

SPRING LAKE ESTATES HOME OWNERS ASSOCIATION



P.O. Box 5701
Rockford, IL 61125

2019 INSPECTION REPORT Permit No. 17607 Dam ID No. IL 00545

SPRING LAKE DAM
WINNEBAGO, COUNTY, ILLINOIS

ARC DESIGN
RESOURCES INC.

Observed by:
Arc Design Resources, Inc.
5291 Zenith Parkway
Loves Park, IL 61111

Revision Date: November 27, 2019



Table of Contents

1. Use of the Lake	3
2. Operations	3
3. Emergency Conditions	3
4. 2019 Observed Deficiencies and Recommendations	4
5. Annual and Semi-Annual Maintenance	7
6. Owner's Maintenance Statement	12

Tables and Figures

Site photos	13
IDNR Inspection Forms	16
Plat Maps from Previous Reports	33

Use of the Lake

Spring Lake is used for recreational purposes. Small sailboats, canoes, rowboats, or kayaks are used on the lake by the residents of Spring Lake Estates. Electric trolling motors are allowed, gas powered engines are not.

Operations

The lake serves two functions. One is for the recreational and aesthetic value described above. The other is to provide storm water management for the subdivision development. The lake level is controlled by a square concrete spillway with a 60" diameter pipe outfall to Spring Creek. The normal water level is estimated to be 839.56 based on WinGIS data. The high-water elevation is calculated to be 843.55. the top of the dam is approximately 844.5. Storm water will flow into the principle spillway once it reaches an elevation higher than 839.56 and will flow into the emergency spillway at elevation 843.55. At the high-water level, the dam stores approximately 36 acre-feet of water.

Once water begins to flow over the emergency spillway, access to the houses on the south end of Montlake Drive will be impaired and potentially dangerous. During extreme flood events, first responders will be directed to contact homeowners in this area for assistance.

Emergency Conditions

Emergency Conditions (some of this material is taken from Hanson's 2018 report) - If a condition arises where there is a possibility of dam failure, then the following procedures will be followed:

1. The lake level can be lowered by opening the dewatering valve (providing the valve is operational, and access can be safely achieved). This valve should only be opened if there is a possibility of dam failure when the lake is not in a flood condition. During extreme flooding conditions, it is not safe to access the dewatering valve. During extreme flooding, the dewatering valve does not significantly increase discharge from Spring Lake so it is not imperative the valve be opened.
2. Provisions will be made to obtain equipment in a ready condition in case it is necessary to breach the dam in a controlled manner. The breach locations shall be determined considering operator safety and the level of downstream safety. The primary location for the breach shall be the easternmost end of the. A breach at the east end will keep excess flood waters in the existing

creek channel and limit damage to the existing dam outfall structures and systems.

3. The lake, the primary spillway, and the dam will be monitored for changes in conditions.

4. The following agencies will be notified by the Spring Lake Estates Home Association of the condition of the Spring Lake Dam.

(1) Emergency 911 for the City of Rockford

(2) Illinois Department of Natural Resources - Dam Safety Engineer,
Telephone Number (217) 782-4427.

(3) Illinois Emergency Management Agency
Telephone Number (800) 782-7860 (only from within Illinois)

(4) *Winnebago County Emergency Services Disaster Agency - Civil
Defense
Telephone No. (815) 966-2900*

(5) *Rockford Police
Telephone Number (815) 966-2900*

(6) *Rockford Public Works Department
Telephone Number (779) 348-7300
After Hours (779) 348-7260*

5. *These agencies should alert the public concerning the status of the dam and advise as to appropriate actions to take to prevent the loss of life and property damage. However, such notification and advice will in no way relieve the Spring Lake Estates Home Association from liability in case of dam failure. The Spring Lake Home Association should keep their insurance policy for the dam and the associated impoundment in force.*

6. *If possible, any item, including debris, which is interfering with the normal flow over the primary and emergency spillways, will be removed.*

7. *A subsequent re-inspection of the dam will be performed by a Professional Engineer to determine possible causes of failure and possible corrective actions to take.*

2019 Observed Deficiencies and Recommendations

Dam inspection observations revealed several items needing repair or maintenance. The items listed in the following repair inventory fall into the category defined in the dam inspection Condition Codes as minor maintenance needed within the next year (MM) or

immediate maintenance to restore the dam to its original intended safety or integrity (IM). Items like long term vegetation restoration fall into the category requiring ongoing observations to make sure that the intended goal of the turf restoration is achieved.

Recommendations on sloughing repairs and minor holes are listed in the inventory. Placement of compacted clay soil means compacting the soil to 95% of the soil's maximum density. To achieve this density, the soil must be placed in lifts or layers not exceeding 8" in total thickness. Once each layer is correctly compacted, the next layer of soil may be added and compacted. This systems of placing, compacting, and adding the additional soil shall be repeated until the desired depth of fill placement is reached. Compacted clay soil should be placed until the depth of hte clay is within 4" of the existing dam surface. The final four inches are reserved for the placement of topsoil.

Seeding of all repaired areas shall follow the specifications listed herein. Optimal times for seeding occur in the first two weeks of May or the first two weeks of September.

Reconstruction of the rip rap shoreline protection must follow the detail included in this report. The shoreline protection repairs should take place at locations where sloughing or holes in the dam are repaired. Each section of shoreline protection repair should be at least 6 feet long for each section repaired. The goal of this approach is to repair the shoreline protection along the entire length of the dam over the term of the next ten years of dam repairs.


