

THE CITY OF Edinburg



**SOLID WASTE
MANAGEMENT**

SITE DEVELOPMENT GUIDELINES, PLANNING STANDARDS AND REQUIREMENTS FOR SOLID WASTE COLLECTION SERVICES

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SITE DEVELOPMENT GUIDELINES, PLANNING STANDARDS AND REQUIREMENTS FOR SOLID WASTE COLLECTION

INTRODUCTION/ PURPOSE

The Planning and Guideline Manual will provide information and resources for designing trash and recycling sites that will be used by building occupants in new construction, developments or significant remodels. City of Edinburg Ordinance No. 2011-3488, requires all new single or multi-family residences, new commercial and multi-family developments, all commercial buildings/businesses, duplexes, institutions or any of the same with improvements that exceed 45% or more of the actual value listed under the City/County Tax Rolls, to comply with the standards listed in this manual to include adequate, accessible, and convenient areas for collecting and loading waste, trash and recyclable materials. Waste disposal and recycling must be well planned in conjunction with the City to not only address sanitation issues but also address urban runoff control practices, City zoning codes and the City's waste minimization and recycling goals. Conventional recycling must be designed into the site along with the trash capacity.

**Note that the use of this manual does not negate the need for submittal and approval of detailed plans for any project concerning solid waste issues by Engineering, Planning & Zoning, Code Enforcement, Health, Public Works or Utilities Department.*

DEFINITIONS

The following words and terms, when used in this Chapter, shall have the meanings respectively ascribed to them in this section.

Approved Container - An approved container meeting designated standards and issued by the City. A reusable metal container and referred to as commercial containers, or a reusable plastic container referred to as residential container or plastic cart both of sufficient size and strength to adequately hold garbage and refuse without spillage.

Additions – Please see Significantly Remodeled.

Brush – non-putrescible solid wastes consisting of yard clippings, leaves, wood and similar materials, such as cuttings or trimmings, shrubbery, grass clippings, brush, leaves, tree trimmings, refuse, trees, shrubs or similar materials that are not suitable for placement in disposable containers

Bulky waste or Trash - Stoves, refrigerators, old iceboxes, pieces of metal scrap, furniture, water tanks, washing machines, loose brush, loose tree trimmings, bundles in excess of three cubic yards or 50 lbs. in weight, and other waste materials; but does not include construction debris, rocks, shingles, building

materials, junk, trash, and other worn-out, wrecked or dismantled machinery, tractors, automobiles, and other similar wastes.

Carrion - shall mean the dead and putrefying flesh of any animal, fowl, or fish.

Customer - Any owner, occupant, tenant or person otherwise in control of any premises in the City on which garbage and trash are accumulated and from which the same is removed or required to be removed pursuant to the terms of this Chapter.

City - City of Edinburg, Texas

Commercial or Commercial Unit - All premises, locations, or entities, public or private, requiring refuse collection that is not a residential unit, nor an industrial unit. Duplexes, single or multi-family residences (consisting of three or more units), apartments; pertaining to any structure or premises and all businesses, institutions (public or private), apartments, single or multi-family dwellings (consisting of three or more units), commercial establishments

Commercial Refuse - All waste, garbage, rubbish and stable matter generated by a producer at a commercial unit, but exclude pallets, wood and/or any material, which falls under the category of construction material or debris.

Commingled Recyclables — Glass bottles and jars, aluminum cans, bimetal cans, tin cans and plastic bottles;

Construction Debris or Debris - Dirt, concrete, rocks, bricks, shingles, junk, trash, wood, pallets or other waste building materials resulting from construction, remodeling, repair or demolition operations.

Designated Recyclable Materials- means those materials designated within the City of Edinburg Recycling Plan to be source separated for the purpose of recycling. These materials include, but are not limited to:

Aluminum Cans - Cans made from aluminum that was manufactured to hold a serving of a beverage. Specifically omitted from this definition are aluminum foil and aluminum pie plates.

Plastic Bottles (coded 1 and 2) - Plastic bottles coded to indicate that they are comprised of the specific types of plastic compounds (polymers) known as polyethylene terephthalate (PETE) or high density polyethylene (HDPE). See symbols to the left. A bottle is defined as a receptacle having a narrow neck and a mouth that can be corked or capped. Caps and lids not included. Any item made of plastic that is not a bottle, and any plastic bottle without one of the symbols shown to the left is specifically omitted from this definition. Empty bottles which contained hazardous materials, such as motor oil, antifreeze, etc. should not be recycled.



Steel (Tin) Cans - An airtight container for the distribution or storage of goods, composed of thin, usually ferrous, and metal. Examples are soup cans and tuna fish cans.

Newspaper - A publication containing news, information and advertising, usually printed on low-cost paper called newsprint. Newspaper may include glossy inserts that come with the paper, dependent upon the market conditions at the time.

Corrugated Cardboard - Shipping containers made with Kraft paper linerboard and corrugated medium.

Mixed Paper - Various categories of recyclable paper including, but not limited to white and colored paper used in printers, photocopiers and fax machines, white and colored ledger paper, carbonless copy paper, construction paper, undeliverable mail, mailed promotional letters/advertisements/circulars, magazines, catalogues, envelopes, soft cover books.

Used Motor Oil - Motor oil from motor vehicles, lawn mowers, boats, etc., which has served its intended useful purpose.

Lead-Acid Batteries - Storage batteries in which the electrodes are grids of lead containing lead oxides that change in composition during charging and discharging, and the electrolyte is dilute sulfuric acid. These include starting batteries such as car batteries that deliver a short burst of high power to start the engine. In addition, they may include deep cell batteries found on boats or campers used to power accessories like trolling motors, winches or lights.

Metal Appliances - Appliances composed predominantly of metal, and may include stoves, washing machines and dryers, for example, if the appliance is predominantly metal. Also included are air conditioners, refrigerators and dehumidifiers if they are predominantly metal. If these appliances on the latter list contain refrigerants that are prohibited by the Clean Air Act from being knowingly vented, the refrigerant must be recovered accordingly.

Developed Property - shall mean any tract of land or lot, which meets any one of the following criteria:

- 1) Any structure or paving currently exists or has previously existed on the tract or lot; or
- 2) Any grading, mining, drilling, dredging, filling or excavation has taken place on the tract or lot.
- 3) Clearing trees or vegetation from a tract or lot shall not, by itself, be construed to render the affected tract or lot "developed property" within the meaning of this article.

Director - means the Director of Solid Waste.

Disposal Site or Landfill - A refuse depository, licensed, permitted and approved to receive refuse, garbage, trash, debris and dead animals for final disposal.

Filth - shall mean any matter in a putrescent state

Garbage - shall mean all animal, vegetable and inorganic matter subject to discard which is generated from within a household, residence, or business, such as but not limited to coffee grounds, tin cans, bottles, paper bags, plastic items, boxes, glass, and food articles, and additionally, shall include all animal, vegetable, and inorganic matter and any putrescible animal or vegetable waste materials resulting from the handling, preparation, cooking and consumption of foods, including waste materials from markets, storage facilities, handling and sale of produce and other food products. The term "garbage" also means admixtures of animal or vegetable waste with rubbish, but does not include dead animal carcasses.

Hazardous Waste - Any chemical, compound, mixture, substance or article, which is designated by the United States Environmental Protection Agency or appropriate agency of the state to be "hazardous" as that term, is defined by or pursuant to federal or state law.

Infectious Waste - A solid waste containing pathogens or biologically active material that, because of its type, concentration and quantity is capable of transmitting disease.

Litter - The word "litter" is "garbage," "refuse," and "rubbish," as defined herein and all other waste material which, if thrown or deposited as herein prohibited, tends to create a danger to public health, safety and welfare.

Municipal Solid Waste (MSW) Stream – means all solid waste generated from residential, commercial, and institutional establishments within the City of Edinburg, which is not bulky waste or construction and demolition debris.

Non-profit Organization - A civic or fraternal organization, charity, lodge, association, proprietorship, or corporation possessing an Internal Revenue Code § 501(C)(3) exemption, or a religious organization meeting the definition of "church" under the Internal Revenue Code § 170(b)(1)(A)(i).

Owner - shall mean a person having some interest in title to real property.

Person - Any individual, partnership, co-partnership, firm, company, corporation, association, joint-stock company, trust, estate, political subdivision or any other legal representatives, agents or assigns.

Property - Any real or personal property of any type.

Putrescible - Any matter or material capable of decaying or rotting.

Refuse - The word "refuse" is all putrescible and non-putrescible solid wastes, except body wastes, but including garbage, rubbish, ashes, street cleanings, dead animals and solid market and industrial wastes.

Recyclable Material – means those materials which would otherwise become solid waste, and which may be collected, separated, or processed and returned to the economic mainstream in the form of raw materials or products.

Remodeled – Please see Significantly Remodeled.

Residential or Residential Unit - Pertaining to any structure or premises used for permanent living quarters of whatever type, including conventional single-family residences or mobile homes. A residential unit shall be deemed to be occupied when either water or domestic light and power services are being supplied thereto.

Rubbish – Trash or Garbage

Sharps - Includes the following materials when contaminated: hypodermic needles and syringes with attached needles; scalpel and razor blades used for medical procedures; Pasteur pipettes; and broken glass from laboratories

Significantly Remodeled – A Significant Remodel for residential, commercial, institutional, multiple-family dwellings and/or residential developments will constitute when the improvements and/or work exceeds more than 45% of the actual value listed under the City/County Tax Rolls.

Small Dead Animals - Animals or portions thereof equal to but not greater than ten lbs. in weight that have expired from any cause, except those slaughtered or killed for human use. Animals or portions thereof that have expired from any cause shall also be so defined, regardless of weight, when said animal

or portion thereof is in the possession of the city, or when said animal or portion thereof is found on a public street or thoroughfare.

Solid Waste - means any discarded or unwanted solid materials, garbage, brush, refuse, rubbish, litter, junk, trash, sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, and other discarded material including solid, liquid, semisolid, or contained gaseous material resulting from industrial, municipal, commercial, mining, and agricultural operations and from community and institutional activities but does not include:

- 1) Solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or industrial discharges subject to regulation by permit issued pursuant to state law;
- 2) Soil, dirt, rock, sand and other natural or manmade inert solid materials used to fill land if the object of depositing same is to render the land suitable for the construction of surface improvements; and
- 3) Waste materials, which result from activities, associated with exploration, development, or production of oil or gas and are subject to the jurisdiction or control of the Texas Railroad Commission.

Source-Separation – means the process by which recyclable materials are separated at the point of generation by the generator from their MSW stream for the purposes of recycling.

Source-Separated Recyclable Materials – means recyclable materials, which are separated at the point of generation by the generator from their MSW stream for the purposes of recycling.

Special Waste – Waste, which requires special authorization from the Departmental Director prior to its acceptance at the Sanitary Landfill, due to the characteristics of the waste or handling methods needed that, make it a special waste.

Tenant Improvements – See Significantly Remodeled.

Trash - shall mean all non-decayable waste; plastics, cardboard, rubber and fabrics or fibers; but for the purpose of service does not include construction materials, debris or bulky waste for commercial collection.

Undeveloped property - shall mean any tract of land or lot, which is not developed property.

Waste Material - Refuse, garbage, rubbish, other solid or liquid wastes and useless, unused, unwanted or discarded materials.

SOLID WASTE SERVICE GENERAL REQUIREMENTS FOR ALL NEW DEVELOPMENTS, ADDITIONS, TENANT IMPROVEMENTS AND SIGNIFICANT REMODELS

The City has provided information and resources for designing trash and recycling sites that will be used by building occupants in new developments or significant remodels. The City requires new single or multi-family residences, commercial buildings, duplexes, institutions or any of the same with improvements that exceed 45% or more of the actual value listed under the City/County Tax Rolls, to comply with the standards listed in this manual. The Standards include adequate, accessible and

convenient areas for collecting and loading materials for disposal or recycling. Waste disposal and recycling must be well planned in conjunction with the City and the Department of Solid Waste. The Standards Manual provides waste enclosure design, placement requirements, procedures on how to estimate waste volume and size of containers. The Manual also provides a detailed guide that presents design considerations, measurements, and clearances required for trash collection vehicles, enclosures and guidelines for minimum space allocation and requirements between service locations and utilities.

- A. Solid Waste Services required. The City of Edinburg requires all developed properties to have solid waste collection services. Solid waste services are to be provided by the city in accordance with § 51.2 Exclusive Municipal Service For Garbage Collection and § 51.4 Solid Waste Management
- B. Collection Required at Least Once a Week. All solid waste of any kind shall be removed by the City at a minimum of once every seven days. *Note that solid waste storage issues and potential overflow problems that lead to nuisance or inappropriate housekeeping conditions are not permitted.*
- C. Compliance with § 51.60 NEW DEVELOPMENTS OF CERTAIN PROPERTIES.
New Developments of Multi-Family Residential Units or Commercial, Institutional, or Industrial Properties:
 - a. Any new application to the City, for a subdivision or site plan approval for the construction of multi-family dwellings of three or more units, single family developments of 50 or more units or any commercial, institutional, or industrial development for the utilization of 1,000 square feet or more of land, must include a recycling plan. This plan must contain, at a minimum, the following:
 - i. A detailed analysis of the expected composition and amounts of solid waste and recyclables generated at the proposed development; and
 - ii. Locations documented on the application’s site plan that provide for convenient recycling opportunities for all owners, tenants, and occupants. The recycling area shall be of sufficient size, convenient location and contain other attributes (signage, lighting, fencing, etc.) as may be determined by the Recycling Coordinator.

- b. Provision shall be made for the indoor, or enclosed outdoor, storage and pickup of solid waste, to be approved by the Director.
- D. Residential Collection Service. Residential collection is conducted at assigned intervals on Monday and Tuesday; Thursday and Friday; there is no residential collection on Wednesday. Your day of collection will depend in the area that you live in; please refer to **Illustration 1** to find the area where the development will be. For this type service, an automated collection vehicle is used to service single-family residential areas once a week where 96 gallon wheeled carts are utilized.
- a. Single-Family Services: For design and planning purposes, single family structures should include adequate storage capacity to accommodate three (3) standard 96-gallon roll out carts, the maximum allowed for single family residences. The standard 96-gallon waste cart is Height 43.25" X Length 35.25" X Width 29.75.
 - b. For safe and efficient curbside servicing, solid waste residential vehicles require:
 - i. a minimum of 40 feet of turning radius (66 feet of curb to curb diameter for a 180 degree turn);
 - ii. an unobstructed vertical clearance of 18 feet;
 - iii. unobstructed horizontal clearance of at least 18 feet; and
 - iv. at least 2 feet of clearance between each container and any other object (i.e. this includes parked cars, etc...) placed at curbside for servicing purposes.
- E. Commercial Service. Commercial, institutional, apartment(s), multi-family dwellings (consisting of three or more units), flats, commercialized residence (consisting of three or more units), businesses or industrial premises, commercial establishments, and/or construction sites. Tenant mix and/or size of the development can affect the type of service and the number of containers and enclosures required to service a development. Specific requirements per project type or size are detailed in Table I. Service levels and number of containers and enclosures require City review, and discussion between applicant and the City. This process will assure that sufficient service levels and minimum capacity requirements are planned prior to plans being submitted to the City. Guidance on the design, placement, and other requirements associated with solid waste services may be directed to City staff at (956)381-5635 and are addressed herein and in the associated Exhibits referenced herein.

