CITY OF HEMET
PUBLIC WORKS DEPARTMENT

STANDARD DRAWINGS

CITY OF HEMET PUBLIC WORKS DEPARTMENT

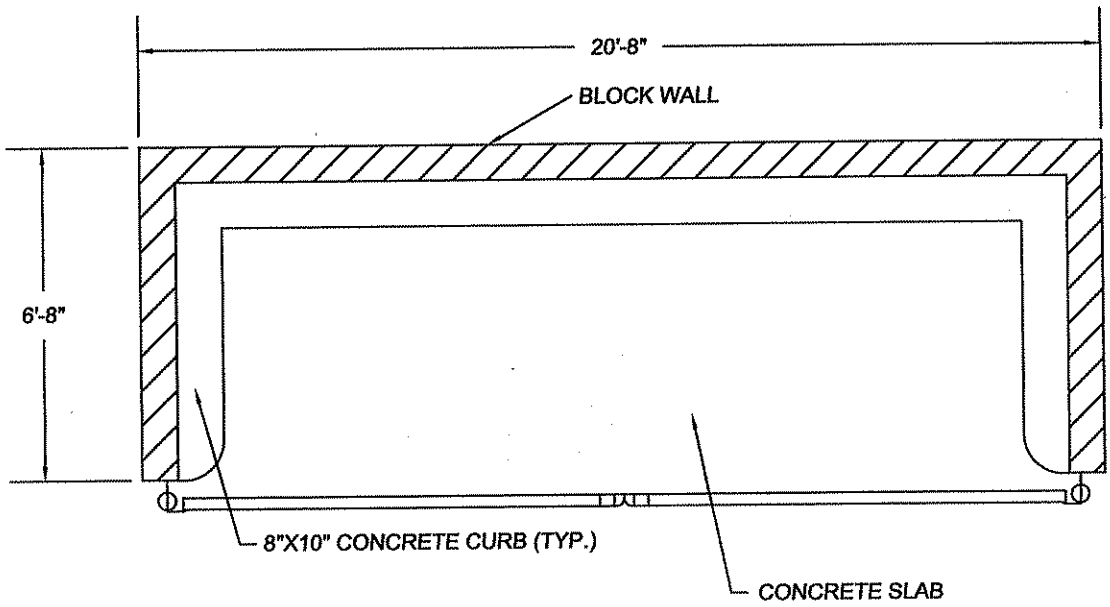
STANDARD DRAWINGS

TABLE OF CONTENTS (Cont.)

Text in ***BOLD ITALICS*** indicates 2011 revisions.

DOUBLE

TO BE USED IN ALL MULTI-FAMILY RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL DEVELOPMENTS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.



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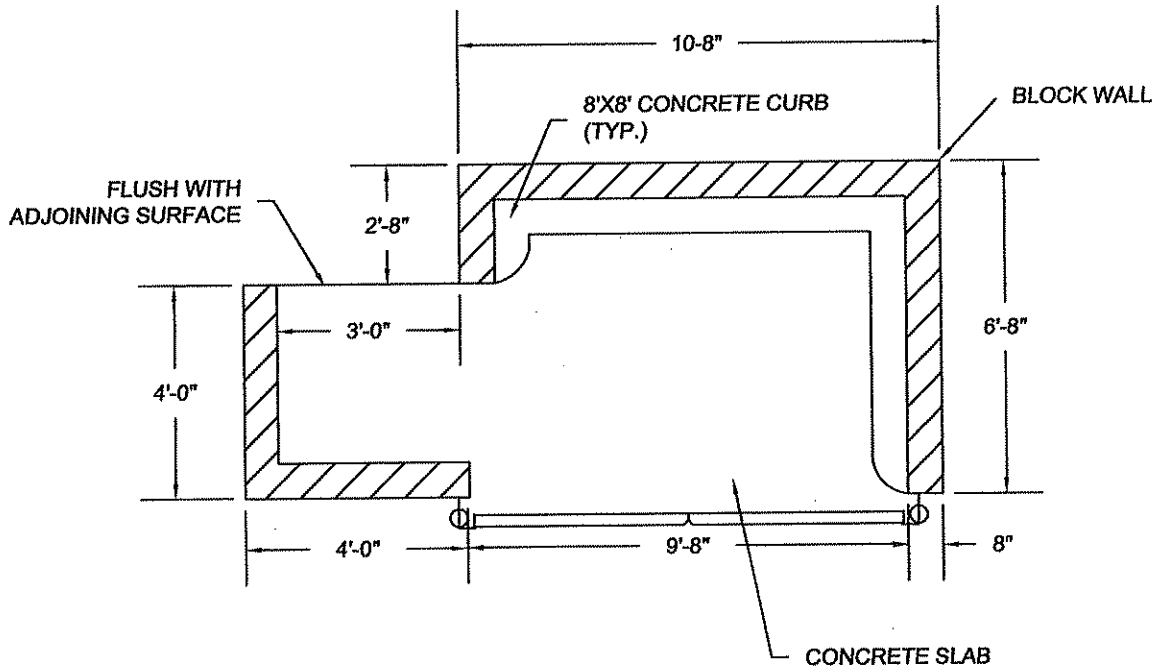


