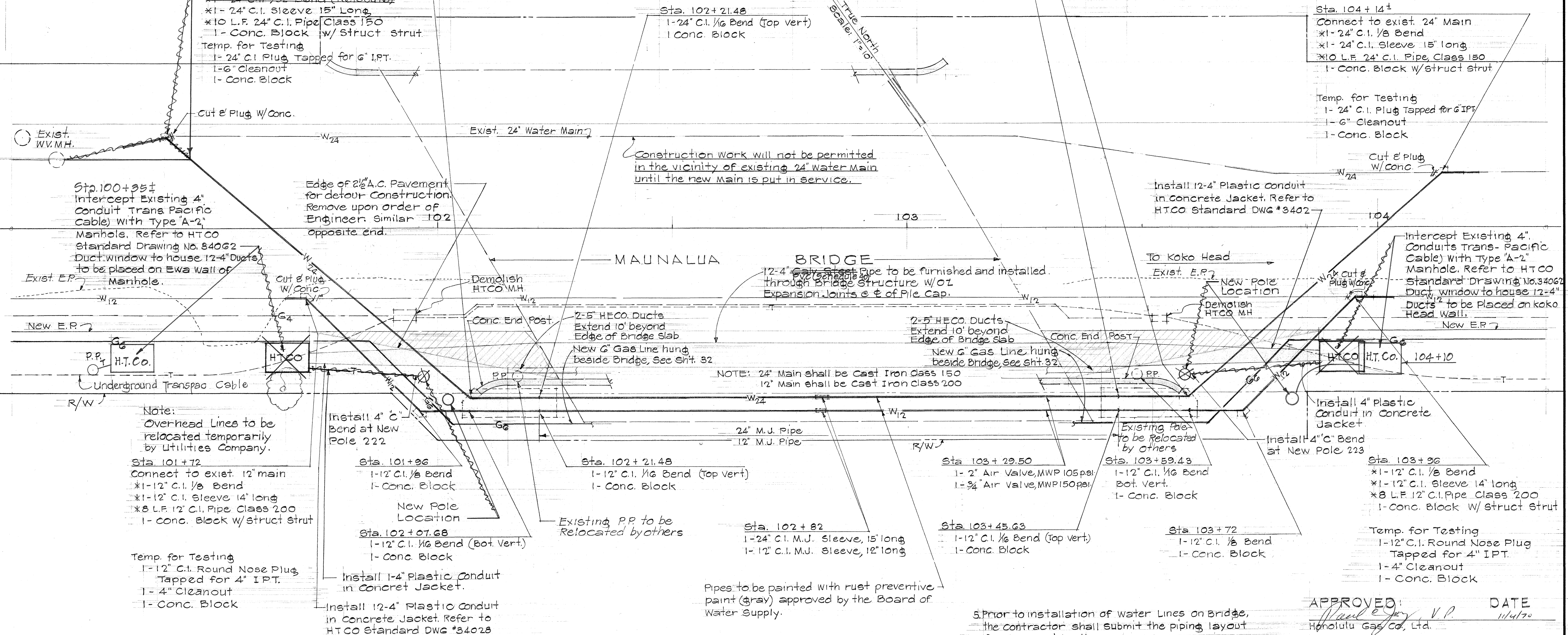


GAS NOTE

Existing Gas Line to be relocated by Gas Co.



FED. ROAD DIST. NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	740A-01-70	1970	6	40

Note: Overhead Lines to be relocated temporarily by Utilities Company.

Sta. 101+72: Connect to exist. 12" main. *1- 12" C.I. 1/8 Bend. *1- 12" C.I. Sleeve 14" long. *8 L.F. 12" C.I. Pipe Class 200. 1- Conc. Block w/struct. strut.

Temp. for Testing: 1- 12" C.I. Round Nose Plug Tapped for 4" IPT. 1- 4" Cleanout. 1- Conc. Block.

Sta. 101+96: 1- 12" C.I. 1/8 Bend. 1- Conc. Block.

Sta. 102+07.68: 1- 12" C.I. 1/8 Bend (Bot. Vert.). 1- Conc. Block.

Install 1-4" Plastic Conduit in Concrete Jacket. Refer to HTCO Standard DWG #34028.

Sta. 102+21.48: 1- 12" C.I. 1/8 Bend (Top Vert.). 1- Conc. Block.

Sta. 102+82: 1- 24" C.I. M.J. Sleeve, 15" long. 1- 12" C.I. M.J. Sleeve, 12" long.

Sta. 103+29.50: 1- 2" Air Valve, MWP 105 psi. 1- 3/4" Air Valve, MWP 150 psi.

Sta. 103+45.63: 1- 12" C.I. 1/8 Bend (Top Vert.). 1- Conc. Block.