Spring Lake Dam Repair Inventory

Repair items noted from dam inspection on October 31, 2019

This inventory accompanies the dam site plan showing WinGIS property lines, ground contours, an underlying aerial photo and notations of various items requiring maintenance or repair. This inventory is meant to assist property owners in determining what items are located on their property that are in need of maintenance.		
Item Description on Dam Site Plan	Detailed Description	Repair Recommendation
Minor sloughing along bank	Soil embankment slope has become steeper due to lack of stabilizing rip-rap	When lake level is down 2 feet, recompact weakened soil plane, add compacted clay, line with geotextile fabric, pull up sloughed rip rap along repaired slope to two feet above normal water level.
Hole 1	6" diameter hole in surface of dam face	Remove vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Hole 2	6" diameter hole in surface of dam face at water level	Remove vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Hole 3	3-4" diameter hole in surface of dam face	Remove vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
7 small trees in this area, four on the back slope of the dam must be removed	3 of the 7 trees in this area must be removed because they are on the back slope of the dam. The remaining trees are in the creek channel.	Remove tree, cut stump off level with ground surface, treat stump with herbicide.
Hole 4	3-4" diameter hole in surface of dam face, back slope	Remove vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Hole 5	3-4" diameter hole in surface of dam face	Remove vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Hole 6	3-4" diameter hole in surface of dam face	Remove vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Hole 7	4' x 3' slough in surface of dam face upslope from rip-rap	Remove dislodged soil and vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Hole 7a - related to adjacent slough	2' x 2' slough in surface of dam face upslope from rip-rap	Remove dislodged soil and vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Hole 8	minor slough in surface of dam face	Remove dislodged soil, remove vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Vegetation along the back slope of the embankment must be removed	Evergreen plants on both sides of elevated walkway to dam	Remove plant material and roots. Replace disturbed soil with compacted clay, cover with 4" of topsoil, apply specified seed mix.
Hole 9, animal bore	2" diameter hole in surface of dam face	Remove vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Hole 10	3-4" diameter hole in back slope surface of dam face	Remove vegetation, fill with compacted clay, cap with 4" of topsoil, seed with specified seed mix.
Vegetation along both sides of the dam embankment must be modified	Excessive plant growth on dam embankment is not acceptable.	Remove woody plant material and roots. Replace disturbed soil with compacted clay, cover with 4" of topsoil, apply specified seed mix.
Principle spillway with newly fabricated metal grate.	Principle spillway, top grate, 60" dia pipe outfall.	Lake drawdown valve must be modified to be operational from top of new metal grate. A manually operated gate valve is recommend with an extended valve shaft and operating wheel.
Emergency spillway location from observation.	The emergency spillway appears to be set at the appropriate grade and will function as originally designed. WinGIS does not show the overland flood route easements as shown on the original construction plans.	Consider replatting a portion of the property to correctly show the overland flood route in a properly sized drainage easement. Priority is low.

Turf restoration will require more arduous efforts. Tree removal in the zone of the dam embankment, as shown on the exhibits is required. The 4" diameter tree and larger must have the stumps removed and backfilled with compacted clay and topped with 4"

of locally sourced topsoil. Trees smaller than 4" diameter should be cut level with the existing grade and treated with a herbicide. Trees and branches must also be removed from the slopes. Once cleared of trees and woody shrubs, the remaining vegetation must be mowed with a brush hog or large rotary mower. Overgrowth should be removed from the slopes to reduce the presence of existing seeds. Optimal times of the year to complete this work are before or after the growing seasons. Once the overgrowth is removed, the dam embankments are to be seeded with the seed mix as specified below.

IDOT Class 2 Roadside Mix

Application Rate: 200 lbs./acre

Pure Seed	Description	Germination	Source Origin
49.33%	Inferno Tall Fescue	98%	OR
24.29%	Perennial Ryegrass*	96%	OR
19.59%	Creeping Red Fescue*	88%	CAN
4.87%	Red Top	85%	IL

0.00% Other Crop

0.05% Weed Seed

1.87% Inert Matter

Noxious Weeds: NONE

*Variety Not Stated

Date Tested 1/19

IL. Permit 2411

Net Weight 50 lb. / 22.68 kg.

Sell By 1/20

Source: Martenson Turf Products, Inc.

250 W. Adams

P.O. Box 218

Waterman, IL 60556-0218

Phone: 800-833-2290

Fax: 815-264-3324

Website: www.mtp78.com

This process may take one or more growing seasons to provide a homogeneous turf coverage on the earth embankment. The resultant turf coverage can be mowed twice per year. The grass will be visually acceptable long or mowed.

Other required maintenance items are defined in the inventory.

