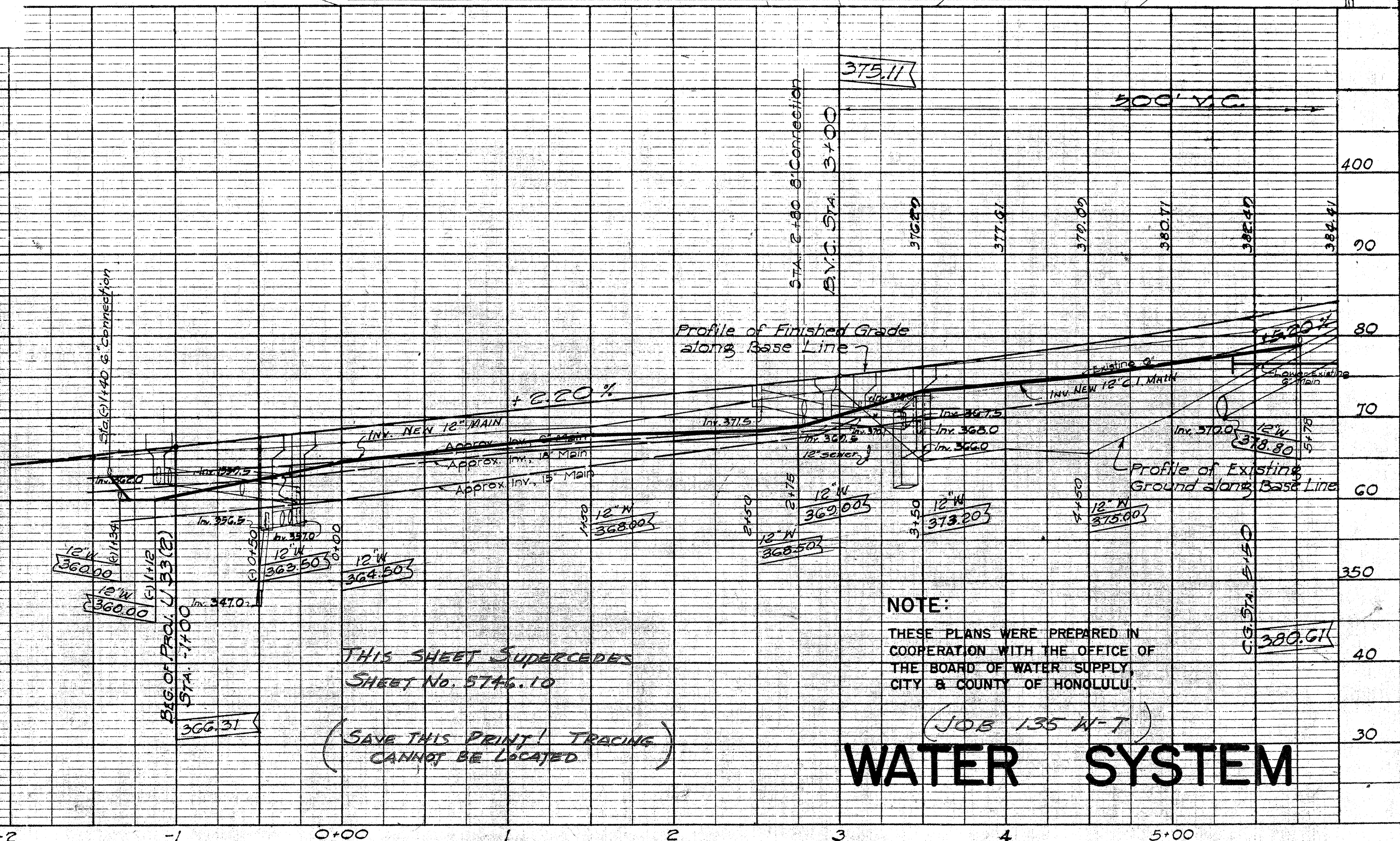
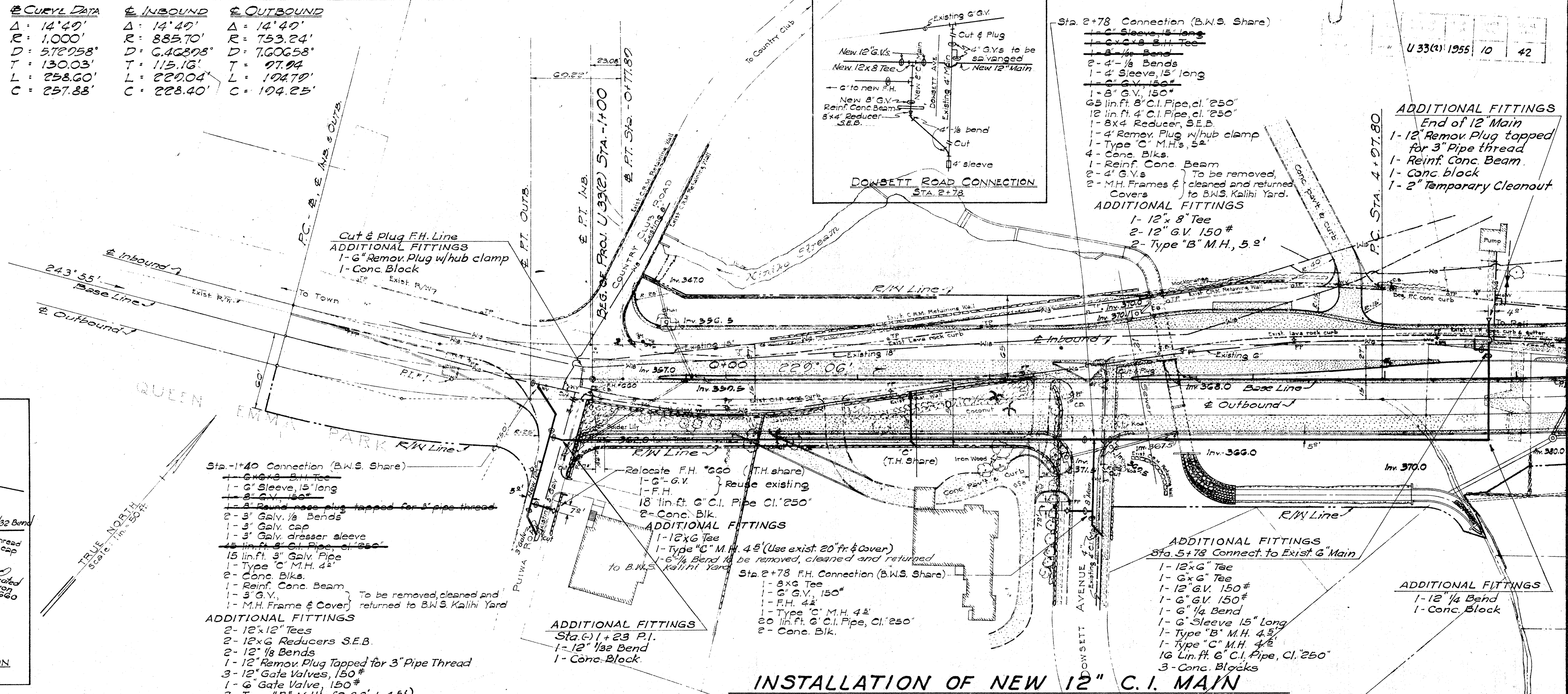
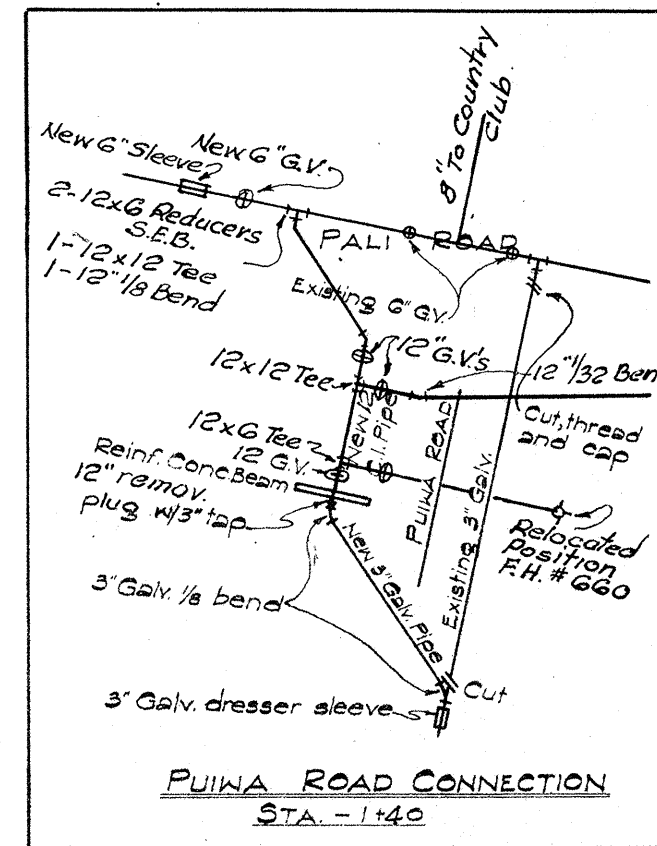


