# **PART 1 GENERAL**

- 1.1 THE TRACKLESS SPEEDGATE IS A POST DRIVEN ELECTRICALLY OPERATED FAST ACTING BI-FOLD GATE.
- 1.2 ALL STRUCTUAL COLUMNS, DRIVE UNIT, CONTROLLER, GATE PANELS BY WALLACE PERIMETER SECURITY.

#### 1.3 RELATED SECTIONS

- .1 Section 01 33 13 Submittal Procedures.
- .2 Section 01 74 20 Construction Waste Management and Disposal.
- .3 Section 01 78 00 Closeout Submittals.
- .4 Section [ \_\_\_\_]: Fencing.
- .5 Section 03 30 00 Cast-in-Place Concrete: Structural portal foundations.
- .6 Section [ ]: Electrical service and connections.

#### 1.4 SUBMITTALS

- .1 Shop Drawings:
  - .1 Submit final assembly drawings in accordance with Section 01 33 13 Submittal Procedures.
  - .2 Indicate electric power requirements, installation details, wiring diagrams.
- .2 Installation instructions:
  - .1 Submit two copies of manufacturer's written installation instructions.
  - .2 Submit reference list of five (5) installations of the specified type within the last 2 years.
- .3 Test reports:
  - .1 Drive unit shall bear a label indicating that the gate controller/operator mechanism has been tested certified to UL 325 and CSA C22.2 No. 247 standards for all electrical components.

## 1.5 CLOSEOUT SUBMITTALS

- .1 Provide operation and maintenance data for gate for incorporation into manual specified in Section 01 78 00 Closeout Submittals.
- .2 Conduct comprehensive demonstration for maintenance staff on operation and care of gate.

# 1.6 QUALITY ASSURANCE

- .1 Manufacturer: A company specializing in the manufacture of automated gate systems.
- .2 Installer: A minimum of three years' experience installing similar equipment and approved by manufacturer.

# PART 2 PRODUCTS

#### 2.1 HIGH SPEED ELECTRONIC SECURITY GATE

- .1 Manufacturers:
  - .1 Wallace Perimeter Security
     Model PDXT Series SpeedGate
     Contact Wallace Perimeter Security:
     115 Lowson Crescent, Winnipeg, Manitoba Canada, R3P 1A6
     T. 866.300.1110
     www.wallaceperimetersecurity.com

#### 2.2 MATERIALS

- .1 Steel sheet: hot dipped galvanized to ASTM A653/A653M, A36 pre galvanized steel.
- .2 Steel sections: to ASTM (Canadian Equivalent CAN/CSA-G40.21) Grade [300W] [350W].
- .3 Welding materials: to ASWD1.1 (Canadian Equivalent CSA W59).
- .4 Electrical components: Complete gate system to be UL325 listed and/or CSA C22.2 No.247 and complying with local requirements.
- .5 Power Supply: 208/240 V 20 Amp single phase 60 hertz power supply.

#### 2.3 COMPONENTS

- .1 Gate Columns:
  - .1 Formed steel columns, anchored to concrete foundation.
  - .2 Columns to be 12" square with a wall thickness of .250".

### .2 Model PDXT:

- .1 Dimensions: [max 8] ft high x [max 24] ft clear opening OR [max 10] ft high x [max 18] ft clear opening.
- .2 Panels to be capable of fully opening within 7 seconds.
- .3 Panels: [1.5" vertical bar infill] [6 gauge welded wire infill] [6 gauge woven wire infill].
- .4 Manufacturer's standard corrosion resistant hinges. Hinges are to be serviceable heavy duty corrosion resistant base material with a minimum 1" stainless steel shaft.
- .5 Fully compliant with ASTM F2200 05, Class I through Class IV.

SPEC NOTE: Safety devices are installed to minimize likelihood of vehicle or pedestrian injury/entrapment. Edit the following paragraphs for safety feature options required for project. Pedestrians are NOT permitted to use the automated gate and must be provided with a separate, clearly marked access point.

MANUFACTURER'S NOTE: Complete gate system to be UL325 listed and/or CSA C22.2 No.247 and complying with local requirements.

## .3 Safety/Obstruction Devices:

- .1 Provide reduced speed sensor Absolute encoder mounted directly to drive motor to act as primary entrapment detection device.
- .2 Photoelectric transmitter and receiver: Equip each column with [1] built-in photocell(s) at 20" above the base plate. To be mounted within the columns.
- .3 Provide 2 channel obstruction loop relay card for integration of dual obstruction loops.
- .4 Provide sensing edges as per UL update.

MANUFACTURER'S NOTE: Control unit to be located within 30 ft. of the gate structure, 2 conduits (recommend 2") for communication/power cabling to gate structure. Control unit <u>not to be</u> mounted within arm's reach of the automated gate.

#### .4 Drive Unit:

- .1 Provide variable frequency drive with programmable logic controller for controlling electromechanical drive system. Drive system to incorporate encoders with reduced speed sensing software as primary entrapment detection device.
- .2 All drive electrical components to be enclosed in weather-resistant housing.
- .3 Dual .75HP 3 Phase gear motors with integrated brake and 360:1 gear reduction box with synthetic lubricant.
- .4 Emergency override: Provide secured access panel for manual opening and closing in case of power failure/malfunction.

# 2.4 FINISHES

- .1 Select from:
  - .1 [Hot dip galvanized finish [0.5] kg/m² zinc coating to ASTM A653/A653M (CAN/CSA-G164)].
  - .2 [Powder coated to 80 micron thickness standard RAL colors- check with manufacturer before specifying color.]

#### 2.5 PRODUCT OPTIONS

- .1 [Anti climb top guard]
- .2 [Red / Green traffic lights][For Entrance][For Exit].
- .3 [Fence Mounting Devices: Provide mounting brackets for mounting adjoining fence material to columns.]
- .4 [UPS Backup: Provide Uninterruptible Power Supply to variable speed gate controller for emergency operation in event of power outages.]

# **PART 3 EXECUTION**

### 3.1 INSTALLATION

- .1 Provision of concrete foundations as determined by local engineer according to drawings provided.
- .2 Install high-speed security gate to manufacturer's written instructions, by contractor certified by Wallace Perimeter Security.
- .3 Submit certificate of installation to manufacturer upon completion of installation for warranty validation.

## 3.2 CLEANING AND MAINTENANCE

- .1 Perform cleaning and maintenance procedures in strict accordance with manufacturer's written instructions.
- .2 Maintain logbook of repairs and maintenance.