

Appendix G – Bus Detection System

SCOPE OF WORK: NEW TRANSIT CORRIDOR BUS DETECTION SYSTEM:

Supply, Install and Program the following Items (Based on same Design Control Panels used at the Osborne, Harkness and Jubilee Stations):

1. Main Control Panel(Industrial Grade)

- Nema 4/12 Enclosure, Hinged w/ Locking Latch and Inner Swing Out Door
- Allen-Bradley, 6" TFT Color Touch Screen, Ethernet Comm.
- Allen-Bradley, Micro-Logix 1400 PLC w/ CPU, PS, Rack and Misc. I/O Modules
- (3) Telemecanique, 2A / 24VDC Power Supply w/ Overcurrent Protection
- (2) Voice Modules
- (2) Volume Controls
- (Misc.) Omron, Relays w/ LED Indication, Manual Override
- (3) ABB, Supplemental Circuit Breakers
- (1) AEGIS, 5A / 120VAC Surge Suppressor
- (1) Service Receptacle (3A/120VAC Max.)
- (3) 22mm, Telemecanique, Pilot Lights and Operators; 'System ON' Green LED Pilot Light,
- System Switch 'ON-OFF' (Keyed), 'Alarm' Red LED Pilot Light.
- (Misc.) Wiring Hardware: - P/C Terminals, Weidmuller DIN Rail, Panduit Wiring Duct, Ground
- Bars, etc... as required.
- Panel Factory Built and Tested
- Panel Factory CSA Approved as Complete Assembly
- Full Set of AutoCAD Drawings
- O&M Binder w/ Electronic Backup
- Operator Training

2. Panel OPTION(s):

- UPS (750VA)

The purpose of the UPS is to provide emergency power to the system to alarm problem and to overcome any short term power outages. UPS to be housed in above panel. Includes all power cords, wiring, etc... as required.

- Outside Mounted Enclosure Upgrades:

- o Enclosure to be upgraded from painted steel to corrosion resistant stainless steel
- o Lock/latch upgraded to industrial quality clasp to accept customer own pad lock
- o Interior panel fully insulated with 1" insulation board, steel foil finish.
- o Panel heater (300W) w/ thermostat and heat guard
- o Rain Shield (when working on open panel in elements such as rain, snow, etc.)
- o Interior panel light w/ door switch (automatically activates when door open)

3. Field Devices:

- (4) Industrial Grade Alarm Beacons, AMBER
- (4) Custom Pedestals with Raceway and Wire Guard Cages for Beacon Install
- (4) Industrial Grade Amseco Audible Horns (Mounted on Light Standards)