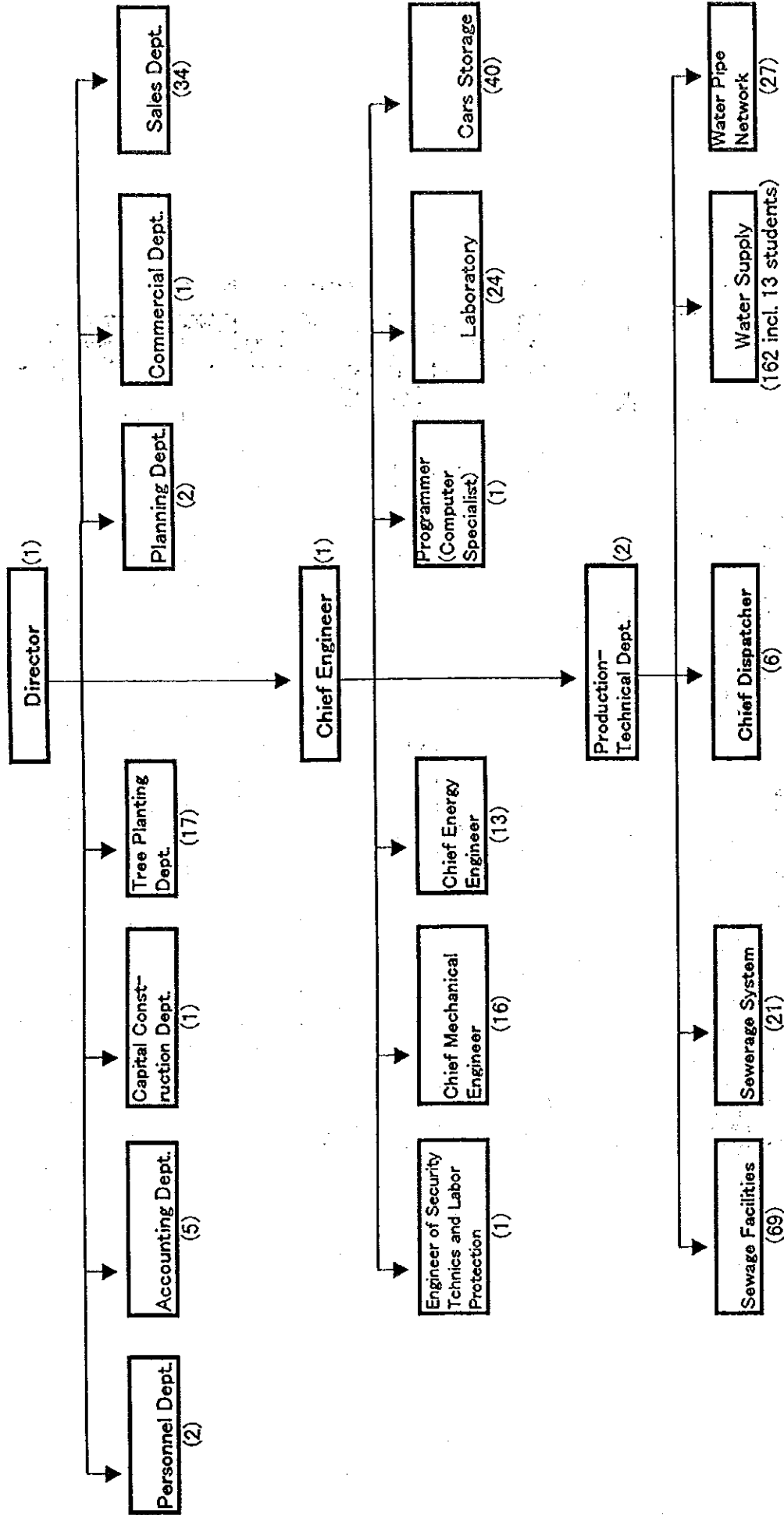


D. 4-3-401

Dynamics of Prices' Changes from 1992 till 1999 on Rendering Communal Services in Tashkent Province

occasion	kind of service unit	1m ² of heating	hot water per 1 person	cold water		waste water		ordinary gas		1 kg of natural gas	electricity per 1 person	rights to use 1m ² of dwelling spaces
				1m ³	1 person (6.1 m ³)	1m ³	1 person (11.7m ³)	10m ³	1 person (9.0m ³)			
Total services on 31.12.91	rubles	0.07	1.00	0.04	0.32	0.02	0.21	0.50	0.45	0.10	0.15	0.13
State committee prices # 4/1 of 9.01.92	rubles	0.14	2.00	0.08	0.65	0.04	0.42				0.30	0.198
Resolution of Ministry of Finance # 24/16 of 14.08.92	rubles			0.50	4.05	0.30	3.16	1.00	0.90	3.00		
Resolution of Cabinet of Ministers of 16.10.92	rubles	0.70	10.00					1.50	1.35		2.00	
Resolution of Cabinet of Ministers dated from 1.06.93	sum-coopons	1.40	20.00	1.00	8.10	0.60	6.32	3.00	2.70	45.00	5.00	
from 20.09.93	sum-coopons	3.00	42.80	2.00	16.20	1.50	15.80	5.00	4.50	60.00	30.00	
Price list 02-04-89 of 28.01.94	..			20.00	162.00	15.00	158.00	15.00	13.50	180.00	50.00	
Price list 15-04 of 28.01.94	..	43.00	420.00									
Decision of governor # 125 of 25.04.94	..											
Price list of Ministry of Finance of 1.06.94	..							35.00	31.50		100.00	242.08
PRECALCULATION TO THE SUM	sum	0.04	0.42	0.02	0.16	0.015	0.16	0.04	0.04	0.18	0.20	0.24
Decision of governor # 292 of 21.10.94	..											0.38
Price list of 1.10.94	..							0.15	0.14	0.65		
Decision of governor # 273 of 30.09.94	..										0.50	
Decision of governor # 6 of 7.01.95	..			0.16	1.30	0.10	1.05					
Decision of governor # 12 of 12.01.95	..										2.00	
Decision of governor # 21 of 31.01.95	..	0.86	8.40									
Decision of governor # 21 of 17.03.95	..											
Price list of Ministry of Finance of 5.04.95	..							0.30	0.27	3.50		1.21
Decision of governor # 126 of 12.05.95	..										3.00	
Decision of governor # 201 of 4.09.95	..											2.35
Price list of Ministry of Finance of 1.10.95	..							0.75	0.68	4.00		
Decision of governor # 44 of 6.02.96	..			0.80	6.48	0.80	8.42				5.00	
Decision of governor # 69 of 6.03.96	..											
Price list of Ministry of Finance of 1.04.96	..							2.25	2.03		6.00	2.65
Decision of governor # 209 of 2.05.96	..											
Price list of Ministry of Finance of 1.08.96	..							2.41	2.17	4.00		
Decision of governor # 210 of 7.10.96	..	1.00	18.00					4.66	4.19	4.00	1.50	3.44
Price list of Ministry of Finance of 1.12.96	..											
Decision of governor # 257 of 30.12.96	..											
Decision of governor # 1 of 03.01.97	..										7.00	
Decision of governor # 68 of 12.03.97	..										8.00	
Decision of governor # 82 of 26.03.97	..			1.00	8.10	1.00	10.53					
Decision of governor # 83 of 26.03.97	..	2.00	50.00									
Decision of governor # 162 of 1.07.97	..										9.00	
Decision of governor # 183 of 21.07.97	..										10.00	
Price list of Ministry of Finance of 1.08.97	..							13.98	12.57			
Decision of governor # 259 of 4.12.97	..											4.79
Decision of governor # 14 of 19.01.98	..										12.00	
Decision of governor # 92 of 23.04.98	..										15.00	
Decision of governor # 131 of 3.06.98	..	3.00	60.00									
Decision of governor # 130 of 3.06.98	..			1.50	12.15	1.50	17.55					
Price list of Ministry of Finance of 30.06.98	..							27.95	25.16		20.00	
Decision of governor # 175 of 4.08.98	..											
Decision of governor # 180 of 13.08.98	..	4.50	90.00									
Decision of governor # 185 of 15.08.98	..											
Decision of governor # 187 of 24.08.98	..			2.25	18.22	2.25	26.32					5.97
Decision of governor # 184 of 14.08.99	..			3.00	24.30	3.00	35.10					

(Received from TCMA Tashkent Province)



(Number): Number of Employee

(Source: Chirchik City Vodokanal
Approved by Mr. T. A. Abdullaev, Director)

D.4.4 Present Situation of Computerization

D.4.4.2 Tariff Collection Procedures

(1) Sample Lists

REF 4.4.1 Contract

CONTRACT No. _____

" " _____ 1999

Chirchik city

PA "Suvokova" on behalf of its director, Mr. T.A. Abdullaev, hereinafter referred to as a "Provider", acting in accordance with Charter and Regulations on use of communal water supply systems and drainage systems of the Republic of Uzbekistan from one part, and _____, hereinafter referred to as a "User", acting in accordance with his Charter, on another part, have concluded the present Contract.

1. SUBJECT OF CONTRACT

1. The subject of this contract is a providing of drinking water conformable to state standards, collection and purification of sewage.

2. RESPONSIBILITIES AND RIGHTS OF "PROVIDER"

- 2.1. "Provider" is obliged to provide to "User" the drinking water at amount of _____ m³/year, _____ m³/month, _____ m³/day, sewage collection at amount of _____ m³/year, _____ m³/month, _____ m³/day.
- 2.2. To prevent and to eliminate the damages of water supply and sewer systems
- 2.3. To conduct the supervision on conditions and exploitation of water and sewerage networks connected to communal water supply and drainage systems.
- 2.4. To struggle with leakage and irrational water consumption.
- 2.5. To control the observance of order and limit of consumption of drinking water.
- 2.6. "Provider" has a right to stop the water supply and sewage collection completely or partially, with preliminary notification of "User", in following cases:
 - Unsatisfactory technical condition of water and sewerage networks and facilities, attended and balanced by "User", and non-fulfillment of "Provider" requirements on elimination of infractions of technical exploitation.
 - Prohibition for authorized body of "Provider" in inspection of "User" water meter unit, water and sewerage networks and facilities for the purpose of control and meter reading, sealing, adjustment of water consumption by over-expenditure of prescribed limit and fulfillment of other activities at any time.

- Conduction by "Provider" of planned – preventive repairs and works on maintenance of water and sewerage networks and facilities.
- Definition of self-dependent connection of "User" to communal water supply and sewerage systems.
- Instructions and prescriptions by Khokimiyat, higher organs, State Nature Committee and State authority on regulation of water usage and conservancy.
- Non-fulfillment by "User" of terms of this contract or application on prescribed limit on water supply and non-observance of terms on volume and contains of sewage water.

- 2.7. "Provider" has a right to stop the water supply without preliminary notification of "User" in cases of:
- natural calamities
 - accidents
 - necessity to increase the water supply to the places of conflagration
 - discontinuance of "Provider" power supply.
- 2.8. In case of complete discontinuance of water supply in settlements and separate districts, not depending on reasons, caused it, in general actions, taken by Khokimiyat, "Provider" has a right to solve the problem of providing the temporary water supply to population right up to water supply renewal.

3. RESPONSIBILITIES AND RIGHTS OF "USER"

- 3.1. "User" is obliged to provide the suitable security and exploitation of communal water and sewerage networks and facilities, situated on his territory and balance, to prohibit the storing of different things above the water network and facilities and to inform "Provider" about all shown damages and disrepair.
- 3.2. To do not exceed the contain and concentration of sewage water:
1. Suspended matter _____ mg/cub.dm
 2. BPK _____ mg/cub.dm
 3. HPK _____ mg/cub.dm
 4. N-NH _____ mg/cub.dm
 5. N-NO _____ mg/cub.dm
 6. N-NO _____ mg/cub.dm
 7. Chlorides _____ mg/cub.dm
 8. Sulfates _____ mg/cub.dm
 9. Solid _____ mg/cub.dm

Payment is imposed, due to the price list, for exceeding of concentration of sited-above components. The sewing of non-mentioned components is prohibited.

- 3.3. To install and to procure the water meters.
- 3.4. To read meter and to pay correctly and in proper time.

- 3.5. To do not permit the water and sewage over-expenditure in excess of norms, established by this contract.
- 3.6. To control the water consumption by sub-users and to take actions on decrease of all kinds of water losses.
- 3.7. "User" shall attach the technical documents for water-pipe and sewerage to the present contract.
- 3.8. "User" has a right to claim the violation by "Provider" his responsibilities.
- 3.9. "User" has a right to receive from "Provider" the information on Regulations on use of communal water supply and drainage systems.

4. ORDER AND PAYMENT FOR RENDERED SERVICES.

- 4.1. Settlements with "Users" are carried out due to the tariffs, established by current legislation on payment orders.
- 4.2. "User" shall prepay not less than 15% of monthly norm of water consumption and sewerage.
- 4.3. "User" shall pay for rendered services until the 30-th day of every month.
- 4.4. For untimely payment "User" will be imposed the 0.5% fine of debt amount per each overdue day, but at the most of 50% of overdue payment amount.
- 4.5. In case of non-providing the constant water supply (except the cases, indicated in item 2.5. of present contract) without preliminary notification, "User" has a right to conduct the re-calculation with "Provider" with a reduction of agreed price (tariff) up to 0.5%.
- 4.6. In case of water consumption and sewage exceeding "User" shall pay a fivefold fine per 1m³ of drinking water and double fine per sewage.
- 4.7. "User" has a right to require the reimbursement of losses, caused by cases provided in item 4.5. (in the presence of statement of losses, signed by both parties) at amount of fivefold fine for sewage.
- 4.8. For lack of water meters the settlement of supplied water and sewage is conducted due to pipe sections for calendar days.
- 4.9. "User" shall officially inform "Provider" about the rejection of water supply and sewerage services 3 months before.

5. LIABILITY OF PARTIES

- 5.1. For violation of responsibilities, prescribed by present contract, parties shall be accounted in accordance with current legislation.

6. FORCE-MAJEUR

- 6.1. Parties shall not be responsible for complete or partial non-fulfillment of any agreed responsibilities, if this fulfillment will be caused by natural calamities (flood, conflagration, earthquake etc.), embargo, war or military operations, happened after the conclusion of this contract.

7. PERIOD OF VALIDITY

- 7.1. This contract comes into effect from the day of signing and is valid until December 31, 2002.
- 7.2. This contract considered to be extended if 3 months before the end of validity the application on refusal, retrial or addendum of this contract was not received from any party.

8. OTHER TERMS

- 8.1. In case of disputes on fulfillment of present contract arisen between the parties, parties shall take appropriate measures for settlement of these disputes by means of negotiations.
- 8.2. Parties shall act in all situations, not indicated by present contract, in accordance with current legislation of the Republic of Uzbekistan.
- 8.3. Present contract is compiled in duplicate with an equal legal force.

