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APR - 3 2014

OTSEGO COUNTY CLERK

STATE OF MICHIGAN
IN THE 46TH JUDICIAL CIRCUIT
COUNTY OF OTSEGO

MICHIGAN DEPARTMENT OF
ENVIRONMENTAL QUALITY, *et al*,

Plaintiffs,

and

MICHIGAN COUNCIL OF TROUT
UNLIMITED, *et al*,

Intervening Plaintiffs

v.

GOLDEN LOTUS, INC.,

Defendant.

Docket No. 09-12933-CE(m)

Hon. JANET ALLEN

CONSENT JUDGMENT

FILED

APR - 3 2014

OTSEGO COUNTY CLERK

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and Agriculture Division
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Edward B. Davison (P26421)
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8455 S. Saginaw, Ste. 2
Grand Blanc, MI 48439
(810) 234-3633

CONSENT JUDGMENT

At a session of said Court held in the courtroom,
City of Gaylord, Michigan, on the ____ day of
_____ 2014.

Present: Hon. Janet Allen, Circuit Court Judge

The Parties agree that settlement of this action is in the public interest and consent to the entry of this Consent Judgment (“Judgment”), without further litigation, as the most appropriate means of resolving the Complaints filed with the Court on February 17, 2009 and May 7, 2009. As evidenced by the signatures below, the Parties agree to, and shall be bound by, the terms and findings of this Judgment.

The entry of this Judgment by Defendant is neither an admission or a denial of liability with respect to any issue dealt with in this Judgment nor an admission or denial of any factual allegations or legal conclusions stated or implied herein.

This Judgment requires the completion of specified activities by Defendant pursuant to the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) at Defendant’s property in Corwith Township, Otsego County that is the subject of the Complaints.

NOW, THEREFORE, upon the consent of the Parties, by their attorneys, it is hereby ORDERED, ADJUDGED AND DECREED:

I. JURISDICTION AND VENUE

A. This Court has jurisdiction over the subject matter of this action pursuant to MCL 324.3115(1) and MCL 324.30112. This Court also has personal

jurisdiction over the Defendant. Defendant waives all objections and defenses that it may have with respect to the jurisdiction of the Court.

B. Venue is proper in this circuit pursuant to MCL 324.3115(1) and MCL 324.30112.

C. The Court determines that the terms and conditions of this Consent Judgment are reasonable, and properly protect the interests of the people of the State of Michigan.

D. The Court shall retain jurisdiction over the Parties and subject matter of this action to enforce this Judgment and to resolve disputes arising under the same, including those that may be necessary for its construction, execution, or implementation.

II. PARTIES BOUND

A. The plaintiffs are the Michigan Departments of Environmental Quality (“MDEQ”) and Natural Resources, (“MDNR”) both principal departments within the Executive Branch of the State of Michigan. At the time of the filing of the Plaintiffs’ Complaint, the Plaintiffs were one agency, the Department of Natural Resources and Environment (“MDNRE”). The MDNRE was reorganized back into the MDEQ and MDNR through Executive Order 2011-01.

B. Intervening Plaintiffs Michigan Trout Unlimited (“MITU”) and Pigeon River Country Association (“PRCA”) are Michigan non-profit corporations interested in the protection and restoration of the Pigeon River in Northern Lower Michigan.

C. Defendant, Golden Lotus, Inc. (“GLI”) is the sole owner of the Song of the Morning Ranch located at 9607 East Sturgeon Valley Road, Vanderbilt, Otsego

County. GLI is a Michigan non-profit corporation and owns and operates the Lansing Club Dam on its property, maintaining an impoundment known as the Lansing Club Pond.

D. The provisions of this Consent Judgment shall be binding on the Parties, their officers, agents, successors and assigns. No change or changes in the ownership or other legal status of the Defendant, including, but not limited to, any transfer of assets or of real or personal property, shall in any way alter Defendant's responsibilities under this Judgment unless expressly agreed to by the MDEQ, MDNR and Intervening Plaintiffs, as an amendment to this Judgment. Defendant shall provide the MDEQ, MDNR and Intervening Plaintiffs with written notice prior to the transfer of ownership of part or all of the Property and shall also provide a copy of this Judgment to any subsequent owners or successors prior to the transfer of any ownership rights.

E. Defendant shall provide a copy of this Judgment to all contractors, subcontractors, and consultants that are retained to conduct any portion of the compliance activities to be performed pursuant to this Judgment, and to the employees overseeing environmental management of the Property, within three calendar days of the effective date of such retention.

F. Notwithstanding the terms of any contract(s) that Defendant may enter with respect to the compliance activities to be performed pursuant to this Judgment, Defendant is responsible for compliance with the terms of this Judgment and shall ensure that its contractors, subcontractors, consultants, and employees

perform all compliance activities in full conformance with the terms and conditions of this Judgment.

III. STATEMENT OF PURPOSE & EFFECT ON PRIOR ORDERS

A. In entering into this Judgment, it is the mutual intent of the Parties that Defendant will do the following:

1. Permanently draw down the Lansing Club Pond Impoundment to the spillway invert;
2. Prevent Unlawful Discharges to waters of the state;
3. Provide partial mitigation for natural resource damages associated with the events alleged within the Complaints;
4. Partially reimburse Plaintiff MDEQ for Costs of Surveillance and Enforcement as well as for reasonable attorney's fees; and
5. Pay a civil fine commensurate with the violations alleged in the Complaints and in the future pay stipulated fines as required by this Judgment for failures to meet its obligations.

B. In entering into this Judgment, it is the mutual intent of the Parties that the court Order the following with respect to prior orders arising from this same action:

6. This Court's July 22, 2011 "Opinion and Order Re: Intervening Plaintiffs' Motion to Clarify and Enforce Interim Order" is rescinded in its entirety.
7. The Interim Order issued by this Court on April 5, 2010 ("Interim Order") is affirmed and ratified.

8. Declaratory judgment is entered that the Permit issued by the MDEQ on October 16, 2013 for permanent drawdown of the Lansing Club Pond to the spillway invert ("MDEQ Permit") conforms with the Interim Order.

IV. DEFINITIONS

- A. "Effective Date" means the date that the Court enters this Judgment.
- B. "Party" means the Plaintiffs, Intervening Plaintiffs, or Defendants.
"Parties" means the Plaintiffs, Intervening Plaintiffs, and Defendants.
- C. "Property" means land owned by the Defendant.
- D. "Water Resources Division" or "WRD" means that Division of the MDEQ and any successor entities charged with implementing Parts 31 or 301 of the NREPA.
- E. Unless otherwise defined herein, all terms used in this document, which are defined in pertinent parts of the NREPA and associated administrative rules and/or permits or the federal Clean Water Act, shall have the same meaning in this document as in those pertinent parts, rules, and/or permits.

V. COMPLIANCE WITH STATE AND FEDERAL LAWS

All actions required to be taken pursuant to this Judgment shall be undertaken in accordance with the requirements of all applicable or relevant and appropriate state and federal laws, rules, and regulations including the procurement of all necessary permits and approvals.

VI. COMPLIANCE PROGRAM

A. Defendant shall implement the activities authorized by the MDEQ Permit, effective on October 16, 2013, as an enforceable component of this Judgment, including but not limited to compliance with notice provisions contained within permit conditions listed as #13 and #16 of the MDEQ permit (MDEQ File No.: 11-69-0001-P), appended as Exhibit 1.

B. Implementation of the MDEQ permit shall occur in accordance with any additional federal permits as required to be obtained by Defendant from the United States Fish & Wildlife Service for the non-purposeful taking of eagles in the vicinity of the Property. Defendant may only commence the drawdown authorized by the MDEQ Permit upon Defendant's receipt of a written directive from the MDEQ indicating that the drawdown may commence. Under no circumstances may implementation of the MDEQ permit for drawdown of the Lansing Club Dam impoundment commence later than *August 31, 2014*.

C. Upon completion of all activities authorized by the MDEQ Permit, or any modifications thereto, Defendant shall submit a written certification of the same to the WRD Project Manager in accordance with Section XI of this Judgment, with a copy to Intervening Plaintiffs, in addition to conditions set forth within Exhibit 1.

VII. EMERGENCY RESPONSE

A. In the event of a discharge to surface waters or other spill of polluting materials to the ground or water attributable to Defendant's activities, Defendant shall undertake the following measures:

1. Upon the discovery of a discharge of any waste, wastewater, or other spill of polluting materials to the ground or water, Defendant shall take immediate corrective measures to contain any losses of waste, wastewater, or other polluting material to prevent any further discharge or spill to waters of the state.
2. Defendant shall immediately upon discovery of any discharge of waste, wastewater, or other polluting material to surface waters of the state notify the WRD Gaylord District. Emergency notification shall be as follows:
 - a. Monday through Friday, during the hours of 8:00 AM to 5:00 PM, contact the MDEQ WRD Gaylord District at 989-731-4920.
 - b. At all other times, contact the Pollution Emergency Alerting System (PEAS) Hotline at 800-292-4706.
3. In addition to the verbal notification requirement above, Defendant shall provide written notification to the WRD Gaylord District Supervisor and the Chief of WRD Resource Enforcement Unit within ten calendar days following the discovery of any discharge of waste, wastewater, or other spill of polluting materials to the ground or water. The written notification shall include:

- a. A description and cause of the discharge or other spill, including an estimate of the discharge volume, and any analytical data in the possession of the Defendant related to the discharge or spill;
- b. The estimated duration of the discharge or other spill, including the date and time of the commencement and cessation of the discharge to the extent known;
- c. The corrective measures that were or will be implemented to prevent a future occurrence; and
- d. Copies of all pertinent records maintained pursuant to Section IX. of this Judgment.

VIII. REPORTING

A. Defendant shall verbally report any violation of this Judgment, excluding discharges to surface waters or other spill of polluting materials to the ground or water reported in accordance with Section VII above, to the WRD Gaylord District Supervisor not later than the close of the next business day following detection of such violation, and shall provide a written report within fourteen business days after detection of such violation to both the WRD Gaylord District Supervisor and the Chief of the WRD Resource Enforcement Unit, with a copy to Intervening Plaintiffs. The written report shall include a detailed description of the violation, the precise cause or causes of the violation, a detailed description of any action taken or proposed to correct the violation, and a schedule for the implementation of any proposed corrective action. Defendant shall report any

anticipated violation of this Consent Judgment to the MDEQ, WRD Gaylord District Supervisor, with a copy to Intervening Plaintiffs, in advance of the relevant deadlines whenever reasonably practicable.

MDEQ WATER RESOURCES DIVISION
GAYLORD DISTRICT SUPERVISOR
2100 WEST M-32
GAYLORD, MICHIGAN 49735-9282
989-731-4920

MDEQ RESOURCE ENFORCEMENT UNIT CHIEF
P.O. BOX 30458
LANSING, MICHIGAN 48909-7958
517-284-5502

IX. RECORD RETENTION AND ACCESS TO INFORMATION

A. Until five years after the termination of this Judgment, Defendant shall retain, and shall instruct its contractors, agents, and representatives to preserve, all non-identical copies of records and documents, including records or documents in electronic form, that this Judgment requires Defendant to create or maintain.

B. Upon MDEQ request, Defendant shall provide to the MDEQ and Intervening Plaintiffs copies of all documents and information within the possession or control of Defendant, its employees, contractors, agents, or representatives that this Judgment requires Defendant to create or maintain. Defendant shall not prevent its employees, contractors, agents, or representatives from discussing with MDEQ and Intervening Plaintiffs any relevant facts, except for privileged information, concerning the performance of activities undertaken pursuant to this Judgment.

C. This Judgment in no way limits or affects any right to obtain information held by the MDEQ pursuant to applicable laws, regulations, or permits, nor does it limit or affect any duty or obligation of Defendant to maintain records or information imposed by applicable laws, regulations, or permits.

X. ACCESS

A. Upon the Effective Date of this Judgment and to the extent of the property covered by this Judgment is owned, controlled by, or available to Defendant or successors in interest, the MDEQ, MDNR as well as their authorized employees, contractors and consultants, and authorized directors, officers, and consultants of MITU and PRCA shall, upon presentation of proper credentials, have access at all reasonable times to the Property for the purpose of conducting any activity for which access is required for the implementation of this Judgment or the continued evaluation of Defendant's compliance with Exhibit 1 of this Judgment and the NREPA, including, but not limited to:

1. Monitoring activities taking place pursuant to this Judgment;
2. Verifying any data or information submitted to the MDEQ;
3. Conducting investigations relating to discharges of potentially injurious substances at or from the Property;
4. Obtaining samples;
5. Assessing the need for corrective action or other response activities at or near the Property;

6. Assessing pollution control structures to assure the effectiveness and integrity of the structure(s);
7. Inspecting and copying non-privileged records, inspection logs, contracts and other documents maintained pursuant to this Judgment;
8. Communicating with Defendant, Defendant's personnel, representatives, or consultants for the purpose of assessing compliance with this Judgment;
9. Determining whether the Property is being used in a manner that is prohibited or restricted, or that may need to be prohibited or restricted, by or pursuant to this Judgment or the NREPA;
10. Assuring the protection of public health, safety, and welfare and the environment; and
11. Conducting tests and inspections pursuant to the NREPA.

B. To the extent that property where activities are performed by the Defendant under this Judgment is owned or controlled by persons other than Defendant, Defendant shall use its best efforts to secure from such persons access for the Parties and their authorized employees, contractors and consultants. Defendant shall provide the MDEQ with a copy of each access agreement secured pursuant to this section. For purposes of this paragraph, "best efforts" includes, but is not limited to, providing reasonable consideration acceptable to the owner.

XI. NOTICES

A. Except where this Judgment already identifies the persons to whom a document or information is to be submitted, any submittal, notice, report, documentation, or recitation required by this Judgment shall be submitted to the attention of:

For Plaintiff MDEQ: Jim Pawloski, WRD Dam Safety Engineer
Gaylord District
2100 West M-32
Gaylord, Michigan 49735-9282
989-705-3443 (office)
989-370-1528 (cell)

For Plaintiff MDNR: David Borgeson, Supervisor
Northern Lake Huron Management Unit
Gaylord Operations Service Center
1732 M-32 West
Gaylord, Michigan 49735-9282
989-732-3541 ext. 5070

For Intervening
Plaintiff MITU: Bryan Burroughs, Ph.D.
Executive Director Michigan Trout Unlimited
PO Box 442
DeWitt, Michigan 48220

and

Peter L. Gustafson
900 Fifth Third Center
111 Lyon Street N.W.
Grand Rapids, Michigan 49503

For Intervening
Plaintiff PRCA: Joseph Jarecki
8485 Old Vanderbilt Road
Vanderbilt, Michigan 49795

and

Peter L. Gustafson
900 Fifth Third Center
111 Lyon Street N.W.
Grand Rapids, Michigan 49503

For Defendant: Golden Lotus, Inc.
Attn: Linda Gabby, Board Chairperson
9607 Sturgeon Valley Rd.
Vanderbilt, Michigan 49795

William M. Schlecte, Esq.
Schlecte Law Firm, PC
761 W. Michigan Ave., Ste L
Jackson, MI 49201

Either party may substitute others for those designated to receive such notices by providing written notice to the other party.

XII. DELAYS IN PERFORMANCE, EXTENSION REQUESTS AND FORCE MAJEURE

A. Defendant shall perform the requirements of this Judgment within its time limits, unless events, which constitute a Force Majeure, prevent or delay performance or unless the WRD Chief grants an extension pursuant to Paragraph G of this section.

B. Any performance delay attributable to a Force Majeure shall not be deemed a violation of Defendant's obligations under this Judgment in accordance with this section. For this Judgment's purpose, Force Majeure means an occurrence or non-occurrence of the requirements under this Judgment arising from causes beyond the control of Defendant and for which Defendant is without fault for the

occurrence or non-occurrence, including, but not limited to: an act of God; inordinate delay by the MDEQ of submissions required under this Judgment; and the acts or omissions of a third party not under contractual obligations to Defendant that could not have been avoided or overcome through Defendant's due diligence and that resulted in a delay of performance of an obligation under this Judgment. Force Majeure does not include, among other things, unanticipated or increased costs, changed financial circumstances (including a failure to obtain funding), or failure to apply for a permit or license as a result of Defendant's action or omission.

C. Defendant shall telephone the WRD Gaylord District Supervisor within 48 hours of discovering any event, which causes a delay in its compliance with any provision of this Judgment. Verbal notice shall be followed by written notice to both the WRD Gaylord District Supervisor and Chief of the WRD Resource Enforcement Unit at the addresses in Section VIII of this Judgment, with a copy to Intervening Plaintiffs, within 10 calendar days and shall describe in detail the delay's anticipated length, the delay's precise cause or causes, the measures that Defendant has taken to prevent or minimize the delay, and the timetable by which those measures shall be implemented. Defendant shall use all reasonable measures to avoid or minimize any such delay.

