SUPPLEMENTAL AGREEMENT NO. 4

To the

CONTRACT FOR ENGINEERING SERVICES DATED May 25, 1999

between

THE CITY OF WICHITA, KANSAS

Party of the First Part, hereinafter called the

"CITY"

and

HNTB CORPORATION

Party of the Second Part, hereinafter called the

"CONSULTANT"

WITNESSETH:

WHEREAS, there now exists a Contract between the two parties covering Engineering Services to be provided by the CONSULTANT in conjunction with improvements for the Wichita Central Corridor Railroad Grade Separation project from Waterman to 21st Street, and

WHEREAS, it is desirous of both parties that there will be a reduction of inspection services by the CONSULTANT to the original Scope of Work in accordance with Article IV B, as a Supplemental Agreement, and

NOW THEREFORE, the parties hereto mutually agree as follows:

In Article I, Scope of Services, Attachment 1, Exhibit A, add:
(See Attachment for Scope of Work and Project Schedule)

In Article IV, Payment Provisions, add to paragraph A:

It should be noted that SUPPLEMENTAL AGREEMENT No. 4 redefines the scope of services that were previously defined in SUPPLEMENTAL AGREEMENTS 2 and 3 to establish a new reduced upper limit of compensation and new reduced fixed fee amount. Payment provisions for the SUPPLEMENT AGREEMENT No. 4 shall be made on a Cost Plus Fixed Fee. Maximum payments to the CONSULTANT for the newly defined scope of services associated with SUPPLEMENTAL AGREEMENT No. 4 shall include the actual costs accruing in the performance of the professional services as outlined in this agreement, which are estimated to amount to $1,788,126, plus a fixed fee of $205,634. The total Cost Plus Fixed Fee payment for SUPPLEMENTAL AGREEMENT

No. 4 shall not exceed $2,199,563 and will generally be in accordance with the estimate provided in the ATTACHMENT.

SUPPLEMENTAL AGREEMENTS 2 and 3 established an upper limit of compensation of $4,427,494. SUPPLEMENTAL AGREEMENT No. 4 results in a reduction of services provided and results in a change in the upper limit of ($2,227,931) and a change in the fixed fee amount of ($185,078).

IN WITNESS WHEREOF, the CITY and the CONSULTANT have executed this SUPPLEMENTAL AGREEMENT as of this _____day of_____, _____.

By Action of the City Council
CITY OF WICHITA

By: _____
Carlos Mayans
Mayor

ATTEST:

_____
Pat Graves (seal)
City Clerk

APPROVED AS TO FORM

_____
Gary Rebenstorf
Director of Law

HNTB CORPORATION

By: _____
A. James Scherzberg, P.E.
Vice President

ATTEST:

_____
Chris O. Rops, P.E.
Transportation Section Manager

EXHIBIT "A"

I. SCOPE OF SERVICES

A. PROJECT DESCRIPTION

The Wichita Central Corridor Railroad Grade Separation Project extends from Douglas northward to the UPRR crossing of Chisholm Creek, a length of approximately two miles. The project involves extending the elevated portion of the tracks by maintaining the elevated grade of the BNSF Railroad from the Union Station at Douglas to 13th Street (decreasing back to an at-grade crossing at 17th Street) to provide new grade separations at Central, Murdock, and 13th Street. The project also involves reconstruction of the railroad bridges over 1st and 2nd Streets and modification of the bridge over Douglas. It requires the closing of present railroad grade crossings at 9th, 10th, 11th, 15th, and 18th, and the reconstruction of the existing railroad grade crossing at 17th Street. The existing UP Bridge over Chisholm Creek will be widened approximately 6 feet to accommodate the UP track relocation. Extensive retaining walls will be used to keep the project mostly within the existing railroad right of way. Approximately 5,000 feet of the walls will be 25 or more feet in height.

Presently the UP and BNSF Railroads operate on joint tracks between Douglas and Central. North of Central the UP track departs from the BNSF and is located one block to the east from Murdock north to 21st Street. After this project is completed, the UP and BNSF will operate on joint tracks from Douglas north to 17th Street, where the UP will curve northeasterly to tie back to their present line.

The ~~present~~ scope of services is to provide ~~Construction Monitoring services and~~ Design Services during Construction ~~for~~ *of* the Project and to have provided inspection services from the point of letting the project through November 1, 2005.

