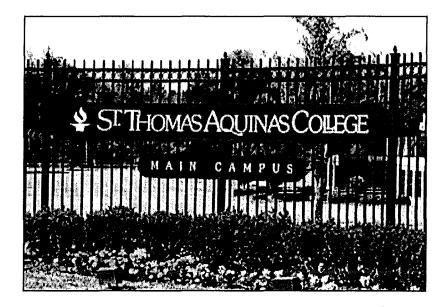
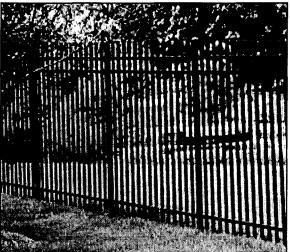
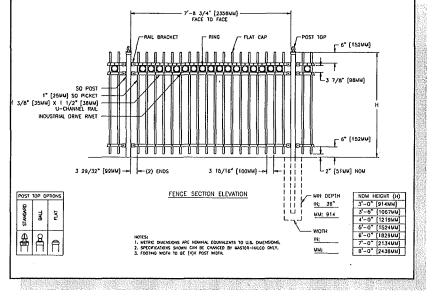
ESTATE STYLE WITH FLAT PICKETS

Estate Style with flat top pickets is the most contemporary and classic look offered in the Estate series. Good looking and long lasting, this fence will enhance the beauty and value of any property. Every Monumental Iron Works fence provides lasting beauty and performance. All components are engineered for strength, security and low maintenance.

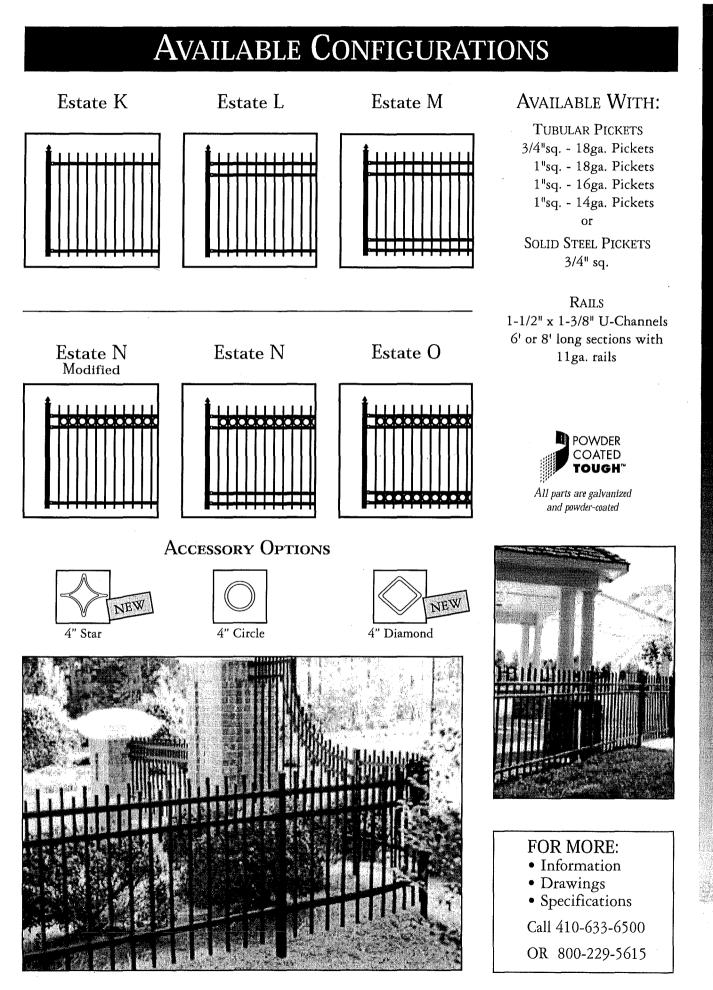








Typical Fence Section Elevation



PART 2 - PRODUCTS

2.01 STEEL FENCE AND GATES WITH GRANITE GATE POSTS

- A. Steel fence shall be the Estate Style 'A' black ornamental steel fence which shall be modified to have flat top pickets and posts as manufactured by Monumental Iron Works local distributor, Walpole Woodworkers telephone (617) 329-0770 or approved equal. Height of fence as shown on Drawings. Provide pedestrian self-closing gates with ADA compliant latches and vehicular gates to match. Provide post for cannon ball gate self-closer to match fence. Post shall be four and one half inches (4 1/2") nominal with finish to match fence and gate.
 - 1. Pickets shall be solid stock. Pickets shall be hot-dipped galvanized per ASTM A525-G90, latest requirements. Space between pickets shall be 3 31/32" face-to-face.

<u>Size</u>	Wall Thickness	Wgt./Ft.	Tensile Strength
3⁄4" Sq.	Solid	1.914 lbs.	50,000 p.s.i.