D. Defendant's failure to comply with the notice requirements of Paragraph C of this section shall render the Force Majeure provisions of this section void as to the particular incident involved. The MDEQ may, at its sole discretion

and in appropriate circumstances, provide Defendant with a written waiver of the notice requirements of Paragraph C of this section.

E. If the MDEQ agrees that the delay or anticipated delay was beyond the control of Defendant, this may be so stipulated, and the Parties may petition the Court for an appropriate Consent Judgment modification. Defendant bears the burden of proving that any delay was beyond its reasonable control, and of showing that Defendant has met the requirements under this section.

F. In the absence of a Force Majeure, the Parties agree that the WRD Chief may, but in no circumstances is obligated to, grant Defendant an extension of the specified deadlines set forth in this Judgment. Any extension shall be preceded by a timely written request, received by the MDEQ, with a copy to Intervening Plaintiffs, no later than 10 business days prior to the pertinent deadline, which shall include:

1. An identification of the specific deadline that will not be met;
2. A detailed description of what will prevent Defendant from meeting the deadline;
3. A description of the measures Defendant has taken or intends to take to meet the required deadline;
4. The length of the extension requested and the specific date on which the obligation will be met.

The WRD Chief shall respond promptly to such requests and shall not unreasonably withhold approval for such requests.

G. Any extension of the specified deadlines, and any other modifications and amendments of this Judgment shall be signed by Plaintiffs MDEQ and MDNR, Intervening Plaintiffs, and the Defendant, shall have as their effective date the date on which they are signed by the WRD Chief, and shall be incorporated into and become an enforceable part of this Judgment upon approval of the Court. A denial by the WRD Chief that an event constitutes a Force Majeure constitutes a final decision on the matter and is not subject to appeal and review by the court.

H. An extension of one compliance date based upon a particular incident does not mean that Defendant qualifies for an extension of a subsequent compliance date without providing proof that an extension to a separate requirement under this Judgment is justifiable.

XIII. COMPENSATION TO THE STATE OF MICHIGAN

A. As set forth within Paragraph 17 of the Interim Order, Defendant agreed to pay to the State of Michigan \$150,000.00 as mitigation for alleged damages and investigation costs.

B. In consideration of Defendant's desire to further restore the Pigeon River on its Property, for the benefit of the State of Michigan, Plaintiffs MDEQ and MDNR agree to forgo the first two \$15,000.00 installments toward the total sum owed pursuant to the Interim Order and Paragraph 13.A, above provided that Defendant submits to the MDEQ, not later than the second anniversary date of this Judgment in 2016, an application for a permit requesting authorization to undertake additional river restoration activities. In the event that a permit application is not received by the MDEQ upon the two-year anniversary date of this

Judgment, then payment shall be made of the \$30,000.00 within 30 days of the anniversary date in accordance with Paragraph D, below.

C. Payment of the remaining \$120,000.00 shall be made in \$15,000.00 installments for each of the succeeding eight years on the anniversary date of this Judgment, commencing on the three-year anniversary date, or until the remaining sum is otherwise paid in full.

D. Defendant shall make all payments required by this Section XIII by certified or cashier's checks made payable to the State of Michigan and mailed to the Accounting Services Division, Cashier's Office for MDEQ, P.O. Box 30657, Lansing, Michigan 48909-8157, or hand delivered to the Accounting Services Division, Cashier's Office for MDEQ, 25 W. Ottawa St., Lansing, Michigan 48933, within 30 days of the Effective Date of this Judgment. To ensure proper credit, all payments made pursuant to this Judgment must include the Payment Identification Number **WTR-40069** on the face of the checks, or in the cover letter with the payments.

XIV. STIPULATED FINES

A. The MDEQ and Defendant stipulate to the payment of stipulated fines by the Defendant in the following manner should violations of this Judgment occur:

1. Any failure to comply with any compliance date in this Judgment shall result in stipulated fines as follows:
 - a. \$200.00 for the first day of violation;
 - b. \$300.00 for the second consecutive day of violation; and

c. \$500.00 for the third consecutive day of violation and every consecutive day thereafter.

2. A failure by Defendant to comply with any other provisions of Section VI or any other provision of this Judgment shall result in a stipulated fine of \$250.00 per day, per violation.

B. All stipulated fines shall be paid within 30 days of Defendant's receipt of a demand from the MDEQ. Demands for payment shall be sent via certified mail to ensure accuracy regarding the date of receipt. Failure to make any payment required under this Judgment by the specified deadline constitutes a separate violation of this Judgment and is subject to an interest penalty calculated in accordance with Section 600.6013(8) of the Revised Judicature Act; MCL 600.6013(8).

C. Defendant shall pay all stipulated fines and interest penalties by certified or cashier's check made payable to the State of Michigan and mailed to the Michigan Department of Environmental Quality, Cashier's Office, P.O. Box 30657, Lansing, Michigan 48909-8157. To ensure proper credit, all payments made pursuant to this Consent Judgment must include the Payment Identification Number **WTR-40069** on the face of the check, or in the cover letter with the payment.

D. Defendant agrees not to contest the legality of any stipulated fines or interest penalties assessed under this section, but reserves the right to dispute the factual basis upon which MDEQ demands stipulated fines or interest penalties.

E. Liability for or payment of stipulated fines under this Judgment shall not preclude the MDEQ or Intervening Plaintiffs from seeking injunctive relief or other relief to which they are entitled for Defendant's failure to comply with other specific requirements of this Judgment, or any other applicable law, except that Plaintiffs and Intervening Plaintiffs shall not seek additional monetary relief for any violations for which MDEQ has accepted stipulated fines under this Judgment.

XV. RESERVATION OF RIGHTS

A. As to Plaintiffs MDEQ and MDNR:

1. With respect to any violations not expressly addressed and resolved by this Judgment, the MDEQ reserves the right to pursue any other remedies to which it is entitled for any failure to comply with the requirements of any state or federal law, including the NREPA and its rules.
2. This Judgment does not affect Defendant's responsibility to comply with any other applicable state, federal, or local laws or regulations including the procurement of required permits and/or approvals; or with any order of this or any court, including, without limitation, any corrective action or similar requirements under Parts 31 or 301 of the NREPA or rules or any amendments thereto.
3. This Judgment does not limit the rights of the Defendant or the State of Michigan against any third parties.

B. As to Intervening Plaintiffs MITU and PRCA:

1. With respect to any violations, acts or omissions not expressly addressed and resolved by this Judgment, MITU and PRCA reserve the right to pursue any other remedies to which they are entitled for any failure to comply with the requirements of any state or federal statutory or common law, or prior court judgments, including the Michigan Environmental Protection Act (MCL 324.1701, *et seq.*) and public nuisance. This Judgment does not limit the rights of Defendant or Intervening Plaintiffs against any third parties.

C. As to Defendant GLI:

1. Defendant reserves the right to notify responsible authorities and expect reasonable regard and consideration for the life and well-being of wildlife affected by the drawdown, including reptiles, amphibians, fish, threatened species, species of interest living on the pond, or animals injured or displaced as a result of the drawdown.
2. Defendant is a spiritual Retreat with an atmosphere of the sacredness of our forest and our beliefs, and persons accessing the premises are to have due regard and respect for guests and others at the retreat.

XVI. GENERAL PROVISIONS

A. Severability

Should a court of competent jurisdiction declare any provision of this Consent Judgment to be unenforceable, the remaining provisions shall remain in effect.

B. Modification

Any Party to this Judgment may petition the Court for modification of this Judgment including its termination prior to expiration of the effective period. Any modification must be in writing and approved by the Court. No Party may petition the Court for a modification of this Judgment without first having made a good faith effort to reach agreement with the other Party on the terms of any such modification. The Parties may petition the Court to modify any requirement or provision of this Judgment by mutual agreement or may modify this Judgment through a writing signed by authorized representatives of the Parties.

C. Other Laws

This Judgment in no way affects the Defendant's responsibility to comply with any other applicable state or federal laws or local regulations or with any order of this or any other Court including without limitation, any amendments to the NREPA or its rules or regulations.

D. Settlement

This Judgment is in settlement and satisfaction of all civil claims against Defendant alleged by the Plaintiffs and Intervening Plaintiffs in their respective Complaints; provided, the Parties acknowledge that this Consent Judgment is not

intended to affect the rights of GLI, MITU, and PRCA under any other separate agreements existing between them.

XVI. RETENTION OF JURISDICTION

Prior to termination of this Judgment, in accordance with Section XVII below, this Court shall retain jurisdiction over this action to modify or enforce the terms of this Judgment, assess disputed stipulated fines, resolve all other disputes arising under its terms, or to take any action necessary or appropriate for construction or implementation of this Judgment.

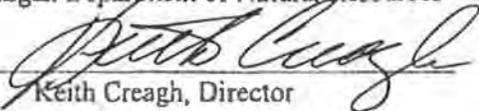
XVII. TERMINATION

This Judgment shall terminate upon written request of Defendant and written approval from the MDEQ and Intervening Plaintiffs, along with approval of this Court through the issuance of a Satisfaction of Judgment. The written request of Defendant shall include a certification by Defendant that it has:

- (1) accomplished and complied with all requirements of this Judgment;
- (2) has paid in full all fines and costs owed to the State of Michigan under this Judgment;
- (3) has not received a Notice Letter or other document from the MDEQ alleging a violation of Part 31, Part 301, or this Judgment for three consecutive years; and
- (4) written statements indicating approval of Defendant's request for Satisfaction of Judgment from the MDEQ, MDNR, and Intervening Plaintiffs.

The MDEQ, MDNR, MITU, and PRCA will not withhold agreement to terminate this Judgment unless reasonably disputed.

Michigan Department of Natural Resources

By: 
Keith Creagh, Director

Dated: 3/28/2014

By: 

Pamela J. Stevenson (P40373)
Assistant Attorney General
Michigan Department of Attorney
General
Environment, Natural Resources, and
Agriculture Division

Dated: 4/2/2014

FOR INTERVENING PLAINTIFFS

Michigan Trout Unlimited

Dated: March 27, 2014

By: 
Bryan Burroughs, Ph.D.
Executive Director

Pigeon River Country Association

Dated: March 27, 2014

By: 
Joseph Jarecki
Authorized Board Member

Dated: March 27, 2014

By: 
Peter L. Gustafson
Co-Counsel for Intervening Plaintiffs

Dated: March 27, 2014

By: 
Edward H. Davison
Co-Counsel for Intervening Plaintiffs

XVIII. SEPARATE DOCUMENTS

This Judgment may be executed in four or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Judgment may be executed in duplicate original form.

XIX. SIGNATORIES

The signatories to this Judgment certify that they are authorized to execute this Judgment and to legally bind the Parties they represent to the requirements of this Judgment.

FOR DEFENDANT:

By: _____

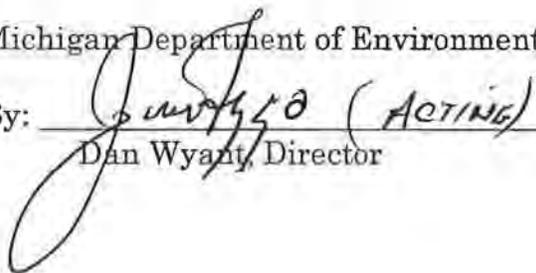
Dated: _____

By: _____

Dated: _____

FOR STATE PLAINTIFFS:

Michigan Department of Environmental Quality

By:  (ACTING)

Dan Wyant, Director

Dated: 4/2/2014

XVIII. SEPARATE DOCUMENTS

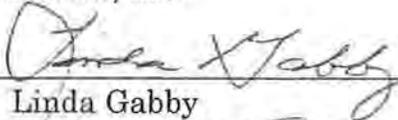
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XIX. SIGNATORIES

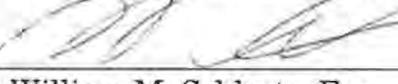
The signatories to this Judgment certify that they are authorized to execute this Judgment and to legally bind the Parties they represent to the requirements of this Judgment.

FOR DEFENDANT:

Golden Lotus, Inc.

By: 
Linda Gabby
Chairperson, Board of Directors

Dated: 3/25/2014

By: 
William M. Schlecte, Esq.
Counsel for Defendant

Dated: 3/27/2014

FOR STATE PLAINTIFFS:

Michigan Department of Environmental Quality

By: _____
Dan Wyant, Director

Dated: _____

IT IS SO ORDERED, ADJUDGED AND DECREED THIS 3rd day of
APRIL, 2014. This Consent Judgment constitutes a final order resolving
the last pending claim and closes the case.



Hon. Janet Allen
Circuit Court Judge

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY PERMIT

ISSUED TO:

Golden Lotus, Inc.
Attn: Linda Gabby
9607 E. Sturgeon Valley Road
Vanderbilt, MI 49795

Permit No.	11-69-0001-P
Issued	October 16, 2013
Extended	
Expires	October 16, 2018

This permit is being issued by the Department of Department of Environmental Quality (DEQ) under the provisions of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA) and specifically:

Part 301, Inland Lakes and Streams
Part 303, Wetlands Protection
Part 315, Dam Safety

Permission is hereby granted, based on permittee assurance of adherence to State requirements and permit conditions to:

Permanently drawdown the Lansing Club Pond impoundment to the minimum elevation possible with the existing infrastructure. Drawdown shall be limited to a maximum elevation change of one 4 inch board per 3 day period. Discharge approximately 34 cubic yards of fill to construct a permanent haul road measuring 130 feet long by 8 feet wide for the purpose of getting mechanical equipment to the water's edge. Construct a sediment basin immediately upstream of the existing dam measuring approximately 30 feet long by 20 feet wide; mechanically dredge granular sediment from the basin as necessary. Remove selected dam infrastructure, including the primary spillway gates, guide, and operators; remove the powerhouse turbine and associated equipment; remove the upstream gate, trash racks, and guides and lower part of the downstream exterior wall of the powerhouse; and remove the dividing wall downstream of the primary spillway gates. All work shall be done in accordance with the following conditions and attached plans.

Water Course Affected: Pigeon River

Property Location: Otsego County, Corwith Township, Section 19 & 30

Town/Range 32N, 1W **Property Tax No.** 69-040-019-100-005-01

Authority granted by this permit is subject to the following limitations:

- A. Initiation of any work on the permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of this permit.
- B. The permittee in exercising the authority granted by this permit shall not cause unlawful pollution as defined by Part 31, Floodplain/Water Resources Protection of the NREPA.
- C. This permit shall be kept at the site of the work and available for inspection at all times during the duration of the project or until its date of expiration.
- D. All work shall be completed in accordance with the plans and the specifications submitted with the application and/or plans and specifications attached hereto.
- E. No attempt shall be made by the permittee to forbid the full and free use by the public of public waters at or adjacent to the structure or work approved herein.
- F. It is made a requirement of this permit that the permittee give notice to public utilities in accordance with Act 53 of the Public Act of 1974 and comply with each of the requirements of that act.
- G. This permit does not convey property rights in either real estate or material, nor does it authorize any injury to private property or invasion of public or private rights, nor does it waive the necessity of seeking federal assent, all local permits or complying with other state statutes.
- H. This permit does not prejudice or limit the right of a riparian owner or other person to institute proceedings in any circuit court of this state when necessary to protect his rights.
- I. Permittee shall notify the DEQ within one week after the completion of the activity authorized by this permit, by completing and forwarding the attached, preaddressed post card to the office addressed thereon.
- J. This permit shall not be assigned or transferred without the written approval of the DEQ.
- K. Failure to comply with conditions of this permit may subject the permittee to revocation of permit and criminal and/or civil action as cited by the specific State Act, Federal Act and/or Rule under which this permit is granted.
- L. Work to be done under authority of this permit is further subject to the following special instructions and specifications:

FROM :

FAX NO. : 989-732-1092

Jul. 23 2011 03:33PM P1

Golden Lotus, Inc.

Permit No. 11-69-0001-P

This permit shall become effective on the date of the DEQ representative's signature. Upon signing by the permittee named herein, this permit must be returned to the DEQ's Water Resources Division, Attn: Jim Pawloski at 2100 West M-32, Gaylord, Michigan 49735 for final execution.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

Golden Lotus, Inc October 11, 2013
Permittee Date
Linda Gabby, Chairperson of Bd. of Directors
Printed Name and Title of Permittee

Please provide the name, address, and telephone number of the person responsible for compliance of these permit conditions, and who has the authority to stop work on the project, whom the DEQ shall contact if necessary:

Name:

Print Linda Gabby

Sign [Signature]

Date October 11, 2013

Address 9607 E. Sturgeon Valley Rd.

Vanderbilt, Mi. 49795

Telephone Number 989-983-4107

FAX Number 989-982-3180

e-mail address linda@goldenlotus.org

1. In issuing this permit, the DEQ has relied on the information and data that the permittee has provided in connection with the permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete, or inaccurate, the DEQ may modify, revoke, or suspend the permit, in whole or in part, in accordance with the new information.
2. It is the intent of the permittee and the DEQ to restore the natural sediment transport processes in the Pigeon River in the vicinity of the Lansing Club Pond. The permitted activities are intended to accomplish this goal to the extent practical. As the permitted activities are implemented, the DEQ will periodically review and assess the impact of the activities relative to this goal to determine when dredging of accumulating sediments may cease.
3. The permitted activity must be implemented in full, unless otherwise authorized in writing by the DEQ. Any activity less than full implementation will be considered as non-compliant and will be subject to permit enforcement action.

