



RECYCLING AND SOLID WASTE PLANNING MANUAL

Adopted by Council Resolution 2005-023
Updated 10/25/2008 Resolution 2008-244

276 Fourth Ave
Chula Vista, CA 91910
www.chulavistaca.gov

Table of Contents

	Page
Section 1	
Overview.....	3
Section 2	
Recycling and Solid Waste Standards for.....	7
Curbside or Door-to-Door Service for Small Quantity Generators	
Section 3	
Recycling and Solid Waste Standards for.....	8
Multi-Family Complexes-Central Collection-Bin Service	
Section 4	
Deconstruction Guidelines.....	9
Section 5	
Recycling and Solid Waste Standards for.....	10
Commercial and Industrial Businesses-Central Collection-Bin Service	
Section 6	
Recycling and Solid Waste Enclosure Standards.....	11
Section 7	
Sample Drawings of Enclosures	15

1 - OVERVIEW

The State of California has mandated that at least 75% of the solid waste generated be diverted from landfills. Therefore, each applicant of a development, subdivision or major construction project (including new public facilities) is required to allocate adequate space and provide facilities to house the equipment necessary for recycling and trash services to be provided to all future residents. Such space allocation and facilities are to be illustrated within preliminary plans submitted to the city (i.e. Design Review process). Recycling and Solid Waste Plans are subject to approval by the City Manager or designee.

Items to be considered in your plan:

When designing your project, your recycling considerations should include the steps necessary to meet local and state mandates, to include the Designated Recyclable materials as defined in Chula Vista Municipal Code. (See Municipal Code § 8.25.020.B) including food/organic waste. Plans are subject to approval by the City Manager or designee.

The following are items to be considered when designing your project and should be addressed on your plans. If you have questions or need clarification, you may contact the City's Environmental Services Division at (619) 691-5122 or EnvironmentalServices@chulavistaca.gov, or visit the City's website at www.chulavistaca.gov.

1. Identify the recycling and trash space allocated within your project, as this will dictate how well your occupants will be able to participate in the various City recycling programs, how much they will recycle and how much they can save.
2. Make sure your infrastructure planning allows your future occupants the ability to avail themselves of all recycling and solid waste services. Your plan must provide adequate space to properly store all the solid waste, recyclables and food/organic waste generated on the site in approved containers between service days. The plan must also allocate space in a manner that provides occupants with the opportunity to divert all the Designated Recyclables generated at the site.



Designated Recyclables include:

- **Residential recyclables** – those specific recyclable materials from residential solid waste (single-family and multi-family) including but not limited to, aluminum, glass bottles and jars, plastic bottles, tin and bi-metal cans, newspapers, mixed paper (magazines, junk mail, telephone books, paperback books, and boxboard) cardboard, white goods and food/organic waste.
- **Commercial recyclables** – designated recyclable materials from office and hospitality industries. Materials include but are not limited to, office paper, cardboard, glass bottles and jars, plastic bottles, aluminum, tin and bi-metal cans, and food/organic waste. .
- **Industrial recyclables** – recyclable material from industrial, construction and demolition operations including, but not limited to asphalt, concrete, dirt, land-clearing brush, sand and rock.

Your plan needs to demonstrate how the recycling and solid waste infrastructure will be utilized by the occupants and maintained on an on-going basis, such as:

- ❑ Include trash and recycling requirements and information in your CC&Rs, employee/owner/tenant orientations, policy manuals, and lease agreements. Include the draft language for these items in your Plan.
- ❑ Show where residents will store containers during the week and where they will be placed on service day; where and how bulky items, Holiday trees and used motor oil will be placed for collection.

- ❑ If contracting with a landscaper, your plan must demonstrate that you will require all yard waste to be diverted for reuse, either through on-site mulching, grasscycling, or a permitted compost facility, not disposal. Your plan shall establish the requirement to obtain receipts from the contractor demonstrating that the material was recycled or composted. Those receipts shall be maintained for eighteen (18) months and be available to City staff for review upon two days’ notice during regular business hours.
- ❑ Color code containers and provide graphic signs that instruct occupants/customers to separate materials in the containers used to transport recyclables and trash to the outdoor enclosure.
- ❑ Place recycling containers next to all trash containers – this is known as “twinning.”
- ❑ Review your operations at least annually. Contact the city for a free waste audit to improve business recycling productivity, reduce waste and keep your solid waste and recycling services cost-effective and up to date.

Trash, recycling and food/organic waste service capacity calculations:

Small Quantity Generators (SQG – curbside service for single-family homes using plastic cans/carts with 2 wheels and handles) for weekly trash, recycling and food/organic waste collection.

Large Quantity Generators (LQG - commercial, and industrial projects with central collection service using steel containers/ with 4-wheel dumpsters) for weekly trash, recycling and food/organic waste collection.

Estimating Trash Service Capacity Needs for Central Bin Collection in Multi-family Complexes

After estimating the required trash service – pair each trash bin with the required recycling service and design enclosures appropriately.

Multi-family Complex	
Service Needs Table	
# Bedrooms per unit	Cubic yards per unit per wk.
Studios-1Br.	0.33
1-2 Br.	0.36
2-4 Br.	0.40

Calculation:

# Of units in complex (example: 100, 3-bedroom units)	X # Of cubic yards per unit from Service Needs Table above	= Total cubic yards of service needed per week	Total cubic yards of service needed per week	÷ Product of bin size times days a week service (4 yd bin X 2 days)	= Number of trash enclosures required
100	X 0.4	= 40	40	÷ 8	= 5

Logistical Considerations:

- Weekly trash, recyclables and food/organic waste collection is the minimum requirement. All multi-family, commercial, industrial and public facility properties may subscribe to service that is more frequent.
- Small Quantity Generators (SQG – curbside collection) place three 96-gallon or smaller trash and recycling carts at the curb for weekly collection on their assigned collection day. These customers also receive yard waste, bulky-item, used oil and oil filter collection services. Therefore, there must

be curbside space for these containers with one and one-half (1 1/2) feet, approximately eighteen inches, between each cart and any stationary objects (e.g. parked cars), on service day.