- Rails Made of hot-rolled structural steel, rolled into "U" channel measuring 1 3/8" wide x 1 ½" deep x .120 wall thickness. Manufactured per ASTM A513 and hot-dipped galvanized per ASTM A525-G90, latest requirements.
 Posts shall be hot-rolled structural steel. The wall thickness and weights are
- 3. Posts shall be hot-rolled structural steel. The wall thickness and weights are shown below. Tubular steel shall be manufactured per ASTM A513 and hot-dipped galvanized per ASTM A525-G90, latest requirements.

Size	Wall Thickness	Wgt./Ft.	Tensile Strength
2 ½" sq.	14 Ga.	2.733 lbs.	45,000 p.s.i.

 Rail attachment brackets shall be die cast zinc (ZAMAK #3 alloy) per ASTM B86-83Z 33521, latest requirements. Ball and socket design capable of 30° swivel (up/down & left/right). Bracket to fully encapsulate rail end for complete security.
Finials shall be flat style post tops and shall be cast iron with minimum 20.000

Finials shall be flat style post tops and shall be cast iron with minimum 20,000 p.s.i. hot-dipped galvanized per ASTM A153, latest requirements.

6. Coating:

8.

- a. Entire fence shall have a galvanized undercoat inside and outside on all members to assure maximum corrosion resistance.
- b. All fence components shall have a four (4) stage "Power Wash" pretreatment process that cleans and prepares the galvanized surface to assure complete adhesion of the finish coat.

<u>Stage 1</u> – All metal is cleaned and phosphate treated simultaneously to form an amorphous structure on the galvanized surface for superior powder coating adhesion.

<u>Stage 2</u> – All metal is given a thorough water rinse to prepare the phosphatecoated surface for the seal rinse (stage 3).

<u>Stage 3</u> – All metal is given a non-chromate seal rinse, which further improves corrosion resistance.

<u>Stage 4</u> – All metal is then baked dry, prior to the powder coating being applied.

7. All hardware shall be vandal proof.

All metal shall be given a polyester resin based coating applied by electostatic spray process, to thickness of 2.5 (.0635 mm) mils. The finish is then baked in a 450 degree F (232° C) (metal temperature) oven for 20 minutes.

- B. Granite for gate posts shall be engineering grade structural granite having characteristics and physical requirements as defined by ASTM C119 and C615, in accordance with the following ASTM test references.
 - 1. Abrasion resistance of stone, subject to foot traffic: ASTM C241.
 - 2. Absorption of natural building stone: ASTM C97.
 - 3. Compressive strength of natural building stone: ASTM C170.
 - 4. Modulus of rupture of natural building stone: ASTM C99.
 - 5. Granite shall be free from seams, which impair its structural integrity, and of smooth splitting character. Natural variations characteristic of the deposit will be permitted.
 - 6. Granite shall be "Kitledge Grey" granite, local supplier Fletcher Granite Company West Chelmsford, MA 508-251-4031 or approved equal. Comply with the requirements of the National Building Granite Quarries Association, Inc. for tolerances, color, and finished qualities.
 - 7. To the greatest extent possible, provide contiguous stone to provide for fabrication of continuous matching units. Mark matched units to provide continuous-sequence installation.
 - 8. Refer to Drawings for size of all units. All granite shall have all sides sawn with thermal finish on all exposed sides.
- C. Grout shall be high strength 100% solids, solvent free, and non-shrink epoxy adhesive for anchoring. Manufacturer shall be Hallenite "Por-rok," Sonneborn "Sonogrout," Penn Dixie or Master Builders or approved equal.
- D. Concrete for footings shall be 4000 p.s.i. 28-day air-entrained concrete as specified under Section and Section M4 of the 'Standard Specifications' and Section 03300 CONCRETE, herein.
- E. Provide padlock with three master keys and chain for each gate. The padlock shall be by American Lock Company or approved equal. Chain shall be thermal fusion coated (PVC) galvanized steel. Submit sample and product literature for approval.
- F. Provide cannon ball and chain closure as manufactured by Walpole Woodworkers telephone (800) 343-6948 catalog # 500113 or approved equal. Cannon ball shall be solid iron three and one half-inch (3 1/2") diameter ball, weight twelve- (12) pounds minimum, with a black powder coated finish. Chain shall be thermal fusion coated (PVC) galvanized steel. Submit sample of ball and chain enclosure and product literature for approval.
- G. Plaques for gateposts shall be cast bronze plaques by Raders Engraving Boston, MA. telephone(617) 227-2921 or approved equal by McGann Bronze Cambridge, MA or La Hay Architectural Bronze Corona, CA.
 - 1. Material: Cast bronze.
 - 2. Size: 6" x 6" overall dimension.
 - 3. Background texture: Pebbled.
 - 4. Background color: Standard green patina.
 - 5. Letters: Satin finish, letter style (font) to be Goudy Old Style.
 - 6. Border style: Single line border, flat band.
 - 7. Mounting boss and stud.

2.02 BENCH

A. Benches, shall be the Victorian Series as manufactured by American Site Furniture, Concord, MA or approved equal. Bench catalog number is #B-76 sizes as shown on the