4. The permittee shall indemnify and hold harmless the State of Michigan and its departments, agencies, officials, employees, agents and representatives for any and all claims or causes of action arising from acts or omissions of the permittee, or employees, agents, or representatives of the permittee, undertaken in connection with this permit. This permit shall not be construed as an indemnity by the State of Michigan for the benefit of the permittee or any other person.
5. The authority to conduct the activity as authorized by this permit is granted solely under the provisions of the governing act as identified above. This permit does not convey, provide, or otherwise imply approval of any other governing act, ordinance, or regulation, nor does it waive the permittee's obligation to acquire any local, county, state or federal approval or authorization, necessary to conduct the activity.
6. All permitted activities shall be completed in conformance with Attachment C—Project Narrative, dated February 2011, on file in the Water Resources Division, Gaylord Field Office, attached to the permit application and public notice (dated March 18, 2011) for this project. The referenced attachment is incorporated herein in its entirety as part of this permit. Where discrepancies may exist between the permit application language and the actual language in this permit, the language in this permit shall govern.
7. This stream falls under the authority of Part 305, Natural Rivers, of the NREPA. Authority granted by this permit does not waive permit requirements under the authority of Part 305. A Natural Rivers Zoning Permit may be required for construction, land alteration, stream bank stabilization, or vegetation removal along or near the river. Authorization under Part 305 must be obtained prior to beginning the work authorized by this permit. For information regarding a Natural River Zoning Permit, please contact Mr. Brian Bury at 989-732-3541, Department of Natural Resources (DNR), Gaylord.
8. Prior to initiating construction, authorized by this permit, the permittee shall provide a copy of the permit to the contractor(s) for review.
9. The property owner and contractor(s) involved in exercising this permit are held responsible to ensure the project is constructed in accordance with all drawings and specifications contained in this permit. The contractor is required to provide a copy of the permit to all subcontractors doing work authorized by this permit.
10. All construction/deconstruction shall be in accordance with the plans and specification prepared by Mr. Mark Funkhouser, P.E., dated February 15, 2011. Construction activity must be done under the supervision of engineer licensed in Michigan.
11. Authority granted by this permit does not waive permit requirements under Part 91, Soil Erosion and Sedimentation Control, of the NREPA, or the need to acquire applicable permits from Otsego County. Please contact Ms. Patricia Osburn at 989-731-4711.
12. Prior to initiation of construction, a preconstruction meeting shall be held with the contractor, permittee or her/his representative(s), and representatives of the DEQ. To arrange the required meeting, please contact Mr. Jim Pawloski at 989-705-3443 or pawloskij@mi.gov.
13. Notification shall be made to the DEQ's Water Resources Division, five days prior to starting the project. Contact Mr. Jim Pawloski at 989-705-3443 or pawloskij@mi.gov.

14. The permittee is hereby notified that there is a United States Geological Survey (USGS) gauging station in the vicinity of the permitted project. Prior to initiation of this project the permittee shall contact the USGS, 6520 Mercantile Way, Suite 5, Lansing, Michigan 48911-5991 for any special procedural requirements. Telephone 517-887-8903 for information.
15. The drawdown of the impoundment and removal of the dam is likely to disturb a known bald eagle nest in the vicinity of the impoundment. The permittee shall apply for a non-purposeful eagle take permit pursuant to the Bald and Golden Eagle Protection Act of 1940. The permit application form is available at <http://www.fws.gov/migratorybirds/baldeagle.htm>. Further questions regarding bald eagle issues should be directed to Mr. Matt Stuber, United State Department of the Interior, Fish and Wildlife Service, 2651 Coolidge Road, Suite 101, East Lansing, Michigan, 48823-6316, matthew_stuber@fws.gov, 517-351-8469.
16. Notification of the drawdown shall be published in the Gaylord Harold Times at least 20 days prior to the beginning of the drawdown.
17. The applicant will monitor the drawdown for stranding of fish and wildlife and rescue thereof. A report documenting any stranding and rescue efforts shall be provided to the DEQ within 60 days of the completion of the project.
18. Dredged material shall not be transported until sufficiently dewatered.
19. All dredge/excavated spoils including organic and inorganic soils, vegetation, and other material removed shall be placed at the approved upland location (non-wetland, non-floodplain), prepared for stabilization, and stabilized with sod and/or seed and mulch in such a manner to prevent and ensure against erosion of any material into any waterbody, wetland, or floodplain.
20. The spoils shall not be mixed with other waste or materials that are not inert as defined in Part 115, Solid Waste Management, of the NREPA.
21. The provisions of this permit do not preclude the permittee from disposal of the spoils in accordance with Part 115 at a properly licensed Type II solid waste disposal facility or at an out-of-state facility in accordance with the State's solid waste disposal regulations.
22. Within 60 days after final placement of spoils, the permittee shall obtain a boundary survey and property description of the area used as a disposal site, including the cover and side slopes thereof. The permittee shall enter said description on the enclosed Declaration of Restrictive Covenant, have the Restrictive Covenant signed by the proper corporate officers, have the signatures properly witnessed and notarized, and record the Restrictive Covenant with the appropriate County Register of Deeds. A copy of the recorded document shall be submitted to the DEQ, Attn: Mr. Jim Pawloski at 2100 West M-32, Gaylord, MI 49735, within 60 days after final placement of spoils.
23. During removal of the existing structural elements, every precaution shall be taken to prevent debris from entering any watercourse. Any debris reaching the watercourse during the removal and/or reconstruction of the structure shall be immediately retrieved from the water. All material shall be disposed of in an acceptable manner consistent with local, state, and federal regulations.
24. Any modification or revision to the approved design plans and/or specifications must be approved in writing by the DEQ.

25. Record drawings (construction plans) of the project shall be submitted to this office within 60 days of project completion. The record drawings shall be sealed and signed by a licensed professional engineer registered in the State of Michigan, and shall be accompanied by a written statement that the project has been completed in accordance with this permit. The project will be considered complete when the permitted activity has been fully executed (including drawdown, removal of infrastructure, and dredging as described under the permitted activity), the referenced drawings have been received by the DEQ, and an on-site review of the project by the DEQ has been completed.
26. A licensed professional engineer of the permittee's choice shall certify to the DEQ that the excavation and covering of contaminated soils was completed per DEQ permit requirements. The permittee is responsible to insure the project is constructed in accordance with all drawings and specifications contained in this permit. Certification shall be provided no later than 60 days after the spoils are placed on-site and covered.
27. Noncompliance with these terms and conditions, and/or the initiation of other regulated activities not specifically authorized by this permit shall be cause for the modification, suspension, or revocation of this permit, in whole or in part. Further, the DEQ may initiate criminal and/or civil proceedings as may be deemed necessary to correct project deficiencies, protect natural resource values, and secure compliance with statutes.
28. A project documentation report shall be prepared to adequately document all project activities associated with the permitted activity. The report shall include, but not be limited to, documentation of: dissolved oxygen monitoring, stop log removal, dredging and spoil disposal, fish and wildlife stranding and rescue, dam infrastructure removal and other pertinent project activities. The report shall be provided to the DEQ within 60 days of completion of the permitted activities.
29. If any change or deviation from the permitted activity becomes necessary, the permittee shall request, in writing, a revision of the permitted activity and/or mitigation plan from the DEQ. Such revision requests shall include complete documentation supporting the modification and revised plans detailing the proposed modification. Proposed modifications must be approved, in writing, by the DEQ prior to being implemented.
30. This permit may be transferred to another person upon written approval of the DEQ. The permittee must submit a written request to the DEQ to transfer the permit to the new owner. The new owner must also submit a written request to accept transfer of the permit. The new owner must agree, in writing, to accept all conditions of the permit. A single letter signed by both parties which includes all the above information may be provided to the DEQ. The DEQ will review the request and if approved, will provide written notification to the new owner.
31. This permit is being issued for the maximum time allowed under Part 301, Inland Lakes and Streams, and Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, PA 451 of 1994, as amended, including all permit extensions allowed under the administrative rules R 281.813 and R 281.923. Therefore, no extensions of this permit will be granted. Initiation of the construction work authorized by this permit indicates the permittee's acceptance of this condition. The permit, when signed by the DEQ, will be for a five-year period beginning at the date of issuance.

32. This permit placard shall be kept posted at the work site, in a prominent location at all times for the duration of the project, or until permit expiration.

Dan Wyant, Director
Department of Environmental Quality

By James T. Pawloski
James T. Pawloski, P.E.
Water Resources Division
989-705-3443

Enclosure

cc: Mr. William Schlecte, Schlecte Law Firm
Mr. Tom Stanko, Golder Associates
Ms. Patricia Osburn, Otsego County SESC Officer
Corwith Township Clerk
Ms. Melanie Haveman, U.S. Environmental Protection Agency
Mr. Scott Hicks, U.S. Fish & Wildlife Service
Ms. Pamela Stevenson, Department of the Attorney General
Mr. David Borgeson, DNR
Mr. Brian Bury, DNR
Dr. William Larsen, DEQ
Ms. Colleen O'Keefe, DEQ



Notice of Authorization

Permit Number 11-69-0001-P

Issued: 10/16/2013

Expiration Date: 10/16/2018

The Michigan Department of Environmental Quality, Water Resources Division,
P.O. Box 30458, Lansing, Michigan 48909-7958, under provisions of the Natural Resources and
Environmental Protection Act, 1994 PA 451, as amended, and specifically:

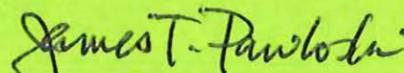
- Part 31, Floodplain Regulatory Authority of the Water Resources Protection.
- Part 301, Inland Lakes and Streams.
- Part 303, Wetlands Protection.
- Part 315, Dam Safety.
- Part 323, Shorelands Protection and Management.
- Part 325, Great Lakes Submerged Lands.
- Part 353, Sand Dunes Protection and Management.

Authorized activity:

Permanently drawdown the Lansing Club Pond impoundment to the minimum elevation possible with the existing infrastructure. Drawdown shall be limited to a maximum elevation change of one 4 inch board per 3 day period. Discharge approximately 34 cubic yards of fill to construct a permanent haul road measuring 130 feet long by 8 feet wide for the purpose of getting mechanical equipment to the water's edge. Construct a sediment basin immediately upstream of the existing dam measuring approximately 30 feet long by 20 feet wide; mechanically dredge granular sediment from the basin as necessary. Remove selected dam infrastructure, including the primary spillway gates, guide, and operators; remove the powerhouse turbine and associated equipment; remove the upstream gate, trash racks, and guides and lower part of the downstream exterior wall of the powerhouse; and remove the dividing wall downstream of the primary spillway gates. All work shall be done in accordance with the following conditions and attached plans.

To be conducted at property located in: Otsego County, Waterbody: Pigeon River
Section 19 30, Town 32N, Range 1W, Corwith Township

Permittee: Golden Lotus Inc.
9607 E Sturgeon Valley Road
Vanderbilt, MI 49795


James T Pawloski
Water Resources Division
989-731-4920

*This notice must be displayed at the site of work.
Laminating this notice or utilizing sheet protectors is recommended.*

Please refer to the above Permit Number with any questions or concerns.

DECLARATION OF RESTRICTIVE COVENANT

Completion of this form is required under the authority of Part 115, Solid Waste Management, the Natural Resources and Environmental Protection Act (NREPA), 1994 PA 451, as amended, Michigan Compiled Laws Annotated. Completion of this document is required in order to obtain a site specific designation of inertness or approval pursuant to Part 301, Inland Lakes and Streams, of the NREPA.

THIS INDENTURE made the _____, day of _____, 20____, by and between, _____ whose address is _____, and the Director of the Michigan Department of Environmental Quality for and on behalf of the state of Michigan whose address is PO Box 30241, Lansing, MI 48909-7741.

WHEREAS, application for a site specific designation of inertness under provisions of Part 115 or approval for disposal pursuant to Part 301, for the purpose of placing, managing, maintaining dredged materials removed from the _____ River/Lake upon lands situated in the Township of _____, County of _____, more particularly described as

The legal description of the land upon which this restrictive covenant is imposed is set forth in Attachment A. Attachment A also contains a map depicting the following:

- a. the property boundary,
- b. the boundary of the land upon which the restrictive covenant is imposed, as described in Attachment A, with Metes and Bounds for each section of traverse labeled,

has been properly made by the _____; and

WHEREAS, the Director of the Department of Environmental Quality will contemporaneously issue a site specific designation of inertness or approval for disposal pursuant to Part 301; and

WHEREAS, Part 115, R 299.4116 or R 299.4110(d), requires that at the time of issuance of a site specific designation of inertness or for disposal pursuant to the provisions of Part 301, an instrument which imposes a restrictive covenant upon the land involved shall be executed by all the owners of the tract of land upon which the dredged materials are placed.

NOW THEREFORE, _____, do for themselves, their heirs, successors, lessees, or assigns declare, covenant, and agree:

1. That the lands hereinbefore described have been or will hereafter contain dredged material, and that neither they, nor their servants, agents, employees, nor any of the heirs, successors, lessees or assigns shall (or shall by their leave or sufferance permit others to) engage in filling, grading, excavating, developing a drinking water well, drilling, or mining of the lands and premises above described, unless written authorization therefore is obtained from the Director of the Department of Environmental Quality and that the State of Michigan or any municipality may in addition to any other remedy available at law bring an action for an injunction or other process against any person, county, or municipality to restrain or prevent any violation of the restrictive covenant hereby imposed upon the subject premises.
2. That at the time of the sealing and delivery of this instrument, the above described premises are free from all encumbrances (other than liens, mortgages, judgement liens, mechanics' liens, accrued or unpaid taxes, leases other than mineral leases, or other security interests).

B (Partnership)

Signed in the presence of:

 * Grantor

 By _____
 * _____
 Its _____

STATE OF MICHIGAN)
) ss
 COUNTY OF _____)

The foregoing instrument was acknowledged before me this _____ day of _____, 20____,
 by _____, Partner(s) on behalf of _____,
 _____, a partnership.

Form prepared/drafted by:

 (NAME) * _____ Notary Public

 (BUSINESS ADDRESS) _____ County, Michigan

 (CITY, STATE AND ZIP CODE) My Commission Expires _____

Signed in the presence of:

 * By _____

 * Steven R. Sliver
 for the Director, Dan Wyant
 Michigan Department of Environmental Quality

STATE OF MICHIGAN)
) ss
 COUNTY OF INGHAM)

The foregoing instrument was acknowledged before me this _____ day of _____, 20____,
 by Steven R. Sliver, Chief, of the Solid Waste and Land Application Section, Resource Management Division,
 for the Director of the Department of Environmental Quality, on behalf of the state of Michigan.

 * Notary Public
 Ingham County, Michigan
 My Commission _____

When recorded, return to:
 Michigan Department of Environmental Quality
 Resource Management Division
 Solid Waste and Land Application Section
 P.O. Box 30244, Lansing, Michigan 48909-7744

FROM :

FAX NO. :989-732-1092

Jul. 23 2011 03:43PM P1

C (Individual)

Signed in the presence of:

 * Grantor

 * By _____

 * Its _____

STATE OF MICHIGAN)
) ss
 COUNTY OF)

The foregoing instrument was acknowledged before me this _____ day of _____, 20_____

by _____

Form prepared/drafted by:

 (NAME) *Notary Public

 (BUSINESS ADDRESS) _____ County, Michigan

 (CITY, STATE AND ZIP CODE) My Commission Expires _____

Signed in the presence of:

 * By _____

 Steven R. Sliver
 for the Director, Dan Wyant
 Michigan Department of Environmental Quality

STATE OF MICHIGAN)
) ss
 COUNTY OF INGHAM)

The foregoing instrument was acknowledged before me this _____ day of _____, 20_____

by Steven R. Sliver, Chief, of the Solid Waste and Land Application Section, Resource Management Division,
 for the Director of the Department of Environmental Quality, on behalf of the State of Michigan.

