APPENDIX D
Site Photographs

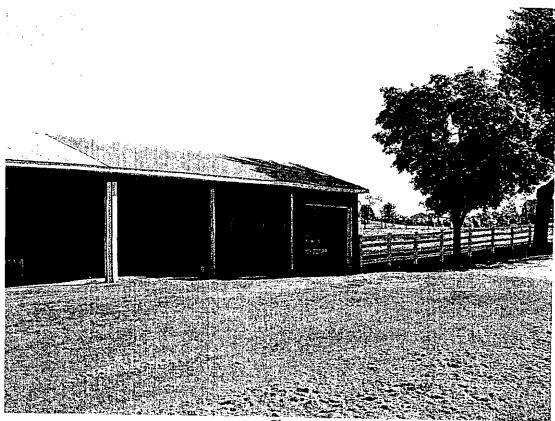


Photo 1

Looking northeast at the east pole barn

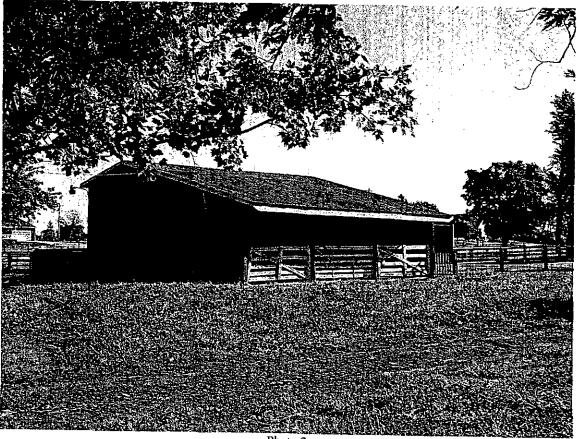
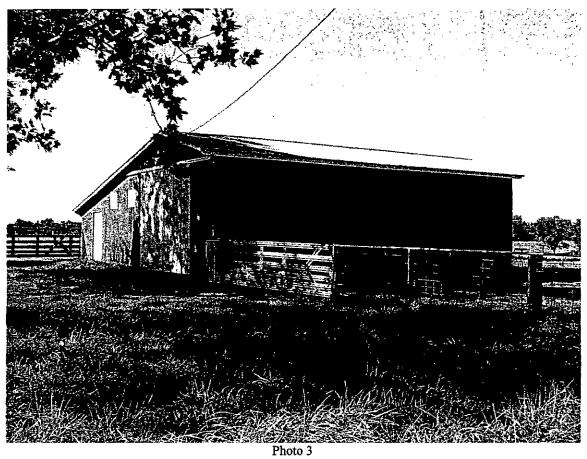


Photo 2 Looking northeast at the west pole barn.



A view of the south pole barn, facing southwest. The big double doors in the photo open onto a farm equipment storage area. Access to the pig farming area is via the small wide door to the left.

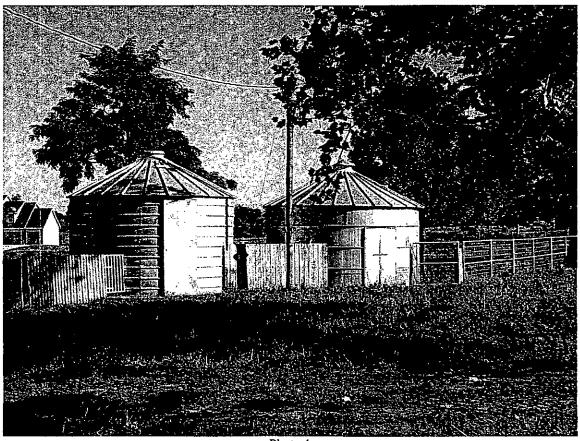


Photo 4
The grain silos, facing north.

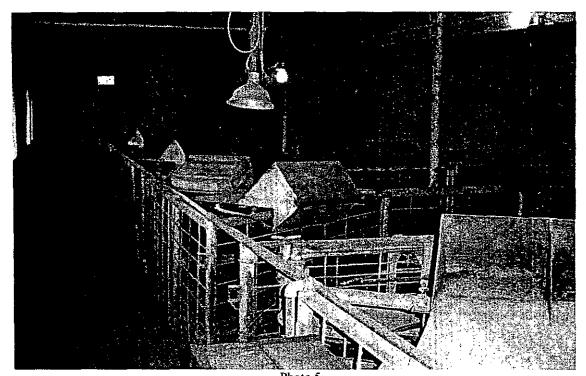


Photo 5
Pig pens in the pig farming area within the southern portion of the south pole barn.

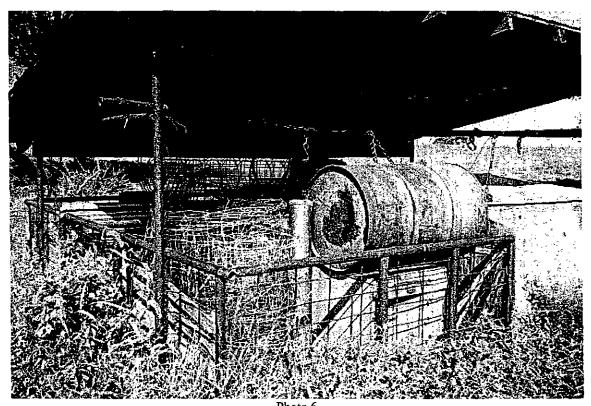


Photo 6
Metal storage in the pig shed located on the southwestern portion of the northern half of the Property.

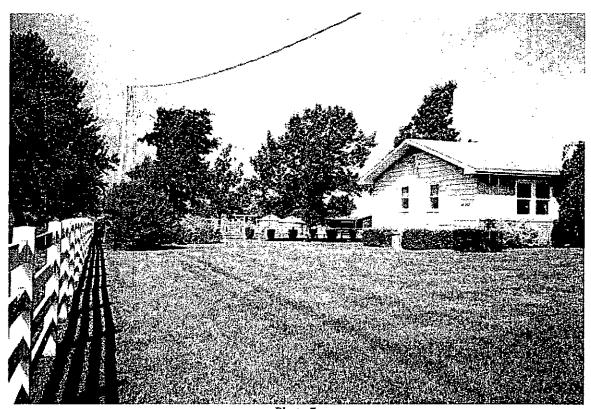


Photo 7
The south side of the Bremer home, facing northwest.

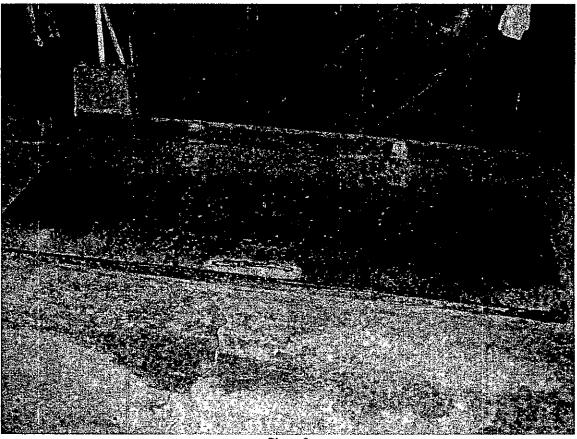


Photo 8

Access to the 10,000 gallon cistern in the garage of the Bremer home. Cracks and stains are visible in the concrete slab floor of the garage.



Photo 9
The area of the former farm dump, facing west.

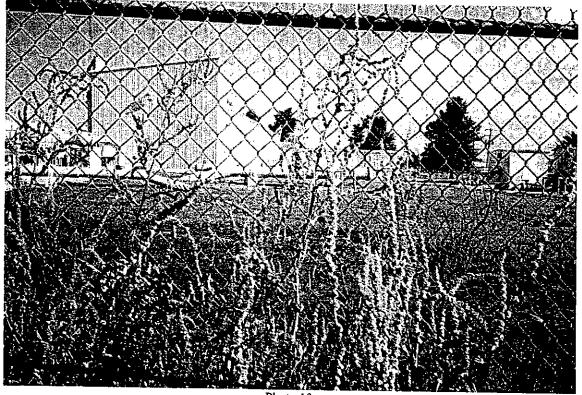


Photo 10
A view of the south side of the compressor station.



Photo 11
Runoff from the south side of the compressor station, facing southwest. The tall weeds mark the path of the runoff.



Photo 12
Runoff (muddy path) from the west side of the compressor station. The west side of the compressor station is shown by the chain link fence.

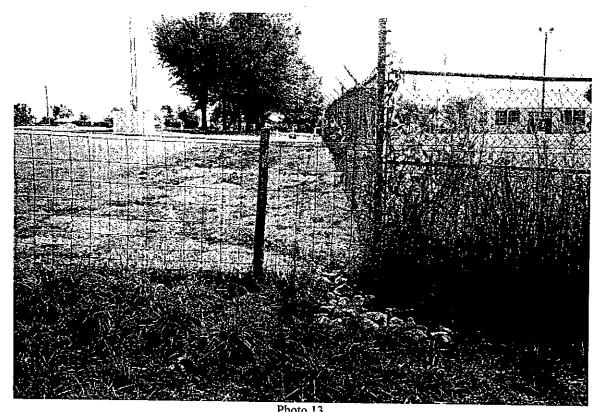
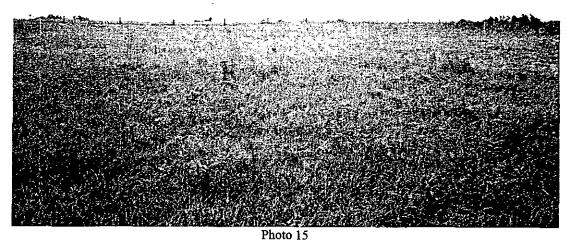


Photo 13
Facing east at the compressor station (within the chain link fence). Runoff from the compressor station is visible in this photo.



Runoff from the compressor station flows through the low lying area in the central portion of the photo to this pond. This view is facing southwest across the Property.



A view of the southern half of the Property, facing east from the west central portion of the southern half of the Property.



Photo 16
Facing southeast, a view of the southeast corner of the Property.



Photo 17

The southwest corner of the Property, facing southwest.

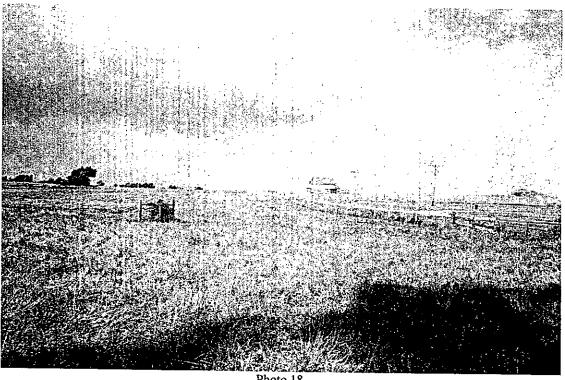
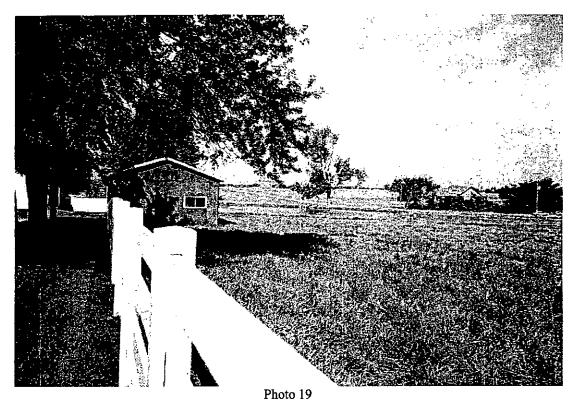


Photo 18
The northwest portion of the north half of the Property, facing west.



The northeastern portion of the north half of the Property, facing west. The east pole barn and a pond are visible in this photo.

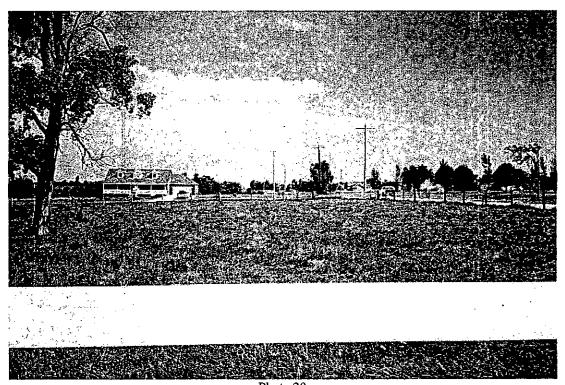
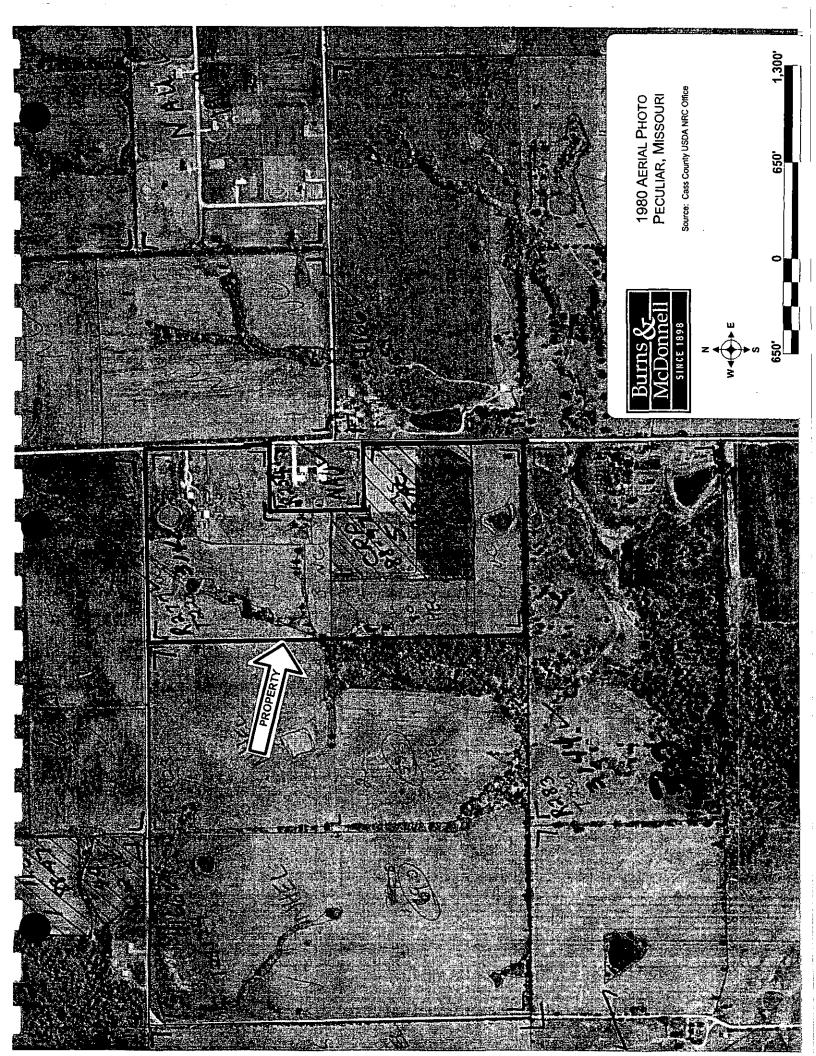
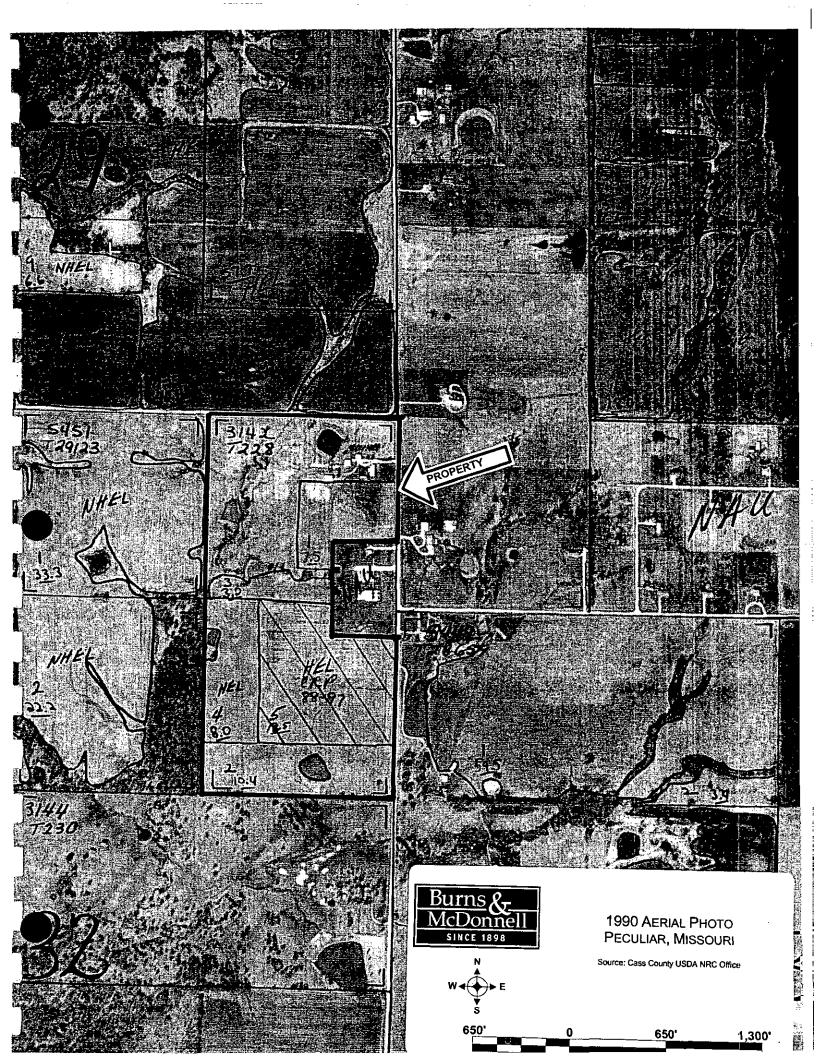


Photo 20
The northeast corner of the Property, facing north.

APPENDIX E
Aerial Photographs







APPENDIX F
Land Title Records

### SOUTH HARPER PEAKING STATION

**METES AND BOUNDS PROPERTY DESCRIPTION:** As recommended By This Professional Land Surveyor

Containing 3,205,155 sq.ft. or 73.5802 acres more or less.

