



MISSOURI
HIGHWAYS and TRANSPORTATION
COMMISSION
JEFFERSON CITY, MISSOURI
SPECIFICATIONS
FOR
CONSTRUCTING OR IMPROVING

DISTRICT - 4
MULBERRY SITE WORK
KANSAS CITY, MISSOURI

9-090728A

**MAIL BID
BOOKLET TO:**

MISSOURI DEPARTMENT OF TRANSPORTATION
GENERAL SERVICES
1320 Creek Trail Drive – P.O. BOX 270
JEFFERSON CITY, MO 65102

REQUEST NO.	9-090728A		
DATE	July 1, 2009		
PAGE NO.	1	NO. OF PAGES	1

SEALED BIDS, SUBJECT TO THE ATTACHED
CONDITIONS WILL BE RECEIVED AT THIS OFFICE
UNTIL:

3:00 PM Local Time on July 28, 2009
AND THEN PUBLICLY OPENED AND READ FOR
FURNISHING THE FOLLOWING SUPPLIES AND
SERVICE

BIDS TO BE BASED F.O.B.
MISSOURI DEPARTMENT OF TRANSPORTATION
Submit net bid as cash discount stipulations will not be considered

District – 4
Mulberry Site Work
Kansas City, Missouri

BUYER: Clayton Hanks 573-522-9565

Clayton.Hanks@modot.mo.gov

Scope of Work - Overhead Door Replacement
IN ACCORDANCE WITH ATTACHED SPECIFICATIONS

Accomplish site grading work in accordance with the incorporated plans and specifications to the satisfaction of the MHTC.

- The undersigned, having examined the proposed Contract Documents titled: “**District 4 – Mulberry Site Work**” and having visited the sites and examined the conditions affecting the Work, hereby proposes and agrees to furnish all labor, materials, equipment and everything which may be necessary or incidental thereto, as proposed by said Contract Documents, all to the satisfaction of the Chief Engineer of the Missouri Department of Transportation and the Missouri Highway and Transportation Commission, for the stipulated sum of:

_____ DOLLARS (\$_____).

- The undersigned, acknowledges having examined and being familiar with the contract documents including the drawings, the Instructions to Bidders, General Conditions, Supplementary Conditions and the body of technical specifications.
- The undersigned acknowledges receipt of Addenda number _____ through _____ inclusive.
- Enclosed with this bid is bid security in the amount of not less than 5% of the bidder's proposed Contract Sum, the amount being _____ DOLLARS (\$_____).

Date: _____
Telephone No.: _____
Fax No.: _____
Federal I.D. No. _____

Firm Name: _____
Address: _____
By (Signature): _____

Email Address: _____

Type/Print Name _____

Title: _____

PREFERENCE IN PURCHASING PRODUCTS

DATE: _____

The bidders attention is directed to Section 34.076 RSMo 2000 which gives preference to Missouri corporations, firms, and individuals when letting contracts or purchasing products.

Bids/Quotations received will be evaluated on the basis of this legislation.

All vendors submitting a bid/quotation must furnish ALL information requested below.

FOR CORPORATIONS:

State in which incorporated: _____

FOR OTHERS:

State of domicile: _____

FOR ALL VENDORS:

List address of Missouri offices or places of business:

THIS SECTION MUST BE COMPLETED AND SIGNED:

FIRM NAME: _____

ADDRESS: _____

CITY: _____ **STATE:** _____ **ZIP:** _____

BY (signature required): _____

Federal Tax I.D. #: _____ **if no Federal Tax I.D. # - list Social Security #:** _____

NOTE: For bid/quotation to be considered, the "Preference in Purchasing Products" form must be on file in the General Services (Facilities Management) Division and must be dated in the current calendar year.

MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT

The bidder's attention is directed to the Missouri Domestic Products Procurement Act, Sections 34.350 to 34/359, RsMO, which requires all manufactured goods or commodities used or supplied in the performance of this contract or any subcontract to be manufactured or produced in the United States.

Section 34.355, RsMO, requires the vendor or contractor to certify his compliance with Section 34.353 and, if applicable, Section 34.359, RsMO, at the time of bidding **and** prior to payment. Failure to comply with Section 34.353, RsMO, during the performance of the contract **and** to provide certification of compliance prior to payment will result in nonpayment for those goods or commodities.

Section 34.353.2, RsMO, specifies that it does not apply where the total contract is less than Twenty-Five Thousand Dollars (\$25,000.00). If your total bid is Twenty-Five Thousand Dollars (\$25,000.00) or more, you **must** complete this form as directed below.

Failure to complete and return this document with this bid will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis. Please read the certification appearing below on this form.

- [] If all the goods or products specified in the attached bid which the bidder proposes to supply to the State shall be manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left.

- [] If only one item of any particular goods or products specified in the attached bid is manufactured or produced in the "United States" as defined in Section 34.350, RsMO, check the box at left and list the items (or item number) here:

- [] If any or all of the goods or products specified in the attached bid which the bidder proposes to supply to the State are **not** manufactured or produced in the "United States" as defined in Section 34.350, RsMO, then: (a) check the box at left; (b) list below, by item (or item number), the country other than the United States where each good or product is manufactured or produced; and (c) check the boxes to the left of the paragraphs below if applicable and list the corresponding items (or item numbers) in the spaces provided.

Item (or item number)	Location Where Item Manufactured or Produced

(attach an additional sheet if necessary)

- [] The following specified goods or products cannot be manufactured or produced in the United States in sufficient quantities or in time to meet the contract specifications. Items (or item numbers): _____

- [] The following specified goods or products must be treated as manufactured or produced in the United States, in accordance with an existing treaty, law, agreement, or regulation of the United States, including a treaty between the United States and any foreign country regarding export-import restrictions or international trade. Items (or item numbers): _____

CERTIFICATION

By submitting this document, completed as directed above, with a bid, the bidder certifies under penalty of making false declaration (Section 575.060, RsMO) that the information contained in this document is true, correct and complete, and may be relied upon by the State in determining the bidders qualifications under and in compliance with the Missouri Domestic Products Procurement Act.

The bidder's failure to complete and return this document with the bid as directed above will cause the State to presume the manufactured goods or products listed in the bid are not manufactured or produced in the United States, and the bid will be evaluated on that basis pursuant to Section 34.353.3(2), RsMO.

MISSOURI SERVICE-DISABLED VETERAN BUSINESS PREFERENCE

By virtue of statutory authority, RSMo 34.074, a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable.

Definitions:

Service-Disabled Veteran is defined as any individual who is disabled as certified by the appropriate federal agency responsible for the administration of veterans' affairs.

Service-Disabled Veteran Business is defined as a business concern:

- a. Not less than fifty-one (51) percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than fifty-one (51) percent of the stock of which is owned by one or more service-disabled veterans; and
- b. The management and daily business operations of which are controlled by one or more service-disabled veterans.

If an offeror meets the definitions of a service-disabled veteran and a service-disabled veteran business as defined in 34.074 RSMo and is either doing business as a Missouri firm, corporation, or individual; or maintains a Missouri office or place of business, the offeror **must** provide the following with the proposal in order to receive the Missouri service-disabled veteran business preference over a non-Missouri service-disabled veteran business when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing proposals, in their entirety, are comparable:

- a. A copy of a letter from the Department of Veterans Affairs (VA), or a copy of the offeror's discharge paper (DD Form 214, Certificate of Release or Discharge from Active Duty) from the branch of service the offeror was in, stating that the offeror has a service-connected disability rating ranging from 0 to 100% disability; and
- b. A completed copy of this exhibit

(NOTE: For ease of evaluation, please attach copy of the above-referenced letter from the VA or a copy of the offeror's discharge paper to this Exhibit.)

By signing below, I certify that I meet the definitions of a service-disabled veteran and a service-disabled veteran business as defined in 34.074 RSMo and that I am either doing business as a Missouri firm, corporation, or individual; or maintain Missouri offices or places of business at the location(s) listed below.

Veteran Information

Business Information

Service-Disabled Veteran's Name, (Please Print)

Service-Disabled Veteran's Signature

Service-Disabled Veteran Business Name

Missouri Address of Service-Disabled Veteran Business

SUBCONTRACTOR LISTING

1. For portions of the Work equaling or exceeding 1% of the total proposed Contract Sum, the undersigned proposes to use the following subcontractors. Except as otherwise approved by the Owner, the undersigned proposes to perform all other portions of the Work with his own forces.

2. Portion of the Work:	Subcontractor name and address:
_____	_____

_____	_____

_____	_____

_____	_____

USE ADDITIONAL SHEETS
IF REQUIRED

PROVIDE SIGNATURE
IDENTICAL TO THAT
SHOWN ON THE BID FORM

BIDDER:

by _____

JOB SPECIAL PROVISIONS TABLE OF CONTENTS

(Job Special provisions shall prevail over General Special provisions whenever in conflict therewith)

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	<p>MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 W. CAPITOL AVE. JEFFERSON CITY, MO 65102 Phone 1-888-275-6636</p>
	<p>JOB NUMBER: TJ414001 JACKSON COUNTY, MO DATE PREPARED:</p>
<p>Date:</p>	<p>ADDENDUM DATE:</p>
<p>Only the following items of the Job Special Provisions (Roadway) are authenticated by this seal:</p>	

A. GENERAL – STATE JSP-06-03

1.0 Description. The Federal Government is not participating in the cost of construction of this project.

1.1 This contract requires payment of the prevailing hourly rate of wages for each craft or type of worker required to execute the contract as determined by the Missouri Department of Labor and Industrial Relations. The current State Wage Rates can be found on the Missouri Department of Transportation web page at www.modot.mo.gov under "Business With MoDOT" for the applicable bid opening. This supplemental bidding document has important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

State Wage Rates

1.2 The following documents are available on the Missouri Department of Transportation web page at www.modot.mo.gov under "Business With MoDOT" "Standards and Specifications". The effective version shall be determined by the letting date of the project.

General Provisions & Supplemental Specifications

Supplemental Plans to October 2006 Missouri Std. Plans
For Highway Construction

These supplemental bidding documents contain all current revisions to the bound printed versions and have important legal consequences. It shall be conclusively presumed that they are in the bidder's possession, and they have been reviewed and used by the bidder in the preparation of any bid submitted on this project.

B. PROJECT CONTACT FOR CONTRACTOR/BIDDER QUESTIONS JSP-96-05

All questions concerning this project during the bidding process shall be forwarded to the project contact listed below.

Matt Killion, Project Contact
MoDOT
908 East Truman Road
Kansas City, MO 64106

Telephone Number 816-889--3380
e-mail: Matthew.Killion@modot.mo.gov.

All questions concerning the bid document preparation can be directed to the Headquarters General Services Office at (573) 522-9565.

C. SUPPLEMENTAL REVISIONS JSP-07-01

Insert 109.15, subsequent section renumbered accordingly:

MEASUREMENT AND PAYMENT

109.15 Asphalt Cement Price Index. Adjustments will be made to the payments due the Contractor for any plant mix bituminous base, plant mix bituminous pavement, plant mix bituminous surface leveling and asphaltic concrete pavement that contains PG64-22, PG70-22 or PG76-22 when it has been determined that the monthly average price for the midpoint of the published prices of PG64-22 for St. Louis, Missouri area and Kansas City area has fluctuated from the monthly average price of the month the project was bid. The St. Louis, Missouri area and Kansas City area prices will be obtained from the Asphalt Weekly Monitor published by Poten & Partners Inc. The monthly base price will be the price from the last published Asphalt Weekly Monitor prior to MoDOT's monthly bid opening. The monthly base price, established prior to the monthly bid opening, shall apply to payment estimates for the following month.

109.15.1 The adjusted contract unit price will be applied to the actual amount of asphalt binder used by the Contractor for all asphalt items that are set up by the wet ton mix. The adjustment will be applied to projects that have a quantity of asphalt wet ton mix pay items over 1000 tons. The percentage of virgin asphalt as shown in the job mix formula, in accordance with Sec 401.4 and Sec 403.4, will be the basis for adjustments for any asphalt mix type placed on the project during the monthly index period. The effective asphalt obtained from the use of recycled asphalt pavement (RAP) will not be eligible for adjustment. The base price index for PG64-22 will be applied to the asphalt mix for mixes using PG64-22, PG70-22 or PG76-22.

109.15.2. Basis of Payment To determine the adjustment for any material specified in this provision the following formula will be used.

$$A = (B \times C) \times (D - E) \times T$$

Where: A = Adjustment for mix placed during monthly average index period

B = Tons of Mix Placed during the monthly average index period

C = % of virgin asphalt binder as listed in the job mix formula in use

D = monthly average price at time mix placement

E = monthly average price at time of bid

T = 1.04225 to account for Missouri State use tax

109.15.3. The engineer will make adjustment payments, as defined above, for the applicable work completed during each month except for projects on which the contractor is being charged liquidated damages, due to working beyond the project completion date, in accordance with Sec 108. In this case, the "D" value used for the price adjustment will be either the last "D" value prior to the date that liquidated damage assessment began or the current monthly "D" value, whichever is lower. If the contractor is being charged liquidated damages due to the contract being beyond the project completion date and the current months "D" value results in a deduction, then the current monthly "D" value will be used.

