

July 8, 1996

Introduced by: GREG NICKELS

Proposed No.: 96-594

ORDINANCE NO. **12435**

AN ORDINANCE approving the Maury  
Mutual Water Company Comprehensive  
Plan 1996.

PREAMBLE:

K.C.C. 13.24 requires approval of comprehensive plans for water purveyors as a prerequisite to the granting of right-of-way franchises and approval of right-of-way construction permits.

On June 12, 1996 the King County Utilities Technical Review Committee met to consider the plan and finding it consistent with K.C.C. 13.24 recommended approval.

The Maury Mutual Water Company Comprehensive Plan 1996 was approved by the Board of the Maury Mutual Water Company on February 16, 1995.

The Maury Mutual Water Company Comprehensive Plan 1996 is categorically exempt from environmental review pursuant to Chapter 197-11 of the Washington Administrative Code.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

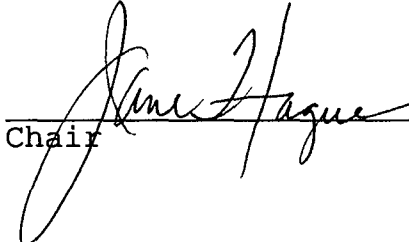
SECTION 1. The Maury Mutual Water Company Comprehensive

1 Plan 1996, Attachment A, is hereby approved without conditions.


2  
3 INTRODUCED AND READ for the first time this 15<sup>th</sup> day  
4 of July, 19 96.

5 PASSED by a vote of 12 to 0 this 31<sup>d</sup> day of  
6 September 19 96.

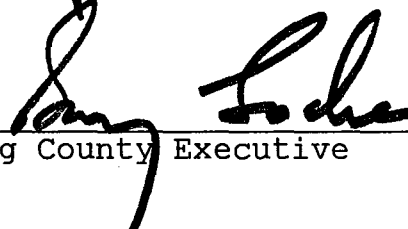
7 KING COUNTY COUNCIL  
8 KING COUNTY, WASHINGTON

9  
10   
11 Chair

12 ATTEST:

13  
14   
15 Clerk of the Council

16 APPROVED this 13<sup>th</sup> day of September, 19 96.

17  
18   
19 King County Executive

20 Attachments:

22 A. The Maury Mutual Water Company Comprehensive Plan 1996.

**MAURY MUTUAL WATER COMPANY**

**COMPREHENSIVE PLAN 1996**

**Prepared for the Board of the Maury  
Mutual Water Company by:  
Douglas P. Dolstad of Island Water Management  
with acknowledgments to Board  
members:**

Joel Walters  
Tom Baxter  
Paul Stoddard  
Mark Clark  
Sheri Reder

## **I. Background Information**

### **A. Reason for Submittal**

The purpose of this revision of the Maury Mutual Water Company Comprehensive Plan is to update the expired plan.

### **B. Capacity (Number of Connections)**

1. Existing	91
2. Obligation	99
3. Source Capacity	99
4. State DOH Approval	not determined (source: Operating Permit issued by DOH)

### **C. Largest Pipe Size**

The largest pipe diameter is 6"

### **D. Community Planning Area**

Vashon-Maury Island

### **E. Plan Approval by Utility**

This plan was approved by the Board of the Maury Mutual Water Company at its regular meeting 2/16/95. (See Appendix 1)

### **F. Environmental Review (Chapter 197-11 WAC)**

This plan is categorically exempt from SEPA rules as the largest pipe size measures eight inches or less.

### **G. System Group (Chapter 246-290 WAC)**

Maury Mutual is a Group A system

### **H. Critical Water Supply Area**

Vashon-Maury Island

### **I. Ground Water Planning Area**

Vashon-Maury Island

12435

## II. Narrative Report

### A. History of Maury Mutual Water Company:

The first pipes for Maury Mutual Water Company (referred to as the Company or the Association) were installed in 1911 by Mr. A. M. Rivers, who owned the land that the present system occupies. Water was pumped by a ram from springs up to 240th Street to supply the County School at 240th and 59th Streets. Mr. O. T. Peterson bought the land and system from Mr. Rivers in 1937, and supplied water to families along Luana Beach Road west as far as the Dockton Road junction with Point Robinson Road. This became the lower part of the system. Meanwhile, several families up on the hill in the vicinity of 240th and 59th Streets hooked up on the then-existing wooden 1,000 gallon tank at the school and became the upper part of the system.

In 1948, Mr. Peterson expressed his desire to sell the system. Mr. E. F. Lewis, Mr. Merry, Mr. Waterman, and Mr. Bixby acquired the system and four years later formed the Maury Mutual Water System cooperative. All existing customers became members of the newly created cooperative.

A pump house and collection reservoir were built in the spring of 1952 and the ram was retired. A concrete holding basin, with approximately 25,000 gallon capacity, was built in 1955 on 63rd Street. This was the reservoir for the lower system. In 1974, the old wooden tank at the school was abandoned. It was functionally replaced by a 12,000 gallon steel tank which was located at the top of the hill on 59th Street at the site of a small 5,000 gallon steel tank constructed in the 1960s. These two tanks comprised the storage for the upper system.

In 1979 a 58,000 gallon concrete tank was added at the upper site and a 78,000 gallon concrete tank was built at the lower site. The previous earthen holding basin at the lower site was abandoned. These three tanks totaling 148,000 gallons serve Maury Mutual's present shareholders.

In 1992, the Association drilled a new well capable of providing 50 gpm in order to be better able to provide water to the members during the low water season and in anticipation of the well pt. source being classified as surface water or under the influence of surface water and thus necessitating a surface water filtration system which would be unacceptably expensive.

In the fall of 1993 Maury Mutual contracted with Island Water Management to provide comprehensive management and operations of the Water Company. IWM provides a state certified WDM to oversee daily management and operations as well as providing administrative and emergency services. IWM also provides technical assistance and consultative services to the board of directors.

#### 1. Description of Existing and Requested Service Area

Maury Mutual presently serves residents in the north-central area of Maury Island. (see maps A, and/or F & G) As recommended in the Vashon CWSP (1990, VIII-1, & Appendix A, "CWSP APPROVAL"; Also: Maps F & G of this document) there is a small area on SW Luana Beach Road that has been served by Maury Mutual since at least the mid 1970's. This area apparently was not included in past comprehensive plans nor was there any modification of the existing franchise to accommodate this inclusion. An amendment to the existing franchise has been submitted to King County Technical Review committee to correct this situation.

#### 2. Purpose of Plan

The purposes of this plan are to:

1. Update the existing comprehensive plan
2. Provide documentation for compliance of franchise requirements
3. Clarify service area/franchise confusion RE: SW Luana Beach Road

### **B. Population projection: Source or Basis of Projection**

All of Vashon-Maury Island was designated a Rural Area in the 1985 and 1994 King County Comprehensive Plans and rural zoning was applied through the Vashon Community Plan and Area Zoning in 1986. Although subsequent development has conformed to the adopted policies, population has grown faster than expected. When the Vashon Community Plan was prepared, the planning area had about 7,800 people, with forecasts for 8,400 people in 1990, and about 10,800 by the year 2000. The 1990 Census, however, indicated a planning area population of 9,300, and the Washington State Office of Financial Management estimated the 1993 population at 9,900. While the available water supply for Vashon-Maury Island could sustain an estimated population of 13,200 people, adopted zoning would allow more than 20,000 residents in the planning area. The combination of increased demand and the adverse effects of development on the aquifer (contamination and/or reduced recharge) could result in an inadequate water supply with consequent threat to public health and safety. Although R-105 of the KC Comprehensive Plan indicates a 7,000 dwelling unit increase in the Rural Areas of the County by the year 2010, the Growth Management Act requires the county's entire growth target to be accommodated with the Urban Growth Area (UGA) none of which includes Vashon-Maury Island. Furthermore, R-105 clearly indicates the growth target of 7,000 du shall, "...be used only to assess possible impacts of growth on public services and the environment. It is neither a minimum growth goal nor a maximum growth limit for the Rural Area, nor does it represent a commitment by King County to provide public facilities and services to accommodate a specific level of growth there."

Maury Mutual is fully subscribed and is not obligated to serve new development in its Planning Area nor is it capable given its source, storage and distribution capacities. There are presently 8 shareholders who have yet to connect to the distribution system and there are no memberships available.

### **C, D Water Demand/Supply**

Table 1. Maury Mutual Water Co. Yearly Statistics 1989-1995

Year	Usage in MGD	Water Supplied (MGD)
1989	0.02024	0.02681
1990	0.01962	0.02412
1991	0.01981	0.02307
1992	0.01863	0.02549
1993	0.01797	0.02478
1994	0.02225	0.02767
1995	0.02099	0.02380

### **E. Forecast Needs**

The Maury Mutual Water Company is fully subscribed. There are only 8 shareholders yet to connect to the distribution system. With the drilling of the well in 1993 the present system has sufficient supply and storage to accommodate these 8 shareholders.

calculated as (MID-Q)\*150, where MID is 144 gpm from Table 1 in the Sizing Guidelines, and Q is 50, based on the flow capacity at the new well for a total of 11,100 gallons required.

The total of standby and equalizing storage is 65,700 gallons. Fire flow storage requires 1000 gpm X 2 hours which equals 120,000 gallons. Total required storage is based on Equalizing storage plus the larger of Fire or Standby Storage. This larger volume is 131,100 gallons. Maury Mutual has 148,000 gallons of storage capacity and thus exceeds the required storage requirements. As seen on Table 2, when projected to the year 2000 the storage requirements still exceed the requirements.

Table 2: Actual and Projected Storage Requirements

Year	Number of Connections	Source (GPD)		Minimum Storage Requirements				
		Req'd	Avail	Standby	Equaliz	Fire	Total	Available
1995	91	72,800	100,800	54,600	11,100	120,000	131,100	148,000
2000	99	79,200	100,800	59,400	12,300	120,000	132,300	148,000

#### 4. Water Quality Documentation.

Maury Mutual tests the quality of its water in accordance with DOH requirements and is in compliance with the requirements. Recent filings that provide data about the Company's water quality are provided in Appendix II.

#### 5. Disinfected Surface Supplies:

The Association does not draw upon surface water, but rather makes use of a well, springs, and well points. Consequently, surface water disinfection is not an issue.

The Department of Health is currently setting the final regulations for whether well points are considered ground water under the influence of surface water, and thus subject to surface water regulations. If the Department considers the well points as so influenced, Maury Mutual will comply with surface water requirements.

#### 6. Water Rights Certificates

See Appendix IV

#### 7. Emergency Planning

##### *Emergency Power*

In the event of a power failure, the storage facilities can supply water via gravity for an estimated 7 days at a normal usage pattern and an estimated 10 days with conservation measures in effect. There is no need for a pump to maintain any pressure zones i.e. there are no booster pumps employed on the system. In the event of a prolonged power outage, Maury Mutual has contracted with Aggreko Company for an emergency generator to be brought to any or all stations requiring power.

##### *Interties*

Maury Mutual is not physically connected to any other water companies. An intertie policy was recommended by the Vashon CWSP and Maury Mutual is deliberating the feasibility for such an intertie with Water District #19 for emergency purposes.

**G. Fireflow Planning:**

Maury Island is served by Fire District 13. There are a few fire hydrants in the system. The service area is designated a rural area and as such is exempt from KCC 17.08. (VASHON CWSP IV-13). Although exempt from fire flow requirements all purveyors are subject to fire flow storage requirements (CWSP III-13, Table 1, Note (4)) This storage capacity is accounted for in the system's total storage capacity. As the system gradually renews and replaces undersized lines hydrants may be installed but such installation would be elective by the membership.

**H. Maintenance and improvement plans:****1. Time schedule for improvements:**

Maury Mutual has recently decided to filter the water from the new well. The water quality tests indicated levels of iron and maganese unacceptable to the membership. An ozone filtration system is being evaluated for its efficacy of removal of these contaminants. It is estimated this treatment system will be in place by the end of 1995.

**2. Projected maintenance for 5 years:**

Maury Mutual expects to begin replacing parts of the older piping in the system and to refurbish the well points to provide a backup for the new well. The Association will also look into the need for well-head protection. The Association has also increased rates to save for future capital improvements.

**3. Proposed construction schedule and financing plan:**

a/b. The water treatment system is the first priority. It has been financed by a new special assessment of the membership levied in the fall of 1994 and will be installed during 1995. An increase in the rate structure has also be implemented in the fall of 1994 to finance necessary pipe replacement which will begin as soon as this special maintenance account grows sufficiently. This pipe replacement will be scheduled on an as needed basis.

Moneys are already available for the refurbishing of the well points and this process should begin as soon as it can be arranged with a contractor.

**4. Assessment of Previous Capital Improvements from Previous Plans****(a). Proposed Looped System**

The looped system proposed in the previous plan has proved economically unfeasible to undertake. The proposed looping would have expanded the service area within the franchised area. This proved: (1) unnecessary, given the fully subscribed nature of Maury Mutual's shares and, (2) prohibitively expensive without the revenue base of an expanding membership.

**(b). Hydrants**

Since the last plan three desired hydrants have been installed. These are located at;

1. 63rd and Luana Beach Road
2. 63rd and Middle Reservoir
3. Adjacent to the Upper Reservoir



## I. Conservation Element

### Maury Mutual Water Co. Conservation Plan

This section will follow the same outline as the Vashon Coordinated Water System Plan water conservation program outlined in Appendix G of that document. The Maury Mutual plan coordinates with the overall Vashon conservation plan.

An effort to meet the State of Washington's Conservation Planning Requirements needs some explanation. It is understood the goal of the Conservation Plan is an a 4% reduction in water supplied from the 1991 levels (per capita) by 1996 and a 6% reduction by the year 2000. For Maury Mutual the 1991 per capita use was 107 gallon/day. This means the 1996 per capita supplied water target is 103 gpd and 101 gpd in 2000. (The per capita use figures are: 92.6, 88.89 and 87.0 respectively. See Table 2). It must be understood that the members of Maury Mutual have for years been in a "nature enforced" moratorium situation seasonally and during periodic leak episodes. They have as a group been very thrifty of their water resource. The 1995 supplied water amount is 111 gallons per person per day. (Actual usage is considerably less: 98 g/person/day) This compares very favorably with the estimates given in Table II-2 of the Vashon CWSP (p. II-8) which also assumes a household of 2.35 persons and an average usage of 120 gallons/person/day.

Table 3: Maury Mutual Conservation Target Projections

Year	Maury Mutual (per capita)		Vashon Community; Estimated
	Water Supplied, gpd	Water Used, gpd	Water Supplied, gpd (est)
Baseline 1991	107.8	92.6	120
Target 1996	103.48	88.89	115.2
Target 2000	101.33	87.04	112.8

It is apparent the most significant gains will be made in tracking down unaccounted for water, assumed to be leaks. However, as a smaller system the per capita usage could be skewed by a large new user or an unfortunate leak. 1991 was also the lowest per capita supplied water year in the past 7 years. Not a great year to use as a benchmark as far as Maury Mutual is concerned. Be that as it may, the system is now under professional management which has proven cost effective in stemming leaks and providing technical assistance to users. In addition a historically large user has drilled a private well to supply his business. This expensive undertaking was prompted by the increased water rates that went into effect in 1994. This single action may result in Maury Mutual easily meeting the stated conservation goals.

Table 4: Maury Mutual Conservation Action Table 1995-2000

Year	Action	Date Implemented	% Savings
1995	Rogers Well drilled	1/95	4
1996	Repipe Cooper et. al	5/96	5
1997-2000	<ul style="list-style-type: none"> <li>• Vigilant leak detection</li> <li>• Renew and replace system components</li> </ul>	on-going	3-5

### I. Public Education

The water level in the water storage reservoirs is monitored on a daily basis. Whenever there is a water shortage, Maury Mutual puts up signs to advise all members of this. In the past this has been quite effective. The issue of

water availability and the graduated rate system for water usage are addressed in every annual meeting. There are periodic educational articles in the local newspaper regarding different means of water conservation. Several times indifferent and/or unduly selfish individual users have had their water shut off by stalwart board members during times of severe water shortage. While this is not a common practice it does tend to get the attention of the system's users via an active grapevine and underscores the seriousness with which the board members take the community nature of their system. Such incidents also provide grist for enduring community stories which is another subject altogether...

There have been many articles in the local paper and public awareness of water issues is high. This is especially true during this time of the completion of the draft of the Ground Water Management Plan. The effects of the GWMP if adopted by the KC Council with the revisions suggested by the community will have far reaching implications on water quality and quantity.

**2. Technical Assistance**

Maury Mutual has contracted with a professional management company to oversee its operations. This company provides a certified WDM who consistently updates the company's conservation equipment, which includes new meters that help detect leaks. The meter reader notifies the management company of any unusually high water usage, an indication of possible leaks in the system. The water board plans to send conservation information with any rate increase notifications.

**3. Policy Recommendations**

Meters are in place for all water use. Maury Mutual has recently completed installation of all new meters with sensitive leak detection capabilities. The water system has in place an inverted rate structure. The rates have been increased at each level twice in the recent past, as shown in the accompanying chart, to enhance water conservation.

Table 5: Maury Mutual Rate structure History

Prior to 1991	1991-1994	1995-
bi-monthly assessment: \$15	bi-monthly assessment: \$22	bi-monthly assessment: \$42
\$ .01/<600 cu. ft.	\$ .01/<600 cu.ft.	\$.02/<600 cu.ft.
\$.015/>600 cu.ft.	\$.02/600-3000 cu.ft.	\$.03/600-3000 cu.ft.
	\$.03/3000-4000 cu.ft.	\$.04/3000-4000 cu.ft.
	\$.05/> 4000 cu.ft.	\$.06/> 4000 cu.ft.

**J. Satellite Management**

Maury Mutual does not currently manage satellite systems and does not plan to do so in the future.

**K. Wellhead Protection Program**

It is recognized wellhead protection is in the best interest of the system. Maury Mutual has pursued financing to undertake a wellhead protection study with other purveyors on the Island in cooperation with KC Water District 19. (See Appendix III) Unfortunately the grant submitted by WD 19 was not funded. Other avenues are being pursued including securing funding through the Ground Water Management Plan which has yet to be authorized by the King County Council.

**P. Neighboring purveyor issues:**

The Association is located between Water District 19 and Gold Beach Water District, but does not have any service area that immediately borders any water purveyors. There was an interlocal agreement to, "... establish responsibilities and provide for local funds in the event a grant is offered by the Washington State Department of Ecology to prepare Wellhead Protection Plans for the restricted area of Vashon Island, a federally designated SOLE-SOURCE AQUIFER area." (See Appendix III.) but, as mentioned earlier, the grant was not funded.

There is also an agreement establishing a service boundary with Water District # 19 (1-12-80) included in Appendix III

**Q. Developer extension plans:**

The Association does not plan to extend memberships beyond the current number. Consequently, the Association has no extension plans, and does not offer extensions to developers.

**R. Relationship to the basin wide plan:**

Maury Mutual's operations are consistent with the policies in the Vashon Community Plan, the Vashon Coordinated Water System Plan and the 1995 King County Comprehensive Plan as they relate Group A water systems.

Pertinent Vashon Community Policies include:

- V-52 Maury Mutual obtains and expects to continue to obtain all of its water from resources on the island. The current water resources consist of shallow-driven well points, springs and a well.
- V-53 Property development is largely low density residential structures as per existing zoning regulations that designate most land as low-density residential use: AR-5-P, AR-10-P, and AR-2.5-P. There is one parcel zoned agricultural/potential agricultural, and another designated mining/quarry to be designated AR-2.5-P when those activities have terminated. Source of zoning designations is the 1986 Vashon Community Plan and Area Zoning. (See Map C)
- V-54 The land use and density controls and other factors in the Vashon Community Plan and Area Zoning will do much to protect the island's groundwater aquifer. Maury Mutual owns the land on which its water sources and storage facilities lie, and consequently protects the most vital component of its water resources above and beyond the protections offered in the Community Plan.
- V-55 Maury Mutual is committed to using water resources efficiently. The Association is not taking on new members in any portion of its service territory.
- V-56 Maury Mutual is a Group A system on Vashon Island.
- V-57 Almost all of Maury Mutual's service area is designated low density residential with one parcel designated agricultural. This low-density zoning, combined with topographic features in many areas that hinder development, suggests that the ground water recharge areas and watersheds should be protected.
- V-58 Maury Mutual is a Group A but is limited in size by its bylaws.
- V-59 The Association is fully subscribed given status, and is not taking on new shareholders regardless of population growth within its service area. The Association is concerned that expansion could risk the

adequacy of existing service, and this is part of the reason the Board has determined not to expand the system.

- V-60 Maury Mutual is fully subscribed.
- V-61 V-60 and V-61 place responsibility upon DDES and potential developers to consider effects of development on existing customers (V-60) and groundwater (V-61).
- V-62 The Association has provided information about the location of its water sources to the King County Health Department and other relevant regulators, and will provide information to any private developer who may site new housing that could impinge upon the Association's supply.
- V-63 Maury Mutual is in the process of licensing a well that has been constructed and tested. The well is essential for the Association to meet members' need for water.

Pertinent Vashon Coordinated Water System Plan recommendations include:

1. Service Area

This Comprehensive Plan seeks to conform to the service area as recommended by the VASHON CWSP

2. New Water Systems and Utility Service Review Procedures

Maury Mutual is not, and does not intend to engage in satellite management of other systems within or adjacent to its designated service area. It has instead opted for contract management. Maury Mutual has also lent its voice to express concern at the proliferation of private water sources and has recommended to the Vashon Groundwater Management Program to give Group A purveyors authority to review and deny private water source applications within its service area.

3. Design Standards, Planning criteria and system Improvements

Maury Mutual has adjusted its planning to conform to Part IV of the Vashon CWSP. There are no new mains forecast. Renewal and replacement of distribution system components will meet the minimum design standards unless an exception is warranted with engineering justification.

4. Future source and Groundwater Management

The new well at Maury Mutual is monitored for groundwater elevations, flow rates and production data monthly in accordance with this recommendation.

5. Protection of Groundwater Quality

There are no specific water purveyor recommendations but Maury Mutual certainly supports the general recommendations made.

6. Water Conservation

Maury Mutual has an aggressive program to reduce unaccounted for water through repair of leaking mains and facilities and close monitoring of water use records .

7. Water shortage Response Planning

Maury Mutual is developing an Emergency Response Plan and considering intertie possibilities.

8. Plan Updates

This document satisfies the requirements of the Vashon CWSP within the Vashon Critical Water Supply Service Area.

Pertinent King County Comprehensive Plan 1994 policies are:

- R-105 See comments under Section B; "Population Projection" (p.4 of this document)
- R-106 Maury Mutual supports the intention of this policy and stands ready to respond.
- F-301 Maury Mutual is not in an Urban Growth Area
- F-302 Maury Mutual has contracted with Island Water Management to provide a certified water system operator. There are no satellite management agreements in effect.
- F-306 Maury Mutual has an aggressive conservation program as mentioned earlier in this document.
- R-109 Maury Mutual is providing services to the Rural Area that protect basic public health and safety and the environment and are financially supportable at rural densities and do not encourage urban development.
- R-112 Maury Mutual's standards and plans for utility service are consistent with the long-term, low-density development intention of this policy.

**S. Reason for service area request:**

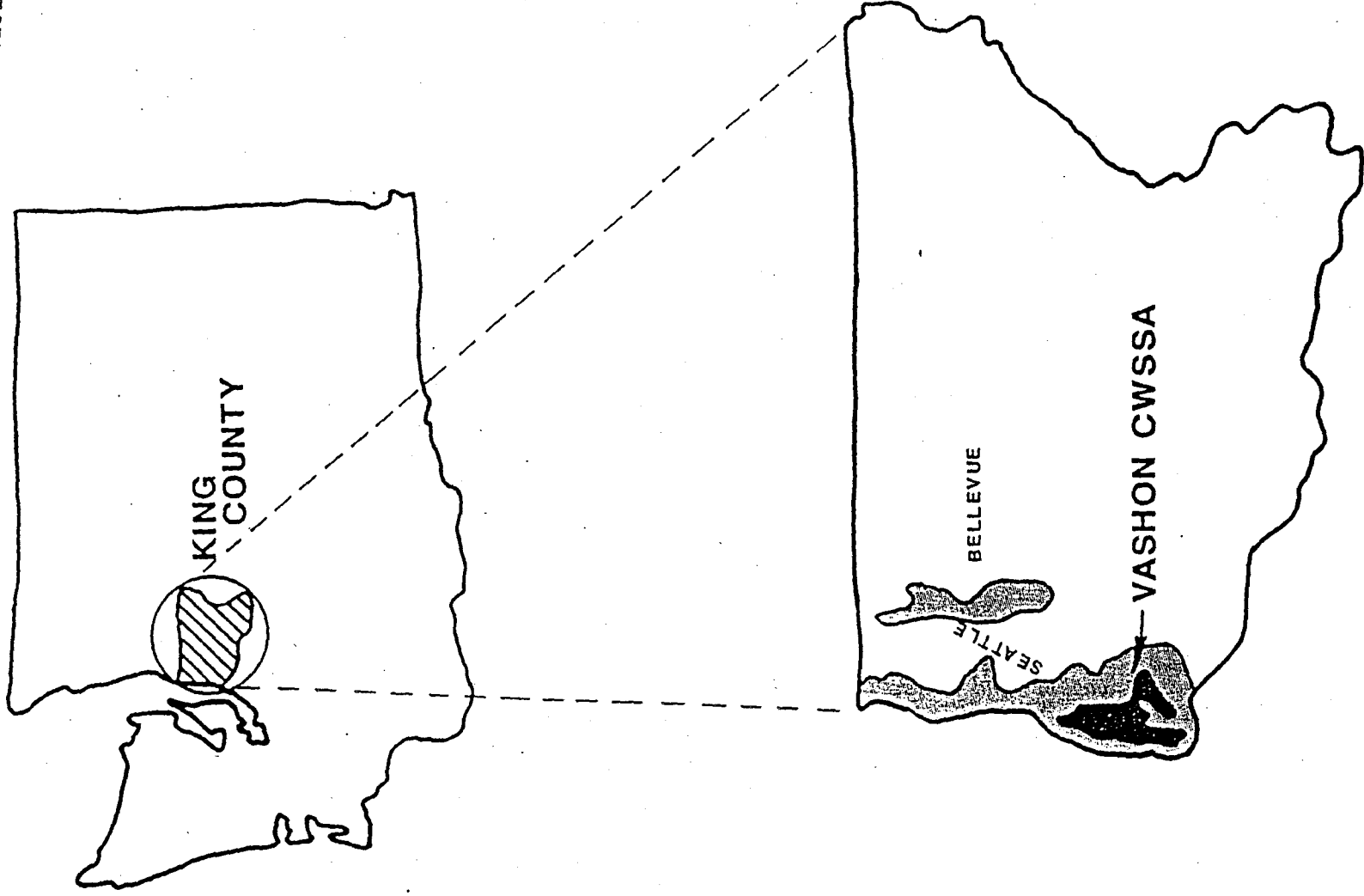
Maury Mutual is not planning to grow, and is only making a service area request to conform with the Vashon CWSP which, in turn only reflects what has been historically served by Maury Mutual at least since the mid 70's.

**III. Maps: (A-J)**

See attached.

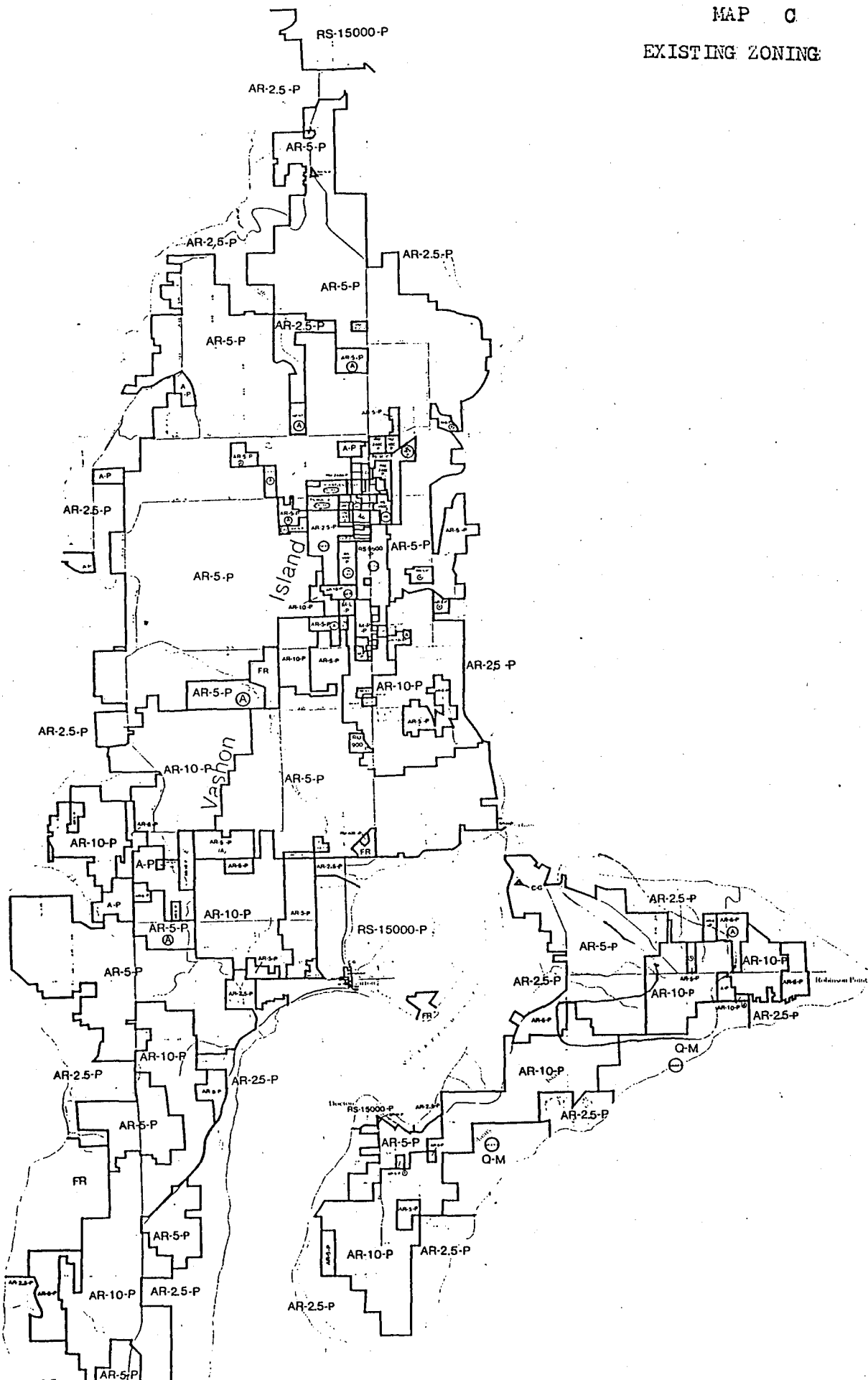
VICINITY MAP

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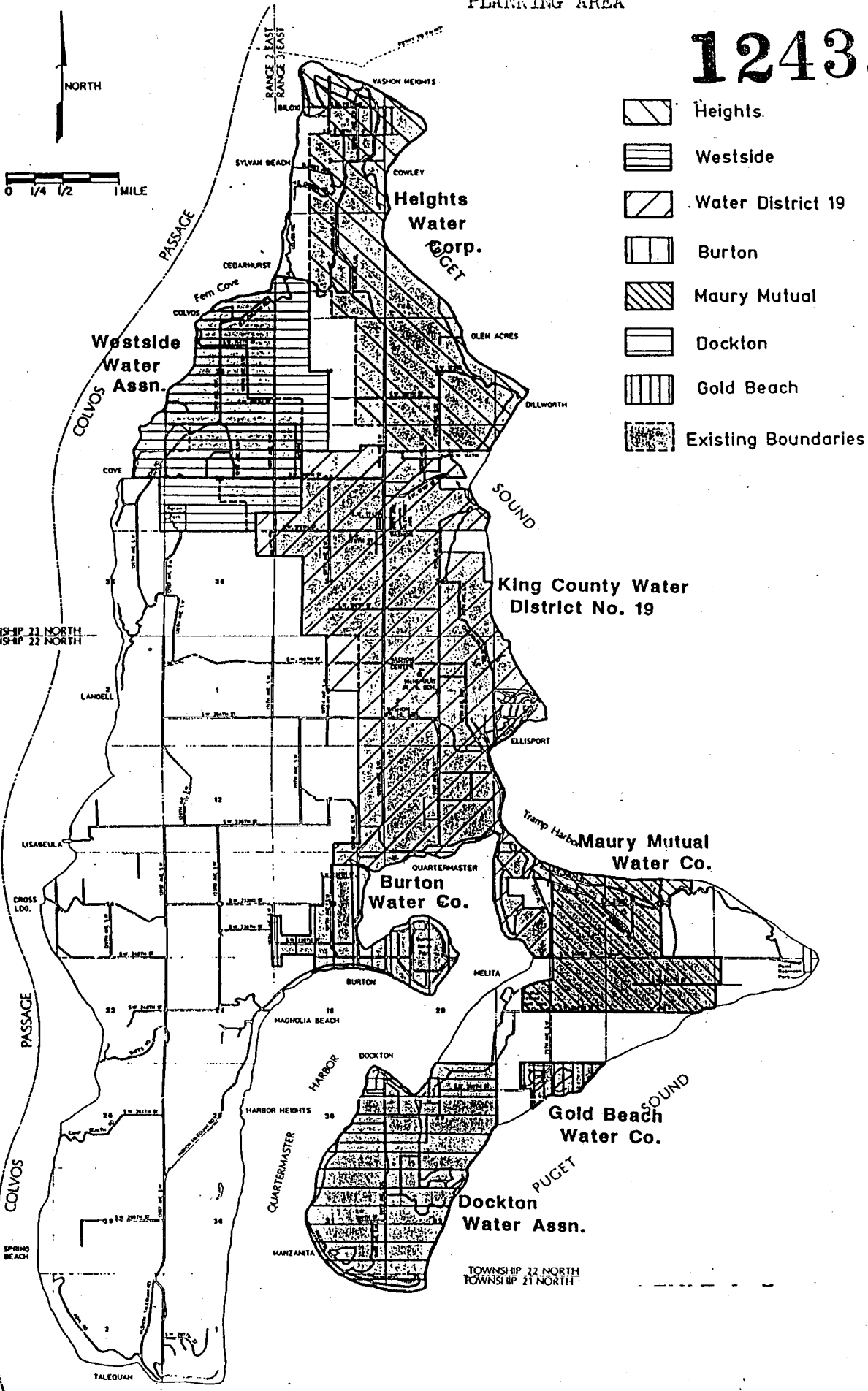
LOCATION MAP

MAP C  
EXISTING ZONING



SHOWING COMMUNITY PLANNING AREA  
ADJACENT PURVEYORS &  
PLANNING AREA

12435

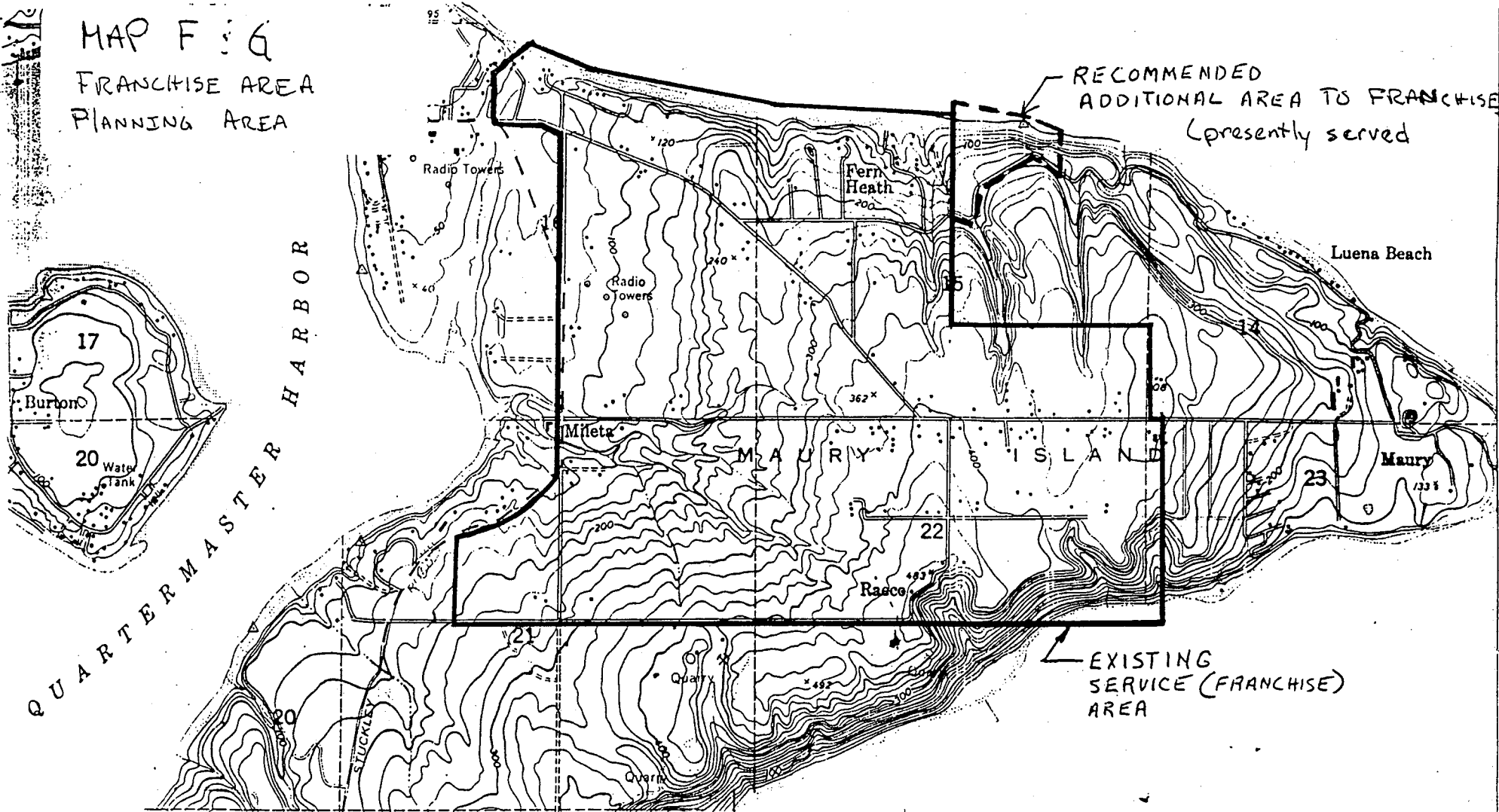




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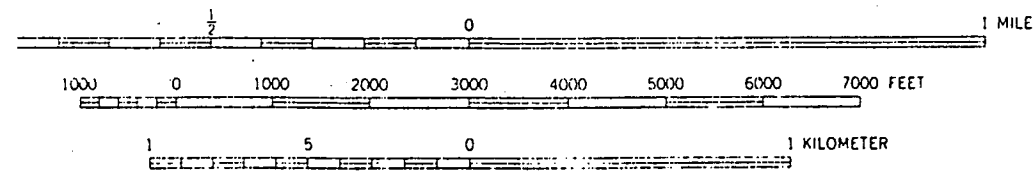
# MAP F 3 G

FRANCHISE AREA  
PLANNING AREA



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SCALE 1:24000

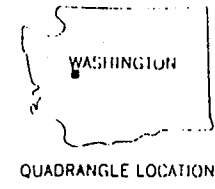


ROAD CLASSIFICATION

Heavy-duty	—————	Light-duty	.....
Medium-duty	———	Unimproved dirt	.....

CONTOUR INTERVAL 25 FEET  
NATIONAL GEODETIC VERTICAL DATUM OF 1929

SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER  
THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 11 FEET



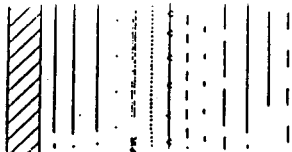
VASHON, WASH.  
N4722.5—W12222.5/7.5

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

# LEGEND

SCALE  
1"=400'

IMPROVED 5" LOTTING MAIN  
IMPROVED MAIN  
EXISTING MAIN  
PROPOSED MAIN  
GATE VALVE



MAINT  
MEDIUM  
LOW  
12" MC  
10" MC  
8" MC  
6" MC  
4" MC  
3" MC  
2" MC  
1 1/2" MC  
1" MC  
3/4" MC  
1/2" MC  
1/4" MC  
1/8" MC  
1/4" GALV  
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12" MC

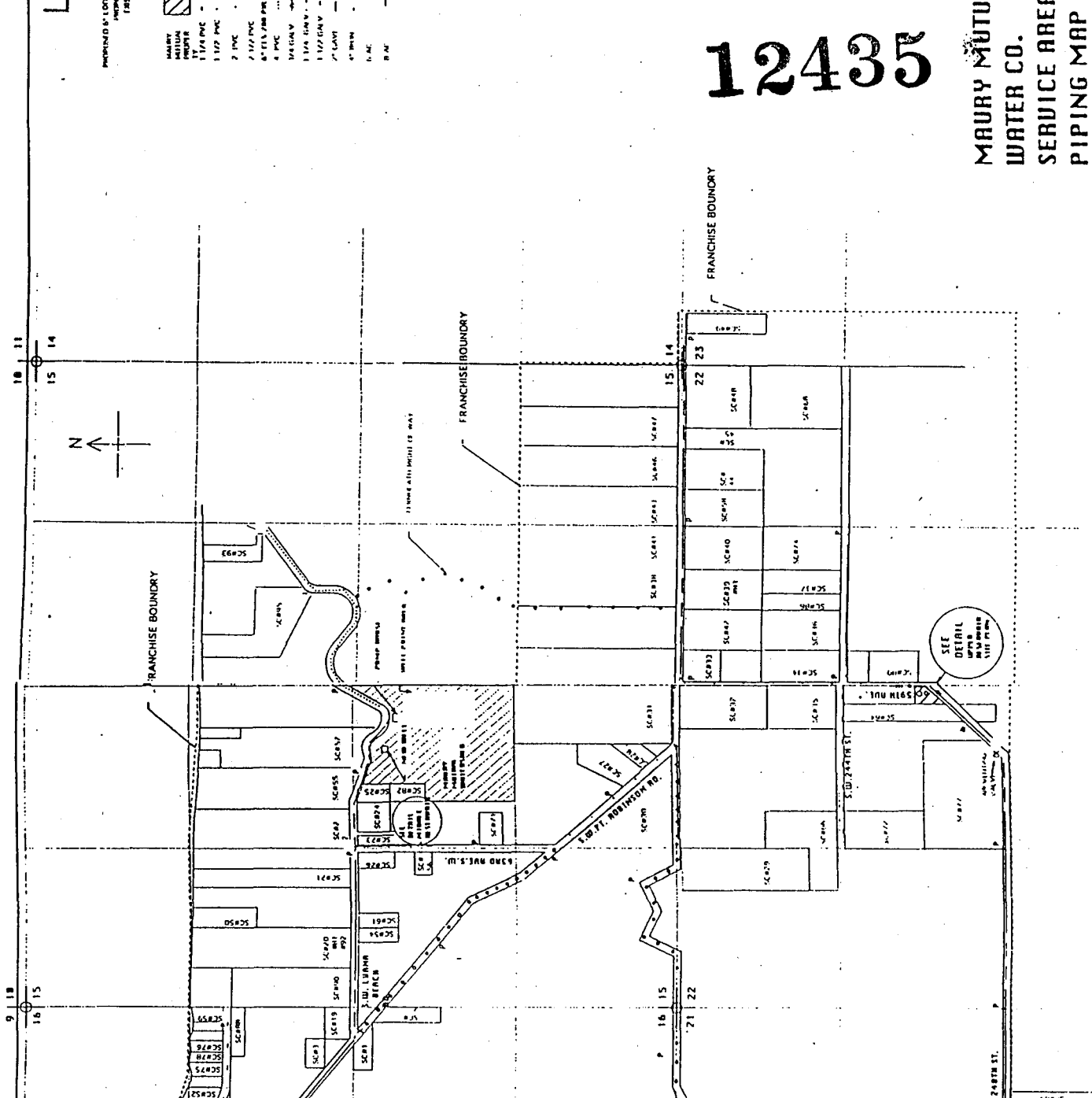
MAP H

## EXISTING AND PROPOSED MAINS

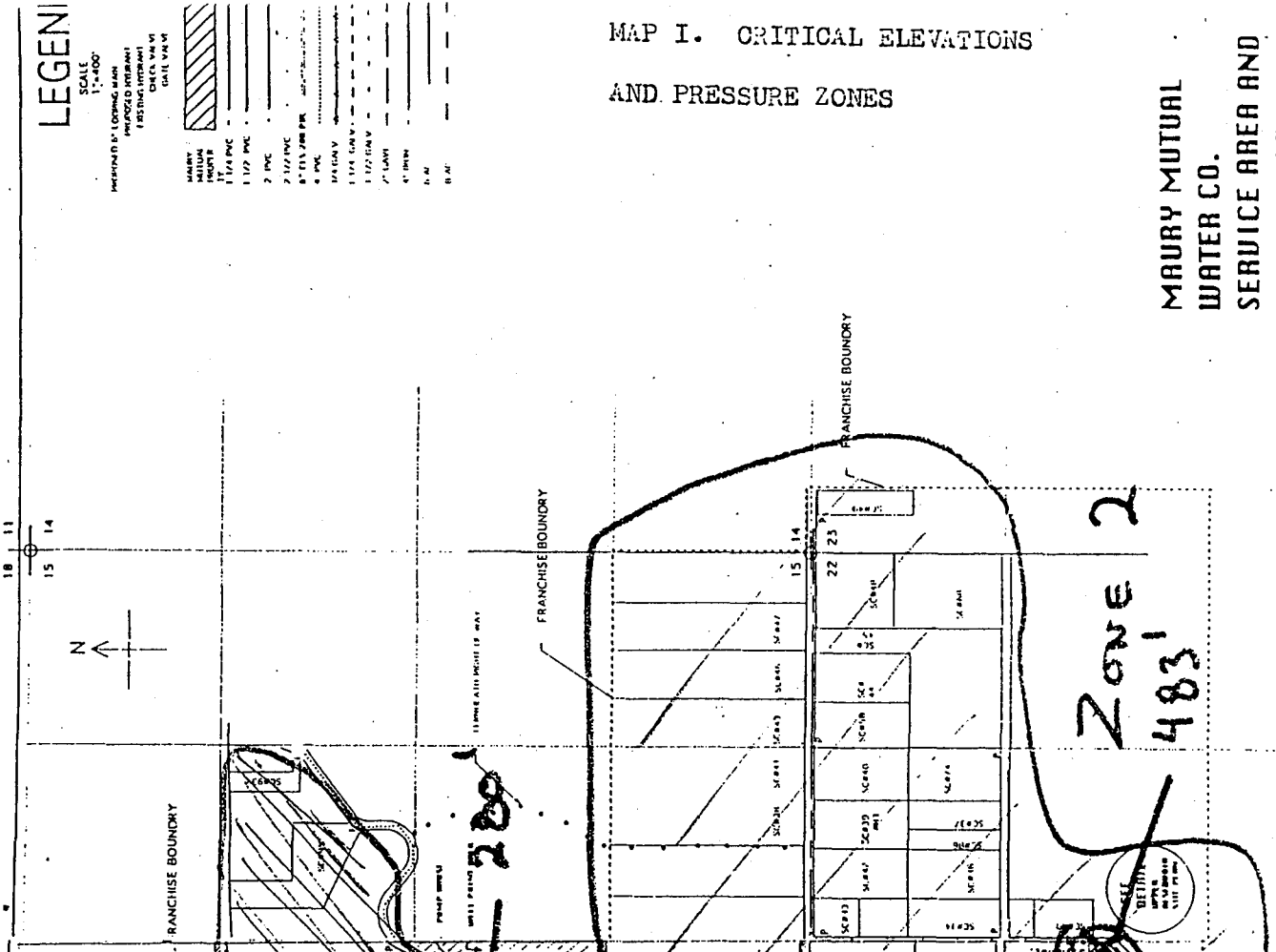
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MAURY MUTUAL  
WATER CO.  
SERVICE AREA AND  
PIPING MAP

1007

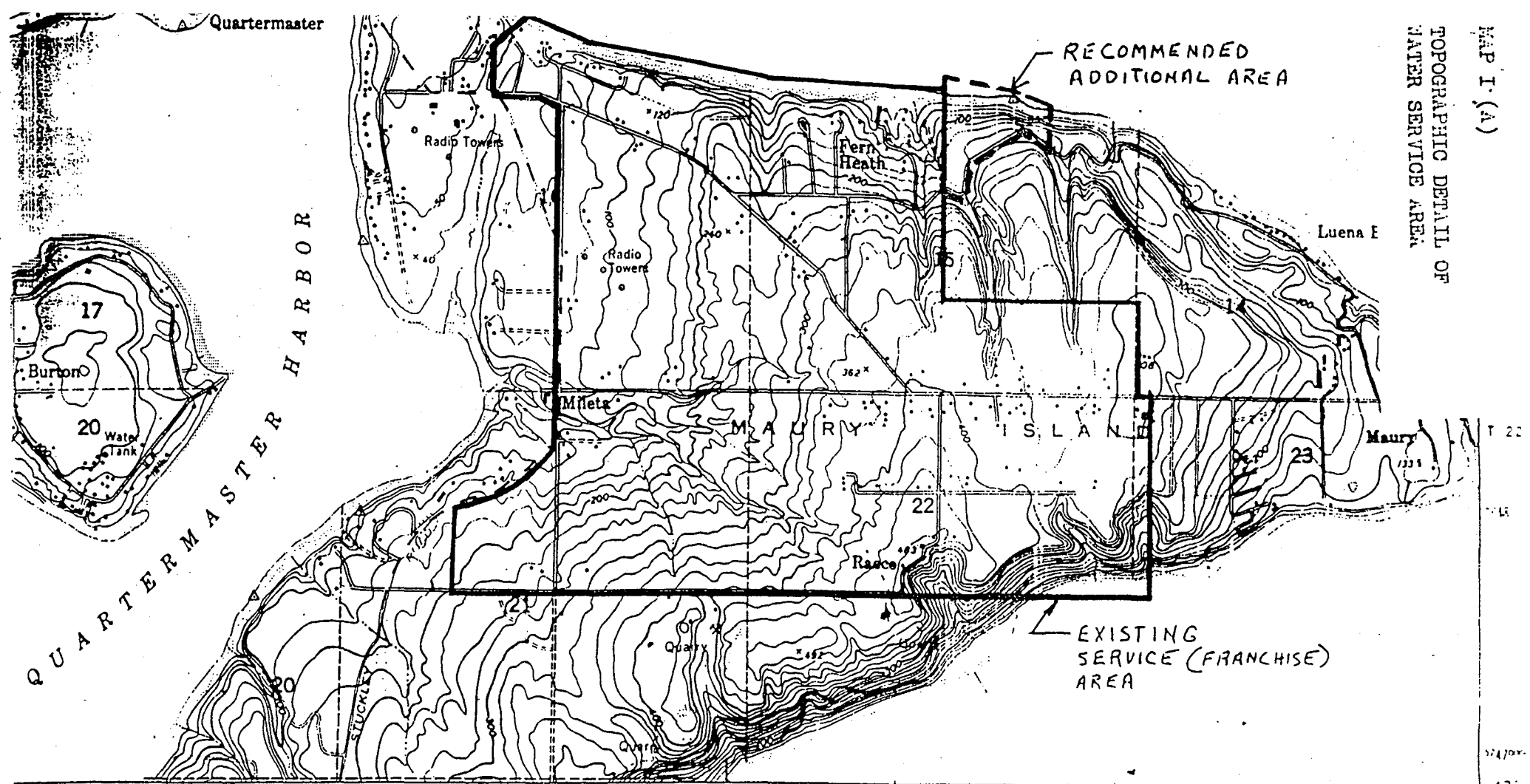


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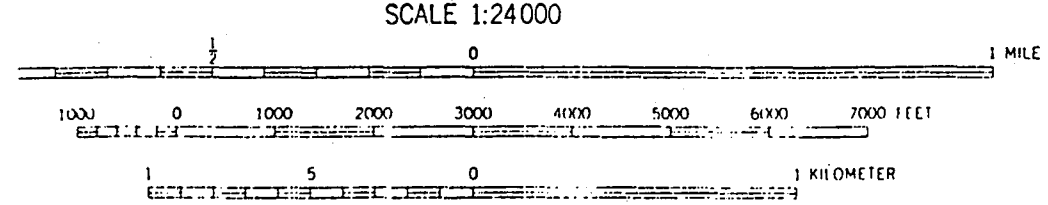


MAP I. CRITICAL ELEVATIONS  
AND PRESSURE ZONES

MAURY MUTUAL  
WATER CO.  
SERVICE AREA AND  
PIPING MAP



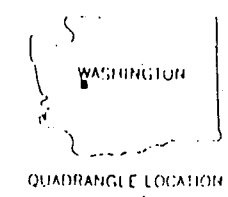
41 42 (TACOMA NORTH) 43 25' 45 47  
 157° IV SW DOCKTON 0.7 MI. 5460000 E 122°22'30"



ROAD CLASSIFICATION

Heavy duty	———	Light duty	———
Medium duty	- - -	Unimproved	.....

CONTOUR INTERVAL 25 FEET  
 NATIONAL GEODETIC VERTICAL DATUM OF 1929  
 SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER  
 THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 11 FEET

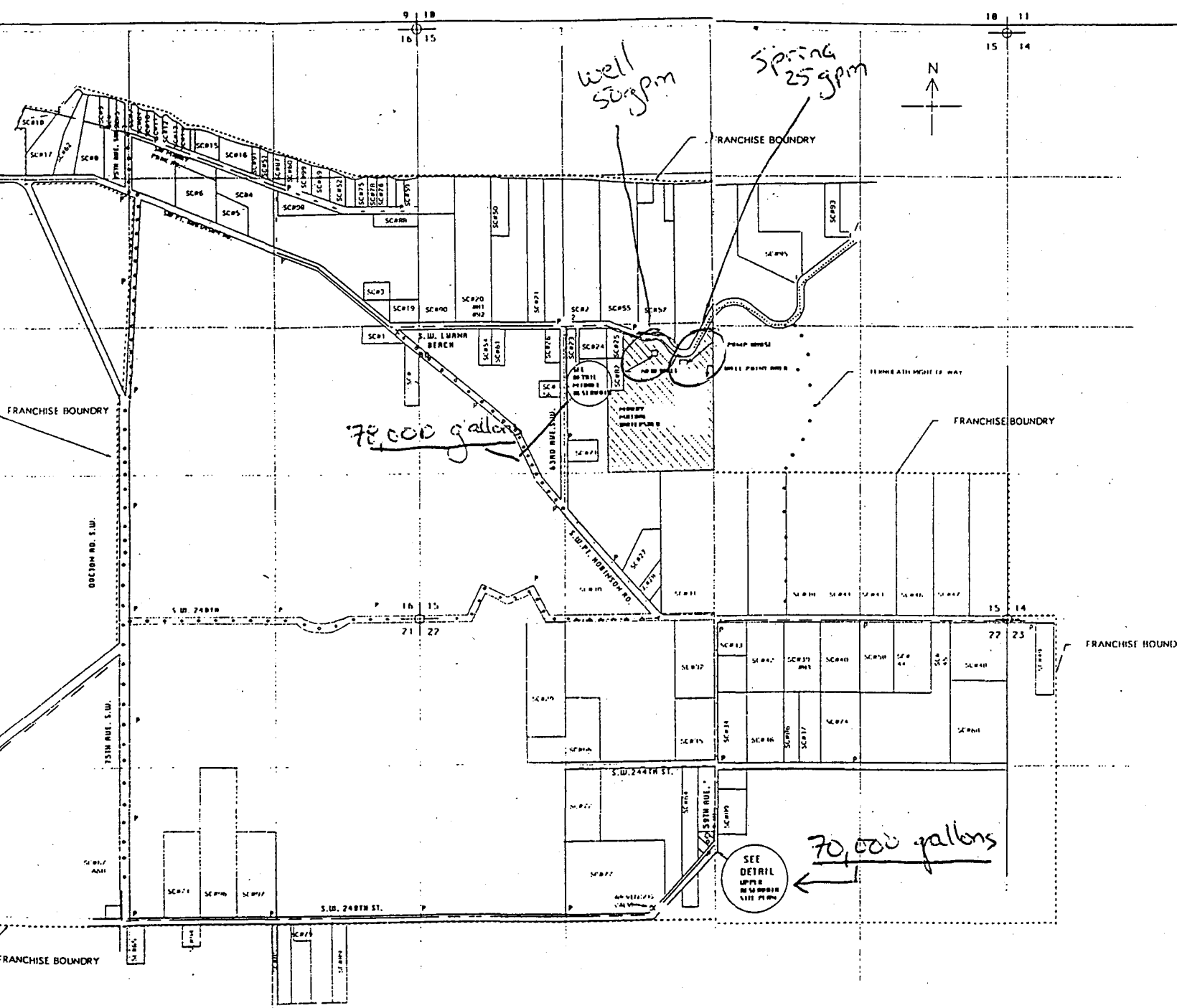


VASHON, WASH  
 N4722.5-W12222.5/7

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
 BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092  
 A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

1949

12435



**LEGEND**

SCALE  
1"=400'

PERMANENT 6" LIFTING MANHOLE  
EMERGENCY 6" PERMANENT  
EXISTING HYDRANT  
CHECK VALVE  
GATE VALVE

MAURY MUTUAL WATER CO.	[Hatched pattern]
1" 1/2" PVC	[Solid line]
2" PVC	[Dashed line]
4" PVC	[Dotted line]
6" 1/2" 200 PSI	[Dotted line]
8" 1/2" 200 PSI	[Dotted line]
1" 1/2" GALV	[Dotted line]
2" GALV	[Dotted line]
4" IRON	[Dotted line]
6" IRON	[Dotted line]
12" IRON	[Dotted line]

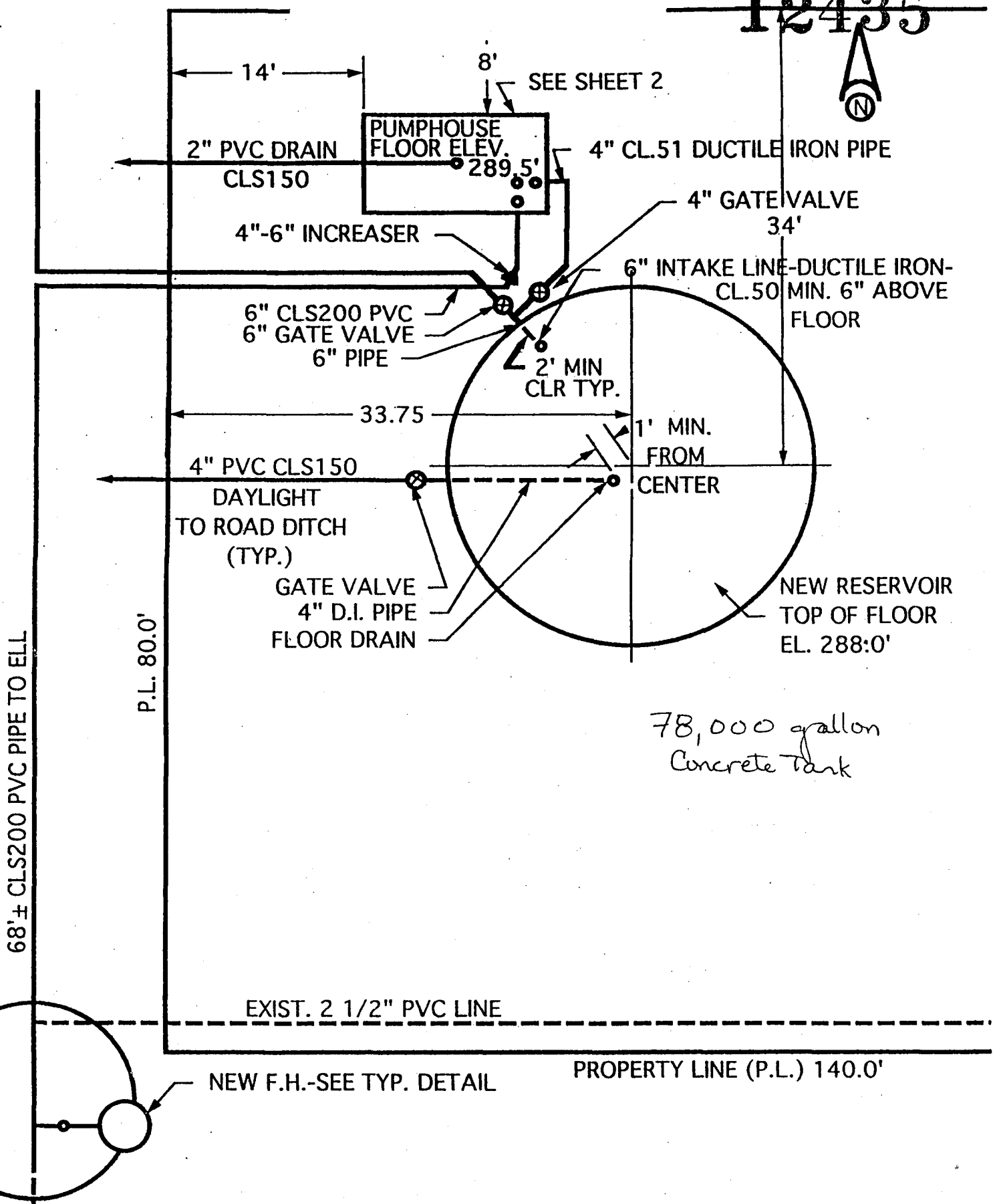
MAP J  
STORAGE AND PUMP FACILITIES.

MAURY MUTUAL  
WATER CO.  
SERVICE AREA AND  
PIPING MAP  
1987

12435

MIDDLE RESEVOIR DETAIL

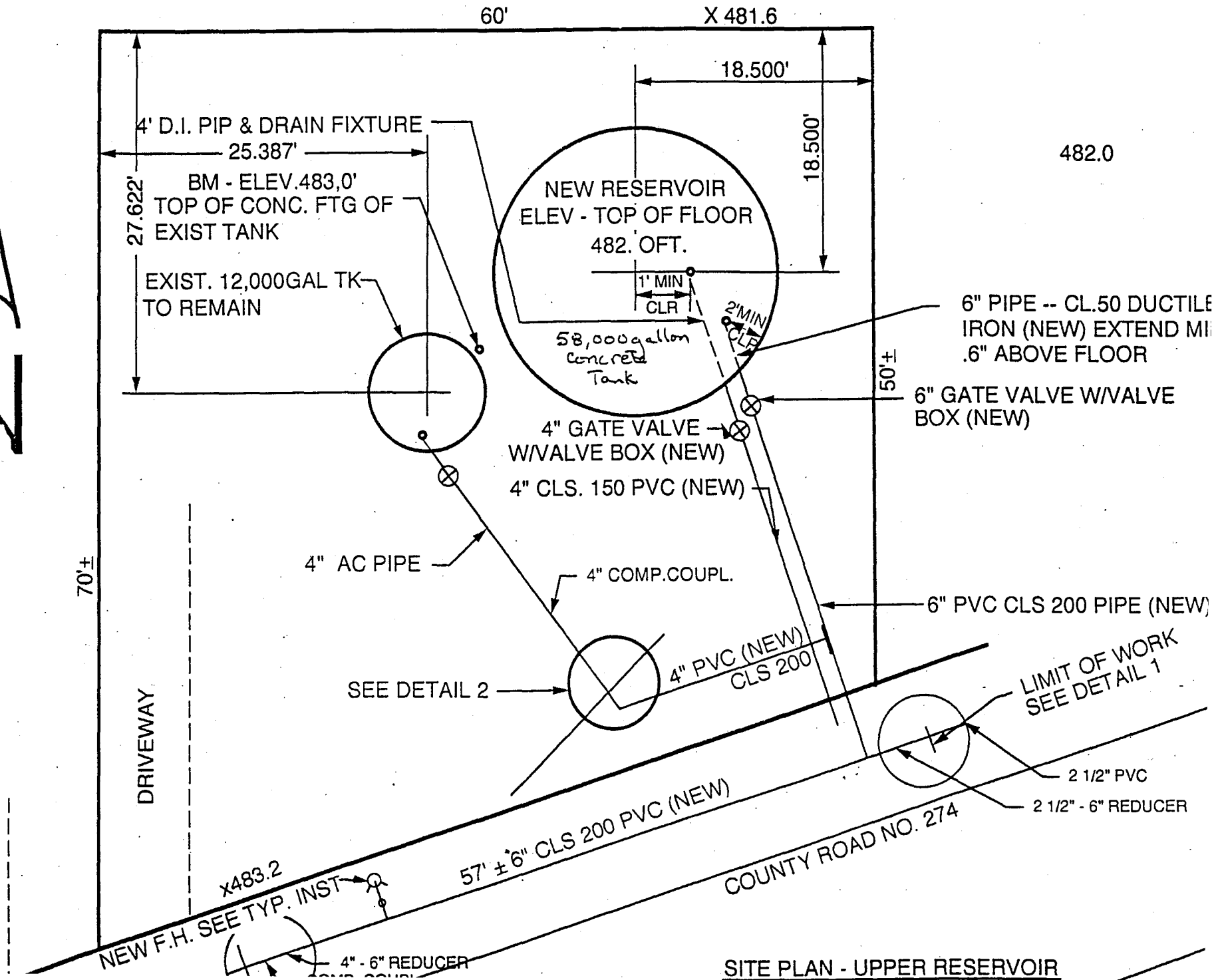
12435



MIDDLE RESERVOIR DETAIL

12435

MAP J, 2  
UPPER RESEVOIR DETAIL



RESOLUTION NO. 021695

A RESOLUTION of the Board of Directors of the Maury Mutual Water Company authorizing the submittal of the 1996 MAURY MUTUAL COMPREHENSIVE PLAN to the King County Technical Review Committee; and, adopting said Plan to serve as a framework for the operation and development of the Maury Mutual Water Company through the year 2001.

WHEREAS, Maury Mutual Water Company is a legally constituted water utility operating under the laws of the State of Washington; and

WHEREAS, the Board of Directors recognizes the requirement to have an approved Comprehensive Plan in effect for the purposes of satisfying state and local laws; and

WHEREAS, the Board of Directors recognizes the requirement to have an approved Comprehensive Plan as a precondition for obtaining a franchise; and,

WHEREAS, the 1996 Comprehensive Plan satisfies these requirements; and

WHEREAS, the 1996 Comprehensive Plan provides a framework for the operation and development of the water system

NOW, THEREFORE, IT IS HEREBY RESOLVED BY THE BOARD OF DIRECTORS OF THE MAURY MUTUAL WATER COMPANY TO ADOPT THIS 1996 COMPREHENSIVE PLAN.

PASSED by the Board of Directors of the Maury Mutual Water Company at a regularly scheduled meeting held on this 14th day of February 1996.

BOARD OF DIRECTORS OF MAURY MUTUAL  
WATER COMPANY

By: JE Baxter  
Tom Baxter, Director

By: [Signature]  
Mark Clark, Director

By: John H. Gerstle  
John Gerstle, Director

By: Gina Olsen  
Gina Olsen, Director

By: Paul Stoddard  
Paul Stoddard, Director



12435

Appendix II  
WATER QUALITY DATA

STATE OF WASHINGTON  
DEPARTMENT OF HEALTH  
**WATER BACTERIOLOGICAL ANALYSIS**  
SAMPLE COLLECTION: READ INSTRUCTIONS ON BACK OF GOLDENROD COPY  
If instructions are not followed, sample will be rejected.

DATE COLLECTED MONTH DAY YEAR 5 / 7 / 76		TIME COLLECTED 10 : 45 <input checked="" type="checkbox"/> AM <input type="checkbox"/> PM	COUNTY NAME KING
TYPE OF SYSTEM <input checked="" type="checkbox"/> PUBLIC <input type="checkbox"/> INDIVIDUAL (serves only 1 residence)		IF PUBLIC SYSTEM, COMPLETE: I.D. No. 521000 CIRCLE GROUP (A) B	
NAME OF SYSTEM MAURY Mutual			
SPECIFIC LOCATION WHERE SAMPLE COLLECTED 63rd Street TAP		TELEPHONE NO. DAY ( ) 975-8414 EVENING ( ) ( )	
SAMPLE COLLECTED BY: (Name) DPO		SYSTEM OWNER/MGR.: (Name) Don S. [unclear]	
SOURCE TYPE <input type="checkbox"/> SURFACE <input type="checkbox"/> WELL <input type="checkbox"/> WATER UNDER SURFACE INFLUENCE <input type="checkbox"/> SPRING <input type="checkbox"/> PURCHASED or INTERTIE <input type="checkbox"/> COMBINATION or OTHER			
SEND REPORT TO: (Name, Address and Zip Code) [unclear] 13333 [unclear] WASHINGTON 98013			

TYPE OF SAMPLE (check only one in this column)	
<input checked="" type="checkbox"/> ROUTINE DRINKING check	<input type="checkbox"/> Chlorinated (Residual: _____ Total <u>0.8</u> PpM)
<input type="checkbox"/> REPEAT Previous	<input type="checkbox"/> Filtered
<input type="checkbox"/> RAW WATER	<input type="checkbox"/> Untreated or Other _____
<input type="checkbox"/> NEW CONSTRUCTION or REPAIRS	Lab # _____
<input type="checkbox"/> OTHER	Date _____ / _____ / _____
	Source # S [ ] [ ]
	<input type="checkbox"/> Total Coliform
	<input type="checkbox"/> Fecal Coliform

REMARKS:

LAB USE ONLY) DRINKING WATER RESULTS	
<input type="checkbox"/> UNSATISFACTORY, Coliforms present	<input checked="" type="checkbox"/> SATISFACTORY, Coliforms absent
<input type="checkbox"/> REPEAT SAMPLES REQUIRED	<input type="checkbox"/> E. Coli present <input type="checkbox"/> E. Coli absent
	<input type="checkbox"/> Fecal present <input type="checkbox"/> Fecal absent
OTHER LABORATORY RESULTS	
TOTAL COLIFORMS _____ /100 ml	E. COLI _____ /100ml
FECAL COLIFORMS _____ /100 ml	PLATE COUNT _____ /ml
ANOTHER SAMPLE REQUIRED	
SAMPLE NOT	BECAUSE:
<input type="checkbox"/> Sample	TEST UNSUITABLE BECAUSE:
<input type="checkbox"/> Wrong	<input type="checkbox"/> Confluent growth
<input type="checkbox"/> Incomp.	<input type="checkbox"/> TNTC
<input type="checkbox"/> _____	<input type="checkbox"/> Turbid culture
	<input type="checkbox"/> Excess debris

SEE REVIEW OF GREEN COPY FOR EXPLANATION OF RESULTS		
LAB NO. (7 DIGITS) 200020	DATE TIME RECEIVED 5/8/96 2:30	RECEIVED BY [signature]
DATE REPORTED	LABORATORY:	

# SOUND ANALYTICAL SERVICES, INC.

# 12435

4813 PACIFIC HIGHWAY EAST, TACOMA, WASHINGTON 98424 • TELEPHONE 206-922-2310 • FAX 206-922-5047

## WATER SAMPLE INFORMATION FOR INORGANIC CHEMICAL ANALYSIS

DO NOT WRITE IN SHADED AREAS, PLEASE FILL BOXES NUMBERED 1 THRU 13, SEE BACK FOR INSTRUCTIONS

LABORATORY NUMBER <b>10703079</b>	LABORATORY REPORT (Do Not Write Inside This Box)							
DATE RECEIVED <b>8/16/95</b>	Tests	MCL	Less Than <	Result	Units	Compliance Yes No	Chemist Initials	
1. Date Collected <b>08/14/95</b>	Antimony	Sb	0.006					
	Arsenic	As	0.05					
2. System Name: <b>Murray Mutual</b>	Barium	Ba	2.0					
	Beryllium	Be	0.004					
3. System ID <b>52100D</b>	4. Circle Group <b>(A) B</b>	Cadmium	Cd	0.005				
		Chromium	Cr	0.1				
5. County: <b>KENNA</b>	Copper	Cu	1.3					
6. Source Type: (circle)  Surface <input type="checkbox"/> Well <input checked="" type="checkbox"/> Spring <input type="checkbox"/> Purchase <input type="checkbox"/>	Iron	Fe	0.3	<b>N/D</b>	mg/L	<input checked="" type="checkbox"/>	<b>SP</b>	
	Lead	Pb	0.015		mg/L			
	Manganese	Mn	0.05	<b>N/D</b>	mg/L	<input checked="" type="checkbox"/>	<b>SP</b>	
	Mercury	Hg	0.002		mg/L			
7. Sample Taken (circle)  Before Treatment <input type="checkbox"/> After Treatment <input checked="" type="checkbox"/>	Nickel	Ni	0.1		mg/L			
	Selenium	Se	0.050		mg/L			
	Silver	Ag	0.1		mg/L			
8. Source No.: <b>502</b>	Source Name: <b>Well</b>	Sodium	Na	None	mg/L			
		Thallium	Tl	0.002		mg/L		
10. Collected By: <b>D. DeStefano</b>	Telephone: <b>(206) 925-8414</b>	Zinc	Zn	5.0		mg/L		
		Hardness		None		mg/L		
11. If taken after treatment, circle:  Fluoridation <input type="checkbox"/> Chlorination <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Filtration <input type="checkbox"/> Other O <sub>3</sub> <input type="checkbox"/> Water Softener Type	Conductivity		700		umhos			
	Turbidity		1.0		NTU			
	Color		15.0		Units			
	Chloride	Cl	250		mg/L			
12. If taken from distribution, indicate address <b>63 Street</b> Name: <b>Reservoir</b> <b>Source</b>	Cyanide	CN	0.2		mg/L			
	Fluoride	F	2.0		mg/L			
	Nitrate	as N	10.0		mg/L			
	Nitrite	as N	1.0		mg/L			
13. Party to pay for testing:  Name: <b>Island Water Management</b> Address: <b>PO Box 13333 Burien, WA 98148</b> Telephone: <b>(206) 835-9203</b>	Sulfate	SO <sub>4</sub>	250		mg/L			
	TDS		500		mg/L			
	<b>LABORATORY COMMENTS</b>							
	14. Remarks <b>FE, MN #50799</b>	Laboratory Supervisor: <b>Steve Palomquist</b>					Date of Report: <b>8-18-95</b>	

MCL - Maximum Contaminant Level

Reference SOP #SAS-0513

# 12435

Use Print Plainly

LABORATORY NAME

## WATER SAMPLE INFORMATION FOR INORGANIC CHEMICAL ANALYSIS

DO NOT WRITE IN SHADED AREAS. PLEASE FILL BOXES NUMBERED 1 THRU 14. SEE BACK FOR INSTRUCTIONS

LABORATORY NUMBER: 5114791

DATE RECEIVED: 12-6-93

DATE COLLECTED: 12/6/93

SYSTEM NAME: MAURY MUTUAL WATER CO.

SYSTEM ID #: 52100D      4. CIRCLE GROUP: (A) B

COUNTY: King

SOURCE TYPE:  
 SURFACE       WELL  
 SPRING       PURCHASE

SAMPLE TAKEN:  
 BEFORE TREATMENT       AFTER TREATMENT

SOURCE NO.: 501      9. SOURCE NAME: SPRING #1

COLLECTED BY: CHRIS HOWIE

TELEPHONE: (206) 463-5827

IF TAKEN AFTER TREATMENT, CHECK TREATMENT:  
 FLUORIDATION  
 CHLORINATION  
 FILTRATION  
 WATER SOFTENER, TYPE: \_\_\_\_\_  
 OTHER: \_\_\_\_\_

IF TAKEN FROM DISTRIBUTION, INDICATE ADDRESS:

PARTY TO PAY FOR TESTING:  
 SIGNATURE: Chris Howie  
 NAME: CHRIS HOWIE  
 ADDRESS: PO Box 1827  
VASHON WA 98070  
 TELEPHONE: ( ) 463-5827

REMARKS: (water quality problems, address for extra copies, etc.)

LABORATORY REPORT (DO NOT WRITE INSIDE THIS BOX)						
TESTS	MCL <sup>1</sup>	LESS THAN <	RESULTS	UNITS	COMPLIANCE YES/NO	CHEMIST INITIALS
Antimony Sb	0.006	<	<u>0.020</u>	mg/l	✓	PC
Arsenic <sup>P</sup> As	0.05	<	<u>0.010</u>	mg/l	✓	JDA
Barium <sup>P</sup> Ba	2.0	<	<u>0.10</u>	mg/l	✓	PC/PC
Beryllium Be	0.004	<	<u>0.030</u>	mg/l	✓	PC/PC
Cadmium <sup>P</sup> Cd	0.005	<	<u>0.020</u>	mg/l	✓	JDA
Chromium <sup>P</sup> Cr	0.1	<	<u>0.010</u>	mg/l	✓	PC/PC
Copper Cu	1.0 <sup>2</sup>	<	<u>0.2</u>	mg/l	✓	PC/PC
Iron Fe	0.3	<	<u>0.10</u>	mg/l	✓	PC/PC
Lead <sup>P</sup> Pb	0.05 <sup>2</sup>	<	<u>0.002</u>	mg/l	✓	JDA
Manganese Mn	0.05	<	<u>0.010</u>	mg/l	✓	PC/PC
Mercury <sup>P</sup> Hg	0.002	<	<u>0.005</u>	mg/l	✓	JDA
Nickel Ni	0.1	<	<u>0.020</u>	mg/l	✓	PC/PC
Selenium <sup>P</sup> Se	0.05	<	<u>0.005</u>	mg/l	✓	JDA
Silver Ag	0.1	<	<u>0.010</u>	mg/l	✓	PC/PC
Sodium <sup>P</sup> Na			<u>7</u>	mg/l		PC/PC
Thallium Tl	0.002	<	<u>0.010</u>	mg/l	✓	PC
Zinc Zn	5.0	<	<u>0.2</u>	mg/l	✓	PC/PC
Hardness			<u>7.3</u>	mg/l as CaCO <sub>3</sub>		PC/PC
Conductivity	700		<u>180</u>	µmhos/cm 25° C	✓	BT
Turbidity <sup>P</sup>	1.0		<u>0.1</u>	NTU	✓	BT
Color	15.0		<u>5.2</u>	Color Units	✓	BT
Chloride Cl	250		<u>5</u>	mg/l	✓	H.
Cyanide CN	0.2	<	<u>0.01</u>	mg/l	✓	JDA
Fluoride F	2.0	<	<u>0.2</u>	mg/l	✓	BT
Nitrate <sup>P</sup> as N	10.0		<u>4.1</u>	mg/l	✓	CR
Nitrite as N	1.0	<	<u>0.05</u>	mg/l	✓	CR
Sulfate SO <sub>4</sub>	250		_____	mg/l		
TDS	500		_____	mg/l		

LABORATORY COMMENTS:  
CN Tested at Laveis, work order # 93-12-31

CHARGE: \$195.00      LABORATORY SUPERVISOR: [Signature]      DATE OF REPORT: 12-28

APPENDIX III  
AGREEMENTS

12435

INTERLOCAL AGREEMENT

This AGREEMENT is made and entered into between the VASHON ISLAND WATER ALLIANCE, hereinafter referred to as ALLIANCE, and KING COUNTY WATER DISTRICT NO. 19, hereinafter referred to as LEAD AGENCY where applicable, and the following monitarily participating Island water companies, hereinafter referred to as PURVEYORS, and non-monitarily participating Island water companies, hereinafter referred to as MEMBERS: Burton Water Company, Dockton Water Company, Heights Water, Maury Mutual Water, Westside Water Association and Gold Beach Water Company (PURVEYORS); and, Bachelor Water System, Beulah Park, Clam Cove, Glen Acres, Hollymere, Island Spring Water, Luana, Morningside Community, Quartermaster Heights, Sylvan Beach Water, Tahlequah System, Hillcrest Association, and Wesleyan Community Church (MEMBERS); the AGREEMENT herein intended to create Island wide protection from contaminating the sole-source aquifer, provide aid in castastrofic emergencies, provide a vehicle to obtain available monies from whatsoever sources; and, provide any and all necessary information and available education to its PURVEYORS and MEMBERS, said PURVEYORS considered herein as simultaneously MEMBERS.

The purpose of the AGREEMENT is to establish responsibilities and provide for local funds in the event a grant is offered by the Washington State Department of Ecology (DOE) to prepare Wellhead Protection Plans for the restricted area of Vashon Island, a federally designated SOLE-SOURCE AQUIFER area.

WHEREAS, the Washington State Legislature has provided the interlocal agreements, as established in Chapter 39.34, RCW; and,

WHEREAS, Section 1428 of the 1986 Amendments to the federal Safe Drinking Water Act mandates that every State develop a wellhead protection program; and, that the State Drinking Water Act requires that all federally defined public water systems (Group A systems defined as having 15 or more connections) using ground water as their source implement a Wellhead Protection Program, said ground-water to include springs; and,

WHEREAS, the Washington State Department of Ecology (DOE) has funds available through the Centennial Clean Water Fund on a matching basis for preparation of Wellhead Protection Plans; and,

WHEREAS, the PURVEYORS/MEMBERS and MEMBERS of this AGREEMENT are individually and collectively concerned with responsible wellhead protection on Vashon-Maury Island, and in particular, fulfilling Wellhead Protection requirements by the Washington State Department of Health (DOH); and,

WHEREAS, the ALLIANCE has been requested by the small water systems of Vashon-Maury Island to act on their behalf to coordinate a comprehensive planning approach to Wellhead Protection.

NOW, THEREFORE, in consideration of the mutual benefits to be derived from this AGREEMENT, the LEAD AGENCY, VASHON ISLAND WATER ALLIANCE and its small system PURVEYORS/MEMBERS and MEMBERS, the undersigned entities, agree as follows:

1. ALLIANCE SCOPE OF SERVICES:

A. KING COUNTY WATER DISTRICT NO. 19 shall be LEAD AGENCY on behalf of its PURVEYORS'/MEMBERS' systems in grant applications to the DOE for the Island WELLHEAD PROTECTION PROGRAM and PLAN; said LEAD AGENCY located at 17630 - 100th Avenue SW, P. O. Box 'T', Vashon, WA. 98070, phone (206) 463-9007.

B. If offered, the ALLIANCE may execute and administer a contract with DOE in accordance with their rules and procedures for the fulfillment of the grant requirements; TO WIT, JOSEPH S. GREEN, JR. hereby appointed said executor.

C. Upon grant execution the ALLIANCE will coordinate State, Local and consultant participation toward the preparation of Wellhead Protection Plans.

D. The ALLIANCE will select a qualified consultant, as needed and/or as applicable, to perform specified functions within the context of the Wellhead Protection Plan. Prospective consultants will be solicited through a request for proposal (RFP) process. The RFP shall be prepared at the direction of the Island Wellhead Protection Advisory Group (WPAG). The WPAG will review consultant proposals and make recommendations to the ALLIANCE.

E. The ALLIANCE shall schedule all meetings necessary for plan development, prepare agendas and packets, disperse grant funds, prepare grantee reports, as well as other administrative duties, as required, to fulfill grant obligations. The ALLIANCE budget shall be approved by the PURVEYOR parties hereto, and a copy of such budget provided to each.

## 2. PURVEYORS ROLES

### A. Prior to grant execution:

- 1) Each PURVEYOR shall support the ALLIANCE and the LEAD AGENCY, and co-ordinator, for the plan development process by authorization of the legislative body to enter into this AGREEMENT.
- 2) Each PURVEYOR shall designate, in writing a WPAG member to represent its company throughout the development of the Plans.
- 3) Each PURVEYOR agrees to provide a proportional share of the local match required for the State grant based on fifty per cent (50%) current number of ground water sites in service and fifty per cent (50%) based on the number of connections with KING COUNTY WATER DISTRICT NO. 19 bearing the local share cost of drilling a monitoring well.

### B. During plan development:

- 1) Each PURVEYOR shall actively participate at WPAG meetings, at which MEMBERS should and are encouraged to attend.
- 2) Each PURVEYOR adopting the Wellhead Protection Plan should adopt sufficient regulations to properly implement its plan. Such regulations may include design standards, various sundry operating standards, public education and other appropriate tools for managing a successful Wellhead Protection Plan.
- 3) Each PURVEYOR will cooperate with the WPAG by providing information and plan element review and comment in a timely fashion.
- 4) Each WPAG member shall keep his/her company body informed of WPAG activities and progress.

### C. Post Draft Plan Development:

- 1) Each PURVEYOR understands adoption of the Wellhead Protection Plan is mandated by DOH through the U. S. Clean Water Act.
- 2) Each PURVEYOR may enter into an appropriate written agreement(s) which assigns implementation roles, where jurisdictional responsibilities occur.

## 3. LOCAL MATCH:

Each PURVEYOR understands that there will be a local match requirement for the State grant.

It is estimated that the total project cost will be \$250,000. Since this particular grant is a 75% State, 25% local cost grant, the State amount would be \$187,500 and a local match would be \$62,500. Of that \$62,500, 50% can be matched in-kind. If the full 50% or \$31,250 was in-kind match, \$31,250 would be a direct cash match.

Each PURVEYOR understands the above estimates are the best estimates that can be made at this time for developing seven (7) separate plans. actual costs

While local match may be cash, in-kind services, or a combination of both, it is understood that hard costs (remaining after the State grant is spent) must be paid from cash from the local match.

In-Kind service can be used after all hard costs are met. The hourly value of full or parttime employees may be used on a dollar for dollar basis, to meet each PURVEYORS' share of the local match. Consumable supplies, photocopying costs, mileage to meetings, and secretarial time can (all) qualify for in-kind match.

4. LIMITATIONS OF CONFERENCE ADMINISTRATION:

From the time of termination of this AGREEMENT, the implementation, administration, and amendment of each PURVEYORS' plan shall be the responsibility of that company. The controlling bodies of the following signed MEMBERS and PURVEYORS/MEMBERS may, by resolution, delegate to the ALLIANCE other specific duties or administrative roles within the context of Wellhead Protection.

5. TERMINATION:

Any MEMBER and/or PURVEYOR/MEMBER may terminate its obligation herein by providing written notice to the ALLIANCE prior to the date a contract is executed with the DOE, for plan preparation. For purposes of this AGREEMENT, such notice must be physically received by the ALLIANCE prior to the date of contract execution.

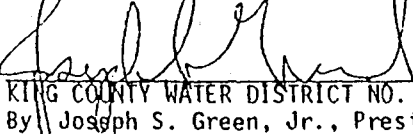
6. EFFECTIVE DATE & DURATION OF AGREEMENT:

This AGREEMENT shall be effective upon the date a contract is executed between the ALLIANCE and the DOE, to coordinate the preparation of the Wellhead Protection Plan.


This AGREEMENT shall be in effect until all contractual obligations covered by this AGREEMENT have been fulfilled or when the grant contract with DOE has been terminated, whichever first occurs.

IN WITNESS WHEREOF, this AGREEMENT is hereby executed on behalf of their respective MEMBERS and PURVEYORS/MEMBERS, as evidenced by the signatures hereto by the individuals indicated hereinbelow, who are so authorized to act on behalf of and/or to encumber their companies.

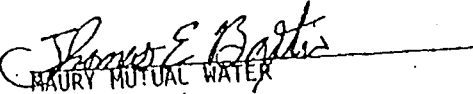
PURVEYORS' / MEMBERS' APPROVAL:

  
KING COUNTY WATER DISTRICT NO. 19  
By: Joseph S. Green, Jr., President

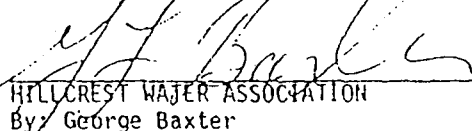
  
DURTON WATER COMPANY  
By: Gerald Garrison

  
DOCKTON WATER COMPANY  
By: Mike Todd

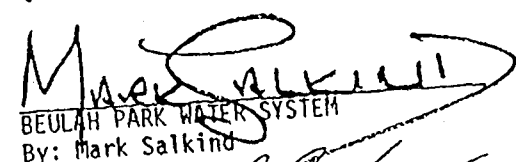
  
HEIGHTS WATER  
By: W. Reed Fitzpatrick

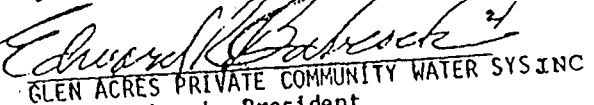
  
HAURY MUTUAL WATER  
By: Tom Baxter  
President

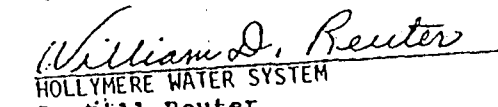
MEMBERS' APPROVAL:

  
HILLCREST WATER ASSOCIATION  
By: George Baxter

NA  
BACHELOR WATER SYSTEM  
By: Frank Erickson

  
BEULAH PARK WATER SYSTEM  
By: Mark Salkind

  
GLEN ACRES PRIVATE COMMUNITY WATER SYSTEM  
By: Ed Babcock, President

  
HOLLYMERE WATER SYSTEM  
By: Bill Reuter

[Signature]  
WESTSIDE WATER ASSOCIATION  
By: Terry Jansen

[Signature]  
ISLAND SPRING WATER SYSTEM  
By: Luke Lukoskie, President

[Signature]  
GOLD BEACH WATER CO. ON BEHALF OF  
By: Dom Spano, President

[Signature]  
LIANA WATER ASSOCIATION  
By: Gary Cummings

MORNINGSIDE COMMUNITY WATER SYSTEM  
By: Sid Shapiro

NA  
WESLEYAN COMMUNITY CHURCH  
By: Larry Niece

NA  
QUARTERMASTER HEIGHTS WATER  
By: Fred Harding

[Signature]  
SYLVAN BEACH WATER SYSTEM  
By: Mike Soltman

VASHON ISLAND WATER ALLIANCE  
APPROVAL:  
[Signature]  
By: Joseph S. Green, Jr.  
King County Water District No. 19

[Signature]  
MOUNTAIN VIEW COMMUNITY CLUB  
By: Phillip F. McClure

WITNESSETH this the 14<sup>th</sup> day of February, 1995  
A.D., before me, a NOTARY PUBLIC in and for the State of Washington,  
County of King.



[Signature]  
Bonita M. Quesinberry, NOTARY PUBLIC  
My Commission expires 12-26-96

AGREEMENT OF "WATER" SERVICE AREA

WHEREAS, King County requires water purveyors to establish water service area boundary agreements with neighboring water purveyors, and

WHEREAS, King County Water District No. 19 and Maury Mutual Water Company serve areas adjacent to one another, and

WHEREAS, King County Water District No. 19 and Maury Mutual Water Company believe that it is appropriate to enter into water service area boundary agreement,

NOW THEREFORE BE IT RESOLVED as follows:

1. The service area boundary between King County Water District No. 19 and Maury Mutual Water Company is hereby established by the following described line:

Beginning at the SW corner of Government lot 8 in the SW 1/4 of Section 16, Township 22 N, Range 3 E, W.M.; Thence east along the south line thereof to the centerline of 75th Avenue S.

Thence north along the centerline of 75th Avenue S.W. to the centerline of SW 230th Street;

Thence northwesterly along the centerline of SW 230th Street to the intersection of the centerline of SW 228th Street;

Thence west along the centerline of SW 228th Street to a point which lies approximately 610' west of the east line of Government lot 3 in the NW 1/4 of section 16-22-3, said point being at the intersection of the southerly extension of the east line of tax lot 3 with said centerline of SW 228th Street;

Then northeasterly to the shoreline of Puget Sound.

Accepted by King County Water District No. 19

Date Jan 8 1980

By Howard L. Willsie  
Howard L. Willsie, President

Accepted by Maury Mutual Water Company

Date 1-12-80

By John Sanders



Committed to Public Use  
State of Washington, County of King  
Page No. 12435

APPENDIX IV, 1

B-4 CERTIFICATE OF SURFACE WATER RIGHT

SPRING CERTIFICATE

This is to certify that Henry James Water Control

located in Washington county of King in the state of Washington obtained spring water rights with point of diversion within King county.

To Henry James Water Control of King county, Washington state, for the purpose of water control under and specifically water control to irrigate land in King county, Washington state, Permit No. 1-3024 issued by the Department of Ecology and the Board of Ecology and Water Quality on August 19, 1954 such that said right to the extent said water has been purchased in accordance with the laws of Washington, and is hereby confirmed by the Department of Ecology and the Board of Ecology and Water Quality on August 19, 1954 that the priority of the right hereby confirmed shall be August 19, 1954 that the quantity of water under the right hereby confirmed for the aforesaid purpose is limited to an annual actual beneficial use and shall not exceed 2.13 cubic foot per second, 160 acre-feet per year, continuously, for conveyance to irrigation.

A description of the lands to which such surface water right is appurtenant is as follows:

Area covered by the Henry James Water Control within sections 13, 14, 15 and 16, T. 22 N., R. 3 E.W.M.

The right to the use of the water aforesaid hereby confirmed is restricted to the kinds of uses of the lands described, except as provided in RCW 90A 02 310 and 90A 02 390. This certificate of surface water right is specifically subject to all qualifications for location of water provided in RCW 90A 02 110.

Given under my hand and the seal of the State of Washington, this 19th day of August, 1954.

JOHN A. BIGGS, Director  
Department of Ecology

*[Handwritten Signature]*  
Assistant Director

Enclosure  
1954

REPORT OF EXAMINER

NUMBER 1, 1955

SPRING SOURCE: REPORT OF EXAMINATION

12435

Date of application 8-19-54 Date of examination 11-10-54

Name Maury Mutual Water Company c/o Tom / Reville Address Route 1; Burton

Quantity applied for 0.85 c.f.s. Use Community domestic supply

Source of appropriation Unnamed springs Tributary of Puget Sound

Legal sub. E $\frac{1}{2}$  NE $\frac{1}{4}$  SW $\frac{1}{4}$  Sec. 15 Twp. 22 N. Rge. 3 E. County King

Measured or estimated quantity 0.15 Probable low flow 0.15

Quantity previously appropriated: W.T. 0 CWT. 0 E.T. 0

Other use made of water Two domestic uses downstream from applicant's diversion.

Diversion works contemplated or observed Concrete diversion box

Other equipment Hydraulic ram and electric pump

Available acreage: Planned 0 Present 0 Feasible 0

Other water rights appurtenant to this land Claim of use of .25 c.f.s. dating from 1912.

Progress of project System now in use - considerable improvement anticipated

Tests

Quantity recommended (total) 0.50 c.f.s. Irrig. Dom. 0.50 c.f.s.

Power Municipal Other uses

Department of Fisheries and Game report Approved

Special remarks and provisions:

The applicant is taking over a private water system that has been in use since the early 1900's.

Several springs arise within the subdivision described and it is the intent of the applicant to develop these springs and furnish domestic water to a maximum of 100 outlets in the community of North Maury Island.

Considerable storage is anticipated such that a diversion of .50 c.f.s. (225 g.p.m.) will be more than adequate to supply 100 outlets.

Permit should issue as supplemental to the quantity claimed under vested right.

Signed this 18th day of January, 1955.

*Stuart E. Shumway*  
 STUART E. SHUMWAY, Engineer  
 Division of Water Resources



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

APPENDIX IV, 2

WELL DOCUMENTATION

## PERMIT

TO APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

**Surface Water** (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)

**Ground Water** (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE April 9, 1991	APPLICATION NUMBER G1-25954	PERMIT NUMBER G1-25954 P	CERTIFICATE NUMBER
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NAME  
Maury Mutual Water Company

ADDRESS (STREET) 5120 SW 244th	(CITY) Vashon	(STATE) Washington	(ZIP CODE) 98070
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*The applicant is, pursuant to the Report of Examination which has been accepted by the applicant, hereby granted a permit to appropriate the following described public waters of the State of Washington, subject to existing rights and to the limitations and provisions set out herein.*

### PUBLIC WATERS TO BE APPROPRIATED

SOURCE  
Well

TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE 50	MAXIMUM ACRE-FEET PER YEAR 50.0*
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QUANTITY, TYPE OF USE, PERIOD OF USE

Community domestic supply - continuously  
\*Not cumulative to S1-00295C

### LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL

150 feet south and 500 feet west of the center of Section 15

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) NE¼ NE¼ SW¼	SECTION 15	TOWNSHIP N. 22	RANGE, (E. OR W.) W.M. 3E	W.R.I.A. 15	COUNTY King
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### RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
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### LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

Area served by the Maury Mutual Water Company within Sections 14, 15, 16, 21, 22, and 23, Township 22 north, Range 3 east Willamette Meridian, within King County, Washington.

DESCRIPTION OF PROPOSED WORKS

12435

8" X 308'

DEVELOPMENT SCHEDULE

START DATE:	COMPLETE PROJECT BY THIS DATE:	WATER PUT TO FULL USE BY THIS DATE:
6/15/94	June 15, 1994	June 15, 1996

PROVISIONS

Installation and maintenance of an access port as described in Ground Water Bulletin No. 1 is required. An access port and gauge may be installed in addition to the access port.

This permit is subject to the implementation of the minimum requirements established in the Interim Guidelines for Public Water Systems Regarding Water Use Reporting, Demand Forecasting Methodology and Conservation Programs, July 1990.

An approved measuring device shall be installed and maintained in accordance with RCW 90.03.360, WAC 508-01-010 through WAC 508-64-040. Meter readings shall be recorded monthly and this data shall be maintained and made available to the Department of Ecology upon request.

The permittee or its successor(s) shall submit in writing to the Department of Ecology, Northwest Regional Office, 10000 1st Avenue, Bellevue, Washington, during the months of April and August each year, the chloride concentration of the water sampled and static water level (pump off) of the well authorized by this permit. Depending on the results of data collection, the withdrawal of ground water under this permit may be limited, or other appropriate restrictions may be required, by Department of Ecology Order, to prevent seawater intrusion into the subject aquifer.

In order to protect the resource, static water level (SWL) shall be measured at least once each month. Measurements shall be taken after the pump has been shut off a reasonable time to allow water level to return to normal. Ecology's Water Resources section (NWRO) shall be notified if a below normal seasonal drop is observed in SWL, otherwise this data shall be maintained and be made available to Ecology upon request.

A certificate of water right will not be issued until a final investigation is made. The investigation will determine the annual water use by the Maury Mutual Water Company. To accomplish this, a minimum of three years monthly meter readings for each source will be submitted with the Proof of Appropriation form.

*This permit shall be subject to cancellation should the permittee fail to comply with the above development schedule and/or fail to give notice to the Department of Ecology on forms provided by that Department denoting such compliance.*

Given under my hand and the seal of this office at Bellevue, Washington,

5th day of June, 1993.

Department of Ecology

ENGINEERING DATA

CS

by Stephen J. Hirschey  
 Stephen J. Hirschey, Section Supervisor, Water Resources

# 12435

APPENDIX IV, 2.1

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

WELL REPORT OF EXAMINATION

## REPORT OF EXAMINATION

APPROPRIATE PUBLIC WATERS OF THE STATE OF WASHINGTON

Surface Water (Issued in accordance with the provisions of Chapter 117, Laws of Washington for 1917, and amendments thereto, and the rules and regulations of the Department of Ecology.)

Ground Water (Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the Department of Ecology.)

PRIORITY DATE April 9, 1991	APPLICATION NUMBER G1-25954	PERMIT NUMBER	CERTIFICATE NUMBER
--------------------------------	--------------------------------	---------------	--------------------

NAME Maury Mutual Water Company			
ADDRESS (STREET) 5120 SW 244th	(CITY) Vashon	(STATE) Washington	(ZIP CODE) 98070

### PUBLIC WATERS TO BE APPROPRIATED

SOURCE  
Well

TRIBUTARY OF (IF SURFACE WATERS)

MAXIMUM CUBIC FEET PER SECOND	MAXIMUM GALLONS PER MINUTE 50	MAXIMUM ACRE-FEET PER YEAR 50.0*
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QUANTITY, TYPE OF USE, PERIOD OF USE  
Community domestic supply - continuously  
\*Not cumulative to S1-00295C

### LOCATION OF DIVERSION/WITHDRAWAL

APPROXIMATE LOCATION OF DIVERSION--WITHDRAWAL  
150 feet south and 500 feet west of the center of Section 15

LOCATED WITHIN (SMALLEST LEGAL SUBDIVISION) NE¼ NE¼ SW¼	SECTION 15	TOWNSHIP N. 22	RANGE, (E. OR W.) W.M. 3E	W.R.I.A. 15	COUNTY King
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### RECORDED PLATTED PROPERTY

LOT	BLOCK	OF (GIVE NAME OF PLAT OR ADDITION)
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### LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED

Area served by the Maury Mutual Water Company within Sections 14, 15, 16, 21, 22, and 23, Township north, Range 3 east Willamette Meridian, within King County, Washington.

## DESCRIPTION OF PROPOSED WORKS

Well 8" X 308'

12435

## DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE:	COMPLETE PROJECT BY THIS DATE:	WATER PUT TO FULL USE BY THIS DATE:
Started	1 year from permit issuance	2 years from permit issuance

## REPORT

**RECOMMENDATIONS:**

I recommend that a permit be issued for the requested 50 gpm instantaneous and 50.0 acre-feet per year for a community domestic supply. The annual quantity is not cumulative to existing rights. The permit should be issued subject to existing rights and the following provisions:

Installation and maintenance of an access port as described in Ground Water Bulletin No. 1 is required. An airline and gauge may be installed in addition to the access port.

This permit is subject to the implementation of the minimum requirements established in the Interim Guidelines for Public Water Systems Regarding Water Use Reporting, Demand Forecasting Methodology and Conservation Programs, July 1990, which are enclosed.

An approved measuring device shall be installed and maintained in accordance with RCW 90.03.360, WAC 508-64-020 through WAC 508-64-040 (Installation, operation and maintenance requirements enclosed). Meter readings shall be recorded monthly and this data shall be maintained and be made available to the Department of Ecology upon request.

Permittee or its successor(s) shall submit in writing to the Department of Ecology, Northwest Regional Office, Bellevue, Washington, during the months of April and August each year, the chloride concentration of the water pumped and static water level (pump off) of the well authorized by this permit. Depending on the results of the data collection, the withdrawal of ground water under this permit may be limited, or other appropriate action may be required, by Department of Ecology Order, to prevent seawater intrusion into the subject aquifer.

In order to protect the resource, static water level (SWL) shall be measured at least once each month. Measurements shall be taken after the pump has been shut off a reasonable time to allow water level to return to normal. Ecology's Water Resources section (NWRO) shall be notified if a below normal seasonal drop is measured in SWL, otherwise this data shall be maintained and be made available to Ecology upon request. See enclosed form.

A certificate of water right will not be issued until a final investigation is made. The investigation will determine actual annual water use by the Maury Mutual Water Company. To accomplish this, a minimum of three years of monthly meter readings for each source will be submitted with the Proof of Appropriation form.

**BACKGROUND:**

Ground Water Application G1-25954

Name: Maury Mutual Water Company

Priority Date: April 9, 1991

Use: Community Domestic Supply

Legal Notice: Published September 5 and 12, 1991  
 In The Vashon-Maury Island Beachcomber  
 50 gpm, community domestic supply  
 No protests were received

Report Continued

INVESTIGATION:

Investigation consisted of:

Field examination by the report writer on March 19, 1992  
Office research  
Conversations with the applicant  
Review of consultants report by Carr/Associates, Inc.

Approximate location of point of withdrawal:

NE $\frac{1}{4}$  SW $\frac{1}{4}$  Section 15, T. 22 N., R. 3 E., W.M., King County  
Approximately 235 feet above mean sea level (MSL) as taken from consultants report  
1450 feet from marine shoreline  
The well site is on the north end of Maury Island just off Luana Beach Rd.

Well characteristics:

Completed April 15, 1992  
Diameter 8 inches, 308.5 feet in depth  
Top of casing 2 feet above ground surface  
Surface elevation 235 feet above MSL  
Screened from 272 to 303.5 feet below surface (37 to 68.5 feet below MSL)  
Static water level (SWL) 202.58 feet below top of the casing (32.42 feet above MSL) on April 14, 1992  
Pump intake set at 260 feet (25 feet below MSL)

Pump test results:

24 hour test on April 14-15, 1992  
SWL 202.58 feet below the top of the casing  
Pumping rate 50 gpm  
9.3 feet of drawdown  
Recovery to within 0.5 feet of SWL in 3 minutes.  
3 mg/l chlorides

System status:

The Maury Mutual Water Co. currently provides water to 88 services. The source of supply being utilized is a spring source (S1-00295C). The proposed ground water source will increase system reliability, providing a more dependable source of water during the summer when the springs may not be able to produce an adequate supply of water.

Total future services will not exceed 100. All the water shares have been allocated and the main lines are in, but it is not known when the remaining 12 lot owners will build on their lots. It is assumed that at some time the lots will be developed. Since there is an existing certificated water right with an annual quantity adequate for 100 services, and the recommended annual quantity for the ground water source is supplemental to existing rights, no new annual quantity is being granted.

Existing rights:

Surface water rights will not be affected by withdrawals from the applicant's well. The aquifer which the applicant's well penetrates is below MSL and confined.

There are no certificated ground water rights in the area for wells that penetrate the same aquifer. A review of Water Well Reports indicate that there are two exempt domestic wells in the vicinity that may penetrate the same aquifer as the applicant's well. The nine feet of drawdown and quick recovery time seen during the pump test indicate that water is available and that existing rights should not be impaired. A permit, if issued, will be subject to existing rights.

Seawater intrusion:

The applicant's well penetrates an aquifer that is below MSL. The pump intake, also, is below MSL. An inorganic chemical analysis performed in April 1992 showed a chloride concentration of 3 mg/l. To monitor the reaction of the aquifer to the stress of long term pumping, a permit, if issued, will be conditioned to chloride testing twice annually.

Annual allocation:

The annual quantity associated with the applicant's existing water right is 100 acre-feet per year. This is more than enough to supply water to 100 services. The annual quantity associated with the ground water withdrawal will not be cumulative to existing rights. The applicant's well, pumping at a rate of 50 gpm, can easily produce 50 acre-feet per year. This is an annual quantity that more closely reflects today's conservation standards. A permit, if issued, will have an annual quantity of 50 acre-feet, which is not cumulative to existing rights.

CONCLUSION:

In accordance with chapter 90.03 RCW (and chapter 90.44 RCW), I find that there is water available for this beneficial appropriation from the source in question and that the appropriation as authorized will not impair existing rights or be detrimental to the public welfare. Therefore, permit should issue subject to existing rights and indicated provisions.

REPORT BY: Wade C. Shyne

DATE: 5/1/93