AGENDA FOR THE WEST HAYMARKET JOINT PUBLIC AGENCY (JPA) TO BE HELD FRIDAY JANUARY 7, 2011 AT 1:00 P.M.

CITY-COUNTY BUILDING
555 S. 10TH STREET
CITY COUNCIL CHAMBERS ROOM 112
LINCOLN, NE 68508

1. Introductions and Notice of Open Meetings Law Posted by Door (Chair Snyder)

2. Public Comment and Time Limit Notification Announcement (Chair Snyder)

   Individuals from the audience will be given a total of 5 minutes to speak on specific items listed on today's agenda. Those testifying should identify themselves for the official record.

3. Approval of the minutes from the JPA meeting held December 16, 2010 (Chair Snyder)
   - (Staff recommendation is for the JPA Board to approve the minutes as presented)

4. Bill No. WH 10-23 Resolution to Approve a Contract between General Excavating and the West Haymarket JPA for Arena Site Diesel Fuel Plume Remediation. (Miki Esposito)
   - Public Comment
   - (Staff recommendation is for the JPA Board to approve the resolution)

5. Bill No. WH 11-02 Resolution to Approve the Purchase Order for Tank Removal and Closure by General Excavating (Miki Esposito)
   - Public Comment
   - (Staff Recommendation is for the JPA Board to approve the resolution)

6. Bill No. WH 11-03 Resolution to Approve Amendment No. 2 to the Haymarket Infrastructure Design Contract (Roger Figard)
   - Public Comment
   - (Staff Recommendation is for the JPA Board to approve the resolution)

7. Bill No. WH 11-06 Resolution to approve Amendment No. 1 to the Consultant Agreement between SAIC Energy, Environment & Infrastructure, LLC (formerly Benham Companies LLC) and the West Haymarket Joint Public Agency (Rick Peo)
   - Public Comment
   - (Staff Recommendation is for the JPA Board to approve the resolution)

8. Bill No. WH 11-07 Resolution authorizing AON Risk Solutions on behalf of the West Haymarket Joint Public Agency to bind the Owners Liability Interest coverage being offered by Lexington Insurance Company (including Excess Coverage Layer 1) and Liberty Insurance Underwriters Inc. for Excess Coverage - Layer 2 (Dan Marvin)

9. Bill No. WH 11-08 Resolution to Approve Modifications to the Contract with DLR Group, Inc. for the design of the Arena and Other Arena Improvements (Rick Peo)
    - Public Comment
    - (Staff Recommendation is for the JPA Board to approve the resolution)

10. Set Next Meeting Date: Wednesday January 26, 2011 3:00 P.M. (County/City Building Room 303)

11. Motion to Adjourn

WEST HAYMARKET JOINT PUBLIC AGENCY (JPA)
Board Meeting
December 16, 2010

Meeting Began At: 3:00 P.M.

Meeting Ended At: 4:10 P.M.

Members Present: Chris Beutler, Tim Clare, Jayne Snyder

Item 1 - Introductions and Notice of Open Meetings Law Posted by Door

Chair Snyder opened the meeting and advised that the open meetings law is in effect and is posted in the back of the room.

Item 2 – Public Comment and Time Limit Notification

Snyder stated that individuals from the audience will be given a total of five minutes to speak on specific items listed on today's agenda. Those testifying should identify themselves for the official record and sign in.

Item 3 – Approval of the minutes from the JPA meeting held November 18, 2010

Snyder asked for any corrections or changes to the minutes. Hearing none, Clare motioned for approval of the minutes. Beutler seconded the motion. Motion carried 3-0.

Item 4 – Approval of Payment Registers

Don Herz brought forward two payment registers for the Board's approval. The first report has been changed to coincide with the JPA meetings and will be run on a monthly basis. It contains three disbursements totaling $51,000. One of these is to CSL for $41,000 for work done in September, October and November. The other report contains Public Works engineering costs that have been charged to the program for about $8,500. Public Works Engineering Services charges their time to the project they are working on and those costs are paid through an interoffice transaction. They were not included in the check registers for the past couple of months because they are not paid with an actual check. Herz will provide a similar report for the Board's approval as Engineering Services continues to work on projects.

Clare clarified that from now on Herz will provide both the check register and the electronic payment. Herz affirmed that he will provide both and they are also reflected on the disbursement report.

Snyder noted that the Public Works Engineering Services charges are from September through the end of November and asked if there was anything before that. Herz noted that they started to bill against the projects on September 1.

Snyder asked for any comments from the public. Hearing none, Clare made a motion to approve the payment registers. Beutler seconded the motion. Motion carried 3-0.

Item 5 – Review of the November 2010 Expenditure Reports

Don Herz noted that since the last meeting he has been looking at enhancing the information that is provided in the reports. On the report the Board will see a column added called encumbrances, which will represent any commitments that have been approved for which a payment has not been made. For instance, the CSL contract is for about $1.5 million and if there had not been any payments made, the entire amount would have shown as an encumbrance. As payments are made the amount of encumbrance will be reduced and converted to payments. The purpose is to give the Board more information regarding the available balance. Herz has discussed the possibility of breaking this information into two pieces, the engineering/soft costs and the construction costs. This report would then be a summation of those.

Herz and his staff have also looked at taking the expenditure report and putting it on the website to allow individuals to drill down against any expenditure and see the detail. Currently someone would have to review each monthly report to determine the total payments made on a particular project. Herz also plans to record the approved contracts on the report and will look at providing supplemental information so the Board will know where it stands with respect to the budget. Next month, Benham will start taking over more of this reporting and provide additional information regarding the progress of the project.

Clare was thankful and appreciative of Herz's efforts. The Board wants to make sure the expenditures they are approving are in line with what the budget shows. The additional information will be very helpful. Clare asked for Herz's observations regarding how things are progressing financially within the budget. Herz has not seen anything that causes him any concern. With the contracts that the Board has approved and the additional contracts that need to be completed, the JPA should still be well under the engineering/soft cost budget of about $40 million. It is difficult to say anything about the construction budget until construction contracts start coming in and the Construction Manager provides a guaranteed maximum price.

Snyder asked if all of this information is online. Herz pointed out that from the City's homepage there is a link to the West Haymarket JPA website. The website contains all of the agendas, minutes and attachments from every meeting.

Snyder asked for any comments from the public. No one came forward.

Item 6 – Review and Approval of the Amended JPA Operating Budget

Herz pointed out that when the Operating Budget was put together, the debt payments for the interest or note payments were not included. He would like to get the Board's concurrence with the amounts on the amended budget. The amended budget includes two modifications. The first is for $6.7 million for interest payments to be made on the $200 million bonds through August 31, 2011. This will include a payment made in December and another payment to be made in six months. The other modification is a $2 million note principle payment for the line of credit that was taken out until the JPA had permanent financing. Adequate notice was made when the bonds were issued and the Board approved those transactions. Herz would like the Operating Budget to reflect those payments.

Clare inquired if the principle repayment was for the $50 million line of credit that was issued of which only $2 million was utilized. Herz said that is correct, the line of credit was in the event the JPA needed to close on some property before the first bond issue went through. There were some operating expenses that occurred before the bond issue closed so an initial draw of $2 million was made. The line of credit is now closed.

Snyder asked Herz to clarify the sources of funds that are part of the amended budget. Herz explained that when the $200 million was issued, some of the proceeds were set aside to pay the interest. In addition to that, the federal government is providing a 35% subsidy payment of the interest due to the Build America Bonds that were issued. The first subsidy payment of $2.4 million has been received. Therefore, the sources of funds are from the capitalized interest fund and federal subsidy payment.

Snyder asked for any comments from the public. Hearing none, Beutler made a motion to approve the payment registers. Clare seconded the motion. Motion carried 3-0.

Item 7 – Bill No. WH 10-19 Resolution to Approve a Letter of Agreement Between the West Haymarket Joint Public Agency and District Energy

Rick Peo came forward and noted that this item was on the agenda and discussed at the last meeting. The Letter of Agreement provides preliminary funding in the amount of $2 million for the DEC to prepare development plans, specifications and feasibility study costs for a plant to heat and cool the arena and other facilities in the West Haymarket project area. This is the first of many steps to come up with a cooling system for the area. In the future, the decision would have to be made if this facility will be owned by the DEC or the JPA. The ownership will determine if this advanced funding will be reimbursed back to the JPA or if it will become part of the JPA's development costs.

Clare thought the $2 million would be more like a loan. Peo stated it could be a loan if the DEC ultimately becomes the owner of the plant. If the JPA becomes the owner it would be part of the JPA's costs, however, that decision has not been made. The studies are ongoing and the final recommendation will primarily be based on the financial advantage to the JPA or DEC.

Beutler asked what the estimated cost of the plant will be and if it was originally identified as a cost that was intended to be paid by the JPA. Peo though the cost would be in the neighborhood of $12 million. Don Herz added that he had originally shown that the JPA would pay for this through the arena operating costs. There may be a financial advantage for the JPA to finance the plant because the JPA will either pay for it through a capital cost or by reimbursing the DEC through energy usage. As more information becomes available about the construction costs a decision can be made if this would fit in the construction budget or if it should be paid as originally budgeted.

Beutler inquired of the Board executed this document, does the JPA retain the right to insist that the capitalization be done by the DEC. Peo answered that the way the Letter of Agreement is drafted; the funding would primarily be a contribution to the DEC. The presentation, resolution and testimony at the DEC Board meeting stated that the ownership of the plant will be determined at a later date. There will have to be a Memorandum of Understanding and a final agreement between the JPA and DEC before the plant could go forward and be constructed.

Beutler asked if a DEC representative was present to answer questions. Doug Bantam, Lincoln Electric System, came forward for the DEC. Beutler thanked Bantam for being present and asked if the DEC considered the decision to capitalize by the JPA or DEC a decision of the JPA. Bantam answered that they are willing to do it either way.

Clare questioned if the $2 million is for part of the initial design work, would the total cost of the facility then be $14 million. Bantam observed that part of the reason it is being structured this way is because they have the same issue as the arena as far as not knowing what the actual capital costs will be. Once the design is completed and out for bids they will know what the capital cost is and can determine what the fixed operating expenses will be to the JPA. The ownership decision can then be made at that point. Snyder asked who would be making that decision. Bantam stated that the DEC is fine either way because there will be a recovery of the capital cost either through an operating rate or through the JPA paying the capital expense. The decision would probably be based on whichever has the least cost to the JPA. Snyder requested some statistical information to show the advantages of owning the plant and what kind of profit or loss the JPA would have.

Clare observed that there is a reference in the budget to $4 million for DEC and a utility budget of $4.2 million. He inquired if those numbers were separate from this $2 million. Jim Martin, Program Manager, came forward and stated that the amounts in the budget are for the distribution of the energy that will be out in the street.

Snyder asked for any comments from the public. Hearing none, Beutler made a motion to approve the resolution. Clare seconded the motion. Motion carried 3-0.

Item 8 – Bill No. WH 10-23 Resolution to Approve a Contract between General Excavating and the West Haymarket JPA for Arena Site Diesel Fuel Plume Remediation

Miki Esposito reported that this is a resolution to approve the contract for the petroleum remediation or the Title 200 work. If approved, work would begin in January and probably continue until the end of February. This is necessary environmental remediation in order to get a No Further Action Letter from DEQ. The contract amount is approximately $830,000 and a reimbursement application would be submitted to DEQ to get the money back.

Beutler pointed out that he did not have the contract in his book, only a page referencing a website. Snyder and Clare had the same. Esposito reported that the contract was about 169 pages with the important parts in the first 14 pages containing the Notice to Bidders and contract documents for signatures. The rest of the contract has addendums and appendixes that are relevant documents to the contractor. If approved by the JPA, a Notice to Proceed would go out next week to General Excavating. Beutler asked how many bidders there were. Esposito was not certain but indicated that General Excavating was the lowest responsible bidder.

Snyder asked what would happen if this item was delayed until the next meeting on January 26, 2011. Esposito explained that the monitoring period would delay work until February. Performance monitoring has to be done to make sure the remedial action work is done. There can't be development on the site for two years after the monitoring is complete.

Clare suggested holding a special meeting for the purpose of reviewing this contract. Beutler asked how long this contract could be delayed without slowing the project. Esposito felt there was enough flexibility to delay until the first of the year.

Clare made a motion to delay action on this item until the special meeting. Beutler seconded the motion. Motion approved 3-0.

Snyder advised that the public would be notified when the special meeting is set. If there are any other items that come up, they can be brought before the Board as well to speed things along.

Item 9 – Bill No. WH 10-24 Resolution to Approve Change Order No. 1 to the Contract with TJ Osborn for the West Haymarket Utility Relocation Project

Roger Figard informed the Board that at the time this contract was put out for bid, they were not certain of the insurance requirements that Burlington Northern was going to require. The City bid the project and assigned it to the JPA. Burlington Northern increased their request on the insurance coverage to $5 and $10 million. The $17,000 is the additional cost for TJ Osborn to secure that coverage. TJ Osborn is working on their property to relocate the sanitary sewer.

Snyder asked for any comments from the public. Hearing none, Beutler made a motion to approve the resolution. Clare seconded the motion. Motion carried 3-0.

Item 10 – Bill No. WH 10-25 Resolution to Accept the Programming Report from DLR

Dan Marvin stated that DLR has put together this initial phase programming report. Benham has had meetings with the University and other stakeholders to discuss the different sized rooms for the various aspects of the building. This is an initial first step to what the ultimate size of the spaces in the building will be. DLR has asked that we start narrowing down the parameters so they have direction on what to do with the building. This resolution would start that process.

Beutler asked legal counsel to come forward to discuss the nature of the document and why the Board needs to approve it. He wanted to know what liability it creates if something in the plan changes. Rod Confer explained that the consultant probably wants this document as protection. If they begin the design with an understanding of what the project consists of and then we come back with different requirements they can use this as a source document to be paid more or to say they are not liable for any delays. Beutler pointed out that there are things in the document not to be resolved at this point, therefore, he did not feel comfortable taking a position on unresolved matters if they may be used to claim additional expense.

Jim Martin pointed out that this is common practice in a project like this. The report is a conceptual document that tries to define the original assumptions to get the process started. There is no guarantee that any changes to the document would result in additional fees. Beutler asked what the ramifications would be if this was delayed. Martin did not think there would be any ramifications. Confer added that it could lead to some uncertainties for DLR and may slow them down in their work if they don't know exactly where we want them to go. Marvin added that the ultimate goal is to flow this information to the Board and get direction to keep the process moving forward.

Snyder observed that part of the problem is that the Board members have not been involved in the programming meetings. They do not have the background information and have not been briefed on the processes that lead to the creation of the document. Martin was willing to arrange for DLR or members of the team to come forward and brief the Board.

Beutler inquired if sustainability has been considered with the design. Martin indicated that the team has been talking about sustainable design and will be giving the Board estimates of the various levels of sustainability. Those items that are at a higher level will cost more. Beutler asked if there had been discussion about how to keep the costs under control so that it fits into Don Herz's cost estimates. Martin explained that the team started with a basic assumption such as a 16,000 seat arena with the capability to expand. In a sports arena the immediate focus is on the seating bowl because it determines what the foundation system looks like. They then design to a budget, adding the other aspects such as suites and bathrooms later on. The CMR is brought in early so they can be estimating costs as the design is taking place.

Beutler was appreciative of the speed and level of detail the team has provided. He would like a little more time to absorb the information and think about a few questions he has. Snyder agreed. Martin reminded the Board that although the report looks very specific, it is still at a conceptual level.

Item 11 – Bill No. WH 10-26 Resolution to Approve Amendment No. 1 to the Haymarket Infrastructure Design Contract

Roger Figard explained that this is a resolution to add design services for two more pieces of infrastructure to the contract approved at the last Board meeting. This is not a change order or an overage; it is an amendment to add additional design pieces. Figard distributed two documents to the Board. The first is a map showing the different pieces of civil infrastructure surrounding the West Haymarket. There are 17 different activities that need to be done to complete the project. The second document is a listing of the 17 pieces that will be tasked out by the consultant for a separate fee. When the Haymarket infrastructure team was selected it did not make sense and was not possible to have all 17 activities scoped out at that time. Therefore, the separate activities will be scoped out and negotiated throughout the project.

Today the Board is being asked to add the design services for the streetscape design (A7) and the Amtrak station design (A14). The streetscape design will be done by Clark Enersen for just under $406,000. The anticipated completion date is September 30, 2013 as each piece will be added to the project as it is put under construction. The Amtrak station and platform design will be completed by Sinclair Hille for just under $237,000. The goal is to go out for bids on August 1, 2011, with a target construction date of October 1, 2011, and completion date of June 15, 2012. These two pieces will take the original contract from $2.7 million to $3.35 million.

Figard reiterated that this is not a request for additional money for the earlier work; it is adding additional tasks that are needed to move ahead. He will be returning to future Board meetings with additional amendments to move ahead with different pieces.

Clare expressed his appreciation for the explanation. He asked if the expenditures that will be added are part of the budget that Don Herz put together. Herz stated that all of the costs in addition to the amount the Board initially approved are within the engineering/soft cost budget.

Beutler inquired about the improvements shown on Sun Valley Boulevard and if all of the changes will be in place before the State changes the right-of-way. Roger informed the Board that the improvements to Sun Valley Boulevard that the State of Nebraska has proposed from West O Street to 1st and Cornhusker have been shelved and taken out of their funding program. If the State completes the project at some point in the future, the improvements the JPA makes along Charleston and the new bridge access will be compatible. Beutler asked if there were parts of Sun Valley Boulevard that would be abandoned with the State's improvements. Figard stated that the portion over I-180 and towards 10th Street would be abandoned under the State's plan. Due to that, the improvements would be minimal but are necessary to support traffic coming out of the parking area.

Beutler asked if the improvements on Sun Valley near O Street and Cornhusker Highway are being 100% funded by the JPA. Figard noted that the decision to make those improvements has not been made. The JPA boundary map has not been amended to include those locations. They are shown to note that those improvements need to be done but there has not been a commitment by the JPA to do them. They are open for further discussion and negotiations. Beutler questioned if those pieces are covered under the original cost estimates. Figard answered that

they are not which is why they will not bring them to the Board at this time. Snyder inquired if the State would be interested in helping the JPA make those improvements. Figard indicated that they continue to have dialog with the State but it will be an uphill battle to get them to find the revenue within the three year timeframe. There have been discussions about getting credit for any funds the JPA expends on those pieces. Figard will come back for discussions with the Board when he has more information.

Snyder asked for any comments from the public. Hearing none, Beutler made a motion to approve the resolution. Clare seconded the motion. Motion carried 3-0.

Item 12 – Set Next Meeting Date: Wednesday January 26, 2011 3:00 P.M. (County/City Building Room 303)

The next JPA meeting will be announced later, due to the special meeting. After that, the next meeting will be held on Wednesday January 26, 2011 at 3:00 P.M.

Clare made a motion to adjourn. Beutler seconded the motion. Motion carried 3-0.

Item 13 – Motion to Adjourn

Meeting adjourned at 4:10.

Prepared by: Melissa Ramos-Lammli, Engineering Services

WH 10-23 Introduce: 12-16-10

RESOLUTION NO. WH- _____

BE IT RESOLVED by the Board of Representatives of the West Haymarket Joint Public Agency:

That the Contract Agreement between the West Haymarket Joint Public Agency and General Excavating, Inc. for West Haymarket Arena Site Diesel Fuel Plume Remediation, pursuant to Bid No. 10-230, is hereby approved is hereby accepted and approved and the Chairperson of the West Haymarket Joint Public Agency Board of Representatives is hereby authorized to execute said Agreement on behalf of the West Haymarket Joint Public Agency.

Adopted this ___ day of _____, 2010.

Introduced by:

_____

Approved as to Form & Legality:

West Haymarket Joint Public Agency
Board of Representatives

_____
Legal Counsel for
West Haymarket Joint Public Agency

_____
Jayne Snyder, Chair

_____
Tim Clare

_____
Chris Beutler

Advertise 3 times
Friday, November 5, 2010
Friday, November 12, 2010
Friday, November 19, 2010

NOTICE TO BIDDERS
SPECIFICATION NO. 10-230

Sealed bids will be received by the JPA **BY ELECTRONIC BID PROCESS** until: **12:00 pm, Wednesday, December 1, 2010** for providing the following:

West Haymarket Joint Public Agency
West Haymarket Arena Site Diesel Fuel Plume Remediation
Project No. 870601
Bid No. 10-230

Bidders must be registered on the City/County's E-Bid site in order to respond to the above Bid. To Register go to: lincoln.ne.gov (type: e-bid - in search box, then click "Supplier Registration")

Questions concerning this bid process may be directed to City/County Purchasing at (402) 441-8314 or (402) 441-7410 or *vmejer@lincoln.ne.gov.* No telephone inquiries will be accepted by any JPA representative.

City of Lincoln/Lancaster County (Lincoln Purchasing)
Supplier Response

Bid Information

Bid Creator	Kim Wilnes Senior Office Asst.
Email	KWilnes@lincoln.ne.gov
Phone	1 (402) 441-7417
Fax	1 (402) 441-6513
Bid Number	10-230 Addendum 4
Title	West Haymarket Arena Site Diesel Fuel Plume Remediation, Project 870601
Bid Type	Bid
Issue Date	11/05/2010
Close Date	12/1/2010 12:00:00 PM CST
Need by Date	

Contact Information

Address	Purchasing\City & County 440 S. 8th St. Lincoln, NE 68508
Contact	Vince Mejer Purchasing Agent
Department	
Building	
Floor/Room	
Telephone	1 (402) 441-8314
Fax	1 (402) 441-6513
Email	vmejer@lincoln.ne.gov

Ship to Information

Address
Contact
Department
Building
Floor/Room
Telephone
Fax
Email

Supplier Information

Company	General Excavating
Address	6701 Cornhusker Hwy Lincoln, NE 68507
Contact	
Department	
Building	
Floor/Room	
Telephone	1 (402) 467 1627
Fax	1 (402) 467 2084
Email	
Submitted	12/1/2010 8:59:30 AM CST
Total	$829,747.20

Signature _____

Supplier Notes

Bid Notes

If you need assistance in preparing your bid, there are several options.

1) Click the "Help" button in the upper right hand corner of any screen; 2) Contact our office for a training session in Purchasing or assistance over the phone; 3) View the PowerPoint presentation at http://www.lincoln.ne.gov/city/finance/purch/spec/bidinst.ppt

Attached Addendum No. 1 - Proposal and Exhibit BB
"See bid attachments for Addendum No. 2 Information.
No. 3 Information.
No. 4 Information."

Bid Messages

Please review the following and respond where necessary

#	Name	Note	Response
1	Instructions to Bidders	I acknowledge reading and understanding the Instructions to Bidders.	Yes
2	Insurance Requirements	I acknowledge reading and understanding the Insurance Requirements.	Yes
3	Specifications	I acknowledge reading and understanding the Specifications.	Yes
4	Sample Contract	I acknowledge reading and understanding the sample contract.	Yes
5	Form of Bonds	I acknowledge that the Performance Bond and Payment Bond in the amount of 100% of the Contract amount will be required with the signed contract upon award of this job.	Yes
6	Tax Exempt Certificate Forms	Materials being purchased in this bid are tax exempt and unit prices are reflected as such. A Purchasing Agent Appointment form and a Exempt Sales Certificate form shall be issued with contract documents. (Note: State Tax Law does not provide for sales tax exemption for proprietary functions for government, thereby Water projects are taxable.)	Yes
7	Bid Bond Submission - City	I acknowledge and understand that my bid will not be considered unless a bid bond or certified check in the sum of five percent (5%) of the total amount of the bid is made payable to the order of the City Treasurer as a guarantee of good faith prior to the bid opening. The bid security may be scanned and attached to the 'Response Attachments' section of your response or faxed to the Purchasing Office (402)441-6513. The original bond/check must then be received in the Purchasing Office, 440 S. 8th Street, Ste. 200, Lincoln, NE 68508 within three (3) days of bid closing. YOU MUST INDICATE YOUR METHOD OF BID BOND SUBMISSION IN BOX TO RIGHT!	I have scanned and attached my bid bond.
8	Project Dates	The Contractor agrees that the Work in this Contract shall begin as soon after the Notice to Proceed as is necessary for the Contractor to complete the Work no later than February 15, 2011.	YES
9	Employee Class Act EO	I acknowledge reading and understanding the Employee Classification Act, Executive Order 83319.	Yes
10	Employee Class Act Affidavit	I acknowledge if awarded the contract I will abide by the law, notorize and attach the Employee Classification Act Affidavit to my contract.	Yes

11	Contractor Must Provide References in Bidders Response Section	Contractor must provide (4) four references for projects similar in nature to the work required in this project. This shall be attached in the Response Attachment Section Each reference must include the following: Owner: Street Address: City: State: Zip: Name Owners Representative: Phone: Project Name and/or Number: Contract Amount: Completion Date:	YES
12	Equipment List	Contractor must provide a list of equipment intended for use on this project. This shall be attached in the Response Attachment Section.	Yes
13	Contact	Name of person submitting this bid:	Ken Imig
14	Electronic Signature	Please check here for your electronic signature.	Yes
15	Page 2	Please note that there is a page 2 of Attributes.	Yes
16	Attachment A - BNSF Erosion and Sedenent Control Plan	I acknowledge reading and understanding Attachment A.	Yes
17	Attachment B - Remedial Action Plan	I acknowledge reading and understanding Attachment B.	Yes
18	Attachment C - BNSF 2010 Specifications Section 04100	I acknowledge reading and understanding Attachment C.	Yes
19	Attachment D - Water Treatment Equipment from NDEQ Inventory	I acknowledge reading and understanding attachment D.	Yes
20	Appendix B - Temporary Shoring Requirements	I acknowledge reading and understanding Appendix B.	Yes
21	Exhibit C and M - Contractor Requirements	I acknowledge reading and understanding Exhibit C and M.	Yes
22	Exhibit C-1-A Contractor's Right of Entry	I acknowledge reading and understanding Exhibit C-1-A.	Yes
23	Exhibit C-1-B Contractor's Right of Entry	I acknowledge reading and understanding Exhibit C-1-B.	Yes
24	Figure 1 - Topographic Map	I acknowledge reading and understanding Figure 1.	Yes
25	Figure 2 - Site Location Map	I acknowledge reading and understanding Figure 2.	Yes
26	Figure 3 - Site Excavation Map	I acknowledge reading and understanding Figure 3.	Yes
27	Figure 4 - Cross Section Diagram	I acknowledge reading and understanding Figure 4.	Yes
28	Figure 5 - Erosion Control Map	I acknowledge reading and understanding Figure 5.	Yes
29	Figure 6 - Santiary Sewer Reconstruct	I acknowledge reading and understanding Figure 6.	Yes
30	Agreement to Addendum No. 1	Respondent hereby certifies that the change set forth in this addendum has been incorporated in their proposal and is part of their bid. Reason: See Bid Attachments section for Addendum information.	Yes
31	Agreement to Addendum No. 2	Respondent hereby certifies that the change set forth in this addendum has been incorporated in their proposal and is part of their bid. Reason: See Bid Attachments section for Addendum information.	Yes

32	Agreement to Addendum No. 3	Respondent hereby certifies that the change set forth in this addendum has been incorporated in their proposal and is part of their bid. Reason: See Bid Attachments section for Addendum information.	Yes
33	Agreement to Addendum No. 4	Respondent hereby certifies that the change set forth in this addendum has been incorporated in their proposal and is part of their bid. Reason: See Bid Attachments section for Addendum information.	Yes

Line Items

#	Qty	UOM	Description	Response
1	1	Lump Sum	Total Lump Sum of Bid	$829,747.20

Item Notes: Fill out the itemized Excel spreadsheet attached below. Attach completed spreadsheet on the 'Response Attachments' of your response.

Supplier Notes:

Response Total: $829,747.20

TETRA Technologies, Inc.
25025 I-45 North
The Woodlands
Texas
77380
Linden Price
(281) 364-2237
TETRA Micronutrients Corrective Measures Implementation
$485,545.77
October 14, 2010

State of Nebraska – Department of Roads
1500 Highway 2
Lincoln
Nebraska
68509
Belinda Fowler
(402) 479-4656
Superior NDOR Site Remediation, UG# 040392-PH-1800
$242,372.00
October 31, 2005

Nucor, Bar Mill – Norfolk
2911 East Nucor Road
Norfolk
Nebraska
68702
Tomas Miller
(402) 644-0200
Nucor Steel NN 2 Site Remediation
$682,028.00
December 5, 2003

Ak-Sar-Ben Future Trust c/o HDR Engineering, Inc.
8404 Indian Hills Drive
Omaha
Nebraska
68114
Michael J. Conzett
(402) 399-1286
Aksarben Remediation Excavation and Disposal

$99,206.51
May 26, 2007

EQUIPMENT LIST:

Side dump trucks, truck and pup dump trucks, track excavators, rubber-tired hoe, and NDEQ provided equipment

10-230

GENERAL EXCAVATING, INC.

Line No.	Pay Item No.	Description	Quantity	Unit	Unit Price	Amount
01	00.2000	Const Staking	1.0000	LS	$1,650.00	$1,650.00
02	00.4000	Mobilization	1.0000	LS	$10,150.00	$10,150.00
03	02.0010	Excavation	14,000.0000	CY	$4.70	$65,800.00
04	50.0010	Imported Soil Replacement and Compaction	8,000.0000	CY	$12.00	$96,000.00
05	50.0010	On-Site Soil Replacement and Compaction	6,000.0000	CY	$8.40	$50,400.00
06	09.0004	Construction Fencing Installation, Maintenance and Removal	950.0000	LF	$7.40	$7,030.00
07	15.0001	Traffic Control Plan	1.0000	LS	$1,290.00	$1,290.00
08	32.0040	Synthetic Fabric Silt Fence Installation	950.0000	LF	$3.10	$2,945.00
09	32.0050	Synthetic Fabric Silt Fence Maintenance and Removal	950.0000	LF	$1.90	$1,805.00
10	50.0005	Replace Sanitary Sewer Pipe, 10"	209.0000	LF	$66.30	$13,856.70
11	50.0001	Flexible Coupling	4.0000	EA	$187.00	$748.00
12	50.0001	Well Abandonment	14.0000	EA	$618.00	$8,652.00
13	50.0015	Dewatering	1.0000	LS	$30,300.00	$30,300.00
14	50.0065	Recovered Product/Waste Disposal	10,000.0000	GA	$2.00	$20,000.00
15	50.0045	Temporary Shoring at Railroad Tracks	3,200.0000	SF	$45.60	$145,920.00
16	50.0045	Temporary Shoring at Manhole and Sewer Pipes	1,440.0000	SF	$43.40	$62,496.00
17	50.0015	Bypass Pumping	1.0000	LS	$10,554.00	$10,554.00
18	50.0005	Remove Sanitary Sewer Pipes	209.0000	LF	$28.50	$5,956.50
19	50.0035	Soil Hauling and Disposal	12,000.0000	TON	$18.40	$220,800.00
20	50.0035	Concrete and Debris Removal and Disposal	2,800.0000	TON	$18.60	$52,080.00
21	50.0015	Stockpile Management	1.0000	LS	$21,314.00	$21,314.00
						$829,747.20

WEST HAYMARKET JOINT PUBLIC AGENCY(JPA)

WEST HAYMARKET ARENA SITE DIESEL FUEL PLUME REMEDIATION
BID NO 10-230
PROJECT 870601

CONTRACT AGREEMENT

THIS CONTRACT, made and entered into this 2ND day of DECEMBER, 2010 by and

between GENERAL EXCAVATING, INC.

hereinafter called the Contractor and the WEST HAYMARKET JOINT PUBLIC AGENCY, a **municipal corporation**, hereinafter called JPA.

WITNESS, that:

WHEREAS, JPA has caused to be prepared, in accordance with law, Specifications, Plans, and other Contract Documents for the Work herein described, and has approved and adopted said documents and has caused to be published an advertisement for and in connection with said Work, to wit:

WEST HAYMARKET ARENA SITE DIESEL FUEL PLUME REMEDIATION ; and

WHEREAS, the Contractor, in response to such advertisement, has submitted to the JPA, in the manner and at the time specified, a sealed Proposal in accordance with the terms of said advertisement; and,

WHEREAS, JPA, in the manner prescribed by law, has publicly advertised, opened, examined, and canvassed the Proposals submitted in response to such advertisement, and as a result of such canvass has determined and declared the Contractor to be the lowest and best bidder for the said Work for the sum or sums named in the Contractor's Proposal, a copy thereof being attached to and made a part of this Contract.

NOW, THEREFORE, in consideration of the sums to be paid to the Contractor and the agreements herein contained, the Contractor and JPA have agreed and hereby agree as follows:

CONTRACT AGREEMENT

The Contractor agrees to (a) furnish all tools, equipment, supplies, superintendence, transportation, and other construction accessories, services, and facilities; (b) furnish all materials, supplies, and equipment specified to be incorporated into and form a permanent part of the complete Work; (c) provide and perform all necessary labor in a substantial and workmanlike manner and in accordance with the provisions of the Contract Documents; and (d) execute, construct, and complete all Work included in and covered by JPA's official award of this Contract to the Contractor, such award being based on the acceptance by JPA of the Contractor's Proposal, or part thereto, as follows:

ALL OF THE PROPOSAL SUBMITTED BY GENERAL EXCAVATING, INC., IN CONNECTION WITH THE WEST HAYMARKET JOINT PUBLIC AGNECY & THE CITY OF LINCOLN FOR THE WEST MAYMARKET ARENA SITE DIESEL FUEL PLUME REMEDIATION PROJECT 870601 DATED DECEMBER 1, 2010

JPA agrees to pay to the Contractor for the performance of the work embraced in this Contract, and the Contractor agrees to accept as full compensation therefore, the sums and prices for all Work covered by and included in the Contract award and designated above, payment thereof to be made in the manner provided in the General Provisions and Requirements.

COMPLETION DATE – The Contractor agrees that the Work in this Contract shall begin as soon after the Notice to Proceed as is necessary for the Contractor to complete the Work within the number of calendar days allowed and prior to the stated completion date. The completion date shall be no later than FEBRUARY 15, 2011.

GUARANTEE – The guarantee periods as stated in Section IX, Paragraph A of the City of Lincoln Standard Specifications for Municipal Construction shall not be applicable to this project.

CONTRACT DOCUMENTS – The Contract Documents comprise the Contract, and consist of the following:

1. City of Lincoln Standard Specifications for Municipal Construction (2006 Edition)
2. Proposal Forms
3. Contract Agreement Forms
4. Commentary to Accompany Construction Bonds
5. Construction Performance Bond
6. Construction Payment Bond
7. Special Provisions
8. Lincoln Standard Plans 2010
9. Standard Specifications for Highway Construction Nebraska Department of Roads (2007 Edition)
10. Plan and Profile Detail Sheets
11. Any executed Addenda or Change Orders
12. Any portion of this project used for **providing water service**, such as pipe for water mains, **are not tax exempt and are subject to sales and use tax.**
13. The **remainder** of this project, including items exclusively used for providing fire protection, such as fire hydrants, **are exempt from sales and use taxes.**
14. Sales tax exempt forms will be provided upon award of bid.

CONTRACT AGREEMENT

These Contract Agreements, together with the other Contract Documents herein above mentioned, form this Contract, and they are as fully a part of the Contract as if hereto attached or herein repeated.

The Contractor and JPA hereby agree that all the terms and conditions of this Contract shall, by these presents, be binding upon themselves, and their heirs, administrators, executors, legal and personal representatives, successors, and assigns.

IN WITNESS WHEREOF, the Contractor and JPA do hereby execute this Contract.

EXECUTION BY JPA

ATTEST:

BY: _____
JPA CHAIR

_____ (Seal)
JPA

Dated: _____

JOINT PUBLIC AGENCY

EXECUTION BY CONTRACTOR

IF A CORPORATION

General Excavating

ATTEST:

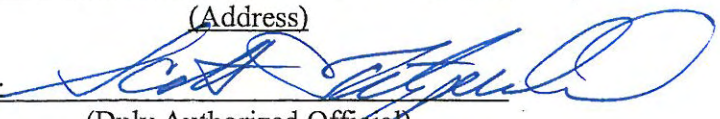
Crystal R. Watkins (Seal)

IF OTHER TYPE ORGANIZATION

IF AN INDIVIDUAL

General Excavating
(Name of Corporation)

6701 Cornhusker Hwy, Lincoln, NE 68507
(Address)

By: 
(Duly Authorized Official)

President
(Legal Title of Official)

(Name and Type of Organization)

(Address)

(Member)

(Member)

(Member)

By:
(Name)

Commentary to Accompany Construction Bonds

A. GENERAL INFORMATION

There are two types of construction bonds that are required by statutes for public work in many jurisdictions and are widely used for other projects as well.

- Construction Performance Bond
- Construction Payment Bond

The Construction Performance Bond is an instrument that is used to assure the availability of funds to complete the construction.

The Construction Payment Bond is an instrument that is used to assure the availability of sufficient funds to pay for labor, materials and equipment used in the construction. For public work the Construction Payment Bond provides rights of recovery for workers and suppliers similar to their rights under the mechanics lien laws applying to private work.

The objective underlying the rewriting of construction bond forms was to make them more understandable and to provide guidance to users. The intention was to define the rights and responsibilities of the parties, without changing the traditional rights and responsibilities that have been decided by the courts. The new bond forms provide helpful guidance regarding time periods for various notices and actions and clarify the extent of available remedies.

The concept of a pre-default meeting has been incorporated into the Construction Performance Bond. All of the participants favored early and informal resolution of the problems that may precipitate a default, but some Surety companies were reluctant to participate in pre-default meetings absent specific authorization in the bond form.

The responsibilities of the Owner and the options available to the Surety when a default occurs are set forth in the Construction Performance Bond. Procedures for making a claim under the Construction Payment Bond are set forth in the form.

EJCDC recommends the use of two separate bonds rather than a combined form. Normally the amount of each bond is 100 percent of the contract amount. The bonds have different purposes and are separate and distinct obligations of the Surety. The Surety Association reports that the usual practice is to charge a single premium for both bonds, and there is no reduction in premium for using a combined form or for issuing one bond without the other.

B. COMPLETING THE FORMS

Bonds have important legal consequences; consultation with an attorney and a bond specialist is encouraged with respect to federal, state, and local laws applicable to bonds and with respect to completing or modifying the bond forms.

Both bond forms have a similar format and the information to be filled in is ordinarily the same on both bonds. If modification is necessary, the modifications may be different.

The bond forms are prepared for execution by the Contractor and the Surety. Evidence of authority to bind the Surety is usually provided in the form of a power of attorney designating the agent who is authorized to sign on behalf of the Surety. The power of attorney should be filed with the signed bonds.

Each bond must be executed separately since they cover separate and distinct obligations.

Preferably the bond date should be the same date as the contract, but in no case should the bond date precede the date of contract.

EMPLOYEE CLASSIFICATION ACT AFFIDAVIT

For the purposes of complying with THE NEBRASKA EMPLOYEE CLASSIFICATION ACT, I, General Excavating, herein below known as the Contractor, state under oath and swear as follows:

1. Each individual performing services for the Contractor is properly classified under the Employee Classification Act.

2.The Contractor has completed a federal I-9 immigration form and has such form on file for each employee performing services.

3. The Contractor has complied with Neb Rev Stat 4-114.

4. The Contractor has no reasonable basis to believe that any individual performing services for the Contractor is an undocumented worker.

5. The Contractor is not barred from contracting with the state or any political subdivision pursuant to section 12 of this Act.

6. As the Contractor I understand that pursuant to the Employee Classification Act a violation of the Act by a contractor is grounds for rescission of the contract by the City. I understand that pursuant to the Act any contractor who knowingly provides a false affidavit may be subject to criminal penalties and upon a second or subsequent violation shall be barred from contracting with the City for a period of three years after the date of discovery of the falsehood.

I hereby affirm and swear that the statements and information provided on this affidavit are true, complete and accurate. The undersigned person does hereby agree and represent that he or she is legally capable to sign this affidavit and to lawfully bind the Contractor to this affidavit.

PRINT NAME: Scott D. Fitzgerald
(First, Middle, Last)

SIGNATURE: _____

TITLE: President

State of Nebraska)
) ss.
County of Lancaster)

This affidavit was signed and sworn to before me, the undersigned Notary Public, on this 7th day of December, 20 10.

CRYSTAL R. WHITAKER
State of Nebraska-General Notary
My Commission Expires
April 24, 2012

Crystal R. Whitaker
Notary Public

Client#: 33138 GENER6

ACORD™ CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 12/07/2010

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER INSPRO Insurance P.O. Box 6847 Lincoln, NE 68506 402 483-4500	CONTACT NAME: Tonya Wagner PHONE (A/C, No, Ext): 402-483-4500 FAX (A/C, No): 402-483-7977 E-MAIL ADDRESS: twagner@insproins.com PRODUCER CUSTOMER ID #:
INSURED General Excavating Company 6701 Cornhusker Hwy Lincoln, NE 68507	INSURER(S) AFFORDING COVERAGE — NAIC # INSURER A : Employers Mutual Insurance — 21415 INSURER B : Endurance American Specialty In INSURER C : RSUI Indemnity Company INSURER D : INSURER E : INSURER F :

COVERAGES CERTIFICATE NUMBER: REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	GENERAL LIABILITY X COMMERCIAL GENERAL LIABILITY CLAIMS-MADE X OCCUR X PD Ded:10,000 GEN'L AGGREGATE LIMIT APPLIES PER: POLICY X PRO-JECT LOC			1X4477411	07/01/2010	07/01/2011	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	$1,000,000 $100,000 $5,000 $1,000,000 $2,000,000 $2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO ALL OWNED AUTOS SCHEDULED AUTOS X HIRED AUTOS X NON-OWNED AUTOS			1X4477411	07/01/2010	07/01/2011	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	$1,000,000 $ $ $
A	X UMBRELLA LIAB X OCCUR EXCESS LIAB CLAIMS-MADE DEDUCTIBLE X RETENTION $ 10000			1X4477411	07/01/2010	07/01/2011	EACH OCCURRENCE AGGREGATE	$10,000,000 $10,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N: N If yes, describe under DESCRIPTION OF OPERATIONS below	N/A		2X0761111	07/01/2010	07/01/2011	X WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	$500,000 $500,000 $500,000
B	Pollution Liab			ECC10100160902	07/01/2010	07/01/2011	Limit: $1,000,000	
C	Excess Umbrella			NHA053205	07/01/2010	07/01/2011	Limit: $10,000,000	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

Joint Public Agency is additional insured in regards to General Liability.

Job: West Haymarket Arena Site Diesel Fuel Plume Remediation, Project 870601, Bid No 10-230

CERTIFICATE HOLDER

Joint Public Agency
531 Westgate Blvd
Lincoln, NE 68528

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

James D. Gibbard

TSN

ORIGINAL BOND # 2 OF 3

Project Name: West Haymarket Arena Site Diesel Fuel Plume Remediation Bid No 10-230

Project No.: 870601

Bond No.: 114118

PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, The City of Lincoln, Nebraska ("The City") has awarded to General Excavating 6701 Cornhusker Hwy, Lincoln, NE 68507 as Principal a contract dated the 2nd day of December, 20 10, (the "Contract"), which Contract is by this reference made a part hereof, for the work described as follows:

West Haymarket Arena Site Diesel Fuel Plume Remediation

AND WHEREAS, Principal is required to furnish a bond in connection with the Contract, guaranteeing the faithful performance thereof;

NOW, THEREFORE, we, the undersigned Principal and Universal Surety Company, as Surety, are held and firmly bound unto The City in the sum of Eight Hundred Twenty-Nine Thousand Seven Hundred Forty-Seven & 20/100-- dollars ($829,747.20), to be paid to The City or its successory and assigns; for which payment, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal, or its heirs, executors, administrators, successors, or assigns approved by The City, shall promptly and faithfully perform the covenants, conditions, and agreements of the Contract during the original term and any extensions thereof as may be granted by The City, with or without notice to Surety, and during the period of any guarantees or warranties required under the Contract, and shall also promptly and faithfully perform all the covenants, conditions, and agreements of any alteration of the Contract made as therein provided, notice of which alterations to Surety being hereby waived, on Principal's part to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify, defend, protect, and hold harmless The City as stipulated in the Contract, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and effect.

No extension of time, change, alteration, modification, or addition to the Contract, or of the work required thereunder, shall release or exonerate Surety on this bond or in any way affect the obligation of this bond; and Surety does hereby waive notice of any such extension of time, change, alteration, modification, or addition.

Whenever Principal shall be and declared by The City to be in default under the Contract, Surety shall promptly remedy the default, or shall promptly:

1. Undertake through its agents or independent contractors, reasonably acceptable to The City, to complete the Contract in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including without limitation, all obligations with respect to warranties, guarantees, and the payment of liquidated damages, or, at Surety's election, or, if required by The City,

Project Name: West Haymarket Arena Site Diesel Fuel Plume Remediation Bid No 10-230

Project No.: 870601

2. Obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and, upon determination by The City of the lowest responsible bidder, arrange for a contract between such bidder and The City and make available as work progresses (even though there should be a default or a succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the balance of the Contract Sum, and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees, and the payment of liquidated damages; but, in any event, Surety's total obligations hereunder shall not exceed the amount set forth in the third paragraph hereof. The term "balance of the Contract Sum," as used in this paragraph, shall mean the total amount payable by The City to the Principal under the Contract and any amendments thereto, less the amount paid by The City to Principal.

Surety's obligations hereunder are independent of the obligations of any other surety for the performance of the Contract, and suit may be brought against Surety and such other sureties, jointly and severally, or against any one or more of them, or against less than all of them without impairing The City's rights against the others.

No right of action shall accrue on this bond to or for the use of any person or corporation other than The City or its successors or assigns.

Surety may join in any arbitration proceedings brought under the Contract and shall be bound by any arbitration award.

In the event suit is brought upon this bond by The City, Surety shall pay reasonable attorney's fees and costs incurred by The City in such suit.

Correspondence or claims relating to this bond shall be sent to Surety at the address set forth below.

IN WITNESS WHEREOF, we have hereunto set our hands this 7th day of December, 2010

Principal: GENERAL EXCAVATING
(Name of Firm)

By: _____
(Signature)

Scott Fitzgerald
(Printed Name)

Title: President

Surety: UNIVERSAL SURETY COMPANY
(Name of Firm)

By: _____
(Signature)

James M. King
(Printed Name)

Title: Attorney-in-Fact

Address for Notices:

Gene Lilly Surety Bonds, Inc.

3440 O St.

Lincoln, NE 68510

NOTE: Notary acknowledgment for Surety and Surety's Power of Attorney must be attached.

Project Name: West Haymarket Arena Site Diesel Fuel Plume Remediation Bid No 10-230

Project No.: 870601

Bond No.: 114118

PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS:

THAT WHEREAS, The City of Lincoln, Nebraska ("The City") has awarded to ~~General Excavating~~ 6701 Cornhusker Hwy, ~~Lincoln, NE 68507~~ as Principal a contract dated the 2nd day of December, 2010, (the "Contract") for the work described as follows:

West Haymarket Arena Site Diesel Fuel Plume Remediation

AND WHEREAS, Principal is required to furnish a bond in connection with the Contract to secure the payment of claims of laborers, mechanics, material suppliers, and other persons as provided by law;

NOW, THEREFORE, we, the undersigned Principal and Universal Surety Company, as Surety, are held and firmly bound unto The City in the sum of ~~Eight Hundred Twenty-Nine Thousand Seven Hundred Forty-Seven & 20/100~~ dollars ($829,747.20), for which payment well and truly to be made we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that if Principal, or its heirs, executors, administrators, successors, or assigns approved by The City, or its subcontractors shall fail to pay any of the persons named in the City Charter or state statutes, or amounts due with respect to work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the State of Nebraska from the wages of employees of Principal and subcontractors with respect to such work and labor, that Surety will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall become and be null and void.

Surety, for value received, hereby expressly agrees that no extension of time, change, modification, alteration, or addition to the undertakings, covenants, terms, conditions, and agreements of the Contract, or to the work to be performed thereunder, shall in any way affect the obligation of this bond; and it does hereby waive notice of any such extension of time, change, modification, alteration, or addition to the undertakings, covenants, terms, conditions, and agreements of the Contract, or to the work to be performed thereunder.

Surety's obligations hereunder are independent of the obligations of any other surety for the payment of claims of laborers, mechanics, material suppliers, and other persons in connection with the Contract; and suit may be brought against Surety and such other sureties, jointly and severally, or against any one or more of them, or against less than all of them without impairing The City's rights against the other.

Project Name: West Haymarket Arena Site Diesel Fuel Plume Remediation Bid No 10-230

Project No.: 870601

In the event suit is brought upon this bond, the parties not prevailing in such suit shall pay reasonable attorneys' fees and costs incurred by the prevailing parties in such suit.

Correspondence or claims relating to this bond shall be sent to Surety at the address set forth below.

IN WITNESS WHEREOF, we have hereunto set our hands this 7th day of December, 2010.

Principal: GENERAL EXCAVATING
(Name of Firm)

By: _____
(Signature)

Scott Fitzgerald
(Printed Name)

Title: President

Surety: UNIVERSAL SURETY COMPANY
(Name of Firm)

By: _____
(Signature)

James M. King
(Printed Name)

Title: Attorney-in-Fact

Address for Notices:

Gene Lilly Surety Bonds, Inc.

3440 O St.

Lincoln, NE 68510

NOTE: Notary acknowledgment for Surety and Surety's Power of Attorney must be attached.

UNIVERSAL SURETY COMPANY

Lincoln, Nebraska

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS:

That the **UNIVERSAL SURETY COMPANY**, a corporation of the State of Nebraska having its principal office in the City of Lincoln, Nebraska, pursuant to the following Bylaw, which was adopted by the Board of Directors of the said Company on July 23, 1981, to wit:

"Article V-Section 6. RESIDENT OFFICERS AND ATTORNEYS-IN-FACT. The President or any Vice President, acting with any Secretary or Assistant Secretary, shall have the authority to appoint Resident Vice Presidents and Attorneys-In-Fact, with the power and authority to sign, execute, acknowledge and deliver on its behalf, as Surety: Any and all undertakings of suretyship and to affix thereto the corporate seal of the corporation. The President or any Vice President, acting with any Secretary or Assistant Secretary, shall also have the authority to remove and revoke the authority of any such appointee at any time."

does hereby make, constitute and appoint

Robert T. Cirone or James M. King or Suzanne P. Westerholt
or Jacob J. Buss, Lincoln, Nebraska

its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver for and on its behalf, as Surety:

Any and all undertakings of suretyship

And the execution of such bonds or undertakings in pursuance of these presents, shall be as binding upon said Company, as fully and amply, to all intents and purposes, as if they had been duly executed and acknowledged by the regularly elected officers of the Company at its offices in Lincoln, Nebraska, in their own persons.

The following Resolution was adopted at the Regular Meeting of the Board of Directors of the **UNIVERSAL SURETY COMPANY**, held on July 23, 1981:

"RESOLVED, That the signatures of officers of the Company and the seal of the Company may be affixed by facsimile to any Power of Attorney executed in accordance with Article V-Section 6 of the Company Bylaws: and that any such Power of Attorney bearing such facsimile signatures, including the facsimile signature of a certifying Assistant Secretary and facsimile seal shall be valid and binding upon the Company with respect to any bond, undertaking or contract of suretyship to which it is attached."

All authority hereby conferred shall remain in full force and effect until terminated by the Company.

IN WITNESS WHEREOF, UNIVERSAL SURETY COMPANY has caused these presents to be signed by its Vice President and its corporate seal to be hereunto affixed this 17th day of February, 20 10.

UNIVERSAL SURETY COMPANY

Secretary By Vice President

CORPORATE SEAL

State of Nebraska }
} ss.
County of Lancaster }

On this 17th day of February, 20 10, before me personally came Curtis L. Hartter, to me known, who being by me duly sworn, did depose and say that (s)he resides in the County of Lancaster, State of Nebraska; that (s)he is the Vice President of the UNIVERSAL SURETY COMPANY, the corporation described in and which executed the above instrument; that (s)he knows the seal of the said corporation; that the seal affixed to the said instrument is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation; that (s)he signed (his) (her) name by like order; and that Bylaw, Article V-Section 6, adopted by the Board of Directors of said Company, referred to in the preceding instrument, is now in force.

GENERAL NOTARY - State of Nebraska
TARA MARTIN
My Comm. Exp. Feb. 16, 2014

My Commission Expires February 16, 2014. Notary Public

I, Cheryl A. Brown, Assistant Secretary of UNIVERSAL SURETY COMPANY, do hereby certify that the above and foregoing is a true and correct copy of a Power of Attorney executed by said UNIVERSAL SURETY COMPANY, which is still in full force and effect.

Signed and sealed at the City of Lincoln, Nebraska this 7th day of December, 20 10.

Assistant Secretary

CORPORATE SEAL

General Decision Number: NE100002 10/29/2010 NE2

)erseded General Decision Number: NE20080002

State: Nebraska

Construction Types: Heavy and Highway

Counties: Adams, Antelope, Arthur, Banner, Blaine, Boone, Box Butte, Boyd, Brown, Buffalo, Burt, Butler, Cedar, Chase, Cherry, Cheyenne, Clay, Colfax, Cuming, Custer, Dakota, Dawes, Dawson, Deuel, Dixon, Dodge, Dundy, Fillmore, Franklin, Frontier, Furnas, Gage, Garden, Garfield, Gosper, Grant, Greeley, Hall, Hamilton, Harlan, Hayes, Hitchcock, Holt, Hooker, Howard, Jefferson, Johnson, Kearney, Keith, Keya Paha, Kimball, Knox, Lancaster, Lincoln, Logan, Loup, Madison, McPherson, Merrick, Morrill, Nance, Nemaha, Nuckolls, Otoe, Pawnee, Perkins, Phelps, Pierce, Platte, Polk, Red Willow, Richardson, Rock, Saline, Scotts Bluff, Seward, Sheridan, Sherman, Sioux, Stanton, Thayer, Thomas, Thurston, Valley, Wayne, Webster, Wheeler and York Counties in Nebraska.

HEAVY CONSTRUCTION PROJECTS (does not include water well drilling); HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects, and railroad construction; bascule, suspension & spandrel arch bridges; bridges designed for commercial navigation; bridges involving marine construction; other major bridges).

.ification Number	Publication Date
0	03/12/2010
1	10/29/2010

SUNE1999-001 06/16/1999

	Rates	Fringes
CARPENTER	$ 13.30	
CEMENT FINISHER	$ 12.50	
ELECTRICIAN	$ 11.90	
Flagger	$ 7.60	
Form Setter	$ 10.80	
LABORER	$ 8.30	
MANHOLE BUILDER	$ 10.20	
MECHANIC	$ 12.95	
PAINTER	$ 8.35	
Pile driver lead person	$ 8.35	
:r equipment operators:		
All purpose spreader	$ 9.50	
Asphalt distributor	$ 9.65	
Asphalt paving machine (screed)	$ 10.45	

Asphalt paving machine.....$ 12.35
Asphalt roller, self-
propelled.....$ 11.20
Backhoe excavator (track
type).....$ 12.55
Bulldozer or push tractors:
115 drawbar h.p. and over..$ 12.80
Less than 115 drawbar h.p..$ 11.60
Clamshell, dragline,
crane, pile driver/shovel...$ 13.60
Concrete cure machine.....$ 9.20
Concrete finishing machine
or slip form paver.....$ 12.80
Concrete saw operator.....$ 11.20
Concrete texture machine....$ 9.20
Crusher (including those
with integral screening
plant).....$ 11.75
Dredge pump.....$ 9.50
Front end loaders:
4 cu. yds. or less.....$ 11.40
Over 4 cu. yds.....$ 12.10
Hydrohammer.....$ 9.60
Loader/backhoe (rubber-
tired).....$ 9.85
Material stockpiler.....$ 10.20
Motor grader (finisher).....$ 13.15
Motor grader (rough).....$ 10.90
Power broom operator.....$ 9.15
Power grader machine
(trimmer & profiler).....$ 12.80
Roller or compactor,
earthwork, self-
propelled.....$ 10.05
Scraper.....$ 12.40
Skid steer loader.....$ 9.50
Stationary plant (asphalt
or concrete).....$ 12.75
Stationary plant (base or
stabili- zation).....$ 11.75
Tractor (farm type).....$ 9.50
Traveling plant
stabilization.....$ 11.60
Trenching machine.....$ 9.85
Water tankers:
6000 gallons and over.....$ 11.20
Under 6000 gallons.....$ 9.65

Truck drivers:
Semi-trailer or lowboy.....$ 10.85
Single axle.....$ 8.40
Tandem axle.....$ 9.65
Transit mix.....$ 9.65

WELDER.....$ 12.25

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Unlisted classifications needed for work not included within
the scope of the classifications listed may be added after
award only as provided in the labor standards contract clauses

(29CFR 5.5 (a) (1) (ii)).

In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination
* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

h regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

INSURANCE REQUIREMENTS FOR ALL WEST HAYMARKET JOINT PUBLIC AGENCY CONTRACTS

1. GENERAL PROVISIONS

A. **Indemnification.** The Contractor shall indemnify and save harmless the West Haymarket Joint Public Agency, hereinafter referred to as "JPA" from and against all losses, claims, damages, and expenses, including attorney's fees, arising out of or resulting from the performance of the contract that results in bodily injury, sickness, disease, death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom and is caused in whole or in part by the Contractor, any subcontractor, any directly or indirectly employed by any of them or anyone for whose acts any of them may be liable. This section will not require the Contractor to indemnify or hold harmless JPA for any losses, claims, damages, and expenses arising out of or resulting from the sole negligence of the West Haymarket Joint Public Agency.

B. **Approved Coverage Prior to Commencing Work/Subcontractors Included.** Contractor shall purchase and maintain in place insurance to Protect Contractor and JPA against all liabilities and hazards as provided in this article throughout the duration of the Contract. Contractor shall not commence work under this contract until the Contractor has obtained all insurance required under this Section and such insurance has been approved by the City Attorney for JPA, nor shall the Contractor allow any subcontractor to commence work on any subcontract until all similar insurance required of the subcontractor has been so obtained and approved.

C. **Occurrence Basis Coverage.** All insurance shall be provided on an ***occurrence basis*** and not on a claims made basis, except for hazardous materials, errors and omissions, or other coverage not reasonably available on an occurrence basis; provided that all such claims made coverage is subject to the prior written approval of the City Attorney and must be clearly indicated as such in any certificate showing coverage.

D. **Authorized and Rated Insurers Required.** All insurance coverage are to be placed with insurers authorized to do business in the State of Nebraska and must be placed with an insurer that has an A.M. Best's Rating of no less than A:VII unless specific approval has been granted by the City Attorney.

E. **Certificates Showing Coverage.** All certificates of insurance shall be filed with the City Attorney, and may utilize an appropriate standard ACORD Certificate of Insurance form showing the specific limits of insurance coverage required by this Article; provided that restrictions, qualifications or declarations inconsistent with the requirements of this Article shall not relieve the Contractor from providing insurance as required herein. Such certificates shall show JPA as additional insured, including by specific endorsement where necessary, as indicated in the following requirements. Such certificate shall specifically state that the related insurance policies are to be endorsed to require the insurer to provide JPA thirty days, notice of cancellation, non-renewal or any material reduction in the stated amounts or limits of insurance coverage.

F. **Terminology.** The terms "insurance," "insurance policy," or "coverage" as used in this article are used interchangeably and shall have the same meaning as "insurance" unless the context clearly requires otherwise. References to "ISO®" forms are merely for convenience and ease of reference, and an equivalent or better form as determined acceptable by the City Attorney may be used. (Note: ISO® is a registered trademark of ISO Properties, Inc.)

2. INSURANCE REQUIREMENTS

A. **Scope of Required Coverage**. The Contractor shall take out and maintain during the life of Contract such insurance in the forms and minimum amounts as specified in this Article and as will protect Contractor and JPA from the following claims arising out of or resulting from or in connection with the Contractor's operations, undertakings or omissions directly or indirectly related to the Contract, whether by the Contractor or any Subcontractor or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

(1) Claims under workers' compensation, disability benefit, or other employee benefit acts;

(2) Claims arising out of bodily injury, occupational sickness or disease, or death of an employee or any other person;

(3) Claims customarily covered under personal injury liability coverage;

(4) Claims other than to the work itself arising out of an injury to or destruction of tangible property, including the loss of use resulting therefrom;

(5) Claims arising out of ownership, maintenance or use of any motor vehicle;

(6) Railroad protective liability coverage in the event the contract involves work to be performed within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road beds, tunnel, underpass or crossing.

B. **Worker's Compensation Insurance and Employer's Liability Insurance**. The Contractor shall provide applicable statutory Worker's Compensation Insurance with minimum limits as provided below covering all Contractor's employees, and in the case of any subcontracted work, the Contractor shall require the subcontractor similarly to provide Worker's Compensation Insurance for Subcontractor's employees.

The Contractor shall provide Employer's Liability Insurance with minimum limits as provided below placed with an insurance company authorized to write such insurance in all states where the Contractor will have employees located in the performance of this contract, and the Contractor shall require each Subcontractor similarly to maintain Employer's Liability Insurance on the Subcontractor's employees.

Coverage	Listing	Min Amt	Notes
Worker's Comp.			
	State	Statutory	
	Applicable Federal	Statutory	
Employer's Liability			
	Bodily Injury by accident	$500,000	each accident
	Bodily Injury by disease	$500,000	each employee
	Bodily Injury	$500,000	policy limit

C. **Commercial General Liability Insurance.**

(1) The Contractor shall provide Commercial General Liability Insurance in a policy form providing no less comprehensive and no more restrictive coverage than provided under the ISO® form CG00010798 or newer with standard exclusions "a" through "o" and with minimum limits as provided below. Any other exclusions that operate to contradict or materially alter the standard exclusions shall be specifically listed on the certificate of insurance and shall be subject to the prior written approval of the City Attorney.

Coverage	Min Amt	Notes
General	$10,000,000	Aggregate
Products and Completed Operations	$10,000,000	Aggregate
Personal and Advertising Injury	$ 5,000,000	
Each Occurrence	$ 5,000,000	
Fire Damage Limit	$ 100,000	any one fire
Medical Damage Limit	$ 10,000	any one person

(2) The required Commercial General Liability Insurance shall also include the following:

- Coverage for all premises and operations
- Endorsement to provide the general aggregate per project endorsement
- Personal and advertising injury included
- Operations by independent contractors included
- Contractual liability coverage included
- X.C.U. Coverage including coverage for demolition of any building or structure, collapse, explosion, blasting, excavation and damage to property below the surface of ground.
- Any fellow employee exclusions shall be deleted
- Coverage shall not contain an absolute pollution exclusion, and applicable remaining coverage shall apply for pollution exposures arising from products and completed operations.
- Coverage for products and completed operations maintained for duration of work and shall be maintained for a minimum of three years after final acceptance under the Contract or the warranty period for the same whichever is longer, unless modified in any Special Provisions.
- Contractual Liability coverage shall include contractually assumed defense costs in addition to any policy limits.

(3) If work is to be performed within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road beds, tunnel, underpass or crossing, Railroad Contractual Liability Endorsement (ISO® form CG24170196 or newer).

(4) JPA may at its sole option, and in lieu of being additional insured on the Contractor's policy, by written requirement in the Special Provisions or by written change order, require Contractor to provide a separate Owner's Protective liability policy. The premium cost to obtain such insurance shall be as paid as provided in the Special Provision or change order, with any related cost savings as reasonably determined by JPA being reimbursed or paid to JPA.

D. **Vehicle liability insurance coverage.**

- The Contractor shall provide reasonable insurance coverage for all owned, non-owned, hired and leased vehicles with specific endorsements to include contractual liability coverage and delete any fellow employee exclusion.

- If specifically required in the Special Provisions, the required coverage shall also include an endorsement for auto cargo pollution (ISO® form CA 99 48).

E. **Railroad Protective Liability.** If work is to be performed within 50 feet of any railroad property and affecting any railroad bridge or trestle, tracks, road beds, tunnel, underpass or crossing or otherwise required by the Special Provisions or applicable requirements of an affected railroad, the Contractor shall provide Railroad Protective Liability Insurance naming the affected railroad/s as insured with minimum limits for bodily injury and property damage of $5,000,000 per occurrence, $10,000,000 aggregate, or such other limits as required in the Special Provisions or by the affected railroad. The original of the policy shall be furnished to the railroad and a certified copy of the same furnished to the City Attorney's office prior to any related construction or entry upon railroad premises by the Contractor or for work related to the Contract.

F. **Umbrella or Excess Insurance.** The Contractor shall provide Umbrella or Excess insurance coverage with minimum coverage limits of $3,000,000 each occurrence and aggregate.

G. **JPA included as Insured on Contractor's Policy – Endorsements required.** The Contractor shall provide adequate written documentation, including applicable ACORD certificates, declarations pages or other acceptable policy information demonstrating that JPA is included as an additional insured along with the Contractor with respect to all of the coverages required in this "Section 2A Insurance Requirements," except for applicable Worker's Compensation coverage, to include all work performed for JPA and specifically including, but not limited to, any liability caused or contributed to by the act, error, or omission of the Contractor, including any related subcontractors, third parties, agents, employees, officers or assigns of any of them. The documentation or endorsement shall specifically include JPA as an additional insured for purposes of Products and Completed Operations. The inclusion of JPA as additional insured shall be for coverage only on a primary basis for liability coverage, and no coverage shall contain a policy or other restriction or attempt to provide restricted coverage for JPA, whether on an excess, contributory or other basis regardless of any other insurance coverage available to JPA.

3. CONTRACTOR'S INDEMNITY – CONTRACTUAL LIABILITY INSURANCE

A. To the same extent as specified for minimum coverage requirements in Section 2 above, the required insurance shall include contractual liability coverage to include indemnification and hold harmless agreements and provisions in the related Contract Documents, specifically including the following provision:

(1) To the fullest extent permitted by law, Contractor shall defend, indemnify, and hold harmless JPA, its officers, agents, employees, volunteers and consultants from and against any and all claims, damages, losses, costs, and expenses, including but not limited to attorney's fees and costs arising out of or related to the Contract or the Contractor's activities, errors, or omissions related to the Contract including liabilities or penalties imposed by applicable, law, rule or regulation in connection therewith; provided that such claims, damages, losses, costs, and expenses, including but not limited to attorney's fees and costs:

- is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property including the loss of use therefrom, and

- is caused in whole or in part by any act or omission of the Contractor, any subcontractor, agent, officer, employee, or assigns of the same or by anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in whole or in part by a party indemnified hereunder.

(2) Such indemnification shall not be construed to negate, abridge, limit or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person described in this section.

B. In any and all claims by any employee (whether an employee of the Contractor or subcontractor, or their respective agents or assigns by anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable as an employer) in whole or in part against JPA, its officers, agents, employees, volunteers or consultants, the above indemnification shall not be limited in any way by the amount of damages, compensation, benefits or other contributions payable by or on behalf of a the employer under Worker's Compensation statutes, disability benefit acts, or any other employee benefit or payment acts as the case may be.

C. The obligations of indemnification herein shall not include or extend to:

(1) Any outside engineer's or architect's professional errors and omissions involving the approval or furnishing of maps, drawings, opinions, reports, surveys, change orders, designs or specifications within the scope of professional services provided to JPA and related to the Contract; and

(2) Any claims arising out of the negligence of the JPA to the extent the same is the sole and proximate cause of the injury or damage so claimed.

D. In the event of any litigation of any such claims shall be commenced against JPA, Contractor shall defend the same at Contractor's sole expense upon notice thereof from JPA. Contractor shall notify the insuring company that JPA reserves and does not waive any statutory or governmental immunity and neither Contractor, nor Contractor's counsel whether employed by Contractor or by an insurer on behalf of the Contractor shall waive such defenses or enter into any settlement or other disposition requiring waiver of any defenses or immunity of JPA without the express written consent of the JPA.

4. CONTRACTOR'S INSURANCE FOR OTHER LOSSES.

A. Contractor shall assume full responsibility for all loss or damage from any cause whatsoever to any tools owned, rented or used in connection with the Contract including any tools, machinery, equipment, storage devices, containers, sheds, temporary structures, staging structures, scaffolding, fences, forms, braces, jigs, screens, brackets, vehicles and the like owned or rented by Contractor, or Contractor's agents, subcontractors, suppliers, or employees.

B. In connection with the above, Contractor shall cause or require any applicable insurance related to physical damage of the same to provide a waiver of a right of subrogation against JPA.

5. NOTIFICATION IN EVENT OF LIABILITY OR DAMAGE.

A. The Contractor shall promptly notify JPA in writing and provide a copy of all claims and information presented to any of Contractor's insurance carrier/s upon any loss or claim or upon any occurrence giving rise to any liability or potential liability related to the Contract or related work. The notice to JPA shall include pertinent details of the claim or liability and an estimate of damages, names of witnesses, and other pertinent information including the amount of the claim, if any.

B. In the event JPA receives a claim or otherwise has actual knowledge of any loss or claim arising out of the Contract or related work and not otherwise known to or made against the Contractor, JPA shall promptly notify the Contractor of the same in writing, including pertinent details of the claim or liability; Provided, however JPA shall have no duty to inspect the project to obtain such knowledge, and provided further that JPA's obligations, if any, shall not relieve the Contractor of any liability or obligation hereunder.

