

HIGHWAY ROBBERY: How Connecticut Wastes Million\$ on Contracted- Out Transportation Projects



**REPORT ON THE USE OF CONSULTING ENGINEERS BY THE
CONNECTICUT DEPARTMENT OF TRANSPORTATION
OCTOBER 1, 2002 TO JUNE 30, 2004**

Prepared by the CSEA/SEIU Local 2001
Engineering, Scientific and Technical Council (P-4)
October 24, 2005
Revised October 31, 2006

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i. INTRODUCTION TO REVISED REPORT, 2006

This report is updated in two areas:

- 1) When we released our initial report, questions were raised over the accuracy of our accounting methods. Critics claimed that we failed to include overhead charges for Connecticut Department of Transportation (CDOT) employees, in our calculations (i.e. the cost of running CDOT), thereby artificially lowering state employee costs. In fact in 1994, the last time the Department undertook a comprehensive review of whether it was cost effective to hire in-house staff or contract out engineering work, CDOT determined that indirect overhead falls proportionately upon both state and consultant engineers, and that the overhead rate is fairly equal on both parties. We've included a summary of that report in Appendix G.
- 2) Recently, the 127.55% cap on consulting engineering agreements was eliminated. That means consulting engineers can charge even higher rates of overhead and profits to the state, making them still more expensive than state employees. It is expected that consultant Benefits, Fringe and Overhead costs (BFO%) will increase up to 150%-160% for all new engineering consultant agreements.

Our report highlighted the lack of oversight by consultants hiring consultants to watch other consultants. We discussed how consultants were retained to perform standard, non-exotic engineering tasks. We showed how CDOT was chronically understaffed.

All of our warnings were borne out by the recent scandal on Interstate 84. Consultants watched contractors perform shoddy work and failed to protect the public interest. The work performed was straightforward, installing storm drains, and did not require specific expertise. A conscious decision was made to hire contractors, including contractors that were previously barred from State service, instead of in-house staff. And when their deficient work was finally exposed, apologists for incompetent leadership claimed that there wasn't enough work to invest in more public servants, who ultimately provide greater quality and accountability.

To date, the only errors that have been uncovered are hundreds of storm drains that were improperly installed. Despite what Governor Rell says, state taxpayers will ultimately be on the hook for millions to pay for the incompetence and fraud in this project, not to mention months or even years of further traffic delays. CSEA/SEIU Local 2001's membership calls on the governor and the legislature to make real reforms in the contracting out process, to stop wasting money on high priced consultants and bring more work in-house when it is cost effective, and to mandate that all public projects that could impact the safety of our citizens be inspected by accountable state employees, not contracted-out firms eager to make a buck at any cost.

I. EXECUTIVE SUMMARY

CSEA/SEIU Local 2001 is the bargaining representative for engineers, planners and other technical professionals at the CDOT. Union members have analyzed all active consulting engineering contracts for the period October 1, 2002 through June 30, 2004.

The results of this study show:

- CDOT spent approximately **\$55 million** annually during the study period on consulting services from 59 consulting engineering firms, with 50% of the contract dollars going to **7 large engineering firms**.
- The consultant engineer workforce during the study period was approximately **387 full time equivalent (FTE) engineers** and did not vary appreciably during this period of study.
- The total cost of hiring a consulting engineer was on average **\$17,900.00 per consulting engineer** more expensive than hiring a comparably-skilled state engineer. This is due to higher pay for outside engineers, higher overhead costs plus profits for the consulting firms.
- By hiring consultants instead of in house staff, the **State wastes \$6.9 million** per year.

Looking at one contract in specific, PSA# 5183 with the engineering firm Close, Jensen and Miller, it was found that:

- Consultants initially hired as temporary, have **remained on the job for over 5 years**.
- The contract has **quadrupled in cost over the initial price**.
- The owner and his wife **contributed over \$40, 000 to the State and National Republican Party since 1998**.

Recommendations:

- **The CDOT should hire 387 state employees to do the work currently contracted out, thereby saving nearly \$7 million a year, money that could be spent on important projects.**
- **When high priced consultants watch other consultants, there is little accountability on how taxpayer dollars are spent. Replacing consultants with State public service employees would not only save money, but also would improve accountability.**
- A bill requiring cost comparisons between private sector and public sector prior to letting a contract (vetoed by Governor Rell 3 times) would have prevented the wasteful spending highlighted in this report. The Legislature should pass and the governor should **sign into law strict contracting-out guidelines**.

II. INTRODUCTION

As a result of the layoff of over 50 CDOT engineers in the winter of 2003 by ex- Governor Rowland, and the early retirement of at least a hundred more later that year, CSEA/SEIU Local 2001 has undertaken this study of the impact that contracting out had on our members who were CDOT engineers. The layoffs seemed pointless given the large amount of contracting out that was ongoing at that time. Yet the total number of consulting engineers, their workforce, and the cost of retaining them is a mystery; there is no published data in the budget of the Department that reflects the scope of consulting engineering work at CDOT.

The only study that was ever undertaken by CDOT on the costs of consulting engineers took place in March, 1994. This study, entitled "Analysis of In-House vs. Consultant Preliminary Engineering and Construction Inspection Costs, Jointly Prepared by The Office of Management Services, Office of Fiscal/Special Projects and The Office of Construction, March 1994," studied all projects whose total cost was less than \$5 million. The conclusion reached after analyzing data using 5 different accounting methodologies was that it was less expensive to utilize in-house engineering staff for the under \$5 million projects. One of the methods used -"Direct Cost"- is utilized for our report. **A second method, called the Cost Allocation method, will be analyzed as well. Using an average of the 5 accounting methods, the study showed that there was a 17.8% cost savings in design, or \$10.07 million, utilizing in-house engineering staff. For construction inspection there was a 15.62% cost savings, or \$7.71 million, using in-house engineering staff.** As a result of this study, over 100 new in-house engineering positions were created to handle most work under \$5 million, and 250 durational engineering positions were made permanent.

Over the years since this report was published, the in-house engineering staff has decreased through attrition. CDOT Management has never been held accountable for continuing to favor consulting engineering contracts when they had proved to be more costly in relation to state engineering personnel.

When CDOT engineers were laid off there was no rational analysis by CDOT management of the cost impact in utilizing consultants while state engineers were laid off. In one case, an engineer in bridge design was laid off, quickly hired by a consulting engineer to work on the same type of bridges he was working on as a state engineer, and worked on these small bridges until he was rehired by the state in May, 2004. This employee won an arbitration award for all of his back pay and seniority under the layoff language in the union's Engineering, Scientific, and Technical Council (P-4) bargaining unit contract.

This study is undertaken with the purpose of bringing to the public's attention the actual scope of consulting engineering work at the Department of Transportation, so that policy discussions can take place based on real knowledge of the waste of taxpayers' money involved that runs to millions of dollars annually. If one million dollars can be saved per year on in-house engineering staff expansion, that is \$1 million additional dollars that can be put to work rebuilding a bridge or improving an intersection. That extra money could have been directed to other needed infrastructure.

III. DATA SOURCES AND METHODOLOGY

The contract document is the legal document created by the Connecticut Department of Transportation to hire a consultant to perform engineering work for the Department. It contains important information of a contractual and financial nature. This report relies almost entirely upon contract data provided by the Connecticut Department of Transportation.

The primary source of information came from the Contract unit in the Department. Each individual engineering contract that was active between October 1, 2002 and June 30, 2004 was reviewed, and relevant information copied. In the case of "On-Call" engineering contracts, where the contract fee was not reflective of the work assigned, invoices for work performed were reviewed. Where project-ending dates were unclear, information was used from internal databases maintained by the Department. Pre-Construction Management System reports were utilized for design projects; the Progress Report for construction projects. Some salary and overhead data were taken from Fee Negotiation documents, also reviewed in the Contracts unit. Maximum salaries for in-house engineers were taken from P-4 contracts active for the relevant years.

The following data items were entered into the database:

CONSULTANT NAME: The name of the consulting firm. In cases where the name changed, the latest corporate name was used for all of their contracts in the database. 48 consulting engineering firms were identified on regular contracts, and an additional 12 firms were identified in on-call contracts during the period of study.

CONTRACT #: The name of the contract for CDOT internal use. This number was not useful in tracking consultant work because each contract amendment was treated as a separate contract.

PS#: Personal Service Agreement Number. This number is assigned by the State Comptroller's Office for the original contract and all of its subsequent amendments. All work in the database is sorted by PS#. Further, the database relates the PS# and contract information against the project number and all project related data. 131 Personal Service Agreements were reviewed for the study, 109 in regular contracts and 22 in on-call contracts. Use of the word "contract" in this study actually refers to the Personal Service Agreement with all its amendments.

PROJECT(S): A contract for engineering will describe a project, or a number of projects. An engineering contract can be amended numerous times to add additional projects. For most engineering work reference is made only to the project number, never the contract number or PS#. The contract is the only place where the contract #, PS# and project number are referenced together.

ON-CALL: Regular engineering contracts provide a limiting amount of funds that will probably be spent on the projects called for. On-Call contracts have a limiting amount face value, but the vendor has no advance knowledge that he will ever be called to perform work under the contract. Therefore the face value of the contract cannot be relied upon to predict costs. Review of invoices was undertaken to determine the actual costs involved under these contracts. 22 on-call contracts were reviewed with a nominal value of \$73.576 million. 7 contracts were reviewed for invoices totaling \$1.4 million, from October 2002 through September 2003.

Table 1. Types of CDOT On-Call Engineering Contracts Active October 1, 2002 through June 30, 2004

<i>TYPE OF ON-CALL CONTRACT</i>	<i>NUMBER</i>	<i>NOMINAL VALUE (\$ MILLION)</i>
ENVIRONMENTAL FIELD REMEDIATION	8	\$36.151
ENGINEERING	5	\$15.000
RAILROAD ENGINEERING	1	\$6.000
FACILITIES DESIGN	1	\$5.000
MATERIALS TESTING	1	\$4.326
ARCHEOLOGY	2	\$2.600
TRAFFIC	1	\$1.500
PHOTOGRAMMETRY	1	\$1.500
ENVIRONMENTAL	1	\$1.000
TITLE SEARCH	1	\$0.5000
I. TOTAL	22	\$73.577

This study does not cover on-call contracts nor invoices that do not impact unionized engineers at the Department of Transportation. The Department has never maintained in-house capabilities in the areas of environmental field remediation and photogrammetry. These contracts account for 51% of the total nominal value of the on-call contracts.

A review of on-call engineering contracts found invoices for 6 of the 20 remaining contracts, worth \$1.419 million during the period 10/1/02 to 10/1/03. This is 3.9% of the total nominal value of \$35.926 million for the 20 engineering related contracts. It should be noted, however, that the on-call contracts cover a time period from 1998 to 2006 and the invoices cover one year only. For the period October 1, 2002 until October 1, 2003, the average monthly nominal value of engineering on-call contracts was \$238,253.00. The average monthly invoice during this period was \$141,804.00, all for additional work on previously assigned tasks. This indicates that the on-call agreements were being utilized at about 60% of their nominal value. There is no indication that CDOT utilized on-call agreements to perform work performed by state engineers laid off, however laid off engineers could have been assigned this work, and thereby eliminate the need to eliminate a position.

TYPE: Contracts were grouped into the following engineering areas: Bridge Design, Bridge Inspection, Construction Inspection, Facilities Design, Highway Engineering (includes railroad), Studies and Miscellaneous (studies, surveying traffic, environmental), Operational Support (consultant liaison, corridor oversight, testing).

Table 2. Types of CDOT Engineering Consultant Contracts Active October 1, 2002 through June

30, 2004

<i>TYPE</i>	<i>NUMBER</i>	<i>TOTAL VALUE (\$ MILLION)</i>	<i>FTE ENGINEERS</i>
CONSTRUCTION INSPECTION	25	\$95.976	160.6
HIGHWAY DESIGN	29	\$89.330	87.4
OPERATIONAL SERVICES	7	\$87.702	97.3
FACILITIES DESIGN	8	\$39.758	32.8
BRIDGE INSPECTION	9	\$26.890	41.6
BRIDGE DESIGN	17	\$25.625	20.6
STUDIES AND MISC.	14	\$9.880	20.8
TOTAL	109	\$375.161	461.1

START DATE: The date of signing by the CDOT manager responsible. There are three signature blocks on the contract; owner, CDOT manager, and Attorney General's office. This date gives a consistent starting point for the contract.

FINAL END DATE: The last date that the consulting engineer can work on the project, at the last recorded contract amendment. In many cases this field contains the words "completion of work". In this case other Department records need to be consulted to determine an approximate end to the project work. For design engineering, the date used was the Design Completion Date (DCD), as recorded in the PCMS database. DCD is the date that all construction documents are finalized so that the project can be bid. For construction inspection, the date used was the revised final date on the latest monthly Construction Progress Report plus 3 months.

