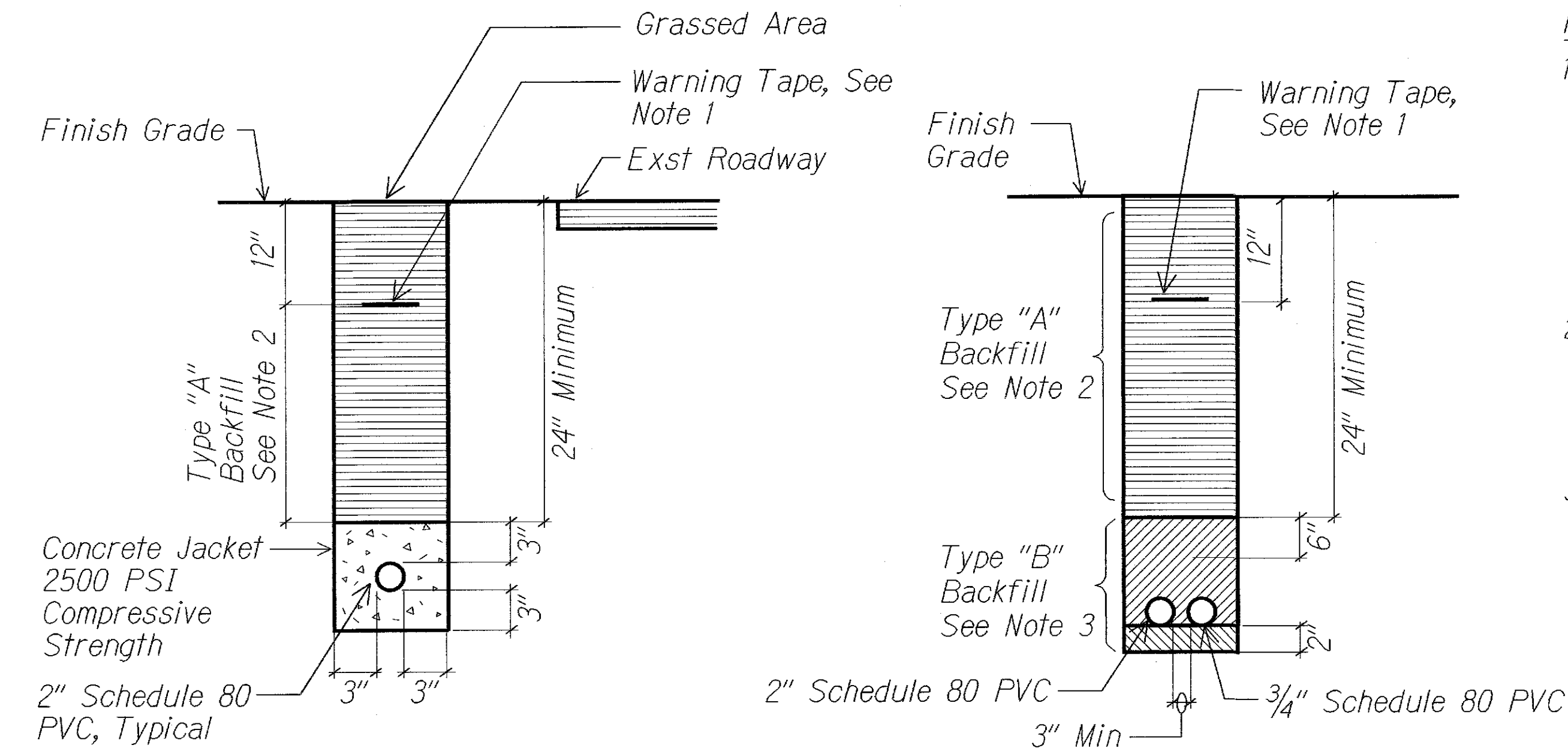


FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	