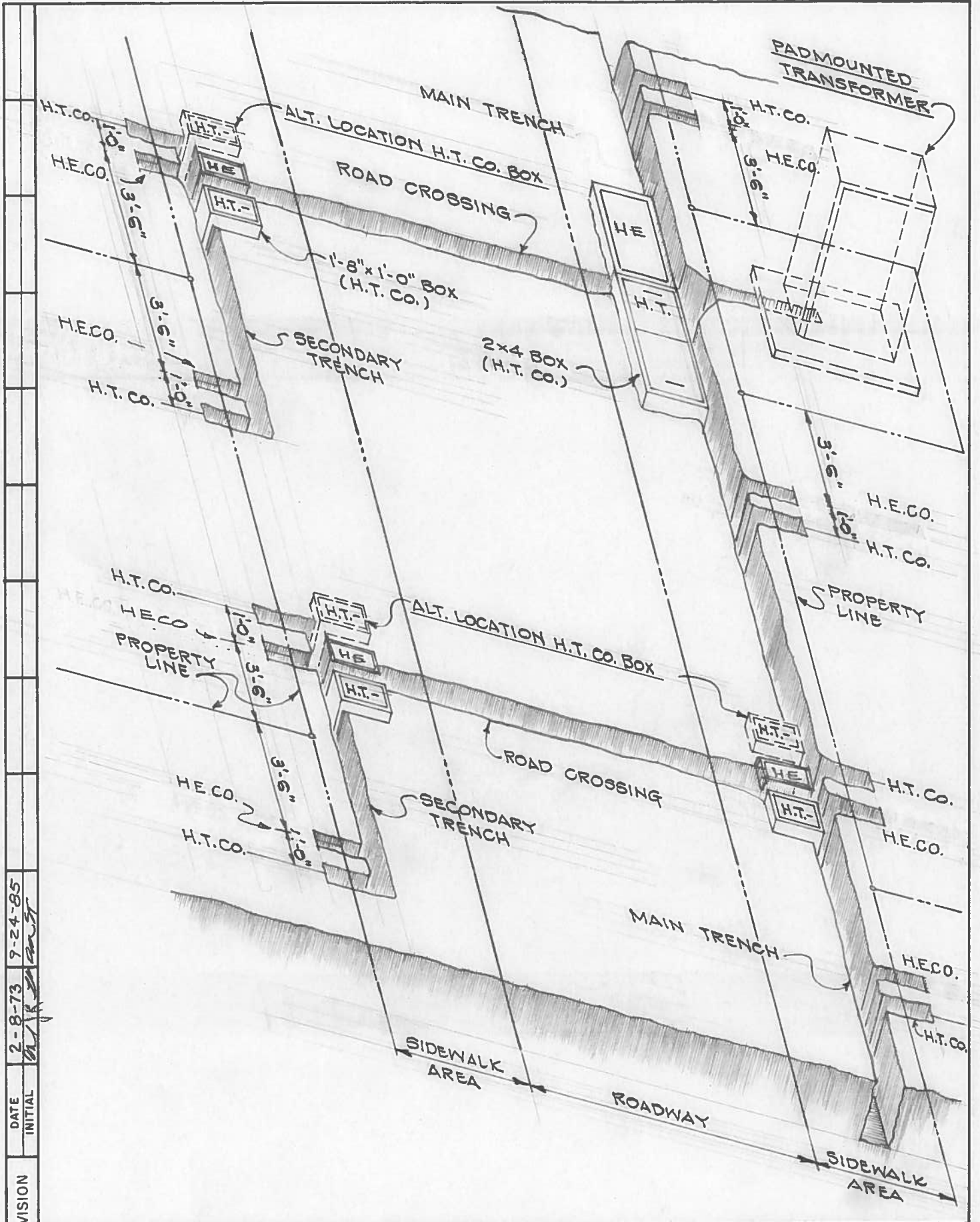




**Hawaiian
Electric**

The information found in this document are general guidelines that may be used to aid in the preparation of your service request proposal. Please be advised that depending on the specific needs and actual conditions of your project, Hawaiian Electric may require your design to comply with different specifications including specifications that include more stringent requirements than those included in these design specification guidelines. For further guidance and clarification on the actual specifications that will apply to your particular project, please refer to instructions issued by Hawaiian Electric's Planner or Engineer who is assigned to your particular (Project/Review Request/...). Additionally, please be advised that Hawaiian Electric reserves the right to require additional modifications to any approved design if it is determined during actual construction that additional modifications must be made to address certain field conditions that were not detected or Hawaiian Electric was unaware of during the design review process.