FINAL LIMITING AMOUNT: The final contracted amount that can be paid to the consulting engineer as reported in the last amended contract under the PS#. This does not mean that all of the money was spent, however amended contracts showing additional fees or reduced fees indicate that accounts are monitored so that significant funds do not remain unused. The total value of regular contracts reviewed was \$375.161 million. For the period of study, approximately \$95 million was accounted for.

Note that these values are not for the contractor or the building of the project, but only for the costs associated with retaining engineering expertise to design or administer a project. **There is an extra work provision that allows costs up to 10% over final limiting amount to be paid if authorized. This amount was not used in our calculations.**

AMENDMENTS: Contracts are amended to reflect additional fees required, time extensions, and corporate name changes, changes in project scope, reduced fees, or additional projects added.

26% of the contracts had no amendments, 18% had one amendment, 36% had 2-4 amendments, and 20% had 4-12 amendments.

Reasons to amend the contract were as follows:

- 62% fee increases
- 24% time extensions
- 7% corporate name changes
- 4% fee reallocations
- 3% fee decreases.

CONSULTANT TITLE: The titles of the engineers that will be utilized on the project. These titles fall into 4 categories that relate to state engineering titles.

- Project Manager. This title is for the overall manager, who is limited in the hours he or she can charge to the project. This title is equated with the Transportation Supervising Engineer. These titles were not used for any cost analysis due to the limited hours of involvement in the project.
- Project Engineer/Senior Engineer. These titles are for the full time overseer of the project, or for an engineer with specialized skills. This title is equated with the Transportation Senior Engineer or Transportation Engineer 3.
- Engineer/Chief Inspector. The titles are utilized for the performance of the full range of engineering work. The equivalent title for a state engineer is Transportation Engineer 2. The Engineer 2 is utilized as a chief inspector on construction projects as well.
- Engineer Intern/Sr. Drafter. These titles reflect engineers at the beginning level or technicians at the senior level. The equivalent state titles are Transportation Engineer 1 or Drafter 2.
- Technician/Drafter. Technical level employees. CDOT employs very few of these titles but the equivalent state title is Transportation Engineer in Training 3.

The purpose of this study is to compare costs, not the relative efficiency of utilizing a particular engineering firm or in-house engineering staff. It is assumed that both staffs employ the appropriate number of qualified engineers using the latest engineering methods. The CDOT fee negotiation process also operates under this assumption.

Finally, the use of secretaries by consultants was not taken into account. Their costs at the low end of the salary scale and the Project Managers at the upper end of the salary scale were ignored in any computation of a full time equivalent engineer cost. Additional costs associated with administering consultant agreements or allocating staff to supervise the consultants was also ignored.

HOURLY RATE: Within the contract document, the titles and maximum hourly rates of the titles are listed. The maximum hourly rate is shown to be valid until a certain future date shown. The hourly rate is strictly the salary rate paid to the employee. This maximum rate is compared to the maximum hourly rate paid to the equivalent state engineering title in the P-4 contract on the ending effective date listed in the consultant's contract.

Neither the consultant nor the state engineer can actually be paid over the maximum salary. The maximum hourly rate is an indication of comparable value between two equally qualified engineers in the private and public sectors. Use of this value in computing the number of consulting engineers working for CDOT gives a conservative estimate.

The Total Rate is the labor cost that is charged to the CDOT Special Transportation Fund. It is made up of base hourly rate times BFO% plus profit additive.

Table 3. Hourly Rate Data Summary by Functional Engineering Title *

<i>Count</i>	<i>Title</i>	<i>CDOT Average Hourly Rate</i>	<i>CDOT Average Total Rate</i>	<i>Conslt. Average Hourly Rate</i>	<i>Conslt. Average Total Rate</i>
68	Technician	\$24.58	\$45.93	\$18.59	\$45.03
81	Jr. Engineer	\$29.84	\$56.04	\$27.20	\$63.87
87	Engineer	\$34.39	\$64.52	\$30.17	\$71.26
95	Project/Senior Engineer	\$39.19	\$73.28	\$41.06	\$98.98
44	Project Manager	\$46.28	\$86.43	\$48.47	\$116.63

*Averages of salaries for years 2001-2004

BFO%: The Benefits, Fringes & Overhead Percentage. The true cost of hiring a consultant engineer includes the benefits, fringes and office overhead associated with the consulting engineering firm. For design work the BFO% averages over **120% of the straight hourly salary**. For construction inspection the BFO% averages **100%** due to the fact that the employee works out of an office trailer provided as part of the construction project. The comparable BFO% for state engineers was **77.39%** in Fiscal Year 2003 and **88.47%** in Fiscal Year 2004 and thereafter.

In October, 2005, CDOT established a new rate of 83.74%; this number was not in place during the period of study. **As of January, 2006 the BFO% cap for consultants has been lifted. New engineering agreements can expect BFO% rates of up to 150%-160%. This is not part of our study but is a dramatic increase in consulting overhead of over 20%.**

When BFO% could not be found in the contract document, fee negotiations documents or other contracts with the same firm were used. If no document could be found the average value was used.

PROFIT or FEE: Once the BFO% additive has been computed on the straight salary, the consulting firm adds a percentage for profit. This fixed fee averages 9.8% of the total for straight hourly rate plus BFO%. **This item is known as a fixed fee because the consultant receives the dollar value, not the % figure. If the project is under budget, the consultant's profit would be greater on a % basis.**

DIRECT COST: An estimate is made of all direct cost items such as travel, office equipment, copying expenses and specialized equipment needed. Any minor costs associated with overtime estimates were also placed in the direct cost category, due to its uncertainty. This value averages around 3% of the total cost of the contract, but for bridge inspection contracts this value averages 24.6% of the total cost of the contract, due to the specialized equipment required to perform the work. This cost is removed from all cost comparisons between consultant and in-house engineering staff; it is assumed these costs would be equal no matter who undertook the job.

IV. DATA ANALYSIS

A. Labor Cost Components in CDOT Consulting Engineer Contracts

The final limiting amount on an engineering contract with CDOT consists almost entirely of labor costs and their additives. The only cost not associated with labor cost is the direct cost for equipment on the job. The first step then is to reduce the final limiting amount by its direct cost percentage. The remaining cost value is purely the cost of labor with its Benefits, Fringes and Overhead (BFO%) additive and fixed fee or profit.

EXAMPLE:

Tectonic Engineering and Surveying Consultants, PC was hired under Personal Service Agreement Number 4111 to provide highway design services in the Norwalk-Stamford stretch of I-95 to CDOT. The start date was 9/23/1991 and the final end date was 12/30/2003. The final limiting amount was \$3,105,450 after 5 contract amendments.

The contract showed a BFO% of 124.53%, fixed fee (profit) of 9.78%, and direct costs of 2.156%.

Final Limiting Amount	\$3,105,450
Direct Cost (2.156%)	- \$ 66,954
Total Labor Cost	\$3,038,496

This total labor cost is the actual cost that is charged to the State Transportation Fund as the cost of labor under the Personal Service Agreement. This is the labor cost that can be directly compared to the cost of utilizing in-house engineering staff. In order to better understand how the consulting firm views this total labor cost, it can be further broken down into profit, overhead, and base salary costs:

Total Labor Cost	\$3,038,496	
Fixed Fee (PROFIT 9.78%)	-\$ 297,165	
Salary + BFO%	\$2,741,331	
BFO% (124.53%)	-\$1,520,411	
Base Salary Cost	\$1,220,920	(ACTUAL PAYROLL)

In comparing the cost of consulting engineering labor costs to in-house engineering costs, the state engineer cost is the base salary cost plus the BFO% additive. Even if the base salary was the same, the BFO% rate for state engineers is much less than the consulting engineer, at 88.47% and no fixed fee. The above example will be computed in reverse using the same base salary cost:

CDOT Base Salary Cost	\$1,220,920
CDOT BFO% (88.47%)	<u>\$1,080,148</u>
CDOT Salary + BFO%	\$2,301,068
CDOT Fixed Fee (0%)	<u>\$ 0</u>
CDOT Total Labor Cost	\$2,301,068

With base salaries the same there is a \$737,428 savings in utilizing state engineers on this project.

B. Cost Comparison Total Hourly Rate, CDOT vs. Consultant

CDOT analyzed consultant costs with an overall analysis in 1994 and concluded that it was less expensive to utilize in-house engineering staff on projects less than \$5 million. This report has collected 375 maximum hourly rates on engineers, from the contracts reviewed, and will reach the same conclusion looking at a comparison between a consulting engineer and his or her in-house counterpart's total hourly rate. The total hourly rate is the labor cost that is charged to the State Transportation Fund for the project worked on. For a consultant this consists of the base hourly rate times the BFO%, and that product times the profit % additive. For in-house engineering staff total hourly rate is the base hourly rate times BFO% for CDOT.

Table 4 shows the results for all full time engineering personnel. The Project Manager position is only part time, so it was eliminated from evaluation.

Table 4. Full Time Equivalent Engineer Hourly Rate Comparison

<i>Count</i>	<i>Title</i>	<i>CDOT Hourly Rate</i>	<i>CDOT Total Rate</i>	<i>Conslt. Hourly Rate</i>	<i>Conslt. Total Rate</i>
68	Technician	\$24.58	\$45.93	\$18.59	\$45.03
81	Jr. Engineer	\$29.84	\$56.04	\$27.20	\$63.87
87	Engineer	\$34.39	\$64.52	\$30.17	\$71.26
95	Project/Senior Engineer	\$39.19	\$73.28	\$41.06	\$98.98
331	Average FTE	\$32.00	\$59.94	\$29.26	\$69.79

An analysis of the total rate cost for in-house engineering staff versus equivalent consulting engineers gives the savings shown in Table 5.

Table 5. Total Hourly Rate Savings utilizing In-House CDOT Engineers

<i>Title</i>	<i>Total Hourly Savings</i>	<i>Total % Savings</i>
Technician	- \$0.90	-2.0%
Jr. Engineer	\$7.83	14.0%
Engineer	\$6.75	10.5%
Project/Senior Engineer	\$25.70	35.1%
Average FTE Engineer	\$9.84	16.4%
Weighted Average FTE Engineer	\$10.88	17.8%

The determination of an equivalent state engineering title to a consultant engineering title is a matter of professional judgment. Knowledge of the makeup of design teams and construction inspection teams is needed. The engineering progression from Technician to Project Manager follows general principles of work flow that are common to consultant and CDOT in-house engineering offices. CSEA/SEIU Local 2001 has actively participated in the State Objective Evaluation process for over 20 years, and is very familiar with job comparison judgments.

Using a 35-hour work week for both consultant and state employees, and with average savings of \$9.84 an hour, then the annual savings of using CDOT engineers are over \$17,900 annually.

C. Computation Of FTE Consulting Engineer Hourly Rate

From the hourly rate data collected, a representative hourly rate must be computed that will combine all of the engineering titles. The engineer is the working level engineer, with supervisors more highly compensated and subordinates less well compensated. The rate used in this computation will be the base hourly rate so that individual contract financial additives can be used in conjunction with the representative hourly rate.

Table 6 shows the 3 base hourly rates that could be utilized.

Table 6. Base Hourly Rate Choices for Computation of Number of Consultant FTE Engineers working for CDOT

<i>Base Hourly Rate Choice</i>	<i>Base Hourly Rate</i>
Engineer Average	\$30.17
4 Engineering Function Average	\$29.26
4 Engineering Function Weighted Average	\$30.19

The weighted average was utilized for computing the number of FTE engineers working for CDOT. The number was very close to the base hourly rate for Engineer, the mid level professional, and will provide a more conservative answer for numbers of FTE consulting engineers than the average. The computation for numbers of FTE consulting engineers is a monthly cost; therefore \$30.19 times 8 hours times 21 days = \$5,072.21 as the base rate cost for an FTE consulting engineer for one month.

D. Computation of Number Of FTE Consulting Engineers

In order to develop an estimate of the number of consultant engineers working for CDOT in any one month, the concept of the full time equivalent (FTE) engineer is utilized. A representative monthly base cost using the weighted average of 331 reported hourly rates should provide a realistic estimate the 109 regular contracts reviewed. The FTE is the full working level professional who does not supervise, but rather can handle the entire range of engineering tasks assigned. The project engineer is the supervisor and earns more. The engineering intern or junior engineer performs simpler tasks; the technician is a paraprofessional class, both earn less. The mean of all the job titles by weighted average comes very close to the engineer salary, which indicates that the weighted mean is a realistic number to use in estimating total FTE engineers employed in a month. Project managers are not included due to the part time nature of their employment; secretaries are not included because they are not engineering personnel. The latter two groups averaged out would also tend to be close to the mean salary for FTE Engineer.

