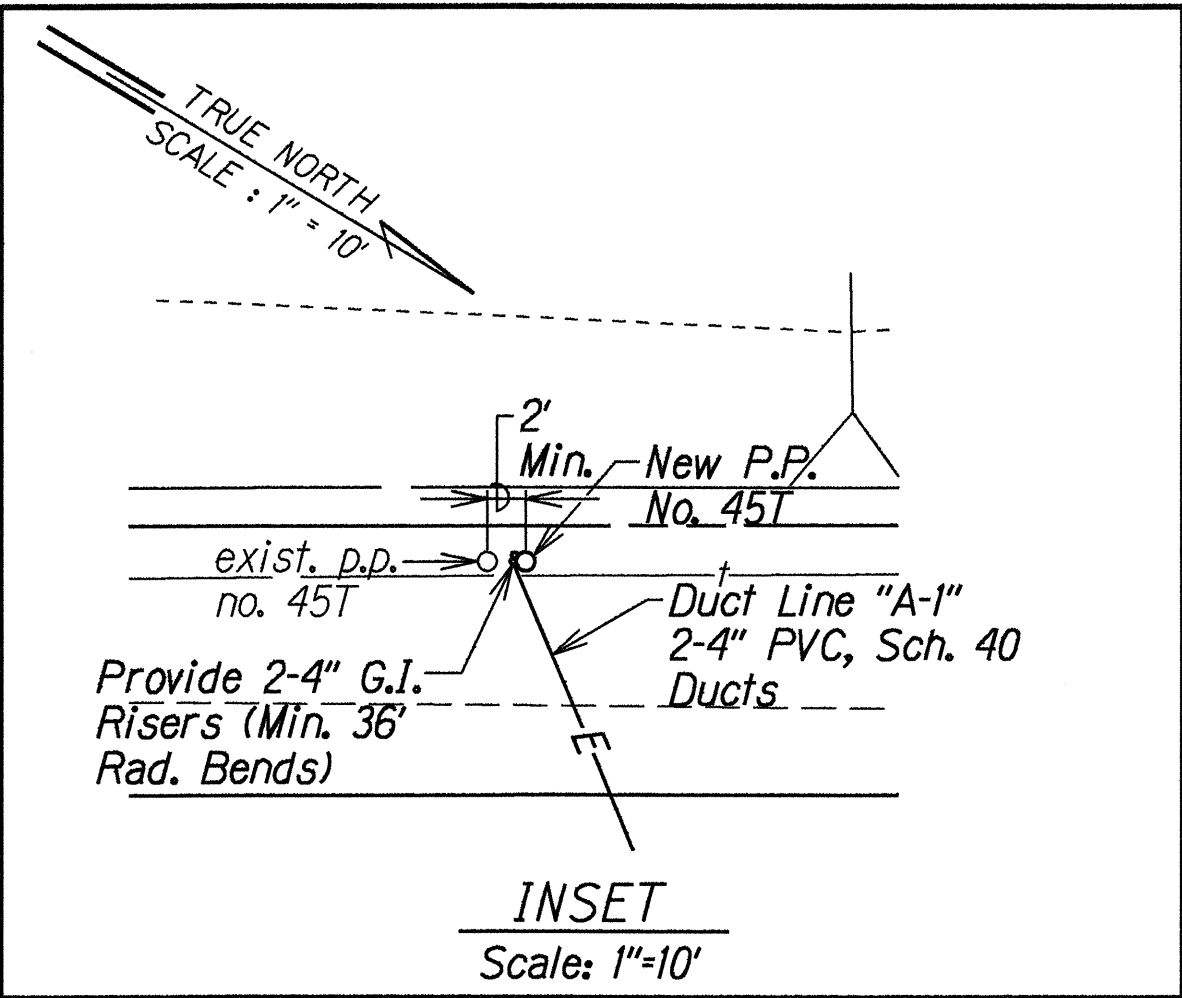
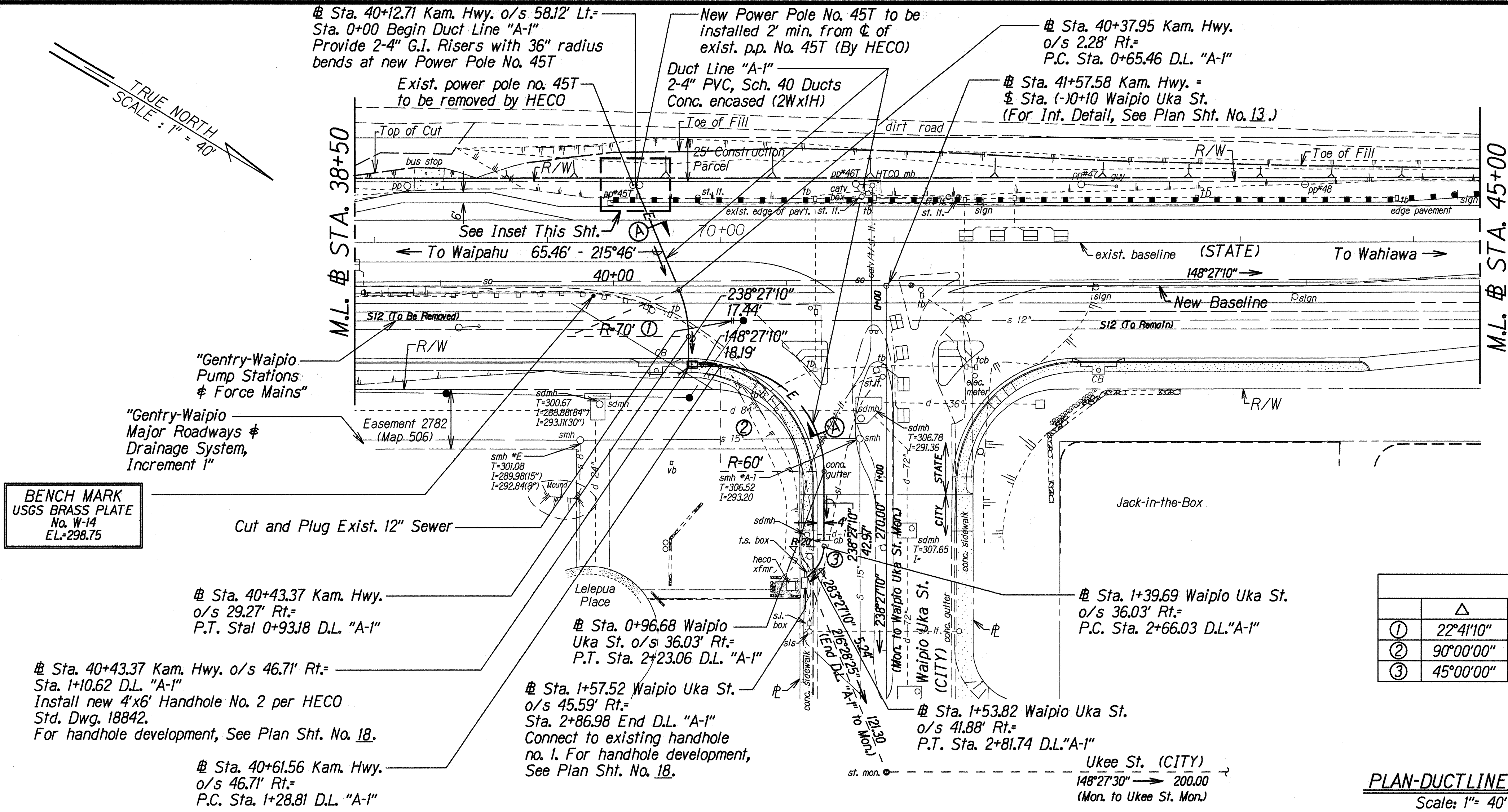


