General Engineering CompanyP.O. Box 340
916 Silver Lake Drive
Portage, WI 53901



608-742-2169 (Office) 608-742-2592 (Fax) gec@generalengineering.net www.generalengineering.net

August 23rd, 2021

Little Green Lake Protection & Rehabilitation District ATTN: Jack Goes 427 Tower Dr Wautoma, WI 54982

Re: 2021 Little Green Lake Dam Inspection

GEC # 2-0413-127B

Dear Jack,

General Engineering Company inspected the Little Green Lake Dam on June 25th, 2021; the results of our inspection are as follows:

1.0 Background Information and Definitions:

The purpose of this inspection was to satisfy the requirements of NR 333, which requires an engineer to inspect large, low hazard dams every ten years. Wisconsin DNR requires the inspection to utilize the inspection checklist included with this report; which evaluates the individual components of the dam to note where deficiencies are found. Note that left and right are referenced by looking in the downstream direction.

The dam on this property is labeled as the Little Green Lake Dam. The key sequence number is 1211 and the field file number is 24.10. There was a single monument found on the property on the left downstream abutment. Access to the dam is provided by State Highway 44. There is no signage on the dam and there are no fences or other protection to keep people off of the dam.

The Little Green Lake Dam is comprised of an earthen embankment and a concrete culvert with wooden stoplogs that discharges to a rock lined channel. In this report, the dam structures will be distinguished as follows:

1.1 Concrete Control Structure:

The Concrete Control Structure is located on the East side of the impoundment, on the Little Green Lake Outlet that is a tributary of the Grand River, and is constructed with cast-in-place concrete wingwalls, and approximately 5 ft. x 5 ft. precast concrete culvert that has a length of





approximately 80 ft. that runs below State Hwy. 44. The control structure appears to have 3 rows of wooden stoplogs at the upstream side of the dam.

The wooden stoplogs are formed using what appears to be 4x4 boards. Access to the structure is provided by a metal grate walkway over the upstream abutments. After the water passes over the wooden stoplogs, it passes through culvert and discharges to a rock lined channel downstream of the dam.

1.2 Earthen Embankments:

Earthen embankments make up the rest of the structure. The upstream and downstream faces of the earthen embankments are protected using dense vegetation. The crest of the dam is an asphalt paved State highway.

2.0 Key Inspection and Repair Items:

2.1 Concrete Control Structure:

The concrete structure of this dam appears to be in good condition, not showing any major cracks. There are two issues that were noted with the control structure.

The first issue is that the joint between the concrete culvert sections and the upstream wingwalls has separated in the past. There appears to be a previous repair attempt that consists of installing steel eye bolts into the face of the concrete wingwall and first culvert section, with threaded rod bolts to tie the two sections together and prevent further separation. After the installation of the bolts, the joint was then filled with a joint filler. On the day of the inspection, it was noted that the bolted connections are holding up well, but there are leaks coming through both of the joints. It is recommended that the joints be injected with SealGuard Dual component Polyurethane grout to stop the current leaks.

The second issue it that there is an approximately 2 in. diameter hole in the base of the concrete flowline in the culvert approximately 30 ft. from the stoplogs. It is recommended that the hole be filled with Xypex Patch'N Plug.

The wood stoplogs appear to be in acceptable condition at this time. There are minor leaks between some of the stoplog sections that should be monitored for worsening conditions.

2.2 Earthen Embankments

The embankments of this dam are in good condition. There is generally well-established vegetation cover that is overgrown. There is woody vegetation on the right upstream embankment near the concrete control structure, and directly above the downstream culvert. It is recommended that the vegetation be mowed on both the upstream and downstream embankments, and remove all woody vegetation around the control structure.





3.0 <u>Timeline for Recommended Repairs:</u>

The DNR requires us to provide recommended timeframes for you to complete the above-referenced repairs as spelled out in the "Suggested Time Frames for Follow-Up to Dam Inspection Directives" from the DNR website. A detailed schedule for your dam, as budgets allow, is as follows:

• Concrete Control Structure:

Repair Seepage at Concrete Joints
 Repair Hole in Flowline
 3-12 Months
 3-12 Months

• Embankments:

o Tree/Brush Removal 6-12 Months

Mowing
 With Current Season

Please review this information and if you have any questions, please feel free to call.

Sincerely,

GENERAL ENGINEERING COMPANY

Kent E. Fish

Registered Professional Engineer

cc: Uriah Monday, DNR (w/ enclosures)

Jack Goes





Suggested Time Frames for Follow-up to Dam Inspection Directives

Activity		Time Range
Signing		30-90 days
Benchmark		6-12 months
Embankments Trees/bru Erosion Seepage Rodents Mowing	sh removal (investigate) (repair) (investigate) (repair)	6-12 months 0-3 months 3-6 months 0-3 months 6-24 months 3-6 months within current season
Gates	(investigate) (repair)	up to 18 months 0-36 months
Concrete	(investigate) (repair)	up to 18 months 3-36 months
Dam Failure Analy	ysis	1-2 years (high and significant hazard) 5 years (low hazard)
EAP	(interim) (based on DFA)	6 months-1 year (high and significant hazard) 2 years (low hazard) 6 months after DFA
IOM		12 months
Safety Features		0-3 months
Inspection Report		1-3 months