DATE INITIAL
 2-8-73 JH
 7-24-85 JH

REVISION

DRAWN JH

DESIGNED TH/EM

APPD. JH RDL TEL

REDRAWN

SUPERSEDES

TYPICAL URD
 TRENCHING LAYOUT
 LIQ SYSTEMS

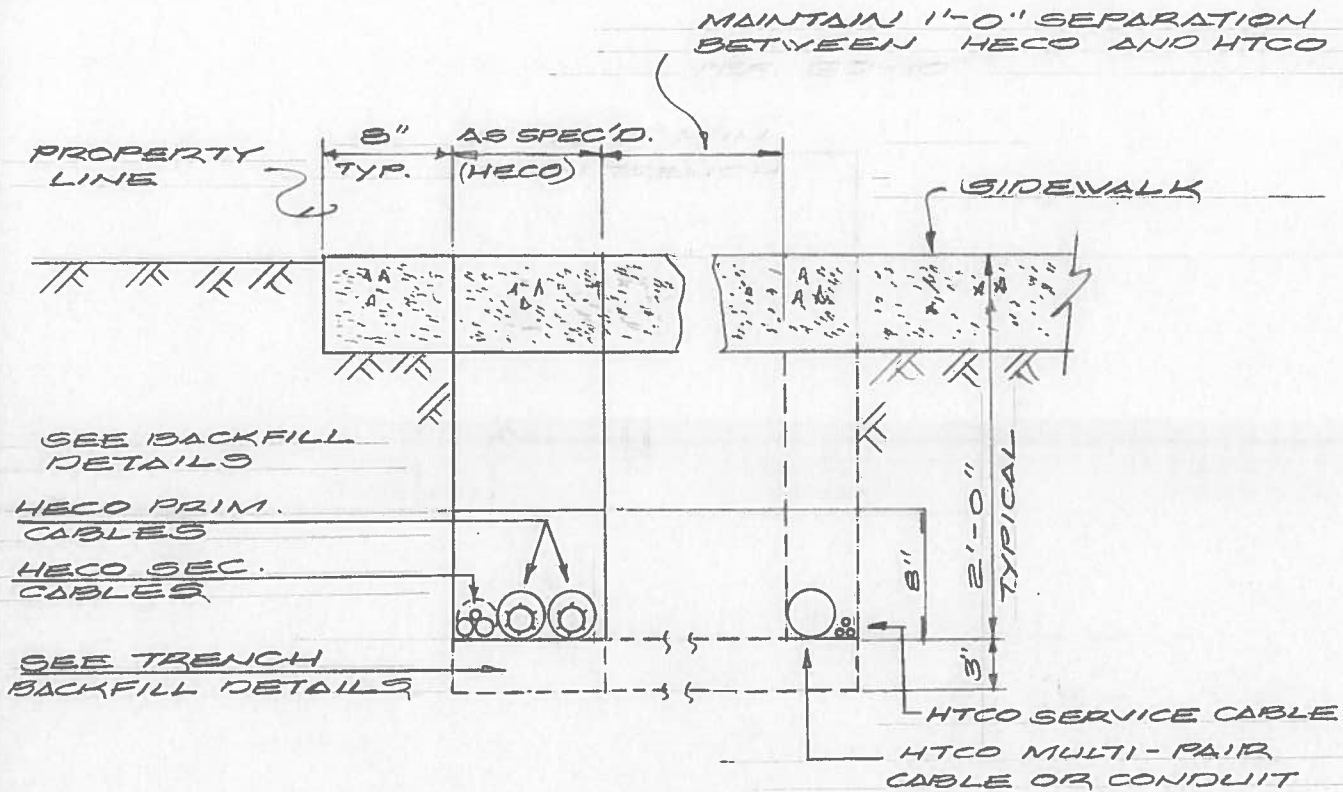
ORIGINAL 9-14-70

22-1012

Rev.
2

STANDARD CONSTRUCTION
 HAWAIIAN ELECTRIC CO. INC.

SHEET 1



TYPICAL TRENCHING DETAIL
UNDER SIDEWALK
FIGURE 1

