

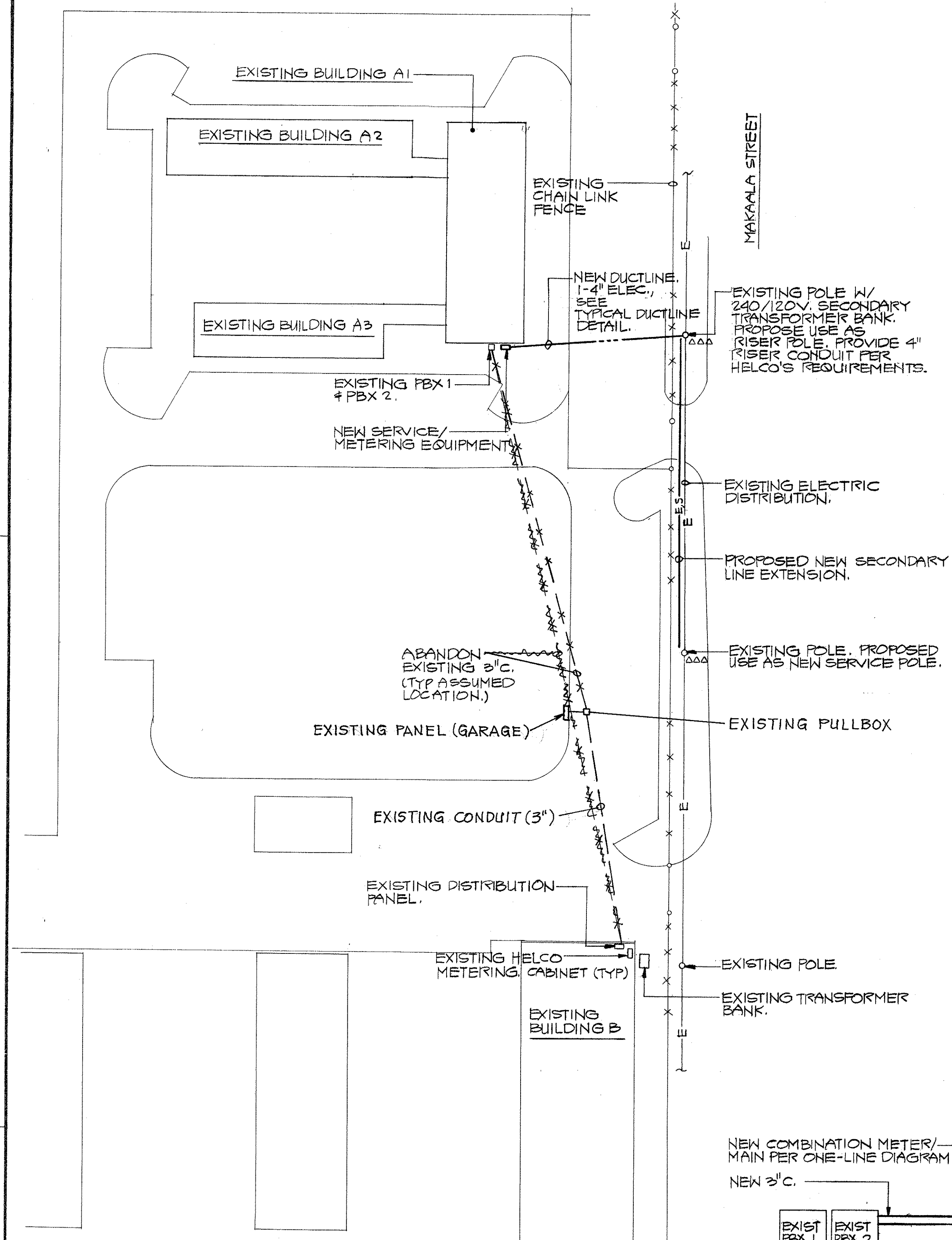
FED. ROAD DIST. NO.	STATE	FED-AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	HWY-H-01-88M	1988	2	2