PROFILE		BY	DATE
	SURVEYED		
	PLOTTED		
	GRADES CHECKED		
	B. M.'S NOTED		
NO.	STRUCTURE NOTAT'NS CH'KD.		

WATER NOTES:

1. Adjust existing water Manholes to new grade where necessary.
2. All existing water services shall be maintained at all times without disruption during construction.
3. Wherever requested by the Engineer, the contractor shall verify locations and depths of existing water mains in R/W area prior to commencement of construction.
4. All excavation and backfill, including pipe cushion, to be done by contractor.
5. All connections to existing mains, and existing service to be done by B.W.S. and charged to project. All other work to be done by contractor.
6. All materials furnished by B.W.S. will be hauled to job site by contractor at no extra expense to the project.
7. All pipes, fittings and appurtenances furnished by B.W.S. and installed by contractor unless otherwise noted in proposal.
8. All manholes and concrete work to be done by contractor.

<u>ℰ CURVE DATA</u>	<u>ℰ INBOUND</u>	<u>ℰ OUTBOUND</u>
Δ = 14° 40'	Δ = 14° 40'	Δ = 14° 40'
R = 1,000'	R = 885.70'	R = 753.24'
D = 578° 258'	D = 6468° 08'	D = 7606° 58'
T = 130.03'	T = 115.16'	T = 97.94'
L = 258.60'	L = 220.04'	L = 104.79'
C = 257.88'	C = 228.40'	C = 104.25'



THIS SHEET SUPERCEDES
SHEET No. 5746.10

(SAVE THIS PRINT! TRACING
CANNOT BE LOCATED)

NOTE:

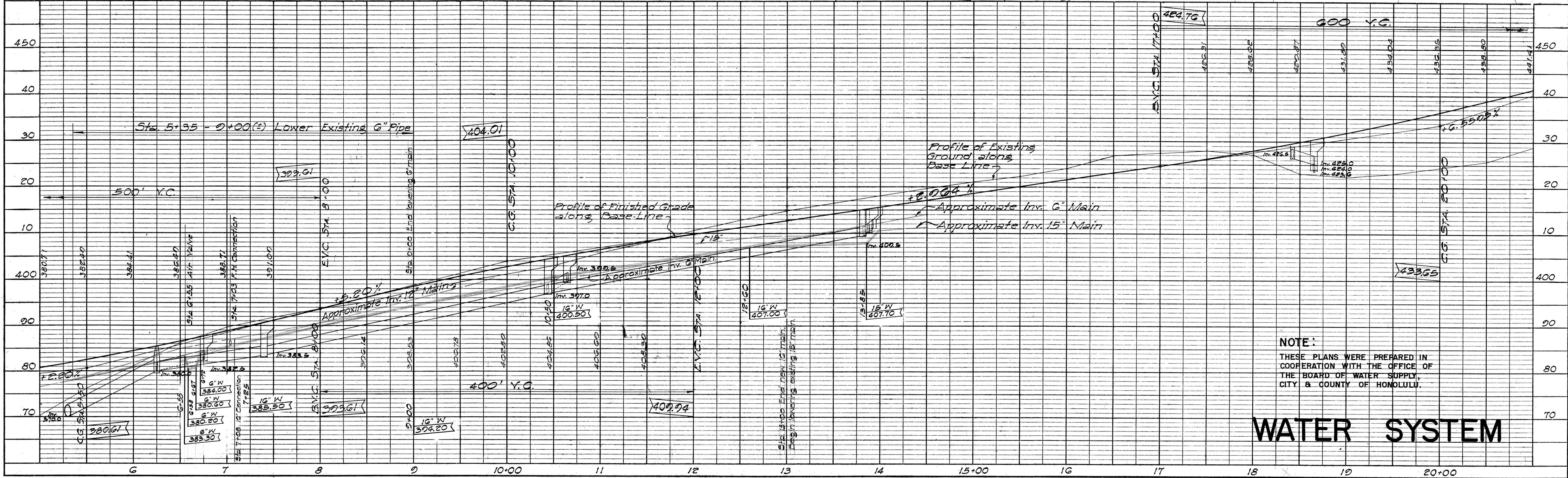
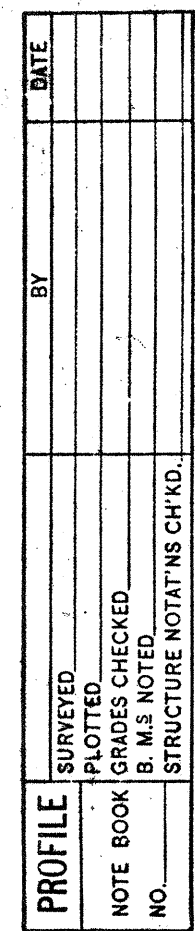
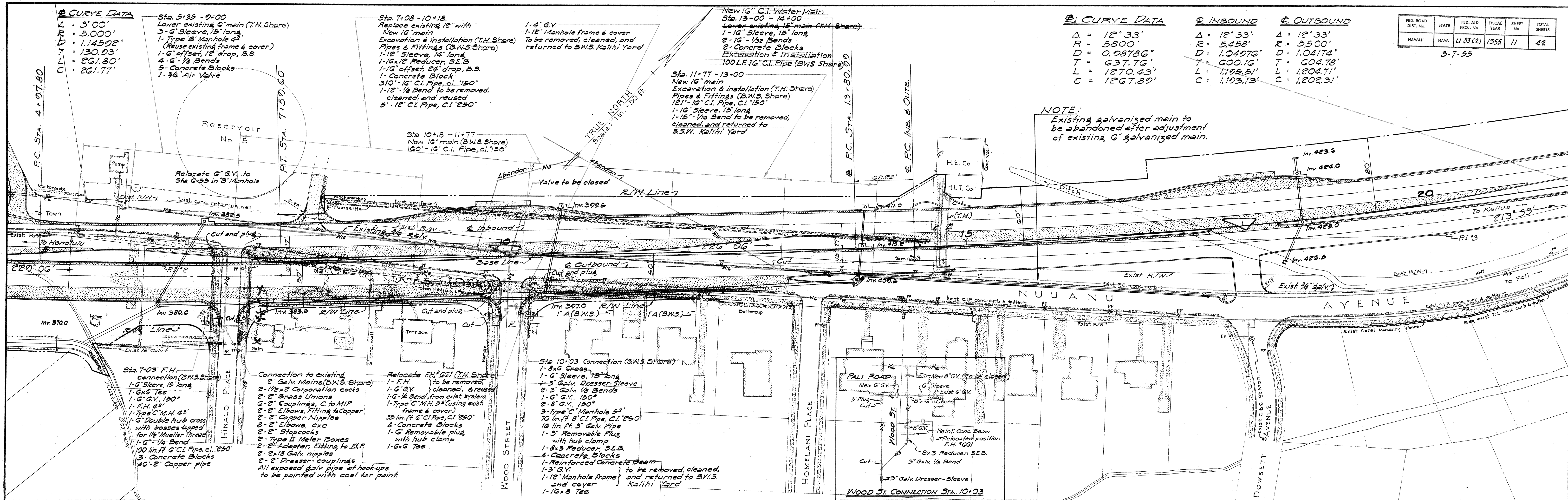
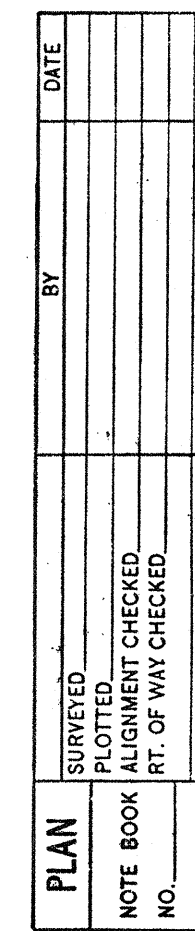
THESE PLANS WERE PREPARED IN
COOPERATION WITH THE OFFICE OF
THE BOARD OF WATER SUPPLY,
CITY & COUNTY OF HONOLULU.

(JOB 135 W-7)

WATER SYSTEM

FED. ROAD DIST. No.	STATE	FED. AID PROJ. No.	FISCAL YEAR	SHEET No.	TOTAL SHEETS
HAWAII	HAW.	<u>U 33 (2)</u>	<u>1955</u>	<u>11</u>	<u>42</u>

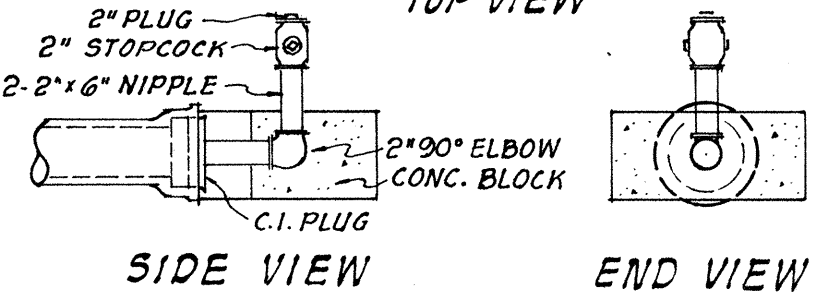
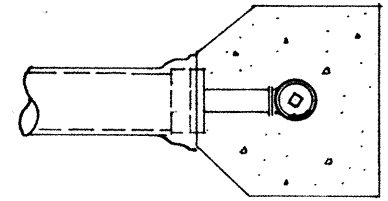
<u>Σ: CURVE DATA</u>	<u>Σ INBOUND</u>	<u>Σ OUTBOUND</u>
Δ = 12° 33'	Δ = 12° 33'	Δ = 12° 33'
R = 5800'	R = 5458'	R = 5500'
D = 0.28786°	D = 1.04976°	D = 1.04174°
T = 637.76'	T = 600.16'	T = 604.78'
L = 1270.43'	L = 1192.51'	L = 1204.71'
C = 1267.89'	C = 1193.13'	C = 1202.31'