B. ~~ROLE DEFINITION FOR HNTB/ALLIED ON SITE PERSONNEL~~

~~*Resident Engineer:* Schedule and supervise all of HNTB construction monitoring personnel and Allied inspection/testing team members. Coordinate with the Master Consultant's Program Manager. Be the point of contact for all communications on-site with contractor superintendent. Schedule and coordinate testing and survey service efforts from Allied Labs and the structural steel and concrete shop certification. Coordinate/communicate with Master Consultant concerning project status and inspection effort. Conduct on site visit of all construction activities daily and monitor resolution of field construction conflicts.~~

~~*Railroad / General Inspector:* Provide inspection for utility location and removals, retaining wall installation, railroad museum track construction and staging, early track removals, temporary main track construction, early bridge removals, and main track construction (new).~~

~~*Structural Inspector 1:* Structural advisor for retaining wall construction, retaining wall construction inspection, structural advisor for all structural close out items, and bridge construction inspector for bridge rehabilitation at Douglas and widening at Chisholm Creek.~~

~~*Structural Inspector 2:* Primary inspector for 1st, 2nd, and Central bridge construction with secondary role for bridge rehabilitations (Douglas and Chisholm).~~

~~*Structural Inspector 3:* Primary inspector for Murdock and 13th Street bridges with secondary role for bridge inspection at 1st, 2nd, and Central bridges.~~

~~[Note: The anticipated schedule dictates that the six bridges will be constructed to meet the thirty eight month schedule. All inspectors will be flexible and provide assistance at other locations than their primary assignment as the contractor's schedule dictates.]~~

~~*Road / General Inspector:* This inspector will primarily inspect all side street construction, landscaping installation, and irrigation installation. The inspector will also assist other inspectors as needed and also be available to assist with the bridge inspections and retaining wall inspections as workload dictates. This person will also be used regularly for measuring pay quantities. He/she will also regularly inspect the jobsite for contractor house cleaning needs and traffic control deficiencies.~~

~~*Allied Inspectors:* Allied's inspector(s) will primarily be used for peak work efforts. With the extended 38 month schedule this person will be used on an as needed basis only.~~

C. SERVICE TO BE PERFORMED BY THE CONSULTANT

The CONSULTANT agrees to:

1. <u>Contract Administration and Construction Monitoring Services</u>

a. Attend conferences designated by the CITY, or required under the terms of the Agreement including pre-bid, pre-construction and closeout conferences.

b. ~~Designate a Resident Construction Engineer who shall report and transmit PROJECT activity and documents to CITY and Master Consultant.~~

c. ~~Provide and assign a sufficient number of technically qualified and experienced Inspectors to the PROJECT to perform the services required under the Agreement, in a timely manner to avoid delay to the Contractor. The approximate manpower level for construction observation personnel to be provided is shown in Exhibit B.~~

d. ~~Become familiar with the standard practices of the CITY and Railroads, the Contract Documents (Specifications, Construction Contract Proposal, Special Provisions and Plans), and the Contractor's proposed schedule of operations prior to beginning field services to be performed under the Agreement.~~

e. ~~Perform the CONSULTANT's field operations in accordance with accepted safety practices and have all field personnel railroad safety trained.~~

f. ~~Furnish equipment required to accomplish the CONSULTANT's services, and to check or test it prior to use on the PROJECT.~~

g. ~~Provide for CONSULTANT personnel such transportation, supplies, materials and incidentals as are needed to accomplish the services required under the Agreement.~~

h. Undertake and perform the following:

(1) ~~Transmit orders from the CITY and/or Master Consultant to the Contractor and provide guidance in the proper interpretation of the Specifications and Plans.~~

(2) ~~Perform measurements and surveys that are involved in the determination of final pay quantities. Final cross sections for the determination of earthwork pay quantities will not be required.~~

(3) ~~Monitor construction operations to determine the Contractor's general compliance with Contract Documents and to reject such work and materials, which are not in general compliance with Contract Documents until any questions at issue, can be referred to and be decided by the CITY and/or the Master Consultant.~~

(4) *Provide* ~~Keep such~~ daily diaries, logs, and records *that have been created by HNTB personnel from the beginning of the PROJECT to the current date to the City and/or the Master Consultant* ~~as are needed for a complete record of the Contractor's progress and major activities, including Resident Construction Engineer and Inspector's diaries.~~