109.15.4. Optional This provision is optional. If the bidder wishes to be bound by this provision, the bidder shall execute the acceptance form in the Bid. Failure by the bidder to execute the acceptance form will be interpreted to mean election to not participate in the Asphalt Cement Price Index.

Amend Sec 1036.3 to include the following:

1036.3.3 Welded steel wire fabric shall be in accordance with AASHTO M 55 or AASHTO M 221.

D. UTILITY SERVICE CONNECTIONS

The contractor's first order of work will be to establish the utility connections to the parcel. Service connections shall meet the applicable State and City building codes. The contractor will be required to establish service connections for the following utilities:

GAS: Provided a 2-inch service line from the main to within 20 feet of the building footprint.

SEWER: Provide a 6-inch line from 20 foot outside the building footprint to the brick sewer main. Includes manhole, frame and cover.

POWER: Provide a 30-foot service pole located in the Northeast corner of the property.

WATER: Provide a 2-inch service line from the main to within 20 feet of the building footprint. Due to the previous use of the site the contractor will be required to use copper water lines anywhere the water lines are in contact with the ground.

PHONE / DATA: Provide 2 4-inch PVC conduits, equipped with a pull string, from the main trunk at Mulberry St to within 20 feet of the building footprint. All bends in this conduit will need to be sweeps with a minimum 3-foot radius.

DOWNSPOUT DRAIN: Provide an 8-inch PVC line from 20 foot outside the building footprint to the drop inlet at Station 193+84. This line will be used to tie the building downspout drain systems to the drop inlet.

Any excavation or excess soil that is a result of the utility work will be properly handled and disposed of as described in the Risk Management Plan and Soil Management Plan or elsewhere in the JSP.

Payment will be considered as covered by and made under the various items in the project.

E. UTILITIES

1.0 For informational purposes only the following is a list of names, addresses, and telephone numbers of the known utility companies in the area of the construction work for this improvement:

<u>Utility Company</u>	<u>Known Required Connection</u>
Mr. Jon Harrel Missouri Gas Energy 3025 S.E. Clover Drive Lee's Summit, MO 64082 (816) 969-2298	Yes

Mr. Andy Shively
City of Kansas City Water
Services Dept.
4800 E. 63rd Street
Kansas City, Mo. 64130
(816) 513-0304

Yes

Mr. Jerry Woodall
Level 3 Communications
1212 E. 19th Street
Kansas City, Mo. 64108
(913) 645-5032

Yes

Mr. Kirk Thaelke
LightCore, a Century Tel Company
14567 North Outer Forty Road
Suite 500
Chesterfield, MO 63017
(314) 880-1610

No

Mr. David Webb
Kansas City Power & Light Co.
8325 N. Platte Purchase Bridge
Kansas City, Missouri 64118-1057
(816) 420-1057

Yes

Mr. John Cornick
AT&T
215 N. Spring
Independence, MO 64050-2822
(816) 325-5615

Yes

1.1 The Commission does not warrant that the above listing or the depiction of utility lines or facilities on other bidding documents are complete or accurately reflect either all utilities or their precise locations within or adjacent to the project limits or the status of any relocation work. It is, therefore, the responsibility of the contractor to verify the above listing information indicating existence, location and status of any facility. Such verification includes direct contact with the listed utilities.

1.2 The contractor agrees that any effects of the presence of the utilities, their relocation, contractor's coordination of work with the utilities and any delay in utility relocation shall not be compensable as a suspension of work, extra work, a change in the work, as a differing site condition or otherwise including but, without limitation, delay, impact, incidental or consequential damages. The contractor's sole remedy for the effects of the presence of utilities, delay in their relocation or any other effects shall be an excusable delay as provided in Section 105.7.3. The contractor waives, for itself, its subcontractors and suppliers the compensability of the presence of utilities, delay in their relocation and any cost to the contractor, it's subcontractors and suppliers in any claim or action arising out of or in relation to the work under the contract.

1.3 The contractor shall be solely responsible and liable for incidental and consequential damage to any utility facilities or interruption of the service caused by it or its subcontractors operation. The contractor shall hold and save harmless the Commission from damages to any utility facilities interruption of service by it or it's subcontractor's operation.

2.0 It shall be noted by the contractor that MoDOT is a member of Missouri One Call (800 Dig Rite). Some work on this project may be in the vicinity of MoDOT utility facilities, which includes but is not limited to traffic signal cables, highway lighting circuits, ITS cables, cathodic protection cables, etc. Prior to beginning work, the contractor shall request locates from Missouri One Call. The contractor shall also complete the Notice of Intent to Perform Work form located at the Missouri Department of Transportation website:

<http://www.modot.mo.gov/asp/intentToWork.shtml>

The contractor shall submit the form over the web (preferred method) or by fax to the numbers on the printed form. The notice must be submitted a minimum of 2 and a maximum of 10 working days prior to excavation just as Missouri One Call requires. If the contractor wants verification the locate is complete they may inquire from the associated district office 2 working days after making the request.

F. SITE RESTRICTIONS

Contractor shall delineate a 20' radius around areas marked on the plans as TW1-1 & TW-2-1 prior to any work being performed on site. These areas have shows high concentrations of contaminants and shall not be disturbed.

G. SPECIAL WASTE

The redevelopment of the site will involve some excavation of contaminated soil. This soil is not considered hazardous waste. It will be handled as special waste and transported to a permitted municipal solid waste (MSW) landfill to prevent use in residential locations. The contractor will be responsible for providing test results of the special waste should the MSW require them. It is the contractor's responsibility to obtain a disposal manifest from the MSW landfill detailing the volume of soil accepted. The manifest will serve as documentation for pay. The original manifest shall be provided to the Engineer.

Two MSW landfills in the Kansas City area accepting special waste are:

Courtney Ridge Recycling & Disposal Facility
2001 N 291 Highway
Sugar Creek, MO., 64058
Contact is Nancy Hardin - 816-257-2185 ext.21

Deffenbaugh Disposal Service
I-435 & Holliday Drive
Shawnee, KS, 66203
Contact is Mike Dale – 913-631-3300

The contractor may use these either of these MSW or another permitted MSW to dispose of the special waste.

Payment for testing, hauling, disposal and documentation will be considered as covered by and made under the pay item 202-99.01 "Special Waste Hauling and Disposal".

H. GRADING SITE EROSION AND SILTATION CONTROL

Appropriate erosion and siltation controls must be used and maintained in effective operating condition during the grading project.

All exposed soil and disturbed areas shall be stabilized at the earliest practicable date.

Erosion control shall be in accordance with Section 800 of the Standard Specifications, and Missouri Standard Plans for Highway Construction Standard Drawing 806.10.

Payment will be considered as covered by and made under the various items in the project.

I. EMBANKMENT IN PLACE (CONTRACTOR FURNISHED BORROW)

1.0 Description of Work. This work shall consist of excavating, loading, hauling, placing, furnishing approved material and constructing the required embankment as designated in the project plans. Embankment construction shall be the first order of work to allow for the anticipated settlement. All specification requirements noted in Section 203 of the Missouri Standard Specifications for Highway Construction shall apply except for issues specifically addressed within this provision.

2.0 Material Requirements. Design of this project was based upon the use of soils from the Knox-Sibley-Urban Land soil association as indicated on a General Soil Map of Jackson County, Missouri published by the U.S. Department of Agriculture Soil Conservation Service. Soils within the project limits were sampled and tested and determined to consist of lean clay (CL) by ASTM Soil Classification (ASTM D2487). Average group index of the projects soils was determined to be on the order of 15 as determined by AASHTO M 145-49. Contractor furnished material shall be a soil equal to or better than the soil used in the design of this project. The successful bidders source of soil shall be a lean clay (CL) with an average group index value not exceeding 15.

2.1 The successful bidder is advised that his/her source of material will be sampled and tested only after the award of the contract. The successful bidder shall schedule his/her work in advance in such a manner to allow six weeks for quality assurance (QA) sampling under the direction of MoDOT's Geologist and QA testing by MoDOT's Central Laboratory. Sampling is to occur at time in which is mutually agreeable with the contractor and the Geologist. The sampling and testing of material will be performed after the letting of the contract and before the material is to be incorporated into the roadway. The contractor shall not incorporate any material into the roadway until a review of testing and acceptance of the material is determined. The geologist or designated representative will determine the locations and depths of soil samples. The successful bidder shall furnish equipment suitable for the purpose of obtaining representative soil samples.

2.2 Any preliminary subsurface investigations to determine depth to rock and soil characteristics shall be the sole responsibility of the successful bidder.

2.3 Environmental clearances for contractor-furnished borrow sites may be obtained from the Project Manager in the District 4 office located at 600 N.E. Colbern Road or from:

Mr. Kevin Wideman, Senior Environmental Specialist
Phone 573-526-4171
E-mail Kevin.Wideman@modot.mo.gov

3.0 Maximum Density Compaction Requirements. Compaction to at least 95 percent of maximum density, as determined by the Standard Compaction Test, will be required in the areas of the buildings as shown on the plans. All other areas will follow Section 203 of the Missouri Standard Specifications for Highway Construction specifications.

4.0 Material Acceptance. Acceptance will be based upon various soil characteristics and dispersion of test data as compared to those used in the design of the project and the requirements of this provision.

5.0 Construction Requirements. The material to be placed in the embankment shall be placed in accordance with this provision and all applicable provisions of Section 203 of the standard specifications and in conformity with the lines, grades, and typical cross sections shown on the plans.

6.0 Method of Measurement and Basis of Payment. As per Section 203 of the Standard Specifications.

J. MODIFYING DROP INLET

There are two existing area inlets on the site to be modified. The top 1 foot of the area inlet shall be removed exposing the reinforcing steel. The existing reinforcing steel shall be cleanly stripped to insure bonding to new concrete. Reinforcing steel which is damaged or otherwise unsuitable for incorporation into the new concrete shall be removed as directed by the engineer. New reinforcing steel shall be spliced onto the existing steel. The new walls will be formed and poured as shown on the plans. New grate and bearing plates will be built.

Payment will be considered as covered by and made under the various items in the project.

K. TIME FOR COMPLETION OF WORK

1.0 Description. Completion of this project shall be in accordance with Sec 108.7 and will be administered on both a calendar date completion basis and by working days completion basis.

1.1 Regardless of when the work is begun on this project, all work shall be completed on or before the date specified below. Completion by this date shall be in accordance with the requirements of Sec 108.7.1.

Completion Date: **October 31, 2009.**

1.2 In addition, working days for the completion of this project have been established. The count of working days will start on the date the contractor starts any construction operations. All work shall be completed within the working days specified below. Completion of the work by working days shall be in accordance with the requirements of Sec 108.7.2.

Working Days: 40

- 1.3 Should the contractor, or in case of default, the surety, fail to complete the work within the above specified working days or the completion date, whichever occurs first, a deduction of the amount shown below will be made for each day that the project remains uncompleted in accordance with the requirements of Sec 108.8.

Liquidated Damages Per Day: \$500

- 1.4 Near the completion of this project a contract will be awarded to build three structures on the property. Should the timelines overlap cooperation between the contractors will be in accordance with the requirements of Sec 105.6

L. PHASE II ESA

A copy of the Phase II Environmental Site Assessment (ESA) is available at the following web site: <ftp://ftp.kcmo.org/outgoing/CD/abracker/>. Open the folder marked "**650 Mulberry St. (MoDOT Relocation Site)**". Open the subfolder marked "**Aquaterra Phase II Report**". Open the subfolder marked "**MoDOT Phase II Report PDF**".

By submitting a bid on this contract the contractor acknowledges receipt of the Phase II ESA and his ability to meet the requirements set forth in the Phase II ESA.

M. SOIL / RISK MANAGEMENT PLAN

A copy of the Soil Management Plan (SMP) and the Risk Management Plan (RMP) are attached and made a part of this proposal. The contractor will be required to adhere to and follow the guidelines that are established by the SMP / RMP.

Missouri Highways and Transportation Commission
Standard Bid/Proposal Provisions, General Terms and Conditions and Special Terms and Conditions

STANDARD SOLICITATION PROVISIONS

- a. The Missouri Department of Transportation (MoDOT) reserves the right to reject any or all bids/quotes/proposals, and to accept or reject any items thereon, and to waive technicalities. In case of error in the extension of prices in the bid/quote/proposal, unit prices will govern.
- b. All bids/quotes/proposals must be signed with the firm name and by a responsible officer or employee. Obligations assumed by such signature must be fulfilled.
- c. By virtue of statutory authority, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown, within the State of Missouri.
- d. Time of delivery is a part of the consideration and, if not otherwise stated in the solicitation documents, must be stated in definite terms by the Bidder/Offeror and must be adhered to. If time varies on different items, the Bidder/Offeror shall so state.
- e. If providing bids/quotes/proposals for commodities, the Bidder/Offeror will state brand or make on each item. If bidding or proposing other than the make, model or brand specified, the manufacturer's name, model number or catalog number must be given.
- f. **For bids/proposals of \$25,000 or more**, no bids/proposals by telephone, telegram or telefax will be accepted.
- g. The date specified for the returning of bids/quotes/proposals is a firm deadline and all bids/quotes/proposals must be received at the designated office by that time. The Department does not recognize the U.S. Mail, Railway Express Agency, Air Express, or any other organization, as its agent for purposes of accepting proposals. All proposals arriving at the designated office after the deadline specified will be rejected.

