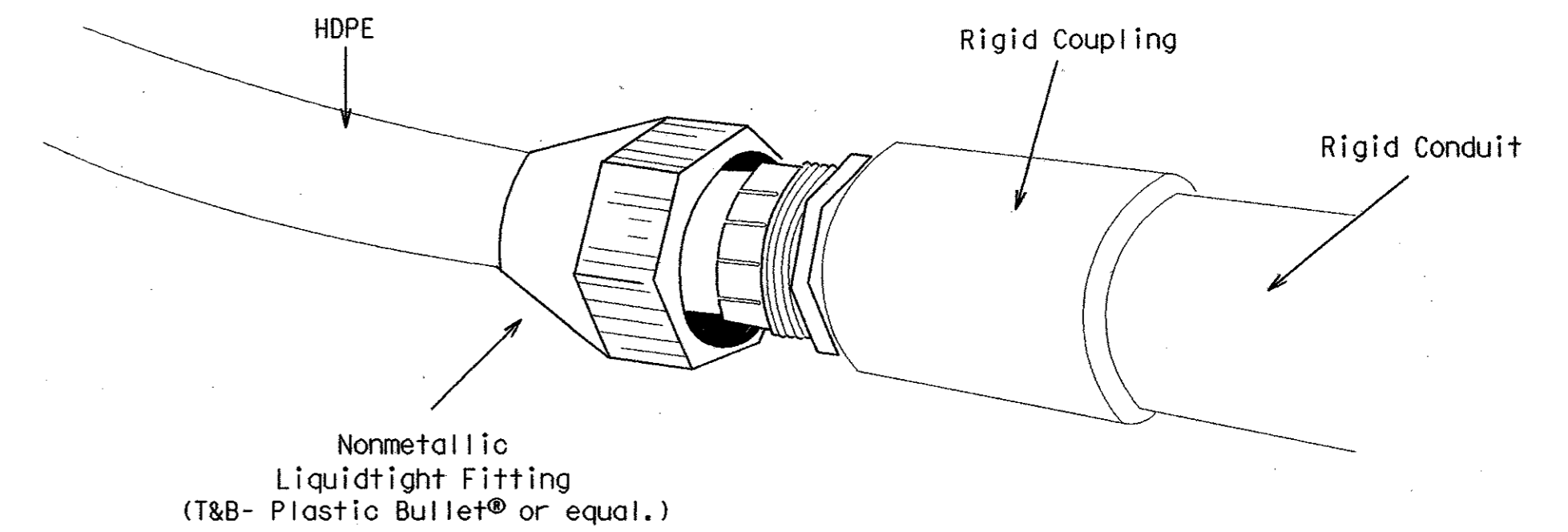
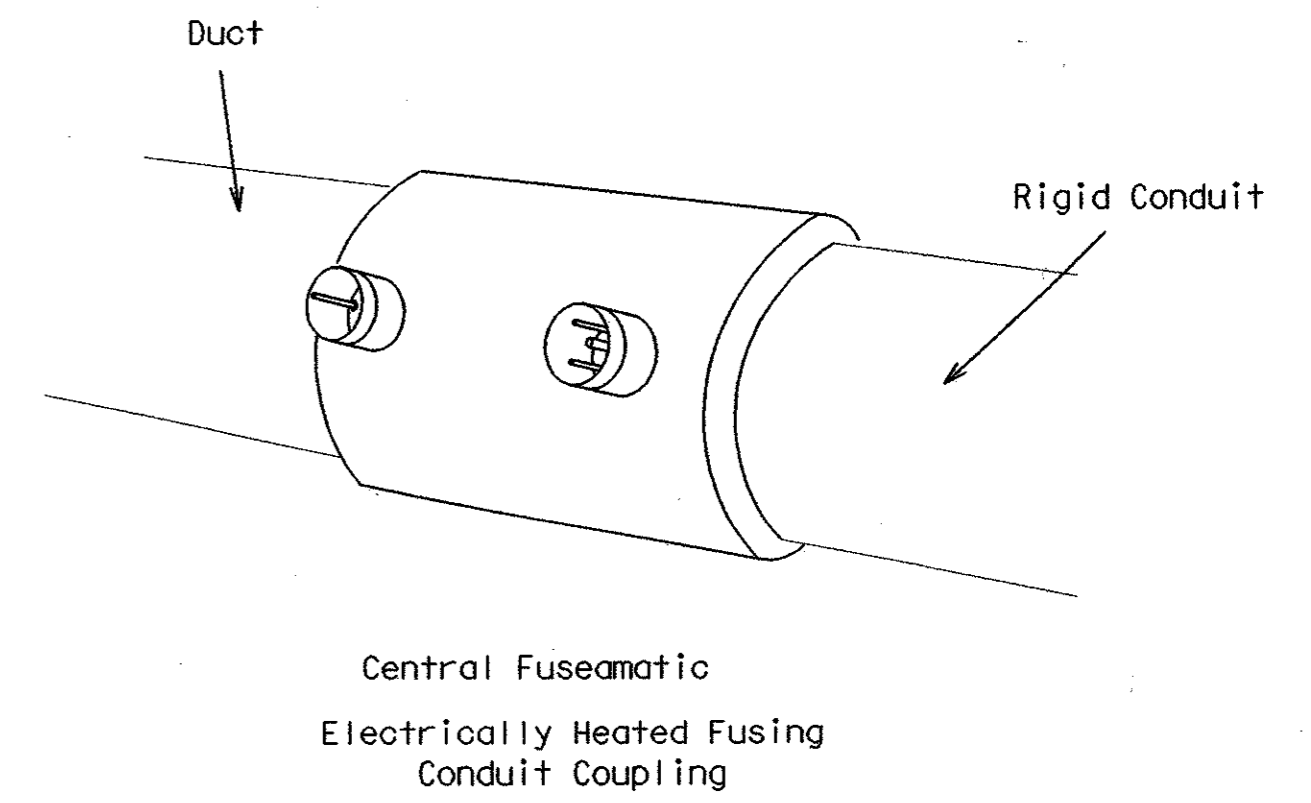