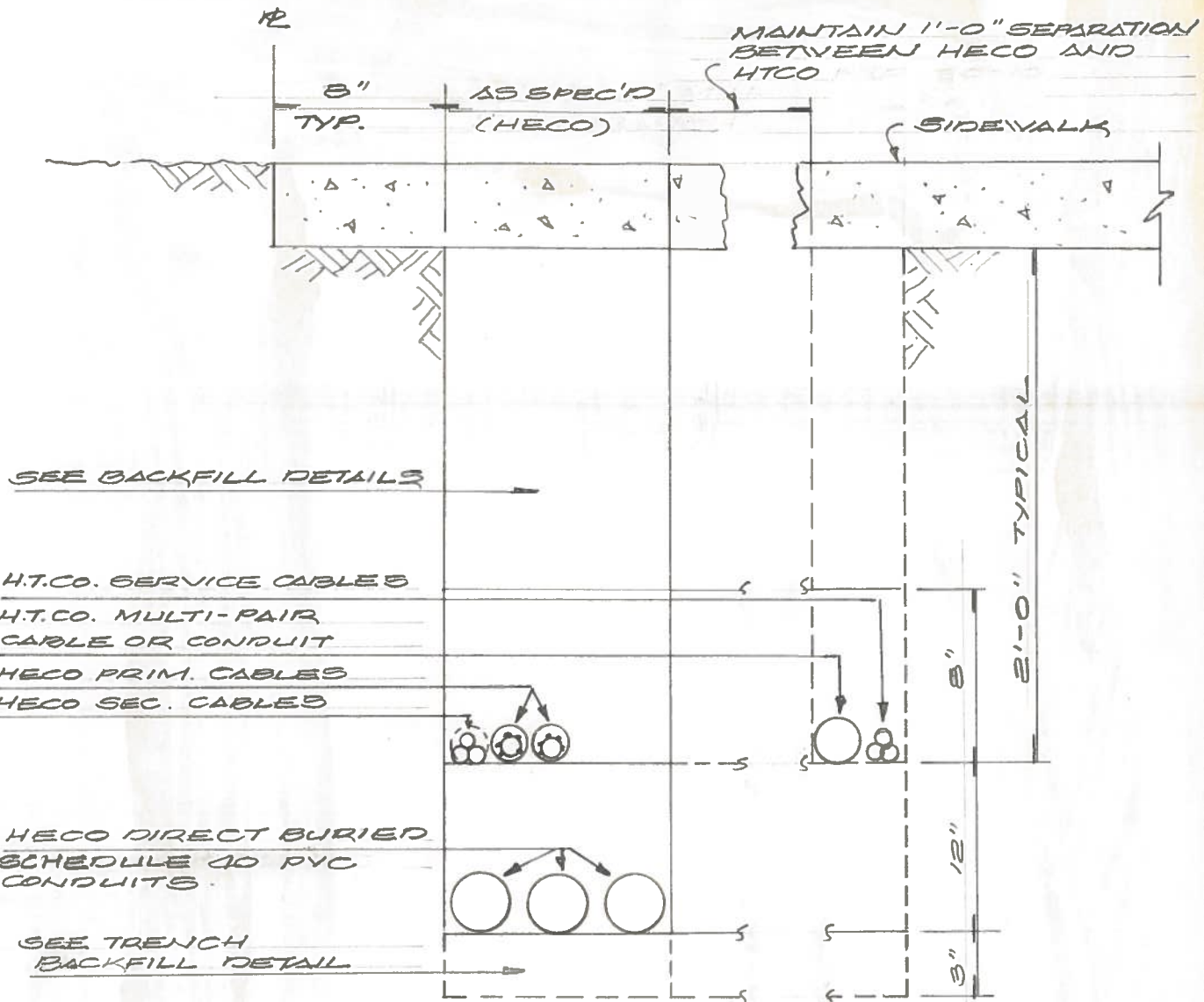
The depth and width for the main trench shall normally be as shown in this detail, unless indicated otherwise on the work print. The HECO & HTCO Engineering Dept. shall specify wider trenches when necessary to adequately accommodate cables and/or conduit with all of the cables and/or conduit occupying the trench floor.