Engineers • Consultants • Inspectors

DAM INSPECTION REPORT



LITTLE GREEN LAKE DAM JUNE 2021

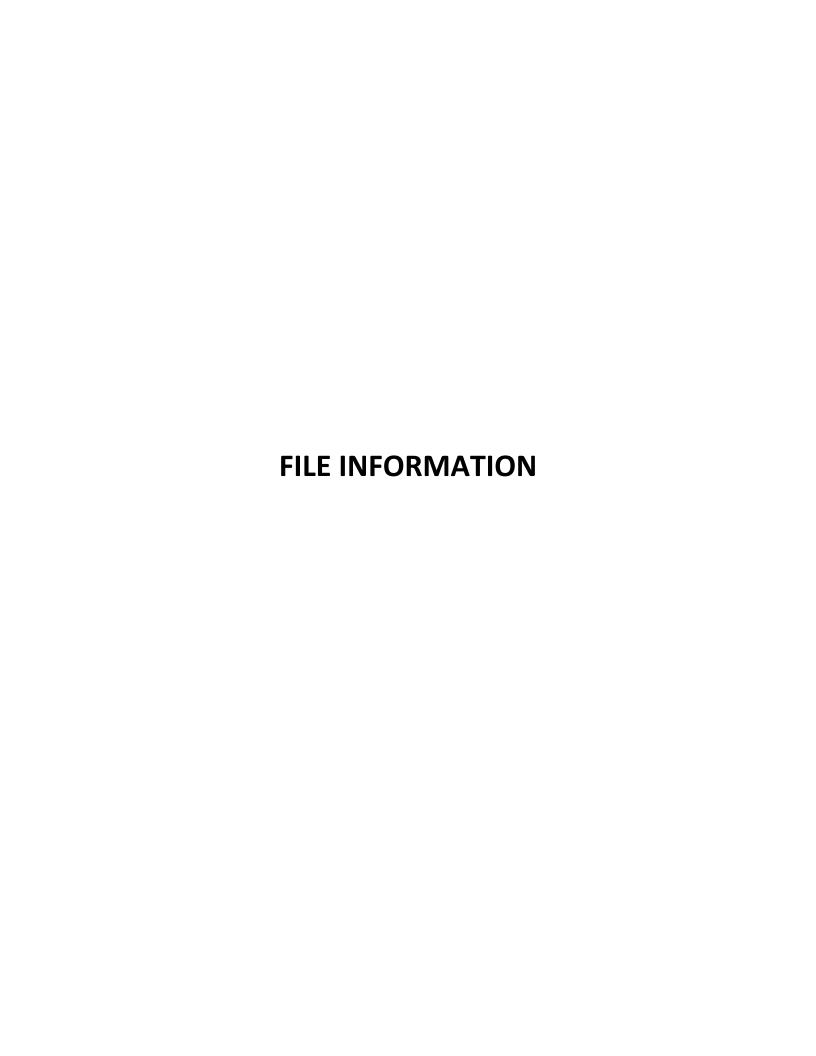
Prepared by: Owner:

GENERAL ENGINEERING COMPANY

916 Silver Lake Drive P.O. Box 340 Portage, WI 53901 Phone: (608) 742-2169 GEC No.: 2-0413-127B

LITTLE GREEN LAKE PROTECTION AND REHABILITATION DISTRICT

427 Tower Dr Wautoma, WI 54982 Phone: (920) 787-4686



Detailed Information for Dam Little Green Lake Outlet

1211 Field File No 24.10 Dam Key Seq No

LARGE NID 10167 Size

Popular Name State Highway Comission Former Name

Location

County Green Lake Latitude 43.734473

Longitude **Permitted TRS Located TRS**

QQQ: QQ:NE Q:NW - Sec:32 T:15N R:13E

Contacts

Little Green Lake Protection Contact Owner Fredrickson, Bruce

and Rehabilitation District

Waterbody

Drainage Basin (sq mi) 4.80

Stream **Impoundment**

Local Name LITTLE GREEN LAKE Local Name

OUTLET Row and Official Name

Navigable? not determined Size (acres) 466.00

When was navigability

determined?

Maximum Depth (ft) 28.00

Row and Official Name

-88.972824

LITTLE GREEN LAKE

6.00

6.00

Regulatory/Inspection

NR 333 Years EAP:2014 IOM: HYD:1997 STAB: ZONE:2014

Auth. Approval Desc Regulatory Agency **WIDNR** Hazard Rating Low Estimated Hazard Rating Low

Ferc. No **Exempt Issue Date** License Expiration Year Ferc. Inspection Year

Construction Characteristics

500.00 Max Storage (acre-ft) Normal Storage (acre-ft) 2,300.00 Structural Height (ft) 11.00 Hydraulic Height (ft) 6.00

Controlled Crest Length (ft) 1,000.00 Spillway Type

Discharge Through Principal 25.00 Width/Diameter of Principal

Spillway (cfs) Spillway (ft)

Total Discharge Through All 75.00 Total Width/Diameter of All

Spillways (cfs) Spillways (ft) Core Type Position

Foundation Type **Foundation Certainty** Purposes RECREATION Structural Types

GRAVITY EARTH

Detailed Information for Dam Little Green Lake Outlet

Water Levels

	Normal		Winter	
	MSL	Datum	MSL	Datum
Minimum				
Normal				
Maximum				

Construction History

	Designer	Construction Firm	Complete Year
Ī	MSA ASSOCIATES		1998

Outlet Gates

No data found.