NOTE: FOR WALL AND FOOTING RE-INFORCEMENT AND GATE DETAILS, SEE STD. NO. R-101 & R-102

City of Hemet
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
510 E. FLORIDA AVENUE
HEMET, CA 92543
(951) 765-2360

REFUSE ENCLOSURE

MICHAEL A. GOW, PW DIRECTOR/CITY ENG. R.C.E. 54164 — MAR 2009 DATE

REVISIONS

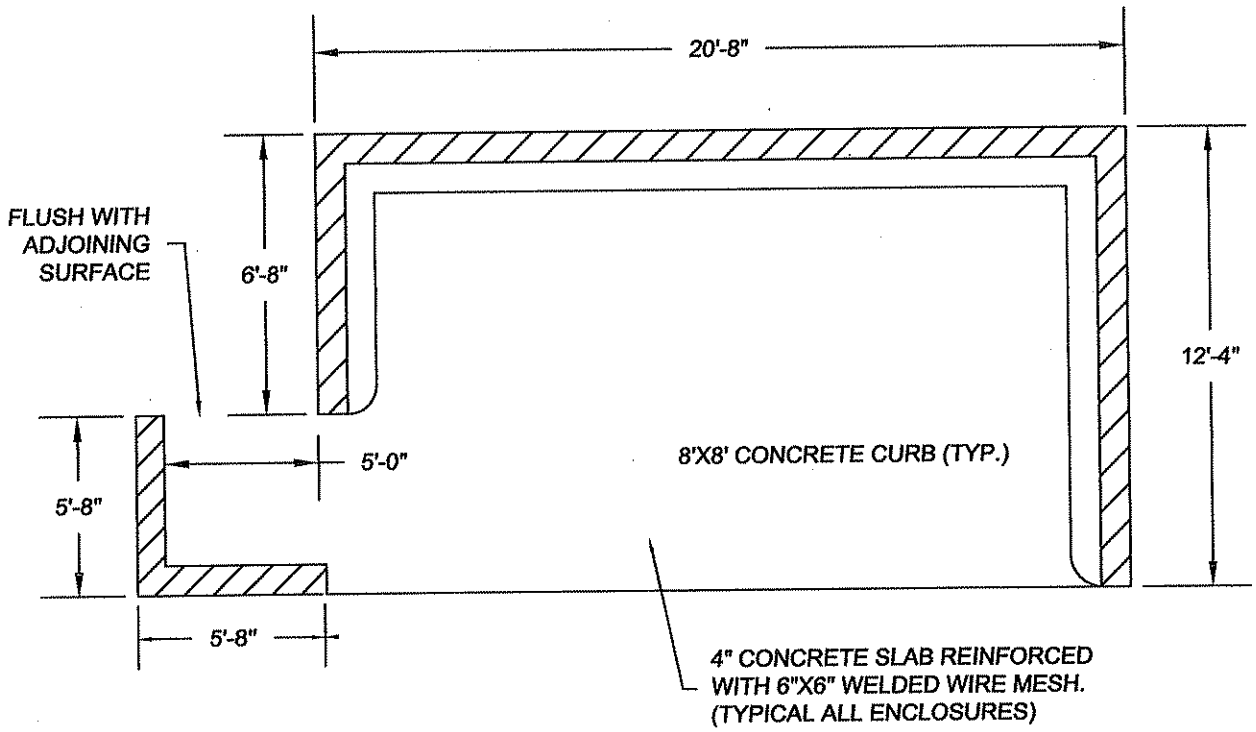
N:\ PW\4100\COH_STDS\REVISIONS\REFUSE\R-500.dwg — N.Beltran 2009

1 OF 2 SHEETS

STANDARD NO. R-500

DOUBLE

TO BE USED IN ALL MULTI-FAMILY RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL DEVELOPMENTS, UNLESS OTHERWISE APPROVED BY THE CITY ENGINEER.