GENERAL TERMS AND CONDITIONS

General Performance

- a. This work is to be performed under the general supervision and direction of the Missouri Department of Transportation (MoDOT) and, if awarded any portion of the work, the Contractor agrees to furnish at his own expense all labor and equipment required to complete the work, it being expressly understood that this solicitation is for completed work based upon the price(s) specified and is not a solicitation for rental of equipment or employment of labor by MoDOT, and MoDOT is to have no direction or control over the employees used by the Contractor in performance of the work.

Deliveries

- a. Unless otherwise specified on the solicitation documents or purchase order, suppliers shall give at least 24 hours advance notice of each delivery. Delivery will only be received between the hours of 8:00 a.m. to 3:00 p.m., Monday through Friday. Material arriving after 3:00 p.m. will not be unloaded until the following workday. No material will be received on Saturday, Sunday or state holidays.
- b. If the prices bid herein include the delivery cost of the material, the Contractor agrees to pay all transportation charges on the material as FOB - Destination. Freight costs must be included in the unit price bid and not listed as a separate line item.
- c. Any demurrage is to be paid by the Contractor direct to the railroad or carrier.

Nondiscrimination

- a. The Contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
- b. All solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under a subcontract, including procurements of materials or leases of the Contractor's obligations under this contract and the Regulations, will be relative to nondiscrimination on the grounds of race, color, or national origin.
 - 1) **Sanctions for Noncompliance:** In the event of the Contractor's noncompliance with the nondiscrimination provisions of this contract, MoDOT shall impose such contract sanctions as it or the Federal Highway Administration may determine to be appropriate, including, but not limited to:
 - i. withholding of payments to the Contractor under the contract until the Contractor complies, and/or,
 - ii. cancellation, termination or suspension of the contract, in whole or in part.

Contract/Purchase Order

- a. By submitting a bid/quote/proposal, the Bidder/Offeror agrees to furnish any and all equipment, supplies and/or services specified in the solicitation documents, at the prices quoted, pursuant to all requirements and specifications contained therein.
- b. A binding contract shall consist of: (1) the solicitation documents, amendments thereto, and/or Best and Final Offer (BAFO) request(s) with any changes/additions, (2) the Contractor's proposal and/or submitted pricing, and (3) the MHTC's acceptance of the proposal and/or bid by purchase order or post-award contract.
- c. A notice of award does not constitute an authorization for shipment of equipment or supplies or a directive to proceed with services. Before providing equipment, supplies and/or services, the Contractor must receive a properly authorized purchase order and/or notice to proceed.
- d. The contract expresses the complete agreement of the parties and performance shall be governed solely by the specifications and requirements contained therein. Any change, whether by modification and/or supplementation, must be accomplished by a formal contract amendment signed and approved by and between the duly authorized representative of the Contractor and the duly authorized representative of the MHTC, by a modified purchase order prior to the effective date of such modification. The Contractor expressly and explicitly understands and agrees that no other method and/or no other document, including correspondence, acts, and oral communications by or from any person, shall be used or construed as an amendment or modification.

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Subcontracting

- a. It is specifically understood that no portion of the material or any interest in the contract, shall be subcontracted, transferred, assigned or otherwise disposed of, except with the written consent of MoDOT. Request for permission to subcontract or otherwise dispose of any part of the work shall be in writing to MoDOT and accompanied by documentation showing that the organization which will perform the work is particularly experienced and equipped for such work.
- b. Consent to subcontract or otherwise dispose of any portion of the work shall not be construed to relieve the Contractor of any responsibility for the production and delivery of the contracted work and the completion of the work within the specified time.
- c. All payments for work performed by a subcontractor shall be made to the Contractor to whom the contract was awarded and the purchase order issued.

Invoicing and Payment

- a. MoDOT is exempt from paying Missouri Sales Tax, Missouri Use Tax and Federal Excise Tax. However, the Contractor may themselves be responsible for the payment of taxes on materials they purchase to fulfill the contract. A Project Tax Exemption Certificate will be furnished to the successful Bidder/Offeror upon request if applicable.
- b. Each invoice should be itemized in accordance with items listed on the purchase order and/or contract. The statewide financial management system has been designed to capture certain receipt and payment information. Therefore, each invoice submitted must reference the purchase order number and must be itemized in accordance with items listed on the purchase order. Failure to comply with this requirement may delay processing of invoices for payment.
- c. Unless otherwise provided for in the solicitation documents, payment for all equipment, supplies, and/or services required herein shall be made in arrears. The Missouri Highways and Transportation Commission (MHTC) shall not make any advance deposits.
- d. The MHTC assumes no obligation for equipment, supplies, and/or services shipped or provided in excess of the quantity ordered. Any authorized quantity is subject to the MHTC's rejection and shall be returned at the Contractor's expense.
- e. The MHTC reserves the right to purchase goods and services using the state-purchasing card.

Applicable Laws and Regulations

- a. The contract shall be construed according to the laws of the State of Missouri. The Contractor shall comply with all local, state, and federal laws and regulations related to the performance of the contract.
- b. The Contractor must be registered and maintain good standing with the Secretary of State of the State of Missouri and other regulatory agencies, as may be required by law or regulations. Prior to the issuance of a purchase order and/or notice to proceed, the Contractor may be required to submit to MoDOT a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
 - 1) Prior to the issuance of a purchase order and/or notice to proceed, all **out-of-state** Contractors **providing services** within the state of Missouri must submit to MoDOT a copy of their current Transient Employer Certificate from the Department of Revenue, in addition to a copy of their current Authority Certificate from the Secretary of State of the State of Missouri.
- c. The exclusive venue for any legal proceeding relating to or arising, out of the contract shall be in the Circuit Court of Cole County, Missouri.

Executive Order

- a. The Contractor shall comply with all the provisions of Executive Order 07-13, issued by the Honorable Matt Blunt, Governor of Missouri, on the sixth (6th) day of March, 2007. This Executive Order, which promulgates the State of Missouri's position to not tolerate persons who contract with the state engaging in or supporting illegal activities of employing individuals who are not eligible to work in the United States, is incorporated herein by reference and made a part of this Agreement.
 - 1) "By signing this Agreement, the Contractor hereby certifies that any employee of the Contractor assigned to perform services under the contract is eligible and authorized to work in the United States in compliance with federal law."
 - 2) In the event the Contractor fails to comply with the provisions of the Executive Order 07-13, or in the event the Commission has reasonable cause to believe that the contractor has knowingly employed individuals who are not eligible to work in the United States in violation of federal law, the Commission reserves the right to impose such contract sanctions as it may determine to be appropriate, including but not limited to contract cancellation, termination or suspension in whole or in part or both.
 - 3) The Contractor shall include the provisions of this paragraph in every subcontract. The Contractor shall take such action with respect to any subcontract as the Commission may direct as a means of enforcing such provisions, including sanctions for noncompliance.

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Preferences

- a. In the evaluation of bids/quotes/proposals, preferences shall be applied in accordance with Chapter 34 RSMo. Contractors should apply the same preferences in selecting subcontractors.
- b. By virtue of statutory authority, RSMo. 34.076 and 34.350 to 34.359, a preference will be given to materials, products, supplies, provisions and all other articles produced, manufactured, made or grown within the State of Missouri. Such preference shall be given when quality is equal or better and delivered price is the same or less.
 - 1) If attached, the document entitled "**PREFERENCE IN PURCHASING PRODUCTS**" should be completed and returned with the solicitation documents.
 - 2) If attached, the document entitled "**MISSOURI DOMESTIC PRODUCTS PROCUREMENT ACT**" should be completed and returned with the solicitation documents. **Applies if bid is Twenty-Five Thousand Dollars (\$25,000.00) or more.**
- c. By virtue of statutory authority, RSMo 34.074, a preference will be given all contracts for the performance of any job or service to service-disabled veteran business either doing business as Missouri firms, corporations, or individuals; or which maintain Missouri offices or places of business, when the quality of performance promised is equal or better and the price quoted is the same or less or whenever competing bids, in their entirety, are comparable.
 - 1) If attached, the document entitled "**MISSOURI SERVICE-DISABLED VETERAN PREFERENCE**" should be completed and returned with the solicitation documents.
- d. In the event of a tie of low bids, the MHTC reserves the right to establish the method to be used in determining the award

Remedies and Rights

- a. No provision in the contract shall be construed, expressly or implied, as a waiver by the MHTC of any existing or future right and/or remedy available by law in the event of any claim by the MHTC of the Contractor's default or breach of contract.
- b. The Contractor agrees and understands that the contract shall constitute an assignment by the Contractor to the MHTC of all rights, title and interest in and to all causes of action that the Contractor may have under the antitrust laws of the United States or State of Missouri for which causes of action have accrued or will accrue as the result of or in relation to the particular equipment, supplies, and/or services purchased or produced by the Contractor in the fulfillment of the contract with the MHTC.
- c. In the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request MoDOT to enter into such litigation to protect the interests of the MHTC, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

Cancellation of Contract

- a. The MHTC may cancel the contract at any time for a material breach of contractual obligations or for convenience by providing the Contractor with written notice of cancellation. Should the MHTC exercise its right to cancel the contract for such reasons, cancellation will become effective upon the date specified in the notice of cancellation sent to the Contractor.
- b. If the MHTC cancels the contract for breach, the MHTC reserves the right to obtain the equipment, supplies, and/or services to be provided pursuant to the contract from other sources and upon such terms and in such manner as the MHTC deems appropriate and charge the Contractor for any additional costs incurred thereby.

Bankruptcy or Insolvency

- a. Upon filing for any bankruptcy or insolvency proceeding by or against the Contractor, whether voluntary or involuntary, or upon the appointment of a receiver, trustee, or assigned the benefit or creditors, the Contractor must notify MoDOT immediately. Upon learning of any such actions, the MHTC reserves the right, at its sole discretion, to either cancel the contract or affirm the contract and hold the Contractor responsible for damages.

Inventions, Patents, and Copyrights

- a. The Contractor shall defend, protect, and hold harmless the MHTC, its officers, agents, and employees against all suits of law or in equity resulting from patent and copyright infringement concerning the Contractor's performance or products produced under the terms of the contract.

Inspection and Acceptance

- a. No equipment, supplies, and/or services received by MoDOT pursuant to a contract shall be deemed accepted until MoDOT has had reasonable opportunity to inspect said equipment, supplies, and/or services.
- b. All equipment, supplies, and/or services which do not comply with the specifications and/or requirements or which are otherwise unacceptable or defective may be rejected. In addition, all equipment, supplies, and/or services which are discovered to be defective or which do not conform to any warranty of the Contractor upon inspection (or at any later time if the defects contained were not reasonably ascertainable upon the initial inspection) may be rejected.
- c. The MHTC reserves the right to return any such rejected shipment at the Contractor's expense for full credit or replacement and to specify a reasonable date by which replacements must be received.
- d. The MHTC's right to reject any unacceptable equipment, supplies, and/or services shall not exclude any other legal, equitable or contractual remedies the MHTC may have.

Warranty

- a. The Contractor expressly warrants that all equipment, supplies, and/or services provided shall: (1) conform to each and every specification, drawing, sample or other description which was furnished to or adopted by MoDOT, (2) be fit and sufficient for the purpose expressed in the solicitation documents, (3) be merchantable, (4) be of good materials and workmanship, and (5) be free from defect.
- b. Such warranty shall survive delivery and shall not be deemed waived either by reason of the MHTC's acceptance of or payment for said equipment, supplies, and/or services.

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Status of Independent Contractor

- a. The Contractor represents itself to be an independent Contractor offering such services to the general public and shall not represent itself or its employees to be an employee of the MHTC. Therefore, the Contractor shall assume all legal and financial responsibility for taxes, FICA, employee fringe benefits, workers' compensation, employee insurance, minimum wage requirements, overtime, etc., and agrees to indemnify, save and hold the MHTC, its officers, agents and employees harmless from and against any and all losses (including attorney fees) and damage of any kind related to such matters.

Indemnification

- a. The Offeror shall defend, indemnify and hold harmless the Commission, including its members and department employees, from any claim or liability whether based on a claim for damages to real or personal property or to a person for any matter relating to or arising out of the Offeror's performance of its obligations under this Agreement.

SPECIAL TERMS AND CONDITIONS

Insurance

- (1) Prior to contract signing, the Offeror may be asked about its ability to provide certificates of insurance which meet, or approach, the following coverages:

- | | |
|---|---|
| a. General Liability | Not less than \$500,000 for any one person in a single accident or occurrence, and not less than \$3,000,000 for all claims arising out of a single occurrence; |
| b. Automobile Liability | Not less than \$500,000 for any one person in a single accident or occurrence, and not less than \$3,000,000 for all claims arising out of a single occurrence; |
| c. Missouri State Workmen's Compensation policy or equivalent in accordance with state law. | |

Permits, Licenses and Safety Issues

- a. The contract price shall include any necessary permits and licenses required by law incidental to the work. Local ordinances requiring building permits are not applicable to state agencies.
- b. The Contractor will comply with local laws involving safety in the prosecution of the work.