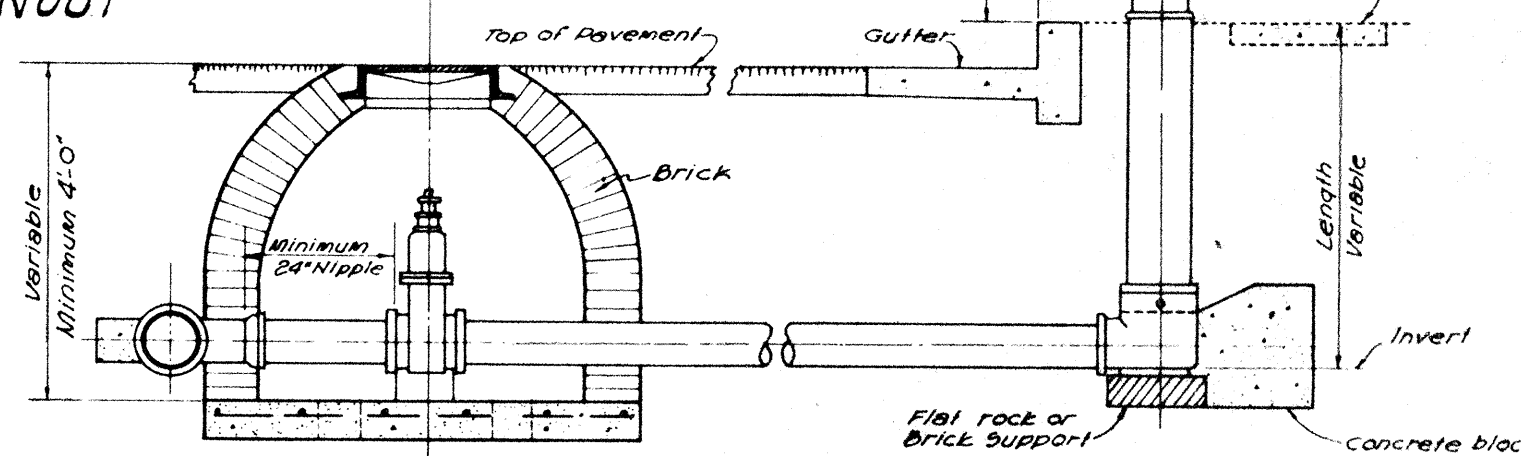
NOTE:

THESE PLANS WERE PREPARED IN COOPERATION WITH THE OFFICE OF THE BOARD OF WATER SUPPLY, CITY & COUNTY OF HONOLULU.

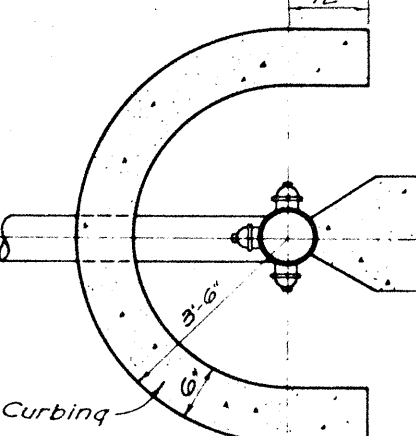
WATER SYSTEM



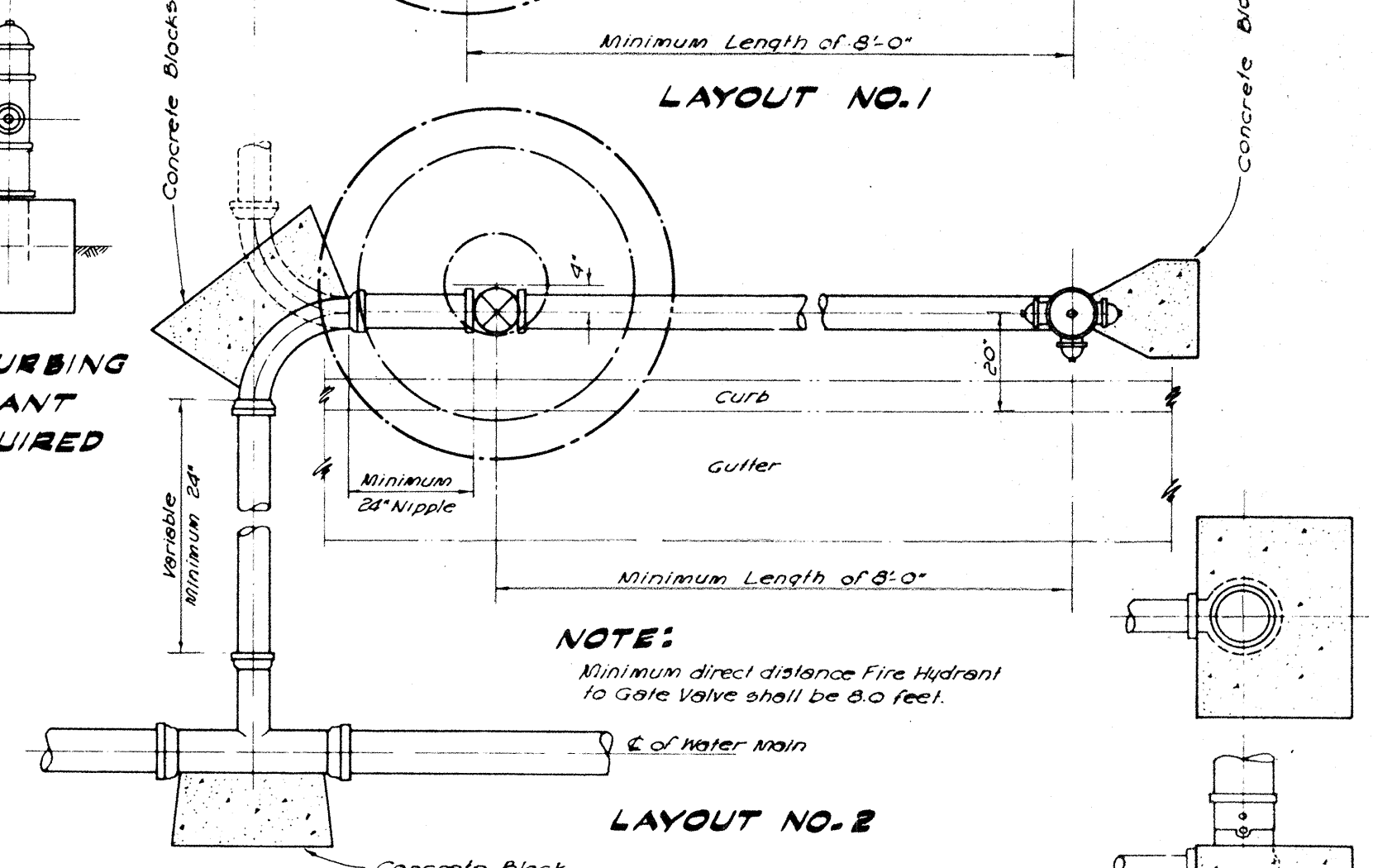
DETAIL OF CLEANOUT



TYPE "C" MANHOLE



DETAIL OF CURBING AT HYDRANT WHERE REQUIRED

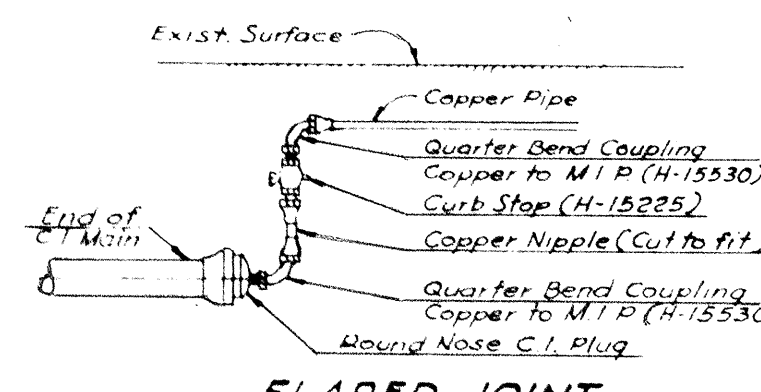


NOTE: Minimum direct distance Fire Hydrant to Gate Valve shall be 8.0 feet.