(5) *Provide* measured and computed *quantities for* materials incorporated *into* the *PROJECT* ~~work and quantities of work items~~ *from the beginning of the Project through November 1, 2005 to the City and/or the Master Consultant.* , ~~and maintain an item account record.~~

(6) ~~Prepare and submit, or assist in preparing, such periodic, intermediate and final reports as may be required by the CITY and/or Master Consultant and as are applicable to the~~

~~PROJECT, which may include:~~

- ~~Progress Reports~~
- ~~Notice of change in construction status~~
- ~~Report of field inspection of material~~
- ~~Contractor pay estimates~~
- ~~Pile data~~
- ~~Pile record~~
- ~~Final certification of materials~~
- ~~Explanation of quantity variation~~

i. ~~The bridge inspection forms will not include electrical inspection for roadway and sign lighting.~~

j. ~~Prepare and submit, partial payment invoices for services rendered by the CONSULTANT, but not to exceed one submittal per month.~~

k. Collect, properly label or identify, and deliver to the CITY and/or the Master Consultant all original diaries, logs, notebooks, accounts, records, reports and other documents *that have been created by the Consultant from the beginning on the Project through November 1, 2005.* ~~prepared by the CONSULTANT in the performance of the Agreement, upon completion or termination of the Agreement.~~

l. Return, ~~upon completion or termination of the Agreement,~~ all Manuals, Contract Documents, guides, written instructions, unused forms and record keeping books, and other documents and materials furnished by the CITY.

m. ~~Assist Master Consultant in the preparation and submittal of a certification of PROJECT completion.~~

n. ~~Prepare and submit a final payment invoice for services rendered by the CONSULTANT including a statement that all conditions have been met for final payment.~~

2. Office Engineering

a. Provide qualified engineering staff in their established design office to review each of the Contractor's shop drawing submittals for general compliance with the bid documents. Provide consultation services from their established design offices to answer questions concerning the design intent and construction activities at any time during the construction period. Design office representatives will conduct periodic site visits. Design office representatives will attend meetings at the site to discuss unusual problems at the request of the CITY and/or Master Consultant. Design office support is anticipated for the following disciplines:

- Roadway
- Railroad
- Bridges
- Retaining Walls
- Geotechnical
- Drainage
- Urban Design
- Project Management

Sole responsibility for correctness of dimensions, details, quantities and safety during fabrication and erection shall remain with the Contractor. Sufficient personnel will be assigned to maintain timely review cycle of each submittal. Review of shop drawings, forming plans, and similar submittals by the CONSULTANT shall not be construed as his approval of the methods, construction procedures nor facilities to be used in construction of this work.

3. Testing Services

a. Provide testing results through October 14, 2005.

b. ~~Perform field testing of materials to be incorporated in the work, including concrete, asphalt and embankment tests, and reject those materials not meeting the provisions of the Contract Documents. Any questions at issue will be referred to and decided by the Project Coordinator.~~

b. ~~Perform laboratory materials testing and reporting of test results on structural materials, including testing of concrete cylinders, beams, and associated hardware.~~

4. Surveying Services

a. Re-establish survey references for horizontal and vertical control one time at the beginning of the project. Contractor's surveyor will be responsible for restoring points destroyed by construction activities.

b. ~~Provide field surveying services to spot check the contractor's layouts to confirm general compliance with the construction plans.~~

c. ~~Flag limits of right of way and easements available for construction operations. Contractor's surveyor will be responsible for restoring points destroyed by construction activities.~~

5. **Plan Modifications**

a. Remove the white concrete from the base project and move it into an alternate and specify a white coating to place over the standard concrete finish.

b. Remove the pipe bollards and all details from the base project and summarize them into an alternative.

c. Remove the brick pavers from the base project and place them in an alternate, replace the brick with concrete sidewalk.

d. Move all of the wall washer bridge lights and the lighted handrail on top of the bridges to an alternate replace the lighted handrail with a more standard handrail.

e. Remove the planter bridges and all of the associated plants and irrigation from the plan set.

f. Remove all of the plants and irrigations from the base project and add back to specific locations in an alternate.

g. Rewrite the vibration monitoring specification to better define what will be required by the contractor.

h. Research and acquire railroad approval for additional ground improvement systems and revise the specification to include additional alternatives.

i. Reduce the Number of Deck Drains.

j. Reduce Museum Track lengths on the plans.

k. Review changes made by relaxing the schedule to 38 months.

l. Reduce the quantity of concrete bin wall or T-Wall by identifying areas where it will not be seen and maintenance can be kept to a minimum.