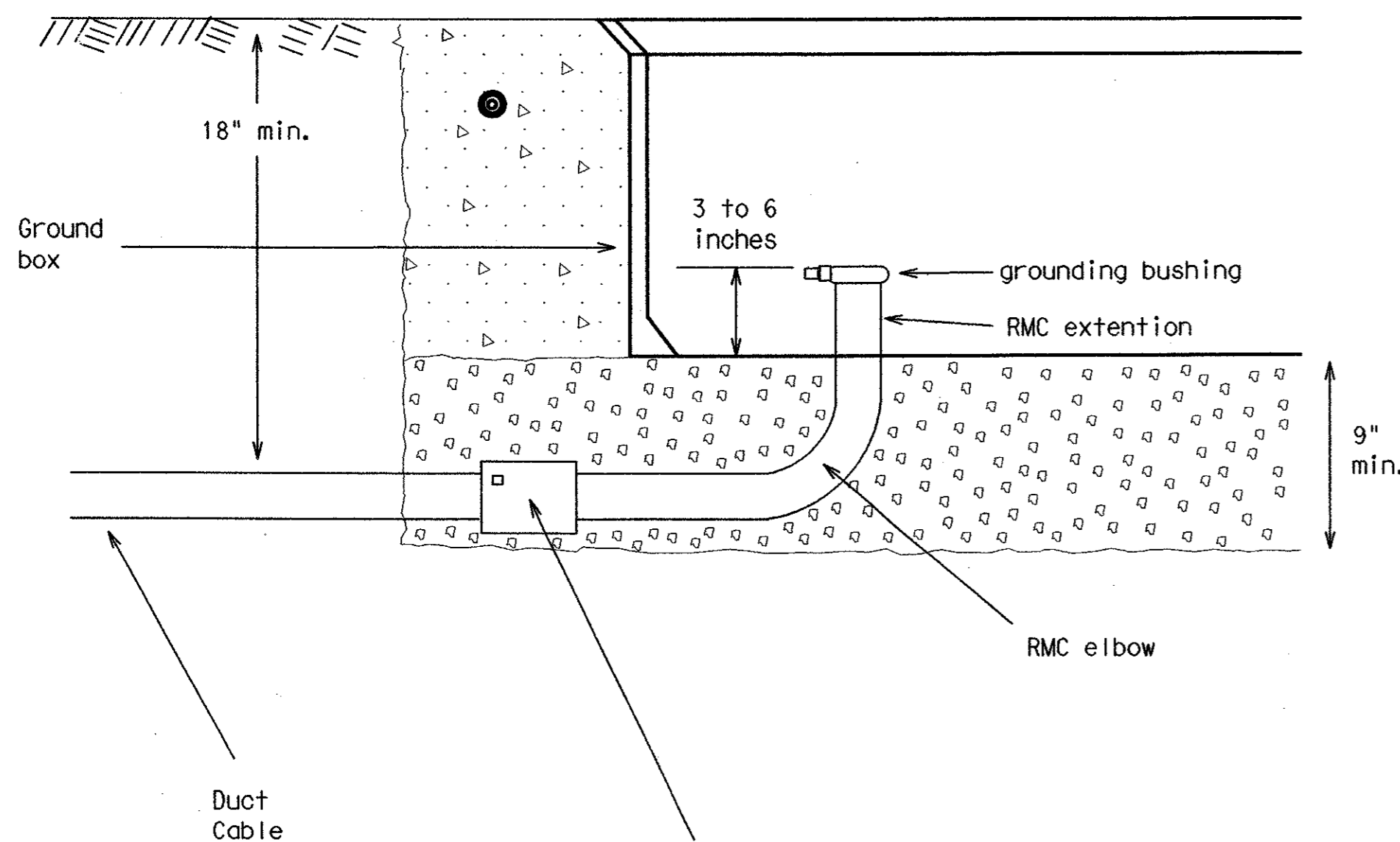
DISCLAIMER
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I. DUCT CABLE

