**TOP VIEW OF CONCRETE PULL BOX**

3/4" DIA. NC THREADED LIFT INSERT OR PRESTRESSED CABLE LIFTING LOOP (4" TO 5" LOOP)

USE CLIP WHEN FRAME QUADRANT AREA IS IN DIRT.

FRAME EDGE CENTER CASTING ON PULL BOX

KNOCKOUT AREA 12" x 12" (OD DIM.) TYPICAL 4 SIDES

35" O.D.

ANCHOR & CLIP AS REQUIRED

8 EACH, #4 REBAR 26" LONG, GRADE 60 SPACED EACH SIDE OF THE KNOCKOUT (VERTICALLY CENTERED)

**SECTION X-X PULL BOX WITH FRAME AND LID**

3/4" DIA. LIFT INSERT 5" BELOW TOP OF CONCRETE

MASTIC

11" NOM

30"

1.5"

12"

6"

12" OF #57 COMPACTED AGGREGATE

**CLIP PROFILE** (NOM. VALUES)

THE CLIP SHALL BE MADE FROM A36 METAL, HD GALV (ASTM A123) AND IN THE SHAPE SHOWN.

4" HEAVY DUTY FRAME WITH SOLID LID WITH WORD "TRAFFIC" IN LID & PICK HOLE (MEETS ASTM A48 CLASS 358 SPECS)

3/8"x4" (NOM.) SS LT WEDGE ANCHOR, WASHER AND NUT WITH CLIP. FIELD DRILL ANCHOR HOLE IN CONCRETE PULL BOX. ANGLE WEDGE ANCHOR TO MISS THE WELDED WIRE FABRIC.

LIFTING LOOP

REMOVE WIRE MESH IN KNOCKOUT AREA CENTER DUCTS IN KNOCKOUT

ASTM A-185 WELDED WIRE FABRIC (6X6, W2.9 x W2.9)
2" RAISED LETTERS
FLUSH W/ TOP SURFACE

4" HEAVY DUTY FRAME WITH SOLID LID WITH
WORD "TRAFFIC" IN LID & PICK HOLE.
(MEETS ASTM A48 CLASS 358 SPECS)

1 1/2"

2 1/2"

3 1/2"

1"

(2) OPEN PICK HOLES
(EXTRA MATERIAL
UNDERNEATH IS SQUARED OFF)

FRAME AND COVER DETAIL

28 1/2"

28 1/4"

26 3/8"

4"

1 1/2"

1/2" STAINLESS STEEL
(UNC) GROUND BOLT
FIELD DRILL AND TAP
27/64" HOLE

GROUND BOLT INSTALLATION DETAIL

BONDING WIRE

NON-INSULATED ONE
HOLE TIN PLATED
COPPER COMPRESSION
TERMINAL, UL LISTED
AND APPROVED FOR #4
AWG COPPER WIRE

PULL BOX
27"

CITY OF COLUMBUS, OHIO
DEPARTMENT OF PUBLIC SERVICE
DIVISION OF DESIGN AND CONSTRUCTION

STD DWG
4021

07/01/2020

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NOTES:

ONE COAT OF WATER REPELLENT SEALER (SEE CITY OF COLUMBUS QUALIFIED PRODUCTS LIST) SHALL BE APPLIED TO THE INSIDE & OUTSIDE OF THE PULL BOX.

CONCRETE SHALL HAVE AIR ENTRAINMENT OF 6% ± 2% AND SHALL HAVE 4500 PSI STRENGTH AT 28 DAYS.

LID RING LOAD TRANSFER IS TO BE DISTRIBUTED BY USE OF A PREFORMED MASTIC JOINT MATERIAL.

CUT OFF CONDUITS SO THEY EXTEND NO MORE THAN THREE INCHES BEYOND THE INSIDE PULL BOX WALL AND PROVIDE BUSHINGS.

WHENEVER POSSIBLE, CONDUITS SHOULD ENTER THE PULL BOX VIA A KNOCKOUT. WHEN APPROVED BY THE DIVISION OF DESIGN AND CONSTRUCTION PERSONNEL, CONDUITS MAY ENTER THE PULL BOX THROUGH ITS WALL ONLY IF THE OPENING IS SAWN OR CORE DRILLED. CONDUITS SHALL NOT ENTER VIA THE BOTTOM OF THE PULL BOX WITHOUT APPROVAL BY THE DIVISION OF DESIGN AND CONSTRUCTION PERSONNEL. CONDUIT SHALL ENTER KNOCKOUT AS CLOSE TO 90° AS POSSIBLE.

THE WEDGE ANCHOR ASSEMBLY SHALL BE OMITTED WHENEVER THE ENTIRE AREA ABOVE THE KNOCKOUT (1/4 OF THE CASTING) IS EITHER ENCASED IN CONCRETE OR ASPHALT. THE ENCASEMENT SHALL BE CENTERED AROUND THE KNOCKOUT.

ENLARGING THE KNOCKOUT AREA IF REQUIRED SHALL BE DONE BY SAW CUTTING THE CONCRETE. NO OTHER METHOD IS ALLOWED. CONTRACTOR SHALL REPLACE THE CONCRETE HOUSING IF DAMAGED AT HIS EXPENSE.

AFTER THE CONDUITS HAVE BEEN INSTALLED, ANY OPENING IN THE PULL BOX WALL SHALL BE TOTALLY FILLED WITH MORTAR OR CONCRETE AND FINISHED FLUSH WITH THE INSIDE PULL BOX WALL. (NO voids)

PULL BOX BEARING CAPACITY TO EXCEED 40,000 POUNDS.

ANY CONDUIT THAT EXITS A PULL BOX AND DIRECTLY ENTERS ANY ELECTRONIC CABINET SHALL BE SEALED USING DUCT SEAL AND STEEL WOOL AT BOTH THE CABINET AND THE PULL BOX. AT LEAST THREE LAYERS OF EACH MATERIAL SHALL BE USED AND SHALL BE INSTALLED IN AN ALTERNATING PATTERN.

THE CONTRACTOR SHALL INSTALL NON-ORGANIC FIBERGLASS PULL TAPE WITH A MINIMUM 1800 FT./LBS TENSION STRENGTH IN CONDUIT TO FACILITATE CABLE PLACEMENT.

ALL UNUSED CONDUITS SHALL BE CAPPED AND THE CAPS SECURED TO THE CONDUITS WITH TAPE.

THE WORD "TRAFFIC" SHALL BE CAST IN THE LID WITH 2" RAISED LETTERS. SEPARATE, BONDED, OR WELDED TAGS SHALL NOT BE USED.

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PULL BOX
27"

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