Award

- a. Award of this bid/quote/proposal will be made on an "All Or Nothing" basis using the "lowest and best" principle of award.

Failure to Execute Contract

- a. Failure to execute the contract and file acceptable performance payment (Contract Bond) or cashier's check, bank money order or certified check within **15 days** after the contract has been mailed to the bidder shall be just cause for the cancellation of the award and the forfeiture of the proposal guaranty. Award may then be made to the next lowest responsible bidder, or the work may be re-advertised and performed under contract or otherwise, as the Commission may decide. No contract shall be considered effective until it has been executed by all parties thereto.

Notice to Proceed

- a. Within **30 days** after the execution of the contract, a "**Notice to Proceed**" will be issued by the Department. A purchase order will be attached to the "Notice to Proceed," which will specify the date or dates that the Contractor can start delivery, roadway or stockpile delivery and will also include the completion dates. These dates will be in accordance with the dates shown in the proposal.

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Temporary Suspension of Work

- a. The **District Engineer** shall have authority to suspend work wholly or in part for such period or periods as may be deemed necessary when weather or other conditions are such that in the opinion of the engineer, the work may be done at a later time with advantage to the Department or for failure on the part of the Contractor to comply with any of the provisions of the Contract.
- b. If the Department suspends the work for its own advantages and not because of the Contractor's failure to comply with the Contract, the Contractor will be allowed an equal number of calendar days after the completion date for the completion of the work. The Department may at its discretion give the Contractor an extension of time for completing the work where the Contractor incurs delays for causes beyond his control.
- c. Normal rainfall is not considered a cause qualifying for an extension of time. Claim for extension of time for all causes must be submitted by the Contractor in writing within **30 Days** after the claimed cause for the delay has ceased to exist.

Cancellation of Contract

- a. If the Contractor/supplier fails to carry out the performance of the work with sufficient workmen and equipment to insure the completion of the delivery within the time specified or becomes insolvent or is adjudicated a bankrupt or commits any act of bankruptcy or insolvency or allows any final judgment to stand against him for a period of ten (10) days, the Missouri Department of Transportation may give notice in writing by registered mail to the Contractor/supplier and the surety of such delay, neglect or default.
- b. If, within ten (10) days after such notice the Contractor/supplier does not proceed to remedy to the satisfaction of the Department's representatives the faults specified in said notice, or the surety does not proceed to take over the deliveries, the Department shall have full power and authority, without impairing the obligation of the Contractor/supplier under the contract or the surety under the bond, to take over the completion of the work and arrange for the shipment of any materials necessary to complete the work and the Contractor/supplier and the surety will be responsible for any additional costs incurred by the Department in obtaining the completion of the deliveries.

Liquidated Damages

- a. In the event the successful Contractor fails to deliver the material within the time specified, the Department and the public will sustain damages because of such delay in delivery, the exact extent of which would be difficult to ascertain, and in order to liquidate such damage in advance it is agreed that the **sum of five-hundred dollars (\$500.00) per day, per item**, for each assessable calendar day on which the delivery has not been completed, is reasonable and the best estimate which the parties can arrive at as liquidated damages, and it is therefore agreed that said amount will be withheld from payments due the Contractor or otherwise collected from the Contractor as liquidated damages.

Prohibition Of Employment Of Unauthorized Aliens:

- a. Pursuant to RSMo 285.530 (1), no business entity or employer shall knowingly employ, hire for employment, or continue to employ an unauthorized alien to perform work within the state of Missouri. As a condition for the award of any contract or grant in excess of five thousand dollars by the state or by any political subdivision of the state to a business entity, or for any business entity receiving a state-administered or subsidized tax credit, tax abatement, or loan from the state, the business entity shall, by sworn affidavit and provision of documentation, affirm its enrollment and participation in a federal work authorization program with respect to the employees working in connection with the contracted services. Every such business entity shall sign an affidavit affirming that it does not knowingly employ any person who is unauthorized alien in connection with the contracted services. [RSMO 285.530 (2)] A copy of the affidavit referenced above is provided within this document.

PREPARED FOR:

CITY OF KANSAS CITY, MISSOURI
DEPARTMENT OF CITY PLANNING AND DEVELOPMENT
BROWNFIELD OFFICE
KANSAS CITY, MISSOURI 64106

DATE

November 10, 2008

PREPARED BY:



MUSTARDSEED CULTURAL AND ENVIRONMENTAL SERVICES, LLC
606 East 66th Street · Kansas City, Missouri 64131 · Phone (816) 333-2480 · FAX 816-333-1632
Project #: ENV-AQ-0108056-RMP

AQUATERRA
ENVIRONMENTAL SOLUTIONS, INC.

**RISK MANAGEMENT PLAN - FINAL
MoDOT RELOCATION SITE
KANSAS CITY, MISSOURI**

**Aquaterra Project Number 2836.10
November 10, 2008
Revised June 17, 2009**

Prepared for:

**Mr. Andrew Bracker
Brownfields Coordinator
Department of City Planning and Development
City of Kansas City, Missouri
414 E. 12th Street, 16th Floor
Kansas City, Missouri 64106**

AQUATERRA
ENVIRONMENTAL SOLUTIONS, INC.

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RISK MANAGEMENT PLAN
MoDOT Relocation Site
Kansas City, Missouri

EXECUTIVE SUMMARY

Missouri Department of Transportation (MoDOT) intends to relocate its current facilities in the Columbus Park Project area to this property located at 700 Mulberry Street. The 700 Mulberry Street address is the address used for the site by the City of Kansas City, Missouri Brownfields Program. The address of the MoDOT facility will be 650 Mulberry Street which is the address of their new Maintenance Facility Building.

The MoDOT Relocation Site has a history of industrial activities that involved arsenic and lead as well as petroleum based products. Phase I and II Environmental Site Assessments confirmed the presence of arsenic and lead (COCs) in the soil and groundwater at the site above Risk-Based Target Levels (RBTL's) for non-residential use.

The Risk Management Plan (RMP) for the MoDOT Relocation Site will prevent the mobility and exposure to chemicals of concern (COCs) in the soil and groundwater by use of engineering controls, legal instruments, and management controls.

Although the COCs in the soil are below construction worker Risk-Based Target Levels (RBTLs), with the exception of one arsenic detection noted during the initial Phase II Environmental Site Assessment (ESA) completed by Barr Engineering in December 2007, and will not present a significant hazard during redevelopment activities, the types of COCs at the site will be made available to the contractors for incorporation into their site specific safety program(s).

The property has been vacant since 2000, when all the structures on the site were demolished and unused for more than five years. There have not been any accidental releases over the past five years. Historically, the release of heavy metals to the soil and groundwater occurred over time since the early 1900's. A specific point source or location of release, date(s), or quantity of release(s) is not possible.

The Land Clearance for Redevelopment Authority (LCRA) of Kansas City, Missouri enrolled the site in the Missouri Department of Natural Resources (MDNR) Voluntary Cleanup Program (VCP) in March 2008. The 4.3-acre site occupies the majority of Lot 4 of the Central Industrial Park. The MoDOT Relocation Site is subject to oversight by both VCP and MoDOT, a site location map may be found in **Figure 1, Appendix A**.

**Risk Management Plan
MoDOT Relocation Site
November 2008
Revised June 2009**

Two groundwater monitoring wells are located on the property along Mulberry Street. The location of the two monitoring wells is shown on **Figure 2, Appendix A**. These wells were installed as part of an EPA Resource Conservation and Recovery Act (RCRA) investigation related to historical activities of Philips Services, and therefore responsibility for these wells belongs to Philips Services. According to the Phase I ESA performed by Barr Engineering in December 2007, the wells do not represent a recognized environmental condition to the site as sampling of the wells has indicated that they are contaminant free.

1.0 ROLES AND RESPONSIBILITIES

Project Manager (PM) or his designee will be responsible for the review, documentation, and status of all risk mitigation efforts for the MoDOT Relocation project. The PM will have the authority and responsibility of the implementation of the RMP. The PM for the MoDOT Relocation Site is Mr. Andrew Bracker, Brownfields Coordinator, Department of City Planning and Development, City of Kansas City, Missouri. An Environmental Covenant was established for the property between the MDNR and the LCRA on May 13, 2009, and was recorded with Jackson County, Missouri Recorder of Deeds on May 21, 2009. The General Warranty Deed transferring property ownership from the LCRA to MoDOT was recorded with the Jackson County, Missouri Recorder of Deeds on May 21, 2009. MoDOT is now the legal owner of the property.

2.0 RISK DOCUMENTATION

In June 2008, a second Phase II ESA (Aquaterra, July 2008) was conducted at the site to delineate areas of arsenic and lead contamination in near surface soils and develop sufficient data to obtain a "No Further Action" letter through the MDNR VCP. In addition, a Missouri Risk Based Corrective Action (MRBCA) Tier I Risk Assessment (Aquaterra, July 2008) was completed to determine whether or not contaminants exceeded the appropriate RBTLs for non-residential use and construction worker exposure scenarios. The identified COC levels are shown in the following tables. Sample locations are identified on **Figure 2, Appendix A**.

Soil Metals COCs

Parameter (mg/kg)	Arsenic	Lead	Benzo(a)Pyrene
RBTL (non-Resident)	15.9	660	2.11
RBTL (Construction Worker)	654	NA	119
Boring ID			
B-1s	224	Below Target Level	Below Target Level
B-6	52.6	1,100	Below Target Level
TW-1	1,210	Below Target Level	Below Target Level
TW-2	30.1	Below Target Level	2.84
B-1-2	22	Below Target Level	Below Target Level
B-6-1	42	Below Target Level	Below Target Level
TW-1-1	76	Below Target Level	Below Target Level

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TW-1-2	74	Below Target Level	Below Target Level
TW-1-3	78	Below Target Level	Below Target Level
TW-2-1	45	1,100	Below Target Level
TW-2-2	30	Below Target Level	Below Target Level

Groundwater COCs

Parameter (ug/L)	Arsenic	Lead	Naphthalene
RBTL (residential)	10	15	1.09
RBTL (non-resident)	578	NA	75.1
RBTL Construction Worker	25,800	NA	5,210
Groundwater Sample ID			
TW-2	165	2,980	9.29
TW-3	615	9,310	Not detected

This Risk Management Plan is being prepared to address the concentrations of soil and groundwater contamination (arsenic and lead) that exceeded RBTLs for non-residential use and provide a management method to permit issuance of a "No Further Action" letter for non-residential use.

2.1 Risk Assessment

Aquaterra Environmental Solutions, Inc. (Aquaterra) prepared a Tier 1 Risk Assessment Report in July 2008 for the MoDOT Relocation Site. The City of Kansas City, Missouri Department of Planning and Development approved the report in August 2008. The report conclusions and additional information regarding the pathways and receptors for the COCs are summarized below:

- Additional samples collected during previous investigations were identified as having concentrations of COCs in excess of residential RBTLs but are not listed within this RMP. These results are summarized within the *Phase II ESA Report for the MoDOT Relocation Site, Aquaterra July 2008*. Therefore as part of the risk management of this site, the property will be subject to a residential use restriction.
- Past site investigations indicate that there is one organic parameter in the soil or groundwater above MRBCA Tier 1 RBTLs for non-residential land use, benzo (a) pyrene (BAP), detected in the soil sample collected from boring location TW-2. BAP is a concern for drinking water migration and therefore impacts from this COC to underground utilities do not pose a hazard. Naphthalene was detected in the groundwater collected from boring location TW-2, well below non-residential and construction worker RBTL levels, however, to prevent contamination of drinking water, waterlines that will not allow absorption of naphthalene, such as copper, should be used.

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- The detected levels of arsenic and lead in the shallow groundwater samples collected during December 2007 exceeded the residential Tier 1 RBTLs for ingestion, and the arsenic in the sample collected from boring location TW-3 exceeded the non-residential Tier 1 RBTL for dermal contact. However, shallow groundwater samples collected during the 2007 investigation were not filtered and had high turbidity. Based on Aquaterra's prior experience with collection of groundwater samples for metals analysis in this region of Kansas City, the presence of sediment within the groundwater samples is likely to contribute to the very high metals concentrations. The most prudent avenue to prevent future consumption of the groundwater is through institutional control by placing a groundwater use restriction on the property, which would prohibit future installation of a private groundwater well for use at the site.
- There are no public water supply wells or private domestic wells located on the site. As discussed in the Executive Summary, two groundwater monitoring wells, installed as part of a RCRA investigation associated with Philips Services, are located on the property along Mulberry Street. Analytical reports for the two on-site monitoring wells reports indicate no contaminants are present. However, due to groundwater impacts identified during the Philips Services RCRA investigation, the Philips Services site and its groundwater monitoring wells are subject to a groundwater use restriction. Municipal water service by the City of Kansas City, Missouri supplies water to the subject site; therefore, groundwater consumption hazards are not present.
- There are no known nearby sensitive receptors within a 500-foot radius of the subject site. The subject site has had no known impacts to the Missouri River located approximately 1,000 feet north of the site.
- The Ecological Risk Assessment Checklist B responses were negative or estimated to be unlikely.
- No COCs were found to be present above MRBCA Tier 1 RBTLs for Non-Residential Land Use in the Soil Vapor Pathway.
- Current and future exposure pathways to human receptors were evaluated; both on-site and off-site, do not anticipate concentration of soil metals that will present a significant hazard to the proposed development at the site.
- Historically and currently, the site has not been considered to pose an imminent or substantial threat to public health or the environment.
- The locations that are critical not to disturb are TW-1 and TW-2-1. TW-1 was a soil boring collected during the Barr Phase II ESA conducted in December 2007. TW-1 indicated an arsenic concentration of 1,210 mg/kg, above the MBRCA construction worker RBTL. TW-2-1 was a soil boring collected during the Aquaterra Phase II ESA which indicated an exceedance of the toxic characteristic leaching procedure (TCLP) regulatory level for lead.