9. JURIDICAL ADDRESSES

"PROVIDER"

702100, Chirchik, Vokzalnaya str.,1

PA "Suvokova"

B/a 20210000000135227002

Chirchik branch

MFO 00478

"USER"

AKT

“ ” _____ 199

We, the undersigned representative of “Suvokova” of _____ district,
Mr. _____ and representative of customer _____

Mr. _____, have made this Act to confirm that water
meter No. _____ diameter _____ address _____
on the date “ ” _____, 199

has the reading: _____, last reading: _____
Consumption of water for estimated period _____
Sewage collection _____

Note _____

The Act hereof is made in 2 copies

Representative of “Suvokova”

Representative of customer

REF 4.4.3 Payment Order

Calculation Table :

Subdivisions	Volume of water	Amount without VAT	Volume of sewerage	Amount without VAT	VAT	Total with VAT
Drug stores	2	46.8	2	10.5	11.5	68.8
TOTAL	0	46.8		10.5	11.5	68.8
amount of settlements	0					
amount of over-allowed consump.	0					
over-limit and leakage	0					
prepayment of current month	0					
prepayment of next month	0					
penalty for 0 days	0					
TOTAL to payment	68.76					

WITHOUT ACCEPTANCE
PAYMENT ORDER NO. 73

IDENT. NO. 200941730

DATE: 20.08.99

Payer: DARIDARMON Tashob State Open-Type enterprise

DEBIT

Payer's account 20210000000128645001

AAAAA

Payer's bank: UzJSB CHIRCHIK

00478

AMOUNT 68.76

Beneficiary: Prod. Enterp. "SUVOKOVA"

CREDIT

Beneficiary's account 20210000800135227001

AAAAA

Beneficiary's bank: UzJSB CHIRCHIK

00478

Amount in letters

Sixty Eight Soum 076 tiyin

Payment detail: Agreement No.270 dd. 16.05.96 for water from 15.07.99 to 15.08.99

ecree of RU dd. 26.01.96 No.170,

item 3.5 of the Agreement

SIGNATURES OF BENEFICIARY

CHIEF ACCOUNTANT

BANK

CHECKED

APPROVED

Performed by bank

SEAL

REF 4.4.4 Invoice

Invoice #318

Date: August 21st, 1999

Supplier: Chirchik Production Board "Suvokova"	Consumer: TekhTa'minlash
Address: 1, Vokzalnaya street	Address:
Telephone: 21716	Telephone:
Bank Account: 20210000800135227001	Bank Account: 2028000302273471001
Bank: UZGSB in Chirchik	Bank: UZGSB in Chirchik
INN: 200941730	INN:

Services	Volume	Price	VAT exclude	VAT		Total amount
				%	Amount	VAT include
water	296	23.40	6926.40	20%	1385.28	8311.68
sewerage	296	5.25	1554.00	20%	310.80	1864.80
total			8480.40		1696.08	10176.48
prepayment						0.00
prepayment						0.00
prepayment for the next month						0.00
offset						0.00
overlimit and leakage						27424.80
fine for 0 days						0.00
Total amount of payment						37601.28

Amount of money (in UZ Thirty thousands six hundred one Uzbek SUM twenty eight TIN)

Mr. Norbaev B., Chief of Water Sale Department
 Mr. Khvan E.G., Chief Accountant

Received by
 Name, Family name (Signature)

REF 4.4.5 Bank Statement

00478 Chirchik town, Chirchik branch of "Uzjilsberbank"

Issued: 16.08.1999

Bank statement for 16.08.1999

Executor:

Last transaction: 13.08.1999

PB "SUVOKOVA"

Balance: beginning of the day

Balance: end if the day

Account:
Liability
Liability

No.	Account	Document No.	VO	Code MFO	Debit	Credit

REF 4.4.6 Bank Statement

Electronic payment order No.53

Payer: Zhilsberbank-12 Public services

Payer's account:

Payer's Bank:

Payer's Bank code:

Amount: 404.30

Beneficiary's name: PB "SUVOKOVA"

Beneficiary's account:

Beneficiary's Bank

Beneficiary's Bank code

Amount in words: Four Hundred Four Soum and thirty tiyin

Detail of payment:

Seal

Head:

Chief Accountant

Checked: Approved:

Issued:

REF 4.4.7 Information

**Information
on income as of 1998, Chirchik city, PU Suvokova**

	UNIT	
Total volume of water provided to users	thousand m3	31062
including population	thousand m3	22337
budget organizations	thousand m3	4685
other	thousand m3	4040
Income to be paid	thousand soum	186418.9
including population	thousand soum	31365
budget organizations	thousand soum	68502.4
other	thousand soum	86551.5
Real income	thousand soum	175865.7
including from population	thousand soum	33269.8
from budget organizations	thousand soum	42127.2
from other	thousand soum	100468.7

N.I. Tegai

REF 4.4.8 Account Receivable

ACCOUNTS RECEIVABLE
of the Chirchik Production Board "SUVOKOVA" as of 1.08.99

Name of organization	overdue	current	total
"Electro-chemical Industry" assoc.		4,196.20	4,196.20
Uzbek Complex of Refractory Materials		2,230.00	2,230.00
Municipal enterp. for Heating & Power		2,374.90	2,374.90
GAS. VODOKANAL		967	967
GORONO (City National Educ. Dept)		6,574.20	6,574.20
Gorzdrav (City territorial Medical Assoc.)		4,996.60	4,996.60
Blood Transfusion Clynic		62.5	62.5
Drug Addiction Treatment Dispenser		204	204
SES (Sanitary Epidemiological Station)		69	69
Culture Dept. (libraries)		26.7	26.7
Culture Dept (music)		159.5	159.5
Hokimiyat (Mayor's Office)		194	194
GOVD (City Interior Affairs Dept.)		165.6	165.6
Medical College		220.9	220.9
College		170	170
Boarding School		317.8	317.8
Children's Home		96.7	96.7
Vocational school No.1		149	149
RUOR (Repub. Board of Olympic Reserve)		109.3	109.3
ChLLP (Chirchik Light Industry Lyceum)		42.5	42.5
College		177.2	177.2
Chirchik Industrial School		74.9	74.9
GNI (State Tax Inspection)		17.6	17.6
Justice Board		3.8	3.8
Legal Medical Expertise		24.6	24.6
TOTAL:		23,624.50	23,624.50

Director of "SUVOKOVA"

T.Abdullayev

REF 4.4.9 Table of Debtors

CHIRCHIK "VODOKANAL"

SUMMARY TABLE OF DEBTORS FOR III QUARTER. CONTROLLER DIYANOVA APT. 5

Flat	Name	debt for last period	charged for quarter	paid for quarter	debt
1	2	3	4	5	6
4-5		162	216	162	216
6		404.2	432	324	512.2
7		-648	324		-324
8		-36.2	108	99	-27.2
9		-324.8	432		107.2
10		161.6	216	144	377.6
11		17.6	216	243	89.6
12		-0.6	324	160	80.4
13		13.6	216		69.6
14		-325.4	162	216	-163.4
15		-0.4	216	486	-0.4
16		-660	162	864	-984
17		-0.8	432		-432.8
18		-567	243		-324
19		-12.6	864		851.4
20		-441.8	162		-279.8
21		645.6	864		1,509.60
22		324	432	972	-216
23		784.6	216		1,000.60
24					
25		71.4	108	216	-36.6
26		108	432	252	288
27		-372.2	162		-210.2
28		149.6	216	378	-12.4
29		-71.28	151.2	151	-71.08
30		-108.2	302.4	306	-111.8
TOTAL		-727.08	7608.6	4973	1908.52

REF 4.4.10 Guarantee

REPUBLIC OF UZBEKISTAN

Printing Division of Executive Body of Khokim of Tashkent City

CHIRCHIK CITY PRINTING HOUSE

Chirchik, Tashkent region, A. Navoi avenue, 135 a/c 20210000900128648001 ZhSB,

Bank code 00478 tel. 5-30-49

August, 18 1999

Mr. Abdullaev T.A
Chief of Vodokanal

CHIRCHIK CITY PRINTING HOUSE because of difficult finance situation can cover debt at the size of 25.4 thousand sums not earlier than in August, 25, 1999.

Director

signed

Ishmanov A.A

Uzbek Combine of Refractory and Heat Resisting Metals (uzKTZhM)

702119, Chirchik, Tashkent region

Teletype 116661

For telegrams: Chirchik Alloy

A/c 20210000700430487001

Main operation Dpt. NB FER RUz. Tashkent

Bank code 00407

16.08.99 # Mya/729

Mr. Abdullaev T.A
Director of Vodokanal

Mnagement of UzKTZhM asks you to supply Sportinaya and Ibn-Sino str. With water. We will cover our debt within August.

Acting General Director signed

Yakubov M.M.

Chief accountant signed

Mirzakulova M.T.

stamped

**CONTRACT NO.
FOR INSTALLATION OF COLD WATER METERS**

“ ” _____, 1999

(Surname, name, patronymic)

residing at the address: _____
hereinafter referred to as the “House Owner”, on the one hand, and the Chirchik Production Board “SUVOKOVA” represented by Director T.A.Abdullayev, on the other hand, hereinafter referred to as the “Executive”, have entered into this Contract as follows:

1. The House Owner shall:

- a) pay the expenses connected with installation and registration of cold water meters in the amount of _____ soum, within the period until “ ” _____ 0 __, 1999, with obligatory monthly paying off.

Kinds of services	Schedule of monthly payment in 1999			
	I quarter	II quarter	III quarter	IV quarter
Installation & registration of a water meter	2,612.75	2,612.75	2,612.75	2,612.75

- b) make current payments for supply of household drinking water and services of the city sewerage according to the existing tariffs and terms;
c) ensure safety of controlling seals and operate the meter in conformity with technical rules and norms;
d) observe the existing “Regulations on utilization of the municipal supply systems and drainage in the Republic of Uzbekistan”;
e) when leaving the house, the House Owner shall notify the Executive 10 days before leaving, and make complete settlement for the consumed water and sewage. After the House Owner’s departure, the responsibility for his indebtedness and safety of the water meter shall transfer to a new owner.

2. The Executive shall:

- a) install the water measuring unit with a water meter in accordance with the requirements of the Uzbekistan State standard and KMK;
b) register the water measuring unit with sealing of the unit for the purpose of making further settlements on the basis of the water meter indices;
c) perform controlling examination and reading of the cold water measuring unit as often as once a quarter.

3. If the House Owner doesn’t pay for installation and registration of the water meter within the terms herein specified, the Executive can switch the House Owner off the city water-supply and sewerage network with preliminary verbal advice of the House Owner 3 days before switching off, subject to switching on after making payment.

In case of unwarranted switching to the city water supply and sewerage network, the House Owner shall incur administrative and criminal liability according to the existing legislation.

This Contract has been filled out in 2 copies, one copy for each party.

ADDRESSES OF THE PARTIES

Executor
Chirchik, 1, Boz-Suv bekati for Street
Production Board “SUVOKOVA”
Account: 20210000800135227001
at the Chirchik branch of UzZhSB
MFO 00478, INN 200941730
Signatures

House Owner

CONTRACT

for rendering services on supply of drinking water and drainage of sewage

Chirchik town

This Contract has been made by the Chirchik Production Board "Suvokova", on the one hand, hereinafter referred to as the "Supplier", and the owner of the private house (apartment), on the other hand, hereinafter referred to as the "User", as follows.

1. DUTIES AND RIGHTS OF THE PARTIES

- 1.1. The Supplier shall provide the User with drinking water and sewerage.
- 1.2. The Supplier shall inform in the mass media about changes of tariffs.
- 1.3. Within a short period, the Supplier shall eliminate breaks in water supply and sewerage networks.
- 1.4. The Supplier can stop water supply without preliminary notification in the following cases:
 - a) if the Supplier is not provided with electric power;
 - b) in case of natural calamities;
 - c) if there is a break in the main pipe;
 - d) in case, the User has an outstanding payment.
- 1.5. The User shall observe the rules of utilizing the systems of communal water supply and water drainage of the Republic of Uzbekistan.
- 1.6. Promptly pay for services rendered and make re-calculations in connection with changes in tariffs
- 1.7. Install a water meter at its own expense and maintain it in good technical order.
- 1.8. In case the owner sells or leases the flat (private house), or the family composition changes, the User shall inform the Supplier within one month.
- 1.9. Annually, until 1 November, the User shall take measures on warming the outdoor water pipes.
- 1.10. The User can get from the Supplier full information about the Regulations of the Water Supply and Communal Economy of Uzbekistan.
- 1.11. The User can lodge claims on breach of the Supplier's obligations.

2. PROCEDURE AND FORM OF PAYMENT

- 2.1. Settlements with users are made according to existing tariffs by means of payment documents (receipts).
- 2.2. The User shall make monthly payment until the 10th of each month. After this period, beginning with the 11th of the month, a penalty at the rate of 0.5% shall be charged for each day of default.
- 2.3. The User can demand compensation of damage caused by non-supply of water (except cases stipulated by items 1-4 hereof), with the act confirming non-supply of water, which is to be signed by two residents and the Mahalla Committee.

3. RESPONSIBILITY OF THE PARTIES

In case of breach of the contract obligations, the parties shall be answerable according to the current legislation.

4. VALIDITY PERIOD OF THE CONTRACT

This Contract shall become valid from the date of signing and shall be valid until its termination.

"SUVOKOVA" Production Board
1, top kuchasi, Boz-Suv bekati
Chirchik town

USER

Name

Address

REF 4.4.13 Notification and Receipt

Chirchik Vodokanal, Volkzalnaya str.,1
 A/c 2021000000135227002 bank code 00478 UzZHSB
NOTIFICATION

Name: _____
 Address: _____
 From _____ 199 to _____ 199

Chirchik Vodokanal, Volkzalnaya str.,1
 A/c 2021000000135227002 bank code 00478 UzZHSB
RECEIPT

Name: _____
 Address: _____
 From _____ 199 to _____ 199

	Number of people or water meter figure	Norm, m3	Volume, m3	Tariff	Soums	Tiyn; 1 soum= 100 tiyn
Water for						
House needs						
Cattle						
Sheep						
Watering						
Of garden						
Of yard						
Car washing						
sewerage						

Amount _____ Payment term _____

Penalty _____

Amount _____ Payment term _____

Penalty _____

CASHIER

CASHIER

CUSTOMER'S BOOK NO. _____

on settlements for water and sewerage

For the customer's reference!

1. Calculation of payment for water and sewerage:
 - in the availability of a water meter, calculations shall be effected according to the meter indices;
 - if the water meter is out of order or unavailable, calculations shall be effected according to existing tariffs and norms with recording of the calculation results into the Customer's Book
2. The customer shall pay every month for using water and sewerage. If the water meter is out of order, the amount of payment in the receipt shall correspond to the amount indicated in the Act and sample of the receipt.
3. In case of non-payment within the set period, a penalty shall be charged for each day of delay beginning with the 11th day of the month, at the rate of 0.1% of the amount indicated in the receipt. Advance payment for the period of the current year is possible.
4. If case any changes take place in water using conditions, or not all receipts have been used, or the Customer's Book lost, the customer shall immediately apply to the customer service department of the Production Board "Suvokova".
5. The customer shall be responsible for proper maintenance and safety of the water meter seal.

In case of the water meter malfunctioning, the customer shall immediately apply to the Production Board "Suvokova".

IT IS PROHIBITED:

- to make any unwarranted amendments to the Customer's Book;
- to conduct unwarranted reconstruction and switching on water supply and sewerage networks;
- to delete the seal and perform unwarranted repair of the water meter;
- to water yards and plants from 6 to 12 o'clock p.m.

The current tariffs for water and sewerage.

1. In the availability of a water meter:

- a) in houses with sewerage for 1m³ _____
- b) in houses without sewerage for 1 m³ _____

2. Customers enjoying privileges at the rate of 50%

- a) in houses with sewerage for 1m³ _____
- b) in houses without sewerage for 1 m³ _____

3. Customers enjoying privileges at the rate of 30%

- a) in houses with sewerage for 1m³ _____
- b) in houses without sewerage for 1 m³ _____

4. Customer's account

5. Second name _____

First name _____

Patronymic _____

6. Address _____

7. I have studied the procedure of use and payment for water and sewerage:

" " _____, 199

Customer's signature

Controller's signature

RECEIPT	NOTIFICATION
PB "Vodokanal"	PB "Vodokanal"
Account 000508504 in Chirchik	Account 000508504 in Chirchik
branch of Promstoibank	branch of Promstoibank
Customer	Customer
Name	Name
Address	Address

Date	water meter indices	Date	water meter indices
to		To	
from		from	
difference		difference	
amount in soum		amount in soum	
discount		discount	
penalty %		penalty %	
Due amount		Due amount	
Cashier		Cashier	

REF 4.4.15 List of Debtors

List of debtor living in Abaya street

Apartment	Family name	Balance for the period of 1998	Current depreciation	Paid	Debt for 2000/1/1

Total:

REF 4.4.16 Notification

from 26 August, 1999
Chirchik PB "VODOKANAL"
1, Vokzalnaya St.

Account 20210000800135227001
UzJSB Chirchik

NOTIFICATION

Name Soloshin
Address 1, Chemists' village, 13
19 Party Congress Street,
Apt.3

For 1999

hemists' village			
	2	q-ty of persons	Amount
Water		3	-25.1

Bath, sauna, no sewerage

Discount 30.00%

Amount: Twenty Five soum 10 tiyin

Payment deadline: 26 August, 1999

Cashier

Chirchik PB "VODOKANAL"
1, Vokzalnaya St.