When recorded, return to:
 Michigan Department of Environmental Quality
 Resource Management Division
 Solid Waste and Land Application Section
 P.O. Box 30241, Lansing, Michigan 48909-7741

 *Notary Public

 Ingham County, Michigan

 My Commission Expires _____

Revised



WRD/DEA Permitted Eriam

OCT 16 2013

File No. 11-6A-0001
Page No. 11 of 21



RECEIVED

FEB 18 2011

DNR/WRD PERMIT CONSOLIDATION UNIT

GOLDEN LOTUS
SONG OF THE MORNING
JOINT PERMIT APPLICATION

PROJECT

PLAN VIEW AND SECTION
LOCATION -
DREDGING

TITLE

PROJECT No. 093-88639

FILE No. 09388639B001

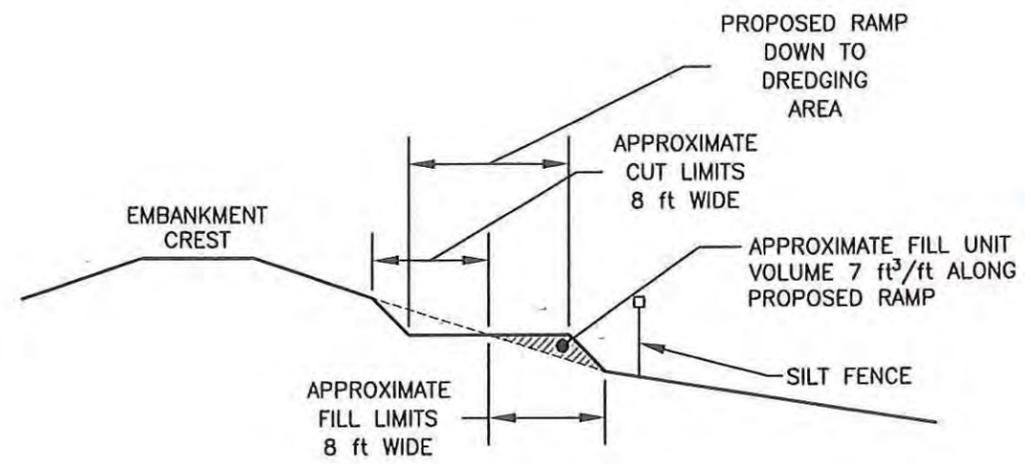
REV. 1 SCALE AS SHOWN

DESIGN MF 01/14/11

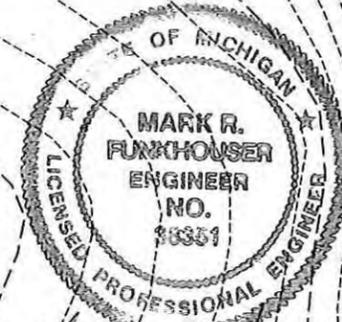
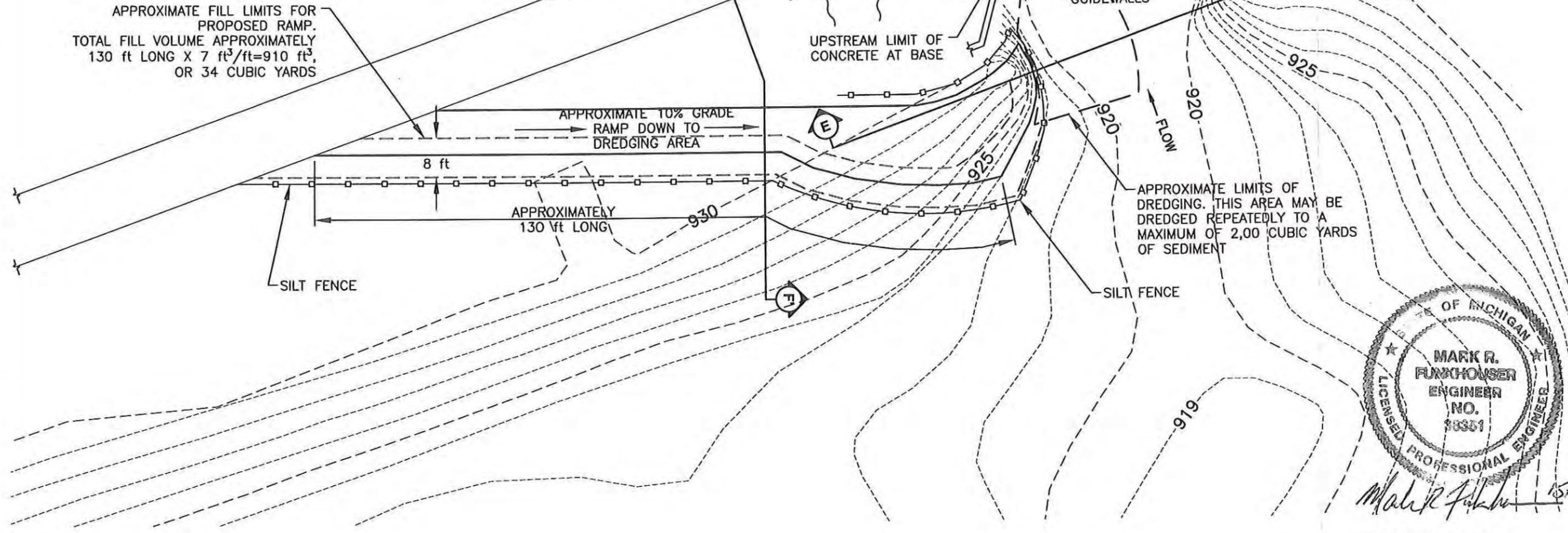
CADD JJS 01/17/11

CHECK MRF 02/15/11

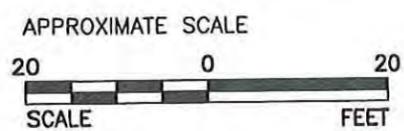
REVIEW TAS 02/15/11



APPROXIMATE FILL LIMITS FOR PROPOSED RAMP. TOTAL FILL VOLUME APPROXIMATELY 130 ft LONG X 7 ft³/ft=910 ft³, OR 34 CUBIC YARDS



Mark R. Funkehouse 15 FEB 11



NOTE:

1. BATHYMETRY BASED ON AFFILIATED RESEARCHERS 2008 SURVEY.

Revised

WRD/DEQ
Permitted Plan

OCT 16 2013

File No. 11-69-0001
Page No. 12 of 21



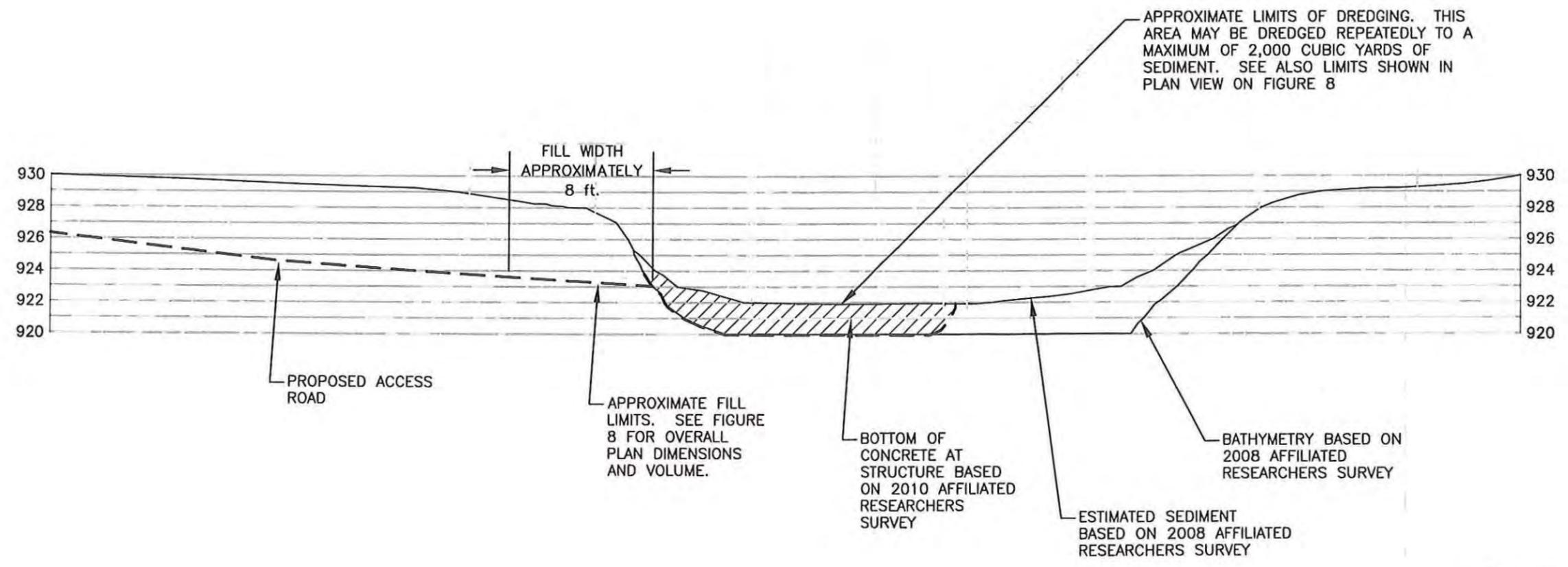
GOLDEN LOTUS
SONG OF THE MORNING
JOINT PERMIT APPLICATION

PROJECT

SECTION E - E'

TITLE

PROJECT No.	093-88639
FILE No.	09388639B001
REV. 1	SCALE AS SHOWN
DESIGN	MF 01/14/11
CADD	JJS 01/17/11
CHECK	MRF 02/15/11
REVIEW	TAS 02/15/11



RECEIVED

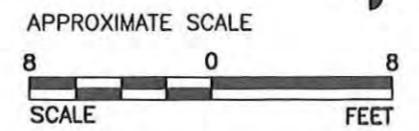
FEB 18 2011

DNPRE/WRD
PERMIT CONSOLIDATION UNIT

SECTION E-E'



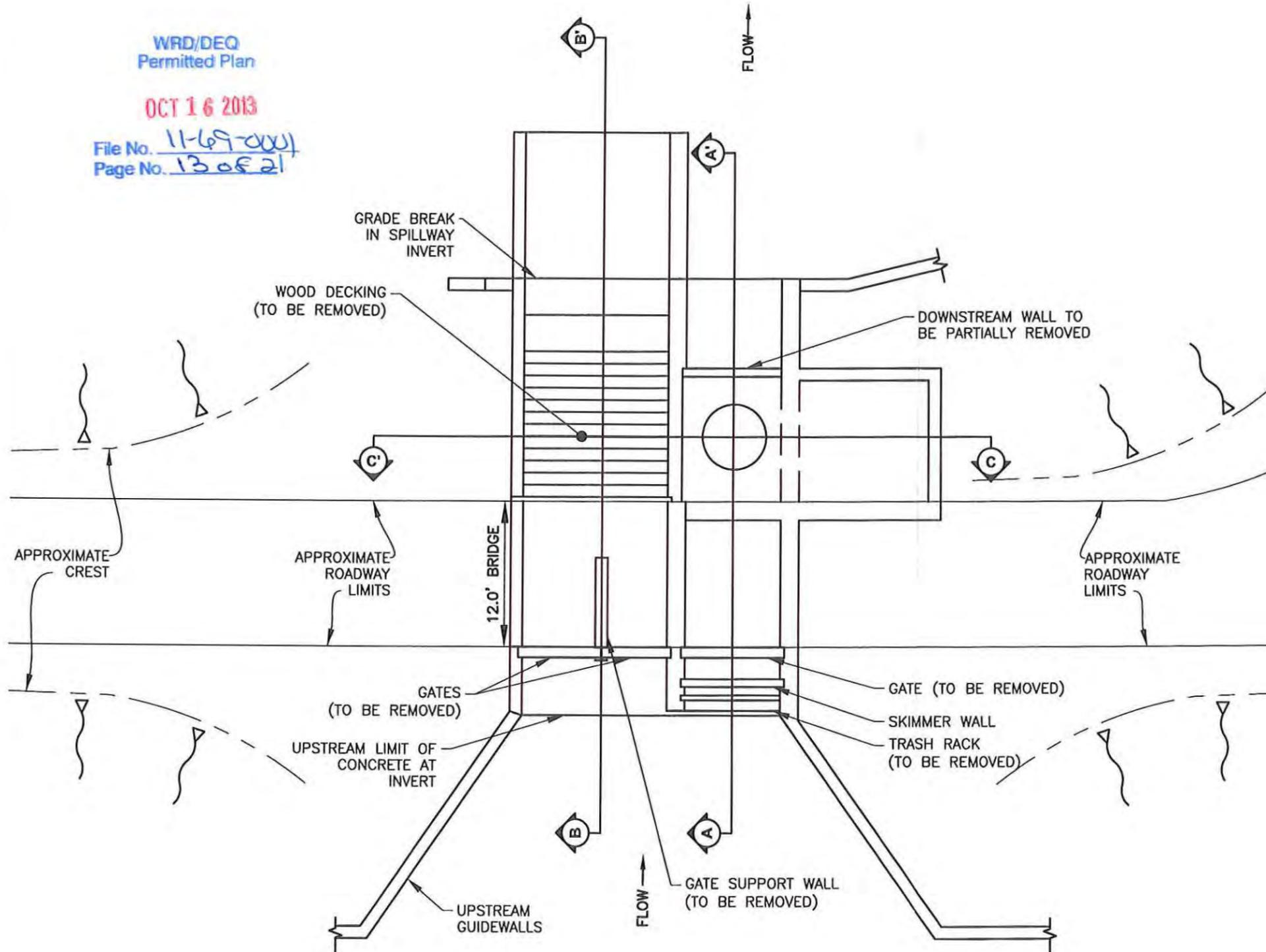
Mark R. Funkhouser 15 FEB 11



WRD/DEQ
Permitted Plan

OCT 16 2013

File No. 11-69-0001
Page No. 13 of 21



NOTES:

Revised

DRAWING BASED ON THE FOLLOWING:

1. DRAWING NO. 49319 "GENERAL ARRANGEMENT," DRAWING DATED 10/10/57 BY THE JAMES LEFFEL & CO.
2. DRAWING NO. 52082R1 "GENERAL ARRANGEMENT," DRAWING DATED 09/14/72 BY THE JAMES LEFFEL & CO.
3. RECORD DRAWING, SHEET 2 OF 2, "UPSTREAM DAM FACE SLOPE IMPROVEMENTS AND EMERGENCY OVERFLOW SPILLWAY," DATED 11/12/90, BY WADE-TRIM/GRANGER.
4. RECORD DRAWING, SHEET 2 OF 2, "SECONDARY GATE STRUCTURE AND PRIMARY GATE REPLACEMENT ASSEMBLY," DATED 11/12/90, BY WADE-TRIM/GRANGER.



GOLDEN LOTUS
SONG OF THE MORNING
JOINT PERMIT APPLICATION

PROJECT

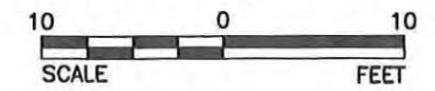
PLAN VIEW AND SECTION
LOCATIONS

TITLE

RECEIVED
FEB 18 2011
DNR/WRD
PERMIT CONSOLIDATION UNIT



Mark R. Funkhouser
APPROXIMATE SCALE



Drawing file: 09388639B005.dwg Feb 01, 2011 - 2:06pm

PROJECT No.	093-88639
FILE No.	09388639B005
REV. 0	SCALE AS SHOWN
DESIGN	MF 01/14/11
CADD	MGG 01/17/11
CHECK	MRF 02/01/11
REVIEW	TAS 02/01/11

5A

WRD/DEQ
Permitted Plan

OCT 16 2013

File No. 11-69-0001
Page No. 19 of 24

NOTES:

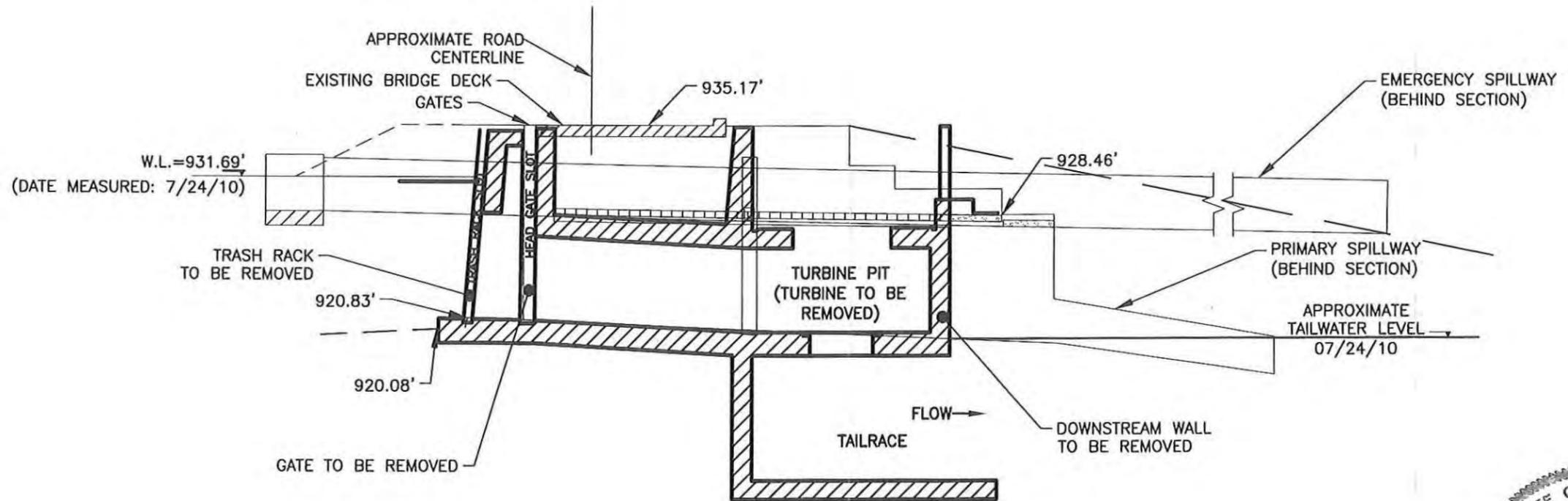
Revised

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GOLDEN LOTUS
SONG OF THE MORNING
JOINT PERMIT APPLICATION



RECEIVED
FEB 18 2011
DNR/WRD
PERMIT CONSOLIDATION UNIT

**CROSS SECTION A-A' THROUGH
POWERHOUSE AND TAILRACE**



Mark R. Funkhouser 15 FEB 11

APPROXIMATE SCALE
10 0 10
SCALE FEET

PROJECT

TITLE
**LONG SECTION - POWERHOUSE
AND TAILRACE**

PROJECT No.	093-88639
FILE No.	09388639B005
REV. 0	SCALE AS SHOWN
DESIGN	MF 05/26/10
CADD	MGG 09/17/10
CHECK	MRF 02/01/11
REVIEW	TAS 02/01/11