GENERAL NOTES

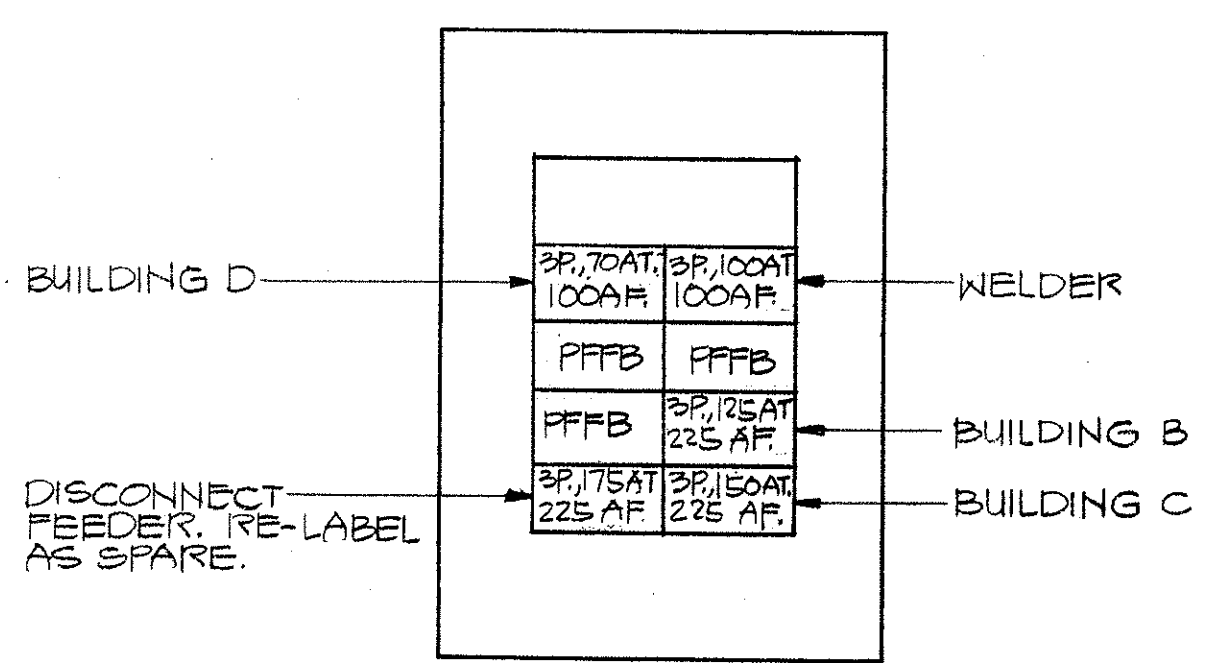
- Improvements consist of modifying and installing electrical circuits, and providing all equipment, material, and labor; for furnishing and installing the complete air conditioning systems for the Main Office Building, the Drafting Room Building, and the Laboratory Building, of the Hilo Baseyard.
- Contractor's attention is called to Section 096.02(B) Plans, for required submittals within twenty (20) days following the award of contract.
- Complete As-Built Plans for the Hilo Baseyard Office and Laboratory Buildings, Job No. 313-02-60, will be available for inspection by the Contractor at the Highways Design Section, Highways Division, Department of Transportation, located at 860 Punchbowl St, Room 403, and at the office of the District Engineer - Hawaii, located at 50 Makaala St., Hilo.
- Contractor shall examine carefully the site of the proposed work and verify existing conditions prior to beginning any work.
- Contractor shall pay for any damages incurred to the existing structures and utility systems which is a result of his operations.
- Contractor shall touch-up paint all existing surfaces damaged or affected by his work to match existing adjacent surfaces.
- Contractor shall perform his work to prevent disruption of existing operations.
- Contractor shall provide warning signs and barricades as required to ensure safety of office workers and personnel.