- All properties must have adequate space to accommodate bin and/or cart storage for waste and recyclable materials separately and out of public view in-between collection days. The City strongly recommends that commercial properties plan for no more than three collections per week and that multi-family properties plan for no more than twice per week service. For details on enclosure design requirements see Enclosure and Chute Design Requirements – Central Collection.
- Twinning – design so that recycling and food/organic waste containers are placed with each trash receptacle.
- On a mixed-use site, the Recycling and Solid Waste Management Plan generally follows the space allocation criteria for each use category (i.e. single-family, multi-family, commercial, curbside collection, or central collection).
- Public facilities shall implement the service category that best fits the facility use, always twinning recycling, food/organic waste and trash containers for ease, convenience and to minimize the contamination of recyclable materials.
- Offices typically generate a waste stream with 40% to 60% mixed paper. Mixed paper includes: office paper, cardboard, junk mail, magazines, telephone books, box board, etc.
- If your business will consistently generate a large number of wooden pallets, food/organic waste, five-gallon plastic buckets or another potentially recyclable items. Please contact the City's Environmental Services Division or Republic Services for recycling market assistance.
- Design in a manner that facilitates the following priorities: reduce, reuse, recycle, compost and dispose.

Examples:

- Residential kitchens: Ample space for trash, recycling and food/organic waste bins under sinks or in cabinetry for separation of Designated Recyclables.
 - Show where residents will store carts during the week on their property and where they will be placed at the curb on collection day.
 - Outdoor dining, lounge areas and public facilities: Plan for trash and Designated Recyclables collection containers side-by-side (twinning).
 - Copy and print rooms: Allow space for both trash and paper recycling containers side by side to encourage diversion.
 - Bars and dining areas: Incorporate space for recycling of all food/organic waste food and beverage containers, specifically, along with other Designated Recyclables as appropriate.
 - Recreation Centers and Community Pools: Plan for trash, recyclables and food/organic waste collection containers side-by-side (twinning.)
- Residential automated collection vehicles collect materials from the right side of the vehicle only.
- Commercial collection vehicles collect materials at the front of the vehicle.
- If commercial collection vehicles must enter your property to service bins, vehicles must be able to circulate the parking area without backing up. Collection vehicles have a turning radius of 37.1 ft., are approximately 35 feet long (curbside collection bucket adds 7 feet to the length for a total of 42 feet) and 8 feet wide.

To Complete your Plan:

- Review the manual section that applies to your project: residential, commercial or industrial.
- Write a thorough description of how you will implement your ***Recycling and Solid Waste Management Plan*** through each phase of the project: pre-construction, construction, and operation/occupancy.
- Submit your ***Recycling and Solid Waste Management Plan*** with your project application to the Chula Vista Planning Department for approval. Include a short narrative about your plan implementation and operation within your “Notes” on your building plans.

CONTACTS:



- Contact the City’s Environmental Services Division for a list of construction and demolition material recycling processors and/or service brochures for program details. Or check the City’s web site at www.chulavistaca.gov. Staff is also available to assist you with your recycling program and your solid waste management plan (619) 691-5122.

Recycling and Solid Waste Plans are subject to approval by the City Manager or designee.

**2 - RECYCLING AND SOLID WASTE STANDARDS FOR CURBSIDE OR DOOR-TO-DOOR SERVICE FOR
SMALL QUANTITY GENERATORS**

Small Quantity Generators receive weekly trash, recyclables and food/organic collection, bulky items pick up, used motor oil and oil filter collection services. Include in your site plan defined location(s) where the trash, recycling and yard waste carts will be stored in-between service days, out of public view, and where they will be placed at the curb for collection on service days.

All residential dwellings with curbside or door-to-door collection must be designed to allow for weekly placement and collection of trash, yard waste and recycling containers at the curb.

There must be space at the curb for a minimum of three containers (trash, recyclables and green waste), approximately eighteen inches apart, for each dwelling unit. The City must pre-approve alley collection.

The automated collection vehicle services the containers from the right side (curbside) of the vehicle.

Condominiums with no private landscaping can provide space for two carts (trash and recycling, eliminating organic waste) per unit. However, condominiums must have an enclosure on the property, sufficient for organic waste bins, to serve the common areas.

If contracting with a landscaper, your plan must demonstrate that you will require that all lawn and garden waste be diverted for reuse, either through on-site mulching, grasscycling, a permitted compost facility or for reuse at the landfill – not disposal. Your plan shall establish the requirement to obtain receipts from the contractor demonstrating that the material was recycled or composted. Those receipts shall be maintained for eighteen (18) months and be available to City staff for review upon a two-day notice during regular business hours.

See detailed information on all available services for single-family residential customers at www.chulavistaca.gov/clean.

CONTACTS:

- The City's Environmental Services Division may be reached at (619) 691-5122 or environmentalservices@chulavistaca.gov

3 - RECYCLING AND SOLID WASTE STANDARDS FOR MULTI-FAMILY COMPLEXES
CENTRAL COLLECTION - BIN SERVICE

The Residential Waste Stream typically includes the following recyclables: 40% paper, 10% metal, glass and plastic containers and 30% food/organic waste (apartments/condos usually generate only 7% to 15% lawn and garden waste from common areas).

Residential services include trash, recyclables and food/organic waste, bulky item pick up. Review www.chulavistaca.gov/clean for details on each of these services and how to prepare materials for collection in these programs.