NOTE: FOR WALL AND FOOTING RE-INFORCEMENT AND GATE DETAILS, SEE STD. NO. R-101 & R-102

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DOUBLE REFUSE ENCLOSURE W/HANDICAP ACCESS

MICHAEL A. GOW, PW DIRECTOR/CITY ENG. R.C.E. 54164 — MAR 2009 DATE

REVISIONS

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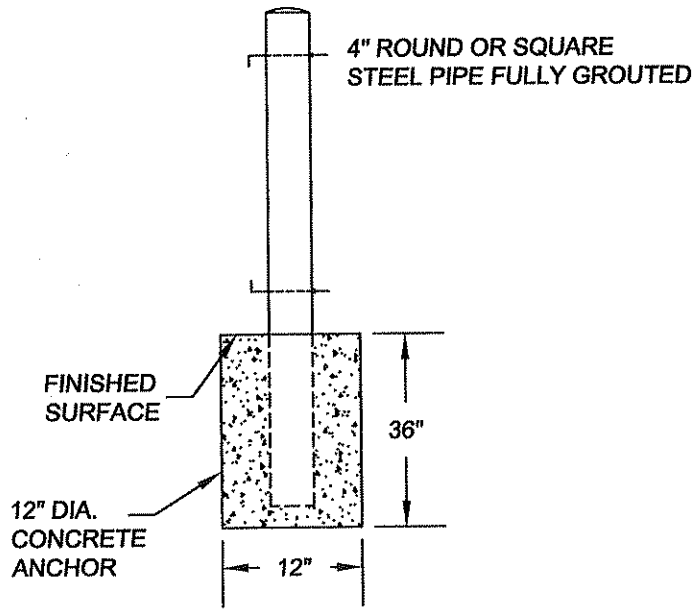
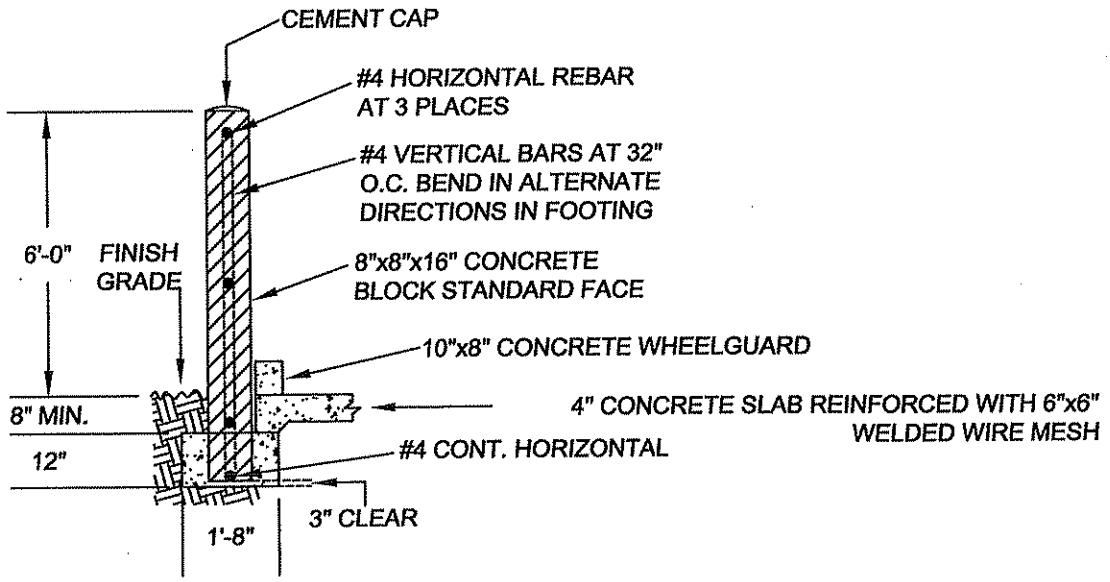
STANDARD NO. R-500A

GATE POST DETAIL





NOTE: FILL ALL CELLS WITH GROUT.
SEE R-100 FOR PLAN

DETAILS

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REFUSE ENCLOSURE
WALL AND FOOTING DETAILS

MICHAEL A. GOW, PW DIRECTOR/CITY ENG. R.C.E. 54164 — MAR 2009 DATE

REVISIONS

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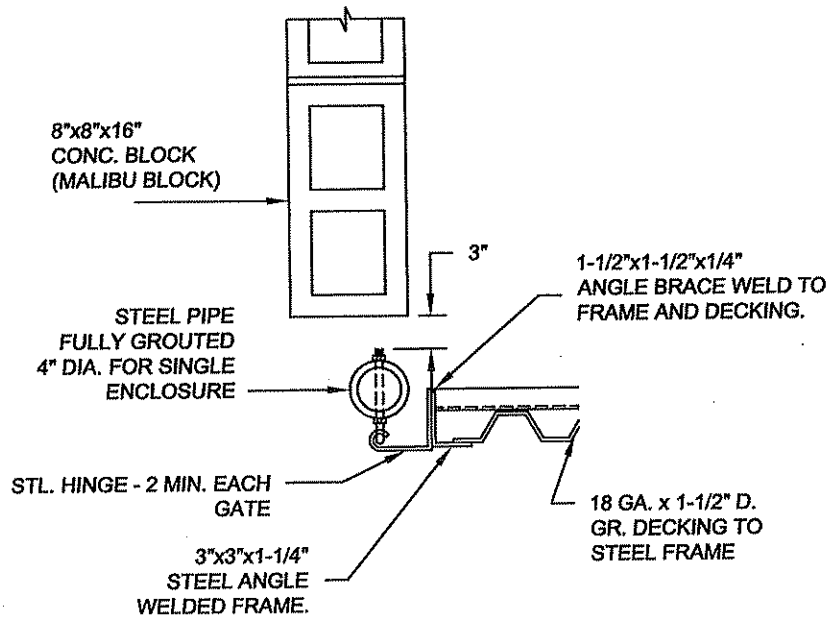
1 OF 1 SHEETS