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
NOTE BOOK	DRAWN BY	
NO.	DESIGNED BY	
	QUANTITIES BY	
	CHECKED BY	

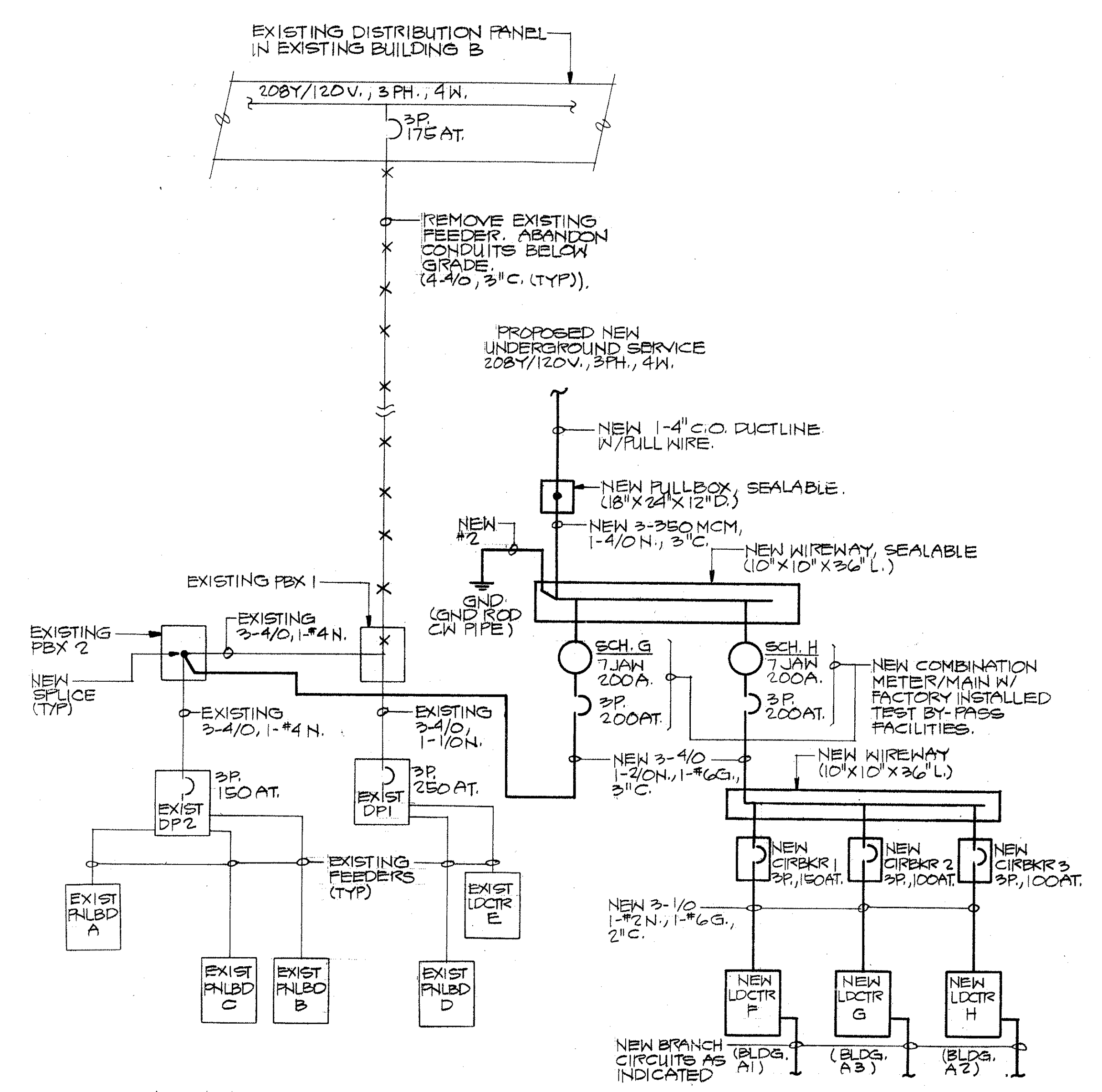
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
GENERAL NOTES
HILO BASEYARD - OFFICE DRAFTING & LABORATORY BLDGS AIR CONDITIONING
PROJ. NO. HWY-H-01-88M
Date: May 1988
SHEET No. 1 OF 1 SHEETS