6 **Advertising and Bidding Efforts**

Preparing the boiler plate documents, plans, and specifications for bidding. Setting up and answering contractor questions on the hot line. Preparing addendums for any items that may change during the bidding process.

a. Railroad Discipline
b. Bridges Discipline
c. Retaining Wall Discipline
d. Roadway Discipline
e. Urban Design Discipline

f. Geotech Discipline
g. Drainage Discipline

D. SERVICES TO BE PROVIDED BY MASTER CONSULTANT (TRANSYSTEMS)

Refer to TranSystem's contract with the City of Wichita.

Prepare and deliver (when PROJECT is completed) one set of neatly maintained record drawings, which have been revised to incorporate any substantial changes made to the project during construction. These drawings will be used by HNTB to create final record drawings.

~~The Master Consultant's role will continue to be the oversight of the City of Wichita's railroad grade separation program. Entailed with those general duties are the continued oversight of the SECTION DESIGN CONSULTANT'S work and submittals and the coordination efforts with the BNSF and UP railroads. Specific activities of the Master Consultant related to the construction activities are to act as the OWNER'S/CITY'S representative and oversee and certify payment for the railroad force account items. Specific items the Master Consultant is providing the affect the inspection services provided by HNTB are noted below:~~

~~1. Provide the project office space sufficient to accommodate HNTB and TranSystem's staff with conference room capabilities for contractor and/or railroad meetings.~~
~~2. Provide an administrative assistant/office engineer available for both HNTB and TranSystem's project needs.~~
~~3. Provide survey layout for all UP and BNSF railroad items (switches, line ins, signals, removals, etc.)~~
~~4. Perform all coordination necessary to integrate construction operations with ongoing Railroad Operations and Maintenance. Furthermore, ensure adequate Railroad flagging support is in place for all operations requiring Railroad flagging.~~
~~5. Coordinate, schedule and monitor procurement of Owner/Railroad provided materials.~~

~~Perform initial bridge maintenance inspections and prepare bridge inspection forms for initializing required documentation of inspection data for this and subsequent inspections. Complete initial inspection sheets and prepare summary report for Douglas Avenue Bridge, 1st Street Bridge, 2nd Street Bridge, Central Bridge, Murdock Bridge, and 13th Street Bridge.~~

E. SERVICES TO BE PROVIDED BY THE CITY

The CITY agrees to:

1. Make available to the CONSULTANT sufficient copies of the Contract Documents, shop drawings, plan revisions, written instructions and other information and data considered by the CITY to be necessary to enable the

CONSULTANT to perform the services under this Agreement.

2 Designate a Project Coordinator.

3 Provide, through the Project Coordinator, such assistance and guidance to the CONSULTANT as may be reasonably necessary to perform.

II. PROSECUTION AND PROGRESS

The current target is for the services to be performed under the construction contract to start in February 2005, and be completed by July 2008 ~~(see attached detailed engineer's schedule). However, this contract is still valid should the project be delayed for a period of up to six months beyond the February 2005 start date. Beyond a six month delay, HNTB would need to re-examine the personnel anticipated to be assigned to the project, their labor rates, and any necessary salary adjustments for additional raises during the period of delay.~~

If additional ~~inspection or~~ office engineering services are required beyond the targeted 42 month time frame, HNTB will prepare a supplemental agreement for the additional work needed beyond the target completion. Scope and fee will be agreed upon before any work is prosecuted.

ATTACHMENT 1
EXHIBIT A

WICHITA CENTRAL CORRIDOR
RAILROAD GRADE SEPARATION PROJECT
Waterman to 21st Street

Project Fee Summary
Submitted October 2005

Task Description	Total Hours	Direct Labor	Direct Expenses
Task 1 – Contract Administration and Construction Monitoring Services	9,070	$316,248	$66,375
Task 2 – Office Engineering	9,072	$376,492	$25,146
Task 3 – Testing Services	-	$0	$0
Task 4 – Surveying	-	$0	$0
Task 5 – Plan Modifications	113	$4,211	$0
Task 6 – Advertising and Bidding Efforts	44	$1,755	$3,350
TOTALS	18,299	$698,705	$94,871

Overhead on Direct Labor	155.92%	x	$698,705	$1,089,421
Subtotal Direct Labor and Overhead -				$1,788,126
Fee	11.50%			$205,634