A tract of land situated in the Southeast Quarter of the Southeast Quarter of Section 29, Township 45 North, Range 32 West of the Fifth Principal Meridian and the Northeast Quarter of the Northeast Quarter of Section 32, Township 45 North, Range 32 West of the Fifth Principal Meridian all in Cass County, Missouri and being more particularly described as follows:

**COMMENCING** at the Northwest corner of said Southeast Quarter (Found Iron Bar with 2-1/2" Alum. Mon. LS 1738), said comer also being the Northwest corner of HARRIS PLACE, a subdivision of land in Cass County Missouri; Thence South 01°44'25" West (South 00°42'32" East Plat) along the West line of the Northwest Quarter of said Southeast Quarter and along the West line of said HARRIS PLACE a distance of 1326.80 feet (1326.77 feet Plat) to the Northwest corner of the Southwest Quarter of the Southeast Quarter of said Section 29 (Found 3/8" Iron Bar); Thence South 86°54'50" East along the North line of said Southwest Quarter of the Southeast Quarter a distance of 1319.51 feet to the Northwest corner of the Southeast Quarter of the Southeast Quarter of said Section 29, said point also being the POINT OF BEGINNING of the tract of land to be more particularly described herein; Thence South 86°54'50" East along the North line of the Southeast Quarter of the Southeast Quarter of said Section 29 a distance of 1319.97 feet to the Northeast corner of said Southeast Quarter of the Southeast Quarter (Found 3/8" Iron Bar); Thence South 01°08'41" West along the East line of said Southeast Quarter of the Southeast Quarter a distance of 868.68 feet to the North line of a tract of land as described in Missouri Warranty Deed located in Book 398 at Page 518; Thence North 86°53'37" West along the North line of said Warranty Deed a distance of 465.00 feet; Thence South 01°40'24" West along the West line of said Warranty Deed a distance of 659.93 feet (660.00 feet deed); Thence South 86°53'37" East along the South line of said Warranty Deed a distance of 465.00 feet to the East line of the Northeast Quarter of the Northeast Quarter of said Section 32; Thence South 02°55'06" West along said East line a distance of 1124.92 feet to the Southeast corner of said Northeast Quarter of the Northeast Quarter; Thence Thence North 86°53'47" West along the South line of said Northeast Quarter of the Northeast Quarter a distance of 1324,29 feet to the Southwest corner of said Northeast Quarter of the Northeast Quarter (Found 1/2" Iron Bar); Thence North 02°48'24" East along the West line of said Northeast Quarter of the Northeast Quarter a distance of 1325.00 feet to the Southwest corner of the Southeast Quarter of the Southeast Quarter of said Section 29 (Found 1/2" Iron Bar with Cap); Thence North 01°26'30" East along the West line of said Southeast Quarter of the Southeast Quarter a distance of 1327.99 feet to the **POINT OF BEGINNING**.



### 2055 East Rio Salado Parkway, Suite 201 Tempe, Arizona 85281

Phone: (480) 967-6752 Fax Number: (480) 966-9422

Web Site: www.netronline.com

### HISTORICAL CHAIN OF TITLE REPORT

### BREMER SITE 24110 SOUTH HARPER ROAD PECULIAR, MISSOURI

#### Submitted to:

## ENVIRONMENTAL DATA RESOURCES, INC. C/O

### **BURNS AND MCDONNELL ENGINEERING**

9400 Ward Parkway Kansas City, Missouri 64114 (816) 822-4288

Attention: Amy Reed

Project No. N04-1678

Friday, October 22, 2004

**NETR- Real Estate Research & Information** hereby submits the following ASTM historical chain-of-title to the land described below, subject to the leases/miscellaneous shown in Section 2. Title to the estate or interest covered by this report appears to be vested in:

AQUILA, INC.

The following is the current property legal description:

All those certain pieces or parcels of land being in the Southeast ¼ of the Southeast ¼ of Section 29, Township 45, Range 32 and the Northeast ¼ of the Northeast ¼ of Section 32, Township 45, Range 32, lying and situate in the City of Peculiar, County of Cass, State of Missouri.

Assessor's Parcel Number: 2746700

### 1. HISTORICAL CHAIN OF TITLE

1. DEED:

RECORDED:

02-12-1923

GRANTOR:

Sinclair Pipeline Company

GRANTEE:

Sarah B. Williams

INSTRUMENT:

Bk 251, Pg 597

2. WILL:

RECORDED:

01-20-1937

GRANTOR:

Sarah B. Williams

GRANTEE:

George R. Urton

INSTRUMENT:

Bk 311, Pg 497

3. WARRANTY DEED:

RECORDED:

04-10-1942

**GRANTOR:** 

Blanche Bremer, et al

GRANTEE:

W. R. Urton and Nell McGrath

**INSTRUMENT:** 

Bk 332, Pg 215

4. WARRANTY DEED:

RECORDED:

03-25-1946

GRANTOR:

W. R. Urton and Velma Urton

GRANTEE:

Nell G. McGrath

INSTRUMENT:

Bk 350, Pg 162

5. DEED:

RECORDED:

12-16-1949

**GRANTOR:** 

Nell G. McGrath and James G. McGrath

GRANTEE:

Federal Land Bank

**INSTRUMENT:** 

Bk 339, Pg 245

6. WARRANTY DEED:

RECORDED:

07-01-1955

GRANTOR:

Nell G. McGrath and James G. McGrath

GRANTEE:

Cities Services Gas Company

INSTRUMENT:

Bk 398, Pg 518

7. WARRANTY DEED:

RECORDED:

05-14-1959

GRANTOR:

Nell G. McGrath

GRANTEE:

George F. Bremer, et al

**INSTRUMENT:** 

Bk 423, Pg 596

8. WARRANTY DEED:

RECORDED:

03-22-2000

**GRANTOR:** 

George F. Bremer and Maxine F. Bremer

**GRANTEE:** 

George F. Bremer, Trustee and Maxine F. Bremer

**INSTRUMENT:** 

Bk 1861, Pg 81

9. TRUSTEE WARRANTY DEED:

RECORDED:

02-06-2004

GRANTOR:

George F. Bremer, Trustee and Maxine F. Bremer

**GRANTEE:** 

George F. Bremer and Maxine F. Bremer Trust

**INSTRUMENT:** 

Bk 2403, Pg 35

10. TRUSTEE'S DEED:

RECORDED:

10-07-2004

**GRANTOR:** 

George F. Bremer and Maxine F. Bremer Trust

**GRANTEE:** 

Aquila, Inc.

INSTRUMENT:

Bk 2504, Pg 176

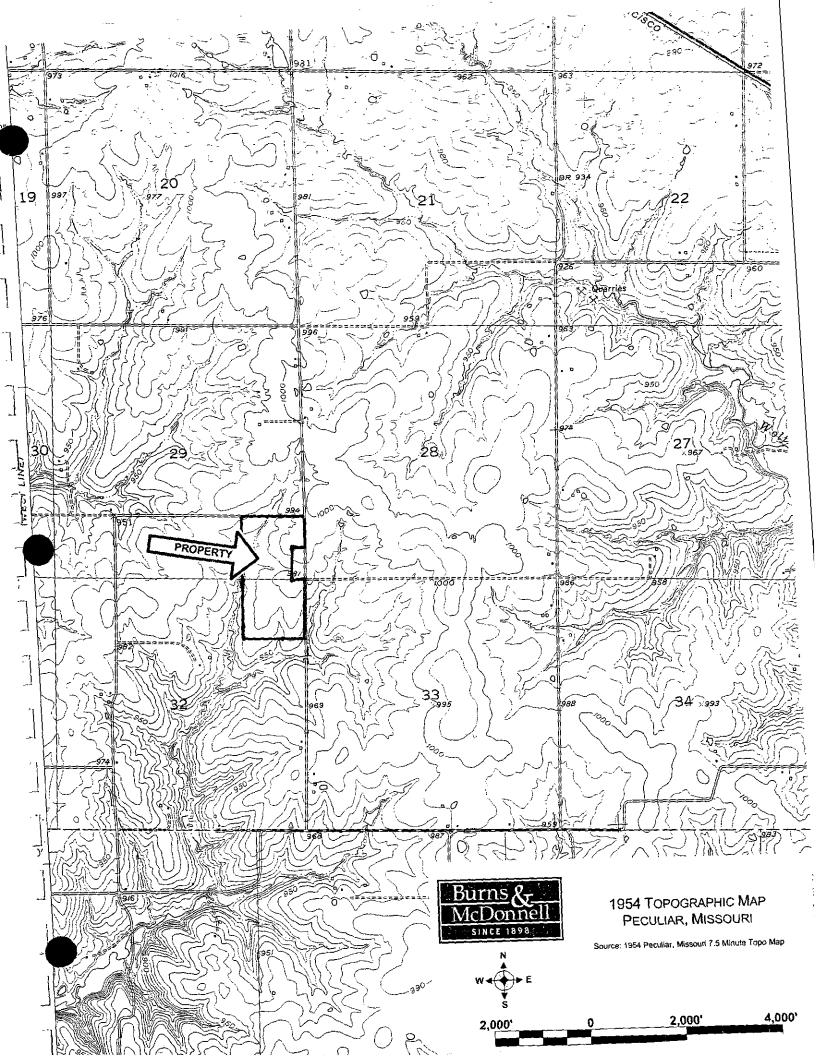
### 2. LEASES AND MISCELLANEOUS

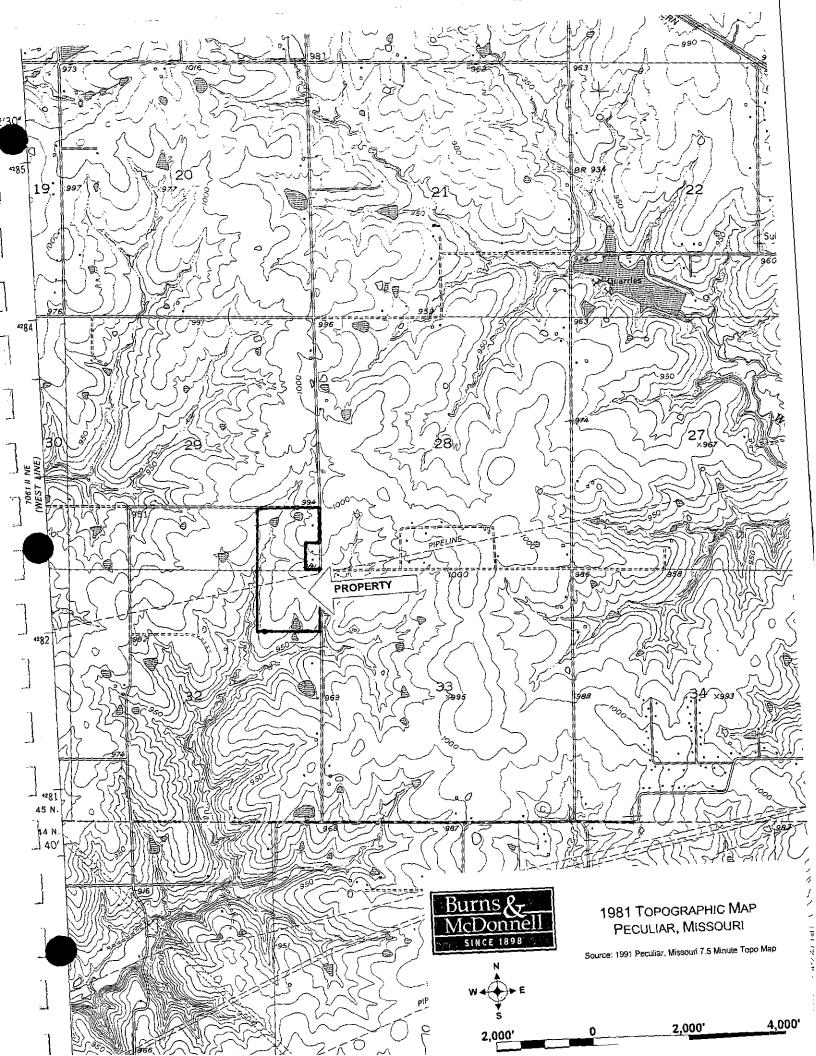
1. No leases or environmental liens were found of record.

### 3. LIMITATION

This report was prepared for the use of Environmental Data Resources, Inc., and Burns and McDonnell Engineering, exclusively. This report is neither a guarantee of title, a commitment to insure, or a policy of title insurance. NETR- Real Estate Research & Information does not guarantee nor include any warranty of any kind whether expressed or implied, about the validity of all information included in this report since this information is retrieved as it is recorded from the various agencies that make it available. The total liability is limited to the fee paid for this report.

APPENDIX G
Historic Topographic Maps





**APPENDIX H**Local Street Directories



# The EDR-City Directory Abstract

Bremer Site 24110 South Harper Rd. Peculiar, MO 64078

September 07, 2004

Inquiry Number: 1253520-7

## The Standard In Environmental Risk Management Information

440 Wheelers Farms Road Milford, Connecticut 06460

**Nationwide Customer Service** 

Telephone: 1-800-352-0050

Fax: 1-800-231-6802

## Environmental Data Resources, Inc. City Directory Abstract

Environmental Data Resources, Inc.'s (EDR) City Directory Abstract is a screening tool designed to assist professionals in evaluating potential liability on a target property resulting from past activities. ASTM E 1527-00, Section 7.3 on Historical Use Information, identifies the prior use requirements for a Phase I environmental site assessment. The ASTM standard requires a review of reasonably ascertainable standard historical sources. Reasonably ascertainable means information that is publicly available, obtainable from a source with reasonable time and cost constraints, and practically reviewable.

To meet the prior use requirements of ASTM E 1527-00, Section 7.3.4, the following standard historical sources may be used: aerial photographs, fire insurance maps, property tax files, land title records (although these cannot be the sole historical source consulted), topographic maps, city directories, building department records, or zoning/land use records. ASTM E 1527-00 requires "All obvious uses of the property shall be identified from the present, back to the property's obvious first developed use, or back to 1940, whichever is earlier. This task requires reviewing only as many of the standard historical sources as are necessary, and that are reasonably ascertainable and likely to be useful." (ASTM E 1527-00, Section 7.3.2, page 12.)

EDR's City Directory Abstract includes a search and abstract of available city directory data.

### City Directories

City directories have been published for cities and towns across the U.S. since the 1700s. Originally a list of residents, the city directory developed into a sophisticated tool for locating individuals and businesses in a particular urban or suburban area. Twentieth century directories are generally divided into three sections: a business index, a list of resident names and addresses, and a street index. With each address, the directory lists the name of the resident or, if a business is operated from this address, the name and type of business (if unclear from the name). While city directory coverage is comprehensive for major cities, it may be spotty for rural areas and small towns. ASTM E 1527-00 specifies that a "review of city directories (standard historical sources) at less than approximately five year intervals is not required by this practice." (ASTM E 1527-00, Section 7.3.2.1, page 12.)

NAICS (North American Industry Classification System) Codes

NAICS is a unique, all-new system for classifying business establishments. Adopted in 1997 to replace the prior Standard Industry Classification (SIC) system, it is the system used by the statistical agencies of the United States. It is the first economic classification system to be constructed based on a single economic concept. To learn more about the background, the development and difference between NAICS and SIC, visit the following Census website: http://www.census.gov/epcd/www/naicsdev.htm.

Please call EDR Nationwide Customer Service at 1-800-352-0050 (8am-8pm EST) with questions or comments about your report.

Thank you for your business!

### Disclaimer - Copyright and Trademark Notice

This report contains information obtained from a variety of public and other sources. NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL EDR BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OR DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. It can not be concluded from this report that coverage information for the target and surrounding properties does not exist from other sources. Any analyses, estimates, ratings or risk codes provided in this report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forceast of, any environmental risk for any property. Any liability on the part of EDR is strictly limited to a refund of the amount paid for this report.

Copyright 2004 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc. or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

### 4. SUMMARY

### City Directories:

Business directories including city, cross reference and telephone directories were reviewed, if available, at approximately five year intervals for the years spanning 1997 through 2003. (These years are not necessarily inclusive.) A summary of the information obtained is provided in the text of this report.

### **Date EDR Searched Historical Sources:**

City Directories

Sep 07, 2004

Target Property:

24110 South Harper Rd. Peculiar, MO 64078

**PUR ID** 

Year Uses **NAICS** 

Source

(N/A)

1997

Address not Listed in Research Source

N/A

Polk City Directory

Target Property Log of Address Changes

Surrounding Area Property Log of Address Changes

24110 S Harper Rd

Multiple Addresses

2003

Residence

Polk City Directory

### **Adjoining Properties**

### **SURROUNDING**

Multiple Addresses Peculiar, MO 64078

PUR ID

Year <u>Uses</u> <u>NAICS</u>

N/A

N/A

N/A

N/A

N/A

(N/A)

1997

\*\*S HARPER RD\*\*

Address not listed in research source (24005)

Address not listed in research source (24101)

Residence (24107)

Address not listed in research source (24211)

Address not listed in research source (24304)

Address not listed in research source (24305)

Source

Polk City Directory

2003 \*\*S HARPER RD\*\*

Residence (24005)

Residence (24101)

Residence (24107)

Residence (24211)

Residence (24304)

Residence (24305)

Polk City Directory

APPENDIX I FOIA Request



September 8, 2004

Mr. Michael Warrick General Counsel Missouri Department of Natural Resources P.O. Box 176 Jefferson City, MO 65102

Freedom of Information Act Request Phase I Environmental Site Assessment 24110 South Harper Road, Peculiar, Missouri 64708

Dear Mr. Warrick:

Under the Freedom of Information Act, I am requesting access to any files you have in regards to the Property located at 24110 South Harper Road, Cass County, Peculiar, Missouri. The Property is currently owned by Mr. George Bremer.

In the past, I have submitted a single FOIA request to MDNR's General Counsel and in turn it is distributed to all MDNR departments/divisions/programs.

