2002 Project Inspection Report

Prepared for

Clearwater River Watershed District

Wenck

June 2002

Wenck Associates, Inc.
1800 Pioneer Creek Ctr.
P.O. Box 249
Maple Plain, MN 55359-0249

(763) 479-4200
Fax (763) 479-4242
E-mail: wenckmp@wenck.com

June 12, 2002

Mr. Richard Eckman
President
Clearwater River Watershed District
P.O. Box 481
Annandale, MN 55302

Re: 2002 Project Inspection Report
Wenck File #0002-47-1

Dear Mr. Eckman:

This 2002 Project Inspection Report was prepared for the Clearwater River Watershed District as part of the operation and maintenance activities for the District's Projects.

The District's projects were inspected between April 30, 2002 and May 14, 2002. The attached Table 1 contains the inspection results and our recommendations of maintenance activities with estimated costs. The figures show where maintenance activities are required and the photographs show existing conditions for each project. Repair work at the Kingston Wetland Treatment System, Annandale Wetland Treatment System and Lake Augusta Erosion Control Project is recommended for this year.

Our recommendation is to solicit at least three quotes and complete the required maintenance work this summer or fall as weather permits.

The estimated contractor costs are $18,000, plus 44 hours for Kevin Wittrock to perform minor maintenance items.

Sincerely,

WENCK ASSOCIATES, INC.

Norman C. Wenck, P.E.
President

Attachments

N:\0002\47-1\lre61202.doc-emw

Tables

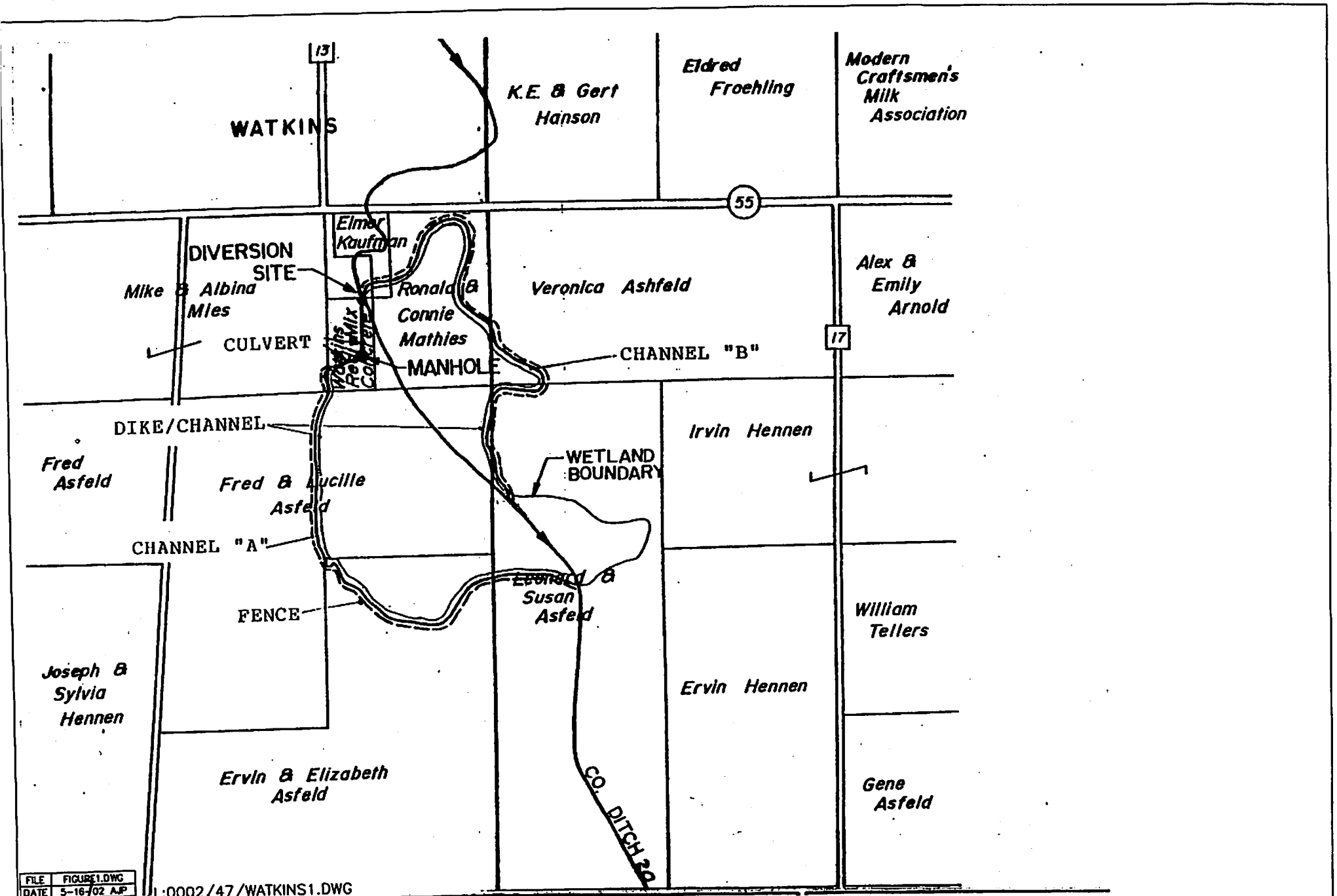
Table 1
Clearwater River Watershed District
Annual Project Inspection
May 2002