The resulting number of FTE engineers working on a project in a given month is an estimate based on the following factors:

1. The FTE Engineer salary for the month, \$5,072.21 is a weighted average based on 331 reported

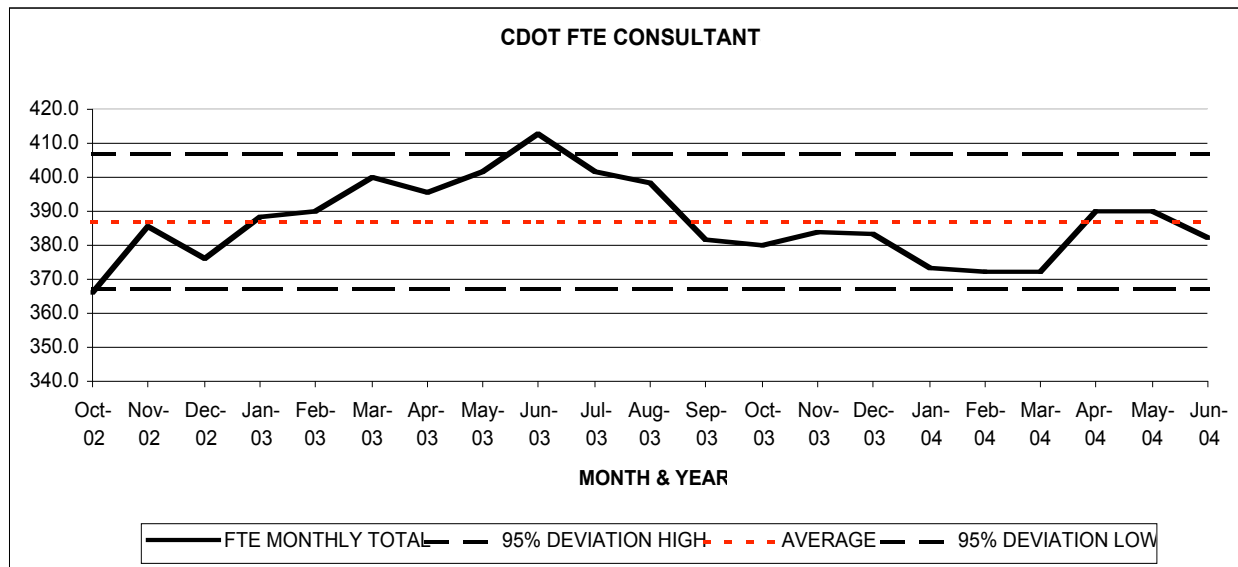
hourly rates, not the individual maximum rate for the project reported in the contract, nor the actual rate paid to the employees on the project.

2. The project specific BFO%, profit and direct costs are utilized in arriving at the estimate.
3. The starting time is project specific. The ending time is project specific based on Department records, plus 3 or 4 months of extra time for construction inspection projects. These values are used to compute the number of months in a project.
4. Base labor costs for the project are computed from the Final Limiting Amount of the final amended Personal Service Agreement times (1 – Direct cost %) to give Total Labor Costs. Total Labor Costs divided by (1 + Profit %) and then divided by BFO% result in the Total Base Labor Cost for the project.
5. Total Base Labor Cost is divided by months of the project to equal the Monthly Base Labor Cost.
6. Monthly Base Labor Cost is divided by the FTE Engineer monthly salary of \$5,072.21 to arrive at the number of FTE Engineers in a month for the project.
7. The FTE Engineer is applied uniformly to the project in every month from the beginning to the end of the project. This results in an averaging of employment over the life of the contract. The typical project will ramp up to a peak of employment and then tail off to minimal employment by the end of the project, or have peaks and valleys of economic activity throughout the project.
8. Every project and its FTE Engineer monthly number was placed on a spreadsheet matrix and totaled per month. Every month projects begin or end, which creates a rise and fall in the number of total FTE Engineers in any month.
9. The resultant chart showing FTE Engineers is intended to be a realistic estimate of the number of engineers employed by CDOT year in and year out, and to show if there are cycles of use and non use, or a steady employment of consultants.

The results show that the mean number of FTE Engineers per month is 387, with a 95% confidence level of plus or minus 24 engineers. The low in employment was 366 in October, 2002, just before the layoffs of state engineers, and peaked at 413 in June, 2003, (following the layoffs and Governor Rowland's Early Retirement Incentive Program), before reducing to near the mean by June, 2004. The running yearly average of FTE Engineers was 392 from October 2002 to October 2003; 393 from January 2003 to January 2004; 390 from March 2003 to March, 200; 384 from July 2003 to July 2004.

The chart below illustrates most clearly that **the consulting engineer workforce is not cyclical in nature, but rather a permanent presence as a labor cost to the State of Connecticut. This permanent labor force is not under the control or scrutiny of the State Legislature; there is no position count of consulting engineers.**

Chart 1. FTE Consulting Engineers per Month, October, 2002 through June, 2004.



E. An Example of Privatization Abuse

While performing the review of contracts at CDOT, a particularly blatant example of privatization with no cost control and contract piggybacking came to light. This is the story of one consulting firm, Close Jensen & Miller, P.C. (the Connecticut based contractor that receives the most state consulting contract dollars) and how they came to increase the value of a contract with CDOT through contract amendments from an initial value of \$2.8 million on November 01, 1999 to \$10.175 million on November 1, 2003, through the use of amended contracts that far eclipsed the intent of the original PSA# 5183.

This story begins in the mid-1980s when CDOT decided to contract out consultant liaison services to a private consulting engineering firm Close Jensen & Miller, P.C. (CJM) to supervise the activities of consultants in a 1985 bridge rehabilitation program. PSA #3374, CDOT Contract 2.26-01(87) was executed on July 6, 1987 and underwent possibly 10 supplemental agreements, total limiting fee unknown. Another PSA, #4289, CDOT Contract 4.12-03(93) was executed July 22, 1993, which after 7 supplemental agreements was worth \$14.836 million and expired on April 13, 2001. Consultant liaison responsibilities concern oversight of consultant designs of bridges in an ongoing program. A small staff of CDOT engineers in turn supervised CJM. No effort was made to determine the cost effectiveness of consultants supervising consultants by union during this period of time.

The above programs ran their course, and after so many supplemental agreements, CDOT re-advertised for a consulting engineer to perform additional engineering and liaison services under the State and/or Federal Bridge Rehabilitation Program. PSA 5183, CDOT Contract 10.27-01(99), starting November 1, 1999, ending October 31, 2002, with a limiting value of \$2.8 million, and 4 projects, was awarded to CJM through the CDOT consultant selection process. In the contract, page 3, the second rationale for executing the contract was listed as follows:

"WHEREAS, this program is of such magnitude as to require additional engineering and liaison services to temporarily augment state forces in the administration, supervision, and review of engineering services performed by the State's consulting engineering firms..." [CSEA/SEIU Local 2001 emphasis].

This three-year contract, originally valued at \$2.800 million for 4 projects, has gone through the following contract amendments:

Table 7. PSA# 5183 and CONTRACT AMENDMENTS

AMENDMENT	DATE	REVISED FEE	PROJECTS	COMMENTS
Original	11-1-99	\$2.800 million	4	
1	6-6-00	\$3.040 million	5	Add project, fee increase
2	10-25-00	\$2.240 million	5	Fee decrease
3	2-14-01	\$2.240 million	5	Fee reallocation
4	3-4-02	\$3.64 million	13	PS 4289 incorporated
5	7-11-02	\$4.555 million	19	PS 3374 incorporated add 1 yr.
6	2-26-03	\$7.375 million	20	Fee increase, add projects
7	1-6-04	\$10.175 million	20	Fee increase, add 1 yr.

This original contract was amended far beyond its initial falsely stated intent to "temporarily augment state forces". This program had been administered by CJM since the mid-1980s and it appears they were continuing to run it.

In the rationale it states that there were not enough state engineers to perform this function. If this were a permanent program, which it is, and oversight of consultants is a core function of state government, then CDOT Management would have needed to make a good faith effort to determine this was an efficient use of the taxpayers' money through an analysis of the costs involved.

In fact, CJM's hourly rates were incorporated into the hourly rate data that determined state engineers had a \$9.84 per hour cost advantage over consultants. In addition, this type of work- overseeing consultants- is performed by Senior Engineers, where state engineers have a \$25.70 cost advantage over consulting engineers or 35.1% savings. Hourly rates for CJM under PSA# 5183 are as follows with a BFO% of 227.73% and a profit of 9.78%, compared to state senior engineers with a with a BFO% of 188.47%:

Table 7. CJM Maximum Rates Effective Through 11-1-2004

CJM TITLE	STATE TITLE	CJM TOTAL RATE/hr.	STATE TOTAL RATE/hr.	CJM VS. STATE per hour
Project Director	Tr. Supv. Engr.	\$106.88	\$87.83	\$19.05 more
Special Advisor	Tr. Supv. Engr.	\$112.50	\$87.83	\$24.67 more
Project Manager	Tr. Supv. Engr.	\$ 95.63	\$87.83	\$ 7.80 more
Senior Engineer	Tr. Sr. Engr.	\$101.38	\$73.37	\$28.01 more
Average				\$19.88 more

The fact that this contract was not for designing bridges but for liaison work and overseeing the work of other consultants should raise flags on why we are spending money at premium rates on consultants like CJM. There is no value added for the extra \$20-30 an hour spent on this

consultant.

CDOT Management seems oblivious to the fact that having consultants oversee consultants on a long-term basis or any basis is not cost effective or efficient and could lead to less accountability and corruption. The terms “Project Director” and “Special Advisor” are unique titles never seen before; it is unknown whether their role is limited in any way.

All this privatization does is add another layer of bureaucracy at CDOT; Senior and Supervising Engineers who could be performing direct consultant engineer oversight are overseeing consultants who are overseeing more consultants. There are sufficient engineers at CDOT to staff these Senior Engineer positions, and the new hiring that would take place would be at the entry level of the engineering career ladder. The need is a permanent need and bringing this work in-house will save significant bridge program dollars.

One reason why CJM may have received these contracts despite the fact that they cost millions more than utilizing state employees is the fact that the owner, **John H. Miller, has contributed \$40,000 to various state and Federal Republican political campaigns in 1998 and 2002.**

In 2005, the Connecticut General Assembly passed Senate Bill (SB) 94, which would have **established standards on contracting out state work.** Among other things the bill would have implemented a process of assessing the costs of a particular contract and then compare that cost to how much it would cost state employees to perform the task.

If such guidelines had been in effect at the time the CJM contract was let, **CDOT would be hard pressed to explain why it should spend an extra \$20 or more on CJM personnel** than what it would pay for work done in house. In July 2005, the Governor vetoed SB 94.

F. An Example of Privatization Corruption

CJM is not the only firm with political connections to Connecticut decision-makers. While CJM only wastes money, another firm wired into the Connecticut Republican party has been convicted of defrauding the state and federal government. During the period that this study encompassed, one of the most politically influential consulting engineers, Frank S. Chuang, owner of L-C Associates, P.C., was indicted by a federal grand jury on January 30, 2003 for 13 counts of mail fraud, two counts of wire fraud and 15 counts of false claims in connection with federally-financed transportation projects from 1995 to 2003. He was subsequently convicted and sent to prison. The Federal Highway Administration suspended L-C Associates on May 6, 2003 and CDOT suspended his firm on May 7, 2003. Mr. Chuang was noted for his generous parties and golf outings that included CDOT officials, and political donations to Governor Rowland.

It is important to note that no CDOT consultant oversight was effective in uncovering the nature of the fraudulent activities, which involved double billing his engineers' time to multiple DOT projects in multiple states. If CDOT consultant oversight cannot effectively monitor the work hours needed for a consultant to complete an assignment, it is ripe for contract amendments that add additional fees and profits to the consulting engineer for work not performed.

While Mr. Chuang is currently repaying his debt to society, his son has formed another company and continues to do business with the state.

G. CDOT Overhead

There has been criticism from both the engineering consultant lobbyists and CDOT Management that CSEA/SEIU Local 2001's October 24, 2005 report calculated the overhead for the consulting engineer, but that the state engineer costs included only benefits and fringe benefits, but ignored the overhead component of the BFO%.

For any policy maker in state government it is important that they know of and properly utilize generally accepted accounting principles for governmental units and organizations. CSEA/SEIU Local 2001 retained the CPA firm Kostin, Ruffkess & Company to describe how overhead should be computed. In their September 29, 1992 opinion, they stated:

"Generally accepted accounting principles relating to the operations of a governmental unit and organization doing business with governmental units for cost accounting methods is promulgated by the Cost Accounting Standards Board. These cost accounting standards are contained in the Code of Federal Regulations. Cost Accounting Standards Board Statement 410 'Allocation of Business Unit General and Administrative Expenses to Final Cost Objectives' sets the standard for allocating overhead. CAS 410 states that the **overhead costs should be allocated to a base which represents the total direct costs of the total activity of the organization. The total direct costs of this organization [CDOT] includes the cost of the state employees as well as the cost of consultants.** Thus the Department of Transportation's overhead rate should be calculated using the \$106,985,983.00 [State engineer costs in 1991] plus the costs of the consultants, and should be allocated to both the state employees and consultants. This will result in a much more accurate picture of the costs of using consultants versus state employees."