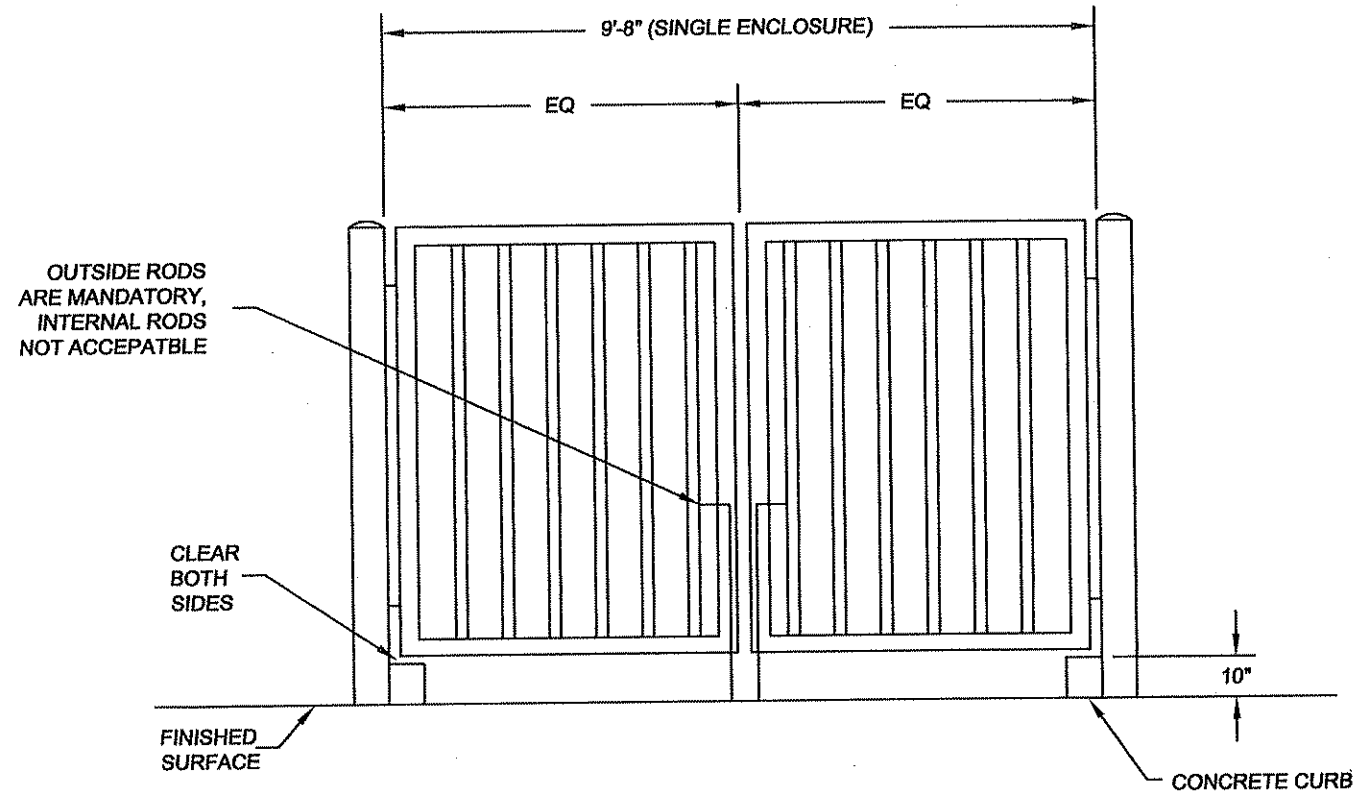
STANDARD NO. R-501



NOTES

GATES SHALL OPEN 180° AND REST FLUSH AGAINST WALL. "PLUNGER ROD" GATE STOPS SHALL BE INSTALLED FOR BOTH CLOSED AND FULLY OPENED ATE POSITIONS. ALL

ALL LATCHES SHALL BE INSTALLED ON EXTERIOR OF GATES AND THE LATCH RODS SHALL BE A MINIMUM OF 36" ABOVE GROUND LEVEL. LATCH RODS SHALL BE MINIMUM 3/4" IN DIAMETER. THE RECEIVER SHALL BE 3" DEEP, 1" INSIDE DIAMETER AND FLUSH WITH THE GROUND.



PAINT CORRUGATED METAL GATES W/ ONE COAT RUST-OLEUM #1069 RED PRIMER, ONE COAT #1060 INTERMEDIATE PRIMER AND FINISH COAT COLOR TO BE SELECTED BY OWNER. APPROVE COLOR SAMPLE WITH OWNER PRIOR TO PAINTING CORRUGATED METAL. SEE R-100 FOR PLAN

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SINGLE ENCLOSURE (GATE DETAIL)