3.0 CHEMICAL OF CONCERN REMEDIATION PLAN

This Risk Management plan follows the Tier 1 Risk Assessment Report recommendations presented July 2008 to the City of Kansas City, Missouri and MoDOT. A comparison was performed between the proposed site building layout and the sample boring locations with concentrations of soil metals and groundwater contamination (arsenic and lead) that exceeded non-residential RBTLs, construction worker RBTLs, and the TCLP regulatory limit for lead. The controls outlined below address the controls for these locations. The MoDOT Building 04-PP001-TJ14001 plan with the locations with concentrations above the non-residential RBTLs (B-1s, B-1-2, B-6, B-6-1, TW-1-1, TW-1-2, TW-1-3, TW-2-1 and TW-2-2) and construction worker RBTL for arsenic (TW-1) is in **Appendix A, Figure 2**.

3.1 Engineering Control

A protective cap will be the remediation method for the soil metals at the site. The uncovered soil will be capped with sidewalks, walkways, parking lot, and buildings. This will prevent the mobility of the COCs.

Locations B-1 and B-1-2 will be covered by the concrete apron of the Storage Building and locations B-6 and B-6-1 will be covered by the Maintenance Building.

Locations TW-1-1, TW-1-2, TW-1-3, TW-2-1 and TW-2-2, which will be paved areas, will follow the following specifications: Compact the top 8" of subgrade and each layer of fill material or backfill material at 90% of maximum density. Three to four feet of clean fill will be placed over soil areas prior to preparation of the soil areas for paving to prevent disturbance of the COCs. The paving and surfacing of the area around TW-1 and TW-2-1 will follow the 1996 edition of the Missouri Standard specifications for Highway Construction and the typical section provided as **Figure 3, Appendix A**.

- **Fill Layer:** Three to four feet of clean fill will be placed over areas to be paved. The fill will be compacted prior to placement of crushed rock base layer.
- **Base:** The 4" crushed rock shall conform to Section 1007.1 for Type 1 or 2 aggregate, or commercial equivalent as approved by owner.
- **Surface:** The 5.75" Asphalt concrete surface course shall be a commercial surface mix with AC 20 asphalt cement or as approved by the owner.
- **Prime;** Surface shall be primed with MC 30 at a rate of 0.3 gallons per square yard as directed by owner.
- Surface shall be designed for movement of trucks up to 80,000#.

This risk mitigation measure will be considered closed when the site redevelopment is complete, with no exposed surfaces.

3.2 Legal Instruments

Institutional/legal control will be the mitigation method to prevent receptor exposure to contaminated groundwater. Activity and use limitation (AUL) will be placed on the property to:

- 1) Prohibit future installation of a private groundwater well.
- 2) Prohibit use of excavated soil for fill material.
- 3) Prohibit use of the site for residential purposes.

A restrictive covenant will be added to the title for the property. This risk mitigation measure will be considered closed when the chain of title document includes the AUL.

3.3 Administrative and Management Controls

The redevelopment of the site will involve some excavation of the contaminated soil (the soil is not considered to be a hazardous waste) that will be handled as a special waste and transported to a permitted municipal solid waste (MSW) landfill to prevent use in residential locations. The MSW landfill will provide disposal manifest that detail the volume of soil accepted from the site. The excavated soil shall not be used as fill dirt. The manifests will serve as completion of this activity.

Excavation and/or trenching shall not take place in the areas of TW-1 and TW-2-1. The areas around TW-1 and TW-2-1 shall be clearly staked and the site construction supervisor will ensure the area is not excavated or trenched. Plans show the areas around TW-1 and TW-2-1 are outside the major grading area. The supervisor will ensure that the grading is shallow/limited and the asphalt paving is applied per MoDOT Highway Construction specifications.

4.0 QUALITY ASSURANCE/QUALITY CONTROL

The MoDOT Relocation Site is subject to oversight by both VCP and MoDOT, the site will be governed by the Tier I Risk Assessment Report approved by the City and MoDOT and this Risk Management Plan.

**Risk Management Plan
MoDOT Relocation Site
November 2008
Revised June 2009**

The presence of the protective cap will be documented by inspection with photographs to verify that the areas identified as having COCs in excess of MBRCA RBTLs have no exposed soil surface. Manifest documenting the amount of excavated soil and the landfill that accepted the soil would become part of the documentation for the completion report. The AUL will be verified and documented with a copy of the institutional control prohibiting the future installation of a private groundwater well for use at the site, prohibiting residential use, and, prohibiting use of excavated soil as fill material.

A signed and dated statement that the construction contractor received a copy of the 2008 Phase II ESA will also become a part of the completion report for this RMP.

A copy of the restrictive covenant that is added to the title for as long as contaminants pose an unacceptable risk of harm to human health and the environment will be part of the documentation that the remediation steps have been completed for the subject property. The covenant should ensure that:

- There should not be any soil left exposed on the site the areas identified as having COCs in excess of MBRCA RBTLs.
- Soil removed from the site will not be used as fill dirt; all excavated soil must be treated as a special waste and sent to a permitted MSW landfill.
- The installation of a private potable groundwater well on the site is prohibited.
- The site may only be used for non-residential activities.
- Lawns and mulch areas shall be maintained per specifications.

A completion report documenting the management, engineering and institutional controls with photographs and the chain of title with the restrictive covenant will be provided to the VCP and MoDOT.

5.0 SCHEDULE

The plan will be implemented upon the approval of the Risk Management Plan by MDNR.

6.0 CERTIFICATION

I, Roberta Broeker certify that the following is true for this RMP:

- The worst case accidental release scenario for the process would not reach public receptors; and
- Additional measures to prevent offsite impacts are not necessary.

The undersigned certifies that, to the best of my knowledge, information, and belief, formed after reasonable inquiry, the information submitted is true, accurate, and complete.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

Roberta Broeker

TITLE Chief Financial Officer

ATTEST:

Dana Kausler

SECRETARY TO THE COMMISSION

Asst.

APPROVED AS TO FORM:

Audita Key

COMMISSION COUNSEL

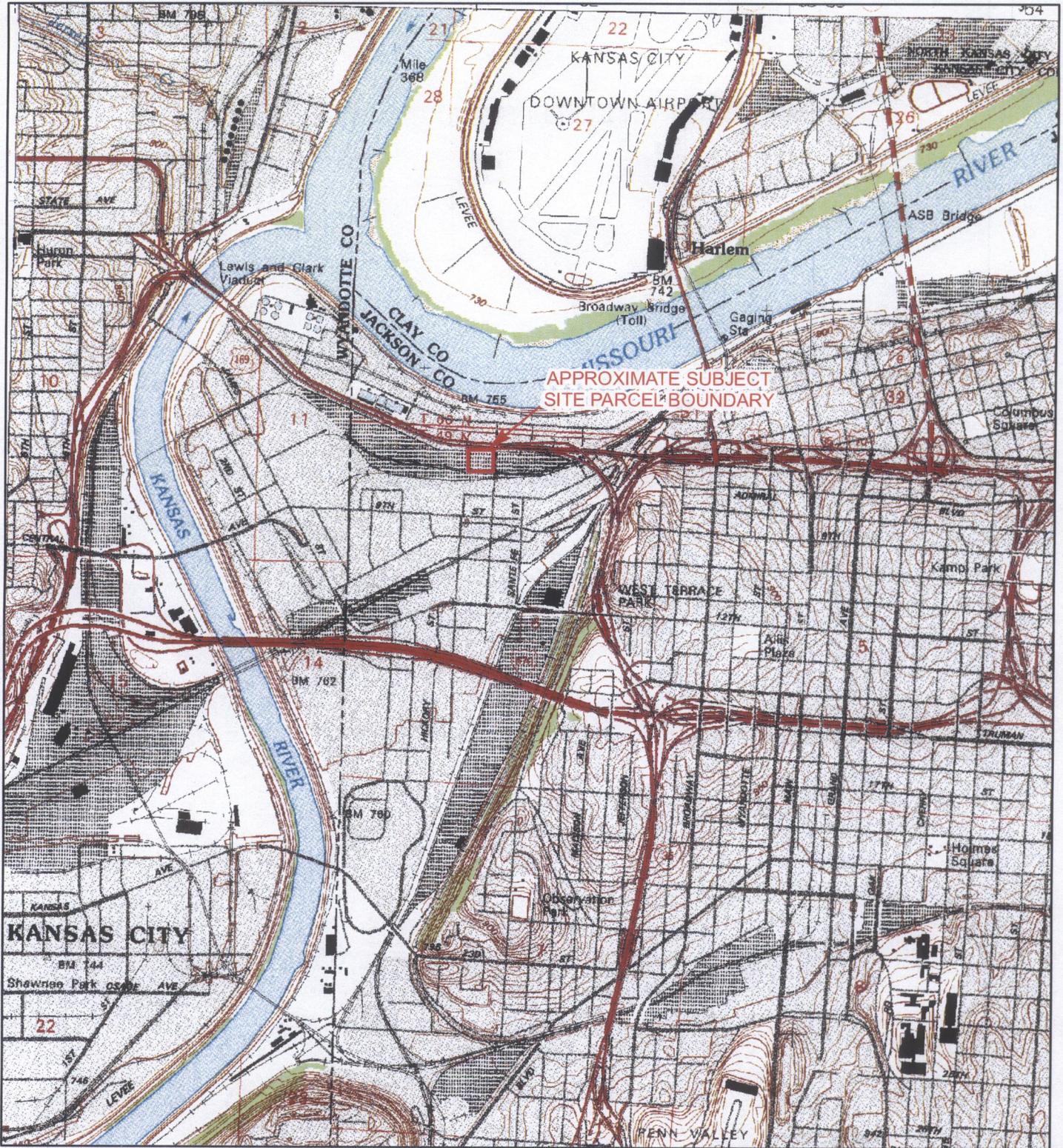


7.0 GENERAL COMMENTS

This Risk Management Plan was prepared for the exclusive use of the City of Kansas City, Missouri and MoDOT for specific application to this project and has been prepared in accordance with generally accepted practices. The analysis, conclusions, and recommendations presented in this report are based upon data evaluated as discussed within this Risk Management Plan. Mustardseed Cultural and Environmental Services, LLC and Aquaterra do not warrant the work of regulatory agencies or other parties, which may have supplied information used in the assimilation of this document.