Inspection History

Inspection Date	Inspection Report Date	DNR Engineer Initials	Inspection Type
7/30/2020		UM	CHECK
7/30/2013		MMH	CHECK
6/25/2012	11/30/2012	MMH	CNSLT
8/31/2009	10/7/2009	DLS	31.19
11/11/1998	6/21/1998	LJH	31.19
4/30/1975	5/9/1975	XXX	LEVEL
9/9/1969	9/12/1969	XXX	LEVEL
4/11/1961		XXX	GEN
4/11/1961	4/20/1961	XXX	LEVEL
10/10/1934	10/11/1934	XXX	LEVEL
10/10/1934		XXX	GEN
5/24/1933	6/2/1933	XXX	LEVEL
7/1/1930	7/2/1930	XXX	LEVEL
8/17/1926	8/17/1926	XXX	LEVEL
10/27/1925	10/29/1925	XXX	LEVEL

Followups

Type of Followup	Due Date	Extension Date	Completion Date
Seepage/Drainage	9/1/2014	12/1/2014	10/24/2014
Embankment repairs	8/30/2010	12/1/2014	1/1/2020
Embankment repairs	7/1/2013	12/1/2014	1/1/2020
Emergency Action Plan	1/15/2010	2/1/2014	8/21/2014
Inspection, Operation &	2/1/2014		2/1/2014
Maintenance Manual			
Emergency Action Plan	2/1/2014		8/21/2014
Inspection, Operation &	1/15/2010	2/1/2014	
Maintenance Manual			
Dam failure analysis	4/30/2011		7/25/1997
Inspection by P.E.	12/31/2008		6/25/2012
Embankment repairs	10/1/1989		11/11/1998
Schedule	8/1/1988		1/1/1998
Inspection, Operation &	6/21/1988		11/11/1998
Maintenance Manual			
Outlet conduit	6/21/1988		11/11/1998

Approvals

Approval Date	Docket ID	Approval Type	DNR Engineer Initials
8/1/2014		EMERGENCY ACTION PLAN	TLM
7/1/2014		PLAN APPROVAL-REPAIR, RECON; STAT	TLM
		31.18	
4/1/2014	NE-F-324-	COMMUNITY HAS ADOPTED FAILURE	TLM
	77(7J)	ZONING	

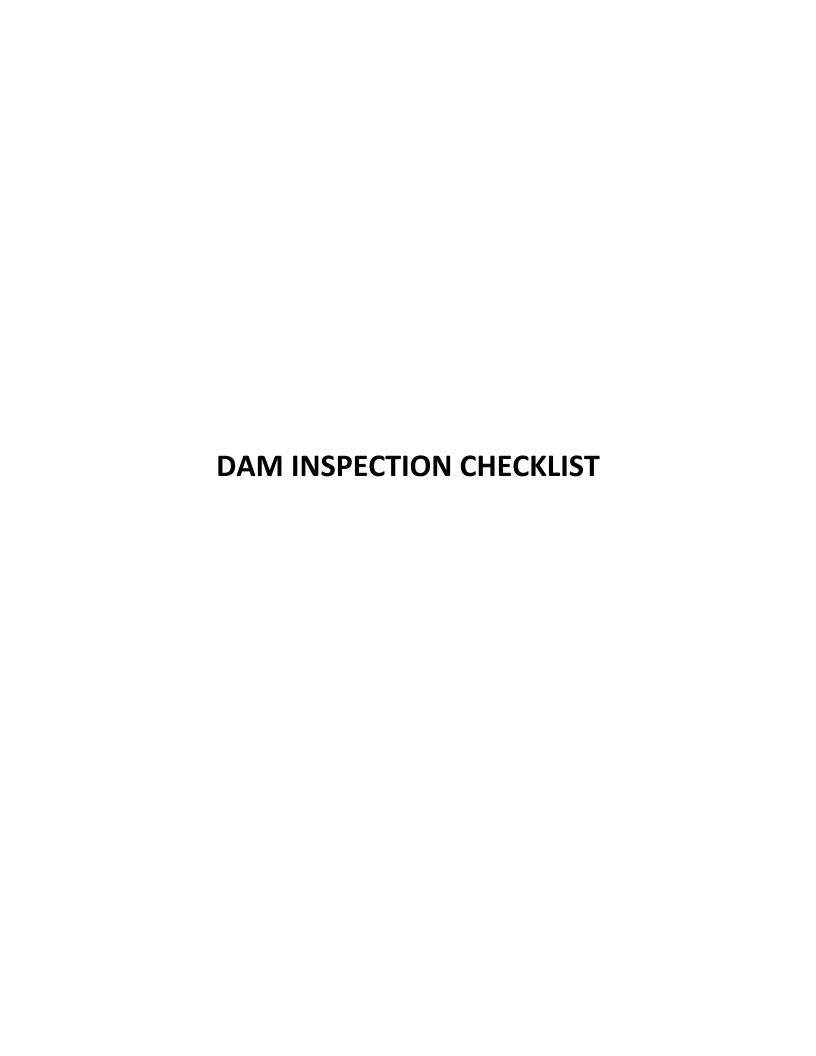
4/1/2014	Low - TL will	ASSIGN HAZARD RATING	WDS
	send email		
7/1/1997		HYDROLOGY & HYDRAULIC ANALYSIS	SGJ
7/1/1997		ASSIGN HAZARD RATING	WDS
6/1/1997		DAM FAILURE ANALYSIS	WDS
6/1/1956	2-WP-1101	APPROVAL FOR TEMPORARY	XXX
		DRAWDOWN, 31.02	
3/1/1934	2-WP-131	PLAN APPROVAL-REPAIR, RECON; STAT	XXX
		31.18	
7/1/1926	WP-252	LEVELS; STAT 31.02	XXX

Orders

No data found.