MICHAEL A. GOW, PW DIRECTOR/CITY ENG. R.C.E. 54164 — MAR 2009 DATE

REVISIONS

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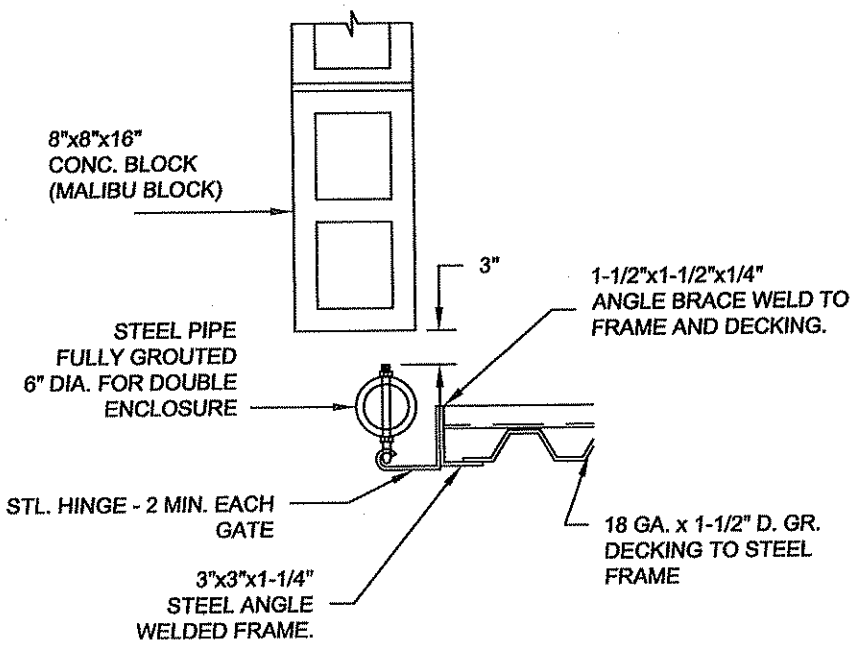
1 OF 2 SHEETS

STANDARD NO. R-502



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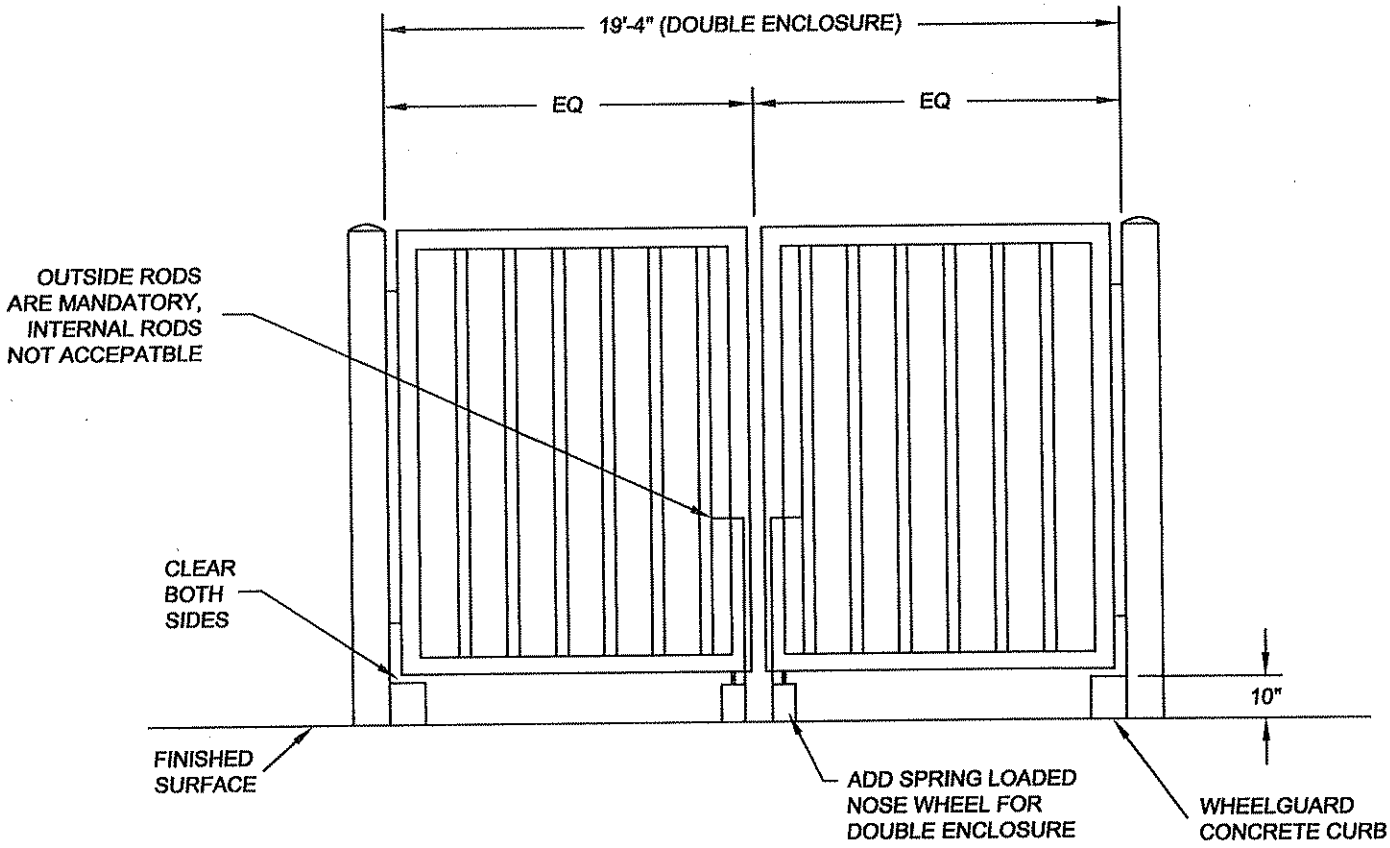

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DOUBLE ENCLOSURE (GATE DETAIL)

MICHAEL A. GOW, PW DIRECTOR/CITY ENG. R.C.E. 54164 — MAR 2009 DATE

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2 OF 2 SHEETS

STANDARD NO. R-502A

CITY OF HEMET DEPARTMENT OF PUBLIC WORKS

REFUSE GUIDELINES
REQUIREMENTS FOR SOLID WASTE

The intent of the requirement of trash enclosure is in the interest of health and safety of the public and work crews - the goal is to contain the refuse within the provided bins and to provide easy access for the progressive filling and emptying of the provided trash bins.

