SECTION 653 PULL BOXES AND JUNCTION BOXES

653.1 Description

(1) This section describes providing, adjusting, and removing pull boxes and providing junction boxes.

653.2 Materials

653.2.1 Pull Boxes

(1) Furnish pull boxes made of corrugated steel pipe conforming to the material requirements of 521.2 with annular corrugations. Furnish manhole frames and solid lids conforming to 611.2. Use locking covers in pavement roadway locations and on 12-inch pull boxes.

653.2.2 Junction Boxes

(1) Furnish hot-dipped zinc coated cast iron junction boxes with a recessed cover from the department's approved products list. Ensure that the cover has a seal to prevent water from entering but provides for drainage and is attached with hex-head stainless steel bolts.

(2) Furnish grounding lugs and mechanical connectors UL or NRTL listed and approved for copper wire. Use stainless steel for mechanical connections to the junction box. Provide engineer-approved protection that totally and permanently seals connections with a silicone or rubberized caulk.

653.3 Construction

(1) Under the Pull Boxes Steel and Pull Boxes Steel Communications bid items, provide pull boxes with manhole frames and solid lids. The contractor may extend pull boxes as the plan details show using the same material as the pull box. Saw extensions parallel to the annular ring and clamp to the pull box using a band manufactured for this purpose. Excavate, place coarse aggregate drain material, and backfill as the plan details show. Dispose of surplus or unsuitable material as specified under 205.3.12.

(2) Also under the Pull Boxes Steel Communications bid items, use covers stamped with "WISDOT COMMUNICATIONS" as the plans show.

(3) Under the Junction Boxes bid items, provide junction boxes mounted and connected as the plans show. Grounding lugs are not required in junction boxes with less than 50 volt AC.

(4) Under the Adjusting Pull Boxes bid item, move existing pull boxes to grade level. Excavate, adjust subsurface components as required, and backfill as the plan details show. Dispose of surplus or unsuitable material as specified under 205.3.12.

(5) Under the Removing Pull Boxes bid item, excavate and remove existing pull boxes. Backfill with material similar to the material surrounding the removal. Salvage existing frames and covers and return them to the department. Dispose of surplus or unsuitable excavated material as specified under 205.3.12.

653.4 Measurement

(1) The department will measure all the bid items under this section as each individual box acceptably completed.

653.5 Payment

(1) The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER	DESCRIPTION	UNIT
653.0100 - 0150	Pull Boxes Steel (inch)	EACH
653.0180 - 0199	Pull Boxes Steel Communications (inch)	EACH
653.0200 - 0299	Junction Boxes (size)	EACH
653.0900	Adjusting Pull Boxes	EACH
653.0905	Removing Pull Boxes	EACH

(2) Payment for the Pull Boxes Steel and Pull Boxes Steel Communications bid items is full compensation for providing all materials including drain piping components and aggregate, manhole frames and covers; for required pull box extensions; conduit extensions less than 10 feet long including fittings; and for all excavating, backfilling, and disposing of surplus material.

(3) Payment for the Junction Boxes bid items is full compensation for providing all materials including grounding lugs and stainless steel mounting hardware, wiring if required,.

(4) Payment for Adjusting Pull Boxes is full compensation resetting the box elevation; for all required materials; and for all excavating, backfilling, and disposing of surplus material.

(5) Payment for Removing Pull Boxes is full compensation for removal, salvaging, and for all excavating, backfilling, and disposing of surplus material.