F. Submittal of Plans. All development projects as outlined in the title are subject to the requirements of these "Development Standards for Solid Waste Services" and shall submit at the time of application, plans to a typical architect's or engineer's scale that is clearly identified (i.e. marked on the plans) showing the proposed (1) design, (2) size, (3) elevation, (4) location of solid waste enclosure(s) and/or storage area(s), (5) type of collection containers to be used, (6) if applicable, location where containers shall be placed for collection purposes, (7) Ingress and Egress for those services (8) Type of drive (e.g. concrete, paved) (9) location of any storm drains within twenty feet of a proposed enclosure, (10) location of any power transformers, electrical, data, phone and utilities within twenty feet of a proposed enclosure (11) and, if applicable any proposed turn around (i.e. 3-point turn locations) within the project for collection vehicles. These plans shall demonstrate compliance with applicable standards in this manual and any standards required by the City and shall be in addition to the required plans and information for the project.

VEHICLE ACCESS STANDARDS

Truck specifications

- A. **Residential Collection:** Trucks are 8' feet wide plus an additional 12"-20" for mirrors. Collection vehicles for single-family residential streets are equipped with a fully automated 8-foot arm on the right side of the truck, which grabs the cart and dumps it over the side into the truck. The Residential garbage trucks can only access the carts from the right side.
- B. **Commercial Collection:** (1-10 cubic yards dumpsters) Commercial vehicles need a minimum of 40 foot unobstructed clearance to access the trash enclosure. Front Load Commercial collection vehicles access the trash enclosure at the front of the vehicle; while, Commercial Side Load Vehicles access the trash enclosure and container from the driver side.
- C. **Roll-off containers:** (10-40 cubic yards) Vehicles servicing Roll-off containers need a minimum of 132 feet to approach and load the container, and 30 feet of overhead clearance. Roll-off containers are 20 feet in length and 8 feet wide. Weight of a Roll-off container cannot exceed 10 tons when full (legal street limit).
- D. Refuse vehicle turning radii
 - i. Inside radius28 feet
 - ii. Outside radius40 feet
- E. Refuse vehicle width clearance12 feet

- F. Refuse equipment access / service drives (i.e. Ingress / Egress) and service area surfaces shall be designed and maintained to support the imposed loads of collection trucks weighing up to 66,000 lbs. of Gross Vehicle Weight (GVW) and shall be provided with an approved surface so as to provide all weather driving capabilities. All access /service roads and service area surfaces are required and shall be engineered accordingly to avoid future pavement damage by adhering to the City Roadway Standard Plans and Specifications under the Unified Development Code and Engineering Standards Manual.
- G. **Overhead Clearance:** If garbage/recycling trucks must enter under a building, parking garage or gate, there must be 18 feet of overhead clearance. Additionally, if the container will be emptied or serviced from that same location, total overhead clearance of 24 feet is required from surface to lowest point of overhead obstruction (rafter, roof, fixtures, etc.) to empty the container over the truck.
 - a. Refuse vehicle height clearance18 feet
- H. **Turnaround/Backing distance:** For safety reasons, a turnaround must be provided for any street, driveway or travel aisle that would otherwise require the collection truck to back up. If a turnaround is required, the applicant must provide a 40 foot outside turning radius for collection trucks to make a 180 degree turn without stopping. If on-street parking is allowed, more width is required to maneuver safely. Refuse vehicle backing: If allowed will be straight only and the distance will be determined on case by case basis. Preference is :
 - a. No Backing for Residential Refuse vehicle.
 - b. No Backing on Major streets or thoroughfares.
 - c. Commercial / Roll-Off Refuse vehicle backing distance to be determined on a case-by-case basis, minimum backing is preferred, 45' backing is maximum allowed.
- I. **Service Area:** The area where services will be conducted, must be maintained and parking prohibited. A minimum of a 40-foot long unobstructed drive will be provided up to the apron directly facing the enclosure for front load services or parallel of the midpoint of the enclosure apron for sideload services. The enclosure must face the driveway, not parking spaces.
- J. Alleys must be a minimum of 20 feet in width, and have enough room to allow for a 28 foot minimum turning radius when making turns at 90 degree intersections in the alley.
- K. Containers must not obstruct travel path of refuse vehicle, or compromise the ability of the refuse vehicle to safely service the containers.

Table 1
SOLID WASTE GENERATION GUIDELINE

Classification	Building Type	Quantities Generated
Residential Collection	Single Family Residence	96 Gallon Plastic Roll-Out Cart
Commercialized Residence	Multi-family Apartments Single Family Detached	2.0-cubic yards of refuse per 4 units/week
Commercial Buildings	Office Department Store Supermarkets Drugstores/Convenience Banks Shopping Center Vehicle, Appliance, Furniture, Auto Repair/ Lube Shop	1.00 C.Y./5,000 Sq. Ft./Day 1.00 C.Y./2,500 Sq. Ft./Day 1.00 C.Y./1,250 Sq. Ft./Day 1.00 C.Y./2,000 Sq. Ft./Day 1.00 C.Y./2,000 Sq. Ft./Day .25 C.Y./1,250 Sq. Ft./Day 4.0 C.Y./ 8,000 Sq. Ft./Day 4.0 C.Y./ 8,000 Sq. Ft./Day
Hotels & Motels	High Occupancy (90%) Median Occupancy (75%) Mediocre Occupancy (40%)	.50 C.Y./Room/Week w/restaurant .25 C.Y./Room/Week w/o restaurant 1/6 C.Y./Room/Week w/o restaurant 4 cubic yards per 10,000 square feet
Warehouse		4 cubic yards per 30,000 square feet
Industrial Park		4 cubic yards per 8,000 square feet
Multi-Tenant Industrial Park		4 cubic yards for every 2 tenants
Institutions	Nursing Homes Retire. Homes Personal Care/Assisted Living	1.00 C.Y./20 Persons/Day
Restaurants	Family Style	1.00 C.Y./250 Meals/Week
Schools	Grade Schools High Schools Universities	1.00 C.Y./8 Rooms/Day 1.00 C.Y./10 Rooms/Day Audit required

Note: These guidelines are approximate and can be helpful when observation of the current service level is not possible, or, in pre-construction planning. Determined on a case-by-case basis, the City may require

additional containers or additional service levels. All levels shown above are based on once a week service.

On a case-by-case basis, the City may require additional containers or specify other types of containers.

Each tenant is and will be considered separately.

REFUSE ENCLOSURE LOCATION AND SPACE REQUIREMENTS (GRAPHIC STANDARDS) *SEE THE ATTACHED STANDARDS AND DRAWINGS*

Enclosures/Pads – Enclosures/Pads are required for all new and/or significantly remodeled commercial, institutional or multiple-family dwellings and/or residential developments consisting of **three (3) or more** units. Type (i.e. enclosure or pad) will be determined by the DSWM at the time of application, final determination will rest with the Department of Solid Waste Management. Upon determination the area shall be set aside for the provision of adequate and accessible enclosures or pads for the storage of refuse in proper receptacles. The design, construction and accessibility of the pads or enclosures shall be shown on the site plan in conformance with the standards and specifications of the Department of Solid Waste and the design guidelines listed below:

- A. The refuse collection area shall be in an enclosure(s)/pad area conveniently located next to the building(s) it serves and easily accessible to collection vehicles. No enclosure/pads shall be located in any required setback unless there is no other option available to place the enclosure/pads.
- B. All Solid Waste Containers and Storage areas shall be screened from public view and should not be visible from any public way.
- C. Solid Waste Container Enclosure Areas: Wherever feasible solid waste storage/container enclosure(s) shall not be located in the front yard area, defined for the purposes of this section as the area measured from the front property line to a line parallel with the face of the front wall of the main building located the greatest distance from the front property line and extending the full width of the lot. **(General Enclosure Requirements - please refer also to article 2; division 2.200 Use Standards (L)(1) Residential uses; or (L)(2) Nonresidential Uses of the City Unified Development Code).**
- D. All containers, with the exception of twenty to forty (20-40) cubic yard roll-off containers, shall be permanently protected from adverse environmental conditions with lids or other methods

approved by the Department of Solid Waste. The lids shall be kept closed when the receptacles are not being loaded or emptied.

- E. The property owner is responsible for maintenance and upkeep of all the ingress and egress drives to the service areas, the enclosure(s) and/or container pad(s) and shall maintain such in a clean condition.
- F. The enclosure(s) shall be secured by all metal gates to prevent the removal of materials by unauthorized persons while permitting access to authorized persons. Enclosures and Pads shall be clear of other materials/items and shall be used only for solid waste collection services only, no other services or materials shall be collected nor stored within the enclosure/pad. (i.e. waste oil collection containers, milk crates, drink trays or carriers, tires, oil collection containers, etc...)
- G. Enclosures and pads shall be located so that refuse vehicles can pull in or pull up to the front of the enclosure or pad, empty and reset the container without the vehicle operator physically removing the bin from the enclosure or pad.
- H. Clear an unobstructed access for collection vehicles shall be provided to the service area and the front of the solid waste container enclosure or pad.
- I. The solid waste container pad or enclosure shall be located at a minimum of fourteen (14) feet away from any utilities, electrical services both above and below ground, data and phone communication pedestals, combustible walls, openings or combustible roof eave lines. The container shall not be located under overhead wires, tree branches or other overhead obstructions. The distance from any obstruction to any other obstruction shall not be less than forty feet (40').
- J. All refuse bins and enclosures shall be located on major drives within developments to provide adequate circulation of refuse vehicles.(Must be within setback requirements)
- K. **PRE-EXISTING OR PREVIOUSLY APPROVED SITE PLAN/ENCLOSURES:**
 - a. For commercial establishments that have approved site plans that pre-date the current SW Standards and the designated garbage site location fails to meet the current area requirements in use; the department may allow for the use of a Modified Enclosure and/or Container Pad; all other provisions of these standards will remain in force. In order for a development to qualify for this modification exemption, the Plat or Site Plan SHALL have been approved and recorded prior to the date of acceptance of these standards. The

development after qualifying for this exception shall meet the minimum requirements as follows:

i. ENCLOSURE:

1. Must be of CMU design
2. Must have metal gates where deemed necessary
3. Must have bollards similar and in the same proximity of those found in the 12X12 Enclosure
4. Must meet a minimum inside dimension design of 8Ft X 8Ft X 6Ft
5. Must meet all other enclosure design criteria found in the Standards Manual in relation to stenciling, driveway, setbacks, utility proximity, drive construction standards, etc...

ii. CONTAINER PAD ONLY:

1. Must be of concrete design
2. Must have bollards similar and in the same proximity of those found in the 12X12 Enclosure
3. Must meet a minimum inside dimension design of 8Ft X 8Ft
4. Must meet all other enclosure design criteria found in the Standards Manual in relation to stenciling, driveway, setbacks, utility proximity, drive construction standards, etc...

L. **DRIVEWAYS (Ingress / Egress):**

- a. Ingress and Egress (Driveways) to all service areas will, at a minimum, require a 20-foot wide asphalt pavement section that consist of 8-inch subgrade, 12-inch flexible caliche base and 3-inch hot mix asphalt material or 6-inch concrete (3300 psi) drive with #4 rebar at 18-inch on center each way. Service areas, will be comprised of the driveway and must provide a 40-foot unobstructed straight driveway up to the apron, for front load systems; or a 40-foot parallel driveway from the center point of the pad/enclosure apron for side loads systems. All service drives/ driveways (ingress and egress) are required and should be built in accordance with the City Engineering Standards and Specifications **SECTION 2 STREETS AND ROADWAYS POLICY: 2.05 General; B. Right-of-Ways and Paving Widths; 6. Street Standards (a)** and be able to withstand trucks weighing up to 66,000 lbs. of Gross

Vehicle Weight (GVW). All drives and service area surfaces shall be engineered accordingly to avoid future pavement damage.

- b. Through circulation of traffic shall be provided for Refuse vehicles in all parking areas. This is to prevent or reduce necessity of backing up with refuse collection vehicles

M. APRON

- a. A 6 inch concrete slab “Apron”, shall be installed in front of the service area and cover the Width of container service pad and extend out an additional 10 feet from the pad. The apron shall withstand up to 22,000 lbs. of direct force from a single truck axle. All access and service area surfaces shall be engineered accordingly to avoid future pavement damage. Concrete surfacing is required in all service areas. Dimensions may increase depending on the size of the enclosure and its service requirements.
- b. Apron surface shall be the same elevation as the pad threshold and the surrounding surfaces
- c. No drainage V-ditches or catch basins shall be allowed within this 6" apron. Apron shall be to grade on all edges
- d. The area in front of the solid waste container pad or enclosure shall be marked as a "**NO PARKING**" zone with minimum 12" high white traffic safety paint stenciled lettering. **(FIGURE 1)**

N. CONTAINER PAD:

- a. The minimum interior dimension for a container pad to house at least one ten (10) cubic yard bin is 12 feet wide x 12 feet deep; minimum pad dimensions may increase depending on the size and number of bins. The container pad shall be constructed with minimum of a Six (6) inch thick reinforced concrete slab. Dimensions may increase depending on the number of bins. (see **FIGURES - 1 & 3**)
 - i. The concrete pad shall be sloped to the front to eliminate ponding with a maximum slope of 2%.
 - ii. Curb -stop or wheel-stop: A 10" high x 6" deep concrete high curb (i.e. curb-stop or wheel-stop) shall be provided to the rear and sides of the pad. If a container enclosure is not required, the rear curbing shall run along the full width of the pad, and the side curbing shall be a minimum of four (4) feet in length from the back curb. (see **FIGURE 1**)

- iii. The concrete forms shall be inspected and approved by the City, for size and location prior to the placement of any concrete.

O. CONTAINER ENCLOSURE.

- a. If a container enclosure is required, a concrete block wall shall be on constructed on three sides, with a twelve (12) foot clear gate opening, a twelve (12) foot pad width and a twelve (12) foot pad depth. The wall shall have a minimum height of seven (7) feet with a maximum of ten (10) feet - please refer also to article 2; division 2.200 Use Standards (L)(1) Residential uses; or (L)(2) Nonresidential Uses of the City Unified Development Code. Minimum pad dimensions may increase depending on the size and number of bins. **(FIGURE 2 and 4)**
- b. Gate/doors: gates shall be solid metal and shall have a minimum height of seven (7) feet with a maximum of ten (10) feet. Gated openings for ingress/egress of bins must be a minimum of 12 feet wide with no posts in the middle. A separate, additional pedestrian entrance is encouraged from the backside. Use bolts, not screws, to secure gate to the poles or walls. The gate shall have latches to hold the gate in the open position. All latches shall be installed on exterior of gates and latch rods shall be a minimum of 36" above ground level. Latch rods shall be a minimum of 3/4" in diameter. The receiver shall be three inches deep, one inch inside diameter and flush with the ground. Hung gates must have a 4-inch clearance off the finished pad or apron. Gates in the opened position shall not infringe on the traffic aisles and open to at least 180 degrees when secured open. **(General Enclosure Requirements - please refer also to article 2; division 2.200 Use Standards (L)(1) Residential uses; or (L)(2) Nonresidential Uses of the City Unified Development Code).**
- c. For enclosures where more than one container will be required, the enclosure design shall be submitted to the department of solid waste management for approval.
- d. Where a concrete block container enclosure is installed, vertical and horizontal steel reinforcement shall be required in accordance with the current city unified development code and the city engineering standards for construction.
- e. Bollards: the rear of the enclosure and corners of the enclosure where the door hinges and are attached shall be protected with bright yellow colored bollards.