6. PROPERTY INSURANCE/ BUILDER'S RISK.

A. The Contractor shall provide property insurance (a/k/a Builder's Risk or installation Floater) on all Projects involving construction or installation of buildings or structures and other projects where provided in the Special Provisions. Such insurance shall be provided in the minimum amount of the total contract sum and in addition applicable modifications thereto for the entire work on a replacement cost basis. Such insurance shall be maintained until JPA completes final acceptance of the work as provided in the Contract. Such insurance shall be written and endorsed, where applicable, to include the interests of JPA, Contractor, Subcontractors, Sub-subcontractors in the related work. The maximum deductible for such insurance shall be $5,000 for each occurrence, which deductible shall be the responsibility of the Contractor. Such insurance shall contain a "permission to occupy" endorsement.

B. All related Property Insurance shall be provided on a "Special Perils" or similar policy form and shall at a minimum insure against perils of fire including extended coverage and physical loss or damage including without limitation or duplication of coverage: flood, earthquake, theft, vandalism, malicious mischief, collapse, and debris removal, including demolition whether occasioned by the loss or by enforcement of applicable legal or safety requirements including compensation or costs for JPA's related costs and expenses (as owner) including labor required as a result of such loss.

C. All related Property Insurance shall include coverage for falsework, temporary buildings, work stored off-site or in-transit to the site, whether in whole or in part. Coverage for work off-site or in-transit shall be a minimum of 10% of the amount of the policy.

D. The Contractor's Property Insurance shall be primary coverage for any insured loss related to or arising out of the Contract and shall not be reduced by or coordinated with separate property insurance maintained by JPA.

SPECIAL PROVISIONS
TO THE
CITY OF LINCOLN
STANDARD SPECIFICATIONS

SOIL EXCAVATION, SCREENING, AND STOCKPILING
WEST HAYMARKET ARENA SITE
DIESEL FUEL PLUME REMEDIATION
UG# 07116-MBS-1100

Joint Public Agency Project No. 870601

The work as detailed on the plans shall be completed in accordance with the requirements of the 2006 City of Lincoln Standard Specifications for Municipal Construction and the City of Lincoln, Lincoln Standard Plans 2010. The 2006 City of Lincoln Standard Specifications for Municipal Construction, the Special Provisions, Lincoln Standard Plans 2010, project plans, and all supplementary documents are essential parts of the contract. **All work must be completed in accordance with maximum allowable rates published in NDEQ Environmental Guidance Document 08-023 Reasonable Rate Schedule and Reimbursement Guidance Manual (Title 200 Program).**

In case of a discrepancy:

1. Special Provisions shall govern over the City of Lincoln Standard Specifications for Municipal Construction.
2. The Special Provisions shall govern over the Plans.

The CONTRACTOR shall not take advantage of any apparent error or omission in the plans or specifications. Upon discovery of such an error or omission, the CONTRACTOR shall notify the Engineer immediately. The Engineer will then make such corrections or interpretations as necessary to fulfill the intent of the plans and specifications.

Materials or work described in words which, so applied, have known technical or trade meaning shall be held to refer to such recognized standards.

Figured dimensions on the plans shall be taken as correct but shall be checked by the CONTRACTOR before starting construction. Any errors, omissions, or discrepancies shall be brought to the attention of the Engineer and the Engineer's decision thereon shall be final. Correction of errors or omissions on the drawings or specifications may be made by the Engineer when such correction is necessary for the proper execution of the work.

1.0 CONTRACT TIME

It is anticipated that notice to proceed for this project will be given on December 22, 2010. Substantial completion of the project shall include completion of soil excavation, required stockpiling and/or disposal, soil backfilling and compaction, removal of all storm water and erosion control materials, construction fencing and water treatment equipment from the site and return of any equipment owned by the Nebraska Department of Environmental Quality (NDEQ) to the NDEQ

warehouse located at 2717 S. 8th St. in Lincoln, NE. Final completion for this contract shall be on or before February 15, 2011.

2.0 HOURS OF WORK

Due to the expedient nature of the project, no hours of work limitations are applied at this time.

3.0 BONDING PERIOD

The City of Lincoln General Provisions and Requirements have been amended as follows:

II. Proposal Requirements and Conditions

*G. **Construction Performance and Construction Payment Bonds***

*Within **five (5) days** after the acceptance of the bid, the CONTRACTOR shall furnish, on a form acceptable by the City, a construction performance and construction payment bond, in a sum not less than the Contract Sum, executed by the CONTRACTOR and a corporate surety company authorized to transact business in the State of Nebraska. Such Bond shall be conditioned upon the faithful performance of all the terms and conditions of the Contract Documents, including the holding harmless of the Joint Public Agency (JPA or "OWNER") from failure to do so, and including the making good of any and all guarantees that the Contract Documents may require. The Bond shall be further conditioned upon the payment of all laborers and material suppliers used in the performance of the Contract, including Insurance premiums and interest.*

*H. **Failure to Execute the Contract***

*It is agreed by the Bidder that upon a failure to enter into the Contract and furnish the necessary Construction Performance and Construction Payment Bond, within **five (5) calendar days**, the amount of the Bidder's security may, at the discretion of the JPA, become the property of the JPA and will be retained, as damages to the JPA. The award of the Contract may then, at the discretion of the JPA, be made to the next lowest responsible bidder, or the Work may be rebid, or may be constructed by the JPA in any legal manner.*

4.0 STATUS OF PERMITS

Add the following to Article VI, Section M. (PERMITS AND LICENSES):

The OWNER has or will arrange for provision of the following permits:

1) NPDES Permit
2) Flood Plain Permit

The CONTRACTOR shall be responsible for complying with the requirements of all permits including those acquired by the OWNER.

In addition to permits acquired by OWNER, the CONTRACTOR shall acquire all other permits required by Laws or Regulations, including, without limitation, the following specific permits (if applicable):

1) Certificates and permits are required for uses such as, but not limited to:
a) Fuel burning equipment
b) Gasoline and petroleum distillate storage containers
c) Land disturbing activities
d) Odors
2) All associated building demolition permits
3) City, State, and County Transportation Encroachment permits
4) Permit-Required Confined Space - The workplace in which the WORK is to be performed may contain permit-required confined spaces (permit spaces) as defined 29 CFR 1910.146 and, if so, permit space entry is allowed only through compliance with a confined space entry program meeting the requirements of 29 CFR 1910.146. CONTRACTOR shall submit a confined space entry program or submit in writing that compliance with the City of Lincoln's program will be made.
5) Dewatering Permits as required by NDEQ and the Lower Platte South Natural Resources District.
6) Fugitive Dust Control Permit

A "Notice of Intent" for coverage under the NDEQ Construction Storm Water General Permit has been submitted to the Lower Platte South Natural Resource District and NDEQ. Coverage under this permit will be approved prior to the anticipated Notice to Proceed. No ground disturbance can occur until authorization for coverage under the permit is received.

STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

The CONTRACTOR shall understand the terms and conditions of the general NPDES permit that authorizes the storm water discharges associated with construction at the site. Additionally, the CONTRACTOR, as evidenced by their signature on this proposal, agrees and understands that, if awarded the contract on this project, he/she:

1. Shall read and understand the Storm Water Pollution Prevention Plan (SWPPP) that is developed for this project. The CONTRACTOR must sign a certification form located in the SWPPP, to certify that they will follow the requirements of the NPDES permit;

2. Is legally bound to comply with the Clean Water Act to ensure compliance with the terms and conditions of the SWPPP as developed under the NPDES permit and the terms of the NPDES permit; and will hold OWNER harmless for damages and fines arising as a result of noncompliance with the terms of the storm water permits and authorizations associated with the work on this project;

4. Shall be responsible for the maintenance of sediment control materials and other measures specified in the SWPPP; Erosion control fencing (silt fence) shall be installed prior to conducting any excavation Work. The CONTRACTOR shall install silt fence ditch checks and silt fence barriers and comply with other best management

practices (BMPs) as described in the CSW-NOI and SWPPP included as Attachment A. The CONTRACTOR shall conform to material specifications, placement, proper installation methods, and inspection and maintenance details provided in the site specific CSW-NOI and SWPPP. The final location of erosion control fencing shall be determined in the field and based on the final approved SWPPP. For bidding purposes, the proposed location of the silt fence is shown in Figure 5 and the amount of silt fence needed is estimated to be 950 feet.

5. Shall complete permanent or temporary stabilization within seven (7) calendar days of soil disturbance to the surface of all perimeter controls, soil and debris stockpiles, and any other disturbed or graded areas on the project site which are not being used for material storage, or on which actual earth moving activities are not being performed; and

6. Shall complete the approved inspection forms and inspect/maintain all sediment or erosion control materials required under this contract at least once every seven (7) calendar days and after any storm event of greater than 0.5 inches of precipitation, on the site, during any 24-hour period; any necessary repairs or cleanup to maintain the effectiveness of the best management practices shall be made by CONTRACTOR immediately.

A copy of the NOI and erosion control plans is included as Attachment A.

Measurement and payment will be based on the unit rate bid prices for "Synthetic Fabric Silt Fence Installation" and "Synthetic Fabric Silt Fence Maintenance and Removal".

5.0 PROJECT COORDINATION - STATUS OF UTILITIES

Add the following section to Article V, Section D (PROJECT COORDINATION):

The CONTRACTOR is responsible for contacting the BNSF, local utility providers and the local utility locating service to identify overhead and buried utilities at the project site. The CONTRACTOR is responsible for protecting/temporarily relocating the utilities located within the excavation area, if needed, to facilitate the site excavation process. The CONTRACTOR shall repair any marked utilities damaged as a result of excavating. The CONTRACTOR shall observe all overhead utility lines and cables, taking care not to damage these utilities as a result of Work performed.

The following information is current as of November 2, 2010. The CONTRACTOR shall request a utility status update at the project pre-construction conference, and/or prior to starting work. The CONTRACTOR shall coordinate all construction activities with affected utilities. To arrange for utilities to locate and flag their underground facilities, contact The Diggers Hotline of Nebraska at 1-800-331-5666.

Utilities known in the project area:

Two (2) 10 in. diameter sanitary sewer lines and connecting manhole (depicted on Figure 3) and a power pole with overhead lines are located within the excavation area. According to the City of Lincoln Public Works Department's records, the depth of the sewer lines range from 10 to 12 feet below ground surface. The power pole is owned and maintained by the BNSF. Prior to the site excavation, the excavation CONTRACTOR will coordinate with the City of

Lincoln Public Works Department and BNSF to clarify measures to be taken to temporarily re-route the sewer lines during excavation activities and to temporarily relocate the overhead power lines and the power pole, respectively.

6.0 SPECIAL PROVISIONS TO - EARTHWORK - (CHAPTER 2.00)

2.03 EXCAVATION

Add the following paragraphs:

Several site investigations have been conducted at this site to delineate the extent of petroleum impacts to soil and groundwater. The Remedial Action Plan (RAP) prepared for the project and submitted to the NDEQ is provided as Attachment B. The total volume of soil to be excavated is estimated to be 14,000 cubic yards. Of the 14,000 cubic yards of excavated soils, approximately 2,000 cubic yards are expected to be saturated with diesel fuel and approximately 6,000 cubic yards are expected to be contaminated with petroleum hydrocarbons leaving approximately 6,000 cubic yards of soils that could be reused as backfill materials within the open excavation if determined to be structurally suitable. All of the soil quantities are estimated and the actual volume could be more or less depending on site conditions.

The soil removed will be inspected by the OWNER's designated representative (Benesch) to determine the extent to which it is contaminated with petroleum hydrocarbons or if it is "clean". Both contaminated and clean soils will be stockpiled at the site separately and covered with plastic pending disposal or determination of structural suitability as backfill. If clean soil is deemed unsuitable to be used as backfill, the CONTRACTOR shall haul soils off-site for disposal or legitimate reuse.

The boundary of the excavation is shown in Figures 2 and 3. Tentatively defined access to the site is from the east along "N" Street to 6th Street north into the BNSF yard as highlighted on Figure 2. The excavation area is approximately 125 feet by 200 feet. The depth of the excavation is expected to be 16 feet below ground surface. The two eastern-most tracks portrayed in Figure 3 will be removed by the BNSF before the excavation will be completed. The excavation is still anticipated, however to be within the zone of influence of BNSF's remaining tracks and the CONTRACTOR shall comply with the protective shoring requirements set forth in Section 04100 (Structure Excavation and Backfill) of the BNSF Railway's Standard Construction Specifications, 2010 Edition. The Section 04100 of the BNSF Railway's Standard Construction Specifications is included as Attachment C.

7.0 CONSTRUCTION STAKING/SURVEY

Prior to excavation, CONTRACTOR shall complete construction staking of the proposed limits of the excavation based on coordinates provided by the OWNER and field verified by CONTRACTOR by survey. When determined by the OWNER to meet the remedial objectives of the project, the limits of the excavation will be surveyed by CONTRACTOR for verification of soil removal volumes. This post excavation survey will be the basis for measurement and payment of soil excavated and replaced/compacted.

Payment for construction staking and survey will be paid on a lump sum price bid "Construction Staking/Survey".

8.0 WELL ABANDONMENT

Prior to excavation activities, eight (8) of the existing monitoring wells (MW-1A, MW-2A, MW-10A, MW-11A, MW-12, MW-13, MW-14, and MW-15) and six (6) of the existing recovery wells (RW-4, RW-5, RW-6, RW-7, RW-8, and RW-11) will be abandoned in accordance with Nebraska Department of Health and Human Services Regulations for well abandonment including filing of all forms and payment of fees to the Nebraska Department of Natural Resources. Existing pumps in the wells will be removed by others prior to abandonment. In addition, recovery trench wells OB-4A and OB-4B shall also be removed together with part of the recovery trench originally installed at this site in 1988. Figure 5 of the RAP (Attachment B) shows the locations of the monitoring wells and recovery wells.

Payment for well abandonment will be based on the number of wells located, abandoned, and proper fees and forms provided to the NDNR and will be paid on a unit rate price bid "Well Abandonment".

9.0 IMPACTED SOIL REMOVAL

Excavated soil will be inspected by a Benesch representative on site and loaded either directly onto trucks for hauling to the appropriate stockpiling locations or directly deposited by the excavator on the stockpile if feasible. The tentatively proposed stockpile locations for clean soil, petroleum contaminated soil, and soil saturated with groundwater or petroleum hydrocarbons are shown in Figure 3. Excavated soil that is saturated with water or petroleum hydrocarbons shall be stockpiled on plastic sheeting at one of the excavation side walls for drying prior to hauling to the landfill for disposal. This stockpile area shall be constructed in such a manner that all free liquid will flow back into the excavation as conceptually displayed in Figure 4. Mixing in place with dry soil or applying amendments to accelerate drying of the soil is allowable to make the soil suitable for off-site transport and acceptance at the selected disposal facility.

All stockpiled clean soils will be returned to the excavation as backfill, if deemed structurally suitable by the Benesch inspector. For bidding purposes, 2,000 cubic yards (2800 tons) of the 6,000 cubic yards of the anticipated clean soil overburden to be removed are assumed to be structurally unsuitable for backfill and will need to be disposed of or reused as beneficial fill off site.

Measurement and payment for the volume of soil excavated will be based on pre-excavation staking/survey and post excavation survey of the completed excavation to be completed by CONTRACTOR and will be paid on a unit rate price bid "Soil Excavation".

10.0 DEWATERING

The CONTRACTOR shall provide and maintain adequate equipment to remove, treat and dispose of ground water entering the excavations, trenches, or other parts of the work. Each excavation shall be kept dry during backfill and continually thereafter until the sewer pipes to be removed and reinstalled therein, is completed to the extent that no damage from hydrostatic pressure, flotation or other cause will result. All excavations which extend down to or below ground water shall be dewatered by lowering and keeping the ground water below the bottom of the excavation so as to maintain a stable sub-grade for backfill and compaction of the clean fill material.

The excavation is expected to encounter groundwater at a depth of around 10 – 12 feet. Groundwater is impacted with free-phase diesel fuel product which can be expected to make up a significant portion of fluids removed from the excavation. Methods and details for care and diversion of recovered water and fuel are not detailed on the plans. Full responsibility for the diversion and care of water and fuel from whatever source, including, but not limited to, direct rainfall, groundwater, surface runoff and sources outside of the construction area shall be borne by the CONTRACTOR until completion of work under this contract. The CONTRACTOR shall provide all materials, labor, and equipment, and perform all work necessary to facilitate construction and to protect the work in progress from damage by water or fuel. Benesch is acquiring the necessary approval for discharge to the sanitary sewer located in the vicinity of the excavation. CONTRACTOR is responsible for coordinating and complying with the City of Lincoln Department of Public Works, Sanitary Engineering - Wastewater Division regarding the quality of the effluent discharged to the sewer and any monitoring or reporting required by the City.

NDEQ has made available in their Petroleum Remediation Equipment Warehouse located at 2717 S. 8th St. in Lincoln, NE the following equipment at no cost for treatment of dewatering effluent:

1. 8' high x 12' long air stripper
   NDEQ Inventory Number A00773

2. 1,130 gallon 4' x 12' steel oil water separator
   NDEQ Inventory Number A00779

The CONTRACTOR may or may not elect to use such items but shall specify what equipment will be requested with his/her bid. Additional information and photos of the water treatment equipment are included in Attachment D. The CONTRACTOR shall provide all equipment, wells, and/or filtering systems as necessary to achieve the discharge limitations of the City of Lincoln's Sanitary Sewer System. Additional payment for filtering or other devices required to maintain the discharged water below the limitations of the City's authorization shall not be made.

Measurement and payment for dewatering required to complete all excavation and sanitary sewer reconstruction work for the project shall be measured and paid for at the contract lump sum price bid for the pay item "Dewatering". Said payment shall include furnishing all labor, equipment, materials and incidentals required to dewater the excavations to accommodate the environmental remediation work, reconstruction of the sanitary sewers and other appurtenances at the locations shown on the plans including testing of effluent and compliance with City pre-treatment requirements.

11.0 RECOVERED PRODUCT/WASTE DISPOSAL

CONTRACTOR will be responsible for properly removing all recovered petroleum product, residues and sludge from the water treatment systems to off-site disposal/recycling facilities in order to properly operate and maintain the systems.

Measurement and payment for recovered product and waste removal will be based on a per gallon unit bid price for the pay item "Recovered Product/Waste Disposal" and shall include all fees for transportation and recycling/disposal of specified product/wastes.

12.0 TEMPORARY POWER

The CONTRACTOR shall facilitate the installation of temporary power to the site for the dewatering operation and water treatment equipment to be installed and operated by CONTRACTOR. The CONTRACTOR shall be responsible for the termination and removal of the temporary power at the completion of the Work. All labor and material to provide temporary power shall be included under pay item "Dewatering".

13.0 TEMPORARY SHORING

The CONTRACTOR shall design, construct and maintain temporary shoring as required to complete the excavation work that is located adjacent to railroad tracks that will remain in service during the construction of the project. The temporary shoring installation shall be established to accommodate all of the work required to complete the excavation and backfill work in such a manner so as not to restrict the use of the tracks or stability of the railroad embankment. The CONTRACTOR shall also be required to furnish and construct temporary shoring around the existing sanitary sewer manhole and sewer pipes during the remedial excavation and temporary rerouting of the sewer pipes and reconstruction.

The CONTRACTOR may make a written request to the BNSF Railway to allow the existing yard tracks to be temporarily taken out of service during the completion of the environmental remediation work to reduce the railroad live load applied to the shoring in these areas. Taking tracks out of service to facilitate construction of the utilities is at the sole discretion of the BNSF Railway and the CONTRACTOR shall consult with the appropriate BNSF staff prior to completing their bids to determine if this option will be available on this particular project. No main line tracks will be taken out of service.

The temporary shoring bid item shall include the design for the shoring, construction work associated with installation of the shoring including any tie back anchors required to provide a stable excavation, and removal of the shoring upon completion of the remedial excavation and utility work. The temporary shoring installation shall meet the applicable portions of Section 703 in the State of Nebraska Standard Specifications for Highway Construction 2007 Edition.

It shall be the responsibility of the CONTRACTOR to contract with a professional engineer registered in the State of Nebraska to design the temporary shoring including all necessary tie back anchors to protect the existing railroad embankment and tracks or the existing sanitary sewer and manhole that are to remain in place. The design of the shoring adjacent to the railroad tracks shall use a Cooper E-80 railroad loading and shall take into account all other applicable surcharge loadings and soil conditions that may be encountered during the completion of the work. Prior to the start of excavation adjacent to the tracks, the CONTRACTOR shall submit their shoring design calculations to the BNSF for review to ensure that Cooper E-80 loading requirements are met and that there are no impacts to adjacent "in-service" tracks. No excavation work that may impact existing "in-service" tracks or temporary shoring construction shall proceed without BNSF concurrence on the shoring design. All temporary shoring that is adjacent to the railroad tracks shall be designed in accordance with the requirements outlined in the Railway Guidelines included as Attachment C.

Design of the shoring at the existing sewer manhole (to remain in place) and 10 in. sanitary lines (to be temporarily removed, rerouted and replaced), that are located outside the zone identified in Figure 1 of the Railway shoring guidelines referenced above, shall be completed in accordance with all OSHA, Federal, State and Local building requirements.

The items "Temporary Shoring at Railroad Tracks" and "Temporary Shoring at Existing Sewer Manhole and Pipes" shall each be paid for by lump sum. The price shall be considered full compensation for all work prescribed in these Special Provisions including the design, construction, removal, maintenance and furnishing all necessary materials and incidental items associated with the temporary shoring.

14.0 BYPASS PUMPING FOR SANITARY SEWER CONSTRUCTION

Bypass pumping will be required for the temporary removal and reconstruction of the sanitary sewer lines that cross through the limits of the excavation for the environmental remediation work. The CONTRACTOR shall provide redundant bypass pumping during the reconstruction of all sanitary sewers. The pumping operations shall also have 24-hour standby capabilities.

The bypass pumping for the sewer work shall be paid for as one lump sum. This work shall include all bypass pumping required for removal and reconstruction of both 10" sanitary sewers that cross through the proposed excavation area. This shall include all pumps, piping, power supplies, back-up pumps/piping and all power supplies necessary to operate the pumping system. This shall also include all temporary work necessary at existing manholes to accommodate the bypass pumping so that the work can be completed in such a manner as to not damage the existing manholes or discharge sewage outside of the sanitary sewer system.

The following table provides estimated flow data at the existing sewers that will require bypass pumping in order to complete the construction:

Location	Time Period for Data	Peak Flow (GPM)	Average Flow (GPM)
"Q"/"R" St. Sewer (at 48" Trunk)	12/23/03 – 12/29/03	93 GPM	32 GPM

Bypass pumping will be paid for separately in accordance with the lump sum bid item "Bypass Pumping". Said payment shall be full compensation for providing all equipment, labor, materials and incidental items required to bypass pump the sewage as necessary to facilitate temporary removal and reconstruction of the sanitary sewers as necessary to complete the environmental remediation work including all pumps, piping, power supplies, incidental items and the necessary pumps/piping/power supplies required to provide the capability for redundant pumping in the event the primary pumping system fails.

15.0 REMOVE SANITARY SEWER PIPE

The CONTRACTOR shall remove existing sanitary sewer pipes as shown on the plans or as directed by the OWNER to accommodate the excavation work associated with the environmental remediation. The CONTRACTOR shall saw cut the pipe at the limits for the removal and exercise extreme care so as not to damage existing manholes or sewers that are to remain in place. All material from the removal shall be promptly removed from the project site and disposed of by the CONTRACTOR.

Payment for removal of sanitary sewer pipe shall be paid for at the contract unit price bid per linear foot for the item "Remove Sanitary Sewer Pipes". Said payment shall be full compensation for all labor, equipment, and material required for excavation, cutting, removal, backfill and disposal of the sewer pipe and all other incidental items required to remove the sewer pipe. Temporary plugs at existing sewer pipes or pipe stubs at manholes shall not be paid for directly but shall be considered subsidiary to other items for which direct payment is made.

16.0 SPECIAL PROVISIONS TO – SANITARY SEWERS - (CHAPTER 22.00)

22.05 PIPE INSTALLATION

Add the following paragraphs:

16.1 REPLACE SANITARY SEWER PIPE

Upon completion of the remedial excavation, the CONTRACTOR shall replace removed sanitary sewer pipes in the alignment and configuration as shown on the plans or as directed by the OWNER.

Payment for replacement of sanitary sewer pipe shall be paid for at the contract unit price bid per linear foot for the bid item "Replace Sanitary Sewer Pipes". Said payment shall be full compensation for all labor, equipment, and material required for backfill and bedding and all other incidental items required for installation of the sewer pipes. Temporary plugs at existing sewer pipes or pipe stubs at manholes shall not be paid for directly but shall be considered subsidiary to other items for which direct payment is made.

16.2 FLEXIBLE COUPLING

The CONTRACTOR shall furnish and install a flexible coupling at the locations shown on the plans to connect the existing sanitary sewer pipe to the new pipe being reconstructed. This would include the connection between the new 10" sanitary sewer pipes and existing sewer pipes as shown on the plans. The flexible coupling shall be installed in accordance with the manufacturer's recommendation to provide a watertight seal.

The flexible coupling shall be made of an elastomeric polyvinyl chloride or other approved elastomeric material. The flexible coupling shall be resilient to ultraviolent rays and chemicals, and shall be suitable for storm water and sanitary sewer use in a buried installation. All clamps required for installation of the flexible coupling shall be stainless steel and all other metal components used for the coupling shall be stainless steel or have a corrosion resistant coating.

A reinforced concrete collar shall be constructed around the flexible coupling as shown on the plans. The reinforced collar shall not be paid for directly but shall be considered subsidiary to the cost of the flexible coupling.

Flexible Couplings shall be measured and paid for based upon the contract unit price bid per each for the item "Flexible Coupling". Said payment shall be full compensation for furnishing all labor, equipment and materials required to furnish and install the coupling at the locations shown including construction of the reinforced concrete collar around the pipe and flexible coupling as shown on the plans.

17.0 COORDINATION WITH OTHERS

The CONTRACTOR shall be required to closely coordinate all of their work on this project with the planned grading, storm sewer, culvert and railroad track construction work that is being completed by the BNSF Railway as well as the City of Lincoln's sanitary sewer project. The CONTRACTOR shall communicate directly with the BNSF and their contractor as well as the City and their contractor on an on-going basis when scheduling and performing the environmental remediation work to be completed under this project. This may include attendance at progress meetings and other meetings with the BNSF, City or their respective contractors to ensure proper coordination so that work on the environmental remediation does not adversely affect work on the other projects.

The City's contractor that is completing the sanitary sewer work will be performing work on the downstream segment of the proposed sewer that will be removed and reconstructed as part of the environmental remediation work. The CONTRACTOR shall coordinate all by-pass pumping and work associated with the removal and reconstruction of the sanitary sewer with the City's contractor.

In addition to the work being completed by the BNSF and City of Lincoln, MCI/Verizon and Qwest Communications will be relocating their buried fiber optic utilities along the railroad right-of-way. This work is generally located outside the limits of the environmental remediation work but the CONTRACTOR shall be advised that additional contractors associated with the fiber optic relocations may be working in the same general area concurrently with this project.

All work on this project is being completed on BNSF property and as such the CONTRACTOR shall abide by all rules and requirements of the railroad. The CONTRACTOR shall contact the BNSF to determine the location of all railroad communication lines and other railroad facilities within the project area prior to starting work and shall conduct their operations so as not to impact the railroad utilities.

18.0 SPECIAL PROVISIONS TO EMBANKMENT (CHAPTER 2.06)

2.06 EMBANKMENT

Add the following paragraphs:

18.1 BACKFILLING AND COMPACTION

When soil removal is complete, fill material will be placed and compacted in the excavation. Backfill should be placed as soon as possible following authorization by Benesch.

The excavation will be backfilled with the clean excavated soil that is deemed structurally suitable and soil imported from off site that will meet specifications described below. No wet soil may be used as backfill. Backfill will be free of debris including roots, sod, leaves, and construction debris and will not contain stones over 4-inches in diameter.

The CONTRACTOR shall identify the location of the quarry, pit, or borrow site(s) in which backfill materials are procured to Benesch. The CONTRACTOR shall provide a contact name and address for the operator/OWNER of the quarry, pit, or borrow site(s) in advance of procuring backfill. The CONTRACTOR shall allow Benesch to collect samples for the purpose of laboratory testing to determine the suitability of the backfill for use at the site.

The backfill shall be placed and compacted in accordance with the following:

The basis for controlling the placement of fill and backfill on the site, excluding free draining granular materials, shall be the "optimum moisture content" and "maximum dry density" as determined by ASTM D690-00a, Procedure A, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb_f/ft^3 or 600 kN-m/m^3).

Silty and clayey sands (as defined by ASTM D2487-10, Standard Test Method for Classification of Soils for Engineering Purposes) shall be placed at a workable moisture content (near the soil's optimum moisture content) and compacted to a dry density at least equal to 95% of the soil's maximum dry density.

Clean free draining granular materials (sand) used as fill and backfill shall be compacted to at least 60% "relative density" as determined in accordance with ASTM D4253-00 (Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table) and D4254-00 (Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculations of Relative Density).

Measurement and payment for the volume of soil backfilled will be based on pre-excavation staking/survey and post excavation survey of the final excavation dimensions be completed by CONTRACTOR and will be paid on a unit rate price bid "Soil Replacement and Compaction".

18.2 SOIL SEGREGATION AND DISPOSAL

Inspection of excavated soil on site will be necessary to segregate the petroleum contaminated soil from the clean soil. Benesch technicians will be on site during the excavation to inspect the soil. Segregated petroleum contaminated soil shall be stockpiled on plastic sheeting pending disposal at a licensed Subtitle D landfill under a special waste permit. The CONTRACTOR shall secure a special waste permit prior to hauling the petroleum contaminated soil for disposal at the selected landfill if **not using the Lincoln/Lancaster County Bluff Road Landfill. Bidders are instructed not to contact the Bluff Road Landfill for pricing or other authorizations**. The City has secured pricing at $21/ton which includes tipping fee and occupancy tax for special waste disposal. An additional $5/load is applied for each truck delivery. Benesch is obtaining special waste authorization for the material that will be disposed at this facility. If another landfill will be used

for disposal, bidder shall identify the facility, unit rates for disposal and a listing of applicable permits/authorizations for the facility demonstrating its ability to accept the material in accordance with State and local requirements.

18.3 HAULING

An adequate number of trucks shall be used to efficiently conduct the Work. Trucks should be capable of transporting petroleum contaminated soils from the excavation to the stockpile locations and from the stockpile locations to landfill for disposal without release of soil to the ground. Truck loads must be covered with tarps. Dust control will be provided by the CONTRACTOR to ensure compliance with NDEQ and Lincoln/Lancaster County Health Department Air Quality regulations pertaining to fugitive emissions from hauling operations.

Measurement and payment for soil transported off site for disposal will be based on actual load tickets from the disposal facility or other certified scale facility and will be paid on a unit rate price bid "Soil Hauling and Disposal". OWNER reserves the right to retain contaminated soils on site for reuse and is under no obligation to utilize CONTRACTOR for ultimate disposal of contaminated soils.

18.4 CONCRETE AND DEBRIS REMOVAL

With the exception of minor amounts of concrete associated with monitoring well and recovery well pads referenced above, no concrete removal is expected, although concrete associated with former site operations may be encountered. Concrete removal and disposal is listed at the unit rate price "Concrete and Debris Removal/Disposal" in the event that concrete debris is encountered during the site excavation. If concrete or other debris removal is needed, the material will be removed and stockpiled on site. Stockpiles will be placed and covered with 8-mil plastic sheeting and as specified in the Stockpiling and Covering Stockpiled Soils section of this document. Following landfill disposal approval, the CONTRACTOR will load and haul the waste for disposal or other off site beneficial reuse. Measurement and payment will be based on landfill load tickets or other certified scale tickets and will include all costs for transportation under the unit rate price.

18.5 STOCKPILING AND COVERING STOCKPILED SOILS

Soils will be stockpiled on site at location(s) specified by the OWNER and Benesch. Proposed stockpiling locations are shown in Figure 3.

Stockpiled soil shall meet the following minimum standards:

- Stockpiled soils shall be placed on and covered with plastic (8-mil minimum).
- Stockpiled soil shall not be placed in drainage ways or other areas subject to surface water runoff.
- A soil erosion barrier (silt fence) shall be placed as specified in the Storm Water Pollution Prevention Plan and/or as instructed by Benesch.
- Ground surface at the stockpiling locations shall be graded to prevent surface water from flowing into or ponding below or against the stockpiles.

Stockpiled soil should be piled so that a roll of 40 foot by 100 foot plastic continuous sheeting can easily be placed over the piles and secured with clean soil or other heavy material. The CONTRACTOR will also be responsible for inspecting and maintaining the cover on the stockpile until the Work is completed.

Measurement and payment for stockpile management (including placement on plastic sheeting, covering, soil contouring and stockpile maintenance) shall be based on the lump sum bid item price "Stockpile Management".

19.0 SPECIAL PROVISIONS TO CONSTRUCTION FENCING (CHAPTER 9.04)

Add the following paragraphs:

9.04 CONSTRUCTION FENCING

Construction fencing shall be temporary chain link fencing. The fencing must be installed in order to restrict access to the open excavation during periods when excavation or compaction work is not occurring.

19.1 TEMPORARY CHAIN LINK FENCING

The CONTRACTOR shall provide barricades and fencing so that the public and personnel not directly involved with the Work are free of hazards. The CONTRACTOR shall install temporary construction fencing and barricades around the open excavation while not performing Work. All disturbed areas of the site shall be restored to their prior condition at the completion of the excavation.

The temporary chain link fence shall be new or previously used, salvaged chain link fencing in good condition. Posts shall be galvanized steel pipe of a diameter to provide rigidity. Post will be 96 inches long, driven a minimum of 24 inches below grade and extending 72 inches above grade. Longer posts may need to be used in select locations, as warranted by unstable ground. Fabric shall be woven galvanized steel wire mesh. Fence shall be continuous in length and shall be wire tied to fence posts or prefabricated into modular pipe-framed fence. Top rail is optional for temporary construction fencing.

19.2 INSTALLATION

Chain link posts shall be spaced at a maximum of 10 foot on center. Drive posts or set in holes and backfill. For soft and unstable ground conditions, drive longer posts or cast concrete plug around post. Fabric shall be securely attached to posts.

19.3 MAINTENANCE

Maintain fencing in good condition. Inspect fencing daily during construction. In addition, if the JPA or Benesch identifies maintenance needs, they will contact the CONTRACTOR who must repair damaged fencing immediately.

19.4 REMOVAL

Remove fencing upon completion of the excavation and compaction work.

Installation, maintenance and removal shall be measured and paid for at the contract unit price bid per linear foot for "Construction Fencing". This price shall be full compensation for furnishing, preparing, transporting, delivering, installing, and moving the fence for phasing and for all labor, tools, equipment and incidentals necessary to complete the installation work, maintenance and removal including backfilling and compaction of post holes.

20.0 SPECIAL PROVISIONS TO TRAFFIC CONTROL (CHAPTER 15.0):

Add the following:

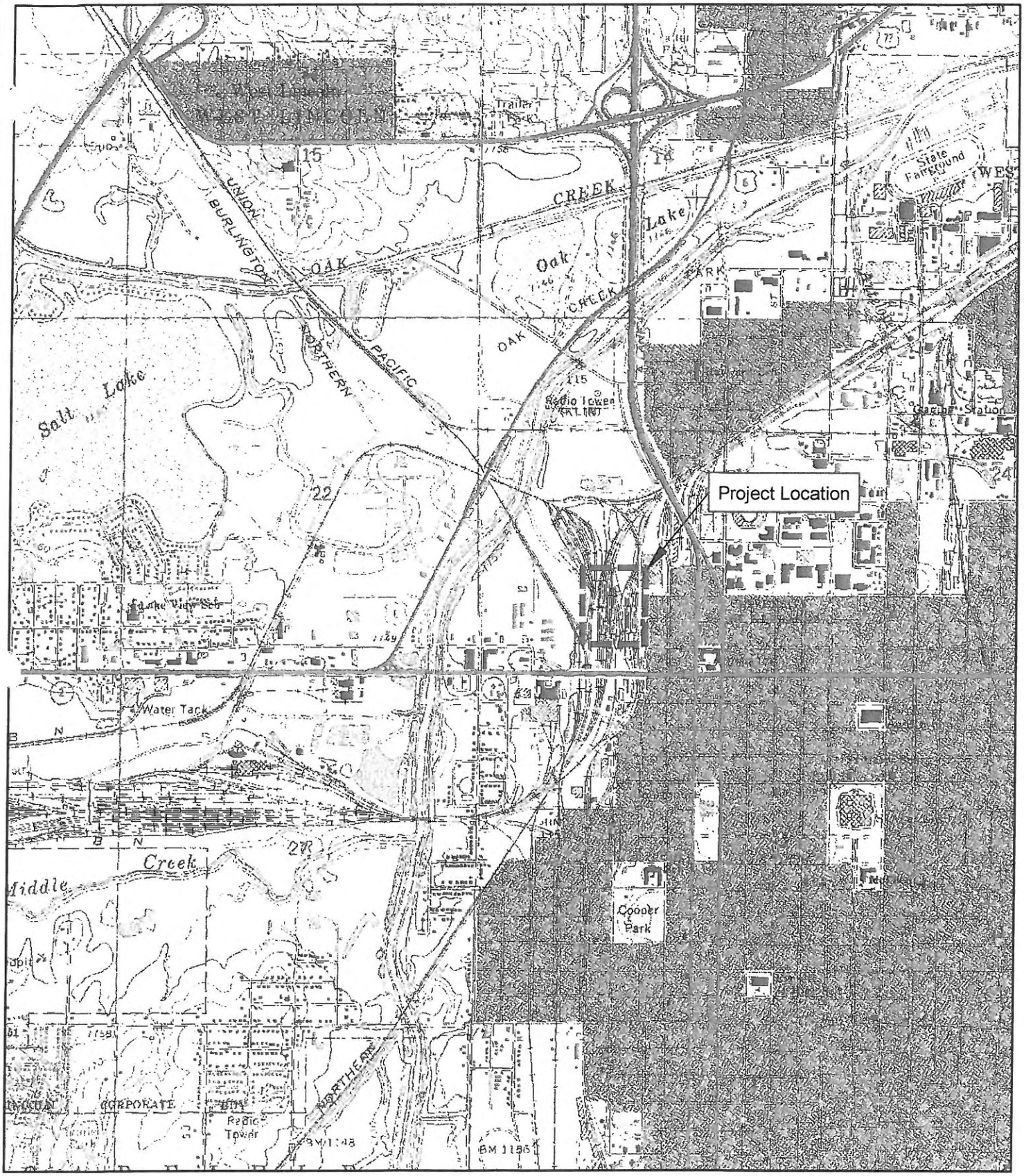
15.01 TRAFFIC CONTROL PLAN

The CONTRACTOR shall prepare a Traffic Control Plan. The CONTRACTOR shall coordinate with BNSF, Alter Metals, Watson Brickson Lumberyard and the selected landfill where impacted soils will be hauled in preparation of the Traffic Control Plan. Payment for preparation and implementation of the Traffic Control Plan will be paid on a lump sum price bid "Traffic Control Plan".

21.0 MISCELLANEOUS

In addition to submitting completed Unit Price Schedules, please include information pertaining to your experience with similar projects and a list of equipment intended for use on this project. **All work must be completed in accordance with maximum allowable rates published in NDEQ Environmental Guidance Document 08-023 Reasonable Rate Schedule and Reimbursement Guidance Manual (Title 200 Program).** Incomplete or partial bids will not be accepted.

FIGURES



NRCS Quad Map

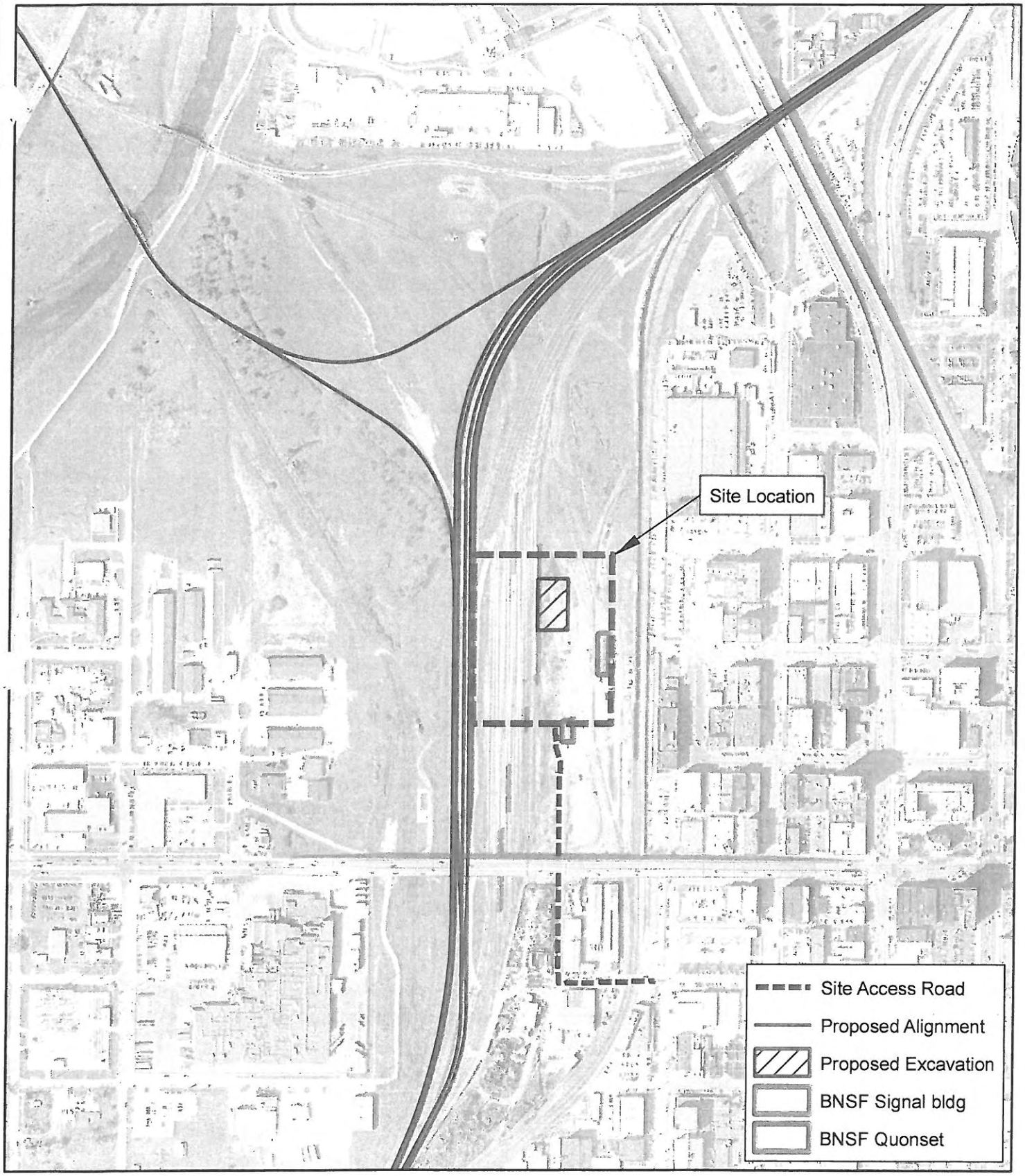
N
W E
S

2,000 1,000 0 2,000 Feet

1 inch = 2,000 feet

West Haymarket Arena
BNSF Lincoln Depot, LINCOLN, NE

Topographic Map
FIGURE 1



NRCS Quad Map

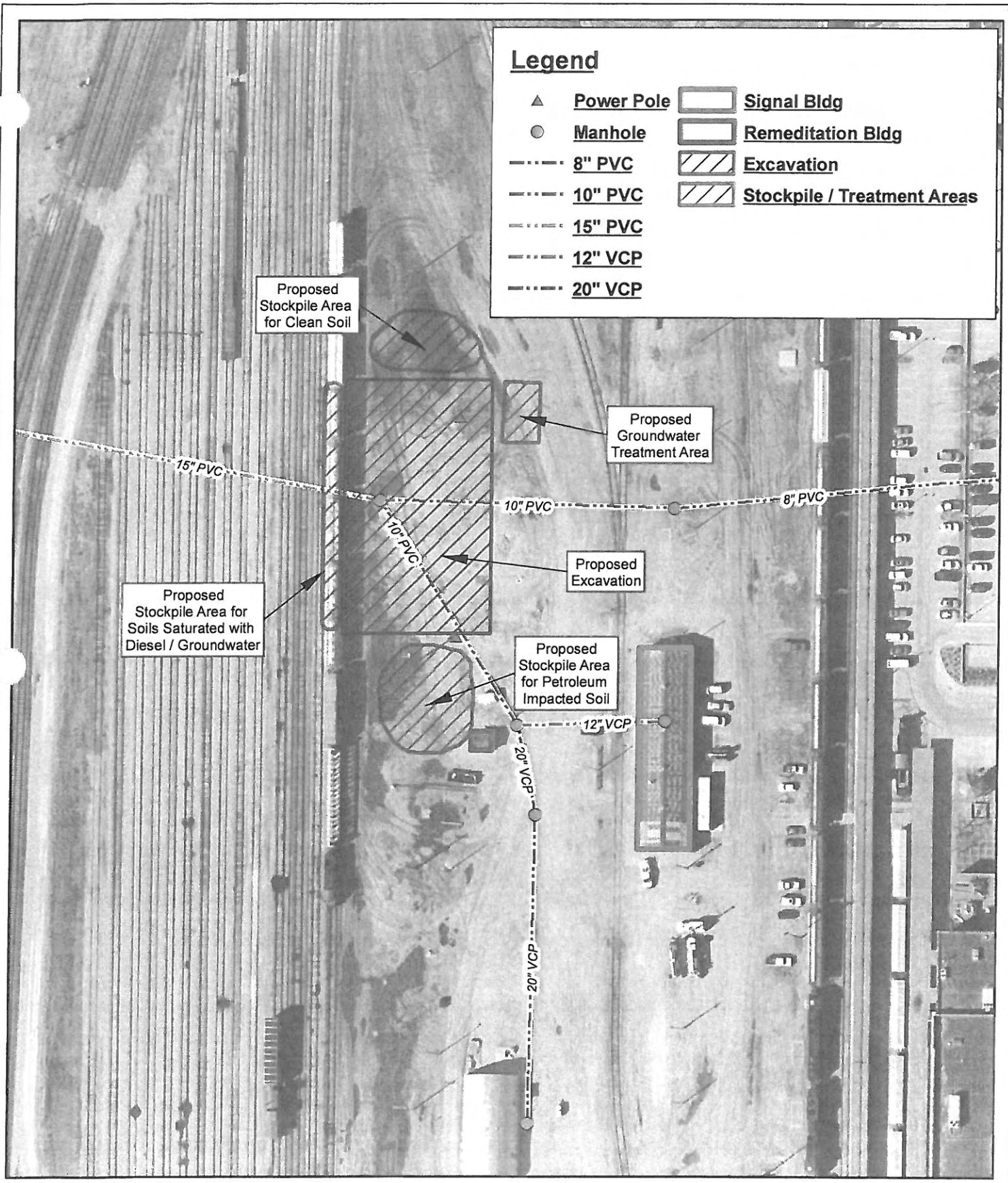
N
W E
S

0 125 250 500
Feet

1 inch = 500 feet

West Haymarket Arena
BNSF Lincoln Depot, LINCOLN, NE

Site Location Map
FIGURE 2



City of Lincoln 2007 Aerial Imagery

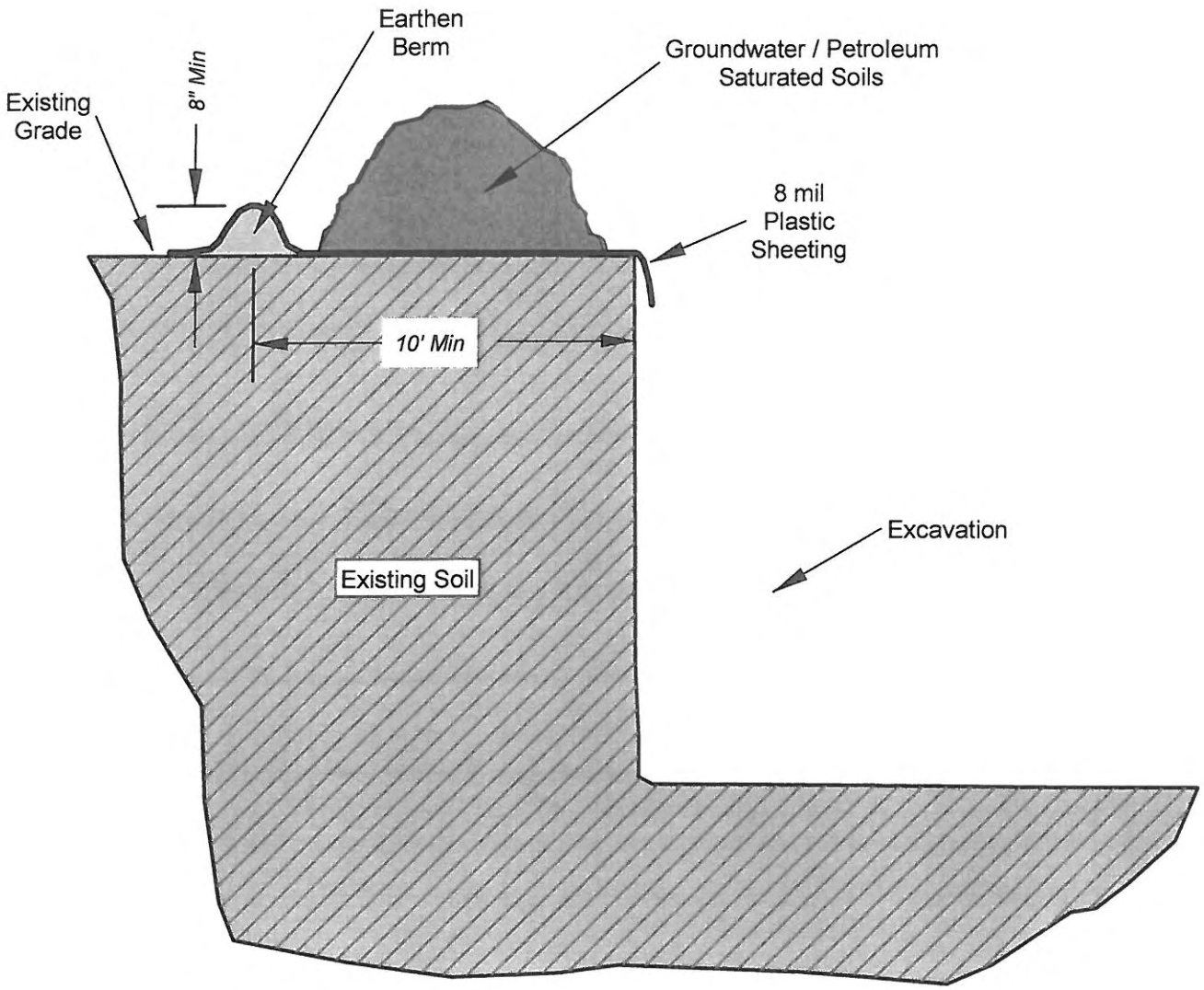
0 25 50 100 Feet

1 inch = 100 feet

HWS Solutions Through Service

West Haymarket Arena
BNSF Lincoln Depot., LINCOLN, NE

Site Excavation Map
FIGURE 3



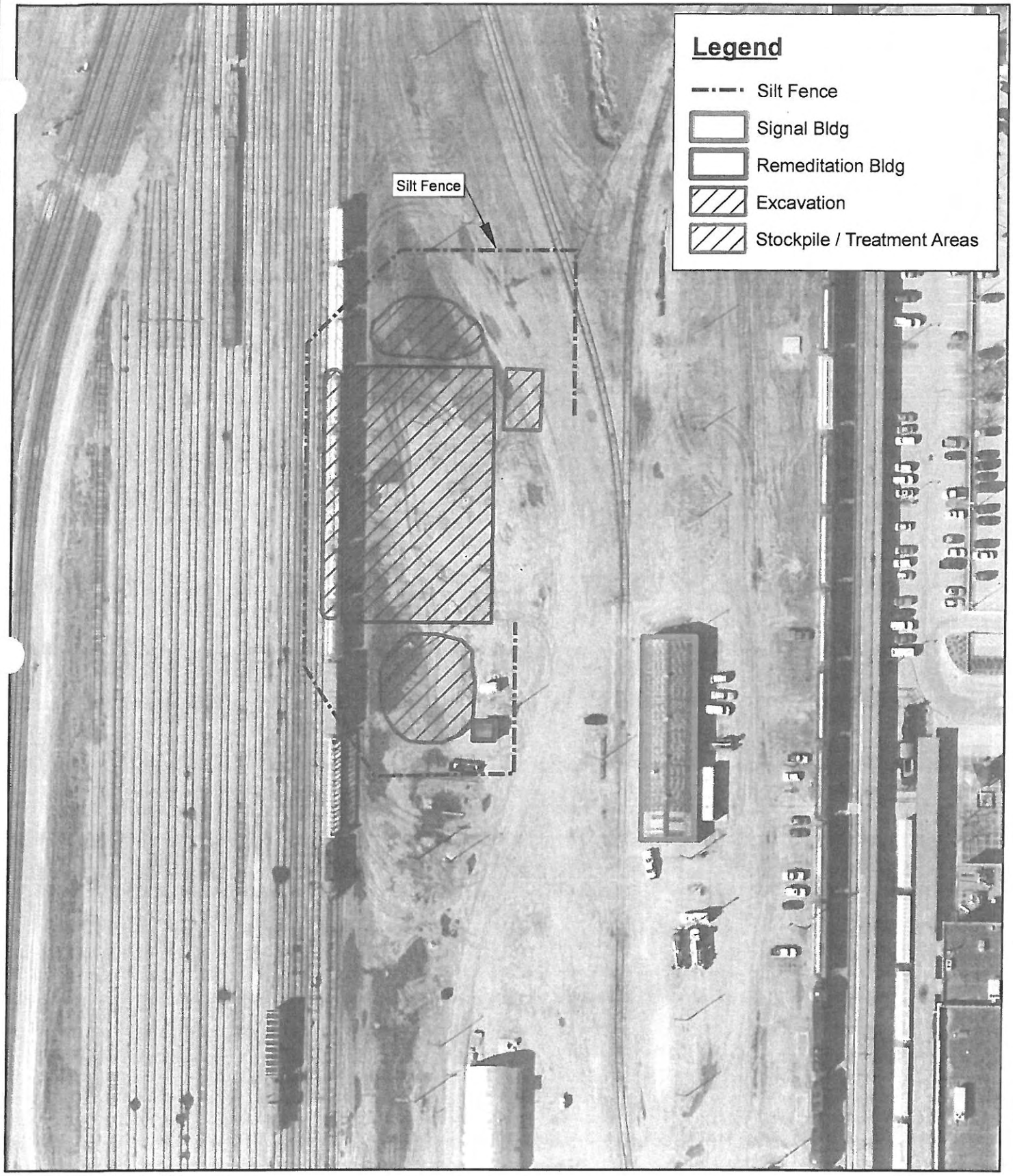
Cross Section of Groundwater / Petroleum Saturated Soils Stockpile Area

No Scale

West Haymarket Arena
BNSF Lincoln Depot., LINCOLN, NE

Cross Section Diagram
FIGURE 4

HWS
Solutions Through Service



City of Lincoln 2007 Aerial Imagery

N
W E
S

0 25 50 100
Feet

1 inch = 100 feet

HWS
Solutions Through Service

West Haymarket Arena
BNSF Lincoln Depot., LINCOLN, NE

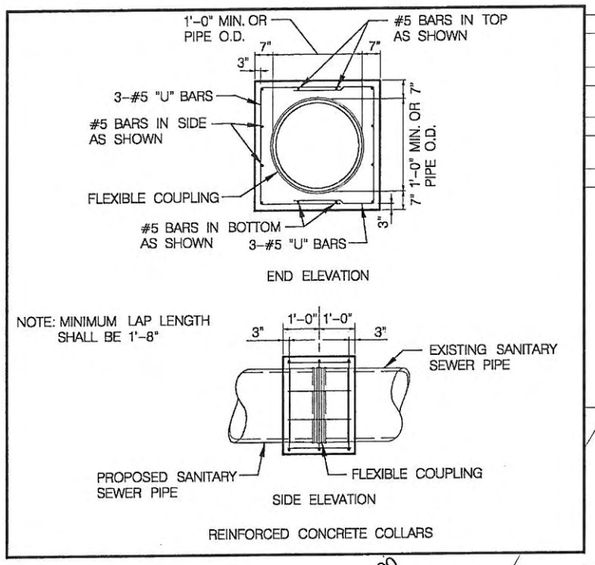
Erosion Control Map
FIGURE 5

PROJ: Soil_Contamination
PEN: Soil_Contamination_Label
USER: dcarey
DATE: 11/1/2010
DGN: P:\PROJECTS\010-2431\Design\Shasta_Soil_Contamination\Waste Water\102431WW01.dgn

OLSSON ASSOCIATES
PROJECT NO. 010-2431

CITY OF LINCOLN NEBRASKA

PROJECT NO.	SHEET NO.
870601	
Date: 11/1/2010	Drawn: DLC
Horz. Scale 1 : 40	Checked: TAL
Vert. Scale 1 : 10	Approved: DLC



NOTES:

ALL SURVEY WAS DONE BY ELECTRONIC INSTRUMENT.
ALL ELEVATIONS SHOWN ARE (N.A.V.D. 1988).
2010 LINCOLN STANDARD PLANS SHALL BE USED WHERE APPLICABLE.

BYPASS PUMPING	50.0015	
STATION TO STATION	SIDE	LS
AS NEEDED	N/A	1

SANITARY SEWER PIPE	22.0005		
NO.	SIZE	LF	DESCRIPTION
1	10"	128	STA. 1+61.00 TO STA. 2+88.67
2	10"	81	STA. 5+10.00 TO STA. 5+91.00

FLEXIBLE COUPLING	50.0001		
STATION	SIDE	SIZE	EA
1+61.00	℄	10"	1
2+88.67	℄	10"	1
5+10.00	℄	10"	1
5+91.00	℄	10"	1

XXXX REM. SANITARY SEWER PIPE	50.0005		
STATION TO STATION	SIDE	SIZE	LF
1+61.00 – 2+88.67	℄	10"	128
5+10.00 – 5+91.00	℄	10"	81

TEMPORARY SHORING	50.0001	
STATION	SIDE	LS
2+98.67	℄	1

R.C. COLLAR QUANTITIES (FOR INFORMATION ONLY)
CONCRETE = 1.44 C.Y.
REFORCING STEEL = 200 LBS.

0 20 40

PROFESSIONAL CIVIL ENGINEER
DANIEL L. CAREY
E-11166
STATE OF NEBRASKA

BENCHMARKS

#4 NGS E-13 NE CORNER OF 3RD & 'J' ST. NEAR POWER POLE.
N(Y) = 203376.64
E(X) = 156047.52
ELEV.=1150.84

CONTROL POINTS

Point	North	East	Elev.	Description
1	203727.21	155555.74	1147.93	5/8" REBAR SE CORNER OF 2ND & 'K' ST.
2	202724.10	155043.03	1148.92	SCOR LCSM W4 26-10-6 NW OF 1ST & 'G' ST.
3	205410.82	155053.41	1150.48	SCOR LCSM NW 26-10-6 NW OF 1ST & 'O' ST.
59	206121.09	157517.80	1153.12	PK NAIL IN ASPHALT 1/2 BLOCK W. OF 7TH & 'G' ST. AND S. OF DECORATIVE LOCOMOTIVE
60	206127.20	157673.29	1154.15	PK NAIL IN BRICK S. OF 7TH & 'Q' ST. IN MEDIAN NOSE
61	205698.28	157530.21	1152.34	PK NAIL IN CONCRETE 1/2 BLOCK W. OF 7TH & 'P' ST. AND S. OF E. WALKWAY CANOPY

10" TRUNK SEWER (SOUTHEAST)

1 P.O.B. STA. 1+00.00 – ℄ 10".SEWER MAIN
N(Y) = 206,186.59
E(X) = 157,207.11
(FIELD VERIFY TO MATCH ℄ OF EXISTING 10" SEWER)

2 P.O.E STA. 2+98.67 – ℄ 10" SEWER MAIN
N(Y) = 206,358.13
E(X) = 157,106.88
(FIELD VERIFY TO MATCH ℄ OF EXISTING 10" SEWER)

10" TRUNK SEWER (EAST)

3 P.O.B. STA. 5+00.00 – ℄ 10" SEWER MAIN
N(Y) = 206,358.13
E(X) = 157,106.88
(FIELD VERIFY TO MATCH ℄ OF EXISTING 10" SEWER)

4 P.O.E STA. 6+00.00 – ℄ 10" SEWER MAIN
N(Y) = 206,363.73
E(X) = 157,206.76
(FIELD VERIFY TO MATCH ℄ OF EXISTING 10" SEWER)

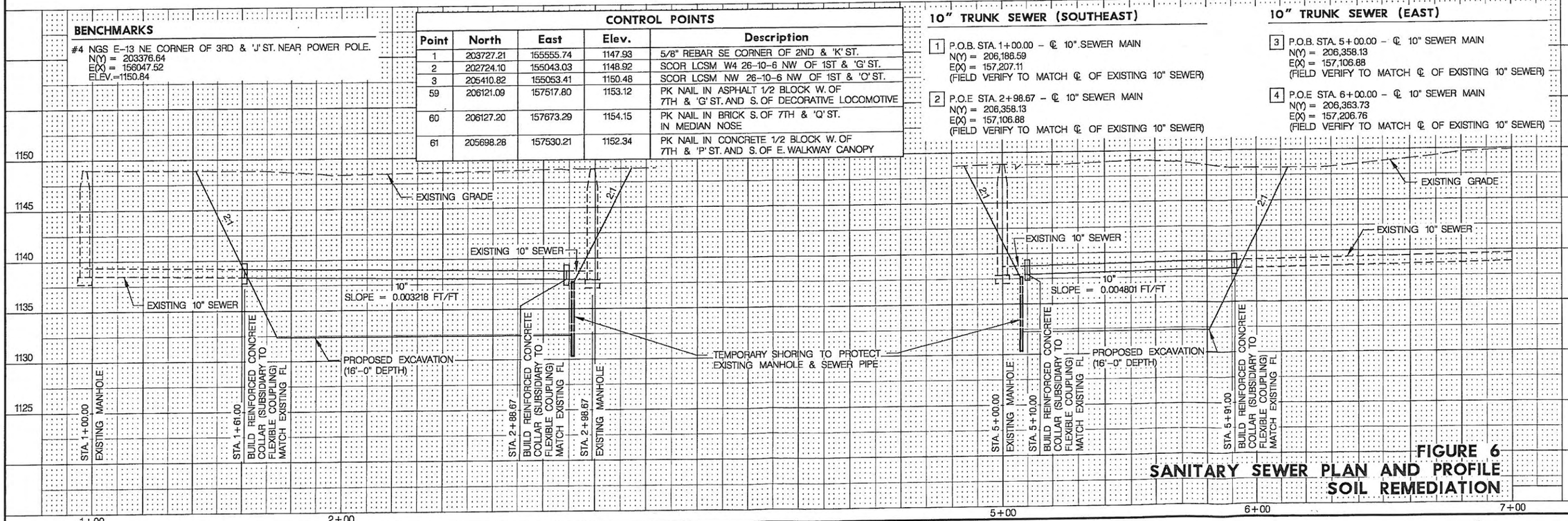
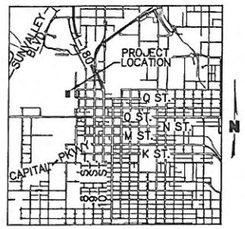


FIGURE 6
SANITARY SEWER PLAN AND PROFILE
SOIL REMEDIATION

ATTACHMENT A

CONSTRUCTION STORM WATER NOTICE OF INTENT (CSW-NOI)
AND
EROSION CONTROL PLANS

BNSF LINCOLN DEPOT
EROSION & SEDIMENT CONTROL PLAN



VICINITY MAP
NOT TO SCALE

FOR DETAILS REFERENCE THE FOLLOWING LINCOLN STANDARD PLANS (LSP):

LSP 175	SEDIMENT FENCE
LSP 176	CONSTRUCTION ENTRANCE
LSP 178	INLET PROTECTION

SITE INFORMATION	
TOTAL DISTURBED AREA	1.99 Ac.
NPDES PERMIT IS REQUIRED	

NOTE:
DIAL BEFORE YOU DIG. CALL 1-800-331-5666 FOR LOCATION OF UNDERGROUND TELEPHONE, ELECTRIC, GAS MAINS, CABLE TELEVISION AND CITY UTILITIES.

ENGINEER
OLSSON ASSOCIATES
1111 LINCOLN MALL, SUITE 111
LINCOLN, NE 68124-6316
ERIN S. BRIGHT, PE
(402) 474-6311

PROPERTY OWNER
BURLINGTON NORTHER RR TAX DIVISION
PO BOX 961089
FORT WORTH, TX 76161-0089

PERMITTEE
CITY OF LINCOLN

N

1" = 50'
0' 25' 50' 100'
SCALE IN FEET

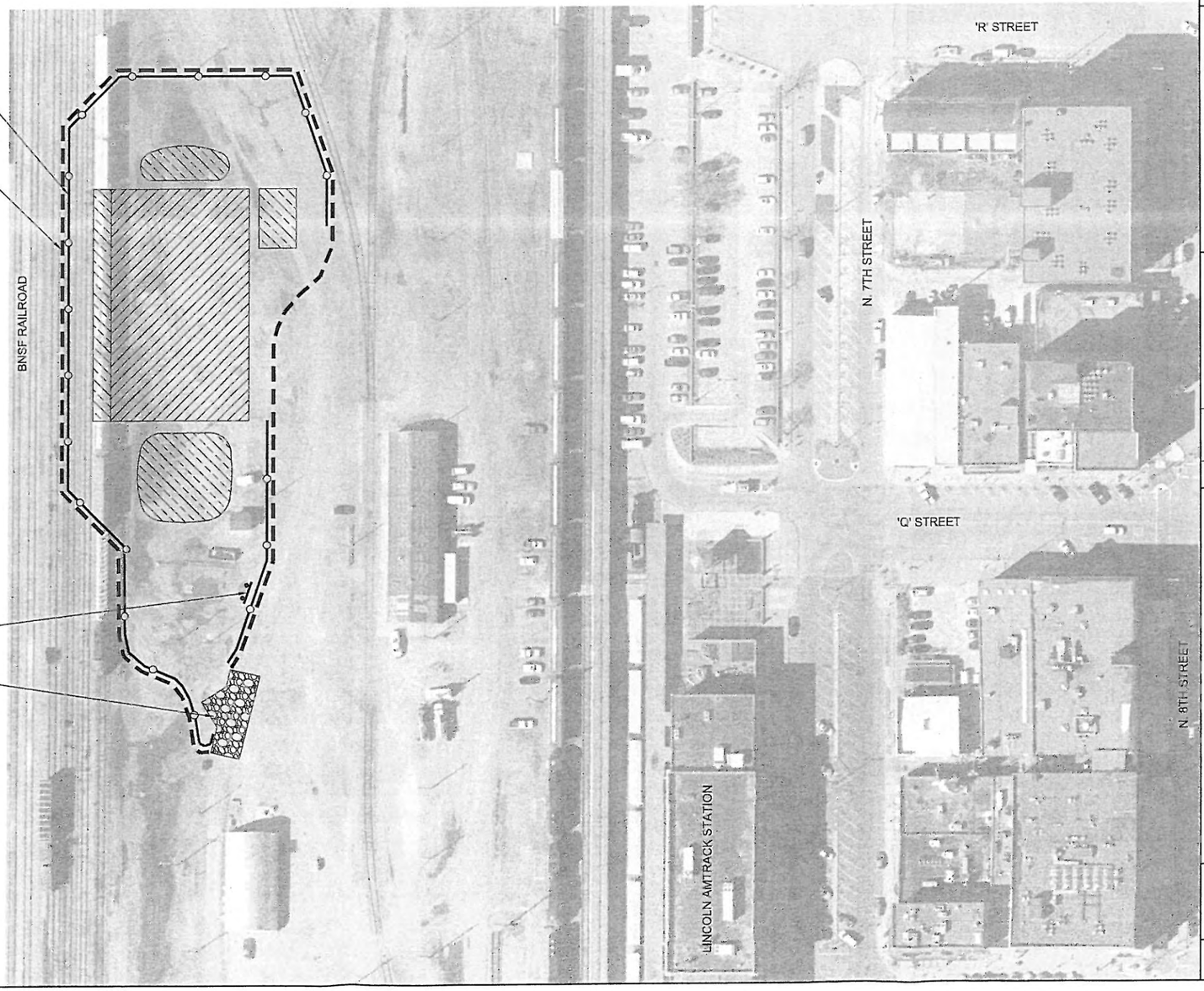
LEGEND
- SILT FENCE
- LIMITS OF GRADING ACTIVITIES
- CONSTRUCTION ENTRANCE
- AREA OF EXCAVATION
- SOIL TREATMENT AREA
- SWPPP INFORMATION SIGN

THE UNDERSIGNED CERTIFIES THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE TERMS OF THE INTERLOCAL AGREEMENT FOR NPDES COMPLIANCE.