Please send me copies of any permits, permit applications, spill reports, environmental records, etc. on file with the agency. I am willing to reimburse for total costs up to \$50. If the costs exceed this amount, please contact me to discuss what remains. If no information concerning the Site is found, please send me a fax or letter stating this. My fax number is 816-822-3494 and my mailing address is:

Burns & McDonnell P.O. Box 419173 Kansas City, Missouri 64141-6173

If you need additional information or have any questions, please call me at 816-822-4288 or e-mail me at areed@burnsmcd.com. Thank you for your time and assistance.

Sincerely,

Amy M. Reed

Environmental Engineer



Missouri Department of Natural Resources Air Pollution Control Program P.O. Box 176 Jefferson City, MO 65102 Phone: 573-751-4817

DNR APCP

Fax: 573-751-2706

To:	Amy Reed	From:	Sharon Rains Records Manager	·
Fax;	816-822-3494	Pages:	1	
Phone:	816-822-4288	Date:	09/13/04	·
Re:	Information on 24110 South	Harper Road		
□ Vrge	nt 🔲 Priority	☐ Routine	□ FYI	X As Requested

This will acknowledge receipt of your letter on September 8, 2004, in which you request information concerning property on 24110 South Harper Road, Cass County, Peculiar, MO. In accordance with the Missouri Open Records Law, Section 610.010 et seq., RSMo. (as amended) and Missouri Department of Natural Resources ("MDNR") Policy 2070, "Requests for Information - Sunshine Law,", Air Pollution Control Program records were searched. No records were found responsive to your request.

If you believe that records do exist within the program, please contract us with more information regarding your request, such as name changes etc., and we will search again.

Thank you for your attention to this matter.

If you have questions or wish to schedule a file review, please contact me at (573) 751-4817 or e-mail at sharon.rains@dnr.mo.gov.



Bob Holden, Governor • Stephen M. Mahfood, Director

## ARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

September 13, 2004

Ms. Amy Reed Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114-3319

RE: FOIA Request - 24110 South Harper Road, Peculiar, Missouri 64708

Dear Ms. Reed:

I am in receipt of your letter dated September 8, 2004, regarding the above referenced property.

I have forwarded your request to the department's Air and Land Protection Division and Water Protection and Soil Conservation Division for response as they have the responsibility for maintaining those records. You should expect to hear from them no later than September 24, 2004.

If you have any questions, please contact my office at (573) 751-0323. Thank you.

Sincerely,

DEPARTMENT OF NATURAL RESOURCES

Warrick

Michael Warrick General Counsel

MW:dlf

c: Jim Werner, Director, Air and Land Protection Division
Kara Valentine, Legal Counsel, Air and Land Protection Division
Scott Totten, Director, Water Protection and Soil Conservation Division
Aimee Davenport, Legal Counsel, Water Protection and Soil Conservation Division

Department of

Missouri

Natural

Bob Holden, Governor • Stephen M. Mahfood, Director

## DEPARTMENT OF NATURAL RESOURCES

www.dnr.state.mo.us

September 15, 2004

Ms. Amy M. Reed, Environmental Engineer Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114-3319

Dear Ms. Reed:

This will acknowledge receipt of your recent request for information concerning:

George Bremer Property 24110 South Harper Road Peculiar, Missouri 64708

Site specific information is not available; however, information may be available in our general files. You are welcome to review.

☐ This file is confidential; please contact the Missouri Attorney General's Office at (573) 751-3321 to gain access to this file.

Data searches of our files indicate we have records regarding this facility. You are welcome to review.

With few exceptions department records are available for your inspection and review during regular business hours, 8 a.m. - 5 p.m., at the Kansas City Regional Office, 500 Northeast Colbern Road, Lee's Summit, Missouri 64086-4710. We request that you contact our office at (816) 622-7000 in order to schedule an appointment in order to confirm the date that you desire to review these records.

Please be advised that you are required to conduct this records inspection and review yourself. The Department of Natural Resources will not conduct any records search; however, a supervisory person may be present to answer questions. We do not maintain records by street addresses or legal description. We do have information related to specific companies, counties, and cities.

Finally, should you desire to make copies of any records, you may furnish your own copying equipment or the Department of Natural Resources may have copying facilities available at a charge. Thank you.

Sincerely,

KANSAS CVTY REGIONAL OFFICE

James R. Macy Regional Director

JRM/lr

L:\JLR\Sunshine.doc

Integrity and excellence in all we do

## Curtis L. Koons

Cass County Assessor Cass County Courthouse 102 East Wall Harrisonville, Missouri 64701 816/380-8179 Fax: 816/380-8186



August 30, 2004

Bremer, George F & Maxine F Tr 24110 S. Harper Rd Peculiar, MO 64078

Re: Real Estate Appraisal Value

S 29 T 45 R 32	
The appraised value is: 22,470	for the year2003
The assessed value is: 127,910	for the year2003
Account # 2747900	
Map # 07-09-29-000-000-038.000	

Sincerely,

Curtis L. Koons Cass County Assessor

# Curtis L. Koons

Cass County Assessor
Cass County Courthouse
102 East Wall
Harrisonville, Missouri 64701
816/380-8179
Fax: 816/380-8186



August 30, 2004

Bremer, George F & Maxine F Tr 24404 S. Harper Rd Peculiar, MO 64078

Re: Real Estate Appraisal Value

In reply to your request for the appraise S 32 T 45 R 32	ed value of property described as:
The appraised value is: 1,390 The assessed value is: 11,550	for the year2003 for the year2003
Account # 2754500 Map # 07-09-32-000-000-002.000	
If we can be of further assistance in this	s matter, do not hesitate to contact us.
·	Sincerely,

Curtis L. Koons

Cass County Assessor

APPENDIX J Asbestos Survey Memo

## Memorandum



Date: September 10, 2004

From: Adrian Wenker, Burns & McDonnell To: Amy Reed, Burns & McDonnell

Re: Asbestos Survey of Bremer Property

On September 9, 2004, Burns and McDonnell was asked to conduct a visual asbestos inspection at the home of Mr. Bremer. At the request of the client, no samples were taken so the information regarding whether or not a material contains asbestos is based solely on past experience and professional opinion. The only way to effectively determine if a material contains asbestos is to submit it for laboratory analysis. Adrian Wenker (MO State Certified Asbestos Inspector #7001022404MOIR9241) conducted a visual asbestos inspection with Amy Reed on September 9, 2004. The structures that were inspected were the east pole barn, west pole barn, south pole barn, and the home. Materials noted have not been verified as asbestos containing.

## • East pole barn:

- A. South pole barn is constructed of wood with corrugated sheet metal siding and roofing. It is built on an earthen foundation.
  - 1. Presumed Asbestos Containing Material (PACM)
    - a. Electrical wire wrapping that runs from the circuit breaker box to the outlets and throughout the barn. Estimated amount: 300 linear feet.
    - b. Window caulk on south window. Estimated amount: 8 square feet.

## • West pole barn:

- A. North pole barn is constructed of wood with corrugated sheet metal siding and roofing. It is built on an earthen foundation.
  - 1. Presumed Asbestos Containing Material (PACM)
    - **a.** Electrical wire wrapping throughout the barn. Estimated amount: 500 linear feet.

## South pole barn:

- A. North barn is constructed of wood with corrugated sheet metal siding and roofing. The east side of the barn is used for material and equipment storage while the west side was a former feeder pig operation.
  - 1. Presumed Asbestos Containing Material (PACM)
    - a. West side of barn, a 4" vertical natural gas pipeline with a black tar-like wrapping. Estimated amount: 5 linear feet.



September 10, 2004 Page 2 of 3

#### • Home:

A. The Bremer's home was constructed circa 1961, according to the homeowner. It is a wood construction home on a basement. It is approximately 30'x60'. It has a shingle roof. The siding is a metal, according to the homeowner, and is relatively new. Burns & McDonnell was unable to view the original siding on the home or the material beneath the metal siding. The home has an attic which is accessible from the attached garage. The insulation in the attic is fiberglass and not suspect. A patio addition was added to the north side of the house and did not contain any suspect material.

## 1. Presumed Asbestos Containing Material (PACM)

## a. Garage:

i. Popcorn type ceiling. Estimated amount: 400 square feet

## b. Utility Room:

- i. Popcorn type ceiling. Estimated amount: 100 square feet
- ii. Window caulk. Estimated amount: 8square feet
- iii. 9"x9" floor tile and any associated mastic. Estimated amount: 100square feet.
- iv. Drywall walls and any associated joint compound. Estimated amount: 300square feet.

#### c. Kitchen:

- i. Popcorn ceiling. Estimated amount: 150 square feet
- ii. Drywall walls and any associated joint compound. Estimated amount: 160 square feet

## d. Living Room:

- i. Popcorn ceiling. Estimated amount: 400 square feet
- ii. Drywall walls and any associated joint compound behind wood paneling. Estimated amount: 800 square feet

## e. Front door entry way:

- i. Popcorn ceiling. Estimated amount: 100 square feet
- ii. Linoleum floor: Estimated amount: 100 square feet

## f. Hallway:

- i. Drywall walls and any associated joint compound. Estimated amount: 200 square feet
- ii. Popcorn ceiling. Estimated amount: 48 square feet

## g. Master Bathroom:

- i. Linoleum flooring. Estimated amount: 40 square feet
- ii. Drywall ceiling and walls and any associated joint compound. Estimated amount: 250 square feet



September 10, 2004 Page 3 of 3

#### h. Second Bathroom:

- i. Linoleum flooring. Estimated amount: 12 square feet
- ii. Drywall ceiling and walls and any associated joint compound. Estimated amount: 100 square feet

## i. Upstairs bedrooms (all three bedrooms the same):

i. Drywall ceiling and walls. Estimated amount: 1600 square feet

#### i. Basement office:

- i. Linoluem flooring. Estimated amount: 150 square feet
- ii. 2'x4' ceiling tiles (pinholes with divots pattern). Estimated amount: 150 square feet
- iii. Electric wire wrapping. Estimated amount: 500 linear feet

## k. Basement TV Room:

i. 2'x4' ceiling tiles (pinholes with divots pattern). Estimated amount: 244 square feet

## 1. Basement Sitting Area:

- i. 1'x1' ceiling tile (pinhole pattern). Estimated amount: 600 square feet
- ii. Drywall and any associated joint compound. Estimated amount: 300 square feet

## m. Basement Hallway:

i. 2'x4' ceiling tile (pinholes with divots pattern). Estimated amount: 60 square feet.

## n. Basement bedroom:

i. 2'x4' ceiling tile (pinholes with divots pattern). Estimated amount: 244 square feet.

All measurements are approximations. Noted material does not mean it is asbestos containing. No destructive sampling was done.

APPENDIX K Scope of Services



October 25, 2004

Mr. Block Andrews Director Environmental Health & Safety Aquila, Inc. 20<sup>th</sup> West 9<sup>th</sup> Street Kansas City, MO 64105

Proposal for Phase One Environmental Site Assessment at 24110 South Harper Road, Peculiar, Missouri

Dear Mr. Andrews:

In accordance with your request, we are pleased to submit our proposal for professional services for a Phase I Environmental Site Assessment (Phase I ESA) as follows:

#### **PROJECT**

Aquila, Inc. (hereinafter referred to as CLIENT) is seeking a study and report concerning a Phase I Real Estate Transfer Environmental Site Assessment (Assessment) of Mr. George Bremer's Property located in Peculiar, Cass County, Missouri. Specific location and description of the property will be furnished by CLIENT prior to starting work.

#### SCOPE OF SERVICES

In order to meet the objectives of this project, Burns & McDonnell (hereinafter referred to as CONSULTANT) proposes the following multi-component approach, which is consistent with ASTM Standard E1527-00 for performing an environmental site assessment for commercial real estate. It is understood that the purpose for conducting this site assessment is to satisfy one of the requirements to qualify for the innocent land owner defense to CERCLA liability and is not intended to include a more comprehensive evaluation of business environment risk associated with a parcel of commercial real estate. See Exhibit A for details of scope of work.

Note that CLIENT is responsible for providing records of historic ownership for the Property; disclosing leases, easements, environmental liens and activity and use limitations for the Property; and other user requirements. Please refer to Section 3.0 Client's Responsibilities of the attached Exhibit A.

## **COMPENSATION**

Compensation has been agreed upon under the Environmental Permitting, Clearances, and Authorizations project for the Proposed Peculiar, Missouri South Harper Peaking Facility.

Compensation does not include fees or visits for obtaining information from government agencies through the Freedom of Information Act, in excess of \$50.00. If we find that greater than 25

9400 Ward Parkway Kansas City, Missouri 64114-3319 Tel: 816 333-9400 Fax: 816 333-3690 www.burnsmcd.com



Mr. Block Andrews October 25, 2004 Page 2

pages of business records or responses from government agencies require review, Burns & McDonnell will contact CLIENT for additional fee authorization prior to performing the review.

If we learn that the Properties are or were a listed LUST, CERCLIS, SWLF, SPL, RCRA or NPL site we will adjust our fee accordingly to allow for Burns & McDonnell to obtain, review and summarize the additional information.

The cost of providing professional services under the Agreement is based CONSULTANT's knowledge of site conditions and its judgment at the time that this cost estimate was prepared and assumes that the site visit can be completed in a single day. In the event that CONSULTANT identifies concealed conditions, which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Agreement, the basic fee will be equitably adjusted.

The attached Supplemental Phase I - Real Estate Transfer Environmental Site Assessments Terms and Conditions is incorporated and made a part of this Agreement.

We appreciate the opportunity to present this proposal. If it is acceptable, please sign and return one copy for our file.

Sincerely,

Lebenh L. Bruand

J. David Langford

Associate Vice President

Attachments:

RETSA Terms and Conditions Dated 01/03/00

Exhibit A, Scope of Work

ACCEPTED:
Aquila, Inc.

By Block anheno

Title Director, Environmental Services

Date 10/26/04

## **EXHIBIT A**

Scope of Work
Submitted to Aquila, Inc. for
Phase I Environmental Site Assessment
South Harper Peaking Facility
24110 South Harper Road
Peculiar, Missouri

October 25, 2004

#### 1.0 PROJECT

In accordance with the Burns & McDonnell Engineering Company, Inc. (hereafter referred to as CONSULTANT) proposal to Aquila, Inc. (CLIENT) dated October 25, 2004, the following Project Scope of Work shall be performed:

## 2.0 SCOPE OF SERVICES

The project scope consists of assisting CLIENT with Phase I Environmental Site Assessments of Mr. George Bremer's (OWNER's) Property located in Peculiar, Cass County, Missouri.

Because CONSULTANT has limited information concerning the Property, the following assumptions have been made for the purposes of cost estimating:

- The Property will be comprised of agricultural land with no commercial or industrial developments on or adjacent the Property.
- There are no buildings located on the Property, except for the barns and residence.
- The Property is accessible from a truck.

Changes in any of the forgoing assumptions may change the fee quoted in this proposal.

CONSULTANT agrees to furnish labor, materials, equipment, and other items necessary to complete the services described herein for CLIENT. This scope of services will be completed in accordance with American Society for Testing and Materials Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (E1527-00).

## 2.1 Regulatory Background Review

- a. CONSULTANT will purchase and review a government database area map search and list report (Report) for the Property. The Report will be purchased from one commercial provider of that service. The Report purchased will use the approximate latitude and longitude of the center of the Property as its location and will contain the following information:
  - National Priority List (NPL) and State Priority List (SPL) for sites within a one
     (1) mile search distance of the Property
  - Federal and State equivalent Comprehensive Environmental Response
     Compensation and Liability Information System (CERCLIS) and state landfill

- and/or solid waste disposal list sites (SWLF) within a one-half (½) mile search distance of the Property.
- Resource Conservation and Recovery Act (RCRA) Notifiers List for generators at and adjoining the Property.
- RCRA CORRACTS Treatment, Storage and/or Disposal (TSD) sites within a
  one (1) mile search distance of the Property
- Non-CORRACTS TSDs within a one-half (½) mile search distance to the Property.
- Federal Emergency Response Notification list sites (ERNs) for the Property only.
- State list of registered underground storage tanks (USTs) for USTs sites within a one-quarter (1/4) mile search distance of the Property.
- State list of reported leaking underground storage tank (LUST) incidents for LUST sites within a one half (½) mile search distance of the Property.
- b. CONSULTANT will review historical aerial photographs, from as many different time periods as practical. The following sources may be used:
  - Either the local County or Township Assessor's office,
  - The local office of the United States Natural Resource Conservation Service.
  - The City Planning and Zoning Department,
  - Commercial Provider.

Aerial photographs will be reviewed in an effort to identify the past uses of the Property. If possible, CONSULTANT will purchase copies of the photographs reviewed, however, CONSULTANT will not purchase copies of more than one photograph per decade. The quoted fee in this scope of work does not include purchasing more than \$100.00 in aerial photographs.

- c. CONSULTANT will review the USGS 7.5 Minute Topographic Map for the Property to evaluate the regional topography and drainage features on or within ½ mile of the Property.
- d. CONSULTANT will purchase and review historic fire insurance maps (Fire Insurance Maps), if they are available. Fire Insurance Maps will be purchased from one commercial provider of that service. The Fire Insurance Maps purchased will use the street address of the Property as the search criteria. CONSULTANT will review the Fire Insurance Maps, if available, to identify known past uses of the Property. The quoted fee in this scope of work does not include purchasing more than \$125.00 in Fire Insurance Maps.

- e. CONSULTANT will interview the person(s) identified by CLIENT as possessing knowledge of the current and former uses of the Property. CONSULTANT also will interview credible people identified, if any, that may possess knowledge of the current and former uses of the Property. Persons attempts will be made to interview include current Property owners and/or operators.
- f. CONSULTANT will review file information concerning the Property at the local fire, building and planning departments and the township or county Assessor's Office, or will interview representatives of these offices by telephone concerning records they have.
- g. CONSULTANT will review reasonably ascertainable published geologic maps or literature for the Property in an effort to identify the thickness of soil and the types of soil and rock underlying the Property. CONSULTANT will not conduct intrusive data gathering or sampling of soil, rock or water at the Property, to obtain this information.
- h. CONSULTANT will submit Freedom of Information Act Requests to federal and state environmental agencies to request copies of file information concerning land and water related matters at the Property. FOIA requests will be sent to the federal and state environmental agencies with authority over land and water issues and ask them for file information about the Property only. The quoted fee in this scope of work does not include more than \$50.00 in copying charges for records obtained as a result of these FOIA requests.