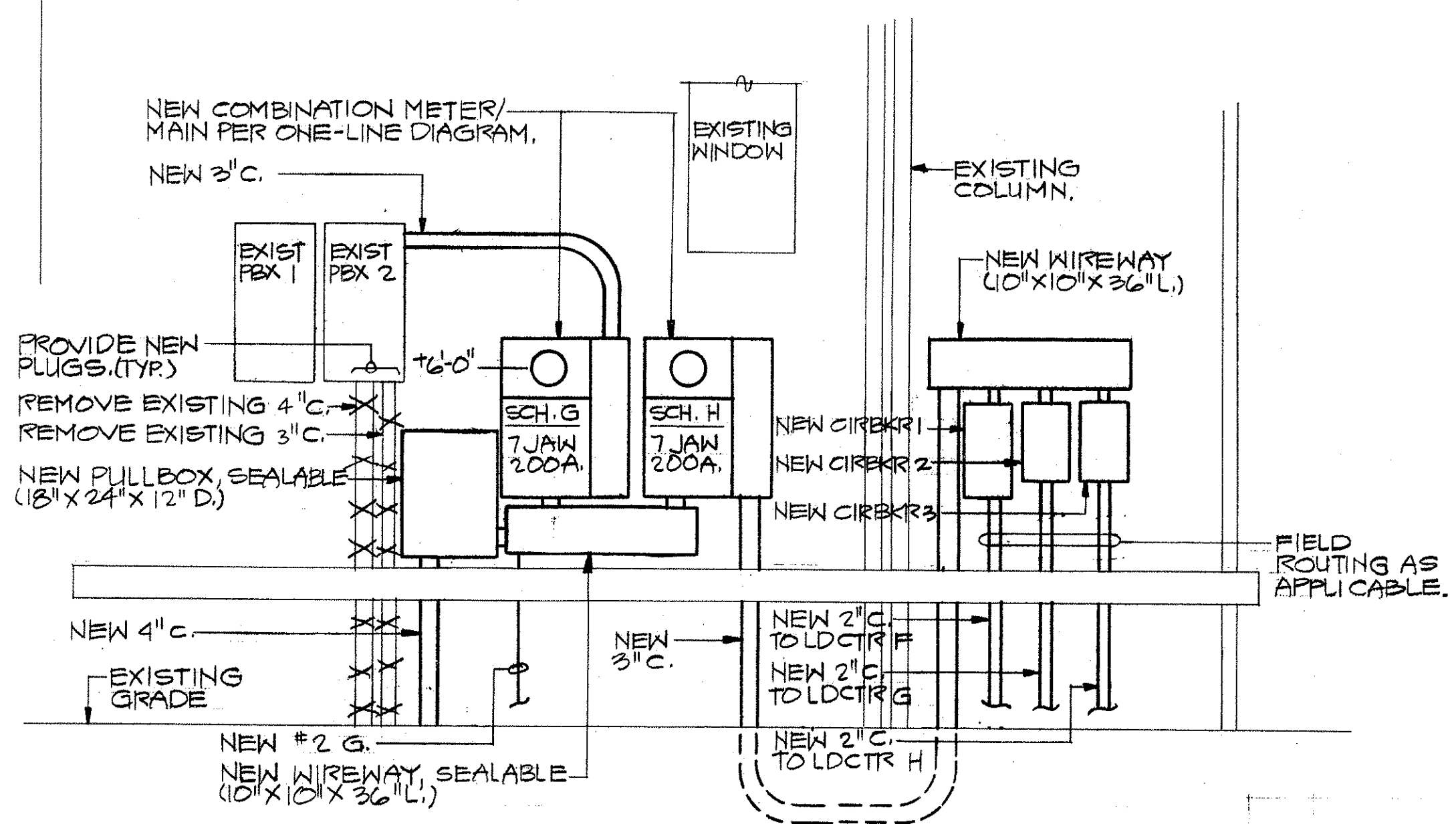
ELECTRICAL SITE PLAN
1/32"=1'-0" TMK: 2-2-50:75



