City Trash & Recycling at **805-564-5631** ***as early in the process as possible*.**

Appendix A: Container Specifications

Container	Width	Depth	Height	Rotation Clearance Radius (r)	Cubic Yards	Equivalent Container(s)	Note
32 gal can	25”		27”		.16	35 gallon cart	
35 gal cart	21”	23”	40”		.16	32 gallon can	
65 gal cart	27”	29”	41”		.32	2 cans or 2-35gal carts	
95 gallon cart	29”	34”	46”		.47	3 cans or 3-35 gal carts	Not available for foodscraps[1]
1.5 yd^3 dumpster	81”	34”	46”	56”	1.5	3-95 gal carts	
2 yd^3 dumpster	81”	40”	52”	57”	2	4-95 gal carts	
3 yd^3 dumpster	81”	48”	60”	59”	3	6-95 gal carts	Not available for foodscraps
4 yd^3 dumpster	81”	55”	67”	61”	4	8-95 gal carts	Not available for foodscraps

[1] Foodscraps are too heavy in large containers

Appendix B: Santa Barbara Waste Profiles for Business types

Business Type	Waste Generation (yd^3/unit)	Unit[2]	Food	Green	Blue Recycle	Trash	Weekend Loading[3]
Auto Repair	0.0010	ft^2			50%	50%	
Bank	0.0006	ft^2			50%	50%	-
Bar	0.0018	ft^2			50%	50%	+
Beauty & Spa	0.0006	ft^2			50%	50%	
Building Materials	0.0017	ft^2			50%	50%	
Car Wash	7.5	flat rate[2]			50%	50%	
Caterer	0.0024	ft^2	20%		60%	20%	
Coffee Shop	0.0076	ft^2	10%		50%	40%	
Construction & Landscaping	0.0017	ft^2		20%	30%	50%	
Convenience Store or Gas Station	0.0029	ft^2			50%	50%	
Day Care/Preschool	0.08	student	30%		35%	35%	-
Drugstore	0.0010	ft^2			50%	50%	
Equipment Rental	0.0004	ft^2			65%	35%	
Fast Food	0.0078	ft^2	15%		45%	40%	
Food Production	0.0043	ft^2	30%		35%	35%	-
Grocery Store	0.0023	ft^2	20%		30%	50%	
Gym & Fitness	0.0006	ft^2			60%	40%	
Homeless Shelter	0.24	beds	20%		30%	50%	
Hotel	0.22	rooms		10%	40%	50%	+
Industrial Manufacturing	8.6	flat rate			50%	50%	-
Industrial Supplies	3.4	flat rate			50%	50%	

[2] When flat rate is the unit, the waste generation is a set amount, regardless of business size. This data may not be applicable for businesses outside the City of Santa Barbara.

[3] Business will have higher waste production on weekends if (+) is shown, lower than weekdays if (–) is shown.

Business Type	Waste Generation (yd^3/unit)	Unit[2]	Food	Green	Blue Recycle	Trash	Weekend Loading[3]
Laundromat	0.0025	ft^2			50%	50%	
Medical	0.0008	ft^2	15%[4]		45%	40%	-
Multi-Family Residential	0.30	bedrooms			50%	50%	
Nursing Care Facility	0.31	beds	20%		30%	50%	
Office & Education	0.0005	ft^2			50%	50%	-
Residential with Dining	0.23	beds	10%	10%	30%	50%	
Restaurant, full service	0.0036	ft^2	20%		40%	40%	+
Retail	0.0012	ft^2			50%	50%	
Schools: K-12	0.04	student	25%	15%	25%	35%	-
Self-Storage	6.1	flat rate			50%	50%	
Services	0.0010	ft^2			50%	50%	
Social Club	4.4	flat rate			50%	50%	
Theater: movie	22	flat rate			50%	50%	+
Vehicle Dealers	0.0010	ft^2			50%	50%	
Veterinary	3.4	flat rate			50%	50%	
Wholesalers / distributors	0.0007	ft^2			50%	50%	
Winery or Tasting[5]	0.0006	ft^2			50%	50%	+

[4] Table paper can be placed in foodscraps bins.