## 2.2 Site Reconnaissance

- a. CONSULTANT will perform a site visit to visually and physically observe the Property. CONSULTANT will perform this site visit in an effort to obtain information that may indicate the likelihood of identifying Recognized Environmental Conditions on the Property.
- b. CONSULTANT will visually observe the Property in an effort to identify transformers or capacitors that may contain polychlorinated biphenyls (PCBs). CONSULTANT will look to see if transformers or capacitors are leaking and attempt to identify visible markings that may confirm their ownership.
- c. CONSULTANT will visually observe the Property to identify aboveground storage tanks and visible signs of underground storage tanks (e.g., fill pipes, manways, vent lines, and dispensing pumps).
- d. CONSULTANT will photograph each accessible property line and each accessible side of Property improvements to document the condition of the Property at the time of the site reconnaissance. Finally, CONSULTANT will photograph each area that, at the time

<sup>&</sup>lt;sup>1</sup> Physically observe as used herein means we will also make note of odors that may suggest environmental impact to the Property.

of the site reconnaissance, CONSULTANT plans to identify as a Recognized Environmental Condition at the Property.

e. CONSULTANT will review waste manifests, material safety data sheets, raw materials inventory lists, and tenant lists for a 50-year period, if these records exist and are made available to CONSULTANT, in an effort to identify issues of environmental relevance to the Property for that time period. Reviews of these documents requiring more than 1 hour are beyond the scope of services of this scope of work and will be billed on a time and expense basis.

## 2.3 Visual Observation of Adjoining and Surrounding Lands

CONSULTANT will visually and physically observe adjoining properties from the CLIENT's Property and public points of view in an effort to identify use of and apparent environmental threats to the Property posed by adjoining properties. Also, CONSULTANT will visually and physically observe up gradient surrounding properties within ¼ mile of the Property, as shown on the local USGS topographic quadrangle map. CONSULTANT will perform visual observations of surrounding properties from the Property and public points of view in an effort to identify use of and apparent environmental threats to the Property posed by up-gradient surrounding properties

## 2.4 Sampling

CONSULTANT will not take any type of soil, water, or air samples. CONSULTANT will not take any samples for asbestos or mold or lead-based paint analysis.

## 2.5 Data Evaluation and Reporting

CONSULTANT will prepare a narrative report that summarizes the information obtained during the work described in Sections 2.1 through 2.4. CONSULTANT will provide three copies of the report for the Property. Draft copies of the reports, revisions to final reports and additional copies requested by CLIENT will be billed on a time-and-expense basis and are beyond the scope of services outlined in this section.

#### 2.6 Additional Services

Telephone consultation and interpretations of findings will be billed on a time-and-expense basis and are beyond the scope of services outlined in Sections 2.1 through 2.4.

At CLIENT's request, CONSULTANT will provide additional services that are beyond the scope of services outlined in Sections 2.1 through 2.4. CONSULTANT will bill time for those non-scope services on a time-and-expense basis. CONSULTANT will proceed with additional services only upon a written notice to proceed from CLIENT. Additional services may include the following items:

- Sampling of readily observable and representative suspected ACBM and analysis bulk samples of ACBM.
- Sampling of readily observable and representative or suspected mold.

- Development of an Operations and Maintenance or Management Plan that addresses the ACBM located within the facility.
- Design and implementation of Phase II environmental assessments to include groundwater studies, underground storage tank management, design of subsurface testing (borings, water, and soil analysis) and RCRA compliance programs.

## 3.0 CLIENT'S RESPONSIBILITY

## CLIENT agrees to provide the following:

- Give prompt written notice to CONSULTANT whenever CLIENT observes or otherwise becomes aware of any development that affects the scope or timing of CONSULTANT's services,
- Provide written and legal authorization for CONSULTANT to perform services on the Property, including right of access to the Property,
- Provide the reason the Phase I ESA is required,
- Describe the type of Property and type of Property transaction, for example, sale, purchase or exchange,
- Provide the complete and correct address for the Property,
- Provide a map or other documentation showing the Property location and boundaries,
- Disclose whether there are any environmental liens on the Property, or activity and use limitations (such as a deed restriction),
- Disclose whether the value of the Property has been reduced below comparable properties due at least in part to environmental conditions associated with the Property (CONSULTANT will be interested to know the environmental condition causing the value reduction),
- The scope of services desired for the Phase I ESA (including whether any parties to the Property transactions may have a required standard scope of services or whether any considerations beyond the requirements of Practice E 1527-00 are to be considered by CONSULTANT),
- Provide the names, addresses and roles of all parties who will rely on the Phase I ESA reports.
- Identify the Property contact and how the contact can be reached,
- Provide historic ownership or chain-of-ownership for the Property. A chain-of-ownership for environmental purposes will be provided by the CLIENT for the Property. The land title records provided will include recorded liens related to environmental cleanup or hazards on the Property, deed restrictions and activity or use limitations. Data will be provided for the period from the date of the signed agreement back to 1940 or to a time prior to 1940 when the Property was first developed, whichever is earliest. To the extent the information is available, leases and easements on the Property will be included.
- Disclose any special terms and conditions which must be agreed upon by CONSULTANT, and
- Any other knowledge or experience with the Property that may be pertinent to CONSULTANT including, but not limited to geotechnical reports, environmental reports, records,

correspondences, plats of survey, building, grading and development plans, tax number, current legal title holder of the Property and any other data concerning the Property and its environmental condition.

# BURNS & McDONNELL ENGINEERING COMPANY, INC. PHASE I - REAL ESTATE TRANSFER ENVIRONMENTAL SITE ASSESSMENTS TERMS AND CONDITIONS

#### SCOPE OF SERVICES

Burns & McDonnell Engineering Company, Inc. ("Consultant") will perform those services set forth in the attached letter, proposal or agreement of which these Terms and Conditions are a part.

#### 2. REPORTS

- A. Consultant will provide Client with a written report ("Report") in connection with the services performed. The Report will present such findings and conclusions respecting the Site as Consultant may reasonably make with the information gathered in accordance with this Agreement. The Report shall be based only upon Consultant's observations made in the performance of the scope of services agreed upon in writing.
- B. In preparing the Report, Consultant may review and interpret certain information provided by subconsultants and others, including government authorities, title companies, testing laboratories and other entities. Consultant will not independently evaluate the accuracy or completeness of such information, and shall not be responsible for any errors or omissions contained in such information.

#### 3. PAYMENTS TO CONSULTANT

- A. Compensation will be as stated in the above-referenced Proposal. Statements are payable upon receipt. A late payment charge will be added to all amounts not paid within 30 days of statement date, calculated at 1.5 percent per month from statement date. Any cost incurred by Consultant, including reasonable attorney's fees, in collecting any delinquent amount shall be reimbursed by Client. If a portion of Consultant's statement is disputed, the undisputed portion shall be paid by Client by the due date. Client shall advise Consultant in writing of the basis for any disputed portion of any statement.
- B. Taxes as may be imposed by state and local authorities, other than federal and state income tax and Kansas City, Missouri earnings tax, shall be in addition to the payment stated in the above-referenced Proposal.

#### 4. INSURANCE

During the course of performance of its services, Consultant will maintain Workers' Compensation, Employers' Liability, Commercial General Liability and Automobile Liability insurance coverages.

#### 5. PROFESSIONAL RESPONSIBILITY

- A. Consultant will exercise reasonable skill, care, and diligence in the performance of its services and will carry out its responsibilities in accordance with customarily accepted good professional practices. If the Consultant fails to meet the foregoing standard, Consultant will perform at its own cost, and without reimbursement from Client, those professional services necessary to correct errors and omissions caused by Consultant's failure to comply with above standard, if reported to Consultant within one year from the completion of Consultant's services. No warranty, express or implied is included in this Agreement or in any drawing, specification, report or opinion produced pursuant to this Agreement.
- B. Notwithstanding the foregoing respecting Consultant's professional responsibility, Client acknowledges its obligations set forth in Paragraph 7 below.

#### 6. LIMITATION OF LIABILITY

- A. Client agrees that to the fullest extent permitted by law Consultant's total liability to Client for any and all injuries, claims, losses, expenses or damages whatsoever arising out of or in any way related to this Agreement from any cause shall not exceed the greater of \$100,000.00 or amount paid (or payable) by the Client for Consultant's services under this Agreement.
- B. Client and Consultant agree that in no event will Consultant be liable to Client for any direct, special, indirect or consequential damages including, without limitation, damages or losses for environmental impairment, increased project costs, loss of revenue or profit, lost production, fines or penalties or any environmental response costs resulting from the presence on Client's property of any environmental pollutant, contaminant, hazardous substance or waste or any material regulated under environmental laws.
- C. The obligations of Consultant and remedies of Client stated in this Agreement are the sole and exclusive obligations and remedies of each, whether liability of Consultant is based upon contract, warranty, tort, statute or otherwise.

#### 7. INDEMNITY FOR POLLUTION-RELATED CLAIMS

In view of the uncertainty involved in investigating and recommending solutions to environmental problems and the abnormal degree of risk of claims imposed upon the Consultant in performing such services, notwithstanding the responsibility of Consultant set forth in Paragraph 5. Client agrees to release, defend, indemnify and hold harmless Consultant and its officers, directors, employees, agents, consultants and subcontractors from all liability, claims, demands, damages, losses, and expenses, including, but not limited to, claims of Client and other persons and organizations, reasonable fees and expenses of attorneys and consultants, and court costs, except where there has been a final adjudication that the damages were caused by Consultant's willful disregard of its obligations under this Agreement. Such indemnification includes claims arising out or in any way relating to the actual, alleged, or threatened dispersal, escape, or release of, or failure to detect or contain, chemicals, wastes, liquids, gases or any other material, irritant, contaminant or pollutant.

#### 8. SITE INFORMATION

In addition to providing the information relating to the site listed in the Proposal, Client shall provide the following:

- A. The location of utilities, underground tanks, and other structures and the routing thereof at the site;
- B. A description of activities conducted at the site at any time by the Client or by any other person or entity; and
- C. Identification, by name, quantity, location, and date, of any storage, release or handling of any substance Client either knows or suspects is hazardous.

#### 9. HAZARDS

If any hazardous substance not identified by Client is discovered after Consultant commences performance of this Agreement, Client and Consultant agree that the scope of services, schedule and compensation may be adjusted accordingly. Consultant shall advise its employees, agents, representatives and subcontractors of known hazardous substances existing on or near the site and they shall exercise due care while at the site, including use of adequate safety equipment.

#### 10. CONTROL OF SITE

By providing services under this Agreement, Consultant does not assume control of or responsibility for the site or become the person in charge of the site or undertake responsibility for reporting to any federal, state or local public agency respecting conditions at the site that may present a potential danger to public health, safety or the environment. Further, nothing contained within this Agreement or the services to be rendered thereunder shall be construed or interpreted as requiring Consultant to assume the status of a generator, storer, transporter, treater, operator or disposal facility as those terms may appear within federal, state or local laws, statutes, ordinances, or regulations concerning the generation, transportation, treatment, storage and disposal of waste. Client assumes full responsibility for compliance with all federal, state or local laws, statutes, ordinances and regulations governing the handling, treatment, storage and disposal of such waste.

#### 11. SITE ACCESS

Client shall obtain for Consultant access to the site and all buildings thereon at reasonable times throughout performance of this Agreement. Consultant will take reasonable precautions to minimize damage to the site from use of equipment, but unavoidable damage or alteration may occur. Client agrees to assume responsibility for such unavoidable damage or alteration.

#### 12. CERTIFICATION

Certification by the Consultant of test results or reports constitute a statement of the professional judgment of the Consultant based on the facts and data known to the Consultant. Certification or other "assurances" are not guarantees or warranties concerning current or future considerations or performance of the facilities surveyed, or that Client or others will be entitled to any innocent land owner or purchaser defenses which may be available under applicable environmental laws including the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended.

#### 13. CHANGES

Client shall have the right to make changes within the general scope of Consultant's services, with an appropriate change in compensation, upon execution of a mutually acceptable amendment or change order signed by an authorized representative of the Client and the President or any Vice President of the Consultant.

#### 14. TERMINATION

Services may be terminated by the Client or Consultant by seven (7) days' written notice in the event of substantial failure to perform in accordance with the terms hereof by the other party through no fault of the terminating party. If so terminated, Client shall pay Consultant all amounts due Consultant for all services properly rendered and expenses incurred to the date of receipt of notice of termination, plus reasonable costs incurred by Consultant in terminating the services.

### 15. DISPUTES

If a dispute arises relating to the performance of this Agreement that results in litigation, it is agreed that the prevailing party shall be entitled to recover all reasonable costs of litigation, including staff time, court costs, attorneys' fees and other related expenses.

#### 16. WITNESS FEES

 A. Consultant's employees shall not be retained as expert witnesses, except by separate written agreement.

B. Client agrees to pay Consultant pursuant to Consultant's then current schedule of hourly labor billing rates for time spent by any employee of Consultant responding to any subpoena by any party in any dispute as an occurrence witness or to assemble and produce documents resulting from Consultant's services under this Agreement.

#### 17. RIGHTS AND BENEFITS

Consultant's services will be performed solely for the benefit of the Client and not for the benefit of any other persons or entities.

#### 18. REPORT DISTRIBUTION

Consultant's Report is intended for the exclusive use of Client, except that the Report may also be provided to the other immediate party (buyer or seller) and lender in the transaction contemplated by this Agreement. There may be no further distribution of the Report, in whole or in part, or summaries or abstracts thereof, without the written consent of an officer of the Consultant.

#### 19. ASSIGNMENT

Neither party may assign this Agreement to another without the express written consent of the other party, except to a majority-owned subsidiary, to a parent corporation, or to an affiliated corporation under common control.

#### 20. ENTIRE AGREEMENT

These Terms and Conditions and the above-referenced Proposal contain the entire agreement between Consultant and Client. All previous or contemporaneous agreements, representations, promises and conditions relating to Consultant's services are superseded. Since terms contained in purchase orders do not generally apply to professional services, in the event Client issued to Consultant a purchase order, no preprinted terms thereon shall become a part of this Agreement. Said purchase order document, whether or not signed by Consultant, shall be considered as a document for the Client's internal management of its operations.

2.2 Cultural Resources Survey/Clearance

Bob Holden, Governor • Stephen M. Mahfood, Director

## DEPARTMENT OF NATURAL RESOURCES

www.dnr.mo.gov

September 7, 2004

John Stower Burns & McDonnell 9400 Ward Parkway Kansas City, Missouri 64114

Re:

Aquila Peculiar Energy Center (EPA) Cass County, Missouri

Dear Mr. Stower:

Thank you for submitting information on the above referenced project for our review pursuant to Section 106 of the National Historic Preservation Act (P.L. 89-665, as amended) and the Advisory Council on Historic Preservation's regulation 36 CFR Part 800, which requires identification and evaluation of cultural resources.

We have reviewed the Section 106 Survey Memo entitled *Aquila Peculiar Energy center*, *Project 37273*, *Cass County, Missouri* by John T. Penman. Based on this review it is evident that a thorough and adequate cultural resources survey has been conducted of the project area. We concur with the investigator's recommendation that there will be **no historic properties affected** and, therefore, we have no objection to the initiation of project activities. However, a second copy of the Survey Memo should be submitted to this office.

Please be advised that, should project plans change, information documenting the revisions should be submitted to this office for further review. In the event that cultural materials are encountered during project activities, all construction should be halted, and this office notified as soon as possible in order to determine the appropriate course of action.

If you have any questions, please write Judith Deel at State Historic Preservation Office, P.O. Box 176, Jefferson City, Missouri 65102 or call 573/751-7862. Please be sure to include the SHPO Log Number (027-CS-04) on all future correspondence or inquiries relating to this project.

Sincerely,

STATE HISTORIC PRESERVATION OFFICE

Mark A. Miles Director and Deputy State Historic Preservation Officer

MAM:jd

c Joe Cothern, EPA
John Penman, Burns & McDonnell

Integrity and excellence in all we do







August 30, 2004

Stephen M. Mahfood State Historic Preservation Officer Department of Natural Resources 100 East High Street or 1659 East Elm Street Jefferson City, MO 65101

Cultural Resource Survey of proposed Aquila Peculiar Energy Center, Cass County, Missouri project 37273

Dear Mr. Mahfood:

Please find the enclosed documentation for the above referenced project. Included are a completed SECTION 106 SURVEY MEMO, and the PROJECT INFORMATION FORM. The Phase I survey of the Peculiar Energy Center was conducted in August 2004. No archaeological sites were found in the proposed construction zone, and there are no standing structures on the project area.

If there are any questions regarding this project please contact me at telephone (816) 822-3916.