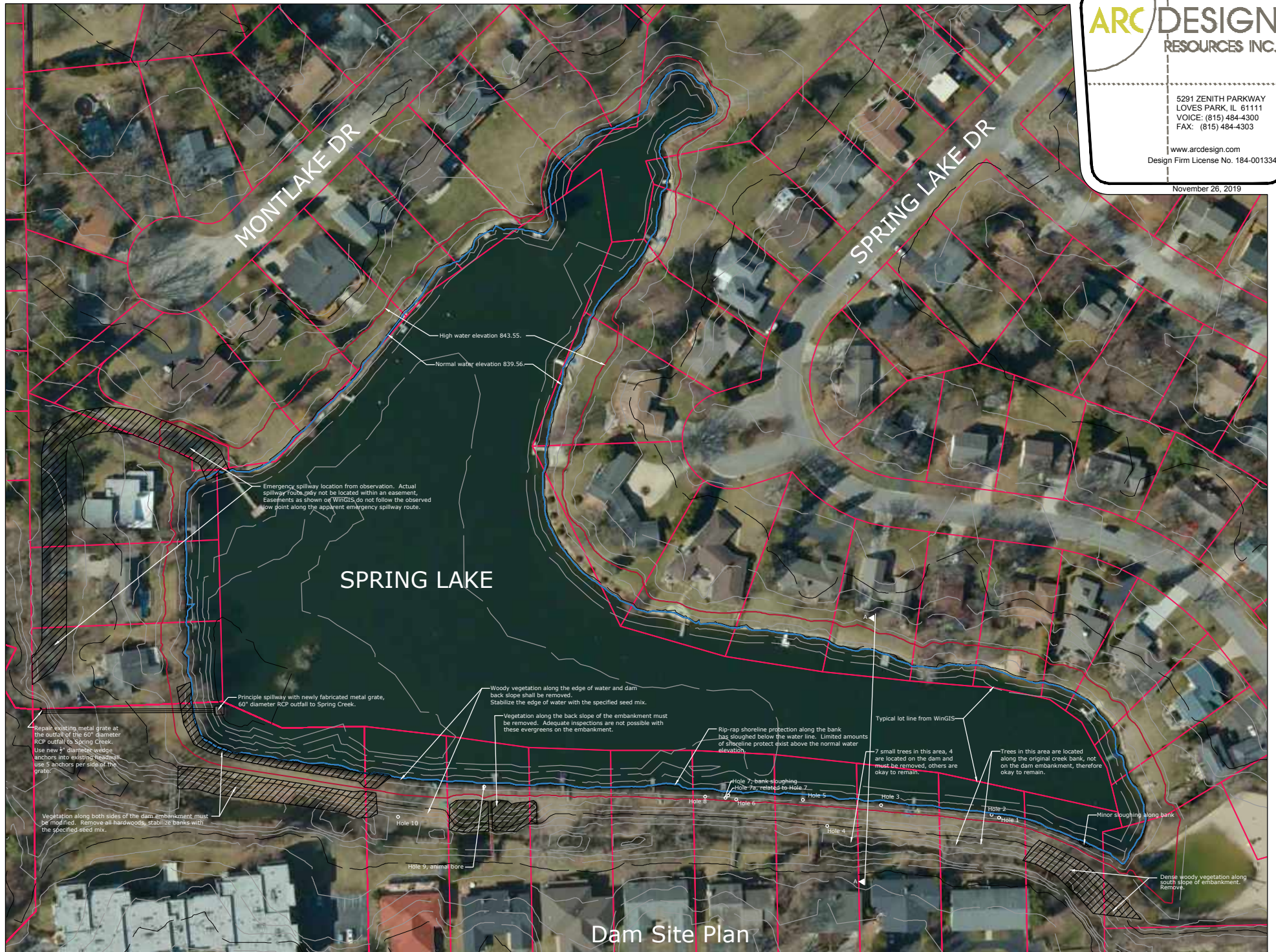
Annual and Semi-Annual Maintenance

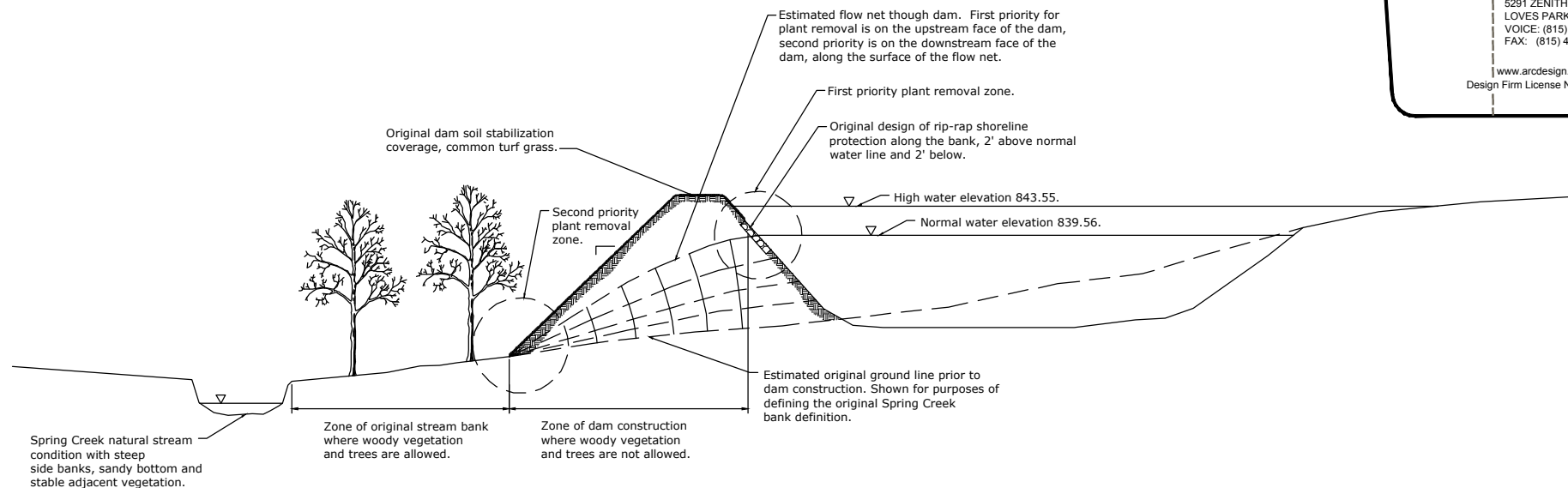
A regular maintenance program is recommended and should include the following:

1. The dewatering valve will be exercised three times per year (Spring, Summer, and Fall), to ensure that it is operable. Moving parts will be lubricated in the Spring and Fall.
2. The slope of the upstream and downstream dam face will be kept clear of brush and tree growth. The slope will be maintained in a grass condition with a mowed height of 6 inches or less.

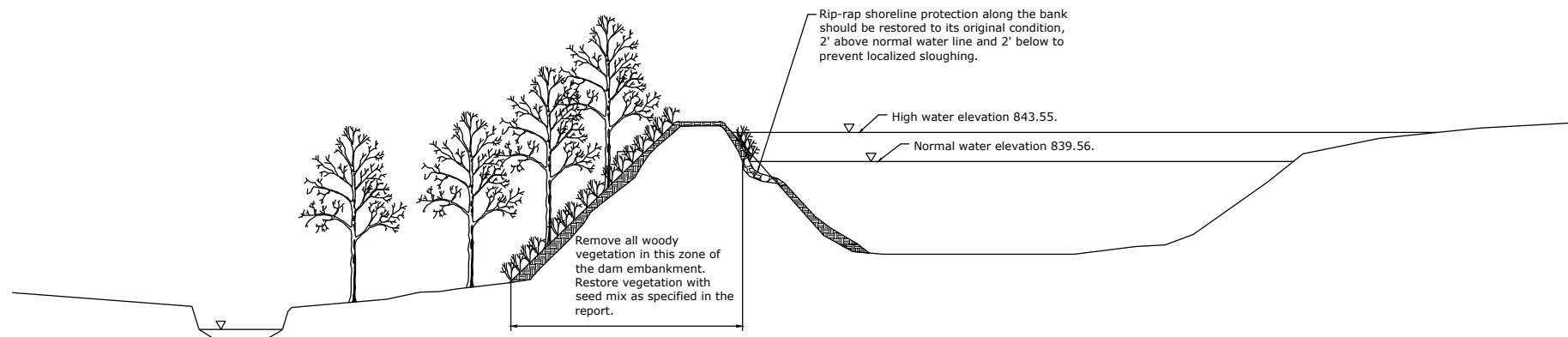
3. Semi-annual inspections will be made for animal habitations in the dam face. Animal habitations that are found will be destroyed, filled with compacted earth, and seeded.

Additional information on dam safety, maintenance and modes of dam failure can be found on the Illinois Department of Natural Resources Dam Safety website. <https://damsafety.org> > illinois





Original Design Dam Cross Section Schematic A-A



2019 Existing Dam Cross Section Schematic A-A

SUMMARY OF MAINTENANCE DONE AND/OR
REPAIRS MADE SINCE THE LAST INSPECTION

DATE OF PRESENT INSPECTION	<u>November 27, 2019</u>
DATE OF LAST INSPECTION	<u>November 28, 2016</u>

1. EARTH EMBANKMENT DAMS

2. CONCRETE MASONRY DAMS

3. PRINCIPAL SPILLWAY

New grate on top of structure

4. OUTLET WORKS

Grate on outlet pipe repaired

5. EMERGENCY SPILLWAY

Owner's Maintenance Statement

I, Tosh Spencer President, SLEHA owner of Spring Lake dam,
Dam Identification Number 00545 in Winnebago County,
am maintaining the dam in accordance with the accepted maintenance plan which is part of
Permit Number 17607.