APPENDIX A

- Figure 1 Site Location
- Figure 2 Building Plan and Soil Boring Comparison
- Figure 3 Typical Section



MODIFIED FROM USGS 7.5-MINUTE
 KANSAS CITY, MO TOPOGRAPHIC
 QUADRANGLE MAP (DATED 1991)



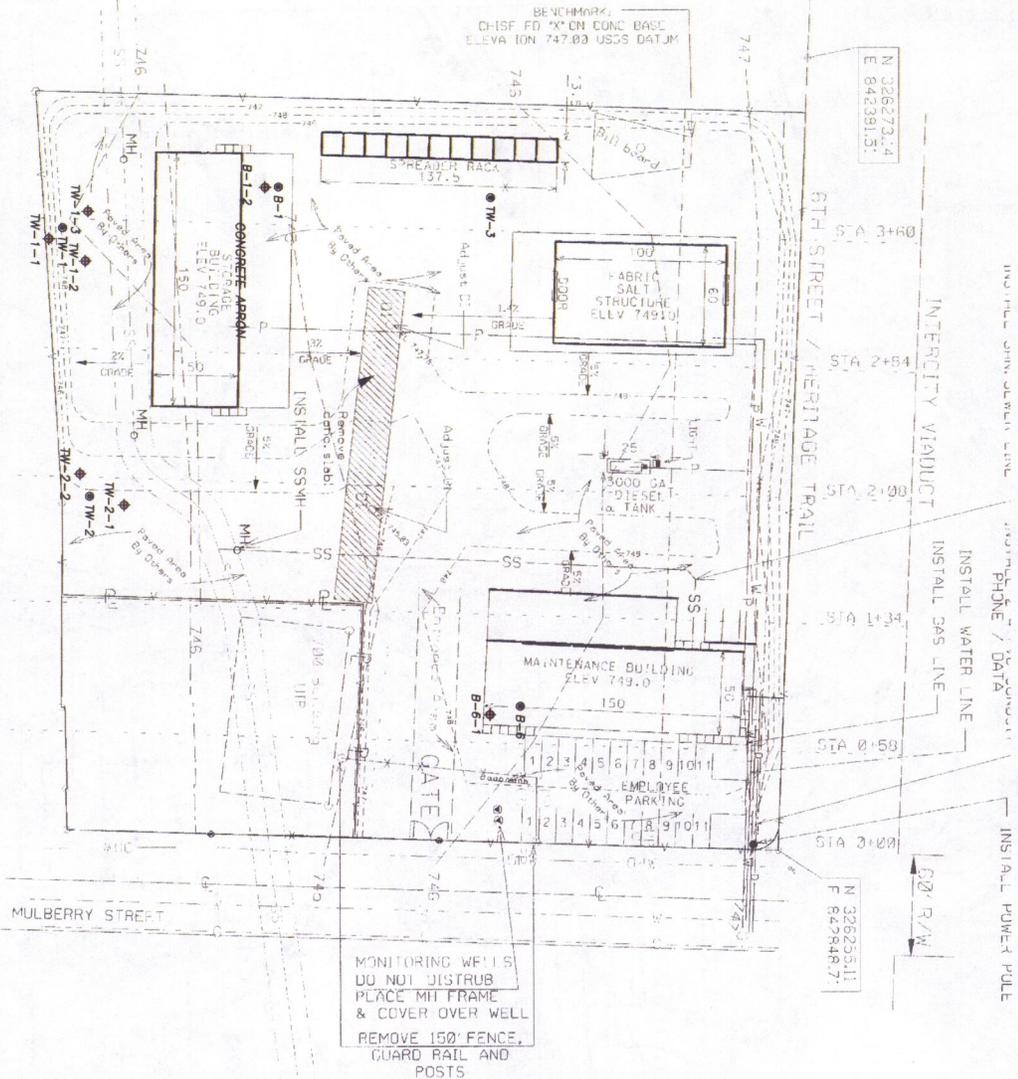
AQUATERRA

ENVIRONMENTAL SOLUTIONS, INC.
 7311 West 130th Street, Suite 100
 Overland Park, Kansas 66213

SITE LOCATION MAP
 TIER 1 RISK ASSESSMENT
 MODOT RELOCATION SITE
 KANSAS CITY, MISSOURI

Project Mgr.	AM	Drawn By	LAM	Designed By	LAM	Project No.	2836.10
Scale	1:24000	Date	7/17/2008	File Name	2836.10_FIG1	Figure No.	1

SOURCE: MISSOURI DEPARTMENT OF TRANSPORTATION
JOB NO. T4414001, SHEET NO. 4, DATED 4/28/09



MONITORING WELLS
DO NOT DISTURB
PLACE MIT FRAME
& COVER OVER WELL
REMOVE 150' FENCE,
GUARD RAIL AND
POSTS

MAIN FENCE	STORAGE	FABRIC SALT	MAINTENANCE	EMPLOYEE PARKING
NW CORNER	NW CORNER	NW CORNER	NW CORNER	NW CORNER
SE CORNER	SE CORNER	SE CORNER	SE CORNER	SE CORNER
SW CORNER	SW CORNER	SW CORNER	SW CORNER	SW CORNER
NE CORNER	NE CORNER	NE CORNER	NE CORNER	NE CORNER
SE CORNER	SE CORNER	SE CORNER	SE CORNER	SE CORNER
SW CORNER	SW CORNER	SW CORNER	SW CORNER	SW CORNER

UTILITY	UTILITY
INSTALL WATER LINE	INSTALL GAS LINE
INSTALL POWER POLE	PHONE / DATA



LEGEND:
 TW-1-3 AQUALTERRA JUNE 2008 SOIL BORING
 TW-1-3 BARR DECEMBER 2007 SOIL BORING/WELL
 B-6

PHASE II ESA SOIL BORING SAMPLE LOCATIONS		CLIENT: CITY OF KANSAS CITY, MISSOURI 700 MULBERRY STREET KANSAS CITY, MISSOURI	AQUATERRA ENVIRONMENTAL SOLUTIONS, INC. 7311 West 130th Street, Suite 100 Overland Park, Kansas 66213	R5 R4 R3 R2 R1 R0	5BY 4BY 3BY 2BY 1BY 0BY
PROJECT NUMBER: 2836.10 SHEET: 1 OF 1	DRAWN BY: JON DESIGNED BY: JON PROJECT MGR: AM DATE: 10/20/08	ELECTRONIC FILE NAME: SOIL BORING SAMPLE LOCATIONS.DWG		REV. DATE BY DESCRIPTION	REV. DATE BY DESCRIPTION

THIS MEDIA SHOULD NOT BE CONSIDERED A CONTRACT DOCUMENT.

DATE PREPARED: 11/03/2008
ROUTE: STATE MO
DISTRICT: SHEET NO.
COUNTY:
JOB NO.: JACKSON
CONTRACT ID: TJ414001
PROJECT NO.:
BRIDGE NO.:

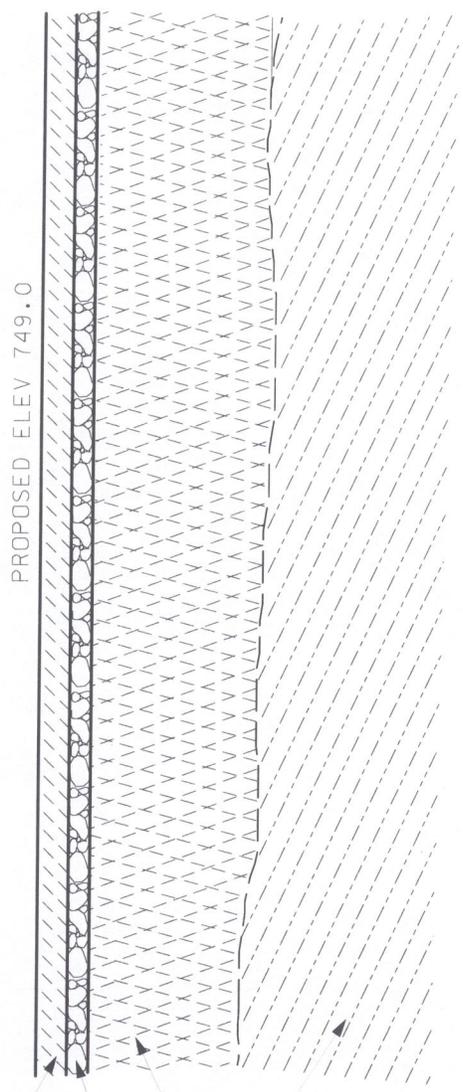
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
JEFFERSON CITY, MO 65102
105 WEST CAPITOL
1-888-ASK-MODOT (1-888-275-6363)



TYPICAL SECTION
650 MULBERRY

5.75" ASPHALT PAVING
4" AGGREGATE BASE
3' TO 4' COMPACTED FILL
EXISTING GROUND



May 1, 2009

Mr. Brian Engel
King Hershey, PC
2345 Grand Boulevard, Suite 2100
Kansas City, MO 64108

**Re: Soil Management Plan
MoDOT Relocation Project
Kansas City, Missouri
Aquaterra Project Number 2836.10**

Dear Mr. Engel:

Enclosed are two copies of the May 2009 revised Soil Management Plan (SMP) for the MoDOT Relocation Site Risk Management Plan (RMP). The language in Section 4.0 Property Use Limitations has been revised to correspond with the language in the Environmental Covenant as prepared by Ms. Christine O'Keefe of the Missouri Department of Natural Resources (MDNR). Additionally, the Revised SMP has been placed on Aquaterra's FTP site to allow for electronic download of the Plan.

If you need any additional information concerning this project, please do not hesitate to contact me at (913) 681-0030.

Sincerely,

Aquaterra Environmental Solutions, Inc.



Anne S. Melia, CHMM
Project Manager

**SOIL MANAGEMENT PLAN
MoDOT RELOCATION SITE
KANSAS CITY, MISSOURI**

Aquaterra Project Number 2836.10

March 2009

Revised May 2009

Prepared for:

**Mr. Andrew Bracker
Brownfields Coordinator
Department of City Planning and Development
City of Kansas City, Missouri
414 E. 12th Street, 16th Floor
Kansas City, Missouri 64106**

AQUATERRA
ENVIRONMENTAL SOLUTIONS, INC.

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LIST OF FIGURES

Figure 1	Site Location Map
Figure 2	Soil Boring Sample Locations
Figure 3	Capping Material Diagram

SOIL MANAGEMENT PLAN
MoDOT Relocation Site
Kansas City, Missouri
March 2009
Revised May 2009

1.0 INTRODUCTION

This Soil Management Plan (SMP) has been prepared to guide the proper handling of soil that is potentially affected by arsenic, lead, and benzo(a)pyrene at the MoDOT Relocation Site at 650 Mulberry Street, Kansas City, Missouri (see Figure 1).

The legal description of the property, as recorded November 7, 2007, as Document No. 2007E0143692 in the public records of Jackson County, Missouri, is as follows:

Tract 1, Certificate of Survey Lot Split of Lot 4, Central Industrial Park, recorded November 7, 2007, as Document No. 2007E0143688, being described as:

Lot 4, Central Industrial Park, a subdivision in Kansas City, Jackson County, Missouri, according to the recorded plat thereof.:

EXCEPT all that part of Lot 4 described as follows: Beginning at the Southeast corner of Lot 4, Central Industrial Park; thence South 88 degrees 38 minutes 23 seconds West, a distance of 24.04 feet; thence North 01 degrees 52 minutes 33 seconds East, a distance of 0.85 feet; thence South 88 degrees 28 minutes 24 seconds West, a distance of 48.08 feet; thence South 01 degrees 52 minutes 33 seconds West, a distance of 1.94 feet; thence North 89 degrees 33 minutes 03 seconds West, a distance of 65.00 feet; thence North 01 degrees 52 minutes 33 seconds East, a distance of 175.00 feet; thence South 87 degrees 47 minutes 24 seconds East, a distance of 136.97 feet to a point on the East line of said Lot 4; thence South 01 degrees 52 minutes 33 seconds West, a distance of 167.27 feet to the point of beginning.

**Soil Management Plan
MoDOT Relocation Site
Kansas City, Missouri
March 2009
Revised May 2009**

At the time of approval and filing of this SMP, soil at this property is known to contain chemicals of concern (COCs) at levels which are not a hazard if the soil remains in place, but could be a long-term exposure hazard if soil is excavated and subsequently mishandled.

This SMP includes:

- (1) Notification of the existence of the affected soil;
- (2) Description of the remedial actions taken;
- (3) Description of property use limitations (including this SMP) related to the remediation;
- (4) Location and depth of the affected soil;
- (5) Conditions or activities covered by the SMP;
- (6) The procedures for materials management during those activities;
- (7) Procedures for sampling and analysis; and
- (8) Site Self-Inspection and Reporting requirements

2.0 REMEDIAL ACTION SUMMARY

The Missouri Department of Natural Resources (MDNR) accepted this site into the Brownfields/Voluntary Cleanup Program (BVCP) on April 11, 2008. The following reports relate to the investigation and remediation activities at this site:

- Soil Investigation at 700 Mulberry, Tetra Tech, July 23, 2007.
- Phase I Environmental Site Assessment, MoDOT/Mulberry Property, 700 Mulberry Street, Barr Engineering Co., December 2007.
- Phase II Environmental Site Assessment, MoDOT/Mulberry Property, 700 Mulberry Street, Barr Engineering Co., January 2008.
- Phase II Environmental Site Assessment, MoDOT Relocation Site, 700 Mulberry Street, Aquaterra Environmental Solutions, Inc, July 2008.

Investigative soil sampling conducted at the MoDOT Relocation Site has indicated that historical industrial activities in the area have contributed to elevated concentrations of arsenic, lead and benzo(a)pyrene above acceptable Risk-Based Target Levels (RBTLs) for non-residential use of the site. The elevated concentrations of these parameters are not unexpected relative to the nature of historical activities previously conducted on the property. Based on the proposed continued use of the site for non-residential activities, it is not anticipated that the concentrations of arsenic, lead, and benzo(a)pyrene in the area soils require mitigation other than to ensure that areas of soil contamination are covered by an impervious surface such as asphalt or building. Additionally, as soil COC concentrations were below construction worker RBTLs, with the exception of one sample location, shown on Figure 2 (TW-1; lead 1,210 milligrams per kilogram), exposure will not present a significant hazard to construction workers during redevelopment activities required to prepare the site for use by MoDOT.

Therefore, the site has been deemed safe for its intended uses (i.e., non-residential) without removing soil, provided direct exposure can be eliminated by capping. However, the soil could be a long-term exposure hazard for humans if the cap is removed and/or soil is excavated and subsequently mishandled. Note that the soil at the site is NOT acutely toxic with respect to short-term exposure; concentrations of arsenic and lead only exceed those deemed safe for many years of long-term exposure.