Sincerely,

John T. Penman

Cultural Resource Specialist

enclosures



## MISSOURI DEPARTMENT OF NATURAL RESOURCES HISTORIC PRESERVATION PROGRAM P.O. BOX 176, JEFFERSON CITY, MISSOURI 65102

SHPO U	SEIONLY	
REVIEWER		
DATE	SHPO LOG #	
ACCEPTED	REJECTED	

(573) 751-7858		DATE: SHPO LOG #				
SECTION 106 SURVEY	Y MEMO					
1) HPP 106 PROJECT # 027-CS-04 (second copy)		☐ ACCEPTED ☐ REJECTED				
LOCATION INFORMATION AND SURVE	EY CONDITIONS	The state of the s				
2) COUNTY(S)						
Cass						
3) QUADRANGLE	4) PROJECT TYPE/TITLE					
Peculiar 1954 p. revised 1981	Aquila Peculiar Energy	Center, project 37273				
5) FUNDING/PERMITTING FEDERAL AGENCY(S)						
Missouri Department of Natural Reso		EPA, air quality				
6) SECTION	7) TOWNSHIP	8) RANGE				
29 and 32	45N	32W				
9) U.T.M.						
Northwest Corner: 370860E 4282692	2N to Southwest Corner: 3708	815E 4281899N				
10) PROJECT DESCRIPTION						
proposed Energy Center in SE 1/4 of	t SE 1/4 of Section 29 and adj	gacent 40 acre area in Section 32				
11) TOPOGRAPHY						
gently rolling hills						
12) SOILS	<b>3</b> 1 22					
Macksburg silt loam, Polo silt loam, C	Oska silty clay loam					
13) DRAINAGE	·					
South Grand River						
14) LAND USE/GROUND COVER (INCLUDING % VISIBILIT		70/ 24 24 24				
	ently mowed, ground cover 95	5% or greater over most project area				
5) SURVEY LIMITATIONS many new stock ponds constructed s	since 1954, some older ponds	s removed completely, much disturbed				
HISTORICAL BACKGROUND INFORMA	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·				
16) HPP - CULTURAL RESOURCE INVENTORY	17) ARCHAEOLOGICAL SURVEY OF	MISSOURI 18) GIS DATABASE				
☑ NRHP list 4/14/98	record search on 08	1 📥				
19) HISTORIC PLATS/ATLASES/SOURCES						
20) PREVIOUSLY REPORTED SITES						
none in Section 29, 32, or 33						
21) PREVIOUS SURVEYS						
none						
22) REGIONAL SOURCES UTILIZED						
three other reports by Burns & McDo	onnell on similar projects in Co	ass County				
23) MASTER PLAN RECOMMENDATION						
24) INVESTIGATION TECHNIQUES						
surface survey on exposed areas, sh	novel testing in majority of pro					
OE9/ distance the little	I through 474 hashing the	25) TIME EXPENDED				
95%, dirt from shovel tests screened	a urrough 1/4 inch mesh, insper-	pected bores 52 PERSON HOURS				
26) HISTORIC PROPERTIES LOCATED	on 90 E	unders II east A 4				
lithic scatter in Section 29 near Section	ion 32 line on west project bo	rundary (Location A-1)				
27) CULTURAL MATERIALS						
three chert thinning flakes on surface	e at A-1, no material in shove	of tests				
		28) CURATED AT				
		returned to landowner				
29) COLLECTION TECHNIQUES						
collected all pre-modern cultural mat	teпаI					
30) AREA SURVEYED (ACRES & SQUARE METERS)	<u> </u>					
79 acres; 319,713 square meters						

MO 780-1718 (6-00) (OVER)

d) Historic Properties May Meet Requirements For National Register Eligibility; Phase II Testing Is Recommended:  e) Comments:  CULTURAL RESOURCE MANAGEMENT CONTRACTOR INFORMATION  32) ARCHAEOLOGICAL CONSULTANT  Burns and McDonnell  33) ADDRESS/PHONE  9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main)  34) SURVEYOR(S)  J. T. Penman, Karla Cordova, Susan Houghton  36) REPORT COMPILED BY  J. T. Penman  38) SUBMITTED BY (SIGNATURE AND TITLE)  John T. Penman, Cultural Resource Specialist	b) No National Register Eligible Historic Properties Located.   c) National Register Eligible Historic Properties Located.   d) Historic Properties May Meet Requirements For National Register Eligibility; Phase II Testing Is Recommended:   e) Comments:   CULTURAL RESOURCE MANAGEMENT CONTRACTOR INFORMATION   29 ARCHAEOLOGICAL CONSULTANT   Burns and McDonnell   39 ADDRESS-PRIONE   39 ARCHAEOLOGICAL CONSULTANT   Burns and McDonnell   39 ADDRESS-PRIONE   30 ADDRE	31) RESULTS OF INVESTIGATION AND RECOMMENDATIONS:								
□ (c) National Register Eligible Historic Proporties Located.         □ (d) Historic Properties May Meet Requirements For National Register Eligibility; Phase II Testing Is Recommended:         e) Comments:         □ CULTURAL RESOURCE MANAGEMENT CONTRACTOR INFORMATION         29) APICHABOLOGICAL CONSULTANT         Burns and McDonnell         39) ADDRESSHOWNER         9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main)         39) SURVEYORES         39) SURVEYORES         30) T. Penman, Karla Cordova, Susan Houghton         39) SUBMITTED BY (SCONTURE AND TITLE)         John T. Penman, Cultural Resource Specialist         39) ATAGEMENT CRECK USE: (RECOURED)         ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;         ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials;         3) Site Form(s): One Copy of Each Form;         ✓ 4) All Relevant Project Correspondence;         5) Additional Information Sheets as Necessary.         40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED         John Stower, Burns and McDonnell         9400 Ward Parkway         Kansas City, MO 64114         **1) CONNER/ PERSON         All Pelman, area code 816	□ c) National Register Eligible Historic Proporties Located.         □ d) Historic Properties May Meet Requirements For National Register Eligibility; Phase II Testing Is Recommended:         e) Comments:         □ COLLTURAL RESOURCE MANAGEMENT CONTRACTOR INFORMATION         32) APPGRASCAGGEAL CONSULTANT         Burns and McDonnell         33) ADDRESSHYPOKE         9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main)         39, SURVEY DATES)         39, BURNATICE BY (ISJANDURE AND TITLE)         J. T. Penman         39, SUBMATICE BY (ISJANDURE AND TITLE)         John T. Penman, Cultural Resource Specialist         39, STANDURGE MICROSCULTS;         ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;         ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials         3) Site Form(s): One Copy of Each Form;         ✓ 4) All Relevant Project Correspondence;         — 5) Additional Information Sheets as Necessary.         40) ADDHESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MALED         John Stower, Burns and McDonnell         9400 Ward Parkway         Kansas City, MO 64114         **10 CONNER PROSON         John T. Penman, area code 816	a) No Historic Properties Located.								
CULTURAL RESOURCE MANAGEMENT CONTRACTOR INFORMATION  29 ARCHESOLOGICA CONSULTANT  Burns and McDonnell  39 ADDRESSHONE  9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main)  39 SURVEY DATE(S)  J. T. Penman, Karla Cordova, Susan Houghton  August 18-24, 2004  39 REPORT COMPILED BY  JOHN T. Penman, Cultural Resource Specialist  39) ATTO-MENT CORDITION CULTURAL RESOurce Specialist  39) Site Form(s): One Copy of Each Form;	□ d) Historic Properties May Meet Requirements For National Register Eligibility; Phase II Teating Is Recommended: e) Comments:  CULTURAL RESOURCE MANAGEMENT CONTRACTOR INFORMATION 23 ARCHAECLOGICAL CONSULTANT Burns and McDonnell 330 ADDRESSPRICHES 3400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 349 SURVEY DATES) 359 SURVEY DATES) 379 LATE Penman, Karla Cordova, Susan Houghton 370 August 18-24, 2004 370 In Penman, Cultural Resource Specialist 379 ATTACHMENT CHECK UST: (REQUIRED)  ✓ 1) Relevant Portion of USGS 7.5" Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials 39 SITE Form(s): One Copy of Each Form;  ✓ 4) All Relevant Project Correspondence; 5) Additional Information Sheets as Necessary.  49 ADDRESS OF OWNERAGENTRAGENCY TO WHOM SHPO COMMENT SHOULD BE MALED  John Stower, Burns and McDonnell 9400 Ward Parkway  Kansas City, MO 64114  41) CONNACT PERSON John 1. Penman, area code 816  822-3916	☑ b) No National Register Eligible Historic Properties L	ocated.							
EULTURAL RESOURCE MANAGEMENT CONTRACTOR INFORMATION  23) APPRISENTEN  Burns and McDonnell  34) APPRISENTEN  9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main)  35) SURVEYDATE(S)  August 18-24, 2004  37) DATE  8/30/04  37) DATE  9/30/04  37) DA	EULTURAL RESOURCE MANAGEMENT CONTRACTOR INFORMATION  23) APPCHAEGLOGICAL CONSULTANT BURNS and McDonnell  33) ADDRESSHONE  9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main)  35) SURVEY DATE(5)  36) SURVEY DATE(5)  37) DATE  37) DATE  38) AUGUST 18-24, 200- 37) DATE  37) DATE  38) SURVEY DATE(5)  37) DATE  38) SURVEY DATE(6)  39) SURVEY DATE(6)  30) SURVEY DATE(6)  31) DATE  32) SURVEY DATE(6)  32) DATE  33) SURVEY DATE(6)  34) DATE  35) SURVEY DATE(6)  36) SURVEY DATE(6)  37) DATE  38) SURVEY DATE(8)  39) SURVEY DATE(9)  30) SURVEY DATE(9)  31) DATE  32) DATE  33) SURVEY DATE(8)  34) AUGUST 18-24, 200- 37) DATE  36) SURVEY DATE(9)  37) DATE  38) SURVEY DATE(9)  39) SURVEY DATE(9)  30) SURVEY DATE(9)  31) DATE  32) DATE  33) SURVEY DATE(9)  34) DATE BY SURVEY DATE(9)  35) SURVEY DATE(9)  37) DATE  37) DATE  38) SURVEY DATE(9)  37) DATE  38) SURVEY DATE(9)  39) SURVEY DATE(9)  30) SURVEY DATE(9)  31) DATE  32) DATE  33) SURVEY DATE(9)  34) ATRICHMENT CARREST (RECURED)  42) PROJECT COMMENT SHOULD BE MAILED  33) SURVEY DATE(9)  34) ADDRESS OF OWNERWASHITIAGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  34) ADDRESS OF OWNERWASHITIAGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  35) DATE SURVEY DATE(9)  36) SURVEY DATE(9)  37) DATE  37) DATE  38) SURVEY DATE(9)  37) DATE  37) DATE  38) SURVEY DATE(9)  37) DATE  37) DATE  38) SURVEY DATE(9)  37) DATE  37) DATE	☐ c) National Register Eligible Historic Properties Located.								
Burns and McDonnell 39) ADDRESSPHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 39) SURVEYORIS) 39) SURVEYORIS 39) SURVEYORIS 39) SURVEY DATE(S) 39) AUTOCOMPILED BY J. T. Penman, Karla Cordova, Susan Houghton 39) SURVEY DATE(S) 39) ATTACHMENT CHECK LIST: (REQUIRED) ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites; ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials; 3) Site Form(s): One Copy of Each Form; ✓ 4) All Relevant Project Correspondence; — 5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENTIAGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell 9400 Ward Parkway Kansas City, MO 64114  41) CONTACT PERSON John T. Penman, area code 816	CULTURAL RESOURCE MANAGEMENT CONTRACTOR INFORMATION  29) ARCHAEDLOGICAL CONSULTANT BUTINS and McDonnell  39) ADDRESSAPHONE  9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main)  39) SURVEY DATE(5)  30) SURVEY DATE(5)  31) DATE 37) DATE 37) DATE 37) DATE 37) DATE 38/30/04  38) SUBMETTE BY (SIGNATURE AND TITLE)  JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CHECK LIST: (RECUREO)  1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  1) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials  3) Site Form(s): One Copy of Each Form;  1) All Relevant Project Correspondence;  5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  JOHN Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON John T. Penman, area code 816  822-3916	d) Historic Properties May Meet Requirements For N	lational Register Eligibility; Phase II Testing Is Recomm	ended:						
Burns and McDonnell 30) ADDRESSPHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 30) SURVEYOR(S) J. T. Penman, Karla Cordova, Susan Houghton 30) REPORT COMPILED BY J. T. Penman 31) AUGUST 18-24, 2004 39) REPORT COMPILED BY J. T. Penman 39) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CHECK LIST: (RECUIRED)  ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials;  ✓ 3) Site Form(s): One Copy of Each Form;  ✓ 4) All Relevant Project Correspondence;  John Stower, Burns and McDonnell 9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON John T. Penman, area code 816	Burns and McDonnell 3a) ADDRESSPHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 3a) SURVEY DATE(S) 3a) ADDRESSPHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 3b) SURVEY DATE(S) 3c) SURVEY DATE(S) 3c) SURVEY DATE(S) 3c) SURVEY DATE(S) 3c) DATE 3c) SURVEY DATE(S) 3c) DATE 3c)	e) Comments:								
Burns and McDonnell 39) ADDRESSPHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 39) SURVEYORIS) 39) SURVEYORIS 39) SURVEYORIS 39) SURVEY DATE(S) 39) AUTOCOMPILED BY J. T. Penman, Karla Cordova, Susan Houghton 39) SURVEY DATE(S) 39) ATTACHMENT CHECK LIST: (REQUIRED) ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites; ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials; 3) Site Form(s): One Copy of Each Form; ✓ 4) All Relevant Project Correspondence; — 5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENTIAGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell 9400 Ward Parkway Kansas City, MO 64114  41) CONTACT PERSON John T. Penman, area code 816	### Burns and McDonnell  #### Burns and McDonnell  #### Burns and McDonnell  #### Burns and McDonnell  #### Burns and McDonnell  #################################									
Burns and McDonnell 33) AUDRESSPHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 34) SURVEYOR(8) 35) SURVEY DATE(8) 37) AUTRESPHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 35) SURVEYOR(8) 37) AUTRESPHONE 37) AUTRESPHONE 37) AUTRESPHONE 37) AUTRESPHONE 37) AUTRESPHONE 38) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CHECK LIST: (REQUIRED)  ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials; 3) Site Form(s): One Copy of Each Form;  ✓ 4) All Relevant Project Correspondence; 5) Additional Information Sheets as Necessary. 40) ADDRESS OF OWNERWAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell 9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON John T. Penman, area code 816	Burns and McDonnell 33) ADDRESSPHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 34) SURVEYOR(S) 35) SURVEY DATE(S) 37) DATE 37) DATE 38) SURVEY DATE(S) 37) DATE 37) DATE 38) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CRECK LIST: (REQUIRED) ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites; ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials 3) Site Form(s): One Copy of Each Form; ✓ 4) All Relevant Project Correspondence; 5) Additional Information Sheets as Necessary. 40) ADDRESS OF OWNERVAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED John Stower, Burns and McDonnell 9400 Ward Parkway Kansas City, MO 64114 41) CONTACT PERSON John T. Penman, area code 816 822-3916	OUTTIDAL DECOUDES MANACEMENT CONTRACT	OD INFORMATION							
33) ADDRESS/PHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 34) SURVEY COR(S) J. T. Penman, Karla Cordova, Susan Houghton 35) PARTICLE BY J. T. Penman 37) DATE 8/30/04 37) DATE 8/30/04 38) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CHECK LIST: (RECURRED)  ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials; 3) Site Form(s): One Copy of Each Form;  ✓ 4) All Relevant Project Correspondence;  5) Additional Information Sheets as Necessary. 40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell 9400 Ward Parkway  Kansas City, MO 64114  41) CONTROT PERSON John T. Penman, area code 816 822-3916	33) ADDRESS/PHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 34) SURVEYOR(S) J. T. Penman, Karla Cordova, Susan Houghton 35) BADRESS PROPAT COMPILED BY J. T. Penman 37) DATE J. T. Penman 38) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CHECK LIST: (RECURED)  ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials 3) Site Form(s): One Copy of Each Form;  ✓ 4) All Relevant Project Correspondence;  5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell 9400 Ward Parkway  Kansas City, MO 64114  41) CONTRACT PERSON John T. Penman, area code 816  822-3916		OR INFORMATION							
9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 39) SUPPEY DATE(S) 31) T. Penman, Karla Cordova, Susan Houghton 30) REPORT COMPILED BY J. T. Penman 31) SUPPEY J. T. Penman 32) SUPPEY DATE(S) 33) AUGUST 18-24, 2004 39) REPORT COMPILED BY J. T. Penman 39) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CRECK LIST: (REQUIRED)  10 Y 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites; 11 Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites; 12 Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials; 13 Site Form(s): One Copy of Each Form; 14 A) All Relevant Project Correspondence; 15 Additional Information Sheets as Necessary. 16 Additional Information Sheets as Necessary. 17 Additional Information Sheets as Necessary. 18 Additional Information Sheets as Necessary. 19 ADORESS OF OWNERWAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED 20 John Stower, Burns and McDonnell 21 ALL PHONE NUMBER 22 APHONE NUMBER 23 AUGUST PERSON John T. Penman, area code 816	9400 Ward Parkway, Kansas City, MO 64114 (phone 816-333-9400, main) 39) SUPEVEYOR(S) 30) T. Penman, Karla Cordova, Susan Houghton 30) REPORT COMPLED BY 37) OATE 37) OATE 37) OATE 37) OATE 38 /30/04 38) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CRECK LIST: (RECURED)  1 (Recourse) 1 (Recours									
34) SURVEYOR(S)  J. T. Penman, Karla Cordova, Susan Houghton  August 18-24, 2004  August 18-24, 2004  August 18-24, 2004  37) DATE  B/30/04  38) SURVEY DATE(S)  J. T. Penman  August 18-24, 2004  39) SURVEY DATE(S)  J. T. Penman  August 18-24, 2004  39) SURVEY DATE(S)  J. T. Penman  August 18-24, 2004  39) AUGUST DEV (SIGNATURE AND TITLE)  John T. Penman, Cultural Resource Specialist  39) AITACHMENT CHECK LIST: (REQUIRED)  1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials;  3) Site Form(s): One Copy of Each Form;  4) All Relevant Project Correspondence;  5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENT/AGENCY TO WHOM SI-PO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816	34) SURVEYOR(S)  J. T. Penman, Karla Cordova, Susan Houghton 39) REPORT COMPILED BY J. T. Penman 39) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CHECK LIST: (RECURED)  1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  1) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials 3) Site Form(s): One Copy of Each Form;  1) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON John T. Penman, area code 816		none 816-333-9400, main)	ļ						
39) REPORT COMPILED BY J. T. Penman 39) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CHECK LIST: (RECUIRED)  ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials;  — 3) Site Form(s): One Copy of Each Form;  ✓ 4) All Relevant Project Correspondence;  — 5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON John T. Penman, area code 816	37) REPORT COMPILED BY J. T. Penman 39) SUBMITTED BY (SIGNATURE AND TITLE) JOHN T. Penman, Cultural Resource Specialist 39) ATTACHMENT CHECK LIST: (RECUIRED)  ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials  — 3) Site Form(s): One Copy of Each Form;  ✓ 4) All Relevant Project Correspondence;  — 5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON John T. Penman, area code 816	34) SURVEYOR(S)		1 1						
J. T. Penman  38) SUBMITTED BY (SIGNATURE AND TITLE)  John T. Penman, Cultural Resource Specialist  39) ATTACHMENT CHECK LIST: (RECUIRED)  ✓ 1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  ✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials;  3) Site Form(s): One Copy of Each Form;  ✓ 4) All Relevant Project Correspondence;  — 5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  822-3916	J. T. Penman  38/30/04  38									
John T. Penman, Cultural Resource Specialist  39) ATTACHMENT CHECK LIST: (REQUIRED)  1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials;  3) Site Form(s): One Copy of Each Form;  4) All Relevant Project Correspondence;  5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  822-3916	John T. Penman, Cultural Resource Specialist  39) ATTACHMENT CHECK LIST: (REQUIRED)  1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  1) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials  3) Site Form(s): One Copy of Each Form;  1) All Relevant Project Correspondence;  3) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816	J. T. Penman		·						
1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials;  3) Site Form(s): One Copy of Each Form;  4) All Relevant Project Correspondence;  5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  822-3916	1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map(s) Showing Project Location and Any Recorded Sites;  2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials.  3) Site Form(s): One Copy of Each Form;  4) All Relevant Project Correspondence;  5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENTY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  822-3916	John T. Penman, Cultural Resource Specialist								
✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials;  — 3) Site Form(s): One Copy of Each Form;  ✓ 4) All Relevant Project Correspondence;  — 5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  822-3916	✓ 2) Project Map(s) Depicting Survey Limits and, when applicable, Approximate Site Limits, and Concentrations of Cultural Materials       3) Site Form(s): One Copy of Each Form;      ✓ 4) All Relevant Project Correspondence;        5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816	39) ATTACHMENT CHECK LIST: (REQUIRED)								
		1) Relevant Portion of USGS 7.5' Topographic Qua	adrangle Map(s) Showing Project Location and Any Re	corded Sites;						
		✓ 2) Project Map(s) Depicting Survey Limits and wh	nen applicable. Approximate Site Limits, and Concentra	tions of Cultural Materials:						
✓ 4) All Relevant Project Correspondence;  — 5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816	4) All Relevant Project Correspondence;  5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER  822-3916	Z/ 1 Tojoot (Map(o) Bopioming Galivoy Zimino and, in	ion approache, ripproximate one control and obtained	none or outday materials,						
		3) Site Form(s): One Copy of Each Form;								
5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER  822-3916	5) Additional Information Sheets as Necessary.  40) ADDRESS OF OWNERVAGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED  John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816	✓ 4) All Relevant Project Correspondence:								
John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER 822-3916	John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER 822-3916	4) All Piciovalia Projecti Goriospondonos,								
John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER 822-3916	John Stower, Burns and McDonnell  9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  822-3916	5) Additional Information Sheets as Necessary.								
9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER  822-3916	9400 Ward Parkway  Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER  822-3916	40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHO	ULD BE MAILED							
Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER  822-3916	Kansas City, MO 64114  41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER  822-3916	John Stower, Burns and McDonnell								
41) CONTACT PERSON  John T. Penman, area code 816  42) PHONE NUMBER  822-3916	41) CONTACT PERSON 42) PHONE NUMBER  John T. Penman, area code 816 822-3916	9400 Ward Parkway								
John T. Penman, area code 816 822-3916	John T. Penman, area code 816 822-3916	Kansas City, MO 64114								
			PORT OF THE PROPERTY OF	en experience						
4. "一个一个大型,一个一点一点的,我的一个点就是在这个特殊的,就是一个一般的手术要被这一个人的都是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一	and the contract of the contra									
图 1977年 1977年 1977年 - 福州省中海市州市大学主义的城市,北京大学主义的大学和新兴学和大学工作。										