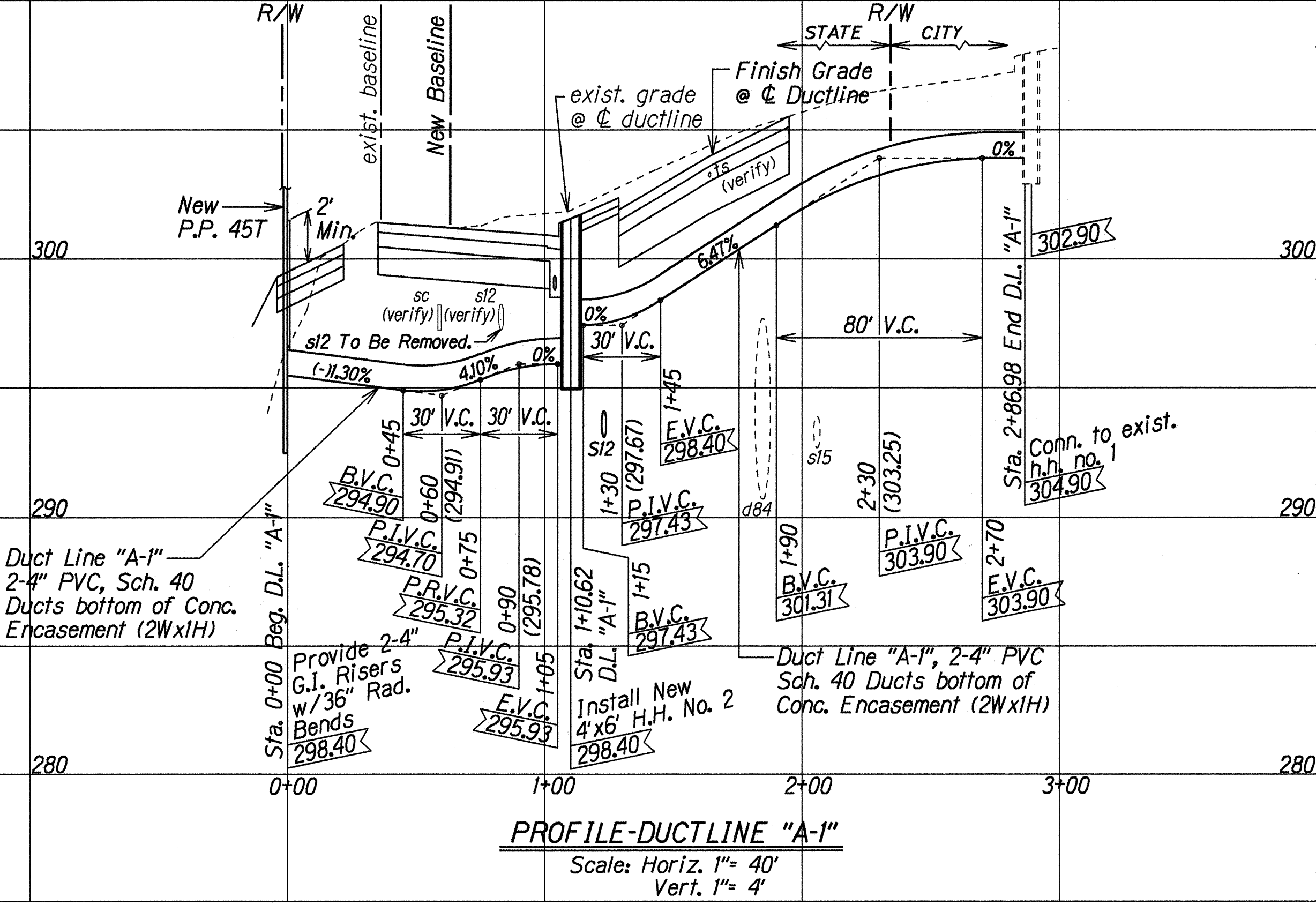
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-099-1(9)	1994	C.O.17	54



CURVE DATA						
	Δ	$\Delta/2$	R	T	Ch	Lc
①	22°41'10"	11°20'35"	70.00'	14.04'	27.54'	27.72'
②	90°00'00"	45°00'00"	60.00'	60.00'	84.85'	94.25'
③	45°00'00"	22°30'00"	20.00'	8.28'	15.31'	15.71'

PLAN-DUCTLINE "A-1"
Scale: 1"= 40'

DATE	REVISION
2-2-95	Added Wastewater Management Signature Block.