- f. Gate stops shall be installed to prevent enclosure gates from closing while bin is being cycled. All gates shall open 180 degrees and the latch rod shall have the same on inch inside diameter receiver, as the closed position requires.
- g. Accessing the enclosure: when a straight on approach cannot be accomplished to access the trash enclosure, a parallel approach will be utilized and the service will be conducted by a side load unit; only in the event where front load service must be utilized and a straight approach cannot be achieved a radius of not more than thirty-one and nine tenths degree (31.9°) shall be used to make the approach into the trash enclosure (**see detail FIGURE 6: turning angle requirements**). There must be a curb or barricade leading from the existing curb to the bin enclosure to prevent parking. All curbs must be on the outside of the trash enclosure. All curbs must be rounded with no square or pointed ends leading to the bin enclosure. This is to prevent tire damage.
- h. Enclosures shall be screened with plant material whenever practical.

P. MULTIFAMILY DEVELOPEMNT MODIFIED ENCLOSURE OR PAD:

In multifamily developments, ONLY, if a container enclosure is required but the site fails to meet with the minimum space requirements for an enclosure the developer may request for a modified container exemption. The process will undertake a departmental review by Solid Waste Management, Planning and Zoning and Engineering, if required, of the proposed enclosure and site plans. The request must also provide a reason of why the SW Standards cannot be met and further provide proof of a financial hardship in meeting such standards. The exemption if granted will ONLY allow for a modified enclosure specification all other criteria contained within these specs, specifically those set up for the aprons, stenciling, driveway, setbacks, utility proximity, drive construction standards etc., will remain in full force and will not be subject to any exemption or modification. (Final Clearance/acceptance of the exemption will rest with City Staff)

- Therefore, if an exemption to the enclosure specification is granted. The Modified Enclosure shall meet the following minimum inside design measurement: the enclosure must have a minimum inside design of eight (8) feet wide by (8) feet in depth and shall be constructed in the specified area designated by the city; with, a minimum design, of six (6) feet CMU wall on three sides. Facing the collection area there shall be an eight (8) foot clear gate opening. The CMU block wall and gates shall have a minimum height of six (6) feet with a maximum height of ten (10) feet. The Gates, if required, will be of all Metal Construction.

Q. SOLID WASTE COMPACTORS.

Self-contained waste roll-off compactors may be used to substitute Commercial Front Load and/or Side Load Services at a minimum of a 18 yd compactor for every (5) 4 cu. yd. bins. Where in a single commercialized location services exceed more than 10 collection stations; centralized collection utilizing self-contained units shall be utilized upon approval by the Department of Solid Waste Management.

- a. A concrete pad large enough for the entire unit shall be provided.
- b. The concrete pad shall have a minimum six (6) inch curb on three sides and slope to a drain in the pad. The fourth side must be open to allow straight access for collection vehicles.
- c. The concrete pad drain shall be trapped, frost proof and have a removable "basket" strainer to keep out large solids.
- d. The drain shall be installed in the area of the pad where the leakage is anticipated and the pad shall be sloped toward the drain.
- e. The drain shall be plumbed into the sanitary sewage disposal system and shall include an oil/water separator.
- f. Cold running water shall be provided and shall have freeze-proof valves. An interior faucet with attached hose may be utilized. All surfaces shall be easily cleanable.
- g. Odor neutralizing equipment may be required depending on collection frequency and solid waste composition. If such equipment is deemed necessary by the City, it shall be provided by the owner.
- h. All privately owned roll-off compactors must be compatible with City's collection equipment. Customer's responsibilities are, but not limited to,
 - i. Furnish any specialty parts that may be required to transport loads safely without spillage occurring.
 - ii. Compactors shall be accessible and prepared for transport or on-site service (must be removed from compactor mechanism.)
 - iii. When compactor requires moving, after the roll-off portion is detached from the compactor, the customer shall furnish an employee to secure the load for transport and to reset the compactor.

- iv. Compactors shall have flush path of travel for compactor container wheels, no obstacles, metal strips, or obstruction of any kind for path of container wheels.
- v. Maintenance and upkeep of the compactor is the sole responsibility of the owner
- vi. Refuse compactor Units: Roll-off compactors with separate charging units (charging units not integral with container) require an area of 15 feet X 85 feet for compactor bin and refuse truck. Compactor units shall not exceed 10 tons when fully loaded, including weight of compactor. Compactors shall be located outside of any building. Minimum of 5 feet clearance space to be allowed from each side of compactor to 35 Feet in front of compactor unit.

Q. BIN ENCLOSURE OTHER:

- a. Private Streets or Private Roads: Private streets and/or private roads that require collection vehicle access must be designed to City Street Standards and must comply with REFUSE ENCLOSURE LOCATION AND SPACE REQUIREMENTS (GRAPHIC STANDARDS) SEE THE ATTACHED STANDARDS AND DRAWINGS **Section L. DRIVEWAYS (Ingress / Egress)** (i.e. able to withstand vehicles weighing up to 66,000 lbs).
- b. Pavers and/or Decorative Stones: The use of decorative pavers and/or stones within designated solid waste collection vehicle access area(s) is not recommended. Damage of these materials and areas will result from the normal anticipated use by solid waste collection vehicles and thus the property owner assumes responsibility for all damage.

If gates with locks are planned to, limit access to the enclosure or to the property, cards or keys must be provided to the City. The City can provide container locks and keys upon request. If keys or cards are not provided, then the Applicant must ensure that all secured gates are open at 5:00 a.m. for commercial collection and 7:00 am for residential collection.

STORM WATER POLLUTION PREVENTION MEASURES

For compliance with the Federal Clean Water Act and the City's Stormwater Program for Municipal Separate Storm Sewer Systems (MS4) Permit, all properties must comply with the standards set forth. The property owner shall ensure that no other materials or containers (i.e. hazardous waste, grease, etc.) are stored in the enclosure. In addition, the area shall be designed to prevent water run-on to the

trash enclosure area and to contain litter and garbage so that it is not dispersed by the wind or runoff during waste removal. Trash enclosures should not be located in the immediate vicinity of storm drains.

SPECIAL EVENTS

Special event requirements. Organizers shall secure a permit for solid waste containers from this department. The determination of the number of solid waste containers shall be in accordance with the Unit Requirements for Solid Waste Appendix, Table 2.

Illustration 1
Service Areas

RESIDENTIAL SERVICE AREAS

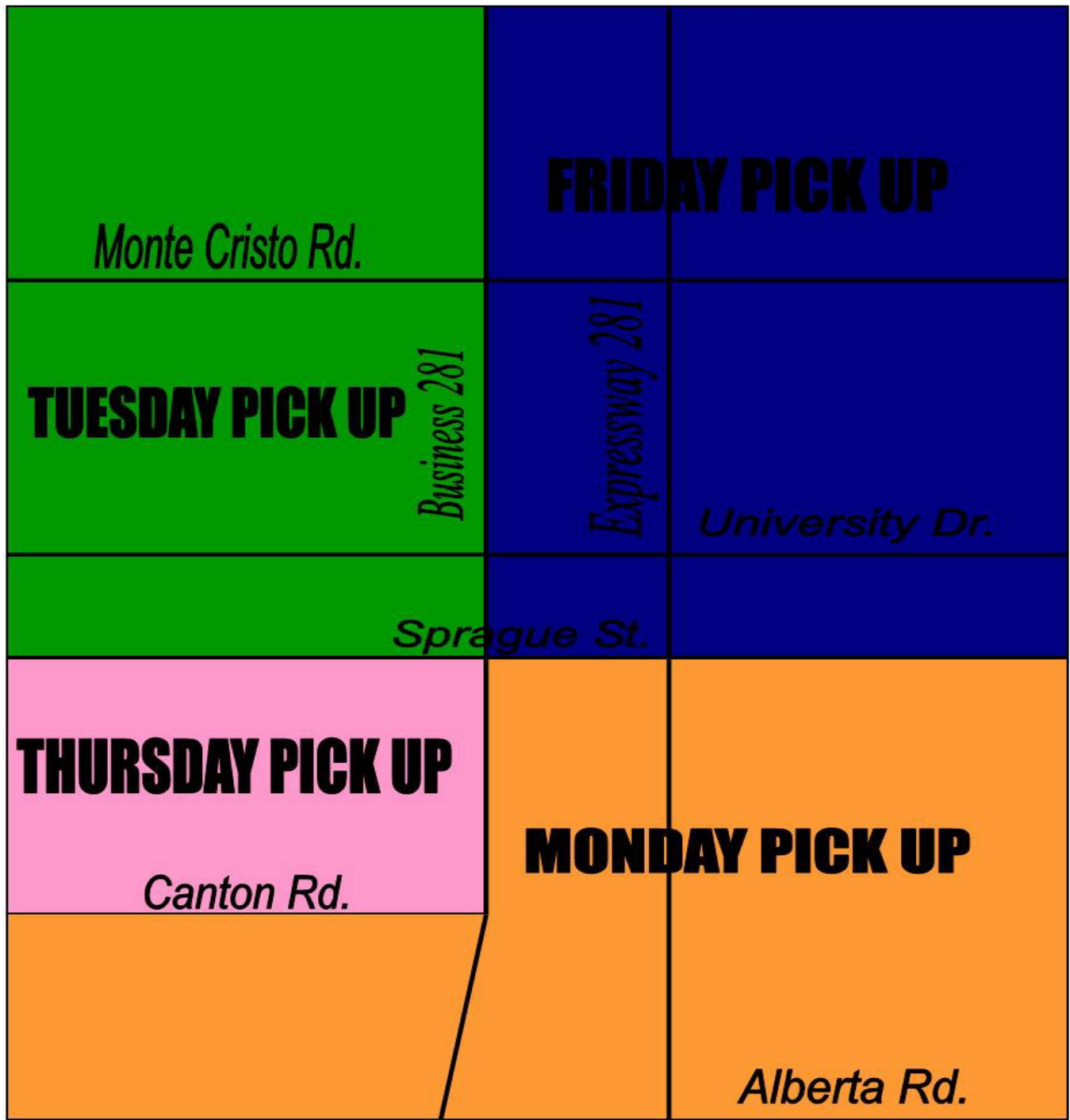


Table 2 Unit Requirements for Solid Waste

Peak Crowd Number of People	Minimum Unit Requirements Solid Waste Receptacles
250	3
500	7
1,000	14
2,000	27
3,000	41
4,000	54
5,000	68
6,000	82
7,000	95
8,000	109
10,000	123
12,500	170
15,000	204

***Minimum Unit Requirements for anticipated peak crowd in excess of 100,000 shall be calculated cumulatively from values based on this chart**

Table 3

Helpful Conversion Table for Various Containers

1 gallon..... 0.134 cu. ft.

27 cu. ft..... 1.00 cu. yd.

1 cu. yd..... 203 gallons

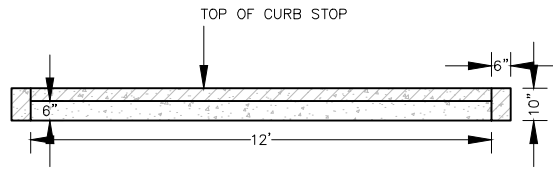
One cubic yard is approximately six (6) 35-gallon carts

One cubic yard is approximately three (3) 65-gallon carts

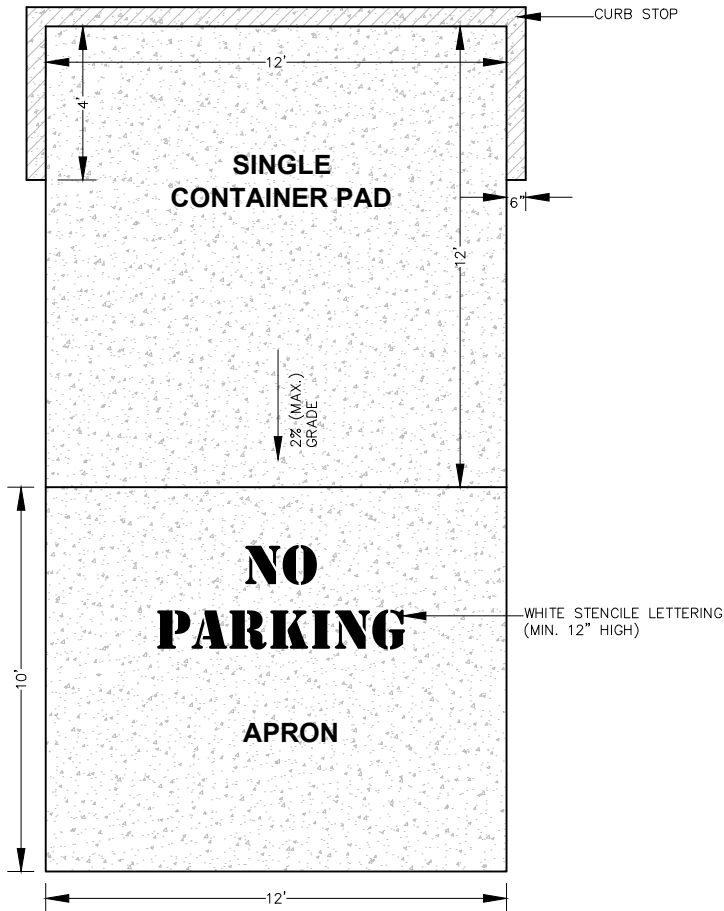
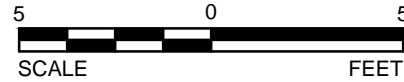
One cubic yard is approximately two (2) 95-gallon carts

To find container capacity in cubic yards, measure Length X Width X Height in inches and divide by 46,656. This will give you the approximate volume in cubic yards.

