I. MATERIALS

THIS SPECIFICATION DEFINES THE 17" X 30" X 24" DEEP PULL BOX WITH COVER.

BOX DEPTH SHALL BE 24 INCHES. THE SIDES SHALL BE STRAIGHT WALLED OR TAPERED INWARDS TOWARDS THE TOP FOR STABILITY. BOX SHALL BE PROVIDED WITH A BOTTOM FLANGE AT LEAST 1–1/4 INCHES WIDE TO PREVENT SETTLING IN FIRM SOIL WHEN SUBJECTED TO SPECIFIED LOADS. TOP REGION OF THE BOX SHALL BE CONFIGURED TO PROVIDE "KEYING IN" TO LOCK THE BOX IN CONCRETE OR BLACKTOP WHEN INSTALLED IN DRIVEWAYS, SIDEWALKS, ETC.

THE COVER SHALL BE INTERCHANGEABLE AND SHALL FIT IN ANY BOX BUILT TO THIS SPECIFICATION. THE COVER SHALL BE FASTENED TO THE BOX WITH TWO 1/2"–13 NC STAINLESS STEEL PENTAHEAD BOLTS. THE BOX SHALL HAVE A "SELF–LOCATING" OR "FLOATING" NUT MADE OF STAINLESS STEEL AND SHALL BE REPLACEABLE. THE COVER SURFACE SHALL BE SKID RESISTANT AND SHALL HAVE A MINIMUM COEFFICIENT OF FRICTION OF 0.50.

KNOCKOUTS SHALL BE EASILY REMOVABLE AND LEAVE A SMOOTH EDGE. IF KNOCK–OUTS MUST BE MADE IN THE FIELD, IT SHOULD BE POSSIBLE TO DO SO WITH A SIMPLE TOOL SUCH AS A WOOD HOLE CUTTING SAW.

THE COVER AND BOX SHALL HAVE A MINIMUM VERTICAL TEST LOAD OF 22,500# OVER A 10"X10" AREA, AND BE SO IDENTIFIED ON THE SURFACE IN ACCORDANCE WITH TIER 15 OF THE ANSI/SCTE 77 2017 "SPECIFICATION FOR UNDERGROUND ENCLOSURE INTEGRITY" STANDARD

THE PULL BOX SHALL BE MADE OF HDP (HIGH DENSITY POLYMER) CONCRETE OR FRP (FIBERGLASS REINFORCED POLYESTER). MINIMUM COMPRESSIVE STRENGTH STRENGTH OF 20,000 P.S.I. AND SHEET MOLDING SMC FIBERGLASS. BOXES SHALL BE MADE WITH A CLOSED STEEL COMPRESSION MOLDING PROCESS FOR GUARANTEED GEOMETRICS AND DIMENSIONS.

WEIGHT SHALL BE LIMITED TO NOT MORE THAN 120 LBS. FOR THE BOX, AND 65 LBS. FOR THE COVER. THE COVER SHALL BE MADE OF HDP AND A COMBINATION OF FRP WITH A THICKNESS OF 2 INCHES. "ELECTRIC" SHALL BE PERMANENTLY MOLDED ON THE TOP SURFACE OF THE PULL BOX COVER. THE PART NUMBER AND YEAR OF MANUFACTURE SHALL BE INCLUDED ON THE COVER.

PULL BOX AND COVER TO BE APPROVED EQUAL IN QUALITY, DESIGN AND PERFORMANCE TO THE FOLLOWING:

17" X 30" X 24"		
VENDOR	BOX PART #	COVER PART #
OLDCASTLE	17301636P	–
QUAZITE	B12173024A	C12173002A
DURALITE	17301832	–

SPLICES IN PULL BOX SHALL BE MADE WITH COMPRESSION CONNECTORS AND 3M SCOTCHCAST RESIN ELECTRICAL SPLICES KITS NO. 82–A1 FOR 2–WAY SPLICES, 82–B1 FOR 3–WAY SPLICES, OR APPROVED EQUAL.

TAPE SHALL BE 1/2" VINYL TAPE SHALL BE CODED RED OR WHITE, SCOTCH #35, TAPE–RITE CO. OR APPROVED EQUAL.