3.0 STANDARDS EXCEEDED – REASON FOR MANAGEMENT PLAN

Surface soil at the site exceeds standards for:

- Single-Family Residential use;
- Non-Residential Use (Commercial/Industrial) – unless protected by an engineered barrier (pavement or buildings) to cut off direct exposure;
- Clean Fill – Missouri statutory definition;
- With the exception of one location noted above in Section 2.0, soil at the site DOES NOT exceed current standards for Construction Worker exposure; there is no significant risk to a worker performing temporary excavation and handling of the soil; no special protective equipment is required.

This determination is based upon current guidance applicable at the time of this filing; Missouri Risk-Based Corrective Action (MBRCA) Technical Guidance, Tables B-11, B-12, and B-13, June 2006. Relevant parameters for the contaminants of concern at the site are summarized on Table A below.

Note that standards may change over time, COCs may degrade naturally, or further remedial actions may occur following execution of this SMP, which could render this SMP inaccurate and/or obsolete. Current standards at the time an excavation is to be performed should be checked, and soil sampling may be desired to verify concentrations.

Table A
 Chemicals of Concern for Site Soils
 Concentrations in milligrams per kilogram (mg/kg)
 MBRCA Guidance – 2006

Chemical of Concern (COC)	Non-Residential Direct Exposure to Surface Soil Target Concentration ¹	Construction Worker Target Concentration ²	Highest Concentration in Contaminated Area ³	Average Concentration in Contaminated Area ³
Arsenic	15.9	654	1,200	88.5
Lead	660	NA	1,100	297.7
Benzo(a) Pyrene	2.11	119	2.84	0.836

Soil Management Plan
MoDOT Relocation Site
Kansas City, Missouri
March 2009
Revised May 2009

- ¹ Note this category of standard only applies to surface soil not capped by an exposure barrier. Soil at the site is capped as of the time of filing of this SMP.
- ² Based on construction worker in direct contact with soil for a number of days.
- ³ Subject to change with natural attenuation or further removal/remediation of soil. As approved by MDNR-B/VCP, average soil concentrations calculated based on sample soil concentrations detected above laboratory reporting limits during the Barr Engineering Phase II Investigation, January 2008 and Aquaterra Phase II Investigation, July 2008.

Based on the soil boring locations from previous investigations at the site which are shown on Figures 2 and 3, the locations that are critical not to disturb are TW-1 and TW-2-1. TW-1 was a soil boring collected during the Barr Phase II ESA conducted in December 2007. TW-1 indicated an arsenic concentration of 1,210 mg/kg, above the MBRCA construction worker RBTL. TW-2-1 was a soil boring collected during the Aquaterra Phase II ESA which indicated an exceedance of the toxic characteristic leaching procedure (TCLP) regulatory level for lead.

4.0 PROPERTY USE LIMITATIONS

The following activity and use limitations have been placed on the use of the property by means of an Environmental Covenant filed in the property chain of title. The Covenant runs with the land in perpetuity unless or until changes are approved by MDNR and the owner of record at the time the changes are proposed, or by a court of competent jurisdiction. The activity and use limitations are as follows:

A. Non-residential Land Use with Engineered Controls: The Property currently meets the Department standards for restricted use (Non-residential Land Use) and, based on reports on file at the Department offices in Jefferson City, Missouri, the chemicals present pose no significant present or future risk to human health or the environment based on restricted use of the Property. No further response action for the Property is required by the Department as long as the Property is not to be used for Residential Land Use or other purposes constituting unrestricted use. The Property is protective for restricted use as long as the concrete apron of the storage building/Maintenance building floor are maintained to prevent exposure to lead and arsenic. The asphalt paved area (Figure 3) on the southern property line is acting as a protective cap ("asphalt cap") to prevent disturbance of the chemicals of concern (arsenic and lead). Three to four feet of clean fill has been placed over contaminated soil with asphalt top, to prevent disturbance of the chemicals of concern (arsenic and lead) The Property shall not be used for purposes other than commercial or industrial uses. If any person desires in the future to use the Property for residential or other purposes constituting unrestricted use, the Department must be notified 120 days in advance and further analyses and, as necessary, response actions will be necessary prior to such use. The Property may not be used in a manner such that the definition of Residential Land Use would define the use of the site.

B. Groundwater Use Limitation: The groundwater beneath the Property contains chemicals at concentrations exceeding applicable cleanup standards. The owner and operator of the Property shall prevent: use of and exposure to the groundwater; any artificial penetration of the groundwater-bearing unit(s) containing chemicals which could result in cross-contamination of clean groundwater-bearing units; installation of any new groundwater wells on the Property, except those used for investigative purposes; use of groundwater for drinking or other domestic purposes and the use of groundwater for purposes other than domestic purposes; release of groundwater to surface water bodies, whether such release is the result of human activities or is naturally occurring. Should a release of contaminated groundwater occur, the owner must take action to contain and properly dispose of such groundwater.

C. Inspection and Maintenance of Engineered Controls: The concrete apron of the storage building and the Maintenance Building floor will be a protective cap for the soil metals (arsenic and lead) at the site.

D. Disturbance of Soil Permitted Under Approved Soil Management Plan: Soil at the Property contains chemicals, as identified in reports on file at the Department offices in Jefferson City, Missouri, at concentrations exceeding the Department's cleanup standards for Non-Residential Land use in the areas shown on Figure 2. Therefore, soil at the Property in the areas shown on Figure 2, shall not be excavated or otherwise disturbed in any manner unless under the provisions of the Department-approved Soil Management Plan.

5.0 LOCATION AND DEPTH OF AFFECTED SOIL

Affected soil is assumed to cover the noted areas of the site as noted on Figure 2, to a depth of 1-foot deep, immediately below pavement/structures and any gravel backfill. This plan applies to all soils in affected areas noted on Figure 2 from 0 to 1-foot below grade, PLUS any artificial fill deeper than 1-foot below grade. These locations include B-1, B-1-2, B-6, B-6-1, TW-1-1, TW-1-2, TW-1-3 TW-2-1, TW-1, and TW-2, and TW-3.

6.0 ACTIVITIES COVERED UNDER THIS PLAN

Disturbance or removal of the affected soil must be done following the requirements in this plan. Breaching or disturbance of the engineered soil cap (pavement and structures) must be done following the requirements in this plan. Unless the affected soil is completely remediated during the project, the engineered control must be replaced to original specifications. Original specifications are provided on Figure 3.

7.0 MATERIAL MANAGEMENT PROCEDURES

This Plan provides for a tiered approach to soil management, documentation and record-keeping. Minor disturbance requires the lowest response level, while major disturbance of the site requires planning of the work, MDNR approval, and documentation.

Soil not exceeding non-residential use levels may be disturbed and replaced onsite without special considerations. Any soil not replaced onsite should be managed as a waste. MDNR's Clean Fill policies, in addition to RCRA regulations regarding hazardous and special wastes, should be consulted if soil is to be moved or disposed. If in doubt as to what regulations apply, consult an environmental professional or the MDNR.

If soils exceeding non-residential use target levels will be disturbed to a significant extent such as during a major construction project (See Table B), contractors or others responsible for subsurface construction at the property will prepare a site-specific and project-specific plan that will specify the excavation, stockpiling, testing, handling, and disposal procedures. Affected activities may include site grading, construction of building foundations, construction and maintenance of site utilities, and construction of parking and driveway areas. As outlined in Table B, MDNR will review the site specific plans pertaining to work involving contaminated soil. MDNR will review site-specific plans for minor construction projects requiring a lower level of record-keeping and MDNR approval.

Protection of human health and the environment should be a primary concern during construction at the site. Construction work at the site can most likely be accomplished in personal protective equipment (PPE) typically worn for non-hazardous waste construction activities. However, it is the responsibility of each construction contractor to review the available information to determine the health and safety requirements for their workers.

TABLE B
Record-Keeping and Approval for
Post-Closure Disturbance
Applies to Capped Areas and Residual Contaminated Areas
Where Concentrations Exceed Non-Residential Use and/or Construction Worker Target
Levels

Type of Construction or Excavation	Examples	Project Plan Requirements	MDNR Pre-Approval	Documentation
Shallow or Minor	Fence Posts Sign Posts Landscaping	None	Not required	Log; subject to review upon request. Include in annual inspection report to MDNR
Intermediate	Underground Utility Lines & Utility Pole Installation, Removal, Replacement Parking Surface (Cap) Maintenance	Project Plan for excavation, stockpiling, testing, handling, disposal	Not required	Log; subject to review upon request. Include in annual inspection report to MDNR
Deep or Major Construction	Building Demolition New Construction: Foundations, Basements Disturbance of engineered controls – impervious cap or subsurface barriers, etc.	Project Plan for excavation, stockpiling, testing, handling, disposal	MDNR Plan review and approval required	Include in annual inspection report to MDNR Submit project final report to MDNR

Material management procedures will follow these general guidelines:

1. The following choices are available when soil is excavated **from the areas and depths described in Section 5.0**:
 - a. Replace the soil at its original location and depth;
 - b. Dispose of the soil offsite (i.e. in a permitted landfill) as a waste;
 - c. Stockpile and test the soil to determine its COC content and evaluate.
2. Soil from the controlled area(s) may not be removed from the site and used as Clean Fill on other sites without testing to verify that it meets Clean Fill requirements.
3. If soil is to be disposed of in a landfill, a Special Waste Permit will be obtained from the landfill prior to removal of excavated soils from the site.
4. Soil that meets MDNR standards for "clean fill" may be used as clean fill on- or off-site. No soils excavated from this site [or particular areas as specified] shall be considered "clean fill" for offsite use without prior testing and confirmation.
5. Soil that meets current MDNR risk-based standards for unrestricted (residential) use is subject to unrestricted use on-site.
6. Soil exceeding unrestricted (residential) target levels but not exceeding non-residential target levels may be disturbed and replaced onsite without special considerations.
7. Soils exceeding non-residential target levels must be replaced at its original location and depth, or disposed of in a permitted landfill.

8.0 SAMPLING AND ANALYSIS

Recommended sample collection procedures for sampling stockpiled soils will consist of composite sampling procedures in accordance with generally accepted practices for sampling environmental media:

- Collect a minimum of one sample per 100 cubic yards of excavated material using clean, decontaminated sampling tools. Analyze the samples for the COCs shown in Table A.
- For non-volatile COCs, collect one composite sample comprising five aliquots from different locations in the pile.
- For volatile COCs, collect a grab sample from single the most visually impacted or odoriferous area of the stockpiled soil.
- Compare the results to applicable state risk-based standards if reusing, or disposal criteria for the disposal facility.

Soil Management Plan
MoDOT Relocation Site
Kansas City, Missouri
March 2009
Revised May 2009

9.0 REFERENCES

Aquaterra Environmental Solutions, Inc., July 2008, Phase II Environmental Site Assessment, MoDOT Relocation Site, 700 Mulberry Street Site.

Barr Engineering Co., December 2007, Phase I Environmental Site Assessment, MoDOT/Mulberry Property, 700 Mulberry Street.

Barr Engineering Co., January 2008, Phase II Environmental Site Assessment, MoDOT/Mulberry Property, 700 Mulberry Street.

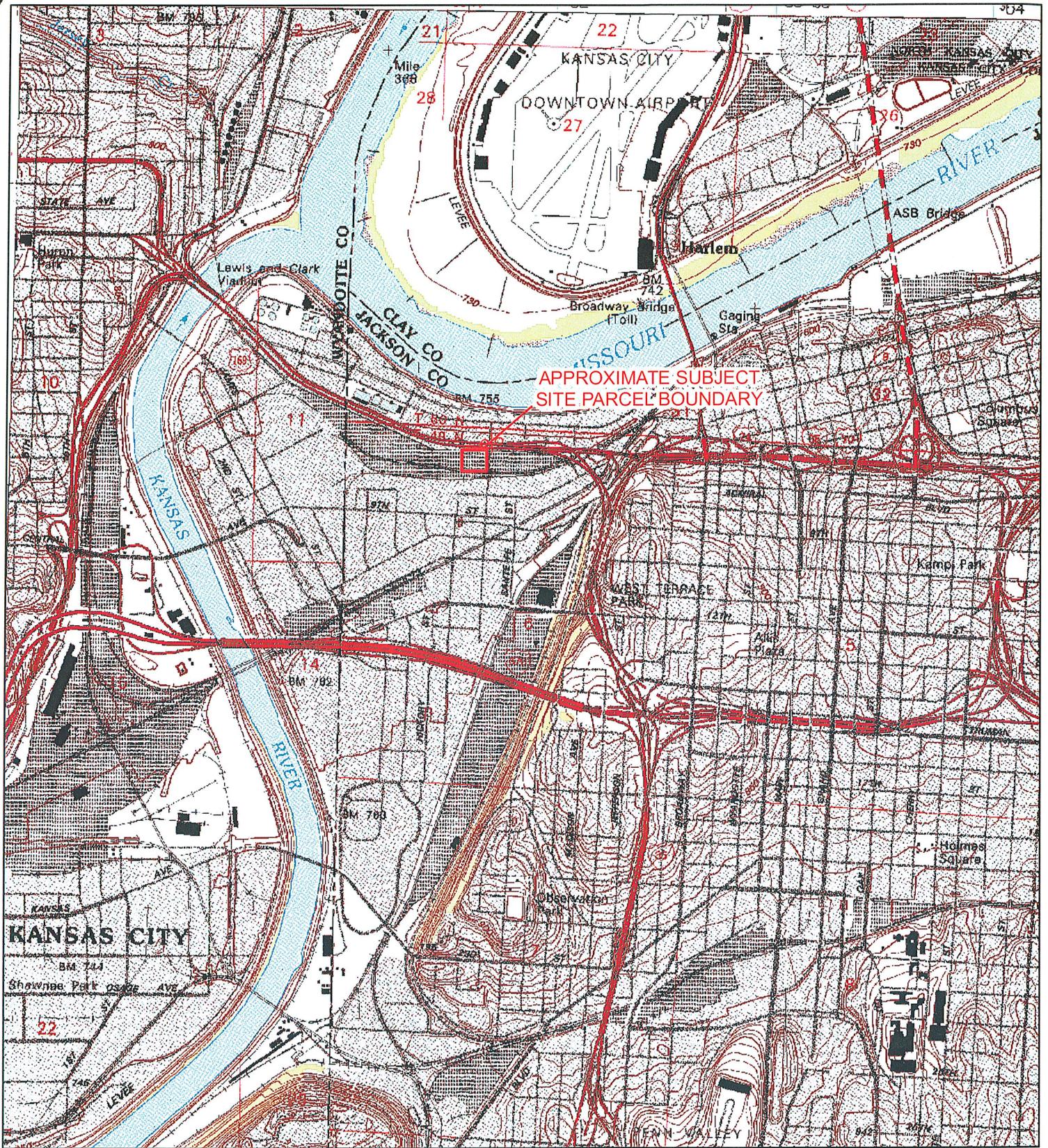
MDNR, 2006, Missouri Risk-Based Corrective Action Guidance, Missouri Department of Natural Resources, Division of Environmental Quality.