Multi-family Housing with Central Collection

- Trash, recycling and food/organic waste bins must be in the same enclosure(s) and must allow access without having to move other containers out of the way.
- Please see attachments for samples of enclosure drawings. All bins should be placed in the enclosure out of public view. If bins are placed front-to-front, leave at least 3 feet between bins for access. The design must provide easy access for the residents and allow the hauler access to service bins and/or carts without moving other bins/carts out of the way.
- Design for approximately, one, 4-cubic yard bin for trash service for every 8-12 units depending on the number of bedrooms per unit. See estimating formula in Section 1. Then add the required recycling services for each enclosure. Plans should be developed for no more than twice per week collection service to limit the number of collection truck trips on your property.
- All projects with six or more units shall provide additional space that is sufficient for the free monthly bulky collection (mattresses, appliances, furniture), free annual Holiday Tree recycling and other periodic or seasonal events. Approximately 400 square feet is required for a complex of 40 units or more.
- If the collection vehicles must enter your property to service bins, the vehicle must be able to circulate the parking area without backing up. Collection vehicles have a turning radius of 37.1 ft. are approximately 35 feet long (curbside collection bucket adds 7 feet to the length for a total of 42 feet) and 8 feet wide.

Visit www.chulavistaca.gov/clean for more information on residential services.

Trash and Recycling Chutes

- When a facility plans to provide chutes, the City requires that you provide two chutes adjacent to one another in each disposal and recycling area. One chute identified for recyclables, and one chute identified for trash. Included additional space in the waste collection enclosure to accept food/organic waste.
- A facility must have enough chute locations so as to require no more than a 200 foot distance from door to chute. The collection vehicle driver must be able to service bins without moving other bins in the chute rooms.
- Chute room must be located no more than 25 feet away from truck access (see above for truck access requirements).
- It is strongly recommended that you provide an enclosure(s) on site for corrugated cardboard as boxes may clog your trash and recycling chutes. If enough space is provided, the enclosure can also be used for free bulky collection, Holiday tree collection and other periodic or seasonal services.

CONTACTS:

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4 – DECONSTRUCTION GUIDELINES

Deconstruction Guidelines

The City of Chula Vista has implemented incentives and rules for projects that perform de-construction in lieu of demolition. Deconstruction projects will NOT be required to pay a construction and demolition (C&D) deposit prior to obtaining permits. All dwelling structures in all zones are eligible for a C&D deposit waiver if they choose to deconstruct.

DECONSTRUCTION REQUIREMENTS

The following requirements describe the standards and expectations for the deconstruction of buildings as authorized in the city.

The responsible party must fully deconstruct primary dwelling structures that are subject to the deconstruction permit. In performing the deconstruction, the responsible party must first prioritize salvaging materials for reuse. The second priority must be for recycling.

The following materials are generally suitable for reuse; however, material condition, or hazardous materials may limit donation or sale of these materials: 1. Doors 2. Lighting 3. Sinks 4. Tubs 5. Wood flooring 6. Lumber - including framing, trim, sheathing and siding 7. Roofing - including wood shake, metal, fiberglass, tile, masonry 8. Mirrors 9. Windows 10. Appliances, furnaces and wood stoves 11. Kitchen and bathroom cabinets 12. Toilets – 1.6 gallon/flush or less 13. Hardware

Non Recyclables. The responsible party must have a trash container present and available on site for the duration of deconstruction activities for the purpose of discarding non recyclables such as food/ organic waste and other organic waste.

DEMOLITION PERMIT APPLICATIONS

Demolition permits as issued at the front counter will be honored as deconstruction permits provided a Waste Management Report form <http://www.chulavistaca.gov/home/showdocument?id=14580> is completed and submitted to the Environmental Services section as part of a complete application for a demolition permit. The form must include an addendum responding to all of the following in order to be considered complete for deconstruction approval:

1. Name of the Deconstruction Contractor.
2. Whether heavy machinery will be used on the deconstruction project (exclusive of foundation removal) and to what extent.
3. List of materials that are intended to be salvaged for reuse.
4. List of materials that are not salvageable and the reason the materials cannot be salvaged.
5. Expected dates for deconstruction activity.

4 - RECYCLING AND SOLID WASTE STANDARDS FOR COMMERCIAL AND INDUSTRIAL BUSINESSES- CENTRAL COLLECTION – BIN SERVICE

The Commercial Waste Stream varies by the type of business, but typically includes the following recyclables: 40-60% paper, 5% metal, glass and plastic containers (10%-15% for food service businesses) and 35-55% food/organic waste (or food waste that can be recycled with yard waste).

- Commercial and industrial properties must have enclosure space and numbers of bins or carts adequate to divert the Designated Recyclables, including food/organic waste generated on their property.
- Trash recycling and food/organic waste bins or carts must be placed in the same enclosures.
- Lawn and garden waste must be separated from the trash. Plan for adequate container volume and service intervals to divert yard waste (tree, brush or grass trimmings) generated at your business. If contracting with a landscaper, your plan must demonstrate that you will require that all lawn and garden waste be diverted for reuse, either through on-site mulching, grasscycling, a permitted compost facility or for reuse at the landfill – not disposal. Your plan shall establish the requirement to obtain receipts from the contractor demonstrating that the material was recycled or composted. Those receipts shall be maintained for eighteen (18) months and be available to City staff for review upon a two-day notice during regular business hours.
- Each business should allocate space, in each enclosure, for at least one recycling bin/ dumpster, one food/organic waste cart, and one trash bin/ dumpster.
- The City may require that the enclosure include additional space and access for other ancillary services (i.e. restaurants-grease collection, auto repair-scrap metal collection, etc., where applicable).

COMPACTORS:

- Commercial compactors are not recommended for trash service. Compactors must be pre-approved by the City's franchise hauler, Republic Services and the City Environmental Services Division. (See Municipal Code § 8.24.080.B)
- A business that is using a compactor must still divert Designated Recyclables: food/organic, paper, cardboard, food and beverage containers, yard waste, clean lumber and metals, etc. (See Municipal Code Chapter 8.25).

CONTACTS:

- The City's Environmental Services Division may be reached at (619) 691-5122 or EnvironmentalServices@chulavistaca.gov

5 - RECYCLING AND SOLID WASTE ENCLOSURE STANDARDS
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The following minimum bin and cart dimensions are to be used when designing your enclosures.