Project	Maintenance			Estimated Cost
	Required	Optional	No Action Now	
Watkins Wetland Treatment System (south) (see Figure 1 and photos 1 and 2).				
1. West side (Channel A) flowing normal, channel ports open.			✓	
2. East side (Channel B) flowing normal, channel ports open.			✓	
3. Fence needs repair and tightening along east side.	✓			Kevin 8 hrs.
Upper Watkins Wetland Isolation Project (north) (see Figure 2 and photos 3 and 4).				
1. Ditches and overflow structures in good condition.			✓	
2. Field erosion along north ditch (David Bates property). Have owner consider a buffer strip.		✓		Merle 4 hrs.
3. Fence needs repair and tightening.	✓			Kevin 8 hrs.
Annandale Wetland Treatment System (see Figure 3 and photos 5, 6, and 7).				
1. Ditch and overflow structure in good condition.			✓	
2. Large beaver dam on SW ditch. Remove dam, cut away brush and clean culverts.	✓			$2,000
School Section Lake Outlet Project (see photo 8).				
1. Outlet structure and culverts in good condition.			✓	
2. Downstream culvert and structures in good condition.			✓	
3. Water level 4 feet below overflow level.			✓	
Pleasant Lake Outlet Project (see photo 9).				
1. Outlet structure in good condition.			✓	
2. Water level 8 in. below overflow level.			✓	

Table 1
Clearwater River Watershed District
Annual Project Inspection
May 2002

Project	Maintenance			Estimated Cost
	Required	Optional	No Action Now	
Kingston Wetland Treatment System (see Figure 4 and photos 10, 11, 12, and 13).				
1. Sediment has filled in 500 LF of 900 ft. long sedimentation basin (see photo 13). 3,000 C.Y.	✓			$12,000
2. Berm washout downstream of sedimentation basin (see Photo 12).	✓			$3,000
3. Fence repair and tightening.	✓			Kevin 16 hrs.
Aerator Buildings (see photo 14).				
1. Lake Augusta – building needs staining and trim brush away.	✓			Kevin 4 hrs.
2. Lake Marie – building needs new door and staining and trim brush away.	✓			Kevin 8 hrs. $300
Carp Trap Project (see photo 15).				
1. Carp trap in good condition.			✓	
Lake Augusta Erosion Control Project (see Figure 5 and photos 16 and 17).				
1. Sedimentation basin in good condition.			✓	
2. Drop manhole structure in good condition. Needs riprap (3 C.Y.)	✓			$700
3. Buffer strip working extremely well.			✓	
Clear Lake Sedimentation Basin (south) (see photos 18).				
1. Sedimentation basin in good condition.			✓	
Clear Lake Wetland Outlet Structure (northeast)(see photo 19).				
1. Outlet structure in good condition.			✓	
Hidden River Sewage Treatment Facility (see photo 20).				
1. Treatment facility in good condition.			✓	