5B



GOLDEN LOTUS
SONG OF THE MORNING
JOINT PERMIT APPLICATION

LONG SECTION - SPILLWAY

PROJECT

TITLE

PROJECT No.	093-88639
FILE No.	09388639B005
REV. 0	SCALE AS SHOWN
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CADD	MGG 09/17/10
CHECK	MRF 02/01/11
REVIEW	TAS 02/01/11

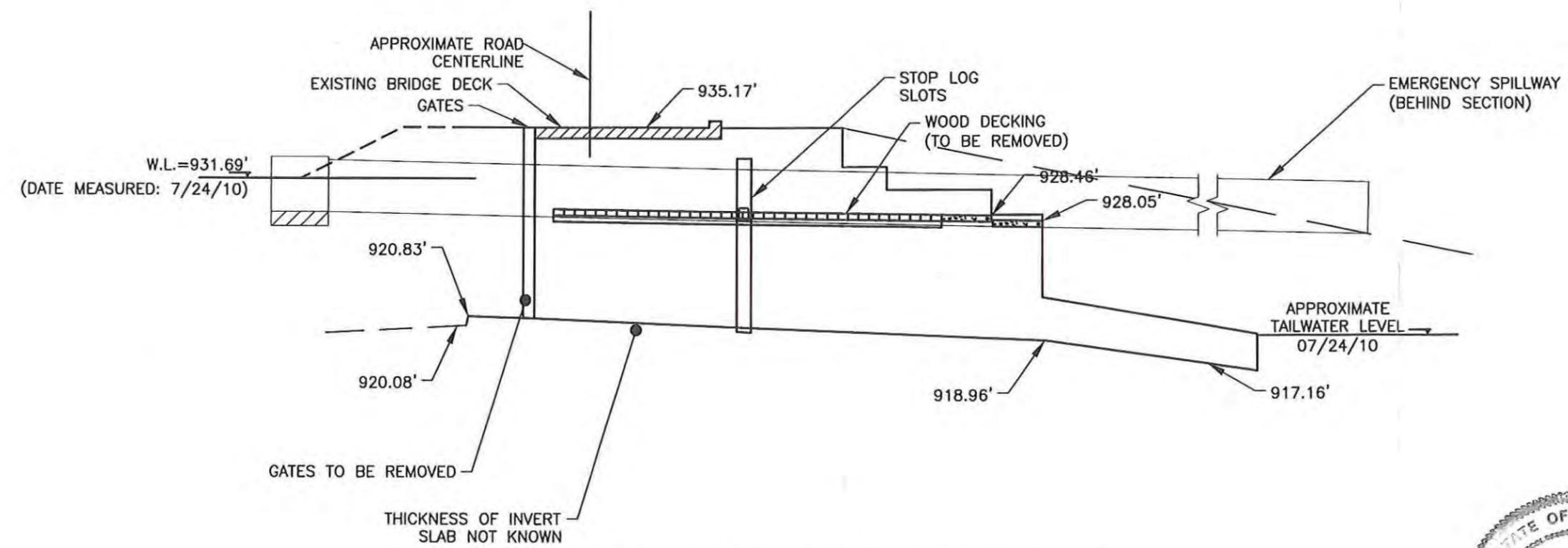
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NOTES: *Revised*

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1. DRAWING NO. 49319 "GENERAL ARRANGEMENT," DRAWING DATED 10/10/57 BY THE JAMES LEFFEL & CO.
2. DRAWING NO. 52082R1 "GENERAL ARRANGEMENT," DRAWING DATED 09/14/72 BY THE JAMES LEFFEL & CO.
3. RECORD DRAWING, SHEET 2 OF 2, "UPSTREAM DAM FACE SLOPE IMPROVEMENTS AND EMERGENCY OVERFLOW SPILLWAY," DATED 11/12/90, BY WADE-TRIM/GRANGER.
4. RECORD DRAWING, SHEET 2 OF 2, "SECONDARY GATE STRUCTURE AND PRIMARY GATE REPLACEMENT ASSEMBLY," DATED 11/12/90, BY WADE-TRIM/GRANGER.

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OCT 16 2013
File No. 11-69-0041
Page No. 15 of 22

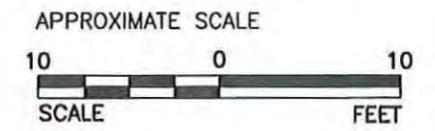


**CROSS SECTION B-B' THROUGH
PRIMARY SPILLWAY**

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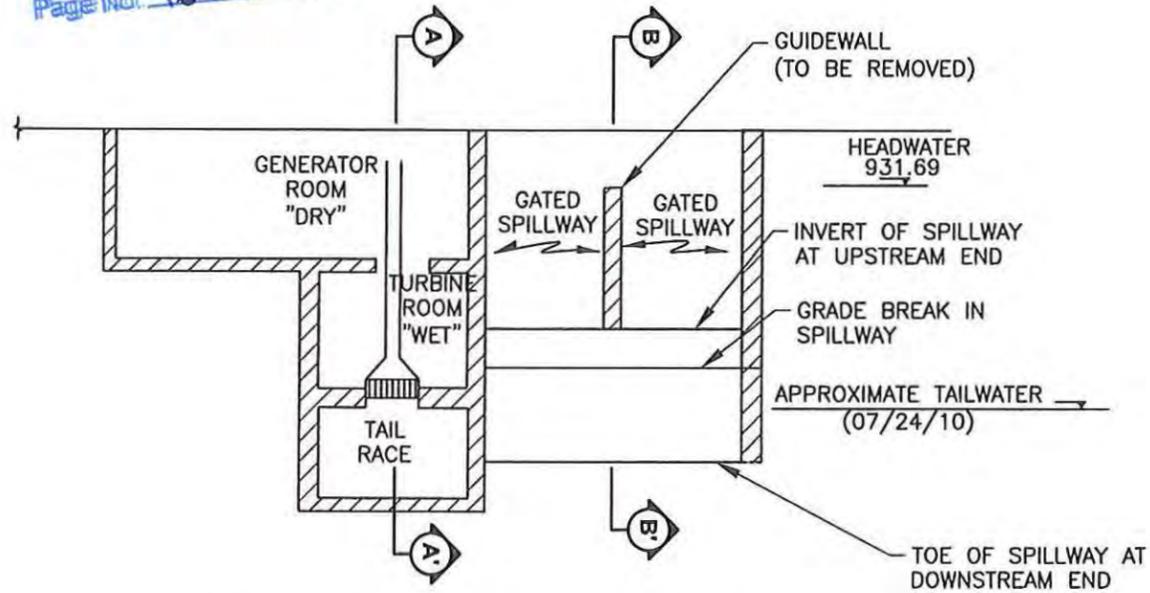
Mark R. Funkhouser 15 FEB 11



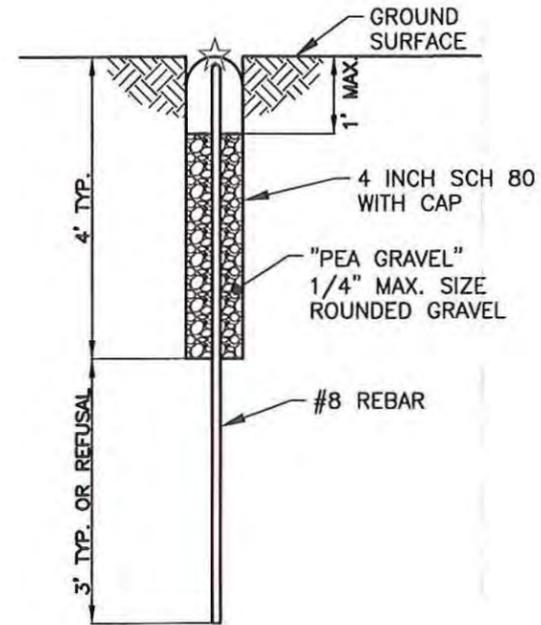
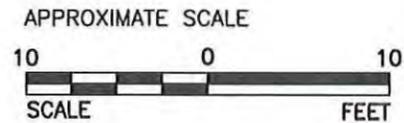
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File No. 11-69-0001
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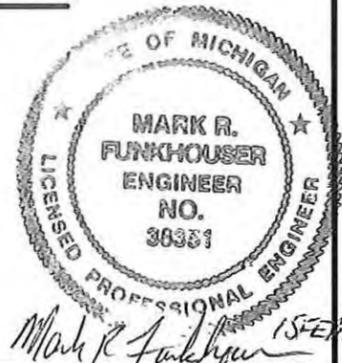
**SECTION C-C' THROUGH POWERHOUSE
AND SPILLWAY PARALLEL TO
EMBANKMENT CENTERLINE**



PERMANENT BENCHMARK DETAIL

NOT TO SCALE

☆ APPROXIMATE SURVEY BENCHMARK LOCATION, SEE FIGURE 3 FOR LOCATION.
N 667,166.348
E 19,657,642.77
Ei 922.165 ft.



NOTES:

DRAWING BASED ON THE FOLLOWING:

1. DRAWING NO. 49319 "GENERAL ARRANGEMENT," DRAWING DATED 10/10/57 BY THE JAMES LEFFEL & CO.
2. DRAWING NO. 52082R1 "GENERAL ARRANGEMENT," DRAWING DATED 09/14/72 BY THE JAMES LEFFEL & CO.
3. RECORD DRAWING, SHEET 2 OF 2, "UPSTREAM DAM FACE SLOPE IMPROVEMENTS AND EMERGENCY OVERFLOW SPILLWAY," DATED 11/12/90, BY WADE-TRIM/GRANGER.
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SECTION THROUGH
POWERHOUSE AND SPILLWAY
AND SURVEY BENCHMARK
DETAIL

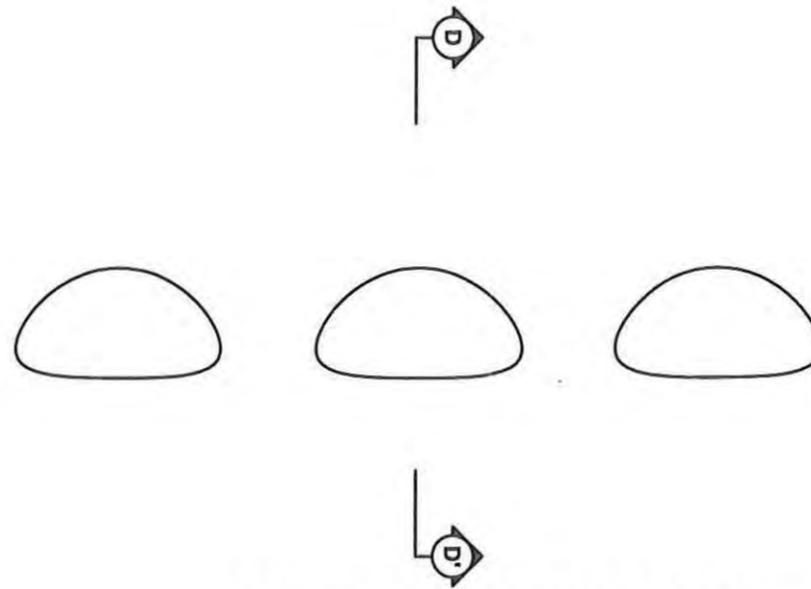
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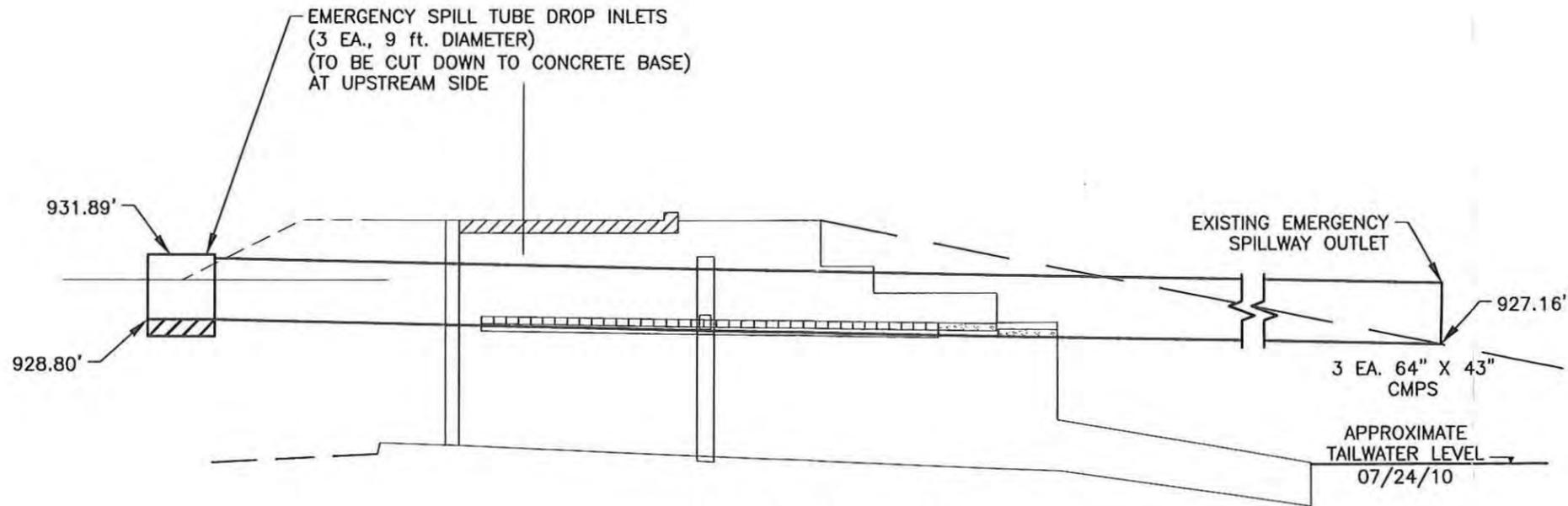
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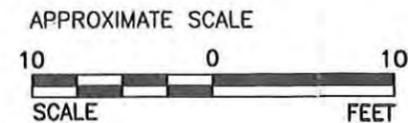
File No. 11-69-001
Page No. 18 of 22



EMERGENCY SPILLWAY 3 OPEN CULVERTS



SECTION D - D' EMERGENCY SPILLWAY



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1. DRAWING NO. 49319 "GENERAL ARRANGEMENT," DRAWING DATED 10/10/57 BY THE JAMES LEFFEL & CO.
2. DRAWING NO. 52082R1 "GENERAL ARRANGEMENT," DRAWING DATED 09/14/72 BY THE JAMES LEFFEL & CO.
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JOINT PERMIT APPLICATION