Bin Dimensions (Allow 2 inches per bin dimension for access/maneuverability)	Height	Depth	Width
4 cubic yards (min. size to plan for trash & mixed paper)	66"	56"	81"
5 cubic yards (larger bins provided at City/hauler discretion)	66"	68"	81"
6 cubic yards (no wheels direct truck access)	72"	70"	81"
Cart Dimensions (Allow 1 inch per cart dimension for access/maneuverability. Dimensions are the maximum size.)	Height	Depth	Width
96 Gallon Carts (for Designated Recyclables, yard waste and trash)	44	36	32"
64 Gallon Carts (for Designated Recyclables, yard waste and trash)	39	32"	30"

- Trash enclosures should be as far away from storm drain inlets as possible.
- All trash enclosures shall be paved with an impervious surface, designed not to allow run-on from adjoining areas, and shall be screened or walled to prevent off-site transport of trash.
- Wheel stops for bins and carts must be configured such that they provide 6-inch bin clearance from all three walls, 6 inches high is recommended.
- Doors must be anchored to appropriately sized steel posts (min. 2 inches by 3/16 gauge steel) set independently from walls.
- Cane bolts dropped into sleeved holes in the concrete, to hold doors in both the open and closed position, are required.
- Enclosures and containers within the enclosure, must have solid roof covers designed to reduce pests, illegal disposal and exclude rain. (See Municipal Code 19.58.340)
- The flat reinforced concrete pad (approximately 24 feet X 12 feet, no decorative stamping or brickwork/cobblestones) in front of the enclosure should extend beyond the enclosure to provide sufficient space to allow:
 - The truck to stop in front of the enclosure with the front wheels resting on the concrete pad;
 - The bins to be rolled out of the enclosure and;
 - The bin to be positioned in front of the truck without moving the truck.
- There must be enough enclosures in the project to provide convenient and sufficient capacity to handle the volume of recyclables and waste generated between collections.
- Each enclosure must be designed and sized appropriately to accommodate bins and/or carts for the Designated Recyclables, food/organic waste, and solid waste generated on the property. All properties are required to allocate space to recycle all Designated Recyclables including food/organic waste.
- Enclosures must be designed so that trash, food/organic waste, paper, rigid containers, and yard waste containers may be accessed by the generator and serviced by the collection company without moving other bins or carts. Recommendation: A separate pedestrian access door could prevent illegal disposal and is safer for the residents to use.
- The City may require that the enclosure include additional space and access for other ancillary services i.e. restaurants - grease collection, auto repair - scrap metal collection, etc. where applicable.

- Each enclosure must be located on the site plan and the bin and carts placement inside the enclosure clearly identified – R= recycling; FO= food/organic waste recycling; T= trash or waste.

See attachments for samples of enclosure drawings.

Enclosure Location

- Reduce or eliminate the need for collection trucks to drive onto private property whenever possible.
- Enclosures are to be accessible by all full-sized trash and recycling collection vehicles, and such access should allow collection vehicles to drive within 25 feet of all enclosures.
- If the collection vehicles must enter your property to service bins the vehicles must be able to circulate the parking area without backing up. Trucks are approximately 35 – 42 feet long, 8 feet wide and a have a turning radius of 37.1 feet.
- Do not put speed bumps, stamped concrete, cobblestones or other obstacles in front of enclosures that would impede the access of the vehicle or bin rollout. Truck and bins must be on a flat surface when being serviced.
- Enclosures for apartments and condominiums should be geographically distributed in a manner that is convenient for residents. Distance from door to enclosure shall not exceed 200 feet.
- Enclosures in commercial settings and public facilities should consider proximity to service doors, traffic flow, delivery patterns, etc.