Inspection Schedule

Inspection Year	Inspection Type
2022	OWNER
2032	OWNER



Consultant Inspection Process Form – for dam inspected by outside consultant

			Responsib	le Party
Task	У	Date Completed	Owner/ Consultant	DNR
Inspection Notification			X	
*Notify dam owner of DNR inspection date/time			21	
File Research				
*Review last inspection report, photos, database, aerial photos, ownership information, etc.	Х	6/24/2021	X	
Field Inspection	х	6/25/2021	X	
*Physically inspect dam, conduct survey if required	^	0/23/2021	Λ	
Inspection Checklist	Х	6/25/2021	X	
*Fill out form documenting observations during inspection	^	0/23/2021	Λ	
Photo Documentation	Х	6/25/2021	X	
*Print and label photos, back up digital copies	^	6/25/2021	Λ	
Review Sufficiency Rating				
*Complete Sufficiency Rating questionnaire based on current				X
condition of the dam.				
Review Hazard Rating				
*Review downstream development for changes, check if downstream	х	6/26/2021	X	
zoning is adopted				
Review EAP			X	
*Review and update EAP, submit to DNR			24	
Review IOM			X	
*Review and update IOM, submit to DNR			21	
Inspection Report Submitted to DNR Regional Engineer			X	
Inspection Report Submitted to DNR Central Office				X
Response Letter				
*DNR letter which outlines work needed to be completed on the dam				X
based on consultant inspection				
Update database				
*Update owner contact information, follow-up dates, inspection				X
dates, etc. on DNR database				
Notify DNR of planned work				
* Determine if plans and specs are needed for the proposed dam			X	
work, issue proper permits or plan approvals				
Complete Required Elements			X	
*Owner completes required items listed in inspection report			21	
Enforcement				
*Pursue enforcement action against the dam owner if the required				X
elements are not completed by the appropriate deadlines				

Dam Name: Little Green Lake DamField File #: 24.10Engineer Completing Form: Kent FishKey Sequence #: 1211

Certification for Dam Inspection

Local Dam Name (PRINT):Little Green Lake Dam
DNR Field File #: 24.10
I certify that I have completed the checklist truthfully and factually:
Certifier's Name (print): Kent Fish
Company Name: General Engineering Company
Signature:
Date: 9-28-21
Multidisciplinary: I am experienced in the technical disciplines or I am working with other professionals experienced in the technical disciplines to properly inspect this dam and appurtenant works. Technical disciplines, in addition to general civil engineering, may include geotechnical, geological, hydrologic, structural, and mechanical:
Yes No
Engineer's Wisconsin Registration Number: <u>F 30872</u>
Expiration Date: Joly 2022
Engineer's Seal (optional):

KENT E. FISH E-30872 PORTAGE WI

Na	me of Dam: Little Green Lake D	am					Date:	06/2	5/202	1
Ins	Inspectors: Jim Nellessen F.F#: 2									
Ow	ner's Name: Little Green Lake	Pro	otec	tion & Rehabilitation	District		Key Seq #:			
_	eet:						-10, 50q m			
_	y, State, Zip Code:									
						D!				
	unty:		00.			Phone				
WE	eather and Site conditions: Sur	nny,	80'	s, Humid		Email			mary and	
_			_		GENERAL			P	Actio	n
	Item	N	P		Notes/ Observation	s		M	I	R
1 1	Monuments/Benchmarks	Х	х							
	Location:	Le	eft D	ownstream Abutmer	nt					_
$ \ $	Elevation:			ured @ 928.35' On D						
Ш	Datum:	l .	AVD		a, oepoolio					
Н	Butum.	١٠,								
2]	Pool Level	Х								
4 1	Normal/Operating:	^		000 07!						
	Normal/Operating: Maximum:		/	928.07'						
	Minimum:			nono						
2	Staff Gage			none						
3	Access Road	Х								
		Co	ount	y Highway 44						
4 5	Signage/ Security									
	Portage/route:			none						
	Dam Warning:			none						
	Downstream Hazard:			none						
	Fencing/Railings/Catwalks:			none						
Add	ditional Comments:									
NT.	N. (. I. D. Di. (. 37. 37.)			1 11 0	4.5					
	Noted; P= Photo; M= Monitor			Action Suggestion	1. Requires immediate ac	tion				
	nvestigate; R= Repair				2. Plan to do soon					
	.= Field File; $RT = Right$; $LT = I$	Left			3. Do when convenient					
U/S	S = Upstream; D/S = Downstream									
			- J							
n	N				pection Checklist					
Dai	m Name: Little Green Lake Dam			F.F. #: 24.10		Date:	06/25/2021	Page	2 of	