EXISTING DISTRIBUTION PANEL
NOT TO SCALE



ONE-LINE DIAGRAM

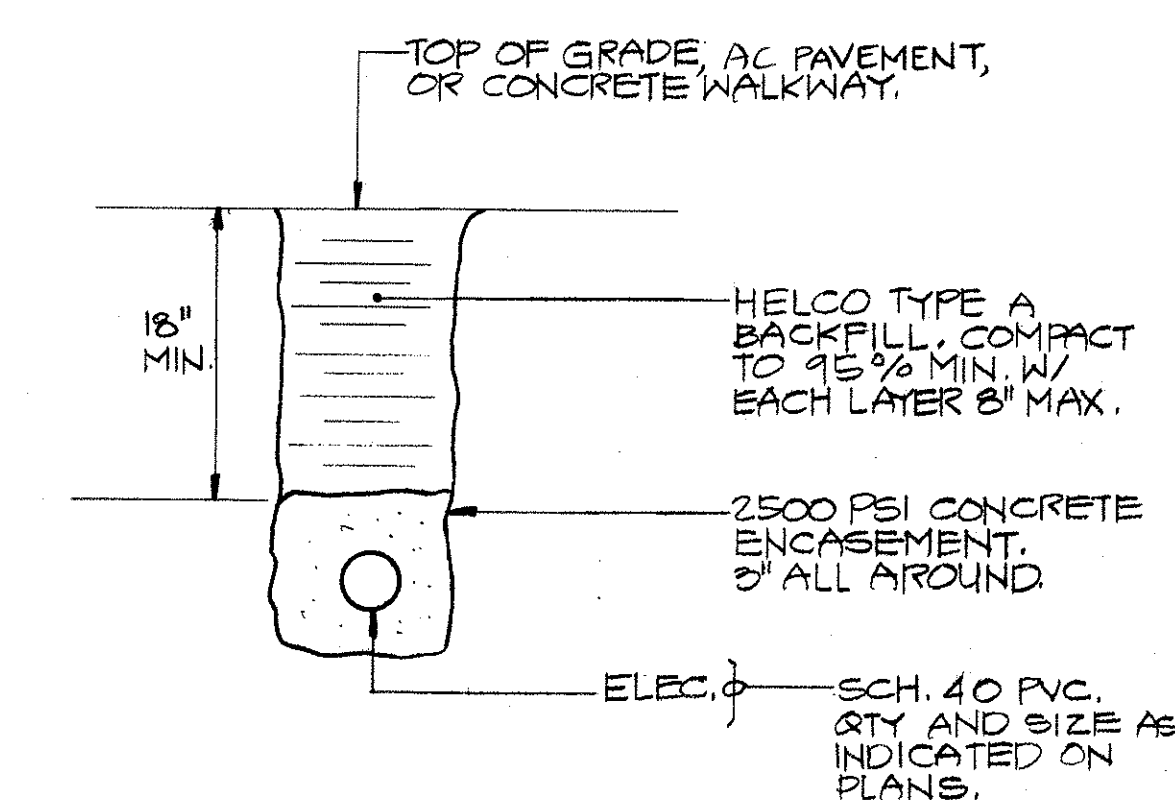


SERVICE/METERING EQUIPMENT
NOT TO SCALE
NOTE: ALL ENCLOSURES SHALL BE RATED NEMA 3R.