In summary, consultants' expenses are a part of CDOT overhead for cost accounting purposes and they **share an additional overhead burden based on CDOT's resources devoted to hiring, financing and overseeing their work.** State engineers also have an overhead burden. This Departmental overhead is not charged to the project account in the State Transportation Fund, and is not part of the engineering consultants' contract with CDOT. That is why it was not included in our project cost analysis. Does it make a difference?

CDOT's 1994 report did in fact compute indirect overhead for state engineers and consulting engineers, based on the resources utilized within the Department. For example, the Personnel Office only impacts state engineers, the Consulting Engineering unit only impacts consulting engineers, and the Commissioner's Office impacts both parties equally. For Engineering/Construction Administration respectively, the overhead rate was determined to be 14.21%/19.45% for state engineers and 8.91%/6.84% for consulting engineers. These overhead values taken alone would indicate a 5%-12% advantage for the consulting engineer.

In fact the final cost comparison using the Direct Method (used by the union) that does not compute Departmental Overhead, and the Cost Allocation Method that accounts for Departmental Overhead show very similar cost advantages utilizing state engineers, as shown in Table 8 below, taken from Appendix G:

Table 8. SAVINGS UTILIZING STATE ENGINEERS IN 1994 CDOT REPORT

	CDOT DIRECT SAVINGS	CDOT ALLOCATED SAVINGS	CSEA/SEIU 2005
ENGINEERING	20.1%	17.8%	
INSPECTION	22.8%	16.9%	
COMPOSITE	20.8%	17.6%	16.4%

CSEA/SEIU Local 2001 was aware that overhead could be accounted for but recognized that this overhead factor applied to both parties fairly equally, and that the direct method of computation gave effective and valid results. We stand by our results.

V. CONCLUSIONS

1. **The use of consulting engineering services is a serious waste of state tax dollars, amounting to \$17, 900 per engineer per year or a total of over \$7 million per year.**
2. DOT needs to **explain why it needs these consultants instead of utilizing state employees.**
3. **Hiring consultants leads to less accountability** to the General Assembly and to the public. Not only is money wasted, in extreme cases **contracting-out leads to criminal activity.**
4. Despite the fact that much is made over the supposed overly generous salary for state employees, **public service workers in this study are paid less in salary on average than outside consulting engineers** doing the same task.
5. Similarly, state employees are criticized for their supposedly overly generous pension and health benefits, yet **state workers in this study have significantly lower overhead costs than private consultant engineers.**
6. “Temporary augmentation” in contracts like the one given to CJM has led to a **permanent shadow workforce of overpaid consultants who never seem to leave.** Indeed, the number of consultants, which has remained fairly constant over the period investigated, belies the excuse that consultants are brought in for a specific period for a specific task.
7. **State public service workers should perform work impacting health and safety of Connecticut’s residents on public projects** because private contractors are ultimately not accountable to the public.
8. Private contractors who are discovered to have **violated the public trust or threatened public safety as a result of inadequate or deficient work should be banned from entering contracts with the State on any public projects for a minimum of five years.** Only after a thorough audit of the firm’s work during this period should they be considered eligible to place a bid for public projects with the State of Connecticut.

VI. APPENDICES

A. CONTRACT DATA

APPENDIX A1 CONTRACT DATA

PS.	START DATE	FINAL END DATE	FINAL LIMITING AMOUNT	MONTHLY FTE ENGINEERS
5582	6/1/2003	12/31/2005	\$677,710	1.7
5388	9/10/2001	5/10/2005	\$496,580	0.8
5395	9/17/2001	2/16/2007	\$773,469	1.0
5617	1/5/2004	11/7/2007	\$283,930	0.5
5381	1/31/2002	6/30/2006	\$324,010	0.5
3757	2/27/1989	9/17/2004	\$8,103,990	3.3
3694	9/27/1988	10/17/2007	\$887,260	0.3
4371	10/1/1993	12/1/2004	\$1,359,120	0.8
4907	12/1/1997	8/21/2006	\$1,222,880	0.9
5369	5/1/2001	11/19/2004	\$563,160	1.1
5155	9/1/1999	12/31/2003	\$371,670	0.5
5177	11/23/1999	6/15/2005	\$631,170	0.4
5175	3/2/2000	12/31/2003	\$182,910	0.3
5581	6/1/2003	12/31/2005	\$728,200	1.8
5181	11/2/1999	12/31/2005	\$546,940	0.6
4452	5/13/1994	6/24/2002	\$493,920	0.4
5168	11/10/1999	10/16/2008	\$7,977,860	5.8
5589	5/27/2003	12/31/2004	\$694,980	2.5
5178	12/23/1999	6/30/2003	\$7,375,390	11.2
5359	2/19/2001	12/30/2004	\$1,262,030	1.9
5580	4/21/2003	12/31/2004	\$2,029,500	6.4
5559	7/1/2002	12/31/2005	\$2,461,690	3.1
5467	7/1/2002	6/3/2004	\$1,468,390	4.6
5354	12/15/2001	12/31/2003	\$607,019	1.0
5141	8/11/1999	6/30/2004	\$10,023,243	10.0
5145	8/1/1999	12/31/2003	\$967,300	0.9
5562	2/18/2003	1/11/2005	\$1,412,440	5.3
5364	2/5/2001	9/20/2005	\$9,625,000	15.3
5466	8/15/2002	12/3/2003	\$278,300	1.5
5446	5/9/2002	1/31/2004	\$228,444	1.1
5569	3/1/2003	1/14/2006	\$3,375,900	8.5
5551	9/9/2002	1/7/2006	\$4,443,230	9.5
5376	3/1/2002	6/16/2003	\$464,860	2.7
5120	4/22/1999	12/31/2003	\$3,299,010	4.7
4809	3/1/1997	10/28/2004	\$14,570,305	13.6
5089	3/1/1999	12/31/2003	\$416,240	0.7
5442	1/2/2002	12/31/2005	\$5,399,570	9.2
4458	7/19/1994	6/3/2003	\$9,815,690	7.6
5585	7/1/2003	3/14/2006	\$4,727,690	12.6

PS.	START DATE	FINAL END DATE	FINAL LIMITING AMOUNT	MONTHLY FTE ENGINEERS
5356	4/2/2001	5/30/2006	\$7,449,109	10.6
5625	1/6/2004	6/30/2006	\$2,298,670	6.3
5630	3/15/2004	7/21/2008	\$11,216,150	17.9
5197	1/1/2000	11/30/2004	\$1,811,752	2.7
5469	8/1/2002	8/28/2005	\$2,304,720	5.5
5227	5/15/2000	7/14/2003	\$180,730	0.4
5583	6/30/2003	5/26/2005	\$2,251,920	8.5
5396	1/31/2002	3/30/2005	\$1,541,061	3.6
5584	6/1/2003	7/1/2004	\$124,740	0.8
5330	9/18/2000	11/30/2003	\$741,972	1.7
5119	5/15/1999	3/28/2006	\$6,524,430	7.0
5615	10/29/2003	10/29/2006	\$1,474,440	3.4
4867	7/28/1997	12/31/2005	\$21,299,550	16.5
5048	2/3/1999	12/1/2003	\$717,770	1.0
4273	3/27/1993	6/30/2005	\$4,260,925	2.3
4807	12/15/1996	7/25/2006	\$3,908,940	2.4
4219	11/18/1992	6/30/2005	\$2,698,160	1.4
5606	9/10/2003	6/29/2005	\$520,000	1.9
5090	3/10/1999	11/30/2004	\$1,190,800	1.3
5471	12/2/2002	8/31/2007	\$5,161,560	6.1
5613	10/23/2003	6/30/2005	\$229,740	0.9
4651	10/25/1995	11/26/2004	\$1,912,790	1.4
4758	6/3/1996	12/31/2005	\$417,660	0.3
4547	10/5/1994	1/14/2005	\$2,605,880	1.7
5576	5/1/2003	3/4/2006	\$373,560	0.9
4553	12/15/1994	1/12/2007	\$4,770,030	2.6
4614	3/16/1995	12/1/2005	\$12,021,160	7.3
4110	12/9/1991	3/19/2005	\$3,402,150	1.6
5143	7/7/1999	4/21/2005	\$401,400	0.5
5349	1/8/2001	11/7/2007	\$783,570	0.7
5418	1/2/2002	6/13/2007	\$2,968,980	3.6
4380	10/1/1993	4/8/2006	\$1,500,350	0.8
4900	4/21/1998	2/23/2005	\$2,545,350	2.3
5180	10/19/1999	7/26/2004	\$2,447,680	3.3
4111	9/23/1991	12/30/2003	\$3,105,450	1.6
4092	7/1/1991	12/31/2004	\$1,929,238	0.9
5604	9/18/2003	6/30/2007	\$699,820	1.2
5194	1/5/2000	1/5/2005	\$25,406,885	33.1
5139	6/15/1999	6/4/2008	\$3,833,160	3.0

PS.	START DATE	FINAL END DATE	FINAL LIMITING AMOUNT	MONTHLY FTE ENGINEERS
4048	11/30/1990	7/22/2003	\$1,991,070	1.0
5565	11/15/2002	8/1/2006	\$1,365,690	2.4
5147	10/6/1999	10/28/2004	\$905,410	1.2
5176	10/8/1999	6/30/2003	\$4,456,310	7.5
5555	11/1/2002	5/16/2006	\$358,710	0.6
4864	3/3/1997	4/6/2005	\$4,608,885	3.7
5236	12/15/2000	12/30/2003	\$176,940	0.4
4547	10/5/1994	1/14/2005	\$2,605,880	1.7
4306	6/28/1993	3/31/2003	\$1,308,540	0.9
4604	4/4/1995	5/28/2004	\$4,582,000	3.3
5123	7/16/1999	8/16/2004	\$18,145,400	25.5
4310	10/1/1993	6/30/2006	\$12,437,420	6.0
5016	8/12/1998	9/6/2003	\$13,366,671	17.2
5183	1/13/2000	10/31/2004	\$10,175,000	13.1
5053	3/31/1999	9/30/2006	\$26,967,750	24.9
5558	1/1/2003	12/31/2004	\$2,028,180	7.3
4802	11/25/1996	9/30/2005	\$403,810	0.3
5460	10/1/2002	12/31/2005	\$166,540	0.3
5331	9/1/2000	12/31/2005	\$1,048,490	1.4
5195	3/1/2002	12/31/2004	\$227,480	0.5
5437	3/1/2002	2/28/2005	\$1,500,000	3.4
5103	12/28/2001	12/31/2003	\$722,240	2.4
5608	11/3/2003	6/30/2005	\$249,700	1.0
5126	8/1/1999	6/30/2005	\$942,810	1.0
5588	8/1/2003	6/30/2007	\$463,430	0.7
5557	12/1/2002	6/30/2005	\$649,440	1.7
5586	8/1/2001	6/30/2003	\$300,000	1.0
5458	6/7/2002	12/31/2004	\$1,303,060	3.4
5386	10/22/2001	6/30/2004	\$300,000	0.7
5365	7/1/2001	12/30/2004	\$1,603,140	3.0

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Total PSAs

APPENDIX A2 CONTRACT DATA

PS.	CONSULTANT	TYPE
3694	URS CORPORATION AES	BRIDGE DESIGN
3757	HARDESTY & HANOVER, LLP	BRIDGE DESIGN
4048	MAGUIRE GROUP	HWY DESIGN
4092	GANNETT FLEMING TRANSIT AND RAIL SYSTEMS	HWY DESIGN
4110	DEWBERRY - GOODKIND, INC	HWY DESIGN
4111	TECTONIC ENGINEERING & SURVEY CONSULTANTS, PC	HWY DESIGN
4219	DMJM + HARRIS, INC.	FACILITIES DESIGN
4273	TAMS CONSULTANTS, INC.	FACILITIES DESIGN
4306	JAMES P. PURCELL ASSOCIATES, INC.	HWY DESIGN
4310	HNTB CORP.	OPERATIONAL SERVICES
4371	URS CORPORATION AES	BRIDGE DESIGN
4380	JAMES P. PURCELL ASSOCIATES, INC.	HWY DESIGN
4452	TECTONIC ENGINEERING & SURVEY CONSULTANTS, PC	BRIDGE DESIGN
4458	PARSONS, BRINCKERHOF, QUADE & DOUGLAS, INC.	CONST INSP
4547	PARSONS TRANSPORTATION GROUP	HWY DESIGN
4547	PARSONS TRANSPORTATION GROUP	HWY DESIGN
4553	JAMES P. PURCELL ASSOCIATES, INC.	HWY DESIGN
4604	FUSS & O'NEILL, INC.	OPERATIONAL SERVICES
4614	STV, INC.	HWY DESIGN
4651	JAMES P. PURCELL ASSOCIATES, INC.	HWY DESIGN
4758	MCFARLAND-JOHNSON, INC.	HWY DESIGN
4802	BSC GROUP - CONNECTICUT, INC.	STUDIES AND MISC.
4807	BAKER ENGINEERING	FACILITIES DESIGN
4809	DMJM + HARRIS, INC.	CONST INSP
4864	SEA CONSULTANTS	HWY DESIGN
4867	HNTB CORP.	FACILITIES DESIGN
4900	TECTONIC ENGINEERING & SURVEY CONSULTANTS, PC	HWY DESIGN
4907	HARDESTY & HANOVER, LLP	BRIDGE DESIGN
5016	PB FARRADYNE, INC.	OPERATIONAL SERVICES
5048	DESMAN, INC.	FACILITIES DESIGN
5053	PARSONS, BRINCKERHOF, QUADE & DOUGLAS, INC.	OPERATIONAL SERVICES
5089	A. DICESARE ASSOCIATES PC	CONST INSP