APPROVED: *[Signature]* 2/15/95
CHIEF, DIVISION OF PLANNING AND SERVICE CONTROL
DEPARTMENT OF WASTEWATER MANAGEMENT
(FOR SEWER WORK WITHIN PUBLIC R/W AND EASEMENT ONLY)

APPROVED: *[Signature]* 4/1/94
HAWAIIAN ELECTRIC COMPANY
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION
PLAN AND PROFILE
12 KV UNDERGROUND DUCTLINE
KAMEHAMEHA HIGHWAY WIDENING
Lumaina St. to Waipio Uka St.
F.A.P. No. NH-099-1(9)
Scale: As Shown Date: March, 1993
SHEET No. 1 OF 3 SHEETS

ORIGINAL PLAN
DESIGNED BY J.A. 1/6
CHECKED BY J.A. 1/6
DATE 12/12/95
NOTE BOOK
004/000
QUANTITIES BY J.A. 1/6
CHECKED BY J.A. 1/6

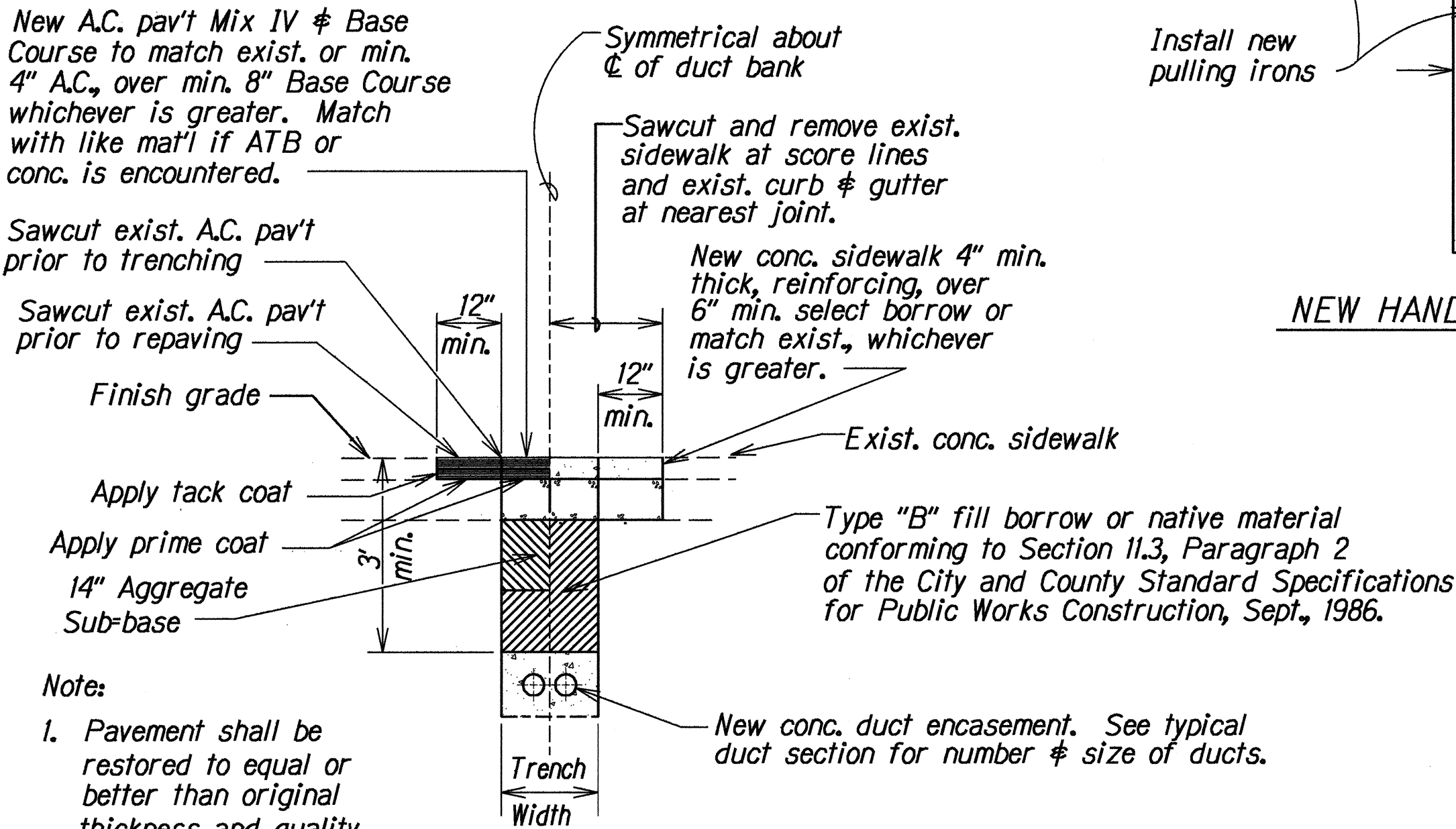
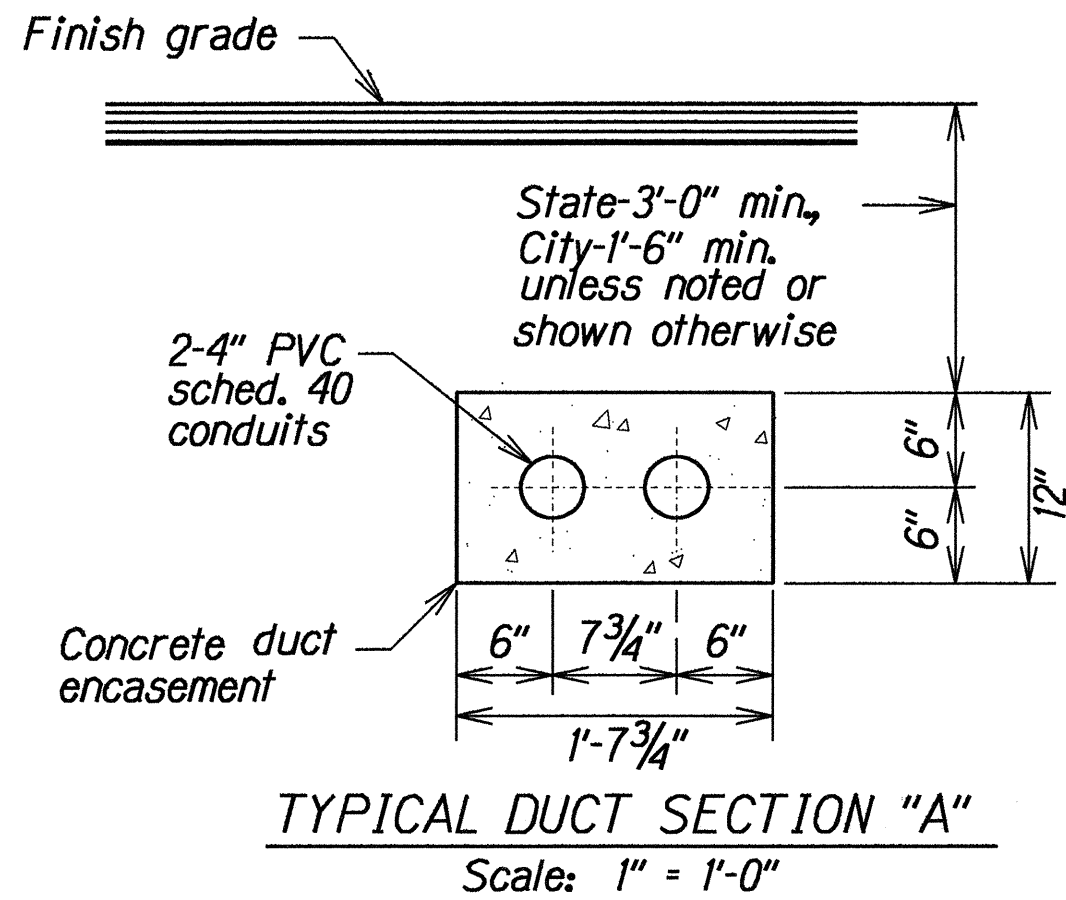
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-099-1(9)	1994	18	54