	GENERAL (Cont.)							
5	Hazard Section							
	A. D/S Development	Х						
	Density:		arse					
	Distance:	12	:00' E	Oownstream				
	Type (Residential, Commercial,	Re	side	ntial				
	Industrial):							
	B. Channel Crossing	х	х					
				Ford, Culvert Trestle, Other (Explain) (Circle One)				
	Dimensions:			ximately 5'x5'x80'				
	D/S distance:			y D/S of Dam				
	Traffic Level (Local, CTH,	S	TH ۱	VI-44				
	Rail Road, STH, Interstate, etc):							
	C. Distance to nearest D/S	Х	/	Approximately 2 Miles D/S				
	community/impoundment:							
	Name:	Ma	arkes	an				
	D. Anticipated Hazard (based	х	,	ow				
	on landuse and zoning):							
	E. Dam Failure Analysis	Х						
	Date Completed/Approved		6/1	/1997				
	Is map available?							
	Are map & profile adopted?							
	List adoption date:							
	Verify validity of failure mode:							
	Verify validity of DFA							
	conclusions:							
	F. Emergency Action Plan	Y	N	Comments, Explanation, and Description	M	I	R	
	1. Current plan posted?	х						
	2. Understood by Operator?	х						
	3. Warning systems?		х					
	4. Certification of last test?		х					
	5. Remote operation?	х						
- 1	6. Revision Date?			8/1/2014				
	7. Habitable structures?	х						
	8. Recreation areas?		х	¥				
	9. Changed hazard potential?		х					
	10. New development?		х					
_	11. Other comments?		х					
Ac	ditional Comments:							
	= Noted; P = Photo; M = Monitor			Action Suggestion 1. Requires immediate action				
	Investigate; R= Repair			2. Plan to do soon				
	F.= Field File; $RT=$ Right; $LT=$ I			3. Do when convenient				
U/	S = Upstream; D/S = Downstream							
				Dam Inspection Checklist				
D٤	am Name: Little Green Lake Dam			F.F. #: 24.10 Date: 06/25/2021	Page	<u>3</u> of	_	

	EMBANKMENTS								
De	Description: Action						n		
						I	R		
	Item	N	P	Location on Embankment and Deficiency	M				
1	Vegetation:	х	No problem						
	A. Trees								
	Quantity (<5,sparse,dense):		None						
	Diameter:		None				- 1		
	Location:						- 1		
	B. Brush	X	X				х		
	Quantity (sparse,dense):		Sparse				- 1		
	Location:		D/S Embar	inkment Right Of Dam			- 1		
	C. Ground cover	_				-	_		
	Type (grass, crown vetch,other):	_					-		
	Quantity (bare, sparse, adequate,		None				- 1		
	dense):						- 1		
	Appearance (too tall, too short,						- 1		
	good):						- 1		
2	Erosion	х	No problem	Not applicable Could not inspect			\neg		
	A. Wave erosion (Beaching):					\Box	\dashv		
	Scarp: Length/ Width:		None				\neg		
	Location:								
	B. Runoff Erosion (Gullies)								
	Quantity:		None						
	Length/ Width/ Depth:		None	None					
	Location:						- 1		
-									
3	Instabilities A. Slides	Х	No problem	Not applicable Could not inspect			_		
	Transverse:	_					_		
	Longitudinal:		None						
	Scarp: Length/ Width:						- 1		
	Crack Length/ Width:						- 1		
	g						- 1		
	B. Cracks:					T			
	Transverse:								
	Longitudinal:		None				- 1		
	Length/ Width/ Depth:						- 1		
	Location:						- 1		
	Other:								
	G D 1 (D	_			, ,				
	C. Bulges/ Depressions								
	Size: Height/ Depth:		None				- 1		
	Height/ Depth:								
	D. Slope (Too Steep)		I IN.		1 1	\neg	\dashv		
	U/S, D/S	_	None				\dashv		
N=	Noted; P= Photo; M= Monitor		Action S	Suggestion 1. Requires immediate action			_		
	Investigate; R= Repair		ACTION 51	2. Plan to do soon					
	F.= Field File; RT = Right; LT = I	Left	t	3. Do when convenient					
	J/S = Upstream; D/S = Downstream								
	Additional Comments:						\neg		
				,					
							- [
			Dam	Inspection Checklist					
Da	ım Name: Little Green Lake Dam	1	F.F. #:		4	of			

EMBANKMENTS (Cont.)						
Action						
Item	N P Notes/ Observations	M I R				
4 Slope Protection	x No problem Not applicable Could not inspe	ect				
A. Type (none, riprap, wave berm, concrete slabs, loose formed concrete/asphalt):	x x Riprap Approximately 12" Diameter					
B. Condition:	Adequate					
5 Other	x No problem Not applicable Could not inspe	ect				
A. Rodent burrows (few, many) Location:	None					
B. Ruts Length/ Width/ Depth: Location: C. Other	None					
C. Other	None					
6 Alignment	x No problem Not applicable Could not inspe	ect				
A. Vertical Low area: Elevation Difference: Location:	None					
B. Horizontal	None					
C. Width Too narrow: Location:	None					
7 Toe	x No problem Not applicable Could not inspe	ect				
Cracks/Slumps: Embankment drains: Type/Flow: Location: Seepage/ Wetness: Hummocky:	None None None None None None None					
8 Seepage	x No problem Not applicable Could not inspe	ect				
Wet area: Boil: Sinkhole: Aquatic vegetation: Rust colored deposits: Other: Sediment in Flow: Flowrate: Location: N= Noted; P= Photo; M= Monitor I= Investigate; R= Repair F.F.= Field File; RT = Right; LT = U/S = Upstream; D/S = Downstream Additional Comments:	None None None None None None None None					
	Dam Inspection Checklist					
Dam Name: Little Green Lake Dam	F.F. #: 24.10 Date: 06/25/202	1				