Std. 30-1010 Typical Backfill Details

HE 534/C

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SUPERSEDES			ORIGINAL 9/14/70
TYPICAL URD TRENCHING UNDER SIDEWALK UG SYSTEMS			22-1012
			SHEET 2
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SEE BACKFILL DETAILS

H.T.CO. SERVICE CABLES
 H.T.CO. MULTI-PAIR
 CABLE OR CONDUIT
 HECO PRIM. CABLES
 HECO SEC. CABLES

HECO DIRECT BURIED
 SCHEDULE 40 PVC
 CONDUITS

SEE TRENCH
 BACKFILL DETAIL

TYPICAL TRENCHING DETAIL
UNDER SIDEWALK WITH
DIRECT BURIED CONDUITS
FIGURE 2

SEE SHEET 2 FOR NOTES

DATE 3-14-89
 INITIAL [Signature]

REVISION

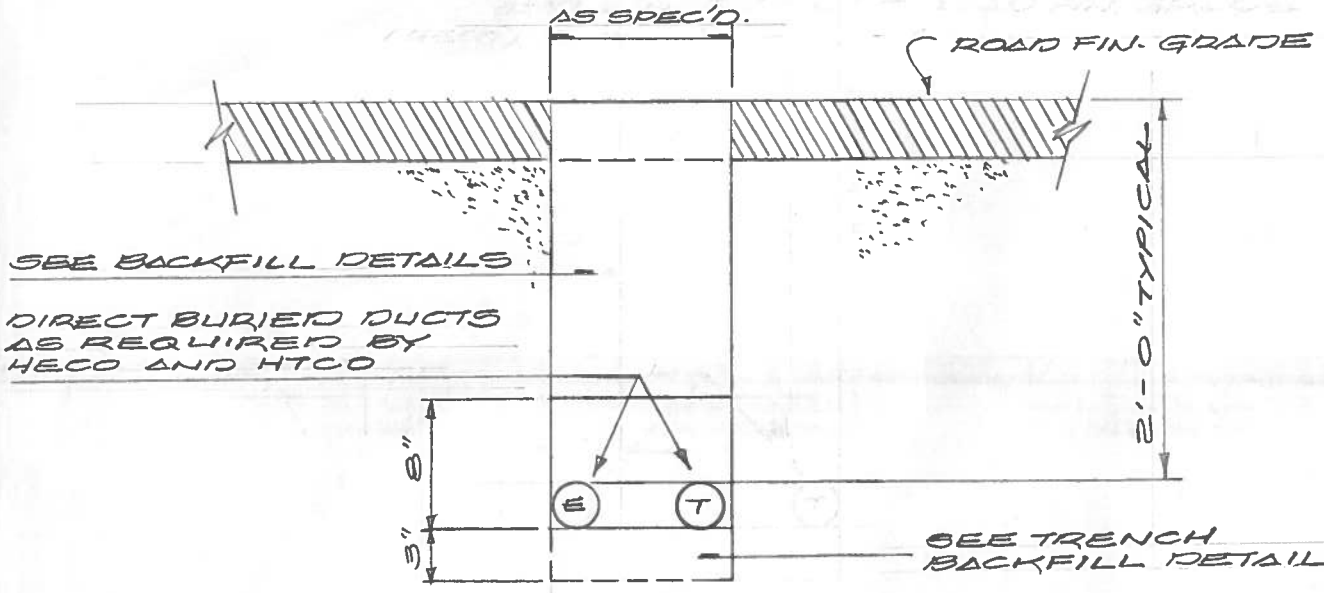
DRAWN MM DESIGNED [Signature] APPD. [Signature] REDRAWN SEPT 1985