Trash and Recycling Chutes

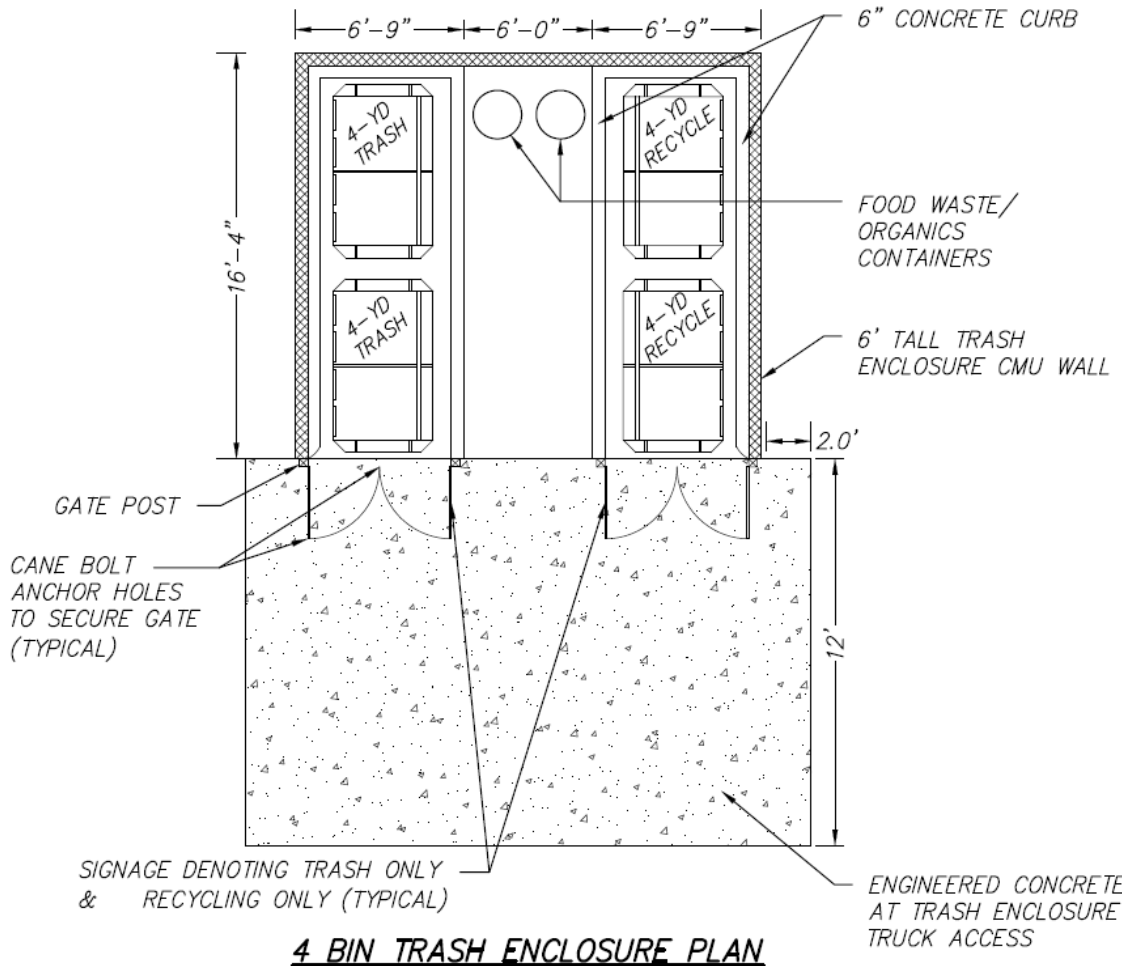
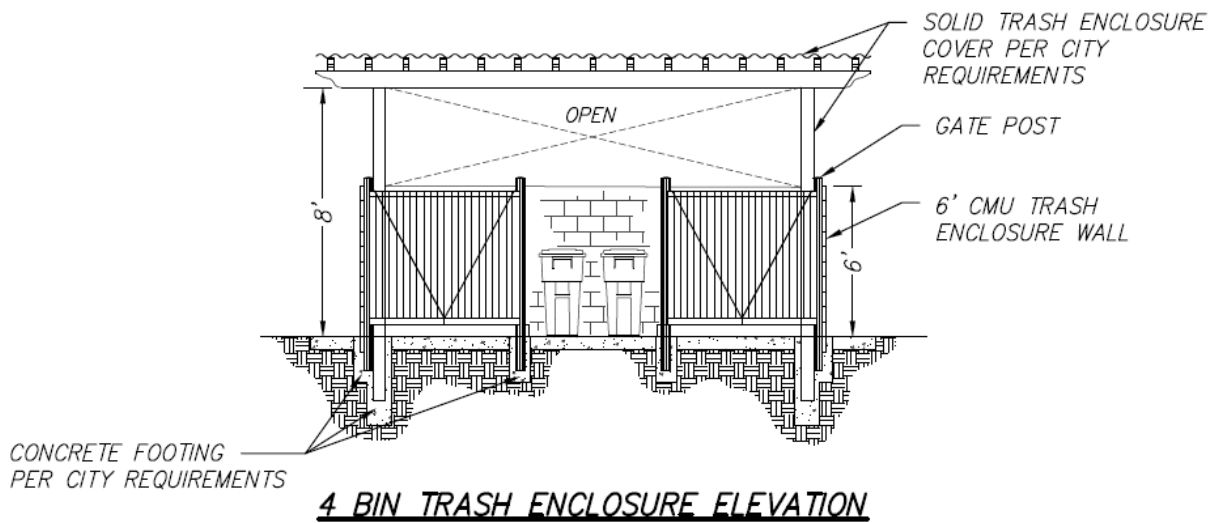
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- A facility must have enough chute locations so as to require no more than a 200-foot distance from door to chute. The driver must be able to service bins without moving other bins in the chute rooms.
- Chute room must be located no more than 25 feet away from truck access (see above for truck access requirements).