GENERAL NOTES

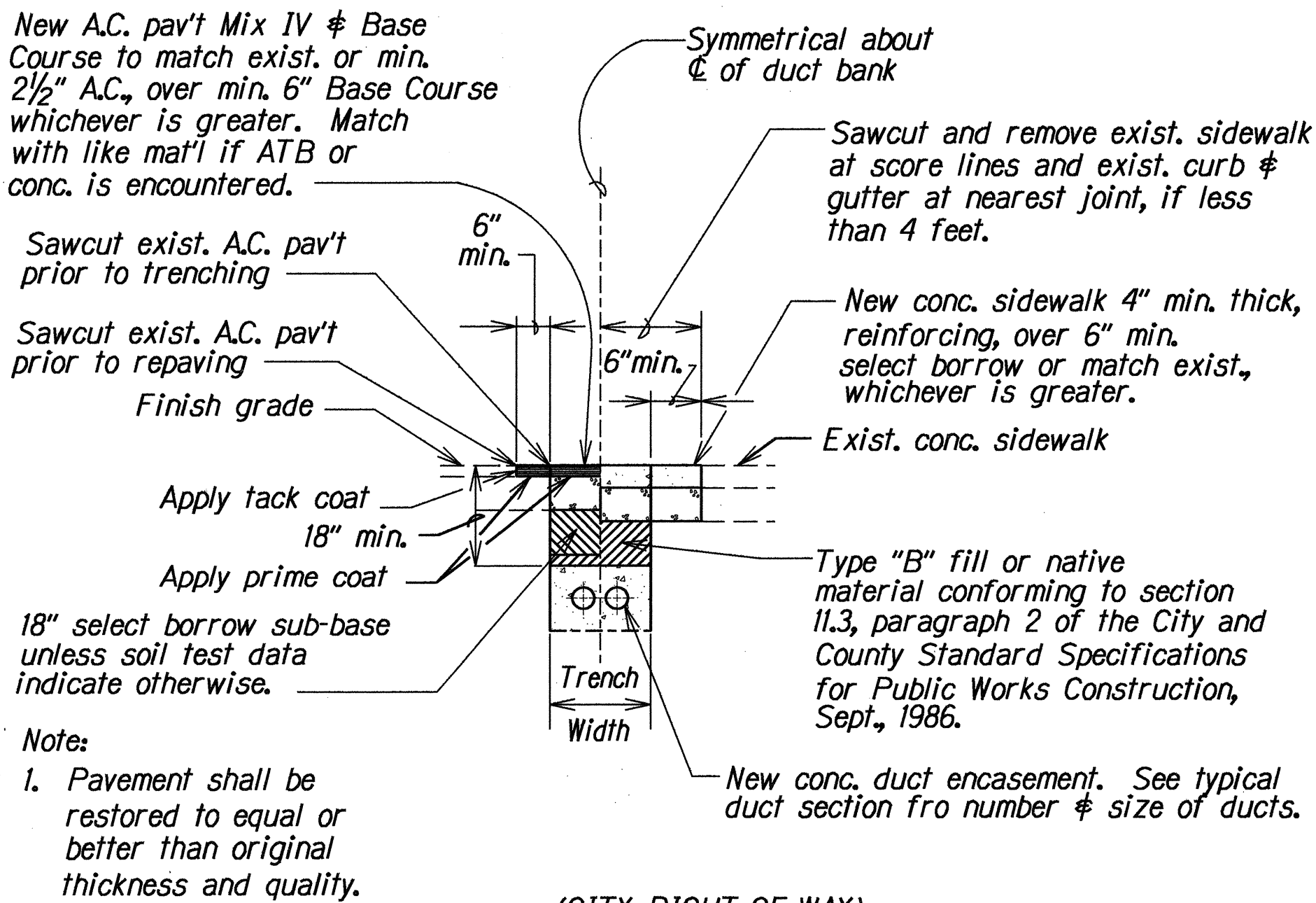
- All construction work within County right-of-way shall be done in accordance with the Standard Specifications for Public Works Construction, Sept. 1986, and Standard Details for Public Works Construction, Sept. 1984, as amended, of the Department of Public Works, City and County of Honolulu.
- The underground pipes, cables or duct lines known to exist by the Engineer from his search of records are indicated on the plans. The Contractor shall verify the locations and depths of the facilities and exercise proper care in excavating the area. The Contractor shall be responsible for any damages to the facilities whether shown or not on the plans.
- The Contractor shall notify OTS, Ed Sniffen or Trask Huddy (848-4571), two weeks prior to construction, informing them of location of project, scope of work, proposed closure of any street or traffic lanes, and the need to relocate any bus stop.
- The Contractor, at his own expense, shall keep the project area free from dust nuisance. The work shall be in conformance with the Air Pollution Control Standards and Regulations of the State Department of Health.
- The cables in these areas are encased, buried and energized. These energized, encased, buried cables are to remain in place during construction. Cables in service boxes, transformer vaults and handholes are also energized. Only Hawaiian Electric Co. men are to handle these cables and erect temporary guards to protect these cables from damage. Contractor to exercise care and precautions to avoid distrubance of energized cables and temporary guards and shall work cautiously to avoid accidents. The Contractor shall coordinate his work with HECO U.G. Division and Inspection Division (PHONE: 543-5668).
- The Contractor shall notify the City and County Department of Public Works', Division of Engineering, Construction Branch, Seven (7) days prior to commencement of construction.
- Where necessary, reconstruction of sidewalk, gutter and driveway areas shall conform to the standard details fo the governmental agency having jurisdiction over the work.
- Whenever connections of new utilities to existing utilities are shown on the plans, the Contractor shall expose the existing lines at the proposed connections to verify their locations and depths prior to excavation for the new lines.