Cass County, Missouri Burns & McDonnell Project 37273

View to the East, Compressor Station in background

August 2004 081004-021



# MISSOURI DEPARTMENT OF NATURAL RESOURCES HISTORIC PRESERVATION PROGRAM P.O. BOX 176, JEFFERSON CITY, MISSOURI 65102 (573) 751-7858

(573) 751-7858			OATE    Street   Stre				
SECTION 106 SURVEY M	ЕМО	DATE OF THE PERSON OF THE PERS					
1) HPP 106 PROJECT #	·	☐ ACCEP	TED : [1]	REJECTED.			
LOCATION INFORMATION AND SURVEY C	ONDITIONS		99-02-06-798-78	200 Sept. 10			
2) COUNTY(S) Cass							
3) QUADRANGLE	4) PROJECT TYPE/TITLE						
Peculiar 1954 p. revised 1981	Aquila Peculiar Energ	y Center, project 3	7273				
5) FUNDING/PERMITTING FEDERAL AGENCY(S)							
Missouri Department of Natural Resource		or EPA, air quality	T-1				
6) SECTION 29 and 32	7) TOWNSHIP 45N		B) RANGE 32W				
29 and 32	1014	<u> </u>	DEAA	<del></del>			
9) 0.T.M.   Northwest Corner: 370860E 4282692N to	o Southwest Corner: 37	'0815E 4281899N					
10) PROJECT DESCRIPTION			· · · · · · · · · · · · · · · · · · ·				
proposed Energy Center in SE 1/4 of SE	1/4 of Section 29 and a	adjacent 40 acre ar	ea in Section 3	2			
11) TOPOGRAPHY							
gently rolling hills			<del>17 </del>				
12) SOILS   Macksburg silt loam, Polo silt loam, Oska	a silty clay loam			,			
13) DRAINAGE		<del>_</del> .					
South Grand River							
14) LAND USE/GROUND COVER (INCLUDING % VISIBILITY)		052/					
Thick pasture grass, some fields recently	mowed, ground cover	95% or greater over	er most project	area			
5) SURVEY LIMITATIONS many new stock ponds constructed since	3 1954 some older ac-	ds removed comple	etely much dist	urbed			
many new stock ponds constructed since HISTORICAL BACKGROUND INFORMATIO	<u>.</u>	.se removed comple	Story, much dist				
16) HPP - CULTURAL RESOURCE INVENTORY	17) ARCHAEOLOGICAL SURVEY	OF MISSOURI	18) GIS DATABASE				
NRHP list 4/14/98	record search on						
19) HISTORIC PLATS/ATLASES/SOURCES							
20) PREVIOUSLY REPORTED SITES	·	<u> </u>	<u> </u>				
none in Section 29, 32, or 33							
21) PREVIOUS SURVEYS NONE							
PONE  22) REGIONAL SOURCES UTILIZED							
three other reports by Burns & McDonne	ell on similar projects in	Cass County					
23) MASTER PLAN RECOMMENDATION	, -,		<del></del> .				
24) INVESTIGATION TECHNIQUES	1.4						
surface survey on exposed areas, shove	en testing in majority of p	project area where o	<del>* ,</del>	· · · · · · · · · · · · · · · · · · ·			
95%, dirt from shovel tests screened thro	ough 1/4 inch mech icc	spected horses	25) TIME EXE 52				
26) HISTORIC PROPERTIES LOCATED	gri ir - incit illesti, ins		52	PERSON HOURS			
lithic scatter in Section 29 near Section 3	32 line on west project t	boundary (Location	A-1)				
27) CULTURAL MATERIALS		J (	· · ·				
three chert thinning flakes on surface at	A-1, no material in shor	<u>vel</u> tests					
IMING OF SUITAGE GL				<del>-</del> · · · · · · · · · · · · · · · · · · ·			
	·		· · · · · · · · · · · · · · · · · · ·				
	·-		28) CURATE				
201 COLLECTION TEACHER			returned	d to landowner			
29) COLLECTION TECHNIQUES Collected all pre-modern cultural material	4						
1 outural materia							
30) AREA SURVEYED (ACRES & SQUARE METERS)	<del></del>						

SHPO/USE ONLY

MO 780-1718 (6-00)

31) RESULTS OF INVESTIGATION AND RECOMMENDATIONS:								
a) No Historic Properties Located.								
b) No National Register Eligible Historic Properties Located.								
C) National Register Eligible Historic Properties Located.								
d) Historic Properties May Meet Requirements For National Regis	ster Eligibility; Phase II Testing Is Recommend	ded:						
e) Comments:								
CULTURAL RESOURCE MANAGEMENT CONTRACTOR INFORM	ATION							
32) ARCHAEOLOGICAL CONSULTANT Burns and McDonnell								
33) ADDRESS/PHONE 9400 Ward Parkway, Kansas City, MO 64114 (phone 816-33	3-9400, main)							
34) SURVEYOR(S)		35) SURVEY DATE(S)						
J. T. Penman, Karla Cordova, Susan Houghton 36) REPORT COMPILED BY		August 18-24, 2004						
J. T. Penman		8/30/04						
38) SUBMITTED BY (SIGNATURE AND TITLE)  John T. Penman, Cultural Resource Specialist								
39) ATTACHMENT CHECK LIST: (REQUIRED)								
1) Relevant Portion of USGS 7.5' Topographic Quadrangle Map	o(s) Showing Project Location and Any Recor	ded Sites;						
2) Project Map(s) Depicting Survey Limits and, when applicable	e, Approximate Site Limits, and Concentration	ns of Cultural Materials;						
3) Site Form(s): One Copy of Each Form;								
4) All Relevant Project Correspondence;								
5) Additional Information Sheets as Necessary.		Į.						
40) ADDRESS OF OWNER/AGENT/AGENCY TO WHOM SHPO COMMENT SHOULD BE MAILED								
John Stower, Burns and McDonnell								
9400 Ward Parkway								
Kansas City, MO 64114								
41) CONTACT PERSON  John T. Penman, area code 816	42) PHONE NUMBER 822-3916							
REVIEWER COMMENTS  The property of the propert								
Company of the substitute of t								
The second secon								
Anger and the second se	and the control of th							
		<b>Andrew Frankling</b>						
		And Control						
tion and the Company of the control	rage setting of the control of the second section is a							
	[1] J. S. Sandar, J. S. Sandar, S. Sandar, M. Sandar, B. Sandar, and C. Sandar, S. Sa							
A CONTRACTOR OF THE PROPERTY O								

Q	
4	<b>(</b>

#### MISSOURI DEPARTMENT OF NATURAL RESOURCES STATE HISTORIC PRESERVATION OFFICE

#### SECTION 106 PROJECT INFORMATION FORM

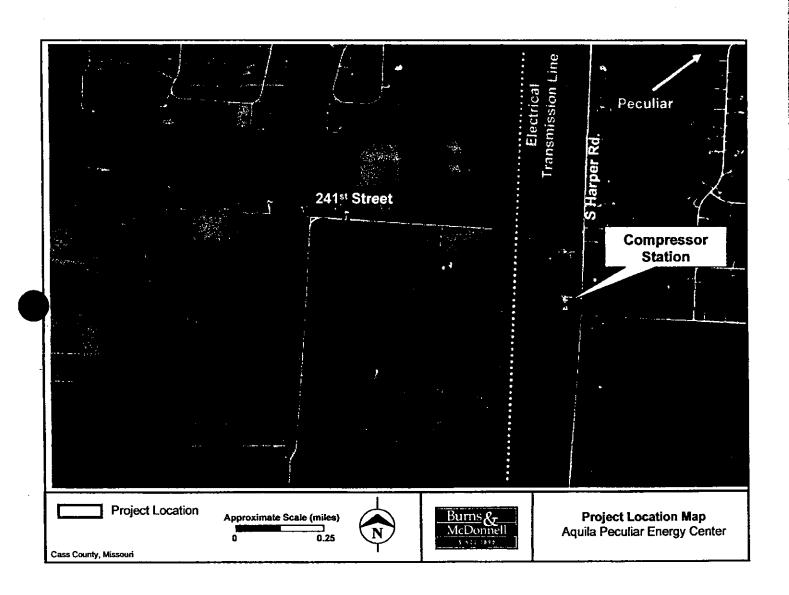
Submission of a completed Project Information Form with adequate information and attachments constitutes a request for review pursuant to Section 106 of the National Historic Preservation Act of 1966 (as amended). We reserve the right to request more information. Please refer to the CHECKLIST on Page 2 to ensure that all basic information relevant to the project has been included. For further information, refer to our Web site at: http://www.dnr.state,mo.us/shpo and follow the links to Section 106 Review.

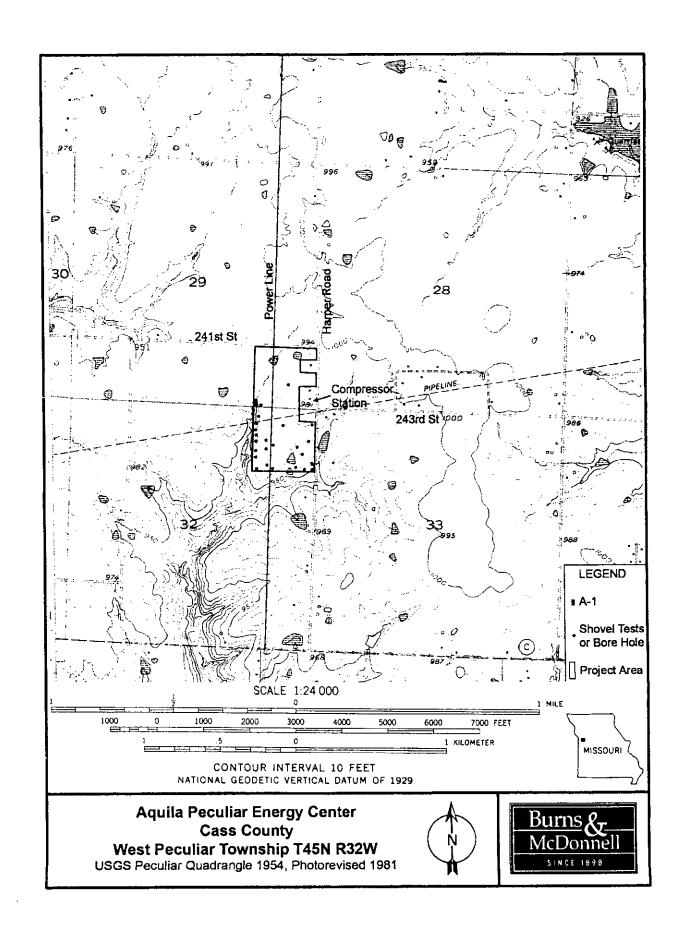
NOTE: Section 106 regulations provide for a 30-day response time	by the Missouri State His	toric Preservation Office from the date of receipt.
PROJECT NAME .	·- · · · · · · · · · · · · · · · · · ·	
Aquila Peculiar Energy Center, project 37273		
FEDERAL AGENCY PROVIDING FUNDS, LICENSE, OR PERMIT		
Missouri Department of Natural Resources delegated aut	nority for EPA, air qua	lity
APPLICANT		TELEPHONE
John Stower		(816) 822-3528
CONTACT PERSON	· <del>-</del>	TELEPHONE
John T. Penman		(816) 822-3916
ADDRESS FOR RESPONSE		
John Stower		
Burns and McDonnell		
9400 Ward Parkway		_
Kansas City, MO 64114		
, vanisas sig, iiis sirii		
LOCATION OF PROJECT		
COUNTY: Cass		
STREET ADDRESS: 24110 South Harper Road	CITY:	Peculiar, MO 64708
GIVE LEGAL DESCRIPTION OF PROJECT AREA (TOWNSHIP, RANGE, SECTION, 1/4 SEC	TION, ETC.)	
*USGS TOPOGRAPHIC MAP QUADRANGLE NAME_Peculiar_		
YEAR: 1954, 1981 TOWNSHIP: 45N	_RANGE: 32W	SECTION: 29 and 32
*SEE MAP REQUIREMENTS ON PAGE 2		
PROJECT DESCRIPTION		

Describe the overall project in detail. If it involves excavation, indicate how wide, how deep, etc. If the project involves demolition of existing buildings, make that clear. If the project involves rehabilitation, describe the proposed work in detail. Use additional pages if

Investigations involved Phase I survey of proposed power generation station identified as the Peculiar Energy Center. The proposed construction area for the Peculiar Energy center is south of the Compressor Station. There are no standing structures on the project area, and there is no evidence of foundations. The proposed acquisition is primarily pasture (photograph attached). Currently there are four stock ponds on the property. There are two other small reservoirs depicted on the 1954 topographic map near the south end of the project. The larger of the two has now been removed and the smaller pond to the south is in disrepair. The proposed construction area and all property to be acquired by Aquila was surveyed in August 2004.

ARCHAEOLOGY (Earthmoving Activities)	
Has the ground involved been graded, built on, borrow Please describe in detail: (Use additional pages	
station. This the retaining wall of this pond has	954 is in the proposed construction zone for the Aquila generation been removed and the area landscaped. Land use in this area is similar it is now pasture grass. Records search of the archaeological site file at no recorded sites in Sections 29, 32, or 33.
Will the project require fill material? Yes  • Indicate proposed borrow areas (source of fill ma	
Are you aware of archaeological sites on or adjacent     If yes, identify them on the topographic map.	o project area? LYes LNo
STRUCTURES (Rehabilitation, Demolition, Addition	ns to, or Construction near existing structures)
To the best of your knowledge, is the structure locate  An Area Previously Surveyed for Historic Prop If yes, please provide the name of the survey or distri	erties A National Register District A Local Historic District
<ul> <li>Please provide photographs of all structures, see</li> <li>NOTE: All photographs should be labeled and k</li> <li>Please provide a brief history of the building(s), in necessary.)</li> </ul>	
ADDITIONAL REQUIREMENTS	
scale project map. Please do not send an individual mal acceptable. USGS 7.5 min. topographic maps may be o	in (8½ x 11) of the current USGS 7.5 min. topographic map <u>and</u> , if necessary, a large of with each structure or site. While an original map is preferable, a good copy is redered from Geological Survey and Resource Assessment Division, Department of elephone: (573) 368-2125, or printed from the website http://www.topozone.com.
photocopies, emailed, or faxed photographs are not acce	or photographs on photographic paper (minimum 3" x 5") are acceptable. Polariods, eptable. Good quality photographs are important for expeditious project review. helpful. All photographs should be labeled and keyed to one map of the project area.
CHECKLIST: Did you provide the following information	
Topographic map 7.5 min. (per project, not structure	e) Other supporting documents (If necessary to explain the project)
Thorough description (all projects)	For new construction, rehabilitations, etc., attach work write-ups, plans, drawings, etc.
Photographs (all structures)	ls topographic map identified by quadrangle and year?
Return this Form	n and Attachments to:
	ARTMENT OF NATURAL RESOURCES
Attn: Section 1	C PRESERVATION OFFICE 6 Review
P.O. BOX 176 JEFFERSON CI	Y, MISSOURI 65102-0176





# Archaeological Survey of Missouri Request for Information © University of Missouri-Columbia

ASM Identification Number: 04-8-120 (revised August 24, 2004) Date: August 18, 2004
Requested by: John T. Penman Organization: Burns & McDonnell
Address: 9400 Ward Parkway, Kansas City, Missouri 64110
Project Type: CRM (x) MAS Member () Other ()
Project Name: Aquila New Power Gen Site (37273)
Federal Agency/Project Sponsor: EPA/ Department of Natural Resouces
ASM file search specifications supplied by user (List by County, Township, Range, and Section)
Cass County T45N, R32W, S5, 8, 17, 20, 29, 32, 33 T46N, R32E, S32, 33
Results of ASM File Search:

No sites located



September 13, 2004

Judith Deel State Historic Preservation Office P. O. Box 176 Jefferson City, MO 65102

Cultural Resource Survey of proposed Aquila Peculiar Energy Center, Cass County, Missouri project 37273

Dear Ms. Deel:

Please find the enclosed copy of the SECTION 106 SURVEY MEMO for the above referenced project (SHPO Log Number (027-CS-04). This is sent per the request of Mark a Miles in a letter of September 7, 2004 (attached). I apologize that this was not sent with the original documentation.