Account 20210000800135227001
UzJSB Chirchik

NOTIFICATION

Name Soloshin
Address 1, Chemists' village, 13
19 Party Congress Street,
Apt.3

For 1999

1, Chemists' village			
	2	q-ty of persons	Amount
Water		3	-25.1

Bath, sauna, no sewerage

Discount 30.00%

Amount: Twenty Five soum 10 tiyin

Payment deadline: 26 August, 1999

Cashier

REF 4.4.17 Customer Book

Account book

Name, Family name _____

Address _____

Telephone _____

I acquainted with rules of water consumption

Signature of debtor

Signature of creditor

Advice					Receipt				
Family name					Family name				
Address					Address				
For the period of					For the period of				
Services	Family Number	Standard in m3	Tariff in UZS	Total Amount	Services	Family Number	Standard in m3	Tariff in UZS	Total Amount
1. Water					1. Water				
2. Sewerage					2. Sewerage				
Amount of payment					Amount of payment				
Fine					Fine				
Total Amount					Total Amount				
Terms of Payment					Terms of Payment				
Casher					Casher				



(2) Systems

Fig D.4.4.1 Computer Systems

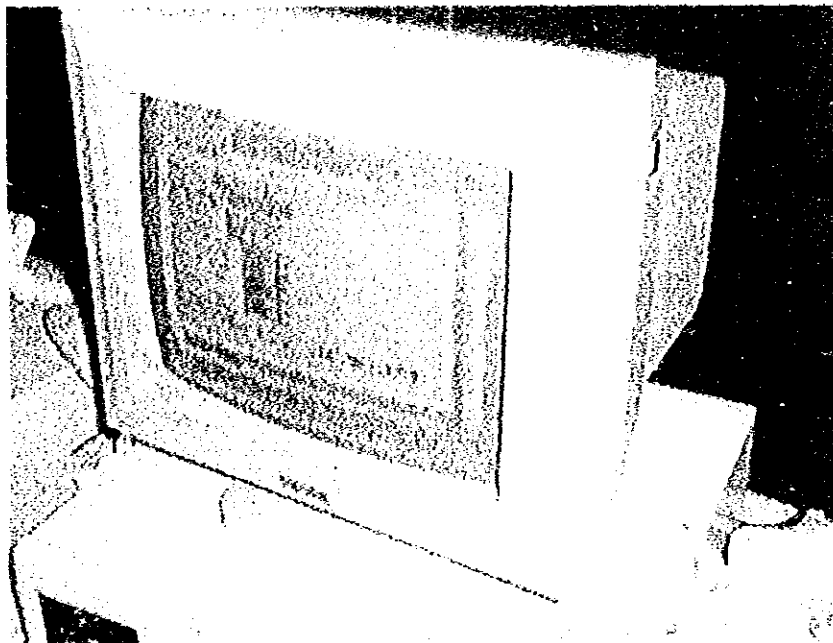
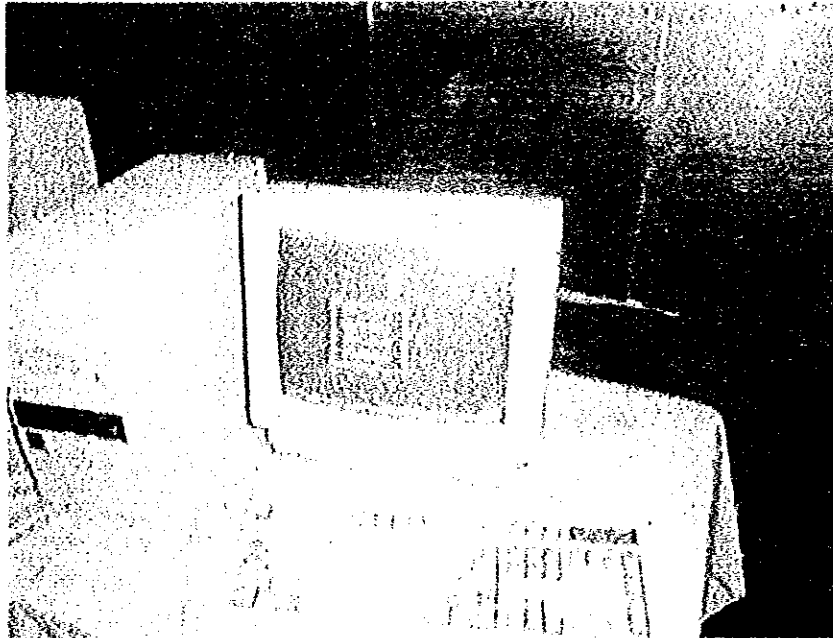


Fig D.4.4.2 Computers and Controllers



Table D.4.5.1 List of Pump Stations

Name	Type of Facility	Type	Dimension	Numbers
			Ave: cu.m/hr(min) x m-H x mm-D x kw	
Pump Station No.1	Deep well		Dia.356 mm x 30 m	31
	Well pump(W)	ECV-10	Ave:144.2 (2.4) x 45 x 125 x 32	26
			Total:3750 cu.m/hr = 90,000 cu.m/day	
	Well pump(R)	ECV-10	Ave:124(2.07) x 50 x 125 x 32	5
	Lifting pump1(W)	D-1250	1250(20.8) x 120 x 400,300 x 630	2
	Lifting pump1(R)	D-1250	1250(20.8) x 120 x 400,300 x 630	1
	Lifting pump2(W)	EV200 x 4	200(3.3) x 120 x 125 x 630	1
	Lifting pump3(W)	D-1250	1250(20.8) x 60 x 400,300 x 500	1
			1	
			Total:5,200 cu.m/hr = 124,800 cu.m/day	
Pump Station No.2 (Booster Pump)	Lifting pump1(W)	4NDV	180(3) x 80 x 125 x 75	1
	Lifting pump2(W)	EV200 x 2	500(8.3) x 80 x 250,200 x 200	1
	Lifting pump2(R)	EV200 x 2	500(8.3) x 80 x 250,200 x 200	1
	Lifting pump3(W)	8NDV	500(8.3) x 80 x 250,200 x 160	1
			Total:1,180 cu.m/hr = 28,320 cu.m/day	
Pump Station No.3	Deep well		Dia.356 mm x 30 m	8
	Well pump(W)	ECV-10	Ave:100(1.7) x 50 x 125 x 32	8
			Total:800 cu.m/hr = 19,200 cu.m/day	
	Lifting pump1(W)	200D60	500(8.3) x 70 x 250,200 x 200	1
	Lifting pump2(W)	6NDS	180(3) x 70 x 125 x 75	1
	Lifting pump2(R)	6NDS	180(3) x 70 x 125 x 75	1
	Lifting pump3(W)	3V200 x 2	250 x 70 x 125 x 125	1
			Total:930 cu.m/hr = 22,320 cu.m/day	
Pump Station No.4 (Booster Pump)	Lifting pump1(W)	6K8	180(3) x 30 x 125 x 28	1
	Lifting pump1(R)	6K8	180(3) x 30 x 125 x 28	1
	Lifting pump3(W)	200D65	500(8.3) x 40 x 250,200 x 125	1
	Lifting pump3(R)	200D65	500(8.3) x 40 x 250,200 x 125	1
Pump Station No.6	Deep well		Dia.356 mm x 30 m	6
	Well pump(W)	ECV-10	Ave:178(2.9) x 40 x 125 x 32	5
			Total:890 cu.m/hr=21,360 cu.m/day	
	Well pump(W)	ECV-10	Ave:178(2.9) x 40 x 125 x 32	1
	Lifting pump1(W)	8NDV	500(8.3) x 70 x 250,200 x 200	1
	Lifting pump1(R)	8NDV	500(8.3) x 70 x 250,200 x 200	1
	Lifting pump2(W)	3V200X2	500(8.3) x 70 x 250 x 250	1
	Lifting pump2(R)	3V200X2	500(8.3) x 70 x 250 x 200	1
			Total:1,000 cu.m/hr = 24,000 cu.m/day	
City Well Independent	Deep well		Dia.356 mm x 30 m	3
	Well pump(W)	ECV-10	Ave:178(2.9) x 40 x 125 x 32	3
			Total:300 cu.m/hr = 7,200 cu.m/day	
Komsomolsk Intake Pump Station	Intake pump1(W)	D1250/65	1,250(20.8) x 65 x 450,350 x 250	1
	Intake pump1(R)	D1250/65	1,250(20.8) x 65 x 400,300 x 200	1
	Intake pump1(W)	D1250/65	1,250(20.8) x 65 x 450,350 x 250	1
	Intake pump1(R)	D1250/65	1,250(20.8) x 65 x 450,400 x 315	1
	Intake pump2(W)	D2500/68	2,500(41.2) x 68 x 500,400 x 500	1
			Total 5,000 cu.m/hr = 120,000 cu.m/day	
Komsomolsk Distribution Pump Station	WTP		Capacity5: 9,000 cu.m/day	1
	Distr. Pump1(W)	D1250	1,250(20.8) x 60 x 400,300 x 250	1
	Distr. Pump1(S)	D1250	1,250(20.8) x 60 x 400,300 x 250	1
	Distr. Pump2(W)	D2500	2,500(41.2) x 60 x 500,400 x 500	1
	Distr. Pump2(S)	D2500	2,500(41.2) x 60 x 500,400 x 500	1
			Total 3,750 cu.m/hr = 9,0000 cu.m/day	

Note: Distr.: Distribution, W: working, S: Stand-by

Table D.4.5.2 Analysis of Surface WTP

No	Sampling Points	Temperature	Odour	Taste	Color	Turbidity mg/L	pH	Oxygen ability mg/L	Ammonia Nitrogen (GOST 4192-82)	Nitrite (GOST 4192-82)	Nitrate mg/L	Hardness mg/L	Oxygen dissolved mg/L	BOD mg/L	Calcium mg/L	Magnesium mg/L	Alkalinity mg/L	Sulfate mg/L (GOST 4389-72)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	June, 1999																	
1	Water resource	14	0	0	0	2.95	8.3	0.88	ND	0.035	1.1	1.8	12.4	4.4	1.4	0.4	1.7	57.6
2	Inflow	14	0	0	0	4.0	8.3	0.88	ND	0.035	1.1	1.8	12.4	4.4	1.4	0.4	1.7	57.6
3	After sediment	14.5	0	0	0	3.9	8.3	0.72	ND			1.8					1.7	
4	After filters	14.5	0	0	0	1.0	8.3	0.64	ND	ND		1.8					1.7	
5	Before entering into network	15	0	0	0	1.0	8.3	0.64	ND	ND	1.1	1.8	11.2	4.4	1.85	0.4	1.7	57.6
6	1-st point of output	15	0	0	0	1.0	8.3	0.64	ND	ND		1.8					1.7	

No	Sampling Place	Solid Total Dissolved mg/L (GOST 18164-72)	Chloride mg/L (GOST 4245-72)	Iron mg/L (GOST 4011-72)	Flourine mg/L (GOST 4386-81)	Copper mg/L (GOST 4386-72)	Zinc mg/L (GOST 18293-72)	Lead mg/L (GOST 18293-72)	Molybdenum mg/L (GOST 18308-72)	Arsenic mg/L (GOST 4152-81)	Chlorine mg/L	Chlorine Demand mg/L	Chlorine Rest (monob) mg/L	Manganese mg/L (GOST 9474-72)	Poly phosphate mg/L	Coagulant mg/L	Aluminium Rest mg/L
1	2	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
	June, 1999																
1	Water resource	186	5.5	ND	0.265	ND	ND	ND	ND	ND				ND	ND		
2	Inflow	186	5.5	ND	0.265	ND	ND	ND	ND	0.77	0.2			ND	ND		
3	After sediment																
4	After filters																
5	Before entering into network	186	5.5	ND	0.265	ND	ND	ND	ND	ND		0.43		ND	ND		
6	1-st point of output																

Table D.4.5.3 (1) Analysis of Water Source for Surface WTP from July 1998 to June 1999

Month	Temperature	Odour	Taste	Color	Turbidity mg/L	pH	Oxygen ability mg/L	Ammonia nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	Hardness mg/L	Oxygen dissolved mg/L	BOD mg/L	Calcium mg/L	Magnesium mg/L	Alkalinity mg/L
Jul 98	16	0	0	0	5	8.5	0.96	ND	0.043	1.1	1.7	11.2	4	1.2	0.5	1.65
Aug 98	16	0	0	0	4.2	8.5	0.96	ND	0.04	1.8	1.65	11.7	4.7	1.2	0.4	1.6
Sep 98	15.5	0	0	0	1.5	8.1	1.04	ND	0.0225	1.8	1.65	12.2	4.2	1.4	0.25	1.6
Oct 98	14	0	0	0	1.4	8.15	0.88	ND	0.016	1.55	1.7	12.9	4.5	1.45	0.25	1.65
Nov 98	11	0	0	0	1.25	8.1	0.96	ND	0.02	2.2	1.9	12.4	4.5	1.2	0.7	1.8
Dec 98	8	0	0	0	2.4	8.3	1.12	ND	0.03	2.4	1.9	12.2	4.5	1.6	0.3	1.8
Jan 99	5	0	0	0	3.15	8.3	1.2	ND	0.04	2.4	2	12.7	4.7	1.6	0.3	1.9
Feb 99	6	0	0	0	2.5	8.35	0.88	ND	0.055	2.2	2.1	12.9	4.2	1.75	0.35	1.95
Mar 99	6	0	0	0	8.5	8.45	1.04	ND	0.05	2.2	2.3	12.1	4.3	1.8	0.5	2.15
Apr 99	9	0	0	0	7.4	8.5	2	ND	0.06	2.2	2.4	12.6	3.9	1.9	0.5	2.25
May 99	13	0	0	0	8.5	8.4	1.12	ND	0.047	1.1	2.25	12.8	4.2	1.85	0.4	2.1
Jun 99	14	0	0	0	2.95	8.3	0.88	ND	0.035	1.1	1.8	12.4	4.4	1.4	0.4	1.7

Month	Sulfate mg/L	Solid total	Chloride mg/L	Iron mg/L	Fluorine mg/L	Copper mg/L	Zinc mg/L	Lead mg/L	Arsenic mg/L	Manganese mg/L	Polyphosphates mg/L
Jul 98	56	182	6.5	ND	0.2	ND	ND	ND	ND	ND	ND
Aug 98	53	171	6	ND	0.16	ND	ND	ND	ND	ND	ND
Sep 98	55.2	173	4	ND	0.175	ND	ND	ND	ND	ND	ND
Oct 98	57.6	183	5	ND	0.165	ND	ND	ND	ND	ND	ND
Nov 98	72	201	4.2	ND	0.15	ND	ND	ND	ND	ND	ND
Dec 98	67.2	204	4.5	ND	0.215	ND	ND	ND	ND	ND	ND
Jan 99	69.6	209	4	ND	0.2	ND	ND	ND	ND	ND	ND
Feb 99	43.2	178	5	ND	0.25	ND	ND	ND	ND	ND	ND
Mar 99	57.6	211	6	ND	0.24	ND	ND	ND	ND	ND	ND
Apr 99	60	218	7	ND	0.225	ND	ND	ND	ND	ND	ND
May 99	64.8	224	7	ND	0.285	ND	ND	ND	ND	ND	ND
Jun 99	57.6	186	5.5	ND	0.265	ND	ND	ND	ND	ND	ND

Table D.4.5.3(2) Analysis of Inflow for Surface WTP From July 1998 to June 1999

Month	Temp rature	Odour	Taste	Color	Turbidity mg/L	pH	Oxygen ability mg/L	Ammonia nitrogen mg/L	Nitrite mg/L	Nitrate mg/L	Hardness dissolved mg/L	Oxygen mg/L	BOD mg/L	Calcium sum mg/L	Magne nity mg/L	Alkalinity mg/L
Jul 98	16	0	0	0	9.7	8.5	0.96	ND	0.043	1.1	1.7	11.2	4	1.2	0.5	1.65
Aug 98	16	0	0	0	4.6	8.5	0.96	ND	0.04	1.8	1.65	11.7	4.7	1.2	0.4	1.6
Sep 98	15.5	0	0	0	1.9	8.1	1.04	ND	0.0225	1.8	1.65	12.2	4.2	1.4	0.25	1.6
Oct 98	14	0	0	0	1.4	8.15	0.88	ND	0.016	1.55	1.7	12.9	4.5	1.45	0.25	1.65
Nov 98	11	0	0	0	1.25	8.1	0.8	ND	0.02	2.2	1.9	12.4	4.5	1.2	0.7	1.8
Dec 98	8	0	0	0	2.4	8.3	1.12	ND	0.03	2.4	1.9	12.2	4.5	1.6	0.3	1.8
Jan 99	5.5	0	0	0	3.9	8.3	1.2	ND	0.04	2.4	2	12.7	4.7	1.6	0.3	1.9
Feb 99	6	0	0	0	8.9	8.3	0.88	ND	0.055	2.2	2.1	12.9	4.2	1.75	0.35	1.95
Mar 99	6	0	0	0	7.2	8.45	1.04	ND	0.05	2.2	2.3	12.1	4.3	1.8	0.5	2.15
Apr 99	9	0	0	0	10.5	8.5	2	ND	0.06	2.2	2.4	12.6	3.9	1.9	0.5	2.25
May 99	13	0	0	0	8.6	8.4	1.12	ND	0.5	1.1	2.25	12.8	4.2	1.85	0.4	2.1
Jun 99	14	0	0	0	4	8.3	0.88	ND	0.035	1.1	1.8	12.4	4.4	1.4	0.4	1.7