- A. Duct cable shall be placed by the open trench method at a minimum depth of 18 inches. Bends in duct cable shall be made in the manner recommended by the manufacturer; minimum bending radius shall be 20 inches for 1 1/2 inch duct and 26 inches for 2 inch duct. Unless otherwise approved by the Engineer in writing, duct cable shall be 2 inch diameter. Handling of duct cable reels and installation of duct shall be as recommended by the manufacturer. Duct for duct cable is designed as a conduit system and shall be considered as such in NEC interpretations. Conductors shall not be spliced within a duct. Duct entering a ground box or foundation shall be coupled to a RMC elbow.
- B. Duct cable shall have factory installed conductors. AWG size of electrical conductors shall be as called for in the plans or as required by the National Electrical Code. Conduit bid as High Density Polyethylene (HDPE) conduit shall meet the requirements of duct cable except that the conduit shall be supplied without factory installed conductors. HDPE conduit may be substituted for duct cable. After HDPE conduit is installed, conductors shall be installed. AWG size of electrical conductors shall be as called for in the plans.
- C. Duct cable shall be extended through conduit casings in one continuous length without connection to the casing.
- D. After duct cable has been installed, a pull test will be made on conductors. If conductors cannot be freely pulled, Contractor shall replace or otherwise adjust installation to free up the conductors. Duct cable ends shall be sealed with foam electrical conduit sealant or with heat-shrinking material after pull test is completed.
- E. Sufficient clearance shall be left between each conduit ell so the bonding bushings may be correctly installed. Conduit cover is shown as 18 inches minimum, where run under a road, the minimum cover requirement is 24 inches.
- F. All duct splices shall be by means of UL listed fittings, threaded duct with PVC threaded connector or UL listed tiwrap fitting or central Fusamatic electrically heated fusing conduit coupling installed in accordance with the manufacturer's instructions and approved by the Engineer. Glue on connectors, water pipe fittings and heat shrink tubing splices will not be allowed.



