

# Solid Waste & Dumpster Enclosure Planning Guide

The City of Sioux Falls encourages development that is environmentally responsible, socially conscious, and aesthetically appealing. This guide provides guidance on planning and constructing dumpster enclosure areas within the City of Sioux Falls to minimize the adverse effects commonly incidental to higher-density residential, commercial, and industrial developments.

Along with meeting established codes, a well-designed solid waste enclosure can offer safe, efficient, and cost-effective collection for years. Whether constructing new facilities or modifying existing ones — architects, developers, property owners, and business managers all have a vested interest in ensuring reliable and trouble-free waste collection services.

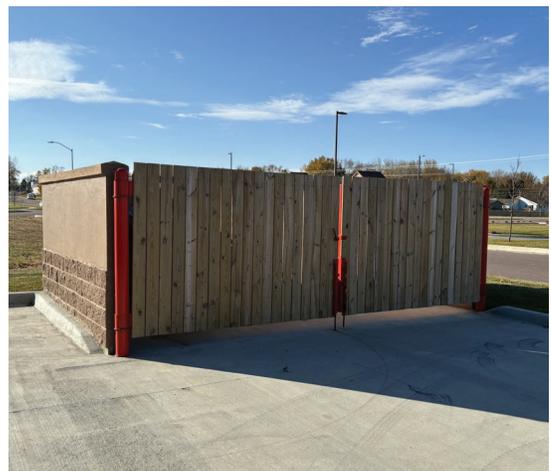
Engaging a waste hauler early in the project can help identify considerations such as truck height clearances and maneuvering requirements. Waste haulers can also provide insight into historical service levels for similarly sized properties.

## SUBJECT AREAS:

- 1) Dumpster Screening
- 2) Enclosure Sizes
- 3) Waste Generation Estimates
- 4) Container Sizes
- 5) Collection Frequency
- 6) Enclosure Location & Accessibility
- 7) Enclosure Gates & Signs

## 1) Dumpster Screening

- Per [City of Sioux Falls Code of Ordinances §160.485\(c\)](#) — *Garbage and recycling dumpsters shall be screened from view of the street right-of-way by an opaque durable fence or wall with a minimum height of 6 feet in height.*
- Compliance may only require screening one or two sides of an enclosure.



## 2) Enclosure Sizes

- The City's ordinances do not dictate the size of enclosures; however, each dumpster enclosure area should be of adequate size to allow users easy access to deposit materials into the containers. Per [City of Sioux Falls Code of Ordinances §57.022\(a\)](#) — *Owners, occupants, or managers shall cause all garbage, animal waste, and rubbish to be deposited into the garbage container, and all recyclable materials deposited into the recycling container.*
- Dumpster enclosure service areas should be sized appropriately for the waste generation needs of the facility and incorporate adequate storage space for both garbage and recycle containers.
- Planners should consider that higher waste-generating properties may require multiple enclosure areas or larger pads to accommodate bulkier waste containers.

**Common enclosure sizes:**

**10' x 10'**



Room for one 6 or 8 CY dumpster

**10' x 15'**



Room for one 6 or 8 CY dumpster, plus either two to three carts, or one 3 or 4 CY dumpster on wheels

**10' x 20'**



Room for two 6 or 8 CY dumpster

## 3) Waste Generation Estimates

- The estimated level of waste generation at a facility can vary greatly depending on factors, such as occupancy rate, business type, number of employees, customer traffic, and seasonal activity.
- Evaluating existing properties of similar size and classification provides the strongest basis for predicting waste generation levels. Check with your service provider.**
- Industry waste container volumes are fairly standardized as follows:
  - ⇒ Dumpsters: 2, 3, 4, 6, 8 & 10 CY each
  - ⇒ Carts: 35, 65 & 95 gallons each (two 95-gal. carts equals approximately 1 CY)
  - ⇒ Compactors: 20 to 46 cu. CY each (compacted waste)
- Waste generation levels at multi-family properties (apartments and condominiums) are slightly more predictable (see the table below).

Material	Property Size*	Estimated Generation Level
Household Garbage	For every 10 units	4 CY/week
Recyclables	For every 10 units	1 CY/week

\*Estimate based on an average of two residents per unit.