Month	Sulfate mg/L	Solid total dissolved	Chloride mg/L	Iron mg/L	Fluorine mg/L	Copper mg/L	Zinc mg/L	Lead mg/L	Arsenic mg/L	Chlorine demand mg/L	Chlorine rest mg/L	Chlorine mg/L	Manganese phates mg/L	Polyphos lant mg/L
Jul 98	56	182	6.5	ND	0.2	ND	ND	ND	ND	0.8	0.22	ND	ND	10
Aug 98	53	171	6	ND	0.16	ND	ND	ND	ND	0.27	0.22	ND	ND	
Sep 98	55.2	173	4	ND	0.175	ND	ND	ND	ND	0.21	0.21	ND	ND	
Oct 98	57.6	183	5	ND	0.165	ND	ND	ND	ND	0.21	0.21	ND	ND	
Nov 98	72	201	4.2	ND	0.15	ND	ND	ND	ND	0.25	0.25	ND	ND	
Dec 98	67.2	204	4.5	ND	0.215	ND	ND	ND	ND	0.2	0.2	ND	ND	
Jan 99	69.6	209	4	ND	0.2	ND	ND	ND	ND	0.23	0.23	ND	ND	
Feb 99	43.2	178	5	ND	0.25	ND	ND	ND	ND	0.25	0.25	ND	ND	13
Mar 99	57.6	211	6	ND	0.24	ND	ND	ND	ND	0.23	0.23	ND	ND	
Apr 99	60	218	7	ND	0.225	ND	ND	ND	ND	0.21	0.21	ND	ND	
May 99	64.8	224	7	ND	0.285	ND	ND	ND	ND	0.2	0.2	ND	ND	11
Jun 99	57.6	186	5.5	ND	0.265	ND	ND	ND	ND	0.2	0.2	ND	ND	

Table D.4.5.3(3) Analysis of Inflow for Surface WTP From July 1998 to June 1999

Month	Temperature	Odour	Taste	Color	Turbidity mg/L	pH	Oxygen ability mg/L	Ammonia nitrogen mg/L	Nitrite mg/L	Hardness mg/L	Oxygen dissolved mg/L	BOD mg/L	Calcium mg/L	Magnesium mg/L
Jul 98	17	0	0	0	1.3	8.45	0.64	ND	1.1	1.7	10.8	3	1.2	0.5
Aug 98	0	0	0	0	1.3	8.45	0.64	ND	1.8	1.65	12.2	4	1.2	0.4
Sep 98	16.5	0	0	0	1	8.1	0.64	ND	1.8	1.65	10.6	3.5	1.4	0.25
Oct 98	15	0	0	0	0.8	8.15	0.64	ND	1.55	1.7	10.8	3.8	1.45	0.25
Nov 98	11.5	0	0	0	0.75	8.1	0.64	ND	2.2	1.9	10.5	3.6	1.2	0.7
Dec 98	9	0	0	0	0.85	8.3	0.8	ND	2.4	1.9	11.4	3.4	1.6	0.3
Jan 99	6	0	0	0	1	8.3	0.64	ND	2.4	2	11.9	3.8	1.6	0.3
Feb 99	7	0	0	0	1.2	8.3	0.56	ND	2.2	2.1	12.2	3.9	1.75	0.35
Mar 99	7	0	0	0	1.5	8.4	0.72	ND	2.2	2.3	10.9	3.7	1.8	0.5
Apr 99	10	0	0	0	1.6	8.4	0.75	ND	2.2	2.4	11.7	3.7	1.9	0.5
May 99	14	0	0	0	1.5	8.35	0.72	ND	1.1	2.25	11.2	3.1	1.85	0.4
Jun 99	15	0	0	0	1	8.3	0.64	ND	1.1	1.8	11.2	4.4	1.85	0.4

Month	Alkalinity mg/L	Sulfate mg/L	Solid total dissolved	Chloride mg/L	Iron mg/L	Fluorine mg/L	Copper mg/L	Zinc mg/L	Lead mg/L	Arsenic mg/L	Chlorine rest mg/L	Manganese mg/L	Polyphosphates mg/L	Alluminium rest mg/L
Jul 98	1.65	56	182	6.5	ND	0.2	ND	ND	ND	ND	ND	ND	ND	0.02
Aug 98	1.6	53	171	6	ND	0.16	ND	ND	ND	ND	0.5	ND	ND	0.1
Sep 98	1.6	55.2	173	4	ND	0.175	ND	ND	ND	ND	0.37	ND	ND	
Oct 98	1.65	57.6	183	5	ND	0.165	ND	ND	ND	ND	0.35	ND	ND	
Nov 98	1.8	72	201	4.2	ND	0.15	ND	ND	ND	ND	0.35	ND	ND	
Dec 98	1.8	67.2	204	4.5	ND	0.215	ND	ND	ND	ND	0.37	ND	ND	
Jan 99	1.9	69.6	209	4	ND	0.2	ND	ND	ND	ND	0.37	ND	ND	
Feb 99	1.95	43.2	178	5	ND	0.25	ND	ND	ND	ND	0.4	ND	ND	
Mar 99	2.15	57.6	211	6	ND	0.24	ND	ND	ND	ND	0.44	ND	ND	
Apr 99	2.25	60	218	7	ND	0.225	ND	ND	ND	ND	0.48	ND	ND	
May 99	2.1	64.8	224	7	ND	0.285	ND	ND	ND	ND	0.46	ND	ND	0.05
Jun 99	1.7	57.6	186	5.5	ND	0.265	ND	ND	ND	ND	0.43	ND	ND	

Table D.4.5.5 (1) Analysis of No.1 Intake

Month	Temp	Odour	Taste	Color	Turbidity	pH	oxygen ability mg/L	ammonia nitrogen (GOST)	nitrite	nitrate mg/L	hardness mg/L	calcium mg/L	magnesium mg/L	alkalinity mg/L	sulphate mg/L	solid total dissolved mg/L	chloride mg/L	iron mg/L	fluorine mg/L	chlorine mg/L	chlorine demand mg/L	chlorine rest mg/L	
Jul 98		0	0	0	0	7.6	0.64	ND	ND	12.8	5.3	4.3	1	3.6	201	520	26	ND	0.19	0.7	0.2	0.5	
Aug 98	14	0	0	0	0	7.6	0.56	ND	ND	12.4	5.7	4.3	1.4	3.4	230	570	27	ND	0.18	0.71	0.2	0.43	
Sep 98	14.5	0	0	0	0	7.5	0.64	ND	ND	13.4	6.1	4.5	1.6	4.8	242	590	28	ND	0.15	0.7	0.2	0.47	
Oct 98	14.5	0	0	0	0	7.45	0.64	ND	ND	11	5.7	4.3	1.4	3.1	240	547	27	ND	0.16	0.7	0.2	0.47	
Nov 98																							
Dec 98	14	0	0	0	0	7.6	0.64	ND	ND	15.5	6.9	4.2	2.7	4.6	268	695	29	ND	0.2	0.7	0.2	0.46	
Jan 99	14	0	0	0	0	7.6	0.56	ND	ND	15	8.2	5.35	2.8	3.65	378	907.5	29.75	ND	0.22	0.7	0.2	0.42	
Feb 99	14	0	0	0	0	7.6	0.56	ND	ND	14.05	7.2	4.9	1.5	4.4	307	721.5	26.5	ND	0.22	0.7	0.2	0.44	
Mar 99	14	0	0	0	0	7.6	0.64	ND	ND	13.95	7.2	4.9	2.3	4.45	323.5	718	27	ND	0.32	0.7	0.2	0.43	
Apr 99	14	0	0	0	0	7.6	0.64	ND	ND	14.6	6.2	4.5	1.7	3.3	280	625	29.5	ND	0.26	0.7	0.2	0.47	
May 99	14	0	0	0	0	7.45	0.56	ND	ND	14.6	6	4.3	1.7	3.3	259	602	28	ND	0.26	0.7	0.2	0.43	
Jun 99	14	0	0	0	0	7.45	0.56	ND	ND	16.8	6.1	4.4	1.7	3.3	192	618	42	ND	0.4	0.7	0.2	0.46	

Table D.4.5.5 (2) Analysis of No.3 Intake

Month	Temp	Odour	Taste	Color	Turbidity	pH	oxygen ability mg/L	ammonia nitrogen (GOST)	nitrite	nitrate mg/L	hardness mg/L	calcium mg/L	magnesium mg/L	alkalinity mg/L	sulphate mg/L	solid total dissolved mg/L	chloride mg/L	iron mg/L	fluorine mg/L	chlorine mg/L	chlorine demand mg/L	chlorine rest mg/L
Jul 98		0	0	0	0	7.45	0.64	ND	ND	11.1	5.5	4.2	1.3	4.7	177	550	31	ND	0.36	0.71	0.2	0.47
Aug 98	14.5	0	0	0	0	7.6	0.56	ND	ND	8.2	5.4	4.3	1.1	4.8	168	540	33.5	ND	0.47	0.71	0.2	0.45
Sep 98	14	0	0	0	0	7.45	0.56	ND	ND	10.4	6	4.3	1.7	4.8	240	610	31	ND	0.45	0.7	0.19	0.5
Oct 98	15	0	0	0	0	7.45	0.56	ND	ND	7.5	6.3	4.2	2.1	5	240	641	42.5	ND	0.32	0.7	0.2	0.5
Nov 98	14	0	0	0	0	7.45	0.56	ND	ND	12.8	6	4.4	1.6	5	216	610	29.7	ND	0.36	0.7	0.2	0.45
Dec 98	14	0	0	0	0	7.45	0.56	ND	ND	10.4	6.4	4.2	2.2	5.1	228	652	38.5	ND	0.35	0.7	0.2	0.45
Jan 99	14	0	0	0	0	7.65	0.56	ND	ND	9.1	6.3	4.4	1.9	5.1	216	635	41.5	ND	0.38	0.7	0.2	0.47
Feb 99	14.5	0	0	0	0	7.45	0.56	ND	ND	9.3	6.1	4.8	1.3	5.1	202	615	39	ND	0.47	0.7	0.19	0.47
Mar 99	14.5	0	0	0	0	7.45	0.56	ND	ND	9.3	6	4.3	1.7	5	259	600	38	ND	0.475	0.7	0.19	0.47
Apr 99	14	0	0	0	0	7.45	0.56	ND	ND	11.5	6.5	4.3	2.2	5.2	220	645	39	ND	0.45	0.7	0.19	0.5
May 99	14	0	0	0	0	7.6	0.64	ND	ND	12	6.4	4	2.4	5.3	268	632	43	ND	0.45	0.7	0.19	0.5
Jun 99	14.5	0	0	0	0	7.4	0.56	ND	ND	16.8	6.1	4.4	1.7	5	192	618	42	ND	0.4	0.7	0.2	0.46

Table D.4.5.5 (3) Analysis of No.6 Intake

Month	Temp	Colour	Taste	Colour	Turbidity	pH	oxygen ability mg/L	ammonia nitrogen (GOST)	nitrite	nitrate mg/L	hardness mg/L	calcium mg/L	magnesium mg/L	alkalinity mg/L	sulphate mg/L	solid total dissolved mg/L	chloride mg/L	iron mg/L	fluorine mg/L	chlorine mg/L	chlorine demand mg/L	chlorine rest mg/L
Jul 98		0	0	0	0 ND	7.55	0.64	ND	64.2	6.4	4.8	1.6	4.4	230	645	18 ND	0.17	0.7	0.21	0.47		
Aug 98	15.5	0	0	0	0 ND	7.55	0.64	ND	48.7	6	4.5	1.5	4.3	206	590	16 ND	0.24	0.71	0.21	0.43		
Sep 98	15.5	0	0	0	0 ND	7.5	0.64	ND	47.8	6	4.5	1.5	4.3	206	615	16 ND	0.2	0.7	0.2	0.5		
Oct 98	15	0	0	0	0 ND	7.5	0.64	ND	57	6.5	4.7	2	4.3	288	662	16 ND	0.15	0.7	0.2	0.5		
Nov 98	15	0	0	0	0 ND	7.35	0.56	ND	66.4	6.5	4.7	1.8	4.2	240	654	15.5 ND	0.26	0.7	0.2	0.46		
Dec 98	14.5	0	0	0	0 ND	7.65	0.64	ND	55.4	6.8	5.3	1.5	4.2	249	670	18.6 ND	0.275	0.7	0.2	0.46		
Jan 99	15	0	0	0	0 ND	7.7	0.56	ND	77.5	7.3	5.8	1.5	4.4	297	740	22 ND	0.27	0.7	0.19	0.43		
Feb 99	15	0	0	0	0 ND	7.55	0.64	ND	73.1	7.2	5.7	1.5	4.5	278	720	22 ND	0.19	0.7	0.2	0.47		
Mar 99	15	0	0	0	0 ND	7.55	0.64	ND	10.6	7.1	5.4	1.7	4.2	250	715	22.5 ND	0.2	0.7	0.2	0.45		
Apr 99	15	0	0	0	0 ND	7.55	0.64	ND	11.7	7.2	5.2	2	4.3	240	725	22.5 ND	0.21	0.7	0.2	0.5		
May 99	15	0	0	0	0 ND	7.55	0.64	ND	66.8	6.6	4.8	1.8	4.5	230	660	20.5 ND	0.2	0.7	0.2	0.5		
Jun 99	15.5	0	0	0	0 ND	7.55	0.64	ND	40	6.4	5	1.4	4.5	240	640	16 ND	0.22	0.7	0.21	0.45		

Table D.4.5.5 (4) Analysis of City Well(Individual)

Month	Temp	Odour	Taste	Colour	Turbidity	pH	oxygen ability mg/L	ammonia nitrogen (GOST)	nitrite	nitrate mg/L	hardness mg/L	calcium mg/L	magnesium mg/L	alkalinity mg/L	sulphate mg/L	solid total dissolved mg/L	chloride mg/L	iron mg/L	fluorine mg/L	chlorine mg/L	chlorine demand mg/L	chlorine rest mg/L
Jul 98	12	0	0	0	0 ND	7.6	0.64	ND	14.6	7.6	5.2	2.4	4	355	760	28.5 ND	0.375	0.7	0.19	0.43		
Aug 98	17.5	0	0	0	0 ND	7.45	0.56	ND	15.1	7	4.2	2.8	3.8	316	710	27 ND	0.475	0.71	0.2	0.47		
Sep 98	12	0	0	0	0 ND	7.4	0.64	ND	13.1	7.9	5.5	2.4	3.7	326	785	27 ND	0.47	0.7	0.19	0.47		
Oct 98	13	0	0	0	0 ND	7.6	0.64	ND	11.8	6.8	4	2.8	3.7	335	691	24 ND	0.4	0.7	0.19	0.47		
Nov 98	11.5	0	0	0	0 ND	7.7	0.56	ND	14.6	7.8	5.3	2.3	3.8	345	760	27 ND	0.36	0.7	0.19	0.47		
Dec 98	12	0	0	0	0 ND	7.6	0.56	ND	17.5	7.8	4.5	3.3	3.7	381	785	27.4 ND	0.4	0.7	0.19	0.43		
Jan 99	13	0	0	0	0 ND	7.6	0.56	ND	17	9.1	5.3	3.8	3.8	422	860	32.5 ND	0.4	0.7	0.2	0.45		
Feb 99	13	0	0	0	0 ND	7.6	0.56	ND	17.7	9.3	5.6	3.7	3.8	446	910	34 ND	0.475	0.7	0.2	0.46		
Mar 99	13	0	0	0	0 ND	7.6	0.56	ND	17.7	8.4	5.2	3.2	3.9	403	840	35 ND	0.455	0.7	0.2	0.47		
Apr 99	13	0	0	0	0 ND	7.6	0.64	ND	17.7	8.2	3.6	3.7	4.08	824	36	22.5 ND	0.455	0.7	0.2	0.47		
May 99	13	0	0	0	0 ND	7.4	0.56	ND	17.7	8.4	5	3.4	3.8	417	845	34 ND	0.47	0.7	0.19	0.43		
Jun 99	12	0	0	0	0 ND	7.6	0.56	ND	19	7.8	5.4	2.4	3.9	364	784	32 ND	0.46	0.7	0.2	0.47		

Table D.4.5.5 (5) Analysis of City Well(Boz-su)

Month	Temp	Odour	Taste	Color	Turbidity	pH	oxygen ability mg/L	ammonia nitrogen (GOST)	nitrite	nitrate mg/L	hardness mg/L	calcium mg/L	magnesium mg/L	alkalinity mg/L	sulphate mg/L	solid total dissolved mg/L	chloride mg/L	iron mg/L	fluorine mg/L	chlorine mg/L	chlorine demand mg/L	chlorine rest mg/L	
Jul 98		0	0	0	0 ND	7.6	0.64	ND	ND	17.6	9.8	6.4	3.4	4.3	446	475	53	ND	0.39	0.7	0.19	0.47	
Aug 98	14.5	0	0	0	0 ND	7.6	0.64	ND	ND	20.8	9.4	5.2	4.2	4.1	456	972	52.5	ND	0.4	0.71	0.2	0.41	
Sep 98	15	0	0	0	0 ND	7.5	0.64	ND	ND	20.4	9	5.2	3.8	3.7	456	945	50	ND	0.38	0.7	0.2	0.43	
Oct 98	14.5	0	0	0	0 ND	7.6	0.64	ND	ND	20.2	10	5	5	3.8	485	980	52.5	ND	0.385	0.7	0.21	0.47	
Nov 98	15	0	0	0	0 ND	7.75	0.58	ND	ND	16	8.9	4.8	4.1	3.5	432	980	42	ND	0.36	0.7	0.19	0.43	
Dec 98																							
Jan 99																							
Feb 99																							
Mar 99																							
Apr 99																							
May 99																							
Jun 99																							