PROJECT

EMERGENCY SPILLWAY

TITLE

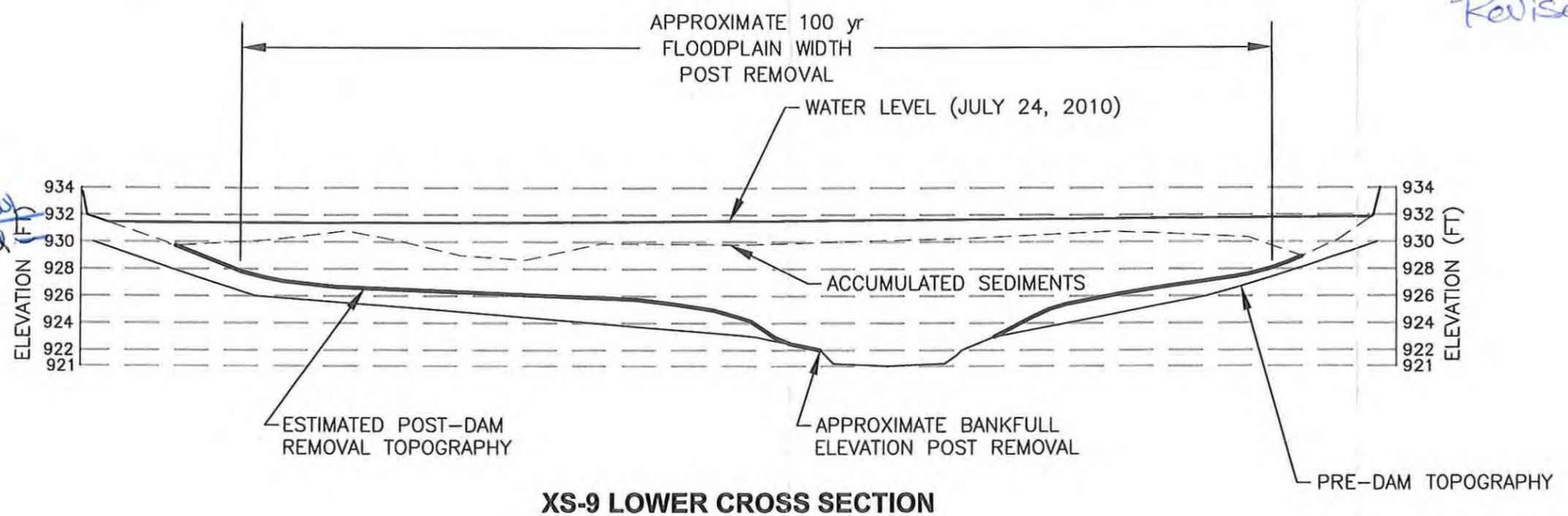
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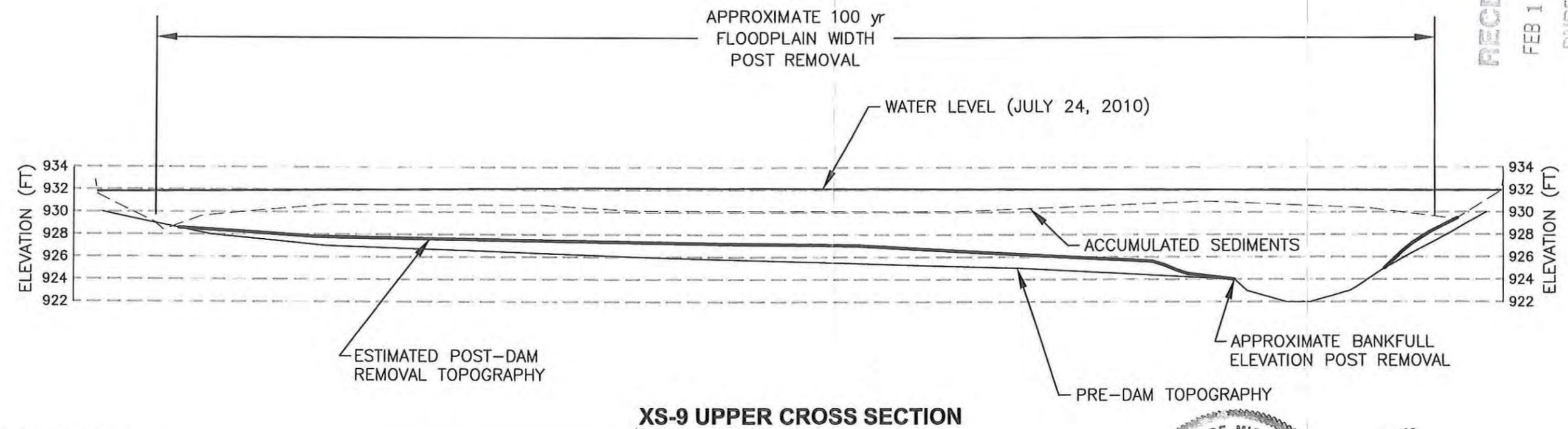
File: K:\Projects\093-88639-Song of the Morning\B-Permit\REV 0\DWG\09388639B004.dwg Layout: 09388639B004 FIGURE 6 User: JSchmuecker Feb 15, 2011 - 11:42am

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XS-9 LOWER CROSS SECTION



XS-9 UPPER CROSS SECTION

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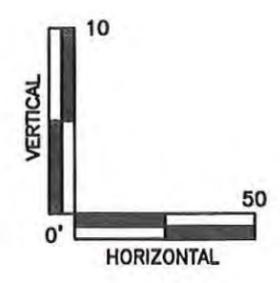


GOLDEN LOTUS
SONG OF THE MORNING
JOINT PERMIT APPLICATION

LAKE
CROSS SECTIONS

REFERENCE

- PRE-DAM TOPOGRAPHY DERIVED FROM AFFILIATED RESEARCHERS 2008 BATHYMETRY REPORT.
- WATER LEVEL AND EXISTING SEDIMENT DATA FROM AFFILIATED RESEARCHERS 2010 SURVEY.
- EXPECTED POST-DAM REMOVAL TOPOGRAPHY DEVELOPED BY GOLDER.



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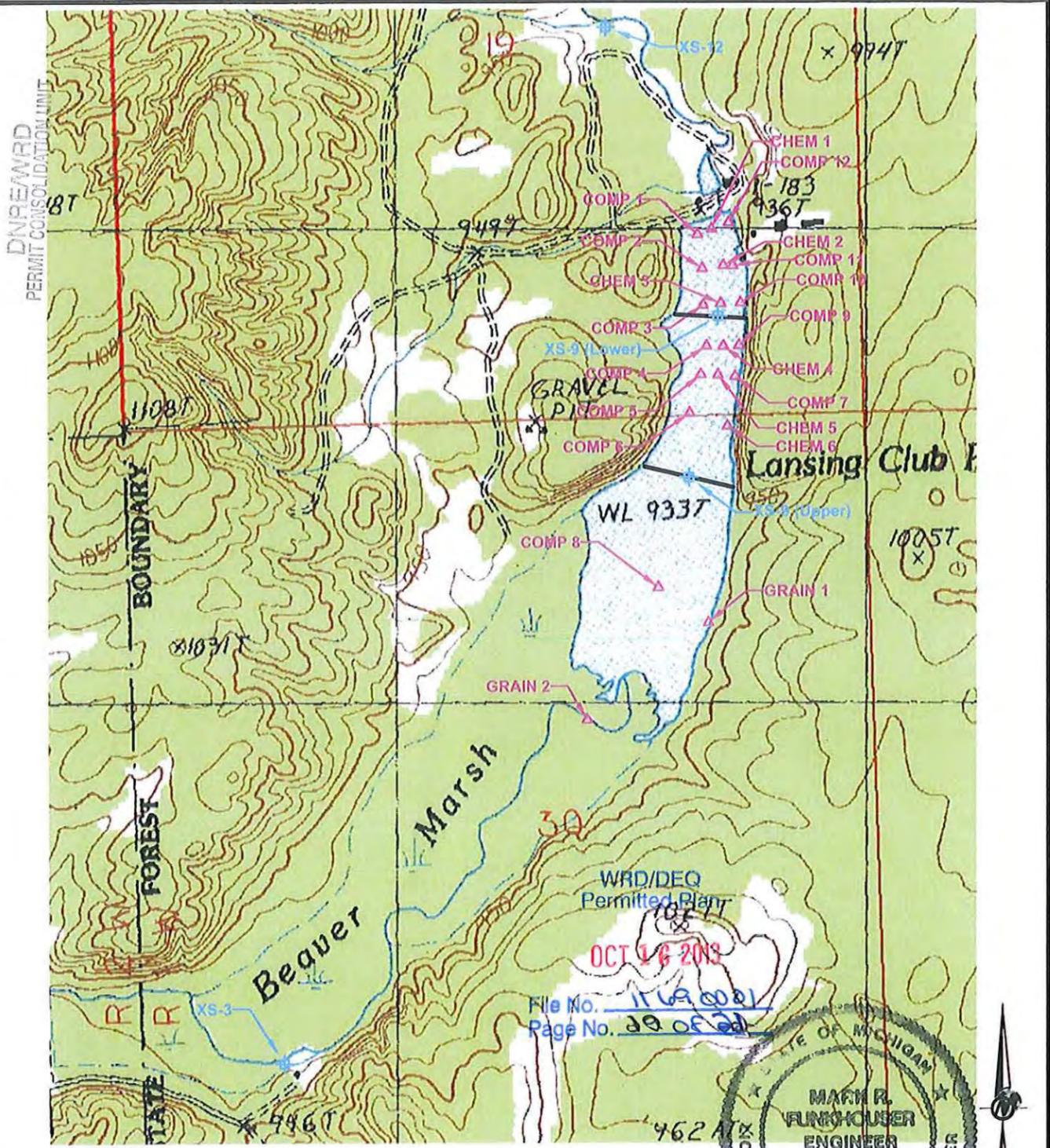
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CHECK	MRF	02/15/11	
REVIEW	TAS	02/15/11	

FIGURE 6

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- LEGEND**
- CROSS SECTION LOCATIONS
 - SEDIMENT SAMPLING LOCATION

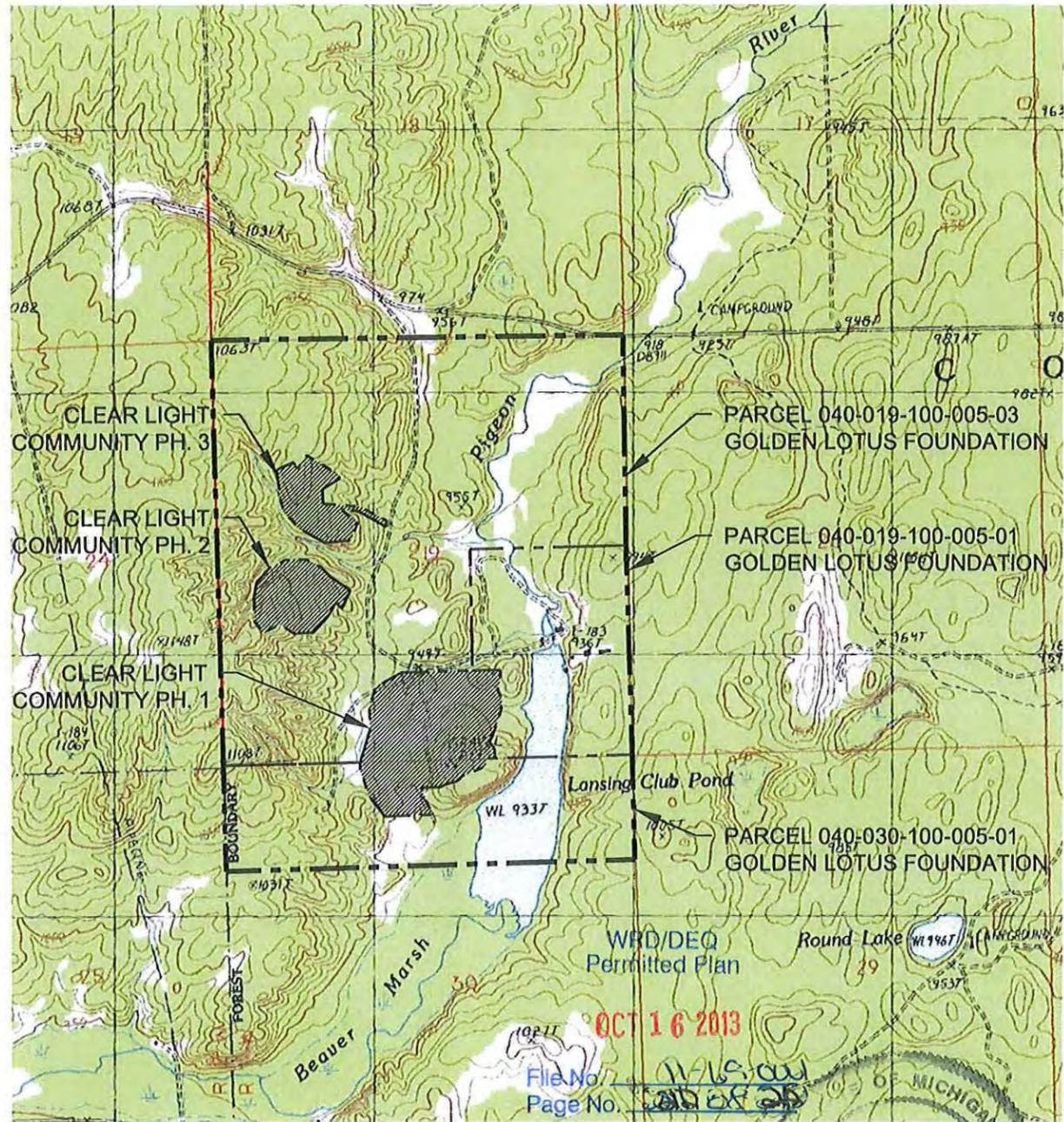
REFERENCE
 AERIAL PHOTOGRAPH FROM GOOGLE EARTH PRO.



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	DATE	02/01/11	
FILE No.	09388639B002	CHECK	JOINT PERMIT APPLICATION
PROJECT No.	093-88639 REV. 0	REVIEW	
			FIGURE
			4

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 Page No. 2 of 25

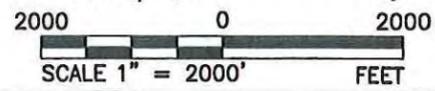
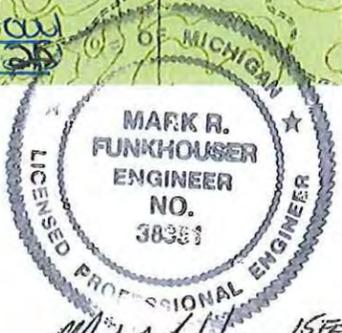
REFERENCE

REFERENCE: U.S. GEOLOGIC SURVEY 7.5 MINUTE HARDWOOD LAKE, MI TOPOGRAPHIC QUADRANGLE MAP, 1986, PROVISIONAL EDITION.

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- PROPERTY BOUNDARY
- INTERIOR PARCEL BOUNDARY

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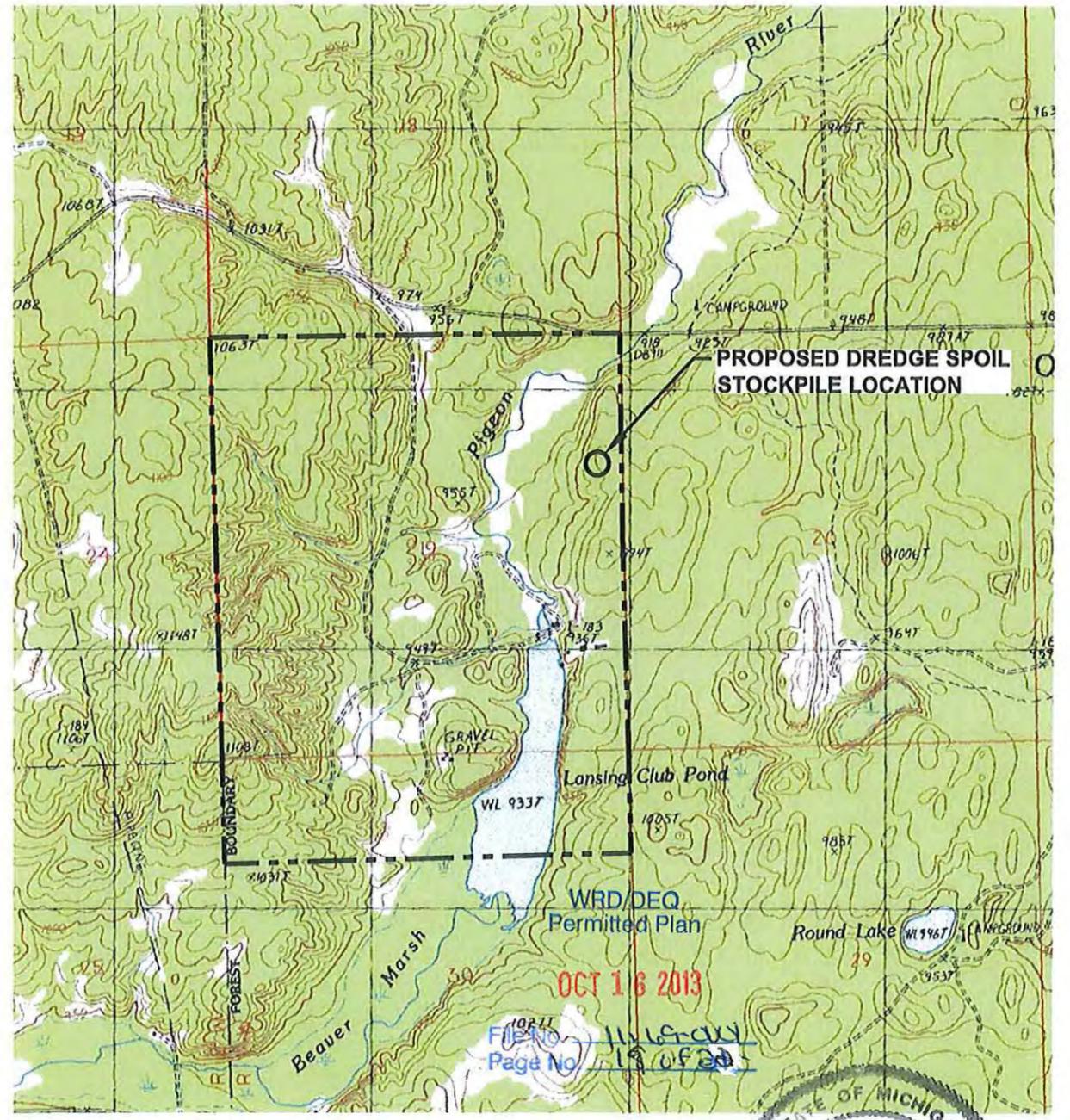


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REVIEW	TAS

TITLE	PROPERTY BOUNDARIES GOLDEN LOTUS - SONG OF THE MORNING
FIGURE	2
JOINT PERMIT APPLICATION	

FILE No.	09388639B007
PROJECT No.	093-88639
REV.	0

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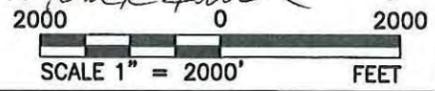
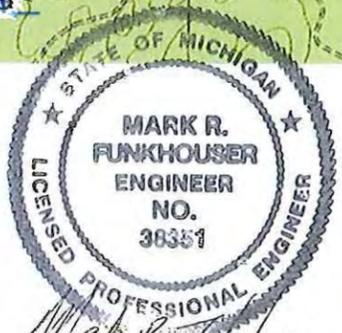
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LEGEND

--- PROPERTY BOUNDARY



SCALE	AS SHOWN
DATE	02/01/11
DESIGN	KDT
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CHECK	MRF
REVIEW	TAS

TITLE
PROPOSED DREDGE SPOIL STOCKPILE LOCATION
GOLDEN LOTUS - SONG OF THE MORNING

FILE No. 09388639B008
PROJECT No. 093-88639 REV. 0

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FIGURE 10

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1.0 DAM REMOVAL

1.1 Narrative of Proposed Dam Removal Sequence

Existing Dam Structure

Golden Lotus Dam is an earthen embankment and concrete elements with sections being older than 100 years. The earthen embankment is more than 200 yards in length and approximately 12 feet high and has a reinforced concrete spillway and power house that was constructed in the 1950s. Additional emergency spillway tubes were constructed in 1990 to provide additional flood flow capacity.