## 4) Container Sizes

- The City's ordinances do not dictate the size of waste containers; however, per [City of Sioux Falls Code of Ordinances §57.022\(d\)\(1\)](#) — *Each container will be of a suitable size to prevent the overflow of garbage, recyclables, and yard waste from occurring.*
- Unfortunately, there are no standard dimensions for waste containers, as the height, width, and depth vary greatly between hauling companies. However, if the customer has an existing service contract with a hauling company for their properties, it might be beneficial for the enclosure designer to reach out to that hauler for the sizes of their containers.
- At locations where space is limited, dumpsters with heavy-duty caster wheels can be an option. However, wheeled dumpsters are generally limited to sizes of 4 CY or smaller, since rolling out a full container of a larger size would prove difficult for the crew to push it out for servicing. Plastic dumpsters are sometimes used to reduce a container's overall weight, but again, the sizes of plastic dumpsters don't generally exceed 4 CY.

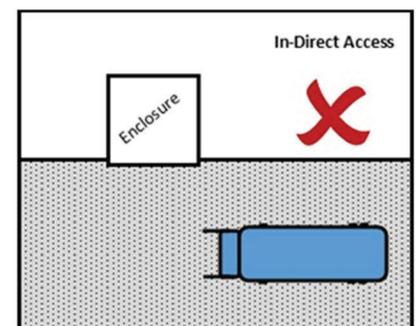
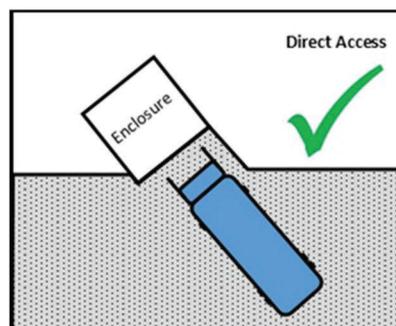
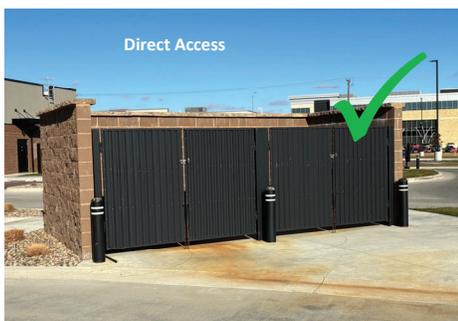


## 5) Collection Frequency

- The City's ordinances require regular collection of garbage and recycling, per [City of Sioux Falls Code of Ordinances §57.020\(a\)](#) — *Garbage shall be collected at least once each week and required recyclables collected at least twice each month.*
- When determining the container sizes for an enclosure area, collection frequency and service costs play a significant role. **Ideally, services should be set up for the largest container that fits the enclosure, with the fewest collections per week.** Fewer collections generally equate to lower service costs and reduced truck emissions.
- Ideally, the cubic yards available for garbage, recyclables, or yard waste should accommodate the facility's needs with no more than two collections a week.
- If waste containers are frequently overflowing, an increase in service container size or collection frequency is warranted.

## 6) Enclosure Location & Accessibility

- In some cases, placing an enclosure at an angle to the roadway will provide direct access for collection vehicles (see below).



## 6) Enclosure Location & Accessibility (continued)

- Locate enclosures where there are no impediments, such as at the end of a driving path. Telephone poles, walls, and parked cars can all interfere with the emptying of waste containers by trucks. Overhead clearance should account for both the height of the service vehicle entering an area and the height clearance of the container as it is lifted for service at the enclosure.
- Enclosure areas and the containers within them should be arranged so that customers and tenants have easy access to use them and waste collectors have sufficient access to service them.
- The turning radius needed for collection vehicles varies greatly depending on the size and type of collection vehicle. Industry standards range from 30 to 70 ft. for a safe turning radius.
- Cars parked in the street or parking lot may impact the turning radius and impede the approach of the collection vehicles.

## 7) Enclosure Gates & Signs

- Enclosure gates are not required, unless a gate is needed to screen the dumpsters from view of the street right-of-way.



- Ideally, enclosures with large gates for opening when the containers are serviced should also have a smaller open entry way or side gate for easy access for customers and tenants to use the dumpsters inside the enclosure.
- Signs placed inside enclosures or on the outside of gates serve to assist customers and tenants with locating the correct container for their waste.