ERIN S. BRIGHT, PE

EROSION AND SEDIMENT CONTROL NOTES

1. THIS EROSION AND SEDIMENT CONTROL PLAN (E & S PLAN) IS PART OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP). THIS E & S PLAN MUST BE USED IN CONJUNCTION WITH THE SWPPP.
2. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. CONTRACTOR WILL BE REQUIRED TO CO-SIGN THE CSW-NOI FOR THE NPDES PERMIT FOR THIS PROJECT.
3. CONTRACTOR SHALL REFERENCE SITE EXCAVATION MAP (PREPARED BY OTHERS) FOR DETAILS OF PROPOSED EXCAVATION.
4. CONTRACTOR SHALL MONITOR VEHICLE SEDIMENT TRACK OUT ON 'N' STREET AND 6TH STREET. TRACK OUT SHALL BE CLEANED UP IMMEDIATELY IF IT OCCURS ON ANY PUBLIC ROADWAYS.
5. THE CONTRACTOR SHALL INSTALL GRAVEL CHECK DAMS OR SEDIMENT BARRIERS IN ANY GULLY WASHOUT AREAS TO CONTROL FURTHER EROSION AS DIRECTED BY THE ENGINEER.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SEDIMENT CONTROL STRUCTURES UNTIL FINAL SITE STABILIZATION IS ACHIEVED.
7. ADDITIONAL SILT FENCE SHALL BE INSTALLED WHEN NECESSARY TO PREVENT SEDIMENT FROM MIGRATING ONTO THE ROADS OR ADJACENT PROPERTY.
8. INSPECTION AND MAINTENANCE OF EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH SECTION 9.7.4 OF THE CITY OF LINCOLN DRAINAGE CRITERIA MANUAL.
9. ANY STORM SEWER INLETS WITHIN THE DISTURBED AREA NOT SHOWN ON THE PLANS SHALL RECEIVE INLET PROTECTION.
10. AREAS WHICH ARE DISTURBED SHALL BE TEMPORARILY STABILIZED WITH NDOR 47B SAND GRAVEL FOLLOWING EARTHWORK OPERATIONS.
11. UNLESS OTHERWISE INDICATED, ALL STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES AND STORM WATER MANAGEMENT PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE LOWER PLATTE SOUTH NRD MANUAL OF EROSION AND SEDIMENT CONTROL AND STORM WATER MANAGEMENT STANDARDS, DATED 1994 AND APPROVED SUPPLEMENTS.
12. FOLLOWING SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN (7) CALENDAR DAYS TO THE SURFACE OF ALL PERIMETER CONTROLS, STOCKPILES, AND ANY OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE WHICH ARE NOT BEING USED FOR MATERIAL STORAGE, OR ON WHICH ACTUAL EARTH MOVING ACTIVITIES ARE NOT BEING PERFORMED.
13. ALL SEDIMENT AND EROSION CONTROL PRACTICES MUST BE INSPECTED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND AFTER ANY STORM EVENT OF GREATER THAN 0.5 INCHES OF PRECIPITATION DURING ANY 24-HOUR PERIOD BY RESPONSIBLE PERSONNEL. ANY NECESSARY REPAIRS OR CLEAN-UP TO MAINTAIN THE EFFECTIVENESS OF THE BEST MANAGEMENT PRACTICES SHALL BE MADE IMMEDIATELY.
14. BMP IMPLEMENTATION SCHEDULE SHALL BE FOLLOWED FOR INSTALLATION, MAINTENANCE AND REMOVAL OF BMP'S.
15. CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND DUST CONTROL. ANY DAMAGE FROM BLOWING DUST OR EROSION AND RUNOFF FROM THE SITE SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
16. CONTRACTOR IS RESPONSIBLE FOR OBTAINING PROPER NPDES PERMITS ON ALL BORROW SITES.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SEDIMENT CONTROL BARRIERS FOR A PERIOD OF 1 YEAR AFTER COMPLETION OF THE PROJECT OR UNTIL HE IS RELEASED FROM THIS RESPONSIBILITY BY THE OWNER, WHICHEVER PERIOD IS SHORTER.
18. ANY ON-SITE FUELING WILL COMPLY WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.



BMP IMPLEMENTATION SCHEDULE

SPECIFIED BMP	INSTALLATION	REQUIRED MAINTENANCE	REMOVAL
CONSTRUCTION ENTRANCE	UPON MOBILIZATION OF GRADING CONTRACTOR	ADD OR REPLACE ROCK AS REQUIRED TO MAINTAIN FUNCTIONALITY	COMPLETION OF STREET PAVING.
SILT FENCE	IMMEDIATELY FOLLOWING CLEARING AND GRUBBING AROUND PERIMETER	REPAIR WASH-OUTS, DOWNED FABRIC, AND REMOVE SEDIMENT WHEN DEPTH IS ½ THE HEIGHT OF THE FABRIC.	95% VEGETATIVE COVER ON UPSTREAM AREAS.
STORM DRAIN INLET PROTECTION	IMMEDIATELY FOLLOWING INSTALLATION OF STORM SEWER	REMOVE SEDIMENT WHEN DEPTH IS ½ THE HEIGHT OF THE FABRIC.	COMPLETION OF STREET PAVING.

OLSSON ASSOCIATES
1111 Lincoln Mall, Suite 111
P.O. Box 84608
Lincoln, NE 68501-4608
TEL 402.474.6311
FAX 402.474.5160
www.olssonassociates.com

PROFESSIONAL CIVIL ENGINEER
ERIN S. BRIGHT
E-12443
STATE OF NEBRASKA

REV. NO.	DATE	REVISIONS DESCRIPTION
		REVISIONS

EROSION & SEDIMENT CONTROL PLAN

BNSF LINCOLN STATION

2010

LINCOLN, NEBRASKA

drawn by:	BPB
checked by:	ESB
approved by:	ESB
QA/QC by:	ESB
project no.:	010-1633
drawing no.:	
date:	10.28.10

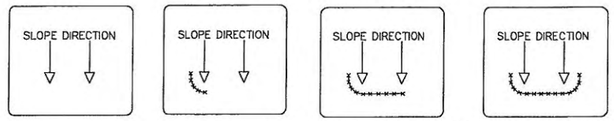
SHEET
C1.1

DWG: F:\Projects\010-1633_LDWP\Final_Plans\101633_SWPPP.dwg
DATE: Oct 28, 2010 12:30pm
XREFS: 101633_AERIAL
USER: bbartek

BNSF LINCOLN DEPOT
EROSION & SEDIMENT CONTROL DETAILS

SILT FENCE PLACEMENT/ONE SLOPE

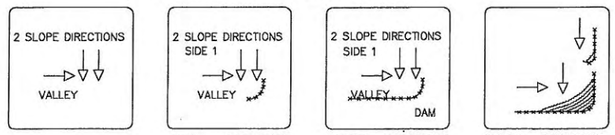
INSTALLATION WITH J-HOOKS OR 'SMILES' INCREASE SILT FENCE EFFICIENCY.



STEP 1 – CONSTRUCT LEG | STEP 2 – CONSTRUCT DAM | STEP 3 – CONSTRUCT LEG 2

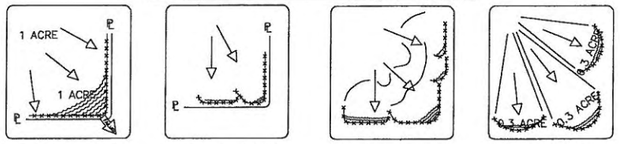
SILT FENCE PLACEMENT/TWO SLOPES

INSTALLATION WITH J-HOOKS WILL INCREASE SILT FENCE EFFICIENCY AND REDUCE EROSION-CAUSING FAILURES.



STEP 1 – CONSTRUCT A DAM | STEP 2 – CONSTRUCT SIDE 2 | STEP 3 – CONSTRUCT J-HOOKS AS NEEDED

SILT FENCE PLACEMENT/PERIMETER CONTROL



INCORRECT – DO NOT LAYOUT "PERIMETER CONTROL" SILT FENCES ALONG PROPERTY LINES. ALL SEDIMENT LADEN RUNOFF WILL CONCENTRATE AND OVERWHELM THE SYSTEM.

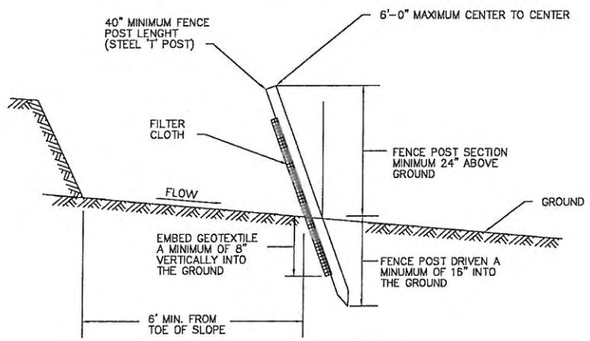
CORRECT – INSTALL J-HOOKS

CORRECT – INSTALL J-HOOKS

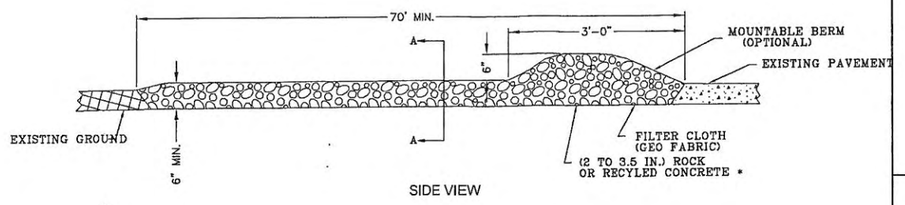
DISCREET SEGMENTS OF SILT FENCE, INSTALLED WITH J-HOOKS OR SMILES' WILL BE MUCH MORE EFFECTIVE.

NOTE:
REFER TO CHAPTER 8 AND 9 OF THE CITY OF LINCOLN DRAINAGE CRITERIA MANUAL FOR MORE INFORMATION ON SEDIMENT AND EROSION CONTROL MEASURES

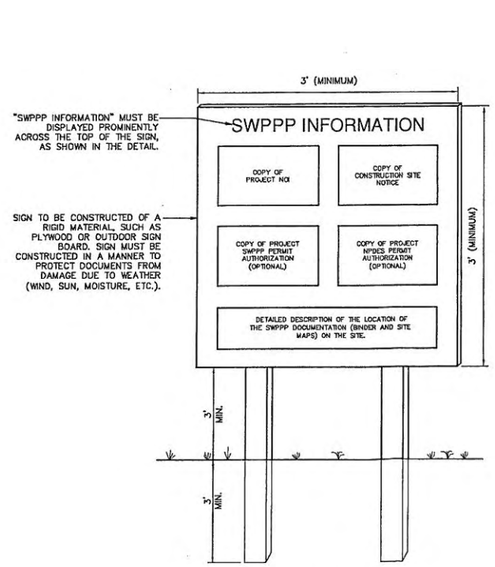
SILT FENCE DETAIL
NOT TO SCALE



SILT FENCE DETAIL
NOT TO SCALE

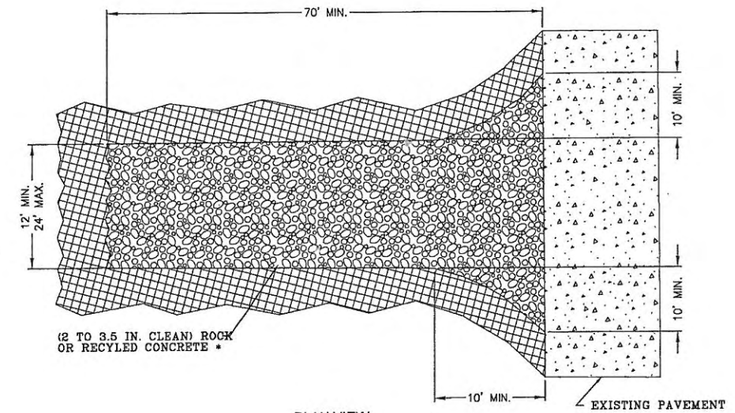


SIDE VIEW

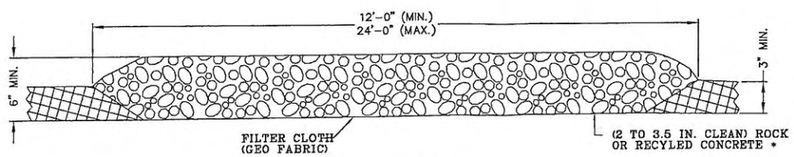


NOTES:
1. THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE ENTRANCE/EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE/VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
2. ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
3. CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE LOCAL AGENCY.
4. SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
5. CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THIS SWPPP INFORMATION SIGN.

SWPPP INFORMATION SIGN
NOT TO SCALE



PLAN VIEW



SECTION A-A

NOTE:
1. * MUST EXTEND THE FULL WIDTH AND LENGTH OF THE CONSTRUCTION ENTRANCE
2. THE 24'-0" WIDTH IS REQUIRED WHEN THE INGRESS AND THE EGRESS ARE THE SAME
3. REFER TO CHAPTER 8 AND 9 OF TH CITY OF LINCOLN DRAINAGE CRITERA MANUAL FOR MORE INFORMATION OF SEDIMENT AND EROSION CONTROL MEASURES
4. FOR ROCK DIMENSIONS AND SPECIFICATIONS SEE TABLE ON LINCOLN STANDARD PLAN NO. 177

CONSTRUCTION ENTRANCE DETAIL
SCALE: NOT TO SCALE

OLSSON ASSOCIATES
1111 Lincoln Mall, Suite 111
P.O. Box 84608
Lincoln, NE 68501-4608
TEL 402.474.6311
FAX 402.474.5160
www.olssonassoc.com

PROFESSIONAL CIVIL ENGINEER
ERIN S. BRIGHT
E-12443
STATE OF NEBRASKA

REV. NO.	DATE	REVISIONS DESCRIPTION
		REVISIONS

EROSION & SEDIMENT CONTROL DETAILS

BNSF LINCOLN STATION

2010

LINCOLN, NEBRASKA

drawn by:	BPB
checked by:	ESB
approved by:	ESB
QA/QC by:	ESB
project no.:	010-1633
drawing no.:	
date:	10.28.10

SHEET
C1.2

DWG: F:\Projects\010-1633_LDVP\Final_Plans\101633_SWPPP.dwg USER: bbartek
DATE: Oct 28, 2010 12:30pm XREFS: 101633_AERIAL

Nebraska Department of Environmental Quality

Construction Storm Water Notice of Intent (CSW-NOI)

Readiness to Apply *(Circle "yes" or "no" as it applies to this project)*

Does a reasonable potential exist for permit authorization to be limited? [Part I.C.3] YES (NO)

If the answer to this question is **Yes**, *contact NDEQ at* **402-471-4220** *before proceeding with this* ***CSW-NOI.***

Storm water Pollution Prevention Plan (SWPPP) Part III

a.	Has a **Storm Water** Pollution Prevention Plan been developed for this project?	YES NO
b.	Has a qualified individual [Part III A] prepared the **SWPPP?**	YES NO

Has the following been incorporated into the SWPPP?

c.	Site and activity descriptions as per Part III.B;	YES NO
d.	Sediment and pollution control measures and record keeping as per Part III.C;	YES NO
e.	**Erosion prevention** measures and record keeping as per Part III.C;	YES NO
f.	Inspections, maintenance of **BMP**s and associated record keeping as per Part III.E, I-J;	YES NO
g.	**Final stabilization** addressed as per Part III.M;	YES NO
h.	Does the SWPPP include documentation supporting a determination of permit eligibility with regards to endangered and threatened species and critical habitat? (Guidance is available on the NDEQ website: www.deq.state.ne.us)	YES NO

If any questions in ***Storm Water Pollution Prevention Plan (SWPPP),*** *"a – h" above, have been answered* **No,** *complete those requirements before proceeding with this* ***CSW-NOI.***

A. Construction Site Description

a. **Project Name:** BNSF Lincoln Depot

b. **Physical Address** and **County** (Indicate general location description if no address is available):
Approximately 950' north of 6th Street and 'O' Street
Lincoln, Lancaster County, NE

c. **Project Type**: Residential ___ Commercial/Industrial ___ Linear ___ Other Railroad

d. **Project Size**: Total Area (acres): 1.99 Area to be disturbed (acres): 1.99

e. **Identify surface waters within ½ mile of project boundary that will received storm water or discharge from permanent storm water management system.**
Salt Creek lies approximately 1/2 mile to the northwest of the project site.

f. **Name of Receiving Waters** (Add attachments if more than two (2) bodies of water and/or Outfalls): Salt Creek.
Waterbody Type Creek (ditch, pond, stream, river etc.).

g. **Legal Description** [1]: SE Quarter of the SW Quarter, Section 23, Township 10N, Range 6 (E) or W)

(1) Applicants may enter a legal description in terms other than those requested. For example: N1/2, Section 8, Township 8 N, Range 6 W.

h. Include a general location map with enough detail to identify the location of the construction site and waters of the state within one mile of the site. Has the map been included? (YES) NO
(e.g., USGS 7.5 minute quad map, a portion of a city or county map, or equivalent map)

i. **SWPPP Designer, company, address and phone number:**

Erin Bright	Olsson Associates
First and Last Name	Company Name
1111 Lincoln Mall, Ste 111	Lincoln, NE 68508
Mailing Address	City, State, Zip Code
402-458-5608	ebright@oaconsulting.com
Phone Number	Email

j. **SWPPP Location:**
SWPPP will be located at the project site in a weatherproof container.

k. **Project start date** (approximate): November 15, 2010

l. **Project end date** (estimated): March 15, 2011

m. List any state or federally-listed threatened or endangered species, or state or federally-designated critical habitat that is in your project area to be covered by this permit.

n. For sites previously authorized under a Construction Storm Water (CSW) permit **and** undergoing a transfer of **owner and / or certifying official**. List the previous NPDES CSW Permit Number:
NER 1_____.

C. Certification

The appropriate individuals must sign information submitted on this **CSW-NOI** form as required in **NPDES** General Permit NER110000 Part VI.D.6, and below or the application will not be authorized. If more than one certifying official, submit multiple copies of the following information.

All permit applications shall be signed as per Title 119, Chapter 13 *Applications; Signatories* as follows:

002.01 For a corporation. By a **Responsible Corporate Officer**, which means:

- A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
- The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

002.02 For a partnership or sole proprietorship: By a general partner or proprietor, respectively.

002.03 For a municipality, State, Federal, or other public agency.

- By either a principal executive officer of the agency, or
- A senior executive officer having responsibility for the operations of a principal geographic unit of the agency.

Certifying Official:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

Certifying Official / Date: _____ / _____

Certifying Official, company name, address, and phone number:

Roger Figard	City of Lincoln
First and Last Name	Company Name/Applicant
402-441-7711	City Engineer
Phone Number	Title
531 Westgate Blvd., Ste 100	Lincoln, NE 68528
Mailing Address	City, State, Zip Code

Certifying Official #2 (optional)/ Date: _____ / _____

Certifying Official #2, company name, address, and phone number:

First and Last Name	Company Name/Applicant
Phone Number	Title
Mailing Address	City, State, Zip Code

Authorized Representative, company name, address, and phone number:

Frank Uhlarik	Benesch
First and Last Name	Company Name
402-333-5792	Project Manager
Phone Number	Title
14748 W Center Rd, Ste 200	Omaha, NE 68144
Mailing Address	City, State, Zip Code

Submit this form to:

Water Quality Division
Storm Water
Suite 400, The Atrium
1200 'N' Street
PO Box 98922
Lincoln NE 68509-8922

ATTACHMENT B

REMEDIAL ACTION WORK PLAN
REVISED OCTOBER 21, 2010

benesch
engineers · scientists planners

Alfred Benesch & Company
14748 W. Center Road, Suite 200
Omaha, NE 68144-2029
www.benesch.com
P 402-333-5792
F 402-333-2248

November 1, 2010

Mr. Michael Ponte
Nebraska Department of Environmental Quality
PO Box 98922
Lincoln, NE 68509-8922

REFERENCE: Revised Remedial Action Plan
West Haymarket Arena Site Diesel Fuel Plume
(Lincoln Depot)
UG #07116-MBS-1100
ILS #62076

Dear Mr. Ponte:

Enclosed please find two (2) copies of the referenced revised Remedial Action Plan for the Lincoln Depot site. I believe we have incorporated all of the NDEQ's comments from our previous meetings. We are as yet uncertain of how much of the marginally impacted soil we will be able to reuse on site but will work with your office to determine the most cost effective reuse solutions that are protective of human health and the environment as the project progresses.

We are currently working with Holly Lionberger with the City of Lincoln Engineering Services Department in procuring the remedial contract for this effort and will keep you posted on schedule and substantive work issues. Please let me know if you have any questions or concerns.

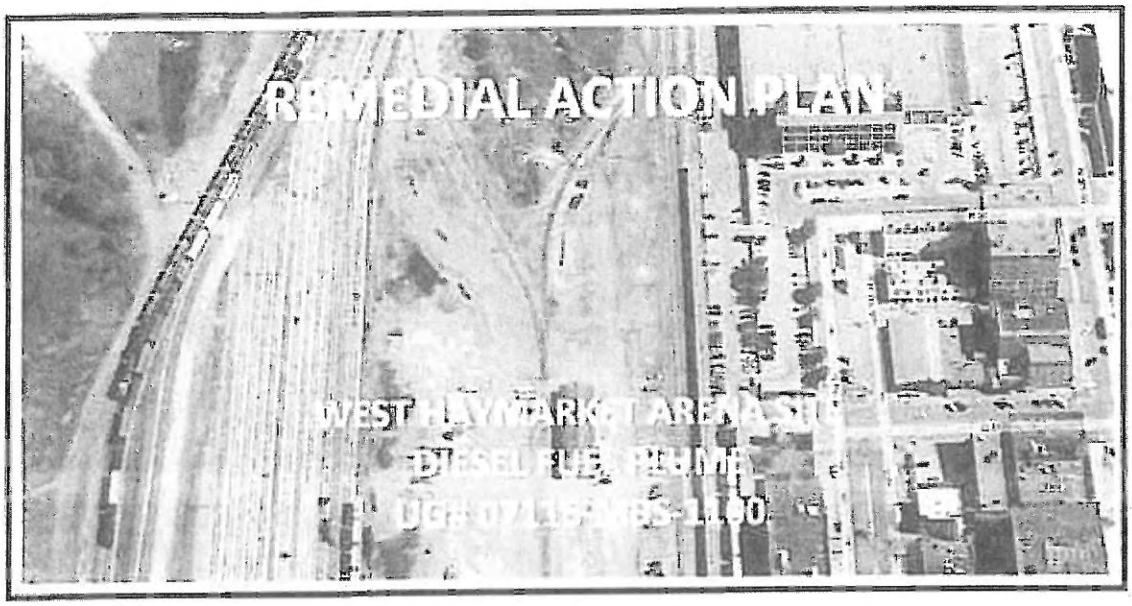
Sincerely,

Frank Uhlarik

Frank Uhlarik; CPG, CEA
Senior Project Manager

Enclosures: Revised Remedial Action Plan (2) Dated October 21, 2010

cc: Miki Esposito
Holly Lionberger
Bill Imig
Steve Masters



OCTOBER 21, 2010

PREPARED FOR:
WEST HAYMARKET REDEVELOPMENT
JOINT PUBLIC AGENCY
LINCOLN, NEBRASKA

PREPARED BY:

benesch
engineers · scientists · planners

ALFRED BENESCH & COMPANY
825 J STREET, PO BOX 80358
LINCOLN, NE 68501
402/479-2200
402/479-2276 FAX

TABLE OF CONTENTS

SECTIONS

FIGURES

APPENDIX

1.0 INTRODUCTION

This remedial action plan (RAP) presents the scope of work and procedures to be employed for excavation and removal of petroleum impacted soils and recovery of free product from the diesel fuel plume located beneath the Lincoln Depot site, Lincoln, Nebraska.

1.1 Site Location and Description

This site is the BNSF Lincoln Depot site located to the west and northwest of the Haymarket District in downtown Lincoln, Lancaster County, Nebraska (see Figure 1). It is bounded by Q Street to the south, R Street to the north, 5th Street to the west, and 7th Street to the east (see Figure 2). It is surrounded by rail yard operations in all directions with adjacent commercial properties located to the east and southeast. The City of Lincoln main Post Office building is located to the northeast of the site. Salt Creek is located approximately ½ miles to the northwest.

1.2 Background

The diesel fuel contamination at the BNSF Lincoln Depot site was first discovered on June 13, 1986 during a subsurface exploration performed by HWS Consulting Group Inc. (HWS) of Lincoln, Nebraska. The subsurface exploration was conducted at the direction of the City of Lincoln in preparation for the construction of a 15-inch sanitary sewer line from 5th & R Streets to 7th & Q Streets. Free product was observed in two (2) of the four (4) boreholes drilled during the exploration. Trace amount of free product was also observed in the third borehole.

The discovery was documented in the Subsurface Exploration Report dated July 2, 1986 and reported to the Nebraska Department of Environmental Quality (NDEQ) on July 11, 1986. NDEQ assigned a spill number (UG# 07116-MBS-1100) to this site and required BNSF to determine the extent of the soils and groundwater contamination.

HWS conducted the first site investigation of this release on September 9, 1986. Forty seven (47) boreholes were drilled at this site and free product was observed in twenty five (25) of the 47 borings. Five (5) of the boreholes were later converted to monitoring wells to monitor the free product at this site. The findings of the investigation were reported in a January 1987 Phase II Site Assessment Report. The report concluded that short of completely removing the contaminated soils, no significant quantities of free product could be recovered from the site.

After reviewing the Phase II Site Assessment Report, NDEQ required BNSF to investigate the impact of the contamination on the lower sandy unit under the site in a letter to BNSF dated April 1, 1987. On July 13, 1987, Groundwater Technology, Inc. (GTI) installed five (5) monitoring wells to investigate the impact of the contamination on the lower aquifer at this site. The GTI investigation revealed that the site has two aquifer systems separated by a tight, silty clay layer. The upper aquifer is perched and the lower aquifer is confined. Small amounts of free product were detected in the lower aquifer in the GTI investigation.

From the findings of the GTI's hydrological assessment report, NDEQ concluded that no significant contamination is present in the lower aquifer but significant and widespread contamination exists in the upper aquifer. NDEQ assigned the site to remedial action class three (RAC-3) and required the recovery of free product from this site. NDEQ's conclusion was conveyed to BNSF in a letter dated March 2, 1988. The NDEQ letter also concluded that a recovery trench system could be the most effective method of free product recovery at this site.

In April 20, 1988, Keck Consulting Services, Inc. (KECK) used the results of the previous investigation to design, install, and operate two recovery trench systems to recover free product from this site. Each trench system consisted of two trenches that intersected in a "T" shape. The bottom of each trench sloped toward the intersection. At the

intersection of the trenches, a 12" recovery well was installed to facilitate free product recovery. A total fluid extract pump was installed in each recovery well to remove groundwater and free product. The groundwater and free product were transferred from the wells to an oil/water separator. Free product from the oil/water separator was recovered manually for recycling while the groundwater was discharged into the City of Lincoln sanitary sewer system.

Environmental Management Resources (EMR) took over management of the recovery trenches in August of 1991. In a Site Investigation Work Plan dated February 10, 1994, EMR proposed to install six (6) monitoring wells to delineate and monitor the extent of the free product plume at this site. The monitoring wells were installed on May 3, 1994. Petroleum hydrocarbon contaminated soils were encountered during the monitoring well installation but no free product was detected in any of the newly installed monitoring wells. The findings of the site investigation were reported to NDEQ in a Site Investigation Report dated July 8, 1994.

In November of 1996, one of the recovery trench systems was closed by Beaver Creek Environmental Corp. as it had failed to recover significant product since it began operation in late 1990.

RDG Geoscience & Engineering, Inc. (RDG) took over the site remediation from EMR in early 1999. Shortly after taking over, RDG installed five (5) shallow test holes near the City of Lincoln sanitary sewer line. Free product was detected in three of the five test holes. Based on the findings of the shallow test holes, the remaining recovery trench system was expanded in February of 2001. The expansion involved the installation of four (4) additional fuel recovery wells adjacent to the City of Lincoln sanitary sewer line. Nearly 4,000 gallons of free product were recovered by the expanded recovery trench system by February of 2002.

In August 14, 2003, NDEQ required BNSF to perform a Risk Based Corrective Action (RCBA) Tier II Site Investigation to gather information for NDEQ to evaluate the need of future actions based on the free product plume's risk to human health and safety. RDG completed investigation and submitted a Tier II Site Investigation Report to NDEQ on February 13, 2004.

Based on the findings of the Tier II Site Investigation, NDEQ required BNSF to prepare a remedial action plan to clean up the free product at this site in a letter dated August 27, 2004. On October 22, 2004, RDG submitted a proposal to NDEQ on behalf of BNSF proposing to install up to five (5) additional groundwater monitoring wells. Up to five (5) additional product recovery wells were also to be installed based on the extent of free product determined by the installation of the new groundwater monitoring wells. RDG also proposed to add a new air compressor and SVE extraction blower to the existing remediation system.

NDEQ approved the RDG proposal on November 9, 2004 and four (4) new monitoring wells were installed at the site by January 7, 2005. Due to the presence of free product in one of the new monitoring wells, an additional monitoring well was installed further north of that well on January 21, 2005. The well installation process was reported to NDEQ in a Free Product Delineation Report dated February 10, 2005.

During the week of August 22, 2005, the remediation system was shut down and the remediation building was cleaned out to make room for new remediation equipment. From September 15, 2005 to January 13, 2006, two (2) new SVE blowers were added to the remediation system, seven (7) additional recovery wells were installed, trenching and subsurface piping were performed to connect the new recovery wells to the modified remediation system, modifications were made to piping to accommodate the new remediation system, new pumps were installed in the recovery wells, and electrical hook up and wiring were completed. The modified remediation system was started on

January 16, 2006. A Free Product Recovery System Start-up and As-Built Report were submitted to NDEQ on April 11, 2006.

RDG continues to monitor and operate the modified remediation system and report the status of the site remediation to NDEQ annually. In January of 2010, after reviewing the most recent Project Status Report from RDG dated January 12, 2009, NDEQ concluded that the extent of the free product plume has not been fully delineated. As a result, NDEQ required that three (3) additional monitoring wells be installed near the western boundary of the free product plume presented in RDG's Project Status Report.

RDG submitted a work plan to NDEQ to install the additional monitoring wells on February 19, 2010. NDEQ approved the work plan on March 1, 2010. The monitoring wells were installed on March 15, 2010. Instead of the proposed three (3) monitoring wells, four (4) monitoring wells were installed due to the presence of free product in one of the monitoring wells. The new monitoring wells were incorporated into the remediation system monitoring program. As of April 26, 2010, approximately 11,230 gallons of diesel fuel had been recovered by the remediation system.

The data presented in RDG's annual Project Status Reports shows historic depths to product within the plume area ranging from 6.72 feet to 16.05 feet. The most recent monitoring event (April 02, 2010) found the depths to product between 8.82 feet to 11.73 feet within the plume area. The lateral extent of the free product plume was also depicted in a free product plume map in each of the annual Project Status Reports. The free product plume maps from the past two annual reports (January 12, 2009 and January 14, 2010) and two subsequent sampling events are shown in Figure 3.

1.3 Site Geology and Hydrogeology

The site is located in the bottomlands associated with Salt Creek. Soils consist of silty clays and silts to depths of 12 or more feet. Alluvial sand was found between depths of

12.5 feet and 17 feet within the plume area. Outside of the plume boundaries, depths to sand are deeper than 17 feet. This combination forms a stratigraphic trap which holds the free product. Some fill and concrete associated with former site structures are found at some locations. The silts and clays have high moisture contents which will complicate excavation and handling of these materials.

Historic depths to groundwater range from 2 to 14 feet but more recent product recovery has dewatered the plume area depths ranging from 8.5 feet to 10 feet. Water levels are expected to rise when the recovery system is turned off.

2.0 REMEDIAL ACTION OBJECTIVES

The primary objectives of this RAP are to remove free product and the more highly impacted soils that could present the potential for vapor intrusion into structures associated with the Arena and mixed commercial redevelopment plans. Secondary or corollary objectives are to remove and properly dispose of soil that is contaminated with petroleum hydrocarbons, to recover and recycle the free product present at this site, and to recover and treat the groundwater contaminated with diesel fuel within the free product plume to the extent that such removal is required during construction de-watering operations.

3.0 PROPOSED PLAN OF REMEDIAL ACTION

The proposed remedial action for the soils, free product, and groundwater at this site will include the following task:

1. Over-excavate the entire area covered by the free product plume foot print (approximately 125 feet by 200 feet). The depth of the excavation is expected to be 16 feet.
2. Transport the excavated petroleum impacted soil for off-site treatment, disposal, or recycling as appropriate and cost-effective.
3. Recover free product and petroleum impacted groundwater from the excavation and treat the groundwater prior to discharge either to the storm sewer or to the City of Lincoln's sanitary system if approved by the City.
4. Backfill and compact the excavation.

3.1 Petroleum Impacted Soil Removal and Disposal

Petroleum impacted soil will be excavated and ultimately transported to an off-site facility. A representative set of soil samples will be collected and analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), total extractable hydrocarbons (TEH) using EPA Method 8260 and Iowa Method OA-2, respectively to characterize the soil prior to off-site shipment. Other sampling parameters as required by the off-site facility will also be tested.

The excavation area will be approximately 125 feet by 200 feet, covering the entire free product plume's foot print (see Figure 4). The depth of excavation is expected to be 16 feet below ground surface. The excavation area will include a portion of the area that is currently occupied by a set of railroad tracks. The impacted tracks and a second set of tracks to the west will be removed prior to the excavation. Therefore, the excavation will not be deterred by the BNSF operations on these two tracks.

Two (2) sewer lines and a power pole are located within the excavation area. According to the City of Lincoln Public Works Department's records, the depth of the sewer lines range from 10 to 12 feet below ground surface. The power pole is owned and maintained by the BNSF. Prior to the site excavation, the excavation contractor will coordinate with BNSF and City of Lincoln Public Works Department to determine the setback distance it needs to maintain from the railroad tracks, to determine measures needed to be taken to excavate around the sewer lines, and to temporarily relocate the overhead power lines and the power pole, respectively.

The excavated soils above the free product plume will be screened with a photo-ionization detector (PID) and stockpiled. The clean soils, soils that show no PID response above the background level (or other level to be concurred upon by NDEQ), will be stockpiled for use as backfill material if determined to be structurally suitable.

The petroleum contaminated soils, soils that show PID response above the background level (or other level to be concurred upon by NDEQ), will be stockpiled on plastic sheeting. Representative soil samples will be collected from the stockpiles and analyzed for BTEX, TEH, total lead and other analyses required by the selected off-site facility to ensure that the soils meet acceptance criteria.

All of the soil saturated with diesel fuel/contaminated groundwater will be stockpiled on plastic sheeting next to the excavation for drying prior to hauling to landfill for disposal. This stockpile area will be constructed in a manner that all free liquid will flow back into the excavation. Security fencing will be installed around the excavation area and will be locked at the end of every work day. The locations of the proposed stockpile areas are shown in Figure 4.

The maximum quantity of soil excavated is expected to be approximately 14,000 yd^3. Of the 14,000 yd^3 of excavated soils, approximately 2,000 yd^3 are expected to be saturated

with diesel fuel and approximately 6,000 yd^3 are expected to be contaminated with petroleum hydrocarbons leaving approximately 6,000 yd^3 of soils that could be used as backfill material if determined to be structurally suitable. Detailed calculations of the soil quantities are attached in Appendix A.

During the excavation activities, eight (8) of the existing monitoring wells (MW-1A, MW-2A, MW-10A, MW-11A, MW-12, MW-13, MW-14, and MW-15) and six (6) of the existing recovery wells (RW-4, RW-5, RW-6, RW-7, RW-8, and RW-11) will be removed from the existing free product recovery system. In addition, recovery trench wells OB-4A and OB-4B will also be removed together with part of the recovery trench originally installed at this site in 1988. Figure 5 shows the locations of the monitoring wells, the recovery wells, and the recovery trench. Closure/abandonment requirements for the wells administered by the Nebraska Department of Health will be complied with to the extent that open conduits to the groundwater are properly sealed.

Prior to site excavation, the pumps in the all of the recovery wells will be removed from the wells and stored in the remediation building. The piping associated with the free product recovery system that is located within the excavation area will be cut and capped during the site excavation.

3.2 Free Product/Petroleum Contaminated Groundwater Removal and Disposal

When the excavation reaches a depth where free product is present, approximately 11 feet below ground surface based on the most recent data collected by RDG, a sump will be dug at one corner of the excavation to facilitate free product/groundwater recovery. All free product/groundwater present within the excavation will be pumped into an equalization tank where sediment and free product is separated from the groundwater. From the sedimentation tank, the free product/groundwater mixture that did not separate in the equalization tank will be pumped into a 1,130 gallon oil/water separator from NDEQ's remedial equipment inventory (NDEQ Inventory Number A00779).

The recovered free product in the equalization tank and the oil/water separator will be transferred to a tanker truck and transported to an oil recycler for recycling. The water from the oil/water separator will be pumped into a tray type air stripping unit from NDEQ's remedial equipment inventory (NDEQ Inventory Number A00773) for treatment prior to discharge into the storm sewer under or to the City of Lincoln's sanitary system if approved by the City. Activated carbon absorption units will also be used to further polish the discharge of the air stripping unit if the effluent does not meet the discharge limits set by permit or other City authorization.

If a large amount of groundwater is present in the excavation or groundwater continues to seep into the excavation during the free product recovery and petroleum impacted soils excavation process, a series of pumping wells will be installed to dewater the excavation area before the excavation is continued.

Assuming a soil porosity of 30%, the maximum amount of diesel fuel that could be recovered from this site is estimated to be 120,000 gallons (as a combination of free phase and interstitially-bound product). The site excavation will continue to approximately 16 feet below ground surface to remove all petroleum contaminated soils. Excavation depths will be monitored to ensure capture of impacted soils to the extent that over-excavation does not threaten stability of sidewalls or nearby structures and track infrastructure.

3.3 Backfill and Compaction

At the completion of petroleum impacted soil and free product removal, the excavation will be backfilled with clean soil (both from the site and clean borrow materials from offsite) and compacted. The backfill will be compacted sufficiently to allow for heavy truck traffic or other structural considerations as provided by the Redevelopment team

of Architects and Engineers. Field density and other required tests will be executed to confirm the compaction.

The basis for controlling the placement of fill and backfill on the site, excluding free draining granular materials, shall be the "optimum moisture content" and "maximum dry density" as determined by ASTM D690-00a, Procedure A, Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lb_f/ft^3 or 600 kN-m/m^3).

Silty and clayey sands (as defined by ASTM D2487-10, Standard Test Method for Classification of Soils for Engineering Purposes) shall be placed at a workable moisture content (near the soil's optimum moisture content) and compacted to a dry density at least equal to 95% of the soil's maximum dry density.

Clean free draining granular materials (sand) used as fill and backfill shall be compacted to at least 60% "relative density" as determined in accordance with ASTM D4253-00 (Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table) and D4254-00 (Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculations of Relative Density).

3.4 Documentation and Reporting

All of the excavation, backfill, and free product/contaminated groundwater recovery activities will be observed and documented by a qualified Benesch technician, experienced in petroleum – impacted soils removal work. At the completion of the free product/contaminated groundwater recovery, a remedial action report will be prepared and submitted to NDEQ.

4.0 POST REMEDIATION MONITORING

At the completion of the site excavation and backfill activities described in this RAP, seven (7) new groundwater monitoring wells will be installed in and around the excavation area to monitor for the presence of free product. The proposed locations of the post remediation groundwater monitoring wells are shown in Figure 6.

The new groundwater monitoring wells, together with the rest of the existing groundwater monitoring and recovery wells, will be monitored quarterly for free product for 12 months. If no free product is observed in any of the groundwater monitoring wells at the end of the 12-month monitoring period, the remedial action will be considered successful and the site will be moved toward closure and the issuance of a No Further Action letter.

Monitoring of the dissolved phase portion of the free product plume is not part of this remedial action. Additional groundwater monitoring wells will be installed to further delineate and monitor the dissolved phase portion under an ongoing Voluntary Cleanup Program Investigation Work Plan for the entire West Haymarket Redevelopment area to be submitted to NDEQ.

5.0 COST ESTIMATE

The cost of performing the remedial action and post remediation monitoring presented in this RAP is estimated to be $833,670.00 based on disposal at a RCRA Subtitle "D" solid waste facility and including dewatering operations. A breakdown of the cost is as follow:

	Quantity	Unit	Rate	Total
1. Excavation and Transport Soil to Landfill for Disposal				
Excavator	200	hours	$100.00/hour	$20,000.00
Backhoe	200	hours	$120.00/hour	$24,000.00
Loader	200	hours	$110.00/hour	$22,000.00
Dump Truck	1,400	hours	$65.00/hour	$91,000.00
Safety Fence	1	unit	$5,000.00/unit	$5,000.00
Power Pole Relocation	1	unit	$5,000.00/unit	$5,000.00
Project Engineer	80	hours	$95.00/hour	$7,600.00
Construction Observation	200	hours	$65.00/hour	$13,000.00
Soil Screening Technician	240	hours	$65.00/hour	$15,600.00
			Subtotal:	**$203,200.00**
2. Backfill, Compaction, and Surface Restoration				
Backfill Materials	8,000	yd^3	$20.00/ yd^3	$160,000.00
Backhoe	120	hours	$120.00/hour	$14,400.00
Loader	120	hours	$110.00/hour	$13,200.00
Field Compaction Testing	50	tests	$25.00/test	$1,250.00
Project Engineer	80	hours	$95.00/hour	$7,600.00
Construction Observation	120	hours	$55/00/hour	$6,600.00
			Subtotal:	**$203,050.00**
3. Soil Disposal				
Soil Disposal Cost	8,000	yd^3	$25.00/ yd^3	$200,000.00
EPA Method 8260 Analysis	28	tests	$80.00/test	$2,240.00
OA-2 Analysis	28	tests	$50.00/test	$1,400.00
Total Lead Analysis	28	tests	$20.00/test	$560.00
			Subtotal:	**$204,200.00**

4. **Free Product Recovery and Disposal**

Oil/Water Separator Rental	4	weeks	$2,000.00/week	$8,000.00
Trash Pump Rental	20	days	$115.00/day	$2,300.00
Carbon Absorption Unit	4	units	$5,000.00/unit	$20,000.00
Project Engineer	40	hours	$95.00/hour	$3,800.00
Project Technician	120	hours	$55.00/hour	$6,600.00
Staff Technician	120	hours	$50.00/hour	$6,000.00
			Subtotal:	**$46,700.00**

5. **Project Management and Reporting**

Project Manager	40	hours	$115.00/hour	$4,600.00
Reporting	40	hours	$95.00/hour	$3,800.00
			Subtotal:	**$8,400.00**

6. **Dewatering**

Dewatering Wells Installation	1	Unit	$20,000.00/unit	$20,000.00
Dewatering Operations	20	Days	$1,000/day	$20,000.00
			Subtotal:	**$40,000.00**

7. **Post Remediation Monitoring & Reporting**

Monitoring Well Installation	7	wells	$2,000.00/well	$14,000.00
Project Geologist	24	hours	$95.00/hour	$2,280.00
Project Technician	20	hours	$55.00/hour	$1,100.00
Staff Technician	20	hours	$50.00/hour	$1,000.00
Equipment Rental	4	quarters	$250.00/quarter	$1,000.00
			Subtotal:	**$19,380.00**

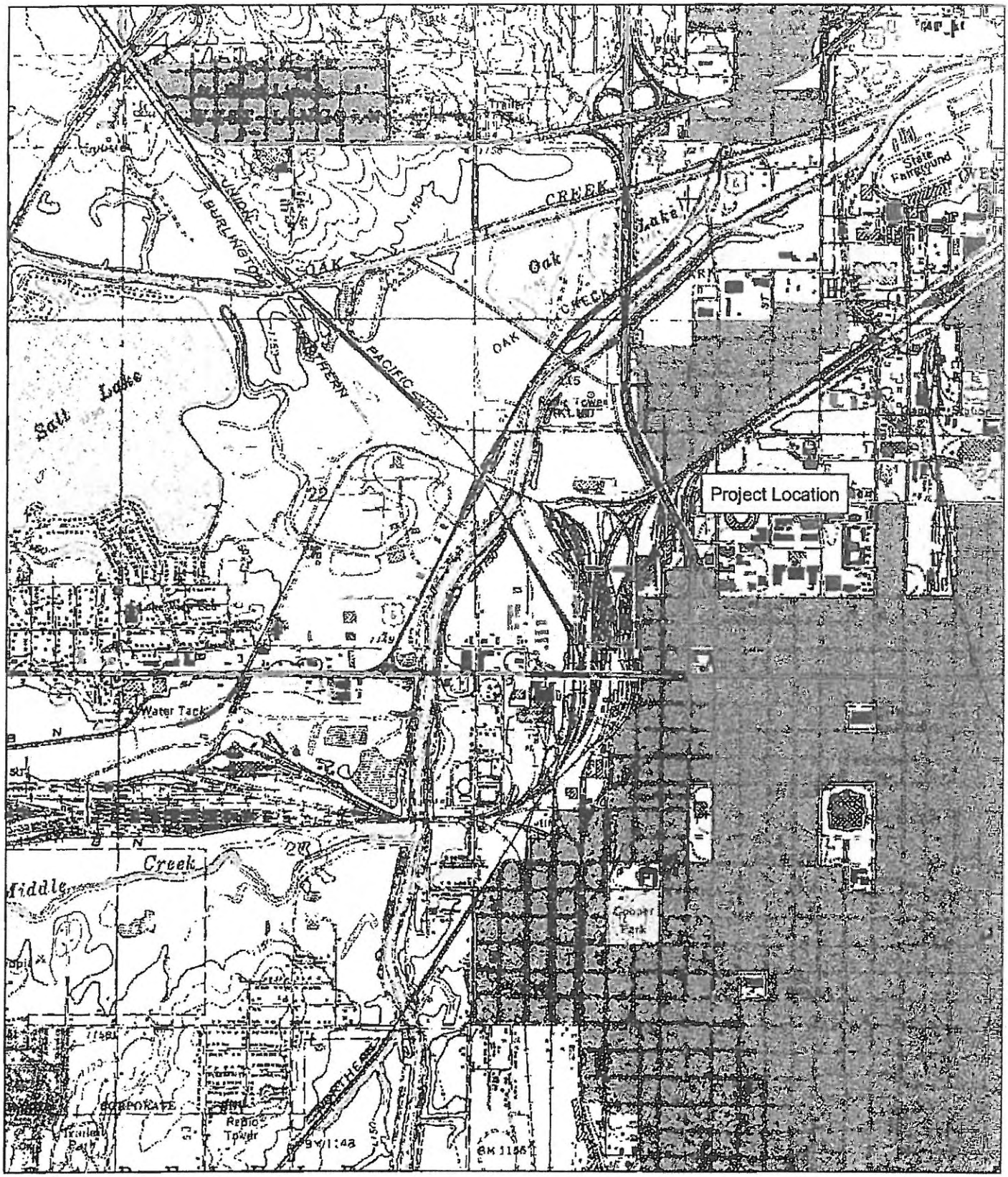
TOTAL:	**$724,930.00**
CONTINGENCY (15%):	**$108,740.00**
GRAND TOTAL:	**$833,670.00**

TOTAL (Without Dewatering):	**$684,930.00**
CONTINGENCY (15%):	**$102,740.00**
GRAND TOTAL (Without Dewatering):	**$787,670.00**

6.0 REFERENCES

1. HWS Technologies Inc.; ***Subsurface Exploration Report***; July 2, 1986.
2. HWS Technologies Inc,; ***Site Assessment for Underground Diesel Fuel Contamination at Burlington Northern Depot, Lincoln, Nebraska***; January 1987.
3. Groundwater Technology, Inc.; ***A Hydrogeological Assessment of the Lower Aquifer Present at the Burlington Northern Rail Depot, Lincoln, Nebraska***; August 20, 1987.
4. Keck Consulting Services, Inc.; ***Proposed Remedial Action Plan Design for Burlington Northern Railroad Northern Depot, Lincoln, Nebraska***; April 20, 1988.
5. Environmental Management Resources, Inc.; ***Site Investigation Work Plan***; February 11, 1994.
6. Beaver Creek Environmental Corp.; ***Site Abandonment Report***; November 4, 1996.
7. RDG Geoscience & Engineering, Inc.; ***RBCA Tier II At Petroleum Release Sites***; February 10, 2006.
8. REG Geoscience & Engineering, Inc.; ***Free Product Recovery System Start-up and As-Built Report***; April 11, 2006.
9. RDG Geoscience & Engineering, Inc.; ***Additional Free Product Delineation Report***; April 29, 2010.

FIGURES



NRCS Quad Map

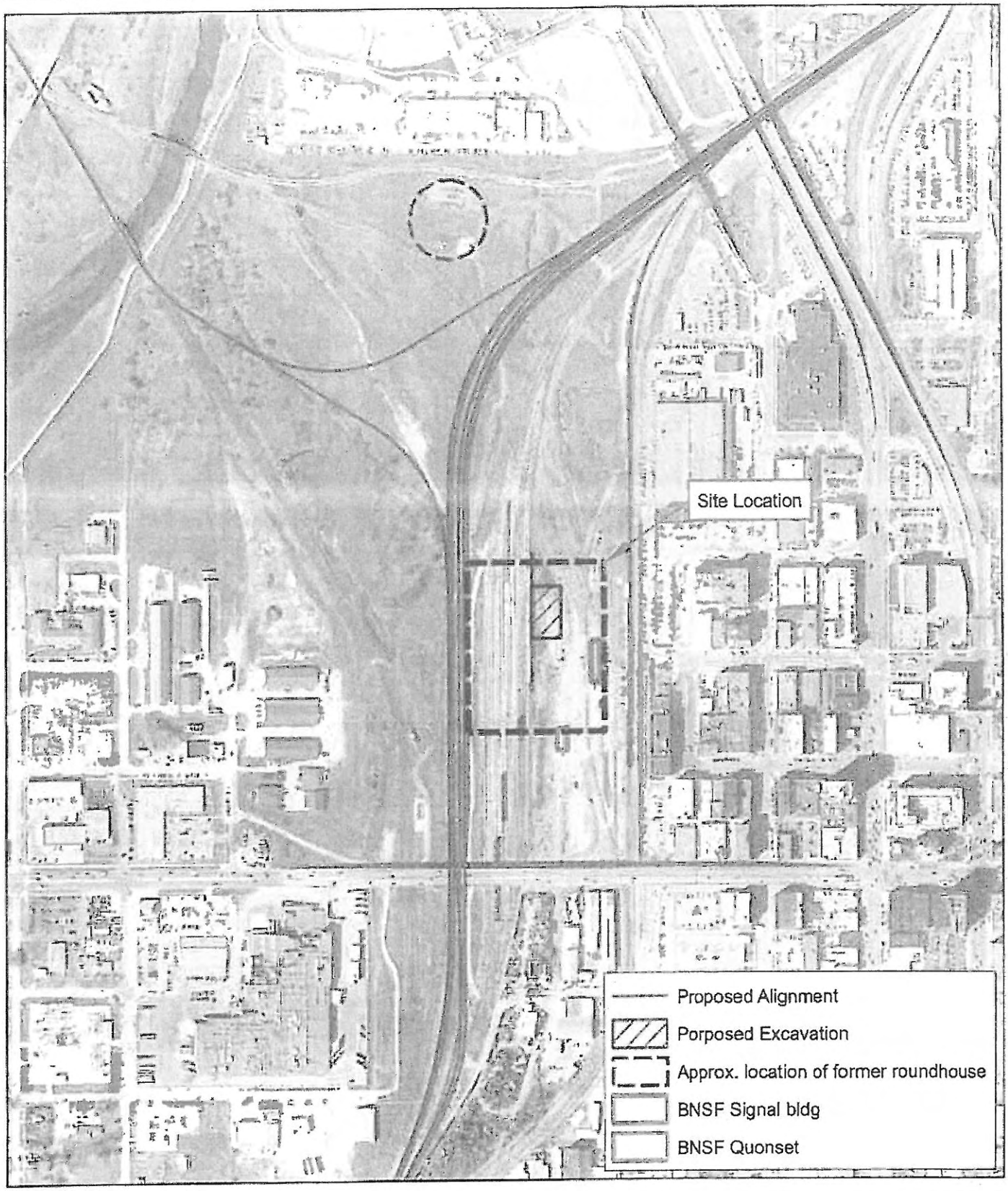
N
W E
S

2,000 1,000 0 2,000 Feet

1 inch = 2,000 feet

West Haymarket Arena
BNSF Lincoln Depot, LINCOLN, NE

Topographic Map
FIGURE 1



NRCS Quad Map

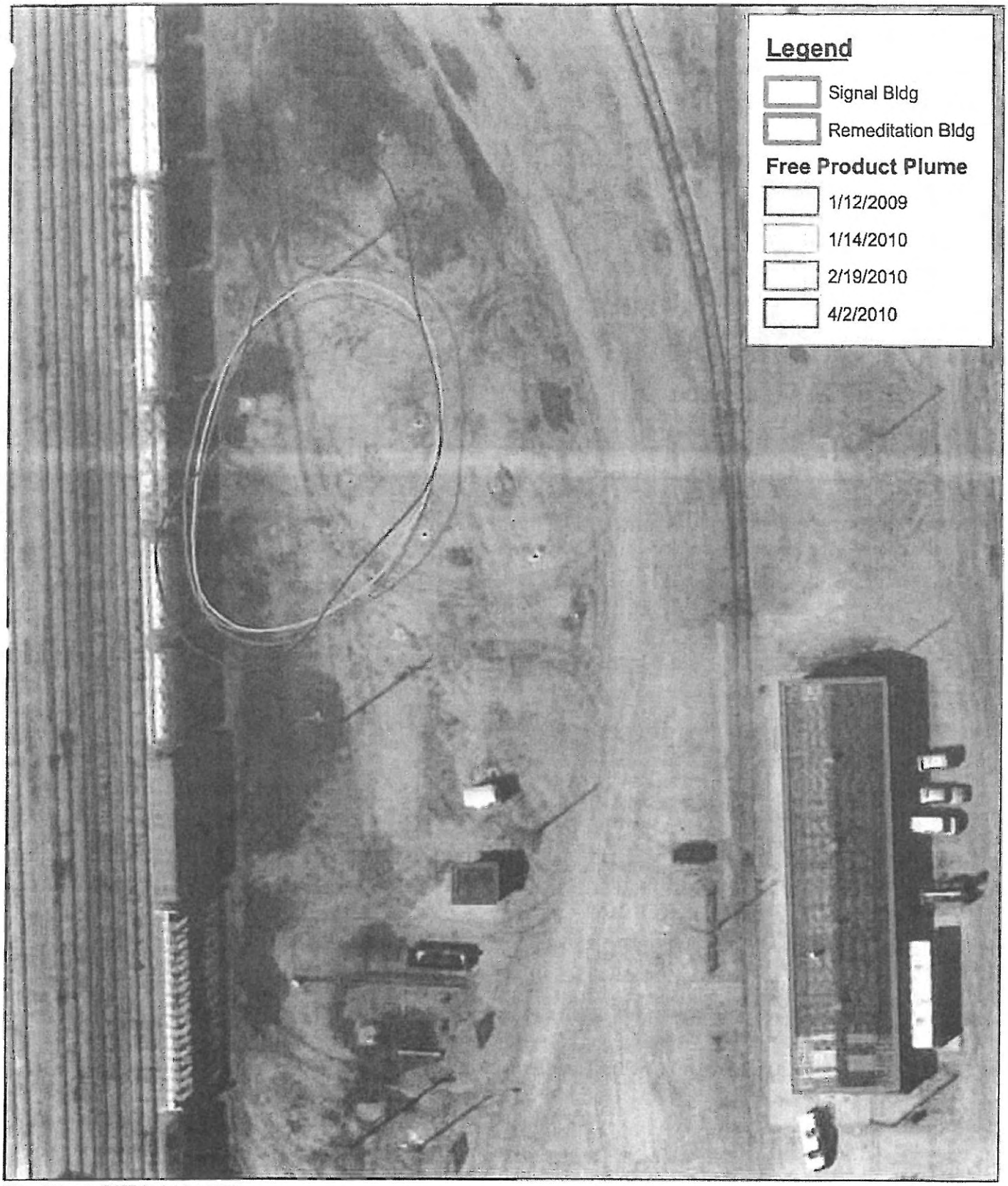
N
W E
S

0 125 250 500
Feet

1 inch = 500 feet

West Haymarket Arena
BNSF Lincoln Depot, LINCOLN, NE

Site Location Map
FIGURE 2



City of Lincoln 2007 Aerial Imagery

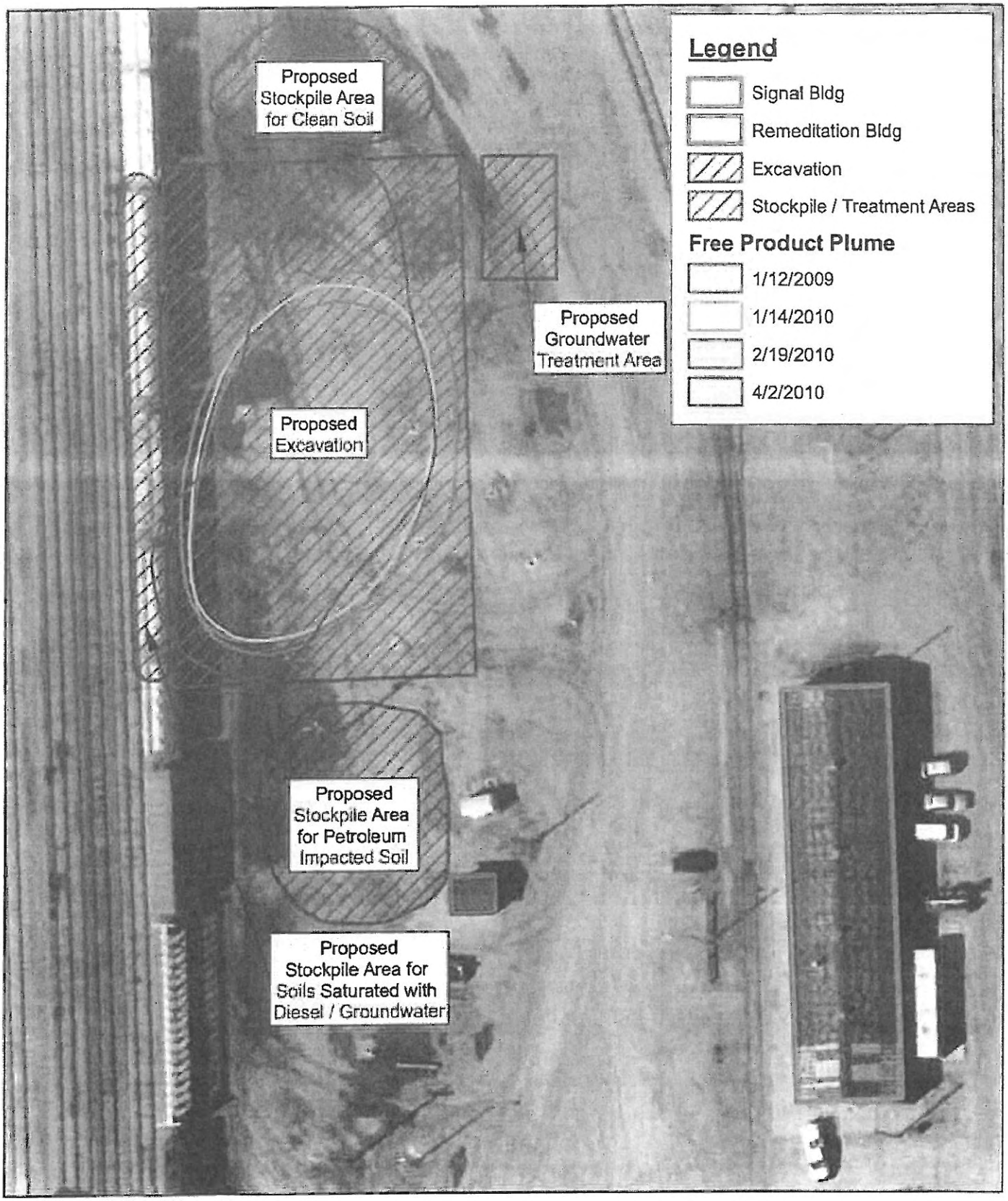
HWS Solutions Through Service

0 12.5 25 50 Feet

1 inch = 50 feet

West Haymarket Arena
BNSF Lincoln Depot., LINCOLN, NE

Free Product Plume Map
FIGURE 3



City of Lincoln 2007 Aerial Imagery

0 12.5 25 50 Feet

1 inch = 50 feet

HWS Solutions Through Service

West Haymarket Arena
BNSF Lincoln Depot., LINCOLN, NE

Site Excavation Map
FIGURE 4

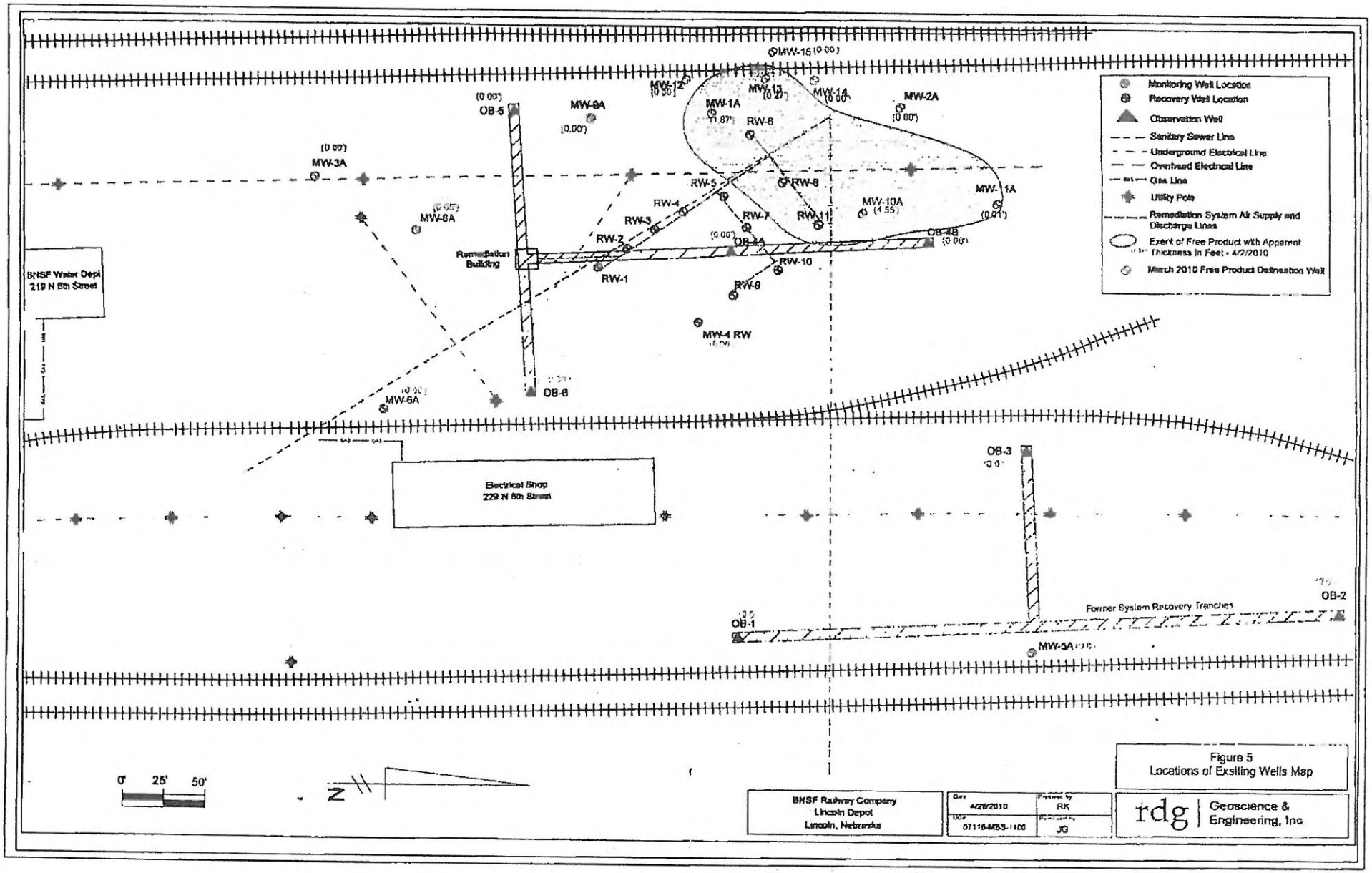
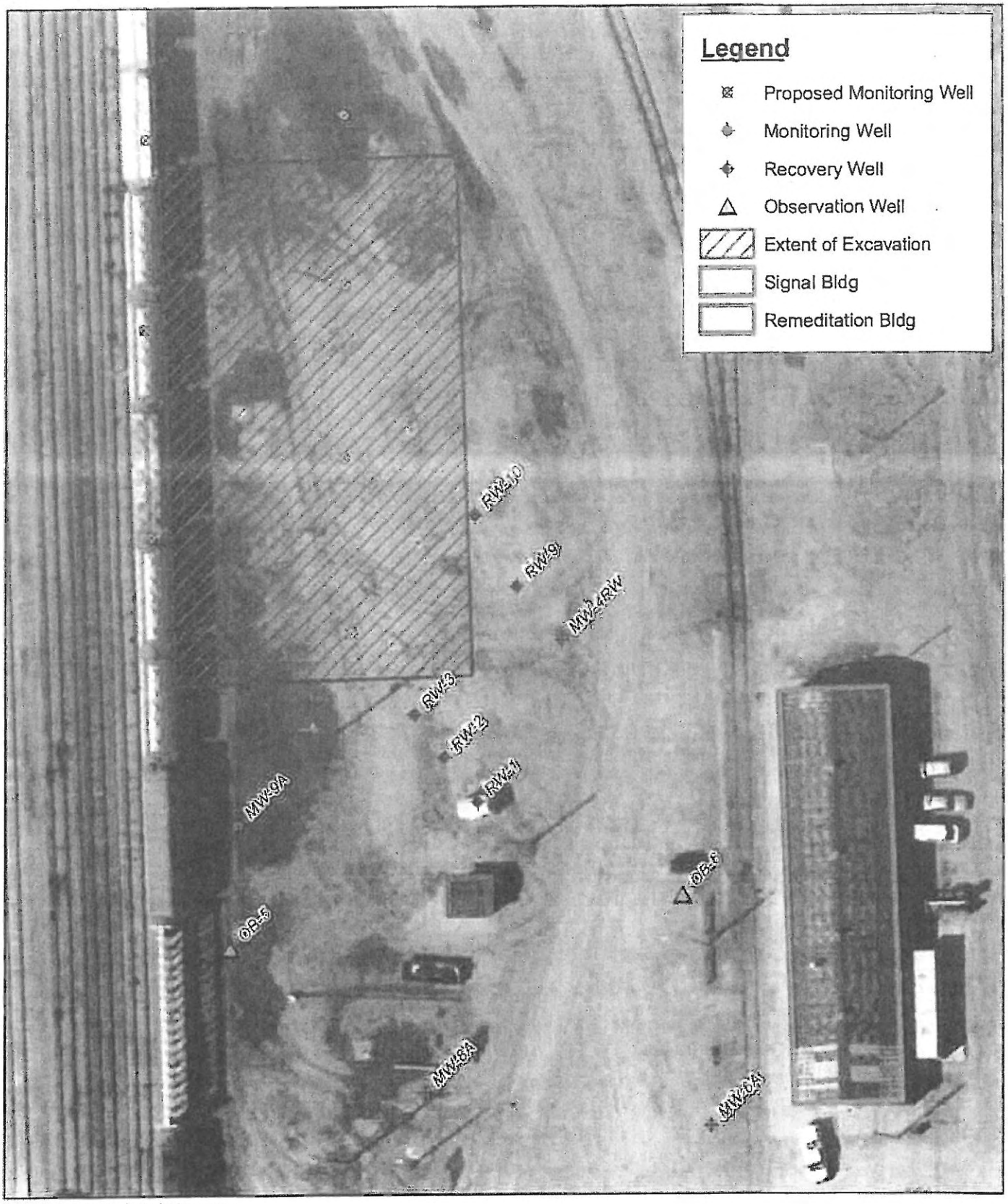


Figure 5
Locations of Exsiting Wells Map

BNSF Railway Company
Lincoln Depot
Lincoln, Nebraska

Date: 4/28/2010
Prepared by: RK
Job #: 07116-MBS-1100
Reviewed by: JG

rdg | Geoscience & Engineering, Inc



City of Lincoln 2007 Aerial Imagery

0 12.5 25 50 Feet

1 inch = 50 feet

HWS Solutions Through Service

West Haymarket Arena
BNSF Lincoln Depot., LINCOLN, NE

Location of Proposed Post Remediation Monitoring Wells Map
FIGURE 6

APPENDIX A

DETAILED CALCULATIONS

Detailed Calculations

Maximum Quantity of Soil to be Excavated:

Excavation Area	= 125 ft x 200 ft
Depth of Excavation	= 16 ft
Excavation Volume	= 125 ft x 200 ft x 16 ft
	= 375,000 ft^3
	= 13,900 yd^3
	≈ 14,000 yd^3

Estimated Volume of Free Product:

Excavation Area	= 125 ft x 200 ft
Average Product Thickness (April 2, 2010)	= (1.87 ft + 4.55 ft + 0.01 ft)/3
	= 2.14 ft
Volume of Product Saturated Soil	= 125 ft x 200 ft x 2.14 ft
	= 53,500 ft^3
	= 1,981 yd^3
	≈ 2,000 yd^3
Volume of Free Product	= 53,500 ft^3 x 7.481 gallon/ ft^3
	= 400,234 gallons x 0.3 (30% porosity)
	= 120,070 gallons
	≈ 120,000 gallons

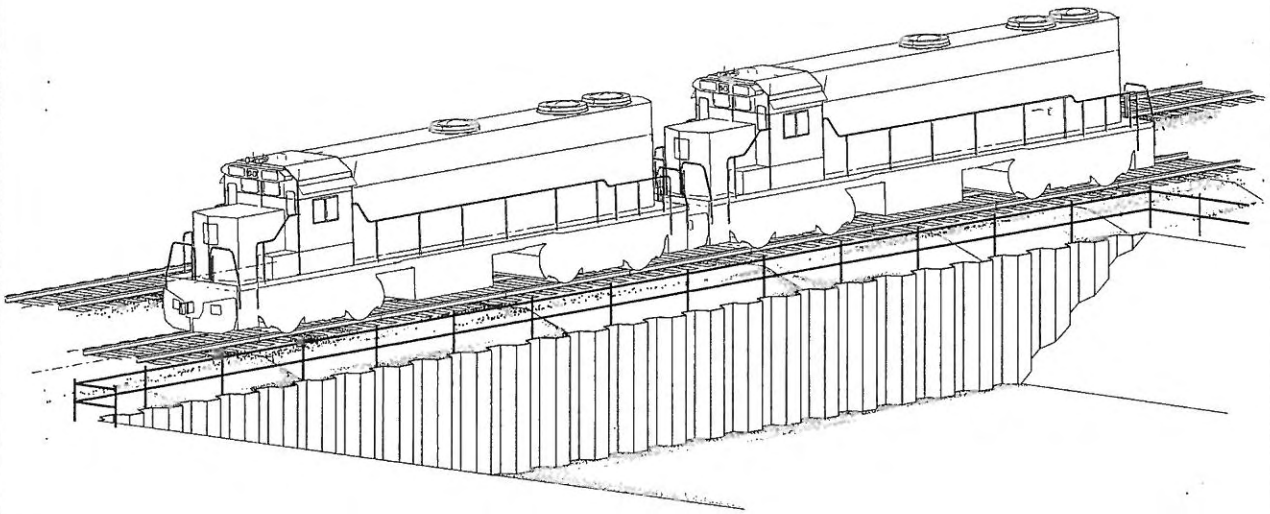
Estimated Volume Petroleum Impacted Soil:

Excavation Area	= 125 ft x 200 ft
Historic Free Product Zone	= 8.23 ft (16.05 ft – 7.79 ft)
Total Volume of Petroleum Impacted Soil	= 205,750 ft^3
	= 7,620 yd^3
	≈ 8,000 yd^3
Volume of Product Saturated Soil	≈ 2,000 yd^3
Volume of Petroleum Impacted Soil	≈ 8,000 yd^3 - 2,000 yd^3
	≈ 6,000 yd^3

ATTACHMENT C

APPLICABLE RAILWAY SHORING SPECIFICATIONS

GUIDELINES FOR TEMPORARY SHORING



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GUIDELINES FOR TEMPORARY SHORING Published October 25, 2004

INDEX

GUIDELINES FOR TEMPORARY SHORING

1. SCOPE

The scope of these guidelines is to inform public agencies, design engineers, contractors and inspectors of current Railroad standards and requirements concerning design and construction of temporary shoring.