[5] If grapes will be crushed onsite seasonally only, designate a space for one or more foodscraps dumpsters that will be staged temporarily. As long as the placement is temporary, screening is not required.

Appendix C: Business Type Definitions

Business Type	Definition
Auto Repair	Auto repair, painting, smog, oil change, tires, car stereo
Bank	Savings and lending institutions
Bar	Primarily serving alcohol, does not serve meals. Bars that serve meals are classified as *Restaurants, full service.*
Beauty & Spa	Hair styling, barbers, tanning, manicurists, health spas, skin treatments
Building Materials	Sellers of bulk material often with installation component: carpet, glass, tile, lumber, air conditioners, stone, doors, windows, hardware, window coverings, canvas
Car Wash	Primarily a car wash, does not include gas stations with car washes. Gas stations with mini marts are classified as *Convenience Stores* regardless of any other amenities onsite.
Caterer	Preparing food onsite and delivering it offsite
Coffee Shop	Primarily serving coffee and tea, including some food
Construction & Landscaping	Service yards of construction companies: landscaping and construction contractors, fencing, pool contractors, roofers, electricians, plumbers, painters, aggregate yards
Convenience Store or Gas Station	Mini marts with drinks and snacks, including those at gas stations
Day Care/Preschool	Facilities for pre-kindergarten children
Drugstore	Pharmacies, plus other goods. CVS, Rite Aid, etc.
Equipment Rental	Vehicle, bicycle, party & event, equipment , limo rental
Fast Food	Food with disposal packaging and wrappings and no table service. ie: to-go, ice cream, smoothies, burgers, etc.
Food Production	Fish market, butchers, produce suppliers, wholesale food and juice production
Grocery Store	Primarily selling food, with some perishable: Vons, Albertsons, Whole Foods, Lazy Acres, Trader Joes, smaller and specialty markets
Gym & Fitness	Gyms, dance studios, martial arts
Homeless Shelter	Sleeping and eating facilities
Hotel	Hotels, bed and breakfast, inns, with or without a breakfast bar. Area of restaurant within hotel must be calculated separately as a restaurant.
Industrial Manufacturing	Facilities that manufacture equipment or electronics onsite
Industrial Supplies	Selling industrial equipment and supplies or compressed gasses
Laundromat	Self Service Coin-op laundries. Commercial laundries are under *Services.*

Business Type	Definition
Medical	All medical outpatient offices, including acupuncture. No hospitals, no overnight stays.
Multi-Family Residential	More than one dwelling sharing trash service
Nursing Care Facility	Residential medical care facility that serves meals and has a commercial kitchen. Assisted living, memory care facilities.
Office & Education	Primarily dealing with information and paperwork: real estate, accounting, government, counseling, investing, radio stations, design, travel, service organizations, foundations, non-profits, newspaper/publication offices, professional services, business colleges, adult education, and any other education related business *except* K-12
Residential with Dining	Dorms, senior housing facilities that are primarily residential, a residential facility with a commercial kitchen
Restaurant, full service	Primarily sit down service, washable tableware, little to no packaging on table, bakeries that serve meals, bars that also serve food
Retail	Selling products with little to no service component: clothing, household goods, jewelry, cosmetics, appliances, equipment, department stores, electronics, furniture, sporting goods, auto parts, pet supplies, showrooms, lighting
Schools: K-12	Primary, middle, and high schools, both public and private
Self-Storage	Rented storage units
Services	Primarily offering a service rather than material goods: post office and mailing companies, art, showroom, pest control, dry cleaners, interiors, photography studio, video & film, tailoring, interior design, woodworking, software, transportation
Social Club	Odd Fellows, boys/girls club, Red Cross, Lions, Veterans, Elks, etc.
Theater: movie	Movie theater, not live performance
Vehicle Dealers	New and used sales for: cars, motorcycles, boats, etc.
Veterinary	Animal medical facilities and hospitals
Wholesalers/distributors	Moving goods through facilities and transportation networks with no direct sales to public
Winery or Tasting	May crush grapes and produce organic waste (harvest season only) or simply offer tasting