Figures



CLEARWATER RIVER WATERSHED DISTRICT

Watkins Wetland Treatment System

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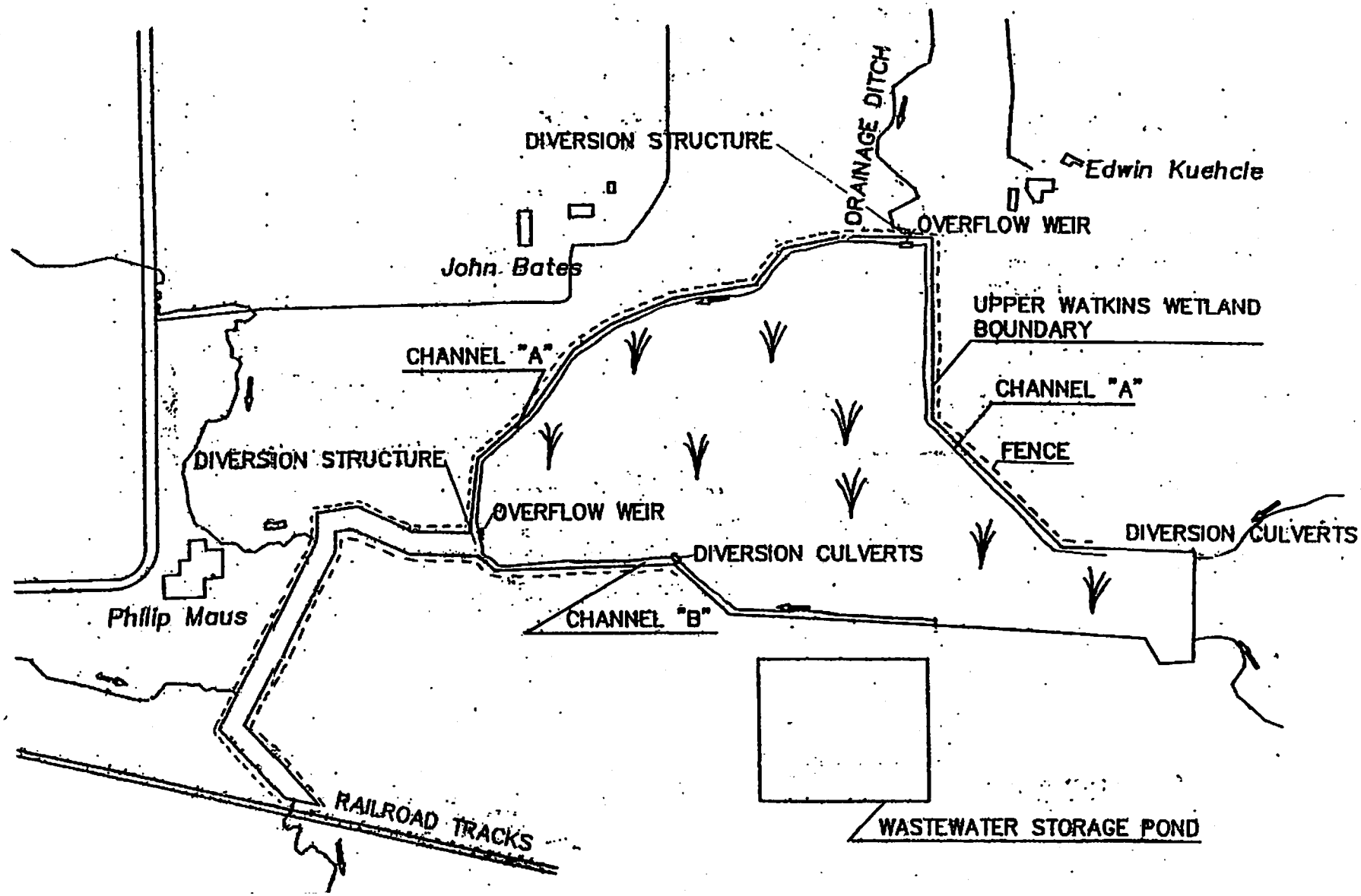
Wenck Associates, Inc.
Environmental Engineers