Dam Removal Sequence

Removal will be conducted in a prescribed manner and will consist of the following three major elements: stoplog installation and impoundment drawdown; spillway and powerhouse modifications, channel and impoundment area restoration. These elements are presented below.

Stoplog Installation and Drawdown

Drawdown of the reservoir will be performed in a systematic and controlled manner. It is intended that the drawdown be conducted in a "fail-safe" method which eliminates on-site judgment calls by the Golden Lotus personnel and be implemented in a manner which mitigates risk of unscheduled or unpermitted releases of water and/or sediment.

- Drawdown of the lake is proposed to occur through the primary spillway where there are two existing side-by-side slide gates and stoplog slots across the entire primary spillway located a few feet downstream of the gates (See Figures 5A and 5C in Attachment A of JPA).
- Four (4) inch high stoplogs will be installed, behind closed gates in the dry, to an elevation of 930 feet. To install stoplogs, the lake water level will first be lowered to an elevation of 930.0 to 930.5 feet (the approximate top of sediment elevation in the impoundment) and then one of the primary spillway gates closed completely allowing water to only flow through the power house and the other spill gate for a brief period to allow for inspection and reinforcement of the stoplog bracket on the non-flow side. Once reinforcement of the bracket is complete, that spill gate will be opened and the other spill gate closed so that inspection and reinforcement work can be completed on the other side. Once all reinforcement work is complete, lower the lake level to 930 feet, close primary spill gates completely and install the stoplogs.
- The extent to which reinforcement of stoplog guide brackets is necessary and the amount of time necessary to complete reinforcement work will not be known until inspection occurs. If during inspection and reinforcement work, the lake water level rises to 931.5, or starts spilling over the

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top of the spill gates, all inspection and reinforcement work will cease, and the primary spill gates will be re-opened to again lower the lake water level to 930.0 to 930.5 feet, and then subsequently closed again so inspection and reinforcement work can resume. This process will be repeated until such time stop logs can be installed to a maximum elevation of 930 feet.

- Following stoplog installation, the gates will be opened minimally (approximately one inch) to flood the area between the gates and the stoplogs. Once flooded and water begins flowing over the top stoplog, the primary spill gates will be opened to approximately three (3) feet during the initial lowering of the first four (4) to six (6) stoplogs. After the initial four (4) to six (6) stoplogs have been removed, both gates will be fully opened (i.e., raised approximately six feet). It is anticipated that flow velocities under the gate and over the stoplogs will be sufficient to carry fine sediments (i.e., organic debris and silts) downstream. It is anticipated that the primary spillway gate operators will not be used at any time later in the drawdown process. After the last stoplog is removed, the primary spill gates, guides and operators will be removed. Concurrently, drop inlets of the three emergency spill tubes will be incrementally lowered as the lake water level is lowered to allow for additional flow capacity during high flow events (see Figures 5A, B and C in Attachment A of the JPA). The top and bottom invert elevation of the drop inlet emergency spill tubes are approximately 931.89 feet and 928.8 feet respectively. In the current configuration and pursuant to information provided in previous inspection reports prepared by Wade Trim and Ledy Design Group, the collective emergency spill tube flow capacity is approximately 190 cfs.
- Post stoplog installation and during the initial stages of the drawdown, water will be allowed to flow through the powerhouse until the water level is lowered to an elevation of 926.0 feet. Allowing water to flow through the powerhouse will allow for additional flow through capacity in the event higher stream flows are encountered during the initial stages of the drawdown. At this elevation, the power house gate will be fully closed. While this elevation is set somewhat arbitrarily, it is believed that below or near this elevation, water will cease to flow through the powerhouse. Once the powerhouse gate is closed, dismantling and removal of the powerhouse turbine and associated equipment and controls will commence.
- Drawdown control will be by systematic removal of the uppermost stop log based on various factors including estimates of sediment release and transport capacities, Pigeon River water quality (i.e., dissolved oxygen levels) downstream of the dam and the time it takes for flow over the stoplogs to return to baseflow following removal of each stoplog. With spillage over the stoplogs, the lake level will gradually be lowered depending on factors including precipitation in the upstream watershed and inflow into the lake. Stoplog removal will be implemented by pulling the topmost stoplog with a backhoe or similar piece of mechanized equipment. Because of hydraulic pressure and flow, there could be difficulties with pulling the stoplogs, but the existing

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onsite equipment is believed to be adequate for performing this task. In the event a stoplog is or becomes stuck, larger equipment can be mobilized to the site.

- Golder has developed an estimate of the amount and type of sediment expected to be transported downstream with each stoplog removed (see Table 1). These estimates are considered to be conservatively high. Field data collection efforts in 2010 suggest sediments are comprised primarily of organic debris and silts downstream of the braided islands in the upper reaches of the impoundment. Upstream of the braided islands, the sediments are comprised primarily of fine sands. Below the braided islands, Golder estimates included an area 4 to 5 times wider than the Pigeon River channel width found in reaches upstream and downstream of the impoundment. Upstream of the braided islands, Golder assumed an additional 2700 feet of river channel may be influenced by the dam, and in turn, may be susceptible to downcutting during drawdown and channel establishment. As such, we've assumed an additional 2 feet of sand deposited (on average) within the channel (average width of 40 feet) would be susceptible to transport downstream during drawdown. Transport of both organic debris and fine sand downstream within and below the impoundment is generally a function of flow and the extent to which stoplog removal intercepts sediment at that elevation. The organic debris is expected to be transported out of the impoundment and stay suspended until it approaches Mullet Lake, where it is expected to settle out in a delta or within Mullet Lake. Sand is expected to migrate through the impoundment and be deposited in the lower reaches of the impoundment or directly upstream of the stoplogs before being transported downstream of the dam.
- The organic debris having potentially high biological oxygen demand (BOD) has the potential to deplete dissolved oxygen (DO) levels in the Pigeon River as it is transported downstream. Based on input from the MDNRE, a DO sag may begin to appear near the existing USGS gauging station located at Sturgeon Valley Road, approximately 1.2 miles downstream of the dam. The greatest DO sag is expected to appear approximately 3.5 miles downstream near the state forest campground. Following the recommendations of the MDNRE staff, continuous DO monitoring will be conducted during the drawdown period near the state campground (the location where the greatest DO sag is expected to occur) to discern if sediment release is causing a deleterious impact to Pigeon River DO levels. Monitoring of DO will be initiated prior to any stoplog removal to develop a baseline value. Results will be shared and discussed with the MDNRE. If necessary and per the recommendation of MDNRE staff, stop log removal will be scheduled to coincide with higher Pigeon River flows to mitigate any deleterious effects that sediment may have on DO levels downstream.
- Transport of sand downstream of the impoundment is not expected to occur until the final few stoplogs are removed. Sediment transport dynamics of sand are complex processes, and as such, developing precise transport estimates is difficult. Golder has developed a range of sand

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Estimate of Amount and Type of Sediment per Stoplog

Stoplog # (from top)	Stop-log Elevation Increments (feet)	- Organic - Sediment / Water Volume (cubic yards)	-Sand- Sediment Volume (cubic yards)
1	930.00 - 929.67	8,215	1126
2	929.67 - 929.33	8,214	1037
3	929.33 - 929.00	8,194	938
4	929.00 - 928.67	8,114	854
5	928.67 - 928.33	8,073	756
6	928.33 - 928.00	8,011	662
7	928.00 - 927.67	7,932	568
8	927.67 - 927.33	7,839	469
9	927.33 - 927.00	7,707	380
10	927.00 - 926.67	7,552	296
11	926.67 - 926.33	7,391	202
12	926.33 - 926.00	7,178	104
13	926.00 - 925.67	6,785	35
14	925.67 - 925.33	6,334	0
15	925.33 - 925.00	5,633	0
16	925.00 - 924.67	4,904	0
17	924.67 - 924.33	4,405	0
18	924.33 - 924.00	3,863	0
19	924.00 - 923.67	3,043	0
20	923.67 - 923.33	2,677	0
21	923.33 - 923.00	2,320	0
22	923.00 - 922.67	1,782	0
23	922.67 - 922.33	1,610	0
24	922.33 - 922.00	1,420	0
25	922.00 - 921.67	1,075	0
26	921.67 - 921.33	928	0
27	921.33 - 921.00	803	0
28	921.00 - 920.67	473	0
29	920.67 - 920.33	338	0
30	920.33 - 920.00	250	0
31	920.00 - 919.67	56.91	0
32	919.67 - 919.33	32.46	0
33	919.33 - 919.00	23.12	0
34	919.00 - 918.67	unknown	0
35	918.67 - 918.33	unknown	0
	TOTAL	143,177	7,427

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transport estimates under various flows to gauge the daily capacity of the Pigeon River to transport sand material out of the impoundment as well as within the Pigeon River downstream of the impoundment (see Table 2 inset below). Golder believes the Pigeon River has sufficient capacity to transport sand material that may be released from the impoundment, so long as sand is released at a rate that does not grossly exceed estimated daily transport rates. Capacity is generally a function of flow, with higher flows having a greater capacity to transport more load, and a function of the size of material, with transport capacity increasing as material size decreases. Based on grain size analysis of material found in the upper reach of the impoundment, the majority of the material was found to be the size of fine sand (less than 0.3 mm in size) or smaller.

Table 2. Range of Total Load Capacity Results in Bulk Volume per Day by Discharge

	Total Load Capacity (yd ³ /day)					
	50 cfs	100 cfs	150 cfs	195 cfs	300 cfs	400 cfs
Average (2mm - 0.3mm)	77	243	480	742	1,504	2,432
Maximum	220	671	1,301	1,994	3,990	6,369
Minimum	19	55	104	157	311	497

- To guard against release of large amounts of sand material in excess of the capacity of the Pigeon River to transport, Golden Lotus has committed to removing sand material that deposits in large quantities directly upstream of the stoplogs within the impoundment (see Figures 8 and 9 in Attachment A of the JPA for specific location of proposed dredging area). The exact amount of sand that would trigger dredging will be discussed with MDNRE on a case-by-case basis. However, it is believed that deposition of 2 to 3 feet of sand within this area and at an elevation of where subsequent stoplogs would be removed would likely necessitate dredging. The depth and rate of sand deposited in this area will only be able to be visually evaluated after the impoundment water level has been lowered several feet.

- Golden Lotus will accomplish sand removal using a rubber tired backhoe-loader with an approximate maximum 16-foot reach, and either a 20,500 pound GVW or 40,000 pound GVW dump trucks, on-site equipment own by Golden Lotus, capable of carrying approximately 6 to 10 cubic yards of material. Since dredge material is expected to be primarily sand, dewatering is likely to occur as it is removed by the backhoe and as it is placed in the dump truck. As such, no separate dewatering process is proposed. Sand material removed will be either stock piled at an upland area location located on Golden Lotus' property (see Figure 10 in Attachment A of the JPA for proposed stockpile location area) or directly applied to roads internal to the Golden Lotus property for regarding purposes. At this time, Golden Lotus is proposing to dredge a maximum of

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2000 cubic yards of sand material. If significant dredging of sand material is required, the proposed drawdown period may need to be extended to accommodate this activity.

- To manage the potential for deleterious impacts of sand deposition downstream, Golden Lotus will monitor substrate coarseness at 2 locations downstream of the dam, but upstream of Sturgeon Valley Road, by conducting zig-zag pebble counts over a 50 to 100 yard stretch of the river channel following each stoplog removal. This information will be provided to the MDNRE for review and discussion. Should the MDNRE conclude sand is having a deleterious impact on the river, then the schedule for stoplog removal will be modified such time between stoplog removal may be increased and/or stoplog removal may be limited to periods of higher Pigeon River flows. The ultimate remedy we determined by the MDNRE. Golder estimated the amount sand material within the impoundment and upstream river channel affected by the impoundment to be approximately 7,400 cubic yards (see Table 1). The intent is to manage the release of sand accordingly to eliminate or minimize the amount of dredging required. However, should dredging be necessary, Golder Lotus is committed to dredging a maximum of 2,000 cubic yards of material. If frequent dredging of sand is required, the drawdown schedule will likely need to be modified to accommodate a longer drawdown period.
- During the initial stages of the drawdown and after the first few stoplogs are removed, the upstream area of the impoundment will be visited to discern if a preferential channel alignment is beginning to establish in the area immediately upstream and downstream of the braided islands. Subsequent inspections of the impoundment will be conducted at the discretion of Golden Lotus throughout the drawdown period to document continued channel establishment.
- Excessive head cutting of impoundment sediments is not anticipated to occur. Since the sand material is not cohesive, formation of a large head cut is not considered likely. Since the organic debris and silts are considered to be predominantly water, this material will be transported downstream as the velocity of water over this material increases.

Ultimately, the last stop log will be removed. At this stage, the lake will be empty and the river will be flowing through the primary spillway only; no flow will occur through the power house. If not performed earlier, the drop inlets of the emergency spillway tubes will be lowered to the invert elevation to effectively increase embankment freeboard. No further lowering at the emergency spillway will be performed.

- At this time, the spillway will be inspected by a structural engineer to confirm proposed modifications can be accomplished. Proposed modifications include the following:
 - Removal of the primary spill gates, guides and associated operators;

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- Removal of the powerhouse turbine and associated equipment, if not already removed;
 - Removal of the upstream gate, trash-racks and guides, and the lower part of the downstream exterior wall of the powerhouse to allow flow through the powerhouse area; and
 - Removal of any dividing wall separating the spillway area downstream of the former (see bullet one) primary spillway gates.
- The sediments in the impoundment will be allowed to continue to dewater following the last stoplog removal. Given the high content of water within the sediments (especially the organic debris and silts), sediments are expected to consolidate significantly such that the existing top of sediment, once dewatered, will likely be several feet lower than its current elevation (see Figure 6 in Attachment A of the JPA showing existing and anticipated topography within the impoundment area).
 - Restoration of the former impoundment area will be accomplished by allowing the Pigeon River to establish a stable pattern, dimension and profile passively via the drawdown and post-drawdown period.
 - Dredging of sediments or bank grading to facilitate stable channel establishment is not being proposed since the stream bank heights of the Pigeon River within the impoundment area once drawdown and dewatering is complete are not considered to be excessively great (see Cross Section Figure 6 in Attachment A of the JPA).
 - Post drawdown, Golden Lotus may choose to seed and/or plant the former impoundment area with native, non-invasive grasses, trees, and shrubs. If planting is pursued, Golden Lotus will submit a list of species to the MDNRE for review. The MDNRE shall in good faith promptly review the list in consultation with Trout Unlimited and promptly advise Golden Lotus in writing whether it approves or objects to any of the listed species. As the passive restoration phase of the dam continues, Golden Lotus may apply for a permit or additional permits to create additional wetland within or adjacent to the former impoundment area.