PS.	CONSULTANT	TYPE
5090	WENDEL DUCHSCHERER ARCHITECTS & ENGINEERS	FACILITIES DESIGN
5103	HNTB CORP.	STUDIES AND MISC.
5119	BERGER,LEHMAN ASSOCIATES, PC	CONST INSP
5120	BAKER ENGINEERING	CONST INSP
5123	O&G INDUSTRIES, INC.	OPERATIONAL SERVICES
5126	MACRO CORPORATION	STUDIES AND MISC.
5139	PARSONS, BRINCKERHOF, QUADE & DOUGLAS, INC.	HWY DESIGN
5141	LICHTENSTEIN CONSULTING ENGINEERS	BRIDGE INSP
5143	HARDESTY & HANOVER, LLP	HWY DESIGN
5145	AI ENGINEERS, INC.	BRIDGE INSP
5147	TECTONIC ENGINEERING & SURVEY CONSULTANTS, PC	HWY DESIGN
5155	TECTONIC ENGINEERING & SURVEY CONSULTANTS, PC	BRIDGE DESIGN
5168	STV, INC.	BRIDGE DESIGN
5175	PARSONS TRANSPORTATION GROUP	BRIDGE DESIGN
5176	CLOSE, JENSEN & MILLER, PC	HWY DESIGN
5177	A. DICESARE ASSOCIATES PC	BRIDGE DESIGN
5178	BAKER ENGINEERING	BRIDGE INSP
5180	PARSONS TRANSPORTATION GROUP	HWY DESIGN
5181	JAMES P. PURCELL ASSOCIATES, INC.	BRIDGE DESIGN
5183	CLOSE, JENSEN & MILLER, PC	OPERATIONAL SERVICES
5194	URS CORPORATION AES	HWY DESIGN
5195	WILBUR SMITH ASSOCIATES, INC.	STUDIES AND MISC.
5197	DECARLO AND DOLL, INC	CONST INSP
5227	FAY, SPOFFARD & THORNDIKE OF NEW YORK, INC.	CONST INSP
5236	DIVERSIFIED TECHNOLOGY CONSULTANTS, INC.	HWY DESIGN
5330	BERGER,LEHMAN ASSOCIATES, PC	CONST INSP
5331	PARSONS, BRINCKERHOF, QUADE & DOUGLAS, INC.	STUDIES AND MISC.
5349	LUCHS CONSULTING ENGINEERS, LLC	HWY DESIGN
5354	A. DICESARE ASSOCIATES PC	BRIDGE INSP
5356	DMJM + HARRIS, INC.	CONST INSP
5359	WILBUR SMITH ASSOCIATES, INC.	BRIDGE INSP
5364	DMJM + HARRIS, INC.	CONST INSP
5365	URBITRAN ASSOCIATES, INC.	STUDIES AND MISC.
5369	JAMES P. PURCELL ASSOCIATES, INC.	BRIDGE DESIGN

PS.	CONSULTANT	TYPE
5376	DEWBERRY - GOODKIND, INC	CONST INSP
5381	CONSOER TOWNSEND ENVIRONDYNE ENGINEERS, INC.	BRIDGE DESIGN
5386	WILBUR SMITH ASSOCIATES, INC.	STUDIES AND MISC.
5388	DEWBERRY - GOODKIND, INC	BRIDGE DESIGN
5395	PARSONS, BRINCKERHOF, QUADE & DOUGLAS, INC.	BRIDGE DESIGN
5396	AI ENGINEERS, INC.	CONST INSP
5418	HNTB CORP.	HWY DESIGN
5437	IBI GROUP	STUDIES AND MISC.
5442	LTK CONSULTING SERVICES, INC.	CONST INSP
5446	A. DICESARE ASSOCIATES PC	CONST INSP
5458	CLOUGH HARBOR & ASSOCIATES, LLP	STUDIES AND MISC.
5460	CONKLIN & SOROKA, INC	STUDIES AND MISC.
5466	A-N CONSULTING ENGINEERS, INC.	CONST INSP
5467	GARG CONSULTING SERVICES, INC.	BRIDGE INSP
5469	DMJM + HARRIS, INC.	CONST INSP
5471	BAKER ENGINEERING	FACILITIES DESIGN
5551	MAGUIRE GROUP	CONST INSP
5555	CLOSE, JENSEN & MILLER, PC	HWY DESIGN
5557	WASHINGTON GROUP INTERNATIONAL	STUDIES AND MISC.
5558	PARSONS, BRINCKERHOF, QUADE & DOUGLAS, INC.	OPERATIONAL SERVICES
5559	AI ENGINEERS, INC.	BRIDGE INSP
5562	KTA-TATOR, INC.	CONST INSP
5565	EARTH TECH, INC.	HWY DESIGN
5569	HNTB CORP.	CONST INSP
5576	DECARLO AND DOLL, INC	HWY DESIGN
5580	BAKER ENGINEERING	BRIDGE INSP
5581	CONSOER TOWNSEND ENVIRONDYNE ENGINEERS, INC.	BRIDGE DESIGN
5582	HNTB CORP.	BRIDGE DESIGN
5583	URS CORPORATION AES	CONST INSP
5584	GM2 ASSOCIATES, INC.	CONST INSP
5585	VOLLMER ASSOCIATES LLP	CONST INSP
5586	WILBUR SMITH ASSOCIATES, INC.	STUDIES AND MISC.
5588	CLOUGH HARBOR & ASSOCIATES, LLP	STUDIES AND MISC.
5589	WILBUR SMITH ASSOCIATES, INC.	BRIDGE INSP
5591	BSC GROUP - CONNECTICUT, INC.	HWY DESIGN
5604	VANASSE, HANGEN, BRUSTLIN, INC.	HWY DESIGN
5606	CONSOER TOWNSEND ENVIRONDYNE ENGINEERS, INC.	FACILITIES DESIGN

PS.	CONSULTANT	TYPE
5608	VOLLMER ASSOCIATES LLP	STUDIES AND MISC.
5613	GM2 ASSOCIATES, INC.	HWY DESIGN
5615	WASHINGTON GROUP INTERNATIONAL	CONST INSP
5617	CME ASSOCIATES, INC.	BRIDGE DESIGN
5625	CONSOER TOWNSEND ENVIRONDYNE ENGINEERS, INC.	CONST INSP
5630	CONSOER TOWNSEND ENVIRONDYNE ENGINEERS, INC.	CONST INSP

109 Total

B. PS# AND CONTRACT FINANCIAL DATA

PS .	PROJECT	BFO%	PROFIT %	DIR. COST %	STATE BFO ESTIM* BFO%	ESTIM*
3694	170-0671D2	220.00%	10.00%	3.00%	177.39%	YES
3694	170-0732D2	220.00%	10.00%	3.00%	177.39%	YES
3757	170-0671D1	227.73%	9.78%	3.00%	177.39%	YES
4048	081-0080D	220.00%	9.78%	3.00%	177.39%	YES
4092	034-0234	220.00%	9.78%	4.70%	177.39%	YES
4110	161-0118	231.89%	10.00%	3.00%	177.39%	YES
4110	161-0124	231.89%	10.00%	3.00%	177.39%	YES
4111	135-0200	224.53%	10.00%	2.16%	177.39%	YES
4219	094-0180	229.57%	9.18%	3.00%	177.39%	YES
4239	170-1132D1	224.53%	10.00%	3.00%	177.39%	YES
4273	300-0001	227.73%	9.78%	0.00%	177.39%	NO
4306	050-0187	220.00%	9.00%	3.00%	188.47%	YES
4310	015-0214	220.00%	9.78%	9.17%	177.39%	YES
4310	015-0228	220.00%	9.78%	9.17%	177.39%	YES
4310	015-0230	220.00%	9.78%	9.17%	177.39%	YES
4310	015-0234	220.00%	9.78%	9.17%	177.39%	YES
4310	015-0244	220.00%	9.78%	9.17%	177.39%	YES
4310	015-0257	220.00%	9.78%	9.17%	177.39%	YES
4310	015-0268D2	220.00%	9.78%	9.17%	177.39%	YES
4310	015-0269	220.00%	9.78%	9.17%	177.39%	YES
4310	015-0271D2	220.00%	9.78%	9.17%	188.47%	YES
4310	015-0272D2	220.00%	9.78%	9.17%	188.47%	YES
4310	050-0201D	220.00%	9.78%	9.17%	188.47%	YES
4314	138-0201	220.00%	9.78%	3.00%	177.39%	YES
4371	056-0248	220.00%	10.00%	3.00%	177.39%	YES
4380	156-0157	220.00%	9.78%	3.00%	177.39%	YES
4452	170-1227D1	224.53%	10.00%	3.00%	188.47%	YES
4458	092-0435	213.25%	9.90%	0.20%	188.47%	YES
4547	034-0260	227.73%	9.78%	0.00%	188.47%	YES
4547	034-0315	227.73%	9.78%	0.00%	188.47%	YES
4553	102-0269	220.00%	9.00%	3.00%	188.47%	YES
4604	170-1269	224.74%	9.91%	1.33%	188.47%	NO
4614	015-0257	220.00%	9.78%	3.00%	188.47%	YES
4614	15-0228	220.00%	9.78%	3.00%	188.47%	YES
4614	015-0268D1	220.00%	9.78%	3.00%	188.47%	YES
4614	015-0269D	220.00%	9.78%	3.00%	188.47%	YES
4614	015-0270	220.00%	9.78%	3.00%	188.47%	YES
4614	015-0271D1	220.00%	9.78%	3.00%	188.47%	YES

PS .	PROJECT	BFO%	PROFIT %	DIR. COST %	STATE BFO ESTIM*	BFO%
4614	015-0272D1	220.00%	9.78%	3.00%	188.47%	YES
4651	120-0079	220.00%	9.78%	3.00%	188.47%	YES
4758	117-0144	220.00%	9.78%	5.99%	177.39%	YES
4802	171-0245	201.61%	10.00%	3.48%	188.47%	YES
4802	171-0259C	201.61%	10.00%	3.48%	188.47%	YES
4807	310-0007	223.00%	10.00%	10.41%	177.39%	YES
4807	310-0022	223.00%	10.00%	10.41%	177.39%	NO
4807	300-0019D	223.00%	10.00%	10.41%	177.39%	NO
4807	300-0035	223.00%	10.00%	10.41%	177.39%	NO
4807	310-0020	223.00%	10.00%	10.41%	177.39%	NO
4809	015-0268C	201.61%	10.00%	3.48%	188.47%	NO
4809	015-0269C	201.61%	10.00%	3.48%	188.47%	NO
4864	018-0113	220.00%	9.78%	2.82%	177.39%	YES
4867	165-0313	220.00%	9.78%	3.00%	188.47%	YES
4900	017-0137	224.53%	10.00%	5.26%	177.39%	YES
4907	083-0232	227.73%	9.78%	3.00%	188.47%	YES
4907	083-0244	227.73%	9.78%	3.00%	188.47%	YES
5006	107-0151	227.73%	9.78%	6.00%	188.47%	YES
5006	065-0100	227.73%	9.78%	6.00%	188.47%	YES
5006	135-0216D2	227.73%	9.78%	6.00%	188.47%	YES
5006	107-0144D2	227.73%	9.78%	6.00%	188.47%	YES
5006	095-0220D	227.73%	9.78%	6.00%	188.47%	YES
5006	095-0226D1	227.73%	9.78%	6.00%	188.47%	YES
5006	ONCALL-ENG	227.73%	9.78%	6.00%	188.47%	YES
5007	ONCALL-ENG	220.00%	9.78%	3.00%	188.47%	YES
5008	414-0019	229.57%	9.18%	3.00%	188.47%	YES
5008	BIA	229.57%	9.18%	3.00%	188.47%	YES
5008	163-0189	229.57%	9.18%	3.00%	188.47%	YES
5008	135-0216D1	229.57%	9.18%	3.00%	188.47%	YES
5008	107-0141	229.57%	9.18%	3.00%	188.47%	YES
5008	118-XXXX	229.57%	9.18%	3.00%	188.47%	YES
5008	094-0204	229.57%	9.18%	3.00%	188.47%	YES
5008	165-0375	229.57%	9.18%	3.00%	188.47%	YES
5016	170-1799	220.00%	9.78%	3.00%	188.47%	YES
5016	170-1703	220.00%	9.78%	3.00%	188.47%	YES
5048	BRADLEY PARKING	220.00%	9.78%	3.00%	188.47%	YES
5053	092-0505	213.25%	9.90%	0.20%	188.47%	YES
5053	092-0524	213.25%	9.90%	0.20%	188.47%	YES
5053	092-0525	213.25%	9.90%	0.20%	188.47%	YES