1800 Pioneer Creek Center P.O. BOX 428
Maple Plain, MN 55359-0428

MAY 2002

FIGURE 1



FILE	watkins2.DWG
DATE	5-16-02 AJP

L:0002/47/watkins2.DWG

CLEARWATER RIVER WATERSHED DISTRICT

Upper Watkins Wetland Isolation Project

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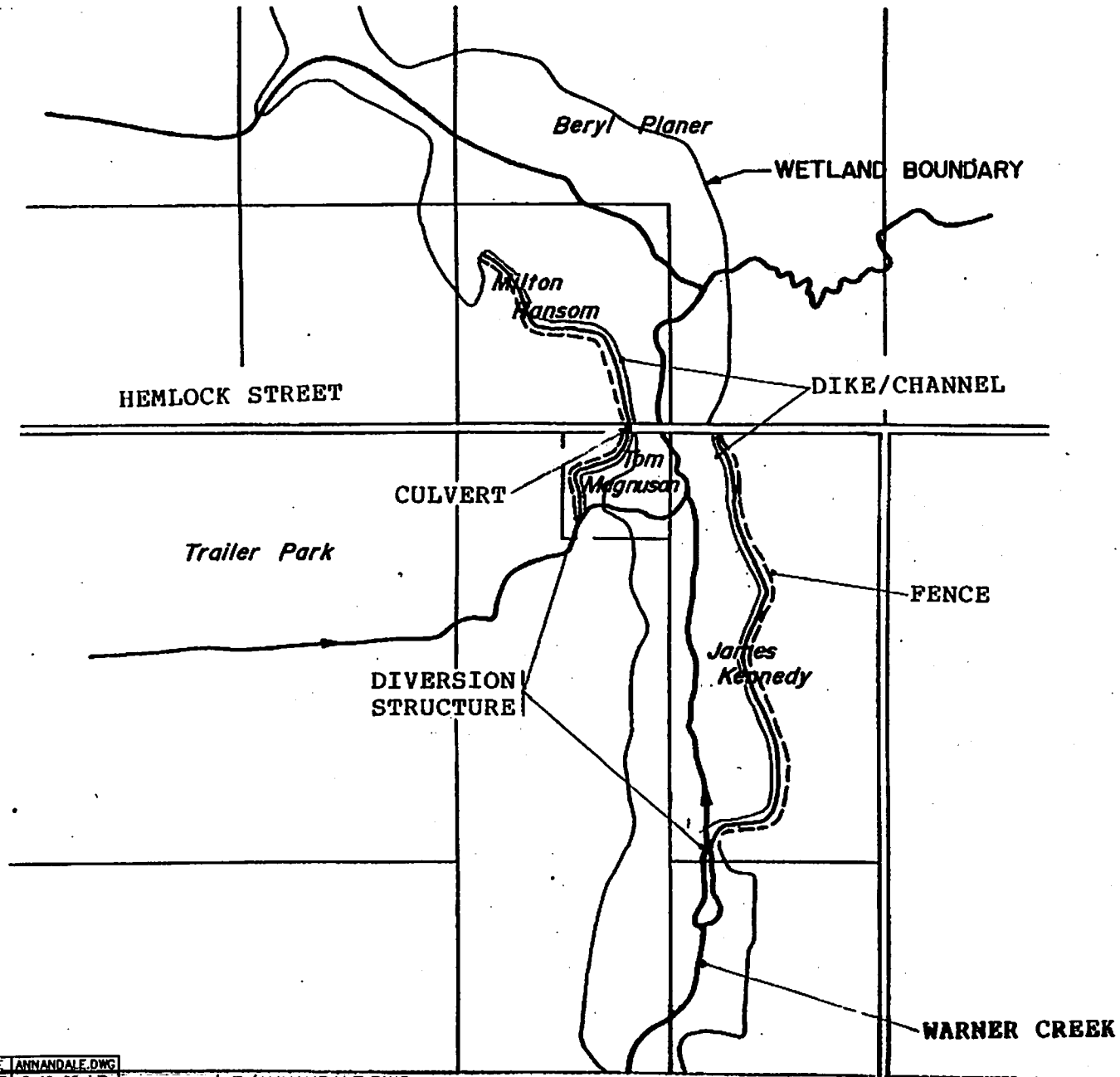
Wenck Associates, Inc.
Environmental Engineers