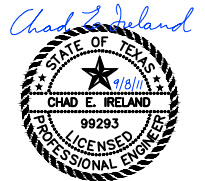
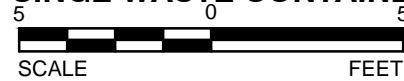
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SECTION
SINGLE WASTE CONTAINER WITH CURB STOP



PLAN
SINGE WASTE CONTAINER PAD WITHOUT ENCLOSURE



GOLDER ASSOCIATES INC.
 F-2578



WASTE ENCLOSURE REQUIREMENTS AND STANDARDS
 CITY OF EDINBURG
 DEPT. OF SOLID WASTE MANAGEMENT
 HIDALGO COUNTY, TEXAS

TITLE

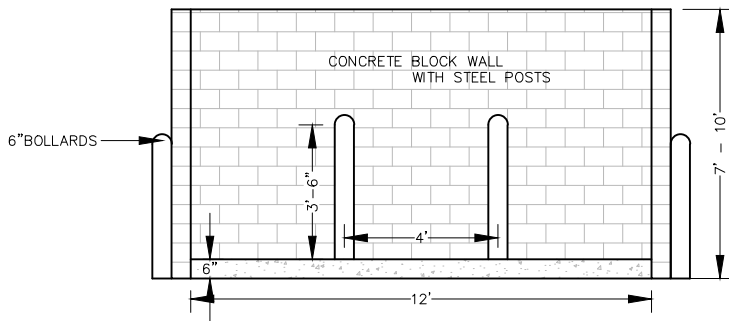
SINGLE CONTAINER PAD WITHOUT ENCLOSURE

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CHECKED	CEI	SCALE	AS SHOWN
REVIEWED	CEI	JOB NO.	103-94657
FILE NO.		DWG NO.	10394657B001

FIGURE NUMBER

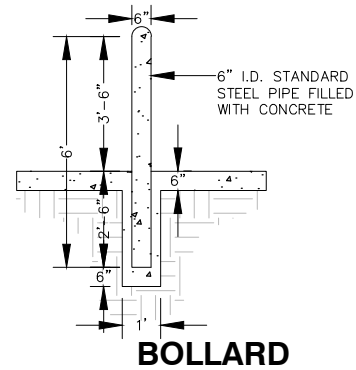
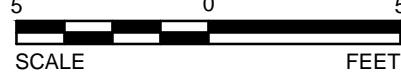
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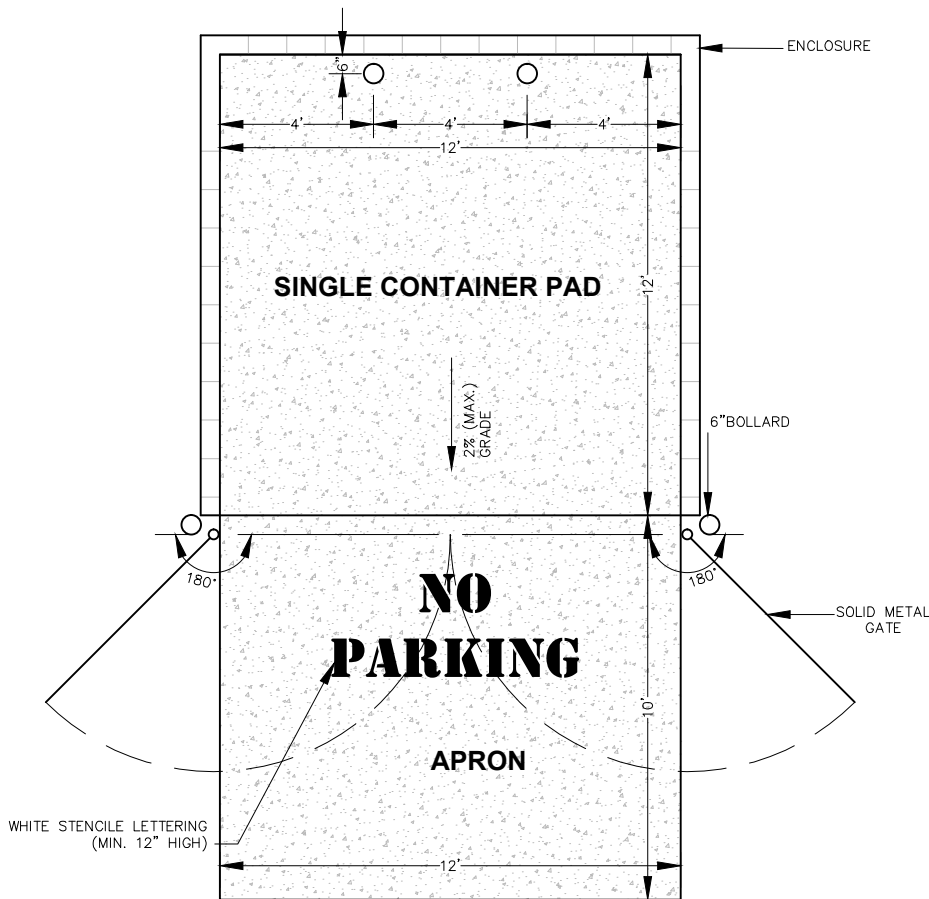


SECTION

SINGLE WASTE CONTAINER ENCLOSURE

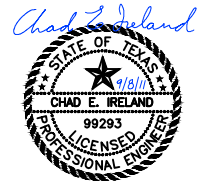


BOLLARD



PLAN

SINGLE WASTE CONTAINER PAD WITH ENCLOSURE



GOLDER ASSOCIATES INC.
F-2578



WASTE ENCLOSURE REQUIREMENTS AND STANDARDS
CITY OF EDINBURG
DEPT. OF SOLID WASTE MANAGEMENT
HIDALGO COUNTY, TEXAS

TITLE

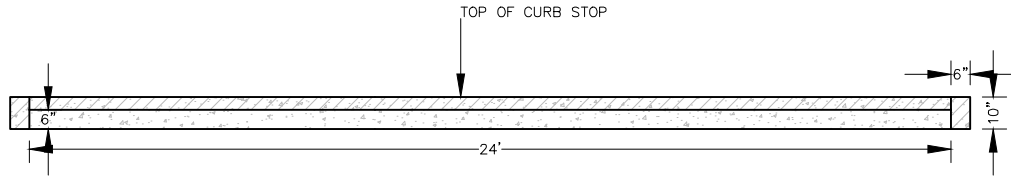
SINGLE WASTE CONTAINER PAD WITH ENCLOSURE

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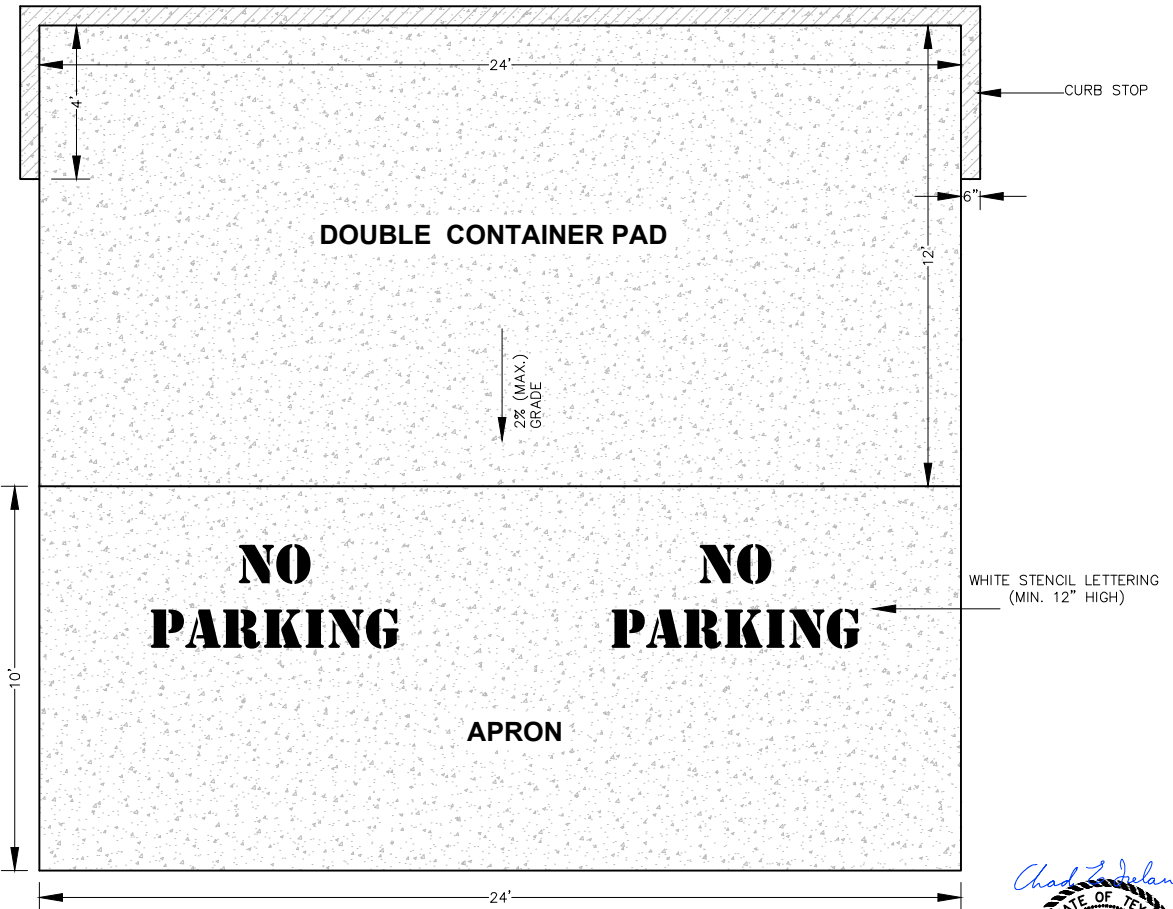
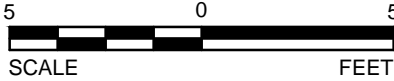
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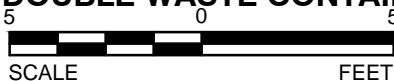
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SECTION
DOUBLE WASTE CONTAINER WITH CURB STOP



PLAN
DOUBLE WASTE CONTAINER PAD WITOUT ENCLOSURE



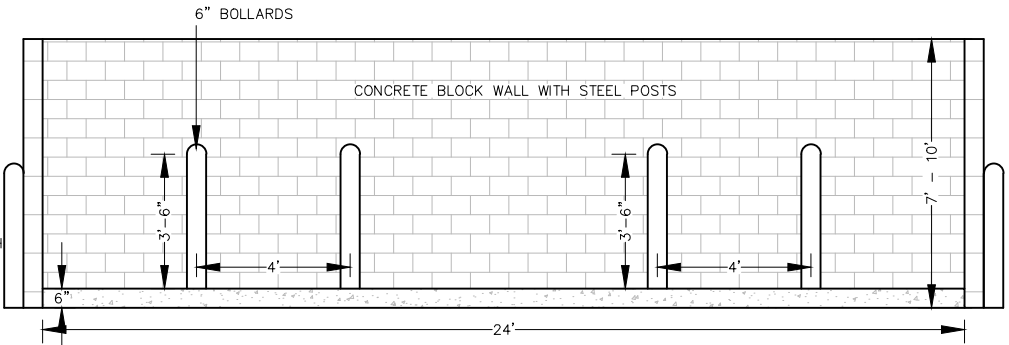
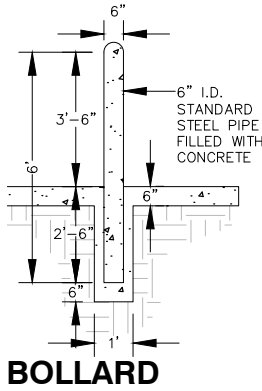
TITLE
DOUBLE CONTAINER PAD WITHOUT ENCLOSURE

PROJECT
**CONTAINER PAD CONSTRUCTION
 EDINBURG SANITARY LANDFILL
 PERMIT NO. 956-B
 HIDALGO COUNTY, TEXAS**

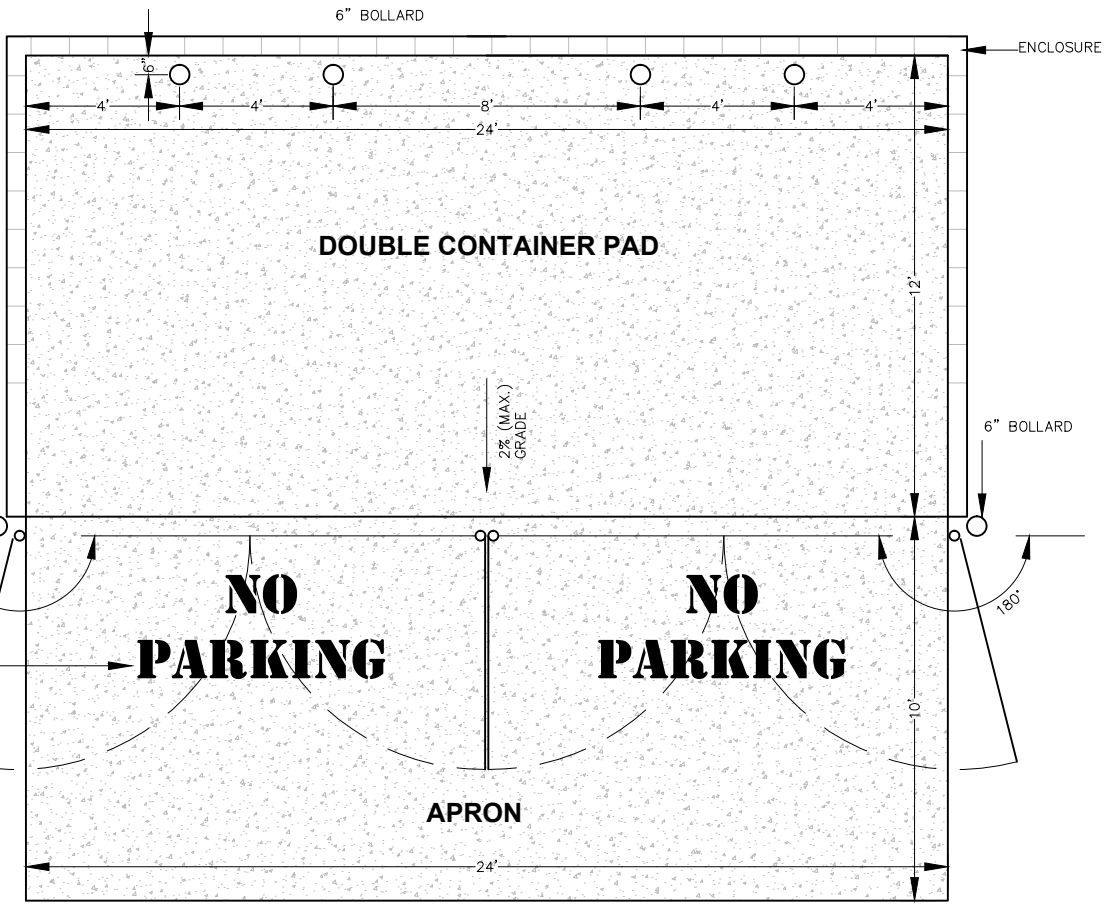
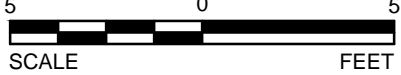
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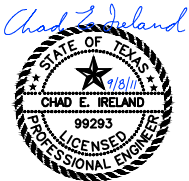
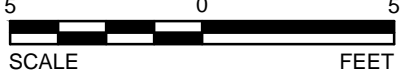
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SECTION
DOUBLE WASTE CONTAINER ENCLOSURE