PS .	PROJECT	BFO%	PROFIT %	DIR. COST %	STATE BFO ESTIM* BFO%	
5053	092-0520	213.25%	9.90%	0.20%	188.47%	YES
5053	092-0526	213.25%	9.90%	0.20%	188.47%	YES
5053	014-0170	213.25%	9.90%	0.20%	188.47%	YES
5089	102-0266	179.98%	7.59%	3.47%	188.47%	YES
5089	301-0045	179.98%	7.59%	3.47%	188.47%	YES
5090	403-0002D1	227.73%	9.78%	4.60%	188.47%	NO
5098	170-1360	227.73%	9.78%	0.00%	188.47%	YES
5098	151-0274/0294D	227.73%	9.78%	0.00%	188.47%	YES
5103	165-0331	220.00%	9.78%	3.00%	188.47%	YES
5119	083-0216	202.03%	10.00%	0.02%	188.47%	NO
5120	300-0068	204.55%	10.00%	5.00%	177.39%	NO
5120	300-0072	204.55%	10.00%	7.69%	177.39%	NO
5123	165-0328	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0369	203.41%	10.00%	1.80%	188.47%	YES
5123	165-0336	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0339	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0340	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0342	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0343	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0344	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0346	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0347	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0348	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0349	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0351	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0354	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0358	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0359	203.41%	10.00%	1.80%	188.47%	NO
5123	165-0368	203.41%	10.00%	1.80%	188.47%	NO
5126	170-1890	220.00%	9.78%	8.58%	188.47%	YES
5126	170-1537	220.00%	9.78%	8.58%	188.47%	YES
5139	092-0522	213.25%	9.90%	0.20%	188.47%	YES
5141	170-1965D2	227.77%	9.59%	25.77%	188.47%	NO
5143	092-0527D	227.73%	9.78%	0.03%	188.47%	NO
5143	170-1966	227.73%	9.78%	0.03%	188.47%	NO
5145	170-2010	227.73%	9.78%	40.00%	188.47%	YES
5146	082-0259	208.04%	4.96%	1.81%	177.39%	NO
5147	098-0093	224.53%	10.00%	3.00%	188.47%	NO

PS .	PROJECT	BFO%	PROFIT %	DIR. COST %	STATE BFO ESTIM* BFO%	
5152	ONCALL-ENV	220.00%	9.78%	3.00%	188.47%	YES
5155	170-1867D1	240.00%	10.00%	0.00%	188.47%	NO
5157	ONCALL-ENV	220.00%	9.78%	3.00%	188.47%	YES
5161	ONCALL- ARCH	220.00%	9.78%	3.00%	188.47%	YES
5162	ONCALL- ARCH	227.73%	9.78%	3.00%	188.47%	YES
5168	138-0221	220.00%	9.78%	3.00%	188.47%	YES
5171	076-0194	227.73%	9.78%	3.00%	188.47%	YES
5171	109-0153	227.73%	9.78%	3.00%	188.47%	YES
5171	ONCALL- WETLAND	227.73%	9.78%	3.00%	188.47%	YES
5175	170-1867	227.73%	9.78%	6.40%	188.47%	YES
5176	043-0122D	222.73%	9.78%	6.67%	188.47%	NO
5176	092-0533	227.73%	9.78%	6.67%	188.47%	NO
5177	170-1375	227.73%	10.75%	48.92%	188.47%	YES
5177	015-0296	227.73%	10.75%	48.92%	188.47%	YES
5178	170-1965D1	224.95%	9.81%	19.58%	177.39%	NO
5180	014-0173	227.73%	9.78%	3.00%	177.39%	YES
5181	170-1867D4	220.00%	9.00%	3.00%	188.47%	YES
5183	170-2003	227.73%	9.78%	6.03%	188.47%	NO
5183	170-0621	227.73%	9.78%	6.03%	177.39%	NO
5183	170-1227D2	227.73%	9.78%	6.03%	177.39%	NO
5183	170-1311	227.73%	9.78%	6.03%	177.39%	NO
5183	170-1328	227.73%	9.78%	6.03%	177.39%	NO
5183	170-1475	227.73%	9.78%	6.03%	177.39%	NO
5183	170-1867D3	227.73%	9.78%	6.03%	177.39%	NO
5183	170-1643	227.73%	9.78%	6.03%	177.39%	NO
5183	170-0568	227.73%	9.78%	6.03%	177.39%	NO
5183	170-2058	227.73%	9.78%	6.03%	177.39%	NO
5183	170-2059	227.73%	9.78%	6.03%	177.39%	NO
5183	170-2060	227.73%	9.78%	6.03%	177.39%	NO
5183	170-2117	227.73%	9.78%	6.03%	177.39%	NO
5183	170-0631	227.73%	9.78%	6.03%	177.39%	NO
5183	170-0671D3	227.73%	9.78%	6.03%	177.39%	NO
5183	170-0732D1	227.73%	9.78%	6.03%	177.39%	NO
5183	170-0973	227.73%	9.78%	6.03%	177.39%	NO
5183	170-1132D2	227.73%	9.78%	6.03%	177.39%	NO
5183	170-1133	227.73%	9.78%	6.03%	177.39%	NO
5183	170-2309	227.73%	9.78%	6.03%	188.47%	NO

PS .	PROJECT	BFO%	PROFIT %	DIR. COST %	STATE BFO ESTIM* BFO%	
5183	170-2310	227.73%	9.78%	6.03%	188.47%	NO
5194	092-0532	220.00%	10.00%	3.00%	188.47%	YES
5195	173-0294	220.00%	9.78%	3.00%	188.47%	YES
5197	002-0119	204.55%	10.00%	1.60%	188.47%	NO
5227	172-0302/0303	200.00%	9.00%	3.00%	188.47%	YES
5236	170-1867D2	228.00%	10.00%	4.39%	177.39%	NO
5239	300-0087	220.00%	9.78%	3.00%	188.47%	YES
5239	301-0069	220.00%	9.78%	3.00%	188.47%	YES
5239	303-0005	220.00%	9.78%	3.00%	188.47%	YES
5239	300-0033	220.00%	9.78%	3.00%	188.47%	YES
5239	300-0005	220.00%	9.78%	3.00%	188.47%	YES
5239	ONCALL-RR	220.00%	9.78%	3.00%	188.47%	YES
5330	017-0130	204.16%	9.60%	1.29%	177.39%	NO
5331	165-0355	213.25%	9.90%	0.20%	188.47%	YES
5343	032-0130D1	220.00%	9.78%	3.00%	188.47%	YES
5343	079-0202	220.00%	9.78%	3.00%	188.47%	YES
5343	093-0153	220.00%	9.78%	3.00%	188.47%	YES
5343	ONCALL-ENG	220.00%	9.78%	3.00%	188.47%	YES
5344	ONCALL- ASBSTS	240.00%	9.17%	19.17%	188.47%	NO
5345	170-2320	220.00%	10.00%	5.00%	188.47%	YES
5345	173-0336	220.00%	10.00%	5.00%	188.47%	YES
5345	ONCALL- TRAFFIC	220.00%	10.00%	5.00%	188.47%	YES
5349	034-0288	220.00%	9.78%	3.00%	188.47%	YES
5354	300-0077	227.73%	10.75%	48.90%	188.47%	NO
5355	ONCALL-ENV	220.00%	9.78%	3.00%	188.47%	YES
5356	301-0053	198.00%	10.00%	3.53%	188.47%	NO
5356	301-0059	198.00%	10.00%	3.53%	188.47%	NO
5356	300-0019C	198.00%	10.00%	3.53%	188.47%	NO
5357	ONCALL-ENV	220.00%	9.78%	3.00%	188.47%	YES
5358	ONCALL-ENV	220.00%	9.78%	3.00%	188.47%	YES
5359	170-1940D1	227.73%	9.78%	12.86%	188.47%	YES
5359	170-2010D1	227.73%	9.78%	12.86%	188.47%	YES
5359	170-2203D1	227.73%	9.78%	12.86%	188.47%	YES
5359	300-0069	227.73%	9.78%	12.86%	188.47%	YES
5364	015-0271C	193.06%	10.00%	4.79%	188.47%	NO
5364	050-0201C	193.06%	10.00%	4.79%	188.47%	NO
5365	300-0067	227.73%	9.78%	3.00%	188.47%	YES

PS .	PROJECT	BFO%	PROFIT %	DIR. COST %	STATE BFO ESTIM* BFO%	
5369	110-0127	220.00%	9.00%	3.00%	188.47%	YES
5369	140-0160	220.00%	9.00%	3.00%	188.47%	YES
5369	065-0104	220.00%	9.00%	3.00%	188.47%	YES
5369	051-0258	220.00%	9.00%	3.00%	188.47%	YES
5371	ONCALL-ROW	220.00%	9.78%	3.00%	188.47%	YES
5376	128-0137	200.00%	10.00%	3.00%	188.47%	YES
5381	168-0155	220.00%	10.00%	8.23%	188.47%	YES
5381	009-0089	220.00%	10.00%	8.23%	188.47%	YES
5381	126-0159	220.00%	10.00%	8.23%	188.47%	YES
5386	076-0195	220.00%	9.78%	3.00%	188.47%	YES
5388	111-0114	231.89%	10.00%	2.22%	188.47%	YES
5388	146-0171	231.89%	10.00%	11.26%	177.39%	NO
5388	142-0143	231.89%	10.00%	2.22%	188.47%	NO
5395	056-0289	213.95%	9.90%	0.20%	188.47%	YES
5395	035-0184	213.95%	9.90%	0.20%	188.47%	YES
5395	135-0274	213.95%	9.90%	0.20%	188.47%	YES
5395	050-0206	213.95%	9.90%	0.20%	188.47%	YES
5396	403-0002D2	200.00%	9.78%	0.50%	188.47%	YES
5418	051-0259	220.00%	9.78%	3.36%	188.47%	YES
5437	ITS	220.00%	9.78%	3.00%	188.47%	YES
5442	300-0085	208.66%	10.00%	5.39%	188.47%	NO
5446	174-0292	179.98%	7.59%	3.47%	188.47%	NO
5458	170-2295	220.00%	9.78%	3.00%	188.47%	YES
5460	171-0259D1	220.00%	9.78%	3.00%	188.47%	YES
5460	171-0259D2	220.00%	9.78%	3.00%	188.47%	YES
5466	107-0144D1	200.00%	9.78%	3.00%	188.47%	YES
5467	300-0097D1	225.80%	9.79%	8.15%	188.47%	NO
5469	095-0226D2	198.00%	10.00%	2.53%	188.47%	YES
5469	095-0220C	198.00%	10.00%	3.53%	188.47%	YES
5469	095-0226C	198.00%	10.00%	3.53%	188.47%	YES
5469	095-0240	198.00%	10.00%	3.53%	188.47%	YES
5469	095-0227	198.00%	10.00%	3.53%	188.47%	YES
5471	171-0305	223.00%	10.00%	16.78%	188.47%	NO
5551	151-0274/0294C	204.00%	10.00%	1.89%	188.47%	NO
5555	156-0171	227.73%	9.78%	15.34%	188.47%	NO
5557	302-0008	220.00%	9.78%	3.00%	188.47%	YES
5558	173-0337	213.25%	9.90%	0.20%	188.47%	NO
5559	170-2272D1	227.73%	9.78%	33.28%	188.47%	YES