1600 Pioneer Creek Center P.O. BOX 428
Maple Plain, MN 55359-0428

MAY 2002

FIGURE 2



FILE ANNANDALE.DWG
DATE 5-16-02 AJP

L:0002/47/ANNANDALE.DWG

CLEARWATER RIVER WATERSHED DISTRICT

Annandale Wetland Treatment System

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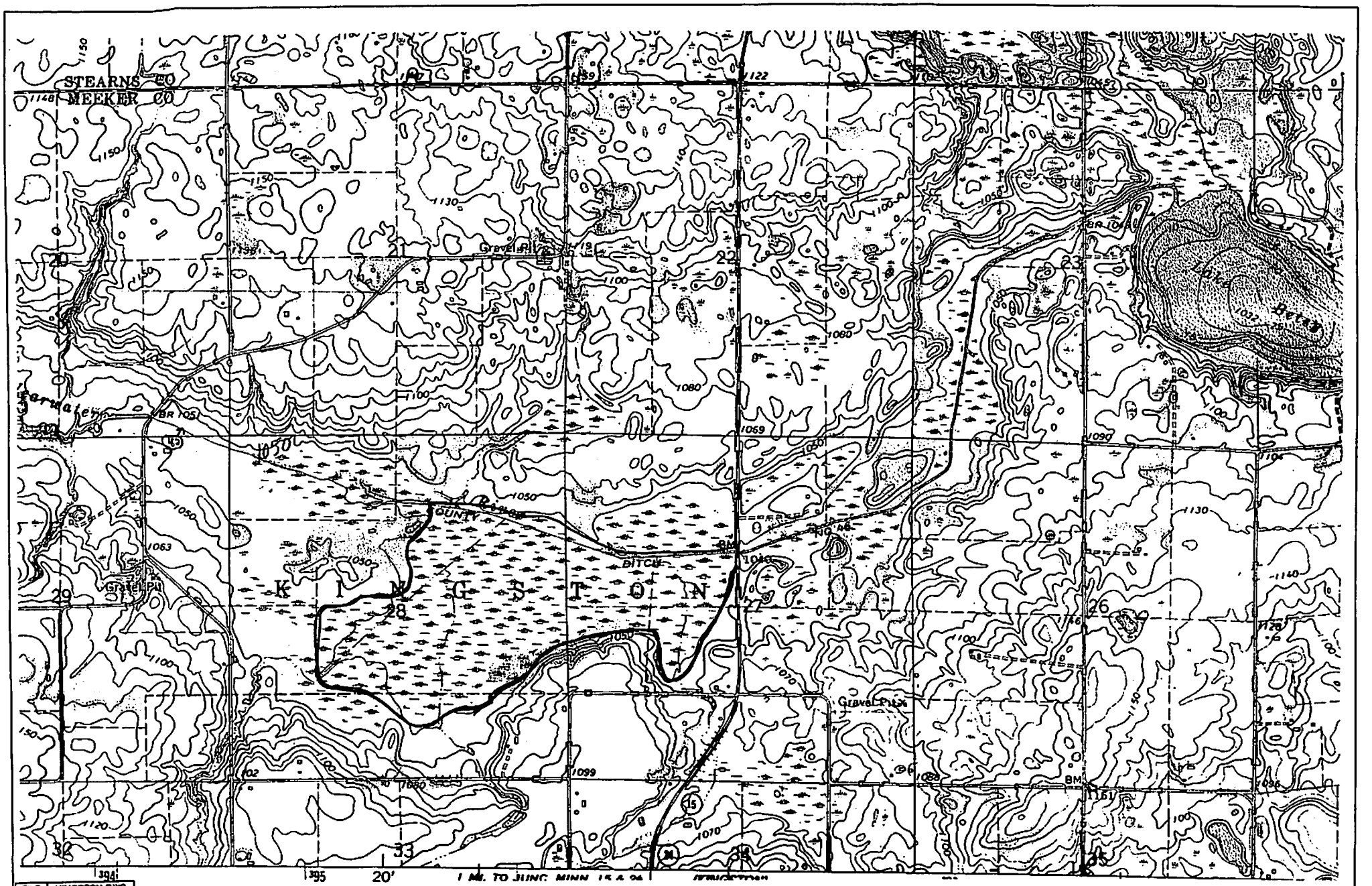
Wenck Associates, Inc.
Environmental Engineers
1800 Pioneer Creek Center P.O. BOX 428
Maple Plain, MN 55359-0428