1. The term **Railroad** refers to the Burlington Northern & Santa Fe Railway (BNSF) and/or the Union Pacific Railroad (UPRR). The term **Contractor** is defined as any party gaining access to work on Railroad right-of-way or other Railroad operating locations.

2. These guidelines are provided as a reference and may not be taken as authority to construct without prior review and written approval of the Railroad. These guidelines supersede all previous guidelines for temporary shoring and are subject to revision without notice.

3. These guidelines supplement the current, American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual of Recommended Practice. The 2002 AREMA Manual was utilized in developing this guideline. The AREMA Manual is available from:

   American Railway Engineering and Maintenance-of-Way Association
   8201 Corporate Drive, Suite 1125
   Landover, MD 20785-2230
   Phone: (301) 459-3200
   FAX: (301) 459-8077
   www.arema.org

4. The specific requirements for temporary shoring addressed in this document shall be followed for all locations where the Railroad operates, regardless of track ownership.

5. Any items not covered specifically herein shall be in accordance with the AREMA Manual and subject to the review and approval of the Railroad. Where conflicts exist, the most stringent specification should be applied.

6. All excavations shall also be governed by Railroad requirements, Federal, State and Local laws, rules, and regulations concerning construction safety.

7. Safe rail operations shall be required for the duration of the project. All personnel, railroad tracks and property shall be protected at all times.

8. To expedite the review process of the temporary shoring plans, drawings submitted by the Contractors are required to adhere to the project specifications, AREMA and other Railroad requirements.

2. GENERAL CRITERIA

The Contractor must not begin construction of any component of the shoring system affecting the Railroad right-of-way until written Railroad approval has been received.

1. All excavations shall be in compliance with applicable OSHA regulations and shall be shored where there is any danger to tracks, structures or personnel regardless of depth.

2. The Contractor is responsible for planning and executing all procedures necessary to construct, maintain and remove the temporary shoring system in a safe and controlled manner.

3. Emergency Railroad phone numbers are to be obtained from the Railroad representative in charge of the project prior to the start of any work and shall be posted at the job site.

4. The Contractor must obtain a valid right of entry permit from the Railroad and comply with all Railroad requirements when working on Railroad property.

5. The Contractor is required to meet minimum safety standards as defined by the Railroad.

6. All temporary shoring systems that support or impact the Railroad's tracks or operations shall be designed and constructed to provide safe and adequate rigidity.

7. The Railroad requirements, construction submittal review times and review criteria should be discussed at the pre-construction meeting with the Contractor.

8. A flagman is required when any work is performed within 25 feet of track centerline. If the Railroad provides flagging or other services, the Contractor shall not be relieved of any responsibilities or liabilities as set forth in any document authorizing the work. No work is allowed within 50 feet of track centerline when a train passes the work site and all personnel must clear the area within 25 feet of track centerline and secure all equipment when trains are present.

9. Appropriate measures for the installation and protection of fiber optic cables shall be addressed in the plans and contract documents. For specific Railroad requirements and additional information refer to:

   www.bnsf.com or call 1-800-533-2891.

   www.uprr.com, call 1-800-336-9193 or refer to UPRR Fiber Optic Engineering, Construction and Maintenance Standards.

10. Relocation of utilities or communication lines not owned by the Railroad shall be coordinated with the utility owners. The utility relocation plans must then be submitted to the Railroad utility representative for approval. The shoring plans must include the correct contact for the Railroad, State or Local utility locating service provider. The Railroad will not be responsible for cost associated with any utility, signal, or communication line relocation or adjustments.

3. CONTRACTOR RESPONSIBILITIES

The Contractor shall be solely responsible for the design, construction and performance of the temporary structure. **(AREMA 8.28.1.3)**

1. The Contractor's work shall in no way impede the train operations of the Railroad and must be coordinated with the local Railroad operating department.

2. The Contractor shall develop a work plan that enables the track(s) to remain open to train traffic at all times.

3. The Contractor shall comply with all State and Federal Laws, county or municipal ordinances and regulations which in any manner affect the work.

4. All removed soils will become the responsibility of the Contractor and shall be disposed of outside the Railroad right-of-way according to the applicable Federal, State and Local regulations.

5. The Project Engineer and the Contractor shall evaluate the quality of materials furnished and work performed.

6. The Contractor is responsible to protect the Railroad ballast and subballast from contamination.

7. The Contractor must monitor and record top of rail elevations and track alignment for the duration of the project. The movement shall be within the limits defined in **Table 1, Deflection Criteria** on page 10. Displacements exceeding the limits defined in **Table 1** must be immediately reported to the Railroad. All work on the project must stop and the Railroad may take any action necessary to ensure safe passage of trains. The Contractor must immediately submit a corrective action plan to the Railroad for review and approval. The Railroad must review and approve the proposed repair procedure. The repair must be inspected by the Railroad before the track can be placed back in service.

8. Any damage to Railroad property such as track, signal equipment or structure could result in a train derailment. All damage must be reported immediately to the Railroad representative in charge of the project and to the Railroad Manager of Track Maintenance (MTM).

4. INFORMATION REQUIRED

Plans and calculations shall be submitted, signed and stamped by a Registered Professional Engineer familiar with Railroad loadings and who is licensed in the state where the shoring system is intended for use. Shoring design plans and calculations shall be in English units. If Metric units are used, all controlling dimensions, elevations, design criteria assumptions, and material stresses shall be expressed in dual units, with English units to be in parentheses. Information shall be assembled concerning right-of-way boundary, clearances, proposed grades of tracks and roads, and all other factors that may influence the controlling dimensions of the proposed shoring system. See section 10 for additional requirements.

1. Field Survey.

   Sufficient information shall be shown on the plans in the form of profiles, cross sections and topographical maps to determine general design and structural requirements. Field survey information of critical or key dimensions shall be referenced to the centerline of track(s) and top of rail elevations. Existing and proposed grades and alignment of tracks and roads shall be indicated together with a record of controlling elevation of water surfaces or ground water. Show the location of existing/proposed utilities and construction history of the area which might hamper proper installation of the piling, soldier beams, or ground anchors.

2. Geotechnical Report shall provide:
   a. Elevation and location of soil boring in reference to the track(s) centerline and top of rail elevations.
   b. Classification of all soils encountered.
   c. Internal angle of soil friction.
   d. Dry and wet unit weights of soil.
   e. Active and passive soil coefficients, pressure diagram for multiple soil strata.
   f. Bearing capacity and unconfined compression strength of soil.
   g. Backfill and compaction recommendations.
   h. Optimum moisture content of fill material.
   i. Maximum density of fill material.
   j. Minimum recommended factor of safety.
   k. Water table elevation on both sides of the shoring system.
   l. Dewatering wells and proposed flownets or zones of influence.
   m. In seismic areas, evaluation of liquefaction potential of various soil strata.

3. Loads.

All design criteria, temporary and permanent loading must be clearly stated in the design calculations and on the contract and record plans. Temporary loads include, but are not limited to: construction equipment, construction materials and lower water levels adjoining the bulkhead causing unbalanced hydrostatic pressure. Permanent loads include, but are not limited to: future grading and paving, Railroads or highways, structures, material storage piles, snow and earthquake. The allowable live load after construction should be clearly shown in the plans and painted on the pavements behind the bulkheads or shown on signs at the site and also recorded on the record plans. Some of the loads are:

a. Live load pressure due to E80 loading for track parallel to shoring system.
b. Live load pressure due to E80 loading for track at right angle to shoring system.
c. Other live loads.
d. Active earth pressure due to soil.
e. Passive earth pressure due to soil.
f. Active earth pressure due to surcharge loads.
g. Active pressure due to sloped embankment.
h. Dead load.
i. Buoyancy.
j. Longitudinal force from live load.
k. Centrifugal forces.
l. Shrinkage.
m. Temperature.
n. Earthquake.
o. Stream flow pressure.
p. Ice pressure.

4. Drainage. **(AREMA 8.20.2.4)**
   a. The drainage pattern of the site before and after construction should be analyzed and adequate drainage provisions should be incorporated into the plans and specifications. Consideration should be given to groundwater as well as surface drainage.
   b. Drainage provisions for backfill should be compatible with the assumed water conditions in design.

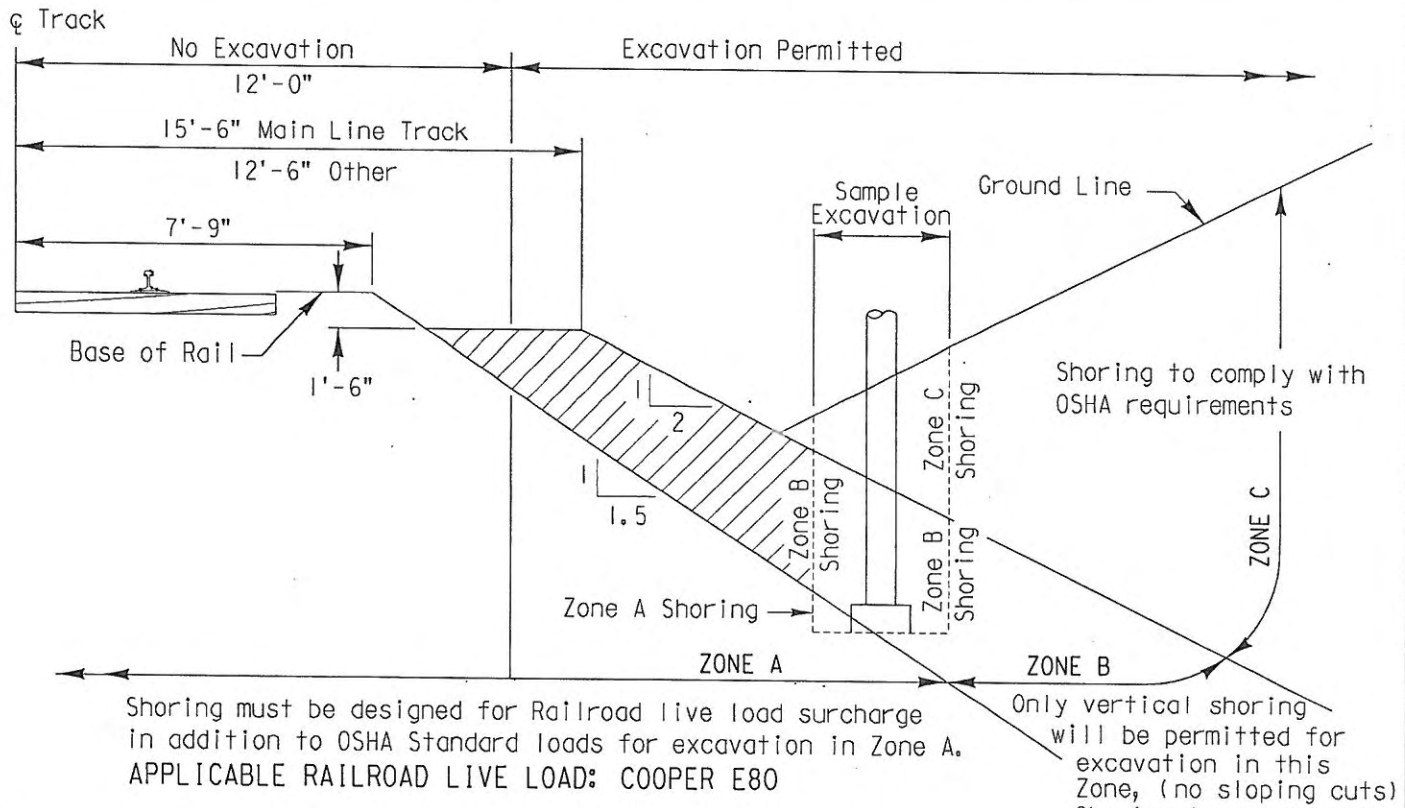
5. Structural design calculations.
   a. List all assumptions used to design the temporary shoring system.
   b. Determine E80 live load lateral pressure using the Boussinesq strip load equation. See **Figure 2** which illustrates Plan Number **710001 "LIVE LOAD PRESSURE DUE TO COOPER E80"**.
   c. Computerized calculations and programs must clearly indicate the input and output data. List all equations used in determining the output.
   d. Example calculations with values must be provided to support computerized output and match the calculated computer result.
   e. Provide a simple free body diagram showing all controlling dimensions and applied loads on the temporary shoring system.
   f. Calculated lateral deflections of the shoring and effects to the rail system must be included. See section 8, Part 6. Include the elastic deflection of the wall as well as the deflection due to the passive deflection of the resisting soil mass.
   g. Documents and manufacturer's recommendations which support the design assumptions must be included with the calculations.

5. TYPES OF TEMPORARY SHORING

1. A shoring box is a prefabricated shoring system which is installed as the excavation progresses. This shoring system is not accepted by the Railroad. This system is allowed in special applications only, typically where Railroad live load surcharge is not present. The shoring box is moved down into the excavation by gravity or by applying vertical loading from excavation equipment.
2. Anchored systems with tiebacks are discouraged. The tiebacks will be an obstruction to future utility installations and may also damage existing utilities. Tiebacks must be removed per Railroad direction. Removal of tieback assemblies is problematic.
3. An anchored sheet pile wall is a structure designed to provide lateral support for a soil mass and derives stability from passive resistance of the soil in which the sheet pile is embedded and the tensile resistance of the anchors.
    a. For purposes of these guidelines, ground anchors shall be cement-grouted tiebacks designed, furnished, installed, tested and stressed in accordance with the project specifications and AREMA requirements.
4. An anchored soldier beam with lagging wall is a structure designed to provide lateral support for a soil mass and derives stability from passive resistance of the soil in which the soldier beam is embedded and from the tensile resistance of the ground anchors.
    a. Anchored soldier beam with lagging walls are generally designed as flexible structures which have sufficient lateral movement to mobilize active earth pressures and a portion of the passive pressure.
    b. For purposes of these specifications, soldier beams include steel H-piles, wide flange sections or other fabricated sections that are driven or set in drilled holes. Lagging refers to the members spanning between soldier beams.
5. A cantilever sheet pile wall is a structure designed to provide lateral support for a soil mass and derives stability from passive resistance of the soil in which the sheet pile is embedded. If cantilever sheet pile is used for shoring adjacent to an operating track, the shoring system shall be at least 12'-0" away from the centerline of track. Cantilever sheet pile walls shall be used only in granular soils or stiff clays.
6. A cantilever soldier beam with lagging wall is a structure designed to provide lateral support for a soil mass and derives stability from passive resistance of the soil in which the soldier beam is embedded.
7. A braced excavation is a structure designed to provide lateral support for a soil mass and derives stability from passive resistance of the soil in which the vertical members are embedded and from the structural capacity of the bracing members.
    a. For purposes of these guidelines, the vertical members of the braced excavation system include steel sheet piling or soldier beams comprised of steel H-piles, wide flange sections, or other fabricated sections that are driven or installed in drilled holes. Wales are horizontal structural members designed to transfer lateral loads from the vertical members to the struts. Struts are structural compression members that support the lateral loads from the wales.
8. A cofferdam is an enclosed temporary structure used to keep water and soil out of an excavation for a permanent structure such as a bridge pier or abutment or similar structure. Cofferdams may be constructed of timber, steel, concrete or a combination of these. These guidelines consider cofferdams primarily constructed with steel sheet piles.

6. GENERAL SHORING REQUIREMENTS

For general shoring requirements and specific applications of the following items refer to **Figure 1** on the next page which illustrates Plan Number **710000 "GENERAL SHORING REQUIREMENTS"**.



GENERAL NOTES:

All dimensions are measured perpendicular to ℄ of track.

Prior to commencing any work, the contractor shall submit for approval by the Railroad detailed plans indicating the nature and extent of the track protection shoring proposed. The contractor shall install the temporary shoring system per the approved plans. Design of the temporary shoring system to comply with **GUIDELINES FOR TEMPORARY SHORING.**

For excavations which encroach into zone A or B, shoring plans shall be accompanied by design calculations. Plans and calculations must be signed and stamped by a Professional Engineer registered in the state where the work will be performed.

GENERAL EXCAVATION ZONES

SCALE: (NOT TO SCALE)

REVISIONS		
DATE	LTR.	DESCRIPTION
5/03	1	FORMERLY UPRR C.E. 106613
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DESIGN BY: PGP | DRAWN BY: JFS | CHECKED BY: AA

APPROVED:

K.H. Jennison
BNSF - ASSISTANT DIRECTOR STRUCTURES DESIGN

9-1-04
UPRR - MGR SPECIAL PROJECTS STRUCTURES DESIGN

BRIDGE STANDARDS

GENERAL SHORING REQUIREMENTS

FILE OWNER: UPRR | DATE: 5-8-03

PLAN NO.: 710000 ⚠ | SHEET: 1 OF 1

PLOTTED: $$$$DATE$$$ $TIME

Figure 1

1. No excavation shall be permitted closer than 12'-0" measured at a right angle from the centerline of track to the trackside of shoring system. If existing conditions preclude the installation of shoring at the required minimum distance, the shifting of tracks or temporary removal of tracks shall be investigated prior to any approval. All costs associated with track shifting or traffic interruption shall be at Contractor's expense.

2. Evaluate slope and stability conditions to ensure the Railroad embankment will not be adversely affected. Local and global stability conditions must also be evaluated.

3. All shoring within the limits of Zone A or Zone B must be placed prior to the start of excavation.

4. Lateral clearances must provide sufficient space for construction of the required ditches parallel to the standard roadbed section. The size of ditches will vary depending upon the flow and terrain and should be designed accordingly.

5. The shoring system must be designed to support the theoretical embankment shown for zones A and B.

6. Any excavation, holes or trenches on the Railroad property shall be covered, guarded and/or protected. Handrails, fence, or other barrier methods must meet OSHA and FRA requirements. Temporary lighting may also be required by the Railroad to identify tripping hazards to train crewmen and other Railroad personnel.

7. The most stringent project specifications of the Public Utilities Commission Orders, Department of Industrial Safety, OSHA, FRA, AREMA, BNSF, UPRR or other governmental agencies shall be used.

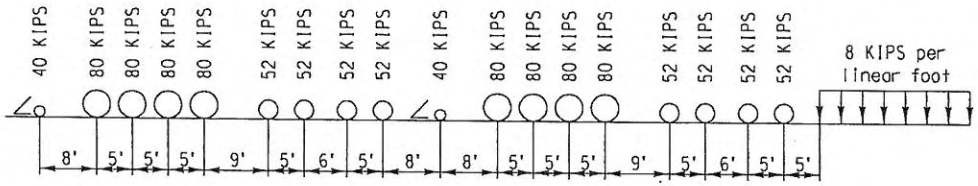
8. Secondhand material is not acceptable unless the Engineer of Record submits a full inspection report which verifies the material properties and condition of the secondhand material. The report must be signed and sealed by the Engineer of Record.

9. All components of the shoring system are to be removed when the shoring is no longer needed. All voids must be filled and drainage facilities restored. See compaction requirements section 9, Part 4.

10. Slurry type materials are not acceptable as fill for soldier piles in drilled holes. Concrete and flowable backfill may prevent removal of the shoring system. Use compacted peagravel material.

7. COMPUTATION OF APPLIED FORCES

1. Railroad live load and lateral forces.
   a. For specific applications of the Coopers E80 live load refer to **Figure 2** on the next page which illustrates Plan Number **710001 "LIVE LOAD PRESSURE DUE TO COOPER E80"**. Supplemental information and sample calculations are provided in the Appendix pages A-1 through A-4.
2. Dead load.
   a. Spoil pile: must be included assuming a minimum height of two feet of soil adjacent to the excavation.
   b. Track: use 200 lbs/linear ft for rails, inside guardrails and fasteners.
   c. Roadbed: ballast, including track ties, use 120 lb per cubic foot.



COOPER E80 LOAD

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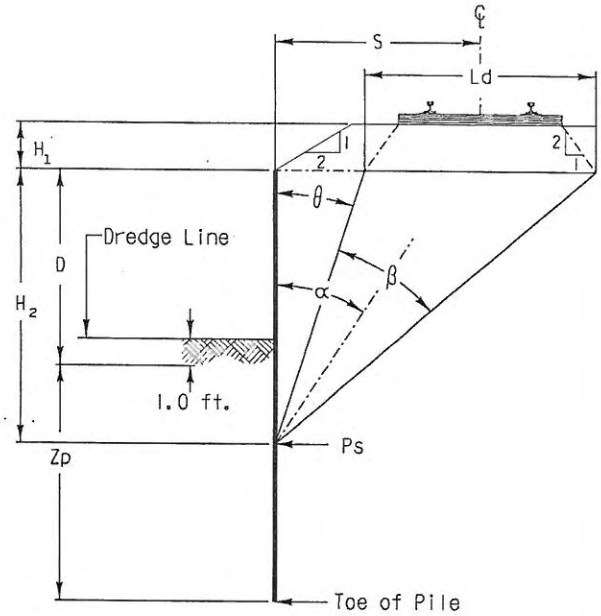

PLAN

SCALE: (NOT TO SCALE)

Vertical pressure q shall be based on a distribution width Ld.
Ld is the length of tie plus H_1.
H_1 is the height from the bottom of tie to the top of shoring.
H_2 is the depth of point being evaluated with the Boussinesq equation.
S is a distance perpendicular from centerline of track to the face of shoring.
D is from top of shoring to one foot below dredge line.
Zp is the minimum embedment depth.
Length of tie is 9 feet
q is the intensity of strip load due to E80 Railroad live load and shall be calculated as follows:

For $H_1 = 0$ Ld = length of tie; therefore, $q = \frac{80,000\ lb}{(5\ feet)(9\ feet)} = 1,778\ psf$

For $H_1 > 0$ Ld = length of tie + H_1; therefore, $q = \frac{80,000\ lb}{(5\ feet)(Ld)}$

CASE 1: Lateral live load pressure Ps, due to E80 loading for track **parallel** to shoring system is calculated using the Boussinesq Strip Load Equation.

$$Ps = \frac{2q}{\pi}(\beta + \sin\beta \sin^2\alpha - \sin\beta \cos^2\alpha)$$

The above equation can be simplified into the following equivalent form:

$$Ps = \frac{2q}{\pi}[\beta - \sin\beta \cos(2\alpha)]$$

α and β are angles measured in radians, $\alpha = \theta + \frac{\beta}{2}$

CASE 2: Live load pressure due to E80 loading for track at a **right angle** to the shoring system can be calcuated using the following equation.

$Ps = K_A q$
where $K_A = \tan^2(45 - \frac{\phi}{2})$
ϕ is the angle of internal friction in degrees

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DESIGN BY: PGP | DRAWN BY: JFS | CHECKED BY: AA

APPROVED:

K.H. Jennison
BNSF - ASSISTANT DIRECTOR STRUCTURES DESIGN

George J. Meyer 9-1-04
UPRR - MGR SPECIAL PROJECTS STRUCTURES DESIGN

BRIDGE SHORING STANDARDS

LIVE LOAD PRESSURE DUE TO COOPER E80

FILE OWNER: UPRR | DATE:
PLAN NO.: 710001 | SHEET: 1 OF 1

PLOTTED: $$$$DATE$$$$ $TIME

Figure 2

3. Active earth pressure.

   a. The active earth pressure due to the soil may be computed by the Coulomb Theory or other approved method.

   b. The active earth pressure at depth "z_a" is:

      $P_A = K_A \gamma z_a$, where $K_A = \tan^2(45 - \frac{\varphi}{2})$

      z_a = depth of soil influencing the active pressure.

4. Active earth pressure due to unbalanced water pressure.

   a. When bulkheads are used for waterfront construction, the bulkhead is subjected to a maximum earth pressure at the low water stage. During a rainstorm or a rapidly receding high water, the water level behind the bulkhead may be several feet higher than in front of the bulkhead.

   b. Drained conditions in backfill apply when clean sand or clean sand and gravel are used and adequate permanent drainage outlets are provided. Where drained conditions exist, the design water level may be assumed at the drainage outlet elevation.

5. Active earth pressure due to surcharge load.

   The active earth pressure due to surcharge load q':

   $P_U = K_A q'$, where $K_A = \tan^2(45 - \frac{\phi}{2})$

6. Passive earth pressure.

   The passive earth pressure, P_p, in front of the bulkhead may also be computed by the Coulomb Theory.

   $P_p = K_p \gamma z_p$, where $K_P = \tan^2(45 + \frac{\varphi}{2})$

   z_p = vertical distance beginning one foot below dredge line but not to exceed embedment depth

7. Pressure due to embankment surcharges.

   Conventional analysis (Rankine, Coulomb, or Log-Spiral) should be used to determine the additional surcharge from embankment slopes.

8. Additional analysis for centrifugal force calculations as described in **AREMA Chapter 15, Part 1, Section 1.3, Article 1.3.6** Centrifugal Loads are required where track curvature exceeds three degrees.

9. Include and compute all other loads that are impacting the shoring system such as a typical Railroad service vehicle (HS-20 truck).

8. STRUCTURAL INTEGRITY

Structures and structural members shall be designed to have design strengths at all sections at least equal to the required strengths calculated for the loads and forces in such combinations as stipulated in **AREMA Chapter 8 Part 2 Article 2.2.4b**, which represents various combinations of loads and forces to which a structure may be subjected. Each part of the structure shall be proportioned for the group loads that are applicable, and the maximum design required shall be used.

1. Embedment depth.

   a. Calculated depth of embedment is the embedment depth required to maintain static equilibrium.

b. Minimum depth of embedment is the total depth of embedment required to provide static equilibrium plus additional embedment due to the minimum factor of safety.

   1. Embedment depth factor of safety for well-defined loading conditions and thoroughly determined soil parameters is generally 1.3 for most temporary shoring systems. (See **AREMA 8.20.4.1.c**)

   2. All anchored shoring systems require a minimum embedment depth of 1.5 times the calculated depth of embedment. Shallow penetration into strong soil layers is not acceptable. (See **AREMA 8.20.5.1**)

2. The allowable stresses based on AREMA requirements are as follows:

   Structural Steel: 0.55Fy for Compression in extreme fiber. **(AREMA Ch.15 Table 1-11)**

   Structural Steel: 0.35Fy for Shear. **(AREMA Ch.15 Table 1-11)**

   Sheet Pile Sections: 2/3 of yield strength for steel. **(AREMA 8.20.5.7)**

   Concrete: 1/3 of Compressive strength. **(AREMA 8.20.5.7)**

   Anchor Rods: 1/2 of yield strength for steel. **(AREMA 8.20.5.7)**

3. AISC allowances for increasing allowable stress due to temporary loading conditions are not acceptable.

4. Gravity type temporary shoring systems must also be analyzed for overturning, sliding and global stability.

5. The contractor is responsible for providing an approved test method to verify the capacity of anchored or tieback systems. The manufacturers recommendations for testing must be satisfied. Systems which support the Railroad embankment will be considered high risk in determining the percentage of elements to be proof tested.

6. Calculated deflections of temporary shoring system and top of rail elevation shall not exceed the criteria outlined in **Table 1 Deflection Criteria**.

Table 1 Deflection Criteria

Horizontal distance from shoring to track C/L measured at a right angle from track	Maximum horizontal movement of shoring system	Maximum acceptable horizontal or vertical movement of rail
12' < S < 18'	3/8"	1/4"
18' < S < 24'	1/2"	1/4"

9. SOIL CHARACTERISTICS

1. Subsurface Exploration. **(AREMA 8.5.2.2)**

   a. Sufficient borings shall be made along the length of the structure to determine, with a reasonable degree of certainty, the subsurface conditions. Irregularities found during the initial soil boring program may dictate that additional borings be taken.

   b. The subsurface investigation shall be made in accordance with the provisions of **AREMA Chapter 8 Part 22, Geotechnical Subsurface Investigation**.

2. Type of backfill.

   a. Backfill is defined as material behind the wall, whether undisturbed ground or fill, that contributes to the pressure against the wall.

b. The backfill shall be investigated and classified with reference to the soil types described in **AREMA Table 8-5-1**.

c. Types 4 and 5 backfill shall be used only with the permission of the Engineer. In all cases the wall design shall be based on the type of backfill used.

Table 8-5-1 (AREMA) Types of Backfill for Retaining Walls

Backfill Type	Backfill Description
1	Coarse-grained soil without admixture of fine soil particles, very free-draining (clean sand, gravel or broken stone).
2	Coarse-grained soil of low permeability due to admixture of particles of silt size.
3	Fine silty sand; granular materials with conspicuous clay content; or residual soil with stones.
4	Soft or very soft clay, organic silt; or soft silty clay.
5	Medium or stiff clay that may be placed in such a way that a negligible amount of water will enter the spaces between the chunks during floods or heavy rains.

3. Computation of backfill pressure. **(AREMA 8.5.3.2a)**

a. Values of the unit weight, cohesion, and angle of internal friction of the backfill material shall be determined directly by means of soil tests or, if the expense of such tests is not justifiable, by means of **AREMA Table 8-5-2** referring to the soil types defined in **AREMA Table 8-5-1**. Unless the minimum cohesive strength of the backfill material can be evaluated reliably, the cohesion shall be neglected and only the internal friction considered. See Appendix page A-6 for AREMA generic soil properties.

Table 8-5-2 (AREMA) Properties of Backfill Materials

Type of Backfill	Unit Weight Lb. Per Cu. Ft.	Cohesion "c"	Angle of Internal Friction
1	105	0	33°-42°(38°for broken stone)
2	110	0	30°
3	125	0	28°
4	100	0	0°
5	120	240	0°

4. Compaction.

a. The backfill shall preferably be placed in loose layers not to exceed 8 inches in thickness. Each layer shall be compacted before placing the next, but over compaction shall be avoided.

b. It is required that backfill be compacted to no less than 95% of maximum dry density at a moisture content within 2% of optimum and tested using Modified Proctor ASTM D1557.

c. Fill within 100 feet of bridge ends or 20 feet outside culverts shall be placed and compacted to not less than 100% of maximum.

d. No dumping of backfill material shall be permitted in such a way that the successive layers slope downward toward the wall. The layers shall be horizontal or shall slope downward away from the wall.

10. PLANS

The shoring plans must completely identify the site constraints and the shoring system. Use the design templates provided in the appendix as an example to show the required information, specifications and drawings. The specific requirements of the plan submittals are as follows:

1. General plan view should show:
   a. Railroad right-of-way and North arrow.
   b. Position of all Railroad tracks and identify each track as mainline, siding, spur, etc.
   c. Spacing between all existing tracks.
   d. Location of all access roadways, drainage ditches and direction of flow.
   e. Footprint of proposed structure, proposed shoring system and any existing structures if applicable.
   f. Proposed horizontal construction clearances. The minimum allowable is 12 feet measured at a right angle from centerline of track.
   g. Location of existing and proposed utilities.
   h. Drawings must be signed and stamped by a Licensed Professional Engineer, registered in the state where the work will be performed.
   i. Railroad and other "CALL BEFORE YOU DIG" numbers.
   j. Detailed view of shoring along with controlling elevations and dimensions.
2. Typical section and elevation should show:
   a. Top of rail elevations for all tracks.
   b. Offset from the face of shoring system to the centerline of all tracks at all changes in horizontal alignment.
   c. All structural components, controlling elevations and dimensions of shoring system.
   d. All drainage ditches and controlling dimensions.
   e. All slopes, existing structures and other facilities which may surcharge the shoring system.
   f. Location of all existing and proposed utilities.
   g. Total depth of shoring system.
3. General criteria
   a. Design loads to be based on the AREMA manual and Cooper E80 loading.
   b. Pressure due to embankment surcharges.
   c. ASTM designation and yield strength for each material.
   d. Maximum allowable bending stress for structural steel is 0.55Fy.
   e. Temporary overstress allowances are not acceptable.
   f. All timber members shall be Douglas Fir grade 2 or better.
   g. Insitu soil classification.
   h. Backfill soil classification.
   i. Internal angle of friction and unit weight of the soil.
   j. Active and passive soil coefficients.
   k. Fill within 100 feet of bridge ends or 20 feet outside culverts shall be placed and compacted to a minimum of 100% of maximum dry density tested per Modified Proctor ASTM D1557.
   l. Slopes without shoring shall not be steeper than 2 horizontal to 1 vertical

m. Dredge line elevation.

n. Shoring deflection to be calculated and meet Railroad requirements.

4. Miscellaneous:

a. Project name, location, GPS coordinates, track owner, Railroad line segment, milepost and subdivision in the title block.

b. Procedure outlining the installation and removal of the temporary shoring system.

c. General notes specifying material requirements, design data, details, dimensions, cross-sections, sequence of construction etc.

d. A description of the tieback installation including drilling, grouting, stressing information and testing procedures, anchor capacity, type of tendon, anchorage hardware, minimum unbonded lengths, minimum anchor lengths, angle of installation, tieback locations and spacing.

e. All details for construction of drainage facilities associated with the shoring system shall be clearly indicated.

f. Details and descriptions of all shoring system members and connection details.

g. Settlement and displacement calculations.

h. Handrail and protective fence details along the excavation.

i. Drawings must be signed and stamped by a Licensed Professional Engineer, registered in the state where the work will be performed.

j. Call before you dig number.

k. Construction clearance diagram.

11. SUBMITTALS

The Contractor will be responsible for any and all cost associated with the review of plans by the Railroad. Review of design submittals by the Railroad will require a minimum of four (4) weeks. To avoid impacting the construction schedule, the Contractor must schedule submittals well in advance. Partial, incomplete or inadequate designs will be rejected, thus delaying the approval. Revised submittals will follow the same procedure as the initial submittal until all issues are resolved. Submit a minimum of three sets of shoring plans and two sets of calculations with manufacturers' specifications. Drawings and calculations must be signed and stamped by a Registered Professional Engineer familiar with Railway loadings and who is licensed in the state where the shoring system is intended for use. Drawings accompanying the shoring plans shall be submitted on 11" x 17" or 8½" x 11" sized paper.

1. Contractor review.

The Contractor must review the temporary shoring plans to ensure that the proposed method of construction is compatible with the existing site and soil conditions. The Contractor's work plan must be developed to allow train traffic to remain in service. Removal of the shoring system must also be addressed.

2. Applicant and or Engineer of Record review.

The applicant and or Engineer of Record must review and approve the submittal for compliance with the project specifications, AREMA Manual, these guidelines and structural capacity before forwarding the submittal to the Railroad.

3. Review process.

   All design submittals shall be forwarded to the Railroad Representative who will send them to the Structures Design Department. The Structures Design Department shall review or have an outside consultant review said submittals. If a Railroad consultant performs said review, the consultant may reply directly to the applicant or their representative after consultation with the Structures Design Department. A copy of the reply will be mailed to the Railroad Representative. During the review process the Railroad Representative is the point of contact to resolve outstanding issues.

12. APPENDIX

13. BIBLIOGRAPHY

The following list of references used in these guidelines are placed here in alphabetical order for your convenience.

1. *Manual for Railway Engineering*, 2002 American Railway Engineering and Maintenance-of-Way Association.

2. *TRENCHING AND SHORING MANUAL,* January 1990, Revision 11/12/96. State of California Department of Transportation, Office of Structures Construction.

SAMPLE PROBLEM

Point in question: S = 12 ft H = 6 ft

$q = \frac{80{,}000 \text{ lbs}}{(5 \text{ ft})(9 \text{ ft})} = 1778 \text{ psf}$ for E80 loading, axle spacing = 5 ft, tie length b = 9 ft

Solve for $X_1 = S - b/2 = 7.5$ ft

Solve for $X_2 = S + b/2 = 16.5$ ft

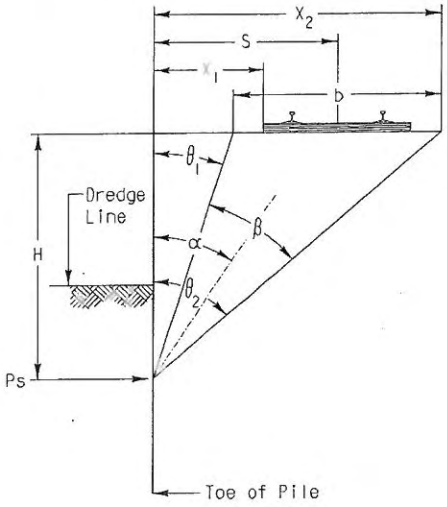
Solve for $\theta_1 = \arctan\left(\frac{X_1}{H}\right) = 0.896$ radians

Solve for $\theta_2 = \arctan\left(\frac{X2}{H}\right) = 1.222$ radians

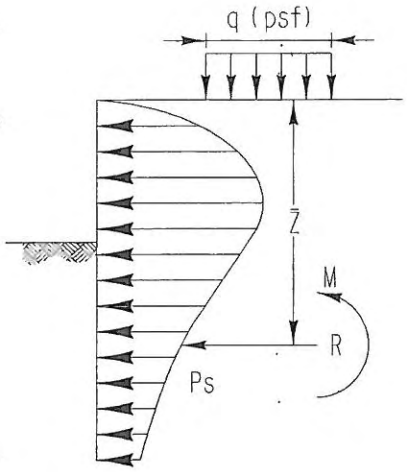
Solve for $\beta = \theta_2 - \theta_1 = 0.326$ radians

Solve for $\alpha = \frac{\theta_1 + \theta_2}{2} = 1.059$ radians

Note: $\tan\alpha \neq \frac{S}{H}$



PRESSURE DISTRIBUTION FOR STRIP LOAD



EQUIVALENT LOADING

- Pressure, Ps due to E80 liveload at the above-identified point:

$$Ps = \frac{2q}{\pi}(\beta - \sin\beta\cos 2\alpha) = \frac{2*1778}{\pi}(0.326 - \sin(0.326)\cos(2*1.059)) = 558.\text{psf}$$

- Shear due to E80 liveload at the above-identified point:

$$R_x = \frac{2qH\beta}{\pi} = \frac{2*1778*6*0.326}{\pi} = 2214.lbs \text{ /ft}$$

- Depth $\bar{z}$ from base of tie:

$$\bar{z} = \frac{H^2\beta - bH + x_2^2\left(\frac{\pi}{2} - \theta_2\right) - x_1^2\left(\frac{\pi}{2} - \theta_1\right)}{2H\beta} = \frac{6^2*0.326 - 9*6 + 16.5^2\left(\frac{\pi}{2} - 1.222\right) - 7.5^2\left(\frac{\pi}{2} - 0.896\right)}{2*6*0.326} = 3.77\text{ft}$$

- Moment due to E80 liveload at the above identified point:

$$M = R_x\left(H - \bar{z}\right) = 2214 * \left(6 - 3.77\right) = 4940 \text{ ft-lbs/ft}$$

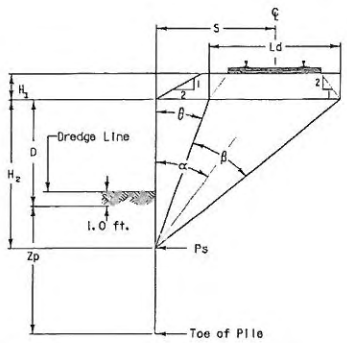
Use the above equations to determine Ps, M, R_x & $\bar{z}$ due to the E80 liveload along the **entire** depth of the shoring system. Typically the equations are evaluated on 6" increments to determine the maximum values along the depth of the shoring system. The resultants must be combined with other applicable pressures and loads to evaluate the total loading on the shoring system for the entire depth of the system. Determine the minimum embedment depth required and the minimum cross sectional properties of the shoring system based on the allowable stresses and the required factors of safety.

This chart identifies the active pressure and resulting forces due to E80 liveload.
See "SAMPLE PROBLEM" sheet for definitions of variables and equations.

1. Select distance S from track centerline to face of shoring.
2. Select depth H_2 below base of tie.
3. Read Ps, M, R and $\bar{z}$ from the table.
4. Use the procedure outlined in the sample problem to determine values at non-tabulated points.

$$Ps = \frac{2q}{\pi}[\beta - \sin\beta\cos(2\alpha)]$$

where q = 1778 psf



Boussinesq surcharge pressure E80 live load for H_1=0

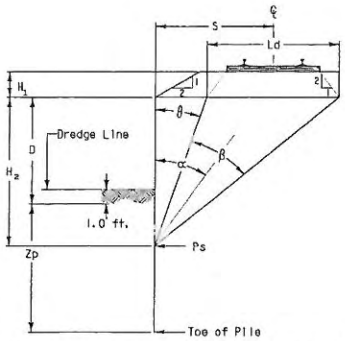
Depth below top of shoring H_2 (ft)	Variables		Horizontal distance (S) from shoring to track CL measured at a right angle									
			12	14	16	18	20	22	24	26	28	30
2	**Ps**	(psf)	**305**	**220**	**166**	**130**	**105**	**86**	**72**	**61**	**53**	**46**
	α	(radians)	1.38	1.41	1.44	1.45	1.47	1.48	1.48	1.49	1.50	1.50
	β	(radians)	0.14	0.10	0.07	0.06	0.05	0.04	0.03	0.03	0.02	0.02
	$\bar{z}$	(ft)	1.32	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
	M	(ft-lbs/ft)	215	152	114	89	71	58	49	41	36	31
	R	(lbs/ft)	317	226	170	132	106	87	73	62	53	46
4	**Ps**	(psf)	**496**	**381**	**299**	**240**	**197**	**164**	**138**	**118**	**102**	**89**
	α	(radians)	1.21	1.27	1.31	1.34	1.36	1.38	1.40	1.41	1.43	1.44
	β	(radians)	0.25	0.19	0.14	0.11	0.09	0.07	0.06	0.05	0.05	0.04
	$\bar{z}$	(ft)	2.59	2.61	2.63	2.64	2.64	2.65	2.65	2.65	2.65	2.66
	M	(ft-lbs/ft)	1,609	1,165	882	692	557	459	384	327	281	244
	R	(lbs/ft)	1,141	840	643	508	411	339	285	242	209	182
6	**Ps**	(psf)	**558**	**461**	**381**	**317**	**266**	**225**	**193**	**167**	**146**	**128**
	α	(radians)	1.06	1.13	1.19	1.23	1.27	1.29	1.32	1.34	1.35	1.37
	β	(radians)	0.33	0.25	0.20	0.16	0.13	0.11	0.09	0.08	0.07	0.06
	$\bar{z}$	(ft)	3.77	3.83	3.88	3.90	3.92	3.94	3.95	3.96	3.96	3.97
	M	(ft-lbs/ft)	4,944	3,674	2,830	2,244	1,822	1,508	1,269	1,082	933	813
	R	(lbs/ft)	2,214	1,696	1,332	1,070	877	731	618	529	458	400
8	**Ps**	(psf)	**535**	**476**	**414**	**358**	**309**	**268**	**234**	**205**	**181**	**160**
	α	(radians)	0.94	1.02	1.08	1.13	1.17	1.21	1.24	1.26	1.29	1.30
	β	(radians)	0.37	0.29	0.24	0.19	0.16	0.14	0.12	0.10	0.09	0.08
	$\bar{z}$	(ft)	4.84	4.97	5.06	5.11	5.16	5.19	5.21	5.23	5.24	5.26
	M	(ft-lbs/ft)	10,481	8,006	6,286	5,051	4,141	3,452	2,920	2,501	2,165	1,892
	R	(lbs/ft)	3,316	2,641	2,134	1,751	1,456	1,228	1,047	903	786	689
10	**Ps**	(psf)	**474**	**449**	**411**	**370**	**329**	**293**	**260**	**232**	**207**	**186**
	α	(radians)	0.83	0.92	0.99	1.04	1.09	1.13	1.17	1.19	1.22	1.24
	β	(radians)	0.38	0.32	0.26	0.22	0.19	0.16	0.14	0.12	0.10	0.09
	$\bar{z}$	(ft)	5.81	6.02	6.16	6.26	6.34	6.39	6.44	6.47	6.50	6.52
	M	(ft-lbs/ft)	18,145	14,227	11,385	9,280	7,689	6,463	5,502	4,736	4,117	3,610
	R	(lbs/ft)	4,328	3,571	2,964	2,482	2,099	1,792	1,544	1,341	1,175	1,037
12	**Ps**	(psf)	**404**	**403**	**386**	**360**	**331**	**302**	**274**	**248**	**225**	**204**
	α	(radians)	0.75	0.83	0.90	0.96	1.01	1.06	1.10	1.13	1.16	1.18
	β	(radians)	0.38	0.33	0.28	0.24	0.20	0.18	0.15	0.13	0.12	0.11
	$\bar{z}$	(ft)	6.68	6.97	7.18	7.34	7.46	7.55	7.61	7.67	7.71	7.75
	M	(ft-lbs/ft)	27,703	22,237	18,121	14,980	12,550	10,641	9,121	7,895	6,894	6,068
	R	(lbs/ft)	5,207	4,424	3,763	3,214	2,762	2,389	2,080	1,823	1,608	1,427
14	**Ps**	(psf)	**338**	**351**	**349**	**337**	**319**	**298**	**276**	**255**	**234**	**215**
	α	(radians)	0.68	0.76	0.83	0.89	0.94	0.99	1.03	1.07	1.10	1.13
	β	(radians)	0.38	0.33	0.28	0.25	0.22	0.19	0.17	0.15	0.13	0.12
	$\bar{z}$	(ft)	7.46	7.85	8.13	8.35	8.51	8.64	8.74	8.82	8.89	8.94
	M	(ft-lbs/ft)	38,880	31,856	26,395	22,116	18,729	16,021	13,831	12,043	10,568	9,339
	R	(lbs/ft)	5,948	5,178	4,499	3,913	3,414	2,990	2,631	2,327	2,068	1,847
16	**Ps**	(psf)	**280**	**301**	**310**	**308**	**300**	**286**	**271**	**254**	**237**	**220**
	α	(radians)	0.62	0.70	0.77	0.83	0.88	0.93	0.97	1.01	1.04	1.07
	β	(radians)	0.36	0.32	0.28	0.25	0.22	0.20	0.18	0.16	0.14	0.13
	$\bar{z}$	(ft)	8.17	8.64	9.01	9.29	9.51	9.68	9.82	9.93	10.03	10.10
	M	(ft-lbs/ft)	51,411	42,880	36,066	30,598	26,183	22,590	19,644	17,207	15,175	13,468
	R	(lbs/ft)	6,563	5,829	5,158	4,560	4,034	3,576	3,179	2,837	2,540	2,284

This chart identifies the active pressure and resulting forces due to E80 liveload.
See "SAMPLE PROBLEM" sheet for definitions of variables and equations.

1. Select distance S from track centerline to face of shoring.
2. Select depth H_2 below base of tie.
3. Read Ps, M, R and $\bar{z}$ from the table.
4. Use the procedure outlined in the sample problem to determine values at non-tabulated points.

$$Ps = \frac{2q}{\pi}[\beta - \sin\beta\cos(2\alpha)]$$

where q = 1778 psf



Boussinesq surcharge pressure E80 live load for H_1=0

Depth below top of shoring H_2 (ft)	Variables		Horizontal distance (S) from shoring to track CL measured at a right angle									
			12	14	16	18	20	22	24	26	28	30
18	**Ps**	(psf)	**231**	**256**	**271**	**277**	**276**	**269**	**259**	**247**	**234**	**220**
	α	(radians)	0.57	0.64	0.71	0.77	0.82	0.87	0.92	0.96	0.99	1.02
	β	(radians)	0.35	0.31	0.28	0.25	0.23	0.20	0.18	0.16	0.15	0.13
	$\bar{z}$	(ft)	8.80	9.37	9.81	10.16	10.44	10.67	10.85	11.00	11.12	11.22
	M	(ft-lbs/ft)	65,062	55,110	46,976	40,313	34,834	30,304	26,536	23,384	20,728	18,477
	R	(lbs/ft)	7,072	6,386	5,739	5,145	4,609	4,132	3,710	3,338	3,012	2,725
20	**Ps**	(psf)	**191**	**217**	**236**	**246**	**250**	**249**	**244**	**237**	**227**	**217**
	α	(radians)	0.52	0.59	0.66	0.72	0.77	0.82	0.87	0.91	0.94	0.98
	β	(radians)	0.33	0.30	0.28	0.25	0.23	0.21	0.19	0.17	0.15	0.14
	$\bar{z}$	(ft)	9.37	10.03	10.56	10.98	11.32	11.59	11.82	12.01	12.16	12.30
	M	(ft-lbs/ft)	79,641	68,368	58,973	51,137	44,586	39,093	34,465	30,548	27,216	24,367
	R	(lbs/ft)	7,493	6,859	6,245	5,668	5,135	4,651	4,214	3,822	3,474	3,163
22	**Ps**	(psf)	**159**	**184**	**204**	**217**	**225**	**228**	**227**	**223**	**217**	**210**
	α	(radians)	0.49	0.55	0.62	0.67	0.73	0.77	0.82	0.86	0.90	0.93
	β	(radians)	0.31	0.29	0.27	0.25	0.23	0.21	0.19	0.17	0.16	0.14
	$\bar{z}$	(ft)	9.89	10.64	11.24	11.73	12.14	12.47	12.74	12.97	13.17	13.33
	M	(ft-lbs/ft)	94,986	82,497	71,913	62,945	55,341	48,878	43,370	38,658	34,611	31,122
	R	(lbs/ft)	7,842	7,260	6,684	6,131	5,611	5,128	4,685	4,283	3,918	3,590
24	**Ps**	(psf)	**133**	**157**	**176**	**191**	**202**	**207**	**210**	**209**	**206**	**201**
	α	(radians)	0.45	0.52	0.58	0.63	0.68	0.73	0.78	0.82	0.85	0.89
	β	(radians)	0.30	0.28	0.26	0.24	0.22	0.20	0.19	0.17	0.16	0.15
	$\bar{z}$	(ft)	10.35	11.19	11.87	12.44	12.90	13.29	13.62	13.89	14.13	14.32
	M	(ft-lbs/ft)	110,969	97,366	85,670	75,625	66,997	59,577	53,183	47,661	42,875	38,716
	R	(lbs/ft)	8,132	7,600	7,064	6,540	6,037	5,564	5,122	4,715	4,342	4,001
26	**Ps**	(psf)	**112**	**134**	**153**	**168**	**180**	**188**	**192**	**194**	**193**	**191**
	α	(radians)	0.42	0.48	0.54	0.60	0.65	0.69	0.74	0.78	0.82	0.85
	β	(radians)	0.28	0.27	0.25	0.23	0.22	0.20	0.19	0.17	0.16	0.15
	$\bar{z}$	(ft)	10.78	11.69	12.45	13.09	13.62	14.07	14.44	14.77	15.04	15.28
	M	(ft-lbs/ft)	127,485	112,863	100,135	89,071	79,460	71,105	63,836	57,499	51,963	47,113
	R	(lbs/ft)	8,376	7,890	7,393	6,899	6,418	5,959	5,524	5,118	4,741	4,393
28	**Ps**	(psf)	**94**	**114**	**132**	**148**	**160**	**169**	**175**	**179**	**180**	**180**
	α	(radians)	0.40	0.46	0.51	0.56	0.61	0.66	0.70	0.74	0.78	0.81
	β	(radians)	0.27	0.26	0.24	0.23	0.21	0.20	0.19	0.17	0.16	0.15
	$\bar{z}$	(ft)	11.17	12.16	12.99	13.70	14.29	14.80	15.23	15.60	15.91	16.19
	M	(ft-lbs/ft)	144,448	128,896	115,211	103,191	92,642	83,385	75,258	68,113	61,823	56,274
	R	(lbs/ft)	8,581	8,137	7,677	7,214	6,758	6,315	5,892	5,491	5,115	4,764
30	**Ps**	(psf)	**80**	**98**	**115**	**130**	**142**	**152**	**160**	**165**	**167**	**168**
	α	(radians)	0.37	0.43	0.48	0.53	0.58	0.63	0.67	0.71	0.74	0.78
	β	(radians)	0.26	0.25	0.23	0.22	0.21	0.20	0.18	0.17	0.16	0.15
	$\bar{z}$	(ft)	11.52	12.59	13.49	14.26	14.92	15.48	15.97	16.38	16.75	17.06
	M	(ft-lbs/ft)	161,789	145,388	130,819	117,903	106,466	96,343	87,381	79,443	72,404	66,153
	R	(lbs/ft)	8,755	8,349	7,925	7,492	7,060	6,636	6,227	5,834	5,462	5,112
32	**Ps**	(psf)	**69**	**85**	**101**	**115**	**127**	**137**	**145**	**151**	**155**	**157**
	α	(radians)	0.35	0.41	0.46	0.51	0.55	0.60	0.64	0.68	0.71	0.75
	β	(radians)	0.25	0.24	0.22	0.21	0.20	0.19	0.18	0.17	0.16	0.15
	$\bar{z}$	(ft)	11.85	12.98	13.95	14.79	15.51	16.13	16.67	17.13	17.54	17.89
	M	(ft-lbs/ft)	179,452	162,274	146,888	133,136	120,859	109,909	100,144	91,432	83,655	76,706
	R	(lbs/ft)	8,904	8,532	8,140	7,736	7,329	6,925	6,531	6,150	5,785	5,438

BNSF guidelines are as follows:

a. Guidelines for Design and Construction of Grade Separation Structures.

UPRR guidelines are as follows:

a. **Underpass Structures** – "Guidelines for Design and Construction of Grade Separation Underpass Structures."
b. **Overhead Grade Separation** – "Guidelines for Design of Highway Separation Structures Over Railroad (Overhead Grade Separation)."
c. **Demolition** – "Guidelines for Preparation of a Bridge Demolition and Removal Plan for Structures Over Railroad."
d. **Shoofly** – "Guidelines for Design and Construction of Shoofly (Detour) Tracks."
e. **Fiber Optic** – "UPRR Fiber Optic Engineering, Construction And Maintenance Standards." 1/1/2002
f. **Pipeline** – "Pipeline Installation" available at www.uprr.com.
g. **Industry Track** – "Technical Specification for Construction of Industrial Tracks"

WEBSITE DIRECTORY:

1. www.astm.org
2. www.arema.org
3. www.bnsf.com
4. www.pilespecs.com
5. www.uprr.com

AREMA Table 8-20-1. Granular Soils

Descriptive Term for Relative Density	Standard Penetration Test Blows per Foot "N"
Very Loose	0 - 4
Loose	4 - 10
Medium	10 - 30
Dense	30 - 50
Very Dense	Over 50

AREMA Table 8-20-2. Silt and Clay Soils

Descriptive Term for Consistency	Unconfined Compressive Strength Tons per Square Foot
Very Soft	Less than 0.25
Soft	0.25 - 0.50
Medium	0.50 - 1.00
Stiff	1.00 - 2.00
Very Stiff	2.00 - 4.00
Hard	Over 4.00

AREMA Table 8-20-3. Unit Weights of Soils, and Coefficients of Earth Pressure

Type of Soil	Unit Weight of Moist Soil, γ (Note 1)		Unit Weight of Submerged Soil, γ' (Note 1)		Coefficient of Active Earth Pressure, K_A				Coefficient of Passive Earth Pressure, Kp		
					For Backfill	For Soils in Place	Friction Angles (Note 2)		For Soils in Place	Friction Angles (Note 2)	
	Minimum	Maximum	Minimum	Maximum			ϕ	δ		ϕ	δ
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Clean Sand:											
Dense	110	140	65	78		0.20	38	20	9.0	38	25
Medium	110	130	60	68		0.25	34	17	7.0	34	23
Loose	90	125	56	63	0.35	0.30	30	15	5.0	30	20
Silty Sand:											
Dense	110	150	70	88		0.25			7.0		
Medium	95	130	60	68		0.30			5.0		
Loose	80	125	50	63	0.50	0.35			3.0		
Silt and Clay (Note 3)	$\frac{165(1+w)}{1+2.65w}$		$\frac{103}{1+2.65w}$		1.00	$1-\frac{q_u}{p+\gamma z}$			$1+\frac{q_u}{p+\gamma z}$		

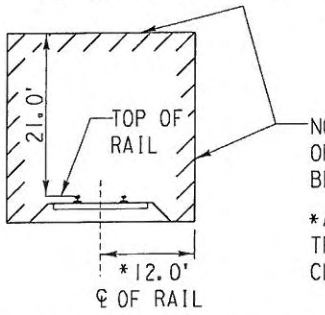
Note 1: In pounds per cubic foot.
Note 2: These angles, expressed in degrees, are ϕ, the angle of internal friction, and δ, the angle of wall friction, and are used in estimating the coefficients under which they are listed.
Note 3: The symbol γ represents γ or γ', whichever is applicable; P is the effective unit pressure on the top surface of the stratum; q_u is the unconfined compressive strength; w is the natural water content, in percentage of dry weight; and z is the depth below the top surface of the stratum.

General criteria:

a. Design loads to be based on the AREMA manual and Cooper E80 loading.
b. Pressure due to embankment surcharges.
c. ASTM designation and yield strength for each material.
d. Maximum allowable bending stress for steel is 0.55Fy.
e. Temporary overstress allowances are not acceptable.
f. All timber members shall be Douglas Fir Grade 2 or better.
g. Insitu soil classification.
h. Backfill soil classification.
i. Internal angle of friction and unit weight of soil.
j. Active and passive soil coefficients.
k. Backfill compacted to a minimum of 95% Proctor density per ASTM D-1557.
l. Slopes without shoring shall not be steeper than 2 horizontal to 1 vertical.
m. Dredge line elevation.
n. Shoring deflection to be calculated and meet Railroad requirements.

Miscellaneous:

a. Project name, location, GPS coordinates, track owner, Railroad line segment, milepost and subdivision in the title block.
b. Procedure outlining the installation and removal of the temporary shoring system.
c. General notes specifying material requirements, design data, details, dimensions and cross-sections, sequence of construction etc.
d. A description of tieback installation including drilling, grouting, stressing information and testing procedures, anchor capacity, type of tendon, anchorage hardware, minimum unbonded lengths, minimum anchor lengths, angle of installation, tieback locations and spacing.
e. All details for construction of drainage facilities associated with the shoring system shall be clearly indicated.
f. Details and descriptions of all shoring system members and connection details.
g. Settlement and displacement calculations.
h. Handrail and protective fence details along the excavations.
i. Drawings must be signed and stamped by a Licensed Professional Engineer, registered in the state where the work will be performed.
j. Call before you dig number.
k. Construction clearances diagram as shown below.



MINIMUM CONSTRUCTION CLEARANCES
(NORMAL TO RAILROAD)
Not to scale

DESIGN BY:	NAME & LOGO OF ENGINEERING FIRM OR PROJECT OWNER
DRAWN BY:	
SCALE:	GENERAL CRITERIA AND MISCELLANEOUS
DRAWING NO:	
SHEET: 1 of 3	RR M.P. SUBDIVISION
DOT#:	CITY COUNTY STATE
DATE:	PROJECT NAME & LOCATION

General plan view should show:

a. Railroad right-of-way and North arrow.
b. Position of all Railroad tracks and identify each track as mainline, siding, spur, etc.
c. Spacing between all existing tracks.
d. Location of all access roadways, drainage ditches and direction of flow.
e. Footprint of proposed structure, proposed shoring system and any existing structures if applicable.
f. Proposed horizontal construction clearances. The minimum allowable is 12 feet measured at a right angle from centerline of track.
g. Location of existing and proposed utilities.
h. Drawings must be signed and stamped by a Licensed Professional Engineer, registered in the state where the work will be performed.
i. Railroad and other "CALL BEFORE YOU DIG" numbers.
j. Detailed view of shoring along with controlling elevations and dimensions.

DESIGN BY:	NAME & LOGO OF ENGINEERING FIRM OR PROJECT OWNER
DRAWN BY:	
SCALE:	GENERAL PLAN VIEW
DRAWING NO:	
SHEET: 2 OF 3	RR M.P. SUBDIVISION
DOT#:	city COUNTY STATE
DATE:	PROJECT NAME & LOCATION

Typical section and elevation should show:

a. Top of rail elevations for all tracks.
b. Offset from the face of shoring system to the centerline of all tracks at all changes in horizontal alignment.
c. All structural components, controlling elevations and dimensions of shoring system.
d. All drainage ditches and controlling dimensions.
e. All slopes, existing structures and other facilities which may surcharge the shoring system.
f. Location of all existing and proposed utilities.
g. Total depth of shoring system.

DESIGN BY:	NAME & LOGO OF ENGINEERING FIRM OR PROJECT OWNER
DRAWN BY:	
SCALE:	TYPICAL SECTION & ELEVATION VIEW
DRAWING NO:	
SHEET: 3 of 3	RR M.P. SUBDIVISION
DOT#:	CITY COUNTY STATE
DATE:	PROJECT NAME & LOCATION

SECTION 04100

STRUCTURE EXCAVATION AND BACKFILL

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Protective Shoring

B. Cofferdams

C. Structure Excavation

D. Structure Backfill

E. Structure Drain Pipe

F. Pervious Backfill Material

G. SAFETY

1. Contractor is responsible for performing all Structure excavation and backfill in compliance with the applicable state, federal, local and OSHA regulations.

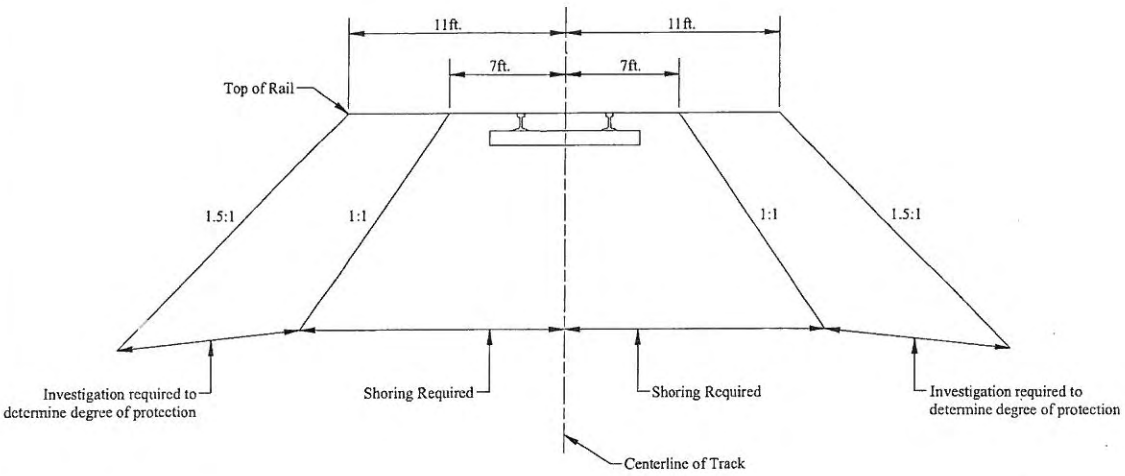
(Note: See General Provisions for utility and permitting requirements and sections that apply)

1.2 DESCRIPTION

A. Protective Shoring:

1. Protective shoring shall consist of providing protection to railroad track or other areas designated on the plans due to an adjacent excavation. See Figure 04100-1 for limit lines where protective shoring is required.

Figure 04100-1



Zone of Influence

2. Protective shoring shall be designed and constructed, in accordance with the Engineer's approval. Removal of protective shoring shall be in accordance with the project plans and the Engineer's approval.

3. Protective shoring shall be constructed of engineered structural components consisting of timber, standard steel sheet pile sections, structural steel sections, cylindrical metal shells or combination of the above.

4. The Contractor shall submit drawings and design calculations showing the proposed design, method of construction, removal, as well as other details left open to choice and not fully detailed on the plans. These drawings and design computations, stamped by a licensed professional or structural engineer in the state where the work is to be done, shall be submitted to the Engineer and approved prior to the start of construction. This approval shall not relieve the Contractor of responsibility for the protective shoring.

5. Design of protective shoring shall consider Cooper E 80 live load surcharge for excavations adjacent to railroad tracks. Refer to the AREMA Manual for Railway Engineering, Chapter 8, Part 20 for methods to determine lateral pressure values for railroad surcharge loading.

6. A safety factor of one and one half (1.5) shall be used in the design of temporary protective shoring. A safety factor of two (2.0) shall be used in the design of

permanent protective shoring.

B. Cofferdams:

1. A cofferdam is defined as any temporary or removable structure constructed to hold the surrounding earth, water, or both, out of the excavation, whether the structure is formed of timber, steel, concrete, or a combination thereof.

2. Cofferdams for placing concrete or other required construction shall consist of watertight enclosures surrounding excavations that cannot be kept free of water by pumping and/or diverting water by the use of sheeting or dikes.

3. When cofferdams are not specified in the contract documents and conditions are encountered where the excavation for the structure cannot be kept free of water for concrete placement by pumping and/or diverting water by the use of sheeting or dikes, the Contractor, with the written permission of the Engineer, will be permitted to construct a cofferdam.

4. When specified in the contract, the cofferdams shall be designed, constructed, and removed in accordance with the Engineer's approval. When not specified in the contract and site conditions warrant, as determined by the Engineer, cofferdams may be added to the contract upon written approval of the Engineer.

5. Cofferdams shall be constructed of engineered structural components consisting of timber, standard steel sheet pile sections, structural steel sections, cylindrical metal shells or combination of the above. Earthen embankments or dikes will not be classified as cofferdams.

6. The Contractor shall submit drawings and design calculations showing the proposed design, method of construction, removal, as well as other details left open to choice and not fully detailed on the plans. These drawings and design computations, stamped by a licensed professional or structural engineer in the state where the work is to be done, shall be submitted to the Engineer and approved prior to the start of construction. This approval shall not relieve the Contractor of responsibility for the cofferdam.

C. Structure Excavation:

1. Structure excavation shall consist of excavation for the construction of foundations for all structures other than drilled shaft foundations or pipe culverts.

2. This work includes: All required pumping, bailing or sloping for drainage; the construction and removal of all sheeting, shoring, and bracing required to support and dewater the excavations; removal and disposal of all material removed from the excavation including old structures or the portions thereof; and clearing and grubbing as required for construction of the structure.