61C-01-04M	2004	45	91

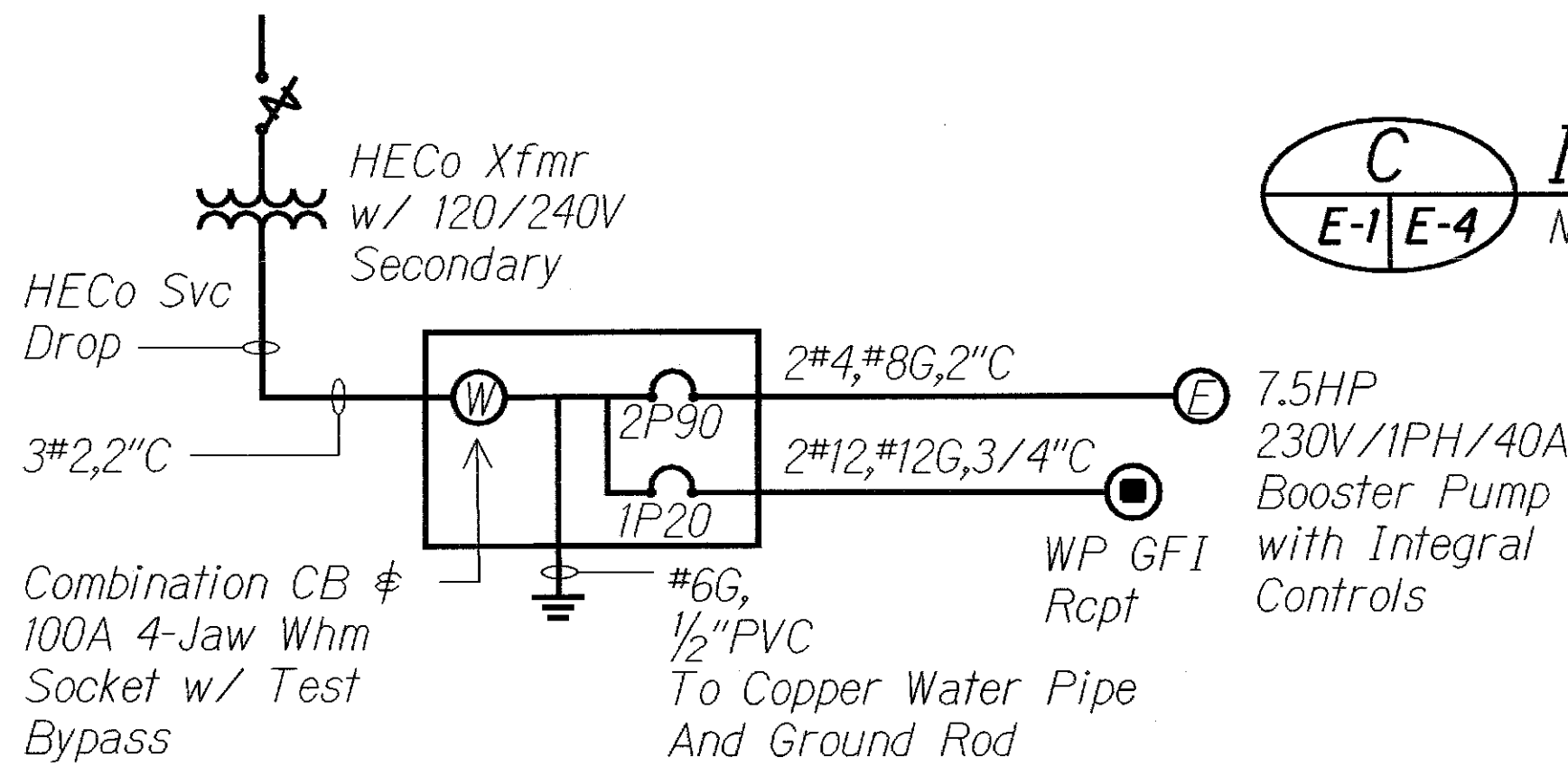


A DUCT SECTION **A**
E-1 E-4 NTS