SERVICE/LOAD DATA

- SERVICE VOLTAGE: 208Y/120V., 3PH., 4W.
PROPOSE DISCONNECTING EXISTING FEEDER FROM BUILDING B AND RE-CONNECTING TO NEW SERVICE EQUIPMENT.
- ESTIMATED CONNECTED KVA:

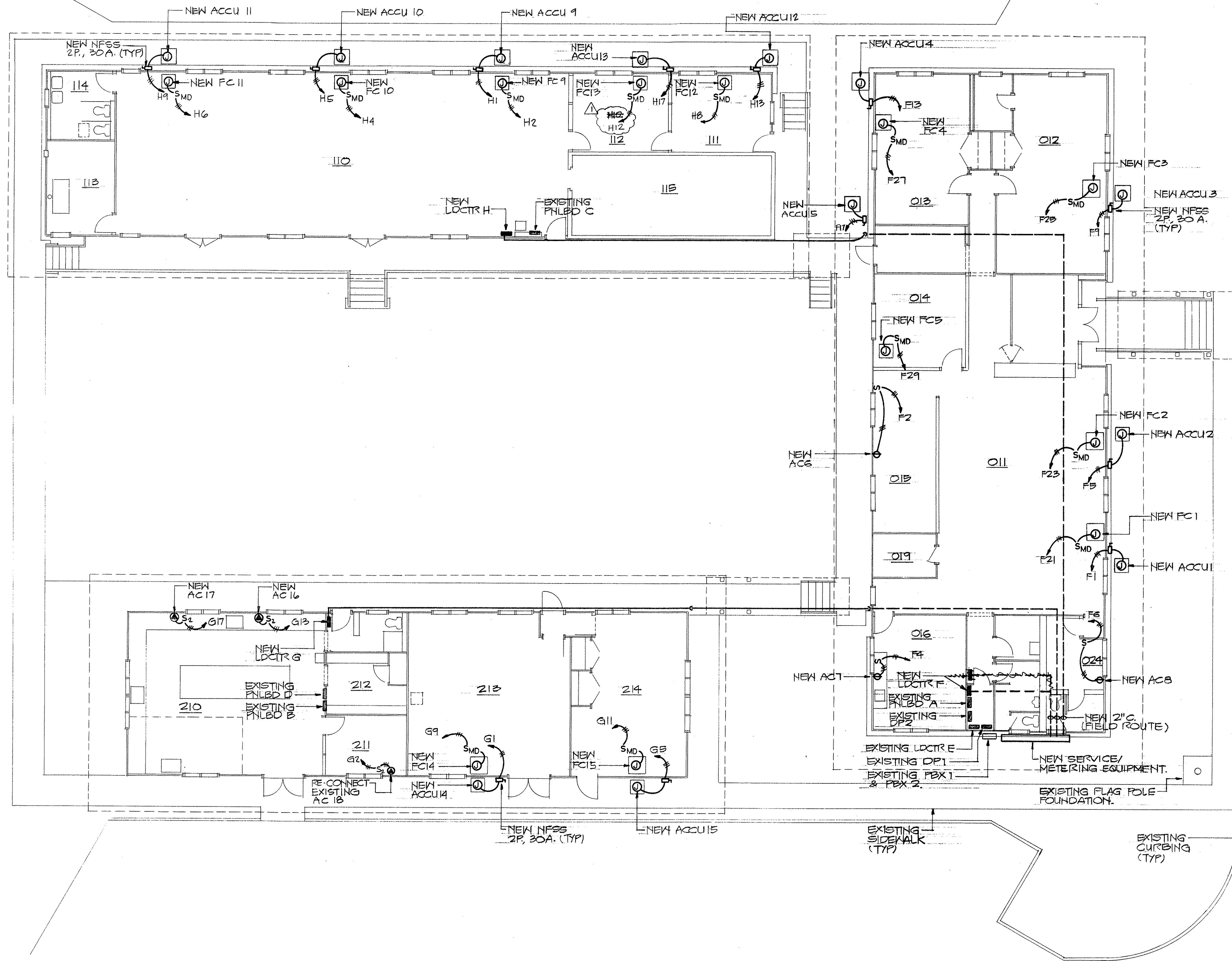
	ESTIMATED DEMAND KVA:
SCH G 50.0	35.0
SCH H 40.0	40.0
TOTAL 90.0	75.0
- DESIGN SERVICE CAPACITY: 300A., 350 MCM CONDUCTORS.
- METERING: SCH G: HELCO STD. B-8, 7 JAW, 200A.
SCH H: HELCO STD. B-8, 7 JAW, 200A.