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ENGINEERING STANDARD HAWAIIAN ELECTRIC CO. INC. TYPICAL CURB TRENCHING UNDER SIDEWALK U.G. SYSTEMS 22-1012 Rev. 1

SHEET 3

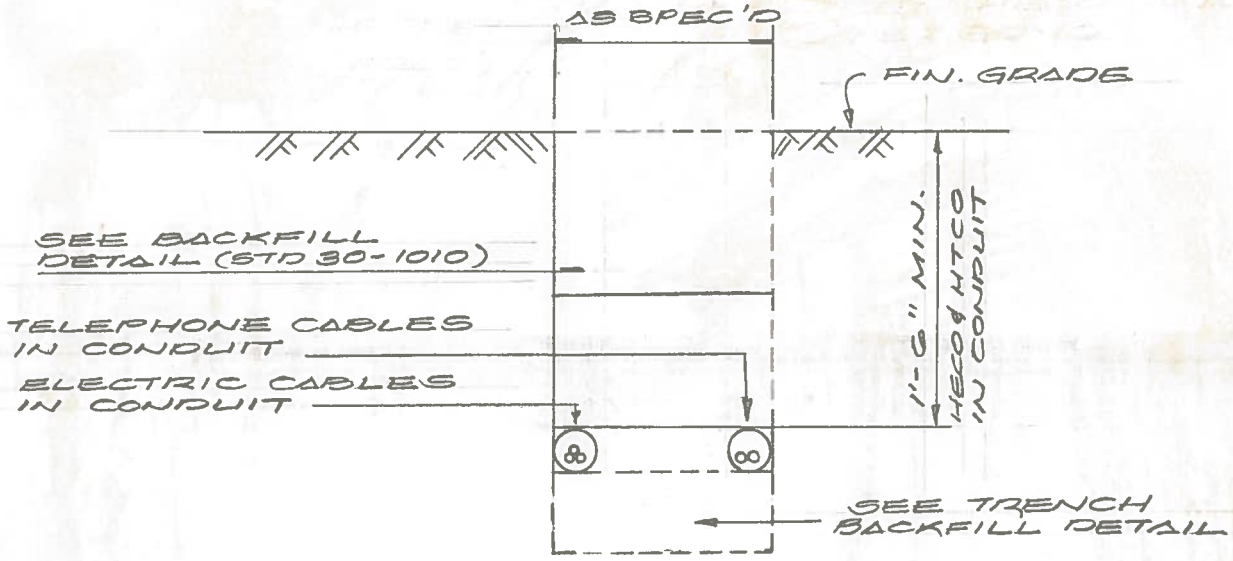
HE 534/C



TYPICAL TRENCHING
FOR ROAD CROSSINGS
FIGURE 3

The number and sizes of conduits for road crossings shall be specified by the HECO and HECO for each project.

HE 533/G	DATE	INITIAL	REVISION	DRAWN MM	DESIGNED TN/om	APPD. <i>[Signature]</i>	REDRAWN SEPT 1985
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	HAWAIIAN ELECTRIC CO. INC.						22-1012
						SHEET 45	



CONDUIT SERVICE TRENCH DETAIL
SERVICE TRENCHING WITHIN CUSTOMER'S PROPERTY
FIGURE 4

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WITHIN CUSTOMER'S PROPERTY
UG SYSTEMS

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