Expenses	Total
HNTB Expenses	$94,871
Allied / Professional Engineering Consultants	$40,932
PSI	$70,000

SUBTOTAL EXPENSES	$205,803
TOTAL UPPER LIMIT (Direct Labor, Overhead, Fee, and Expenses)	$2,199,563

New upper limit	$2,199,563
Original Inspection contract	$4,427,494
CHANGE IN CONTRACT UPPER LIMIT	($2,227,931)
CHANGE IN CONTRACT FIXED FEE	($185,078)

WICHITA CENTRAL CORRIDOR
RAILROAD GRADE SEPARATION PROJECT
Waterman to 21st Street

Estimate of Hours
Submitted October 2005

Task 1 – Contract Administration and Construction Monitoring Services

Subtasks		Origianl Inspection			Current Supplement		
		Hours	Avg. Rate	Labor	Hours	Avg. Rate	Labor
A.	Pre-bid, pre-construction and pre-closeout conferences	210	$48	$10,122	210	$48	$10,122
B-1.	Inspection efforts job to date through November 1, 2005				8,050	$35	$282,456
B.	Resident Engineer	7,118	$48	$345,144	0	$48	$0
C. - H.	Qualified Personnel Assigned to Complete Tasks C - H						
	Road/General Inspector	6,770	$30	$203,100	0	$30	$0
	Rail/General Inspector	5,935	$27	$160,245	0	$27	$0
	Structural Inspector 1	5,208	$27	$140,616	0	$27	$0
	Structural Inspector 2	5,034	$29	$147,496	0	$29	$0
	Structural Inspector 3	800	$33	$26,400	0	$33	$0
I.	Initial Bridge Maintenance Inspections and Inspection Forms	190	$33	$6,270	0	$33	$0
J. & N.	Prepare and submit invoicing monthly	120	$27	$3,240	120	$27	$3,240
K. - M.	Project Closeout Activities	240	$47	$11,280	90	$47	$4,230
O.	Record Drawings	600	$27	$16,200	600	$27	$16,200
Task 1 Total		32,225		$1,070,113	9,070		$316,248

Task 2 – Office Engineering

Subtasks		Origianl Inspection			Current Supplement		
		Hours	Avg. Rate	Labor	Hours	Avg. Rate	Labor
A.	Design Office Support						
	1. Roadway Consultation and Shop Drawing Review						
	Shop drawings/design consultation	192	$28	$5,376	192	$28	$5,376
	Utility conflict resolution	40	$28	$1,120	40	$28	$1,120
	Traffic sequencing	20	$28	$560	20	$28	$560
	Site visit (2)	24	$28	$672	24	$28	$672
	2. Railroad Consult., Shop Drw. Review, and Force Acct Consult.						
	UPRR Track design at Cline Yard				250	$45	$11,250
	Russ Pearce coordination efforts (32 months x 85 hours / mo)				2720	$45	$122,400
	Shop drawings	20	$42	$840	20	$42	$840
	Design consultation	192	$45	$8,640	0	$45	$0
	Site visit (2 per phase)	96	$45	$4,320	96	$45	$4,320
	3. Bridge Consultation and Shop Drawing Review						
	Construction Consultation(RFTs and miscellaneous mtgs.) (120 - 5 bridges, zero for Chisholm, 40 - Douglas)	160	$33	$5,280	200	$33	$6,600
	Consultation on Project Aesthetics (form liners, lighting, etc.)	40	$33	$1,320	40	$33	$1,320
	Site visit (1 per phase)						
	Review Shop Drawings						
	a.) Douglas						
	Review Shop drawings and weld procedures	80	$33	$2,640	80	$33	$2,640

WICHITA CENTRAL CORRIDOR
RAILROAD GRADE SEPARATION PROJECT
Waterman to 21st Street