MAY 2002

FIGURE 3



FILE	KINGSTON.DWG
DATE	5-16-02 AJP

L:0002/47/KINGSTON.DWG

CLEARWATER RIVER WATERSHED DISTRICT

Kingston Wetland Treatment System

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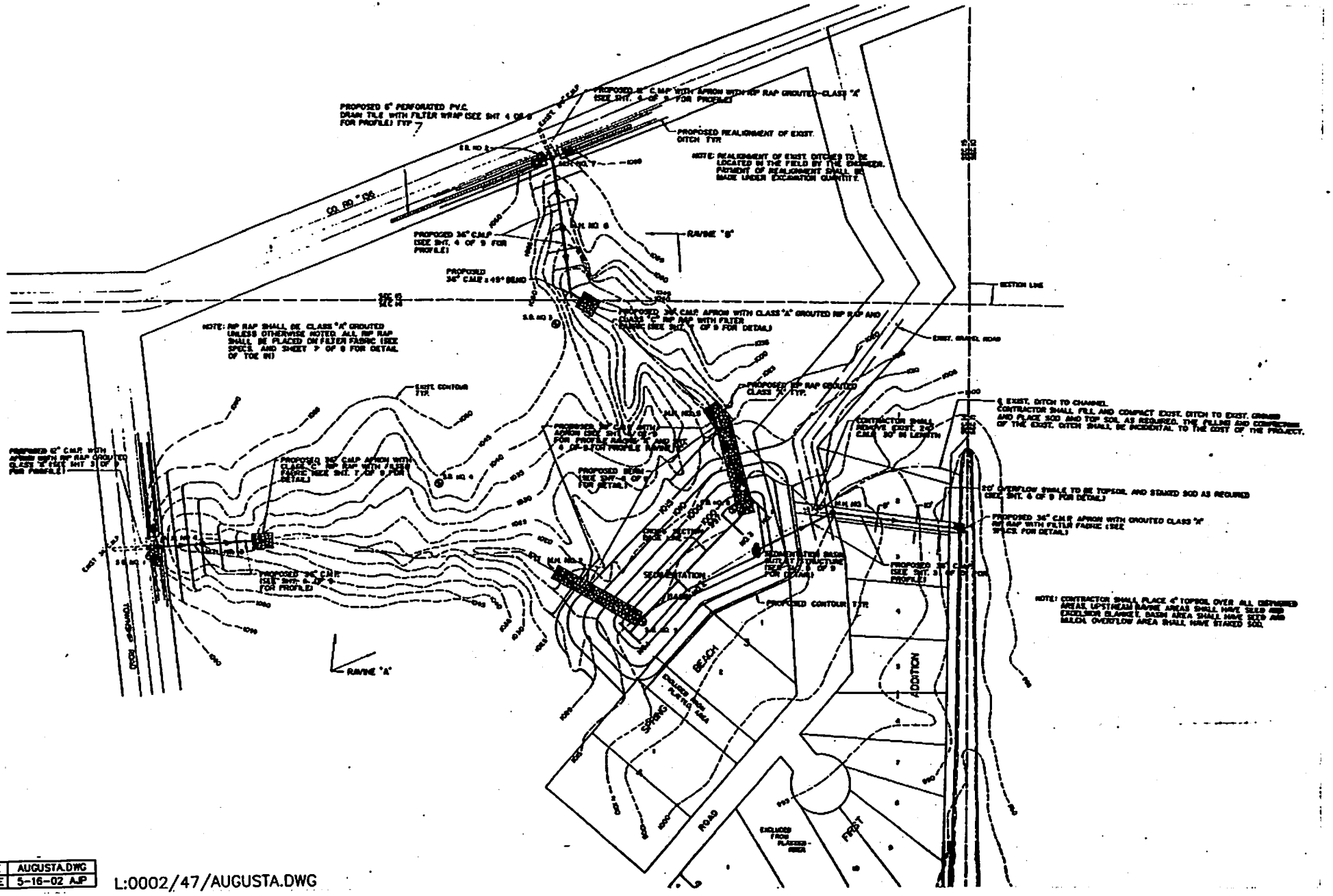
Wenck Associates, Inc.
Environmental Engineers

1800 Pioneer Creek Center P.O. BOX 428
Maple Plain, MN 55359-0428

MAY 2002

FIGURE 4



FILE	AUGUSTA.DWG
DATE	5-16-02 AJP

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CLEARWATER RIVER WATERSHED DISTRICT

Lake Augusta Erosion Control Project

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Wenck Associates, Inc.
Environmental Engineers
1800 Pioneer Creek Center P.O. BOX 428
Maple Plain, MN 55359-0428

MAY 2002

FIGURE 5

Photographs

Photograph 1: Watkins Wetland – West Side (Channel A)

Photograph 2: Watkins Wetland – East Side (Channel B) (maintained in 2001)