D. Structure Backfill: Structure backfill shall consist of furnishing, placing and compacting backfill material around structures to the lines designated on the plans or specified or directed by the Engineer.

E. Structure Drain Pipe: Structure drain pipe shall consist of furnishing and placing underdrain pipe, granular fill and geotextile fabric behind bridge abutments, wingwalls, and retaining walls in accordance with the details shown on the plans and this section.

F. Pervious Backfill Material: Pervious backfill material shall consist of furnishing and placing pervious backfill material behind bridge abutments, wingwalls, and retaining walls in accordance with details shown on the plans and this section.

PART 2 MATERIALS

2.1 PROTECTIVE SHORING

A. Protective shoring materials shall be in accordance with the Contractor's drawings approved by the Engineer.

2.2 COFFERDAMS

A. Cofferdam materials shall be in accordance with the Contractor's drawings approved by the Engineer.

2.3 STRUCTURE BACKFILL

A. Structural backfill shall be made using materials indicated on the plans, in the special provisions, or as approved by the Engineer, and may be obtained from excavation or other sources. Backfill material shall be free from stones or lumps of such size as to interfere with compaction, frozen lumps, wood, or other extraneous material.

2.4 STRUCTURE DRAIN PIPE

A. Asphalt-coated perforated galvanized steel underdrain pipe shall be in accordance with details shown in the plans and Section 05100, Pipe Culverts.

B. Granular fill material around structure drain pipe shall be as specified in Paragraph 2.5.A of this section.

C. Geotextile fabric for structure drain pipe shall be woven or nonwoven fabric. The filaments for woven or nonwoven fabric shall be polypropylene, polyester, or polyethylene. The filaments must be dimensionally stable (i.e., filaments must maintain their relative position with respect to each other) and resistant to delamination. The filaments must be free from any chemical treatment or coating that might significantly reduce porosity and permeability. Nonwoven fabric may be needle-punched, heat-

bonded, resin-bonded, or combinations thereof.

The physical properties for woven or nonwoven fabric shall conform to the following:

Test Method	Property	Requirement
ASTM D 3776	Minimum Weight (oz./sq. yd.)	3.5
ASTM D 4632	Minimum Wet Grab Tensile Strength (lbs.)	100o/
ASTM D 4632	Minimum Grab Elongation at Break (%)	20o/
Corps of Engrs. CW02215	Minimum Equivalent Opening Size (EOS No.)	Nonwoven 305/ Woven 505/

Footnotes:
1. For woven fabric, test results shall be referenced to orientation with warp or fill, whichever the case may be.
2. Manufacturer's certification to meet test requirements.

2.5 PERVIOUS BACKFILL MATERIAL

A. Pervious backfill material shall consist of crushed rock or crushed gravel, or combinations thereof. Pervious backfill material shall conform to the following grading requirements:

Sieve Sizes	*Percentage Passing*
1-1/2 inch	100
1 inch	90-100
3/4 inch	40-85
1/2 inch	10-40
3/8 inch	0-15
No. 4	0-5

PART 3 EXECUTION

3.1 PROTECTIVE SHORING

A. The Contractor is responsible for designing, providing, installing, maintaining, and removing the protective shoring when specified on the plans or by the Engineer. Installation or excavation shall not begin without the prior approval of the Engineer.

B. The limits of the excavation shall not extend beyond the approved limits without permission from the Engineer.

C. The Engineer shall be notified of any conditions not in agreement with the plans including any weak or soft soils, or other conditions causing additional excavation.

3.2 COFFERDAMS

A. Cofferdams for foundation construction shall, in general, be carried below the bottom of footings to a depth as shown in the plans; except in solid rock, where cofferdams shall be seated into rock, sealed, and excavation continued to bottom of footing elevation. The inside dimensions of the cofferdam shall in no case be less than the plan footing dimensions.

B. When conditions, in the judgment of the Engineer, render it impractical to dewater a cofferdam, the Engineer may require the Contractor to place a concrete seal at the base of the excavation to such dimensions as will permit pumping and dewatering of the excavation.

C. No component of the cofferdam shall extend into the substructure concrete without written permission of the Engineer.

3.3 STRUCTURE EXCAVATION

A. General:

1. Excavation shall conform to the lines and grades shown on the plans, or as directed by the Engineer. Excavation shall include removal of all materials encountered, regardless of their nature.

2. Prior to excavation, the area to be excavated shall be cleared and grubbed in accordance with the procedures described in Section 03100, Clearing and Grubbing.

3. Excavated material will be classified as "Structure Excavation Common" or "Structure Excavation Rock." "Structure Excavation Rock" shall include excavation of all rock in ledges, and bedded, cemented, and conglomerate deposits exhibiting the physical characteristics and difficulty of rock removal as

determined by the Engineer. "Structure Excavation Rock" shall also include removal of the portions of existing structures which cannot be loosened by the use of a pick. All other excavated material will be classified as "Structure Excavation Common."

4. Excavated material not suitable for backfill, or excess excavated material shall be legally disposed of by the Contractor at a location and in a manner directed or approved by the Engineer.

5. Over-excavation shall not be allowed without specific instructions from the engineer.

B. Protection of Excavations:

1. The Contractor is responsible for designing, providing, installing, and removing protective sheeting, shoring, cofferdams, or other elements required in order to provide stable and dry excavations for all structures. Protection and shoring of excavations shall, as a minimum, be as required by applicable standards and regulations, including 29CFR Part 1926, Subpart P - Excavations, Trenching, and Shoring of OSHA's Standards and Interpretations. The Contractor shall submit detailed plans for protection and support of excavations to the Engineer prior to construction. Installation or construction of excavation protection or support elements, including cofferdams, shall not begin without the prior approval of the Engineer.

2. The Contractor shall, by means of dikes, sheeting, cofferdams, pumps, or other measures, keep the excavations free of water at all times. Placing of concrete in or under water will not be permitted, except when specifically directed by the Engineer.

C. Excavations for Spread Footing Foundations:

1. Immediately prior to placing concrete for spread footing foundations founded in common material, the bottom of the excavations shall be trimmed to the required level. All loose, spongy, or frozen material existing at the base of foundations shall be removed and replaced with clean gravel or other suitable material as directed by the Engineer. The amount of time during which the excavation for spread footings is allowed to remain open prior to placing concrete shall be minimized. Water shall not be allowed to stand on the base of excavations for spread footings.

2. Spread footing foundations founded in rock shall be excavated to the required lines and grades, and the bottom of the excavations shall be finished to a rough surface. All soil, water, and loose and unsound rock shall be removed prior to placing the concrete foundation.

3. After each excavation is completed, the Contractor shall notify the Engineer. No concrete shall be placed until the Engineer has approved the excavation and the character and condition of the foundation material.

D. Excavations for Pile-supported Foundations:

1. Excavations shall be approximately completed to the bottom of structure elevation prior to driving any piles. No piles for any foundation shall be driven until the Engineer has approved the excavation. All excess or loose material remaining in the excavation after pile driving is completed shall be removed to the elevation of the bottom of the structure.

2. After all piles are driven, the Contractor shall notify the Engineer. No concrete shall be placed until the Engineer has approved the excavation and the character and condition of the foundation material.

E. Excavations Within Channels:

1. When excavation encroaches upon a live streambed or channel, unless otherwise permitted, no excavation shall be made outside of caissons, cribs, cofferdams, steel piling, or sheeting, and the natural streambed adjacent to the structure shall not be disturbed without permission from the Engineer. If any excavation or dredging is made at the site of the structure before caissons, cribs, or cofferdams are sunk or are in place, the Contractor shall, without extra charge, after the foundation base is in place, backfill all such excavation to the original ground surface or riverbed with material satisfactory to the Engineer. Material temporarily deposited within the flow area of streams from foundation or other excavation shall be removed and the stream flow area freed from obstruction thereby.

3.4 STRUCTURE BACKFILL

A. Backfilling shall consist of placing and compacting the necessary fill within the limits specified in Paragraph 4.3.A. Fill required above the ground surface as it existed prior to any excavation is considered as embankment. The backfill shall be constructed up to the ground surface as it existed prior to any excavation, unless the original ground surface is higher than the proposed finish elevation of roadway surface, stream banks, or channels.

B. All bracing, forms, and rubbish shall be removed prior to placing the backfill. Unless sheeting and shoring is to remain in place, it shall be removed in such a manner to prevent loosening unexcavated material.

C. Backfill shall not be placed until the structure has been approved for backfilling by the Engineer. Backfill shall not be placed against concrete walls or piers until the concrete has cured for a minimum of 14 days, or until test cylinders show the strength to be

approximately equal to the design strength, whichever is the lesser time.

D. Backfill material shall be placed in uniform horizontal layers not exceeding 8 inches in thickness before compaction. The backfill shall be brought up uniformly on all sides of the structure. The backfill shall be compacted to the density shown on the plans, in the special provisions, as specified for the adjacent ground, or to a minimum of 95% of the maximum dry density determined in accordance with the Standard Proctor compaction test (ASTM Designation: D 698) if not otherwise specified.

E. Backfill material shall not have rocks larger than 3 inches placed within 18 inches of the concrete columns, piers, wing walls, retaining walls or abutments.

3.5 STRUCTURE DRAIN PIPE

A. Structure drain pipe shall be enclosed by uncompacted granular fill surrounded by geotextile fabric. The installation of the structure drain pipe shall be in accordance with details shown on the plans and Section 05100, Pipe Culverts.

3.6 PERVIOUS BACKFILL MATERIAL

A. Pervious backfill material shall be placed behind bridge abutments, wingwalls and retaining walls to the lines, grades and elevations shown on the plans or as directed by the Engineer. Pervious backfill material shall be placed in layers along with and by the same methods specified for structure backfill. Pervious backfill material at any one location shall be approximately the same grading, and at locations where the material would otherwise be exposed to erosion shall be covered with at least a 12 inch layer of earthy material approved by the Engineer.

PART 4 MEASUREMENT AND PAYMENT

4.1 PROTECTIVE SHORING

A. Measurement of Protective Shoring: Protective shoring, when specified on the plans or as directed by the Engineer, will be measured as individual units complete in place.

B. Payment for Protective Shoring: Protective shoring shall be paid for at the contract price per unit as designated on the plans. This price shall include full compensation for protective shoring design and plans and for furnishing all labor, materials, tools and equipment necessary for the construction of the protective shoring and its subsequent removal, when required.

4.2 COFFERDAMS

A. Measurement of Cofferdams: Cofferdams, when specified on the plans or as directed by the Engineer, will be measured as individual units complete in place.

B. Payment for Cofferdams: Cofferdams shall be paid for at the contract price per unit as designated on the plans. This price shall include full compensation for cofferdam design and plans and for furnishing all labor, materials, tools and equipment necessary for the construction of the cofferdam and its subsequent removal. No extra compensation will be allowed for a cofferdam of excessive size.

4.3 STRUCTURE EXCAVATION

A. Measurement of Structure Excavation: Structure excavation will be measured by the cubic yard. The limits for measurement of structure excavation will be in accordance with the following provisions: The upper limit shall be the original ground surface as it existed prior to the start of the construction operations, except, where structure excavation is performed within channel excavation area or roadway excavation area, said roadway or channel excavation shall be assumed to have been completed, the upper limit shall be the planes of the bottom and side slopes of said areas excavated as shown on the plans or as directed by the Engineer. Channel and roadway sections which are required beyond the limits of the structure will be considered to be continuous through the structure. The bottom and side slopes of this extension of the channel shall form the upper limit of the structure excavation. The lower limit shall be the bottom of the structure as shown on the plans or as specified by the Engineer. The lateral limits shall be vertical planes 2 feet outside of the foundation lines. Excavation outside of the above defined limits will not be included in structure excavation quantities, unless such excavations are required to comply with Federal/State/local regulations.

B. Payment for Structure Excavation:

1. Structure excavation shall be paid for at the contract unit price per cubic yard for structure excavation of the proper classification. This price shall include full compensation for furnishing all labor, materials, tools and equipment, and doing all the work involved in making the excavation and disposing of the resulting excavated material as specified, including the furnishing and installation or construction of all sheeting, shoring and other facilities necessary to the excavation operations, and their subsequent removal if required.

2. As directed by the Engineer, unsuitable materials found below the elevation of bottom of structure as shown on the plans will be removed and paid for as structure excavation. If, in the opinion of the Engineer, the unsatisfactory materials below the bottom of the structure are the result of negligence on the part of the Contractor, due to allowing water to stand on earth foundations, overshooting rock excavations, or from other causes, the unsatisfactory material shall be removed and replaced in a manner specified by the Engineer, and no compensation will be allowed for the work.

3. No compensation will be made for the removal and disposal of swell material resulting from the driving of piles in an excavation.

4.4 STRUCTURE BACKFILL

A. Measurement of Structure Backfill: Structure backfill will be measured by the ton. The limits for measurement of structure backfill will be that volume of structure excavation and roadway excavation or channel excavation, as shown on the plans or specified by the Engineer, which is below the finish elevation of roadway surface or stream banks and channel flow line or below the elevation of ground surface as it existed before any excavation was made, and is not occupied by the structure. Backfill required beyond the limits of measured structure excavation, roadway excavation, and channel excavation will not be included in structure backfill quantities.

B. Payment for Structure Backfill:

1. Structure backfill shall be paid for at the contract unit price per ton. This price shall include full compensation for furnishing all labor, materials, tools and equipment, water for compaction if required, and doing all work involved in furnishing, placing, and compacting the material in place as specified, and applying water necessary for compaction. No payment will be made for any so-called overhaul.

2. Compacted backfill or crushed rock, if specified by the Engineer, required to replace unsuitable materials excavated below the elevation of bottom of structure as shown on the plans when unsuitable materials are not the result of Contractor's negligence, will be paid for as structure backfill.
3. No payment will be made for backfilling foundations up to the bottom of plan structures when the Contractor has excavated below plan elevation due to his negligence.

4.5 STRUCTURE DRAIN PIPE

A. Measurement of Structure Drain Pipe: Structure drain pipe will be measured by the lineal foot of acceptable pipe of the various diameters in place.

B. Payment for Structure Drain Pipe: Structure drain pipe shall be paid for at the contract unit price per lineal foot of pipe of the various diameters in place. This price shall be full compensation for furnishing all materials, and for all equipment, tools, labor and incidentals necessary to install the pipe, granular fill and geotextile fabric and complete the work.

4.6 PERVIOUS BACKFILL MATERIAL

A. Measurement of Pervious Backfill Material: Pervious backfill material will be measured by the ton in place within the designated sections shown on the plans.

B. Payment for Pervious Backfill Material: Pervious backfill material shall be paid for at the contract unit price per ton of material in place. This price shall be full compensation

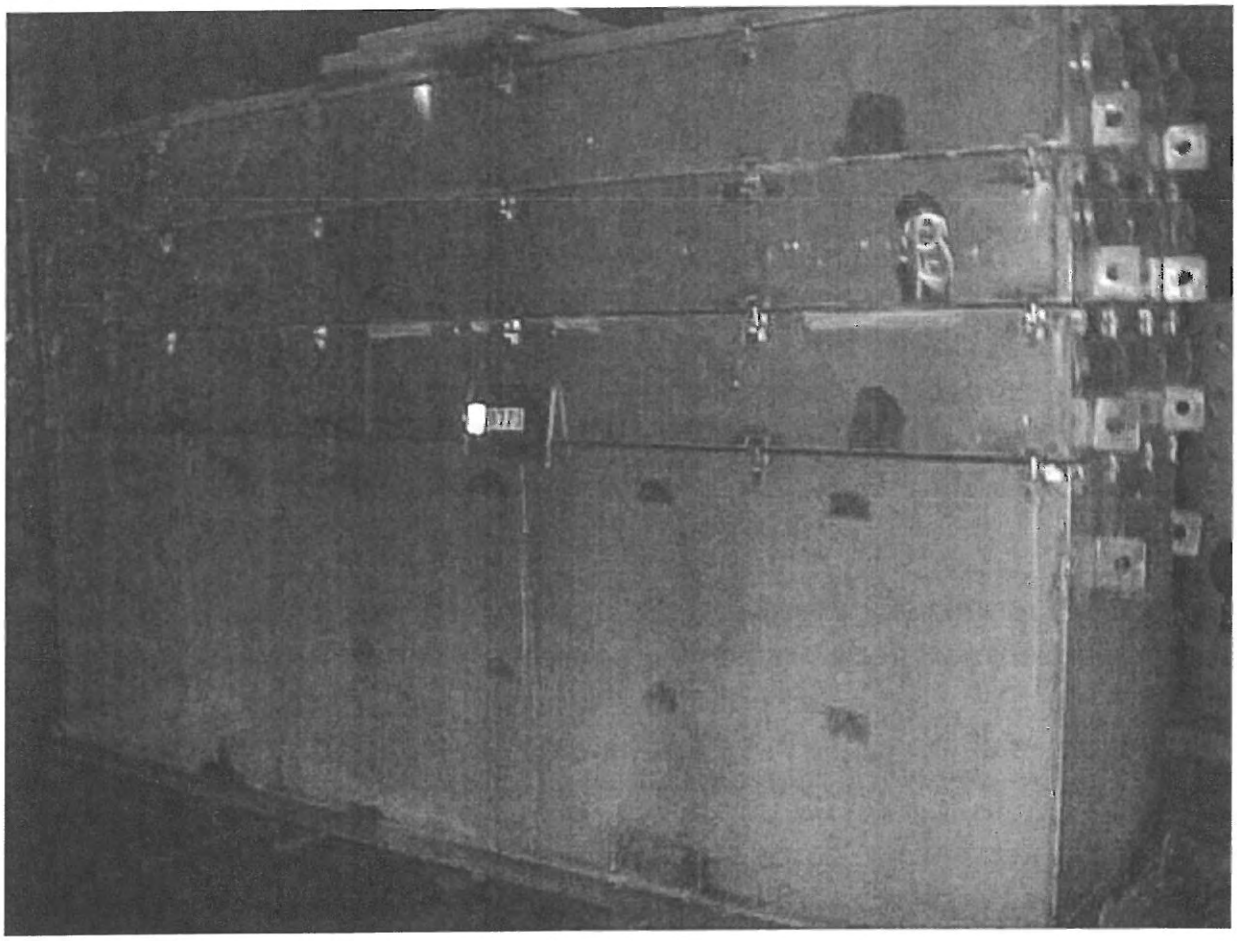
for constructing or excavating the roadbed embankment behind bridge abutments, wingwalls, and retaining walls to the designated section shown on the plans, any special compaction required, furnishing the material, and placing the material to the designated sections shown on the plans.

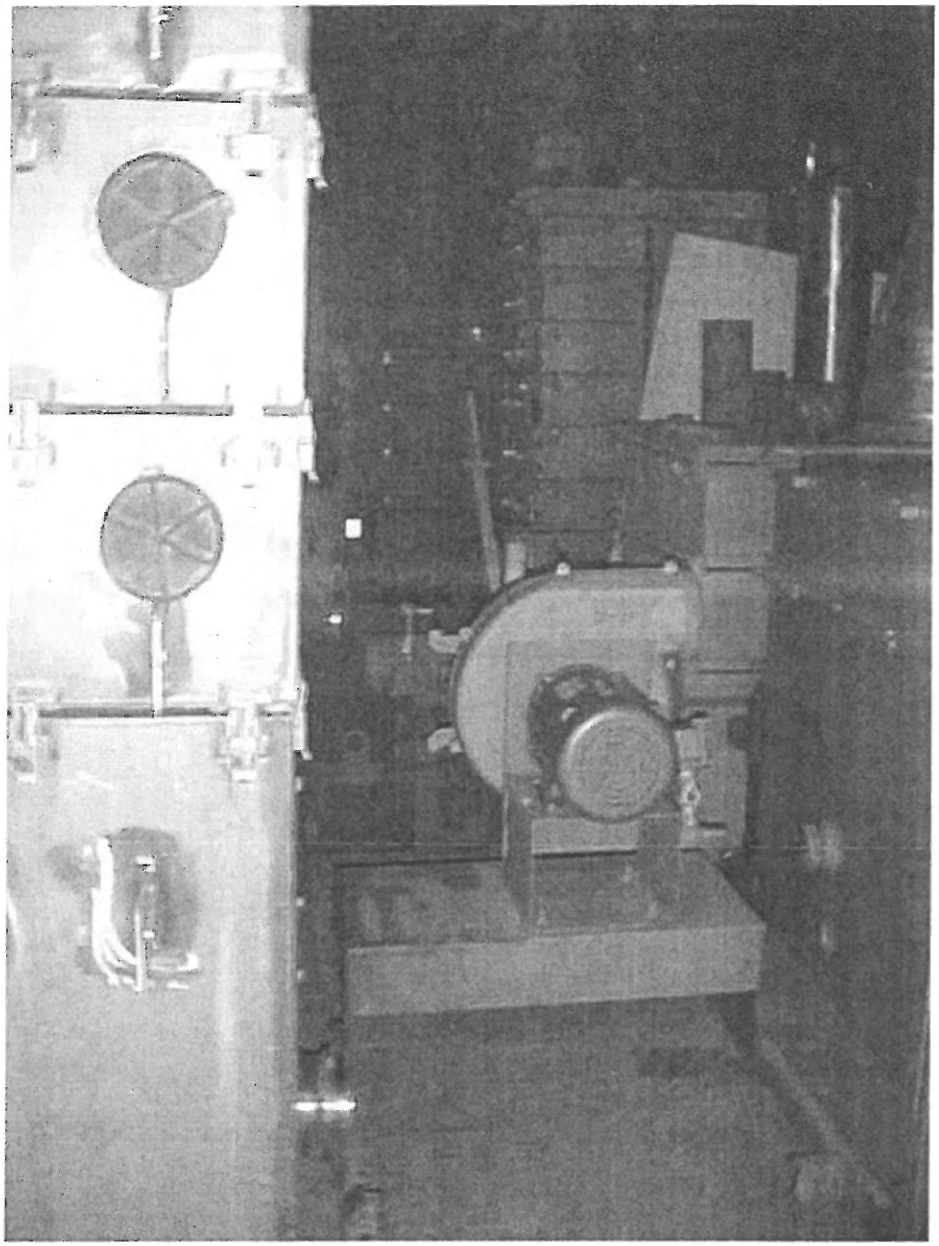
END OF SECTION

ATTACHMENT D

WATER TREATMENT EQUIPMENT FROM NDEQ INVENTORY

Inventory Number	A00773	Type of Equipment	Air Stripper
Make	Northeast	Model	
Serial Number			31231043845
Date Purchased		Cost (New) Per Item	$20,000.00
Equipment Description:			Air Stripper
Comments:			8" high X 12' long with Baldor Transfer Pump & 10 HP Blower@3450 RPM
Status			In Stock
Original Site Number:			
Date In	Date Out		Location





Inventory Number	A00779	Type of Equipment	OWS
Make		Model	
Serial Number			
Date Purchased		Cost (New) Per Item	$5,000.00
Equipment Description:			Steel Tank OWS
Comments:			1130 Gallons 4' x 12'
Status			In Stock
Original Site Number:			GSI Omaha
Date In	Date Out		Location

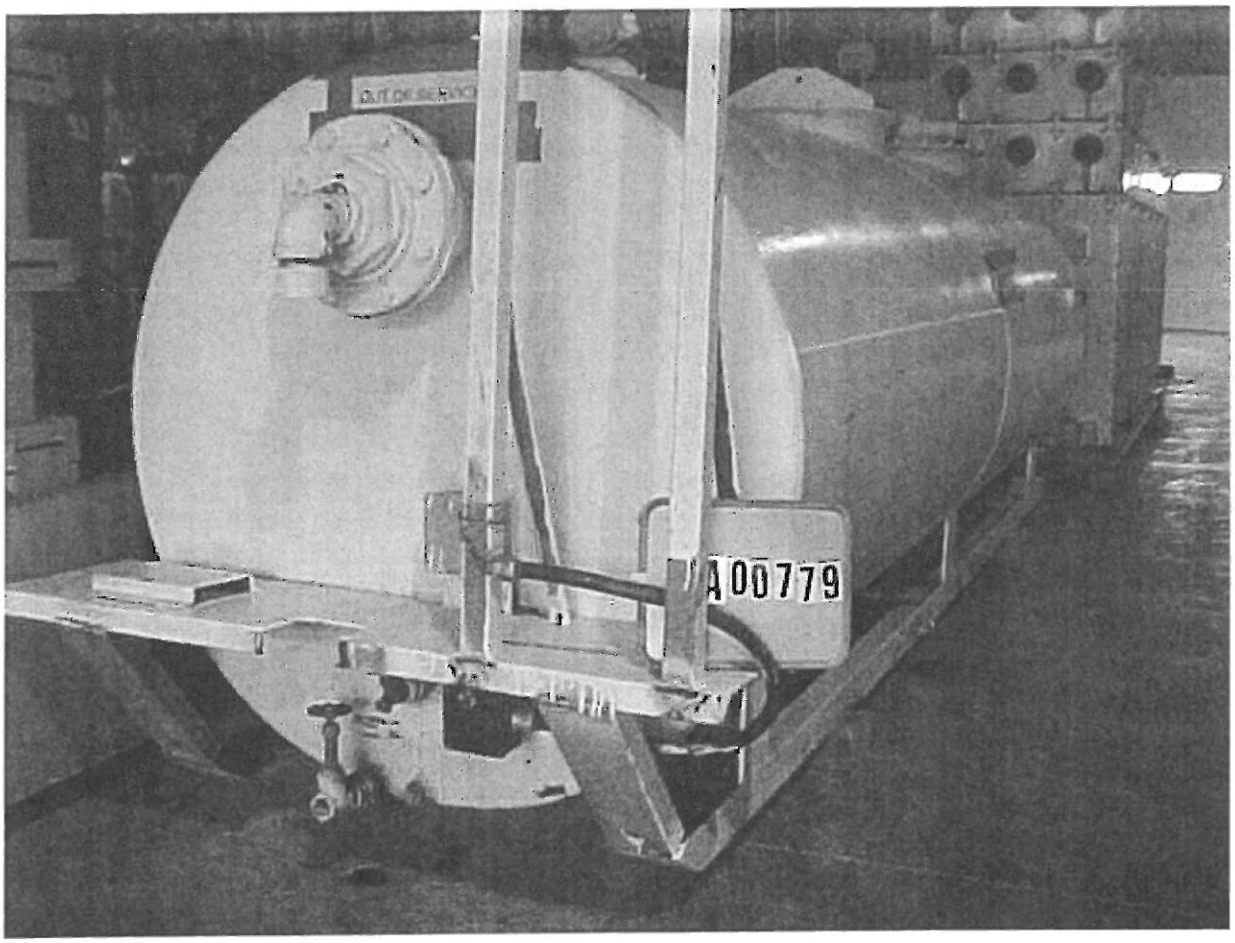


EXHIBIT BB

TEMPORARY ACCESS LICENSE FOR SURVEY / GEOTECH / ENVIRONMENTAL ACTIVITIES / ADVANCE CONSTRUCTION

THIS TEMPORARY ACCESS LICENSE FOR SURVEY / GEOTECH / ENVIRONMENTAL ACTIVITIES / ADVANCE CONSTRUCTION ("**License**") is made to be effective as of the ____ day of _____, 2010 ("**Effective Date**") by and between **BNSF RAILWAY COMPANY**, a Delaware corporation ("**Licensor**") and the **CITY OF LINCOLN, NEBRASKA**, a Nebraska municipal corporation ("**Licensee**").

NOW THEREFORE, in consideration of the mutual covenants contained herein, the parties agree to the following:

1. GENERAL.

1.1 Licensor hereby grants Licensee a temporary non-exclusive license, subject to all rights, interests, and estates of third parties, including, without limitation, any leases, licenses, easements, liens or other encumbrances, and upon the terms and conditions set forth below, to use the areas of Licensor's property labeled as "Existing BNSF Property" and shown purple on **Exhibit B** attached hereto and incorporated herein by reference; situated at or near Lincoln, County of Lancaster, State of Nebraska, Line Segment 2, Mile Post 59.17 to 60.0 (the "**Premises**") for the purposes specified in **Section 1.3** below (the "**Permitted Uses**").

1.2 In the event the Permitted Uses will affect any improvements or facilities of Licensor or Licensor's existing lessees, licensees, easement beneficiaries, or lien holders (collectively "**Other Improvements**"), if any, or interfere with the use of the Other Improvements, Licensee will be responsible at Licensee's sole risk to locate and make any adjustments necessary to such Other Improvements. Licensee must contact the owner(s) of the Other Improvements notifying them of any work that may damage and/or interfere with the Other Improvements and obtain the owner's written approval prior to initiating any of the Permitted Uses.

1.3 Licensee shall use the Premises exclusively as a site for performing: (a) surveying, (b) geotechnical soil borings, and (c) environmental and engineering explorations, such environmental and engineering explorations to include one of, or a combination of, the following categories of work:

(i) Drilling of soil test borings;
(ii) Installation of groundwater monitoring wells;
(iii) Performing groundwater inflow tests on wells;
(iv) Obtaining groundwater samples from wells;
(v) Maintenance and/or checking groundwater level in wells approximately one time per month;
(vi) Performance of any necessary remediation as determined by Licensor in its sole discretion or by applicable state and/ or federal regulations at Licensee's sole cost and expense. In the event applicable state and/or federal regulations require that the Premises be remediated, Licensee will obtain a No Further Action Letter, Release, or other such equivalent closure document from the state or federal agency having jurisdiction over the remediation of the Premises. Such No Further Action Letter, Release, or other such equivalent closure document shall not be contingent upon or specify the performance of any further work or conditions with respect to the Premises.

Licensee shall not use the Premises for any other purpose whatsoever. Licensee shall not use or store hazardous substances, as defined by the Comprehensive Environmental Response, Compensation, and Liability Act, as amended ("**CERCLA**") or petroleum or oil as defined by applicable Environmental Laws on the Premises.

1.4 Licensor and Licensee mutually agree that no construction activities for the Permitted Uses, nor future maintenance of any improvements which have a reasonable likelihood to delay train traffic on Licensor's main lines, will be permitted during the fourth quarter of each calendar year. Emergency work will be permitted only upon prior notification to Licensor's Network Operations Center (telephone number: 800 832-5452). Licensor and Licensee mutually understand and agree that trains cannot be subjected to delay during this time period.

1.5 In case of the eviction of Licensee by anyone owning or claiming title to or any interest in the Premises, Licensor shall not be liable to refund Licensee any compensation paid hereunder or for any damage Licensee sustains in connection therewith.

1.6 Any contractors or subcontractors performing work on the Premises, or entering the Premises on behalf of Licensee shall be deemed servants and agents of Licensee for purposes of this License.

2. TERM. This License shall commence on the Effective Date and, subject to prior termination as hereinafter described, shall continue until completion of the Permitted Uses, but in no event later than the date that is the earliest to occur of: (i) the end of the Development Period (as defined in the Master Agreement [defined below]), or (ii) December 31, 2014.

3. COMPENSATION.

3.1 Licensee shall pay Licensor, prior to the Effective Date, the sum of No Dollars ($0) as compensation for the use of the Premises.

3.2 Subject to the provisions of the C&M Agreement (as defined below) concerning Licensee's reimbursement of costs and expenses, including without limitation flagging costs, incurred by Licensor in connection with Licensee's use of the Premises, Licensee agrees to reimburse Licensor (within thirty (30) days after receipt of bills therefor) for all other costs and expenses incurred by Licensor in connection with Licensee's use of the Premises. All invoices are due thirty (30) days after the date of invoice. In the event that Licensee shall fail to pay any monies due to Licensor within thirty (30) days after the invoice date, then Licensee shall pay interest on such unpaid sum from thirty (30) days after its invoice date to the date of payment by Licensee at an annual rate equal to (i) the greater of (a) for the period January 1 through June 30, the prime rate last published in *The Wall Street Journal* in the preceding December plus two and one-half percent (2 1/2%), and for the period July 1 through December 31, the prime rate last published in *The Wall Street Journal* in the preceding June plus two and one-half percent (2 1/2%), or (b) twelve percent (12%), or (ii) the maximum rate permitted by law, whichever is less.

4. COMPLIANCE WITH LEGAL REQUIREMENTS AND LICENSOR REQUIREMENTS.

4.1 Licensee shall observe and comply with any and all laws, statutes, regulations, ordinances, orders, covenants, restrictions, or decisions of any court of competent jurisdiction ("**Legal Requirements**") relating to the use of the Premises.

4.2 Prior to entering the Premises, Licensee shall and shall cause its contractor to comply with all of Licensor's applicable safety rules and regulations. Prior to commencing any work on the Premises, Licensee shall complete and shall require its contractor to complete the

safety training program at the Website "http://contractororientation.com". This program must be completed no more than one year in advance of Licensee's entry on the Premises.

4.3 Licensee shall, at all times, comply with all provisions contained in that certain Construction and Maintenance Agreement between Licensor and Licensee of even date herewith (the "**C&M Agreement**"). In the event of conflicts between the terms of this License and the C&M Agreement, the most restrictive provisions shall apply to Licensee.

5. DEFINITION OF COST AND EXPENSE. For the purpose of this License, "cost" or "costs" "expense" or "expenses" includes, but is not limited to, actual labor and material costs including all assignable additives, and material and supply costs at current value where used.

6. RIGHT OF LICENSOR TO USE. Licensor excepts and reserves the right, to be exercised by Licensor and any other parties who may obtain written permission or authority from Licensor:

6.1 to maintain, renew, use, operate, change, modify and relocate any existing pipe, power, communication lines and appurtenances and other facilities or structures of like character upon, over, under or across the Premises;

6.2 to construct, maintain, renew, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; or

6.3 to use the Premises in any manner as Licensor in its sole discretion deems appropriate, provided Licensor uses all commercially reasonable efforts to avoid material interference with the use of the Premises by Licensee for the Permitted Uses.

7. LICENSEE'S OPERATIONS.

7.1 Licensee shall notify Licensor's Project Engineer, Gerald Maczuga, at 201 N. 7th Street, Lincoln, NE 68508, telephone (402) 458-7537, and Licensor's Remediation Manager, Greg Jeffries, telephone (763) 782-3490, at least ten (10) business days prior to initially entering the Premises and prior to entering the Premises for any subsequent maintenance thereon (if applicable). After completion of use of the Premises for the Permitted Uses, Licensee shall notify Licensor in writing that such use has been completed.

7.2 In performing the Permitted Uses, Licensee shall use only public roadways to cross from one side of Licensor's tracks to the other. In the event Licensee must cross from one side of Licensor's tracks to the other at a location or locations other than a public roadway, and such location or locations are approved by Licensor in advance, then Licensee shall enter into Licensor's Agreement for Private Crossing for each such private crossing location, each such Agreement for Private Crossing to be in the form attached to the Master Agreement as Exhibit UU.

7.3 Prior to the commencement of any work, Licensee shall submit a workplan to Licensor's Remediation Manager, Greg Jeffries, 80 44th Avenue NE, Minneapolis, MN 55421, telephone (763) 782-3490, for Licensor's review. No work, as set forth in **Section 1.3**, may be conducted by Licensee without Licensor's written consent of said workplan for the Permitted Uses. Such review and consent by Licensor shall not constitute the sufficiency or effectiveness of any workplan.

7.4 No monitoring wells may be installed on the property prior to written approval of Licensee's workplan for the installation of such monitoring wells. Upon obtaining such consent, Licensee shall provide Licensor the location of said well(s) relative to Licensor's nearest trackage, identifying Licensor's nearest Mile Post sign number.

7.5 Under no conditions shall Licensee be permitted to conduct any tests, investigations or any other activity using mechanized equipment and/or machinery, or place or store any mechanized equipment, tools or other materials, within twenty-five (25) feet of the centerline of any railroad track on the Premises unless Licensee has obtained prior written approval from Licensor. Licensee shall, at its sole cost and expense, perform all activities on and about the Premises in such a manner as not at any time to be a source of danger to or interference with the existence or use of present or future tracks, roadbed or property of Licensor, or the safe operation and activities of Licensor. If ordered to stop using the Premises at any time by Licensor's personnel due to any hazardous condition, Licensee shall immediately do so. Notwithstanding the foregoing right of Licensor, the parties agree that Licensor has no duty or obligation to monitor Licensee's use of the Premises to determine the safe nature thereof, it being solely Licensee's responsibility to ensure that Licensee's use of the Premises is safe. Neither the exercise nor the failure by Licensor to exercise any rights granted in this Section will alter the liability allocation provided by this License.

7.6 Prior to Licensee conducting any excavating or boring work on or about any portion of the Premises, Licensee shall explore the proposed location for such work with hand tools to a depth of at least three (3) feet below the surface of the ground to determine whether pipelines or other structures exist below the surface, provided, however, that in lieu of the foregoing, Licensee shall have the right to use suitable detection equipment or other generally accepted industry practice (*e.g.*, consulting with the Underground Services Association) to determine the existence or location of pipelines and other subsurface structures prior to drilling or excavating with mechanized equipment. Upon Licensee's written request, which shall be made thirty (30) business days in advance of Licensee's requested entry on the Premises, Licensor will provide Licensee any information that Licensor's Engineering Department has in its possession concerning the existence and approximate location of Licensor's underground utilities and pipelines on the Premises. Prior to conducting any such boring work, Licensee will review all such material. Licensor does not warrant the accuracy or completeness of information relating to subsurface conditions and Licensee's operations will be subject at all times to the liability provisions herein.

7.7 For all bores greater than 26-inch diameter and at a depth less than 10.0 feet below bottom of rail, a soil investigation will need to be performed by Licensee and reviewed by Licensor prior to construction. This study is to determine if granular material is present, and to prevent subsidence during the installation process. If the investigation determines in Licensor's reasonable opinion that granular material is present, Licensor may select a new location for Licensee's use, or may require Licensee to furnish for Licensor's review and approval, in its sole discretion a remedial plan to deal with the granular material. Once Licensor has approved any such remedial plan in writing, Licensee shall, at its sole cost and expense, carry out the approved plan in accordance with all terms thereof and hereof.

7.8 Any open hole, boring or well constructed upon Premises by Licensee shall be safely covered and secured at all times when Licensee is not working in the actual vicinity thereof. Following completion of that portion of the work, all holes or borings constructed on the Premises by Licensee shall be:

7.8.1 filled in to surrounding ground level with compacted bentonite grout; or

7.8.2 otherwise secured or retired in accordance with any applicable Legal Requirement. No excavated materials may remain on the Premises for more than ten (10) days, but must be properly disposed of by Licensee in accordance with applicable Legal Requirements.

7.9 Upon completion of Licensee's work on the Premises or upon termination of this License, whichever shall occur first, Licensee shall, at its sole cost and expense:

7.9.1 remove all of its equipment from the Premises;

7.9.2 report and restore any damage to the Premises arising from, growing out of, or connected with Licensee's use of the Premises;

7.9.3 remedy any unsafe conditions on the Premises created or aggravated by Licensee; and

7.9.4 leave the Premises in the condition which existed as of the Effective Date.

7.10 Licensee's on-site supervisors shall retain/maintain a fully-executed copy of this License at all times while on the Premises.

8. LIABILITY. During the term of this License, Licensee shall comply with all provisions contained in Sections 3.6 and 3.7 of the C&M Agreement, and all such provisions contained in Sections 3.6 and 3.7 of the C&M Agreement are hereby incorporated herein by reference.

9. PERSONAL PROPERTY WAIVER. ALL PERSONAL PROPERTY, INCLUDING, BUT NOT LIMITED TO, FIXTURES, EQUIPMENT, OR RELATED MATERIALS UPON THE PREMISES WILL BE AT THE RISK OF LICENSEE ONLY, AND LICENSOR WILL NOT BE LIABLE FOR ANY DAMAGE THERETO OR THEFT THEREOF, WHETHER OR NOT DUE IN WHOLE OR IN PART TO THE NEGLIGENCE OF LICENSOR.

10. INSURANCE. During the term of this License, Licensee shall comply with all provisions contained in Section 3.8 of the C&M Agreement, and all such provisions contained in Section 3.8 of the C&M Agreement are hereby incorporated herein by reference.

11. ENVIRONMENTAL.

11.1 Licensee shall strictly comply with all federal, state and local environmental laws and regulations in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA (collectively, the "**Environmental Laws**"). Licensee shall not maintain a treatment, storage, transfer or disposal facility, or underground storage tank, as defined by Environmental Laws on the Premises. Licensee shall not release or suffer the release of oil or hazardous substances, as defined by Environmental Laws on or about the Premises.

11.2 Licensee shall give Licensor immediate notice to Licensor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Licensee's use of the Premises. Licensee shall use the best efforts to promptly respond to any release on or from the Premises. Licensee also shall give Licensor immediate notice of all measures undertaken on behalf of Licensee to investigate, remediate, respond to or otherwise cure such release or violation.

11.3 Licensee recognizes and assumes all responsibility for all present and future environmental obligations imposed under applicable Environmental Laws, regulations or other such requirements relating to contamination of the Premises or groundwater thereunder arising from, caused by, contributed to, or in any way growing out of Licensee's operations. Licensee further agrees to undertake at its sole cost and expense any cleanup of any contamination of the

Premises and groundwater thereunder arising from, caused by, contributed to, or in any way growing out of Licensee's operations as required by applicable laws and regulations.

11.4 Licensee agrees to waive any and all statutes of limitations applicable to any controversy or dispute arising out of **Section 11.3**, and Licensee further agrees that it will not raise or plead a statute of limitations defense against Licensor in any action arising out of Licensee's failure to comply with the provisions of **Section 11.3**.

11.5 In the event that Licensor has notice from Licensee or otherwise of a release or violation of Environmental Laws on, from, or affecting the Premises which occurred or may occur during the term of this License, Licensor may require Licensee, at Licensee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises or Licensor's right-of-way.

11.6 Licensee shall promptly report to Licensor in writing any conditions or activities upon the Premises known to Licensee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Licensee's reporting to Licensor shall not relieve Licensee of any obligation whatsoever imposed on it by this License. Licensee shall promptly respond to Licensor's request for information regarding said conditions or activities.

11.7 Licensee will promptly transmit to Licensor copies of all reports, data boring logs, well completion and other information obtained from all operations on the Premises to Licensor's Remediation Manager. Licensor shall have the option to obtain split samples and otherwise have reasonable access to the groundwater monitoring well(s) subject to this License for the purpose of obtaining samples or other information from the monitoring well(s). Licensee shall also advise Licensor of any applicable health and safety plans or other similar programs in effect with respect to the operations on the Premises.

11.8 Unless otherwise required by applicable law, Licensee shall keep confidential and shall not disclose any reports, data boring logs, well completion and any other information obtained in connection with this License to third parties without the prior written consent of Licensor.

12. ALTERATIONS. Licensee may not make any alterations of the Premises or permanently affix anything to the Premises or any buildings or other structures adjacent to the Premises without Licensor's prior written consent.

13. NO WARRANTIES. LICENSOR'S DUTIES AND WARRANTIES ARE LIMITED TO THOSE EXPRESSLY STATED IN THIS LICENSE AND SHALL NOT INCLUDE ANY IMPLIED DUTIES OR IMPLIED WARRANTIES, NOW OR IN THE FUTURE. NO REPRESENTATIONS OR WARRANTIES HAVE BEEN MADE BY LICENSOR OTHER THAN THOSE CONTAINED IN THIS LICENSE. LICENSEE HEREBY WAIVES ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE PREMISES OR WHICH MAY EXIST BY OPERATION OF LAW OR IN EQUITY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, HABITABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

14. QUIET ENJOYMENT. LICENSOR DOES NOT WARRANT ITS TITLE TO THE PROPERTY NOR UNDERTAKE TO DEFEND LICENSEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE.

15. DEFAULT. If default shall be made in any of the covenants or agreements of Licensee contained in this License, Licensor may pursue any and all remedies set forth in Section 24 of the

Master Agreement. The remedy set forth in this **Section 15** shall be in addition to, and not in limitation of, any other remedies that Licensor may have at law or in equity.

16. TERMINATION.

16.1 Upon termination of this License, should Licensee have installed its monitoring well(s) on the Premises, once Licensee's well(s) are retired, Licensee shall provide Licensor a copy of the closure documents, submitted directly to Licensor's Remediation Manager at 80 44th Avenue NE, Minneapolis, MN 55421.

16.2 If Licensee fails to surrender to Licensor the Premises, upon any termination of this License, all liabilities and obligations of Licensee hereunder shall continue in effect until the Premises are surrendered. Termination shall not release Licensee from any liability or obligation, whether of indemnity or otherwise, resulting from any events happening prior to the date of termination.

17. ASSIGNMENT. Neither Licensee, nor the heirs, legal representatives, successors or assigns of Licensee, nor any subsequent assignee, shall assign, transfer, sell, or hypothecate this License or any interest herein (either voluntarily or by operation of law), without the prior written consent and approval of Licensor, which may be withheld in Licensor's sole discretion. Notwithstanding any contrary provision herein, Licensee shall have the right to assign this License to the West Haymarket Joint Public Agency, a Nebraska joint public agency ("**JPA**") without further consent of Licensor, provided (i) Licensee delivers prior written notification to Licensor of the assignment, (ii) Licensee and JPA enters into Licensor's then-standard Consent to Assignment form, pursuant to which Licensee will remain jointly and severally liable for all of Licensee's obligations hereunder, including without limitation Licensee's liability and indemnification obligations; provided that Licensor agrees it will first send any claim or notice of default to JPA and will not pursue any action against Licensee until thirty (30) days after the date of such claim or notice to JPA, unless failure to pursue action against Licensee during such time would otherwise prejudice Licensor's rights, and (iii) Licensee's entire interest under that certain Master Development Agreement between Licensor and Licensee of even date herewith (the "**Master Agreement**"), the Exchange Agreement (as defined in the Master Agreement), the C&M Agreement, and all Rights of Entry agreements (as defined in the Master Agreement) are assigned at the same time to JPA.

18. NOTICES. Any notice required or permitted to be given hereunder by one party to the other shall be in writing and the same shall be given and shall be deemed to have been served and given if (i) placed in the United States mail, certified, return receipt requested, or (ii) deposited into the custody of a nationally recognized overnight delivery service, addressed to the party to be notified at the address for such party specified below, or to such other address as the party to be notified may designate by giving the other party no less than thirty (30) days' advance written notice of such change in address.

If to Licensor: Jones Lang LaSalle Global Services - RR, Inc.
3017 Lou Menk Drive, Suite 100
Fort Worth, TX 76131
Attn: Licenses/Permits

with a copy to: BNSF Railway Company
2500 Lou Menk Dr. – AOB3
Fort Worth, TX 76131
Attn: Senior Manager Real Estate

If to Licensee: City of Lincoln, Nebraska
555 South 10th Street
Lincoln, NE 68508
Attn: City Attorney

19. SURVIVAL. Neither termination nor expiration will release either party from any liability or obligation under this License, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date when the Premises are restored to its condition as of the Effective Date.

20. RECORDATION. It is understood and agreed that this License shall not be filed of record with the Lancaster County, Nebraska Register of Deeds Office or otherwise recorded in the official records of Lancaster County, Nebraska.

21. APPLICABLE LAW. All questions concerning the interpretation or application of provisions of this License shall be decided according to the substantive laws of the State of Nebraska without regard to conflicts of law provisions.

22. VENUE. To the fullest extent permitted by law any dispute arising under or in connection with this License or related to any subject matter which is the subject of this License shall be subject to the sole and exclusive jurisdiction of the United States District Court for the District of Nebraska. The aforementioned choice of venue is intended by Licensor and Licensee to be mandatory and not permissive. Licensor and Licensee each hereby irrevocably consents to the jurisdiction of the United States District Court for the District of Nebraska in any such dispute and irrevocably waives, to the fullest extent permitted by law, any objection that it may now have or hereafter have to the laying of venue in such court and that any such dispute which is brought in such court has been brought in an inconvenient forum.

23. SEVERABILITY. To the maximum extent possible, each provision of this License shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this License shall be prohibited by, or held to be invalid under, applicable law, such provision shall be ineffective solely to the extent of such prohibition or invalidity, and this shall not invalidate the remainder of such provision or any other provision of this License.

24. INTEGRATION. This License is the full and complete agreement between Licensor and Licensee with respect to all matters relating to Licensee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Licensee's use of the Premises as described herein. However, nothing herein is intended to terminate any surviving obligation of Licensee or Licensee's obligation to defend and hold Licensor harmless in any prior written agreement between the parties.

25. MISCELLANEOUS.

25.1 In the event that Licensee consists of two or more parties, all the covenants and agreements of Licensee herein contained shall be the joint and several covenants and agreements of such parties.

25.2 The waiver by Licensor of the breach of any provision herein by Licensee shall in no way impair the right of Licensor to enforce that provision for any subsequent breach thereof.

25.3 All provisions contained in this License shall be binding upon, inure to the benefit of, and be enforceable by the respective successors and assigns of Licensor and Licensee to the same extent as if each such successor and assign was named a party to this License.

25.4 Jones Lang LaSalle Global Services – RR, Inc. is acting as representative for BNSF Railway Company.

[*Signature page follows*]

IN WITNESS WHEREOF, this License has been duly executed by the parties as of the date below each party's signature; to be effective, however, as of the Effective Date above.

LICENSOR:

BNSF Railway Company

By: Jones Lang LaSalle Global Services – RR, Inc.

By: _____

Name: _____

Title: _____

Date: _____

LICENSEE:

City of Lincoln, Nebraska

By: _____

Name: _____

Title: _____

Date: _____

EXHIBIT B

Premises

EXHIBIT C

Contractor Requirements

1.01 General

- **1.01.01** The Contractor must cooperate with **BNSF RAILWAY COMPANY**, hereinafter referred to as "Railway" during the performance of the C&M Work (as defined in Exhibit C-1) and any other work over, under, on or adjacent to Railway Property.

- **1.01.02** The Contractor must execute and deliver to the Railway duplicate copies of the Exhibit C-1 Contractor Right of Entry for C&M Work, in the form attached hereto, obligating the Contractor to provide and maintain in full force and effect the insurance called for under Section 3 of said Exhibit C-1. Questions regarding procurement of the Railroad Protective Liability Insurance should be directed to Rosa Martinez at Marsh, USA, 214-303-8519.

- **1.01.03** The Contractor must plan, schedule and conduct all C&M Work activities so as not to interfere with the movement of any trains on Railway Property.

- **1.01.04** The Contractor's right to enter Railway Property is subject to the absolute right of Railway to cause the Contractor's work on Railway Property to cease if, in the opinion of Railway, Contractor's activities create a hazard to Railway Property, employees, and/or operations. Railway will have the right to stop construction work on the C&M Work if any of the following events take place: (i) Contractor (or any of its subcontractors) performs the C&M Work in a manner contrary to the plans and specifications approved by Railway; (ii) Contractor (or any of its subcontractors), in Railway's opinion, prosecutes the C&M Work in a manner which is hazardous to Railway Property, facilities or the safe and expeditious movement of railroad traffic; or (iii) the insurance described in the attached Exhibit C-1 is canceled during the course of the C&M Work. The work stoppage will continue until all necessary actions are taken by Contractor or its subcontractor to rectify the situation to the satisfaction of Railway's Division Engineer or until additional insurance has been delivered to and accepted by Railway. Any such work stoppage under this provision will not give rise to any liability on the part of Railway. Railway's right to stop the C&M Work is in addition to any other rights Railway may have including, but not limited to, actions or suits for damages or lost profits. In the event that Railway desires to stop the C&M Work, Railway agrees to immediately notify the following individual in writing:

  Roger Figard, City Engineer
  Department of Public Works and Utilities
  City of Lincoln, Nebraska
  555 South 10th Street
  Lincoln, NE 68508

- **1.01.05** Contractor shall, and shall cause all Contractor parties to, strictly comply with all federal, state and local environmental laws and regulations in its use of Railway's Property, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA (collectively, the "**Environmental Laws**") with respect to Railway's Property. Contractor shall not maintain a "treatment," "storage," "transfer" or "disposal" facility, or "underground storage tank," as those terms are defined by Environmental Laws, on Railway's Property. Contractor shall not handle, transport, release or suffer the release of "hazardous

waste" or "hazardous substances", as "hazardous waste" and "hazardous substances" may now or in the future be defined by any Environmental Laws, except as may be pre-existing in Railway Property and as encountered in the C&M Work and then only in compliance with Environmental Laws, and shall not use any soils or other materials containing hazardous waste or hazardous substances in connection with the C&M Work, or otherwise bring any hazardous waste or hazardous substances onto any Railway Property.

Contractor shall give Railway immediate notice to Railway's Resource Operations Center at (800) 832-5452 in the event of any release of hazardous substances on or from Railway Property, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Contractor's use of Railway Property. Contractor shall use best efforts to promptly respond to any release arising from or related to its activities contemplated in the C&M Work. Contractor shall also give Railway notice of all measures undertaken on Contractor's behalf to investigate, remediate, respond to or otherwise cure such release or violation.

In the event Contractor has notice of a release or violation of Environmental Laws which occurred or may occur as a result of Contractor's activities contemplated in the C&M Work, Contractor shall take timely measures to investigate, remediate, respond to or otherwise cure as required by applicable law such release or violation affecting Railway Property or improvements. If during the C&M Work, soils or other materials considered to be environmentally contaminated are exposed, Contractor will remove and safely dispose of said contaminated soils. Determination of soils contamination and applicable disposal procedures thereof will be made only by an agency having the capacity and authority to make such a determination.

Contractor agrees to periodically to furnish Railway upon written request with reasonable proof that it is in compliance with this **Section 1.01.05**.

- **1.01.06** All C&M Work must performed (i) in a good and workmanlike manner, (ii) in accordance with plans and specifications approved in advance by Railway (the "**Approved Plans**"), (iii) in conformance with applicable building codes and all applicable engineering, safety and any and all laws, statutes, regulations, ordinances, orders, covenants, restrictions, or decisions of any court of competent jurisdiction ("**Legal Requirements**"), (iv) in accordance with the accepted industry standards of care, skill and diligence, and (v) in such a manner as shall not adversely affect the structural integrity or maintenance of any Railway improvements or other improvements on or near Railway Property, or any lateral support of any structures adjacent to or in the proximity of any Railway improvements or Railway Property. In addition, the C&M Work must be promptly commenced by the Contractor and thereafter diligently prosecuted to conclusion in its logical order and sequence. Furthermore, any changes or modifications of the C&M Work which affect Railway will be subject to Railway's written approval prior to the commencement of any such changes or modifications from the Railway's Project Engineer.

- **1.01.07** Contractor shall be responsible for all job site cleanup and restoration, including removal of all construction materials, concrete debris, surplus soil, refuse, contaminated soils, asphalt debris, litter and other waste materials resulting from the C&M Work to the reasonable satisfaction of Railway's Division Engineer.

- **1.01.08** The Contractor must notify the City at City's City Engineer, telephone number (402) 441-7567 and Railway's Project Engineer, telephone number (402) 458-7537 at least ten (10) calendar days before commencing any C&M Work on Railway Property.

- **1.01.09** For any bridge demolition and/or falsework above any tracks or any excavations located with any part of the excavations located within, whichever is greater, twenty-five (25) feet of the nearest track or intersecting a slope from the plane of the top of rail on a 2 horizontal to 1 vertical slope beginning at eleven (11) feet from centerline of the nearest track, both measured perpendicular to center line of track, the Contractor must furnish the Railway five sets of working drawings showing details of construction affecting Railway Property and tracks. The working drawing must include the proposed method of installation and removal of falsework, shoring or cribbing, not included in the contract plans and two sets of structural calculations of any falsework, shoring or cribbing. For all excavation and shoring submittal plans, the current "BNSF-UPRR Guidelines for Temporary Shoring" must be used for determining the design loading conditions to be used in shoring design, and all calculations and submittals must be in accordance with the current "BNSF-UPRR Guidelines for Temporary Shoring". All submittal drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. All calculations must take into consideration railway surcharge loading and must be designed to meet American Railway Engineering and Maintenance-of-Way Association (previously known as American Railway Engineering Association) Coopers E-80 live loading standard. All drawings and calculations must be stamped by a registered professional engineer licensed to practice in the state the project is located. The Contractor must not begin C&M Work until notified by the Railway that plans have been approved, which approved plans shall become part of the Approved Plans. The Contractor will be required to use lifting devices such as, cranes and/or winches to place or to remove any falsework over Railway's tracks. In no case will the Contractor be relieved of responsibility for results obtained by the implementation of the Approved Plans.

- **1.01.10** Subject to the movement of Railway's trains, Railway will cooperate with the Contractor such that the C&M Work may be handled and performed in an efficient manner. The Contractor will have no claim whatsoever for any type of damages or for extra or additional compensation in the event his work is delayed by the Railway.

1.02 Contractor Safety Orientation

- **1.02.01 No employee of the Contractor, its subcontractors, agents or invitees may enter Railway Property without first having completed Railway's Engineering Contractor Safety Orientation, found on the web site www.contractororientation.com. The Contractor must ensure that each of its employees, subcontractors, agents or invitees completes Railway's Engineering Contractor Safety Orientation through internet sessions before any C&M Work is performed. Additionally, the Contractor must ensure that each and every one of its employees, subcontractors, agents or invitees possesses a card certifying completion of the Railway's Engineering Contractor Safety Orientation before entering Railway Property. The Contractor is responsible for the cost of the Railway's Engineering Contractor Safety Orientation. The Contractor must renew the Railway's Engineering Contractor Safety Orientation annually. Further clarification can be found on the web site or from the Railway's Project Engineer.**

1.03 Railway Requirements

- **1.03.01** The Contractor must take protective measures as are necessary to keep railway facilities, including track ballast, free of sand, debris, and other foreign objects and materials resulting from his operations. Any damage to railway facilities resulting from Contractor's

operations will be repaired or replaced by Railway and the cost of such repairs or replacement must be paid for by the Contractor.

- **1.03.02** The Contractor must notify Railway's Project Engineer, telephone number (402) 458-7537, and provide blasting plans to the Railway for review seven (7) calendar days prior to conducting any blasting operations adjacent to or on Railway Property.

- **1.03.03** The Contractor must abide by the following temporary clearances during construction:

  - 15' Horizontally from centerline of nearest track
  - 21'-6" Vertically above top of rail
  - 27'-0" Vertically above top of rail for electric wires carrying less than 750 volts
  - 28'-0" Vertically above top of rail for electric wires carrying 750 volts to 15,000 volts
  - 30'-0" Vertically above top of rail for electric wires carrying 15,000 volts to 20,000 volts
  - 34'-0" Vertically above top of rail for electric wires carrying more than 20,000 volts

- **1.03.04** Upon completion of construction, the following clearances shall be maintained:

  - 25' Horizontally from centerline of nearest existing or future track to the face of the pier or abutment structure
  - 31' Vertically above top of rail to the bottom of the Pedestrian Bridge

- **1.03.05** Any infringement within State statutory clearances due to the Contractor's operations must be submitted to the Railway and to the City and must not be undertaken until approved in writing by the Railway, and until the City has obtained any necessary authorization from the State Regulatory Authority for the infringement. No extra compensation will be allowed in the event the Contractor's C&M Work is delayed pending Railway approval, and/or the State Regulatory Authority's approval.

- **1.03.06** In the case of impaired vertical clearance above top of rail, Railway will have the option of installing tell-tales or other protective devices Railway deems necessary for protection of Railway operations. The cost of tell-tales or protective devices will be borne by the Contractor.

- **1.03.07** The details of construction affecting the Railway Property and tracks not included in the City Work Final Design or Approved Plans for the C&M Work must be submitted to the Railway by the City for approval before work is undertaken and this work must not be undertaken until approved by the Railway.

- **1.03.08** At other than public road crossings, the Contractor must not move any equipment or materials across Railway's tracks until permission has been obtained from the Railway. The Contractor must obtain a "Temporary Construction Crossing Agreement" from the Railway prior to moving his equipment or materials across Railway's tracks. The temporary crossing must be gated and locked at all times when not required for use by the Contractor. The temporary crossing for use of the Contractor will be constructed and, at the completion of the project, removed at the expense of the Contractor.

- **1.03.09** Discharge, release or spill on the Railway Property of any hazardous substances, oil, petroleum, constituents, pollutants, contaminants, or any hazardous waste is prohibited

and Contractor must immediately notify the Railway's Resource Operations Center at 1(800) 832-5452, of any discharge, release or spills in excess of a reportable quantity. Contractor must not allow Railway Property to become a treatment, storage or transfer facility as those terms are defined in the Resource Conservation and Recovery Act or any state analogue.

- **1.03.10** The Contractor, upon completion of the C&M Work, must promptly remove from the Railway Property all of Contractor's tools, equipment, implements and other materials, whether brought upon said Railway Property by Contractor or any subcontractor, employee or agent of Contractor or of any subcontractor, and must cause Railway Property to be left in a condition acceptable to Railway's Project Engineer.

1.04 Contractor Roadway Worker on Track Safety Program and Safety Action Plan

- **1.04.01** Each Contractor that will perform C&M Work within 25 feet of the centerline of a track must develop and implement a Roadway Worker Protection/On Track Safety Program and work with Railway's Project Engineer to develop an on track safety strategy as described in the guidelines listed in the on track safety portion of the Safety Orientation. This Program must provide Roadway Worker protection/on track training for all employees of the Contractor, its subcontractors, agents or invitees. This training is reinforced at the job site through job safety briefings. Additionally, each Contractor must develop and implement the Safety Action Plan, as provided for on the web site **www.contractororientation.com**, which will be made available to Railway prior to commencement of any work on Railway Property. During the performance of C&M Work, the Contractor must audit its C&M Work activities. The Contractor must designate an on-site Project Supervisor who will serve as the contact person for the Railway and who will maintain a copy of the Safety Action Plan, safety audits, and Material Safety Datasheets (MSDS), at the job site.

Contractors shall ensure its employees, subcontractors and agents are United States citizens or legally working in this country under a work VISA.

1.05 Railway Flagger Services:

- **1.05.01** The Contractor must give Railway's Project Engineer, telephone number (402) 458-7537, a minimum of thirty (30) calendar days advance notice when flagging services will be required so that the Roadmaster can make appropriate arrangements (i.e., bulletin the flagger's position). If flagging services are scheduled in advance by the Contractor and it is subsequently determined by the parties hereto that such services are no longer necessary, the Contractor must give the Roadmaster five (5) working days advance notice so that appropriate arrangements can be made to abolish the position pursuant to union requirements.

- **1.05.02** Unless determined otherwise by Railway's Project Engineer, Railway flagger will be required and furnished when Contractor's C&M Work activities are located over, under and/or within twenty-five (25) feet measured horizontally from centerline of the nearest track and when cranes or similar equipment positioned beyond 25-feet from the track centerline could foul the track in the event of tip over or other catastrophic occurrence, but not limited thereto for the following conditions:

- **1.05.02a** When, upon inspection by Railway's Project Engineer, other conditions warrant.

- **1.05.02b** When any excavation is performed below the bottom of tie elevation, if, in the opinion of Railway's Project Engineer, track or other Railway facilities may be subject to movement or settlement.

- **1.05.02c** When C&M Work in any way interferes with the safe operation of trains at timetable speeds.

- **1.05.02d** When any hazard is presented to Railway track, communications, signal, electrical, or other facilities either due to persons, material, equipment or blasting in the vicinity.

- **1.05.02e** Special permission must be obtained from the Railway before moving heavy or cumbersome objects or equipment which might result in making the track impassable.

- **1.05.03** Flagging services will be performed by qualified Railway flaggers.

- **1.05.03a** Flagging crew generally consists of one employee. However, additional personnel may be required to protect Railway Property and operations, if deemed necessary by Railway's Project Engineer.

- **1.05.03b** Each time a flagger is called, the minimum period for billing will be the eight (8) hour basic day.

- **1.05.03c** The cost of flagger services provided by the Railway will be borne by City. The estimated cost for one (1) flagger is approximately between $800.00-$1,600.00 for an eight (8) hour basic day with time and one-half or double time for overtime, rest days and holidays. The estimated cost for each flagger includes vacation allowance, paid holidays, Railway and unemployment insurance, public liability and property damage insurance, health and welfare benefits, vehicle, transportation, meals, lodging, radio, equipment, supervision and other costs incidental to performing flagging services. Negotiations for Railway labor or collective bargaining agreements and rate changes authorized by appropriate Federal authorities may increase actual or estimated flagging rates. **THE GOVERNMENTAL FLAGGING RATE IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL BE USED TO CALCULATE THE ACTUAL COSTS OF FLAGGING PURSUANT TO THIS PARAGRAPH.**

- **1.05.03d** The average train traffic on this route is 65 freight trains per 24-hour period at a timetable speed of 40 MPH and 2 passenger trains at a timetable speed of 15 MPH.

1.06 Contractor General Safety Requirements

- **1.06.01 C&M Work in the proximity of railway track(s) is potentially hazardous where movement of trains and equipment can occur at any time and in any direction. All work performed by contractors within 25 feet of any track must be in compliance with FRA Roadway Worker Protection Regulations. No Contractor shall conduct any tests, investigations or any other activity using mechanized equipment and/or machinery, or place or store any mechanized equipment, tools or other materials, within twenty-five (25) feet of the centerline of any railroad track on Railway Property, except after Contractor has obtained written approval from Railway Director Engineering Services, and then only in strict accordance with the terms and any conditions of such approval.**

- **1.06.02 Before beginning any task on Railway Property, a thorough job safety briefing must be conducted with all personnel involved with the task and repeated when the**

personnel or task changes. If the task is within 25 feet of any track, the job briefing must include the Railway's flagger, as applicable, and include the procedures the Contractor will use to protect its employees, subcontractors, agents or invitees from moving any equipment adjacent to or across any Railway track(s).

- **1.06.03 Workers must not work within 25 feet of the centerline of any track without an on track safety strategy approved by Railway's Project Engineer. When authority is provided, every contractor employee must know: (1) who the Railway flagger is, and how to contact the flagger, (2) limits of the authority, (3) the method of communication to stop and resume work, and (4) location of the designated places of safety. Persons or equipment entering flag/work limits that were not previously job briefed, must notify the flagger immediately, and be given a job briefing when working within 25 feet of the center line of track.**

- **1.06.04 When Contractor employees are required to work on Railway Property after normal working hours or on weekends, Railway's Project Engineer must be notified. A minimum of two employees must be present at all times.**

- **1.06.05** Any employees, agents or invitees of Contractor or its subcontractors under suspicion of being under the influence of drugs or alcohol, or in the possession of same, will be removed from the Railway Property and subsequently released to the custody of a representative of Contractor management. Future access to the Railway Property by that employee will be denied.

- **1.06.06** Any damage to Railway Property, or any hazard noticed on passing trains must be reported immediately to the Railway's Project Engineer. Any vehicle or machine which may come in contact with track, signal equipment, or structure (bridge) and could result in a train derailment must be reported immediately to the Railway's Project Engineer and to the Railway's Resource Operations Center at 1 (800) 832-5452. Local emergency numbers are to be obtained from Railway's Project Engineer prior to the start of any C&M Work and must be posted at the job site.

- **1.06.07** For safety reasons, all persons are prohibited from having pocket knives, firearms or other deadly weapons in their possession while working on Railway Property.

- **1.06.08** All personnel protective equipment (PPE) used on Railway Property must meet applicable OSHA and ANSI specifications. Current Railway personnel protective equipment requirements are listed on the web site, **www.contractororientation.com,** however, a partial list of the requirements include: a) safety glasses with permanently affixed side shields (no yellow lenses); b) hard hats c) safety shoe with: hardened toes, above-the-ankle lace-up and a defined heel; and d) high visibility retro-reflective work wear. The Railway's Project Engineer is to be contacted regarding local specifications for meeting requirements relating to hi-visibility work wear. Hearing protection, fall protection, gloves, and respirators must be worn as required by State and Federal regulations. **(NOTE – Should there be a discrepancy between the information contained on the web site and the information in this paragraph, the web site will govern.)**

- **1.06.09 THE CONTRACTOR MUST NOT PILE OR STORE ANY MATERIALS, MACHINERY OR EQUIPMENT CLOSER THAN 25'-0" TO THE CENTER LINE OF THE NEAREST RAILWAY TRACK. MATERIALS, MACHINERY OR EQUIPMENT MUST NOT BE STORED OR LEFT WITHIN 250 FEET OF ANY HIGHWAY/RAIL AT-GRADE CROSSINGS OR TEMPORARY CONSTRUCTION CROSSING, WHERE STORAGE OF**

THE SAME WILL OBSTRUCT THE VIEW OF A TRAIN APPROACHING THE CROSSING. PRIOR TO BEGINNING WORK, THE CONTRACTOR MUST ESTABLISH A STORAGE AREA WITH CONCURRENCE OF THE RAILWAY'S PROJECT ENGINEER.

- **1.06.10** Machines or vehicles must not be left unattended with the engine running. Parked machines or equipment must be in gear with brakes set and if equipped with blade, pan or bucket, they must be lowered to the ground. All machinery and equipment left unattended on Railway Property must be left inoperable and secured against movement. (See internet Engineering Contractor Safety Orientation program for more detailed specifications)

- **1.06.11** Workers must not create and leave any conditions at the work site that would interfere with water drainage. Any C&M Work performed over water must meet all Federal, State and Local regulations.