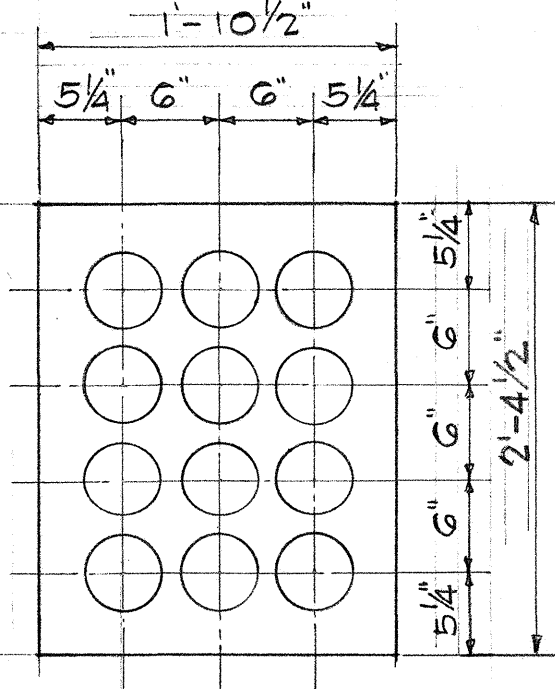
Sta. 103+72: 1- 12" C.I. 1/8 Bend. 1- Conc. Block.

Sta. 103+96: *1- 12" C.I. 1/8 Bend. *1- 12" C.I. Sleeve 14" long. *8 L.F. 12" C.I. Pipe Class 200. 1- Conc. Block w/Struct. Strut.

Temp. for Testing: 1- 12" C.I. Round Nose Plug Tapped for 4" IPT. 1- 4" Cleanout. 1- Conc. Block.

HTCO NOTES

The Contractor shall notify HTCO Inspector 24 hours before pouring of concrete and backfilling. (Ph. 737-6342)



3 WIDE X 4 HIGH
12 DUCTS
MANHOLE ENTRANCE TO POLES 222 & 223

WATER NOTES

- Unless otherwise specified, all material and construction of water system facilities and appurtenances shall be in accordance with the STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, dated 1969, as amended, of the Hawaii Highways Division, Department of Transportation.
- Prior to excavating for new drain, sewer and other utility lines, the Contractor shall verify in the field the location of existing water mains and appurtenances. Where the installation of new drain, sewer or other utility lines are to cross over or under existing water mains, the Contractor shall expose the existing water mains prior to trenching. Excavation around water mains shall be done by hand.
- Items indicated as "relocate" on the plans shall be removed, cleaned, painted and reinstalled at the new location by the Contractor unless otherwise specified.
- Asterisk (*) indicates work to be performed by Board of Water Supply. Materials to be furnished by the Contractor unless specified as "relocate".

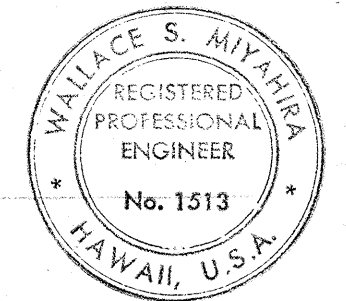
- Prior to installation of water lines on Bridge, the Contractor shall submit the piping layout for approval by the engineer.
- The minimum clearance between fire hydrants and utility poles or light standards shall be 3.0 feet.
- Approval by the Board of Water Supply is only to assure that adjustments to the water system are in conformance with the requirements of the BWS standards. Discrepancies if any, of alignments, grades, fittings, etc., shall be the responsibility of the engineer who prepared the plans.
- The Contractor shall notify the Board of Water Supply in writing one week prior to commencing work on the main.
- The location of existing underground utilities & structures as shown on the plans are from the latest available data but not guaranteed as to the accuracy or that other obstacles may not be encountered in the course of the work. The Contractor shall be responsible and shall pay for all damages to existing utility lines.

APPROVED: *Paul E. Jay, V.P.* DATE: 11/4/70
Honolulu Gas Co., Ltd.

P. Lunn 11-11-70
Supervising Engineer, OSP-East Div. HTCO, Ltd.

W. C. Liao 11/13/70
Hawaiian Electric Co., Inc.

A. K. Kawai 11/19/70
Asst. Chief Engineer BWS.



STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

KALANIANAOLE HIGHWAY
WIDENING
MAUNALUA BRIDGE
UTILITY RELOCATION
PLAN

Proj. No. 740A-01-70
Scale: As Shown
Date: Oct. 1970

SHEET No. 1 OF 1 SHEETS

DATE	11/19/70
DESIGNED BY	W. C. Liao
TRACED BY	W. C. Liao
NOTED BY	W. C. Liao
CHECKED BY	W. C. Liao
ORIGINAL PLAN	No.
NOTE BOOK	No.