EXAMPLES OF PROPER CONNECTIONS

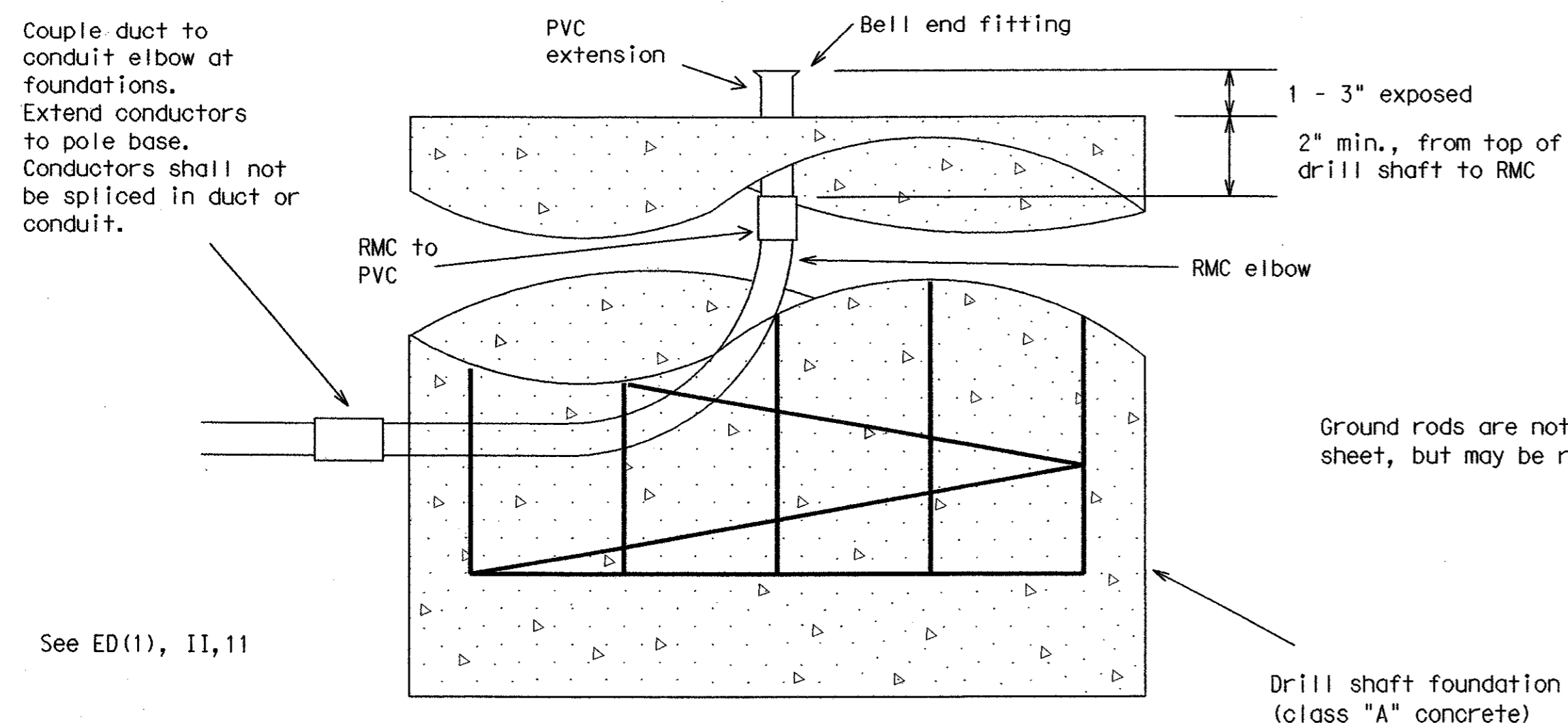


When the upper end of an RMC Ell does not enter the ground box, it may be extended with a Sch-40 PVC conduit nipple and bell end, provided there is 18" of cover over all parts of the elbow. If not, a rigid extension and ground bushing is required.

Gravel bed is to be a min. of 9 inches deep, placed under and not in the ground box. Gravel shall not encroach into the interior of the box.

