1. **GENERAL**
   1. **Requirements Include**
      1. Low energy door operators.
   2. **General Requirements**
      1. All public entrance doors to have automatic door operators.
      2. Coordinate with Division 26 for electrical connections.
      3. Coordinate with Division 28 and consult with SSEM for coordination with current access control maintenance provider.
   3. **Performance and Design Standards**
      1. Specify and detail public entrance doors to have automatic door operators.
      2. For new and retrofit doors, specify overhead surface mounted operators on the interior side of the door.
      3. For automatic operators controlled by motion sensor, ensure there is no interference by ambient light and radio frequencies.
      4. Sliding doors to have break-away capability.
      5. Entire operator to be removable from header as a unit.
      6. Provide for manual open and close operation of door leaves in the event of power failure.
2. **QUALITY ASSURANCE**
   1. **Warranty**
      1. Provide five (5) year manufacturer warranty for motor and compressor.
3. **PRODUCTS**
   1. **Manufacturers**
      1. Subject to compliance with specifications, the following manufacturer is acceptable:
         1. Assa Abloy Entrance Systems.
   2. **Swing Door Operator / Motor**
      1. Swing Door Operator: Acceptable Product: Assa Abloy Entrance Systems or approved alternative. Assa Abloy models that can be considered:
         1. SL500 for sliding door applications.
         2. SW60 for surface mounted applications for swing doors.
         3. SW100 for surface mounted applications for swing doors.
         4. SW200i for exterior or interior applications for large heavy doors.
         5. Alternatives require approval of BCIT Facilities.
   3. **Electrical Controls**
      1. Electrical Control System: Electrical control system shall include a solid state controller with quick connect plugs.
      2. Controller Protection: The controller shall incorporate the following features to ensure trouble free operation:
         1. Main Fuse Protection.
         2. Electronic Surge Protection.
         3. Internal Power Supply Protection.
         4. Motor Protection, over-current protection.
      3. Program Dip Switches: The controller shall have program dip switches to allow selection or change of activation options; standard activation or push-to-operate.
      4. Power Switch: Automatic door operators shall be equipped with a two position On/Off switch to control power to the door.
      5. Where an automatic door opener is installed on an entry point that already has, or will be receiving electrified hardware for card access, appropriate hardware such as a CX-12 Door Interface Relay must be installed to connect with the card access system.
   4. **Activation Device**
      1. Activation Device: Touchless activator model 8310-813 by LCN no substitutions. Provide weather resistant gasket at exterior locations.
      2. Wiring for the activation device to be in conduit. The conduit is preferred to be located within walls unless the wall is solid. Paint to match wall colour.
      3. Wiring to be minimum trade size #12 AWG copper conductor with 600V insulation of cross- linked thermosetting polyethylene material rated (RW90 XLPE), non-jacketed.
   5. **Accessories**
      1. Accessories: provide manufacturer’s standard accessories for a complete installation, confirm requirements with BCIT.
4. **EXECUTION**
   1. **Demonstration and Instructions**
      1. Demonstrate operation, operating components, adjustment features, and lubrication requirements to BCIT maintenance staff.

\*\*\* END OF **AUTOMATIC DOOR OPERATORS** SECTION \*\*\*