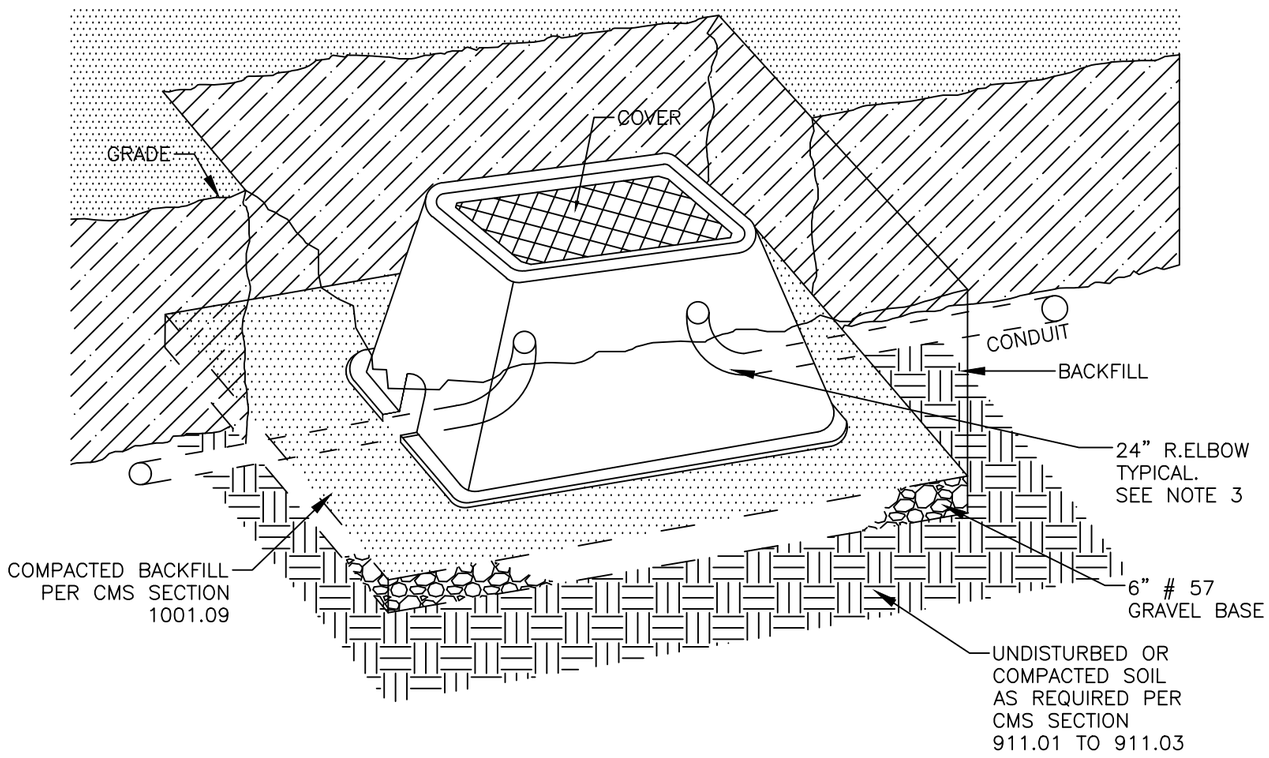
II. INSTALLATION

PULL BOXES SHALL BE INSTALLED AS SHOWN ON THE CONTRACT DRAWINGS, AND AS INDICATED IN THE FIELD BY THE ENGINEER. THE PULL BOX SHALL BE SUPPORTED BY A MINIMUM OF 6" DEEP GRAVEL BASE. THE GRAVEL BASE SHALL BE WIDER THAN THE SIDEWALLS OF THE ENCLOSURE. COMPACT BACKFILLS IN LAYERS NOT EXCEEDING 4" USING A MECHANICAL TAMPING DEVICE. THE CONTRACTOR SHALL ENSURE THAT THE PAVEMENT AND SIDEWALKS ARE TO GRADE LEVEL. PULL BOXES SET WITHIN SIDEWALKS SHALL HAVE EXPANSION JOINT INSTALLED PER ITEM 608.03 (C). PULL BOXES INSTALLED IN GRASS/LAWN AREAS SHALL BE SET FLUSH TO GRADE. ANY EXCESS EARTH SHALL BE HAULED AWAY FROM THE SITE.

THE BLACK #4 AWG CABLE (HOT) SHALL BE WRAPPED WITH RED TAPE (5) TIMES 3" BELOW THE SPLICE KIT. THE BLACK WITH WHITE STRIPE #4 AWG CABLE SHALL BE WRAPPED (5) TIMES WITH WHITE TAPE 3" BELOW THE SPLICE KIT.

III. BASIS OF PAYMENT

ITEM	UNIT	DESCRIPTION
MIS–61	EACH	PULL BOX, 17" X 30"



NOTES:

1. THE BACKFILL SHALL BE POWER TAMPED IN LAYERS NOT EXCEEDING 4 INCHES IN THICKNESS LOOSE MEASUREMENTS COMPLYING WITH SOIL DENSITY COMPACTION REQUIREMENTS UNDER SECTION 203.07 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS.
2. A 6" GRAVEL BASE (1/2"–1" #57) SHALL BE PROVIDED BELOW THE PULL BOX AND SHALL BE SUPPLIED, INSTALLED AND COMPACTED AS PER SECTIONS 703.01 AND 912.01–912.04 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS.
3. FOR 2" SCH. 40 CONDUIT, USE 24" R SWEEP 90. FOR CABLE–IN–DUCT, INSTALLATION MAY BE SWEPT INTO PULL BOX WITHOUT THE USE OF ELBOWS PROVIDED THE MANUFACTURER'S RECOMMENDED BEND RADIUS IS NOT EXCEEDED.

17" H X 30" W X 24" D

PULL BOX

DEPARTMENT OF PUBLIC UTILITIES - DIVISION OF POWER
CITY OF COLUMBUS, OHIO

MIS-61

DRAWN BY: SAW	DATE: 7/15/24	
APPROVED:		
SCALE: NONE	SHEET: 1 OF 1	61