Estimate of Hours
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Review waterproofing details	16	$33	$528	16	$33	$528
Review epoxy injection procedures	8	$33	$264	8	$33	$264
Review handrail modifications	12	$33	$396	12	$33	$396
b.) Chisholm						
Review precast girder shop drawings	0	$33	$0	0	$33	$0
Review handrail and misc. metal shop drgs.	0	$33	$0	0	$33	$0
Review waterproofing details	0	$33	$0	0	$33	$0
c.) 1st Street						
Review Girder Shop drawings and weld proc.	60	$33	$1,980	60	$33	$1,980
Review bearing shop drawings	8	$33	$264	8	$33	$264
Review planter bridge shop drawings	0	$33	$0	0	$33	$0
Review misc. metal and waterproofing	8	$33	$264	8	$33	$264
d.) 2nd Street						
Review Girder Shop drawings and weld proc.	60	$33	$1,980	60	$33	$1,980
Review bearing shop drawings	8	$33	$264	8	$33	$264
Review planter bridge shop drawings	0	$33	$0	0	$33	$0
Review misc. metal and waterproofing	8	$33	$264	8	$33	$264
e.) Central						
Review Girder Shop drawings and weld proc.	60	$33	$1,980	60	$33	$1,980
Review bearing shop drawings	8	$33	$264	8	$33	$264
Review planter bridge shop drawings	0	$33	$0	0	$33	$0
Review misc. metal and waterproofing	8	$33	$264	8	$33	$264
f.) Murdock						
Review Girder Shop drawings and weld proc.	60	$33	$1,980	60	$33	$1,980
Review bearing shop drawings	8	$33	$264	8	$33	$264
Review planter bridge shop drawings	0	$33	$0	0	$33	$0
Review misc. metal and waterproofing	8	$33	$264	8	$33	$264
g.) 13th Street						
Review Girder Shop drawings and weld proc.	60	$33	$1,980	60	$33	$1,980
Review bearing shop drawings	8	$33	$264	8	$33	$264
Review planter bridge shop drawings	0	$33	$0	0	$33	$0
Review misc. metal and waterproofing	8	$33	$264	8	$33	$264
4. Retaining Wall Consultation and Shop Drawing Review						
Construction Consultation						
- Phase 2: 24 weeks @ 5 hrs/wk	120	$33	$3,960	120	$33	$3,960
- Phase 4: 24 weeks @ 5 hrs/wk	120	$33	$3,960	120	$33	$3,960
Review precast wall system design						
- West retaining walls: 6 walls @ 65 hrs/wall	390	$33	$12,870	390	$33	$12,870
- East retaining walls: 6 walls @ 65 hrs/wall	390	$33	$12,870	390	$33	$12,870
Review Temporary MSE wall design & shop drawings						
- 6 walls @ 65 hrs/wall	390	$33	$12,870	390	$33	$12,870
Review miscellaneous form liner, details, etc.	80	$33	$2,640	80	$33	$2,640
5. Geotechnical Consultation and Shop Drawing Review						
- Initial site visit for invest and eval of wall and embankment subgrade	20	$33	$660	20	$33	$660

WICHITA CENTRAL CORRIDOR
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- Two (2) follow-up visits	40	$33	$1,320	40	$33	$1,320
- Initial site visit for installation of geopier foundation	20	$33	$660	20	$33	$660
- One (1) follow-up visit	20	$33	$660	20	$33	$660
- Site visit during initial wall and embankment construction	20	$33	$660	20	$33	$660
- One (1) follow-up visit	20	$33	$660	20	$33	$660
- Construction consultation and RFI's	80	$33	$2,640	80	$33	$2,640
- Shop drawings (Geopier, precast walls, and TMSE walls)	200	$33	$6,600	200	$33	$6,600
- Review geotechnical aspects of material submittals (backfill, select, ect.)	40	$33	$1,320	40	$33	$1,320
- Review compaction and density test records: 18 mo @ 4 hr/mo	72	$33	$2,376	72	$33	$2,376
- Rev vib monit rec and insp reports	40	$33	$1,320	40	$33	$1,320
- Review pile driving equipment submittal and driving records	50	$33	$1,650	50	$33	$1,650
- Rev Geopier install rec and insp reports: 10 mo @ 8 hr/mo	80	$33	$2,640	80	$33	$2,640
- Rev settlement plate monit rec and eval of data: 18 mo @ 8 hr/mo	144	$33	$4,752	144	$33	$4,752
6. Drainage Consultation and Shop Drawing Review	80	$33	$2,640	80	$33	$2,640
7. Urban Design Consultation and Shop Drawing Review						
Review Shop Drawings, Submittals (Estimated 6 sets) (Irrigation, lighting, pavers, bollards)	50	$33	$1,650	50	$33	$1,650
Nursery visits for plant tagging	20	$33	$660	20	$33	$660
Site Inspections						
a. Wall Box Installations	0	$33	$0	0	$33	$0
b. Planter drainage installations	0	$33	$0	0	$33	$0
c. Irrigation Installation (2 phased visits, 1 west & 1 east side)	40	$33	$1,320	40	$33	$1,320
d. Planting Installation (2 visits)	36	$33	$1,188	36	$33	$1,188
e. Lighting installation	24	$33	$792	24	$33	$792
Change order analysis	40	$33	$1,320	40	$33	$1,320
Substantial completion walk throughs and write ups	12	$33	$396	12	$33	$396
Final completion walk through and write ups	12	$33	$396	12	$33	$396
Warrantee walk through and write up	12	$33	$396	12	$33	$396
8. Overall Project Management and Coordination						
Project Manager / Office support (1 person 25% of their time for 42 months)	1,732	$50	$86,580	1,732	$50	$86,580
Principal	400	$70	$28,000	400	$70	$28,000
Secretary	180	$18	$3,240	180	$18	$3,240
B. Value Engineering Proposals (by supplement only)	0	$0	$0	0	$0	$0
Task 2 Total	6,254		$250,162	9,072		$376,492