PLAN
DOUBLE WASTE CONTAINER PAD WITH ENCLOSURE



GOLDER ASSOCIATES INC.
F-2578



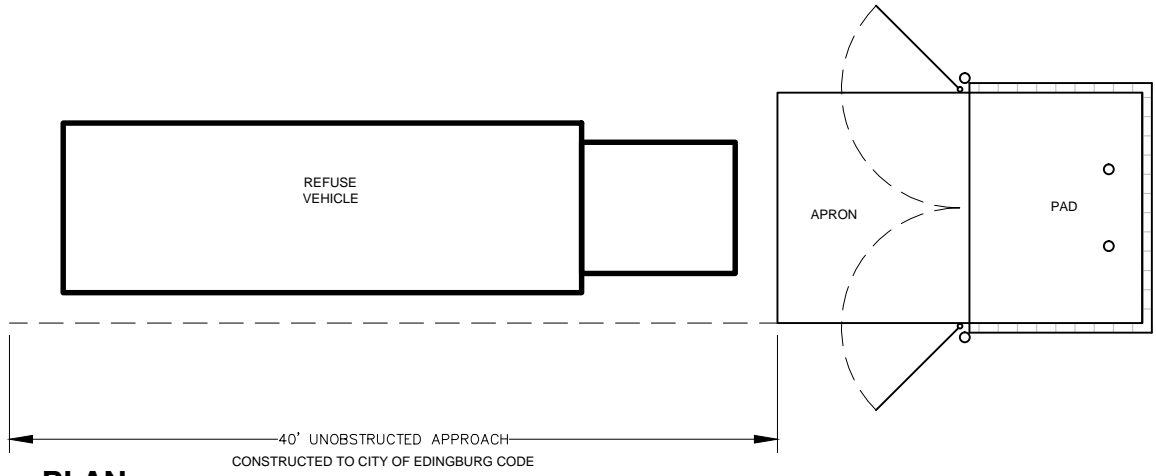
WASTE ENCLOSURE REQUIREMENTS AND STANDARDS
CITY OF EDINBURG
DEPT. OF SOLID WASTE MANAGEMENT
HIDALGO COUNTY, TEXAS

TITLE
DOUBLE CONTAINER PAD WITH ENCLOSURE

DRAWN	VJE	DATE	AUGUST 2011
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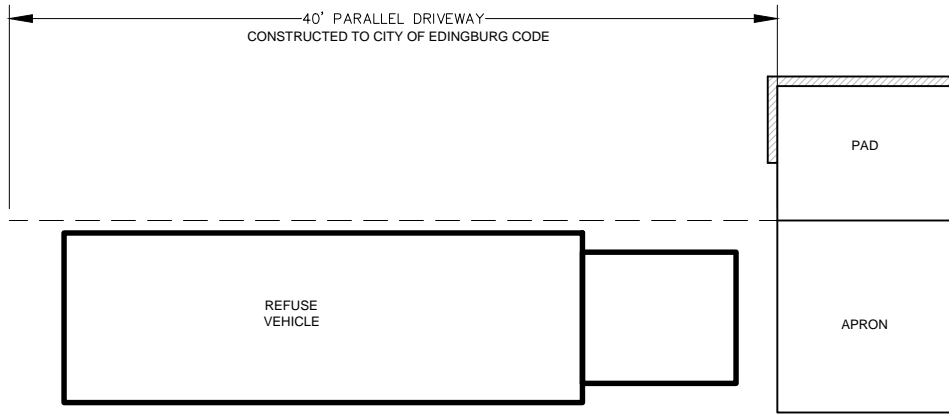
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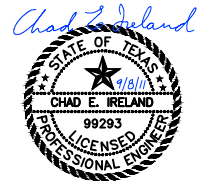
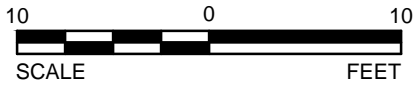


PLAN
DRIVEWAY ACCESS REQUIREMENT
FOR FRONT LOAD VEHICLE

NOTE: SEE SOLID WASTE CONTAINER SPECIFICATIONS, FIGURE 7



PLAN
DRIVEWAY ACCESS REQUIREMENT
FOR SIDE LOAD VEHICLE



GOLDER ASSOCIATES INC.
F-2578



WASTE ENCLOSURE REQUIREMENTS AND STANDARDS
CITY OF EDINBURG
DEPT. OF SOLID WASTE MANAGEMENT
HIDALGO COUNTY, TEXAS

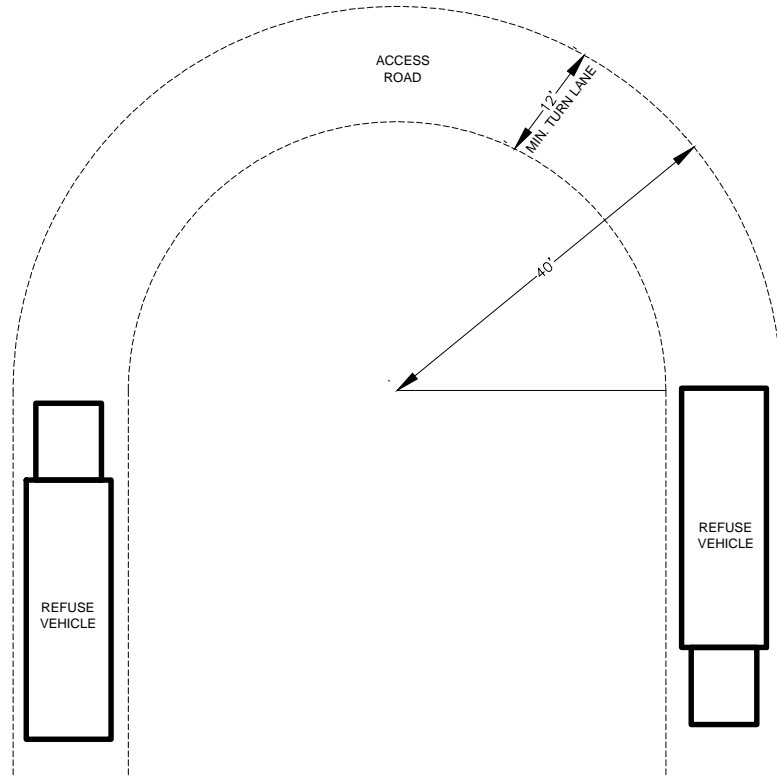
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DRIVEWAY ACCESS FOR REFUSE VEHICLES

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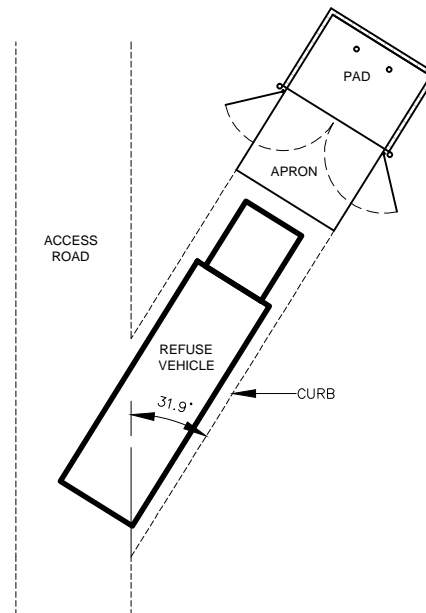
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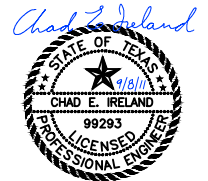
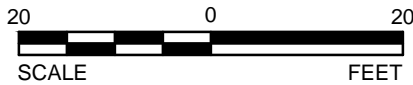


NOTE: SEE SOLID WASTE CONTAINER SPECIFICATIONS, FIGURE 7

DETAIL
TURNING RADIUS REQUIREMENTS



DETAIL
TURNING ANGLE REQUIREMENTS



GOLDER ASSOCIATES INC.
F-2578



WASTE ENCLOSURE REQUIREMENTS AND STANDARDS
CITY OF EDINBURG
DEPT. OF SOLID WASTE MANAGEMENT
HIDALGO COUNTY, TEXAS

TITLE
TURNING RADIUS AND TURNING ANGLE REQUIREMENTS FOR REFUSE VEHICLES

DRAWN	VJE	DATE	AUGUST 2011
CHECKED	CEI	SCALE	AS SHOWN
REVIEWED	CEI	JOB NO.	103-94657
FILE NO.		DWG NO.	10394657B007

FIGURE NUMBER

6

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1. ENCLOSURES AND PADS SHALL BE LOCATED SO THAT REFUSE VEHICLES CAN PULL IN OR PULL UP TO THE FRONT OF THE ENCLOSURE OR PAD, EMPTY AND RESET THE CONTAINER WITHOUT THE VEHICLE OPERATOR PHYSICALLY REMOVING THE BIN FROM THE ENCLOSURE OR PAD.
2. THE FRONT OF THE TRASH ENCLOSURE/CONTAINER PAD SHALL BE LOCATED NO LESS THAN FOURTEEN FEET (14') FROM ANY OBJECT OR OBSTRUCTION, EITHER OVERHEAD OR ON THE GROUND. THE DISTANCE FROM ANY OBSTRUCTION TO ANY OTHER OBSTRUCTION SHALL NOT BE LESS THAN THIRTY-FIVE FEET (35').
3. THE MINIMUM INTERIOR DIMENSION FOR A CONTAINER PAD TO HOUSE AT LEAST ONE FOUR (4) CUBIC YARD BINS IS 9 FEET x 7 FEET. MINIMUM PAD DIMENSIONS MAY INCREASE DEPENDING ON THE SIZE AND NUMBER OF BINS.

CONTAINER PAD

4. THE CONTAINER PAD SHALL BE CONSTRUCTED WITH A MINIMUM OF SIX (6) INCH THICK REINFORCED CONCRETE PAD AND MUST MEET CURRENT CITY ENGINEERING REQUIREMENTS. IN THOSE LOCATIONS WHERE A CONTAINER ENCLOSURE IS NOT REQUIRED THE PAD SHALL HAVE A MINIMUM NINE (9) FOOT WIDTH AND SEVEN (7) FOOT DEPTH. DIMENSIONS MAY INCREASE DEPENDING ON THE NUMBER OF BINS.
5. THE CONCRETE PAD SHALL BE SLOPED TO THE FRONT TO ELIMINATE PONDING WITH A MAXIMUM SLOPE OF 2%.
6. CURB-STOP OR WHEEL-STOP: A 10" HIGH x 6" DEEP CONCRETE HIGH CURB (I.E. CURB-STOP OR WHEEL-STOP) SHALL BE PROVIDED TO THE REAR AND SIDES OF THE PAD. IF A CONTAINER ENCLOSURE IS NOT REQUIRED, THE REAR CURBING SHALL RUN ALONG THE FULL WIDTH OF THE PAD, AND THE SIDE CURBING SHALL BE A MINIMUM OF FOUR (4) FEET IN LENGTH FROM THE BACK CURB.
7. THE SOLID WASTE CONTAINER PAD OR ENCLOSURE SHALL BE LOCATED AT A MINIMUM OF TEN (10) FEET AWAY FROM ANY UTILITIES, ELECTRICAL SERVICES BOTH ABOVE AND BELOW GROUND, DATA AND PHONE COMMUNICATION PEDESTALS, COMBUSTIBLE WALLS, OPENINGS OR COMBUSTIBLE ROOF EAVE LINES. THE CONTAINER SHALL NOT BE LOCATED UNDER OVERHEAD WIRES, TREE BRANCHES OR OTHER OVERHEAD OBSTRUCTIONS.
8. THE CONCRETE FORMS SHALL BE INSPECTED AND APPROVED BY THE CITY'S ENGINEERING AND CODE ENFORCEMENT DEPARTMENTS, FOR SIZE AND LOCATION PRIOR TO THE PLACEMENT OF ANY CONCRETE.
9. THE AREA IN FRONT OF THE SOLID WASTE CONTAINER PAD OR ENCLOSURE SHALL BE MARKED AS A "NO PARKING" ZONE WITH MINIMUM 12" HIGH WHITE STENCILED LETTERING.
10. THE CONCRETE STRESS PAD AND APRON SHALL BE ENGINEERED TO WITHSTAND UP TO 22,000 LBS. OF DIRECT FORCE FROM A SINGLE TRUCK AXLE. ALL ACCESS AND SERVICE AREA SURFACES SHALL BE ENGINEERED ACCORDINGLY TO AVOID FUTURE PAVEMENT DAMAGE. CONCRETE SURFACING IS REQUIRED IN ALL SERVICE AREAS. DIMENSIONS MAY INCREASE DEPENDING ON THE SIZE OF THE ENCLOSURE AND ITS SERVICE REQUIREMENTS.
11. APRON SURFACE SHALL BE THE SAME ELEVATION AS THE PAD THRESHOLD AND THE SURROUNDING SURFACES.
12. NO DRAINAGE V-DITCHES OR CATCH BASINS SHALL BE ALLOWED WITHIN THIS 6" APRON. APRON SHALL BE TO GRADE ON ALL EDGES.