I. REFUSE ENCLOSURE LOCATION STANDARDS

A. 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.

B. 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)

C. A five foot wide concrete apron (with a 2% max. pitch) shall be placed in front of all refuse enclosures. No drainage V-ditches or catch basins shall be allowed within this 5' apron. Apron shall be to grade on all edges.

D. Enclosures shall be screened with plant material whenever practical.

E. Enclosures shall be constructed with interior dimensions so that individual bins can be removed independently of each other. See double bin enclosure detail or guidelines on dimensions.

F. Enclosures shall be located so that refuse vehicles can pull in front of the enclosure, empty and reset container without the vehicle operator physically removing the bin from the enclosure.

G. All refuse enclosures located closer than 5 feet to any adjacent structure shall be protected by an automatic fire sprinkler system approved by the Hemet Fire Life Safety Division.

H. All developments that install security gate systems shall utilize coded entrance equipment only. Systems that require keys, cards, or hand-held remote control devices are not acceptable. Refuse vehicles will not carry keys or other equipment to operate security gate system.

I. Roll-off bins and compactor units shall be located outside of any building except as specifically authorized in writing by the City and the Refuse Department.

I. J. (cont.)

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 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.

K. 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 one inch inside diameter receiver as the closed position requires.

L. All latches shall be installed on exterior of gates and the latch rods shall be a minimum of 36" 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.

II. REFUSE ENCLOSURE SPACE REQUIREMENTS (GRAPHIC STANDARDS)

A. Roll-off Bins: 17, 30, 50, cu. yd. require an 8' x 25' (approx.) concrete pad designated as a "Refuse Storage Zone". Roll-off bins are to be located outside of any building unless approved in advance in writing by the City and the Refuse Department.

B. Refuse Compactor Units: Roll-off compactors with separate charging units (charging units not integral with container) require an area of 15' x 85' for compactor bin and refuse truck. Compactor units shall not exceed 9.5 tons when fully loaded, including weight of compactor. Compactors shall be located outside of any building. Minimum of 5' clearance space to be allowed from each side of compactor to 35' in front of compactor unit.

III. REFUSE VEHICLE ACCESS STANDARDS

A.	Refuse vehicle turning radius	45' inside radius 65' outside radius
B.	Refuse vehicle height clearance	18 feet for entire access & exit path to container
C.	Refuse vehicle width clearance	15 feet
D.	Refuse vehicle backing distance (Residential)	No Backing
E.	Refuse vehicle backing distance (Major streets)	No Backing
F.	Refuse vehicle backing distance (Commercial)	To be determined on a case-by-case basis, minimum backing is preferred, 45' backing is maximum allowed.
G.	Refuse vehicle backing distance (Manufacturing)	To be determined on a case-by-case basis by the City and the Refuse Department, minimum / no backing is preferred.

IV. REFUSE ENCLOSURE SPACE REQUIREMENTS (GRAPHIC STANDARDS) SEE THE ATTACHED STANDARDS AND DRAWINGS

V. DEVELOPMENT STANDARDS FOR REFUSE STORAGE SPACE

A. Residential Collection

1. Condominium/Apartments/Four Plex	
-One and two bedroom	(2) 3 cu. yd. bin per 8 apt. - 1 for refuse - 1 for recycle
-Three bedroom	(2) 3 cu. yd. bin per 6 apt. - 1 for refuse - 1 for recycle
-Four plex	(2) 3 cu. yd. bin per four plex - 1 for refuse - 1 for recycle
-Senior citizen	(2) 3 cu. yd. bin per 10 apt. - 1 for refuse - 1 for recycle
2. Single Family Detached, Duplexes, and Triplexes	Automated collection may be substituted for the above dependent on available collection area .

B. Commercial Collection

1. Shopping Center/Retail	(2) 4 cu. yd. bin per 8,000 sq. ft. of building space - 1 for refuse - 1 for recycle
2. Multi-Tenant Shopping Center/Retail	(2) 4 cu. yd. bin per every 2 tenants - 1 for refuse - 1 for recycle
3. Office Development	(2) 4 cu. yd. bin per 15,000 sq. ft. - 1 for refuse - 1 for recycle

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.

4.	Service Commercial: (Restaurants, Fast-Food, or Mini-Marts)	(2) 4 cu. yd. bins per building or unit - 1 for refuse - 1 for recycle
5.	Service Commercial: (Vehicle, Appliance, Furniture, Repair, Etc.)	(2) 4 cu. yd. bin per 8,000 sq. ft. of building space - 1 for refuse - 1 for recycle

C. Industrial/Manufacturing Collection

1.	Industrial Parks	(2) 4 cu. yd. bin per 8,000 sq. ft. of building space - 1 for refuse - 1 for recycle
2.	Multi-Tenant Industrial Park	(2) 4 cu. yd. bin per every 2 tenant units - 1 for refuse - 1 for recycle
3.	Warehouse Development	(2) 4 cu. yd. bin per 30,000 sq. ft. of building space - 1 for refuse - 1 for recycle
4.	Heavy Industry	Container quantity, size, type, determined on a case-by-case basis

5. All of the above may be substituted with open top or compactor roll-off container upon approval by the City and the Refuse Department.