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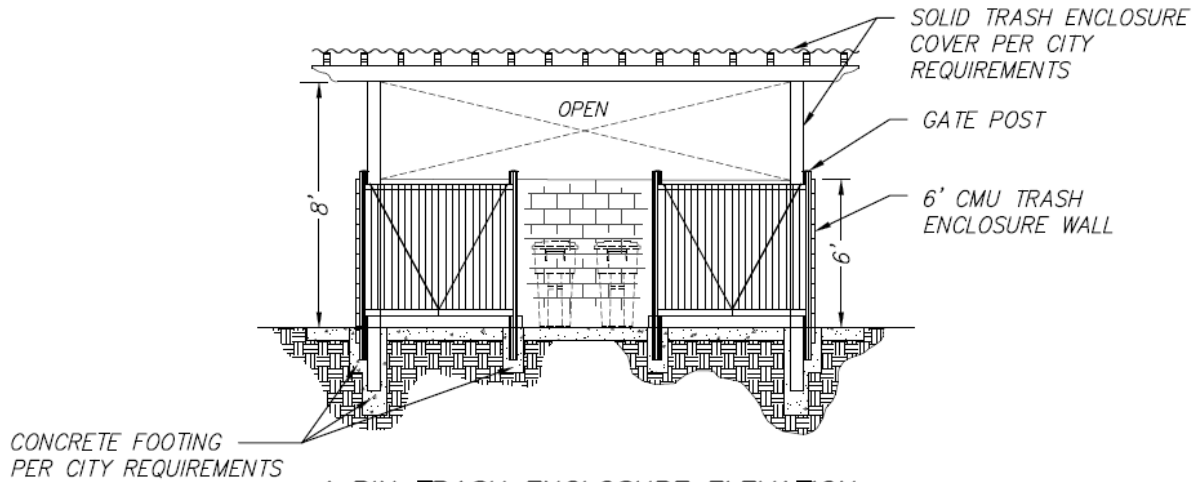
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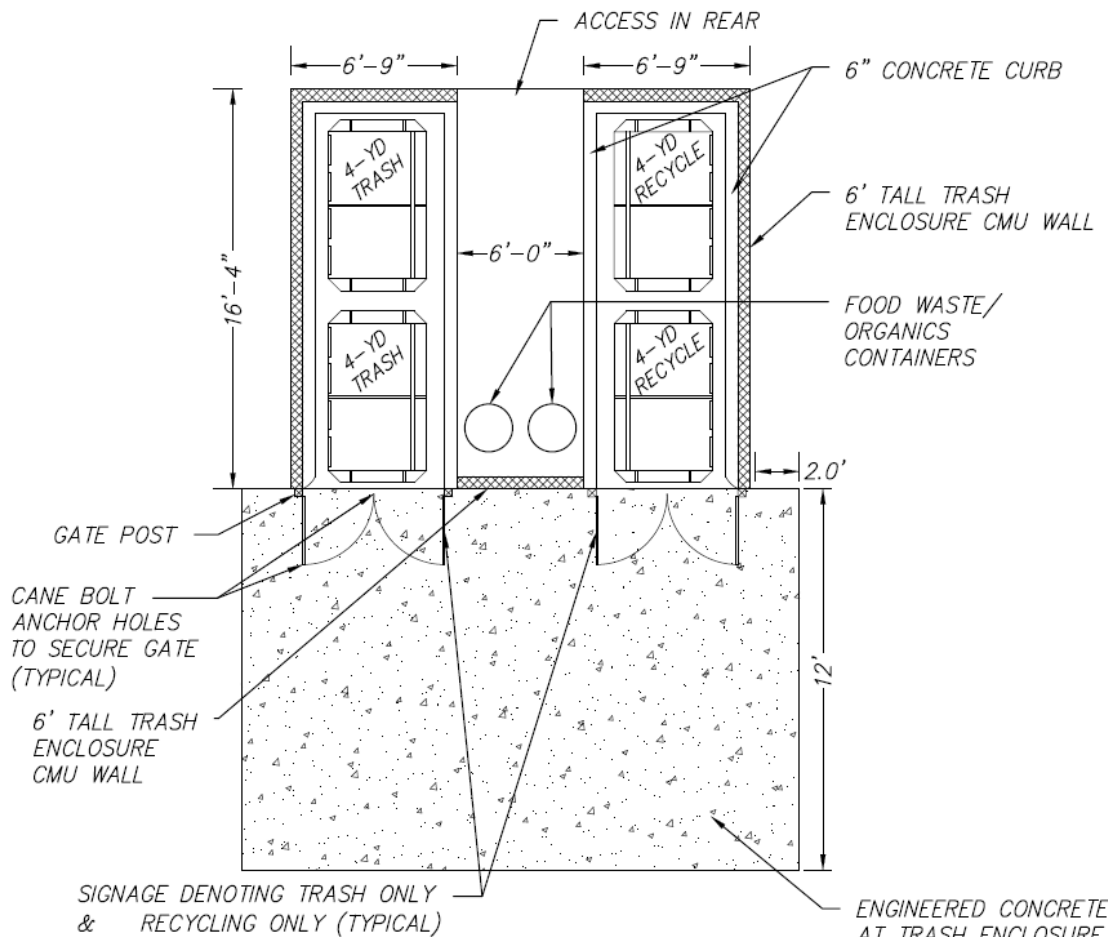


CITY OF CHULA VISTA
 SAMPLE TRASH ENCLOSURE
 (NOT TO SCALE)