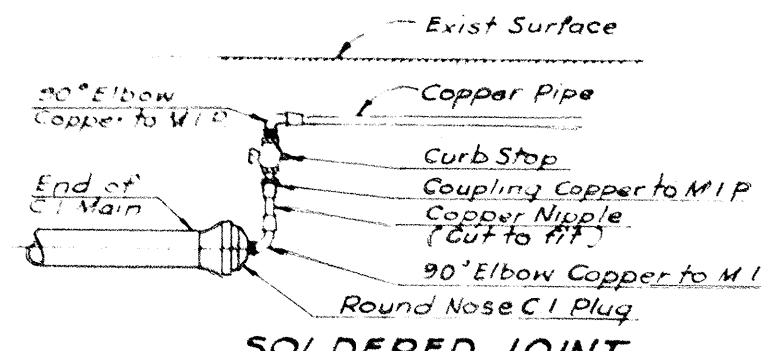
LAYOUT NO. 2

CONCRETE BLOCK FOR MATHEWS HYDRANT ONLY

STANDARD FIRE HYDRANT LAYOUT

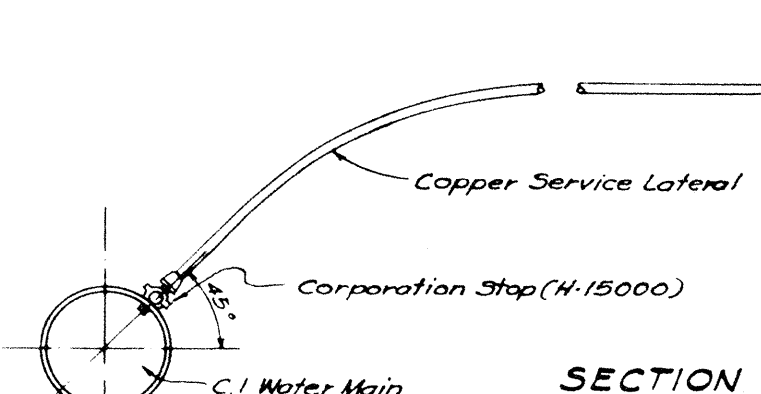


FLARED JOINT



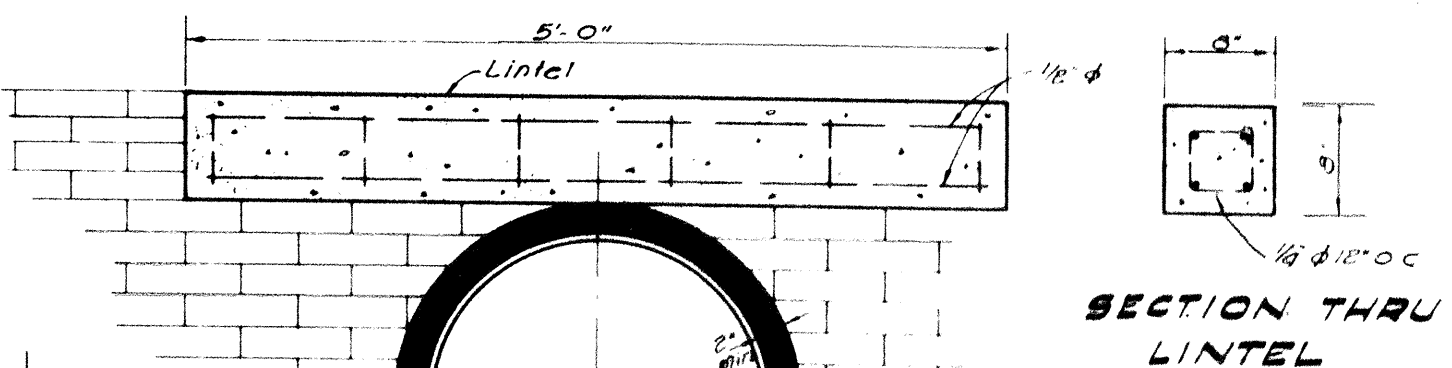
SOLDERED JOINT

SERVICE LATERAL CONNECTION AT END OF LINE



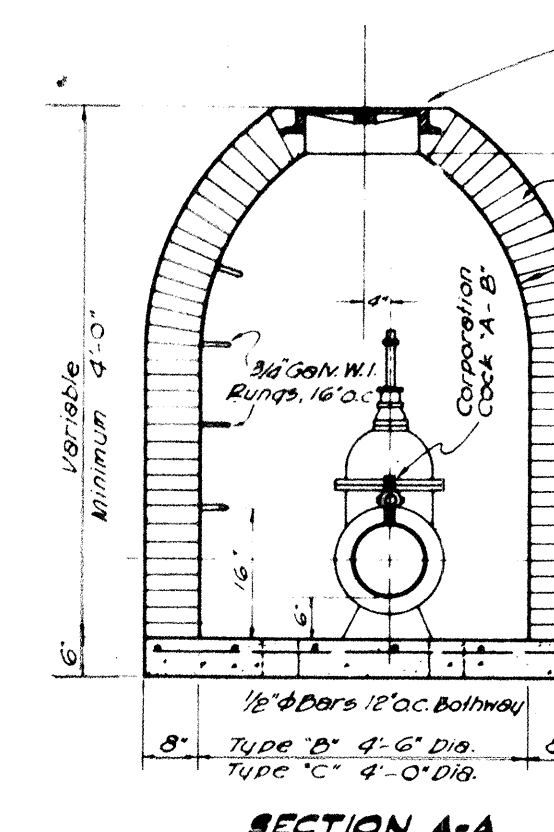
TYPICAL CONNECTION FOR COPPER SERVICE LATERALS

Division Engineer



SECTION THRU LINTEL