NOTES FOR CONSTRUCTION WITHIN STATE RIGHT-OF-WAY

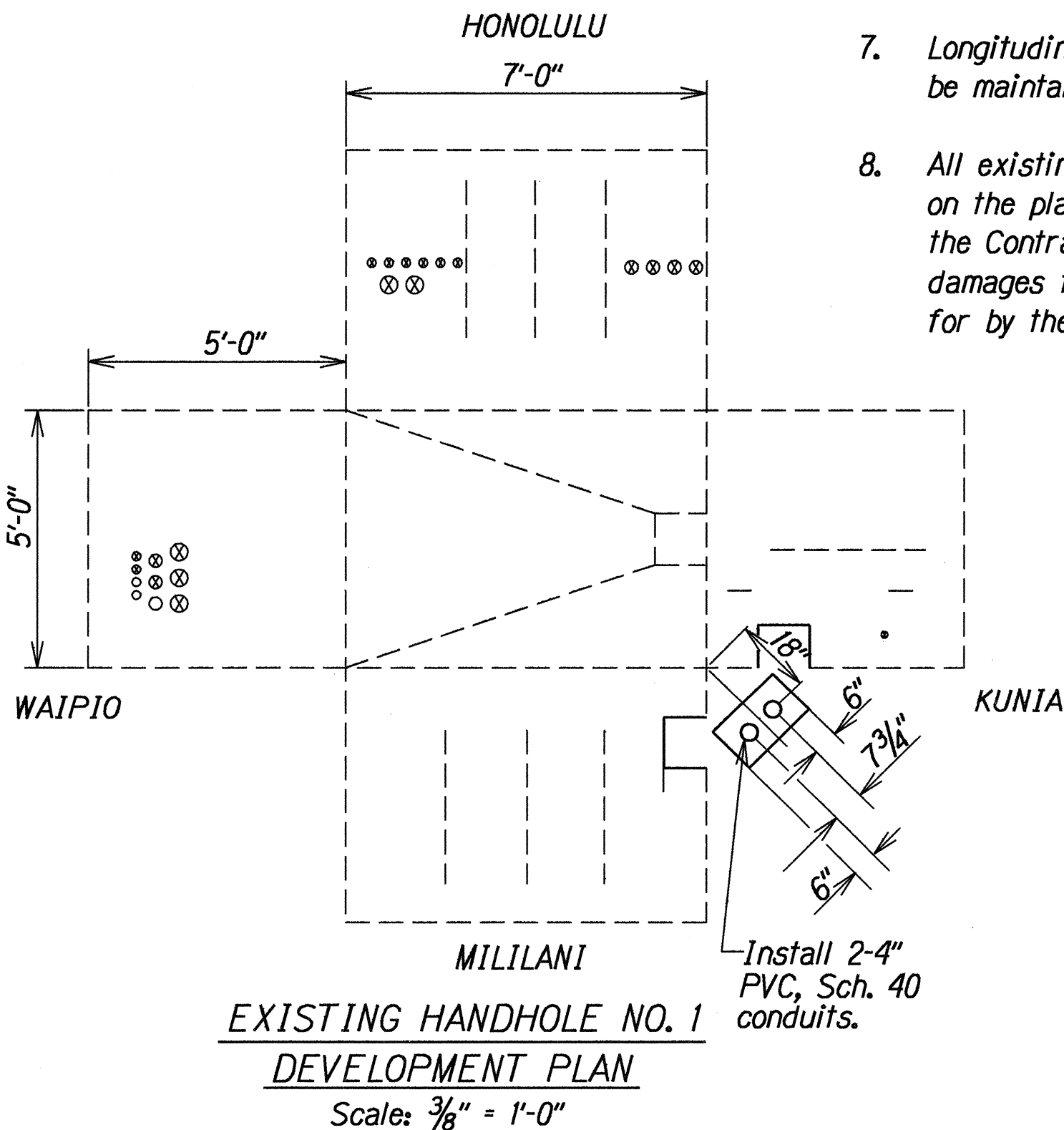
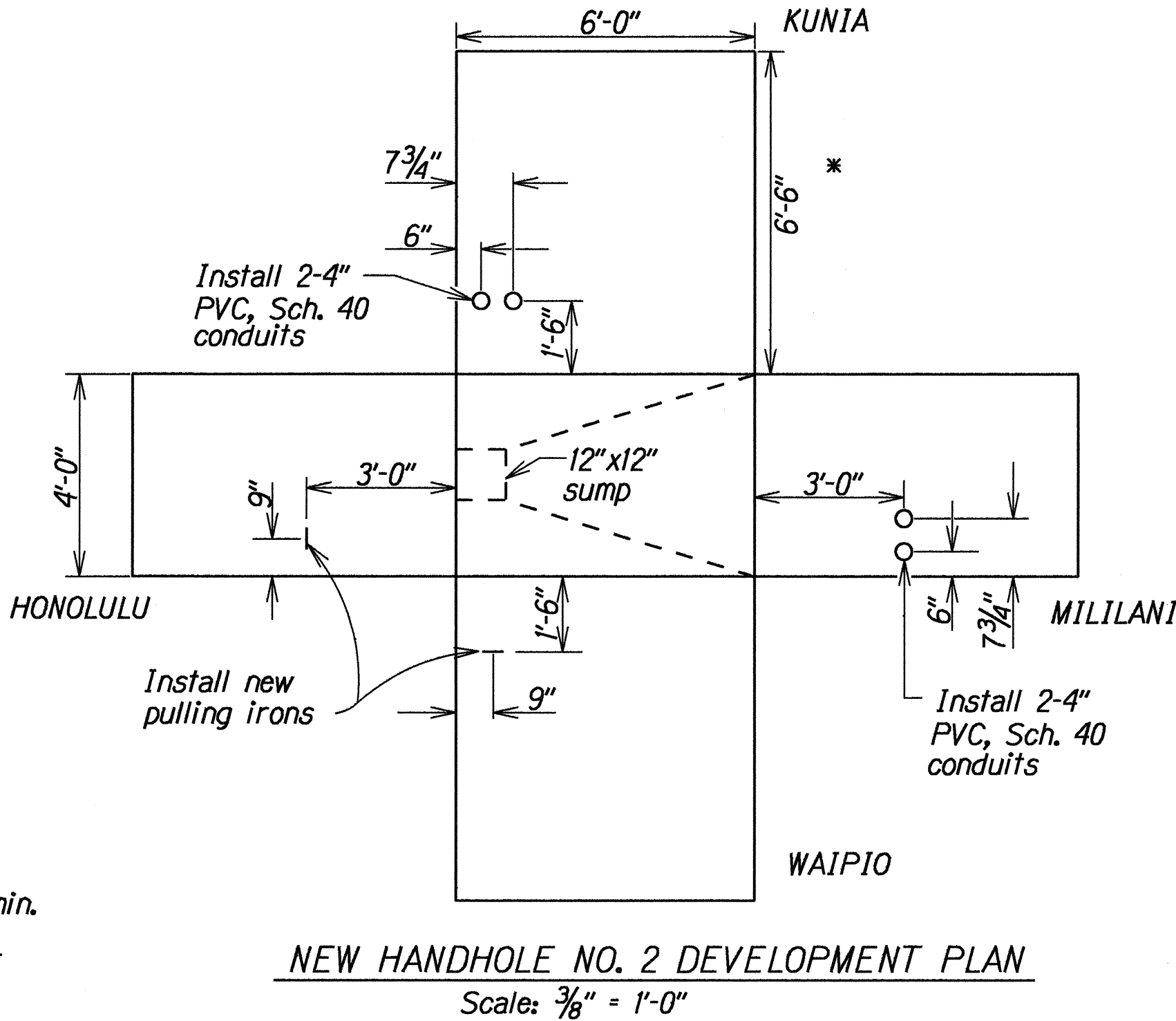
- Construction and restoration of all existing highway facilities within State right-of-way shall be done in accordance with all applicable sections of the current Standard Specifications for Road and Bridge Construction, and the Specifications for Installation of Miscellaneous Improvements within the State highways, of the State Highways Division.
- All lanes shall be opened to traffic during the morning peak hours from 6:00 A.M. TO 8:30 A.M. and during the afternoon peak hours from 3:30 P.M. TO 6:00 P.M., and during off-work hours. Only one lane of roadway shall be closed at any other time.
- No material and/or equipment shall be stockpiled or otherwise stored within highway rights-of-way except at locations designated in writing and approved by the District Engineer.
- Prior to commencing trench excavation work, the Contractor shall take a profile along the new centerline of utility trench, and that information shall be used in the verification of restoring the roadway to its original condition. A copy of the profile shall be submitted to the District Engineer.
- The Contractor shall be required to provide adequate, safe, non-skid bridging material over the trench, including shoring, when trenching in pavement areas, to handle all types of vehicular traffic.
- No trench shall be opened more than 200 feet in advance of the installed and tested pipe and/or ductline..
- Longitudinal drainage along the highway shall be maintained.
- All existing utilities, whether or not shown on the plans, shall be protected at all times by the Contractor during construction and any damages to them shall be repaired and paid for by the Contractor.