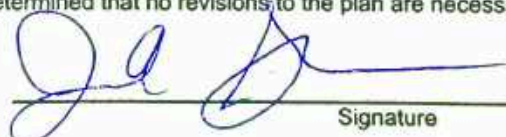
Signature
12/20/19

Date

Owner's Operation and Maintenance Plan Statement

I, Tosh Spencer, President, SLEHA owner of Spring Lake dam,
Dam Identification Number 00545 in _____ County,
have reviewed the operation and maintenance plan including the Emergency Action Plan (EAP),
which is part of, Permit Number 17607.

I ☐ have enclosed the appropriate revisions or
☒ have determined that no revisions to the plan are necessary.



Signature
12/20/19

Date

The Department of Natural Resources is requesting information that is necessary to accomplish the statutory purpose as outlined under the River, Lakes and Streams Act, 615
ILCS 5. Submittal of this information is REQUIRED. Failure to provide the required information could result in the initiation of non-compliance procedures as outlined in
Section 3702.180 of the "Rules for Construction and Maintenance of Dams".



Principal spillway – new trash rack



Inside the drop inlet, draw down



East end of dam, shoreline sloughing



East end, dam back slope, tree coverage.



Sloughing on dam face, multiple locations. Mostly good turf coverage.





Poor dam vegetation coverage



Shoreline vegetation to be removed.



Planters and stump removal required.



Excessive vegetation to be removed.





Outfall pipe grate.



Emergency spillway over an access road.



Newly planted oak trees, remove the three trees on the dam.



Hole 2 - repair



Hole 1 - repair

Dam Inspection Report

Name of Dam Spring Lake Dam Dam ID No. IL 00545

Permit Number 17607 Class of Dam II

Location NE 1/4 Section 9 Township 44N Range 2E- 3rd Principal Meridian

Owner Spring Lake Estates Home Owners Assn. (815) 218-1662
Name Telephone Number (Day)

P.O. Box 5701
Street Telephone Number (Night)

Rockford 61125 County Winnebago
City Zip Code

Type of Dam Earthen fill

Type of Spillway Concrete box drop inlet

Date(s) Inspected 31-Oct-19

Weather When Inspected Partly Cloudy, Calm

Temperature When Inspected 48°

Pool Elevation When Inspected Normal Pool 839.56

Tailwater Elevation When Inspected Normal 830 +/-

Inspection Personnel:

Joseph R. Altenhoff, P.E. Project Manager
Name Title

Name Title

Professional Engineer's Seal
Name Title

The Department of Natural Resources is requesting information that is necessary to accomplish the statutory purpose as outlined under the River, Lakes and Streams Act, 615

ILCS 5. Submittal of this information is REQUIRED. Failure to provide the required information could result in the initiation of non-compliance procedures as outlined in

Section 3702.160 of the "Rules for Construction and Maintenance of Dams".

CONDITION CODES

- NE - No evidence of a problem
- GC - Good condition
- MM - Item needing minor maintenance and/or repairs within the year, the safety or integrity of the item is not yet imperiled
- IM - Item needing immediate maintenance to restore or ensure its safety or integrity
- EC - Emergency condition which if not immediately repaired or other appropriate measures taken could lead to failure of the dam
- OB - Condition requires regular observation to ensure that the condition does not become worse
- NA - Not applicable to this dam
- NI - Not inspected - list the reason for non-inspection under deficiencies

EARTH EMBANKMENT

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Surface Cracks	NE, GC		
Vertical and Horizontal Alignment of Crest	NE, GC		
Unusual Movement or Cracking At or Beyond Toe	NE		
Sloughing or Erosion of Embankment and Abutment Slopes	MM	Several locations of minor sloughing, animal bores or other small diameter holes	fill holes, repair sloughing, restore shoreline rip rap bank protection to provide the required minimum bank stabilization. Refer to dam site plan for specific locations
Upstream Face Slope Protection	MM, IM, OB	excessive vegetative cover must be removed. Detailed observations not possible with existing coverage	Remove woody and tall weeds. Reestablish turf using a specified seed mix as detailed in this report. Observe for the next two growing seasons for achievement of intended goal of uniform earthen embankment turf protection along entire 1,300 feet of dam.
Seepage	NE, GC		
Filter and Filter Drains	N/A		No drains or drain outfalls observed.

EARTH EMBANKMENT

(Continued)

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Animal Damage	MM	One animal bore hole observed, see dam site plan	fill hole, reseed
Embankment Drainage Ditches	NE		
Vegetative Cover	MM, IM, OB	Significant variability of vegetative cover is a problem for the earthen dam. Tree and woody vegetation exists on the	Brush hog areas of dam where vegetation is greater than 3" in height. Remove trees, remove planted landscape beds, remove woody shrubs. Apply herbicide to tree stumps. Apply seed and fertilizer to establish a uniform turf ground cover for the entire dam length. Observe semi-annually until goal is achieved.
Shoreline wave and water level protection	MM	Rip rap shoreline protection has sloughed in many areas along the shoreline. Lack of the rip rap shoreline protection is a leading cause of minor sloughing.	Incrementally attack this problem when the lake levels can be dropped by at least 2 feet. Either by machine or hand method, pull up the sloughed rip rap back into place along the shore after the shore has been regraded and protected with geotextile fabric to accept the relocated rip rap shoreline protection.
Other			
Other			
Other			

CONCRETE OR MASONRY DAMS

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Seepage	N/A		
Structure to Abutment/ Embankment Junctions	N/A		
Water Passages	N/A		
Foundation	N/A		
Surface Cracks in Concrete Surfaces	N/A		
Structural Cracking	N/A		
Vertical and Horizontal Alignment	N/A		

CONCRETE OR MASONRY DAMS

(CONTINUED)

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Monolith Joints	N/A		
Construction Joints	N/A		
Spalling of Concrete	N/A		
Filters, Drains, etc.	N/A		
Riprap	N/A		
Other (Name)	N/A		

IF THE DAM IS GATED - Fill out the portion of the Principal Spillway Form related to Gated Spillways

PRINCIPAL SPILLWAY
APPROACH CHANNEL

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Debris	N/A		
Side Slope Stability	N/A		
Slope Protection	N/A		
Other (Name)			
Other			
Other			
Other			

PRINCIPAL SPILLWAY

☒ Drop Inlet Spillway

☐ Overflow Spillway Structure

☐ Gated

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Erosion, Spalling, Cavitation	NE, GC		
Structure to Embankment Junction	NE, GC		
Drains	N/A		
Seepage Around or Into Structure	NE, GC		
Surface Cracks	NE, GC		
Structural Cracks	NE, GC		