Tetra Tech, July 23, 2007, Soil Investigation at 700 Mulberry.

10.0 GENERAL COMMENTS

This Soil Management Plan was prepared for the exclusive use of the client for specific application to this project and has been prepared in accordance with generally accepted practices. The analysis, conclusions, and recommendations presented in this report are based upon data evaluated as discussed within this report. Aquaterra does not warrant the work of regulatory agencies or other parties, which may have supplied information used in the assimilation of this document.

FIGURES



MODIFIED FROM USGS 7.5-MINUTE
 KANSAS CITY, MO TOPOGRAPHIC
 QUADRANGLE MAP (DATED 1991)



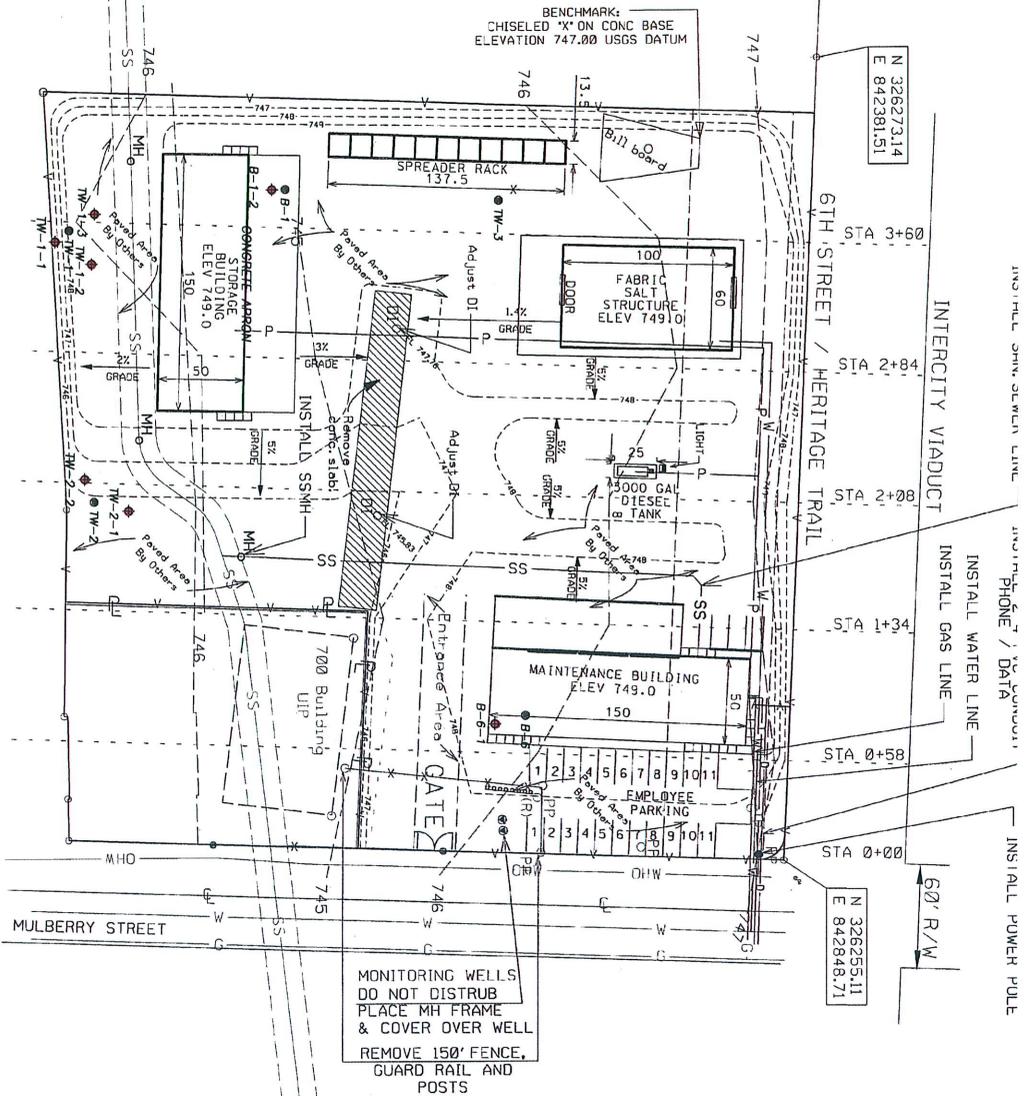
AQUATERRA

ENVIRONMENTAL SOLUTIONS, INC.
 7311 West 130th Street, Suite 100
 Overland Park, Kansas 66213

SITE LOCATION MAP
 TIER 1 RISK ASSESSMENT
 MODOT RELOCATION SITE
 KANSAS CITY, MISSOURI

Project Mgr.	AM	Drawn By	LAM	Designed By	LAM	Project No.	2836.10
Scale	1:24000	Date	7/17/2008	File Name	2836.10_FIG1	Figure No.	1

SOURCE: MISSOURI DEPARTMENT OF TRANSPORTATION
JOB NO. T2414001, SHEET NO. 4, DATED 4/28/09



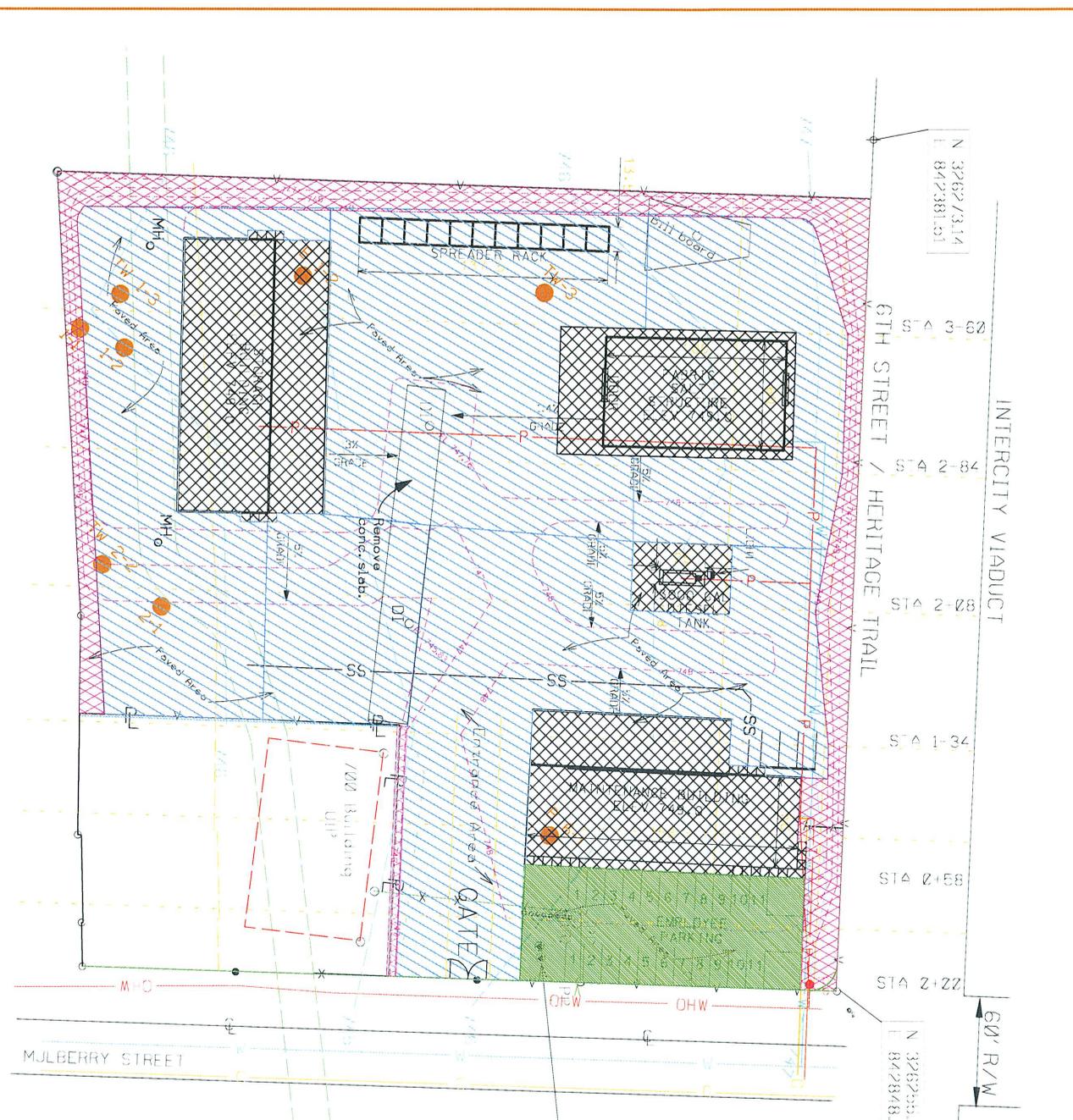
MAINTENANCE BUILDING	FABRIC SALT BUILDING	STORAGE BUILDING	SPREADER NE CORNER	SPREADER SW CORNER
NORTHING: 326210.78	NORTHING: 326212.40	NORTHING: 325927.56	NORTHING: 326111.52	NORTHING: 325974.12
EASTING: 842732.47	EASTING: 842446.94	EASTING: 842446.94	EASTING: 842446.94	EASTING: 842446.94
NE CORNER: 326230.24	NE CORNER: 326213.20	NE CORNER: 325930.52	NE CORNER: 326111.52	NE CORNER: 325974.12
SE CORNER: 326680.24	SE CORNER: 326113.21	SE CORNER: 325980.53	SE CORNER: 325974.12	SE CORNER: 325974.12
SW CORNER: 326080.79	SW CORNER: 326112.42	SW CORNER: 325877.57	SW CORNER: 325974.12	SW CORNER: 325974.12

Drop Inlet (W)	Drop Inlet (E)
N 326213.14	N 326018.85
E 842381.51	E 842647.01
N 326255.11	N 325942.59
E 842846.71	E 842821.55

LEGEND:
 TW-1-3 AQUATERRA, JUNE 2008 SOIL BORING
 B-6 BARR DECEMBER 2007 SOIL BORING/WELL



PHASE II ESA SOIL BORING SAMPLE LOCATIONS		CITY OF KANSAS CITY, MISSOURI 700 MULBERRY STREET KANSAS CITY, MISSOURI		AQUATERRA ENVIRONMENTAL SOLUTIONS, INC. 7311 West 130th Street, Suite 100 Overland Park, Kansas 66213	
DRAWN BY: JON DESIGNED BY: JON PROJECT MARK: AM	SHEET: 1 OF 1 PROJECT NUMBER: 2636.10	DATE: 10/20/08 SOIL BORING SAMPLE LOCATIONS.DWG	REV. 1 DATE:	REV. 2 DATE:	REV. 3 DATE:



MONITORING WELLS
DO NOT DISTURB

TW 1-3
APPROXIMATE LOCATION
OF SITE (BORR SITE & NO.)



650 MULBERRY
(A REPLACEMENT FOR THE
4TH AND CHERRY SITE)

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MDOT (1-888-275-6636)

DATE	DESCRIPTION
3/6/09	ADD 40' N/O 700 MULBERRY E

NO.	DATE	BY	DESCRIPTION
05/14/2009			

THIS SHEET SHALL BE
CONSIDERED VOID
UNLESS THE
SIGNATURES
AND DATES
ARE PRESENT