- **1.06.12** All power line wires must be considered dangerous and of high voltage unless informed to the contrary by proper authority. For all power lines the minimum clearance between the lines and any part of the equipment or load must be; 200 KV or below - 15 feet; 200 to 350 KV - 20 feet; 350 to 500 KV - 25 feet; 500 to 750 KV - 35 feet; and 750 to 1000 KV - 45 feet. If capacity of the line is not known, a minimum clearance of 45 feet must be maintained. A person must be designated to observe clearance of the equipment and give a timely warning for all operations where it is difficult for an operator to maintain the desired clearance by visual means.

1.07 Excavation

- **1.07.01** Before excavating, the Contractor must determine whether any underground pipe lines, electric wires, or cables, including fiber optic cable systems are present and located within the C&M Work area. The Contractor must determine whether excavation on Railway Property could cause damage to buried cables resulting in delay to Railway traffic and disruption of service to users. Delays and disruptions to service may cause business interruptions involving loss of revenue and profits. Before commencing excavation, the Contractor must contact Railway's Project Engineer, telephone number (402) 458-7537. All underground and overhead wires will be considered HIGH VOLTAGE and dangerous until verified with the company having ownership of the line. **It is the Contractor's responsibility to notify any other companies that have underground utilities in the area and arrange for the location of all underground utilities before excavating.**

- **1.07.02** The Contractor must cease all work and notify Railway immediately before continuing excavation in the area if obstructions are encountered which do not appear on drawings. If the obstruction is a utility and the owner of the utility can be identified, then the Contractor must also notify the owner immediately. If there is any doubt about the location of underground cables or lines of any kind, no work must be performed until the exact location has been determined. There will be no exceptions to these instructions.

- **1.07.03** All excavations must be conducted in compliance with applicable OSHA regulations and, regardless of depth, must be shored where there is any danger to tracks, structures or personnel.

- **1.07.04** Any excavations, holes or trenches on Railway Property must be covered, guarded and/or protected when not being worked on. When leaving work site areas at night and over weekends, the areas must be secured and left in a condition that will ensure that Railway

employees and other personnel who may be working or passing through the area are protected from all hazards. All excavations must be back filled as soon as possible.

- **1.07.05** Contractor will be responsible at no cost to Railway to locate and make any adjustments necessary to any wire lines, pipe lines, or other utilities, fences, buildings, improvements or other facilities located within Railway Property (collectively, "**Other Improvements**"). Contractor must contact the owner(s) of the Other Improvements notifying them of any work that may damage these Other Improvements and/or interfere with their service and, if required, obtain the owner's written approval prior to so affecting the Other Improvements. Contractor must mark all Railway improvements and Other Improvements on the applicable Approved Plans or other plans and specifications approved in advance by Railway, and mark all Railway improvements and Other Improvements in the field in order to verify their locations. Contractor must also use all reasonable methods when working on or near Railway Property to determine if any Railway improvements or Other Improvements (fiber optic, cable, communication or otherwise) may exist. Failure to mark or identify any Railway improvements or Other Improvements will be sufficient cause for Railway to stop construction at no cost to Railway until such items are completed. Contractor must make all adjustments and other work described in this Section 1.07.05, including without limitation adjustments to Other Improvements and work on and affecting Railway Property, in a manner that does not adversely impact utility service to Railway.

1.08 Hazardous Waste, Substances and Material Reporting

- **1.08.01** If Contractor discovers any hazardous waste, hazardous substance, petroleum or other deleterious material, including but not limited to any non-containerized commodity or material, on or adjacent to Railway Property, in or near any surface water, swamp, wetlands or waterways, while performing any work under this Agreement, Contractor must immediately: (a) notify the Railway's Resource Operations Center at 1 (800) 832-5452, of such discovery: (b) take safeguards necessary to protect its employees, subcontractors, agents and/or third parties: and (c) exercise due care with respect to the release, including the taking of any appropriate measure to minimize the impact of such release.

1.09 Personal Injury Reporting

- **1.09.01** The Railway is required to report certain injuries as a part of compliance with Federal Railroad Administration (FRA) reporting requirements. Any personal injury sustained by an employee of the Contractor, subcontractor or Contractor's invitees while on the Railway Property must be reported immediately (by phone mail if unable to contact in person) to the Railway's Project Engineer. The Non-Employee Personal Injury Data Collection Form contained herein is to be completed and sent by Fax to the Railway at 1 (817) 352-7595 and to the Railway's Project Engineer no later than the close of shift on the date of the injury.

NON-EMPLOYEE PERSONAL INJURY DATA COLLECTION

INFORMATION REQUIRED TO BE COLLECTED PURSUANT TO FEDERAL REGULATION. IT SHOULD BE USED FOR COMPLIANCE WITH FEDERAL REGULATIONS ONLY AND IS NOT INTENDED TO PRESUME ACCEPTANCE OF RESPONSIBILITY OR LIABILITY.

1. Accident City/St
2. Date: _____ Time: _____ County:
3. Temperature:
4. Weather
   (if non-Railway location)

5. Social Security #

6. Name (last, first, mi)

7. Address: Street: _____ City: St._____ Zip:

8. Date of Birth: _____ and/or Age _____ Gender:
   (if available)

9. (a) Injury: _____ (b) Body Part:
   (i.e. (a) Laceration (b) Hand)

11. Description of Accident (To include location, action, result, etc.):

12. Treatment:
    __ First Aid Only
    __ Required Medical Treatment
    __ Other Medical Treatment

13. Dr. Name _____ 30. Date: _____

14. Dr. Address:
    Street: _____ City: _____ St: _____ Zip: _____

15. Hospital Name:

16. Hospital Address:
    Street: _____ City: _____ St: _____ Zip: _____

17. Diagnosis:

FAX TO RAILWAY AT (817) 352-7595
AND COPY TO RAILWAY ROADMASTER FAX

EXHIBIT C-1(A)

CONTRACTOR'S RIGHT OF ENTRY
For C&M Work

BNSF RAILWAY COMPANY
Attention: Project Engineer

Gentlemen:

The undersigned (hereinafter, the "**Contractor**"), has entered into a contract (the "**Contract**") dated _____, 20_ with the City of Lincoln, Nebraska ("**City**") for the performance of certain work ("**C&M Work**") in connection with the construction of entertainment, recreation, lodging, offices, retail and/or other complementary and/or supporting facilities in Lincoln, Nebraska (collectively, the "**West Haymarket Project**"). The work to be performed under this Agreement is deemed to be "City C&M Work" (as defined in that certain Construction and Maintenance Agreement ["**C&M Agreement**"] dated _____, 2010, between BNSF Railway Company and the City). Performance of such C&M Work will necessarily require Contractor to enter BNSF RAILWAY COMPANY ("**Railway**") right of way and property ("**Railway Property**"). The Contract provides that no C&M Work will be commenced within Railway Property until the Contractor employed in connection with said C&M Work for the **City of Lincoln, Nebraska** (i) executes and delivers to Railway an Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the Owner, General Partner, President or Vice President of Contractor, Contractor must furnish evidence to Railway certifying that the signatory is empowered to execute this Agreement on behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Contract, has agreed and does hereby agree with Railway as follows:

Section 1. RELEASE OF LIABILITY AND INDEMNITY

TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL RELEASE, INDEMNIFY, DEFEND AND HOLD HARMLESS RAILWAY AND RAILWAY'S AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS AND ATTORNEYS' FEES) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON (INCLUDING, WITHOUT LIMITATION, THE EMPLOYEES OF THE PARTIES HERETO) OR ENTITY DIRECTLY OR INDIRECTLY (COLLECTIVELY, "LIABILITIES") ARISING OUT OF, RESULTING FROM OR CAUSALLY RELATED TO (IN WHOLE OR IN PART):

(i) ANY RIGHTS OR INTERESTS GRANTED TO CONTRACTOR PURSUANT TO THIS AGREEMENT;

(ii) THE USE, OCCUPANCY OR PRESENCE OF CONTRACTOR AND CONTRACTOR PARTIES (DEFINED BELOW) AND/OR ANY WORK PERFORMED BY CONTRACTOR AND CONTRACTOR PARTIES IN, ON, OR ABOUT RAILWAY'S PROPERTY OR RIGHT-OF-WAY AND/OR THE WEST HAYMARKET PROJECT, INCLUDING, WITHOUT LIMITATION, OPERATION OF THE PEDESTRIAN BRIDGE, SECURITY FENCING, OR STORM WATER MITIGATION BY ANY CONTRACTOR PARTY (DEFINED BELOW);

(iii) ANY ENVIRONMENTAL MATTERS ARISING FROM CONTRACTOR AND/OR CONTRACTOR PARTIES' USE AND OCCUPANCY OF RAILWAY'S RIGHT-OF-WAY OR OTHER RAILWAY PROPERTY, INCLUDING WITHOUT LIMITATION USE AND OCCUPANCY OF RAILWAY'S RIGHT-OF-WAY OR OTHER RAILWAY PROPERTY IN CONNECTION WITH PERFORMANCE OF THE C&M WORK;

(iv) ANY DAMAGE TO OR DESTRUCTION OF ANY TELECOMMUNICATION LINES IN CONNECTION WITH THE WEST HAYMARKET PROJECT BY CONTRACTOR AND/OR CONTRACTOR PARTIES, INCLUDING BUT NOT LIMITED TO (A) ANY INJURY TO OR DEATH OF ANY PERSON EMPLOYED BY OR ON BEHALF OF ANY TELECOMMUNICATIONS COMPANY, AND/OR ITS CONTRACTORS, AGENTS AND/OR EMPLOYEES AS A RESULT OF SUCH DAMAGE OR DESTRUCTION, AND/OR (B) ANY CLAIM OR CAUSE OF ACTION FOR ALLEGED LOSS OF PROFITS OR REVENUE BY, OR LOSS OF SERVICE BY A CUSTOMER OR USER OF SUCH TELECOMMUNICATION COMPANY(IES) AS A RESULT OF SUCH DAMAGE OR DESTRUCTION;

(v) CONTRACTOR'S BREACH OF THE TERMS AND CONDITIONS OF THIS AGREEMENT; OR

(vi) ANY ACT OR OMISSION OF CONTRACTOR OR ITS OFFICERS, AGENTS, INVITEES, EMPLOYEES OR SUBCONTRACTORS (SUCH OFFICERS, AGENTS, INVITEES, EMPLOYEES AND SUBCONTRACTORS BEING REFERRED TO HEREIN INDIVIDUALLY AS A "CONTRACTOR PARTY" AND COLLECTIVELY, "CONTRACTOR PARTIES"), OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER.

THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT ANY DAMAGE, DESTRUCTION, INJURY OR DEATH WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILWAY, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, BUT EXCLUDING CLAIMS WHOLLY CAUSED BY RAILWAY'S SOLE NEGLIGENCE AND EXCLUDING CLAIMS TO THE EXTENT THAT SUCH CLAIMS ARE CAUSED BY THE WILLFUL MISCONDUCT OR GROSS NEGLIGENCE OF RAILWAY.

FURTHER, TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR AGREES, REGARDLESS OF ANY NEGLIGENCE OR ALLEGED NEGLIGENCE OF RAILWAY, TO INDEMNIFY, DEFEND AND HOLD HARMLESS RAILWAY AGAINST AND ASSUME THE DEFENSE OF ANY LIABILITIES ASSERTED AGAINST OR SUFFERED BY RAILWAY UNDER OR RELATED TO THE FEDERAL EMPLOYERS' LIABILITY ACT ("FELA") WHENEVER EMPLOYEES OF CONTRACTOR OR ANY CONTRACTOR PARTY CLAIM OR ALLEGE THAT THEY ARE EMPLOYEES OF RAILWAY OR OTHERWISE. THIS INDEMNITY SHALL ALSO EXTEND, ON THE SAME BASIS, TO FELA CLAIMS BASED ON ACTUAL OR ALLEGED VIOLATIONS OF ANY FEDERAL, STATE OR LOCAL LAWS OR REGULATIONS, INCLUDING BUT NOT LIMITED TO THE SAFETY APPLIANCE ACT, THE LOCOMOTIVE INSPECTION ACT, THE OCCUPATIONAL SAFETY AND HEALTH ACT, THE RESOURCE

CONSERVATION AND RECOVERY ACT, AND ANY SIMILAR STATE OR FEDERAL STATUTE.

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all Liabilities against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising out of any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all Liabilities arising out of any such claims or suits, provided that the foregoing indemnification obligations do not include Liabilities arising wholly out of the sole negligence of Railway or to the extent caused by the gross negligence or willful misconduct of Railway.

In addition to any other provision of this Agreement, in the event that all or any portion of this Article shall be deemed to be inapplicable for any reason, including without limitation as a result of a decision of an applicable court, legislative enactment or regulatory order, the parties agree that this Article shall be interpreted as requiring Contractor to indemnify Railway to the fullest extent permitted by applicable law. **THROUGH THIS AGREEMENT THE PARTIES EXPRESSLY INTEND FOR CONTRACTOR TO INDEMNIFY RAILWAY FOR RAILWAY'S ACTS OF NEGLIGENCE, BUT EXCLUDING CLAIMS WHOLLY CAUSED BY RAILWAY'S SOLE NEGLIGENCE AND EXCLUDING CLAIMS TO THE EXTENT THAT SUCH CLAIMS ARE CAUSED BY THE WILLFUL MISCONDUCT OR GROSS NEGLIGENCE OF RAILWAY.**

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

Section 2. TERM

This Agreement is effective from the date of the Contract until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

Section 3. INSURANCE

Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. Commercial General Liability Insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of $5,000,000.00 per occurrence, and $10,000,000.00 in the aggregate, but in no event less than the amount otherwise carried by the Contractor. Coverage must be purchased on a post 1998 ISO occurrence form or equivalent and include coverage for, but not limited to, the following:

- Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Waiver of subrogation in favor of and acceptable to Railroad.
- Additional insured endorsement in favor of and acceptable to Railroad.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to Railroad employees.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy with regard to the work being performed under this Agreement.

B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least $1,000,000 per occurrence, and include coverage for, but not limited to the following:

- Bodily injury and property damage
- Any and all vehicles owned, used or hired

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railroad.
- Additional insured endorsement in favor or and acceptable to Railroad.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

C. Workers Compensation and Employers Liability Insurance. This insurance shall include coverage for, but not limited to:

- Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
- Employers' Liability (Part B) with limits of at least $500,000 each accident, $500,000 by disease policy limit, $500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railroad.

D. Railroad Protective Liability Insurance. This insurance shall name only the Railroad as the Insured with coverage of at least $5,000,000 per occurrence and $10,000,000 in the aggregate. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:

- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- Endorsed to include the Limited Seepage and Pollution Endorsement.

- Endorsed to remove any exclusion for punitive damages.
- No other endorsements restricting coverage may be added.
- The original policy must be provided to Railroad prior to performing any work or services under this Agreement

In lieu of providing a Railroad Protective Liability Policy, Contractor may participate in BNSF's Blanket Railroad Protective Liability Insurance Policy available to Contractor.

Other Requirements:

All policies (applying to coverage listed above) must not contain an exclusion for punitive damages and certificates of insurance must reflect that no exclusion exists.

Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad, except for claims and suits arising wholly out of the sole negligence, or to the extent caused by the gross negligence or willful misconduct, of Railroad. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against Railroad for all claims and suits, except for claims and suits arising wholly out of the sole negligence, or to the extent caused by the gross negligence of willful misconduct, of Railroad. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under Contractor's care, custody or control, except for the right of recovery or right of subrogation arising wholly out of the sole negligence, or to the extent caused by the gross negligence or willful misconduct, of Railroad.

Contractor is not allowed to self-insure without the prior written consent of Railroad. If granted by Railroad, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by Contractor in lieu of insurance. Any and all Railroad liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by Contractor's insurance will be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing the C&M Work, Contractor must furnish to Railroad acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments. The policy(ies) must contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify Railroad in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision must be indicated on the certificate of insurance. Upon request from Railroad, a certified duplicate original of any required policy must be furnished. Certificate(s) should be sent to the following address:

Ebix BPO
PO Box 12010-BN
Hemet, CA 92546-8010
Fax number: 951-652-2882
Email: bnsf@ebix.com

Any insurance policy must be written by a reputable insurance company reasonably acceptable to Railroad or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.

Contractor represents that this Agreement has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by this Agreement. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above.

Not more frequently than once every five years, Railroad may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by Contractor, Contractor must require that its subcontractors provide and maintain the insurance coverages set forth herein, naming Railroad as an additional insured, and requiring that the subcontractors release, defend and indemnify Railroad to the same extent and under the same terms and conditions as Contractor is required to release, defend and indemnify Railroad herein.

Failure to provide evidence as required by this section will entitle, but not require, Railroad to immediately suspend work under this Agreement until such evidence is provided. Acceptance of a certificate that does not comply with this section will not operate as a waiver of Contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor will not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad will not be limited by the amount of the required insurance coverage.

For purposes of this section, Railroad means "Burlington Northern Santa Fe, LLC", "BNSF Railway Company" and the subsidiaries, successors, assigns and affiliates of each.

Section 4. EXHIBIT C CONTRACTOR REQUIREMENTS

The Contractor must observe and comply with all provisions, obligations, requirements and limitations contained in the Contract, and the Contractor Requirements set forth on Exhibit C attached to this Agreement and the Contract, including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site.

Section 5. TRAIN DELAY

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.

For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. Damages for train delay are currently $382.20 per hour per incident. **THE RATE THEN IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL BE USED TO CALCULATE THE ACTUAL COSTS OF TRAIN DELAY PURSUANT TO THIS AGREEMENT.**

Contractor and its subcontractors must give Railway's Project Engineer (402) 458-7537 thirty (30) days' minimum advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

[Signature page follows]

Kindly acknowledge receipt of this letter by signing and returning to the Railway two original copies of this letter, which, upon execution by Railway, will constitute an Agreement between us.

_____	
(Contractor)	**BNSF Railway Company**
By:_____	By:_____
Printed Name: _____	Name:_____
Title:_____	*Project Engineer*
Contact Person: _____	Accepted and effective this _____day of 20__.
Address: _____	
_____	
City:_____ State:___ Zip:____	
Fax: _____	
Phone: _____	
E-mail:_____	

EXHIBIT C-1(B)

CONTRACTOR'S RIGHT OF ENTRY
For C&M Work

BNSF RAILWAY COMPANY
Attention: Project Engineer

Gentlemen:

The undersigned (hereinafter, the "**Contractor**"), has entered into a contract (the "**Contract**") dated _____, 20_ with the City of Lincoln, Nebraska ("**City**") for the performance of certain work ("**C&M Work**") in connection with the construction of entertainment, recreation, lodging, offices, retail and/or other complementary and/or supporting facilities in Lincoln, Nebraska (collectively, the "**West Haymarket Project**"). The work to be performed under this Agreement is deemed to be "City C&M Work" (as defined in that certain Construction and Maintenance Agreement ["**C&M Agreement**"] dated _____, 2010, between BNSF Railway Company and the City). Performance of such C&M Work will necessarily require Contractor to enter BNSF RAILWAY COMPANY ("**Railway**") right of way and property ("**Railway Property**"). The Contract provides that no C&M Work will be commenced within Railway Property until the Contractor employed in connection with said C&M Work for the **City of Lincoln, Nebraska** (i) executes and delivers to Railway an Agreement in the form hereof, and (ii) provides insurance of the coverage and limits specified in such Agreement and Section 3 herein. If this Agreement is executed by a party who is not the Owner, General Partner, President or Vice President of Contractor, Contractor must furnish evidence to Railway certifying that the signatory is empowered to execute this Agreement on behalf of Contractor.

Accordingly, in consideration of Railway granting permission to Contractor to enter upon Railway Property and as an inducement for such entry, Contractor, effective on the date of the Contract, has agreed and does hereby agree with Railway as follows:

Section 1. RELEASE OF LIABILITY AND INDEMNITY

TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR SHALL RELEASE, INDEMNIFY, DEFEND AND HOLD HARMLESS RAILWAY AND RAILWAY'S AFFILIATED COMPANIES, PARTNERS, SUCCESSORS, ASSIGNS, LEGAL REPRESENTATIVES, OFFICERS, DIRECTORS, SHAREHOLDERS, EMPLOYEES AND AGENTS FOR, FROM AND AGAINST ANY AND ALL CLAIMS, LIABILITIES, FINES, PENALTIES, COSTS, DAMAGES, LOSSES, LIENS, CAUSES OF ACTION, SUITS, DEMANDS, JUDGMENTS AND EXPENSES (INCLUDING, WITHOUT LIMITATION, COURT COSTS AND ATTORNEYS' FEES) OF ANY NATURE, KIND OR DESCRIPTION OF ANY PERSON (INCLUDING, WITHOUT LIMITATION, THE EMPLOYEES OF THE PARTIES HERETO) OR ENTITY DIRECTLY OR INDIRECTLY (COLLECTIVELY, "LIABILITIES") ARISING OUT OF, RESULTING FROM OR CAUSALLY RELATED TO (IN WHOLE OR IN PART):

(i) ANY RIGHTS OR INTERESTS GRANTED TO CONTRACTOR PURSUANT TO THIS AGREEMENT;

(ii) THE USE, OCCUPANCY OR PRESENCE OF CONTRACTOR AND CONTRACTOR PARTIES (DEFINED BELOW) AND/OR ANY WORK PERFORMED BY CONTRACTOR AND CONTRACTOR PARTIES IN, ON, OR ABOUT RAILWAY'S PROPERTY OR RIGHT-OF-WAY AND/OR THE WEST HAYMARKET PROJECT, INCLUDING, WITHOUT LIMITATION, OPERATION OF THE PEDESTRIAN BRIDGE, SECURITY FENCING, OR STORM WATER MITIGATION BY ANY CONTRACTOR PARTY (DEFINED BELOW);

(iii) ANY ENVIRONMENTAL MATTERS ARISING FROM CONTRACTOR AND/OR CONTRACTOR PARTIES' USE AND OCCUPANCY OF RAILWAY'S RIGHT-OF-WAY OR OTHER RAILWAY PROPERTY, INCLUDING WITHOUT LIMITATION USE AND OCCUPANCY OF RAILWAY'S RIGHT-OF-WAY OR OTHER RAILWAY PROPERTY IN CONNECTION WITH PERFORMANCE OF THE C&M WORK;

(iv) ANY DAMAGE TO OR DESTRUCTION OF ANY TELECOMMUNICATION LINES IN CONNECTION WITH THE WEST HAYMARKET PROJECT BY CONTRACTOR AND/OR CONTRACTOR PARTIES, INCLUDING BUT NOT LIMITED TO (A) ANY INJURY TO OR DEATH OF ANY PERSON EMPLOYED BY OR ON BEHALF OF ANY TELECOMMUNICATIONS COMPANY, AND/OR ITS CONTRACTORS, AGENTS AND/OR EMPLOYEES AS A RESULT OF SUCH DAMAGE OR DESTRUCTION, AND/OR (B) ANY CLAIM OR CAUSE OF ACTION FOR ALLEGED LOSS OF PROFITS OR REVENUE BY, OR LOSS OF SERVICE BY A CUSTOMER OR USER OF SUCH TELECOMMUNICATION COMPANY(IES) AS A RESULT OF SUCH DAMAGE OR DESTRUCTION;

(v) CONTRACTOR'S BREACH OF THE TERMS AND CONDITIONS OF THIS AGREEMENT; OR

(vi) ANY ACT OR OMISSION OF CONTRACTOR OR ITS OFFICERS, AGENTS, INVITEES, EMPLOYEES OR SUBCONTRACTORS (SUCH OFFICERS, AGENTS, INVITEES, EMPLOYEES AND SUBCONTRACTORS BEING REFERRED TO HEREIN INDIVIDUALLY AS A "CONTRACTOR PARTY" AND COLLECTIVELY, "CONTRACTOR PARTIES"), OR ANYONE DIRECTLY OR INDIRECTLY EMPLOYED BY ANY OF THEM, OR ANYONE THEY CONTROL OR EXERCISE CONTROL OVER.

THE LIABILITY ASSUMED BY CONTRACTOR WILL NOT BE AFFECTED BY THE FACT, IF IT IS A FACT, THAT ANY DAMAGE, DESTRUCTION, INJURY OR DEATH WAS OCCASIONED BY OR CONTRIBUTED TO BY THE NEGLIGENCE OF RAILWAY, ITS AGENTS, SERVANTS, EMPLOYEES OR OTHERWISE, BUT EXCLUDING CLAIMS WHOLLY CAUSED BY RAILWAY'S SOLE NEGLIGENCE AND EXCLUDING CLAIMS TO THE EXTENT THAT SUCH CLAIMS ARE CAUSED BY THE WILLFUL MISCONDUCT OR GROSS NEGLIGENCE OF RAILWAY.

FURTHER, TO THE FULLEST EXTENT PERMITTED BY LAW, CONTRACTOR AGREES, REGARDLESS OF ANY NEGLIGENCE OR ALLEGED NEGLIGENCE OF RAILWAY, TO INDEMNIFY, DEFEND AND HOLD HARMLESS RAILWAY AGAINST AND ASSUME THE DEFENSE OF ANY LIABILITIES ASSERTED AGAINST OR SUFFERED BY RAILWAY UNDER OR RELATED TO THE FEDERAL EMPLOYERS' LIABILITY ACT ("FELA") WHENEVER EMPLOYEES OF CONTRACTOR OR ANY CONTRACTOR PARTY CLAIM OR ALLEGE THAT THEY ARE EMPLOYEES OF RAILWAY OR OTHERWISE. THIS INDEMNITY SHALL ALSO EXTEND, ON THE SAME BASIS, TO FELA CLAIMS BASED ON ACTUAL OR ALLEGED VIOLATIONS OF ANY FEDERAL, STATE OR LOCAL LAWS OR REGULATIONS, INCLUDING BUT NOT LIMITED TO THE SAFETY APPLIANCE ACT, THE LOCOMOTIVE INSPECTION ACT, THE OCCUPATIONAL SAFETY AND HEALTH ACT, THE RESOURCE

CONSERVATION AND RECOVERY ACT, AND ANY SIMILAR STATE OR FEDERAL STATUTE.

Contractor further agrees, at its expense, in the name and on behalf of Railway, that it will adjust and settle all Liabilities against Railway, and will, at Railway's discretion, appear and defend any suits or actions of law or in equity brought against Railway on any claim or cause of action arising out of any liability assumed by Contractor under this Agreement for which Railway is liable or is alleged to be liable. Railway will give notice to Contractor, in writing, of the receipt or dependency of such claims and thereupon Contractor must proceed to adjust and handle to a conclusion such claims, and in the event of a suit being brought against Railway, Railway may forward summons and complaint or other process in connection therewith to Contractor, and Contractor, at Railway's discretion, must defend, adjust, or settle such suits and protect, indemnify, and save harmless Railway from and against all Liabilities arising out of any such claims or suits, provided that the foregoing indemnification obligations do not include Liabilities arising wholly out of the sole negligence of Railway or to the extent caused by the gross negligence or willful misconduct of Railway.

In addition to any other provision of this Agreement, in the event that all or any portion of this Article shall be deemed to be inapplicable for any reason, including without limitation as a result of a decision of an applicable court, legislative enactment or regulatory order, the parties agree that this Article shall be interpreted as requiring Contractor to indemnify Railway to the fullest extent permitted by applicable law. **THROUGH THIS AGREEMENT THE PARTIES EXPRESSLY INTEND FOR CONTRACTOR TO INDEMNIFY RAILWAY FOR RAILWAY'S ACTS OF NEGLIGENCE, BUT EXCLUDING CLAIMS WHOLLY CAUSED BY RAILWAY'S SOLE NEGLIGENCE AND EXCLUDING CLAIMS TO THE EXTENT THAT SUCH CLAIMS ARE CAUSED BY THE WILLFUL MISCONDUCT OR GROSS NEGLIGENCE OF RAILWAY.**

It is mutually understood and agreed that the assumption of liabilities and indemnification provided for in this Agreement survive any termination of this Agreement.

Section 2. TERM

This Agreement is effective from the date of the Contract until (i) the completion of the project set forth herein, and (ii) full and complete payment to Railway of any and all sums or other amounts owing and due hereunder.

Section 3. INSURANCE

Contractor must, at its sole cost and expense, procure and maintain during the life of this Agreement the following insurance coverage:

A. Commercial General Liability Insurance. This insurance shall contain broad form contractual liability with a combined single limit of a minimum of $2,000,000.00 per occurrence, and $4,000,000.00 in the aggregate, but in no event less than the amount otherwise carried by the Contractor. Coverage must be purchased on a post 1998 ISO occurrence form or equivalent and include coverage for, but not limited to, the following:

- Bodily Injury and Property Damage
- Personal Injury and Advertising Injury
- Fire legal liability
- Products and completed operations

This policy shall also contain the following endorsements, which shall be indicated on the certificate of insurance:

- The definition of insured contract shall be amended to remove any exclusion or other limitation for any work being done within 50 feet of railroad property.
- Waiver of subrogation in favor of and acceptable to Railroad.
- Additional insured endorsement in favor of and acceptable to Railroad.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

It is agreed that the workers' compensation and employers' liability related exclusions in the Commercial General Liability insurance policy(s) required herein are intended to apply to employees of the policy holder and shall not apply to Railroad employees.

No other endorsements limiting coverage as respects obligations under this Agreement may be included on the policy with regard to the work being performed under this Agreement.

B. Business Automobile Insurance. This insurance shall contain a combined single limit of at least $1,000,000 per occurrence, and include coverage for, but not limited to the following:

- Bodily injury and property damage
- Any and all vehicles owned, used or hired

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railroad.
- Additional insured endorsement in favor or and acceptable to Railroad.
- Separation of insureds.
- The policy shall be primary and non-contributing with respect to any insurance carried by Railroad.

C. Workers Compensation and Employers Liability Insurance. This insurance shall include coverage for, but not limited to:

- Contractor's statutory liability under the worker's compensation laws of the state(s) in which the work is to be performed. If optional under State law, the insurance must cover all employees anyway.
- Employers' Liability (Part B) with limits of at least $500,000 each accident, $500,000 by disease policy limit, $500,000 by disease each employee.

This policy shall also contain the following endorsements or language, which shall be indicated on the certificate of insurance:

- Waiver of subrogation in favor of and acceptable to Railroad.

D. Railroad Protective Liability Insurance. This insurance shall name only the Railroad as the Insured with coverage of at least $5,000,000 per occurrence and $10,000,000 in the aggregate. The policy shall be issued on a standard ISO form CG 00 35 10 93 and include the following:

- Endorsed to include the Pollution Exclusion Amendment (ISO form CG 28 31 10 93)
- Endorsed to include the Limited Seepage and Pollution Endorsement.

- Endorsed to remove any exclusion for punitive damages.
- No other endorsements restricting coverage may be added.
- The original policy must be provided to Railroad prior to performing any work or services under this Agreement

In lieu of providing a Railroad Protective Liability Policy, Contractor may participate in BNSF's Blanket Railroad Protective Liability Insurance Policy available to Contractor.

Other Requirements:

All policies (applying to coverage listed above) must not contain an exclusion for punitive damages and certificates of insurance must reflect that no exclusion exists.

Contractor agrees to waive its right of recovery against Railroad for all claims and suits against Railroad, except for claims and suits arising wholly out of the sole negligence, or to the extent caused by the gross negligence or willful misconduct, of Railroad. In addition, its insurers, through the terms of the policy or policy endorsement, waive their right of subrogation against Railroad for all claims and suits, except for claims and suits arising wholly out of the sole negligence, or to the extent caused by the gross negligence of willful misconduct, of Railroad. The certificate of insurance must reflect the waiver of subrogation endorsement. Contractor further waives its right of recovery, and its insurers also waive their right of subrogation against Railroad for loss of its owned or leased property or property under Contractor's care, custody or control, except for the right of recovery or right of subrogation arising wholly out of the sole negligence, or to the extent caused by the gross negligence or willful misconduct, of Railroad.

Contractor is not allowed to self-insure without the prior written consent of Railroad. If granted by Railroad, any deductible, self-insured retention or other financial responsibility for claims must be covered directly by Contractor in lieu of insurance. Any and all Railroad liabilities that would otherwise, in accordance with the provisions of this Agreement, be covered by Contractor's insurance will be covered as if Contractor elected not to include a deductible, self-insured retention or other financial responsibility for claims.

Prior to commencing the C&M Work, Contractor must furnish to Railroad acceptable certificate(s) of insurance including an original signature of the authorized representative evidencing the required coverage, endorsements, and amendments. The policy(ies) must contain a provision that obligates the insurance company(ies) issuing such policy(ies) to notify Railroad in writing at least 30 days prior to any cancellation, non-renewal, substitution or material alteration. This cancellation provision must be indicated on the certificate of insurance. Upon request from Railroad, a certified duplicate original of any required policy must be furnished. Certificate(s) should be sent to the following address:

Ebix BPO
PO Box 12010-BN
Hemet, CA 92546-8010
Fax number: 951-652-2882
Email: bnsf@ebix.com

Any insurance policy must be written by a reputable insurance company reasonably acceptable to Railroad or with a current Best's Guide Rating of A- and Class VII or better, and authorized to do business in the state(s) in which the service is to be provided.

Contractor represents that this Agreement has been thoroughly reviewed by Contractor's insurance agent(s)/broker(s), who have been instructed by Contractor to procure the insurance coverage required by this Agreement. Allocated Loss Expense must be in addition to all policy limits for coverages referenced above.

Not more frequently than once every five years, Railroad may reasonably modify the required insurance coverage to reflect then-current risk management practices in the railroad industry and underwriting practices in the insurance industry.

If any portion of the operation is to be subcontracted by Contractor, Contractor must require that its subcontractors provide and maintain the insurance coverages set forth herein, naming Railroad as an additional insured, and requiring that the subcontractors release, defend and indemnify Railroad to the same extent and under the same terms and conditions as Contractor is required to release, defend and indemnify Railroad herein.

Failure to provide evidence as required by this section will entitle, but not require, Railroad to immediately suspend work under this Agreement until such evidence is provided. Acceptance of a certificate that does not comply with this section will not operate as a waiver of Contractor's obligations hereunder.

The fact that insurance (including, without limitation, self-insurance) is obtained by Contractor will not be deemed to release or diminish the liability of Contractor including, without limitation, liability under the indemnity provisions of this Agreement. Damages recoverable by Railroad will not be limited by the amount of the required insurance coverage.

For purposes of this section, Railroad means "Burlington Northern Santa Fe, LLC", "BNSF Railway Company" and the subsidiaries, successors, assigns and affiliates of each.

Section 4. EXHIBIT C CONTRACTOR REQUIREMENTS

The Contractor must observe and comply with all provisions, obligations, requirements and limitations contained in the Contract, and the Contractor Requirements set forth on Exhibit C attached to this Agreement and the Contract, including, but not be limited to, payment of all costs incurred for any damages to Railway roadbed, tracks, and/or appurtenances thereto, resulting from use, occupancy, or presence of its employees, representatives, or agents or subcontractors on or about the construction site.

Section 5. TRAIN DELAY

Contractor is responsible for and hereby indemnifies and holds harmless Railway (including its affiliated railway companies, and its tenants) for, from and against all damages arising from any unscheduled delay to a freight or passenger train which affects Railway's ability to fully utilize its equipment and to meet customer service and contract obligations. Contractor will be billed, as further provided below, for the economic losses arising from loss of use of equipment, contractual loss of incentive pay and bonuses and contractual penalties resulting from train delays, whether caused by Contractor, or subcontractors, or by the Railway performing work under this Agreement. Railway agrees that it will not perform any act to unnecessarily cause train delay.

For loss of use of equipment, Contractor will be billed the current freight train hour rate per train as determined from Railway's records. Any disruption to train traffic may cause delays to multiple trains at the same time for the same period.

Additionally, the parties acknowledge that passenger, U.S. mail trains and certain other grain, intermodal, coal and freight trains operate under incentive/penalty contracts between Railway and its customer(s). Under these arrangements, if Railway does not meet its contract service commitments, Railway may suffer loss of performance or incentive pay and/or be subject to penalty payments. Contractor is responsible for any train performance and incentive penalties or other contractual economic losses actually incurred by Railway which are attributable to a train delay caused by Contractor or its subcontractors.

The contractual relationship between Railway and its customers is proprietary and confidential. In the event of a train delay covered by this Agreement, Railway will share information relevant to any train delay to the extent consistent with Railway confidentiality obligations. Damages for train delay are currently $382.20 per hour per incident. **THE RATE THEN IN EFFECT AT THE TIME OF PERFORMANCE BY THE CONTRACTOR HEREUNDER WILL BE USED TO CALCULATE THE ACTUAL COSTS OF TRAIN DELAY PURSUANT TO THIS AGREEMENT.**

Contractor and its subcontractors must give Railway's Project Engineer (402) 458-7537 thirty (30) days' minimum advance notice of the times and dates for proposed work windows. Railway and Contractor will establish mutually agreeable work windows for the project. Railway has the right at any time to revise or change the work windows due to train operations or service obligations. Railway will not be responsible for any additional costs or expenses resulting from a change in work windows. Additional costs or expenses resulting from a change in work windows shall be accounted for in Contractor's expenses for the project.

Contractor and subcontractors must plan, schedule, coordinate and conduct all Contractor's work so as to not cause any delays to any trains.

[Signature page follows]

Kindly acknowledge receipt of this letter by signing and returning to the Railway two original copies of this letter, which, upon execution by Railway, will constitute an Agreement between us.

_____	
(Contractor)	**BNSF Railway Company**
By:_____	By:_____
Printed Name: _____	Name:_____
Title:_____	*Project Engineer*
Contact Person: _____	Accepted and effective this _____day of 20__.
Address: _____	
_____	
City:_____ State:___ Zip:____	
Fax: _____	
Phone: _____	
E-mail:_____	

ADDENDUM NO. 1

WEST HAYMARKET JOINT PUBLIC AGENCY
WEST HAYMARKET ARENA SITE DIESEL FUEL PLUME REMEDIATION
PROJECT 870601
SPEC. NO. 10-230

Addendum #1 to Bid 10-230 for above project, scheduled to close Wednesday, December 1, 2010 at 12:00 noon.

TO ALL PROSPECTIVE BIDDERS:

1. The Bid Proposal has now been attached.

2. Exhibit BB - Temporary Access License for Survey/Geotech/Environmental Activities/Advance Construction has now been attached.

All other terms and conditions shall remain unchanged.

Vince M. Mejer
Purchasing Agent

EXHIBIT BB

TEMPORARY ACCESS LICENSE FOR SURVEY / GEOTECH / ENVIRONMENTAL ACTIVITIES / ADVANCE CONSTRUCTION

THIS TEMPORARY ACCESS LICENSE FOR SURVEY / GEOTECH / ENVIRONMENTAL ACTIVITIES / ADVANCE CONSTRUCTION ("**License**") is made to be effective as of the ____ day of _____, 2010 ("**Effective Date**") by and between **BNSF RAILWAY COMPANY**, a Delaware corporation ("**Licensor**") and the **CITY OF LINCOLN, NEBRASKA**, a Nebraska municipal corporation ("**Licensee**").

NOW THEREFORE, in consideration of the mutual covenants contained herein, the parties agree to the following:

1. GENERAL.

1.1 Licensor hereby grants Licensee a temporary non-exclusive license, subject to all rights, interests, and estates of third parties, including, without limitation, any leases, licenses, easements, liens or other encumbrances, and upon the terms and conditions set forth below, to use the areas of Licensor's property labeled as "Existing BNSF Property" and shown purple on **Exhibit B** attached hereto and incorporated herein by reference, situated at or near Lincoln, County of Lancaster, State of Nebraska, Line Segment 2, Mile Post 59.17 to 60.0 (the "**Premises**") for the purposes specified in **Section 1.3** below (the "**Permitted Uses**").

1.2 In the event the Permitted Uses will affect any improvements or facilities of Licensor or Licensor's existing lessees, licensees, easement beneficiaries, or lien holders (collectively "**Other Improvements**"), if any, or interfere with the use of the Other Improvements, Licensee will be responsible at Licensee's sole risk to locate and make any adjustments necessary to such Other Improvements. Licensee must contact the owner(s) of the Other Improvements notifying them of any work that may damage and/or interfere with the Other Improvements and obtain the owner's written approval prior to initiating any of the Permitted Uses.

1.3 Licensee shall use the Premises exclusively as a site for performing: (a) surveying, (b) geotechnical soil borings, and (c) environmental and engineering explorations, such environmental and engineering explorations to include one of, or a combination of, the following categories of work:

(i) Drilling of soil test borings;
(ii) Installation of groundwater monitoring wells;
(iii) Performing groundwater inflow tests on wells;
(iv) Obtaining groundwater samples from wells;
(v) Maintenance and/or checking groundwater level in wells approximately one time per month;
(vi) Performance of any necessary remediation as determined by Licensor in its sole discretion or by applicable state and/ or federal regulations at Licensee's sole cost and expense. In the event applicable state and/or federal regulations require that the Premises be remediated, Licensee will obtain a No Further Action Letter, Release, or other such equivalent closure document from the state or federal agency having jurisdiction over the remediation of the Premises. Such No Further Action Letter, Release, or other such equivalent closure document shall not be contingent upon or specify the performance of any further work or conditions with respect to the Premises.

Licensee shall not use the Premises for any other purpose whatsoever. Licensee shall not use or store hazardous substances, as defined by the Comprehensive Environmental Response, Compensation, and Liability Act, as amended ("**CERCLA**") or petroleum or oil as defined by applicable Environmental Laws on the Premises.

1.4 Licensor and Licensee mutually agree that no construction activities for the Permitted Uses, nor future maintenance of any improvements which have a reasonable likelihood to delay train traffic on Licensor's main lines, will be permitted during the fourth quarter of each calendar year. Emergency work will be permitted only upon prior notification to Licensor's Network Operations Center (telephone number: 800 832-5452). Licensor and Licensee mutually understand and agree that trains cannot be subjected to delay during this time period.

1.5 In case of the eviction of Licensee by anyone owning or claiming title to or any interest in the Premises, Licensor shall not be liable to refund Licensee any compensation paid hereunder or for any damage Licensee sustains in connection therewith.

1.6 Any contractors or subcontractors performing work on the Premises, or entering the Premises on behalf of Licensee shall be deemed servants and agents of Licensee for purposes of this License.

2. TERM. This License shall commence on the Effective Date and, subject to prior termination as hereinafter described, shall continue until completion of the Permitted Uses, but in no event later than the date that is the earliest to occur of: (i) the end of the Development Period (as defined in the Master Agreement [defined below]), or (ii) December 31, 2014.

3. COMPENSATION.

3.1 Licensee shall pay Licensor, prior to the Effective Date, the sum of No Dollars ($0) as compensation for the use of the Premises.

3.2 Subject to the provisions of the C&M Agreement (as defined below) concerning Licensee's reimbursement of costs and expenses, including without limitation flagging costs, incurred by Licensor in connection with Licensee's use of the Premises, Licensee agrees to reimburse Licensor (within thirty (30) days after receipt of bills therefor) for all other costs and expenses incurred by Licensor in connection with Licensee's use of the Premises. All invoices are due thirty (30) days after the date of invoice. In the event that Licensee shall fail to pay any monies due to Licensor within thirty (30) days after the invoice date, then Licensee shall pay interest on such unpaid sum from thirty (30) days after its invoice date to the date of payment by Licensee at an annual rate equal to (i) the greater of (a) for the period January 1 through June 30, the prime rate last published in *The Wall Street Journal* in the preceding December plus two and one-half percent (2 1/2%), and for the period July 1 through December 31, the prime rate last published in *The Wall Street Journal* in the preceding June plus two and one-half percent (2 1/2%), or (b) twelve percent (12%), or (ii) the maximum rate permitted by law, whichever is less.

4. COMPLIANCE WITH LEGAL REQUIREMENTS AND LICENSOR REQUIREMENTS.

4.1 Licensee shall observe and comply with any and all laws, statutes, regulations, ordinances, orders, covenants, restrictions, or decisions of any court of competent jurisdiction ("**Legal Requirements**") relating to the use of the Premises.

4.2 Prior to entering the Premises, Licensee shall and shall cause its contractor to comply with all of Licensor's applicable safety rules and regulations. Prior to commencing any work on the Premises, Licensee shall complete and shall require its contractor to complete the

safety training program at the Website "http://contractororientation.com". This program must be completed no more than one year in advance of Licensee's entry on the Premises.

4.3 Licensee shall, at all times, comply with all provisions contained in that certain Construction and Maintenance Agreement between Licensor and Licensee of even date herewith (the "**C&M Agreement**"). In the event of conflicts between the terms of this License and the C&M Agreement, the most restrictive provisions shall apply to Licensee.

5. DEFINITION OF COST AND EXPENSE. For the purpose of this License, "cost" or "costs" "expense" or "expenses" includes, but is not limited to, actual labor and material costs including all assignable additives, and material and supply costs at current value where used.

6. RIGHT OF LICENSOR TO USE. Licensor excepts and reserves the right, to be exercised by Licensor and any other parties who may obtain written permission or authority from Licensor:

6.1 to maintain, renew, use, operate, change, modify and relocate any existing pipe, power, communication lines and appurtenances and other facilities or structures of like character upon, over, under or across the Premises;

6.2 to construct, maintain, renew, use, operate, change, modify and relocate any tracks or additional facilities or structures upon, over, under or across the Premises; or

6.3 to use the Premises in any manner as Licensor in its sole discretion deems appropriate, provided Licensor uses all commercially reasonable efforts to avoid material interference with the use of the Premises by Licensee for the Permitted Uses.

7. LICENSEE'S OPERATIONS.

7.1 Licensee shall notify Licensor's Project Engineer, Gerald Maczuga, at 201 N. 7th Street, Lincoln, NE 68508, telephone (402) 458-7537, and Licensor's Remediation Manager, Greg Jeffries, telephone (763) 782-3490, at least ten (10) business days prior to initially entering the Premises and prior to entering the Premises for any subsequent maintenance thereon (if applicable). After completion of use of the Premises for the Permitted Uses, Licensee shall notify Licensor in writing that such use has been completed.

7.2 In performing the Permitted Uses, Licensee shall use only public roadways to cross from one side of Licensor's tracks to the other. In the event Licensee must cross from one side of Licensor's tracks to the other at a location or locations other than a public roadway, and such location or locations are approved by Licensor in advance, then Licensee shall enter into Licensor's Agreement for Private Crossing for each such private crossing location, each such Agreement for Private Crossing to be in the form attached to the Master Agreement as Exhibit UU.

7.3 Prior to the commencement of any work, Licensee shall submit a workplan to Licensor's Remediation Manager, Greg Jeffries, 80 44th Avenue NE, Minneapolis, MN 55421, telephone (763) 782-3490, for Licensor's review. No work, as set forth in **Section 1.3**, may be conducted by Licensee without Licensor's written consent of said workplan for the Permitted Uses. Such review and consent by Licensor shall not constitute the sufficiency or effectiveness of any workplan.

7.4 No monitoring wells may be installed on the property prior to written approval of Licensee's workplan for the installation of such monitoring wells. Upon obtaining such consent, Licensee shall provide Licensor the location of said well(s) relative to Licensor's nearest trackage, identifying Licensor's nearest Mile Post sign number.

7.5 Under no conditions shall Licensee be permitted to conduct any tests, investigations or any other activity using mechanized equipment and/or machinery, or place or store any mechanized equipment, tools or other materials, within twenty-five (25) feet of the centerline of any railroad track on the Premises unless Licensee has obtained prior written approval from Licensor. Licensee shall, at its sole cost and expense, perform all activities on and about the Premises in such a manner as not at any time to be a source of danger to or interference with the existence or use of present or future tracks, roadbed or property of Licensor, or the safe operation and activities of Licensor. If ordered to stop using the Premises at any time by Licensor's personnel due to any hazardous condition, Licensee shall immediately do so. Notwithstanding the foregoing right of Licensor, the parties agree that Licensor has no duty or obligation to monitor Licensee's use of the Premises to determine the safe nature thereof, it being solely Licensee's responsibility to ensure that Licensee's use of the Premises is safe. Neither the exercise nor the failure by Licensor to exercise any rights granted in this Section will alter the liability allocation provided by this License.

7.6 Prior to Licensee conducting any excavating or boring work on or about any portion of the Premises, Licensee shall explore the proposed location for such work with hand tools to a depth of at least three (3) feet below the surface of the ground to determine whether pipelines or other structures exist below the surface, provided, however, that in lieu of the foregoing, Licensee shall have the right to use suitable detection equipment or other generally accepted industry practice (*e.g.*, consulting with the Underground Services Association) to determine the existence or location of pipelines and other subsurface structures prior to drilling or excavating with mechanized equipment. Upon Licensee's written request, which shall be made thirty (30) business days in advance of Licensee's requested entry on the Premises, Licensor will provide Licensee any information that Licensor's Engineering Department has in its possession concerning the existence and approximate location of Licensor's underground utilities and pipelines on the Premises. Prior to conducting any such boring work, Licensee will review all such material. Licensor does not warrant the accuracy or completeness of information relating to subsurface conditions and Licensee's operations will be subject at all times to the liability provisions herein.

7.7 For all bores greater than 26-inch diameter and at a depth less than 10.0 feet below bottom of rail, a soil investigation will need to be performed by Licensee and reviewed by Licensor prior to construction. This study is to determine if granular material is present, and to prevent subsidence during the installation process. If the investigation determines in Licensor's reasonable opinion that granular material is present, Licensor may select a new location for Licensee's use, or may require Licensee to furnish for Licensor's review and approval, in its sole discretion a remedial plan to deal with the granular material. Once Licensor has approved any such remedial plan in writing, Licensee shall, at its sole cost and expense, carry out the approved plan in accordance with all terms thereof and hereof.

7.8 Any open hole, boring or well constructed upon Premises by Licensee shall be safely covered and secured at all times when Licensee is not working in the actual vicinity thereof. Following completion of that portion of the work, all holes or borings constructed on the Premises by Licensee shall be:

7.8.1 filled in to surrounding ground level with compacted bentonite grout; or

7.8.2 otherwise secured or retired in accordance with any applicable Legal Requirement. No excavated materials may remain on the Premises for more than ten (10) days, but must be properly disposed of by Licensee in accordance with applicable Legal Requirements.

7.9 Upon completion of Licensee's work on the Premises or upon termination of this License, whichever shall occur first, Licensee shall, at its sole cost and expense:

7.9.1 remove all of its equipment from the Premises;

7.9.2 report and restore any damage to the Premises arising from, growing out of, or connected with Licensee's use of the Premises;

7.9.3 remedy any unsafe conditions on the Premises created or aggravated by Licensee; and

7.9.4 leave the Premises in the condition which existed as of the Effective Date.

7.10 Licensee's on-site supervisors shall retain/maintain a fully-executed copy of this License at all times while on the Premises.

8. LIABILITY. During the term of this License, Licensee shall comply with all provisions contained in Sections 3.6 and 3.7 of the C&M Agreement, and all such provisions contained in Sections 3.6 and 3.7 of the C&M Agreement are hereby incorporated herein by reference.

9. PERSONAL PROPERTY WAIVER. ALL PERSONAL PROPERTY, INCLUDING, BUT NOT LIMITED TO, FIXTURES, EQUIPMENT, OR RELATED MATERIALS UPON THE PREMISES WILL BE AT THE RISK OF LICENSEE ONLY, AND LICENSOR WILL NOT BE LIABLE FOR ANY DAMAGE THERETO OR THEFT THEREOF, WHETHER OR NOT DUE IN WHOLE OR IN PART TO THE NEGLIGENCE OF LICENSOR.

10. INSURANCE. During the term of this License, Licensee shall comply with all provisions contained in Section 3.8 of the C&M Agreement, and all such provisions contained in Section 3.8 of the C&M Agreement are hereby incorporated herein by reference.

11. ENVIRONMENTAL.

11.1 Licensee shall strictly comply with all federal, state and local environmental laws and regulations in its use of the Premises, including, but not limited to, the Resource Conservation and Recovery Act, as amended (RCRA), the Clean Water Act, the Oil Pollution Act, the Hazardous Materials Transportation Act, CERCLA (collectively, the "**Environmental Laws**"). Licensee shall not maintain a treatment, storage, transfer or disposal facility, or underground storage tank, as defined by Environmental Laws on the Premises. Licensee shall not release or suffer the release of oil or hazardous substances, as defined by Environmental Laws on or about the Premises.

11.2 Licensee shall give Licensor immediate notice to Licensor's Resource Operations Center at (800) 832-5452 of any release of hazardous substances on or from the Premises, violation of Environmental Laws, or inspection or inquiry by governmental authorities charged with enforcing Environmental Laws with respect to Licensee's use of the Premises. Licensee shall use the best efforts to promptly respond to any release on or from the Premises. Licensee also shall give Licensor immediate notice of all measures undertaken on behalf of Licensee to investigate, remediate, respond to or otherwise cure such release or violation.

11.3 Licensee recognizes and assumes all responsibility for all present and future environmental obligations imposed under applicable Environmental Laws, regulations or other such requirements relating to contamination of the Premises or groundwater thereunder arising from, caused by, contributed to, or in any way growing out of Licensee's operations. Licensee further agrees to undertake at its sole cost and expense any cleanup of any contamination of the

Premises and groundwater thereunder arising from, caused by, contributed to, or in any way growing out of Licensee's operations as required by applicable laws and regulations.

11.4 Licensee agrees to waive any and all statutes of limitations applicable to any controversy or dispute arising out of **Section 11.3**, and Licensee further agrees that it will not raise or plead a statute of limitations defense against Licensor in any action arising out of Licensee's failure to comply with the provisions of **Section 11.3**.

11.5 In the event that Licensor has notice from Licensee or otherwise of a release or violation of Environmental Laws on, from, or affecting the Premises which occurred or may occur during the term of this License, Licensor may require Licensee, at Licensee's sole risk and expense, to take timely measures to investigate, remediate, respond to or otherwise cure such release or violation affecting the Premises or Licensor's right-of-way.

11.6 Licensee shall promptly report to Licensor in writing any conditions or activities upon the Premises known to Licensee which create a risk of harm to persons, property or the environment and shall take whatever action is necessary to prevent injury to persons or property arising out of such conditions or activities; provided, however, that Licensee's reporting to Licensor shall not relieve Licensee of any obligation whatsoever imposed on it by this License. Licensee shall promptly respond to Licensor's request for information regarding said conditions or activities.

11.7 Licensee will promptly transmit to Licensor copies of all reports, data boring logs, well completion and other information obtained from all operations on the Premises to Licensor's Remediation Manager. Licensor shall have the option to obtain split samples and otherwise have reasonable access to the groundwater monitoring well(s) subject to this License for the purpose of obtaining samples or other information from the monitoring well(s). Licensee shall also advise Licensor of any applicable health and safety plans or other similar programs in effect with respect to the operations on the Premises.

11.8 Unless otherwise required by applicable law, Licensee shall keep confidential and shall not disclose any reports, data boring logs, well completion and any other information obtained in connection with this License to third parties without the prior written consent of Licensor.

12. ALTERATIONS. Licensee may not make any alterations of the Premises or permanently affix anything to the Premises or any buildings or other structures adjacent to the Premises without Licensor's prior written consent.

13. NO WARRANTIES. LICENSOR'S DUTIES AND WARRANTIES ARE LIMITED TO THOSE EXPRESSLY STATED IN THIS LICENSE AND SHALL NOT INCLUDE ANY IMPLIED DUTIES OR IMPLIED WARRANTIES, NOW OR IN THE FUTURE. NO REPRESENTATIONS OR WARRANTIES HAVE BEEN MADE BY LICENSOR OTHER THAN THOSE CONTAINED IN THIS LICENSE. LICENSEE HEREBY WAIVES ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, WITH RESPECT TO THE PREMISES OR WHICH MAY EXIST BY OPERATION OF LAW OR IN EQUITY, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY, HABITABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

14. QUIET ENJOYMENT. LICENSOR DOES NOT WARRANT ITS TITLE TO THE PROPERTY NOR UNDERTAKE TO DEFEND LICENSEE IN THE PEACEABLE POSSESSION OR USE THEREOF. NO COVENANT OF QUIET ENJOYMENT IS MADE.

15. DEFAULT. If default shall be made in any of the covenants or agreements of Licensee contained in this License, Licensor may pursue any and all remedies set forth in Section 24 of the

Master Agreement. The remedy set forth in this **Section 15** shall be in addition to, and not in limitation of, any other remedies that Licensor may have at law or in equity.

16. TERMINATION.

16.1 Upon termination of this License, should Licensee have installed its monitoring well(s) on the Premises, once Licensee's well(s) are retired, Licensee shall provide Licensor a copy of the closure documents, submitted directly to Licensor's Remediation Manager at 80 44th Avenue NE, Minneapolis, MN 55421.

16.2 If Licensee fails to surrender to Licensor the Premises, upon any termination of this License, all liabilities and obligations of Licensee hereunder shall continue in effect until the Premises are surrendered. Termination shall not release Licensee from any liability or obligation, whether of indemnity or otherwise, resulting from any events happening prior to the date of termination.

17. ASSIGNMENT. Neither Licensee, nor the heirs, legal representatives, successors or assigns of Licensee, nor any subsequent assignee, shall assign, transfer, sell, or hypothecate this License or any interest herein (either voluntarily or by operation of law), without the prior written consent and approval of Licensor, which may be withheld in Licensor's sole discretion. Notwithstanding any contrary provision herein, Licensee shall have the right to assign this License to the West Haymarket Joint Public Agency, a Nebraska joint public agency ("**JPA**") without further consent of Licensor, provided (i) Licensee delivers prior written notification to Licensor of the assignment, (ii) Licensee and JPA enters into Licensor's then-standard Consent to Assignment form, pursuant to which Licensee will remain jointly and severally liable for all of Licensee's obligations hereunder, including without limitation Licensee's liability and indemnification obligations; provided that Licensor agrees it will first send any claim or notice of default to JPA and will not pursue any action against Licensee until thirty (30) days after the date of such claim or notice to JPA, unless failure to pursue action against Licensee during such time would otherwise prejudice Licensor's rights, and (iii) Licensee's entire interest under that certain Master Development Agreement between Licensor and Licensee of even date herewith (the "**Master Agreement**"), the Exchange Agreement (as defined in the Master Agreement), the C&M Agreement, and all Rights of Entry agreements (as defined in the Master Agreement) are assigned at the same time to JPA.

18. NOTICES. Any notice required or permitted to be given hereunder by one party to the other shall be in writing and the same shall be given and shall be deemed to have been served and given if (i) placed in the United States mail, certified, return receipt requested, or (ii) deposited into the custody of a nationally recognized overnight delivery service, addressed to the party to be notified at the address for such party specified below, or to such other address as the party to be notified may designate by giving the other party no less than thirty (30) days' advance written notice of such change in address.

If to Licensor: Jones Lang LaSalle Global Services - RR, Inc.
3017 Lou Menk Drive, Suite 100
Fort Worth, TX 76131
Attn: Licenses/Permits

with a copy to: BNSF Railway Company
2500 Lou Menk Dr. – AOB3
Fort Worth, TX 76131
Attn: Senior Manager Real Estate

If to Licensee: City of Lincoln, Nebraska
555 South 10th Street
Lincoln, NE 68508
Attn: City Attorney

19. SURVIVAL. Neither termination nor expiration will release either party from any liability or obligation under this License, whether of indemnity or otherwise, resulting from any acts, omissions or events happening prior to the date of termination or expiration, or, if later, the date when the Premises are restored to its condition as of the Effective Date.

20. RECORDATION. It is understood and agreed that this License shall not be filed of record with the Lancaster County, Nebraska Register of Deeds Office or otherwise recorded in the official records of Lancaster County, Nebraska.

21. APPLICABLE LAW. All questions concerning the interpretation or application of provisions of this License shall be decided according to the substantive laws of the State of Nebraska without regard to conflicts of law provisions.

22. VENUE. To the fullest extent permitted by law any dispute arising under or in connection with this License or related to any subject matter which is the subject of this License shall be subject to the sole and exclusive jurisdiction of the United States District Court for the District of Nebraska. The aforementioned choice of venue is intended by Licensor and Licensee to be mandatory and not permissive. Licensor and Licensee each hereby irrevocably consents to the jurisdiction of the United States District Court for the District of Nebraska in any such dispute and irrevocably waives, to the fullest extent permitted by law, any objection that it may now have or hereafter have to the laying of venue in such court and that any such dispute which is brought in such court has been brought in an inconvenient forum.

23. SEVERABILITY. To the maximum extent possible, each provision of this License shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this License shall be prohibited by, or held to be invalid under, applicable law, such provision shall be ineffective solely to the extent of such prohibition or invalidity, and this shall not invalidate the remainder of such provision or any other provision of this License.

24. INTEGRATION. This License is the full and complete agreement between Licensor and Licensee with respect to all matters relating to Licensee's use of the Premises, and supersedes any and all other agreements between the parties hereto relating to Licensee's use of the Premises as described herein. However, nothing herein is intended to terminate any surviving obligation of Licensee or Licensee's obligation to defend and hold Licensor harmless in any prior written agreement between the parties.

25. MISCELLANEOUS.

25.1 In the event that Licensee consists of two or more parties, all the covenants and agreements of Licensee herein contained shall be the joint and several covenants and agreements of such parties.

25.2 The waiver by Licensor of the breach of any provision herein by Licensee shall in no way impair the right of Licensor to enforce that provision for any subsequent breach thereof.

25.3 All provisions contained in this License shall be binding upon, inure to the benefit of, and be enforceable by the respective successors and assigns of Licensor and Licensee to the same extent as if each such successor and assign was named a party to this License.

25.4 Jones Lang LaSalle Global Services – RR, Inc. is acting as representative for BNSF Railway Company.

[*Signature page follows*]

IN WITNESS WHEREOF, this License has been duly executed by the parties as of the date below each party's signature; to be effective, however, as of the Effective Date above.

LICENSOR:

BNSF Railway Company

By: Jones Lang LaSalle Global Services – RR, Inc.

By: _____

Name: _____

Title: _____

Date: _____

LICENSEE:

City of Lincoln, Nebraska

By: _____

Name: _____

Title: _____

Date: _____

EXHIBIT B

Premises

ADDENDUM NO. 2

WEST HAYMARKET JOINT PUBLIC AGENCY
WEST HAYMARKET ARENA SITE DIESEL FUEL PLUME REMEDIATION
PROJECT 870601
SPEC. NO. 10-230

TO ALL PROSPECTIVE BIDDERS:

1. Correct pre-bid meeting is to be Wednesday, November 17, 2010, at 8:30 a.m. at Engineering Services, Lincoln, NE.

All other terms and conditions shall remain unchanged.

Vince M. Mejer
Purchasing Agent

CITY OF LINCOLN
NEBRASKA

MAYOR CHRIS BEUTLER
lincoln.ne.gov

Engineering Services
Public Works and Utilities Department
Karl Fredrickson, Director
531 Westgate Blvd.
Suite 100
Lincoln, Nebraska 68528
402-441-7711
fax: 402-441-6576

October 3, 2007

Mr. Kirk Fredrichs
Federal Highway Administration - Nebraska Division
100 Centennial Mall North Room 220
Lincoln, NE 68508

RE: **City of Lincoln, Nebraska - Pedestrian Master Plan & Transition Plan for facilities located in street Right-of-Way.**

Dear Kirk,

Enclosed you will find the final 2007 versions of the **Pedestrian Master Plan** and **Transition Plan** for the City of Lincoln, Nebraska "Right-of-Way Pedestrian Facilities". Included as part of these plans are a map of the construction schedule for repair of sidewalks, a trails facilities plan and our newly adopted A.D.A. Grievance Procedure. Also, I have included correspondence sent to two organizations for the blind and visually impaired and to the League of Human Dignity. As of this date, we have not received any written or verbal comments related to the plans from any of these three agencies. We have received a letter of support from our local Pedestrian/Bicycle Advisory Committee, which is also included.

Please feel free to contact me with any questions or comments. As stated in the **Transition Plan**, we are currently working on gathering data on where curb ramps are in place and where they are absent, with a schedule of completion by 2009. Once this is completed, we will identify a construction schedule for building curb ramps to comply with A.D.A. Until that time we will continue adding and replacing ramps with all sidewalk or street projects or as specific requests are made.

Sincerely,

Scott A. Opfer, Manager
Traffic & Engineering Services Operations
Public Works & Utilities Department
City of Lincoln, Nebraska

cc: Trish Owen, Mayor's Office
Karl Fredrickson, Public Works Director
Roger Figard, City Engineer
Randy Hoskins, Asst. City Engineer
Joe Rupp, Asst. City Attorney
Harry Kroos

Recreational Trails & Grade Separated Crossings

The planning for future recreational trails, as well as for grade separated crossings, has been identified in the most recent update of the Lincoln/Lancaster County Comprehensive Plan (Attachment C). Limited funding for implementation is or will be included in either the Parks & Recreation Department's or Public Works & Utilities Department's Capital Improvement Programs. This 25 year plan also identifies "Strategies" for extension of the existing trail system, as well as for exploring options to establish dedicated funding for not only installation of new facilities, but also for rehabilitation and maintenance of existing facilities.

Pedestrian & School Crossings

The level of protection for pedestrians using pedestrian crossings or school crossings is determined based upon detailed engineering studies. The standards and guidelines used to determine the level of protection are set forth in the Manual On Uniform Traffic Control Devices (MUTCD). Pedestrian crossings, which are identified as crossings where consistently large numbers of pedestrians of all ages are crossing a street daily, are evaluated primarily on a request basis. Evaluation criteria for school crossings, which are identified as crossings where consistently large numbers of school children are crossing a street daily, have been set forth in the City of Lincoln's *School Crossing Protection Manual.* At locations where traffic signal control is in place, other specialized traffic control may also be added to help increase the safety and efficiency of the crossing. "25 mph School Speed Zones" and "Prepare to Stop When Flashing" flashers are installed at locations where large concentrations of elementary or middle school children are crossing an arterial street. Criteria for installation of these devices is also included in the *School Crossing Protection Manual.* Examples of other additional traffic control are things such as extending pedestrian clearance intervals based upon the types of pedestrians using the crossing. For instance, at many heavily used school crossings where the primary use of the crossing is by elementary age school children, a reduced walking speed is used when calculating the pedestrian clearance time, thus extending the amount of time given for pedestrians to clear the street. Also being used are "Countdown Pedestrian Heads". These are being installed to better inform pedestrians of the time remaining to clear the street.

Accommodations for the Blind and Visually Impaired

The use of specialized traffic control for the blind and/or visually impaired people in our community is currently being implemented as requests are made to the Public Works & Utilities Department, Engineering Services Division. Specialized "Pedestrian Push Buttons", which have features which provide other sensory information for the blind or visually disabled pedestrian, are one example of this specialized traffic control and have been installed at some signalized locations in Lincoln. Other measures, such as building "refuge areas" at pedestrian crossings, providing detectable guidance through the use of tactile pathways and working to educate the blind and visually disabled on proper street crossing techniques are all potential solutions for helping to provide for the needs of this portion of our community.

The final component for working towards achieving accessible curb ramps and sidewalk in the City of Lincoln, is the maintenance of existing facilities. As a result of an effort initiated in 1988, the City initiated an comprehensive sidewalk repair program with a goal to notify property owners in selected areas of their responsibility to repair sidewalks and complete repairs in the entire community over a seven year schedule. Representatives from the community initiated a petition in 1990, which placed a ballot initiative in the City's general election which amended the City Charter and assigned the responsibility for sidewalk repair from the property owner to the City. The election initiative was successful and a follow-up vote held in 1992 affirmed the previous vote. Therefore, the City of Lincoln will appropriate funds annually, for sidewalk repair, curb ramp construction and reconstruction to comply with ADA standards. Repair projects will follow the schedule identified on the ***6 Year Sidewalk Reconstruction Map*** (Attachment A) which is based upon available funding. This map will be updated annually to identify additional neighborhood repair projects. The size of the future neighborhood projects will again be dependant upon available funding. In addition, the Public Works & Utilities Department will continue to build curb ramps as specific requests are made to the Sidewalk Office. Funding for these requests will also come from the funds allocated for sidewalk repair. A more specific schedule for installation of ramps in neighborhoods where ramps do not currently exist will be developed following completion of G.I.S. Ramp Database.

G.I.S. Sidewalk and Ramp Database

A critical tool needed to assist in better identifying existing conditions is the development of a GIS map and inventory of the sidewalk and curb ramp system within the City of Lincoln. The Public Works & Utilities Department has initiated this survey with a goal of completion by 2009. This inventory will assist in determining where sidewalks and curb ramps are not present, which will allow better planning and identification of future dollars needed to complete these two critical pedestrian facilities.

Grievance Procedure

The final piece to the overall Pedestrian Master Plan has been developed to comply with the 1992 C.F.R. and deals with a formal process for receiving and processing complaints/requests and for dealing with grievances if the citizen doesn't agree with the response given by the City. This *"Grievance Procedure"* is now in place and meant to better serve the citizens of our community. (See Attachment B)

Attachment B

Grievance Procedure under The Americans with Disabilities Act

The City of Lincoln has adopted a grievance procedure providing prompt and equitable resolution of complaints alleging noncompliance with the Americans with Disabilities Act of 1990.

A complaint may be filed in writing or, when requested as an accommodation, in another format (such as personal interviews or a tape recording of the complaint) that accommodates the complainant's disability. The complaint should provide the complainant's name, address and phone number, a detailed description of the incident or condition, the location, date and time of the incident.

The complaint should be submitted by the grievant as soon as possible but no later than 60 calendar days after the alleged violation.