Table D.4.5.5 (6) Analysis of City Well(Electric)

Month	Temp	Odour	Taste	Color	Turbidity	pH	oxygen ability mg/L	ammonia nitrogen (GOST)	nitrite	nitrate mg/L	hardness mg/L	calcium mg/L	magnesium mg/L	alkalinity mg/L	sulphate mg/L	solid total dissolved mg/L	chloride mg/L	iron mg/L	fluorine mg/L	chlorine mg/L	chlorine demand mg/L	chlorine rest mg/L
Jul 98		0	0	0	0 ND	7.55	0.64	ND	ND	20.2	8.7	5.6	3.1	5.2	364	865	40	ND	0.45	0.7	0.2	0.5
Aug 98	15	0	0	0	0 ND	7.6	0.64	ND	ND	20	8.7	6	2.7	5	384	880	38	ND	0.37	0.71	0.21	0.45
Sep 98	15	0	0	0	0 ND	7.6	0.64	ND	ND	20	8.7	5.4	3.3	4.9	326	884	38	ND	0.37	0.7	0.2	0.47
Oct 98	15	0	0	0	0 ND	7.6	0.64	ND	ND	5.6	8.6	6.1	2.5	4.9	345	840	36	ND	0.5	0.7	0.2	0.5
Nov 98	15	0	0	0	0 ND	7.35	0.64	ND	ND	18.2	8.6	5.4	3.2	4.8	422	890	33.5	ND	0.35	0.7	0.2	0.43
Dec 98	15	0	0	0	0 ND	7.8	0.64	ND	ND	16.6	9.3	5.8	3.7	4.8	451	940	35.3	ND	0.475	0.7	0.19	0.45
Jan 99	15	0	0	0	0 ND	7.55	0.64	ND	ND	16.6	8.9	5.4	3.5	4.7	412	900	45	ND	0.5	0.7	0.2	0.46
Feb 99	14.5	0	0	0	0 ND	7.5	0.56	ND	ND	15.5	8.8	6.6	2.2	4.7	374	875	43	ND	0.485	0.7	0.21	0.43
Mar 99	15	0	0	0	0 ND	7.5	0.58	ND	ND	17.7	8.8	6.4	2.4	5	364	876	41	ND	0.455	0.7	0.21	0.45
Apr 99	14.5	0	0	0	0 ND	7.5	0.64	ND	ND	17.7	8.6	6.1	2.5	5	346	856	41	ND	0.4	0.7	0.2	0.5
May 99	14.5	0	0	0	0 ND	7.6	0.64	ND	ND	18.8	9.1	6.2	2.9	5	364	920	53	ND	0.4	0.7	0.2	0.47
Jun 99	14	0	0	0	0 ND	7.5	0.64	ND	ND	13.3	9.4	6.5	2.9	5.1	422	943	44	ND	0.42	0.7	0.2	0.43

Table D.4.4.5 Analysis of City Water Network

Month	Temp	Odour	Taste	Color	Turbidity	pH	oxygen ability mg/L	ammonia nitrogen (GOST)	nitrite	nitrate mg/L	hardness mg/L	magnesium mg/L	alkalinity mg/L	chloride mg/L	iron mg/L	chlorine demand mg/L	chlorine rest
Jul 98		0	0	0	0 ND	7.45	0.56	ND	ND	2.5	2		1.9	8.5	ND		0.1
Aug 98	13	0	0	0	0 ND	7.5	0.64	ND	ND	2	1.7		1.6	1.6	ND		0.1
Sep 98	12.5	0	0	0	0 ND	7.45	0.64	ND	ND	1.3	1.7	1.6		7	ND		0.1
Oct 98	12	0	0	0	0 ND	7.4	0.56	ND	ND	1.5	1.7		1.6	5.5	ND		0.1
Nov 98	13.5	0	0	0	0 ND	7.35	0.64	ND	ND	2.2	1.9		1.8	4.2	ND		0.1
Dec 98	9.5	0	0	0	0 ND	7.45	0.64	ND	ND	2.2	2		5.1	5.5	ND		0.1
Jan 99	7	0	0	0	0 ND	7.5	0.64	ND	ND	2.2	2		1.9	7	ND		0.1
Feb 99	7	0	0	0	0 ND	7.5	0.64	ND	ND	2.2	2		1.9	6	ND		0.1
Mar 99	8	0	0	0	0 ND	7.5	0.64	ND	ND	2.2	2.3		2.1	6	ND	0.1	0.1
Apr 99	8	0	0	0	0 ND	7.5	0.64	ND	ND	2.2	2.5		2.4	10	ND		0.1
May 99	12	0	0	0	0 ND	7.4	0.64	ND	ND	6.6	2.25		2.1	12.5	ND		0.1
Jun 99	12.5	0	0	0	0 ND	7.5	0.64	ND	ND	1.8	1.8		5.1	5.5	ND		0.1

Table D.4.5.6 Analysis of Wells

Pump Station No	Analyze Month	Well No	Temp	Odour	Taste	Color	Turbidity mg/L	pH	Oxygen ability mg/L	Ammon nitrogen	Nitrite	Nitrate mg/L	Hardness mg/L	Calcium mg/L	Magnesium mg/L	Alkalinity mg/L	Sulfate mg/L	Solid total dis.	Chloride mg/L	Iron mg/L	Fluorine mg/L	Copper mg/L	Zinc mg/L	Lead mg/L	Molybdenum mg/L	Arsenic mg/L	Manganese mg/L																
No.1 Pump Station	Dec	5	14	0	0	0	0 ND	7.5	0.8	ND	ND	11.9	7.1	4.5	2.6	3.6	288	679	34	ND	0.24	ND	ND	ND	ND	ND	ND	ND															
		6	13.5	0	0	0	0 ND	7.5		ND	ND	14.1	7.5	5	2	3.7	307	715	40	ND	0.22	ND	ND	ND	ND	ND	ND	ND															
		7	13.5	0	0	0	0 ND	7.5		ND	ND	12.8	7.6	5.4	2.2	3.9	345	756	21	ND	0.24	ND	ND	ND	ND	ND	ND	ND	ND														
		9	14	0	0	0	0 ND	7.7		ND	ND	14.6	9.8	6.3	3.5	4.4	441	950	31	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND														
		10	14	0	0	0	0 ND	7.4		ND	ND	8.8	6.6	4.3	2.3	4.1	264	684	30.5	ND	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND													
		11	12	0	0	0	0 ND	7.5		ND	ND	13.8	7.9	5.2	2.7	4	312	756	41	ND	0.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND												
		12	14	0	0	0	0 ND	7.5		ND	ND	5.9	5.7	4	1.7	3.5	202	548	19.5	ND	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND											
		14	13	0	0	0	0 ND	7.6		ND	ND	6.6	5.8	4.2	1.6	3.5	254	565	22.5	ND	0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND										
		17	14	0	0	0	0 ND	7.4		ND	ND	7	7.5	5	2.5	3.9	268	575	37	ND	0.175	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND									
		18	13.5	0	0	0	0 ND	7.4		ND	ND	7.9	6.4	4.5	1.9	4.1	264	630	31	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND								
		21	13	0	0	0	0 ND	7.4		ND	ND	13.6	7.2	4.7	2.5	3.5	312	672	35	ND	0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND							
		22	14	0	0	0	0 ND	7.4		ND	ND	8.8	6	4	2	4	216	601	20	ND	0.175	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
		No.3 Pump Station	Nov	1	14	0	0	0	0 ND	7.6	0.88	ND	ND	4.4	6	4.4	1.6	5.2	182	608	54	ND	0.325	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND						
				2	13.5	0	0	0	0 ND	7.5	0.96	ND	ND	6.4	6.8	4.8	2	5	249	682	54	ND	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
				3	14	0	0	0	0 ND	7.4	0.96	ND	ND	9.6	6	4.2	1.8	5.3	202	610	26	ND	0.375	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
				4	14	0	0	0	0 ND	7.3	0.8	ND	ND	4.6	6.9	4.8	2.1	5.7	211	690	60	ND	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
				5	13.5	0	0	0	0 ND	7.4	0.88	ND	ND	9.7	6	4.2	1.8	5.3	202	610	26.5	ND	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
				6	13	0	0	0	0 ND	7.5	0.96	ND	ND	11.1	4.8	3.8	1	3.6	172	490	32	ND	0.33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
				7	13	0	0	0	0 ND	7.2	0.96	ND	ND	12.2	6.7	4.6	2.1	5.3	240	675	29	ND	0.275	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
				8	13	0	0	0	0 ND	7.3	0.88	ND	ND	9.9	5.6	4.1	1.5	4.4	192	572	28	ND	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		No.6 Pump Station	Jun	1	14	0	0	0	0 ND	7.6	0.96	ND	ND	3.3	6.4	4.6	1.8	5.6	201	645	40	ND	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
				2	14	0	0	0	0 ND	7.6	1.04	ND	ND	4.4	7.2	5.2	2	5.6	260	720	36	ND	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	13.5			0	0	0	0 ND	7.6	1.04	ND	ND	5.3	7	5.7	1.3	5.4	264	710	27	ND	0.42	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4	14			0	0	0	0 ND	7.6	0.96	ND	ND	4.4	6.3	4.8	1.5	5.7	210	635	36	ND	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5	14.5			0	0	0	0 ND	7.4	0.88	ND	ND	6.5	6.8	5	1.8	5	260	678	30	ND	0.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
6	14			0	0	0	0 ND	7.5	1.04	ND	ND	9.7	5.8	4.2	1.6	4.5	134	610	62	ND	0.325	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
7	14.5			0	0	0	0 ND	7.5	0.96	ND	ND	12.2	7.1	5.3	1.8	5.4	288	716	29	ND	0.275	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
8	14.5			0	0	0	0 ND	7.6	1.04	ND	ND	1.7	4.9	4	0.9	3.9	166	500	28.5	ND	0.375	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
No.6 Pump Station	Nov	1	13	0	0	0	0 ND	7.6	0.88	ND	ND	57.6	6.2	4.8	1.4	4	230	610	13.9	ND	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
		2	13	0	0	0	0 ND	7.6	0.96	ND	ND	60	6.2	4.8	1.4	4	221	620	13.9	ND	0.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		3	13.5	0	0	0	0 ND	7.6	0.88	ND	ND	110	6.7	5.8	0.9	4.3	220	670	18.6	ND	0.275	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
		4	13	0	0	0	0 ND	7.8	0.96	ND	ND	120	6.5	5.3	1.2	4.4	201	572	17.6	ND	0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table D4.5.7 Treatment Volume of Plants and Disusement Plan for Chemicals and Electricity

in1998

Months	Surface WTP			No 1 P/S			No 3 P/S			No 6 P/S			City wells			Total				
	Liquid chlorine tons	Sulphuric aluminium tons	Hypochlorite tons	Liquid chlorine 1000 cu.m	Electricity 1000 th kW/h	Liquid chlorine tons	Electricity 1000 th kW/h	Liquid chlorine 1000 cu.m	Electricity 1000 th kW/h	Hypochlorite tons	Electricity 1000 th kW/h	Liquid chlorine tons	Electricity 1000 th kW/h	Hypochlorite tons	Electricity 1000 th kW/h	Liquid chlorine tons	Electricity 1000 th kW/h	Hypochlorite tons		
Jan.	1800	2.7	19	1530	590	0.59	501	350	0.35	297	500	1	425	100	0.2	4280	3.64	1.2	2,838	
Feb.	1800	2.7	40	1530	590	0.59	502	350	0.35	298	500	1	425	100	0.2	4280	3.64	1.2	2,940	
Mar.	1800	2.7	40	1530	600	0.6	510	340	0.34	289	500	1	425	100	0.2	4,270	3.64	1.2	2,839	
Apr.	1800	2.7	40	1530	310	0.31	263	340	0.34	289	500	1	425	100	0.2	4,270	3.35	1.2	2,592	
May	1800	2.7	40	1530	310	0.31	264	340	0.34	289	500	1	425	100	0.2	4,270	3.35	1.2	2,593	
June	1800	2.7	40	1530	300	0.3	255	340	0.34	289	500	1	425	100	0.2	4,270	3.34	1.2	2,584	
July	1800	2.7		1530	300	0.3	255	340	0.34	289	500	1	425	100	0.2	4,270	3.34	1.2	2,584	
Aug.	1800	2.7		1530	300	0.3	255	340	0.34	289	500	1	425	100	0.2	4,270	3.34	1.2	2,584	
Sep.	1800	2.7		1530	300	0.3	255	340	0.34	289	500	1	425	100	0.2	4,270	3.34	1.2	2,584	
Oct.	1800	2.7		1530	300	0.3	255	340	0.34	289	500	1	425	100	0.2	4,270	3.34	1.2	2,584	
Nov.	1800	2.7		1530	600	0.6	510	340	0.34	289	500	1	425	100	0.2	4,270	3.64	1.2	2,839	
Dec.	1800	2.7	19	1530	600	0.6	510	340	0.34	289	500	1	425	100	0.2	4,270	3.64	1.2	2,839	
Total	21600	32.4	238	10.8	18360	5100	5.1	4335	4100	4.1	3485	6000	12	5100	1200	2.4	51,260	41.6	14.4	32,500
Average	1800	2.7	34	2.7	1530	425	0.425	361.25	341.67	290.417	500	1	425	100	0.2	4,272	3.47	1.2	2,692	

in1999

Months	Surface WTP			No 1 P/S			No 3 P/S			No 6 P/S			City wells			Total				
	Liquid chlorine tons	Sulphuric aluminium tons	Hypochlorite tons	Liquid chlorine 1000 cu.m	Electricity 1000 th kW/h	Liquid chlorine tons	Electricity 1000 th kW/h	Liquid chlorine 1000 cu.m	Electricity 1000 th kW/h	Hypochlorite tons	Electricity 1000 th kW/h	Liquid chlorine tons	Electricity 1000 th kW/h	Hypochlorite tons	Electricity 1000 th kW/h	Liquid chlorine tons	Electricity 1000 th kW/h	Hypochlorite tons		
January	1800	2.7	19	1530	800	0.8	680	350	0.35	297	500	1	425	100	0.2	4,280	3.85	1.2	3,017	
February	1800	2.7	40	1530	700	0.7	595	350	0.35	298	500	1	425	100	0.2	4,280	3.75	1.2	2,933	
March	1800	2.7	40	1530	600	0.6	510	350	0.35	297	500	1	425	100	0.2	4,280	3.65	1.2	2,847	
April	1800	2.7	40	1530	500	0.5	425	350	0.35	298	500	1	425	100	0.2	4,280	3.55	1.2	2,763	
May	1800	2.7	40	1530	350	0.35	297	350	0.35	297	500	1	425	100	0.2	4,280	3.4	1.2	2,694	
June	1800	2.7	40	1530	350	0.35	298	350	0.35	298	500	1	425	100	0.2	4,280	3.4	1.2	2,636	
July	1800	2.7		1530	350	0.35	297	350	0.35	297	500	1	425	100	0.2	4,280	3.4	1.2	2,634	
August	1800	2.7		1530	350	0.35	298	350	0.35	298	500	1	425	100	0.2	4,280	3.4	1.2	2,636	
September	1800	2.7		1530	350	0.35	297	350	0.35	297	500	1	425	100	0.2	4,280	3.4	1.2	2,634	
October	1800	2.7		1530	350	0.35	298	350	0.35	298	500	1	425	100	0.2	4,280	3.4	1.2	2,636	
November	1800	2.7		1530	600	0.6	510	350	0.35	297	500	1	425	100	0.2	4,280	3.65	1.2	2,847	
December	1800	2.7	19	1530	600	0.6	510	350	0.35	298	500	1	425	100	0.2	4,280	3.65	1.2	2,848	
Total	21600	32.4	238	10.8	18360	5900	5.9	5015	4200	4.2	3570	6000	12	5100	1200	2.4	51,360	42.5	14.4	33,065
Average	1800	2.7	34	2.7	1530	491.67	0.49167	417.917	350	0.35	297.5	500	1	425	100	0.2	4,280	3.54	1.2	2,755