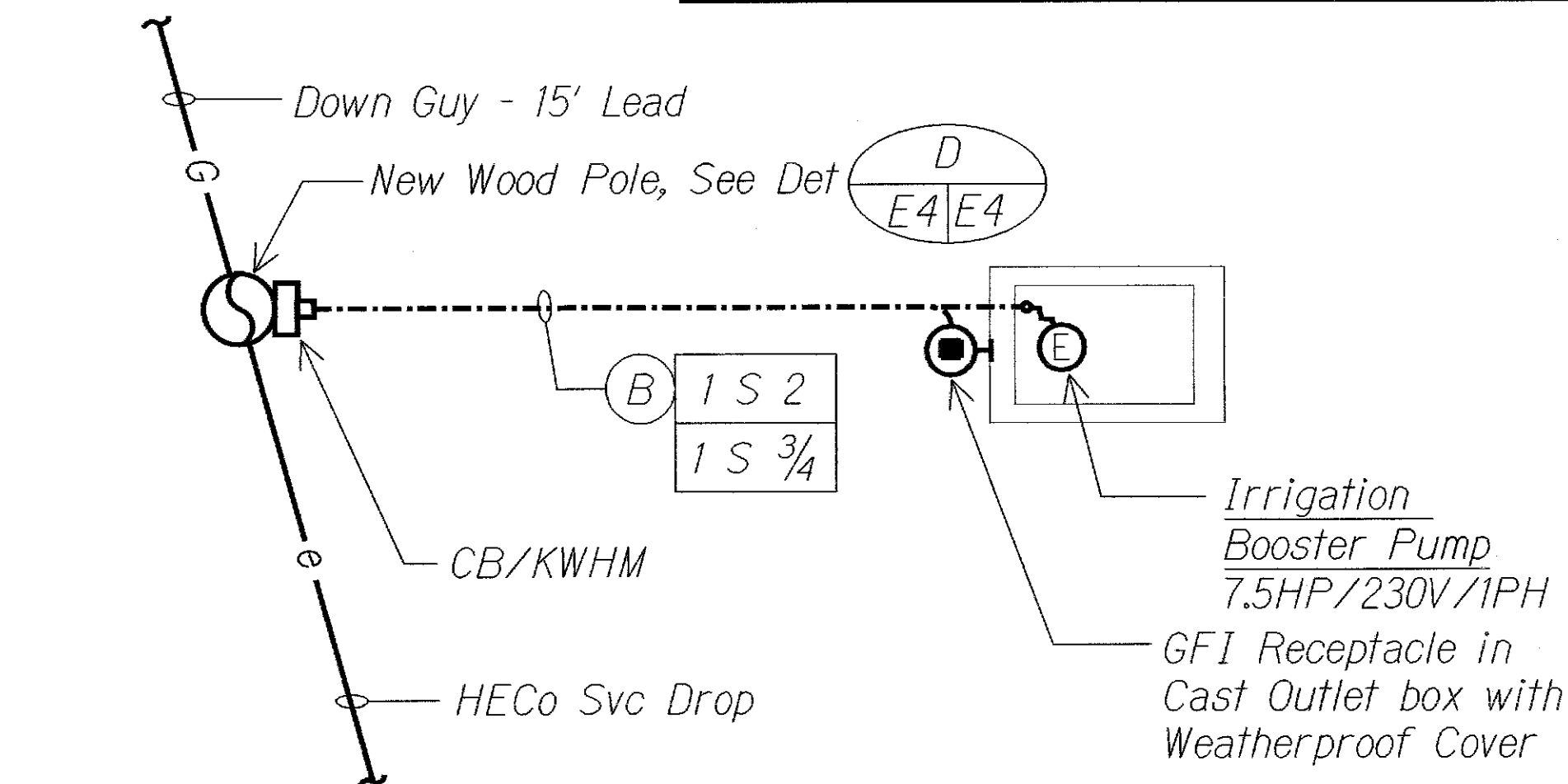
B DUCT SECTION **B**
E-1 E-4 NTS 01002-E16

NOTES:

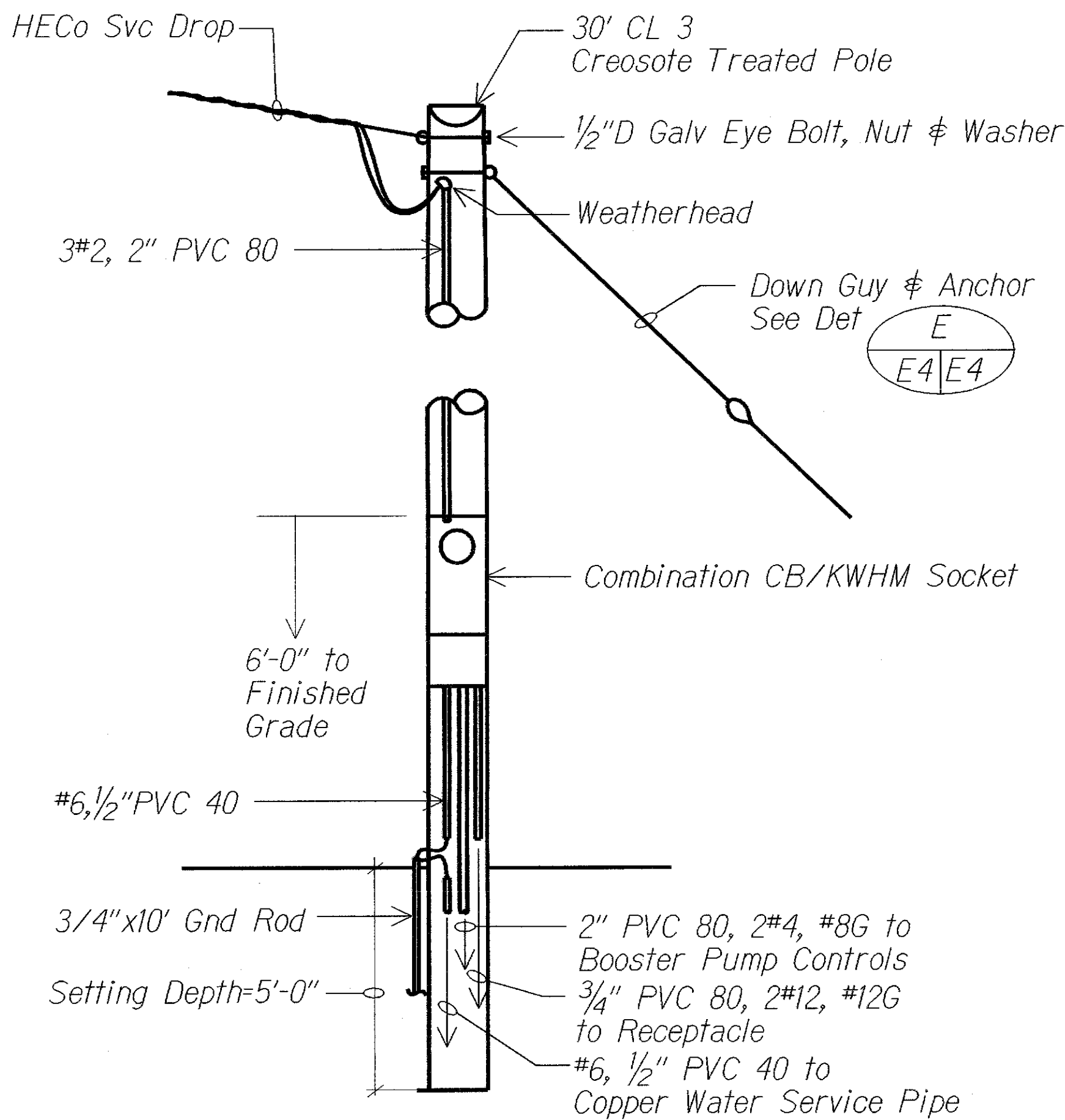
1. 8 MIL Thick Red Colored Plastic Warning Tape 3" Wide, Entire Length of Duct. Tape to Have Continuous Metallic Backing and Corrosion Resistant Foil Core. Warning and Identification to be Imprinted on Tape and Shall Read "Caution Buried Electric Cable Below". Message Shall Be Repeated Approximately Every Ten Feet.
2. Type "A" Backfill: Beach Sand, Earth or Earth and Gravel Used, the Maximum Rock Size Shall Be 1" and the Mixture Shall Contain Not More Than 50% By Volume of Rock Particles.
3. Type "B" Backfill: Same as Type "A" Except That if Earth & Gravel Used, the Mixture Must Pass a 1/2" Mesh Screen & Contain not More Than 20% By Volume of Rock Particles. 95% Compaction