SPILLWAY-PRINCIPAL - GATES Action						
Item	N I	P	Notes/ Observation	ons	M	I R
1 Gates		No problem	Not applicable	Could not inspect		
A. Types (lift/slide, tainter(radial),	x 2	х				
stoplogs, leaf, roller,		ologs				
flashboards, needles, other):	1					
Number and Size:	1	Stop Log Channels With 4x	4 Stoplogs		TVI	
B. Stoplogs Dimensions:		X St. Langeth			x	
Condition:		eptable				
C. Abutments	-	х			П	Х
Condition: *	-	eptable				
Seepage/wetness:		or Seepage At Joint Of Cul	vert To Abutment			
D. Piers (number, shape)						
Condition: *	<u></u>	None				
E. Operability						
Type of Operator:						
Condition(chain, cables, hoists):						
Security(locked?): Backup Operator:						
F. Access	Non				\top	\neg
1.7766633	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Bar Grate Over Abutm	ents			
G. Condition					x	T
Rust:		 0.				
Seals (leakage):	Min	or Leak				
H. Ice protection						
Type (Heaters, Bubblers,		None				
Barriers, Other)	 	1				
I. Debris Prevention (Rack, boom, etc.)	\vdash	_				
Frevention (Rack, booth, etc.)		None				
J. Condition of Flowway	\vdash	2"-3" Diameter Hole TI	nrough Flow Line Conc	rete In	Т	
		Center Approximately	•	icio ili		X
		Conton Approximatory	oo i rom otopiogo			
K. Drains						
Type (Weep holes/ Relief drains/		None				
Other):						
Flow rate:						
Location:	\vdash				Т	
	Н				ш	
N= Noted; P= Photo; M= Monitor	1	Action Suggestion 1.	Requires immediate ac	tion		
I= Investigate; R= Repair			Plan to do soon	*****		
F.F.= Field File; RT = Right; LT =			Do when convenient			
U/S = Upstream; D/S = Downstream	1	Controlled = Gated	Uncontrolled = C	verflow		
Additional Comments and/or Sketch:						
* Type of Concrete Problems:	Spalli	ng, cracks, exposed rebar	misalignment, ioints, bi	ig holes, efflorescence, nono	uts.	
(A)	hone	cycombing, scaling, craze/n	nap cracks, isolated crac	ck, disintegration, other	,	
		Dam Inspection				
Dam Name: Little Green Lake Dam		F.F.#: 24.10		Date: 06/25/2021 Page	6	of _

SPILLWAYPRI	NCIPAL - OUTLET EROSION CONTROL & UNDERMINING					
		A	ction			
Item	N P Notes/ Observations	M	I R			
1 Outlet Erosion Control	x No problem Not applicable Could not inspect					
A. Type (none, endwall, plunge	Rock Lined Channel					
pool, energy dissipation structure						
rock lined channel, apron)						
B. Scour	None	ТТ				
	None					
C. Material	x x					
a. Riprap: Avg Diameter:						
Condition (adequate, sparse	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -					
displaced, weathered) Bedding fabric- (Yes/ No):						
b. Concrete *	No					
Dimensions/Location:	Concrete Flow Line					
D. Sidewall/Headwall						
Misalignment	1 110.10					
Location						
Description: E. Separated Joint / Loss of						
Joint Material:	x x		X			
Location:	U/S 1 1/2" to 2" Gap Between Culvert And Abutment w/ Seepage					
Description:						
F. Natural						
	None					
2 Undermining	No problem Not applicable Could not inspect					
Location:		ТТ				
Description:						
	None					
N. N. I.B. Bl. (M. N.)						
N= Noted; P= Photo; M= Monitor I= Investigate; R= Repair Action Suggestion 1. Requires immediate action 2. Plan to do soon						
F.F.= Field File; RT = Right; LT = Left 2. Plan to do soon 3. Do when convenient						
U/S = Upstream; D/S = Downstream						
Additional Comments:						
			*			
* Towns of Const. D. 11	011					
" Type of Concrete Problems:	Spalling, cracks, exposed rebar, misalignment, joints, bug holes, efflorescence, pope honeycombing, scaling, craze/map cracks, isolated crack, disintegration, other	ruts,				
	Dam Inspection Checklist					
Dam Name: Little Green Lake Dar		e _7	of			

	FIELD BOOK							
Profile Leve	ling For:			Instrum	ent Person:	Jim Nellessen		
Original No	tes in Field	Book #		F	Rod Person:	Jim Nellessen		
Instrument	Used: GPS	;		<u> </u>	Note Taker:			
Weather Co	nditions: S	unny 80's		***************************************				
STATION	B.S. +	Н.І.	F.S	ELEV.	DIST.	REMARKS		
						()		
						WY N		
							-	
					1 Y	>		
					\'			
								
							<u> </u>	
			X					
Db Mayl	- X C 4:-	7						
Bench Mark	intormano	m (Location	n Eleman	., Datumy:				
ľ		•						
Comments:					***************************************			
Suggested S		s: HW		Sill		Low Embankment	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	7	TW		Crest		Lt. Groin		
		D/S Channe		Abutments		Rt. Groin		
	í	Aux. Crest		Aux. Crest		Outlet Pipe Invert		
Dam Name:	Little Green	n I ake Dam	D F.F.#: 24.10	om Inspect		list .06/25/2021	Page 8 of	

STATION	B.S. +	H.I.	F.S	ELEV.	DIST.	REMARKS
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Note:	1					

Note:

Survey data is a valuable dataset to document the constant or changing condition of your dam. It is often the best method to document changes, deficiencies and past construction or survey errors. In most instances, the decision to conduct a field survey will be based on the professions, opinion of the consultant engineer and the responsibility of the dam owner. Based on the inspection report results, the December may determine that a survey is required.