TYPICAL DUCTLINE DETAIL
NOT TO SCALE

- NOTES TO CONTRACTOR**
- INSPECT AND VERIFY EXISTING ELECTRICAL SYSTEM AND WORKING CONDITIONS PRIOR TO SUBMITTING BIDS OR PROPOSALS.
 - RESOLVE ALL QUESTIONS AND DISCREPANCIES W/ ENGINEER PRIOR TO START OF ANY ELECTRICAL WORK.
 - ALL WORK SHALL COMPLY W/ HAWAII COUNTY ORDINANCES AND UTILITY COMPANY REQUIREMENTS AND THE SPECIAL PROVISIONS AND THE CONTRACT PLANS OF PROJECT NO. HNY-H-01-88M.
 - PRIOR TO INSTALLING ANY ELECTRICAL ITEM, VERIFY ITS FINAL LOCATION. COORDINATE AND ADJUST LOCATIONS AS REQUIRED.
 - FURNISH AND INSTALL WIRING FOR ALL MECHANICAL EQUIPMENT. VERIFY REQUIREMENTS BY CONSULTING CONTRACT PLANS AND EQUIPMENT SHOP DRAWINGS AND/OR EQUIPMENT NAMEPLATE DATA.
 - WIRING METHODS:
 - EMT - INTERIOR AND CONCEALED IN FURRED CEILING AND WALL SPACES.
 - PVC - RESTRICTED CEILING AND WALL SPACES, CONCEALED.
 - PVC - IN FLOOR SLAB AND EXTERIOR EXPOSED.
 - RMD - BELOW FLOOR SLAB AND IN CUSHION MATERIAL OR CONCRETE ENCASED FOR EXTERIOR SITE AREAS.
 - TYPE THW, COPPER, FOR SINGLE CONDUCTORS IN CONDUITS.
 - TYPE NM IN FURRED CEILING, WALL, AND CABINET SPACES, WHERE ALLOWED BY NEC, BUILDING OCCUPANCY, AND FIRE RATING REQUIREMENTS.
 - ALL ITEMS DESIGNATED FOR REMOVAL SHALL REMAIN THE PROPERTY OF THE OWNER. CONSULT THE OWNER FOR STORAGE AND/OR DISPOSAL INSTRUCTIONS.
 - CONTRACTOR SHALL SCHEDULE AND COORDINATE ALL POWER OUTAGES WITH THE OWNER. OUTAGES SHALL BE GIVEN AT THE CONVENIENCE OF THE OWNER. CONTRACTOR SHALL EXPEDITE ALL WORK TO KEEP THE OUTAGE TIME TO A MINIMUM AND WITHIN THE TIME ALLOWED BY THE OWNER AND AGREED TO BY THE CONTRACTOR.
 - EXPOSED RACEWAYS, FITTINGS, BOXES, EQUIPMENT, ETC., SHALL BE PAINTED TO MATCH WALLS.
 - PATCHING WORK AFTER CUTTING, DRILLING, ETC., SUBJECT TO APPROVAL OF OWNER OR ENGINEER.
 - TEST COMPLETED INSTALLATION FOR CORRECT AND PROPER OPERATION.

		PROJECT NO. HNY-H-01-88M.		
		ELECTRICAL IMPROVEMENTS FOR AIR CONDITIONING INSTALLATION/ OFFICE, DRAFTING, LABORATORY HILO BASEYARD, HIGHWAYS, DOT		
		GEOCO, INC. 80 POHAKU STREET HILO, HI 96720 GEORGE 961-3729		
12/18/88 GEOCO INC. - 2		WALLACE T. OKI, P.E., INC. ELECTRICAL ENGINEERING P.O. BOX 4070 / 200 KOHOLA ST. HILO, HAWAII 96720, PH: 961-9666		
9/20/88 HELCO-1, GEOCO-6 (FINAL)				
9/12/88 PERMIT-3, HELCO-1, GEOCO-5 (REVIEW)				
DATE	ISSUE	REF. NO. 68143	SHT OF 2	DWG. NO. E-1



ELECTRICAL PLAN

1/8"=1'-0"

NOTE: ALL ITEMS ARE NEW EXCEPT AS INDICATED.