D. Options

1.	Commercial Collection	(1) 4 cu. yd. compactor unit can be substituted for every (3) 4 cu. yd. bins.

2. 50% of total volume must be provided for recycling.

All compactor units must be removed from the compactor by consumer. Additional compactor bins may be required.

When in-house compactors are used the City may specify the size and the frequency of container to be used.

3.	Commercial or Industrial Collection	(1) 30 or 50 cu. yd. open top roll-off bin may be substituted for every (7) 4 cu. yd. bins. Each possible tenant will be considered separately.
4.	Commercial or Industrial Collection	Compactor unit may be substituted for front loader bins. Each possible tenant will be considered separately. Max. gross weight 9.5 ton.

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

Pre-Construction

Contact the City Planning Department; determine if your project is required to comply with the current Construction & Demolition Recycling ordinance or see California Integrated Waste Management Board web site for requirements. If your project is covered, complete the necessary paperwork and provide to the City.

Get a copy of the builder's guide for a list of local recycling facilities from the California Integrated Waste Management Board. Reuse dirt, concrete, asphalt, wood, green waste, metals, etc. on site whenever possible. Divert unused dirt, concrete, asphalt, wood, green waste, metals, etc. to an authorized recycling facility - do not landfill these reusable materials! Provide adequate bin enclosure space for solid waste and recycling collection(PLEASE REFER TO CITY ENCLOSURE STANDARDS)

Construction

Reuse dirt, concrete, asphalt, wood, green waste, metals, etc. on site whenever possible. Divert unused dirt, concrete, asphalt, wood, green waste, metals, etc. to an authorized recycling facility - do not landfill these reusable materials! Refer to the builder's guide for a list of local recycling facilities.
If you are required to follow the requirements of the Construction & Demolition Recycling Ordinance KEEP TRACK OF ALL YOUR RECEIPTS!!

General

Include solid waste and recycling information in your employee orientations, policy manuals, lease agreements, and CC&R's.
Color coding of individual containers by type of material and provision of graphic signs that instruct your employees and /or customers to separate materials in the containers used to transport recyclables and refuse to outdoor enclosures is suggested.
Review your operations at least annually, contact the city for a free waste audit to reduce waste and keep your solid waste services cost effective and up to date. Consult information from the California Integrated Waste Management Board to assist you in meeting state and local regulations. A minimum amount of fifty (50) percent of all waste material generated by the construction project must be diverted from landfills.

Design

Incorporate adequate space for trash, green waste, and recycling containers for the facilities where waste and recyclables will be generated. Incorporate space for recycling containers in the enclosure where they will be stored for collection. Design in a manner that facilitates reuse.

Recyclable materials that are currently recycled include:

- Plastic bottles and containers(#1-7)*no shrink wrap or polystyrene peanuts*
- Glass bottles and jars, *no ceramics, plate glass or windows*
- Aluminum and tin cans, pie tins, metal clothes hangers
- Mixed paper including junk mail, colored paper, office paper and magazines
- Newspaper and cardboard boxes, including cereal boxes, phone books
- Paperboard milk and juice containers
- Linen and clothing textiles
- Small metal appliances(i.e.toasters,microwaves)*no TV's/ monitors(E waste)*
- Wood products, *no treated lumber*
- Concrete and asphalt rippings
- Yard waste including tree leaves, branches, and grass clippings.

Bin Accessability

If a stationary bin is used it must be directly accessible by collection vehicles.

Enclosures must meet or exceed City of Hemet standards. If a driver is required to move or push the bin for servicing, an additional collection fee may be charged.

Providing a turn around or separate refuse collection vehicle exit is required. *Maximum back up distance is 50 feet for any maneuver and must be in a straight line.*

Bins shall not be placed in front of fire hydrants and no bin shall be placed within 5 feet of a combustible wall, opening or combustible roof eave line.

Trash enclosures cannot be installed behind parking spaces.

Enclosure Apron Surfaces

Enclosure apron surface shall be the same elevation as the pad threshold and the surrounding surfaces.

Apron must extend 8 feet from the pad and be the width of the enclosure opening.
Trash enclosure pad and apron shall slope 1/8 inch per foot for proper drainage.
Pad elevation shall be the same as the apron threshold.

Federal Clean Water Act

All properties must comply with the Federal Clean Water Act.

Residential complexes must allow for adequate space to collect refuse and recycling materials. A high density development must make available spacing for cart placement or meet commercial collection requirements.

Enclosures shall be designed with at least 50% of space designated for recycling. This shall be achieved with two containers; one for recycling and one for refuse. Minimum size of containers shall be 3 cubic yards or as approved by the City.