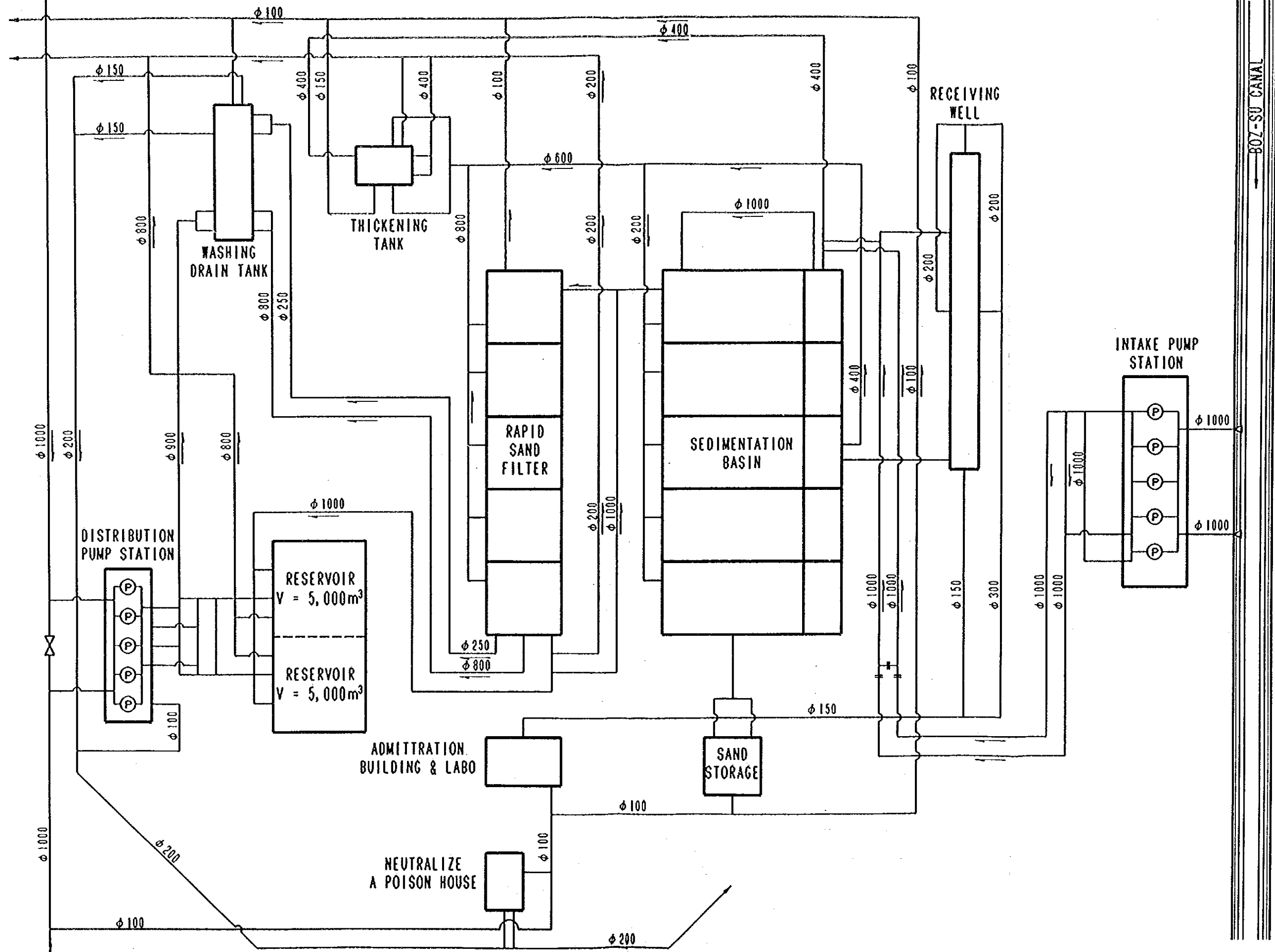
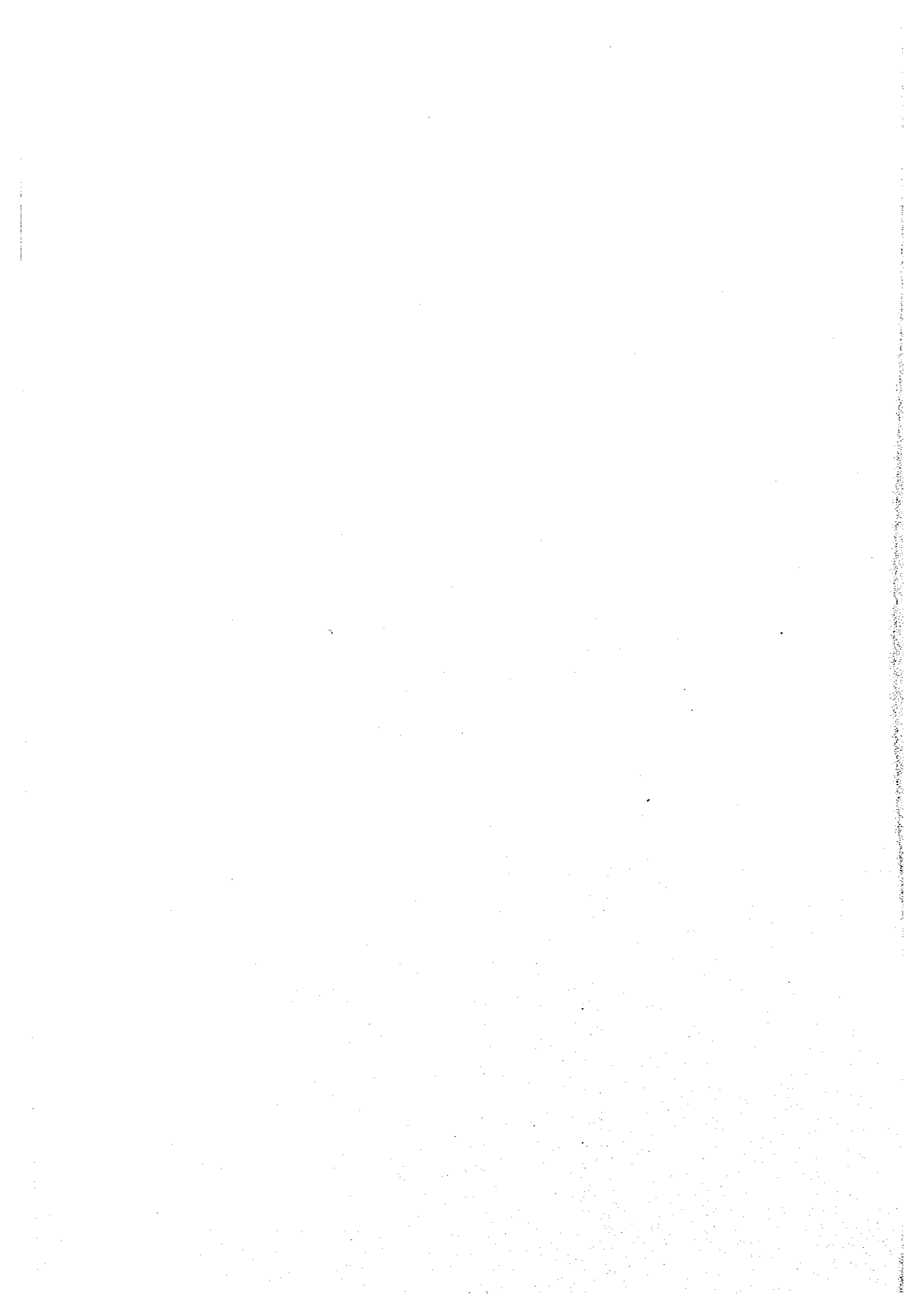