IF THE SPILLWAY IS GATED FILL OUT THE GATES SECTION

PRINCIPAL SPILLWAY

(Continued)

☒ Drop Inlet Spillway☐ Overflow Spillway Structure☐ Gated

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Alignment of Abutment Walls	N/A		Drop structure appears to be a single poured vertical concrete box in good condition.
Construction Joints	GC		Concrete pipe outfall was observed its full length. Pipe joints all appeared in good condition.
Filter and Filter Drains	N/A		
Trash Racks	GC		Newly constructed rack is in good condition.
Bridge and Piers	N/A		
Differential Settlement	GC		At normal pool elevation, water flows over the drop inlet on the west side of the vertical drop box. The box is not perfectly level but it is close. Currently this is not an issue.
Other (Name)			

IF THE SPILLWAY IS GATED FILL OUT THE GATES SECTION

PRINCIPAL SPILLWAY

(Continued)

☒ Conduit☐ Gated

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Erosion, Spalling, Cavitation	NE, GC		
Joint Separation	NE, GC		
Seepage Around of/ Into Conduit	NE, GC		
Surface Cracks	NE, GC		
Structural Cracks	NE, GC		
Trash Racks	NE, GC	Downstream end of conduit is fitted with a metal grate.	Secure the metal grate to the outlet headwall with at least five 1/2" diameter wedge anchors on the top and both sides of the grate.
Differential Settlement	NE, GC		
Alignment	NE, GC		
Other (Name)			

IF THE SPILLWAY IS GATED FILL OUT THE GATES SECTION

PRINCIPAL SPILLWAY

(Continued)

☐ Chute

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Erosion, Spalling, Cavitation	N/A		
Structure to Embankment Junction	N/A		
Construction Joints	N/A		
Expansion and Contraction Joints	N/A		
Differential Settlement	N/A		
Surface Cracks	N/A		
Structural Cracks	N/A		
Wall Alignment			
Other (Name)			

IF THE SPILLWAY IS GATED FILL OUT THE GATES SECTION

PRINCIPAL SPILLWAY

☒ Principal Spillway

☒ Dewatering

☐

Other: _____

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Gate Sill	GC		
Gate Seals	GC		
Gate and Frame	MM	The drawdown valve needs to be replaced due to age and inoperability from the top of the structure.	Replace the valve with a gate valve and provide a long valve stem with sufficient structural supports to allow for operation from the top of the trash rack.
Operating Machinery	MM		Gate cannot be operated from the top of the structure making maintenance of the gate difficult and somewhat dangerous.
Emergency Operating Machinery	N/A		
Other (Name)			
Other			

OUTLET WORKS
IF SEPARATE FROM PRINCIPAL SPILLWAY STRUCTURE

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Erosion, Spalling, Cavitation	N/A		
Joint Separation	N/A		
Seepage Around or Into Conduit	N/A		
Intake Structure	N/A		
Outlet Structure	N/A		
Outlet Channel	NE, GC		Water from the principle spillway discharges through the 60" RCP directly into Spring Creek. The headwall and channel leading to the main creek channel is short, less than 10 feet and in good condition.
Riprap			
Other (Name)			
Other			

ENERGY DISSIPATOR

Principal Spillway

Type: _____

Conduit



Outlet Works

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Erosion, Spalling, Cavitation	N/A		
Structure to Embankment Junction	N/A		
Construction Joints	N/A		
Surface Cracks	N/A		
Structural Cracks	N/A		
Differential Alignment	N/A		
Expansion and Contraction Joints	N/A		

ENERGY DISSIPATOR

(Continued)

☒

Principal Spillway

☐

Outlet Works

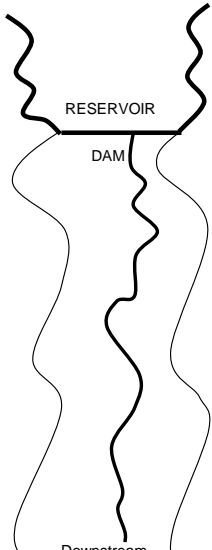
ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Riprap	GC		
Outlet Channel	GC		
Debris	NE		
Other (Name)			
Other			
Other			
Other			

EMERGENCY SPILLWAY☐ EarthOther: Name Earthen with paved roadway

ITEM	CONDITION CODE	DEFICIENCIES	RECOMMENDED REMEDIAL MEASURES AND IMPLEMENTATION SCHEDULE
Erosion	NE		
Weeds, Logs, Other Obstructions	NE		
Side Slope Sloughing	NE, GC		
Vegetation	GC		
Sedimentation	N/A		
Riprap	GC		
Settlement of Crest	NE		
Downstream Channel	GC		Spillway route includes flowing over a private drive. The roadway is clear of obstructions and is in good condition.
Other (Name)			

DOWNSTREAM DEVELOPMENT
APPROXIMATE WIDTH OF AFFECTED FLOODPLAIN

1 MILES

MILES DOWNSTREAM FROM DAM	DOWNSTREAM DEVELOPMENT										Loss of Life Potential			Economic Loss Potential			SKETCH IN DEVELOPMENTS DOWNSTREAM OF THE DAM				
	OCCUPIED HOMES	UNOCCUPIED HOMES	AGRICULTURAL BUILDINGS	INDUSTRIAL BUILDINGS	COMMERCIAL BUILDINGS	SCHOOLS	HOSPITALS	ROADS & BRIDGES	DAMS	OVERHEAD UTILITIES	OTHER DEVELOPMENT (Name)	OTHER DEVELOPMENT (Name)	NONE	1 TO 10	OVER 10	MINIMAL EXPECTED		APPRECIABLE EXPECTED	EXCESSIVE EXPECTED		
0 to 1/4	See exhibit attached below.												X			X					
1/4 to 1/2													X			X					
1/2 to 3/4													X			X					
3/4 to 1													X			X					
1 to 1-1/4													X			X					
1-1/4 to 1-1/2													X			X					
1-1/2 to 1-3/4													X			X					
1-3/4 to 2													X			X					
OVER 2													X			X					

The number of homes, buildings, or other items in the floodplain downstream of the dam should be placed in the appropriate row and column to designate their location.



The partial map from WinGIS shows the dam location and the downstream conditions which extend approximately 1 mile down stream to Alpine Road and Spring Creek. Residential development is located downstream but is situated outside of the floodway and floodplain. Data taken from 2016 FEMA information.