DETAIL OF LINTEL & ASPHALT FILLER

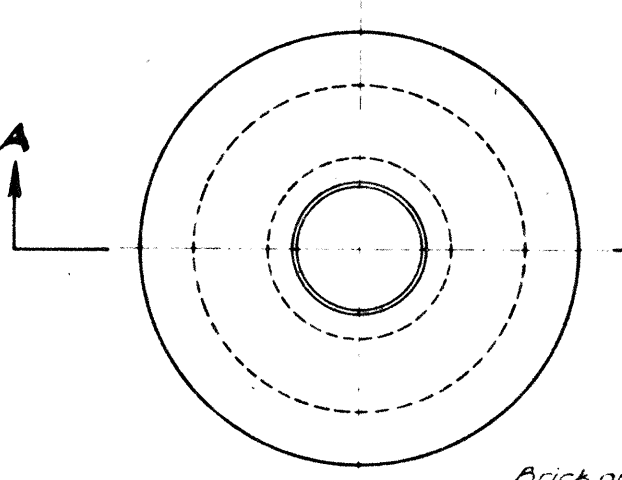


DETAIL OF ASPHALT FILLER

TABLE "A"
REQUIRED CORPORATION COCK SIZES

DIA. OF MAIN INCHES	INLET SIZE CORP. COCK	
	A	B
4	1"	1"
6	1"	1"
8	1"	1"
12	1"	1"
16	1"	1"
20	1"	1"
24	1 1/2"	1"
36	1 1/2"	1"
42	1 1/2"	1"

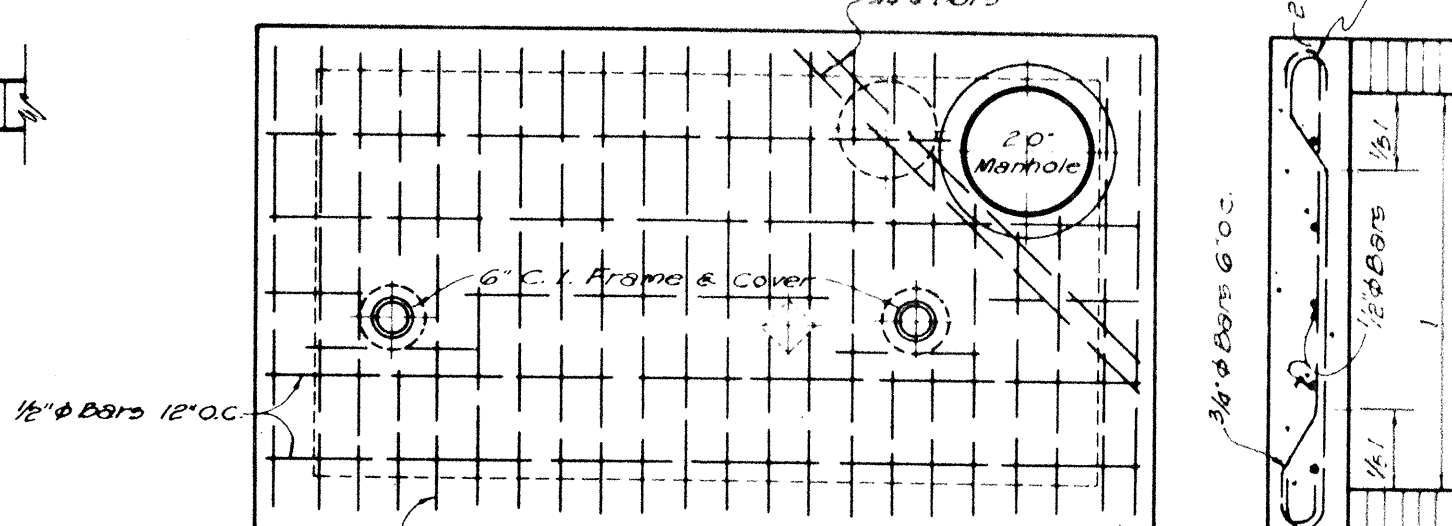
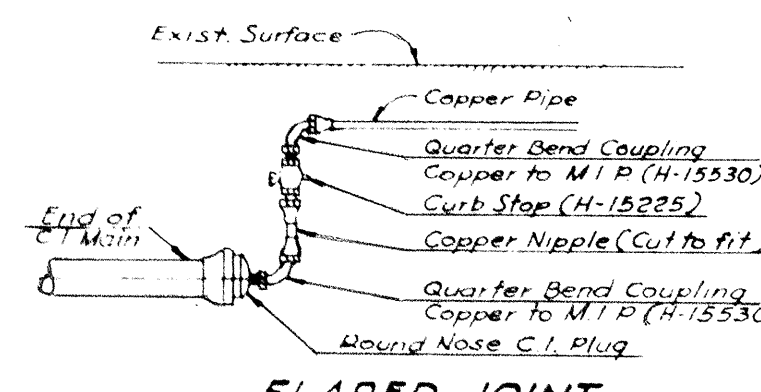
STEEL DETAIL IN BOTTOM SLAB