(STATE RIGHT-OF-WAY)
TRENCH RESTORATION DETAIL
Scale: 1/2" = 1'-0"



(CITY RIGHT-OF-WAY)
TRENCH RESTORATION DETAIL
Scale: 1/2" = 1'-0"



APPROVED:

Key Noda SS
HAWAIIAN ELECTRIC COMPANY

4/7/94
DATE

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

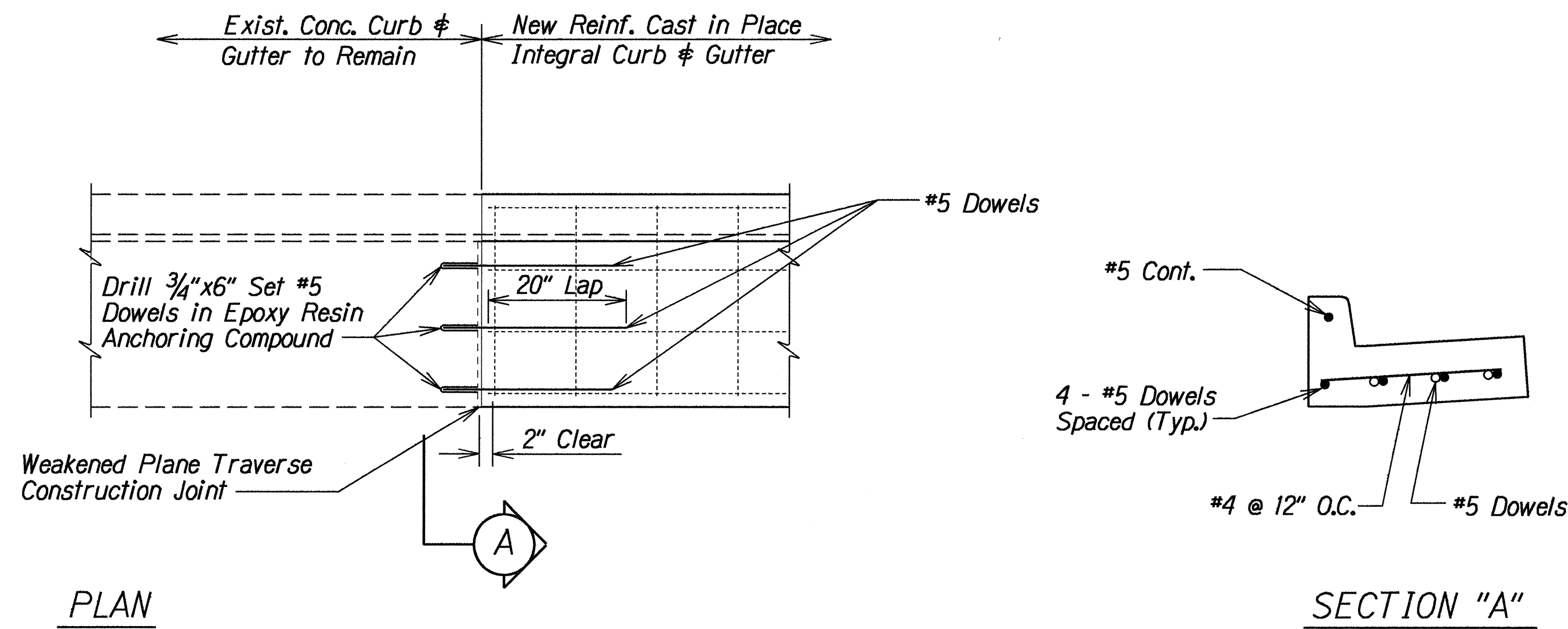
DETAILS & GENERAL NOTES

KAMEHAMEHA HIGHWAY WIDENING
Lumaina Street to Waipio Uka Street
Project No. NH-099-1(9)