Examples of scenarios where survey 3 recommended by the Department:

- 1. To establish a baseline if the dam has no previous survey, an insufficient survey, or no current as-built plans on file
- 2. If evidence of an instability is documented during the inspection. Instabilities could include embankment settling, cracking, or slumping, cracking concrete, or noticeable miss-alignment.
- 3. For dams where the last survey on record is greater than 10 years old.
- 4. When new benchmarks or a new staff gage are installed.

Survey Standards:

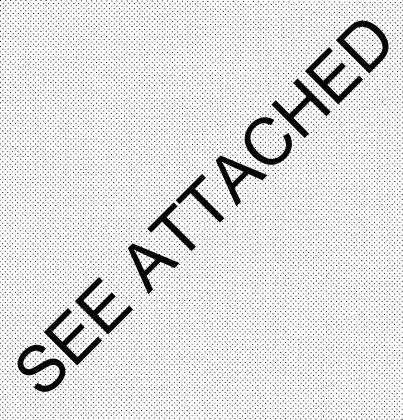
- The Dam Datum must be the same as the Flood Insurance Study Datum for the County
- Survey may require both horizontal and vertical data collection and control
- · Any Benchmarks or Staff Gages must be tied to the Dam Datum
- · Survey Points noted on this page of the Dam Inspection Checklist are the minimum points suggested for a dam survey
- Use the appropriate level of accuracy consistent with Land Surveying standards to document the data being collected Suggested Survey points:

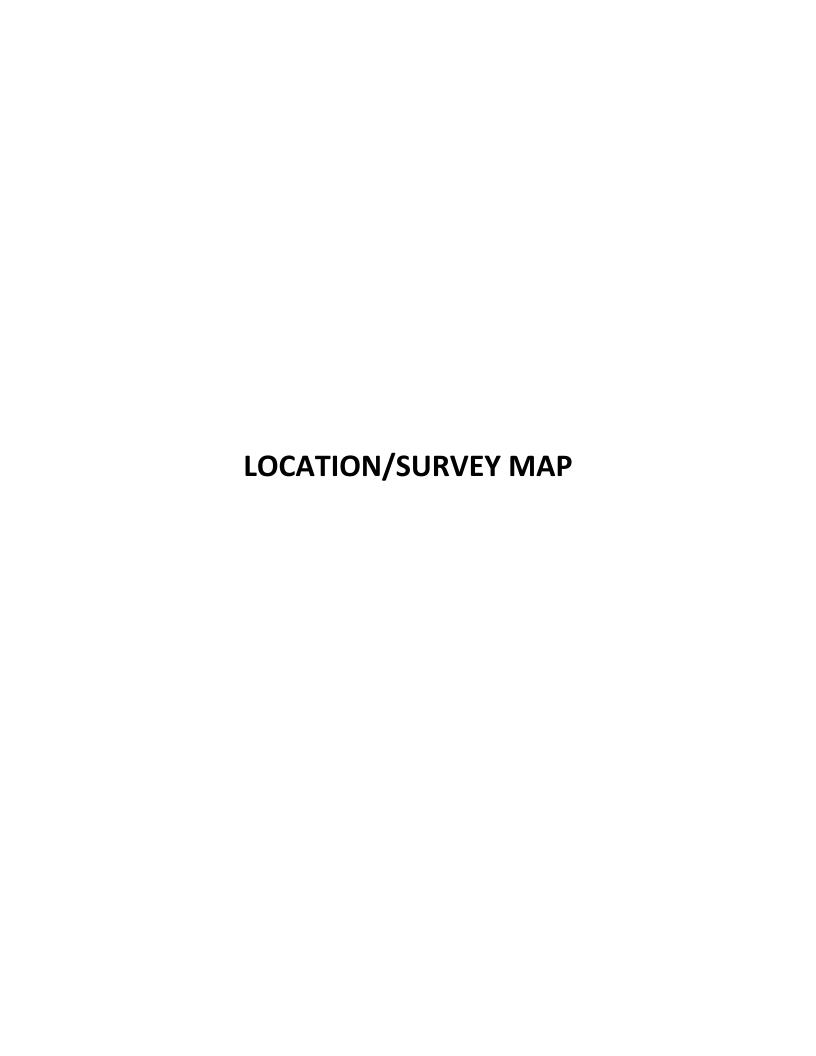
HW	Sill	Low Embankment
TW	Crest	Lt. Groin
D/S Channel (at toe)	Abutments	Rt. Groin
	Aux. Crest RT	Outlet Pipe Invert