Figure D.4.5.1 Chirchik Surface Water Treatment Plant



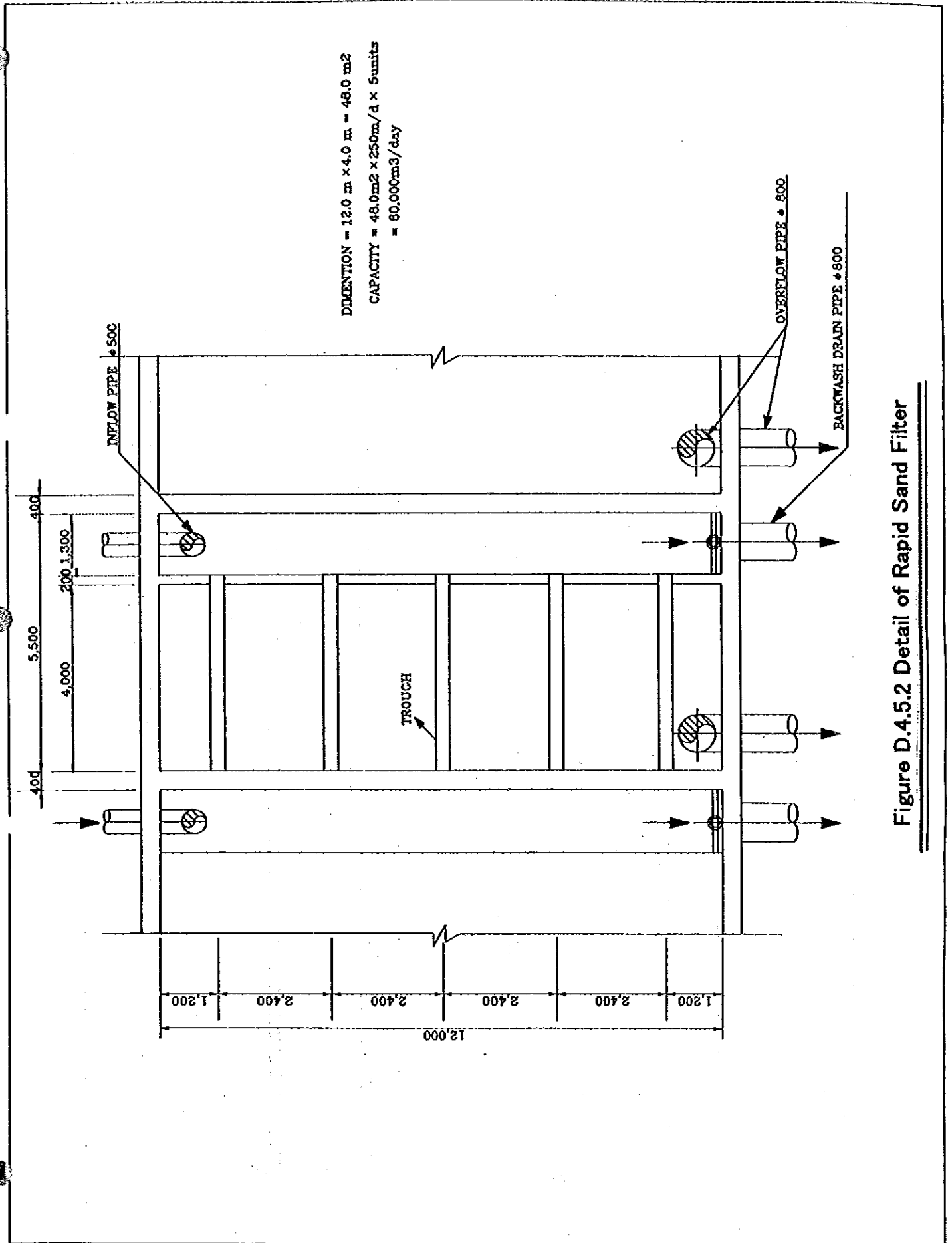


Figure D.4.5.2 Detail of Rapid Sand Filter

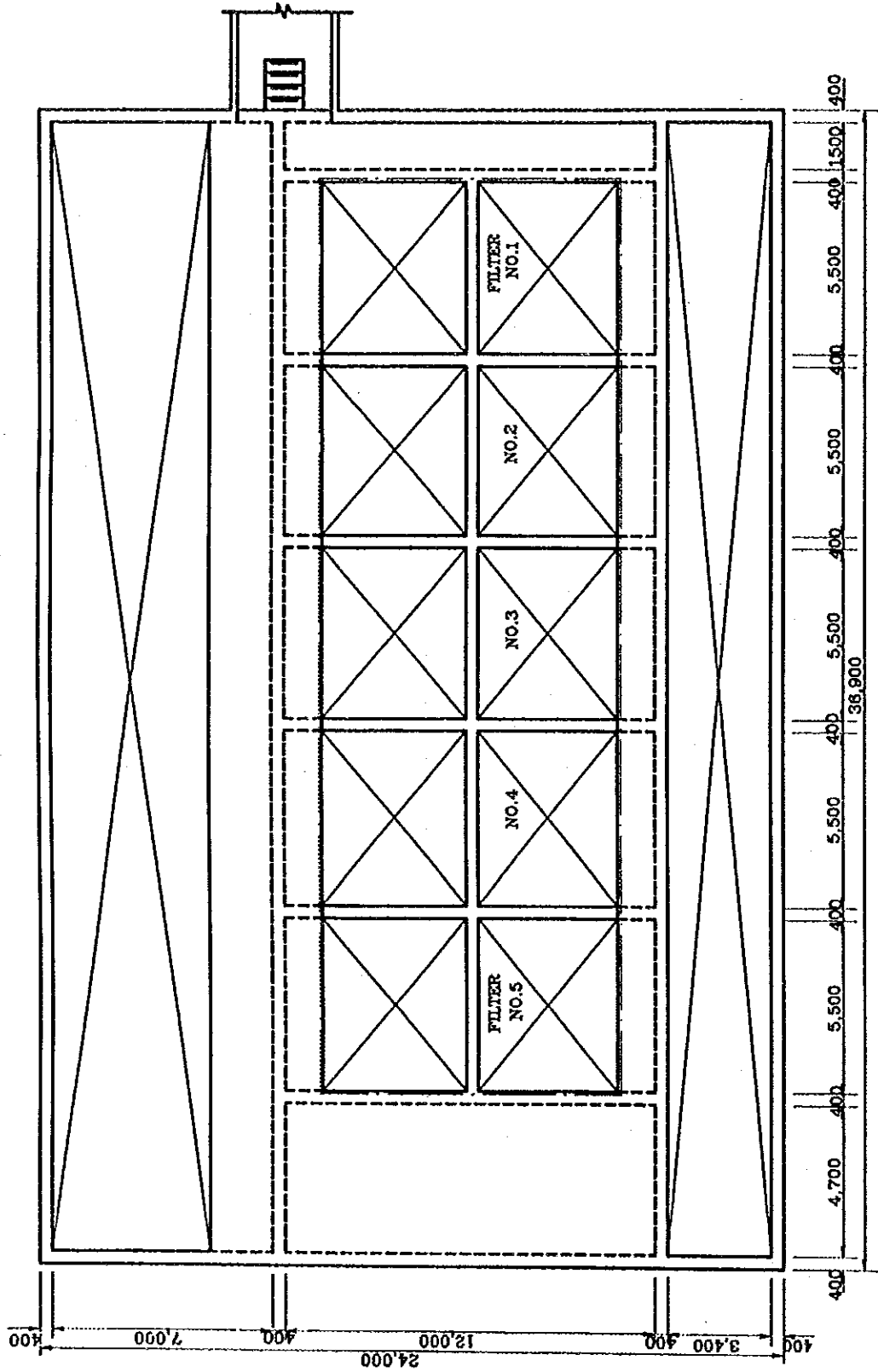


Figure D.4.5.3 Plan of Rapid Sand Filter

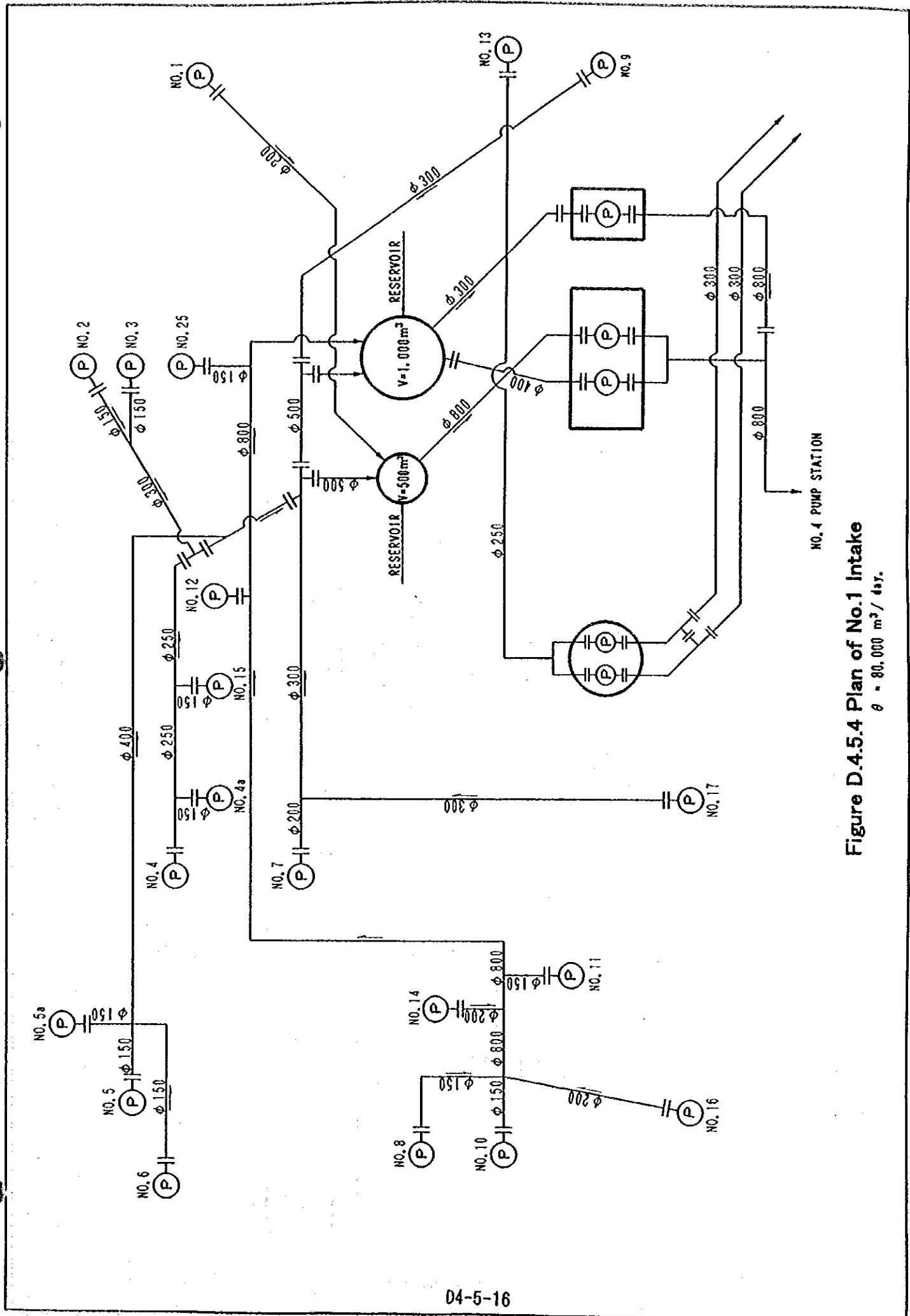


Figure D.4.5.4 Plan of No.1 Intake
 $\theta = 80,000 \text{ m}^3 / \text{day}$

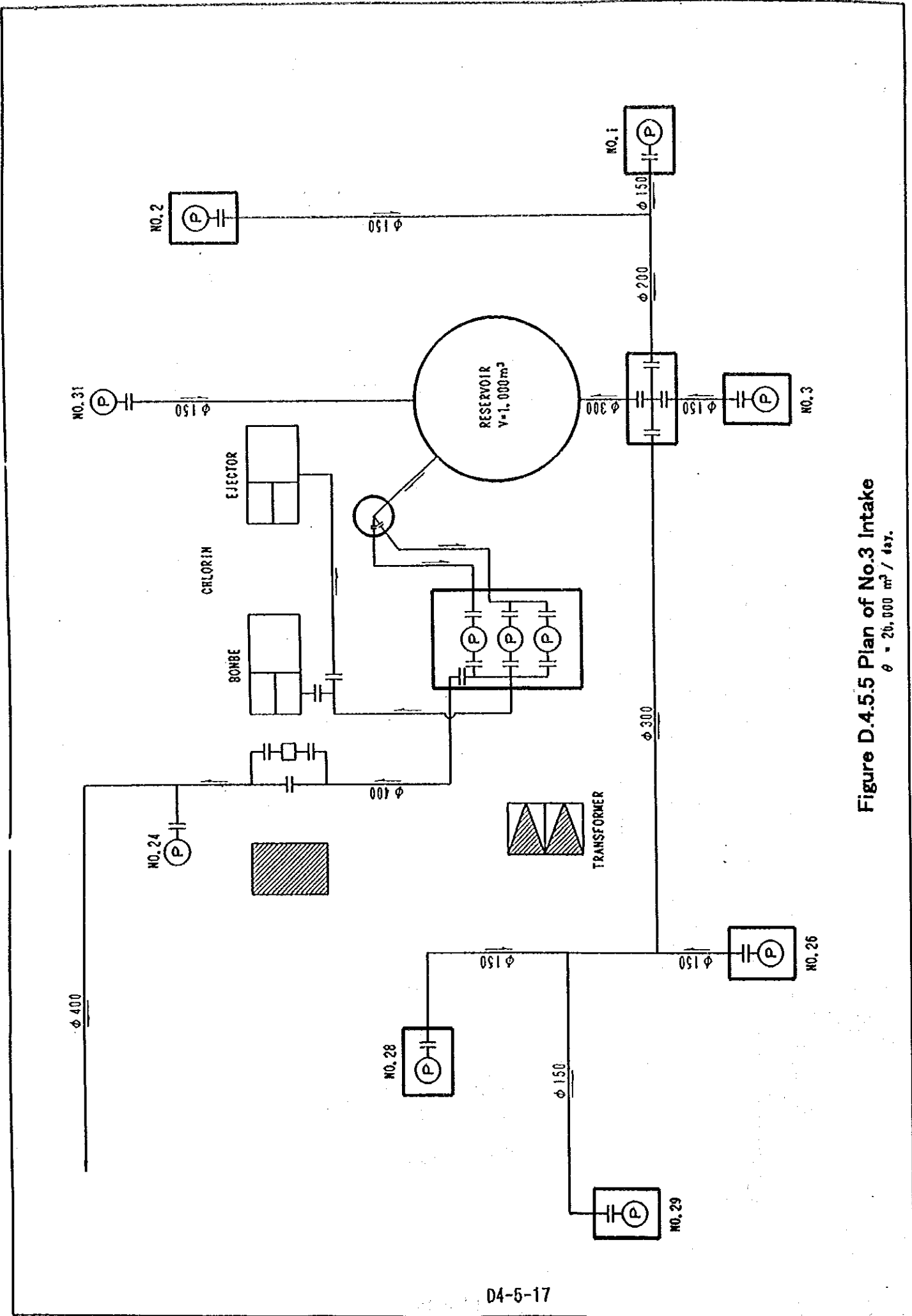


Figure D.4.5.5 Plan of No.3 Intake
 $\theta = 26,000 \text{ m}^3 / \text{day}$.

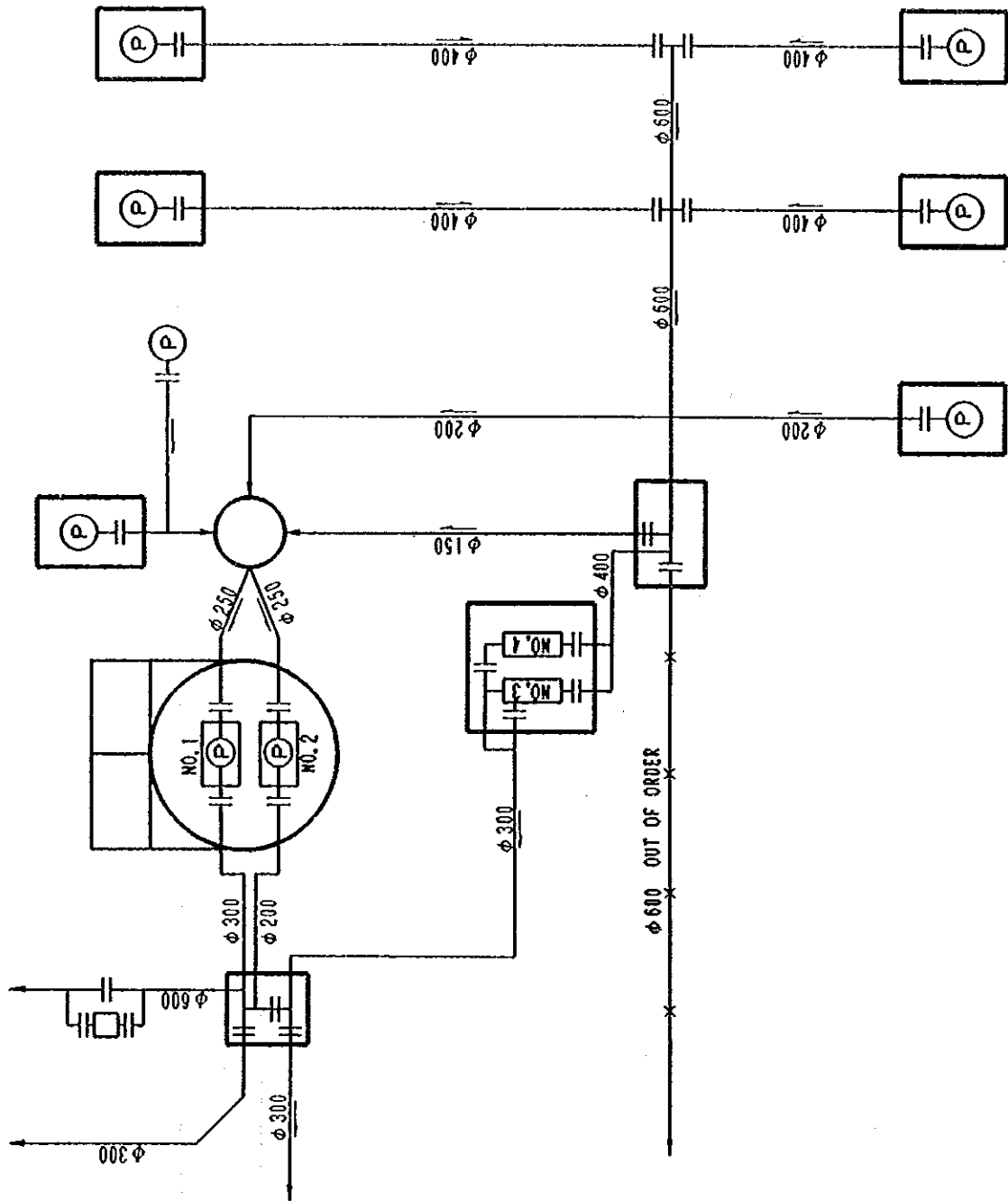
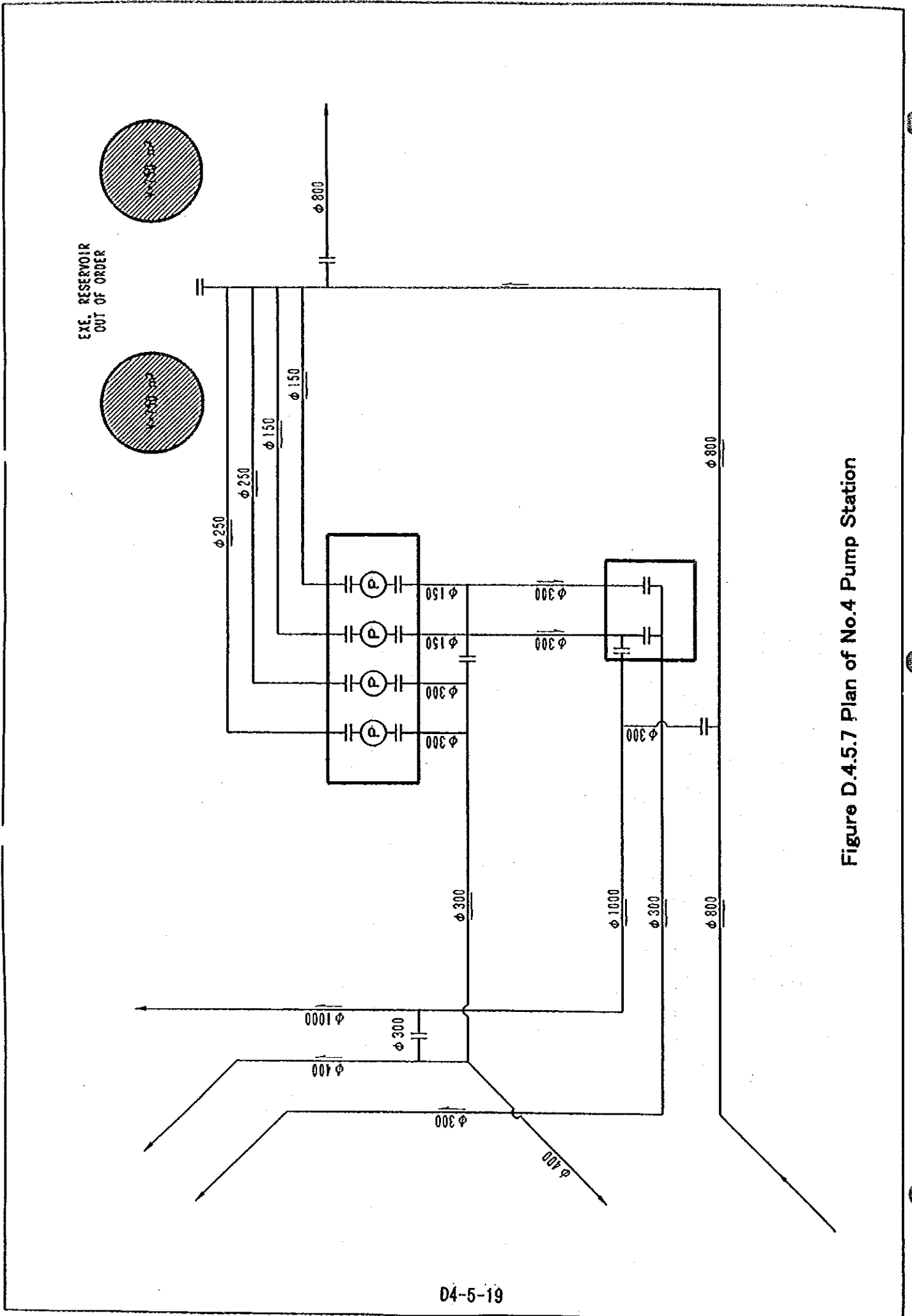


Figure D.4.5.6 Plan of No.6 Intake
 $\phi = 20,000 \text{ m}^3 / \text{day}$.