PREPARED BY:
 R. ALAN REYES, P.E.
 APPROVED BY:
 MANUEL MEDRANO



4 BIN TRASH ENCLOSURE ELEVATION



**4 BIN TRASH ENCLOSURE PLAN
(ALTERNATIVE ACCESS)**

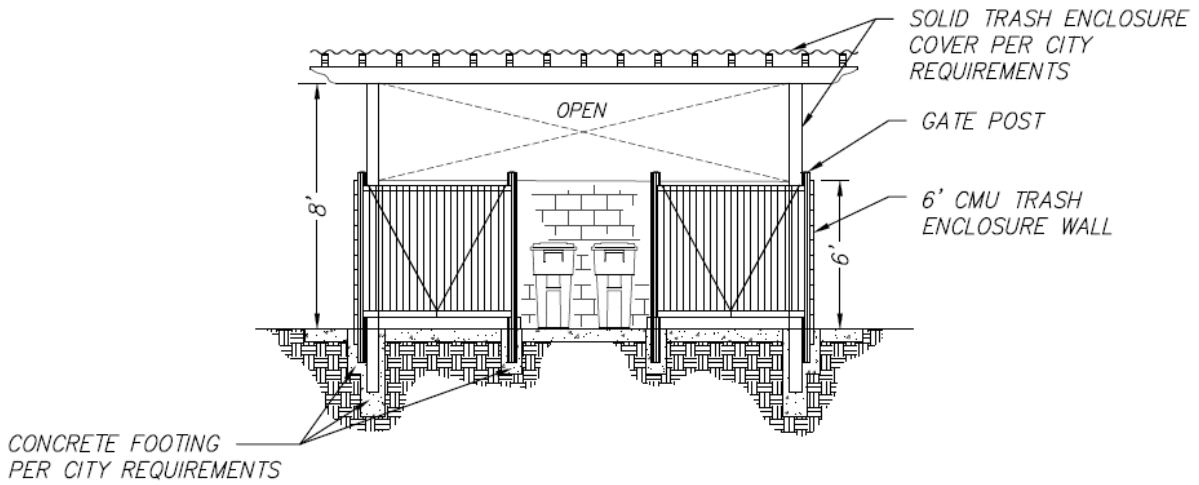


**CITY OF CHULA VISTA
SAMPLE TRASH ENCLOSURE
(NOT TO SCALE)**

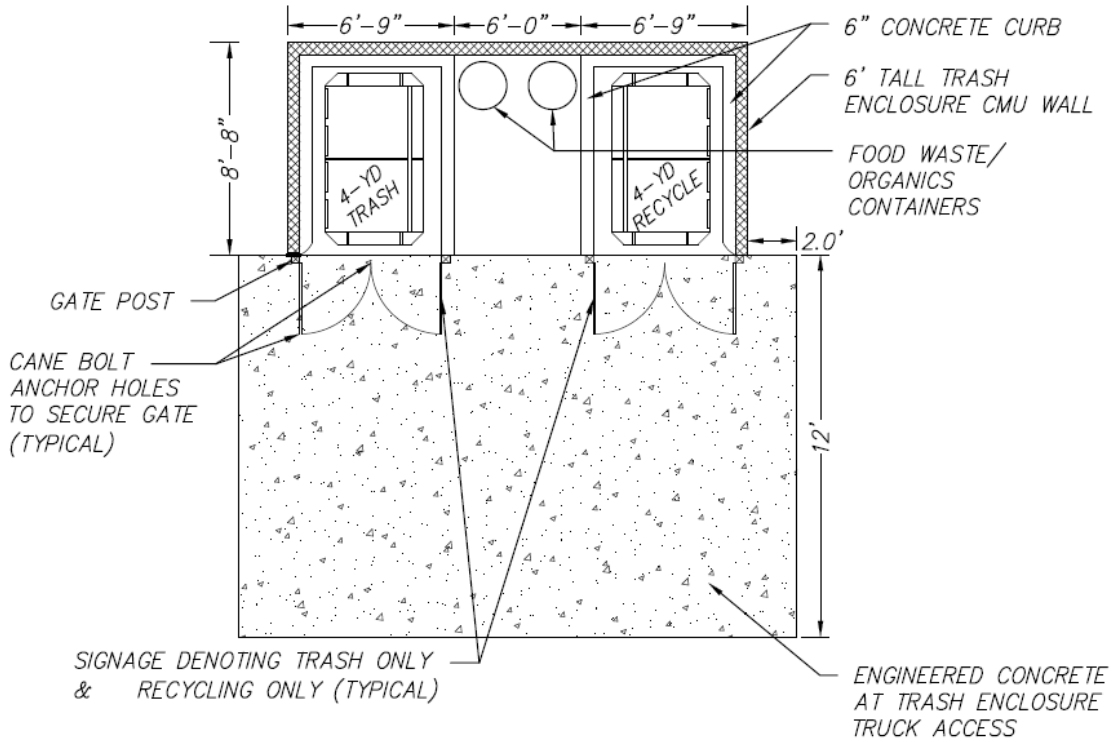
PREPARED BY:
R. ALAN REYES, P.E.

APPROVED BY:
MANUEL MEDRANO

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2 BIN TRASH ENCLOSURE ELEVATION



2 BIN TRASH ENCLOSURE PLAN
(SHALLOW ALTERNATIVE)

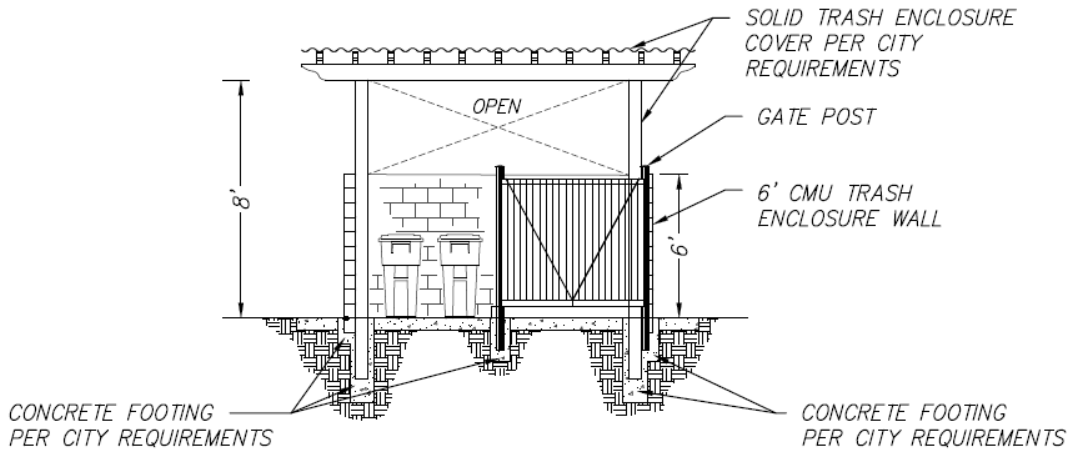


CITY OF CHULA VISTA
SAMPLE TRASH ENCLOSURE
(NOT TO SCALE)

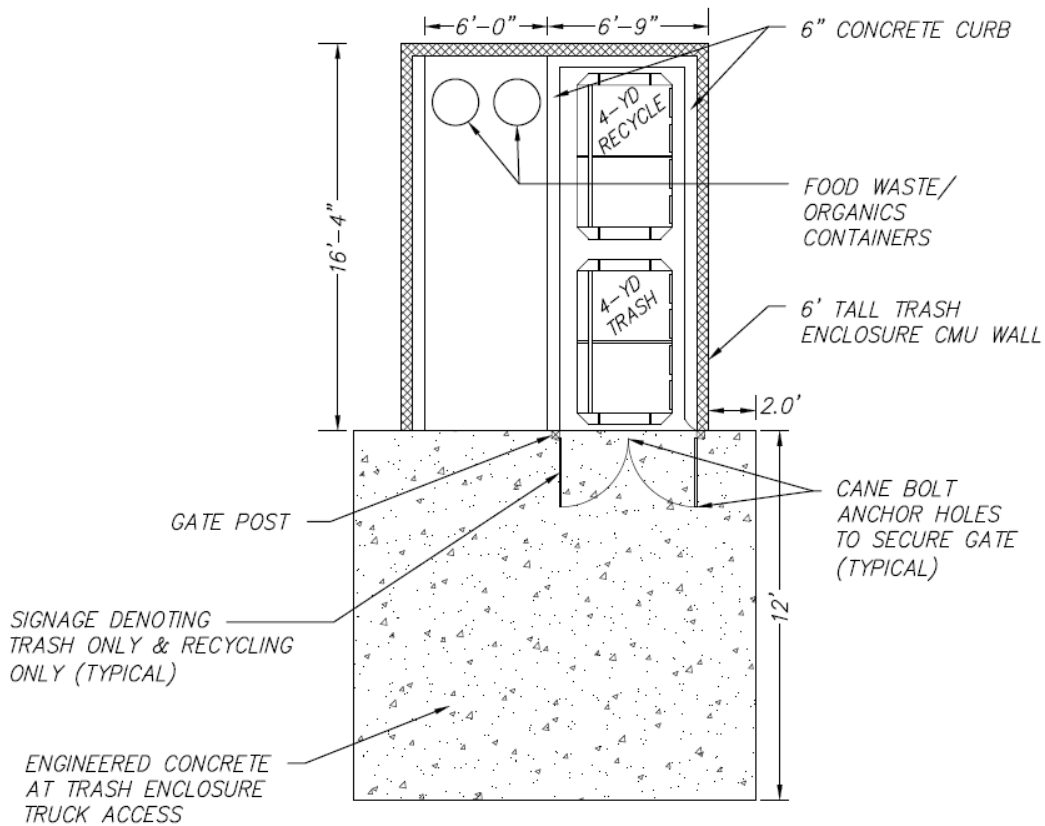
PREPARED BY:
R. ALAN REYES, P.E.