[illegible][illegible][illegible]

[illegible]

44-38861-1000 (Rev. 10-6-95) (Do not write on this label)
 FBI/DOJ - U.S. DEPARTMENT OF JUSTICE
 FEDERAL BUREAU OF INVESTIGATION
 1. NAME (Last, first, middle initial)
 2. DATE OF BIRTH (mm/dd/yyyy)
 3. SEX (M/F)
 4. RACE (A/B/C/D/E)
 5. HEIGHT (ft/in)
 6. WEIGHT (lb)
 7. EYES (C/B/R)
 8. HAIR (B/BK/BL/BR/GR)
 9. COMPLEXION (F/FW/T)
 10. BLOOD TYPE (A/B/AB/O)
 11. SOCIAL SECURITY NUMBER (99-99-9999)
 12. DATE OF ARREST (mm/dd/yyyy)
 13. ARRESTING AGENCY (FBI/DOJ)
 14. ARRESTING OFFICER (FBI/DOJ)
 15. ARRESTING OFFICER'S ID NUMBER (FBI/DOJ)
 16. ARRESTING OFFICER'S SIGNATURE (FBI/DOJ)
 17. ARRESTING OFFICER'S TITLE (FBI/DOJ)
 18. ARRESTING OFFICER'S AGENCY (FBI/DOJ)
 19. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 20. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 21. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 22. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 23. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 24. ARRESTING OFFICER'S CITY (FBI/DOJ)
 25. ARRESTING OFFICER'S STATE (FBI/DOJ)
 26. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 27. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 28. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 29. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 30. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 31. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 32. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 33. ARRESTING OFFICER'S CITY (FBI/DOJ)
 34. ARRESTING OFFICER'S STATE (FBI/DOJ)
 35. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 36. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 37. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 38. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 39. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 40. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 41. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 42. ARRESTING OFFICER'S CITY (FBI/DOJ)
 43. ARRESTING OFFICER'S STATE (FBI/DOJ)
 44. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 45. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 46. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 47. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 48. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 49. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 50. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 51. ARRESTING OFFICER'S CITY (FBI/DOJ)
 52. ARRESTING OFFICER'S STATE (FBI/DOJ)
 53. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 54. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 55. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 56. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 57. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 58. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 59. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 60. ARRESTING OFFICER'S CITY (FBI/DOJ)
 61. ARRESTING OFFICER'S STATE (FBI/DOJ)
 62. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 63. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 64. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 65. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 66. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 67. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 68. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 69. ARRESTING OFFICER'S CITY (FBI/DOJ)
 70. ARRESTING OFFICER'S STATE (FBI/DOJ)
 71. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 72. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 73. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 74. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 75. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 76. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 77. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 78. ARRESTING OFFICER'S CITY (FBI/DOJ)
 79. ARRESTING OFFICER'S STATE (FBI/DOJ)
 80. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 81. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 82. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 83. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 84. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 85. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 86. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 87. ARRESTING OFFICER'S CITY (FBI/DOJ)
 88. ARRESTING OFFICER'S STATE (FBI/DOJ)
 89. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 90. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 91. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 92. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 93. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 94. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 95. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 96. ARRESTING OFFICER'S CITY (FBI/DOJ)
 97. ARRESTING OFFICER'S STATE (FBI/DOJ)
 98. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 99. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 100. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 101. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 102. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 103. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 104. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 105. ARRESTING OFFICER'S CITY (FBI/DOJ)
 106. ARRESTING OFFICER'S STATE (FBI/DOJ)
 107. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 108. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 109. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 110. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 111. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 112. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 113. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 114. ARRESTING OFFICER'S CITY (FBI/DOJ)
 115. ARRESTING OFFICER'S STATE (FBI/DOJ)
 116. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 117. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 118. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 119. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 120. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 121. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 122. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 123. ARRESTING OFFICER'S CITY (FBI/DOJ)
 124. ARRESTING OFFICER'S STATE (FBI/DOJ)
 125. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 126. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 127. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 128. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 129. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 130. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 131. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 132. ARRESTING OFFICER'S CITY (FBI/DOJ)
 133. ARRESTING OFFICER'S STATE (FBI/DOJ)
 134. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 135. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 136. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 137. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 138. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 139. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 140. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 141. ARRESTING OFFICER'S CITY (FBI/DOJ)
 142. ARRESTING OFFICER'S STATE (FBI/DOJ)
 143. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 144. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 145. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 146. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 147. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 148. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 149. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 150. ARRESTING OFFICER'S CITY (FBI/DOJ)
 151. ARRESTING OFFICER'S STATE (FBI/DOJ)
 152. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 153. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 154. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 155. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 156. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 157. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 158. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 159. ARRESTING OFFICER'S CITY (FBI/DOJ)
 160. ARRESTING OFFICER'S STATE (FBI/DOJ)
 161. ARRESTING OFFICER'S ZIP CODE (FBI/DOJ)
 162. ARRESTING OFFICER'S COUNTRY (FBI/DOJ)
 163. ARRESTING OFFICER'S PHONE NUMBER (FBI/DOJ)
 164. ARRESTING OFFICER'S FAX NUMBER (FBI/DOJ)
 165. ARRESTING OFFICER'S E-MAIL ADDRESS (FBI/DOJ)
 166. ARRESTING OFFICER'S WEBSITE (FBI/DOJ)
 167. ARRESTING OFFICER'S ADDRESS (FBI/DOJ)
 168. ARRESTING OFFICER'S CITY (FBI/DOJ)
 169. ARRESTING OFFICER'S STATE (FBI/DOJ

FIRM
FLOOD INSURANCE RATE MAP
WINNEBAGO COUNTY,
ILLINOIS
AND UNINCORPORATED AREAS

PANEL 267 OF 415
 (ST. LOUIS DISTRICT HEADQUARTERS EDITION)

COMMUNITY	COMMUNITY NO.	DATE OF STUDY	DATE OF MAP
WINNEBAGO COUNTY	10000	1977	1977

Scale: 1" = 1 mile
 (Scale of map is not to be used for navigation purposes.)

MAP NUMBER
1720/G257

EFFECTIVE DATE
SEPTEMBER 6, 2001

Federal government logo

Easement Privileges

An easement is hereby reserved for and granted to the
Illinois Bell Telephone Company
 and the
Central Illinois Electric and Gas Co.

governmental bodies and other public utilities and their respective successors and assigns within the area as shown by dotted lines on the plat and method "Easement," to install, lay, construct, remove, replace and maintain and to carry out, repair, replace and maintain within said easement area, said lines and various wires, pipes, conduits, cables, poles, wires, brackets, guys, anchors and other equipment, and finally the right is hereby granted to cut down and remove or trim and keep trimmed any trees, shrubs or saplings that interfere or threaten to interfere with any of the said public utility equipment installed on said easement. No permanent buildings or trees shall be placed on said easement, but same may be used for gardens, shrubs, landscaping and other purposes that do not then or later interfere with the aforesaid uses or the rights herein granted.