CONTAINER ENCLOSURE

13. IF A CONTAINER ENCLOSURE IS REQUIRED, THE CONCRETE BLOCK WALL SHALL BE ON THREE SIDES, WITH A TWELVE (12) FOOT CLEAR GATE OPENING, A TWELVE (12) FOOT PAD WIDTH AND A NINE (9) FOOT PAD DEPTH. THE FENCE OR WALL SHALL HAVE A MINIMUM HEIGHT OF SEVEN (7) FEET WITH A MAXIMUM OF TEN (10) FEET - PLEASE REFER TO ARTICLE 2; DIVISION 2.300 GENERAL USE STANDARDS (G)(2); OR SEC. 2.302 NONRESIDENTIAL USE (D)(3) OF THE CITY UNIFIED DEVELOPMENT CODE. MINIMUM PAD DIMENSIONS MAY INCREASE DEPENDING ON THE SIZE AND NUMBER OF BINS.
14. GATE/DOORS: GATES SHALL BE SOLID METAL. GATED OPENINGS FOR INGRESS/EGRESS OF BINS MUST BE A MINIMUM OF 12 FEET WIDE WITH NO POSTS IN THE MIDDLE. A SEPARATE, ADDITIONAL PEDESTRIAN ENTRANCE IS ENCOURAGED FROM THE BACKSIDE. USE BOLTS, NOT SCREWS, TO SECURE GATE TO THE POLES OR WALLS. THE GATE SHALL HAVE LATCHES TO HOLD THE GATE IN THE OPEN POSITION. (COMMERCIAL CONTAINER ENCLOSURE REQUIREMENTS - PLEASE REFER TO ARTICLE 2; DIVISION 2.300 GENERAL USE STANDARDS (G)(2); OR SEC. 2.302 NONRESIDENTIAL USE (D)(3) OF THE CITY UNIFIED DEVELOPMENT CODE). ALL LATCHES SHALL BE INSTALLED ON EXTERIOR OF GATES AND LATCH RODS SHALL BE A MINIMUM OF 3/8" ABOVE GROUND LEVEL. LATCH RODS SHALL BE MINIMUM OF 3/4" IN DIAMETER. THE RECEIVER SHALL BE THREE INCHES DEEP, ONE INCH INSIDE DIAMETER AND FLUSH WITH THE GROUND. HUNG GATES MUST HAVE A 4-INCH CLEARANCE OFF THE FINISHED PAD OR APRON. GATES IN THE OPENED POSITION SHALL NOT INFRINGE ON THE TRAFFIC AISLES AND OPEN TO AT LEAST 180 DEGREES WHEN SECURED OPEN.
15. FOR ENCLOSURES WHERE MORE THAN ONE CONTAINER WILL BE REQUIRED, THE ENCLOSURE DESIGN SHALL BE SUBMITTED TO THE DEPARTMENT OF SOLID WASTE MANAGEMENT FOR APPROVAL.
16. WHERE A CONCRETE BLOCK CONTAINER ENCLOSURE IS INSTALLED, VERTICAL AND HORIZONTAL STEEL REINFORCEMENT SHALL BE REQUIRED IN ACCORDANCE WITH THE CURRENT CITY UNIFIED DEVELOPMENT CODE AND THE CITY ENGINEERING STANDARDS FOR CONSTRUCTION.
17. BOLLARDS: THE CORNERS OF THE ENCLOSURE WHERE THE DOOR HINGES ARE ATTACHED SHALL BE PROTECTED WITH BRIGHTLY COLORED BOLLARDS.
18. GATE STOPS SHALL BE INSTALLED TO PREVENT ENCLOSURE GATES FROM CLOSING WHILE BIN IS BEING CYCLED. ALL GATES SHALL OPEN 180 DEGREES AND THE LATCH ROD SHALL HAVE THE SAME ON INCH INSIDE DIAMETER RECEIVER AS THE CLOSED POSITION REQUIRES.
19. ACCESSING THE ENCLOSURE: WHEN A STRAIGHT ON APPROACH CANNOT BE ACCOMPLISHED TO ACCESS THE TRASH ENCLOSURE, A PARALLEL APPROACH WILL BE UTILIZED AND THE SERVICE WILL BE CONDUCTED BY A SIDELOAD UNIT; ONLY IN THE EVENT WHERE FRONT LOAD SERVICE MUST BE UTILIZED AND A STRAIGHT APPROACH CANNOT BE ACHIEVED A RADIUS OF NOT MORE THAN THIRTYONE POINT NINE DEGREES (31.9) SHALL BE USED TO MAKE THE APPROACH INTO THE TRASH ENCLOSURE (SEE DETAIL: TURNING ANGLE REQUIREMENTS). THERE MUST BE A CURB OR BARRICADE LEADING FROM THE EXISTING CURB TO THE BIN ENCLOSURE SO AS TO PREVENT PARKING. ALL CURBS MUST BE ON THE OUTSIDE OF THE TRASH ENCLOSURE. ALL CURBS MUST BE ROUNDED WITH NO SQUARE OR POINTED ENDS LEADING TO THE BIN ENCLOSURE. THIS IS TO PREVENT TIRE DAMAGE.


 CHAD E. IRELAND
 LICENSED PROFESSIONAL ENGINEER
 99293
 9/8/11
 GOLDER ASSOCIATES INC.
 F-2578

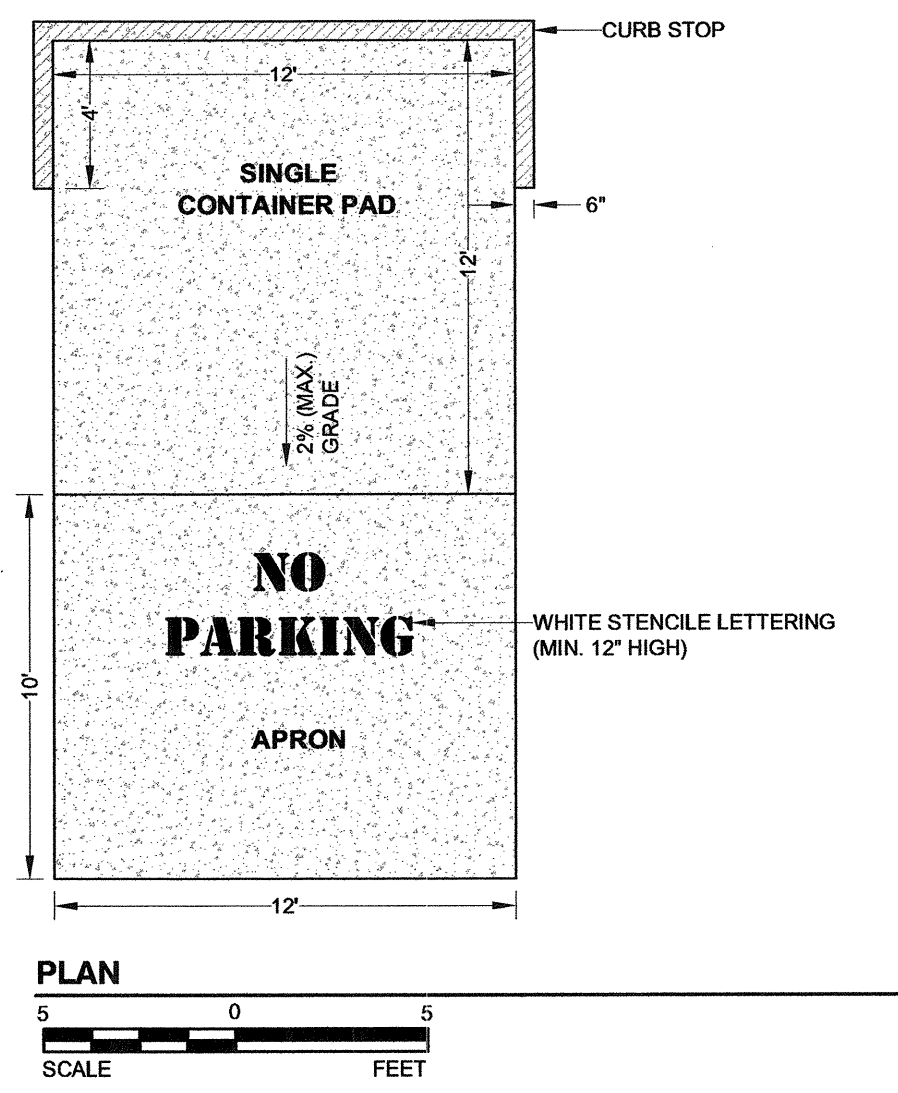
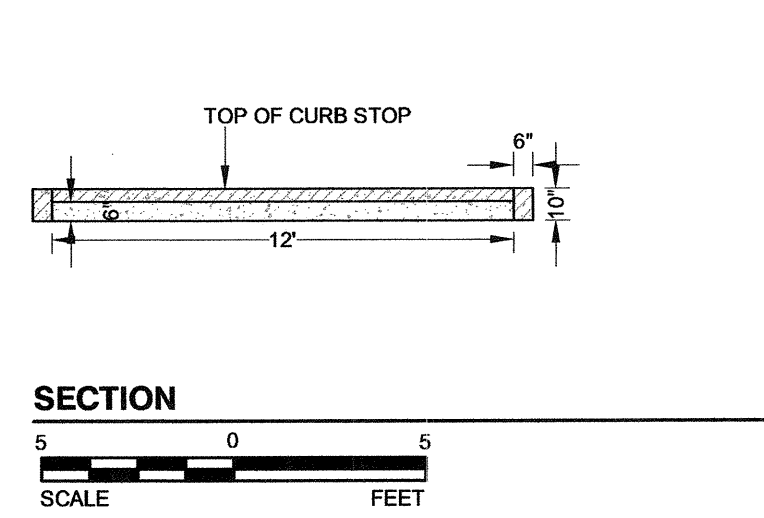


WASTE ENCLOSURE REQUIREMENTS AND STANDARDS
CITY OF EDINBURG
DEPT. OF SOLID WASTE MANAGEMENT
HIDALGO COUNTY, TEXAS

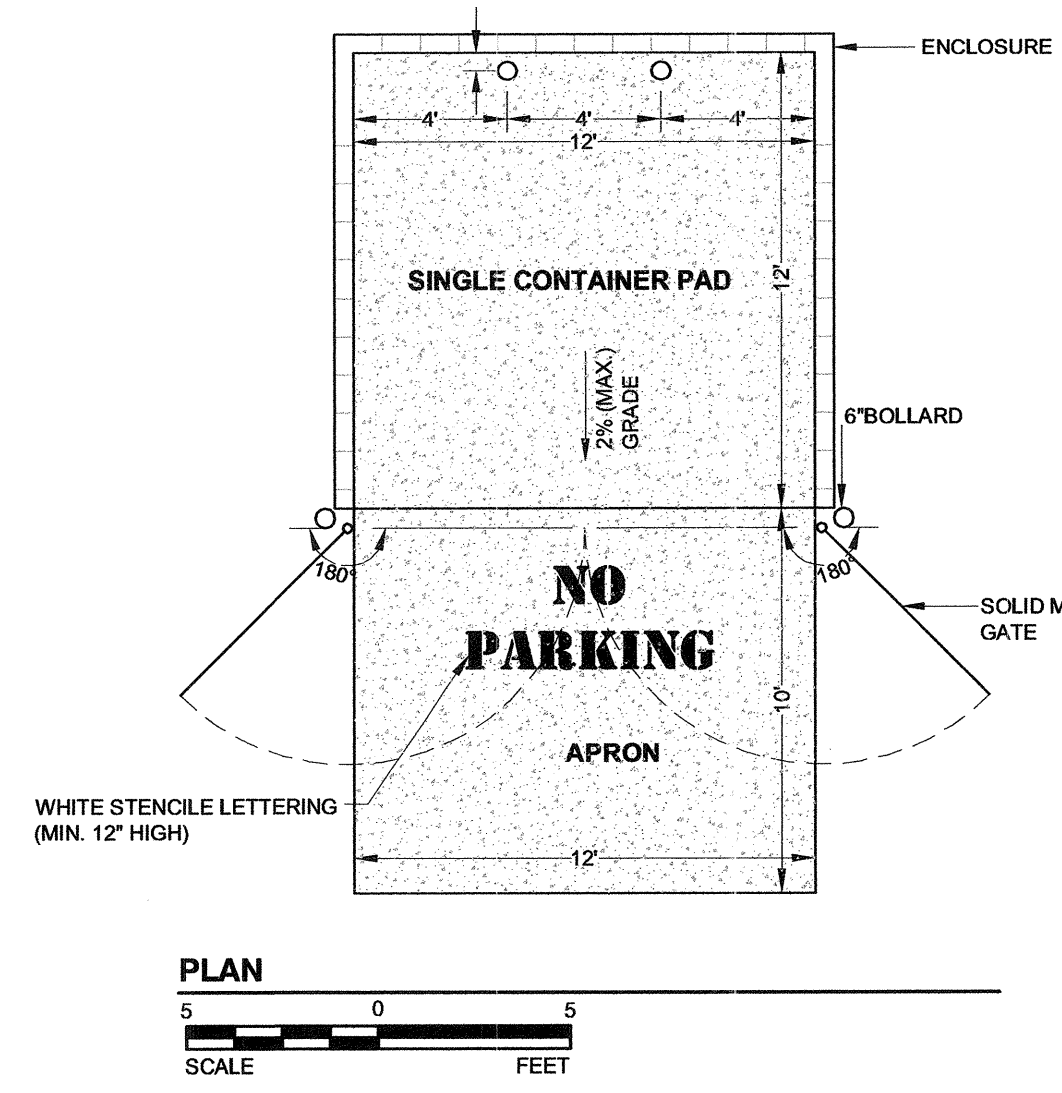
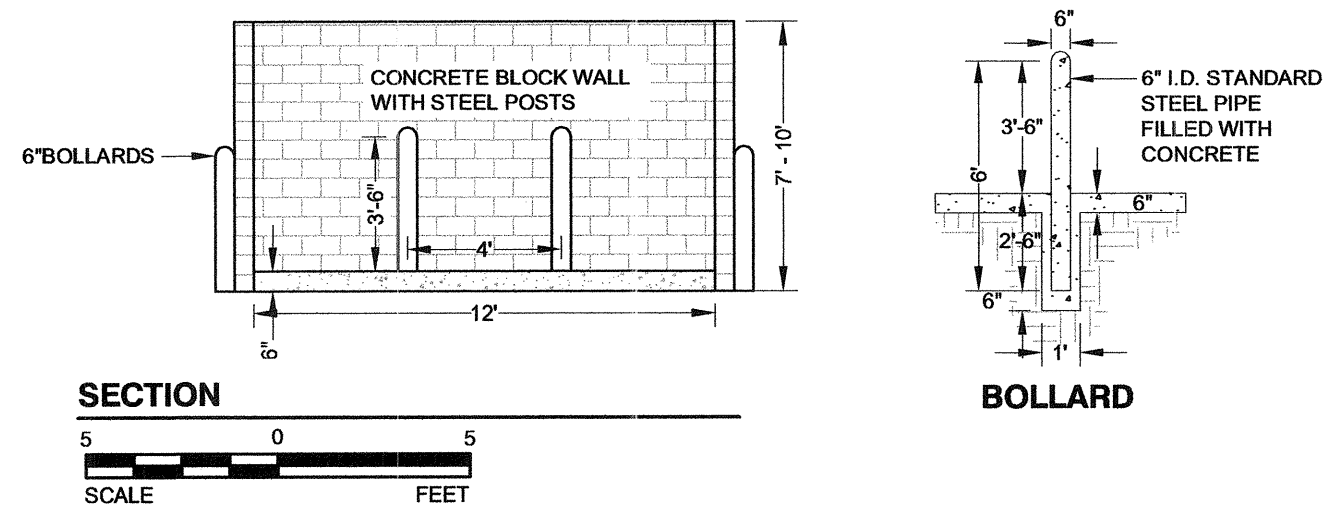
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SOLID WASTE CONTAINER SPECIFICATIONS