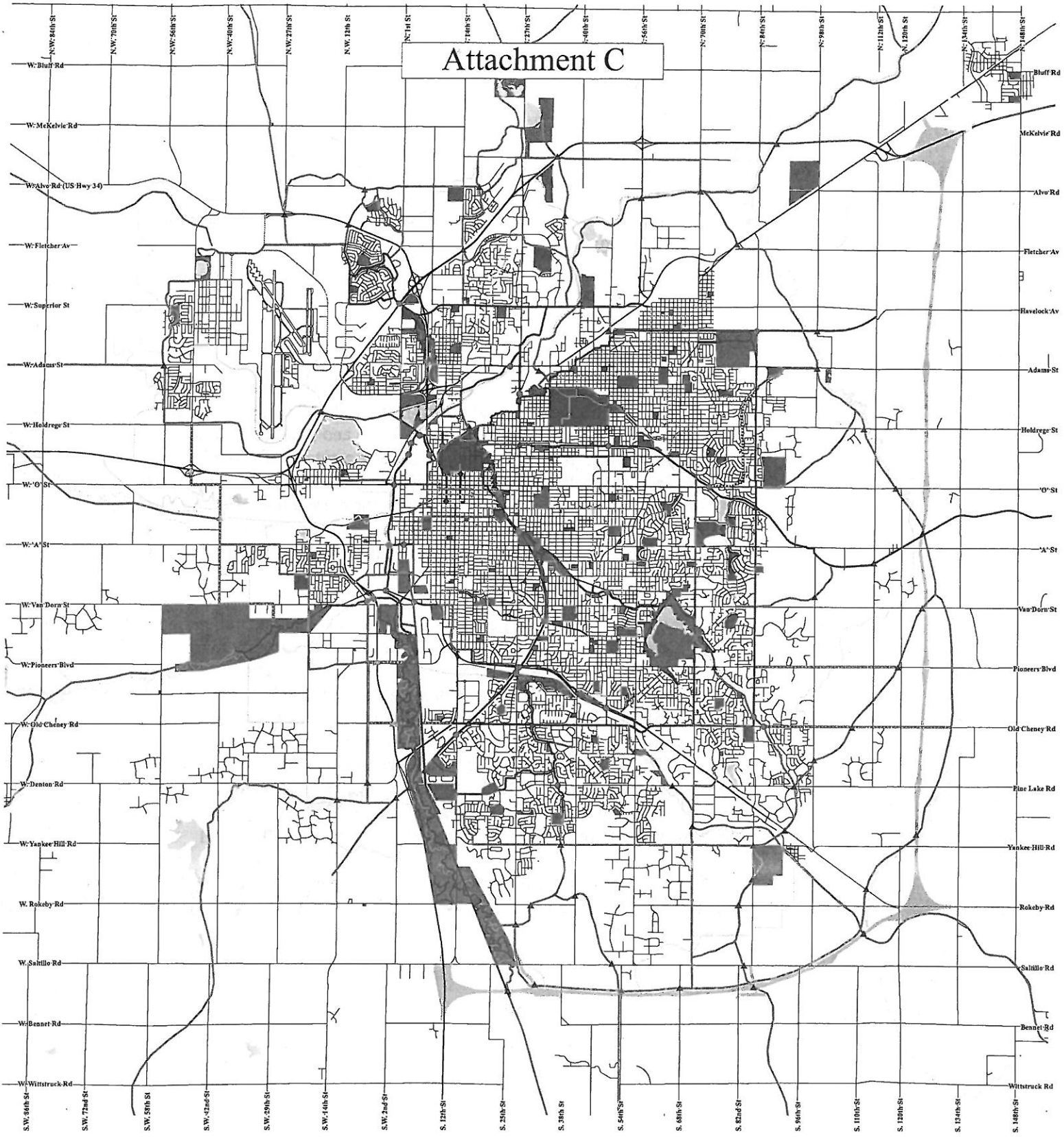
I. City Facilities, Programs, Service or Activities

Complaints concerning access to City facilities, programs, services or activities should be addressed to:

ADA Coordinator
City Attorney's Office
575 S. 10th Street, Suite #4201
Lincoln, NE 68508
Voice: (402) 441-7281
Fax: (402) 441-8812

A. Upon receipt of a complaint, the Mayor's Office will provide the appropriate department ADA Coordinator with a copy of the complaint. The department ADA Coordinator will then conduct an investigation. The departmental ADA Coordinator may seek assistance of the Mayor's Office and the City Attorney in investigating and responding to the complaint.

B. Within thirty calendar (30) days of the receipt of the complaint, the department ADA Coordinator and department head will respond in writing or in a format accessible to the complainant, such as large print, Braille, or audio tape. The response will explain the position of the City, and, where appropriate, offer options for substantive resolution of the complaint.



MULTI-USE TRAILS AND BICYCLE FACILITIES PLAN

- Beltway Corridor
- Schools
- Parks
- Future Service Limit
- Current Trails
- Future Trails
- Preserve Trail ROW
- Existing On-Street Routes
- Existing Bike Lanes
- Potential Bike Lanes
- Existing Grade Separation
- Future Grade Separation
- Trail Location or Bike Route To Be Determined

N W E S

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CITY OF LINCOLN
NEBRASKA

MAYOR CHRIS BEUTLER
lincoln.ne.gov

Engineering Services
Public Works and Utilities Department
Karl Fredrickson, Director
531 Westgate Blvd.
Suite 100
Lincoln, Nebraska 68528
402-441-7711
fax: 402-441-6576

July 24, 2007

American Council of the Blind
Attn: Mr. Bill Orester
P.O. Box 94641
Lincoln, NE 68509

RE: **A.D.A. Transition Plan Review**

Dear Mr. Orester:

As you are aware, the Americans with Disabilities Act of 1990 (ADA) placed a requiremer on all State and local governments with 50 or more employees to perform a self evaluation of their current services, policies and practices that do not or may not meet ADA requirements. It also required the development of a Transition Plan addressing these deficiencies. This self-evaluation and Transition Plan were to be completed by 1995. The City of Lincoln, met these requirements with the completion of the self-evaluation and Transition Plan in August of 1992. Since that time, the City has made every attempt to provide public facilities which meet ADA requirements in accordance with the original 1992 plan.

One of the other requirements of ADA is that the plan be updated periodically and that the public, including the disabled community, have the opportunity to review the plan. We would invite you, as a representative of the American Council of the Blind, to review and provide us with written comments on the attached updated Transition Plan for facilities located within the public right-of-way. Also included with this plan is a more general overview of the City's pedestrian program titled the Pedestrian Master Plan. We would ask that you provide us with written comments on both documents by the end of the business day of August 17, 2007. If you would like to forward your comments electronically, you can send them to me at sopfer@lincoln.ne.gov. If you have any questions while in review, you may contact me directly at 441-7851.

In conclusion, we would like to thank you in advance for providing us with your thoughts and comments on these very important documents. Again, please do not hesitate to contact me with questions.

Sincerely,

Scott A. Opfer, Manager
Traffic & Engineering Services Operations
Public Works & Utilities Department

cc: Trish Owen, Mayor's Office
Karl Fredrickson, Public Works Director
Roger Figard, City Engineer
Randy Hoskins, Asst. City Engineer
Harry Kroos

Enc.

ADA Review Amerian Council of the Blind Orester sao mk.wpd

LINCOLN
The Community of Opportunity

Mayor's Pedestrian/Bicycle Advisory Committee
2740 "A" Street
Lincoln, NE 68502

August 29, 2007

To Whom It May Concern:

The Mayor's Pedestrian/Bicycle Advisory Committee has reviewed the drafts for the Transition Plan Update 2007 Sidewalk & Curb Ramps, the Pedestrian Master Plan, and the Grievance Procedure under The Americans with disabilities Act. The committee unanimously found them to be acceptable and would like to go on record as supporting adoption of them as worded.

Cordially,

Beth Thacker

Beth Thacker, Chairperson
Mayor's Pedestrian/Bicycle Advisory Committee

ADDENDUM No. 3
TO SPEC. 10-230

West Haymarket Arena Site Diesel Fuel Plume Remediation

Project No. 870601

Bid opening date is, **Wednesday, December 1, 2010 at 12:00 NOON.**

TO ALL PROSPECTIVE BIDDERS:

The contract documents for the above project are hereby amended as follows:

1. A PreBid Meeting was held at Engineering Services on November 17 at 8:30 AM. The meeting minutes are attached to this addendum.

2. The Bid Proposal has been changed to reflect questions from the PreBid Meeting and questions received since then.

3. The following questions/clarifications have been received:

A. **Question**: What are the liquidated damages on the project?

Response: Liquidated damages are as given in the City of Lincoln Standard Specification for Municipal Construction.

B. **Question**: What constitutes a weather delay on the project? Temperature will be a major consideration on this project's operations.

Response: See minutes from the prebid meeting.

C. **Question**: If optimum moisture content and/or densities cannot be achieved due to harsh weather conditions, what options does the contractor have in getting these specifications modified or waived to support the project schedule?

Response: See minutes from the prebid meeting. Density requirements will not be waived.

D. **Question**: The project shows that we are to stockpile clean soils on the north end of the project for reuse as backfill. The chances this material can be used as backfill due to the frozen conditions the project will experience is extremely unlikely. What will need to be done with the frozen material if it is not acceptable for backfilling the project site?

Response: See minutes from the prebid meeting.

ADDENDUM #1
TO SPEC. 10-190

West Haymarket Utility Relocation
Project No. 870501

E. **Question**: Please provide the geotechnical report for this project with bore logs that will show the hydro-geological features to at least 50' depth.

Response: See minutes from the prebid meeting. Going to a depth of 50' is outside of the scope of this project. Boring logs for area monitoring wells are provided in this addendum.

F. **Question**: It was stated in the pre-bid meeting that the excavation will be shored on the north, west and south sides only. If this is true the excavation quantities listed in the bid schedule are incorrect. The east line will need to be benched per OSHA standards which will increase the amount of excavation beyond the neat line footprint of 125' x 200'. An adjustment to this quantity is required to reflect this additional excavation. Please provide the bid schedule adjustment.

Response: Shoring was estimated for purposes of protecting rail and sewer infrastructure only. If shoring on the eastern edge is required by OSHA, that determination should be made by the bidder and included in his/her unit rate bid.

G. **Question**: It was stated in the pre-bid meeting that HAZWOPR certified personnel are not needed per 29 CFR 1910.120 for this project. It was vaguely stated at the meeting that it would be up to the contractor whether the HAZWOPR certified personnel would be required on the project. This is a misleading statement by the engineer and it is not up to the contractor and we need this statement clarified. This is either a yes or no answer if the training and medical surveillance is required.

Response: See minutes from the prebid meeting.

H. **Question**: Please provide technical specifications/data on the OWS and the NEEP stripper equipment that can be used on the project that NDEQ has in their possession. Please provide flow capacities, operating temperatures, electrical operation data (voltage, amperage, phase), wiring schematics, system layout and/or design shop drawings, efficiencies of the stripper for the specific #2 diesel contaminate, etc.

Response: Technical specifications available from the NDEQ for the oil/water separator and stripper were provided in the original bid specifications. If additional data is needed on the separator, stripper or equalization tank, bidders are encouraged to contact the NDEQ for clarification.

I. **Question**: It has been stated that the two eastern most railway track sets are to be removed. What is the function of the tracks that remain closest to the project site? Are they mainline or secondary rail?

Response: See minutes from the prebid meeting. The rails are not mainline tracks.

ADDENDUM #1
TO SPEC. 10-190

West Haymarket Utility Relocation
Project No. 870501

J. **Question**: It is stated in Exhibit C; para.; 1.06.09 that the "contractor must not pile or store any materials, machinery, or equipment closer than 25' to the centerline of the nearest railway track'. Per Figure 3 "Site Excavation Map" it appears we are doing exactly what the railroad does not want to happen because we are stockpiling saturated soils on the west edge of the excavation closest to the active rail line. Do we have a variance to this requirement from the railroad? If we don't have a variance, the project documents are, from what we can tell from the aerial photograph provided, flawed. How will this be addressed?

Response: Bidders are free to propose alternate locations for stockpiled soils.

K. **Question**: What are the discharge limitations for the dewatering effluent to the COL sanitary sewer? Need to know max volume the sewer can take as well as the OA-1 and OA-2 concentrations that are acceptable.

Response: Discharge limitations are in accordance with City of Lincoln pre-treatment standards.

L. **Question**: What has been the quality or BTU value for the diesel recovered to date?

Response: BTU value of recovered diesel fuel is not available.

M. **Question**: When was the last recovered shipment of diesel sent to the reclaimer?

Response: This information is not available to the City at this time.

N. **Question**: Who was the reclaiming facility for the diesel?

Response: This information is not available to the City at this time.

O. **Question**: How much of the diesel can be considered emulsified?

Response: This information is not available to the City at this time.

P. **Question**: I would like to know if you have~~v~~ current ground water depths from the monitor wells in the excavation area. If so, I would like to have this data.

Response: See area monitoring well boring logs provided in this addendum.

Q. **Question**: It was discussed at the pre-bid , from what I understand, that the temporary piling can be extracted after we are backfilled. Is this correct?

Response: Piling should be extracted at the discretion of the bidder in accordance with OSHA requirements.

ADDENDUM #1
TO SPEC. 10-190

West Haymarket Utility Relocation
Project No. 870501

R. **Question**: It was not discussed or shown on the project documents where the laydown area for materials and construction equipment can be staged/stored. Please indicate this area. We anticipate an area of approximately 2 acres to be needed.

Response: Specific areas have not been clarified by the BNSF Railway Co., however, two acres of laydown material will be accommodated within close proximity to the excavation site.

S. **Question**: Under Exhibit C Contractors Requirements on page 6 Section 1.05.03c, it states the city will pay for flaggers during the project. Is this correct or is the contractor responsible for any flagging cost?

Response: The City will pay for the flagging costs.

T. **Question**: Will the city charge for water disposal into the sanitary sewer, if so, how much per 1,000 gallons. And as I understand the level of contaminate in the water has to be at 100 ppm or below using OA-2 method of sample analysis.

Response: The charge is $1.77/hundred cubic fet (100hcf=748 gallons). The arrangements for a connection and payment will need to be coordinated with Wastewater Sanitary Engineering (Dave Beyersdorf or Gary Thalken).

Soil Excavation, Screening, and Stockpiling
West Haymarket Arena Site
Diesel Fuel Plume Remediation
Pre-Bid Meeting Minutes
November 17, 2010 8:30 a.m.
Engineering Services Training Room

Introductions:

City Design Project Manager – Holly Lionberger
Design Consultant – Frank Uhlarik, Benesch; Bill Imig, Olsson Associates

Contract Time:

Advertisement Date: November 5, 2010
Bid Letting Date: Wednesday, December 1, 2010
Anticipated Notice to Proceed: December 22, 2010
Final Completion Date: February 15, 2010

Project Overview:

1. This project involves T-200 work to excavate an estimated 14,000 CY for diesel fuel plume remediation and replace with suitable soils. Soils are to be stockpiled on site according to the direction of the on-site Benesch technician who will be screening the level of contamination. Marginally impacted soils may be stockpiled on site for future use of the JPA. Petroleum contaminated soil shall be disposed of by the Contractor at a licensed Subtitle D landfill under a special waste permit.
2. There are two 10-inch sanitary sewer lines and connecting manhole, and a power pole with overhead lines located within the excavation area. It is anticipated that the sanitary sewer lines will be removed and replaced during the excavation work requiring bypass pumping. The existing manhole is to be protected with shoring so as to not be disturbed. Soils remaining inside of the manhole shoring will remain in place.
3. There are numerous documents and figures that make up the bid specifications that can be downloaded from Purchasing's website, including the special provisions, figures, multiple attachments, and multiple railroad agreements.
4. Contractor must provide (4) four references for projects similar in nature to the work required in this project. This shall be attached in the Response Attachment Section.
5. Contractor must provide a list of equipment intended for use on this project. This shall be attached in the Response Attachment Section.

Comments:

1. In addition to the equipment listed in Attachment D to the special provisions, NDEQ can provide an additional equalization tank.

2. Everybody on site will need to meet railroad requirements.
3. BNSF will be limited on flagman after December 17, 2010 so a one week advance notice minimum is needed. Also, a flagman may not be available the date of request which BNSF will do its due diligence to have one as quickly as possible.
4. Insurance requirements are as given in the contract documents and attachments, including $5 million per occurrence and $10 million aggregate; Pollution Legal Liability Insurance requirements per BNSF access agreement.
5. MW-11a will remain in place if not in the excavation area.

Questions:

1. Question was raised as to how to deal with frozen soil.
    a. If unsuitable material needs to be removed from the site it will be handled as an Extra Work Item. There is a bid item for hauling in suitable backfill material as part of the contract if on-site material is determined to be unsuitable. Refer to Section 1.06 of the City of Lincoln Standard Specification for Municipal Construction.
2. Is 40-hour HAZWOPER required?
    a. 40-hour HAZWOPER requirements of 29 CFR 1910.1200 was not specified. This should be a corporate decision as to how the Contractor will address. It is in the City of Lincoln Standard Specifications that the Contractor and his employees shall comply with all Federal, State and local laws and regulations, and shall require all subcontractors and all their employees likewise to comply.
3. How can a Contractor bid shoring as a lump sum if the length and depth of shoring is not a given?
    a. The shoring bid items have been changed to square foot (SF)
4. Is there an Atterberg limit for imported soil?
    a. For cohesive sils there should be a liquid limit of 50 or less and a plasticity index of 30 or less (Silty Clay or "CL" under the Unified Soils Classification System).
5. It is unclear with the current bid items how much soil is estimated to be imported and how much may be reusable on-site?
    a. Bid items for soil replacement have been broken out for imported and re-use of on-site excavated soil.
6. When will the tracks be removed? Are the remaining tracks adjacent to the work mainline or yard tracks?

a. We anticipate the two eastern tracks to be removed by January 1, 2011. The remaining tracks adjacent to the work site are not mainline track.

7. How will the City handle weather delays?

    a. Refer to Section 1.06 of the City of Lincoln Standard Specification for Municipal Construction.

8. Is there a limit to work hours? If not, who's paying for the extra flagging costs?

    a. Work hours are to be limited to 6 a.m. to 6 p.m., unless granted permission from the Engineer to accommodate specific work activities. The work site will need to be fully lighted during work activities. BNSF needs to be notified when any extended hour work is going to be performed.

9. Can we get a site visit?

    a. There will not be a scheduled site visit.

10. Can we see boring logs?

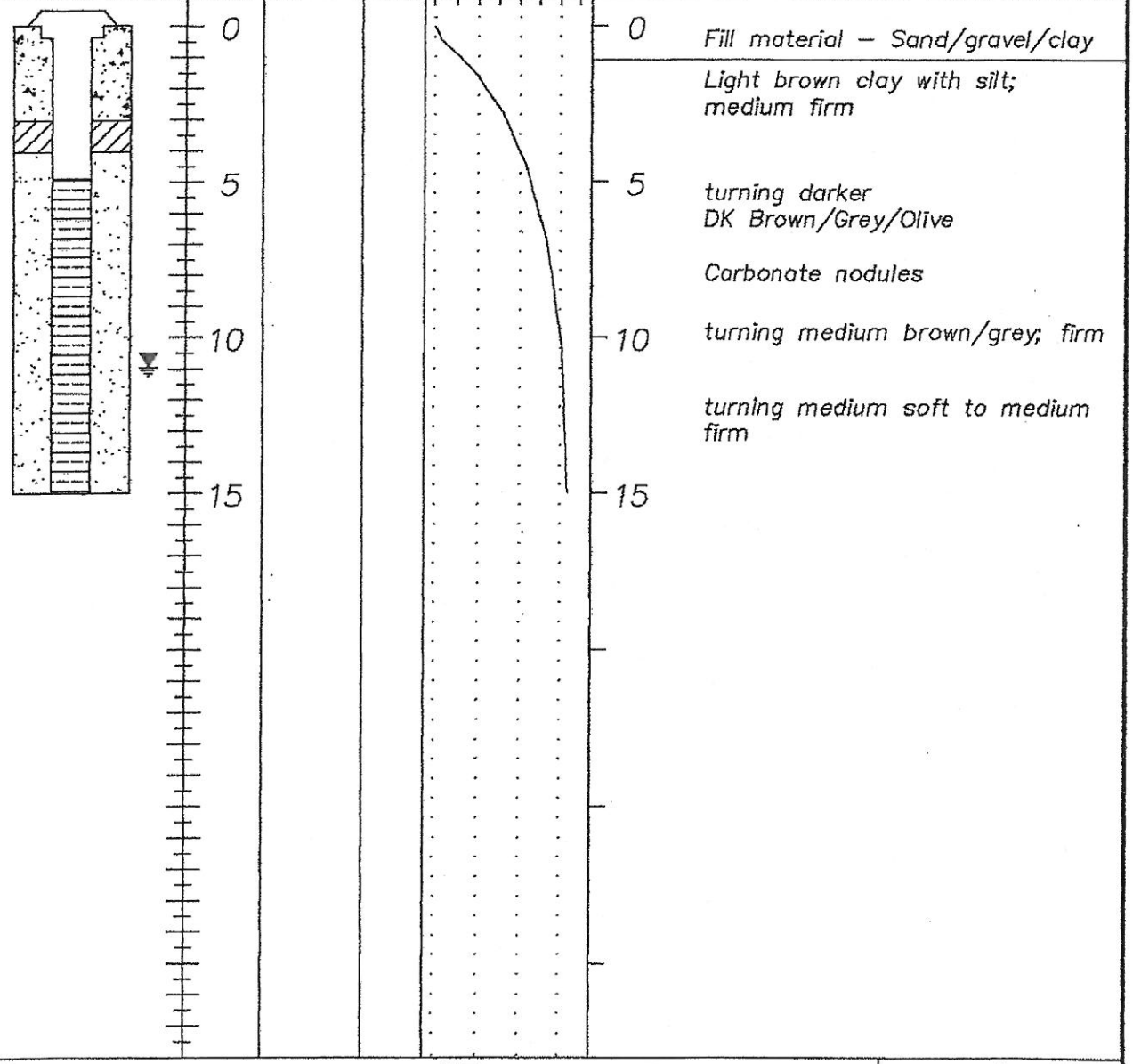
    a. Boring logs from the monitoring wells are attached to this addendum.

11. What documentation will be required of the Contractor for the JPA to seek reimbursement of T-200 program?

    a. Since this project is being competitively bid, the lowest responsive bid, and associated unit prices, will be considered to meet the allowable rates for T-200. The Contractor will not need to submit labor and equipment hours.

GEOLOGIC BORING LOG/WELL COMPLETION

WELL/BORING No.: MW-3A	CONTRACTOR: JB Environmental Drilling	PAGE No.: 1 OF 1
CLIENT: Burlington Northern	RIG TYPE: 2800 Mid Rivers	DATE: 5/03/94
WEATHER: Partly cloudy, 70	DRILLING METHOD: Hollow Stem Auger	JOB NO.: 724
LOCATION: BN Depot	BORING DIA.: 8 1/4"	TOTAL DEPTH: 15'
GEOLOGIST: Adam Broughton	DRILLING FLUID: NA	ELEVATION:
COMMENTS: start time 11:00		WATER: 11'
SCREEN: 2" dia., 0.010' slots	PACKING: 10-20 Silica sand	SEAL: Bentonite



Cl- CLAY
S - SILT
VF- VERY FINE
F - FINE
M - MEDIUM
C - COARSE
VC- VERY COARSE
P - PEBBLES

Bentonite
Casing
Concrete
Sand
Screen

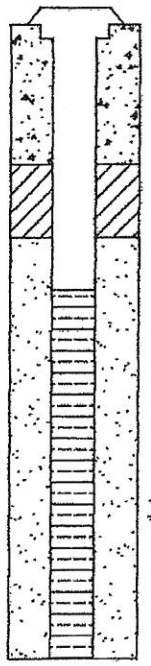
Static Water Level

EMR INCORPORATED
ENVIRONMENTAL MANAGEMENT RESOURCES

mw3a

GEOLOGIC BORING LOG/WELL COMPLETION

WELL/BORING No.: MW-6A	CONTRACTOR: JB Environmental Drilling	PAGE No.: 1 OF 1
CLIENT: Burlington Northern	RIG TYPE: 2800 Mid Rivers	DATE: 5/03/94
WEATHER: Partly cloudy, 70	DRILLING METHOD: Hollow Stem Auger	JOB NO.: 724
LOCATION: BN Depot	BORING DIA.: 8 1/4"	TOTAL DEPTH: 18'
GEOLOGIST: Adam Broughton	DRILLING FLUID: NA	ELEVATION:
COMMENTS: start time: 4:15 finish: 4:55		WATER: 14'
SCREEN: 2" dia., 0.010' slots	PACKING: 10-20 Silica sand	SEAL: Bentonite



DEPTH	SAMPLE	PID	GRAIN SIZE & LITHOLOGIC PROFILE (P VC C M F VF S Cl)	GEOLOGIC DESCRIPTION
0				0 Fill: coal, sand, gravel, cinders, clay
5				5 Olive clayey silt; medium firm
				Dark olive silty clay; medium firm
10				10 Olive clay with silt and some carbonate nodules (11-13'); soft
				Turning firm
				Turning soft
15				15 Silt lens at 16.5'; hard
20				

Cl- CLAY
S - SILT
VF- VERY FINE
F - FINE
M - MEDIUM
C - COARSE
VC- VERY COARSE
P - PEBBLES

Bentonite
Casing
Concrete
Sand
Screen

Static Water Level

EMR INCORPORATED
ENVIRONMENTAL MANAGEMENT RESOURCES

mw6a

rdg **Geoscience & Engineering, Inc.**

BORING LOG

BOREHOLE # **MW-8A**

SHEET 1 of 1

Project: BNSF Lincoln Depot

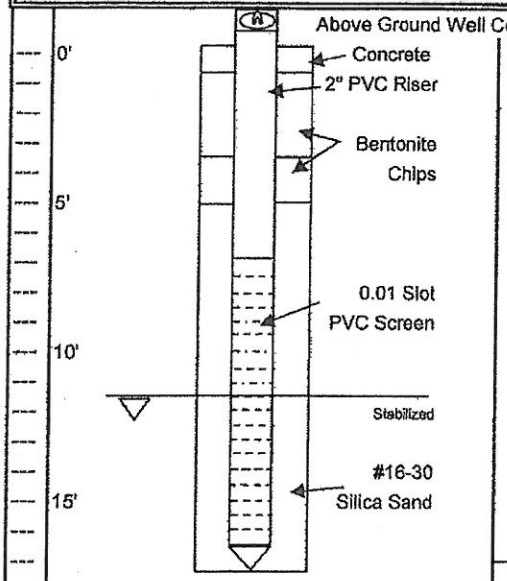
Location: 201 N 7th Street, Lincoln, NE

Drilling Method: 4 1/4-in. Hollow Stem Auger

Logged By: Mary Collura Driller: HWS Consulting Group, # 39402

PROJECT #		
Date Drilled	Top-of-Casing Elevation:	102.41
01/07/05	Ground Surface Elevation:	99.45
Total Depth	Bottom of Well Elevation:	81.95
17.5	Permanent/Temporary:	Permanent

			WATER LEVELS:		
			Initial	Stabilized	Stabilized
Drilling Start Time:	920	Level	15.21	14.34	14.39
Drilling Stop Time:	1015	Elevation	87.2	88.07	88.02
Development Time:	10 min.	Date	01/07/05	01/11/05	01/21/05
NDNR#	Not yet available	Time	1015	1540	1430



DEPTH	#	USC	DESCRIPTION/LITHOLOGY	PID (ppm)	SAMPLE Type	SAMPLE Res
			Stickup 3.7 feet			
			Grass and gravel at surface			
		CL	0-5.0', Silty clay, very dark grey, medium plastic, moist, stiff, grades to a grey brown, Fe staining, carbonate nodules	4	grab	100%
		CL	5.0-8.0', Silty clay, dark olive grey, medium plastic, moist, stiff, petroleum odor	129	grab	100%
		CL	8.0-12.0' Silty clay, grey mottled black, moist, medium plastic, petroleum odor,	121	grab	20%
		SW	12.0-12.5' Sand, fine to coarse, wet, petroleum odor	213	SS	70%
		ML	12.5-13.5' Silt with fine sand, grey, wet, pet.odor			
		SW	13.5-17.5' Sand, fine to coarse, grey, wet, petroleum odor			
			17.5' Bottom of boring			

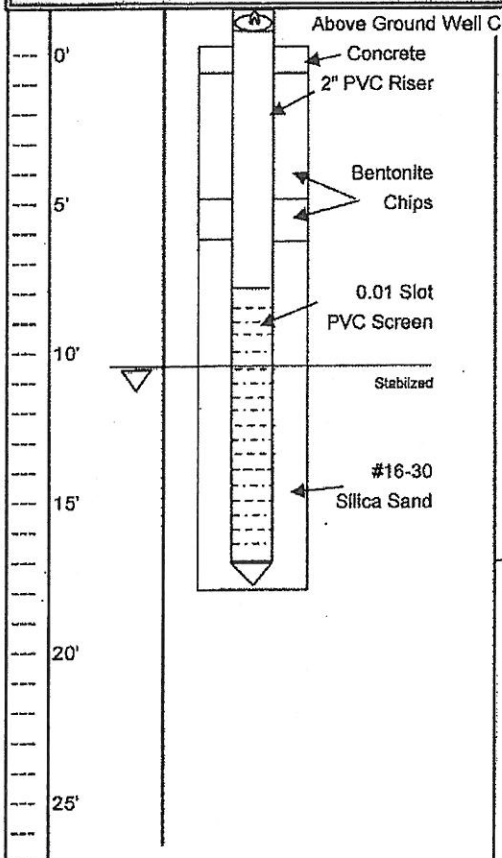
rdg	Geoscience & Engineering, Inc.	BORING LOG
		BOREHOLE # MW-9A
Project:	BNSF Lincoln Depot	
Location:	201 N. 7th Street, Lincoln, NE	SHEET 1 of 1

Drilling Method: $4^1/_4$-in. Hollow Stem Auger sampled with 4' long, 2" diameter Bull Sampler & 2' long Split Spoon Sampler

Logged By: Mary Collura Driller: HWS Consulting Group, # 39402

PROJECT #		
Date Drilled	Top-of-Casing Elevation:	102.67
01/07/05	Ground Surface Elevation:	98.93
Total Depth	Bottom of Well Elevation:	80.93
18.0	Permanent/Temporary:	Permanent

			WATER LEVELS: Initial	Stabilized	Stabilized
Drilling Start Time:	1330	Level	14.5	14.34	14.78
Drilling Stop Time:	1530	Elevation	88.17	88.33	87.89
Development Time:	10 min.	Date	01/07/05	01/11/05	01/21/05
NDNR#	Not yet available	Time	1015	1540	1410



#	USC	DESCRIPTION/LITHOLOGY	PID (mu)	SAMPLE Type	SAMPLE Res
		Stickup 3.0 feet			
		Grass surface			
	CL	0-3.0', Silty clay, very dark grey, brick, ballast, rock, petroleum odor (Fill)			
	CL	3.0-10.0', Silty clay, dark grey, medium plastic, moist, stiff, grades to grey at 7.5', petroleum odor	29	grab	100%
			28	grab	100%
	CL-ML	10.0-12.0', Silty clay with fine sand, olive grey, low plastic, moist, soft,		grab	
	CL	12.0-14.0', Silty clay, olive brown, wet, medium plastic, soft, Fe staining	25	SS	100%
	SW	Sand, fine to coarse, grey, wet, petroleum odor, sheen on water		SS	
		18' Bottom of boring			

rdg **Geoscience & Engineering, Inc.** — **BORING LOG**

Project: BNSF Lincoln Depot — BOREHOLE # MW-11A

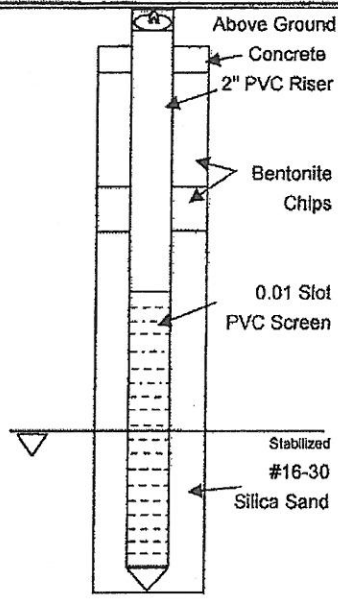
Location: 201 N 7th Street, Lincoln, NE — SHEET 1 of 1

Drilling Method: $4^{1}/_{4}$-in. Hollow Stem Auger sampled with 4' long, 2" diameter Bull Sampler & 2' long Split Spoon Sampler

Logged By: Mary Collura — Driller: HWS Consulting Group, # 39402

PROJECT #		
Date Drilled	Top-of-Casing Elevation:	99.43
01/21/05	Ground Surface Elevation:	99.65
Total Depth	Bottom of Well Elevation:	81.43
18'	Permanent/Temporary:	Permanent

			WATER LEVELS: Initial	Stabilized	Stabilized
Drilling Start Time:	11:26	Level	13.3	13.03	12.30
Drilling Stop Time:	12:30	Elevation	86.13	86.40	87.13
Development Time:	10 min.	Date	01/21/05	01/21/05	01/25/05
NDNR#	Not yet available	Time	1315	1500	1330



DEPTH	#	USC	DESCRIPTION/LITHOLOGY	PID (mu)	SAMPLE Type	SAMPLE Res
			Stickup 2.3 feet			
			Grass and gravel at surface			
		CL	0-2.0', Silty clay, very dark brown, moist, low plasticity, brick, rock, ballast (Fill)			
		CL	2.0-10.0', Silty clay, grey mottled very dark grey, moist, low plasticity, with pieces of gravel, petroleum odor	71	grab	100%
				120	grab	100%
		CL-ML	10.0-14.0 Same as above, grades to a Silty clay with fine sand, soft, petroleum odor	161	grab	100%
		SW	14.0-18.0', Sand, fine to coarse, dark grey, wet, petroleum odor, sheen on water	197	SS	100%
				207	SS	100%
			18' Bottom of boring			

MEETING ATTENDANCE

Type and/or Topic: T-200 PreBid Mtg

Date & Time of Meeting: Wed, Nov 17 8:30 AM Location: Eng Services

Chair (Staff Representative): Holly Lionberger Secretary:

CITY OF LINCOLN
NEBRASKA
MAYOR COLEEN J. SENG
lincoln.ne.gov

Name (Please Print)	Organization	Phone No.	E-Mail
Holly Lionberger	Eng Services	441-8400	hlionberger@lincoln.ne.gov
Bruce Hovey	K & L Landscape & Const.	712-943-2939	bjhov@evertek.net
William A. Bush	New Horizons LLC	402-261-8130	william@newhorizons-llc.com
Stephanie Isaacson	New Horizons	402-261-8130	stephanie@newhorizons-llc.com
Dustin Huenink	New Horizons	402-261-8130	dustin@newhorizons-llc.com
Roger Randall	DECO Companies, Inc	8167698654	roger@decokc.com
Jake Whitefoot	Gana Trucking & Exc. Inc.	402-794-5200	jakew@ganatrucking.com
Steve Gruber	Vision Underground / B2 Env	(402) 525-8110	steveg@vision-underground.com
Vance Behrens	structural design group	402.438.7188	vancebehrens@sdgstructural.com
Ron Williams	Williams Drilling Inc	402-765-6098	Driller 56 @ Hotmail
Joe Delgado	TCW Construction Inc	475-5030	JDELGADO@TCWCONSTRUCTION.COM
Gary Sima	Belair Excavating	651-717-3389	gary.sima@belair-us.com
Michael McCullough	Pavers Inc	402 786 5900	MMccullough@Paversinc.com
Jerry Kabourek	ME Collins Contracting	(402) 443-3663	Jerry@MECollinsContracting.com
Brian Ebr	Graham	(402) 440-9025	brianebr@grahamus.com
Ken Irwig	General Excavating	402.467.1627	kirwig@generalexcavating.com
Fred Jones	GSI	308 381 1987	FJONES@GSINETWORK.com
Joe Damico	General Excavating	402-467-1627	jdamico@generalexcavating.com
Terry Osborn	T.J. Osborn Constr	402-464-4235	TJOSBORN@NEB.RR.COM
Derek Bookstrom	Bookstrom	464-4342	DEREK@HRBOOKSTROM.COM
Aaron Young	Benham	402.417.2072	aaron.v.young@benham.com
Steve Masters	PWU	402.441-7588	smasters@lincoln.ne.gov

MEETING ATTENDANCE

Type and/or Topic:

Date & Time of Meeting: Location:

Chair (Staff Representative): Secretary:

CITY OF LINCOLN
NEBRASKA
MAYOR COLEEN J. SENG
lincoln.ne.gov

Name (Please Print)	Organization	Phone No.	E-Mail
Gary Varley	Land Construction	477-5263	garyclandconstruction.com
Bill Hogan	Hansen Const	435-0163	hansenconstruction@windstream.net
DICK LUDWIG	CONTECH	525-8597	dludwig@contech-cpi.com

ADDENDUM No. 4
TO SPEC. 10-230

West Haymarket Arena Site Diesel Fuel Plume Remediation

Project No. 870601

Bid opening date is, **Wednesday, December 1, 2010 at 12:00 NOON.**

TO ALL PROSPECTIVE BIDDERS:

The contract documents for the above project are hereby amended as follows:

1. The following questions/clarifications have been received:

A. **Question**: We need a measurement and payment listing for shoring.

Response: As listed in the specifications for this project, the shoring will need to be designed by a registered engineer to meet the railroad requirements. As such, the square footage listed in the bid proposal is an estimate with final quantity to be determined from what is actually installed. Square footage will be measured and paid for at the unit price bid based on the buried and exposed square footage.

B. **Question**: What will be the compaction requirements for the base of the excavation and the soil backfill that will be placed at the bottom of the excavation since the base of the excavation will be extremely saturated? The dirt may not compact adequately below ground water level. Will we be required to stabilize the bottom of the excavation with geogrid & rock if we cannot get the required densities at the base of the excavation or will the requirements be lenient with the backfill below the ground water elevation and allow us to put a couple feet of fill in to bridge the saturated soils at the base of the excavation but not require a certain density on the first couple of feet.

Response: If determined by the contractor, with concurrence from the Engineer, that the compaction requirements cannot be met at or below the water table, an adequate layer of rock (1 to 3 in.) may be used. A "geogrid" is not required; however, any rock placed shall be covered with a non-woven filter fabric prior to placement of compacted soil fill above the rock layer. This will be handled and paid for as an Extra Work Item.

C. **Question**: What is the City of Lincoln definition of Winter Conditions? Can the schedule be changed to working days or calendar days?

Response: See Section 1.06 of the City of Lincoln Standard Specifications for Municipal Construction. The Contractor shall be allowed 42 calendar days to complete all items of work for this project. Final completion for this contract remains February 15, 2011 as given in the contract documents.

WH 11-02 Introduce: 1-7-11

RESOLUTION NO. WH- _____

BE IT RESOLVED by the Board of Representatives of the West Haymarket Joint Public Agency:

That the attached Purchase Order for General Excavating to proceed with diesel fuel tank removal, disposal and closure of the project site within the West Haymarket Redevelopment Project Area is hereby approved and the Chair of the Board of Representatives is hereby authorized to execute said Purchase Order on behalf of the West Haymarket Joint Public Agency. Said diesel fuel tank was discovered during excavation of the stormwater mitigation area for the West Haymarket Redevelopment Project and was required to be immediately removed in order to allow the contractor to continue with excavation.

Adopted this ____ day of _____, 2011.

Introduced by:

_____

Approved as to Form & Legality:

West Haymarket Joint Public Agency
Board of Representatives

_____
Legal Counsel for
West Haymarket Joint Public Agency

_____
Jayne Snyder, Chair

_____
Tim Clare

_____
Chris Beutler

City of Lincoln, Nebraska
PURCHASE ORDER

Page 1
Date 12/03/10
Order 14836-000 OP
Brn/Plt 79000

Order number must appear on your invoice, packing slips, shipping documents, packages, and correspondence.

ISSUE TO:

General Excavating
6701 Cornhusker Hwy
Lincoln NE 68507-3113

DELIVERY LOCATION

Public Works/Utilities
Business Office/Management
555 S 10th St
Lincoln NE 68508

Ordered - 12/03/10 Freight -
Requested - 12/03/10 Taken By -
Delivery -

Description / Supplier Item	Ordered	UM	Unit Cost	UM	Extension	Req. Dt
96878000000						
Tank Installation, Removal, Disposal, and Related Services (Including Underground Type)	1	EA	2,250.0000	EA	2,250.00	12/03/10

Kerosene Tank Removal - West Haymarket Project
Price includes removal of tank, disposal of tank, collect two soil samples according the State Regulation Title 159 and Title 118. Vendor agrees to follow all other Local, State and Federal Regulations.
Vendor agrees to all terms as outlined in Quote 3237
Price based on revised quote received from GE on 12/2.

	Sales Tax	Total Order
Terms Due Upon Receipt Tax Rt		2,250.00

Signature _____ Date _____

MATERIAL RECEIVED REPORT

WH 11-03 Introduce: 1-7-11

RESOLUTION NO. WH- _____

BE IT RESOLVED by the Board of Representatives of the West Haymarket Joint Public Agency:

That Amendment No. 2 to the Agreement for Engineering Services with Olsson Associates for the Haymarket Infrastructure Design Project to include development of the preliminary and final designs for the Charleston Street Bridge and Roadway Improvements to Charleston Street and Sun Valley Boulevard is hereby accepted and approved and the Chairperson of the West Haymarket Joint Public Agency Board of Representatives is hereby authorized to execute said Amendment No. 2 on behalf of the West Haymarket Joint Public Agency.

Adopted this _____ day of _____, 2011.

Introduced by:

_____

Approved as to Form & Legality:

West Haymarket Joint Public Agency
Board of Representatives

_____
Legal Counsel for
West Haymarket Joint Public Agency

_____
Jayne Snyder, Chair

_____
Tim Clare

_____
Chris Beutler

AMENDMENT NO. 2
to AGREEMENT for ENGINEERING SERVICES
between OLSSON ASSOCIATES
dba LINCOLN HAYMARKET INFRASTRUCTURE TEAM and the
WEST HAYMARKET JOINT PUBLIC AGENCY
HAYMARKET INFRASTRUCTURE DESIGN PROJECT
Project No. 870000

This Contract Amendment is made by and between Olsson Associates, dba Lincoln Haymarket Infrastructure Team, hereinafter called ENGINEER, and the West Haymarket Joint Public Agency, hereinafter called JPA, this _____ day of _____ 2011 and approved by Resolution No. _____.

WHEREAS, it is the mutual desire of the parties hereto to amend the Agreement to provide professional services associated with the Haymarket Infrastructure Design Contract which was entered into on November 18, 2010 under Resolution WH-12, hereinafter called the existing Agreement. The general description of work to be added to the existing Agreement under this Amendment shall include professional engineering services associated with the design and completion of final plans and Special Provisions for the Charleston Street Bridge and Roadway Project. A detailed breakdown of scope and fee for this project is included in the attached Appendix A-8

The schedule for completion of the work outlined in Appendix A-8 is shown in Appendix B-2 which is attached to this amendment.

The estimated fee for completion of the work associated with the Charleston Street Bridge and Roadway Project is $599,582.00. The total estimated fee for the work associated with this Amendment is $599,582.00, which increases the total not-to-exceed contract amount from $3,353,572.00 to $3,953,154.00.

NOW THEREFORE, it is hereby agreed that the existing Agreement be amended to include the services as described in the attached appendix “Appendix A-8”.

This AMENDMENT shall be deemed a part of, and shall be subject to all terms and conditions of the existing Agreement. Except as modified above, the existing Agreement shall remain in full force and effect.

West Haymarket Joint Public Agency

_____

Title:_____

Engineer – Olsson Associates dba
Lincoln Haymarket Infrastructure Team

By: _____

Title:_____

By: _____

Title:_____

APPENDIX A-8
Scope of Services

HAYMARKET INFRASTRUCTURE DESIGN PROJECT
CHARLESTON STREET BRIDGE AND ROADWAY IMPROVEMENTS

JPA Project Number 870301

General Description of Scope of Services

This scope of services generally includes services related to the preliminary and final design for the new bridge across Salt Creek at Charleston Street; improvements along Charleston Street between 1st Street and 6th Street, including the intersection of Sun Valley Boulevard & Charleston Street and sufficient lengths (approximately 825 feet north and 1,225 feet south) along Sun Valley Boulevard to account for the grade raise of the intersection; and roadway improvements along 6th Street to accommodate widening of the roadway to provide a three-lane section.

The following are the task items that are included as part of the scope of services for the Charleston Street Bridge and Roadway Improvements.

TASK 1. Project Management

a. *Project Management*

The Design Team Project Manager will serve as point of contact, maintain project schedule and budget, and be responsible for coordinating work of the design team for this project. This work will include providing regular progress reports to support invoicing and updates on design schedule. Project Management efforts will follow appropriate guidance as given in the City of Lincoln's website "Guiding Principles and Procedures (GP&P)"

b. *Coordination with Others*

The Design Team will coordinate their design with agencies and/or Consultants that are involved with this project or adjacent projects. Coordination includes one-on-one meetings with the agencies or Consultants. This work item does not include coordination with utilities which is covered under Task 4 of this scope of services.

c. *Design Memorandum*

Using the City of Lincoln's design memorandum outline, the Design Team will prepare a design memorandum with project criteria and design standard information for submittal and agreement by the Program Manager and the JPA Project Management Team.

d. *Condemnation Hearings*

The Design Team Project Manager will, at the request of the JPA Project Management Team, attend all condemnation hearings. This scope estimates one (1) hearing will be attended.

TASK 2. General Project Meetings

a. Kick-Off Meeting

Once notice to proceed has been received, the Design Team Project Manager will schedule and attend a kick-off meeting with the Program Manager, JPA staff and utilities for the project. The JPA Project Management Team will supply a list of invitees and the Design Team shall be responsible for notification to attendees.

b. Progress Meetings

The Design Team Project Manager will schedule and attend all progress meetings for this individual project. The Design Team will create and distribute a meeting agenda at least 48 hours prior to all progress meetings. This scope estimates four (4) progress meetings.

c. Review Meetings

The Design Team will schedule and attend review meetings to receive the JPA's review comments from the first and second submittals.

d. Plan-in-Hand

The Design Team will schedule and attend a plan-in-hand meeting. This meeting is to be held following the review period of the first submittal.

e. Coordination Meetings with ROW Appraisals and Acquisition

The Design Team will schedule and meet with project appraisers and acquisition staff to review the right-of-way needs and impacts at existing properties. The scope estimates one (1) meeting for ROW appraisal and acquisition activities.

TASK 3. Survey

a. Topographical Survey

The JPA is providing the survey information through a separate consultant (Speece Lewis). The Design Team will perform the necessary hard shot confirmation on a sample of random shots such as manholes, etc. The Design Team will review the JPA provided survey and advise the JPA as to the Design Team interpretation of completeness of the survey provided.

b. Supplemental Field Survey

The Design Team will perform the necessary supplemental field survey that is identified during the design of the project to supplement the existing topographic ground survey. This will include hard elevations at tie-in points, additional flowline or utility locations not included with the original survey, topographic features not included with the initial survey and hard elevations at other critical locations as determined during the design process. This work will also include providing the necessary channel cross sections along Salt Creek as required to hydraulically model the new bridge across Salt Creek and additional survey along 6th Street to allow design for widening of this roadway as shown on the TEUP conceptual design plans.

TASK 4. Utility Coordination

a. Utility Location/Verification

The Design Team will review the utility locations shown on the survey provided by the JPA, and verify these locations during field inspections. Plans will be printed and distributed to the Utility Companies for verification of ownership, type, size, location, and cased or uncased.

The Design Team will request that the Utility Companies return to the Design Team marked up plans with utility verification. The Design Team will incorporate the information into the topography. All utilities identified in the topographic survey and verified by the individual utility will be incorporated into the plans. It is assumed the survey accurately depicts the existing utilities in the project area and this scope item is for confirmation of the utility locations.

The Design Team shall identify and verify with Utility Companies major utility conflicts such as fiber optic lines, gas pipelines, crude oil pipelines, high-pressure waterlines, transmission lines, etc., at the earliest possible time. The Design Team, Program Manager and the JPA Project Management Team will discuss major conflicts and attempt to avoid them. If avoidance is not possible, the Design Team will then request the Utility Company to verify the conflict and provide a preliminary estimate of reimbursable costs associated with the utility relocation. The Design Team will work with the affected Utility Companies to determine the best strategies for relocations and potential mitigation strategies that may be implemented to ensure that the project schedule is not adversely impacted.

b. Utility Plan Submittal

At each JPA review submittal, the plans will be distributed by the Design Team to public and private utilities for comment.

c. Utility Review Meetings/Coordination

The Design Team shall schedule utility review meetings to coincide with a regular project progress meeting or JPA review meeting. The Design Team shall include time for coordination via the phone and one-on-one meetings with affected utilities as necessary to maintain the accelerated schedule for the design and construction of the project.

TASK 5. Public Involvement

a. One-on-One, Small Group Meetings (2 Meetings)

The Design Team will meet with individuals or key stakeholders who may be significantly affected by the project. This will include one-on-one meetings with representatives of the property owners adjacent to the project and other key stakeholders as identified by the City or Program Manager. The Design Team shall will notify the Program Manager of all proposed stakeholder meetings and invite the Program Manager to the meetings.

TASK 6. Drainage Analysis

a. Hydraulic/Hydrologic Analysis

The Design Team shall design open and closed drainage systems for the new roadways in accordance with the most current edition of the City of Lincoln Drainage Criteria Manual, or as directed by the Watershed Management Department. It is assumed the system along Charleston Street will be a closed system and Sun Valley Boulevard will remain open ditches.

b. Preliminary Drainage Studies

The Design Team shall review available drainage studies, identify overland flow paths and sumps. At the request of the JPA Project Management Team, hydraulic design calculations will be submitted for review.

c. Detailed Salt Creek Floodplain Review and Evaluation of Levee Impacts

The Design Team shall perform detailed hydraulic modeling for the project to evaluate the impacts the proposed improvements will have on the Salt Creek storage areas and conveyance between areas. This work will be based upon the HEC-RAS storage area model for Salt Creek developed by the City of Lincoln in 2007 to model the impacts of the proposed Charleston Street roadway work on routing of flood flows through Flood Storage Areas (FSA) 10 and 11. This work will also include evaluation of changes to flood storage within the FSA and changes in interconnectivity between the FSA. The hydraulic analysis will evaluate potential alternatives that can be included with the project to try and achieve no net fill and no-rise requirements. If it is not practical to meet no-net fill or no net rise, than practical measures to mitigate impacts and achieve no adverse impact will be developed and evaluated.

An evaluation of the proposed bridge over Salt Creek at Charleston Street will be performed with the regulatory HEC-RAS model, also developed by the City of Lincoln in 2007. The proposed bridge will be designed with the low chord of the bridge above the 100-year flood level and minimal changes to the channel through the bridge opening. The analysis will evaluate two options, one that would keep the pedestrian bridge at Charleston Street in place to continue to control downstream discharges and the a second option that would remove the bridge and identify other means to control downstream flows and/or mitigate potential increases in water surface elevations. This work shall include determination of a preliminary cost to accommodate removal of the existing Charleston Bridge along with additional improvements that would need to be incorporated into the design to control downstream flows or mitigate increases in water surface elevations. This shall be compared to the cost of a new bridge structure with the existing downstream bridge remaining in place.

This work will also evaluate drainage from the new roadways and develop recommendations for outlet storm sewers that accommodate site constraints, including contaminated soils, utility lines, and abandoned railroad structures. The use of existing levee drainage structures, as noted in the Operation and Maintenance Manual for Channel Improvements and Levees thru Lincoln, Nebraska (U.S. Army Corps of Engineers - Omaha District, October 1969) will be used or possibly modified wherever possible to minimize changes to drainage patterns and potential impacts to the Salt Creek levees.

The Design Team will prepare the detailed technical submittal package for transmittal to the Lower Platte South NRD and the U.S. Army Corps of Engineers, the agency responsible for review and/or permitting of projects that impact “waters of the United States” and the Salt Creek Levee. The detailed submittal will include the geotechnical analysis completed under the Geotechnical Task, the detailed checklists, supporting documentation, project plans and project specifications. The submittal package will also include the necessary plans detailing work that will be incorporated into the project to stabilizing the levees at areas that are disturbed by construction. The submittal will provide certification that no adverse impacts to the stability of the levee system and no increase in flood elevations for Salt Creek will result from the construction of the improvements. The overall coordination work with the COE and LPSNRD that is associated with the technical submittal is included in the Design Coordination and Support work effort.

The area of levee around the Charleston Bridge has the potential for global stability failure. This will be known once the final geotechnical study has been completed. It is anticipated that 100 feet of both levees upstream and downstream of the bridge will need to be stabilized. The Design Team will develop levee stabilization plans based on the geotechnical

recommendations. These measures include removing and rebuilding disturbed portions of the levee embankment with stabilized structural fill material. Detailed plans and specifications will be prepared as necessary to show the required reconstruction and stabilization.

The Design Team will prepare and submit a Floodplain Development Permit to the City of Lincoln, the entity responsible for floodplain administration on this portion of Salt Creek. The submittal will include no-rise certification for the proposed construction.

TASK 7. Traffic

a. Traffic Signal / ITS Design / Street Lighting

Based on the recommendations of the traffic study completed as part of the TEUP Project or as directed by the JPA Project Management Team, the Design Team will prepare signal plans at intersections as warranted. It is estimated that the following intersection(s) will require signal design plans to modify existing traffic signals:

- *Sun Valley Boulevard & Charleston Street (permanent)*

For purposes of future ITS systems, 4" Conduit shall be placed along the length of the project. This work will be coordinated with the overall design for the permanent changeable message signs and monitoring cameras that will be designed in conjunction with this project.

Lighting will be designed by Lincoln Electric Systems (LES) after the Design Team supplies LES with electronic files. The Design Team will draft the lighting plans based on LES design.

b. Pavement Marking & Signing

The Design Team shall prepare plan sheets showing pavement marking and signage layouts. In addition, temporary signage and pavement markings will be shown, if applicable.

TASK 8. First Submittal

a. Site Inspections (Estimated 2 Visits)

b. Prepare Alternatives

Design Team will evaluate possible alternatives including but not limited to: horizontal and vertical alignment, number of lanes required, configuration of intersections, median width(s), and bike trail and sidewalk locations. This shall include reviewing the alignment along Charleston Street to potentially reconfigure the design of the 4th and Charleston intersection as shown on the conceptual design plans to provide a stop condition for 4th Street with a through movement on Charleston. This evaluation shall look to minimize adverse impacting to the NSAA facilities or existing wetlands. The final alternative decision shall be made prior to and shown in the first submittal.

c. Preliminary Designs

The Design Team shall prepare project base files and plan sheets in accordance with the City of Lincoln CADD standards. Plan sheets to be included in the first submittal include the following:

- Cover Sheet
- Typical Section Sheets
- General Notes Sheets
- Horizontal/Vertical Control Sheets
- Geometric Sheets

- Roadway Plan and Profile Sheets
- Right-of-Way Sheets
  - Existing right-of-way and ownerships identified
- Roadway Cross-Section Sheets

d. Preliminary Construction Phasing

The Design Team shall prepare preliminary plans showing the anticipated Construction Phasing. This phasing plan shall be submitted at the time of the first submittal. The Design Team shall prepare a written description of the Construction Phasing, noting detour routes if applicable. This phasing plan shall be submitted at the time of the first submittal. It is assumed that project construction west of the new bridge will be completed in two principal phases. These would include construction along Charleston Street between 1st Street and Sun Valley Boulevard; and construction along Sun Valley Boulevard. The scope as outlined is based upon construction on both of these roadway segments being completed under total closure with traffic detoured.

e. Cost Estimates

The Design Team shall prepare an updated total project cost estimate. This shall include Preliminary Engineering, ROW acquisition, Private Utility Relocations, Public Utility Relocations, Construction, and Construction Engineering on the appropriate forms.

TASK 9. Geotechnical Evaluation

Project Background

This project will include geotechnical analysis with a written report for the Charleston Street Bridge and the street widening of Charleston Street and the Sun Valley Boulevard. The soil test borings will be completed approximately every 400 feet along the south side of Charleston Street and the west side of Sun Valley Boulevard.

Upon reviewing soil logs in the area, the Design Team has prepared this proposal with the understanding that the subsoil profile will likely consist of land-fill related material overlying alluvial clays and sands. The proposed depths were determined from this information to provide the best delineation of the sub-surface strata for this project and provide the necessary recommendations.

Field Exploration

a. The Design Team proposes to use a truck-mounted drill rig to complete a total of twelve (12) soil test borings for the roadways and bridge.
   - Two (2) soil test borings to depths of 80 feet each.
   - Three (3) soil test borings to depths of 20 feet each.
   - Four (4) soil test borings to depths of 15 feet each.
   - Three (3) soil test borings to depths of 10 feet each.

   The soil borings will be advanced to the depths proposed, or to refusal, whichever is shallower. This proposal is based on a total drilling footage of 310 linear feet.

b. Contact Diggers Hotline of Nebraska to locate underground utilities. To insure the safety of the crew on site, JPA must inform the Design Team the location of all utilities and utility service connections. Cost of locating utility lines and service connections shall be JPA's responsibility. Design Team is not responsible or liable for damage to any utility or service connection.

c. All boring locations must be readily accessible. Any cost of making boring locations accessible is JPA's responsibility. Design Team will not perform work until boring locations are accessible and acceptable to Design Team's satisfaction.

d. Drilling rigs are heavy equipment. Disturbance of natural surroundings including but not limited to soil indentations, concrete cracking and damage to underground sprinkler systems, may occur. Design Team shall not be liable or responsible for any site disturbance that may occur as a result of bringing equipment on site when notified by

Design Team representative that damage is likely to occur and directed by the JPA to proceed. JPA accepts full responsibility for site disturbance.

e. Sampling of soils in general accordance with ASTM D-1586 and ATSM D-1587.
f. Obtain groundwater levels in the test borings at the time of drilling and upon completion of the drilling operations.

Laboratory Services

a. As soil conditions dictate, laboratory testing may include visual soil classification (ASTM D-2488), unconfined compression tests (ASTM D-2166), thin-walled tube density tests (ASTM D-2937), moisture content tests (ASTM D-2216), Atterberg limit tests (ASTM D4318), a Standard Proctor test (ASTM D-698), one-dimensional consolidation test (ASTM D-2435), and mechanical sieve analysis (ASTM D-422).

Engineering Analysis and Report Preparation

a. Foundation design recommendations for the bridge structure support, including estimates of settlement. Recommendations for the foundation system would include recommended bearing depth, bearing pressure and/or pile capacity.
b. Utilize the survey data and information provided to evaluate the global stability of the existing levee near the proposed bridge location and roadway widening. The global stability analysis will utilize the boring and laboratory information to interpret soil properties values that can be used in a Geo/Slope W software program. Final recommendations will be made regarding acceptable slope conditions based on the available soil information.
b. Coordination and submittal of geotechnical report for COE approval of levee modifications.
c. Recommendations regarding the thickness, moisture, and compaction criteria for backfill or structural fill. Soil excavation criteria in accordance with OSHA Standards will be included or referenced.
d. Discussion of anticipated groundwater concerns, along with recommendations for addressing these concerns during construction, if required.
e. Analysis of the on-site soils encountered, regarding shrink/swell characteristics and the potential for reuse as structural fill.
f. Discussion on the effects of structural fill placement and roadway loading on the existing soil strata and/or land-fill related material. A detailed settlement analysis will be completed to evaluate the future loading conditions from the trash debris as it relates to total and differential settlement.
g. Recommendations regarding the preparation of subgrade soils supporting the pavement, including an evaluation of the laboratory test results for providing an estimated modulus of subgrade reaction.
h. Pavement analysis.
i. Lateral earth pressures.

TASK 10. Environmental / Historical Review

a. Wetlands Delineation Work and Historic Consultation

A portion of the wetlands delineation work for this project has been completed as part of the TEUP planning work. Additional delineation work for the areas along Sun Valley Boulevard that is associated with the interim roadway work was not included in the General Design Coordination and Support Phase and is being included with this project.

The Section 404 permitting and Section 106 Historic consultation work for this project is included in the scope of work for the General Design Coordination and Support Phase.

b. Public Lands Impacts [Section 6(f)]

A large portion of the Oak Lake Park was developed or acquired utilizing land and water conservation funds. It is assumed the project footprint will remain within existing right-of-way and no land conversion will be required.

c. Landfill Evaluation and Recommendations

A portion of the new Charleston Roadway will cross through areas where previous landfill sites have been identified. This work shall include a review of the proposed work with regard to the existing landfill sites and development of a contingency plan to include with the contract documents in the event landfill waste is encountered. This will include testing protocol required if landfill waste is discovered, identification of classification of waste material and determination of disposal alternatives. This shall also include coordination with the Nebraska Department of Environmental Quality regarding the required testing and disposal of the material or alternatively, the reuse of excavated materials as beneficial fill. Field work associated with obtaining samples and testing of waste materials is not included as part of this scope of work. For the purpose of this scope a maximum of four agency coordination meetings is assumed.

TASK 11. Existing Water Main or Wastewater Relocation

The Design Team shall identify existing water mains or sanitary sewers that are in conflict with project improvements. Project improvements are to be designed around water mains and sanitary sewer lines; however, in some situations relocating the water main or sanitary line will produce an improved engineering design. Engineering judgment shall be used to determine when to relocate a public utility. This task involves minor relocates involving a public utility due to an improvement project not initiated by the specific utility section, including coordination with the Fire Chief regarding the relocation/new construction of fire hydrants.

TASK 12. Structural/ Bridge Design

a. Structure Alternative Analysis

The Design Team will investigate structural alternatives for the Charleston Street Bridge over Salt Creek. Items to consider during analysis shall include span length, pier location, constructability, impact on surrounding properties, aesthetic features, and the hydraulics of the Salt Creek channel. The following bridge alternatives will be reviewed:

- ❑ "Conventional" structure with concrete girder superstructure

b. Bridge Design and Plan Preparation

The Design Team will prepare a brief report of conceptual design information, which details all pertinent design features for each structural alternative. This information will be included in the project design memorandum.

The Design Team will investigate the soil types and provide recommendations for the bridge foundation design. (See Task 9 Geotechnical Evaluation)

Once the preliminary design sheets (Bridge Type, Size, and Location (TS&L) and data sheets) are complete, they will be submitted for review to the City of Lincoln. Prior to submitting TS&L sheets, the Design Team will recommend the type of median or center barrier to construct as well as identify pedestrian needs on and under the bridge.

After the preliminary design is approved, the Design Team will prepare final design plans in accordance with NDOR bridge design policies and procedures as well as the most recent edition of AASHTO LRFD Bridge Design Specifications. Since pedestrians are to travel

underneath the bridge, the Design Team will investigate and recommend solutions for bird control on the under-side of the bridge.

The Design Team will prepare an independent design check for each alternative per NDOR requirements. A copy of the design check and comments made during the design check will be submitted to the City's Project Manager.

The Design Team will provide shim shot calculations for use during construction. The Design Team will also review shop drawing submittals and answer design questions during construction.

c. Lighting

The Design Team will evaluate and design lighting along the bridge as follows:

- ❑ Standard Lighting
- ❑ Lighting Above the Bridge Deck
- ❑ Lighting for Bike Trail Undercrossing

The Design Team will include the design of circuits and wiring as well as future conduit location in the bridge design.

d. Retaining Wall

The Design Team will investigate various retaining wall designs for use at the east abutment near the bike trail, and will recommend an appropriate wall type. Example retaining wall options include modular block walls, "stone-strong" walls, and cast-in-place walls. The Design Team will also review shop drawing submittals and answer design questions during construction. The Design Team will prepare retaining wall profiles for each wall along the trail undercrossing. Additional retaining wall design along the loop roadway at Haymarket Park will be performed as necessary due to minimize impacts to the adjacent parking areas. This scope of services assumes all retaining walls are cast-in-place walls and the Design Team is responsible for all design and details associated with the cast-in-place walls.

The Design Team will shall investigate the soil types for retaining walls and will provide the geotechnical information necessary to complete the design. (See Task 9 Geotechnical Evaluation)

e. Trail Undercrossing Design at Charleston Bridge

The Design Team will prepare the design for the trail undercrossing at the new bridge including the trail connections to the existing levee trail system north and south of the bridge. This work will include horizontal and vertical design for the trail, geometric design, construction and removal plans, coordination with levee/bridge work, earthwork modeling, typical trail sections, railings, signing and trail cross sections.

TASK 13. New / Replacement Water Main Design

New or Replacement Water Main Design is not included as part of this project.

TASK 14. New / Replacement Wastewater Design

New or Replacement Wastewater Design is not included as part of this project.

TASK 15. Right-of-Way

a. Right-of-Way Plans

The Design Team will determine the easements (temporary and permanent) and right-of-way required to construct the project. Temporary construction easements will be acquired in cut and fill areas outside the proposed right-of-way acquisition. Temporary construction easements will be acquired to construct driveways or make improvements to personal property beyond the existing or proposed right of way. Existing property corners/property lines will be tied into the County Grid System and Title Research as provided by the JPA will be used by the Design Team to determine the existing right-of-way and to design the easements and additional right-of-way needed to construct the project.

It is estimated there will be two tracts associated with this project. One (1) tract is estimated to need revisions due to property owner negotiations.

b. Legal Descriptions

The Design Team will prepare legal descriptions for the temporary and permanent easements and new right-of-way to be acquired.

c. Stake Right-of-Way

The Design Team will stake corners of right-of-way to be acquired and the corners of easements required to construct the project. It is estimated all of the tracts will be staked once and one (1) tract will be re-staked due to property owner negotiations.

TASK 16. Streetscape and Landscape Design

a. Coordination with Project Streetscape Design

The Design Team will coordinate with the Streetscape team to identify potential streetscape enhancements that may be incorporated into this project to tie in with the overall streetscape scheme that will be developed for the project. It is anticipated that this will be limited to aesthetic design for retaining walls and railings that may be incorporated into this project and that the primary focus will be on identification of locations for future streetscape enhancements that may be constructed under a future project.

TASK 17. Second Submittal

a. Second Submittal Design

The Design Team shall prepare project base files and plan sheets in accordance with the City of Lincoln CADD standards. All sheets that will be included in the PS&E plan set will be included in the second submittal. This includes, but not limited to, the following sheets:

- Cover Sheet
- Summary of Quantities Sheet
- Typical Section Sheets
- General Notes Sheet
- Detail Sheets
- Horizontal/Vertical Control Sheets
- Construction Phasing Sheets
- Traffic Control/Detour Sheets
- Geometric Sheets

- Joints and Grades Sheets
- Roadway Plan and Profile Sheets
- Construction Sheets
- Removal Sheets
- Storm Drainage Plan and Profile Sheets
- Sediment and Erosion Control Sheets
- Temporary and Permanent Traffic Signal Sheets
- Pavement Marking & Signing Sheets
- Lighting Plan Sheets
- Landscaping Plan Sheets
- Right-of-Way/Property Plat Sheets
- Roadway Cross-Section Sheets

b. Cost Estimates

The Design Team shall prepare an updated total project cost estimate. This shall include, but not be limited to Preliminary Engineering, ROW acquisition, Private Utility Relocations, Public Utility Relocations, Construction, and Construction Engineering.

c. Special Provisions

The Design Team will submit Special Provisions with the second submittal.

TASK 18. Quality Assurance / Quality Control (QA / QC)

The Design Team will give a copy of their QA / QC plan to the JPA Project Management Team at the start of the project. The Design Team will submit in writing that this plan has been used during the project at each submittal with the name of the person responsible for performing the QA / QC aspects.

TASK 19. Permit Applications / Agreements

The Design Team shall prepare and submit on behalf of the JPA the following permits, agreements, certifications, and forms. The Design Team shall copy the JPA Project Management Team on all applications being submitted.

- ❑ Floodplain Permit
- ❑ NPDES Permit
- ❑ SWPPP
- ❑ NDOR Permit to Occupy Right-of-way
- ❑ 404 Permit (Preparation included with Design Coordination and Support Scope)

TASK 20. PS&E Submittal

a. Draft PS&E Submittal

The Design Team shall submit a draft PS&E package to the JPA Project Management Team for final review. The package will include the plan set, special provisions, and a total project cost estimate. The Design Team shall prepare an updated total project cost estimate. This shall include, but not be limited to Preliminary Engineering, ROW acquisition, Private Utility Relocations, Public Utility Relocations, Construction, and Construction Engineering.

b. Final PS&E Submittal

Upon incorporating review comments into the plan set and special provisions, the Design Team shall prepare and submit all drawings, special provisions, and an updated total project cost estimate to the JPA Project Management Team for the final PS&E review. Upon JPA acceptance of the PS&E plans, the Design Team shall submit the bid package to the JPA Project Management Team. The bid package includes sealed bond drawings, sealed special provisions, and an electronic file with final bid items and quantities. The bid package will also be accompanied by an electronic copy of the design in MicroStation, GEOPAK format. GEOPAK GPK files will also be submitted.