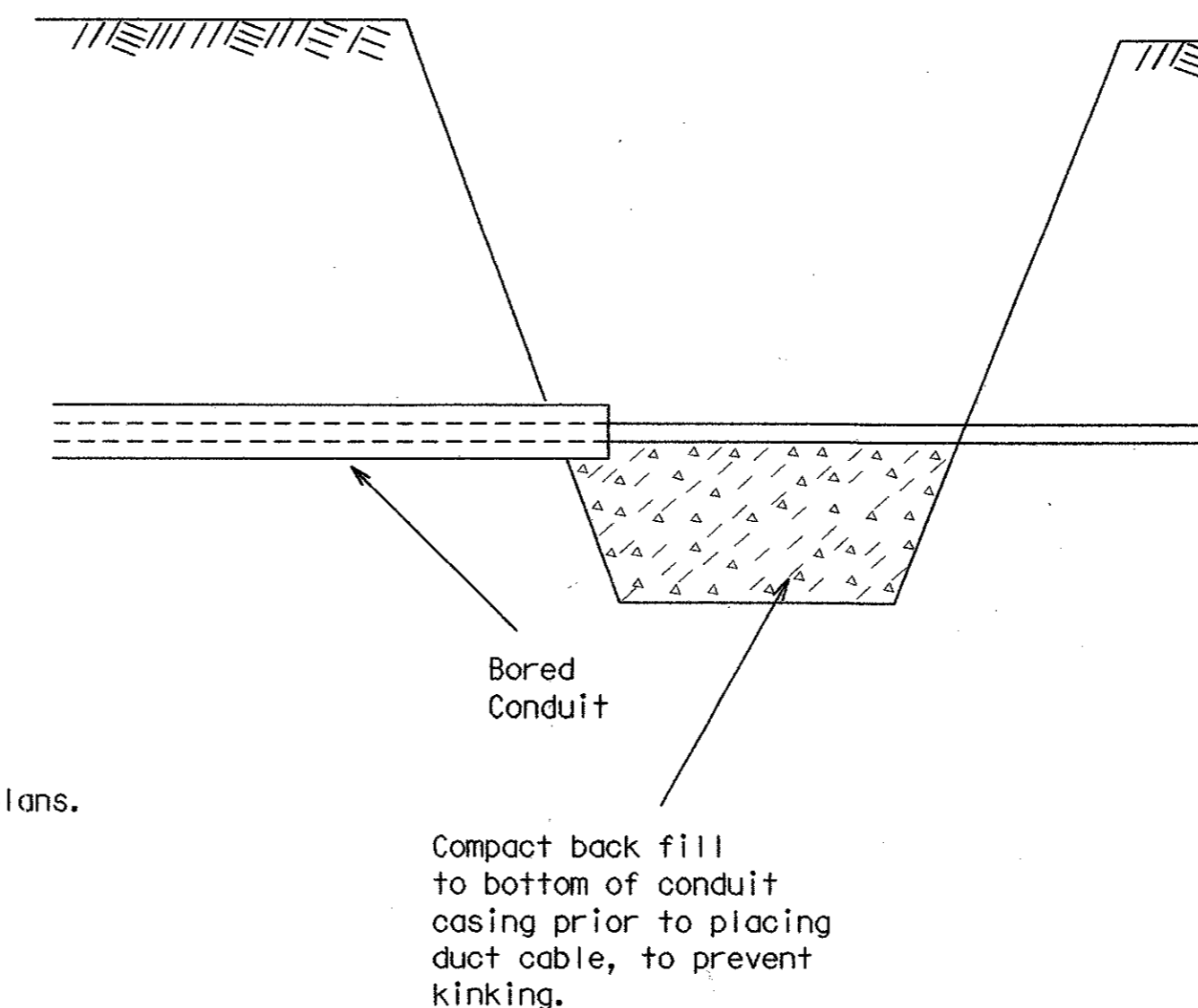
Duct Cable to Conduit Adapter - Duct cable - HDPE conduit and couplings shall comply with the material specification as shown on ED(1) II Conduit A. Materials 12.

DUCT CABLE AT GROUND BOX



See ED(1), II, 11

DUCT CABLE AT FOUNDATION



BORE PIT DETAIL

DN:	CK:	DW:	CK:
12	13	14	15
16	17	18	19
20	21	22	23
24	25	26	27
28	29	30	31
32	33	34	35
36	37	38	39
40	41	42	43
44	45	46	47
48	49	50	51
52	53	54	55
56	57	58	59
60	61	62	63

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STANDARD PLANS
 TEXAS DEPARTMENT OF TRANSPORTATION
 Traffic Operations Division

ELECTRICAL DETAILS-
 DUCT CABLE

ED(10)-03

REVISIONS	STATE DISTRICT	FEDERAL REGION	FEDERAL AID PROJECT	SHEET
12-00		6		BLS-8
3-03				
	COUNTY	CONTROL	SECTION	JOB
				HIGHWAY

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DN: KB, CK: JW, DW: DN, CK: GC, NEG NO.: