

Village of Kirkland

815 522-9839

p.1

Client: Naugle
Village of Kirkland

ISO# 2014130
Location:
2 for E3H

Environmental Isotope Lab
4/3/2014
1 of 1

#	Sample	Lab#	E3H	Result	$\pm 1\sigma$	Repeat	$\pm 1\sigma$
1	Well 2 Kirkland	11425	323695	X	2.3	0.4	
2	Well 3 Kirkland	01613	323696	X	<0.8	0.4	

Conductivity

Tritium is reported in Tritium Units.
1TU = 3.221 Picocuries/L per IAEA, 2000 Report.
1TU = 0.11919 Becquerels/L per IAEA, 2000 Report.

ATTN
RYAN BENNETT

To Contact uwEILAB:
519 888 4732

Rick Heemskerk
uwEILAB Manager
rkhmskrk@uwaterloo.ca
519 888 4557 ext 35838

0370305005 / DeKalb
08/15/2016
Kirkland Quicks Stop
Lust Test Report



Illinois Environmental Protection Agency · P.O. Box 19276, Springfield, IL 62794-9276

INCIDENT OVERSIGHT TRANSFER

LEAKING UNDERGROUND STORAGE TANK

FROM: OCS-ERU TO: LPC-LUST

INCIDENT #: 891717

CITY: Kirkland

COUNTY: DeKalb

BY (ERU): CuB DATE: 2-16-90

RECEIVED BY (LUST) AMP DATE: 2-16-90

1. ERU to retain last carbon when sent and follow up if no reply in 5 working days.
2. LUST to return top copy to ERU, when signed as received.
3. LUST to retain remaining carbon in file.

RELEASABLE

AUG 20 2007

REVIEWER JW

KIRKLAND
DA KALB

PRP **KIRKLAND QUICK STOP**

891717

IESDA INCIDENT ID

INCIDENT TYPE

1. Actual Potential

2. On Site Off Site Transportation

3. Air Storm Sewer
 Surface Water Sanitary Sewer
 PWS Inside Building
 Soil/Ground Water Impervious Surface

4. Abandoned Material HWF CSA LUST
 Open Burning Permit Oil Production
 Complaint Generated Agricultural
 PCB

Contractor For HWF _____

IEPA NOTIFICATIONS

Name	Div	Date

OUTSIDE NOTIFICATIONS

Agency	Name	Date
<input type="checkbox"/> IESDA		
<input type="checkbox"/> IDPH		
<input type="checkbox"/> ISP		
<input type="checkbox"/> USEPA		
<input type="checkbox"/> SFM		
<input type="checkbox"/> M&M		
<input type="checkbox"/> DCI		
<input type="checkbox"/> NRC		
<input type="checkbox"/> IDOC		
<input type="checkbox"/> IDOT		
<input type="checkbox"/> IDNS		
<input type="checkbox"/> USCG		
<input type="checkbox"/> IDOL		
<input type="checkbox"/> IDOA		
<input type="checkbox"/> _____		
<input type="checkbox"/> _____		

RESPONSE

Name	Telephone	On Scene

DISPOSAL

1. Verified
 2. Incomplete
 3. Not Necessary

PERMITS (#s)

1. _____ 4. _____
 2. _____ 5. _____
 3. _____ 6. _____

LETTERS

Type	Sent	Response Required	Response Received

ENFORCEMENT

Enf Referral Notice Sent _____
 Enf Referral Date _____
 EDG Action _____
 Drop Case
 Proceed with enf
 Atty. _____
 DCI Referral _____

EVIDENCE SAMPLES

Sample Type	Taken By	Collected	To Lab	Results
(pte or post)	(Name)	(Date)	(Date)	(Date)

EVALUATION

1. HMAB
 FOS D.O.
 ERU _____

2. CSA
 Reviewed by _____ Date _____
 IDES No. _____ Covered Facility _____
 IDES SIC _____ IMD SIC _____
 Chem sub-ISCA _____
 Significant _____ Determined _____ By _____
 NOS to RP _____
 Release Report: Due _____ Rec'd _____
 IEPA to ESDA Due _____
 Review by Mngr Env. Prgms _____
 IEPA to ESDA Sent _____
 ESDA to RP Due _____ Sent _____

3. Recovery/Loss
 Recovered Spillage ____%
 Unrecovered Loss To
 Soil/GW Sanitary Sewer
 Surface Water Storm Sewer
 Air
 Environmentally sensitive area

CLOSE

Closing Date _____ by _____
 No action
 Clean closure
 Unrecoverable
 Referral to _____



06/19/2016 8 9 1 7 1 7

IESDA INCIDENT ID

- 1. Caller: JOHN BLAKE
- 2. Call back phone: (815) 522-3521
- 3. represents: KIRKLAND BUICK STOP
- 4. Type of Incident: Fire Leak or Spill
 Explosion Water Involvement
 Gas or Vapor cloud Other _____
- 5. Incident Location
street 411 W. MAIN ST.
city KIRKLAND In Near
county DE KALB
milepost _____ RR River Hwy
Sec. _____ Twp. _____ Range _____
- 6. Area Involved: Highway Rail Fixed Facility
 Waterway Air Other _____
- 7. Material(s) Involved: GASOLINE
 Gas Liq. Semisolid Solid
 Pesticide Radioactive
CAS #: _____
Placard (UN/NA) _____
Is this a 302(a) Extremely Hazardous Substance?
 Yes No Unknown
Is this a RCRA Hazardous Waste?
 Yes No Unknown
If Yes, is this a RCRA regulated facility
 Yes No
- 8. Container: Truck RR car Drum
 Above grd tank Pipeline
 Under grd tank Other _____
container size: 5 TANKS
- 9. Amount released: UNK
Rate of release: _____ / min.
- 10. Cause of release: LEAKAGE
- 11. Estimated spill extent: _____
 square feet square yards
- 12. Occurred: _____ : _____ : _____
 Discovered: 15:30 9/16/89

ERU received: 09:28 9/17/89
Duty Officer: FAX 12.21

- 14. On Scene Contact: LLOYD JOHNSON
One scene phone: (815) 522-3510
- 15. No. injured: 0 Haz-mat related
Where taken: _____
- 16. Public health risks and/or precautions taken,
including # evacuated: none

17. What state assistance needed?
none

18. Containment/cleanup action & plans:
unknown at this time

19. Weather: sunny overcast night
 ptly. cldy. rain snow
Temp. _____ °F Wind dir. _____ speed _____ mph

20. Responsible party: KIRKLAND BUICK STOP

Contact: LLOYD JOHNSON
phone: (815) 522-3510
Mailing address:

411 W. MAIN ST.
KIRKLAND, IL
60146

- 13. Local response units contacted
 Fire _____
 Sheriff _____
 Police _____
 Local ESDA _____
 Other OSFM

- On scene responders:
 Fire _____
 Sheriff _____
 Police _____
 Local ESDA _____
 Other _____

EMERGENCY NOTIFICATION - SHORT FORM

EMERGENCY ACTION CENTER TO REGIONAL FIELD OFFICE

IESDA INCIDENT ID **8 9 1 7 1 7**

COUNTY **D E K A L B**

CITY **KIRKLAND**

MATERIAL **GASOLINE**

QUANTITY **UNKNOWN**

POTENTIALLY RESPONSIBLE PARTY **KIRKLAND QUICK STOP**

ERU RESPONDED IN PERSON

INCIDENT TYPE

FIRE LEAK OR SPILL EXPLOSION
 WATER INVOLVEMENT GAS OR VAPOR
 OTHER _____

ABANDONED EVACUATION LUST

FOS ACTION REQUESTED

Region **1** Received by Julie Date 9/7/89 Time 4:10
 Transmitted by Cindy

Electronic Filing - Received Clerk's Office : 06/15/2016

FIELD REPORT

Incident Number 8 9 1 7 1 7

Date 09 07 /89
Time: 0928
Recv'd by: JLN

Notify: ILLINOIS EMERGENCY SERVICES & DISASTER AGENCY
1-800-782-7860 or 217/782-7860

1) Caller: JOHN BLAKE 2) Call back number: (815) 522-3521

3) Caller represents: KIRKLAND QUICK STOP

4) Type of incident: Fire Explosion Leak or spill
 Gas or vapor cloud Water involvement

5) Incident location: Street 411 W. MAIN ST. City KIRKLAND In Near
County DEKALB Milepost _____ : R.R. River Highway
Section _____ Township _____ Range _____

6) Area involved: Highway Waterway Rail Fixed facility Air Other

7) Material(s) involved: GASOLINE

Form: Gas Liquid Semi-Solid Solid Pesticide Radioactive

UN/NA # _____ CAS # _____

Is this a 302(A) Extremely Hazardous Substance? Yes No Unknown CERCLA? Yes No Unknown

Is this a RCRA Hazardous Waste? Yes No Unknown If Yes, is this a RCRA regulated facility? Yes No

8) Container: Truck RR Car Above ground tank Underground tank Drum Pipeline
 Other: _____ Container Size: 5 TANKS INVOLVED

9) Amount released: UNK Rate of release: _____ /minute

10) Cause of release: LEAKAGE

11) Extent of spill: _____ Sq. Ft. Sq. Yd.

12) Incident: Occurred Date: ___/___/___ Time: _____
 Discovered Date: 09 06 89 Time: 1530

13) Local emergency unit(s) contacted: Fire _____ On-scene: Fire _____
 Sheriff _____ Sheriff _____
 Police _____ Police _____
 Local ESDA _____ Local ESDA _____
 Other STATE FIRE MARSHALL Other _____

14) On-scene contact: LLOYD JOHNSON Phone # (815) 522-3510

89 17 17

15) Number injured: NO Hazmat related? Yes No Where taken: _____

16) Public health risks and/or precautions taken; including # evacuated: NO

17) Assistance needed from State Agencies: NO

18) Containment/cleanup actions and plans: FIRST DETERMINE BY TESTING TANKS. ALSO VAC OUT GROUND WATER.

19) Weather: Sunny Rain Snow Overcast Partly Cloudy Night
Temperature: _____ F° Wind direction: _____ Wind speed: _____

20) Responsible party: KIRKLAND QUICK STOP

Contact person: JOHNSON, LLOYD Phone# (815) 522-3510

Mailing address: 411 W. MAIN ST. KIRKLAND, IL. 60146

21) Narrative/Comments: _____

FAAEP EPA 122F
Reg 2

Division of Petroleum & Chemical Safety

[Print Detail Page](#) [Export to Excel](#) [Last Search Page](#)

Facility Details

Facility Number:	1014986
Facility Name:	Kirkland Marathon
Address:	411 West Main Street Kirkland, IL 60146
County:	De Kalb
Status:	Active
Facility Type:	Self-Service/Unattended Self-Service
Motor Fuel Type:	Unattended Self Service
Owner Type:	Private
Green Tag Decal:	Q000564
Green Tag Issue Date:	3/19/2015
Green Tag Expiration Date:	12/31/2017
Motor Fuel Dispensing Permit Inspection Date:	3/19/2015
Motor Fuel Dispensing Permit Expiration Date:	12/31/2017

Owner Details

Owner Name:	Blake Leasing Company, LLC - Real Estate Series
Owner Address:	P.O. Box 98 Stillman Valley, IL 61084
Owner Status:	Current Owner
Purchase Date:	6/29/2001
Type of Financial Responsibility:	Self-Insurance
Financial Responsibility Reporting Due Date:	4/29/2017

Owner Summary

[Click for Facility/Tank Ownership history](#)

Owner Number	Owner Name	Owner Status	Purchase Date
U0030228	Blake Leasing Company, LLC - Real Estate Series	Current Owner	6/29/2001
U0008032	Johnson Lloyd & Janice	Former Owner	11/2/1993

Permits (Unexpired)

[Click for permit history](#)

No Active Permits Found

Deficiencies (Current)

No Deficiencies Found

IEMA Numbers Associated with the Facility

IEMA Number
891717

LUST Fund Eligibility and Deductibility Determinations

IEMA Number	Status	OSFM Received Date	OSFM Response Date	Deductible
89-1717	Eligible	12/1/2014	12/3/2014	\$15,000

Tank Information

Tank Number	Capacity	Product	Status	Red Tag Issued	Fee Due
1	2000	Gasoline	Removed		\$0.00
2	1000	Gasoline	Removed		\$0.00
3	1000	Diesel Fuel	Removed		\$0.00
4	5000	Gasoline	Removed		\$0.00
5	5000	Gasoline	Removed		\$0.00
6	500	Gasoline	Removed		\$0.00
7	500	Gasoline	Removed		\$0.00

Tank Number	Capacity	Product	Status	Red Tag Issued	Fee Due
8	500	Gasoline	Removed		\$0.00
9	500	Gasoline	Removed		\$0.00
10	300	Gasoline	Removed		\$0.00
11	10000	Gasoline	Currently in use		\$0.00
12	4000	Gasoline	Currently in use		\$0.00
13	6000	Diesel Fuel	Currently in use		\$0.00
14	3000	Gasoline	Currently in use		\$0.00

Division of Petroleum & Chemical Safety**Facility: 1014986 Tank: 1**

[Click for Facility/Tank Ownership history](#)

Capacity:	2000
Product:	Gasoline
Status:	Removed
OSFM First Notify Date:	4/17/1986
Current Age:	14
Install Date:	11/1/1978
Last Used Date:	10/5/1993
Product Date:	11/1/1978
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	10/6/1993
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 2

[Click for Facility/Tank Ownership history](#)

Capacity:	1000
Product:	Gasoline
Status:	Removed
OSFM First Notify Date:	4/17/1986
Current Age:	14
Install Date:	11/1/1978
Last Used Date:	10/5/1993
Product Date:	11/1/1978
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	10/6/1993
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 3

[Click for Facility/Tank Ownership history](#)

Capacity:	1000
Product:	Diesel Fuel
Status:	Removed
OSFM First Notify Date:	4/17/1986
Current Age:	14
Install Date:	11/1/1978
Last Used Date:	10/5/1993
Product Date:	11/1/1978
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	10/6/1993
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 4

[Click for Facility/Tank Ownership history](#)

Capacity:	5000
Product:	Gasoline
Status:	Removed
OSFM First Notify Date:	4/17/1986
Current Age:	14
Install Date:	11/1/1978
Last Used Date:	10/5/1993
Product Date:	11/1/1978
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	10/6/1993
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 5

[Click for Facility/Tank Ownership history](#)

Capacity:	5000
Product:	Gasoline
Status:	Removed
OSFM First Notify Date:	4/17/1986
Current Age:	14
Install Date:	11/1/1978
Last Used Date:	10/5/1993
Product Date:	11/1/1978
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	10/6/1993
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 6

[Click for Facility/Tank Ownership history](#)

Capacity:	500
Product:	Gasoline
Status:	Removed
OSFM First Notify Date:	10/2/1989
Current Age:	
Install Date:	
Last Used Date:	11/1/1978
Product Date:	
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	11/1/1989
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 7

[Click for Facility/Tank Ownership history](#)

Capacity:	500
Product:	Gasoline
Status:	Removed
OSFM First Notify Date:	10/2/1989
Current Age:	
Install Date:	
Last Used Date:	11/1/1978
Product Date:	
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	11/1/1989
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 8

[Click for Facility/Tank Ownership history](#)

Capacity:	500
Product:	Gasoline
Status:	Removed
OSFM First Notify Date:	10/2/1989
Current Age:	
Install Date:	
Last Used Date:	11/1/1978
Product Date:	
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	11/1/1989
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 9

[Click for Facility/Tank Ownership history](#)

Capacity:	500
Product:	Gasoline
Status:	Removed
OSFM First Notify Date:	10/2/1989
Current Age:	
Install Date:	
Last Used Date:	11/1/1978
Product Date:	
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	11/1/1989
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 10

[Click for Facility/Tank Ownership history](#)

Capacity:	300
Product:	Gasoline
Status:	Removed
OSFM First Notify Date:	10/2/1989
Current Age:	14
Install Date:	11/1/1978
Last Used Date:	10/5/1993
Product Date:	11/1/1978
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	10/6/1993
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

No Equipment Listed

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 11

[Click for Facility/Tank Ownership history](#)

Capacity:	10000
Product:	Gasoline
Status:	Currently in use
OSFM First Notify Date:	12/9/1993
Current Age:	22
Install Date:	11/2/1993
Last Used Date:	
Product Date:	11/2/1993
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

Equipment Type	Equipment	Last Passing Date	Test Expire Date
Corrosion Prot - Piping	Flexible Non-Corrosive	N/A	N/A
Corrosion Prot - Tank	Fiberglass Non-Corrosive	N/A	N/A
Leak Detect - Piping	Electronic Pressurized Line Leak Detection Veeder Root TLS 350	11/4/2014	11/4/2015
Leak Detect - Piping	Piping Sump Sensors Interstitial Monitoring Veeder Root TLS 350	11/4/2014	11/4/2015
Leak Detect - Tank	Automatic Tank Gauging Veeder Root TLS 350 with CSLD	N/A	N/A
Overfill Prev Device	Overfill Drop Tube Valve OPW 61SO	N/A	N/A
Overfill Prev Device	Overfill Alarm Veeder Root TLS 350	N/A	N/A
Piping	Flexible Double Wall OPW Pisces	N/A	N/A
Spill Contain Device	Manhole Pre-manufactured OPW 101	N/A	N/A
Tank	Fiberglass Single Wall Tank	N/A	N/A

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 12

[Click for Facility/Tank Ownership history](#)

Capacity:	4000
Product:	Gasoline
Status:	Currently in use
OSFM First Notify Date:	12/9/1993
Current Age:	22
Install Date:	11/2/1993
Last Used Date:	
Product Date:	11/2/1993
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

Equipment Type	Equipment	Last Passing Date	Test Expire Date
Corrosion Prot - Piping	Flexible Non-Corrosive	N/A	N/A
Corrosion Prot - Tank	Fiberglass Non-Corrosive	N/A	N/A
Leak Detect - Piping	Electronic Pressurized Line Leak Detection Veeder Root TLS 350	11/4/2014	11/4/2015
Leak Detect - Piping	Piping Sump Sensors Interstitial Monitoring Veeder Root TLS 350	11/4/2014	11/4/2015
Leak Detect - Tank	Automatic Tank Gauging Veeder Root TLS 350 with CSLD	N/A	N/A
Overfill Prev Device	Overfill Drop Tube Valve OPW 61SO	N/A	N/A
Overfill Prev Device	Overfill Alarm Veeder Root TLS 350	N/A	N/A
Piping	Flexible Double Wall OPW Pisces	N/A	N/A
Spill Contain Device	Manhole Pre-manufactured OPW 101	N/A	N/A
Tank	Fiberglass Single Wall Tank	N/A	N/A

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 13

[Click for Facility/Tank Ownership history](#)

Capacity:	6000
Product:	Diesel Fuel
Status:	Currently in use
OSFM First Notify Date:	12/9/1993
Current Age:	22
Install Date:	11/2/1993
Last Used Date:	
Product Date:	11/2/1993
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

Equipment Type	Equipment	Last Passing Date	Test Expire Date
Corrosion Prot - Piping	Flexible Non-Corrosive	N/A	N/A
Corrosion Prot - Tank	Fiberglass Non-Corrosive	N/A	N/A
Leak Detect - Piping	Electronic Pressurized Line Leak Detection Veeder Root TLS 350	11/4/2014	11/4/2015
Leak Detect - Piping	Piping Sump Sensors Interstitial Monitoring Veeder Root TLS 350	11/4/2014	11/4/2015
Leak Detect - Tank	Automatic Tank Gauging Veeder Root TLS 350 with CSLD	N/A	N/A
Overfill Prev Device	Overfill Drop Tube Valve OPW 61SO	N/A	N/A
Overfill Prev Device	Overfill Alarm Veeder Root TLS 350	N/A	N/A
Piping	Flexible Double Wall OPW Pisces	N/A	N/A
Spill Contain Device	Manhole Pre-manufactured OPW 101	N/A	N/A
Tank	Fiberglass Single Wall Tank	N/A	N/A

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Division of Petroleum & Chemical Safety

Facility: 1014986 Tank: 14

[Click for Facility/Tank Ownership history](#)

Capacity:	3000
Product:	Gasoline
Status:	Currently in use
OSFM First Notify Date:	12/9/1993
Current Age:	22
Install Date:	11/2/1993
Last Used Date:	
Product Date:	11/2/1993
Petroleum Use:	
CERCLA Substance:	
CAS Code:	
Removed Date:	
Abandoned Material:	
Abandoned Date:	
Red Tag Issue Date:	
Fee Due:	\$0.00

Equipment Information

Equipment Type	Equipment	Last Passing Date	Test Expire Date
Corrosion Prot - Piping	Flexible Non-Corrosive	N/A	N/A
Corrosion Prot - Tank	Fiberglass Non-Corrosive	N/A	N/A
Leak Detect - Piping	Electronic Pressurized Line Leak Detection Veeder Root TLS 350	11/4/2014	11/4/2015
Leak Detect - Piping	Piping Sump Sensors Interstitial Monitoring Veeder Root TLS 350	11/4/2014	11/4/2015
Leak Detect - Tank	Automatic Tank Gauging Veeder Root TLS 350 with CSLD	N/A	N/A
Overfill Prev Device	Overfill Drop Tube Valve OPW 61SO	N/A	N/A
Overfill Prev Device	Overfill Alarm Veeder Root TLS 350	N/A	N/A
Piping	Flexible Double Wall OPW Pisces	N/A	N/A
Spill Contain Device	Manhole Pre-manufactured OPW 101	N/A	N/A
Tank	Fiberglass Single Wall Tank	N/A	N/A

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State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/785-4787

2200 Churchill Road, Springfield, IL 62794-9276

December 14, 1993

Mr. Fred Manni
Village President
511 West Main Street
P.O. Box 566
Kirkland, IL 60146

Re: Confirmation of Technical Adequacy of the Lateral Area of Influence
Determination(s) for the Village of Kirkland Public Water Supply Well(s)
PWS Facility No. 0370300
Agency Well Nos. 11424 & 11425
Log Date - October 7, 1993
Log Number(s) 93-0161 & 93-0162

Dear Mr. Manni:

The Agency has reviewed the technical adequacy of the lateral area of influence determination for the Village of Kirkland well(s) referenced above. The application and supporting documentation was submitted by Larry Thomas of Baxten and Woodman, Inc., on your behalf.

The Agency confirms the technical adequacy of the lateral area of influence determination for the wells referenced above. This constitutes a final determination by the Agency.

The Agency's evaluation of the application determined the following:

- * the minimum and maximum setback zones located on the Kirkland aerial photographic map should be labeled to tie in with the draft ordinance definitions (see attachment); and,
- * references to Illinois Revised Statutes in the draft ordinance should be the year 1991 and not 1989 (e.g. Ill. Rev. Stat. 1991, ch. 24 par. 11-125-4)

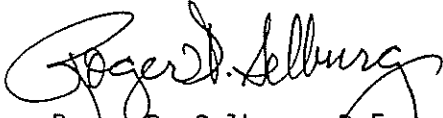
In addition to prohibiting potential primary sources of contamination, the implementation of a maximum setback zone ordinance will expand the regulatory control of certain new and existing activities. These regulations are contained in "Groundwater Protection Regulations for Existing and New Activities Within Setback Zones and Regulated Recharge Area (35 Ill. Adm. Code 601, 615, 616 and 677)" which became effective on January 10, 1992. A copy of these regulations has been provided for your information.

After notice and opportunity for comment pursuant to Section 14.3(c) of the Illinois Environmental Protection Act ("Act") the Village of Kirkland may adopt an ordinance setting forth the location of each affected well and specifying the boundaries of the maximum setback zone(s). After adoption of the final ordinance the city is required to provide the Agency with a copy pursuant to Section 14.3c of the Act. The Agency suggests adding setback zones to any existing zoning maps.

Page 2

Thank you for your continued cooperation and interest in this phase of the Illinois Groundwater Protection Program. If we can be of any further assistance please advise Rick Cobb of my staff or me at 217/785-4787.

Very truly yours,



Roger D. Selburg, P.E.
Division Manager
Division of Public Water Supplies

RDS:CEK:drk:491P/58-59

cc: Larry Thomas

bcc: Jim Park
Roger Kanerva
Roger Selburg
Don Dillenburg
Steve Ewart
Bill Buscher
Carl Kamp
File

MAXIMUM SETBACK ZONE
REVIEW AND COMMENT SHEET

*see
edits
or
cover
in
letter*

PWS FACILITY: KIRKLAND
FACILITY #: 0370300
DATE: 11/10/93
REVIEWER: G. KAMP

1. Lateral Area of Influence Estimation Method and Hydrogeology Data: TODD UNIFORM FLOW EQUATION METHOD USED FOR 2 WELLS - CALCULATIONS PERFORMED BY BAXTER & WOODMAN, INC - AN ENGINEERING FIRM. TRANSMISSIVITY FOR ST. PETER SANDSTONE FROM ISWS. SLOPE GENERALIZED FOR FORMATION AREA. (OK)

2. Maximum Setback Zone Draft Ordinance: SIMILAR TO THE AGENCY DRAFT ORDINANCE (OK) - ALL STATUTE DATE SHOULD BE CHANGED TO 1991

3. Maximum and Minimum Setback Zone Delineation: MINIMUM SETBACK ZONE NOT DESCRIBED IN AREA & MAXIMUM SETBACK ZONE NOT LABELED. NO APPENDIX 'A' LABEL ON MAP.

4. Application: (VILLAGE) SIGNED BY PRESIDENT - OK

5. Other: —



VILLAGE OF KIRKLAND

511 W. MAIN STREET P.O. Box 566
KIRKLAND, ILLINOIS 60146
815-522-6179

October 8, 1993

RECEIVED

OCT 7 1993

DIV. PUBLIC WATER SUPPLIES
ENVIRONMENTAL PROTECTION AGENCY
STATE OF ILLINOIS

Mr. Richard Cobb, Manager
DPWS-Groundwater Section
Illinois Environmental Protection Agency
PO Box 19276
Springfield, IL 62794-9276

Subject: Setback Zones for Public Water Supply Wells

Dear Mr. Cobb:

Enclosed for your review is one "Application for Agency Review of Lateral Area of Influence Determination" for each of Kirkland's public water supply wells. Attached to each application is a copy of the proposed Maximum Setback Ordinance to be adopted by the Village, a map showing the location of the well and its setback zone, and the radius of influence calculations used to determine that the well is qualified for the establishment of the maximum setback zone.

If you have an questions or need any additional information, please call Larry Thomas at Baxter & Woodman, Inc. at 815/459-1260.

Very truly yours,

VILLAGE OF KIRKLAND

Fred Manni
Village President

FM:ww
Enc.
930436/1158R

cc: Trustee File
Larry Thomas

FOR IEPA USE:

SUSPENSE DATE 01/04/94

LOG NUMBER M 93-0161

APPROVAL NUMBER AND DATE M _____ - 1 - 1

DATE RECEIVED BY IEPA 10/07/93

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES
GROUNDWATER SECTION
SPRINGFIELD, ILLINOIS 62794-9276

APPLICATION FOR AGENCY REVIEW OF LATERAL AREA OF INFLUENCE DETERMINATION

- 1. Public Water Supply Facility Name and Number Kirkland 0370300
- 2. Well Name, Number, Description, and Agency 5-Digit Well I.D. Well RRW
I.D.#11424
- 3. Municipality or Township Kirkland County DeKalb
- 4. Name of Public Water Supply Owner Village of Kirkland
Address 511 West Main Street, Kirkland, IL 60146
- 5. Indicate entity which determined the lateral radius of influence.
 Owner, Municipality, County (Circle one or more.)
Name Village of Kirkland Title _____
Address 511 West Main Street, Kirkland, IL 60146

6.0 REQUESTS FOR AGENCY REVIEW

Section 671.301. Where the results of any determination made pursuant to Section 671.201 (Estimation Techniques and Pumping Tests) disclose that the distance from the well to the outermost boundary of the lateral area of influence under normal operational conditions exceeds the radius of the minimum setback established for that well pursuant to Section 14.2 of the Act, any County or Municipality served by such water supply may in writing request the Agency to review and confirm the technical adequacy of such determination.

6.1 Indicate entity filing petition for Agency review. A=County, Municipality (Circle one.)

6.2 Certificate by Applicant

I hereby certify that I have read and thoroughly understand the conditions and requirements of this submittal.

Name of Applicant Filing Petition for Agency Review Village of Kirkland
511 West Main Street, Kirkland, IL 60146
 Street City State Zip Code
 Signature Fred Mann Date 10/6/93
 Title Village President

This Agency is authorized to require this information under Illinois Revised Statutes, 1987, Chapter III 4, Section 14.3. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in a determination that your request is not technically adequate. This form has been approved by the forms Management Center.

APPLICATION FOR AGENCY REVIEW OF LATERAL RADIUS OF INFLUENCE DETERMINATION Page 2

6.3 List any other counties or municipalities served by the public water supply other than the county or municipality in which the public water supply is located.

None	
Entity(s)	Address(s)

7. List documents being submitted and indicate appendix procedure used:
- | | | |
|--|---|-----|
| 1) Radius of influent calculations | Appendix A. Volumetric Flow Equation | ___ |
| | Appendix B. Theis Nonequilibrium Equation | ___ |
| 2) Draft ordinance including map of the ordinance area | Appendix C. Todd Uniform Flow Equation | X |
| | Appendix D. Pump Test Unconfined Aquifer | ___ |
| | Appendix E. Pump Test Confined Aquifer | ___ |
| | Appendix F. Hydrogeologic Mapping | ___ |
| | Appendix G. Alternate Procedure | ___ |
| | (description _____) |) |

8. Indicate the shape of the lateral radius of influence (1=Irregular, 2=Circular, (circle one) and the maximum lateral radius of influence distance in feet _____.

9.0 INFRINGEMENT ON EXISTING PUBLIC WATER SUPPLIES

9.1 Is any part of the maximum lateral radius of influence located within the boundaries of an area served by another public water supply? ___ Yes X No

9.2 If yes, name that water supply facility and indicate the facility number.
Name _____ # _____

9.3 Use a map and provide a written description to show areas of the lateral radius of influence which cross into another public water supply.

10.0 CERTIFICATION

Section 671.201 (Estimation Techniques and Pumping Tests) please indicate the Appendix used by circling the following: A, B, (C), D, E, F, G. Section 671.302 (Contents of a Request) Appendix A or B may be used by a person other than a geologist or engineer. Appendix C-G must be performed by a registered engineer or geologist. Appendix C-G may also be performed by a non-registered engineer or geologist through Section 671.303 (Agency Approval of Alternate Certification).

10.1 Certificate by a person other than an engineer or geologist Section 671.302 if calculated using Section 671.201 Appendix A or B.

I hereby certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief such information is true, complete and accurate.

Address _____	Name _____	Title _____
Signature _____	Phone Number _____	Date _____

APPLICATION FOR AGENCY REVIEW OF LATERAL RADIUS OF INFLUENCE DETERMINATION PAGE 3

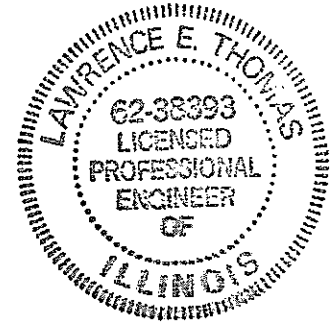
10.2 Certificate by engineer or geologist Section 671.302 or 671.303 if calculated using Section 671.201 Appendix C, D, E, F, or G:

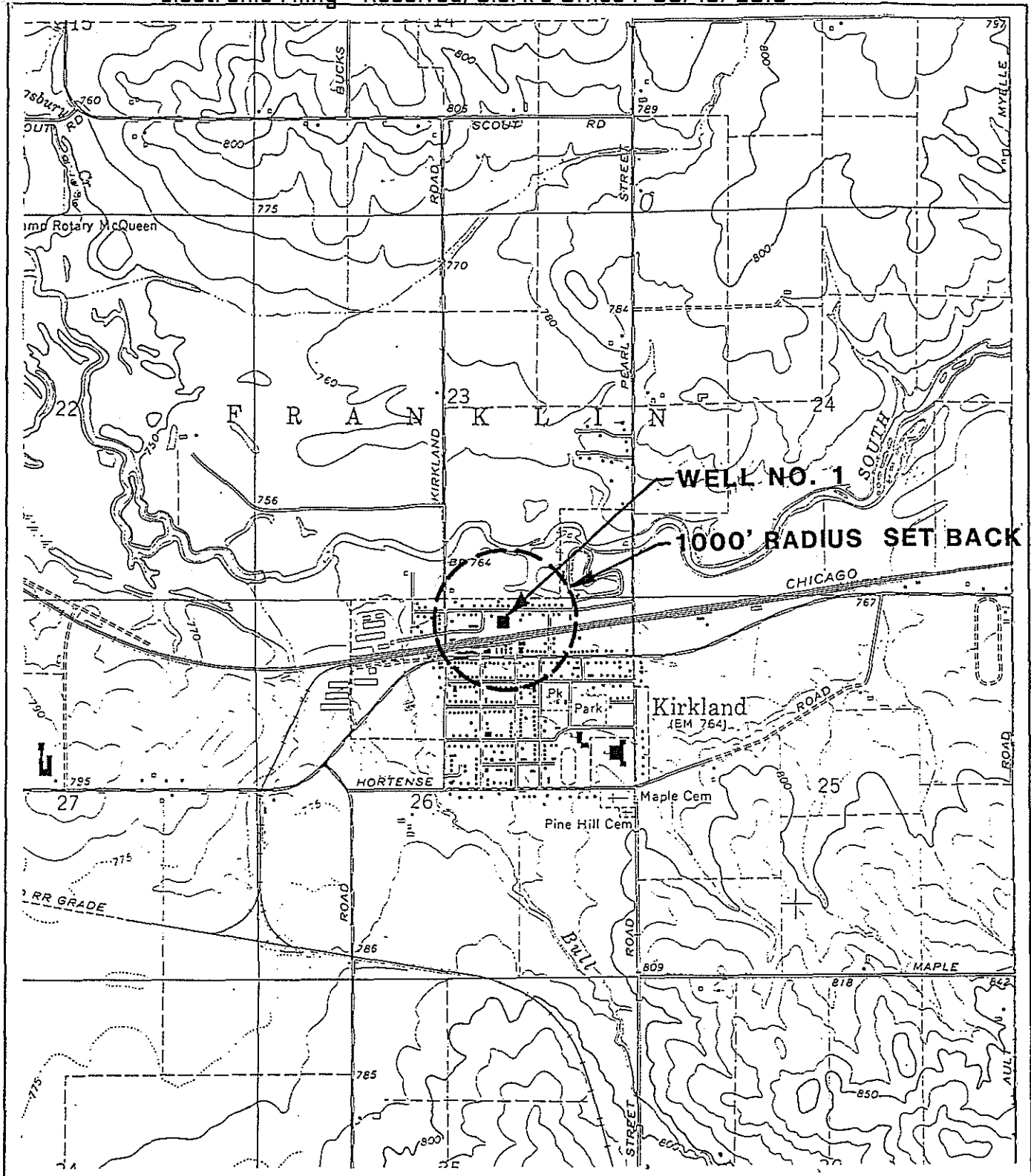
I hereby certify the I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete and accurate.

Engineer	<u>Lawrence E. Thomas</u>	<u>38393</u>
	Name	Registration Number
Geologist	<u></u>	<u></u>
	Name	Registration Number
Alternate*	<u></u>	<u></u>
	Title	Name

*Please attach proof pursuant to Section 671.303

Firm Baxter & Woodman, Inc. Phone Number 815/459-1260
Address 8678 Ridgfield Road, Crystal Lake, IL 60012
Signature Lawrence E Thomas Date





**VILLAGE OF KIRKLAND, ILLINOIS
WATER SUPPLY WELL NO. 1**

SET BACK REQUIREMENTS

**BAXTER & WOODMAN, INC.
ENVIRONMENTAL ENGINEERS
CRYSTAL LAKE ILLINOIS**

DRAWN BY TLU	DATE 9-29-93	FILE NO. 930436	SHEET NO. 1 OF 1
------------------------	------------------------	---------------------------	----------------------------

FOR IEPA USE:

SUSPENSE DATE 01/04/94

LOG NUMBER M 93-0162

APPROVAL NUMBER AND DATE M - - - - - 1 - 1 - -

DATE RECEIVED BY IEPA 6/10/93

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
DIVISION OF PUBLIC WATER SUPPLIES
GROUNDWATER SECTION
SPRINGFIELD, ILLINOIS 62794-9276

APPLICATION FOR AGENCY REVIEW OF LATERAL AREA OF INFLUENCE DETERMINATION

- 1. Public Water Supply Facility Name and Number Kirkland 0370300
- 2. Well Name, Number, Description, and Agency 5-Digit Well I.D. Well No. 1
I.D. #11425
- 3. Municipality or Township Kirkland County DeKalb
- 4. Name of Public Water Supply Owner Village of Kirkland
Address 511 West Main Street, Kirkland, IL 60146
- 5. Indicate entity which determined the lateral radius of influence.
 A=Owner, B=Municipality, C=County (Circle one or more.)
Name Village of Kirkland Title _____
Address 511 West Main Street, Kirkland, IL 60146

6.0 REQUESTS FOR AGENCY REVIEW

Section 671.301. Where the results of any determination made pursuant to Section 671.201 (Estimation Techniques and Pumping Tests) disclose that the distance from the well to the outermost boundary of the lateral area of influence under normal operational conditions exceeds the radius of the minimum setback established for that well pursuant to Section 14.2 of the Act, any County or Municipality served by such water supply may in writing request the Agency to review and confirm the technical adequacy of such determination.

6.1 Indicate entity filing petition for Agency review. A=County, B=Municipality (Circle one.)

6.2 Certificate by Applicant

I hereby certify that I have read and thoroughly understand the conditions and requirements of this submittal.

Name of Applicant Filing Petition for Agency Review Village of Kirkland
511 West Main Street, Kirkland, IL 60146

Street City State Zip Code
Signature Fred Manni Date 6/10/93
Title Village President

This Agency is authorized to require this information under Illinois Revised Statutes, 1987, Chapter 111 4, Section 14.3. Disclosure of this information is required under that Section. Failure to do so may prevent this form from being processed and could result in a determination that your request is not technically adequate. This form has been approved by the Forms Management Center.

6.3 List any other counties or municipalities served by the public water supply other than the county or municipality in which the public water supply is located.

None	
_____	_____
_____	_____
_____	_____
_____	_____
Entity(s)	Address(s)

7. List documents being submitted and indicate appendix procedure used:

1) Radius of influent	Appendix A. Volumetric Flow Equation	___
calculations	Appendix B. Theis Nonequilibrium Equation	___
2) Draft ordinance including map	Appendix C. Todd Uniform Flow Equation	X
of the ordinance area	Appendix D. Pump Test Unconfined Aquifer	___
_____	Appendix E. Pump Test Confined Aquifer	___
_____	Appendix F. Hydrogeologic Mapping	___
_____	Appendix G. Alternate Procedure	___
_____	(description _____)	___

8. Indicate the shape of the lateral radius of influence (1=Irregular, 2=Circular, (circle one) and the maximum lateral radius of influence distance in feet _____.

9.0 INFRINGEMENT ON EXISTING PUBLIC WATER SUPPLIES

9.1 Is any part of the maximum lateral radius of influence located within the boundaries of an area served by another public water supply? ___ Yes X No

9.2 If yes, name that water supply facility and indicate the facility number. Name _____ # _____

9.3 Use a map and provide a written description to show areas of the lateral radius of influence which cross into another public water supply.

10.0 CERTIFICATION

Section 671.201 (Estimation Techniques and Pumping Tests) please indicate the Appendix used by circling the following: A, B, C, D, E, F, G. Section 671.302 (Contents of a Request) Appendix A or B may be used by a person other than a geologist or engineer. Appendix C-G must be performed by a registered engineer or geologist. Appendix C-G may also be performed by a non-registered engineer or geologist through Section 671.303 (Agency Approval of Alternate Certification).

10.1 Certificate by a person other than an engineer or geologist Section 671.302 if calculated using Section 671.201 Appendix A or B.

I hereby certify that I am familiar with the information contained in this application and that to the best of my knowledge and belief such information is true, complete and accurate.

Name _____	Title _____
Address _____	Phone Number _____
Signature _____	Date _____

APPLICATION FOR AGENCY REVIEW OF LATERAL RADIUS OF INFLUENCE DETERMINATION PAGE 3

10.2 Certificate by engineer or geologist Section 671.302 or 671.303 if calculated using Section 671.201 Appendix C, D, E, F, or G:

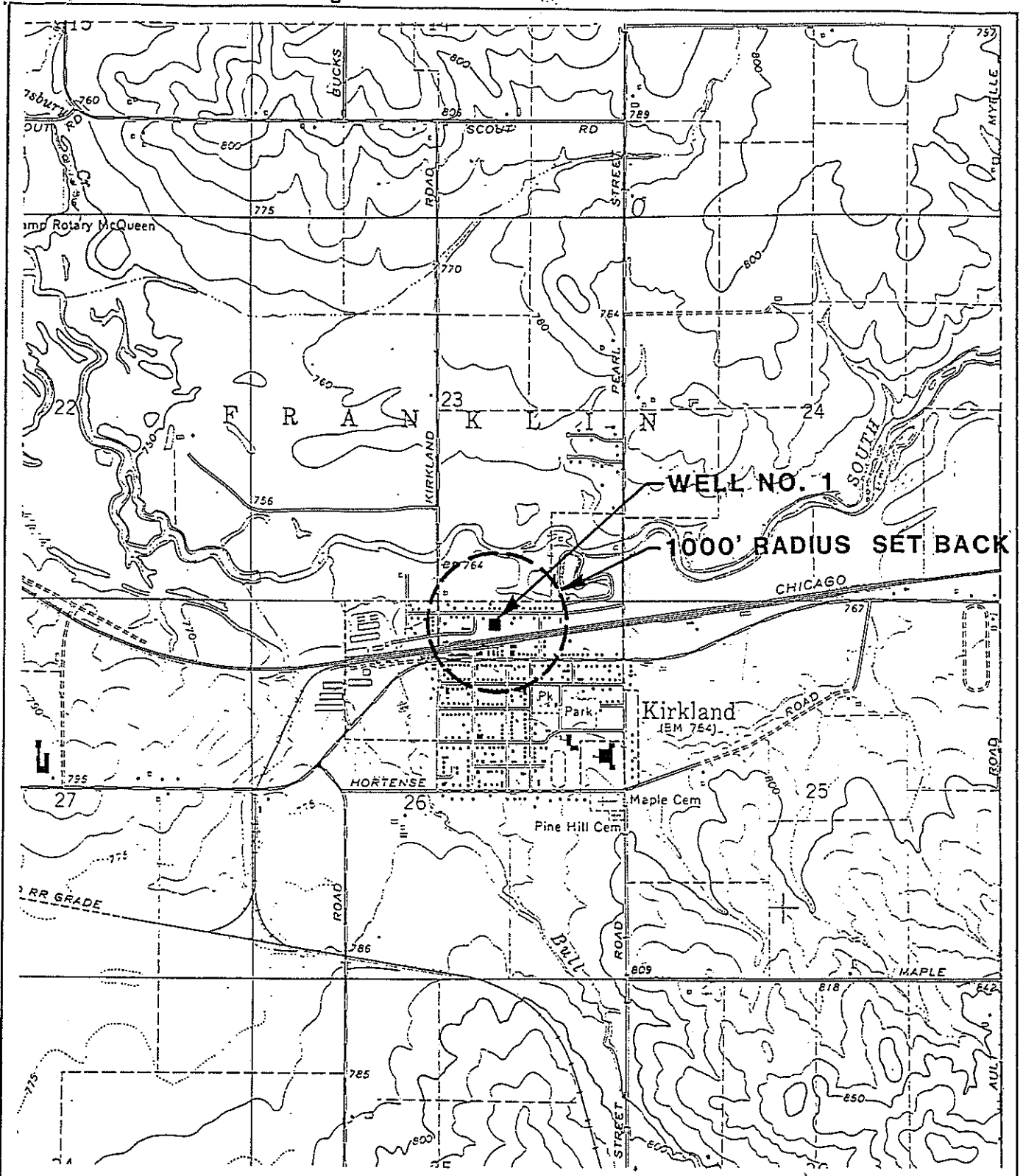
I hereby certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete and accurate.

Engineer	<u>Lawrence E. Thomas</u>	<u>38393</u>
	Name	Registration Number
Geologist	<u></u>	<u></u>
	Name	Registration Number
Alternate*	<u></u>	<u></u>
	Title	Name

*Please attach proof pursuant to Section 671.303

Firm Baxter & Woodman, Inc. Phone Number 815/459-1260
Address 8678 Ridgfield Road, Crystal Lake, IL 60012
Signature *Lawrence E. Thomas* Date 9/28/93





**VILLAGE OF KIRKLAND, ILLINOIS
WATER SUPPLY WELL NO. 1**

SET BACK REQUIREMENTS

**BAXTER & WOODMAN, INC.
ENVIRONMENTAL ENGINEERS
CRYSTAL LAKE ILLINOIS**

DRAWN BY TLU	DATE 9-29-93	FILE NO. 930436	SHEET NO. 1 OF 1
------------------------	------------------------	---------------------------	----------------------------

CERTIFICATION

I, WAYNE WAY, do hereby certify that I am the duly appointed, acting and qualified Clerk of the Village of Kirkland, DeKalb County, Illinois, and that as such Clerk, I am the keeper of the records and minutes and proceedings of the President and Board of Trustees of said Village of Kirkland.

I do hereby further certify that at a regular meeting of the President and Board of Trustees of the Village of Kirkland, held on the _____ day of _____, 19____, the foregoing Ordinance entitled: "An Ordinance" was duly passed by the President and Board of Trustees of the Village of Kirkland.

The pamphlet form of Ordinance No. _____, including the Ordinance and a cover sheet thereof, was prepared, and a copy of such Ordinance was available in the Village Hall, commencing on the _____ day of _____, 19____, and continuing for at least 10 days thereafter. Copies of such Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I DO FURTHER certify that the original, of which the attached is a true and correct copy, is entrusted to me as the Clerk of said Village for safekeeping, and that I am the lawful custodian and keeper of the same.

GIVEN under my hand and seal this _____ day of _____, 19____.

(SEAL)

Wayne Way, Clerk
Village of Kirkland
DeKalb County, Illinois

MINIMUM AND MAXIMUM SETBACK ORDINANCE
OF THE VILLAGE OF KIRKLAND, ILLINOIS

WHEREAS, the Village of Kirkland is authorized by Section 11-125-4 of the Illinois Municipal Code [Ill. Rev. Stat. Chapter 24, Paragraph 11-125-4 (1989)] to perform a groundwater protection needs assessment and adopt a minimum or maximum setback zone around community well heads pursuant to Sections 14.2-14.4 and 17.1 of the Environmental Protection Act ("Act") [Ill. Rev. Stat. Chapter 111-1/2, Paragraph 1014.2-1014.4 and 1017.1 (1989)]; and

WHEREAS, in the interest of securing the public health, safety and welfare; to preserve the quality and quantity of groundwater resources in order to assure a safe and adequate water supply for present and future generations, and to preserve groundwater resources currently in use and those aquifers having a potential for future use as a public water supply, the provisions of this Ordinance shall apply to all properties located within the minimum setback zone established under Section 14.1 of the Act and this Ordinance and the maximum setback zone established under Section 14.3 of the Act and this Ordinance.

NOW, THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of Kirkland, DeKalb County, Illinois, as follows:

SECTION 1: Except as stated in this Ordinance and unless a different meaning of a work or term is clear from the context, the definition of the words or terms in this Ordinance shall be the same as those used in the Act and the Illinois Groundwater Protection Act [Ill. Rev. Stat. Chapter 111-1/2, Paragraph 7451 et seq. (1989)]:

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"Minimum Setback Zone" means the area around a community water supply well established under Section 14.2 of the Act and this Ordinance and shown in Exhibit A.

"Maximum Setback Zone" means the area around a community water supply well established under Section 14.3 of the Act and this Ordinance and shown in Exhibit A.

SECTION 2:

- A. Except as provided in Sections 4 and 5, no person shall place a new potential primary source, new potential secondary source, or new potential route within the minimum setback zone.

- B. Except as provided otherwise in Section 4, no person shall place a new potential primary source within the maximum setback zone.

SECTION 3: WAIVERS, EXCEPTIONS AND CERTIFICATIONS OF MINIMUM HAZARD.

- A. If the owner of a new potential primary source, new potential secondary source or new potential route is granted a waiver by the Agency, pursuant to Section 14.2(b) of the Act, such owner shall be deemed to have a waiver to the same extent from Section 2(a) of this Ordinance.
- B. If the owner of a new potential primary source (other than landfilling or land treating), new potential secondary source, or new potential route is granted an exception by the Board, pursuant to Section 14.2(c) of the Act, such owner shall be deemed to have an exception to the same extent from Section 2(a) of this Ordinance.
- C. If the owner of a new potential primary source (other than landfilling or land treating) is granted an exception by the Board, pursuant to Section 14.2(c) of the Act, such owner shall be deemed to have an exception to the same extent from Section 2(b) of this Ordinance.
- D. If the owner of a new potential primary source, new potential secondary source, or new potential route is issued a certificate of minimal hazard by the Agency, pursuant to Section 14.5 of the Act, such owner shall not be subject to Section 2(a) of this Ordinance to the same extent that such owner is not to subject Section 14.2(d) of the Act.

SECTION 4: Section 2(a) of this Ordinance shall not apply to new common sources of sanitary pollution as specified in Section 17 of the Act and the regulations adopted thereunder by the Agency; however, no such common sources may be located within the applicable minimum distance from a community water supply well specified by such regulations.

SECTION 5: If any section, paragraph, subdivision, clause, sentence or provision of this Ordinance shall be adjudged by any Court of competent jurisdiction to be invalid, such judgment shall not affect, impair, invalidate or nullify the remainder thereof, which remainder shall remain and continue in full force and effect.

SECTION 6: All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

SECTION 7: This Ordinance shall be in full force and effect upon its passage, approval and publication in pamphlet form (which publication is hereby authorized) as provided by law.

Voting Aye:

Voting Nay:

Absent:

Abstain:

APPROVED:

(SEAL)

Fred Manni, Village President

ATTEST:

Wayne Way, Village Clerk

Passed: _____

Approved: _____

Published: _____

VILLAGE OF KIRKLAND, ILLINOIS
MAXIMUM SETBACK ZONE DETERMINATION
RADIUS OF INFLUENCE CALCULATIONS
TODD UNIFORM FLOW EQUATION

PUBLIC WATER SUPPLY WELL NO. 1

$$X = \frac{1.19Q}{T_i}$$

$$Y = \frac{7.48Q}{T_i}$$

Where:

Q = Daily flow from well under normal conditions.

$$= \frac{425 \text{ gals.}}{\text{min.}} \times \frac{60 \text{ mins.}}{\text{hr.}} \times \frac{18 \text{ hours}}{\text{day}} \times \frac{7.48 \text{ gals.}}{\text{cu.ft.}} = \frac{61,400 \text{ cu.ft.}}{\text{day}}$$

i = Hydraulic gradient of the water table or potentiometric surface.

$$= \frac{50'}{15,840} = 0.0032$$

T = Aquifer transmissivity as determined from information supplied in the Illinois State Water Survey Groundwater Report No. 10.

$$= 19,200 \text{ gals. per foot per day}$$

X = Lateral area of influence.

Y = maximum width of the lateral area of influence.

$$X = \frac{(1.19)(61,400)}{(19,200)(0.0032)} = 1,200 \text{ ft.}$$

$$Y = \frac{(7.48)(61,400)}{(19,200)(0.0032)} = 7,600 \text{ ft.}$$

The width of the lateral area of influence is greater than 400 feet. The well is therefore qualified for establishment of a 1,000 foot maximum setback zone.

VILLAGE OF KIRKLAND, ILLINOIS
MAXIMUM SETBACK ZONE DETERMINATION
RADIUS OF INFLUENCE CALCULATIONS
TODD UNIFORM FLOW EQUATION

PUBLIC WATER SUPPLY WELL RRW

$$X = \frac{1.19Q}{Ti}$$

$$Y = \frac{7.48Q}{Ti}$$

Where:

Q = Daily flow from well under normal conditions.

$$= \frac{358 \text{ gals.}}{\text{min.}} \times \frac{60 \text{ mins.}}{\text{hr.}} \times \frac{18 \text{ hours}}{\text{day}} \div \frac{7.48 \text{ gals.}}{\text{cu.ft.}} = \frac{51,700 \text{ cu.ft.}}{\text{day}}$$

i = Hydraulic gradient of the water table or potentiometric surface.

$$= \frac{50'}{15,840} = 0.0032$$

T = Aquifer transmissivity as determined from information supplied in the Illinois State Water Survey Groundwater Report No. 10.

$$= 19,200 \text{ gals. per foot per day}$$

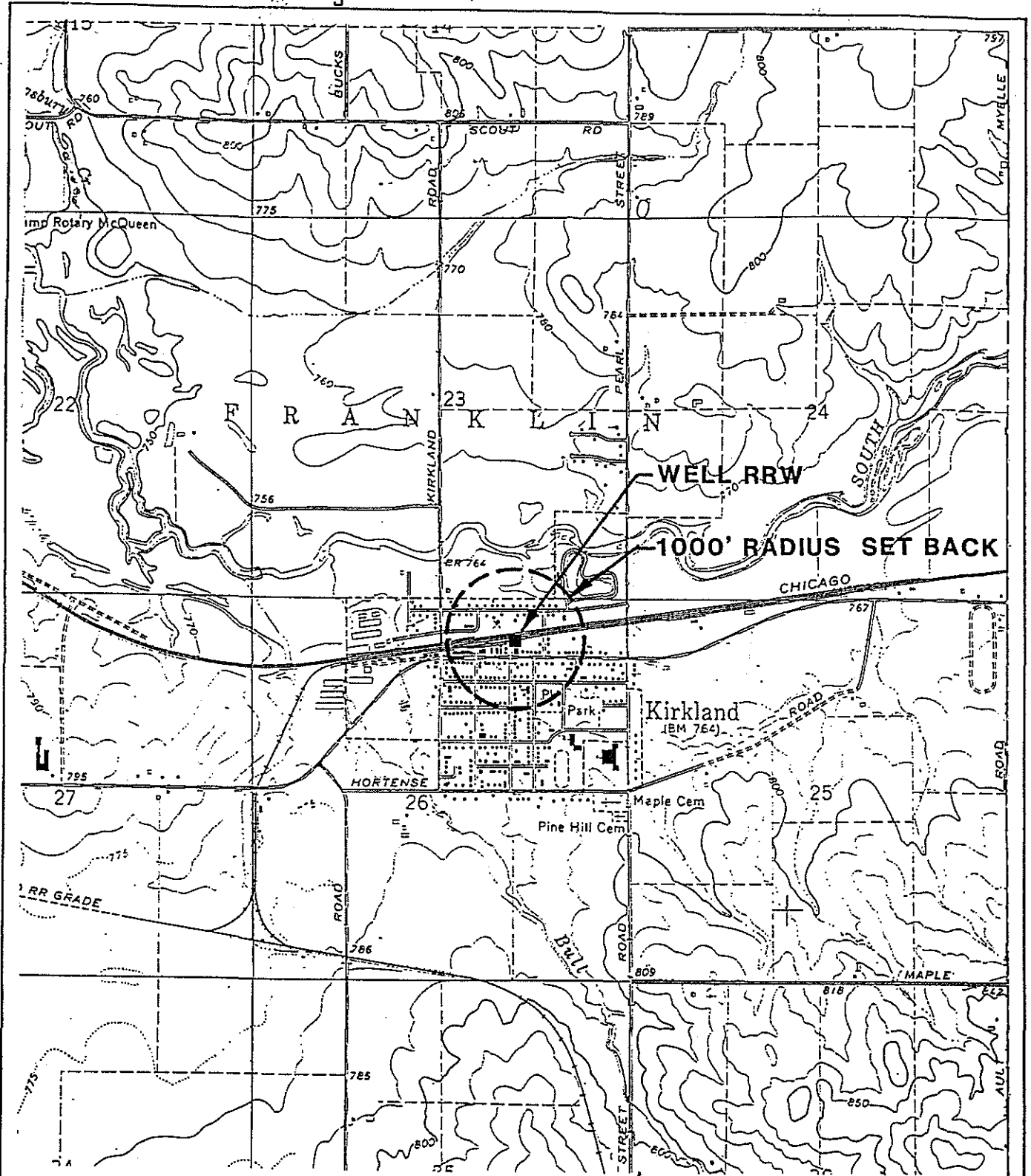
X = Lateral area of influence.

Y = maximum width of the lateral area of influence.

$$X = \frac{(1.19)(51,700)}{(19,200)(0.0032)} = 1,000 \text{ ft.}$$

$$Y = \frac{(7.48)(51,700)}{(19,200)(0.0032)} = 6,300 \text{ ft.}$$

The width of the lateral area of influence is greater than 400 feet. The well is therefore qualified for establishment of a 1,000 foot maximum setback zone.

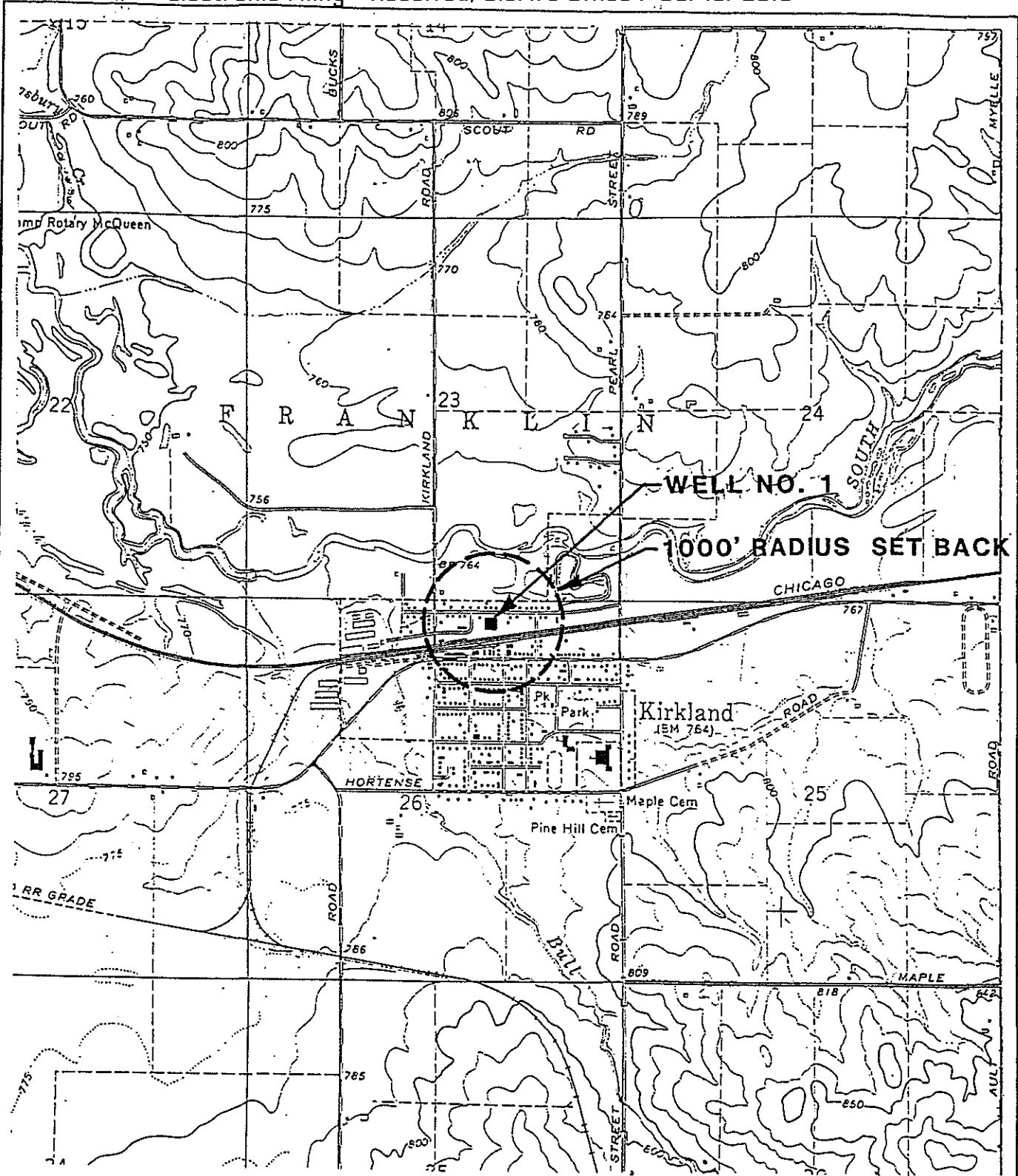


**VILLAGE OF KIRKLAND, ILLINOIS
WATER SUPPLY WELL RRW**

SET BACK REQUIREMENTS

**BAXTER & WOODMAN, INC.
ENVIRONMENTAL ENGINEERS
CRYSTAL LAKE ILLINOIS**

DRAWN BY	DATE	FILE NO.	SHEET NO.
TLU	9-29-93	930436	1 OF 1



**VILLAGE OF KIRKLAND, ILLINOIS
WATER SUPPLY WELL NO. 1**

SET BACK REQUIREMENTS

**BAXTER & WOODMAN, INC.
ENVIRONMENTAL ENGINEERS
CRYSTAL LAKE ILLINOIS**

DRAWN BY	DATE	FILE NO.	SHEET NO.
TLU	9-29-93	930436	1 OF 1

Illinois State Geological Survey
 Urbana, Illinois
 KIRKLAND VILLAGE WELL

R 3 E
 T 42 N S 26
 De Kalb Co.

250'S + 1875'W NE/C

Elevation: 775'
 Drilled 1950 by J. B. Null

Sample Set No. 20714
 Examined 1951 by P. M. Busch

P L	LITHOLOGY	Top Elev.	Bottom Elev.	Thickness Feet	Description	Notes	Other
	GLACIAL DRIFT	60	60		Soil, Dark brown; gravel, to 1/2"; sand; till, silty, grayish orange		
	GALENA	87	87		Dolomite, partly cherty, yellowish orange to light yellowish gray		
	DECORAH	28	28		Dolomite, yellowish gray, fine to coarse		
	PLATTEVILLE	125	125		Dolomite, partly argillaceous, yellowish gray to yellowish orange, gray, fine to coarse		
	GLENWOOD	50	50		Shale, firm; Dolomite, fine; Sandstone, fine and coarse, incoherent		
	ST PETER	280	280		Sandstone, silty zones as shown, white to gray, fine to coarse, incoherent		
					TD = 636		

CORRECTION

117'
 12 1/2'
 605
 69'
 8'
 605
 12 1/2'
 Hole
 152'

8' Hole

COMMENT SHEET

Omission and Accuracy Review

Facility: 0370300 KIRKLAND

Reviewer: PATTY

Date of Review: 10-12-93

Review completed on day 3RD (WEEK DAY) of review period.

1. Are all of the wells belonging to the facility listed on the application? [~~Yes~~] [No]

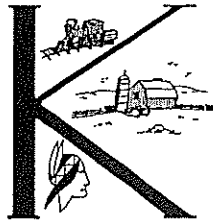
a) If you check "No", list omitted well 5-digit ID.

2. Has a well log been submitted for each well listed on the application? [Yes] [~~No~~]

3. Has a draft ordinance been submitted with the application? [~~Yes~~] [No]

NOTES:

0370300



VILLAGE OF KIRKLAND

511 W. MAIN STREET P.O. BOX 566
KIRKLAND, ILLINOIS 60146
815-522-6179

RECEIVED

DEC 14 1995

DIV. PUBLIC WATER SUPPLIES
ENVIRONMENTAL PROTECTION AGENCY
STATE OF ILLINOIS

December 12, 1995

William E. Buscher
Supervisor, Hydrogeology Unit
Division of Public Water Supplies
Bureau of Water

RE: Maximum Setback Zoning Ordinance Village of Kirkland

Please find enclosed a copy of Ordinance 94-8 to address the above.

Should you need any further information please let me know.

Sincerely,

Wayne Way
Wayne Way, Clerk
VILLAGE OF KIRKLAND

cc: Charles Fruit
President

enclosure

RECEIVED

DEC 11 1995

DIV. PUBLIC WATER SUPPLIES
ENVIRONMENTAL PROTECTION AGENCY
STATE OF ILLINOIS

ORDINANCE 94-8

MINIMUM AND MAXIMUM SETBACK ORDINANCE
OF THE VILLAGE OF KIRKLAND, ILLINOIS

WHEREAS, the Village of Kirkland is authorized by Section 11-125-4 of the Illinois Municipal Code [Ill. Rev. Stat. Chapter 24, Paragraph 11-125-4 (1989)] to perform a groundwater protection needs assessment and adopt a minimum or maximum setback zone around community well heads pursuant to Sections 14.2-14.4 and 17.1 of the Environmental Protection Act ("Act") [Ill. Rev. Stat. Chapter 111-1/2, Paragraph 1014.2-1014.4 and 1017.1 (1989)]; and

WHEREAS, in the interest of securing the public health, safety and welfare; to preserve the quality and quantity of groundwater resources in order to assure a safe and adequate water supply for present and future generations, and to preserve groundwater resources currently in use and those aquifers having a potential for future use as a public water supply, the provisions of this Ordinance shall apply to all properties located within the minimum setback zone established under Section 14.1 of the Act and this Ordinance and the maximum setback zone established under Section 14.3 of the Act and this Ordinance.

NOW, THEREFORE, BE IT ORDAINED by the President and Board of Trustees of the Village of Kirkland, DeKalb County, Illinois, as follows:

SECTION 1: Except as stated in this Ordinance and unless a different meaning of a work or term is clear from the context, the definition of the words or terms in this Ordinance shall be the same as those used in the Act and the Illinois Groundwater Protection Act [Ill. Rev. Stat. Chapter 111-1/2, Paragraph 7451 et seq. (1989)]:

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"Minimum Setback Zone" means the area around a community water supply well established under Section 14.2 of the Act and this Ordinance and shown in Exhibit A.

"Maximum Setback Zone" means the area around a community water supply well established under Section 14.3 of the Act and this Ordinance and shown in Exhibit A.

SECTION 2:

A. Except as provided in Sections 4 and 5, no person shall place a new potential primary source, new potential secondary source, or new potential route within the minimum setback zone.

- B. Except as provided otherwise in Section 4, no person shall place a new potential primary source within the maximum setback zone.

SECTION 3: WAIVERS, EXCEPTIONS AND CERTIFICATIONS OF MINIMUM HAZARD.

- A. If the owner of a new potential primary source, new potential secondary source or new potential route is granted a waiver by the Agency, pursuant to Section 14.2(b) of the Act, such owner shall be deemed to have a waiver to the same extent from Section 2(a) of this Ordinance.
- B. If the owner of a new potential primary source (other than landfilling or land treating), new potential secondary source, or new potential route is granted an exception by the Board, pursuant to Section 14.2(c) of the Act, such owner shall be deemed to have an exception to the same extent from Section 2(a) of this Ordinance.
- C. If the owner of a new potential primary source (other than landfilling or land treating) is granted an exception by the Board, pursuant to Section 14.2(c) of the Act, such owner shall be deemed to have an exception to the same extent from Section 2(b) of this Ordinance.
- D. If the owner of a new potential primary source, new potential secondary source, or new potential route is issued a certificate of minimal hazard by the Agency, pursuant to Section 14.5 of the Act, such owner shall not be subject to Section 2(a) of this Ordinance to the same extent that such owner is not to subject Section 14.2(d) of the Act.

SECTION 4: Section 2(a) of this Ordinance shall not apply to new common sources of sanitary pollution as specified in Section 17 of the Act and the regulations adopted thereunder by the Agency; however, no such common sources may be located within the applicable minimum distance from a community water supply well specified by such regulations.

SECTION 5: If any section, paragraph, subdivision, clause, sentence or provision of this Ordinance shall be adjudged by any Court of competent jurisdiction to be invalid, such judgment shall not affect, impair, invalidate or nullify the remainder thereof, which remainder shall remain and continue in full force and effect.

SECTION 6: All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict.

SECTION 7: This Ordinance shall be in full force and effect upon its passage, approval and publication in pamphlet form (which publication is hereby authorized) as provided by law.

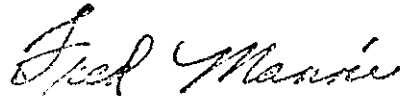
Voting Aye: BECKER, BELLAM, DAVIS, KETTER

Voting Nay: 0

Absent: BERNHARDY, LITTLEJOHN

Abstain:

APPROVED:



Fred Manni, Village President

(SEAL)

ATTEST: Wayne Way
Wayne Way, Village Clerk

Passed: 10-20-94

Approved: 10-20-94

Published: 10-21-94

CERTIFICATION

I, WAYNE WAY, do hereby certify that I am the duly appointed, acting and qualified Clerk of the Village of Kirkland, DeKalb County, Illinois, and that as such Clerk, I am the keeper of the records and minutes and proceedings of the President and Board of Trustees of said Village of Kirkland.

I do hereby further certify that at a regular meeting of the President and Board of Trustees of the Village of Kirkland, held on the 20 day of OCTOBER, 1994, the foregoing Ordinance entitled: "An Ordinance" was duly passed by the President and Board of Trustees of the Village of Kirkland.

The pamphlet form of Ordinance No. 94-8, including the Ordinance and a cover sheet thereof, was prepared, and a copy of such Ordinance was available in the Village Hall, commencing on the 21 day of OCTOBER, 1994, and continuing for at least 10 days thereafter. Copies of such Ordinance were also available for public inspection upon request in the office of the Village Clerk.

I DO FURTHER certify that the original, of which the attached is a true and correct copy, is entrusted to me as the Clerk of said Village for safekeeping, and that I am the lawful custodian and keeper of the same.

GIVEN under my hand and seal this 21 day of OCT, 1994.

(SEAL)

Wayne Way
Wayne Way, Clerk
Village of Kirkland
DeKalb County, Illinois

VILLAGE OF KIRKLAND, ILLINOIS
MAXIMUM SETBACK ZONE DETERMINATION
RADIUS OF INFLUENCE CALCULATIONS
TODD UNIFORM FLOW EQUATION

PUBLIC WATER SUPPLY WELL NO. 1

$$X = \frac{1.19Q}{Ti}$$

$$Y = \frac{7.48Q}{Ti}$$

Where:

Q = Daily flow from well under normal conditions.

$$= \frac{425 \text{ gals.}}{\text{min.}} \times \frac{60 \text{ mins.}}{\text{hr.}} \times \frac{18 \text{ hours}}{\text{day}} \div \frac{7.48 \text{ gals.}}{\text{cu.ft.}} = \frac{61,400 \text{ cu.ft.}}{\text{day}}$$

i = Hydraulic gradient of the water table or potentiometric surface.

$$= \frac{50'}{15,840} = 0.0032$$

T = Aquifer transmissivity as determined from information supplied in the Illinois State Water Survey Groundwater Report No. 10.

$$= 19,200 \text{ gals. per foot per day}$$

X = Lateral area of influence.

Y = maximum width of the lateral area of influence.

$$X = \frac{(1.19)(61,400)}{(19,200)(0.0032)} = 1,200 \text{ ft.}$$

$$Y = \frac{(7.48)(61,400)}{(19,200)(0.0032)} = 7,600 \text{ ft.}$$

The width of the lateral area of influence is greater than 400 feet. The well is therefore qualified for establishment of a 1,000 foot maximum setback zone.

VILLAGE OF KIRKLAND, ILLINOIS
MAXIMUM SETBACK ZONE DETERMINATION
RADIUS OF INFLUENCE CALCULATIONS
TODD UNIFORM FLOW EQUATION

PUBLIC WATER SUPPLY WELL RRW

$$X = \frac{1.19Q}{Ti}$$

$$Y = \frac{7.48Q}{Ti}$$

Where:

Q = Daily flow from well under normal conditions.

$$= \frac{358 \text{ gals.}}{\text{min.}} \times \frac{60 \text{ mins.}}{\text{hr.}} \times \frac{18 \text{ hours}}{\text{day}} \div \frac{7.48 \text{ gals.}}{\text{cu.ft.}} = \frac{51,700 \text{ cu.ft.}}{\text{day}}$$

i = Hydraulic gradient of the water table or potentiometric surface.

$$= \frac{50'}{15,840} = 0.0032$$

T = Aquifer transmissivity as determined from information supplied in the Illinois State Water Survey Groundwater Report No. 10.

$$= 19,200 \text{ gals. per foot per day}$$

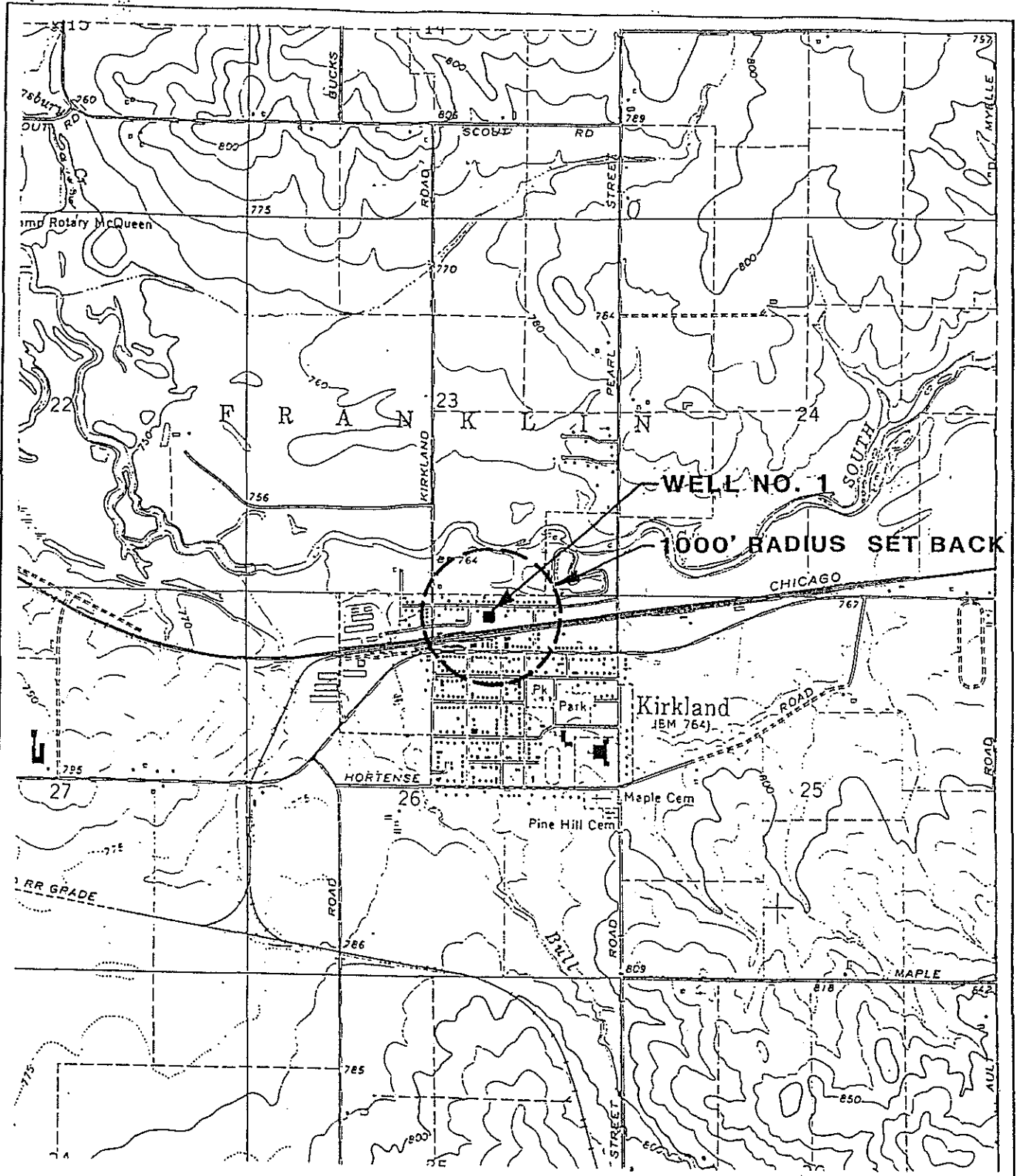
X = Lateral area of influence.