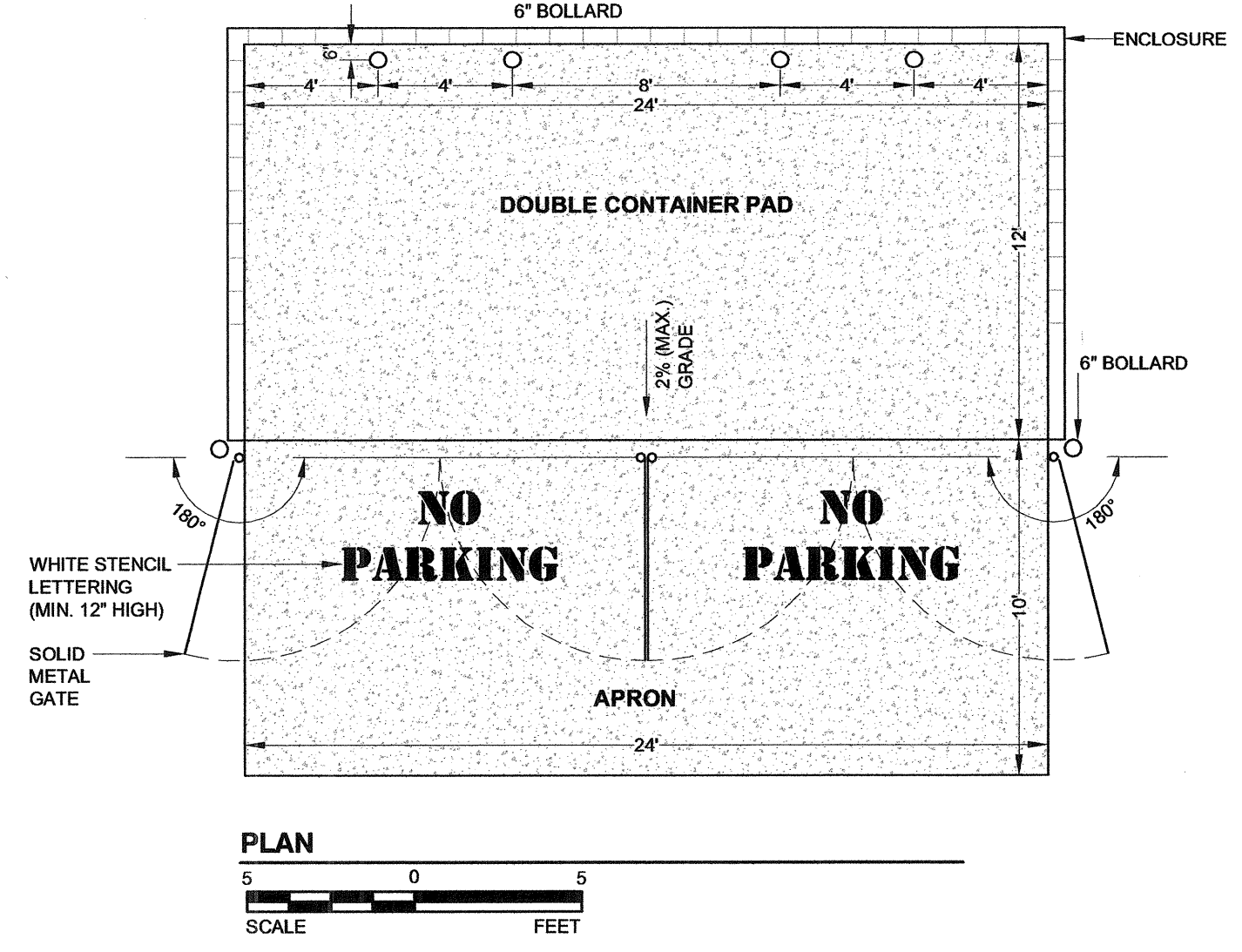
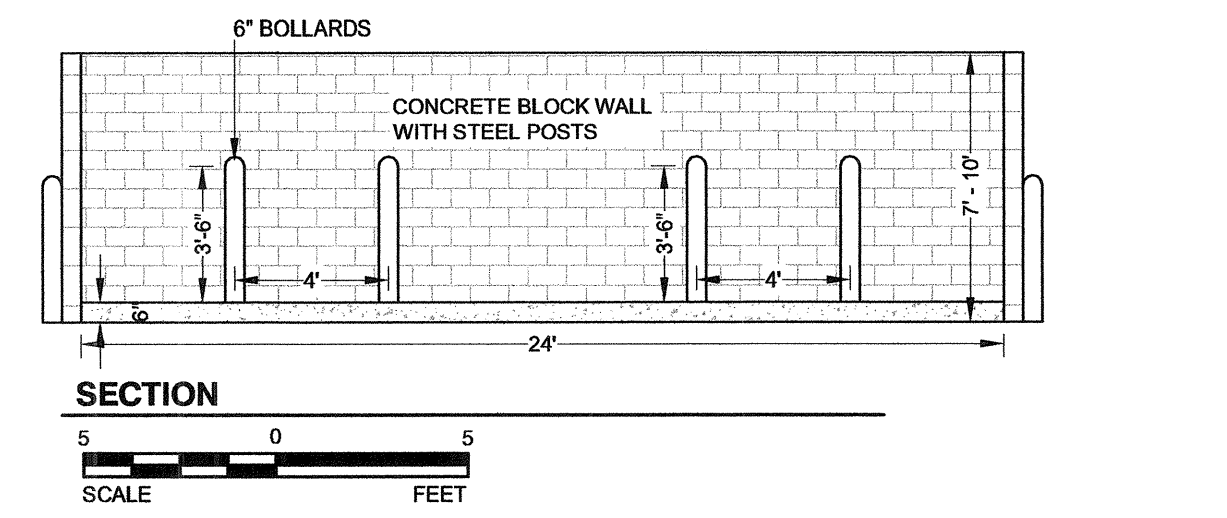
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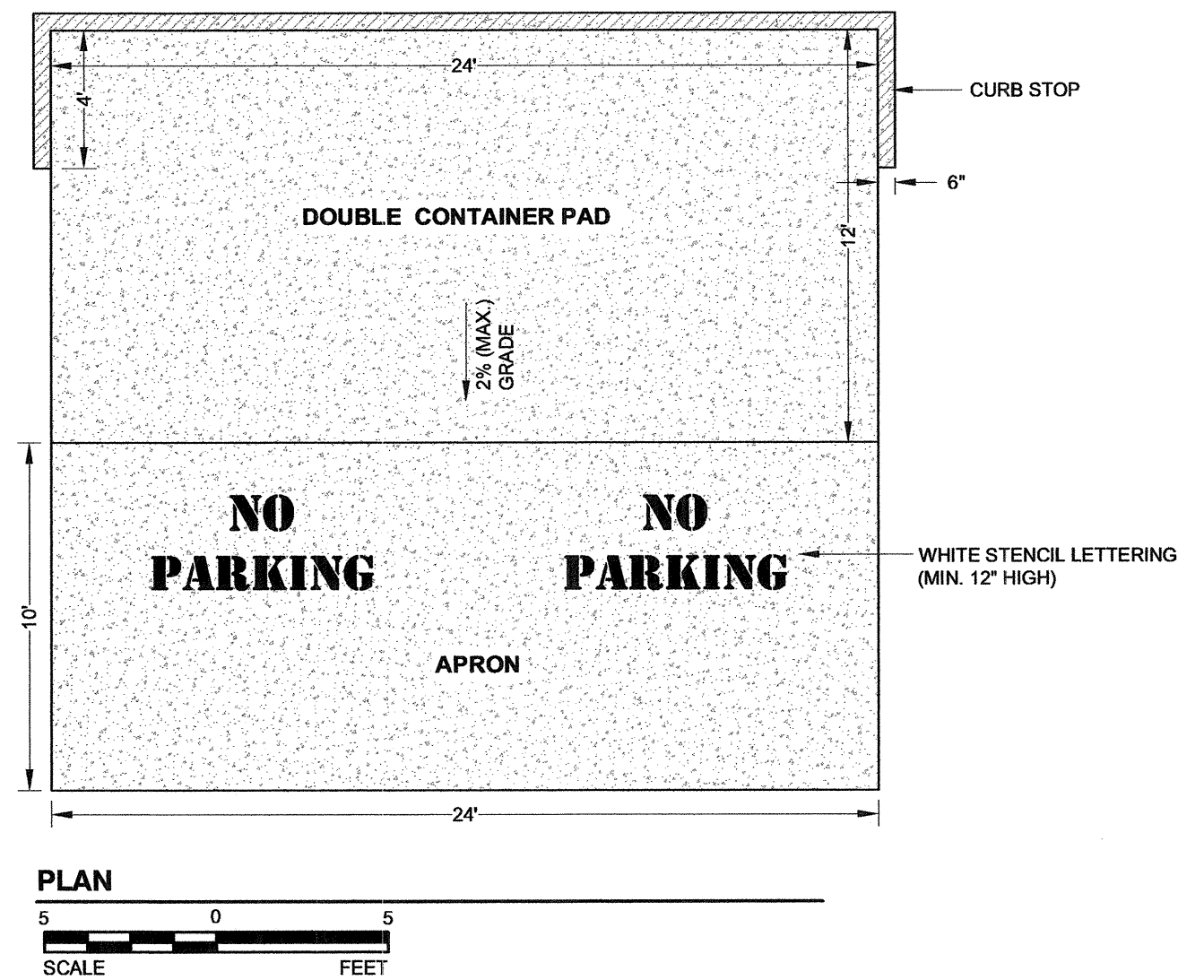
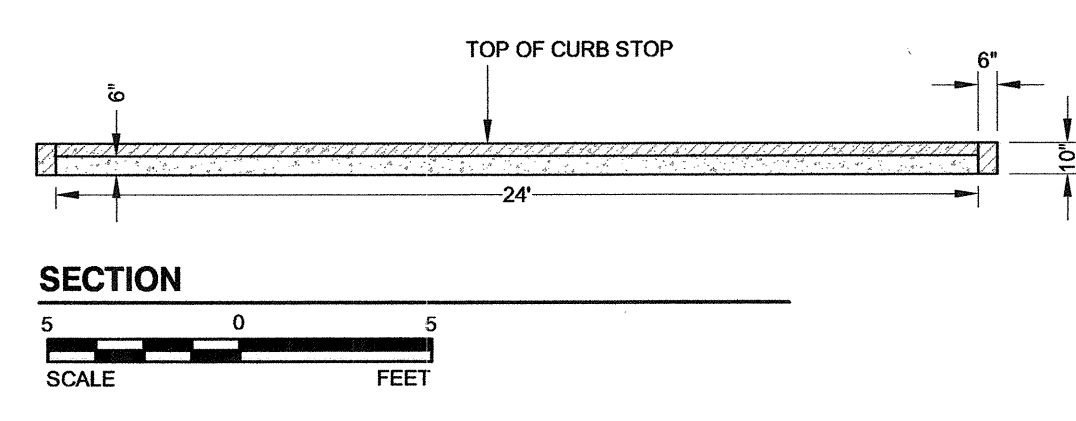
1 SINGLE CONTAINER PAD WITHOUT ENCLOSURE



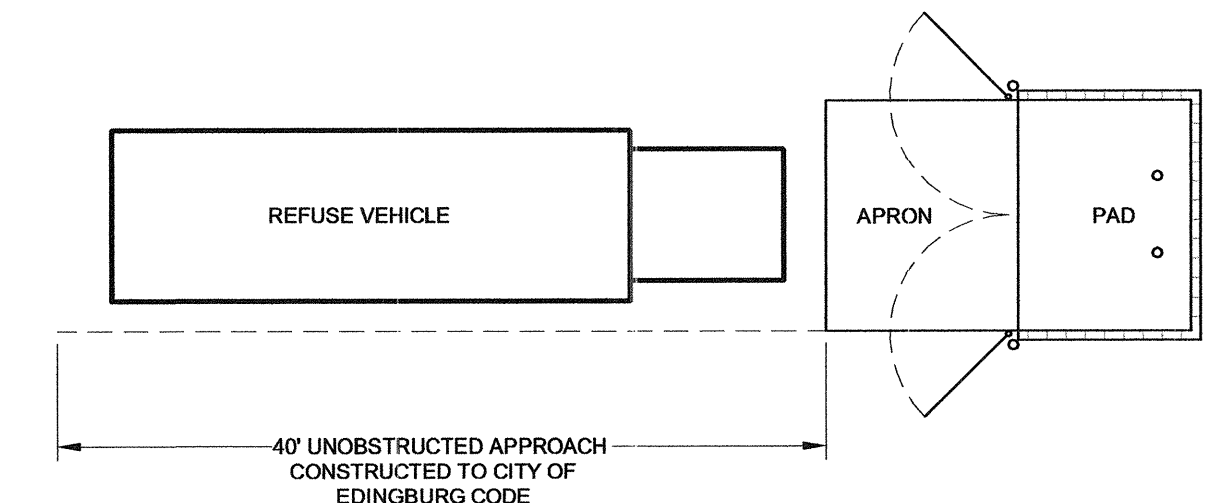
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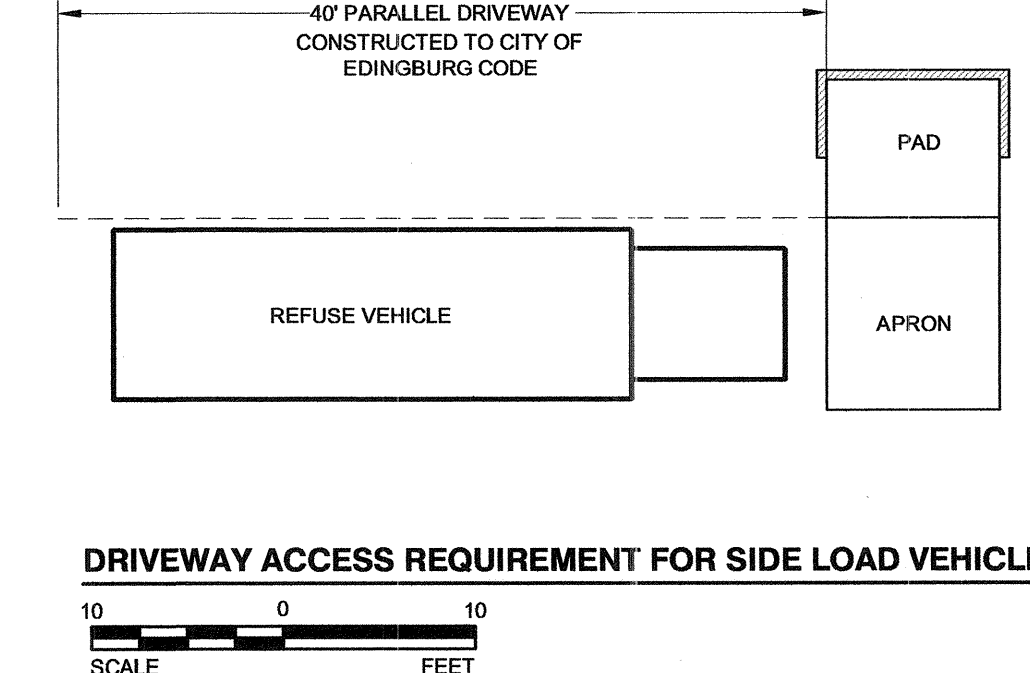
3 DOUBLE CONTAINER PAD WITH ENCLOSURE



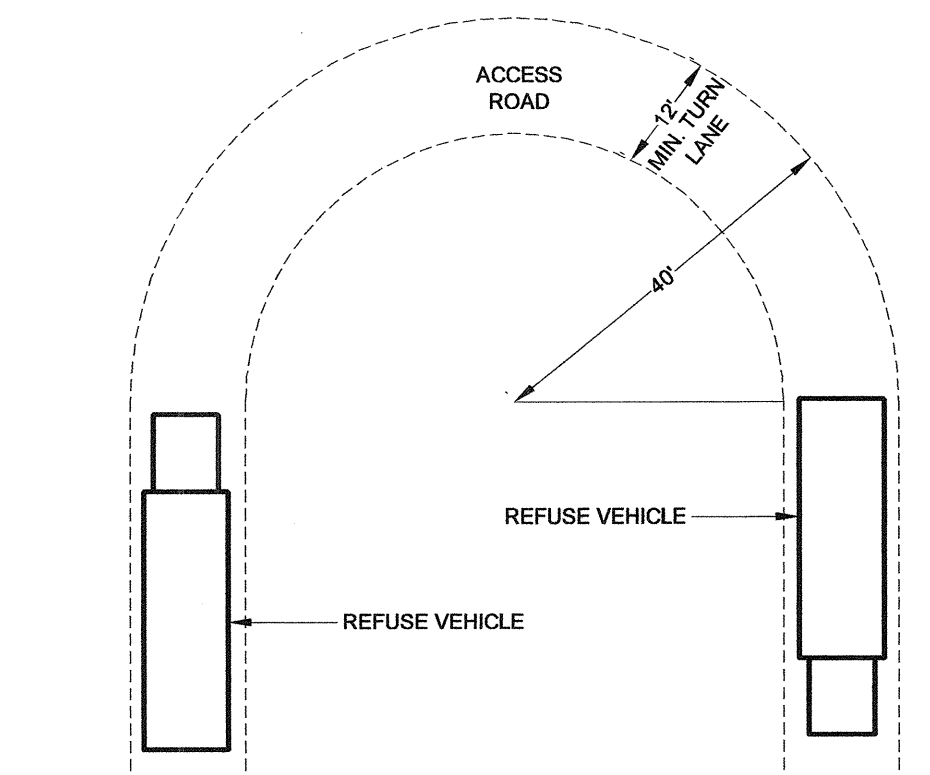
4 DOUBLE CONTAINER PAD WITHOUT ENCLOSURE