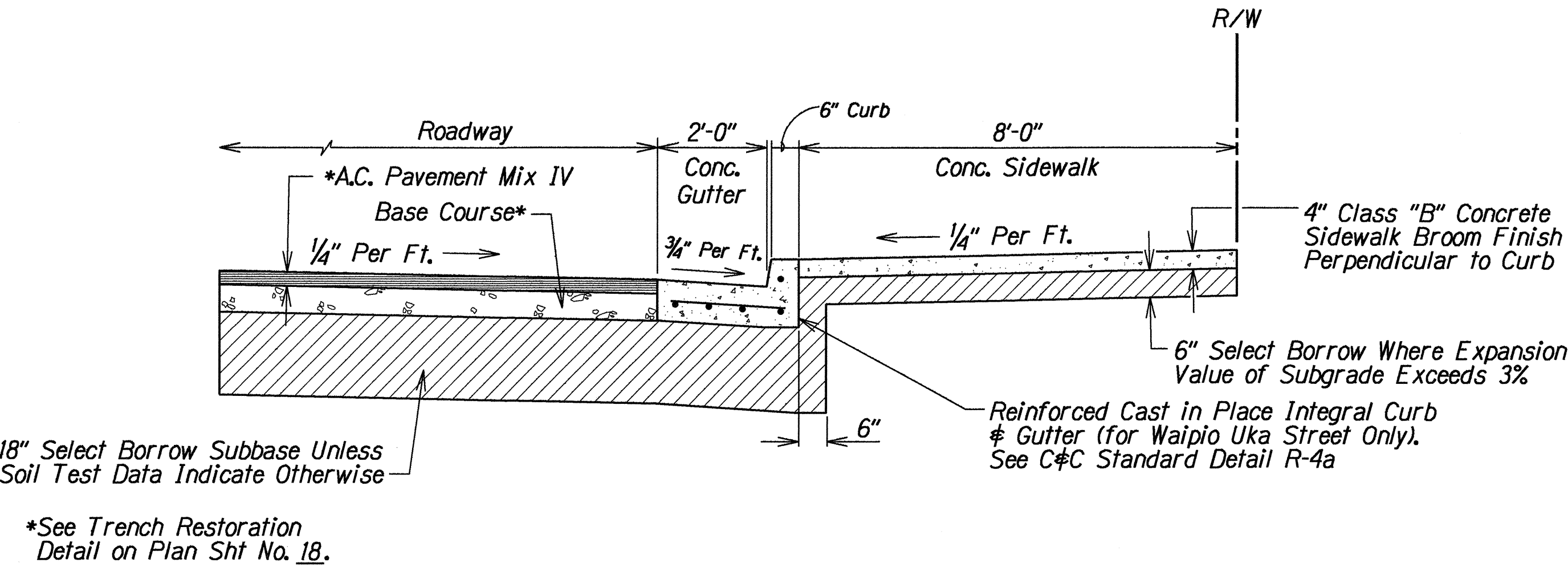
Scale: As shown Date: Oct., 1994

SHEET No. 2 OF 3 SHEETS

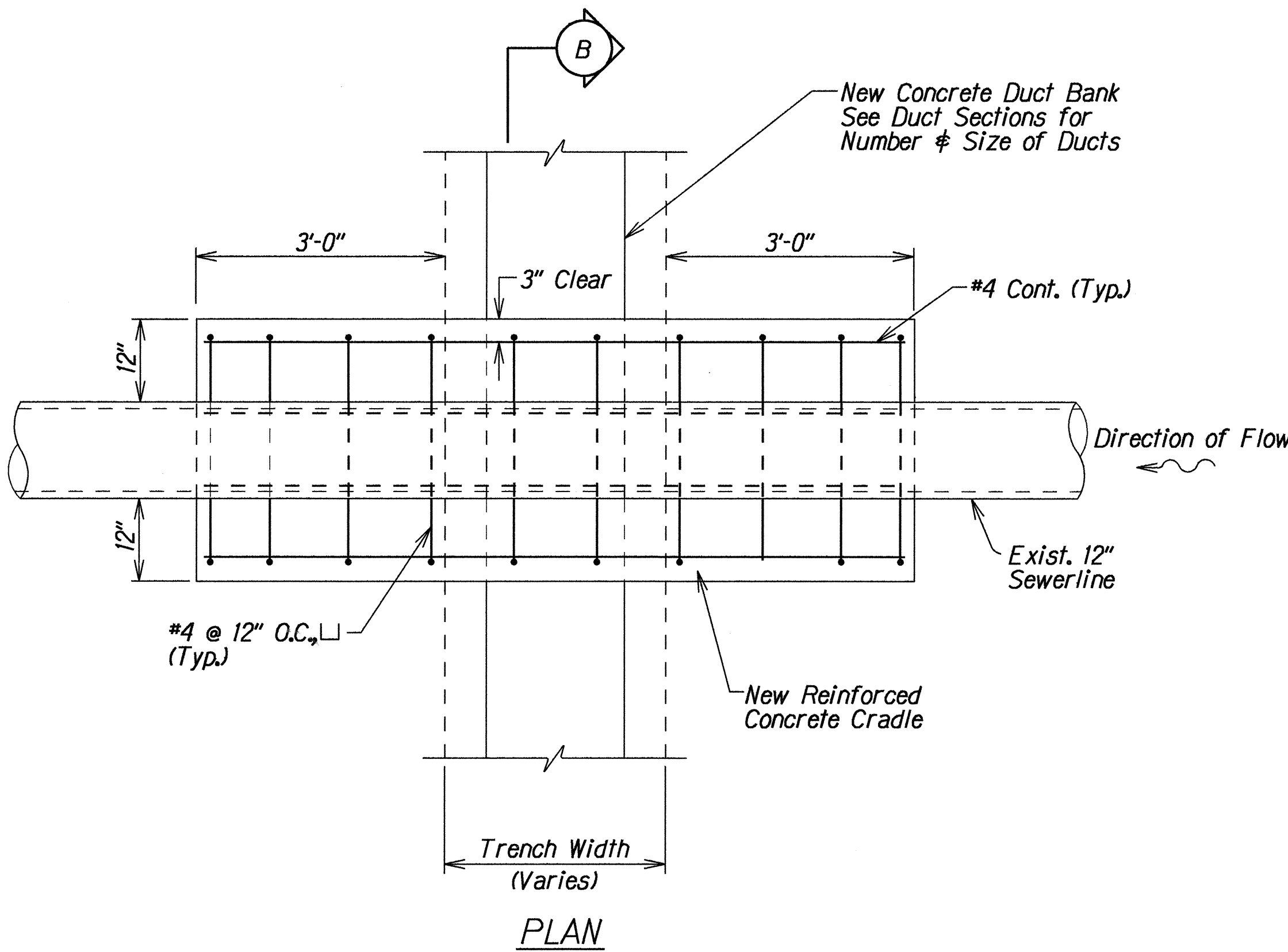
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.	NH-099-1(9)	1993	19	54