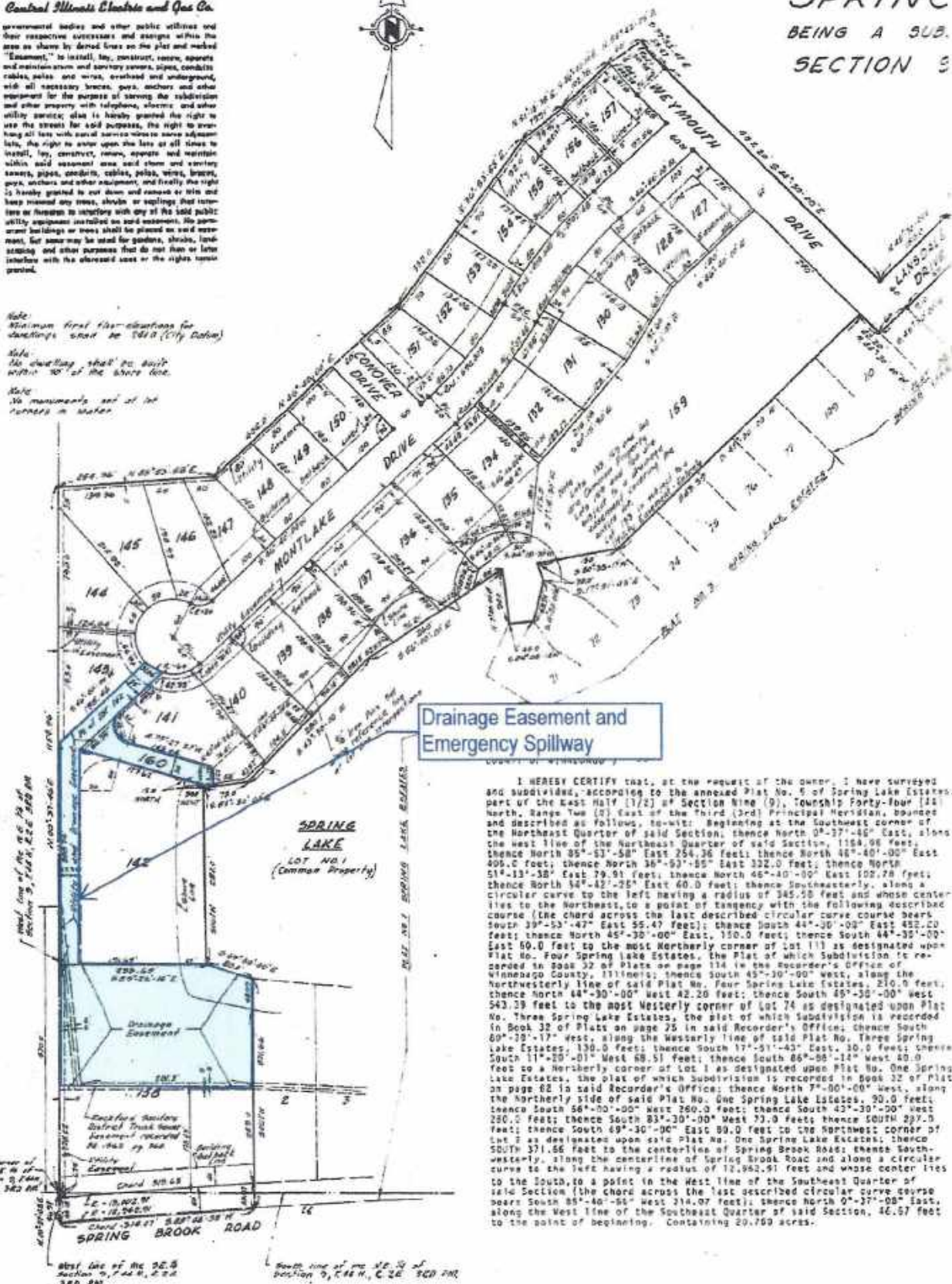
Note:
 Minimum first floor elevations for
 buildings shall be 181.0 (City Code)

Note:
 No dwelling shall be built
 within 10' of the above line.

Note:
 No monuments set at lot
 corners in water.



SPRING BEING A SUB. SECTION 9



Drainage Easement and Emergency Spillway

I HEREBY CERTIFY that, at the request of the owner, I have surveyed and subdivided, according to the annexed Plat No. 9 of Spring Lake Estates, part of the East Half (1/2) of Section Nine (9), Township Forty-four (44) North, Range Two (2) East of the Third (3rd) Principal Meridian, bounded and described as follows, to-wit: Beginning at the Southwest corner of the Northwest Quarter of said Section, thence North 0°-37'-45" East, along the West line of the Northwest Quarter of said Section, 1158.98 feet; thence North 85°-51'-58" East 254.36 feet; thence North 48°-40'-00" East 406.0 feet; thence North 36°-53'-55" East 332.0 feet; thence North 51°-13'-38" East 79.91 feet; thence North 46°-40'-00" East 102.78 feet; thence North 54°-42'-25" East 60.0 feet; thence Southeast, along a circular curve to the left having a radius of 345.50 feet and whose center lies to the Northwest, to a point of tangency with the following described course (the chord across the last described circular curve bears South 39°-53'-47" East 55.47 feet); thence South 44°-30'-02" East 432.00 feet; thence North 45°-30'-00" East, 150.0 feet; thence South 44°-35'-00" East 69.0 feet to the most Northerly corner of Lot 11 as designated upon Plat No. Four Spring Lake Estates, the Plat of which Subdivision is recorded in Book 32 of Plats on page 114 in the Recorder's Office of Winnebago County, Illinois; thence South 45°-30'-00" West, along the northwesterly line of said Plat No. Four Spring Lake Estates, 210.0 feet; thence North 44°-30'-00" West 42.20 feet; thence South 49°-30'-00" West 543.39 feet to the most Westerly corner of Lot 74 as designated upon Plat No. Three Spring Lake Estates, the Plat of which Subdivision is recorded in Book 32 of Plats on page 25 in said Recorder's Office; thence South 60°-30'-17" West, along the Westerly line of said Plat No. Three Spring Lake Estates, 130.0 feet; thence South 17°-51'-43" East, 30.0 feet; thence South 11°-25'-01" West 68.51 feet; thence South 86°-55'-12" West 40.0 feet to a Northerly corner of Lot 1 as designated upon Plat No. One Spring Lake Estates, the Plat of which Subdivision is recorded in Book 32 of Plats on page 62 in said Recorder's Office; thence North 7°-00'-00" East, along the Northerly side of said Plat No. One Spring Lake Estates, 90.0 feet; thence South 56°-00'-00" West 260.0 feet; thence South 43°-30'-00" West 280.0 feet; thence South 83°-30'-00" West 73.0 feet; thence South 89°-30'-00" West 89.0 feet to the Northwest corner of Lot 2 as designated upon said Plat No. One Spring Lake Estates; thence South 371.56 feet to the centerline of Spring Brook Road; thence Southwesterly, along the centerline of Spring Brook Road and along a circular curve to the left having a radius of 12,962.91 feet and whose center lies to the South, to a point in the West line of the Southeast Quarter of said Section (the chord across the last described circular curve bears South 85°-40'-55" West 214.07 feet); thence North 0°-37'-08" East, along the West line of the Southeast Quarter of said Section, 46.57 feet to the point of beginning. Containing 20.760 acres.