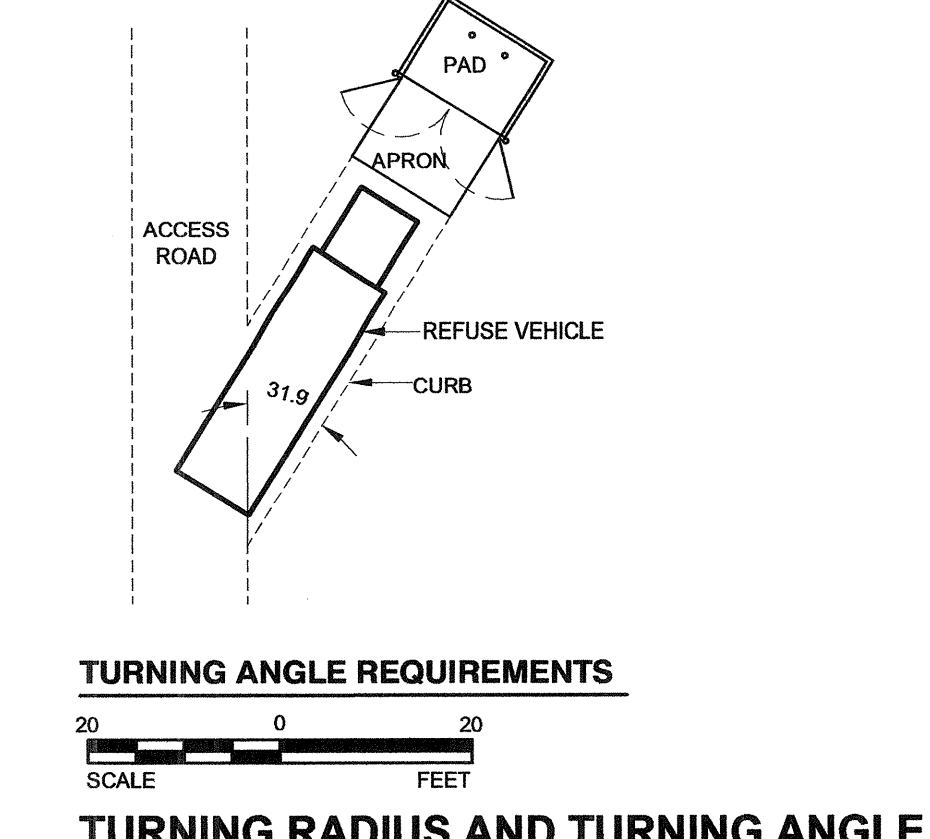
DRIVEWAY ACCESS REQUIREMENT FOR FRONT LOAD VEHICLE



DRIVEWAY ACCESS REQUIREMENT FOR SIDE LOAD VEHICLE



TURNING RADIUS REQUIREMENTS



TURNING ANGLE REQUIREMENTS

REFUSE ENCLOSURE LOCATION AND SPACE REQUIREMENTS

Enclosures/Pads - Enclosures/Pads are required for all new and/or significantly remodeled commercial, institutional or multiple-family dwellings and/or residential developments consisting of three (3) or more units. This area shall be set aside for the provision of adequate and accessible enclosures for the storage of refuse in proper receptacles. The design, construction and accessibility of the pads and enclosures shall be shown on the site plan in conformance with the standards and specifications of the Department of Solid Waste and the design guidelines listed below.

- The refuse collection area shall be in an enclosure(s)/pad area conveniently located next to the building(s) it serves and easily accessible to collection vehicles. No enclosure/pads shall be located in any required setback unless there is no other option available to place the enclosure/pads.
- Solid Waste Containers and Storage areas shall be screened from public view, containers that are not visible from any public way or view may qualify for container pad use only, final determination will rest with the Department of Solid Waste Management.
- Solid Waste Container Enclosure Areas: Whenever feasible solid waste storage/container enclosure(s) shall not be located in the front yard area, defined for the purposes of this section as the area measured from the front property line to a line parallel with the face of the front wall of the main building located the greatest distance from the front property line and extending the full width of the lot. (General Enclosure Requirements - please also refer to Article 2, Division 2.300 General Use Standards (G)(2), Sec. 2.302 Nonresidential Use (D)(3) of the City Unified Development Code).
- All containers, with the exception of twenty to forty (20-40) cubic yard roll-off containers, shall be permanently protected from adverse environmental conditions with lids or other methods approved by the Department of Solid Waste. The lids shall be kept closed when the receptacles are not being loaded or emptied.
- The enclosure(s) shall be secured to prevent the removal of materials by unauthorized persons while permitting access to it by authorized persons.
- The property owner shall be responsible for maintenance of the enclosure(s)/container pad and maintain such in a clean condition.
- Enclosures and Pads shall be clear of other materials/items and shall be used only for solid waste collection services no other services or materials shall be collected nor stored from within the enclosure/pad. (i.e. waste oil collection containers, milk, drink, trays or carriers, tires, etc.)
- Enclosures and pads shall be located so that refuse vehicles can pull in or pull up to the front of the enclosure or pad, empty and reset the container without the vehicle operator physically removing the bin from the enclosure or pad.
- Clear access for collection vehicles shall be provided to the front of the solid waste container pad.
- The solid waste container pad or enclosure shall be located at a minimum of fourteen (14) feet away from any utilities, electrical services both above and below ground, data and phone or communications, combustible walls openings or combustible roof eave lines. The container shall not be located under overhead wires, tree branches or other overhead obstructions. The distance from any obstruction to any other obstruction shall not be less than thirty-five feet (35').
- All refuse bins and enclosures shall be located on major drives within developments to provide adequate circulation of refuse vehicles. (Must be within setback requirements)

DRIVEWAYS:

- A 21-foot wide asphalt pavement section that consist of 8-inch subgrade, 12-inch flexible caliche base and 3-inch hot mix concrete asphalt material or concrete 6-inch slab (330 lb psi) with #4 rebar at 18-inch on center each way reinforcement driveway with a 40-foot straight drive, for front load systems, drive access that leads to and from the enclosure to the bin; or a 40 foot parallel driveway from the center point of the pad/enclosure for side load systems; is required and should be built in accordance with the City Engineering Standards and Specifications and be able to withstand trucks weighing up to 66,000 lbs. of Gross Vehicle Weight (GVW). All access and service area surfaces shall be engineered accordingly to avoid future pavement damage.
- Through circulation of traffic shall be provided for refuse vehicles in all parking areas. This is to prevent or reduce necessity of backing up with refuse collection vehicles.

M. APRON:

- A 6-inch concrete slab "Apron", shall be installed in front of the service area and cover the width of container service pad and extend out an additional 10 feet from the pad. The apron shall be to City Standards and to withstand up to 22,000 lbs. of direct force from a single truck axle. All access and service area surfaces shall be engineered accordingly to avoid future pavement damage. Concrete surfacing is required in all service areas. Dimensions may increase depending on the size of the enclosure and its service requirements.
- Apron surface shall be the same elevation as the pad threshold and the surrounding surfaces.
- No drainage V-ditches or catch basins shall be allowed within this 6' apron. Apron shall be to grade on all edges.
- The area in front of the solid waste container pad or enclosure shall be marked as a "NO PARKING" zone with minimum 12" high white traffic safety paint stenciled lettering. (DETAIL 1)

N. CONTAINER PAD:

- The concrete pad shall be sloped to the front to eliminate ponding with a maximum slope of 2%.
- Curb-stop or wheel-stop: A 10" high x 6" deep concrete high curb (i.e. curb-stop or wheel-stop) shall be provided to the rear and sides of the pad. If a container enclosure is not required, the rear curbing shall run along the full width of the pad, and the side curbing shall be a minimum of four (4) feet in length from the back curb. (see DETAIL 1)
- The concrete forms shall be inspected and approved and approved by the City's Engineering and Code Enforcement Departments, for size and location prior to the placement of any concrete.

O. CONTAINER ENCLOSURE:

- If a container enclosure is required, a concrete block wall shall be on constructed all three sides, with a twelve (12) foot gate opening, a twelve (12) foot pad width and a twelve (12) foot pad depth. The wall shall have a minimum height of seven (7) feet with a maximum of ten (10) feet - please refer to article 2, division 2.300 general use standards (g)(2) or sec. 2.302 nonresidential use (D)(3) of the City Unified Development Code. Minimum pad dimensions may increase depending on the size and number of bins. (see DETAIL 2 and 3).
- Gate/doors: gates shall be solid metal. Gated openings for ingress/egress of bins must be a minimum of 12 feet wide with no posts in the middle. A separate, additional pad set/entrance is encouraged from the backside. Use bolts, not screws, to secure gates to the poles or walls. The gate shall have latches to hold the gate in the open position. All latches shall be installed on exterior of gates and latches shall be a minimum of 36" above ground level. Latch rods shall be a minimum of 3/4" in diameter. The receiver shall be three inches deep, one inch inside diameter and flush with the ground. Hang gates must have a 4-inch clearance off the finished pad or apron. Gates in the opened position shall not infringe on the traffic aisles and open to at least 180 degrees when secured open. (General Enclosure Requirements - please refer also to article 2, division 2.300 general use standards (g)(2); or sec. 2.302 nonresidential use (D)(3) of the City Unified Development Code)
- For enclosures where more than one container will be required, the enclosure design shall be submitted to the department of solid waste management for approval.
- Where a concrete block container enclosure is installed, vertical and horizontal steel reinforcement shall be required in accordance with the current city unified development code and the city engineering standards for construction.
- Bollards: the rear of the enclosure and corners of the enclosure where the door hinges and are attached shall be protected with bright yellow colored bollards.
- Gate stops shall be installed to prevent enclosure gates from closing while bin is being cycled. All shall open 180 degrees and the latch rod shall have the same one inch inside diameter receiver as the closed position requires.
- Accessing the enclosure: when a straight on approach cannot be accomplished to access the trash enclosure, a parallel approach will be utilized and the service will be conducted by a side load unit; only in the event where front load service must be utilized and a straight approach cannot be achieved a radius of not more than thirty-one and nine tenths degree (31.9°) shall be used to make the approach into the trash enclosure (see DETAIL 6: TURNING ANGLE REQUIREMENTS). There must be a curb or barricade leading from the existing curb to the bin enclosure so as to prevent parking. All curbs must be on the outside of the trash enclosure. All curbs must be rounded with no square or pointed ends leading to the bin enclosure. This is to prevent tire damage.
- Enclosures shall be screened with plant material whenever practical.

P. SOLID WASTE COMPACTORS:

Self-contained waste roll-off compactors may be used to substitute Commercial Front Load and/or Side Load Services at a minimum of a 18 yd compactor for every (5) 4 cu. yd. bins. Where in a single commercialized location services exceed more than 10 collection stations; centralized collection utilizing self-contained units shall be utilized upon approval by the Department of Solid Waste Management. Max. Gross weight 10 tons. (Legal street limit).

- A concrete pad large enough for the entire unit shall be provided.
- The concrete pad shall have a minimum six (6) inch curb on three sides and slope to a drain in the pad. The fourth side must be open to allow straight access for collection vehicles.
- The concrete pad drain shall be trapped, frost proof and have a removable "basket" strainer to keep out large solids.
- The drain shall be installed in the area of the pad where the leakage is anticipated and the pad shall be sloped toward the drain.
- The drain shall be plumbed into the sanitary sewage disposal system and shall include an oil/water separator.
- Cold running water shall be provided and shall have freeze-proof valves. An interior faucet with attached hose may be utilized. All surfaces shall be easily cleanable.
- Odor neutralizing equipment may be required depending on collection frequency and solid waste composition. If such equipment is deemed necessary by the City, it shall be provided by the owner.
- All privately owned roll-off compactors must be compatible with City's collection equipment. Customer's responsibilities are, but not limited to:
 - Furnish any specialty parts that may be required to transport loads safely without spillage occurring.
 - Compactors shall be accessible and prepared for transport or on-site service (must be removed from compactor mechanism.)
 - When compactor requires moving, after the roll-off portion is detached from the compactor, the customer shall furnish an employee to secure the load for transport and to reset the compactor.
 - Compactors shall have flush path of travel for compactor container wheels, no obstacles, metal strips, or obstruction of any kind for path of container wheels.
 - maintenance and upkeep of the compactor is the sole responsibility of the owner.
- Refuse compactor Units: Roll-off compactors with separate charging units (charging units not integral with container) require an area of 15 feet x 85 feet for compactor bin and refuse truck. Compactor units shall not exceed 10 tons when fully loaded, including weight of compactor. Compactor shall be located outside of any building. Minimum of 5 feet clearance space to be allowed from each side of compactor to 35 feet in front of compactor unit.

Q. BIN ENCLOSURE OTHER:

- Private Streets of Private Roads: Private streets and/or private roads that require solid waste collection vehicle access must be designed to City Street Standards (i.e. able to withstand vehicles weighing up to 66,000 lbs).
- Pavers and/or Decorative Stones: The use of decorative pavers and/or stones within designated solid waste collection vehicle access area(s) is not recommended. Damage of these materials and areas will result from the normal anticipated use by solid waste collection vehicles and thus responsibility for all damage is assumed by the property owner.

If the gates with locks are planned to limit access to the enclosure of to the property, cards of keys must be provided to the City. The City can provide container locks and keys upon request. If keys or cards are not provided, then the Applicant must ensure that all secured gates are open at 5:00 a.m. for commercial collection and 7:00 a.m. for residential collection.

Golder Associates

REV	DATE	DES	REV. DESC	REVISION DESCRIPTION	CDD	CHK	RWW
01/10/11		XXX					

CHAD E. IRELAND
Professional Engineer
Registration Number F-2578

CITY OF EDINBURGH
DEPT. OF SOLID WASTE MANAGEMENT
HILDAGO COUNTY, TEXAS

PROJECT

WASTE ENCLOSURE REQUIREMENTS AND STANDARDS

PROJECT No.	103-94657
FILE No.	10394657E001
SCALE	AS SHOWN
DESIGN	CET
CADD	ML
CHECK	ML
REVIEW	CET

1