WICHITA CENTRAL CORRIDOR
RAILROAD GRADE SEPARATION PROJECT
Waterman to 21st Street

Estimate of Hours
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Task 3 – Testing Services

Subtasks	Origianl Inspection			Current Supplement		
	Hours	Avg. Rate	Labor	Hours	Avg. Rate	Labor
A. & B. Coordinate Testing Provided by Allied Labs	20	$33	$660	0	$33	$0
Task 3 Total	20		$660	0		$0

Task 4 – Surveying

Subtasks	Origianl Inspection			Current Supplement		
	Hours	Avg. Rate	Labor	Hours	Avg. Rate	Labor
A. - C. Coordinate Survey Provided by Allied Labs	20	$33	$660	0	$33	$0
Task 4 Total	20		$660	0		$0

Task 5 – Plan Modifications

Subtasks	Origianl Inspection			Current Supplement		
	Hours	Avg. Rate	Labor	Hours	Avg. Rate	Labor
A. Eliminate White Concrete on Abutments	15	$40	$593	15	$40	$593
B. Eliminate Steel Pipe Bollards	5	$30	$152	5	$30	$152
C. Replace Brick Pavers with Concrete Sidewalk	8	$30	$243	8	$30	$243
D. Remove Bridge Lighting (everything but street lights)	15	$34	$512	15	$34	$512
E. Remove Planter Bridge	5	$38	$191	5	$38	$191
F. Eliminate Landscaping, Irrigation, and Planter Removal	15	$34	$512	15	$34	$512
G. Reduce Vibration Monitoring	5	$48	$240	5	$48	$240
H. Ground Improvement Reductions	5	$45	$225	5	$45	$225
I. Reduce the Number of Deck Drains	10	$36	$356	10	$36	$356
J. Reduce Museum Tracks	5	$40	$200	5	$40	$200
K. Relax Schedule	10	$39	$390	10	$39	$390
L. Reduce Concrete Bin or T Walls	15	$40	$597	15	$40	$597
Task 5 Total	113		$4,211	113		$4,211

WICHITA CENTRAL CORRIDOR
RAILROAD GRADE SEPARATION PROJECT
Waterman to 21st Street

Estimate of Hours
Submitted October 2005

Task 6 – Advertising and Bidding Efforts

Subtasks		Origianl Inspection			Current Supplement		
		Hours	Avg. Rate	Labor	Hours	Avg. Rate	Labor
A.	Railroad Discipline	10	$45	$450	10	$45	$450
B.	Bridges Discipline	10	$44	$441	10	$44	$441
C.	Retaining Wall Discipline	8	$45	$360	8	$45	$360
D.	Roadway Discipline	8	$28	$224	8	$28	$224
E.	Urban Design Discipline	8	$35	$280	8	$35	$280
F.	Geotech Discipline	0	$50	$0	0	$50	$0
G.	Drainage Discipline	0	$40	$0	0	$40	$0
Task 6 Total		44		$1,755	44		$1,755

SUMMARY OF PROJECT HOURS AND LABOR ESTIMATE

	Origianl Inspection			Current Supplement		
	Hours	Avg. Rate	Labor	Hours	Avg. Rate	Labor
Task 1 Total	32,225		$1,070,113	9,070		$316,248
Task 2 Total	6,254		$250,162	9,072		$376,492
Task 3 Total	20		$660	0		$0
Task 4 Total	20		$660	0		$0
Task 5 Total	113		$4,211	113		$4,211
Task 6 Total	44		$1,755	44		$1,755
GRAND TOTAL	**38,676**		**$1,327,560**	**18,299**		**$698,705**

