1. **Irrigation Controller:** Rain Bird IQ ESP-LXMEF Satellite Controller with IQ Flow Smart Connection Module and IQ NCC RS232 Cartridge in LXM Metal Cabinet with Outside Wall Mount. Install controller and cabinet on wall per manufacturer's recommendations.

2. **Junction Box**

3. 1-inch conduit and fittings to power supply

4. Power supply wire

5. 1-inch conduit and fittings for RS232 serial cable to IQ Central Control computer

6. RS232 serial cable to IQ Central Control computer (maximum length 50 feet)

7. 1-inch conduit and fittings for communication cable to client satellite controllers

8. PE-cable or Y-cable for external radio to client satellite controllers

9. 2-inch conduit and fittings for station wires

10. Master valve and remote control valve wires

11. Flow sensor wire (PE 39, 89 or 54) to flow sensor

**Notes:**

1. IQ ESP-LXMEF Controller is available in 8- or 12-station base models. Additional modules in 4-, 8-, and 12-station versions may be added to bring the controller up to 48 stations maximum.

2. For ease of installation into a controller with more than 24 stations, install a junction box at the base of controller and transition larger valve and common wires from field to 18 AWG multi conductor wire to be used in controller.

3. Use steel conduit for above grade and SCH 40 PVC conduit for below grade conditions.

4. Provide proper grounding components to achieve ground resistance of 10 Ohms or less.

5. Use PE-cable with short haul modems for instances where controller is more than 50 feet from IQ Central Control Computer.