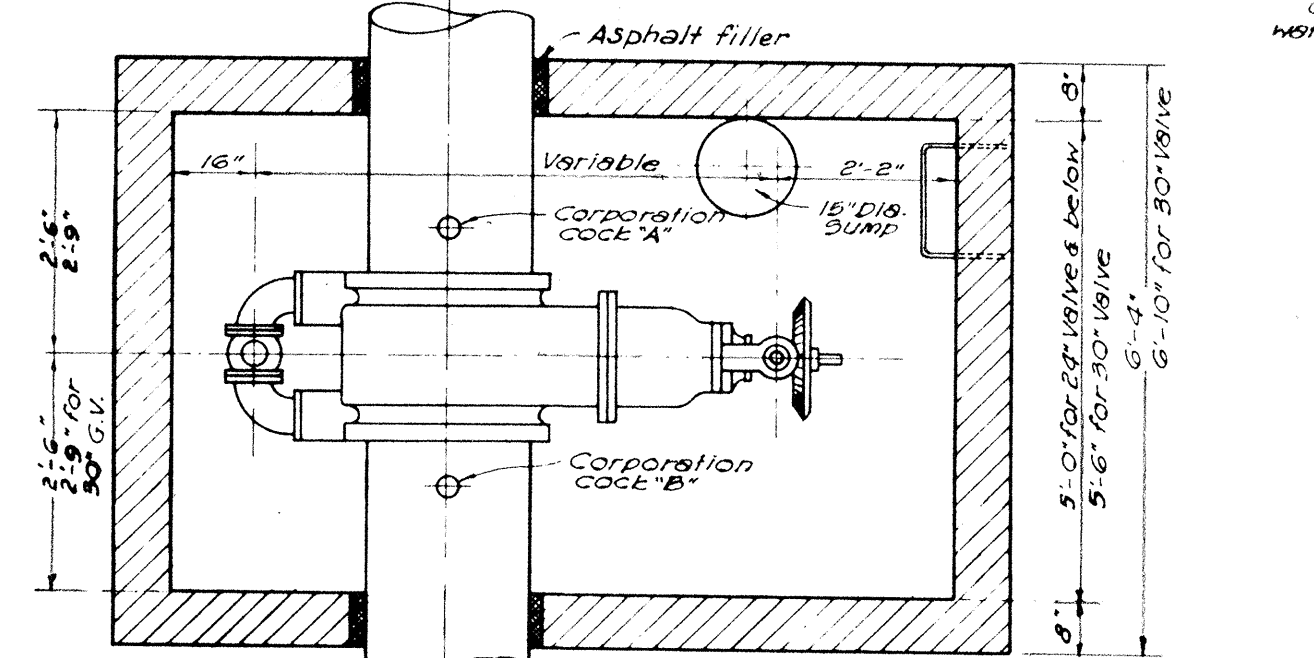
PLAN

TYPE "B" AND "C" MANHOLES
TYPE "B" 4'-6" DIA. (FOR 18" VANE)
TYPE "C" 4'-0" DIA. (FOR 6" & 8" VANES)

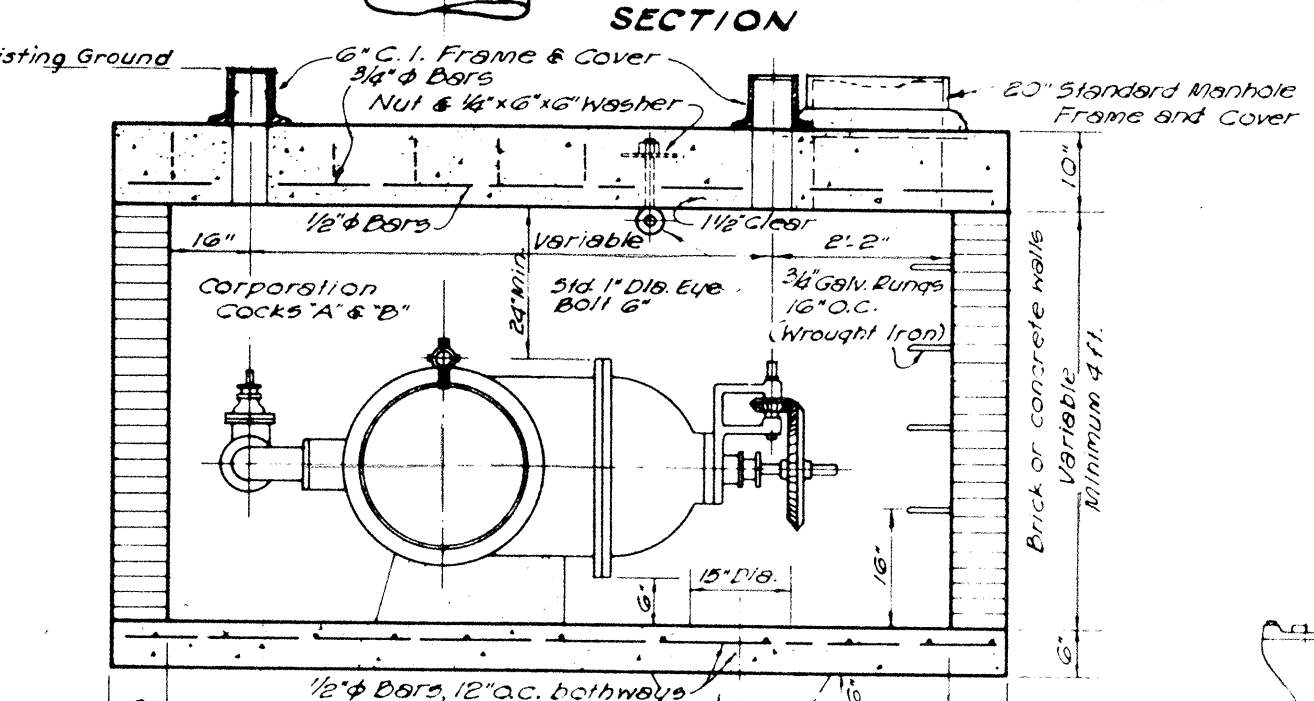
DETAIL OF RUNG



PLAN OF TOP



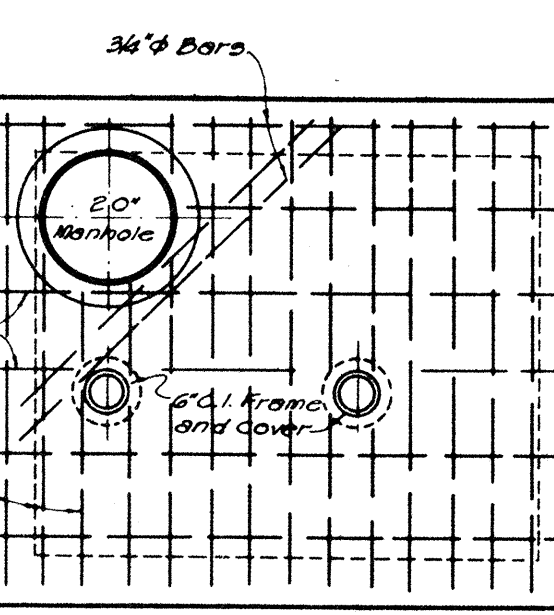
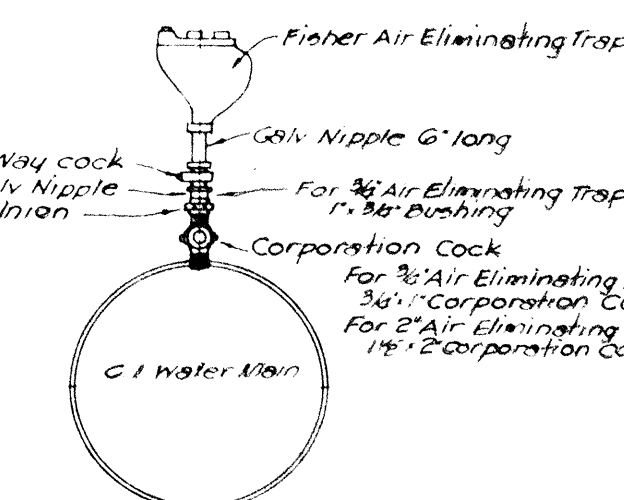
SECTION