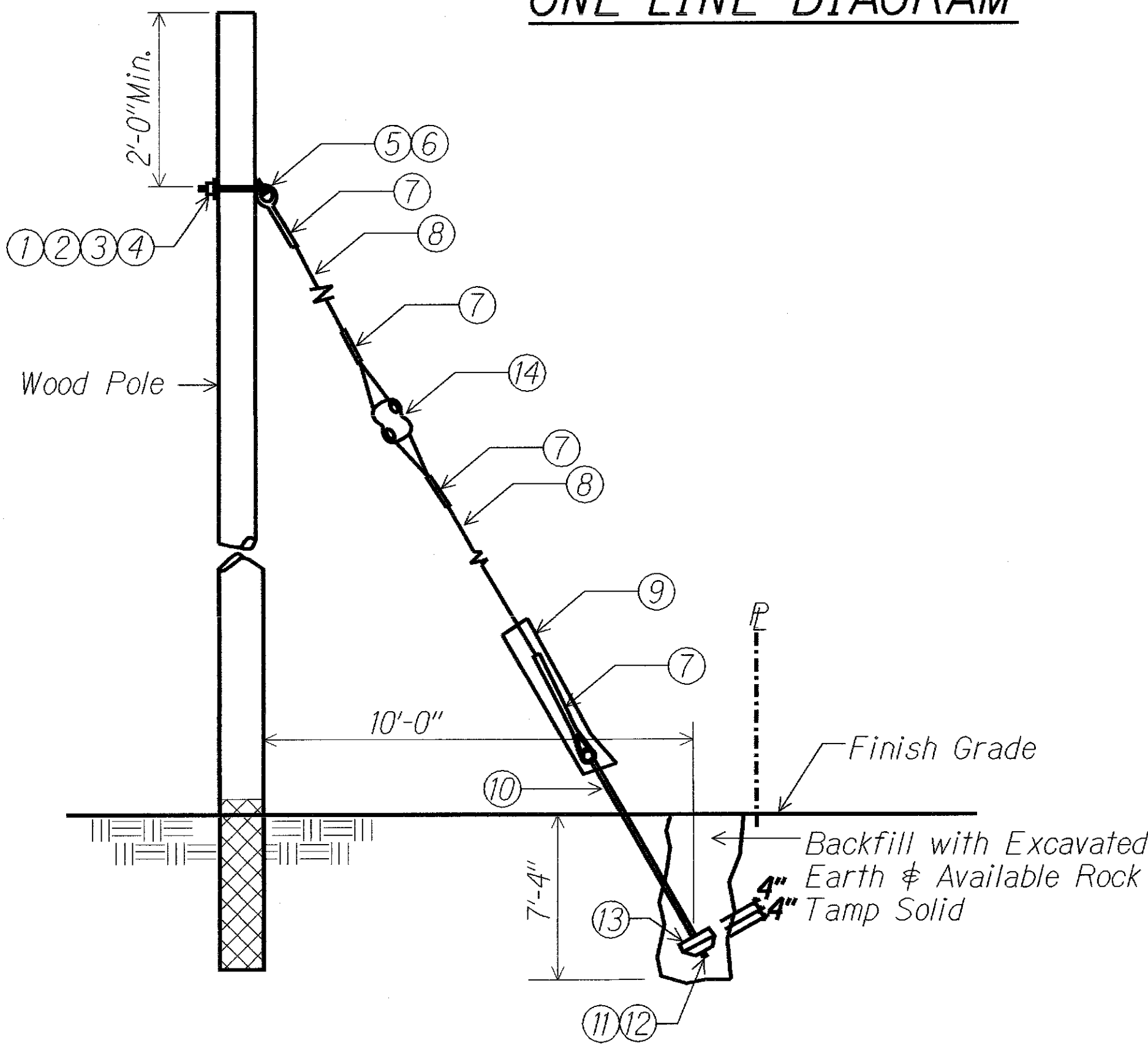
ONE-LINE DIAGRAM



C IRRIGATION PUMP ELECTRICAL PLAN
E-1 E-4 NTS

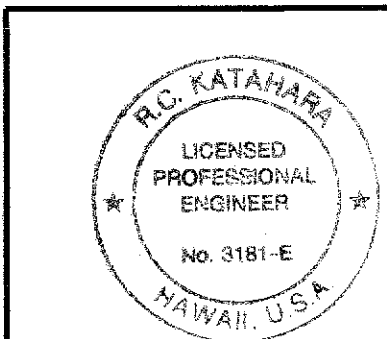


D ELECTRICAL SERVICE EQUIP DETAIL
E-1 E-4 NTS



E GUY ANCHOR DETAIL
E-4 E-4 NTS

Item	Description
1	Washer, Round, Galvanized, 3/8"
2	Nut, Square Head, Galvanized, 5/8"
3	M-F Locknut, 5/8"
4	Angle Thimble Eye Bolt, 5/8"
5	Screw, Lag, Galvanized, 1/2"x4"
6	Lift Plate, 3 Hole, 1/4" Steel Plate
7	Guy Grip, Galvanized
8	Galvanized Stranded Guy Wire, 5/8" Dia.
9	Guy Protector, 8'-0" PVC or Vinyl
10	Anchor Rod, Twin Eye, 8'-0"x1"
11	Washer Square, Galvanized, 1"
12	Nut, Galvanized, Square Head, 1"
13	Concrete Anchor
14	Guy Strain Insulator



This work was prepared by me or under my supervision.
Date: 9/22/03
MK ENGINEERS, LTD.
LICENSE EXPIRATION DATE: 4/30/04

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

DUCT SECTIONS & MISC. DETAILS

KALANIANA'OLE HIGHWAY
EMERGENCY LANDSLIDE REPAIRS AT CASTLE JUNCTION

PROJECT NO. 61C-01-04M

Scale: Date: 9/26/03

SHEET No. E-4 OF 4 SHEETS