PS .	PROJECT	BFO%	PROFIT %	DIR. COST %	STATE BFO ESTIM* BFO%	
5559	170-2357D1	227.73%	9.78%	33.28%	188.47%	NO
5560	ONCALL-INSP	220.00%	9.78%	3.00%	188.47%	YES
5562	092-0527C	200.00%	10.00%	2.03%	188.47%	NO
5565	102-0305	220.00%	9.78%	3.00%	188.47%	YES
5569	025-0133/0136	204.55%	10.00%	1.70%	188.47%	NO
5571	ONCALL-ENG	220.00%	9.78%	3.00%	188.47%	YES
5576	106-0113	220.00%	9.78%	4.10%	188.47%	YES
5576	167-0100	220.00%	9.78%	4.10%	188.47%	YES
5576	034-0305	220.00%	9.78%	4.10%	188.47%	YES
5580	170-2272D2	225.00%	9.80%	19.80%	188.47%	NO
5580	170-2357D2	225.62%	9.80%	19.80%	188.47%	NO
5581	301-0040D1	220.00%	9.78%	8.23%	188.47%	YES
5582	301-0040D2	220.00%	9.78%	9.26%	188.47%	YES
5583	081-0080C	201.00%	10.00%	1.56%	188.47%	NO
5584	087-0135	202.16%	10.00%	3.70%	188.47%	NO
5585	043-0122C	204.55%	10.00%	1.84%	188.47%	NO
5586	076-0195	227.73%	9.78%	3.00%	188.47%	YES
5587	ONCALL-AIR	220.00%	9.78%	3.00%	188.47%	YES
5588	107-0154	220.00%	9.78%	17.26%	188.47%	YES
5589	170-1940D2	227.73%	9.78%	12.86%	188.47%	NO
5589	170-2010D2	227.73%	9.78%	12.86%	188.47%	NO
5589	170-2203D2	227.73%	9.78%	12.86%	188.47%	NO
5589	300-0097D2	227.73%	9.78%	12.86%	188.47%	NO
5591	032-0130D2	220.00%	9.78%	7.83%	188.47%	YES
5604	106-0116	220.00%	9.78%	6.00%	188.47%	YES
5606	301-0060	220.00%	9.78%	6.90%	188.47%	YES
5608	170-2443	220.00%	9.78%	6.00%	188.47%	YES
5613	170-1895	220.00%	10.00%	3.70%	188.47%	YES
5614	ONCALL- PHOTOG	220.00%	9.78%	3.00%	188.47%	YES
5615	300-0062	200.20%	10.00%	7.60%	188.47%	NO
5615	300-0074	200.20%	10.00%	7.60%	188.47%	NO
5615	300-0104	200.20%	10.00%	7.60%	188.47%	NO
5617	063-0561	220.00%	9.78%	3.00%	188.47%	YES
5618	ONCALL-ENV- DTC	209.89%	12.00%	10.00%	188.47%	NO
5625	301-0071	202.50%	10.00%	9.76%	188.47%	NO
5630	300-0098	200.80%	10.00%	6.09%	188.47%	NO
5630	300-0099	200.80%	10.00%	6.09%	188.47%	NO
5630	301-0033	200.80%	10.00%	6.09%	188.47%	NO
5630	301-0054	200.80%	10.00%	6.09%	188.47%	NO
5630	301-0056	200.80%	10.00%	6.09%	188.47%	NO

*BFO ESTIM refers to whether the BFO was estimated. YES means that the BFO was estimated from either other contracts between CDOT or the vendor or if the average BFO was used. NO means that the BFO was specified in the contract

C. CONTRACT SALARY DATA

Consultant CDOT Code Title	CDOT Total	Consultant Title	Consultant Total
TK4A TEIT-3(02)	\$43.69	DRAFTER	\$44.21
TK3A TEIT-3(02)	\$43.69	TECHNICIAN	\$23.96
TK2A TEIT-3(02)	\$43.69	TECHNICIAN	\$23.96
DTC7X TEIT-3(03)	\$42.36	DRAFTER	\$44.09
DG6 TEIT-3(03)	\$42.36	DRAFTER	\$48.59
CJMX6 TEIT-3(03)	\$45.01	DRAFTER	\$78.30
CJM11B TEIT-3(03)	\$42.36	DRAFTER	\$46.25
CJM1C TEIT-3(03)	\$42.36	DRAFTER	\$43.13
UI3 TEIT-3(03)	\$45.01	TECHNICIAN	\$60.92
LC3C TEIT-3(03)	\$45.01	TECHNICIAN	\$47.88
CJM6K TEIT-3(03)	\$42.36	TECHNICIAN	\$55.00
DTC6X TEIT-3(03)	\$42.36	TECHNICIAN	\$48.03
LC6B TEIT-3(03)	\$45.01	TECHNICIAN	\$49.63
GARG2A TEIT-3(03)	\$45.01	TECHNICIAN	\$49.63
BAKER10 TEIT-3(03)	\$45.01	TECHNICIAN	\$37.75
CJM9A TEIT-3(03)	\$42.36	TECHNICIAN	\$26.25
CJM12A TEIT-3(03)	\$42.36	TECHNICIAN	\$35.63
LC4A TEIT-3(03)	\$45.01	TECHNICIAN	\$37.75
CJM7L TEIT-3(03)	\$42.36	TECHNICIAN	\$50.00
BAKER9 TEIT-3(03)	\$45.01	TECHNICIAN	\$47.88
TK5C TEIT-3(03)	\$45.01	TECHNICIAN	\$32.84
CJM8A TEIT-3(03)	\$42.36	TECHNICIAN	\$44.38
TECT5 TEIT-3(04)	\$46.34	DRAFTER	\$44.80
CJM8C TEIT-3(04)	\$46.34	DRAFTER	\$47.75
AIE30X TEIT-3(04)	\$46.34	DRAFTER	\$41.49
CJM6J TEIT-3(04)	\$46.34	DRAFTER	\$45.63
AIE10 TEIT-3(04)	\$46.34	TECHNICIAN	\$42.11
AIE17 TEIT-3(04)	\$46.34	TECHNICIAN	\$81.75
AIE26X TEIT-3(04)	\$46.34	TECHNICIAN	\$38.27
AIE52 TEIT-3(04)	\$46.34	TECHNICIAN	\$49.55
AIE25 TEIT-3(04)	\$46.34	TECHNICIAN	\$49.55

Consultant CDOT Code	CDOT Title	CDOT Total	Consultant Title	Consultant Total
AIE26	TEIT-3(04)	\$46.34	TECHNICIAN	\$42.11
F&O6	TEIT-3(04)	\$46.34	TECHNICIAN	\$51.87
AIE27X	TEIT-3(04)	\$46.34	TECHNICIAN	\$34.68
AIE50	TEIT-3(04)	\$46.34	TECHNICIAN	\$49.55
AIE14	TEIT-3(04)	\$46.34	TECHNICIAN	\$29.73
AIE9	TEIT-3(04)	\$46.34	TECHNICIAN	\$49.55
AI11	TEIT-3(04)	\$46.34	TECHNICIAN	\$48.08
F&O10	TEIT-3(04)	\$46.34	TECHNICIAN	\$42.86
CJM8B	TEIT-3(04)	\$46.34	TECHNICIAN	\$45.20
AIE24X	TEIT-3(04)	\$46.34	TECHNICIAN	\$49.55
CJM6I	TEIT-3(04)	\$46.34	TECHNICIAN	\$63.38
BAKER7(UITEIT-3(04) C)		\$46.34	TECHNICIAN	\$64.23
CJM10B	TEIT-3(04)	\$46.34	TECHNICIAN	\$54.88
AIE39	TEIT-3(04)	\$46.34	TECHNICIAN	\$49.55
GARG3A	TEIT-3(04)	\$46.34	TECHNICIAN	\$45.45
AI12	TEIT-3(04)	\$46.34	TECHNICIAN	\$49.40
AIE29	TEIT-3(04)	\$46.34	TECHNICIAN	\$29.73
AIE28	TEIT-3(04)	\$46.34	TECHNICIAN	\$29.73
AIE42	TEIT-3(04)	\$46.34	TECHNICIAN	\$29.73
AIE30	TEIT-3(04)	\$46.34	TECHNICIAN	\$28.49
AIE43	TEIT-3(04)	\$46.34	TECHNICIAN	\$28.49
AIE41	TEIT-3(04)	\$46.34	TECHNICIAN	\$38.27
AIE40	TEIT-3(04)	\$46.34	TECHNICIAN	\$42.11
AIE25X	TEIT-3(04)	\$46.34	TECHNICIAN	\$42.11
AIE13X	TEIT-3(04)	\$46.34	TECHNICIAN	\$29.73
AIE28X	TEIT-3(04)	\$46.34	TECHNICIAN	\$34.68
AIE27	TEIT-3(04)	\$46.34	TECHNICIAN	\$38.27
V12(GARG)	TEIT-3(05)	\$48.93	DRAFTER	\$45.00
WD6	TEIT-3(05)	\$48.93	TECHNICIAN	\$61.88
WS7	TEIT-3(05)	\$48.93	TECHNICIAN	\$51.75
DTC7	TEIT-3(05)	\$48.93	TECHNICIAN	\$46.19
V11(GARG)	TEIT-3(05)	\$48.93	TECHNICIAN	\$45.45
WD12	TEIT-3(05)	\$48.93	TECHNICIAN	\$33.88
CTE6	TEIT-3(06)	\$50.40	TECHNICIAN	\$53.13
CTEE7	TEIT-3(06)	\$50.40	TECHNICIAN	\$61.63
CTEE16	TEIT-3(06)	\$50.40	TECHNICIAN	\$53.34

Consultant CDOT Code Title	CDOT Total	Consultant Title	Consultant Total
CTE9 TEIT-3(06)	\$50.40	TECHNICIAN	\$51.57
LC2A TE-1(03)	\$53.88	ENGINEER	\$65.69
O&G4 TE-1(03)	\$53.88	ENGINEER	\$60.98
GARG1B TE-1(03)	\$53.88	INSPECTOR	\$63.64
LC4B TE-1(03)	\$53.88	INSPECTOR	\$57.96
UI1 TE-1(03)	\$53.88	INSPECTOR	\$59.69
VN1 TE-1(03)	\$53.88	INSPECTOR	\$61.05
LC3B TE-1(03)	\$53.88	INSPECTOR	\$58.90
LC2C TE-1(03)	\$53.88	INSPECTOR	\$64.63
O&G3 TE-1(03)	\$53.88	INSPECTOR	\$70.40
LC5B TE-1(03)	\$53.88	PARTY CHIEF	\$69.68
A19 TE-1(03)	\$53.88	PARTY CHIEF	\$69.16
BAKER8 TE-1(03)	\$53.88	PARTY CHIEF	\$63.36
LC2B TE-1(03)	\$53.88	PARTY CHIEF	\$63.36
DTC5X TE-1(03)	\$50.72	SR. DRAFTER	\$60.02
LC5A TE-1(03)	\$53.88	SR. DRAFTER	\$61.45
TECT4 TE-1(03)	\$53.88	SR. DRAFTER	\$55.73
DG5 TE-1(03)	\$50.72	SR. DRAFTER	\$61.83
GARG5A TE-1(03)	\$53.88	SR. DRAFTER	\$46.61
TK4B TE-1(03)	\$53.88	SR. DRAFTER	\$44.13
BAKER5 TE-1(03)	\$53.88	SR. DRAFTER	\$59.31
BAKER11 TE-1(03)	\$53.88	SR. DRAFTER	\$61.45
LC1A TE-1(03)	\$53.88	SR. INSPECTOR	\$80.78
KTA4 TE-1(03)	\$53.88	SR. INSPECTOR	\$65.45
MAG4 TE-1(03)	\$53.88	SR. INSPECTOR	\$66.31
GF1 TE-1(03)	\$53.88	SR. INSPECTOR	\$76.89
AI1 TE-1(03)	\$53.88	SR. INSPECTOR	\$69.92
LC3A TE-1(03)	\$53.88	SR. INSPECTOR	\$70.16
BAKER5(UITE-1(04) C)	\$55.49	INSPECTOR	\$76.59
GM2-3 TE-1(04)	\$55.49	INSPECTOR	\$40.03
PBCS6 TE-1(04)	\$55.49	INSPECTOR	\$63.98
BAKER6(UITE-1(04) C)	\$55.49	INSPECTOR	\$67.94
HNTB5 TE-1(04)	\$55.49	INSPECTOR	\$63.79
GARG2AA TE-1(04)	\$55.49	INSPECTOR	\$56.25
PBCS5 TE-1(04)	\$55.49	INSPECTOR	\$78.86
D&D7 TE-1(04)	\$55.49	INSPECTOR	\$49.16
D&DAI1 TE-1(04)	\$55.49	INSPECTOR	\$45.45