PLAT NO. ONE
OF

SPRING LAKE ESTATES

BEING A SUBDIVISION OF PART OF THE S. $\frac{1}{2}$ OF THE
SECTION 9, T. 44 N., R. 2 E. OF THE 3RD P. M.

WINNEBAGO COUNTY, ILLINOIS

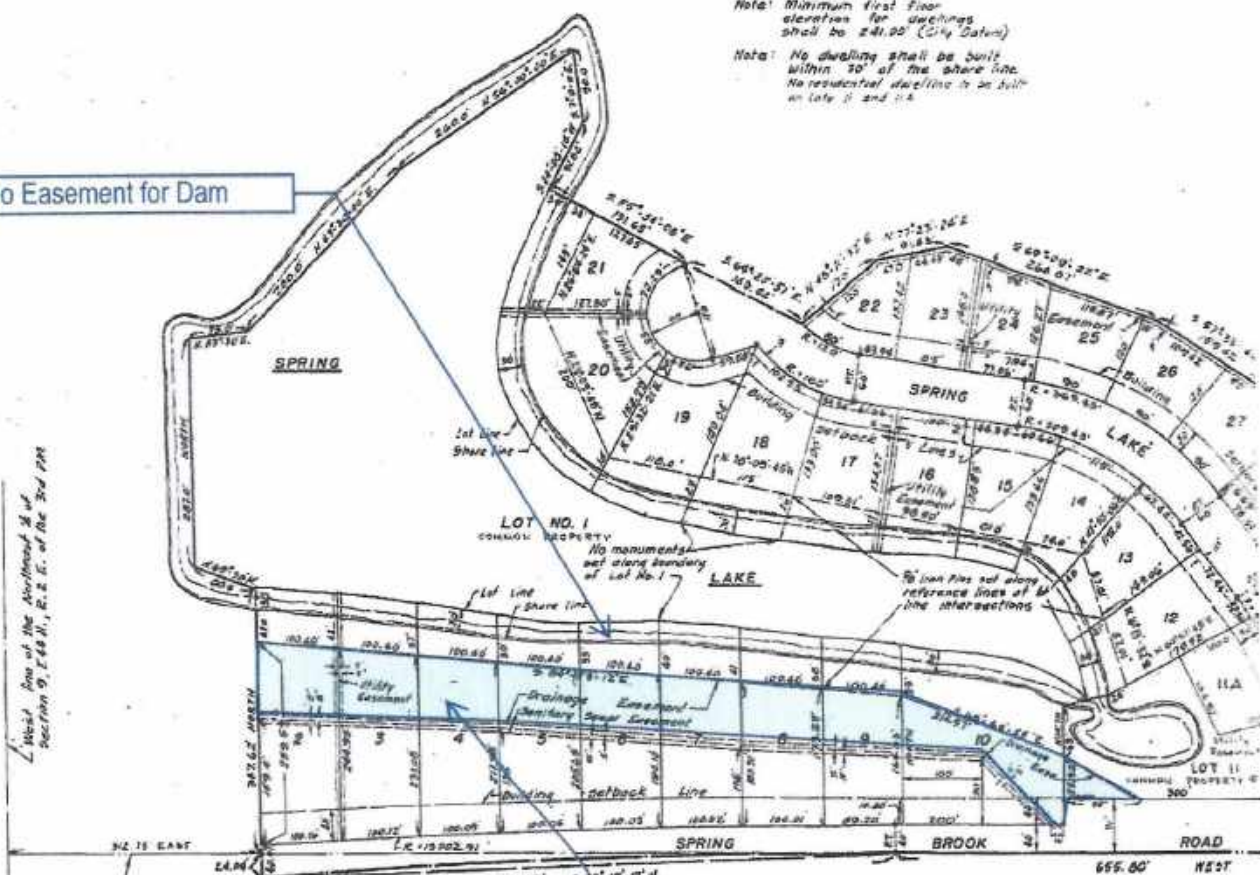
SCALE: 1" = 100'

Note: Minimum first floor
elevation for dwellings
shall be 241.00 (City Dates)

Note: No dwelling shall be built
within 50' of the shore line.
No residential dwelling to be built
on lots 21 and 22.

No Easement for Dam

West line of the Northwest 1/4 of
Section 9, T. 44 N., R. 2 E. of the 3rd P.M.



Drainage Easement for Spring Creek.

South line of the Northeast 1/4
of Section 9, T. 44 N., R. 2 E. of the 3rd P.M.

DEDICATION OF COMMON AREAS

THE ILLINOIS NATIONAL BANK AND TRUST COMPANY OF ROCKFORD, ILLINOIS, as Trustee, in recording this plat of SPRING LAKE ESTATES has designated certain areas of land as COMMON PROPERTY intended for use by the homeowners in SPRING LAKE ESTATES for recreation and other related activities.

The above-described areas are not dedicated hereby for use by the general public but are dedicated to the common use and enjoyment of the homeowners in SPRING LAKE ESTATES as more fully provided in Article IV, Declaration of Covenants and Restrictions applicable to SPRING LAKE ESTATES dated July 21, 1968 and recorded with this plat. Said Article IV is hereby incorporated and made part of this plat.

Easement Provisions

An easement is hereby reserved for and granted to the
Illinois Bell Telephone Company
and the

Central Illinois Electric and Gas Co.

governmental bodies and other public utilities and their respective successors and assigns within the area as shown by dotted lines on this plat and marked "Easement" to install, lay, construct, remove, operate and maintain storm and sanitary sewers, pipes, conduits, cables, poles and wires, overhead and underground, with all necessary braced, guys, anchors and other equipment for the purpose of serving the subdivision and other property with telephone, electric and other