#### Section 08316

# Automatic 'Buoyant-Beam' Flood Barriers

#### PART 1 GENERAL

#### 1.01 WORK INCLUDED

- Product engineering and fabrication techniques, shop drawings, structural calculations and Professional Engineering Stamps State of Florida in accordance with the manufacturers standard manufacturing specifications.
- Factory fabrication and installation of aluminum flood barriers.

## 1.01 DESCRIPTION:

- **A.** The "AutoGate" is a buoyant composite beam placed at the entrance to a driveway, doorway, or other potential flood path. The barrier hinges into a recess in the pavement immediately in front of the entrance. Its normal position is down, allowing fulltime protection without affecting traffic or otherwise changing the look and feel of the area.
  - Acceptable Manufacturers: 'FloodBreak', as represented by:

Savannah Flood Protection, Inc. 561-656-2556 (toll free) 888-640-0850 Fax 561-656-2599

#### 1.02 FABRICATION:

- **A.** The "AutoGate" is welded aluminum construction using aluminum wire- ER 4043 AWS A5.10 3/32 by an ASTM, AWS certified welder, meeting AWS D1.2, "Structural Welding Code", while also utilizing 304 grade stainless bolts for hinge and gasket installation. Aluminum grades and gasket specifications are provided in the General Specifications Notebook.
- **B.** Fabrication of the "AutoGate" is protected under patent # U.S. 6,623,209 B1.

#### C. Dimensions:

1. Custom fabricated to accommodate the width of the openings, flood path, (i.e. driveway, doorway, etc.) and the prescribed flood mitigation elevation as indicated.

## 1.03 INSTALLATION:

Coordinate with owner and/or GC, all site accessibility, automobile traffic, pedestrian traffic and available work hours along with other variables, as they have impact on the install schedule.

GC shall furnish flagmen and all permits and personnel relating to installation.

# A. Installation scope

- 1. Full depth saw cut around perimeter where "AutoGate" is to be placed.
- 2. Break out and excavate as needed. Set spoils aside for GC removal.
- 3. Install drainage system as required.
  - **a.** To Storm
  - **b.** To Catch Basin
  - c. To Street
  - d. To Dry Sump/ French Drain
- **4.** Back fill with stabilized sand as required and obtain required compaction percentage.
- 5. Install "AutoGate".
- **6.** Dowel into existing concrete with #4 rebar, 12" on centers.
- 7. Secure "AutoGate" with #4 rebar, 12" on centers each way.
- 8. Pour back using 3,000 psi. concrete with light broom finish.
- 9. Site clean up.

#### 1.04 MAINTENANCE:

- **A.** Although minimum maintenance is required it is the recommendation of FloodBreak, L.L.C. that the following procedures are performed at least once every 90 days, or more if conditions dictate.
  - 1. Check gate panel, pan, and sidewalls for visible damage or misuse.
  - 2. Check all gasket flange bolts for proper tightening.
  - **3.** Lubricate gaskets and sidewalls with Armor All or other like substance. This will assist with manual raising and lowering during the quality assurance process.
  - 4. When lifting the AutoGate check all allowable clearances to insure non-restricted
    - movement to the open position. Should interference occur, contact the manufacturer for assistance.
  - **5.** Clean gate pan of all debris with a high pressure hose or wet/dry vacuum.
  - **6.** Check flexibility and integrity of gasket seal faces.

- 7. Hand-check each hinge to insure that it is butted securely to the hinge mounting angle. In the event a hinge has become loose, the performing technician must then remove the hinge gasket flanges and gasket to tighten the hinge bolts.
- **8.** Once tasks 1-7 have been achieved place the AutoGate back into the closed position, side seal gaskets in the "down" position underneath the panel.
- **B.** Contract maintenance agreements and extended warranties are available and will be negotiated separately as to meet the Owner/ Managers specific needs and request.

## 1.05 DELIVERY:

**A.** All pricing is base d on F.O.B the job site and delivery can be expected approximately 8-10 weeks after the receipt of a final signed, approved shop drawings. . Larger orders, or phased orders involving multiple gates will receive their gates in phases