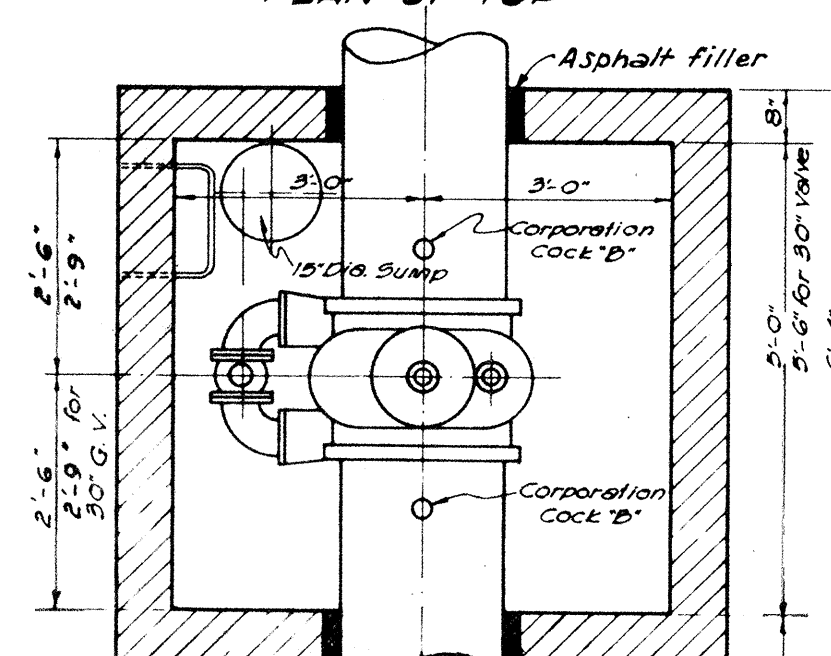
SECTION

TYPE "A" MANHOLE FOR BEVEL GEARED GATE VALVES

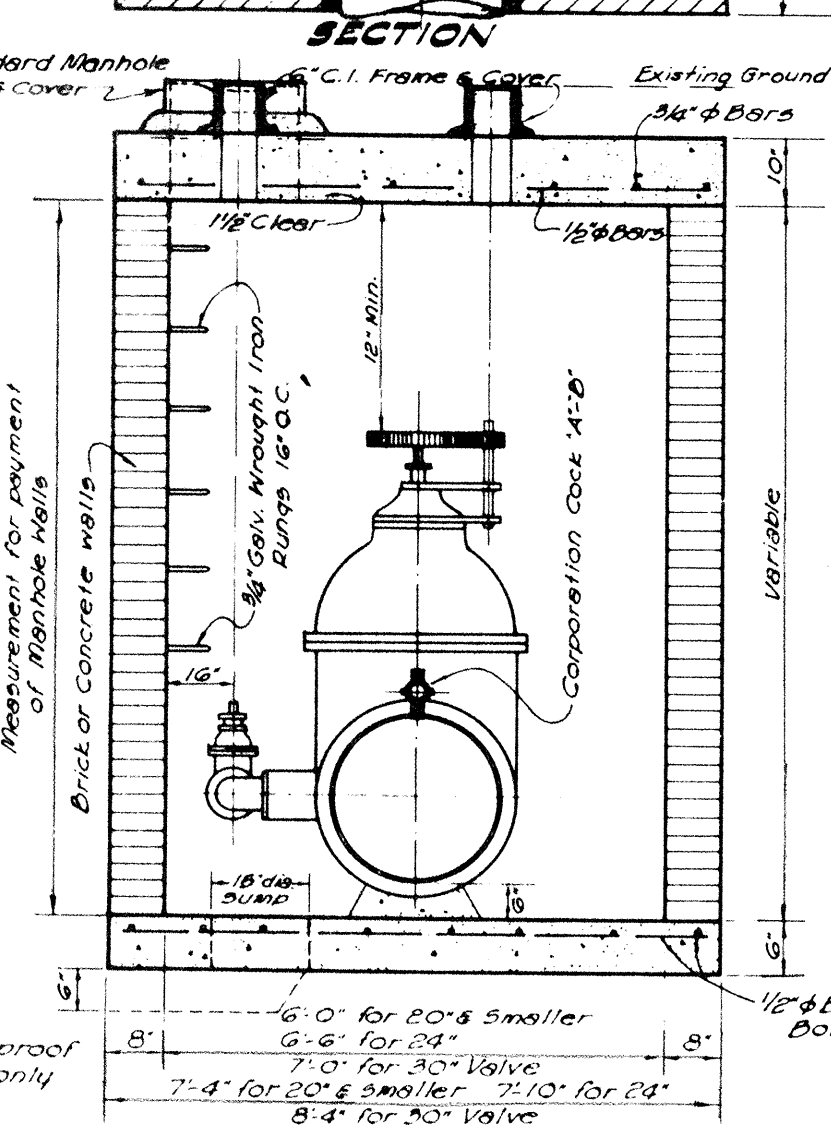
DETAIL OF CONNECTION FOR FISHER AIR ELIMINATING TRAP



PLAN OF TOP

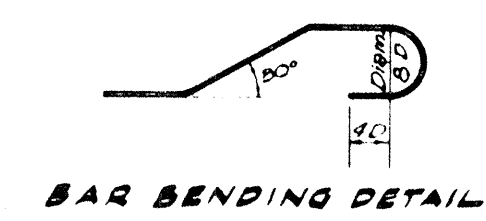


SECTION



SECTION

TYPE "A" MANHOLE FOR SPUR-GEARED GATE VALVES



BAR BENDING DETAIL

STANDARD DETAILS

APPROVED: [Signature]
MANAGER & CHIEF ENGINEER
SCALE: 1/8" = 1'-0" DATE: Oct. 31, 1952

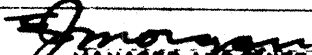
BOARD OF WATER SUPPLY
HONOLULU, T.H.

TERRITORIAL HIGHWAY DEPARTMENT
TERRITORY OF HAWAII

NUUANU AVENUE
PROJECT NO. U33(2)

JANUARY 1955

5746.13

STANDARD DETAILS		DRAWN BY RO	
COPPER SERVICE LATERALS AND CONNECTIONS		TRACED BY RO	
C. I. METER BOX FRAME AND COVER		CHECKED BY T I	
		ENGINEER T I	
		DRAWING NO.	
APPROVED 	MANAGER AND CHIEF ENGINEER	FILE 2	
SCALE	DATE JAN. 27, 1953	POCKET	FOLDER NO.
		6	24 b
BOARD OF WATER SUPPLY			
MONOLULU, T. H.			
TERRITORIAL HIGHWAY DEPARTMENT			
TERRITORY OF HAWAII			
NUUANU AVENUE			
PROJECT NO. U33(2)			
JANUARY 1955			