Photograph 3: Upper Watkins Wetland – West Overflow Structure

Photograph 4: Upper Watkins Wetland – North Ditch

Photograph 5: Annandale Wetland – Outlet Structure

Photograph 6: Annandale Wetland – Beaver Dam in SW channel

Photograph 7: Annandale Wetland – Northwest Ditch

Photograph 8: School Section Lake – Outlet Structure

Photograph 9: Pleasant Lake – Outlet Structure

Photograph 10: Kingston Wetland – East Ditch

Photograph 11: Kingston Wetland – West Ditch

Photograph 12: Kingston Wetland – Break in berm

Photograph 13: Kingston Wetland – Sedimentation Basin

Photograph 14: Lake Marie – Aeration Building

Photograph 15: Carp trap – Clearwater River

Photograph 16: Lake Augusta Erosion Control Project – Sedimentation Basin

Photograph 17: Lake Augusta Erosion Control Project – Outlet Structure

Photograph 18: Clear Lake Sedimentation Basin (south)

Photograph 19: Clear Lake Northeast Wetland – Outlet Structure

Photograph 20: Hidden River Sewage Treatment Facility

330 SO. CLEVELAND ST.
CAMBRIDGE, MN 55008
LAB (763) 689-2175
FAX (763) 689-1092
info@midwestanalytical.com

MIDWEST ANALYTICAL SERVICES

MINNESOTA CERTIFIED LABORATORY
NUMBER 027-059-156

WISCONSIN CERTIFIED LABORATORY
NUMBER 999-788-790

SUMMARY REPORT

City of Annandale - US Filter
0000
Annandale, MN 00000
SAMPLED: 04/17/02
RECEIVED: 04/18/02

Project: Annandale WWTP
Project Number: none
Project Manager: William McNellis
REPORTED: 05/07/02 14:18

LAB #			0201575-01	0201575-02	-	-	-	-
SAMPLE ID	Minimum		Pond Eff_	Pond Eff_	-	-	-	-
MATRIX	Reporting Limit		Water	Water	-	-	-	-
Chemistry Parameters by APHA/EPA Methods								
Total Kjeldahl Nitrogen	0.5	mg/L	14.9	-	-	-	-	-
Biochemical Oxygen Demand	1	mg/L	14	-	-	-	-	-
pH - Laboratory		pH Units	7.8 [2]	-	-	-	-	-
Total Phosphorus	0.03	mg/L	3.41	-	-	-	-	-
Total Suspended Solids	1.3	mg/L	10.4	-	-	-	-	-
Microbiological Parameters by APHA Std Methods								
Fecal Coliform Bacteria	10	CFU/100 ml	-	<10 [1]	-	-	-	-

Special Notes:
1 = Sample analyzed outside of 6 hour holding time.
2 = This sample was analyzed outside the EPA recommended holding time.

Midwest Analytical Services

Larry Kidder 5/7
Microbiology Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

330 SO. CLEVELAND ST.
CAMBRIDGE, MN 55008
LAB (763) 689-2175
FAX (763) 689-1092
info@midwestanalytical.com

MIDWEST ANALYTICAL SERVICES

MINNESOTA CERTIFIED LABORATORY
NUMBER 027-059-156

WISCONSIN CERTIFIED LABORATORY
NUMBER 999-728-750

SUMMARY REPORT

City of Annandale - US Filter	**Project:** Annandale WWTP
0000	**Project Number:** none
Annandale, MN 00000	**Project Manager:** William McNellis
SAMPLED: 04/18/02	**REPORTED:** 05/03/02 12:40
RECEIVED: 04/19/02	

LAB #			**0201589-01**	**0201589-02**	**0201589-03**	**0201589-04**	-	-
SAMPLE ID	Minimum		Ditch	Ditch	WWTP Runoff	WWTP Runoff	-	-
MATRIX	Reporting Limit		Water	Water	Water	Water	-	-
Chemistry Parameters by APHA/EPA Methods								
Total Phosphorus	0.03	mg/L	1.01	-	0.494	-	-	-
Microbiological Parameters by APHA Std Methods								
Fecal Coliform Bacteria	10	CFU/100 ml	-	150 [1]	-	80 [1]	-	-

Special Notes:

1 = Sample analyzed outside of 6 hour holding time.

Midwest Analytical Services

Larry Kidder
Microbiology Manager

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Maple Plain, MN 55359-0249
(763) 479-4200
Fax (763) 479-4242