Y = maximum width of the lateral area of influence.

$$X = \frac{(1.19)(51,700)}{(19,200)(0.0032)} = 1,000 \text{ ft.}$$

$$Y = \frac{(7.48)(51,700)}{(19,200)(0.0032)} = 6,300 \text{ ft.}$$

The width of the lateral area of influence is greater than 400 feet. The well is therefore qualified for establishment of a 1,000 foot maximum setback zone.



**VILLAGE OF KIRKLAND, ILLINOIS
WATER SUPPLY WELL NO. 1**

SET BACK REQUIREMENTS

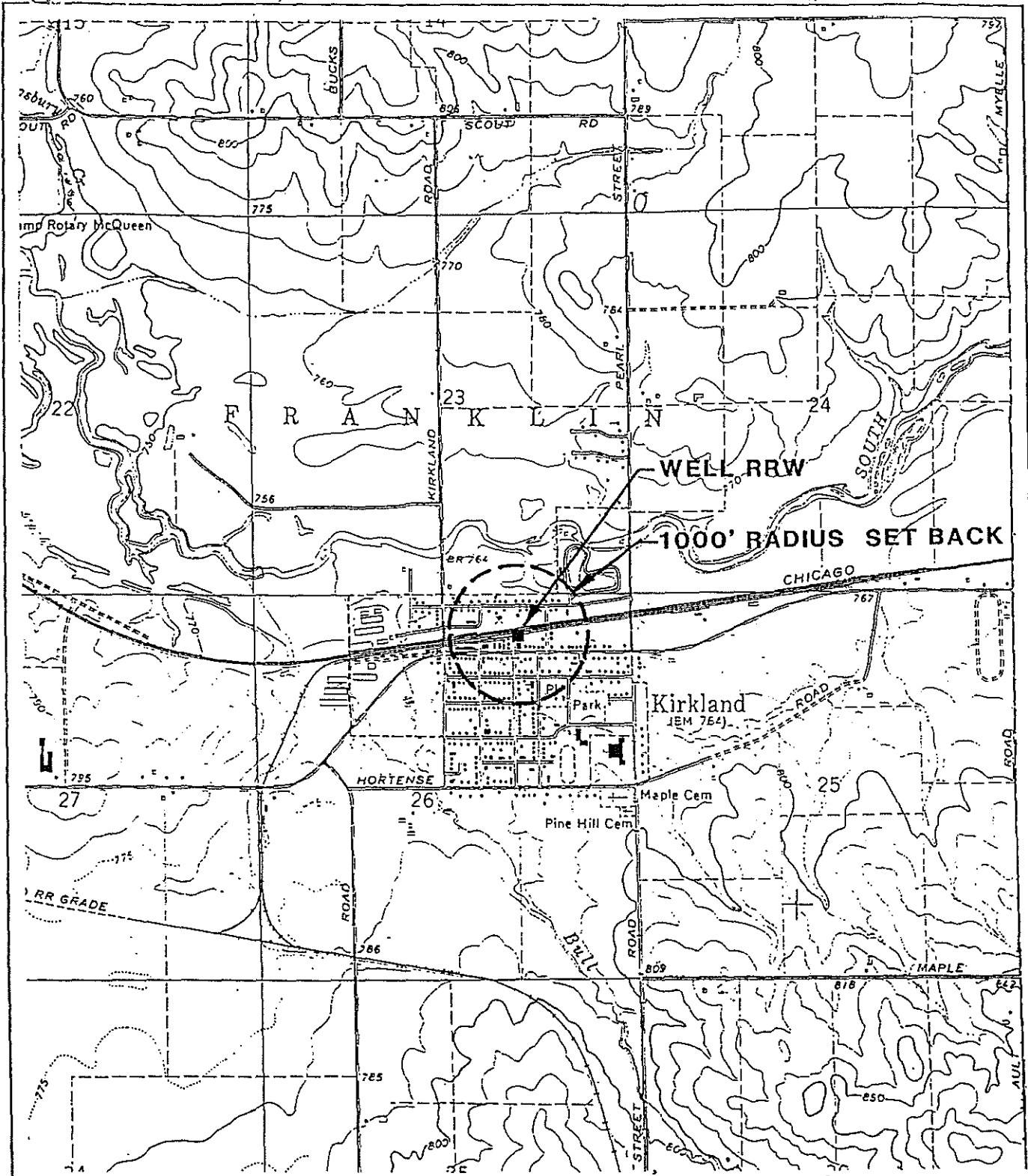
**BAXTER & WOODMAN, INC.
ENVIRONMENTAL ENGINEERS
CRYSTAL LAKE ILLINOIS**

DRAWN BY
TLU

DATE
9-29-93

FILE NO.
930436

SHEET NO.
1 OF 1



**VILLAGE OF KIRKLAND, ILLINOIS
WATER SUPPLY WELL RRW
SET BACK REQUIREMENTS**

**BAXTER & WOODMAN, INC.
ENVIRONMENTAL ENGINEERS
CRYSTAL LAKE ILLINOIS**

**DRAWN BY
TLU**

**DATE
9-29-93**

**FILE NO.
930436**

**SHEET NO.
1 OF 1**



Electronic Filing - Received, Clerk's Office : 06/15/2016
State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/785-4787

November 27, 1995

Fred Manni
President - Village Hall
511 West Main Street
Kirkland, Illinois 60146

Re: Maximum Setback Zoning Ordinance for the Kirkland Public Water Supply Wells

Dear Mr. Manni:

The Agency confirmed the technical adequacy of the lateral area of influence determination for the Kirkland Public Water Supply wells on December 14, 1993. The confirmation allows the Community of Kirkland to proceed with the adoption of a maximum setback zone ordinance, allowing additional protection to the well(s). Pursuant to Section 14.3c of the Environmental Protection Act ("Act") the Community is required to provide the Agency with a copy of the adopted ordinance. The Agency has not received a copy of Kirkland's adopted maximum setback zone ordinance. Section 14.3c of the Act also requires adoption of the maximum setback zone ordinance within two years of receipt of Agency confirmation of technical adequacy. Failure to pass a maximum setback zone ordinance within the allowed time period would require new confirmation of technical adequacy pursuant to Section 14.3(b) of the Act. The allotted two year period expires on December 14, 1995.

Please send a copy of the adopted ordinance, or notification that the maximum setback zone ordinance has not been adopted, to William E. Buscher, Division of Public Water Supplies at the address noted above.

Additional Agency review of the final adopted ordinance is necessary to help assure enforceability. The Act allows a municipality or county served by a community water supply to pass the maximum setback zone ordinance, but only if it is consistent with the powers enacted by the Act.

Thank you for your continued cooperation and interest in this phase of the Illinois Groundwater Protection Program. If we can be of any further assistance, please advise Carl Kamp or me at 217/785-4787.

Sincerely,

A handwritten signature in cursive script that reads "William E. Buscher".

William E. Buscher
Supervisor, Hydrogeology Unit
Division of Public Water Supplies
Bureau of Water

WEB:CEK:tml



State of Illinois

ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
217/785-4787

2200 Churchill Road, Springfield, IL 62794-9276

December 14, 1993

Mr. Fred Manni
Village President
511 West Main Street
P.O. Box 566
Kirkland, IL 60146

Re: Confirmation of Technical Adequacy of the Lateral Area of Influence
Determination(s) for the Village of Kirkland Public Water Supply Well(s)
PWS Facility No. 0370300
Agency Well Nos. 11424 & 11425
Log Date - October 7, 1993
Log Number(s) 93-0161 & 93-0162

Dear Mr. Manni:

The Agency has reviewed the technical adequacy of the lateral area of influence determination for the Village of Kirkland well(s) referenced above. The application and supporting documentation was submitted by Larry Thomas of Baxten and Woodman, Inc., on your behalf.

The Agency confirms the technical adequacy of the lateral area of influence determination for the wells referenced above. This constitutes a final determination by the Agency.

The Agency's evaluation of the application determined the following:

- * the minimum and maximum setback zones located on the Kirkland aerial photographic map should be labeled to tie in with the draft ordinance definitions (see attachment); and,
- * references to Illinois Revised Statutes in the draft ordinance should be the year 1991 and not 1989 (e.g. Ill. Rev. Stat. 1991, ch. 24 par. 11-125-4)

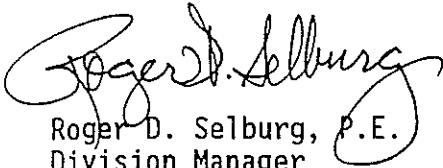
In addition to prohibiting potential primary sources of contamination, the implementation of a maximum setback zone ordinance will expand the regulatory control of certain new and existing activities. These regulations are contained in "Groundwater Protection Regulations for Existing and New Activities Within Setback Zones and Regulated Recharge Area (35 Ill. Adm. Code 601, 615, 616 and 677)" which became effective on January 10, 1992. A copy of these regulations has been provided for your information.

After notice and opportunity for comment pursuant to Section 14.3(c) of the Illinois Environmental Protection Act ("Act") the Village of Kirkland may adopt an ordinance setting forth the location of each affected well and specifying the boundaries of the maximum setback zone(s). After adoption of the final ordinance the city is required to provide the Agency with a copy pursuant to Section 14.3c of the Act. The Agency suggests adding setback zones to any existing zoning maps.

Page 2

Thank you for your continued cooperation and interest in this phase of the Illinois Groundwater Protection Program. If we can be of any further assistance please advise Rick Cobb of my staff or me at 217/785-4787.

Very truly yours,



Roger D. Selburg, P.E.
Division Manager
Division of Public Water Supplies

RDS:CEK:drk:491P/58-59

cc: Larry Thomas

bcc: Jim Park
Roger Kanerva
Roger Selburg
Don Dillenburg
Steve Ewart
Bill Buscher
Carl Kamp
File



State of Illinois

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ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2209 Churchill Road, Springfield, IL 62794-9276

217/785-4787

October 27, 1993

*stick
in computer*

Mr. Fred Manni
Village President
511 West Main Street
Kirkland, IL 60146

Re: Agency Acknowledgement of Application for Review of the Lateral Area of Influence Determination for the Village of Kirkland's Public Water Supply Well(s)
PWS Facility Number - 0370300
Agency Well Numbers - 11424, 11425
Log In Date - October 12, 1993
Log Numbers - 93-0161, 93-0162

Dear Mr. Manni:

The Agency has received your application regarding Agency review of the lateral area of influence determination for Kirkland's well(s). The date and log numbers referenced above have been assigned to your application. Please refer to these log numbers in all future communications concerning this application. The 90-day review period expires January 4, 1994.

Thank you for your interest and cooperation in this phase of the Illinois Groundwater Protection Program. Please advise Carl Kamp of my staff or me at 217/785-4787 if you have any questions or require assistance.

Sincerely,

William E. Buscher
Division of Public Water Supplies
Bureau of Water

WEB:plc

cc: L. Thomas

bcc: Jim Park
Roger Kanerva
Roger Selburg
Don Dillenburg
Steve Ewart
Bill Buscher