Pads and Access Areas:

1. Trash and recycling enclosures shall be sited to ensure that the maximum roll-out by collector does not exceed 25' from enclosure to truck.
2. Roll out areas shall be level and free of dips and bumps.
3. Front-end loading trucks may weigh up to 30 tons when loaded. All access surfaces shall be engineered accordingly to avoid future pavement damage. Concrete surfacing is required in all access and service areas.
4. Trash and recycling enclosures shall be sited to ensure that overhead obstructions do not impede access to the site.
5. Storm drain grills shall not be placed in the driving path of the truck.
6. Trash and recycling enclosures shall be sited with a turn around or separate exit that allows the truck to move forward rather than backwards.
7. Trash and recycling enclosures shall be sited to accommodate parked cars, delivery trucks, and similar accessability concerns.

Clearance
Twenty-five foot clearance of overhead obstructions is necessary where the vehicle will lift and empty the container.

Roll-Off container placement
Allow minimum of 75' to load/ unload container safely. Truck rails may extend to 25' high when servicing container.

Exception: Vertical clearance may be reduced, provided such reduction does not impair access by refuse equipment and approved signs are installed and maintained indicating the established vertical clearance when approved.

Surface
Refuse equipment access roads shall be designed and maintained to support the imposed loads of refuse equipment and shall be provided with an approved surface so as to provide all weather driving capabilities.

Turning radius
The turning radius of a refuse equipment access road shall be no less than fifty-five feet (55') outside and thirty-one (31') inside turning radius.

Cul-de-sac Approaches
Cul-de-sac approaches shall have a minimum right-of-way radius of fifty-one feet (51') for single family and two family use, and sixty feet (60') for all other uses. The maximum length shall be no more than five hundred feet (500') from the nearest intersecting through street. This depth limit applies to multiple streets having only one outlet to an arterial or collector. Development on cul-de-sacs longer than three hundred feet (300') shall not generate more than one hundred (100) vehicle trips per day as projected using current data from the Institute of Transportation Engineers.

Cul-de-sac Turnarounds
Cul-de-sac Turnarounds shall have an outside curb radius of fifty-one feet (51"), plus sufficient area to accommodate side walks within the right-of-way, plus easements as need for utilities including drainage and mail service. Temporary turnarounds may be provided at the end of streets that will be extended within three (3) years from the beginning of development activity on the Cul-de-sac.

Temporary Cul-de-sac
A street in a phased development may be constructed without a turn around if it is constructed one lot in length. A street constructed in a phased development which is longer than one lot shall have a temporary turnaround meeting the cul-de-sac dimensions.
All temporary cul-de-sacs shall be asphalt surfaced.

Hammerhead Approaches
Hammerhead approaches shall have a minimum width of sixty-one feet (61') back of curb for single family and two family use. The maximum length shall be no more than five hundred feet (500') from the nearest intersecting through street. This depth limit applies to multiple streets having only one outlet to an arterial or collector.

Hammerhead Turnarounds
Hammerhead turnarounds shall have a minimum width of sixty-one feet (61') back of curb
plus sufficient area to accommodate side walks within the right-of-way, plus easements as needed for utilities including drainage and mail service. Temporary turnarounds may be provided at the end of streets that will be extended within three (3) years from the beginning of development activity on the hammerhead.

Dead ends
Dead end refuse equipment access roads in excess of fifty feet (50') in length shall be provided with approved provisions for the turning around of refuse equipment. When dead ends cannot be installed in the fifty feet limitations due to location on property, topography, waterways, non-negotiable grades or other similar conditions, the limitation can be extended to a maximum of one hundred and fifty feet(150') These conditions must be approved on a
case-by-case basis by the City and the Refuse Department.

When a bridge is required to be used as part of a refuse equipment access road, it shall be constructed and maintained in accordance with nationally recognized standards. See article 90, standard a.1.1. The bridge shall be designed for a live load sufficient to carry the imposed loads of refuse equipment.

Grade
The gradient for refuse equipment access road shall not exceed twelve percent (12%) grade. Angles of approach and angles of departure shall not exceed six percent (6%) for twenty-five feet (25') prior to or after the grade change.

Clear visibility for all interior drive aisles shall be maintained.
Trash enclosures shall be located as to minimize disturbance to single family residential development. Trash enclosures shall be at least fifty feet (50') away from any single family residential zoning district, unless the adjacent property is undeveloped and the city council determines that the setback will not fulfill its intended purpose at the present time. Projects requiring trash enclosures must be designed to city standards and all locations must be approved by the City and the Refuse Department before approval of construction plans.

Accessing the enclosure
When a straight on approach cannot be accomplished to access the trash enclosure, a radius of not more than thirty-one point nine degrees(31.9) shall be used to make the approach into the trash enclosure. The front of the trash enclosure 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") 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.

Enclosure specifications
All gates must meet or exceed City requirements. Variants must be approved by the City and the Refuse Department. All gates must have their own cane bolts to ensure the gates stay closed and/ or open when being serviced. If H.U.D. specifications are required, the handle of the cane bolt can be no less than four inches (4") in length and must not be able to operate higher than thirty-six inches (36") or lower than twenty-four inches (24"). Cane bolt holes must have a metal pipe sleeve installed in the asphalt to eliminate asphalt breakage.

Gates are not allowed to have locking devices on them except by approval of the City and the Refuse Department. All gates must be marked "NO PARKING" to ensure proper access to the bin enclosures.