Stoplog Removal Decision Process

The following stoplog removal steps are proposed:

Step 1: Remove top 4-inch stoplog.

Step 2: Monitor and report to the DO monitoring and zig-zag pebble count results to the MDNRE.

Step 3: Visual inspect and estimate sediment (i.e., sand material) accumulation immediately upstream of stoplogs in the impoundment area and discuss results with the MDNRE.

Step 4: Dredge sand material if necessary.

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Step 5: Reach consensus with MDNRE that another stoplog can be removed.

Step 6: Repeat Steps 1 through 5 until all 35 stoplogs are removed.

Pending consultation with identified MDNRE staff, a decision may be reached to remove more than one stoplog at a time. Based on Golder's hydraulic evaluation assuming stoplogs were 4 inches in height, the impoundment was not filled with sediments, and average Pigeon River flow was approximately 80 cfs, the maximum time to draw down the impoundment level for any given stoplog was approximately 18 hours (see Appendix A of this document for stoplog removal hydraulic evaluation). Theoretically, a stoplog could be removed every day to achieve the necessary drawdown assuming no impacts to downstream water quality. However, removing a stoplog daily may not be practical. Therefore, it is assumed that on average a stoplog will be removed every three days, taking a total of 105 days to remove all 35 stoplogs.

Sediment Management / Control Methods

Management of sediment is primarily expected to occur by controlling the drawdown process such that released sediments do not cause deleterious effects on water quality or physical habitat. Should DO monitoring or zig-zag pebble count results indicate, according to MDNRE interpretation that deleterious impacts have or may occurred, the stoplog removal process will be modified to the satisfaction of MDNRE. Additionally, to mitigate against large sand releases of sediment downstream (beyond the capacity of the Pigeon River to transport), Golden Lotus has committed to dredging large quantities of sand material that may accumulate immediately upstream of the stoplogs prior to subsequent stoplog removal. No sediment traps are proposed downstream of the dam. All sediment dredging work will occur upstream of the stoplogs.

Estimated Beginning and Completion Dates

Assuming a permit can be authorized by April 1, 2011, the following schedule is proposed:

<u>Date</u>	<u>Activity</u>	
Year - 2011		
April 1	Removal Processes Initiated	RECEIVED FEB 18 2011 MDNRE PERMIT CONSOLIDATION UNIT
April 1 - April 31	Stoplog Construction	
May 1 – May 31	Stoplog Installation	
June 1 – October 31	Incremental Stoplog Removal and Drawdown Drop Inlet Emergency Spill Tube Alteration	
October 15 – November 15	Powerhouse Turbine and Associated Equipment Removal Powerhouse and Spillway Structural Inspection	
Year - 2011 and 2012		
November 15 – January 15	Structural Modifications Completed	
January 15	Active Dam Removal Completed / Commence Passive Impoundment Restoration Only	



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The above schedule is considered to be relative and can be adjusted accordingly if permit issuance does not occur by the assumed date. Active drawdown and stoplog removal during winter months may require additional considerations, such as but limited to keeping primary spillway gates lowered below the water level to inhibit icing build up behind the stoplogs.

1.2 Post Removal Hydraulic Evaluation

Golder performed a hydraulic evaluation of the structure to determine hydraulic capacity post removal (see Appendix A of this document). Post removal, the remaining structure is expected to have openings with the following approximate dimensions:

- 12 feet wide x 11 feet high; and
- 9 feet wide x 6 feet high.

Excluding any flow capacity of the existing emergency spill tubes, the structure is estimated to convey approximately 2800 cfs before overtopping of the roadway would occur during extreme river flows. The developed rating curve (see Appendix A) indicates at a Pigeon River discharge of 1000 cfs, the headwater elevation (water depth just upstream of the spillway and powerhouse area) is approximately 6 feet. The Pigeon River 100 year flood flow at the dam location is estimated to be 992 cfs (see Appendix B, DNR 1987 letter). Therefore, the post removal structure is expected to pass the 100 year flood flow.

1.3 Narrative of Potential Effects and Proposed Mitigating Measures

Surrounding Wetlands – Permanent drawdown of the impoundment is not anticipated to have a deleterious impact to surrounding wetlands. Some conversion of wetland type (e.g., from permanently inundated and emergent wetlands to scrub shrub and forested) may occur. These changes are discussed in more detail in Section 6 of this document. No change in wetland acreage is anticipated to occur as a result of the drawdown and proposed dam spillway modifications.

Fisheries – No deleterious impact to fisheries is anticipated. Downstream dissolved oxygen levels will be monitored throughout the drawdown process. If deleterious effects are noted at anytime during the drawdown process and deemed to be associated with removal activities, a modified stoplog removal process will be developed in concert with MDNRE. While fisheries surveys have not been conducted, the impoundment likely supports a different suite of species than that found within non-impounded sections of the Pigeon River. Post removal, the suite of fish species in Pigeon River within the impoundment may change and tends towards that currently found with the flowing sections of the Pigeon River upstream of the impoundment.

Wildlife – Golden Lotus has requested that a MDNRE representative be identified and contacted if during the drawdown process turtles or other aquatic fauna are discovered in the former impoundment area and deemed not able to migrate to other suitable habitats post drawdown. Golden Lotus will halt stoplog

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removal as long as necessary for the MDNRE to develop and implement appropriate actions. All wildlife relocation will be the responsibility of the MDNRE. Given the slow rate of drawdown proposed, it is anticipated that most to all of the wildlife will be able to migrate from the impoundment.

Threatened and Endangered Species - According to the Michigan Natural Features Inventory (MNFI) there are 23 state listed and one federally listed species (the bald eagle) found in Otsego County. However, in 2007 the Department of Interior removed the bald eagle from the federal list of threatened and endangered wildlife. As such, Golder believes that the MNFI has not updated their web based records to reflect the current status of the bald eagle. Based upon a review of state listed species and their habitat requirements, the following five state listed species appear to utilize habitat types currently found at or expected to be found post dam removal:

- Secretive locust (*Appalacia arcane*);
- Ram's head lady's-slipper (*Cypripedium arietinum*);
- Common loon (*Gavia immer*);
- Wood turtle (*Glyptemys insculpta*); and,
- Hill's pondweed (*Potamogeton hillii*).

Secretive locust - is a species of special concern that is endemic to the northern lower peninsula of Michigan and has been collected from only 9 counties, including Otsego County. Its habitat preferences are not fully known, but it has been observed on wetland and bog plants, and uncut buffer areas around bogs and wetlands may help protect oviposition sites (Rabe *et al.* 1996). Based upon this information, Golder anticipates that dam removal may serve to enhance necessary habitat for this species.

Ram's head lady's-slipper - is a species of special concern that was last observed in Otsego County in 1981. It occurs in mature, deeply shaded, extensive cedar swamps and is associated with a number of forested wetland plants (MNFI 2007). Based upon this information, Golder anticipates that dam removal may serve to enhance necessary habitat for this species as dam removal may eventually create additional forested wetland areas.

Common loon - is a state threatened species that has been documented to breed in Otsego County. Breeding pairs typically prefer inland lakes greater than 40 acres in size, with stable water levels, undeveloped shorelines, and small islands or bog mats for nesting. However, loon pairs have been observed using smaller lakes with poorer water quality as well (Gibson 2007). Dam removal would render the former pond site unusable for the common loon.

Wood turtle - is a state special concern species that is typically found near areas containing hard-bottomed streams and rivers, herbaceous vegetation for foraging, and sandy nesting substrate. They prefer clear, medium-sized rivers and streams with sand or sand and gravel substrates and moderate

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flow, as well as forested floodplains with low herbs and shrubs (Lee 1999). Based upon this information, dam removal may serve to increase the amount of required habitat for this species by creating additional sandy and gravelly bottomed river habitat.

Hill's pondweed - is a state threatened aquatic macrophyte that was last observed in Otsego County in 1981. It is found in cold, alkaline streams on sandy, mucky, and marly substrates, and usually occurs in water up to one meter in depth (MNFI 2007). Based upon this information, removal of the dam may be expected to neither increase or decrease the required habitat for this species

Water Quality – Temporary increases in water turbidity are expected to occur throughout the drawdown period. Dissolved oxygen levels may be temporarily lowered below the dam. However, dissolved oxygen will be monitored downstream during the drawdown process and results shared with MDNRE. Should concerns be noted by the MDRNE, Golden Lotus will work with the MDNRE to develop a revised drawdown process.

Stream Flows - No significant changes in stream flow are anticipated. During the initial phases of the dam removal project, some minor manipulation of stream flow at the dam will be necessary to draw lake levels down to accommodate stoplog installation. Minor increases in stream flow will occur after each stoplog removal event. No rapid changes in flow are anticipated. Currently the impoundment may attenuate larger stormflows somewhat. Post removal, downstream Pigeon River flows should mimic flow characteristics in upstream reaches.

Sediment Transport – During drawdown and possibly immediately after drawdown is complete, Pigeon River sediment loads will increase as sediment is transported from the impoundment downstream. An evaluation of sediment transport capacity suggests the Pigeon River has sufficient capacity to transport small to large sand and finer sediments. The majority of sediments within the impoundment are comprised of organic debris and fine silts and are expected to stay suspended as they are transported downstream. Golden Lotus will monitor sand accumulation behind the stoplogs, and if significant amounts accumulate, they will be dredged from immediately behind the stoplogs before additional stoplog removal. Additionally, if zig-zag pebble count results suggest channel substrates are becoming finer or if significant deposition of sand material is observed in the Pigeon River immediate downstream of the dam, Golden Lotus will work with the MDNRE to revise the drawdown process (e.g., only remove stoplogs when flows are elevated) to mitigate any deleterious effects of sediment transport. Currently, the impoundment acts to trap sediments being transported in the Pigeon River upstream. Post removal, the sediment transport characteristics of the Pigeon River within the impoundment should better approximate that of sections that are not impounded.

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Turbidity - Turbidity levels downstream of the dam impoundment may increase throughout the drawdown period, especially the early phases when relatively larger amounts of organic debris are expected to be transported out of the impoundment. Post removal, turbidity should not be impacted.

Water Chemistry – This is addressed in the Water Quality and Turbidity sections above. No other impacts to water quality are anticipated.

Water Temperature – The current impoundment may cause the Pigeon River water temperatures to increase as it flows through the impoundment. Post dam removal, any warming effects associated with the impoundment will be eliminated. No impacts to water temperature are anticipated during removal activities.

Riparian Rights – No effects to riparian rights are anticipated.

1.4 List of Current Mailing Addresses of Adjacent Landowners

A list of current mailing addresses for adjacent property owners as well as tax payers is provided in Attachment E to the JPA application.

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2.0 DREDGING

2.1 Sediment Testing

Sediment sampling was conducted on June 22 and 24, 2010 to characterize sediment physical composition (e.g., organic debris, silts or sand) and chemical analysis (for organic debris and silt samples only) to discern concentration of target metals, PCBs, and PNA's (see Figure 4 in Attachment A of the JPA for sampling locations). Laboratory analytical results for chemical analysis are summarized in Table 3 (attached). Grain size analysis was performed on one sample (Grain 2) containing granular material. Chemical analysis was performed on six (6) samples, and per the request of the MDNRE staff, only on samples with organic debris and/or silt. It is our understanding that the MDNRE has reviewed analytical results and no concerns were noted. Raw laboratory analytical data is provided in Appendix C of this document.

2.2 Spoils Disposal

Should coarse grain material (i.e., sand) be removed from the Pigeon River or dam structure just upstream of the stoplogs as discussed in previous section of this document. Dredged sand material will stockpiled on Golden Lotus' property in an upland area (see Figure 10 in Attachment A of the JPA for specific stockpile location) and also used for regrading of existing roads located within Golden Lotus' property.

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Table 3.
Summary of Sediment Chemistry Data

Parameter	Rep Limit (ug/kg) dry	Chem 1 (ug/kg) dry	Chem 2 (ug/kg) dry	Chem 3 (ug/kg) dry	Chem 4 (ug/kg) dry	Chem 5 (ug/kg) dry	Chem 6 (ug/kg) dry
2-Methylnaphthalene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Acenaphthene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Acenaphthylene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Anthracene	2800	<2800	<2600	<2600	N/A	<2200	<2200
Arsenic, Total	100	7800	9200	8700	8000	9300	8700
Barium, Total	500	94000	120000	130000	93000	80000	68000
Benzo(a)anthracene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Benzo(a)pyrene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Benzo(b)fluoranthene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Benzo(g,h,i)perylene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Benzo(k)fluoranthene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Cadmium, Total	50	670	740	760	760	800	730
Chromium, Total	200	6100	6600	7000	7000	7700	7100
Chrysene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Copper, Total	100	8500	9500	9500	8900	9900	8600
Dibenz(a,h)anthracene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Fluoranthene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Fluorene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Indeno(1,2,3-cd)pyrene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Lead, Total	100	11000	12000	13000	13000	13000	10000
Manganese, Total	2000	860000	480000	600000	520000	560000	580000
Mercury, Total	50	110	120	120	100	110	100
Naphthalene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Nickel, Total	100	7400	8100	8300	8100	8300	7100
PCB-1016	840	<840	<800	<780	<680	<660	<670
PCB-1221	840	<840	<800	<780	<680	<660	<670
PCB-1232	840	<840	<800	<780	<680	<660	<670
PCB-1242	840	<840	<800	<780	<680	<660	<670
PCB-1248	840	<840	<800	<780	<680	<660	<670
PCB-1254	840	<840	<800	<780	<680	<660	<670
PCB-1260	840	<840	<800	<780	<680	<660	<670
PCB-1262	840	<840	<800	<780	<680	<660	<670
PCB-1268	840	<840	<800	<780	<680	<660	<670
Percent Solids	0.001	0.12	0.12	0.13	0.15	0.15	0.15
Phenanthrene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Pyrene	2800	<2800	<2600	<2600	<2200	<2200	<2200
Selenium, Total	200	2700	2800	2900	2600	2900	3300
Silver, Total	50	90	97	76	68	74	64
Zinc, Total	1000	39000	40000	43000	44000	47000	36000

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3.0 FLOODPLAIN/FLOODWAY

Cross sections figures/drawings of the impoundment and dam structure showing existing and anticipated topography are provided in Attachment A of the JPA application (see Figure 6). The 100-year elevation and associated floodplain/floodway within the existing impoundment area is not currently mapped, it is expected to be contained within the current impoundment limits. Post drawdown, the 100-year floodplain is still expected to be within the former impoundment area, but may be narrower and lower in elevation as the normal water elevation will be lower.

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4.0 PROJECT PLAN REQUIREMENTS

A series of site plans, layouts and cross sections figures/drawings are provided in Attachment A to the JPA application (see Figures 5A-E, 8 and 9).

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5.0 BRIDGE

A series of site plan, layouts, and cross section figures/drawings showing the existing bridge and river in the vicinity of the spillway and powerhouse are provided in Attachment A of the JPA document (see Figures 5A-E, 6, 8, and 9).

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6.0 WETLANDS

Wetland locations, types, and sizes were estimated based on review of publically available National Wetland Inventory (NWI) information for Otsego County, Michigan. In generally the proposed drawdown is not anticipated to reduce the amount of wetland that currently exists. However, some wetland types maybe converted to other wetland types.

Current Wetland Acreages, Types, and Functions

Current wetlands located upstream of the Lansing Club Pond Dam have been directly influenced by the impoundment, likely altering the wetland types from their historical state. From the dam to the approximate upstream limit of impoundment influence, there are three primary wetland types: emergent, scrub-shrub, and forested wetland (excluding the permanently inundated impoundment area). Based on NWI classification categories, Golder estimates that approximately 30 acres of Palustrine, scrub-shrub, emergent, semi-permanently flooded, diked/impounded wetland and 43 acres of Palustrine, forested, needle-leaved evergreen, seasonally flooded wetland are present within this area (see Figure 7 in Attachment A of the JPA). Current wetlands serve several important functions including, but not limited to, filtration of stormwater runoff, flood flow attenuation in the Pigeon River, and provision of habitat for both flora and fauna.

Estimate of Pre-Dam Wetland Acreages and Types

Prior to impoundment of the Pigeon River, the current impoundment area was likely comprised primarily of forested wetland, with scrub-shrub wetland present along the banks of the river and in low lying floodplain areas.

Post Dam Removal Wetland Acreages and Types

Following permanent drawdown of the impoundment, it is estimated that the majority of the current impoundment will return to forested wetland, with scrub-shrub wetland and pockets of emergent wetland nearer to the river. Golder anticipates that wetlands in the former impoundment area will follow a pattern of natural succession as they establish, with an initial predominance of wet-meadow and emergent wetland, followed by scrub-shrub and then finally forested wetland.

6.1 Mitigation Plan

No mitigation plan is proposed as no net loss of wetlands is anticipated.

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