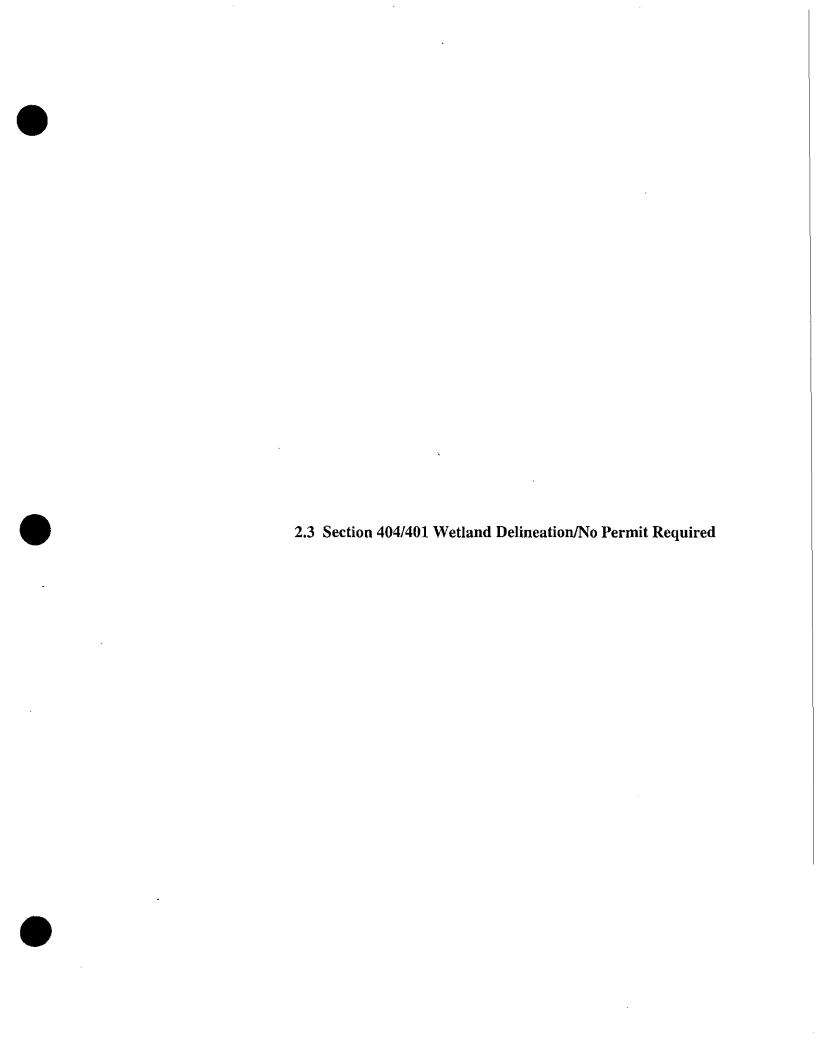
If there are any questions regarding this project please contact me at telephone (816) 822-3916.

Sincerely,

John T. Penman

Cultural Resource Specialist

enclosures





#### DEPARTMENT OF THE ARMY

KANSAS CITY DISTRICT, CORPS OF ENGINEERS
700 FEDERAL BUILDING
KANSAS CITY, MISSOURI 64106-2896

REPLY TO ATTENTION OF: October 19, 2004

Regulatory Branch (200402288) (Cass County, NPR)

Brad Guhr, Wetland Scientist Burns & McDonnell 9400 Ward Parkway Kansas City, Missouri 64114-3319

Dear Mr. Guhr:

This is in response to your letter received on September 15, 2004, requesting a Department of the Army (DA) permit determination concerning the proposed South Harper Peaking Facility to be constructed by Aquila, Incorporated. The project is located in Sections 29 and 32, Township 45 north, Range 32 west, Cass County.

The Corps of Engineers has jurisdiction over all waters of the United States. Discharges of dredged or fill material in waters of the United States, including wetlands, require prior authorization from the Corps under Section 404 of the Clean Water Act (33 USC 1344). The implementing regulation for this Act is found at 33 CFR 320-330.

The enclosed Jurisdictional Determination (JD) form describes the extent of waters of the United States on the project site. Also, the enclosed Notification of Administrative Appeal Options and Process and Request for Appeal form (FORM) describes your options in Section E of the FORM. If you choose to appeal, and you have new information concerning the elevation of the OHWM, you should complete Section # II of the FORM and return the FORM to this office. If you choose to appeal, but have no new information, please submit the completed FORM directly to U.S. Army Corps of Engineers, Commander, Northwestern Division (ATTN: CENWD-CM-OR), 12565 West Center Road, Omaha, NE 68144-3869.

We have reviewed the information furnished and have determined that the proposed activity will not involve the discharge of dredged or fill material in waters of the United States. Therefore, Department of the Army permit authorization is not required. Other Federal, state and/or local permits may be required, however, and you should verify this yourself.

Mr. Douglas R. Berka, Regulatory Project Manager, reviewed the information furnished and made this determination. If you have any questions concerning this matter, please feel free to contact Mr. Berka at 816-983-3657 (FAX 816-426-2321).

Enclosure

Copies Furnished:

Environmental Protection Agency

U.S. Army Corps of Engineers

DISTRICT OFFICE: Kansas City District (CENWK)

FILE NUMBER: 200402288

PROJECT LOCATION INFORMATION	PR	OJEC	T LOCA	MOITA	INFOR	MATION	٧:
------------------------------	----	------	--------	-------	-------	--------	----

State: Missouri County: Cass

Center coordinates of site (latitude/longitude): Lat: 38-55-25.4640 North - Long: 94-50-49.5240 West

Approximate size of area (parcel) reviewed, including uplands: 80 acres.

Name of nearest waterway: South Grand River Name of watershed: South Grand River

1	TID	Ter	TC3	rin	N A	1.1	ነምግ	FER	MI	N A	TI	n	N
d	LIN						40.	L F.K	ILA	N.A			U

Completed: Desktop determination Date: 14 October 2004
Site visit(s) Date(s):

#### Jurisdictional Determination (JD):

図	Preliminary ID - Based on available information, \( \subseteq there appear to be (or) \subseteq \text{there appear to be no "waters of the or the content of th
	United States" and/or "navigable waters of the United States" on the project site. A preliminary ID is not appealable
	(Reference 33 CFR part 331).

Approved JD - An approved JD is an appealable action (Reference 33 CFR part 331). Check all that apply:

There are "navigable waters of the United States" (as defined by 33 CFR part 329 and associated guidance) within the reviewed area. Approximate size of jurisdictional area:

There are "waters of the United States" (as defined by 33 CFR part 328 and associated guidance) within the reviewed area. Approximate size of jurisdictional area:

There are "isolated, non-navigable, intra-state waters or wetlands" within the reviewed area.

Decision supported by SWANCC/Migratory Bird Rule Information Sheet for Determination of No Jurisdiction.

#### BASIS OF JURISDICTIONAL DETERMINATION:

- A. Waters defined under 33 CFR part 329 as "navigable waters of the United States":
- The presence of waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
- B. Waters defined under 33 CFR part 328.3(a) as "waters of the United States":
- (1) The presence of waters, which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide.
- (2) The presence of interstate waters including interstate wetlands.
- (3) The presence of other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate commerce including any such waters (check all that apply):
  - (i) which are or could be used by interstate or foreign travelers for recreational or other purposes.
  - (ii) from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
  - (iii) which are or could be used for industrial purposes by industries in interstate commerce.
- (4) Impoundments of waters otherwise defined as waters of the US.
- (5) The presence of a tributary to a water identified in (1) (4) above.
- (6) The presence of territorial seas.
- (7) The presence of wetlands adjacent to other waters of the US, except for those wetlands adjacent to other wetlands.

Rationale for the Basis of Jurisdictional Determination (applies to any boxes checked above). If the jurisdictional water or wetland is not itself a navigable water of the United States, describe connection(s) to the downstream navigable waters. If B(1) or B(3) is used as the Basis of Jurisdiction, document navigability and/or interstate commerce connection (i.e., discuss site conditions, including why the waterbody is navigable and/or how the destruction of the waterbody could affect interstate or foreign commerce). If B(2, 4, 5 or 6) is used as the Basis of Jurisdiction, document the rationale used to make the determination. If B(7) is used as the Basis of Jurisdiction, document the rationale used to make adjacency determination. Tributary streams of the South Grand River

		Extent of Jurisdiction: (Reference: 33 CFR parts 328 and 329) inary High Water Mark indicated by:    High Tide Line indicated by:
		clear, natural line impressed on the bank
		the presence of litter and debris   fine shell or debris deposits (foreshore)
	닏	changes in the character of soil physical markings/characteristics
	X	destruction of terrestrial vegetation tidal gages
	H	shelving
	با	Outer.
		n High Water Mark indicated by:
	∟s	survey to available datum;  physical markings;  vegetation lines/changes in vegetation types.
	図 Wetl	land boundaries, as shown on the attached wetland delineation map and/or in a delineation report prepared by:
-	Basis For	r Not Asserting Jurisdiction:
	The r	reviewed area consists entirely of uplands.
		ble to confirm the presence of waters in 33 CFR part 328(a)(1, 2, or 4-7).
		iquarters declined to approve jurisdiction on the basis of 33 CFR part 328.3(a)(3).
		Corps has made a case-specific determination that the following waters present on the site are not Waters of the sed States:
		Waste treatment systems, including treatment ponds or lagoons, pursuant to 33 CFR part 328.3.
		Artificially irrigated areas, which would revert to upland if the irrigation ceased.
		Artificial lakes and ponds created by excavating and/or diking dry land to collect and
		retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
		Artificial reflecting or swimming pools or other small ornamental bodies of water created
	_	by excavating and/or diking dry land to retain water for primarily aesthetic reasons.
		Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is
		abandoned and the resulting body of water meets the definition of waters of the United States found at 33 CFR 328.3(a).
		Isolated, intrastate wetland with no nexus to interstate commerce.
	吕	Prior converted cropland, as determined by the Natural Resources Conservation Service. Explain rationale:
		Non-tidal drainage or irrigation ditches excavated on dry land. Explain rationale:
		Other (explain):
•		$\cdot$
		EWED FOR JURSIDICTIONAL DETERMINATION (mark all that apply):
		s, plans, plots or plat submitted by or on behalf of the applicant.
		sheets prepared/submitted by or on behalf of the applicant.  This office concurs with the delineation report, dated September 7, 2004, prepared by (company): Burns &
McD	onnell	rins office concurs with the defineation report dated september 7, 2004, prepared by (company): Burns &.
,	🗆 1	This office does not concur with the delineation report, dated , prepared by (company):
	Data	sheets prepared by the Corps.
		s' navigable waters' studies:
		Geological Survey Hydrologic Atlas: Geological Survey 7.5 Minute Topographic maps:
		Geological Survey 7.5 Minute Historic quadrangles:
		Geological Survey 15 Minute Historic quadrangles:
	USD.	A Natural Resources Conservation Service Soil Survey:
	Natio	onal wetlands inventory maps:
	State	/Local wetland inventory maps:
	ENL DAI 100-X	IA/FIRM maps (Map Name & Date): year Floodplain Elevation is: (NGVD)
	Aeria	al Photographs (Name & Date):
		r photographs (Date):
	Adva Adva	anced Identification Wetland maps:
	到 Site v	visit/determination conducted on:
	स्टर्ग 🖈 👓	tuat 1
	Appli Appli	icable/supporting case law: r information (please specify):

Wetlands are identified and delineated using the methods and criteria established in the Corps Wetland Delineation Manual (87 Manual) (i.e., occurrence of hydrophytic vegetation, hydric soils and wetland hydrology).

<sup>&</sup>lt;sup>2</sup>The term "adjacent" means bordering, contiguous, or neighboring. Wetlands separated from other waters of the U.S. by man-made dikes or barriers, natural river berms, beach dunes, and the like are also adjacent.

## NOTHTICATHON OF ADMINISTRATING APPEAR OPTIONS AND PROCEESS AND RECOURSEPPOR APPEAR

Applicant: Aquila Incorporated File Number: 200402288			Date: Oct. 14, 2004	
Attach	ned is:	See Section below		
	A. INITIAL PROFFERED PERMIT (Standard Permit or Letter of Permission)			
	B. PROFFERED PERMIT (Standard	В		
	C. PERMIT DENIAL		C	
	D. APPROVED JURISDICTIONAL	DETERMINATION	D	
XX	E. PRELIMINARY JURISDICTION	AL DETERMINATION	E	

SECTION I. The following identifies your rights and options regarding a modification, reconsideration, or administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/inet/functions/cw/cecwo/reg or Corps regulations at 33 CFR Part 331.

- A: INITIAL PROFFERED PERMIT: You may accept or request modification of the permit.
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the <u>District Engineer</u> for final
  authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
  signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights
  to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- REQUEST MODIFICATION: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the <u>District Engineer</u>. Your objections must be received by the <u>District Engineer</u> within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the <u>District Engineer</u> will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the <u>District Engineer</u> will send you a proffered permit for your reconsideration, as indicated in Section B below.
- B: PROFFERED PERMIT: You may accept or appeal the permit.
- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the <u>District Engineer</u> for final
  authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your
  signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights
  to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the <u>Division Engineer</u> (address on page 2). This form must be received by the <u>Division Engineer</u> within 60 days of the date of this notice.
- C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the <u>Division Engineer</u> (address on page 2). This form must be received by the <u>Division Engineer</u> within 60 days of the date of this notice.
- D: APPROVED JURISDICTIONAL DETERMINATION: You may accept the approved JD, appeal the approved JD, or submit new information and request reconsideration of the approved JD.
- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date
  of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the <u>Division Engineer</u> (address on page 2). This form must be received by the <u>Division Engineer</u> within 60 days of the date of this notice.
- RECONSIDERATION BASED ON NEW INFORMATION: You may submit new information to the <u>District Engineer</u> for reconsideration of an approved JD. You must submit the information within 60 days of the date of this notice.
- E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II—Fill out this section and return this form to the appropriate office only if submitting a request for modification or reconsideration to the District-Engineer, or it submitting a request for Administrative Appeal to the Division Engineer: All such submittals must be made within 60 days of the date of this notice. Submit the following requests to the District Engineer. A Modification of an INITIAL PROFFERED PERMIT (Item A) DERECONSIDERATION OF an APPROVED JURISDICTIONAL DETERMINATION based on NEW INFORMATION (Item D RECONSIDERATION) Submit the following requests to the Division Engineer B' Administrative Appeal of a PROFFERED PERMIT (Item B): C. Administrative Appeal of a PERMIT DENIAL (Item C).
D. Administrative Appeal of an APPROVED JURISDICTIONAL DETERMINATION (Item D'APPEAL). (for reasons other than reconsideration of an approved ID based on new information) (Note: Preliminary Jurisdictional Determinations (Item E) are not appealable. If you have concerns regarding a preliminary Jurisdictional Determination, you can request an approved Jurisdictional Determination) REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.) SUBMITTAL OF NEW OR ADDITIONAL INFORMATION: The District Engineer may accept and consider new information if you request a modification to an initial proffered permit (Part A), or a reconsideration of an approved JD (Part D). An administrative appeal to the Division Engineer is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the administrative record. However, you may provide additional information to clarify the location of information that is already in the administrative record. POINT OF CONTACT FOR QUESTIONS OR INFORMATION If you have questions regarding this decision and/or the appeal If you wish to submit an appeal or have questions regarding the process you may contact: appeal process you may contact: DIVISION ENGINEER DISTRICT ENGINEER Attn: Joseph S. Hughes Attn: Mores V. Bergman Chief Regulatory Branch Appeal Review Officer U.S. Army Engineer Division, Northwestern Division U.S. Army Engineer District, Kansas City 601 East 12th Street, Room 706 12565 West Center Road Kansas City, MO 64106-2896 Omaha, NE 68144-3869 Telephone: 816-983-3990 Telephone: 402-697-2533 (Use this address for submittals to the District Engineer) RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations. Date: Telephone number: Signature of appellant or agent.



September 7, 2004

Mr. Joseph S. Hughes U.S. Army Corps of Engineers, Kansas City District 700 Federal Building 601 E. 12th Street ATTN: OD-R, Room 706 Kansas City, Missouri 64106

South Harper Peaking Facility
Wetland Delineation Letter Report
Burns & McDonnell Project No.: 37273-3.50

Dear Mr. Hughes:

Burns & McDonnell Engineering, Inc. (Burns & McDonnell) has been retained by Aquila Inc. (Aquila) to obtain the necessary environmental permits and/or clearances for the proposed South Harper Peaking Facility approximately two miles southwest of Peculiar in Cass County, Missouri (Figure 1; Appendix A). Aquila proposes to construct, own, and operate a new, nominal 315 MW peaking power generation facility. The South Harper Peaking Facility (Project) will consist of three simple-cycle, natural gas combustion turbine generators to meet the increasing power consumption requirements in the northwest Missouri Region. As a peaking power facility, the Project is expected to operate no more than 6,000 hours per year, primarily on warm summer days when the demand for electrical power is the highest.