Dam Inspection Checklist

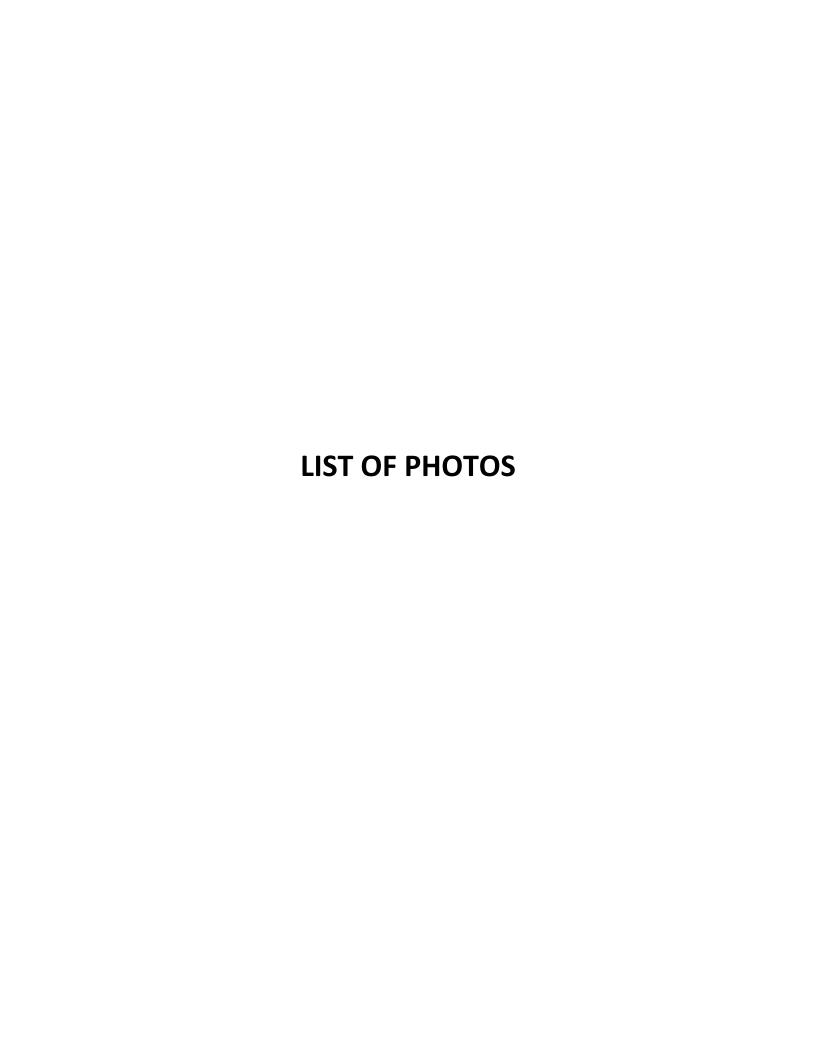
Dam Name: Little Green Lake Dam F,F,#: 24.10 Date: 06/25/2021 Page 9of











Inspection Of Little Green La	nspection Of Little Green Lake Dam (Field File #24.10)					
une 25th, 2021						
File Name	Description					
0121106252101.JPG	Dam From Left Embankment					
0121106252102.JPG	Dam From Right Embankment					
0121106252103.JPG	View Of Upstream Concrete Dam Structure					
0121106252104.JPG	View Of Downstream Outlet Structure					
0121106252105.JPG	Impoundment Upstream Of Dam					
0121106252106.JPG	Creek Downstream Of Dam					
0121106252107.JPG	DOT Monument On Left D/S Abutment					
0121106252108.JPG	Separation Of Joint At Right U/S Abutment					
0121106252109.JPG	Separation Of Joint At Right U/S Abutment					
0121106252110.JPG	Separation Of Joint At Left U/S Abutment					
0121106252111.JPG	Separation Of Joint At Left U/S Abutment					
0121106252112.JPG	Seepage At Joint At Left U/S Abutment					
0121106252113.JPG	Leaking Between Stop Logs					
0121106252114.JPG	Hole In Base Of Flow Line					
0121106252115.JPG	Woody Vegetation On U/S Embankment					
0121106252116.JPG	Woody Vegetation On D/S Embankment					

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Little Green Lake Dam Dam From Left Embankment 0121106252101.JPG



Little Green Lake Dam Dam From Right Embankment 0121106252102.JPG







Little Green Lake Dam View Of Upstream Concrete Dam Structure 0121106252103.JPG



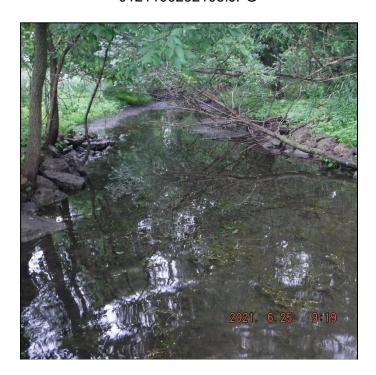
Little Green Lake Dam View Of Downstream Outlet Structure 0121106252104.JPG







Little Green Lake Dam Impoundment Upstream Of Dam 0121106252105.JPG



Little Green Lake Dam Creek Downstream Of Dam 0121106252106.JPG







Little Green Lake Dam DOT Monument On Left D/S Abutment 0121106252107.JPG



Little Green Lake Dam Separation Of Joint At Right U/S Abutment 0121106252108.JPG







Little Green Lake Dam Separation Of Joint At Right U/S Abutment 0121106252109.JPG



Little Green Lake Dam Separation Of Joint At Left U/S Abutment 0121106252110.JPG







Little Green Lake Dam Separation Of Joint At Left U/S Abutment 0121106252111.JPG



Little Green Lake Dam Seepage At Joint At Left U/S Abutment 0121106252112.JPG







Little Green Lake Dam Leaking Between Stop Logs 0121106252113.JPG



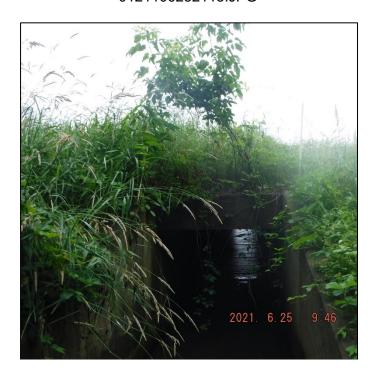
Little Green Lake Dam Hole In Base Of Flow Line 0121106252114.JPG







Little Green Lake Dam Woody Vegetation On U/S Embankment 0121106252115.JPG



Little Green Lake Dam Woody Vegetation On D/S Embankment 0121106252116.JPG