WICHITA CENTRAL CORRIDOR
RAILROAD GRADE SEPARATION PROJECT
Waterman to 21st Street

Estimate of Direct Expenses

Submitted October 2005

Task 1 – Contract Administration and Construction Monitoring Services

Subtasks		Origianl Inspection Direct Expenses	Current Supplement Direct Expenses
A.	Vehicle Costs		
	- 1 Vehicle x 41 mo. x $1000/mo lease and maintenance (Resident Engineer)	$41,000	$12,000
	- 1 Vehicle x 36 mo. x $1000/mo lease and maintenance (Road/General Inspector)	$36,000	$12,000
	- 1 Vehicle x 32 mo. x $1000/mo lease and maintenance (Rail/General Inspector)	$32,000	$12,000
	- 1 Vehicle x 27 mo. x $1000/mo lease and maintenance (Structural Inspector 1)	$27,000	$8,000
	- 1 Vehicle x 26 mo. x $1000/mo lease and maintenance (Structural Inspector 2)	$26,000	$8,000
	- 1 Vehicle x 5 mo. x $1000/mo lease and maintenance (Structural Inspector 3)	$5,000	$0
B.	Inspector cell phones	$16,700	$3,100
C.	Per diem costs for out of town inspectors	$22,500	$11,275
D.	Airfare - Rail/General Inspector	$0	$0
Task 1 Total		$206,200	$66,375

Task 2 – Office Engineering

Subtasks		Origianl Inspection Direct Expenses	Current Supplement Direct Expenses
A.	Kansas City and Overland Park offices		
	Vehicle trips (60) - 1 vehicle x 500 miles x 0.375	$11,250	$11,250
	Misc. daily expense - 60 trips x 2 people average x $40	$4,800	$4,800
	Hotel Expense (30) - Assume 1/2 trips are overnight: 30 x $100	$3,000	$3,000
	PEC Design Services During Construction	$16,732	$16,732
B.	Dallas Office (8 trips)		
	Airfare	$3,400	$3,400
	Rental car	$1,000	$1,000
	Meals	$320	$320
	Hotel	$800	$800
	Airport parking	$256	$256
	Misc. expenses	$320	$320
Task 2 Total		$41,878	$41,878

WICHITA CENTRAL CORRIDOR
RAILROAD GRADE SEPARATION PROJECT
Waterman to 21st Street

Estimate of Direct Expenses

Submitted October 2005

Task 3 – Testing Services

Subtasks		Origianl Inspection Direct Expenses	Current Supplement Direct Expenses
A.	Allied Labs - Materials Testing	$196,850	$20,000
B.	PSI - Structural Steel Fabrication Testing	$150,000	$70,000
Task 3 Total		$346,850	$90,000

Task 4 – Surveying

Subtasks		Origianl Inspection Direct Expenses	Current Supplement Direct Expenses
A.	Allied Labs - Surveying	$20,080	$0
Task 4 Total		$20,080	$0

Task 5 – Plan Modifications

Subtasks		Origianl Inspection Direct Expenses	Current Supplement Direct Expenses
A.	PEC redesign efforts	$4,200	$4,200
Task 5 Total		$4,200	$4,200

WICHITA CENTRAL CORRIDOR
RAILROAD GRADE SEPARATION PROJECT
Waterman to 21st Street

Estimate of Direct Expenses

Submitted October 2005

Task 6 – Advertising and Bidding Efforts

Subtasks		Origianl Inspection Direct Expenses	Current Supplement Direct Expenses
A.	Printing 20 half size sets for internal and Railroad use	$3,000	$3,000
B.	Shipping 10 half size sets	$350	$350
Task 6 Total		$3,350	$3,350

SUMMARY OF PROJECT DIRECT EXPENSE ESTIMATE

	Origianl Inspection Direct Expenses	Current Supplement Direct Expenses
Task 1 Total	$206,200	$66,375
Task 2 Total	$41,878	$41,878
Task 3 Total	$346,850	$90,000
Task 4 Total	$20,080	$0
Task 5 Total	$4,200	$4,200
Task 6 Total	$3,350	$3,350
GRAND TOTAL	**$622,558**	**$205,803**