The Project will be constructed on a parcel of land approximately 73 acres in size; however, the actual land disturbance is anticipated to be only about 38 acres, including the Project footprint and temporary construction areas. The 73-acre site is located in the southeast quarter (SE<sup>1</sup>/<sub>4</sub>) of the southeast quarter (SE<sup>1</sup>/<sub>4</sub>) of Section 29, and the northeast quarter (NE<sup>1</sup>/<sub>4</sub>) of the northeast quarter (NE<sup>1</sup>/<sub>4</sub>) of Section 32, Township 45 North, Range 32 West. An existing 69-kV electrical transmission line owned by Aquila, Inc. intersects the Project site and will allow for interconnection to the electric grid. An existing 20-inch natural gas pipeline, owned by Southern Star Pipeline Company, also intersects the Project site and will be used for the fuel supply. Construction of the Project is expected to begin in the fall of 2004 and will be completed by summer 2005.

The following letter report includes a preliminary review of general information about the proposed location of the Project including its topography, soils, wetland inventory data, and aerial photography. A review is also provided for the on-site investigation for waters of the United States (i.e., intermittent streams, creeks, ponds, and non-isolated wetlands) within the proposed site. A wetland delineation was performed to identify waters of the United States, which are under the jurisdiction of the U.S. Army Corps of



Engineers (Corps). Impacts to waters of the United States may require permit approval by the Corps pursuant to Section 404 of the Clean Water Act. Below are the findings of the background research and field surveys.

#### METHODS

The following sections describe the methods used during the preliminary data review, wetland delineation, and FQA analysis.

### PRELIMINARY DATA REVIEW

Burns & McDonnell gathered and reviewed information to determine if the site had a potential for containing jurisdictional areas including wetlands. The information reviewed included the following references.

- Soil Survey of Cass County, Missouri (Issued May 1985)
- Peculiar, Missouri (July 1998) United States Geological Survey (USGS) topographic map
- United States Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map (July 1997)
- USGS aerial photography (March 1997)

## SITE RECONNAISSANCE

On August 19 and 20, 2004, Brad Guhr, a wetland scientist from Burns & McDonnell, conducted a field survey of the Project site to identify and delineate waters of the United States.

Wetland inventory maps and aerial photography helped focus reconnaissance efforts to areas with the greatest potential for having wetlands, but a survey for general land use types and vegetation communities was extended to all parts of the project site. All waters were identified and delineated in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual (Corps Manual) and general Corps guidance pertaining to water courses and open water.

Streams were identified by the presence of a defined bed and bank or an ordinary high water mark (OHWM). Jurisdicational wetlands were identified as having hydric soils (i.e., redoximorphic features), prevalence of hydrophytic vegetation (i.e., plants typically found in wetter areas), and wetland hydrology (i.e., recent signs or presence of inundation or saturation at or near the surface). Well-drained soils and rolling topography make the presence of wetlands in the upland portion of the project site unlikely. As a result, the search for wetlands was focused along streams as well as areas where surface water drainage is apparent on topographic maps. Sample plots were



established where wetlands might be expected to occur. When a wetland was located, plots were taken both just inside and outside the wetland's boundary. At each plot, a Routine Wetland Determination Data Form from the Corps Manual was completed to determine the presence and boundaries of jurisdictional wetland areas. Locations of the wetlands and sample plots were recorded with a global positioning system (GPS) unit (Trimble® Pro XRS sub-meter GPS unit). All figures are in Appendix A, ground photographs of each wetland and stream are located in Appendix B, and Routine Wetland Determination Data Forms are in Appendix C.

## **RESULTS**

#### PRELIMINARY DATA REVIEW

Review of topographic, soils, and NWI data show an intermittent stream tributary of the South Grand River, Palustrine Unconsolidated Bottom (PUB) ponds and the potential presence of a Palustrine Emergent (PEM) wetland in the Project site (Figures 1, 2, and 3). Figures 1 and 3 show that the Project site topography slopes and groundwater flows to the west and south. Figure 1 shows the intersecting gas line mentioned above and Figures 1 and 3 show nearby roads, residences, and other facilities around the Project site.

A review of the Soil Survey of Cass County, Missouri was performed to determine the presence of hydric soils at the Project site, and Figure 2 illustrates the locations of these soils. The Project site is underlain by Macksburg silt loam with 2 to 5 percent slopes, Sampsel silty clay loam with 2 to 5% slopes, Polo silt loam with 2 to 5% slopes, Oska silty clay loam with 5 to 9% slopes, and Haig silt loam. Both Sampsel silty clay loam and Haig silt loam are listed as hydric soils on the national and state hydric soils lists.

### SITE RECONNAISSANCE

The proposed Project site consists mostly of open pasture (Figures 3 and 4) (Photograph 1; Appendix B). The pasture vegetation consists mostly of non-native pasture grasses, primarily smooth brome (Bromus inermis) and tall fescue (Festuca elatior), and associated invasive, disturbance-tolerant forbs such as common milkweed (Asclepias syriaca), horse nettle (Solanum carolinense), field bindweed (Convolvulus arvensis), fire-on-the-mountain (Euphorbia cyathophora), foxtail (Setaria sp.), white clover (Trifolium repens), red clover (Trifolium pratense), ironweed (Vernonia baldwinii), and daisy fleabane (Erigeron strigosus). Woody vegetation in the area is restricted to a few small clumps of trees and shrubs in drainages and depressions (Photograph 2). These areas include saplings and small trees of black willow (Salix nigra), green ash (Fraxinus pennsylvanica), eastern cottonwood (Populus deltoides), osage orange (Maclura pomifera), honeylocust (Gleditsia triacanthos), and a shrub layer that consists of roughleaf dogwood (Cornus drummondii) and buckbrush (Symphoricarpos orbiculatus).



The intermittent stream (Stream 1) that intersects the northwestern portion of the Project site was mostly dry during the site visit, but carried a trickle of water near where it exits the Project site. Much of the stream appears to have been cultivated and replanted to tall fescue in the past, but a majority of the stream has re-established a channel ranging from one to three feet in width (Photograph 3). The GPS line in Figure 4 identifies where the stream has an identifiable channel. Erosion control measures such as packing brush and tree branches into the stream have been implemented near where the stream exits the Project site (Photograph 4). A second drainage (Stream 2) was likely an ephemeral drainage at one time, but cultivation and planting and pond construction have eliminated all but a small portion of this channel near the eastern edge of the Project site (Figure 4; Photograph 5).

Five livestock ponds (Ponds 1 through 5) dot the north and western portions of the Project site (Figures 1 through 4; Photographs 6 through 10). These ponds are all utilized by livestock and exhibit disturbance-tolerant pasture vegetation around their perimeters. Some are disturbed less than others, and as a result, wetland vegetation has been able to establish along the pond fringe as observed around much of Pond 1 and the western edge of Pond 2. The pond visible in Figures 1 through 4 in the southern portion of the Project site no longer exists (Photograph 11).

Five small wetlands were located in association with the livestock ponds or Stream 1 (Figure 4). Wetland 1 consists of a narrow fringe of PEM/PSS (Palustrine Scrub Shrub) wetland around Pond 1 (Photograph 6), and Wetlands 2 through 5 are PEM wetlands located in or along Stream 1 (Photographs 12 through 15). These wetlands have hydrophytic vegetation including species such as curly dock (Rumex crispus), annual marshelder (Iva annua), barnyard grass (Echinochloa crus-galli), arrowhead (Sagittaria latifolia), giant ragweed (Ambrosia trifida), ladysthumb (Polygonum persicaria), blackstem bulrush (Scirpus atrovirens), prairie cordgrass (Spartina pectinata), bald spikerush (Eleocharis erythropoda), and yellow nutsedge (Cyperus esculentus). The presence of black willow in sapling form causes Wetland 1 to be partially classified as PSS. These wetlands typically exhibit saturation in the upper 12 inches of the soil profile, and hydric soils with low-chroma matrix colors and redoximorphic features (Appendix C).

# IMPACTS AND PERMITTING

Figure 5 highlights the current plans for placement of the generators, and as indicated earlier, total land impacts including laydown area will include 38 acres of the Project site's 73 acres. Land disturbance due to construction should not impact any ponds, streams or wetlands in the Project site, and no Corps permit should be required.



We are seeking to gain your concurrence with our findings in this letter report that no impacts will occur to waters of the United States. Your assistance is appreciated and an expeditious response to this inquiry would be greatly appreciated. If you have any questions regarding this project, please contact me at (316) 283-4114 or by e-mail at <a href="mailto:bguhr@burnsmcd.com">bguhr@burnsmcd.com</a>.

Sincerely,

Brad Guhr

Wetland Scientist

Enclosures

cc: Block Andrews, Aquila;

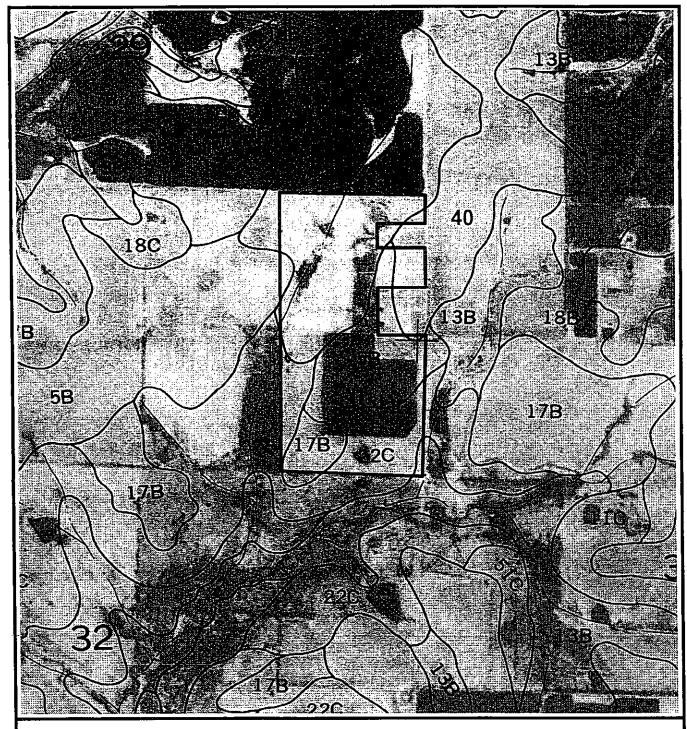
John Stower, Burns & McDonnell

Files

**APPENDICES** 

APPENDIX A FIGURES

ĕ



Legend:

\* Hydric Soils

5B = Macksburg silt loam, 2 to 5% slopes \*13B = Sampsel silty clay loam, 2 to 5% slopes 17B = Polo silt loam, 2 to 5% slopes

22C = Oska silty clay loam, 5 to 9% slopes

\*.40 =Haig silt loam

Source: Soil Survey of Cass County, Missorui (Issued May 1985)

Scale: 1 inch = 915'





Figure 2

Survey Area Soils

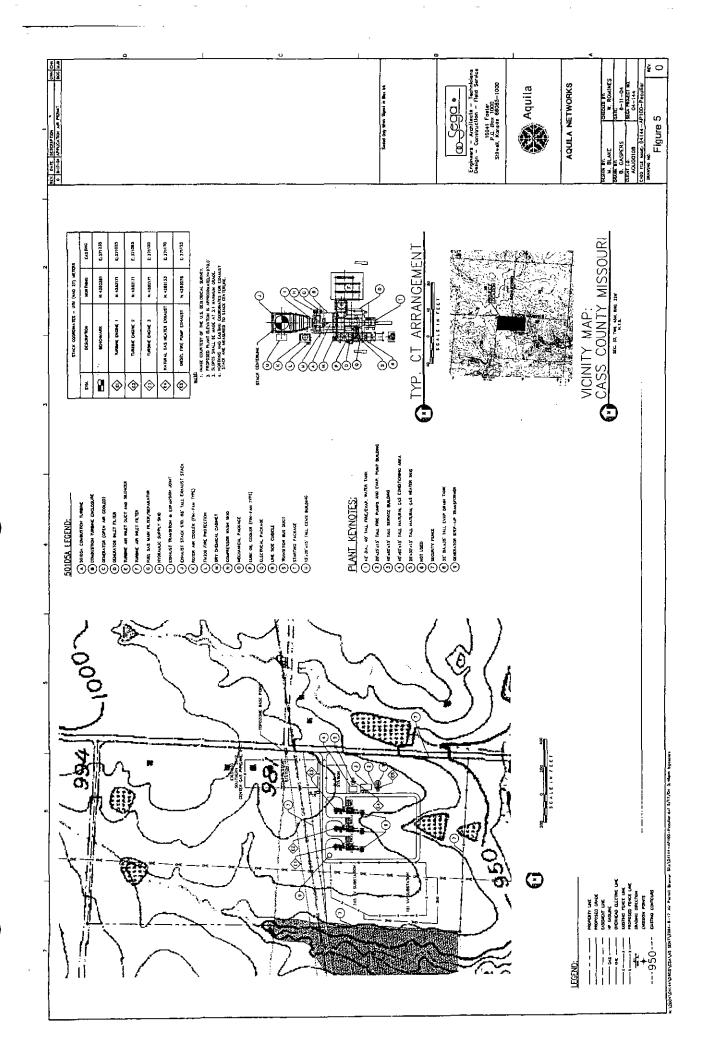
South Harper Peaking Facility Cass County, Missouri

Survey Area

9/1/04

1 inch equals 600 feet

1:4800 9/1/04 Ĕ R:VAquila\37273\_Bremer\_Peculiar\G\S\Arc\ArcDocs\Figure4.mxd



APPENDIX B GROUND PHOTOGRAPHS



Photograph 1: Typical upland pasture in southwestern portion of site (looking south).



Photograph 2: Clump of trees and shrubs in drainage existing in northwestern portion of site (looking south-southwest).





**Photograph 3**: Intermittent stream (Stream 1) (looking northnortheast).



Photograph 4: Brush packed into Stream 1 to prevent erosion (looking west).



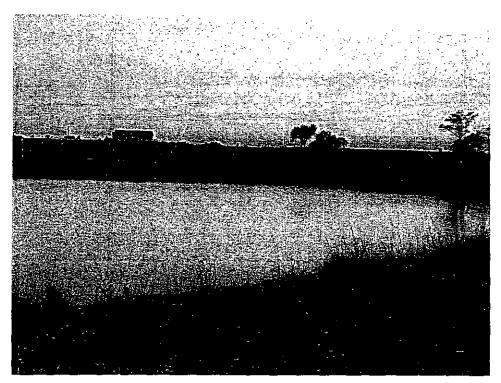


**Photograph 5**: Stream 2 at eastern edge of Project area (looking west).



**Photograph** 6: Pond 1 with PEM/PSS wetland fringe (Wetland 1) (looking north-northwest).



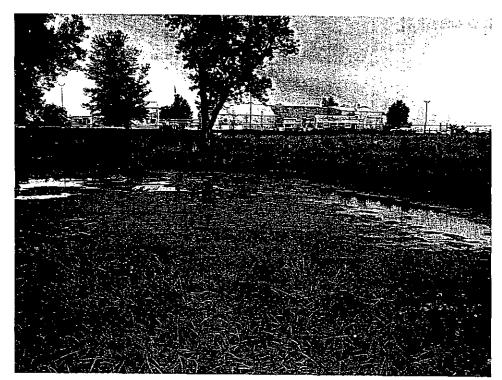


Photograph 7: Pond 2 (looking west-northwest).

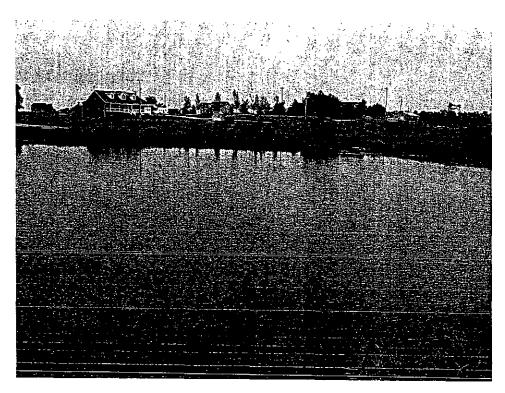


Photograph 8: Pond 3 (looking northeast).





Photograph 9: Pond 4 (looking east-southeast).



Photograph 10: Pond 5 (looking northeast).





Photograph 11: Location of former pond in southern portion of site that has been filled and converted to pasture (looking north).

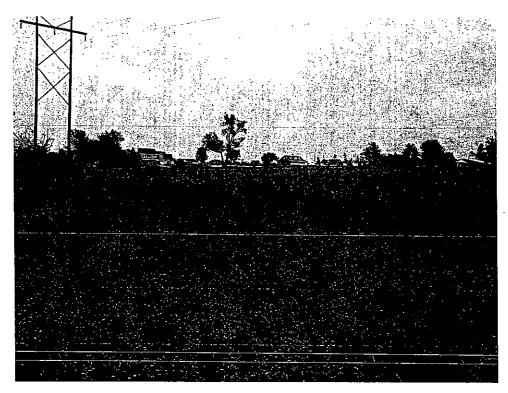


Photograph 12: Wetland 2 - PEM (fringe on either side of stream; looking north).



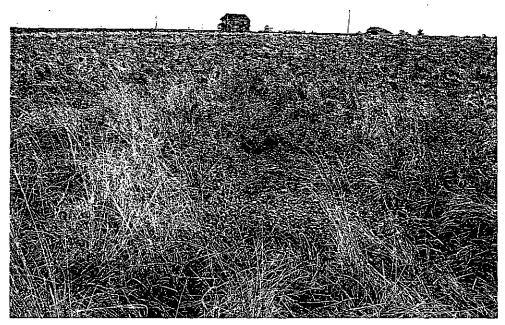


Photograph 13: Wetland 3 - PEM (looking north).



Photograph 14: Wetland 4 - PEM (looking northeast).





Photograph 15: Wetland 5 - PEM (looking west).