APPROVED BY:
MANUEL MEDRANO

These drawings are not to scale. They have been resized to fit in this document.



2 BIN TRASH ENCLOSURE ELEVATION



2 BIN TRASH ENCLOSURE PLAN
(DEEP ALTERNATIVE)

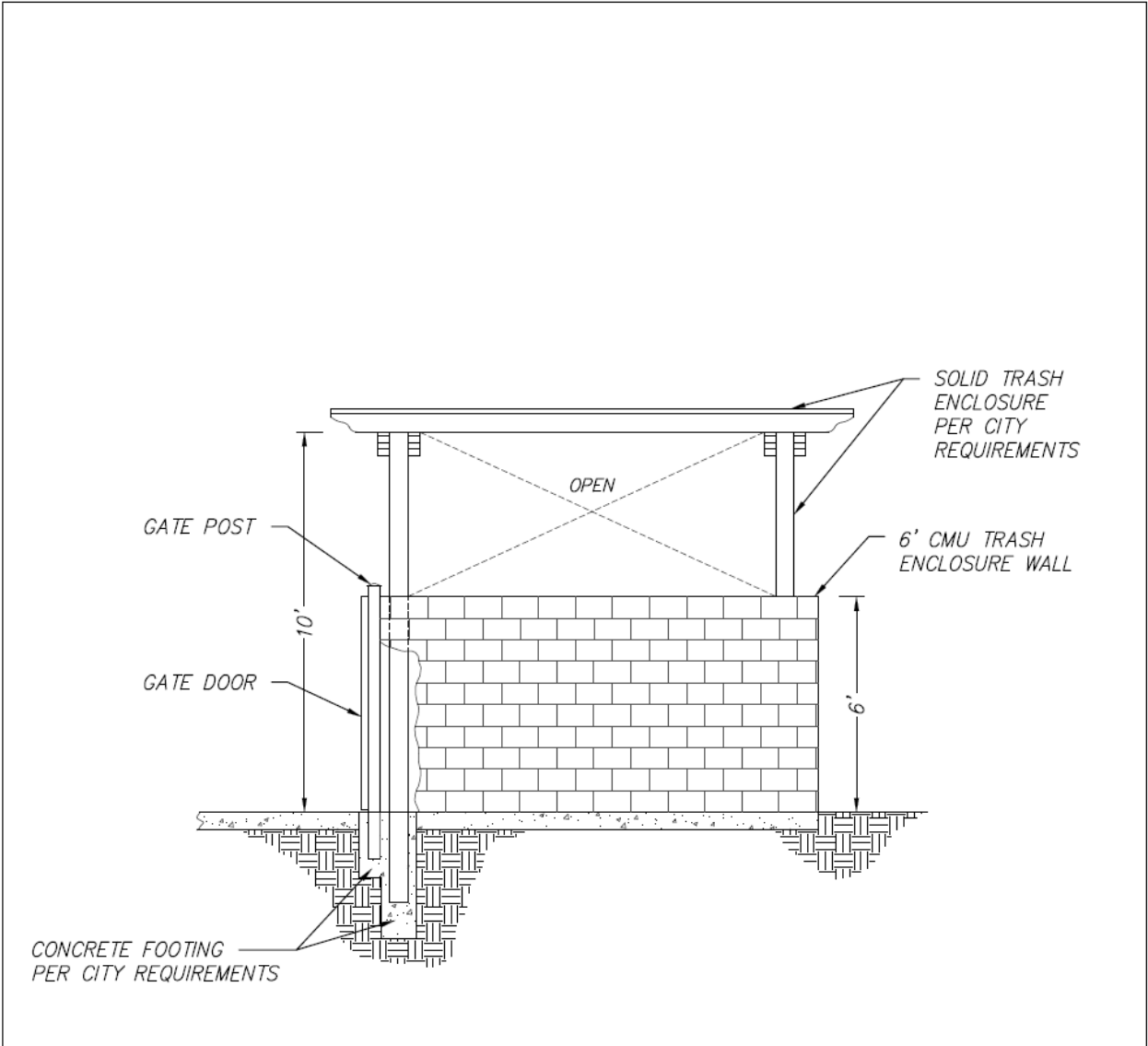


CITY OF CHULA VISTA
SAMPLE TRASH ENCLOSURE
(NOT TO SCALE)

PREPARED BY:
R. ALAN REYES, P.E.

APPROVED BY:
MANUEL MEDRANO

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TRASH ENCLOSURE ELEVATION
(RIGHT SIDE VIEW)



CITY OF CHULA VISTA
SAMPLE TRASH ENCLOSURE
(NOT TO SCALE)

PREPARED BY:
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