TASK 21. Bidding Phase

a. Attend Pre-Bid Meeting and respond to questions

b. Answer Design Questions

c. Addenda to be prepared by JPA Purchasing Representatives

TASK 22. Construction Phase

a. Attend Pre-Construction Meeting

b. Review Shop Drawings and material submittals

c. Prepare Revision Sheets

d. Answer Design Questions and Consultation to clarify plans/specifications

e. Evaluate Substitute "or equal" Bids items as requested by the Program Manager

f. Conduct Site Visits as requested by the Program Manager

JPA Responsibilities

The City of Lincoln will supply the following information:

- ❑ Ownership records and title searches
- ❑ Tenant names (if known)
- ❑ Available water and sewer locations, size, and materials
- ❑ Copies of available reports
- ❑ Available drainage studies
- ❑ Available geotechnical reports
- ❑ Bench marks and horizontal control points
- ❑ Topographic Survey
- ❑ Right-of-entry to private property for surveyors
- ❑ Available current and future traffic volumes and reports
- ❑ Available 3-year accident data
- ❑ Available plats of adjacent properties
- ❑ Current bid item listing

GENERAL INFORMATION

1. PLAN FORMAT

Two Half size (11" x 17") white paper bond copies of the plans will be submitted at the first submittal, second submittal, and draft PS&E submittal. One half size (11" x 17") white paper bond copy of the plans will be submitted for PS&E review. Any material, which does not produce an acceptable reproduction will be returned to the Design Team for rectification. All submittals, except final submittal, shall be bound with post screws or staples. In addition to the paper copies, PDF's of the plans and Special Provisions will be submitted for all reviews.

Final plans will be submitted on 11" x 17" bond paper and will be accompanied by an electronic copy of the design in MicroStation, GEOPAK format. GEOPAK GPK files will also be submitted.

All sheets will be plotted at the City of Lincoln's standard sheet scales.

Care will be exercised in drawing all construction details. All notes will be properly spaced and all lettering will be of an engineering style. Clarity must be maintained to allow the plans to be archived on microfilm; the background topography, grid lines etc. on plan and profile sheets will be removed behind the text.

The Design Team shall follow the City of Lincoln's CADD drafting procedures and guidelines in preparing the plans.

The CADD files will conform to the following standards and conventions. All plans, specifications, and documents will be in English units using the following working units:

a) Master Units = Ft
b) Sub Units = 1000^{th}
c) Position Units = 1

Global origin of the graphics design plane will be located at x= 0.0000, y= 0.0000.

Reports, Studies and Technical Information:

The Design Team shall prepare and submit the following items:

1. Technical memos for all pertinent meetings
2. Meeting minutes from all meetings
3. Drainage computations, culverts and storm drainage design
4. Miscellaneous correspondence and information related to the project
5. Summary of quantities and opinion of probable cost
6. Permit applications
7. Special Provisions for items not covered by the City of Lincoln Standard Specifications
8. Intersection Sight Distance Study for all side streets along the main roadway.

Cross-sections:

The Design Team will:

1. Plot cross-sections with the labeling of the sections on the right side of the sheet, label existing and design centerline elevations at their respective centerline, and offset distances 20 feet from the design centerline along the bottom of each sheet.

2. Plot cross-section on standard size sheets (same size as the plan and profile sheets).

3. Roadway cross-sections are to be plotted using a vertical and horizontal scale of 1" = 20'.

4. Plot the cross-sections with the stations progressing upward from the bottom to the top of the sheet.

5. Plot the original ground with a dashed line

6. Plot the design template with a solid line.

7. Label the cut and fill quantities for each section if cross-sections are used. If a site model is developed that is more accurate this information may be provided for information only.

8. Plot the right-of-way and easements on each cross-section.

2. RIGHT-OF-WAY SUBMITTALS

Plan submittals and right-of-way documents for the project will include, but not be limited to the following:

1. Summary Sheet
2. Right-of-way Plan Sheets
3. Legal Descriptions
4. Condemnation plats (Tract Maps)

The first submittal (Ownership Plans) will show the existing ownership, existing right-of-way, as well as the preliminary design features of the roadway and preliminary limits of construction.

The second submittal (Appraisal/Negotiation Plans) will show the proposed right-of-way and easement design. The plans will show new temporary and permanent easements needed for construction and maintenance of the new roadway, as well as the additional right-of-way.

A summary sheet will be prepared showing the area of new right-of-way or acquisition needed from each tract along the project in square feet, along with a strip map showing the location of the tracts. Legal descriptions will be prepared for tracts needing additional right-of-way or easements.

The Design Team will make right-of-way design alterations as required by the JPA Project Management Team during negotiations. The revisions to the plans must be made within ten working days after the JPA Project Management Team requests the revision.

The right-of-way and easements will be staked for use by the JPA during negotiations. This activity should be coordinated between the Design Team and the JPA Project Management Team.

The PS&E plan submittal will show the right-of-way as acquired or as being acquired through eminent domain.

If needed, the Design Team will prepare right-of-way condemnation plats including legal description as requested by the JPA Project Management Team within ten working days of the request. Condemnation plats will be limited to four tracts

The final right-of-way plans will be submitted on 11” x 17” bond paper with the bid package and will be accompanied by an electronic copy of the design in MicroStation format.

Appendix A-8
Total Project Fee

Charleston Street Bridge and Roadway Improvements
JPA Project Number 870301

Task No.	Task Description		Fee Estimate
1	Project Management		$14,160.00
2	General Project Meetings		$5,343.00
3	Survey		$6,396.00
4	Utility Coordination		$3,888.00
5	Public Involvement		$0.00
6	Drainage Analysis		$48,894.00
7	Traffic		$0.00
8	First Submittal		$18,116.00
9	Geotechnical Evaluation		$11,036.00
10	Environmental / Historical Review		$7,888.00
11	Exist Water - Sanitary Relocates		$0.00
12	Structural / Bridge Design		$178,732.00
13	Water Main Design		$0.00
14	Wastewater Design		$0.00
15	Right-of-Way		$0.00
16	Landscape Design		$0.00
17	Second Submittal		$26,328.00
18	QA/QC		$6,480.00
19	Permit Applications		$0.00
20	PS&E Submittals		$6,240.00
21	Bidding Phase		$4,892.00
22	Construction Phase		$21,854.00
	Expenses (Includes Subconsultant)		$239,335.00
		Total Project Cost	$599,582.00

OA PAY RATES (BASED ON HOURLY RATE SCHEDULE PER CLASSIFICATION)

Overhead Rate :	**0%**
Profit :	**0%**

Personnel		Total Hr.	Salary $ Per Hr.	Labor Cost	Total Cost
Principal/Project Manager	P/PM	0	$180.00	$0	$0.00
Team Leader	TL	280	$162.00	$45,360	$45,360.00
Group Leader	GL	64	$148.00	$9,472	$9,472.00
Senior Engineer	SE	0	$155.00	$0	$0.00
Senior Project Engineer	SPE	515	$142.00	$73,130	$73,130.00
Project Engineer	PE	563	$115.00	$64,745	$64,745.00
Associate Engineer	AE	562	$98.00	$55,076	$55,076.00
Assistant Engineer	ASE	64	$85.00	$5,440	$5,440.00
Senior Scientist	SS	4	$120.00	$480	$480.00
Senior Project Scientist	SPS	0	$105.00	$0	$0.00
Project Scientist	PS	8	$90.00	$720	$720.00
Associate Scientist	ACS	0	$70.00	$0	$0.00
Assistant Scientist	AS	8	$60.00	$480	$480.00
Surveyor	SM	40	$80.00	$3,200	$3,200.00
Survey Crew Member (CM)	SCM	40	$55.00	$2,200	$2,200.00
Technical Manager	TM	0	$118.00	$0	$0.00
Design Technician	DT	8	$84.00	$672	$672.00
Senior Technician	ST	450	$80.00	$36,000	$36,000.00
Technicain	Tech	832	$71.00	$59,072	$59,072.00
Administrative Coordinator	AC	0	$70.00	$0	$0.00
Administrative Assistant	AA	70	$60.00	$4,200	$4,200.00
Expenses					**$239,335.00**
		3508		**$360,247**	**$599,582.00**

TOTAL EXPENSES					
Expenses	**Amount**		**$ Ea.**		**Cost**
Design					
Travel, mile (car)		MILES	0.50		$0.00
Travel, mile (survey vehicle)		MILES	0.68		$0.00
Subconsultant - Schemmer	1	L.S.	227885		$227,885.00
Half Size Plots (each)	1500	EA.	0.3		$450.00
Mylars, Half Size Plots (each)		EA.	4.5		$0.00
Aerial Mapping (DTM)		L.S.			$0.00
Miscellaneous Expenses(Plots, Copies, Reports, etc.)	1	L.S.	1000		$1,000.00
Geotechnical Borings and Lab Testing	1	L.S.	10000		$10,000.00
			Sub Total		**$239,335.00**
Survey Expenses					
Public Involvement Expenses					
			Total		**$239,335.00**

OA MAN-HOUR ESTIMATE - CHARLESTON STREET BRIDGE AND ROADWAY IMPROVEMENTS/PROJECT NUMBER 870301

Task No.	Description of Work Items / Tasks	P/PM	TL	GL	SE	SPE	PE	AE	ASE	SS	SPS	PS	ACS	AS	SM	SCM	TM	DT	ST	Tech	AC	AA	Total Manhours	Total Labor Fee	Overhead 0.00%	Total (A+B)	Profit 0.00%	Total Fee (A+B+C)	
1	**Project Management**																												
	Project Management		80																			20	100	$14,160	$0	$14,160	$0	**$14,160.00**	
	Coordination with Others																						0	$0	$0	$0	$0	**$0.00**	
	Design Memorandum																						0	$0	$0	$0	$0	**$0.00**	
	Condemnation Hearings																						0	$0	$0	$0	$0	**$0.00**	
																													$14,160.00
2	**General Project Meetings**																												
	Kick-Off Meeting					3	3																6	$771	$0	$771	$0	**$771.00**	
	Progress Meetings					8	8																16	$2,056	$0	$2,056	$0	**$2,056.00**	
	Review Meetings					4	8																12	$1,488	$0	$1,488	$0	**$1,488.00**	
	Plan-in-Hand					4	4																8	$1,028	$0	$1,028	$0	**$1,028.00**	
	Meetings with Appraiser & Acquisition Staff																						0	$0	$0	$0	$0	**$0.00**	
																													$5,343.00
3	**Survey**																												
	Topographical Survey		2												40	40		8					90	$6,396	$0	$6,396	$0	**$6,396.00**	
	Base Map Preparation																						0	$0	$0	$0	$0	**$0.00**	
	Horizontal Control																						0	$0	$0	$0	$0	**$0.00**	
	Vertical Control																						0	$0	$0	$0	$0	**$0.00**	
	Locate Section Corners																						0	$0	$0	$0	$0	**$0.00**	
	Bench Level Run																						0	$0	$0	$0	$0	**$0.00**	
	Utility Locates																						0	$0	$0	$0	$0	**$0.00**	
																													$6,396.00
4	**Utility Coordination**																												
	Utility Location / Verification																						0	$0	$0	$0	$0	**$0.00**	
	Utility Plan Submittal																						0	$0	$0	$0	$0	**$0.00**	
	Utility Review Meetings / Coordination		24																				24	$3,888	$0	$3,888	$0	**$3,888.00**	
																													$3,888.00
5	**Public Involvement**																												
	Public Involvement Planning Meetings																						0	$0	$0	$0	$0	**$0.00**	
	Public Involvement Plan																						0	$0	$0	$0	$0	**$0.00**	
	Database Development / Maintenance																						0	$0	$0	$0	$0	**$0.00**	
	Key Stakeholder Outreach																						0	$0	$0	$0	$0	**$0.00**	
	City Council (1 pre-council, 1 reg meeting)																						0	$0	$0	$0	$0	**$0.00**	
	Open Houses (2)																						0	$0	$0	$0	$0	**$0.00**	
	One-on-One, Small Group Meetings																						0	$0	$0	$0	$0	**$0.00**	
	Newsletters / Informational Materials																						0	$0	$0	$0	$0	**$0.00**	
	Web Site Development																						0	$0	$0	$0	$0	**$0.00**	
	Final PI Report / Documentation																						0	$0	$0	$0	$0	**$0.00**	
																													$0.00
6	**Drainage Analysis**																												
	Hydraulic / Hydrologic Analysis																						0	$0	$0	$0	$0	**$0.00**	
	Preliminary Drainage Studies																						0	$0	$0	$0	$0	**$0.00**	
	Salt Creek Floodplain/Levee Review & Evaluation		48			96	122													176		16	458	$48,894	$0	$48,894	$0	**$48,894.00**	
																													$48,894.00
7	**Traffic**																												
	Traffic Data Collection																						0	$0	$0	$0	$0	**$0.00**	
	Traffic Analysis																						0	$0	$0	$0	$0	**$0.00**	
	Traffic Signal / ITS Design / Street Lighting																						0	$0	$0	$0	$0	**$0.00**	
	Pavement Marking & Signing																						0	$0	$0	$0	$0	**$0.00**	
																													$0.00
8	**First Submittal**																												
	Site Inspections						2												2				4	$390	$0	$390	$0	**$390.00**	
	Prepare Alternatives																						0	$0	$0	$0	$0	**$0.00**	
	Preliminary Designs		8				24												16				48	$5,336	$0	$5,336	$0	**$5,336.00**	
	Cover Sheet																						0	$0	$0	$0	$0	**$0.00**	
	Typical Section Sheets						4												8				12	$1,100	$0	$1,100	$0	**$1,100.00**	
	General Notes Sheet																						0	$0	$0	$0	$0	**$0.00**	
	Horizontal/Vertical Control Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Geometric Sheets						8												16				24	$2,200	$0	$2,200	$0	**$2,200.00**	
	Roadway Plan and Profile Sheets						16												16				32	$3,120	$0	$3,120	$0	**$3,120.00**	
	Right-of-Way Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Roadway Cross-Sections						20												12				32	$3,260	$0	$3,260	$0	**$3,260.00**	
	Preliminary Construction Phasing						6																6	$690	$0	$690	$0	**$690.00**	
	Cost Estimates						12												8				20	$2,020	$0	$2,020	$0	**$2,020.00**	
																													$18,116.00
9	**Geotechnical Investigation**																												
	Data Research and Field Work			8					20														28	$2,884	$0	$2,884	$0	**$2,884.00**	
	Design Recommendations		2	8					20														30	$3,208	$0	$3,208	$0	**$3,208.00**	
	Geotechnical Report		4	12					24													8	48	$4,944	$0	$4,944	$0	**$4,944.00**	
																													$11,036.00

OA MAN-HOUR ESTIMATE - CHARLESTON STREET BRIDGE AND ROADWAY IMPROVEMENTS/PROJECT NUMBER 870301

Task No.	Description of Work Items / Tasks	P/PM	TL	GL	SE	SPE	PE	AE	ASE	SS	SPS	PS	ACS	AS	SM	SCM	TM	DT	ST	Tech	AC	AA	Total Manhours	Total Labor Fee	Overhead 0.00%	Total (A+B)	Profit 0.00%	Total Fee (A+B+C)	
10	**Environmental/Historical Review**																												
	NEPA Environmental Review																						0	$0	$0	$0	$0	**$0.00**	
	Traffic Noise Study																						0	$0	$0	$0	$0	**$0.00**	
	Landfill Evaluation and Recommendations			36															8			4	48	$6,208	$0	$6,208	$0	**$6,208.00**	
	Wetlands and Habitat Investigation									4		8		8									20	$1,680	$0	$1,680	$0	**$1,680.00**	
	Wetland Permitting																						0	$0	$0	$0	$0	**$0.00**	
	Historical / Archeological Investigation																						0	$0	$0	$0	$0	**$0.00**	
	Impacts to Misc. Environmental Resources																						0	$0	$0	$0	$0	**$0.00**	
	Prepare Draft Environmental Review																						0	$0	$0	$0	$0	**$0.00**	
	Endangered Species Review																						0	$0	$0	$0	$0	**$0.00**	
	Public Land Impacts (4F or 6F)																						0	$0	$0	$0	$0	**$0.00**	
																													$7,888.00
11	**Water Main/Wastewater Relocation**																												
	Water Main/Wastewater Relocation																						0	$0	$0	$0	$0	**$0.00**	
																													$0.00
12	**Structural Design**																												
	Structural Alternative Analysis																						0	$0	$0	$0	$0	**$0.00**	
	Concrete Girder Alternatives		4																				4	$648	$0	$648	$0	**$648.00**	
	Pier Layout Design					4		8															12	$1,352	$0	$1,352	$0	**$1,352.00**	
	Pier Type Prelim. Design					4		8															12	$1,352	$0	$1,352	$0	**$1,352.00**	
	Beam Layout/Depth Prelim Design/Optimization					8		16															24	$2,704	$0	$2,704	$0	**$2,704.00**	
	Foundation Study/Prelim Design					4		8															12	$1,352	$0	$1,352	$0	**$1,352.00**	
	Bridge Design and Plan Preparation		4																				4	$648	$0	$648	$0	**$648.00**	
	Prepare Design Reprt					6		12														8	26	$2,508	$0	$2,508	$0	**$2,508.00**	
	Investigate Bird Deterring System																						0	$0	$0	$0	$0	**$0.00**	
	Preliminary TS&L Sheets					8		16												20			44	$4,124	$0	$4,124	$0	**$4,124.00**	
	Preliminary Data Sheets					2		4														2	8	$796	$0	$796	$0	**$796.00**	
	Concrete Girder Alternative - Final Design		8																				8	$1,296	$0	$1,296	$0	**$1,296.00**	
	Slab Design					16		24															40	$4,624	$0	$4,624	$0	**$4,624.00**	
	Beam Design					24		40															64	$7,328	$0	$7,328	$0	**$7,328.00**	
	Bearing Design					12		24															36	$4,056	$0	$4,056	$0	**$4,056.00**	
	Pier Design					24		60															84	$9,288	$0	$9,288	$0	**$9,288.00**	
	Abutment Design					20		40															60	$6,760	$0	$6,760	$0	**$6,760.00**	
	Reinforcing Detailing					12		32												60			104	$9,100	$0	$9,100	$0	**$9,100.00**	
	Quantities					4		24												24			52	$4,624	$0	$4,624	$0	**$4,624.00**	
	General Notes					2		6												12			20	$1,724	$0	$1,724	$0	**$1,724.00**	
	General Plan & Elevation					8		16												32			56	$4,976	$0	$4,976	$0	**$4,976.00**	
	Geology Plan & Elevation					12		24												40			76	$6,896	$0	$6,896	$0	**$6,896.00**	
	Foundation/Pile Layout Plans					8		16												32			56	$4,976	$0	$4,976	$0	**$4,976.00**	
	Pier Plans					4		8												60			72	$5,612	$0	$5,612	$0	**$5,612.00**	
	Abutment Plans					4		8												60			72	$5,612	$0	$5,612	$0	**$5,612.00**	
	Beam Framing Plans					4		8												40			52	$4,192	$0	$4,192	$0	**$4,192.00**	
	Beam Details					4		12												32			48	$4,016	$0	$4,016	$0	**$4,016.00**	
	Cross Sections					4		12												40			56	$4,584	$0	$4,584	$0	**$4,584.00**	
	Bearing and Expansion Joint Plans					4		8												24			36	$3,056	$0	$3,056	$0	**$3,056.00**	
	Slab Plans					6		12												40			58	$4,868	$0	$4,868	$0	**$4,868.00**	
	Approach Slab Plans					8		16												40			64	$5,544	$0	$5,544	$0	**$5,544.00**	
	Barrier Rail Plans					8		16												40			64	$5,544	$0	$5,544	$0	**$5,544.00**	
	Bridge Drainage Details					4		8												12			24	$2,204	$0	$2,204	$0	**$2,204.00**	
	Lighting		8				48													48			104	$10,224	$0	$10,224	$0	**$10,224.00**	
	Retaining Wall		8			80		40											80				208	$22,976	$0	$22,976	$0	**$22,976.00**	
	Trail Undercrossing		8			16	80												80				184	$19,168	$0	$19,168	$0	**$19,168.00**	
																													$178,732.00
13	**Water Main Design**																												
	Horizontal Alignment																						0	$0	$0	$0	$0	**$0.00**	
	Vertical Alignment																						0	$0	$0	$0	$0	**$0.00**	
	Detail Drawings																						0	$0	$0	$0	$0	**$0.00**	
	Utility Conflict Verification and Resolution																						0	$0	$0	$0	$0	**$0.00**	
																													$0.00
14	**Wastewater Design**																												
	Horizontal Alignment																						0	$0	$0	$0	$0	**$0.00**	
	Vertical Alignment																						0	$0	$0	$0	$0	**$0.00**	
	Detail Drawings																						0	$0	$0	$0	$0	**$0.00**	
	Utility Conflict Verification and Resolution																						0	$0	$0	$0	$0	**$0.00**	
																													$0.00
15	**Right-of-Way**																												
	Right-of-Way Plans																						0	$0	$0	$0	$0	**$0.00**	
	Legal Descriptions																						0	$0	$0	$0	$0	**$0.00**	
	Stake Right-of-Way																						0	$0	$0	$0	$0	**$0.00**	
																													$0.00
16	**Landscape Design**																												
	Landscape Design																						0	$0	$0	$0	$0	**$0.00**	
																													$0.00

OA MAN-HOUR ESTIMATE - CHARLESTON STREET BRIDGE AND ROADWAY IMPROVEMENTS/PROJECT NUMBER 870301

Task No.	Description of Work Items / Tasks	P/PM	TL	GL	SE	SPE	PE	AE	ASE	SS	SPS	PS	ACS	AS	SM	SCM	TM	DT	ST	Tech	AC	AA	Total Manhours	Total Labor Fee	Overhead 0.00%	Total (A+B)	Profit 0.00%	Total Fee (A+B+C)	
17	**Second Submittal**																												
	Second Submittal Design																						0	$0	$0	$0	$0	**$0.00**	
	Cover Sheet																						0	$0	$0	$0	$0	**$0.00**	
	Summary of Quantities Sheet																						0	$0	$0	$0	$0	**$0.00**	
	Typical Section Sheets						4												4				8	$780	$0	$780	$0	**$780.00**	
	General Notes Sheet																						0	$0	$0	$0	$0	**$0.00**	
	Detail Sheets						4												8				12	$1,100	$0	$1,100	$0	**$1,100.00**	
	Horizontal/Vertical Control Sheets						2																2	$230	$0	$230	$0	**$230.00**	
	Construction Phasing						4												8				12	$1,100	$0	$1,100	$0	**$1,100.00**	
	Traffic Control Sheets						4												12				16	$1,420	$0	$1,420	$0	**$1,420.00**	
	Geometric Sheets						6												12				18	$1,650	$0	$1,650	$0	**$1,650.00**	
	Joints and Grades Sheets						6												12				18	$1,650	$0	$1,650	$0	**$1,650.00**	
	Roadway Plan and Profile Sheets						6												12				18	$1,650	$0	$1,650	$0	**$1,650.00**	
	Construction Sheets						6												12				18	$1,650	$0	$1,650	$0	**$1,650.00**	
	Removal Sheets						6												12				18	$1,650	$0	$1,650	$0	**$1,650.00**	
	Retaining Wall Plan and Profile Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Retaining Wall Details																						0	$0	$0	$0	$0	**$0.00**	
	Storm Drainage Plan and Profile Sheets						6												12				18	$1,650	$0	$1,650	$0	**$1,650.00**	
	Culvert/Channel Cross-Section Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Sediment and Erosion Control Sheets						6												12				18	$1,650	$0	$1,650	$0	**$1,650.00**	
	Wastewater Plan and Profile Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Water Main Plan and Profile Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Traffic Signal Plan Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Pavement Marking & Signing Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Lighting Plan Sheets						8												16				24	$2,200	$0	$2,200	$0	**$2,200.00**	
	Landscaping Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Right-of-Way Sheets																						0	$0	$0	$0	$0	**$0.00**	
	Roadway Cross-Section						12												8				20	$2,020	$0	$2,020	$0	**$2,020.00**	
	Cost Estimates						8												8				16	$1,560	$0	$1,560	$0	**$1,560.00**	
	Special Provisions		24																			8	32	$4,368	$0	$4,368	$0	**$4,368.00**	
																													$26,328.00
18	**QA/QC**																												
	Plan Review		40																				40	$6,480	$0	$6,480	$0	**$6,480.00**	
																													$6,480.00
19	**Permit Applications**																												
	404 Permit/ Section 106 coordination																						0	$0	$0	$0	$0	**$0.00**	
	Floodplain Permit																						0	$0	$0	$0	$0	**$0.00**	
	SWPPP																						0	$0	$0	$0	$0	**$0.00**	
	NPDES Permit																						0	$0	$0	$0	$0	**$0.00**	
	Railroad Permit																						0	$0	$0	$0	$0	**$0.00**	
	Railroad Agreement																						0	$0	$0	$0	$0	**$0.00**	
	Railroad Insurance																						0	$0	$0	$0	$0	**$0.00**	
	NDOR Use of Right of Way Permit																						0	$0	$0	$0	$0	**$0.00**	
	NDOR Agreement																						0	$0	$0	$0	$0	**$0.00**	
	Lancaster County Utility Permit																						0	$0	$0	$0	$0	**$0.00**	
	Lancaster County Inter-local Agreement																						0	$0	$0	$0	$0	**$0.00**	
	Nebraska Dept. of Environmental Quality																						0	$0	$0	$0	$0	**$0.00**	
	City/County Health Dept. Noise Permit																						0	$0	$0	$0	$0	**$0.00**	
																													$0.00
20	**PS&E Submittals**																												
	Draft PS&E Submittal						16												16				32	$3,120	$0	$3,120	$0	**$3,120.00**	
	Final PS&E Submittal						16												16				32	$3,120	$0	$3,120	$0	**$3,120.00**	
																													$6,240.00
21	**Bidding Phase**																												
	Attend Pre-Bid Meeting		4			4	4																12	$1,676	$0	$1,676	$0	**$1,676.00**	
	Answer Design Questions					8	8																16	$2,056	$0	$2,056	$0	**$2,056.00**	
	Prepare Addenda						8															4	12	$1,160	$0	$1,160	$0	**$1,160.00**	
																													$4,892.00
22	**Construction Phase**																												
	Attend Pre-Construction Meeting		4			4	4																12	$1,676	$0	$1,676	$0	**$1,676.00**	
	Review Shop Drawings					20	8	24															52	$6,112	$0	$6,112	$0	**$6,112.00**	
	Prepare Change Orders																						0	$0	$0	$0	$0	**$0.00**	
	Prepare Revision Sheets					6	12	12											24				54	$5,328	$0	$5,328	$0	**$5,328.00**	
	Answer Design Questions					20	20																40	$5,140	$0	$5,140	$0	**$5,140.00**	
	Evaluate substitute "or equal" bids					2	2																4	$514	$0	$514	$0	**$514.00**	
	Conduct Site Visits (6 visits)					12	12																24	$3,084	$0	$3,084	$0	**$3,084.00**	
	Review and Certify Pay Requests																						0	$0	$0	$0	$0	**$0.00**	
																													$21,854.00
	Total Manhours	0	280	64	0	515	563	562	64	4	0	8	0	8	40	40	0	8	450	832	0	70	3508						
	Total	$0	$45,360	$9,472	$0	$73,130	$64,745	$55,076	$5,440	$480	$0	$720	$0	$480	$3,200	$2,200	$0	$672	$36,000	$59,072	$0	$4,200	$360,247	$360,247	$0	$360,247	$0	**$360,247.00**	
	Total Labor, OH & Profit	$0	$45,360	$9,472	$0	$73,130	$64,745	$55,076	$5,440	$480	$0	$720	$0	$480	$3,200	$2,200	$0	$672	$36,000	$59,072	$0	$4,200						**$360,247.00**	

Appendix A-8
Total Project Fee - Schemmer

CHARLESTON STREET BRIDGE AND ROADWAY IMPROVEMENTS
City Project Number 870301

Task No.	Task Description		Fee Estimate
1	Project Management		$13,040.00
2	General Project Meetings		$9,560.00
3	Survey		$6,320.00
4	Utility Coordination		$4,400.00
5	Public Involvement		$1,020.00
6	Drainage Analysis		$7,020.00
7	Traffic		$15,660.00
8	First Submittal		$38,180.00
9	Geotechnical Evaluation		$2,400.00
10	Environmental / Historical Review		$2,400.00
11	Exist Water - Sanitary Relocates		$2,580.00
12	Structural / Bridge Design		$0.00
13	Water Main Design		$0.00
14	Wastewater Design		$0.00
15	Right-of-Way		$5,645.00
16	Landscape Design		$5,840.00
17	Second Submittal		$65,750.00
18	QA/QC		$7,600.00
19	Permit Applications		$7,050.00
20	PS&E Submittals		$11,620.00
21	Bidding Phase		$4,860.00
22	Construction Phase		$15,840.00
	Expenses		$1,100.00
		Total Project Cost	$227,885.00

APPENDIX B -2

PROJECT SCHEDULE FOR AMENDMENT NO. 2 WORK

No.	Individual Project Component	Design Start	Target Ready to Bid Date Plans and Specifications	Target Construction Start Date	Target Construction Substantial Completion or Coordination/Analysis Complete
8	Charleston Street Bridge and Roadway Project	1/8/2011	7/19/2011	9/6/2011	6/22/2012

WH 11-06 Introduce: 1-7-11

RESOLUTION NO. WH- _____

BE IT RESOLVED by the Board of Representatives of the West Haymarket Joint Public Agency:

That Amendment No. 1 to the Consultant Agreement between the City of Lincoln as assigned to the West Haymarket Joint Public Agency and Benham Companies LLC, now known as SAIC Energy, Environment & Infrastructure LLC, is hereby accepted and approved and the Chair of the Board of Representatives of the West Haymarket Joint Public Agency is hereby authorized to execute said Amendment No. 1 on behalf of the West Haymarket Joint Public Agency.

Amendment No. 1 clarifies that the commencement date of the Consultant Agreement to provide interim program management services for the West Haymarket Redevelopment Project began on August 12, 2010, said date being the date that James W. Martin, Senior Program Manager for SAIC, arrived in Lincoln and began work as Program Manager for the West Haymarket Redevelopment Project. Amendment No. 1 further clarifies that the reasonable expenses for meals and other incidentals for certain of the Consultant's employees working in Lincoln, Nebraska is $46.00 per day.

Adopted this _____ day of _____, 2011.

Introduced by:

_____

West Haymarket Joint Public Agency
Board of Representatives

Approved as to Form & Legality:

_____
Legal Counsel for
West Haymarket Joint Public Agency

_____
Jayne Snyder, Chair

_____
Tim Clare

_____
Chris Beutler

AMENDMENT NO. 1
CONSULTANT AGREEMENT

THIS AMENDMENT NO. 1 to the Consultant Agreement by and between the City of Lincoln as assigned to the West Haymarket Joint Public Agency ("JPA") and Benham Companies, LLC, now known as SAIC Energy, Environment & Infrastructure, LLC ("Consultant"), is entered into as of the 7th day of January, 2011 by and between JPA and the Consultant.

RECITALS

A.

The JPA and Consultant desire to amend the Consultant Agreement to clarify that Consultant began providing temporary interim program management services for the West Haymarket Redevelopment Project on August 12, 2010, said date being the date that Consultant James W. Martin, the Senior Program Manager, began providing interim program management services the Project.

B.

The JPA and Consultant desire to amend the Consultant Agreement to clarify that reasonable expenses for meals and other incidentals is $46.00 per day.

C.

The JPA and Consultant desire to extend the Consultant Agreement for the interim program management services in order to complete the final negotiations and enter into a final agreement for program management services.

NOW, THEREFORE, IN CONSIDERATION of the above Recitals and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties hereby agree as follows:

1. That the sentence under Article III. Term of Agreement is hereby deleted and replaced with the following language:

The term of this Agreement shall commence on August 12, 2010 and shall continue until completion of all obligations of this agreement, but in no event beyond January 31, 2011.

2. That Article IV. Compensation be amended by adding a new sentence at the end of the first paragraph to read as follows:

Reasonable expenses for meals and other incidentals shall be limited to the following personnel and shall be $46.00 per day: James W. Martin, Aaron Young and Sandy Steward.

3. Except as expressly modified by this Amendment No. 1, all of the terms and provisions of the Consultant Agreement are hereby reaffirmed and remain in full force and effect.

IN WITNESS WHEREOF, JPA and Consultant have executed this Amendment No. 1 as of the 7th day of January, 2011.

West Haymarket Joint Public Agency

_____

Jayne Snyder, Chair
Board of Representatives

SAIC Energy, Environment & Infrastructure, LLC,
formerly Benham Companies, LLC

_____

Title:

WH 11-07 Introduce: 1-7-11

RESOLUTION NO. WH- _____

BE IT RESOLVED by the Board of Representatives of the West Haymarket Joint Public Agency:

That the West Haymarket Joint Public Agency does hereby authorize AON Risk Services Central, Inc. on behalf of the West Haymarket Joint Public Agency to bind the Owner's Interest Liability insurance coverage being offered by Lexington Insurance Company including excess Liability 1st Layer and with excess Liability 2nd Layer from Liberty Insurance Underwriters, Inc. as set forth in the attached 2010 Proposal of Coverage dated December 20, 2010.

Adopted this _____ day of _____, 2011.

Introduced by:

_____

Approved as to Form & Legality:

West Haymarket Joint Public Agency
Board of Representatives

_____
Legal Counsel for
West Haymarket Joint Public Agency

_____
Jayne Snyder, Chair

_____
Tim Clare

_____
Chris Beutler

City of Lincoln

2010 Proposal of Coverage

Owner's Interest Liability

Aon Risk Services Central, Inc. | *Nebraska & Iowa*
11213 Davenport Street, Suite 201
Omaha, Nebraska 68154
402.697.1400 telephone
402.697.0017 fax
800.729.1011 toll free
Date Prepared: December 20, 2010

Executive Summary

The City of Lincoln and West Haymarket Joint Public Authority, being engaged in the acquisition of land from Burlington Northern Santa Fe Railroad (BNSF) for the purpose of the development including the construction of an arena, contractually agreed to carry certain insurance coverages. Chief among those was an agreement to maintain general liability, with AM Best A rated carriers, limits of $25 million per occurrence and $50 million in the aggregate for the term of the project. The agreement with BNSF requires evidence of this coverage prior to closing. The City addresses their ongoing liability as an entity through a Risk Retention Group which does not participate in AM Best's rating system so would not meet the contractual obligation with BNSF. As such, the most cost effective manner to meet the coverage obligation was to pursue a project specific placement for the required limits.

The proposal that follows summarize the results of that marketing. To best meet the needs of the City for this specialized coverage, Aon approached wholesaler Swett and Crawford to canvas the marketplace for options. As we worked to obtain information on the project once the City selected Mortenson as their prime contractor, it became apparent that two carriers—Lexington and Liberty—had a significant comfort level with the project due to existing relationships with Mortenson on their own liability program. The results are apparent as the quotes from both carriers reflect a very competitive rate. Initially, Lexington was approached to provide the entire 25/50 limits but would only provide up to 25/25. To meet the $50 aggregate Liberty was able to provide a quote for $25 million excess of the underlying Lexington quote at about a quarter of the cost of the underlying $25 million limits.

While BNSF has offered to accept 25/25 initially with the condition that the City contractually agree to reinstate limits if they are eroded by half, the cost to do this would likely be multiples of the cost to purchase the full 25/50 limits up front. Given the relative cost of the excess $25 million our recommendation would be to meet the current contractual obligation rather than commit to potential large expenditures that could significantly affect the budget for the overall project.

Given that there is not a final agreement with Mortenson to date, the Lexington quote is subjective on that agreement mirroring the City/BNSF agreement with respect to indemnification and liability insurance. Also, the Liberty quote is subjective upon a satisfactory soil stability report. Both carriers also require completed signed copies of their own applications.

Commercial General Liability

(Occurrence Form)

LIMIT OF LIABILITY		
General Aggregate (Oother than Products/Completed Operations)	$	2,000,000
Products &and Completed Operations Aggregate	$	2,000,000
Personal &and Advertising Injury	$	1,000,000
Each Occurrence	$	1,000,000
Premises Fire Damage	$	0
Medical Expense (Any One Person)	$	0

BASIC COVERAGES	
Premises/Operations	Products/Completed Operations
Contractual Liability	Broad Form Property Damage
Non-Owned Watercraft – 26 feet or less	Employees as Additional Insureds
Host Liquor Liability	
Limited Worldwide Liability	

OTHER CONDITIONS
Minimum Earned Premium = 100%.
Products/completed operations coverage continues for 10 years after project completion.
If policy is cancelled for any reason, claims for bodily injury or property damage which manifest after the policy period will not be covered under this policy.

ADDITIONAL COVERAGES

No	Fellow Employee Exclusion Deleted
No	Blanket Additional Insureds
Yes	Designated Project Endorsement
No	Personal Injury Contractual Liability
Yes	Blanket Waiver of Subrogation
No	Unintentional Errors and/or Omissions/Failure to Disclose
No	Aggregate per Location
Yes	Primary and Non-Contributory for Additional Insureds
Yes	Application of Limits Endorsement
Yes	Other Insurance Amendment
Yes	General Aggregate– Annual Reinstatement of Limits
Yes	Products/Completed Operations – No Reinstatement of Limits
Yes	Deductible - $25,000 per occurrence
Yes	Limited Contractual Liability - Railroads

MAJOR EXCLUSIONS			
Yes	Pollution	Yes	Lead
Yes	Asbestos	Yes	Employment Related Practices
Yes	Nuclear Energy	Yes	Mold and Biological Agents
Yes	War	Yes	Silica
Yes	Securities/Financial Interest	Yes	Chromium Copper Arsenate
Yes	Pending/Prior Litigation	Yes	Cross Suits
Yes	Professional Liability	Yes	EIFS

Subject to:

- Signed Lexington Owners Liability Application
- Copy of City of Lincoln and Mortenson Contract—when available

INSURANCE COMPANY:	Lexington Insurance Company	**Admitted Carrier:**
POLICY NUMBER:		No
POLICY TERM:	12-30-2010 to 12-30-2013	
A.M. BEST RATING	A XV	

Commercial General Liability Schedule

CLASSIFICATION	CODE	STATE	RATING BASIS	EXPOSURE
Owner's Liability		NE	Project Cost	$299,884,800

NOTE: Payroll/Sales are subject to verification and changes due to audit.
There will be additional premium if the project completion date goes past 12-30-2013.

Follow Form Excess Liability – 1st Layer

LIMITS		
Occurrence Limit	$	25,000,000
Aggregate Limit	$	25,000,000
Self Insured Retention	$	--

SCHEDULE OF PRIMARY COVERAGES

COVERAGE	CARRIER	UNDERLYING LIMIT	
Owner's Interest Liability	Lexington	$ 1,000,000	Each Occurrence
		$ 2,000,000	General Aggregate (Other Than Products/Completed Operations)
		$ 2,000,000	Products &and Completed Operations Aggregate

OTHER PROVISIONS

- Defense Outside Policy Limits
- Employees as Additional Insureds
- Designated Projects Endorsement
- Accident Endorsement
- Follow Form Terms and Conditions of Primary Quote

MAJOR ENDORSEMENTS

- Pollution Exclusion
- Asbestos Exclusion
- Lead Exclusion
- Property in Insured's Care, Custody or Control Exclusion
- Employment Related Practices Exclusion
- Mold Exclusion

Subject to all subjectivities on the primary Lexington quote.

INSURANCE COMPANY:	Lexington	Admitted Carrier:
POLICY NUMBER:		No
POLICY TERM:	12-20-2010 to 12-20-2013	
A.M. BEST RATING	A XV	

Follow Form Excess Liability – 2nd Layer

LIMITS		
Occurrence Limit	$	25,000,000
Aggregate Limit	$	25,000,000
Self Insured Retention	$	--

SCHEDULE OF UNDERLYING COVERAGES

COVERAGE	CARRIER	UNDERLYING LIMIT	
Excess Liability	Lexington Insurance Company	$ 25,000,000	Each Occurrence
		$ 25,000,000	General Aggregate (Other Than Products/Completed Operations)

OTHER PROVISIONS

- Defense Outside Policy Limits
- Employees as Additional Insureds
- Follow Form Terms and Conditions of Primary and 1st Layer Excess Liability

MAJOR ENDORSEMENTS

- Pollution Exclusion
- Asbestos Exclusion
- Lead Exclusion
- Accident Insurance Exclusion
- Property in Insured's Care, Custody or Control Exclusion
- Contractor's Limitation Endorsement
- Property in Insured's Care, Custody or Control Exclusion
- Employment Related Practices Exclusion
- Mold Exclusion
- Auto Liability Exclusion
- Designated Projects Endorsement

Subject to:

- Copy of lead excess policy within 90 days of binding
- Review of primary policies within 90 days of binding
- Copy of safety program within 30 days of binding
- Review and acceptance of current soils report

INSURANCE COMPANY:	Liberty Insurance Underwriters, Inc.	Admitted Carrier: Yes
POLICY NUMBER:		
POLICY TERM:	12-20-2010 to 12-20-2013	
A. M. BEST RATING	A XV	

Premium Summary Revenue Disclosure

COVERAGE	CARRIER	NEW / RENEWAL PREMIUM	TOTAL AON COMMISSION REVENUE	INTERMEDIARY REVENUE
Owner's Interest Liability	Lexington Insurance Company	$126,250*	$12,625	$6,313
First Layer Excess Liability	Lexington Insurance Company	$222,200*	$23,331	$9,999
Second Layer Excess Liability	Liberty Insurance Underwriters, Inc.	$ 81,800*	$ 8,589	$3,681
TOTAL		$430,250	$44,545	$19,993

*Subject to 3% Surplus Lines Tax--$12,907.50 total

PAYMENT TERMS:	OPTIONAL QUOTATIONS:	QUOTE SUBJECT TO REQUIREMENTS:
Annual Payment Premiums quoted include Terrorism charge: Primary -- $1,250 1st Excess -- $2,200 2nd Excess -- Included		Detailed in proposal.

Standard cancellation is 30 days except 10 days' for non-payment. Refer to policies for exact

City of Lincoln

Quote Disclosure Report

Program	Line of Business	Carrier	Carrier Response	Carrier Declination Reason	Premium[2]	Quoted ARS Commission	Nationally Agreed Commission Rate[3]	Intermediary, if applicable	Intermediary Commission	ARS Fee[4]	Total ARS Income[1,3]	Total Cost to Client (Premium + Fee)
Policy Term: December 30, 2010 to December 30, 2013												
1st excess	Excess Liability Coverage	Lexington Insurance Company	Quoted	N/A	$222,200.00	15.0000%	15.0000%	Swett & Crawford	4.5000%	$0.00	$33,330.00	$222,200.00
1st excess	Excess Liability Coverage	Allied World Assurance Company (US) Inc	Declined	Class of Business	N/A	N/A	N/A	Swett & Crawford	N/A	N/A	N/A	N/A
1st excess	Excess Liability Coverage	Navigators Specialty Insurance Company	No Response	N/A	N/A	N/A	15.0000%	Swett & Crawford	N/A	N/A	N/A	N/A
1st excess	Excess Liability Coverage	Liberty Insurance Underwriters, Inc.	Declined	Uncompetitive - Price	N/A	N/A	N/A	Swett & Crawford	N/A	N/A	N/A	N/A
2nd excess	Excess Liability Coverage	Great American Assurance Company	No Response	N/A	N/A	N/A	16.0000%	Swett & Crawford	N/A	N/A	N/A	N/A
2nd excess	Excess Liability Coverage	Liberty Insurance Underwriters, Inc.	Quoted	N/A	$81,800.00	15.0000%	15.0000%	Swett & Crawford	4.5000%	$0.00	$12,270.00	$81,800.00
OILP	General Liability Coverage	Liberty Insurance Underwriters, Inc.	Declined	Uncompetitive - Price	N/A	N/A	N/A	Swett & Crawford	N/A	N/A	N/A	N/A
OILP	General Liability Coverage	RLI Insurance Company	No Response	N/A	N/A	N/A	15.0000%	Swett & Crawford	N/A	N/A	N/A	N/A
OILP	General Liability Coverage	Westchester Surplus Lines Ins Co	Indication Only	N/A	$250,000.00	15.0000%	15.0000%	Swett & Crawford	5.0000%	$0.00	$37,500.00	$250,000.00
OILP	General Liability Coverage	Lexington Insurance Company	Quoted	N/A	$126,250.00	15.0000%	15.0000%	Swett & Crawford	5.0000%	$0.00	$18,937.50	$126,250.00
OILP	General Liability Coverage	Allied World Assurance Company (US) Inc	Declined	Class of Business	N/A	N/A	N/A	Swett & Crawford	N/A	N/A	N/A	N/A

Currency: USD

Presentation Date: 12/21/2010

Disclosures

[1] Aon Risk Services is an insurance producer licensed in your state. Insurance producers are authorized by their license to confer with insurance purchasers about the benefits, terms and conditions of insurance contracts; to offer advice concerning the substantive benefits of particular insurance contracts; to sell insurance; and to obtain insurance for purchasers. The role of the producer in any particular transaction involves one or more of these activities. Compensation will be paid to the producer, based on the insurance contract the producer sells. Depending on the insurer(s) and insurance contract(s) the purchaser selects, compensation will be paid by the insurer(s) selling the insurance contract or by another third party. Such compensation may vary depending on a number of factors, including the insurance contract(s) and the insurer(s) the purchaser selects. In placing, renewing, consulting on or servicing your insurance coverages, Aon Risk Services and its affiliates ("Aon") may participate in contingent commission arrangements with insurance companies that provide for additional contingent compensation, if, for example, certain underwriting, profitability, volume or retention goals are achieved. Such goals are typically based on the total amount of certain insurance coverages placed by Aon with the insurance company or the overall performance of the policies placed with that insurance company, not on an individual policy basis. As a result, Aon may be considered to have an incentive to place your insurance coverages with a particular insurance company. The insurance purchaser may obtain information about compensation expected to be received by the producer based in whole or in part on the sale of insurance to the purchaser, and (if applicable) compensation expected to be received based in whole or in part on any alternative quotes presented to the purchaser by the producer, by contacting your Account Executive or emailing Aon Email Box.

[2] ARS receives premiums Clients pay for remittance to carriers, as well as refunds insurance companies pay for remittance to Clients, and deposits these payments into fiduciary accounts in accordance with applicable insurance laws until they are due to be remitted. ARS will retain the interest or investment income earned while such funds are on deposit pursuant to those laws and carrier agreements.

[3] Notwithstanding whether any commission amounts are shown in the Quoted ARS Commission column, ARS has nationally-agreed commission rates with some carriers for certain lines of business and/or for outsourced administrative services performed on the carrier's behalf. Where there is a Nationally Agreed Commission Rate shown, ARS expects to earn this commission rate on the premium amount quoted herein. Collecting this commission will not change in any way the Premium quoted above.

[4] When a carrier does not pay ARS an amount sufficient to cover the brokerage and administrative services performed by ARS on the carrier's behalf for the benefit of our clients, ARS may charge such fees to the client as ARS deems necessary and where permitted by applicable law.

Program	Line of Business	Carrier	Carrier Response	Carrier Declination Reason	Premium[2]	Quoted ARS Commission	Nationally Agreed Commission Rate[3]	Intermediary, if applicable	Intermediary Commission	ARS Fee[4]	Total ARS Income[5]	Total Cost to Client (Premium + Fee)[6]

[5] Total ARS Income equals the sum of the commission ARS will receive from the Carrier, including quoted or nationally agreed commissions (as applicable), and the ARS fee, if any. Commission is calculated by multiplying the Premium amount by applicable commission rates.

[6] The Total Cost to Client is Premium (inclusive of all ARS commission) plus ARS Fee (if applicable). Total Cost to Client does not include applicable surplus lines taxes and fees and it does not include applicable state fees, surcharges, or taxes assessed on the policy.

[7] ARS performs various administrative functions related to the procurement of coverage, including, but not limited to, electronic policy filing and storage, expiration tracking, client data management, and administration. Where legally permitted to do so, ARS-US charges for its own account and collects from its clients, a $300 policy administrative charge per policy placed. In some countries where legally permitted to do so, ARS charges for its own account and collects administrative fees from its clients. Administrative fees are in addition to and not in lieu of any other service fees agreed to and paid to us by our clients and/or any commissions paid to us by insurers, and these administrative fees appear separately on the invoices we issue.

Acknowledgement and Approval of Insured

We hereby acknowledge receipt and review of the information presented in the Proposal ("Proposal") dated December 20, 2010 for Owner's Interest Liability and provided in the attached Quote Disclosure Report dated December 20, 2010. We hereby instruct Aon Risk Services to bind the insurance program(s) selected by us and understand that our instruction to bind constitutes an acceptance of the terms and conditions and payments described in this Renewal Proposal. [We further agree that Aon is entitled to collect the commissions as set forth in the Quote Disclosure Report from the gross premiums paid by us to Aon, and that Aon will remit net premium to our insurers or intermediaries on our behalf.] We also acknowledge that Aon has provided information about its contractual agreements and ownership interest(s), if any, in the insurers listed in this Renewal Proposal through Aon's website at http://www.aon.com/market_relationships.

Date: _____ _____

On behalf of Client

Fiduciary Funds

Premiums paid by Client to ARS for remittance to insurers and Client refunds paid to ARS by insurance companies for remittance to Client are deposited into fiduciary accounts in accordance with applicable insurance laws until they are due to be paid to the insurance company or Client. Subject to such laws and the applicable insurance company's consent, where required, ARS will retain the interest or investment income earned while such funds are on deposit in such accounts.

Insurer Insolvency

Whether or not a placement is with an admitted insurer, Aon does not guarantee the solvency of any insurer with which we place business. In addition to publicly available information that Aon may convey to our clients, Aon encourages our clients to review all the publicly available information since only the client can make the ultimate decision to accept or reject a particular insurer.

Commission

Unless mandated otherwise by applicable state law and regulation or by contractual agreement between Aon and insurers, any commission that Aon is entitled to receive for any placement shall be deemed fully earned as of the effective date of the insurance programs described our insurance proposals. Any midterm program or coverage changes that result in a premium-bearing endorsement will be negotiated at the same commission rate, as applicable

Insurance Proposals

Aon's insurance documents containing proposals to bind coverage are furnished to clients as a matter of information for our clients' convenience. These documents summarize proposed policies and are not intended to reflect all the terms and conditions of nor exclusions within such proposed policies. Moreover, the information contained in these documents reflects proposed coverage as of the effective dates of the proposed policies and does not include subsequent changes. These documents are not themselves insurance policies and do not amend, alter or extend the coverages afforded by the proposed policies. The insurance afforded by the proposed policies is subject to all the terms, exclusions and conditions contained in such policies as they are issued by the insurers.

Insurer Ownership/Contractual Relationships

Aon has provided information about its contractual agreements with and ownership interests, if any, in the insurers and intermediaries listed in insurance proposals through Aon's website at http://www.aon.com/market_relationships.

Surplus Lines

Based on our marketing efforts, insurance for this proposal is not available in the admitted market for the terms and conditions specified. Therefore, this insurance proposal is with an insurer not licensed to transact insurance in the states of exposure and is issued and delivered as surplus lines coverage pursuant to the various state insurance laws. Persons insured by surplus lines carriers do not have the protection of the state insurance guaranty funds to the extent of any right of recovery for the obligation of an insolvent unlicensed insurer. The states do not audit the finances or review the solvency of the surplus lines insurer providing this coverage. Applicable surplus lines taxes and fees apply.

In some instances, insurance placements made by ARS on your behalf may require the payment of state surplus lines or other premium taxes and/or fees in addition to the premium itself. ARS will make every effort to identify any such tax and/or fee in advance, but in all instances the payment of these taxes and/or fees will remain the ultimate responsibility of you, the client.

Aon's Policy on Use of Intermediaries

It is Aon's policy that our retail brokers approach markets directly (without an intermediary) wherever possible. However, Aon will consider and recommend the use of a managing general agent/managing general underwriter ("MGA/MGU"), wholesale broker, or reinsurance broker (collectively, "Intermediary"*) where we believe it is in the client's best interest for one or more of the following reasons:

- Certain insurers will only underwrite through a designated wholesaler or other organization or agency, such as a Managing General Agent or Managing General Underwriter.
- If a client's particular risks and coverage needs require the unique or specialized expertise developed by certain intermediaries.
- There may be jurisdictional licensing requirements that preclude a US retail broker from accessing certain markets on behalf of its clients (e.g., Bermuda, United Kingdom).
- Certain insurers have multiple access points, some of which require access through an intermediary. This can occur in one of two ways:
  - Some insurers have different underwriting groups around the world. This kind of insurer may specify its risk appetite and capabilities by geographic location. In this instance, we would endeavor to match the client with the most suitable insurer access point.
  - Other insurers have similar appetites and capabilities in all geographic locations. In these scenarios, we will discuss with you our recommended access point, which will be based on our professional judgment and experience where we believe the best underwriting result will be obtained. In these instances, the preferred avenue is usually to access the market directly unless there are extenuating circumstances.

Whenever we recommend utilizing the services of and before approaching an intermediary to assist in accessing, negotiating, placing, or procuring insurance or reinsurance for your insurance programs, we will advise you of the available options, and whether or not the intermediary is affiliated with Aon. Aon will not be responsible for the non-Aon affiliated intermediary's actual or alleged acts, errors, or omissions or those of its officers, directors or employees arising out of this assistance. Any and all compensation earned by a non-Aon affiliated intermediary is in addition to compensation paid to Aon and to any compensation earned by an Aon affiliated intermediary.

*MGA/MGUs typically are appointed as agents or administrators of the insurance companies they represent and they usually are compensated by such companies in the form of commissions from premiums. Wholesale brokers and reinsurance brokers also are typically compensated by insurance companies in the form of commissions. Wholesale brokers may also receive fees from underwriters for services they provide to them. In some instances and subject to applicable law, wholesale brokers may assess a broker fee in addition to the compensation paid by insurance companies, and such broker fees typically are paid by the client.

Market Security Policy

Our goal is to procure insurance for our clients with underwriters possessing the financial strength to perform in today's economic environment. In meeting this goal, Aon Group, Inc. and its subsidiaries (Aon) regularly review publicly available information concerning an underwriter's financial condition. This information includes but is not limited to:

- Approval by various regulatory authorities;
- Analyses by the major insurance rating agencies, such as: A.M. Best, Standard and Poor's, Moody's and Fitch (f.k.a. Duff and Phelps);
- Key performance test results which consist of financial ratios established by the National Association of Insurance Commissioners (NAIC) for United States underwriters and Standard and Poor's for international underwriters; and,
- Input from our global affiliates and correspondents.

The vast majority of Aon placements are made with underwriters that are rated "excellent" by the professional rating agencies.

Aon does not guarantee the solvency of any market with which we place business. Aon encourages our clients to review the publicly available information obtained by us since only the client can make the ultimate decision to accept or reject a particular market. The decision to accept or reject an underwriter shall be made solely by you, the client.

WH 11-08 Introduce: 1-7-11

RESOLUTION NO. WH- _____

BE IT RESOLVED by the Board of Representatives of the West Haymarket Joint Public Agency:

That the Amendment No. 2 to the Agreement dated August 14, 2008 between the City of Lincoln (Assigned to the West Haymarket Joint Public Agency) and DLR Group, Inc. to provide Task 1 and Task 2 Contract modifications for the design of the Arena and other Arena improvements for the West Haymarket Project, attached hereto as Attachment "A" and incorporated herein by this reference, is hereby approved and the Chairperson of the West Haymarket Joint Public Agency Board of Representatives is hereby authorized to execute said Amendment No. 2 on behalf of the West Haymarket Joint Public Agency.

Introduced by:

_____

Approved as to Form & Legality:

_____
Legal Counsel for
West Haymarket Joint Public Agency

West Haymarket Joint Public Agency
Board of Representatives

_____
Jayne Snyder, Chair

_____
Tim Clare

_____
Chris Beutler

ATTACHMENT "A"

AMENDMENT NO. 2

Amendment No. 2 made as of the 7th day of January, 2011 between the West Haymarket Joint Public Agency and DLR Group, Inc., a Nebraska corporation, for the Lincoln Arena (Amendment No. 2 to the Agreement dated August 14, 2008).

That the August 14, 2008 Agreement, as amended by Amendment No. 1, be revised to include the Task 1 and Task 2 modifications in Exhibit 1 attached hereto.

West Haymarket Joint Public Agency, Owner	DLR Group, Inc., Architect
_____	_____
Jayne Snyder Chairperson	Name: Title:

Contract Amendment No. 002

EXECUTIVE SUMMARY

Task 1 Contract Modifications	$698,599
Task 2 Contract Modifications	$110,000
Management Fee on Base Specialty Consultant Allowance	$ 3,786
Total amount of Contract Modification	$812,385

AIA® Document G802™ – 2007

Amendment to the Professional Services Agreement

Amendment Number: 002

TO: Jayne Snyder, Chair
(Owner or Owner's Representative)

In accordance with the Agreement dated: August 14, 2008 and Amendment No. 1 dated September 1, 2010

BETWEEN the Owner:
(Name and address)
West Haymarket Joint Public Agency
555 South 10th Street
Lincoln, NE 68508

and the Architect:
(Name and address)
DLR Group, inc. (a Nebraska corporation)
1111 Lincoln Mall
Suite 201
Lincoln, NE 68508

for the Project:
(Name and address)
Lincoln Arena
Lincoln, Nebraska

Authorization is requested
☒ to proceed with Additional Services.
☐ to incur additional Reimbursable Expenses.

As follows:
Additional services related to the Lincoln Arena are described below:

Task 1: Arena Parking Garage
Complete architectural and engineering design and construction services for a structured parking garage for approximately 500 cars. Services to be performed by a consultant, Clark Enerson Partners, and will be in accordance with the Owner's approved program and coordinated with all design team members involved in the Arena project. Design services to include a specialty Parking Garage consultant, as a subconsultant (AGA) to Clark Enerson Partners. Note: The Arena Parking Garage Design is included in our Contract. A fee amount was not included. This modification is for our fee.

Task 2: Food Service Consultant
Include the services of a Specialty Consultant, SMG/SAVOR, to provide food service planning and design throughout all phases of the design and construction of the Arena. Food service design will be related to the Commissary, Pantry and Concession Areas.

The following adjustments shall be made to compensation and time.
(Insert provisions in accordance with the Agreement, or as otherwise agreed by the parties.)

Compensation:
Task 1: Arena Parking Garage
A stipulated sum of Six Hundred Ninety-Eight Thousand Five Hundred Ninety-Nine Dollars ($698,599) to include labor, related expenses and 10% administrative markup for Consultant.

Task 2: Food Service Consultant
A stipulated sum of One Hundred Ten Thousand Dollars ($110,000) to include labor, related expenses and 10% administrative markup for Consultant. This fee is to be added to the Base Contract Specialty Consultants Allowance of $915,000 as indicated in the attachment. The revised Allowance for the Specialty Consultants is $1,015,000 without DLR management fee.

Time:
Work to be performed in accordance with the approved project schedule.

SUBMITTED BY:	**AGREED TO:**
(Signature)	*(Signature)*
Stanley M. Meradith	Jayne Snyder
Principal	Chair
(Printed name and title)	*(Printed name and title)*
January 3, 2011	
(Date)	*(Date)*

Base Contract Fee

1/3/2011

Lincoln Haymarket Arena - Specialty Consultants Cost Summary					
Specialty	Specialty Consultant	Specialty Consultant Allowance per Contract	Final Negotiated Contract Fee	DLR Management Fee	Total Cost with Management Fee
ADA review	CCI Code Consultants	$35,000	$25,500	$2,550	
Codes/Fire Protection	CCI Code Consultants	$75,000	$60,500	$6,050	
Audiovisual System design	WJHW	$210,000	$109,602	$10,960	
Sound System design	WJHW	$0	$58,958	$5,896	
Acoustics and Noise control	WJHW	$0	$25,339	$2,534	
Communications	WJHW	$50,000	$64,652	$6,465	
Rigging	WJHW	$110,000	$44,499	$4,450	
Building Security	WJHW	$65,000	$31,706	$3,171	
Train Vibration Analysis	WJHW	$30,000	$10,244	$1,024	
Graphics/Wayfinding	Catt Lyon Design	$135,000	$106,085	$10,609	
Curtain Wall	CDC	$35,000	$147,860	$14,786	
Ice Floor design	CIMCO	$50,000	$30,000	$3,000	
Vertical Transportation	Lerch Bates, Inc	$30,000	$52,315	$5,232	
Wind Loading	CPP	$90,000	$68,000	$6,800	
Total Allowance per Contract		$915,000			
Total Negotiated Fee			$835,260		
Difference between Allowance and Negotiated Fee		$79,740			
DLR Management Fee (10% of Negotiated Fee) - Total				$83,526	
Total Negotiated Fee with DLR Management Fee					$918,786

Task 2 - Food Service Consultant

Food Service (Additional Service Fee)	SMG/Savor	$0	$100,000		
DLR Management Fee (10%) - Total				$10,000	
Total Allowance with Task 2 fee		$1,015,000			
Total Negotiated Fee with Task 2 fee			$935,260		
Total Negotiated Fee with DLR Management Fee					$1,028,786

Note: Base contract included a Specialty Consultant Allowance of $915,000.and did not include DLR management fees.

Task 7 12-28-2010

SMG/SAVOR Scope of Work and Cost

Schematic Design

1. Review program and develop preliminary equipment layout plans for Commissary, Pantry and Concession Areas from DLR architectural base.
   Includes two (2) programming meetings in Lincoln

Design Development

2. Refine schematic plans, develop schedules of equipment, hoods, plumbing, HVAC and electrical rough-in schedule in Microsoft Excel format, estimate utility loads, prepare cost estimate, and provide equipment data sheets.
3. Provide plumbing, electrical, and mechanical connection drawings. Dimensioned rough-in locations for early site under slab packages will be provided.
   Includes one (1) meeting in Lincoln.

Construction Documents

4. Finalize floor plans with schedules of equipment developed from dimensioned structural plans furnished by DLR.
5. Design mechanical refrigeration systems and detail cold storage rooms for product cooling.
6. Detail all custom fabricated food service equipment.
7. Provide drawings of all special building conditions related to the Food Service Equipment.
8. Prepare specifications for all Kitchen Equipment in accordance with CSI format for inclusion in DLR bid documents.
9. Check all related architectural and engineering drawings.
   Includes one (1) meeting in Lincoln.

Planning shall be accomplished in accordance with all governing codes.

Bidding Packages

10. Bidding coordination for clarification of documents and addenda as required.
    No meetings are scheduled for this phase.

Construction Administration

11. Review and approve for construction the Food Service Equipment subcontractors dimensioned rough-in drawings, shop details, and equipment brochures.
    Three (3) site visits, including final punch lists, are included in this phase.

Post Construction

12. As-built drawing preparation.
13. Warranty review at 10 months after Substantial Completion.

Compensation shall be stipulated sum of One Hundred Thousand Dollars ($100,000) to include all project and travel related expenses.

Professional Fee Summary Sheet

Arena Parking Garage
Professional Hour Matrix

Name	Documentation/Construction Hours	$/Hour	Cost	Total
Principal/Project Manager	528	$ 175	$ 92,400	
Architect	304	$ 140	$ 42,560	
Architect/CADD/Design	1224	$ 95	$ 116,280	
Interior Designer	144	$ 140	$ 20,160	
Interiors CADD/Design	100	$ 80	$ 8,000	
Landscape Architect	280	$ 120	$ 33,600	
Mechanical Engineer	326	$ 130	$ 42,380	
Electrical Engineer	342	$ 130	$ 44,460	
Engineer/CADD/Design	406	$ 70	$ 28,420	
Construction Administrator	332	$ 100	$ 33,200	
Clerical	266	$ 55	$ 14,630	
		Subtotal	$476,090.00	$ 476,090.00
The Clark Enersen Partners' Labor Total				$ 476,090.00
Consultants				
• Parking Garage Consultant (AGA)			$150,000.00	
		Subtotal	$150,000.00	$ 150,000.00
Reimbursables				
• In-house Printing for Submittals/Reviews/Presentations, Postage, etc.			$4,000.00	
• AGA Travel			$5,000.00	
		Subtotal	$9,000.00	$9,000.00
Total Estimated Professional Fees				**$ 635,090.00**

Proposed Personnel Hours

Arena Parking Garage

Task	Sheet	Principal/ Project Manager	Architect	Architect/ CADD/ Design	Interiors Designer	Interiors CADD Design	Landscape Architect/ Civil	Mechanical Project Engineer	Electrical Project Engineer	Engineering CADD Design	Construction Administrator	Clerical	Subtotal
I	Scope Definition/Schematic Design/Design Development												
a.	Project Management	40	0	0	0	0	0	0	0	0	0	40	80
b.	Project Meetings/Presentations	40	16	16	4	4	8	8	8	8	0	0	112
c.	Schematic Design Development	80	60	140	24	8	40	40	60	40	0	0	492
e.	Design Development	80	60	140	24	24	40	48	80	48	0	0	544
	Subtotal (I)	240	136	296	52	36	88	96	148	96	0	40	1228
II	Construction Documents												
a.	Project Management	24	0	0	0	0	0	0	0	0	0	48	72
b.	Project Team Meetings	24	24	16	8	8	8	16	16	8	0	0	128
c.	Estimates	8	0	0	4	0	8	8	8	0	0	0	36
d.	Site Drawings	4	0	0	0	0	120	0	0	0	0	0	124
e.	Cover Sheet, Index of Drawings	0	0	0	0	0	0	0	0	0	0	0	0
f.	Code Compliance Sheets	16	0	0	0	0	0	0	0	0	0	0	16
g.	Floor Plans	8	40	120	0	0	0	0	0	0	0	0	168
h.	Reflected Ceiling Plans	8	24	40	0	0	0	0	0	0	0	0	72
i.	Finish Plans/Schedules	8	40	80	40	40	0	0	0	0	0	0	208
j.	Roof Plans	8	0	80	0	0	0	0	0	0	0	0	88
k.	Exterior Elevations	8	40	120	0	0	0	0	0	0	0	0	168
l.	Sections	8	0	120	0	0	0	0	0	0	0	0	128
m.	Interior Elevations	8	0	40	0	0	0	0	0	0	0	0	48
n.	Door Types and Schedules	4	0	16	0	0	0	0	0	0	0	0	20
o.	Enlarged Floor Plans	8	0	80	0	0	0	0	0	0	0	0	88
p.	Details	8	0	120	0	0	0	0	0	0	0	0	128
q.	Structural Drawings	0	0	0	0	0	0	0	0	0	0	0	0
r.	Mechanical Symbols & Abbreviations	0	0	0	0	0	0	2	0	2	0	0	4
s.	Mechanical HVAC Plans	0	0	0	0	0	0	24	0	80	0	0	104
t.	Mechanical Plumbing Plans	0	0	0	0	0	0	12	0	40	0	0	52
u.	Mechanical Room Plans	0	0	0	0	0	0	12	0	40	0	0	52
v.	Mechanical Sections	0	0	0	0	0	0	12	0	40	0	0	52
w.	Mechanical Details	0	0	0	0	0	0	12	0	16	0	0	28
x.	Plumbing Riser Diagrams	0	0	0	0	0	0	12	0	16	0	0	28
y.	Mechanical Schedules	0	0	0	0	0	0	12	0	4	0	0	16
z.	Electrical Symbols & Abbreviations	0	0	0	0	0	0	0	0	0	0	0	0
aa.	Electrical Lighting Plans	0	0	0	0	0	0	0	40	0	0	0	40
bb.	Electrical Power & Auxiliary Systems Plans	0	0	0	0	0	0	0	40	0	0	0	40
cc.	Electrical One-Line Diagram	0	0	0	0	0	0	0	16	0	0	0	16
dd.	Electrical Schedules	0	0	0	0	0	0	0	4	0	0	0	4
ee.	Telecommunications Drawings	0	0	0	0	0	0	0	0	0	0	0	0
	Subtotal (II)	152	168	832	52	48	136	122	124	246	0	48	1928

Proposed Personnel Hours

Arena Parking Garage

Task	Sheet	Principal/ Project Manager	Architect	Architect/ CADD/ Design	Interiors Designer	Interiors CADD Design	Landscape Architect/ Civil	Mechanical Project Engineer	Electrical Project Engineer	Engineering CADD Design	Construction Administrator	Clerical	Subtotal
III	Quality Assurance												
a.	Quality Assurance	16	0	0	0	0	0	0	0	0	16	0	32
	Subtotal (III)	16	0	0	0	0	0	0	0	0	16	0	32
IV	Construction Pricing/Bidding												
a.	Addenda, Questions, etc.	40	0	40	8	0	8	16	8	16	0	40	176
	Subtotal (IV)	40	0	40	8	0	8	16	8	16	0	40	176
V	Construction Administration												
a.	Monthly Construction Meetings/Site Visits	24	0	0	8	0	8	24	0	0	160	0	224
b.	Submittal Review	8	0	0	8	0	8	16	16	0	0	40	96
c.	Proposal Requests	8	0	0	0	0	0	16	16	8	40	40	128
d.	Change Order Review	8	0	0	0	0	0	16	16	0	40	24	104
e.	Pay Applications, Substantial Completion, Etc.	8	0	0	0	0	0	0	0	0	40	24	72
f.	Punch Lists	16	0	16	8	8	8	16	12	0	12	8	104
g.	Record Documents	8	0	40	8	8	24	4	2	40	24	2	160
	Subtotal (V)	80	0	56	32	16	48	92	62	48	316	138	888
	Total Hours	528	304	1224	144	100	280	326	342	406	332	266	4252