EXE. RESERVOIR
OUT OF ORDER

Figure D.4.5.7 Plan of No.4 Pump Station

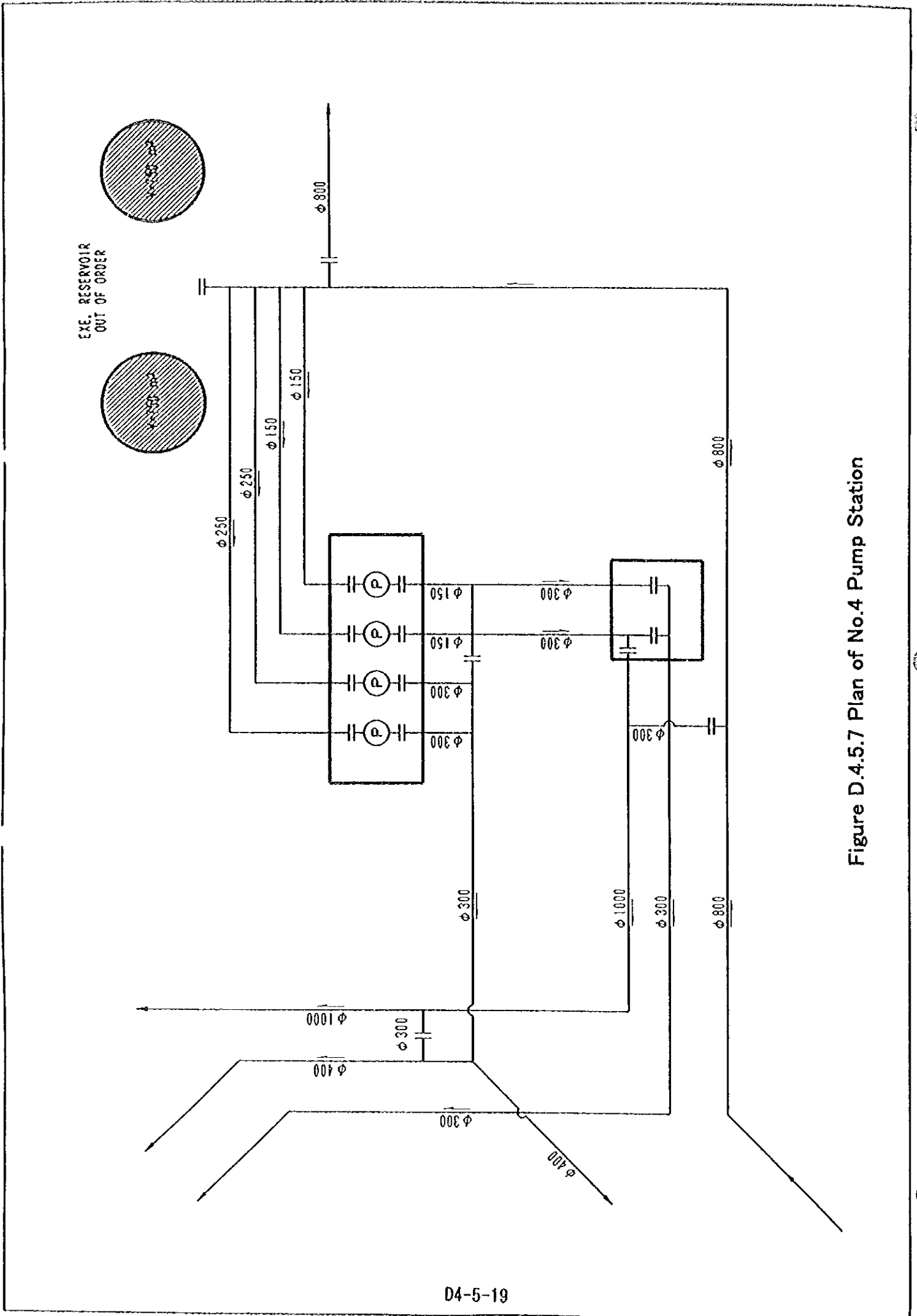


Figure D.4.5.7 Plan of No.4 Pump Station

Figure D.4.5.8 Measured Result of Chirchik Distribution Volume

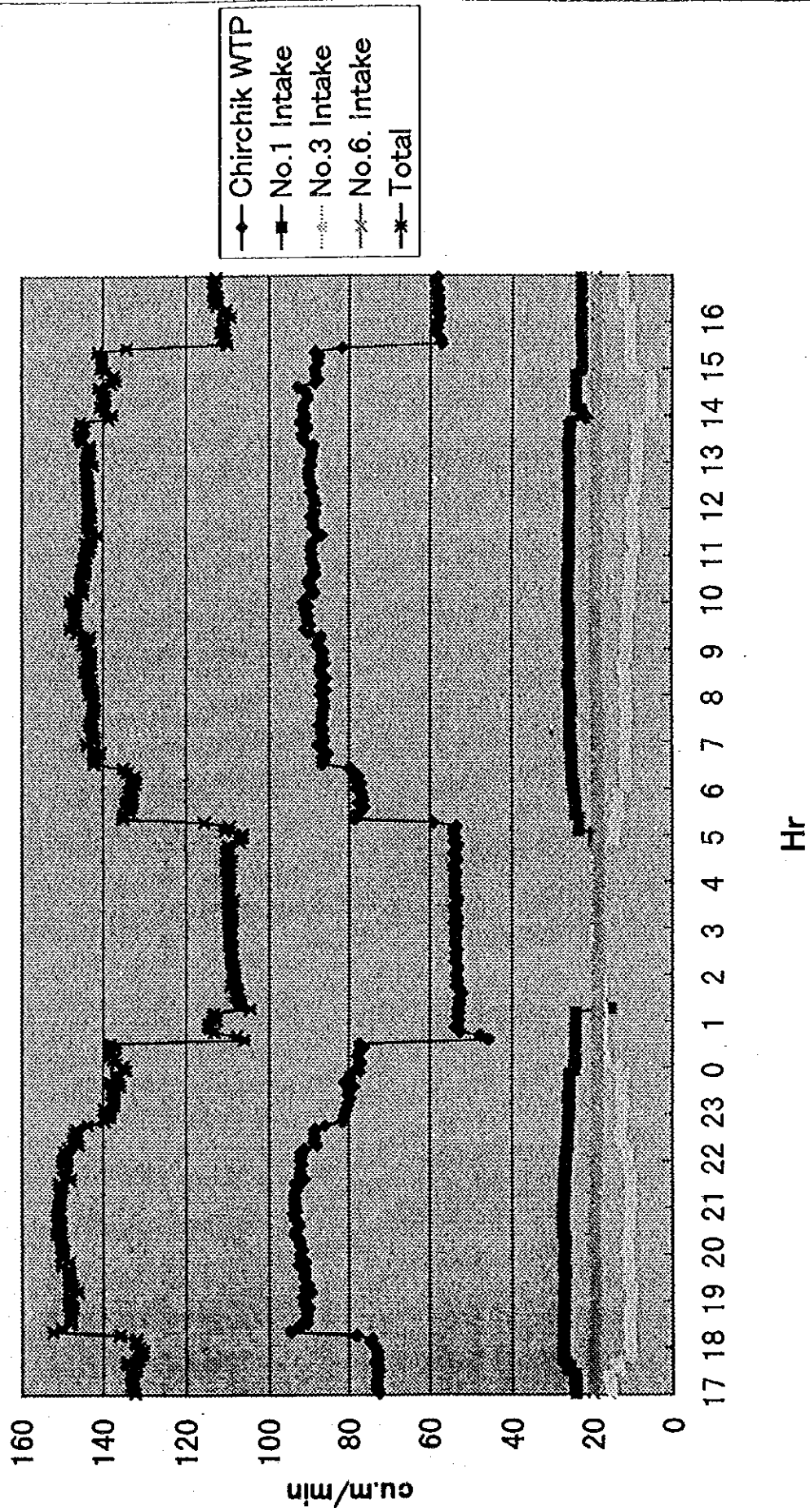
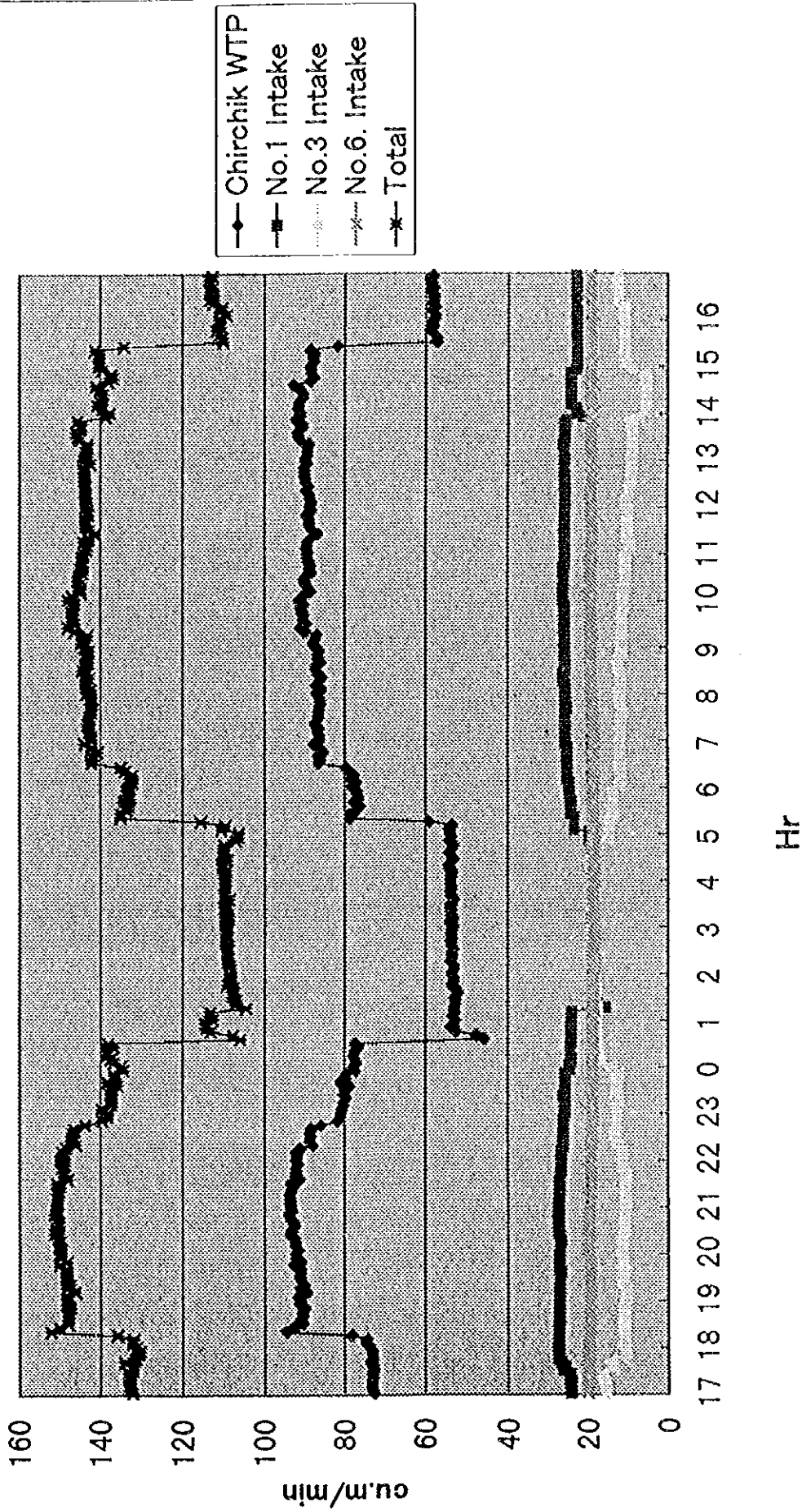


Figure D.4.5.8 Measured Result of Chirchik Distribution Volume



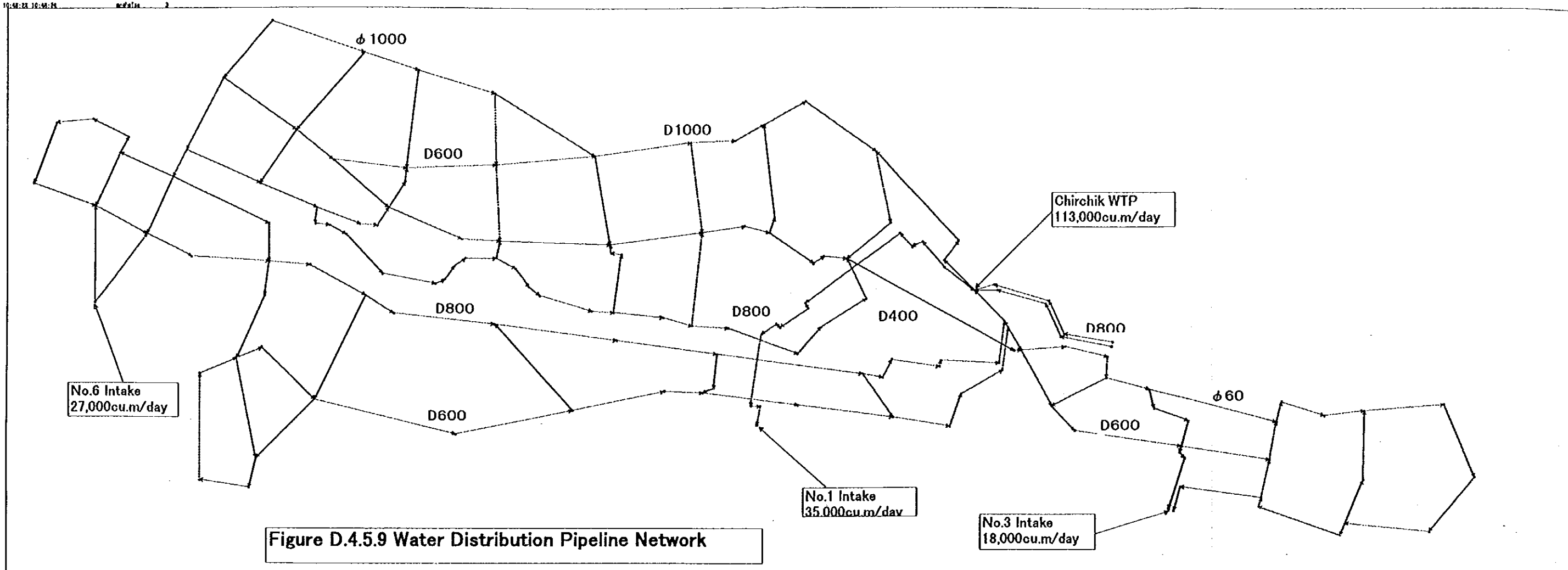
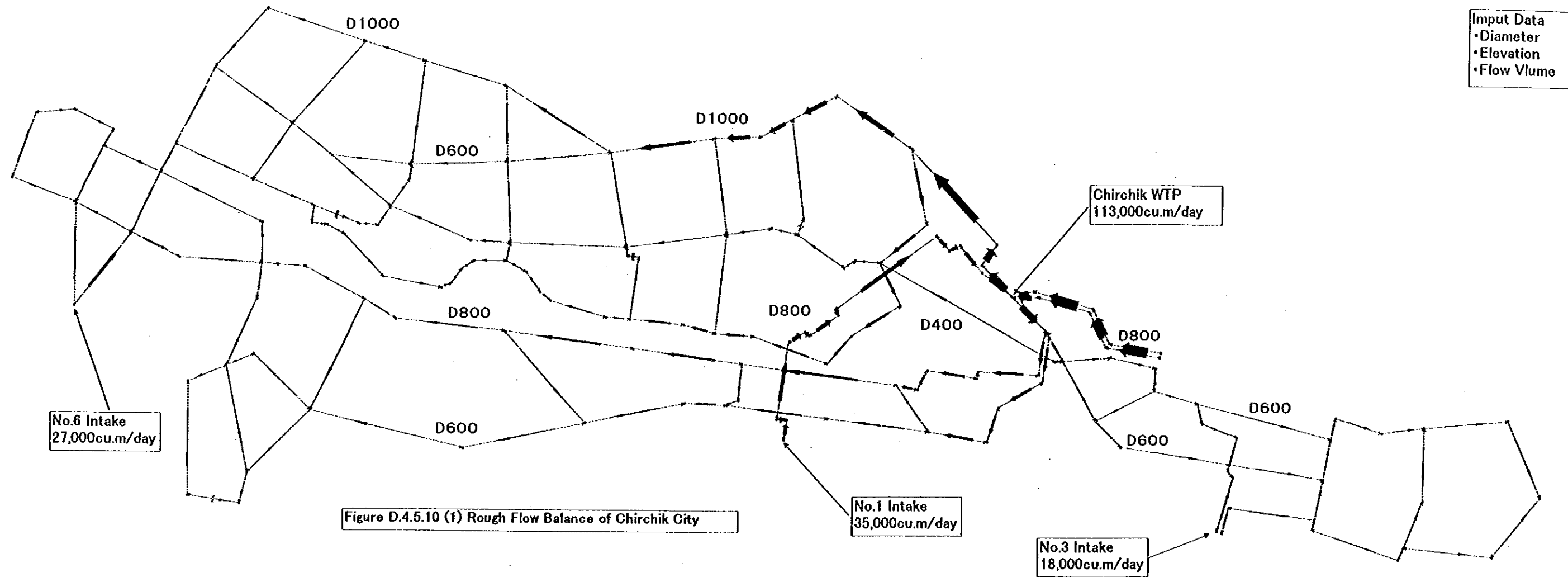


Figure D.4.5.9 Water Distribution Pipeline Network



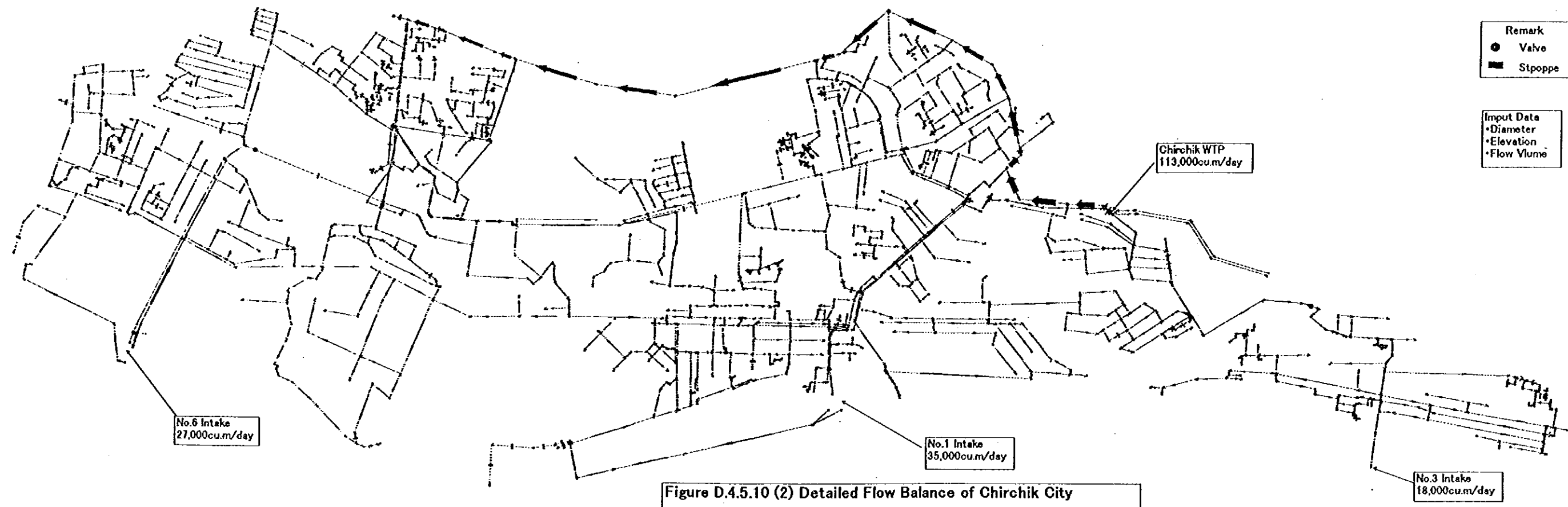


Figure D.4.5.10 (2) Detailed Flow Balance of Chirchik City