NEW		208Y/120 VOLTS, 3 PHASE, 4		WIRE, NEUTRAL BUS, GROUND BUS, SURFACE		MOUNTING,	
LOCTR F		A MAIN BREAKER, 180		A MAIN BUS ONLY, ALUM.		PUSH-IN	
		FULL SIZE BREAKERS ONLY, 10,000		AIG, TYPEWRITTEN		DIRECTORY	
WIRE SIZE	SERVICE	CIR. BKR. AMP	CIR. POLE NO.	CIR. NO.	CIR. BKR. POLE AMP	SERVICE	WIRE SIZE
#10	ACCU1 - RM 011	30	2	1	A 2	AC6 - RM 016	#10
	ACCU2 - RM 011	30	2	5	C 6	AC7 - RM 016	
	ACCU3 - RM 012	30	2	7	A 8	AC8 - RM 024	
	ACCU4 - RM 013	30	2	9	B 10	PFFB	
#12	ACCU5 - RM 014	20	2	17	C 18		
	FC1 - RM 011	20	1	21	B 22		
	FC2 - RM 011			23	C 24		
	FC3 - RM 012			25	A 26		
	FC4 - RM 013			27	B 28		
	FC5 - RM 014			29	C 30		
	PFFB			31	A 32		
				33	B 34		
				35	C 36		

NEW		(SAME AS LOCTR F)					
LOCTR G							
WIRE SIZE	SERVICE	CIR. BKR. AMP	CIR. POLE NO.	CIR. NO.	CIR. BKR. POLE AMP	SERVICE	WIRE SIZE
#10	ACCU14 - RM 213	30	2	1	A 2	AC18 - RM 211	#12
	ACCU15 - RM 214	30	2	5	C 6	PFFB	
#12	FC14 - RM 213	20	1	9	B 10		
#12	FC15 - RM 214	20	1	11	C 12		
#10	AC16 - RM 210	30	2	13	A 14		
	AC17 - RM 210	30	2	17	C 18		
	PFFB			19	A 20		
				21	B 22		
				23	C 24		

NEW		(SAME AS LOCTR F)					
LOCTR H							
WIRE SIZE	SERVICE	CIR. BKR. AMP	CIR. POLE NO.	CIR. NO.	CIR. BKR. POLE AMP	SERVICE	WIRE SIZE
#10	ACCU9 - RM 110	30	2	1	A 2	FC9 - RM 110	#12
	ACCU10 - RM 110	30	2	5	C 6	FC10 - RM 110	
	ACCU11 - RM 110	30	2	9	B 10	FC11 - RM 110	
#12	ACCU12 - RM 111	20	2	13	A 14	FC12 - RM 111	
	ACCU13 - RM 112	20	2	17	C 18	FC13 - RM 112	
	PFFB			19	A 20		
				21	B 22		
				23	C 24		

REV	DATE	BRIEF	DATE	ISSUE
1	12/27/88	AS-BUILT DRAWING	1/12/89	PERMIT-3, GEORGE-E (REVIEW)

PROJECT NO. HWY-H-01-68M.		ELECTRICAL IMPROVEMENTS FOR AIR CONDITIONING INSTALLATION/ OFFICE, DRAFTING, LABORATORY HILO BASEYARD, HIGHWAYS, DOT	
GEOCO, INC.		60 POHAKU STREET HILO, HI 96720	
WALLACE T. OKI, P.E., INC.		ELECTRICAL ENGINEERING P.O. BOX 4070 / 200 KOHOLA ST. HILO, HAWAII 96720, PH: 961-9666	
REF. NO.	SHT. 2	DWG. NO.	E-2
68143	OF 2		