PLAN
 CONNECTION DETAIL-REINFORCED
 CAST IN PLACE INTEGRAL CURB & GUTTER
 Scale: 3/4"=1'-0"

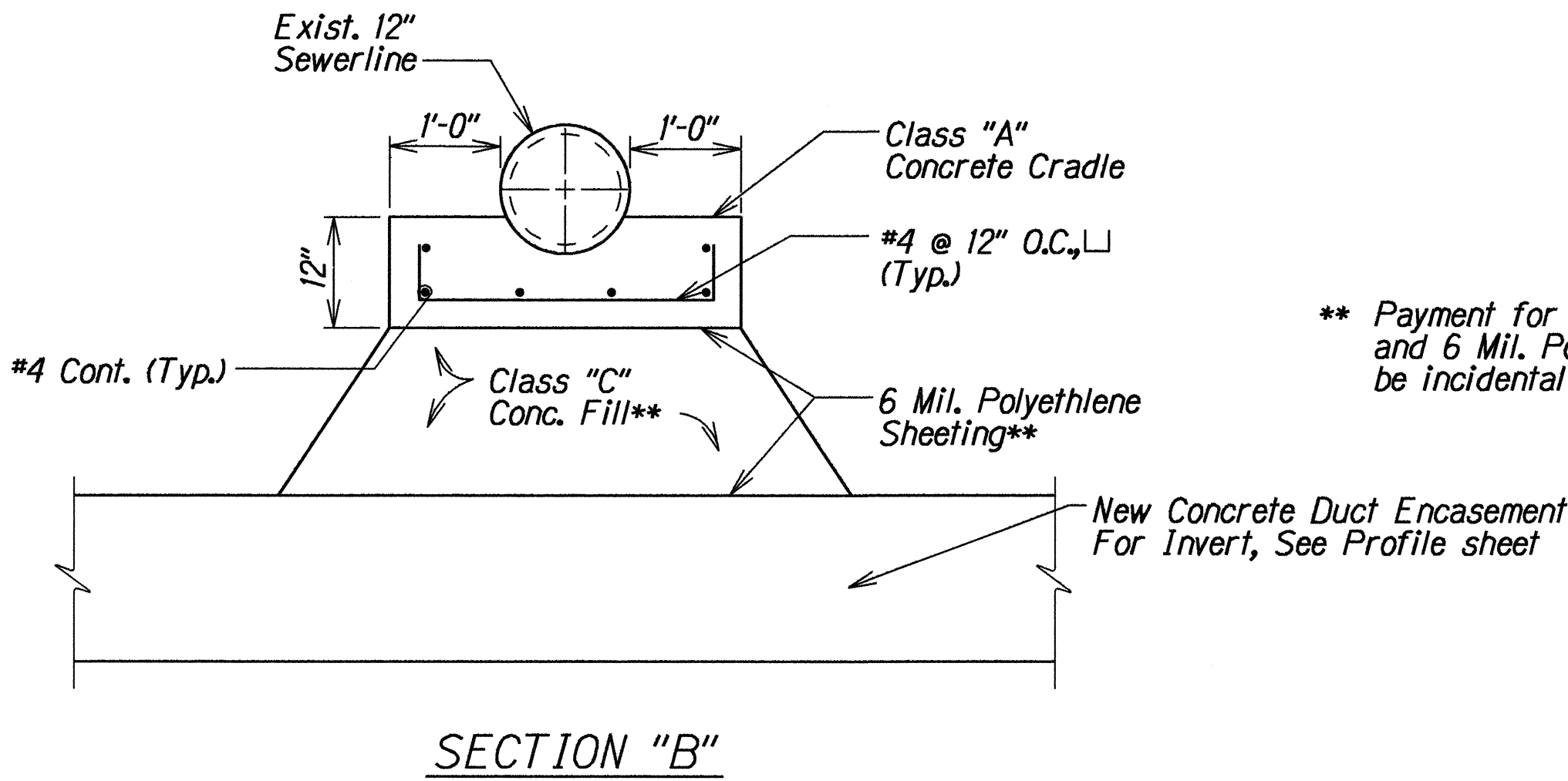


CURB, GUTTER AND SIDEWALK
 RESTORATION DETAIL
 Scale: 1/2" = 1'-0"



PLAN
 REINFORCED CONCRETE CRADLE DETAIL
 Scale: 3/4"=1'-0"

NOTE:
 1. The Contractor shall extend new reinforced concrete cradle 3'-0" beyond trench width, unless otherwise noted.



** Payment for Class "C" Concrete Fill and 6 Mil. Polyethylene Sheeting shall be incidental to Concrete Cradle.

APPROVED:
 [Signature]
 HAWAIIAN ELECTRIC COMPANY
 DATE: 4/7/94

STATE OF HAWAII
 DEPARTMENT OF TRANSPORTATION
 HIGHWAYS DIVISION

MISC. DETAIL - 12 KV
 UNDERGROUND DUCTLINE
 KAMEHAMEHA HIGHWAY WIDENING
 Lumiaina Street to Waipio Uka Street
 Federal Aid Project No. NH-099-1(9)

Scale: 1"=20'
 Date: Oct., 1993

SHEET No. 3 OF 3 SHEETS

SURVEY PLOTTED BY	DATE
DRAWN BY G. Aluabada	10-11-93
DESIGNED BY B. Kimura	
QUANTITIES BY	
CHECKED BY	
NOTE BOOK	
dd4/jason	
5/26/02/2001	