Consultant Code	CDOT Title	CDOT Total	Consultant Title	Consultant Total
GARG1AA	TE-1(04)	\$55.49	INSPECTOR	\$62.66
BL5	TE-1(04)	\$52.22	PARTY CHIEF	\$65.67
F&O9	TE-1(04)	\$55.49	PARTY CHIEF	\$63.48
A19X	TE-1(04)	\$55.49	PARTY CHIEF	\$71.03
BL4	TE-1(04)	\$52.22	PARTY CHIEF	\$64.78
GARG2C	TE-1(04)	\$55.49	PARTY CHIEF	\$65.59
TECT5X	TE-1(04)	\$55.49	SR. DRAFTER	\$56.81
CJM4D	TE-1(04)	\$55.49	SR. DRAFTER	\$58.13
F&O5	TE-1(04)	\$55.49	SR. DRAFTER	\$47.18
CJM7M	TE-1(04)	\$55.49	SR. DRAFTER	\$78.75
HNTB5X	TE-1(04)	\$55.49	SR. DRAFTER	\$115.57
DICEAS6A	TE-1(04)	\$55.49	SR. DRAFTER	\$52.96
CJM5F	TE-1(04)	\$55.49	SR. DRAFTER	\$54.70
DG5X	TE-1(04)	\$55.49	SR. DRAFTER	\$63.77
BL3	TE-1(04)	\$52.22	SR. INSPECTOR	\$59.97
AIE46	TE-1(04)	\$55.49	TECHNICIAN	\$81.75
AIE37	TE-1(04)	\$55.49	TECHNICIAN	\$81.75
WS4	TE-1(05)	\$58.60	INSPECTOR	\$73.25
V5	TE-1(05)	\$58.60	INSPECTOR	\$70.20
V9(GM2)	TE-1(05)	\$58.60	INSPECTOR	\$54.00
D&D8	TE-1(05)	\$58.60	INSPECTOR	\$50.63
DTC6	TE-1(05)	\$58.60	INSPECTOR	\$58.42
D&DAI2	TE-1(05)	\$58.60	INSPECTOR	\$46.80
TRC3C	TE-1(05)	\$58.60	INSPECTOR	\$56.59
V7	TE-1(05)	\$58.60	INSPECTOR	\$71.78
TRC4D	TE-1(05)	\$58.60	INSPECTOR	\$58.30
V10(GARG)	TE-1(05)	\$58.60	PARTY CHIEF	\$52.31
TRC5E	TE-1(05)	\$58.60	SR. DRAFTER	\$77.16
DTC8X	TE-1(05)	\$58.60	SR. DRAFTER	\$56.54
WD5	TE-1(05)	\$58.60	SR. DRAFTER	\$69.13
HH8	TE-1(05)	\$58.60	SR. DRAFTER	\$64.50
WS6	TE-1(05)	\$58.60	SR. DRAFTER	\$62.63
WD11	TE-1(05)	\$58.60	SR. DRAFTER	\$47.75
V8(GM2)	TE-1(05)	\$58.60	SR. INSPECTOR	\$66.38
V6	TE-1(05)	\$58.60	SR. INSPECTOR	\$81.11
CTEE10	TE-1(06)	\$60.35	INSPECTOR	\$70.13
WG5	TE-1(06)	\$60.35	INSPECTOR	\$63.75
URS6	TE-1(06)	\$60.35	INSPECTOR	\$60.80

Consultant	CDOT	CDOT	Consultant	Consultant
Code	Title	Total	Title	Total
CTEE11	TE-1(06)	\$60.35	INSPECTOR	\$71.34
URS4	TE-1(06)	\$60.35	INSPECTOR	\$44.99
CTEE17	TE-1(06)	\$60.35	INSPECTOR	\$74.33
WG4	TE-1(06)	\$60.35	INSPECTOR	\$58.58
CTEE18	TE-1(06)	\$60.35	INSPECTOR	\$70.02
CTEE15	TE-1(06)	\$60.35	PARTY CHIEF	\$74.88
CTE8	TE-1(06)	\$60.35	PARTY CHIEF	\$72.28
TK3B	TE-2(02)	\$60.27	ENGINEER	\$45.52
DICEAS2B	TE-2(02)	\$56.73	SR. INSPECTOR	\$65.83
KTA3	TE-2(03)	\$62.08	CHIEF INSPECTOR	\$86.02
AI3	TE-2(03)	\$62.08	CHIEF INSPECTOR	\$77.39
GARG4C	TE-2(03)	\$62.08	ENGINEER	\$78.50
TECT3	TE-2(03)	\$62.08	ENGINEER	\$55.65
CJMX5	TE-2(03)	\$62.08	ENGINEER	\$87.50
CJM3K	TE-2(03)	\$58.43	ENGINEER	\$65.00
CJM2A	TE-2(03)	\$62.08	ENGINEER	\$65.63
DG4	TE-2(03)	\$58.43	ENGINEER	\$62.65
TK3C	TE-2(03)	\$62.08	ENGINEER	\$45.61
BAKER4	TE-2(03)	\$62.08	ENGINEER	\$69.27
CJMX4	TE-2(03)	\$62.08	ENGINEER	\$78.13
CJM10A	TE-2(03)	\$58.43	ENGINEER	\$66.25
CJM3I	TE-2(03)	\$62.08	ENGINEER	\$65.00
DTC4X	TE-2(03)	\$58.43	ENGINEER	\$65.91
UI2	TE-2(03)	\$62.08	PARTY CHIEF	\$60.92
AI7	TE-2(03)	\$62.08	SR. INSPECTOR	\$70.37
MAG3	TE-2(03)	\$62.08	SR. INSPECTOR	\$67.21
AI5	TE-2(03)	\$62.08	SR. INSPECTOR	\$60.93
HNTB3	TE-2(04)	\$63.93	CHIEF INSPECTOR	\$81.23
GM2-2	TE-2(04)	\$63.93	CHIEF INSPECTOR	\$65.60
BL2	TE-2(04)	\$60.17	CHIEF INSPECTOR	\$72.05
LC1B	TE-2(04)	\$63.93	CHIEF INSPECTOR	\$79.70
AI4	TE-2(04)	\$63.93	CHIEF INSPECTOR	\$79.48
CJM3J	TE-2(04)	\$63.93	ENGINEER	\$65.63
AIE51	TE-2(04)	\$63.93	ENGINEER	\$63.17
AIE22X	TE-2(04)	\$63.93	ENGINEER	\$60.69
AIE23X	TE-2(04)	\$63.93	ENGINEER	\$70.60
TECT4X	TE-2(04)	\$63.93	ENGINEER	\$49.62
CJM3H	TE-2(04)	\$63.93	ENGINEER	\$60.73
AIE20X	TE-2(04)	\$63.93	ENGINEER	\$60.69

Consultant Code	CDOT Title	CDOT Total	Consultant Title	Consultant Total
AIE21	TE-2(04)	\$63.93	ENGINEER	\$60.69
AIE36	TE-2(04)	\$63.93	ENGINEER	\$60.69
AIE48	TE-2(04)	\$63.93	ENGINEER	\$60.69
AIE47	TE-2(04)	\$63.93	ENGINEER	\$60.69
F&O3	TE-2(04)	\$63.93	ENGINEER	\$60.52
DICEAS5A	TE-2(04)	\$63.93	ENGINEER	\$52.96
CJM4C	TE-2(04)	\$63.93	ENGINEER	\$51.25
AIE22	TE-2(04)	\$63.93	ENGINEER	\$70.60
DG4X	TE-2(04)	\$63.93	ENGINEER	\$58.74
AIE23	TE-2(04)	\$63.93	ENGINEER	\$56.98
AIE24	TE-2(04)	\$63.93	ENGINEER	\$56.98
CJM7N	TE-2(04)	\$63.93	ENGINEER	\$66.25
AIE19X	TE-2(04)	\$63.93	ENGINEER	\$63.17
AIE20	TE-2(04)	\$63.93	ENGINEER	\$63.17
HNTB4X	TE-2(04)	\$63.93	ENGINEER	\$136.46
DICEAS4A	TE-2(04)	\$63.93	ENGINEER	\$76.92
CJM9B	TE-2(04)	\$63.93	ENGINEER	\$61.88
F&O8	TE-2(04)	\$63.93	ENGINEER	\$58.17
AIE38	TE-2(04)	\$63.93	ENGINEER	\$60.69
CJM5H	TE-2(04)	\$63.93	ENGINEER	\$70.25
AIE35	TE-2(04)	\$63.93	ENGINEER	\$61.93
F&O2	TE-2(04)	\$63.93	SR. ENGINEER	\$82.92
F&O4	TE-2(04)	\$63.93	SR. ENGINEER	\$89.42
GARG1A	TE-2(04)	\$63.93	SR. INSPECTOR	\$74.03
AI8	TE-2(04)	\$63.93	SR. INSPECTOR	\$72.24
PBCS4	TE-2(04)	\$63.93	SR. INSPECTOR	\$78.86
D&D5	TE-2(04)	\$63.93	SR. INSPECTOR	\$63.11
AI6	TE-2(04)	\$63.93	SR. INSPECTOR	\$62.57
HNTB4	TE-2(04)	\$63.93	SR. INSPECTOR	\$73.80
WS3	TE-2(05)	\$67.51	CHIEF INSPECTOR	\$84.38
V3	TE-2(05)	\$67.51	CHIEF INSPECTOR	\$100.01
TRC2B	TE-2(05)	\$67.51	ENGINEER	\$74.28
DTC4	TE-2(05)	\$67.51	ENGINEER	\$59.36
TAMS(HM D)5	TE-2(05)	\$63.54	ENGINEER	\$88.50
HH4	TE-2(05)	\$67.51	ENGINEER	\$77.00
HH6X	TE-2(05)	\$67.51	ENGINEER	\$87.13
WS5	TE-2(05)	\$67.51	ENGINEER	\$71.88

Consultant	CDOT	CDOT	Consultant	Consultant
Code	Title	Total	Title	Total
D&D6	TE-2(05)	\$67.51	SR. INSPECTOR	\$65.03
V4	TE-2(05)	\$67.51	SR. INSPECTOR	\$81.11
DTC5	TE-2(05)	\$67.51	SR. INSPECTOR	\$68.88
WG2	TE-2(06)	\$69.53	CHIEF INSPECTOR	\$82.58
CTEE4	TE-2(06)	\$69.53	CHIEF INSPECTOR	\$95.31
CTEE13	TE-2(06)	\$69.53	CHIEF INSPECTOR	\$123.36
WG3	TE-2(06)	\$69.53	ENGINEER	\$51.86
CTE3	TE-2(06)	\$69.53	ENGINEER	\$72.62
CTE7	TE-2(06)	\$69.53	ENGINEER	\$79.74
URS2	TE-2(06)	\$69.53	ENGINEER	\$72.52
CTEE6	TE-2(06)	\$69.53	ENGINEER	\$90.78
URS5	TE-2(06)	\$69.53	ENGINEER	\$72.08
CTEE14	TE-2(06)	\$69.53	INSPECTOR	\$83.05
CTE5	TE-2(06)	\$69.53	INSPECTOR	\$78.41
CTEE8	TE-2(06)	\$69.53	SR. INSPECTOR	\$88.46
URS3	TE-2(06)	\$69.53	SR. INSPECTOR	\$72.52
CTEE9	TE-2(06)	\$69.53	SR. INSPECTOR	\$100.83
TK2B	TE-3(02)	\$69.15	PROJECT ENGINEER	\$68.06
AI1X	TE-3(02)	\$69.15	RESIDENT ENGINEER	\$90.24
TK1B	TE-3(02)	\$69.15	SR. ENGINEER	\$104.72
BAKER2	TE-3(03)	\$71.22	PROJECT ENGINEER	\$119.93
LC1C	TE-3(03)	\$71.22	PROJECT ENGINEER	\$90.03
O&G2	TE-3(03)	\$71.22	PROJECT ENGINEER	\$81.87
KTA1	TE-3(03)	\$71.22	PROJECT ENGINEER	\$81.07
TK2C	TE-3(03)	\$71.22	PROJECT ENGINEER	\$56.58
BAKER7	TE-3(03)	\$71.22	PROJECT ENGINEER	\$90.03
DG2X	TE-3(03)	\$67.04	PROJECT ENGINEER	\$114.22
GARG2B	TE-3(03)	\$71.22	PROJECT ENGINEER	\$85.86
MAG2	TE-3(03)	\$71.22	RESIDENT ENGINEER	\$84.15
KTA2	TE-3(03)	\$71.22	RESIDENT ENGINEER	\$88.44
CJM5G	TE-3(03)	\$67.04	SR. ENGINEER	\$72.50
CJM1D	TE-3(03)	\$71.22	SR. ENGINEER	\$72.50
CJM4A	TE-3(03)	\$67.04	SR. ENGINEER	\$75.00
CJM2E	TE-3(03)	\$67.04	SR. ENGINEER	\$80.00
GARG3B	TE-3(03)	\$71.22	SR. ENGINEER	\$82.18
CJM1A	TE-3(03)	\$67.04	SR. ENGINEER	\$95.00
CJM3L	TE-3(03)	\$67.04	SR. ENGINEER	\$77.50
DG3X	TE-3(03)	\$67.04	SR. ENGINEER	\$86.98
BAKER3	TE-3(03)	\$71.22	SR. ENGINEER	\$94.17

Consultant Code	CDOT Title	CDOT Total	Consultant Title	Consultant Total
CJM2C	TE-3(03)	\$67.04	SR. ENGINEER	\$83.75
CJM1B	TE-3(03)	\$67.04	SR. ENGINEER	\$102.50
CJMX3	TE-3(03)	\$71.22	SR. ENGINEER	\$102.28
CJM4E	TE-3(03)	\$71.22	SR. ENGINEER	\$105.00
CJMX2	TE-3(03)	\$71.22	SR. ENGINEER	\$112.98
DTC3	TE-3(03)	\$67.04	SR. ENGINEER	\$84.19
AIE34	TE-3(03)	\$71.22	SR. ENGINEER	\$91.66
DICEAS2A	TE-3(04)	\$73.37	PROJECT ENGINEER	\$93.32
HNTB1X	TE-3(04)	\$73.37	PROJECT ENGINEER	\$175.10
PBCS2	TE-3(04)	\$73.37	PROJECT ENGINEER	\$89.06
TAMS(HM D)4	TE-3(04)	\$69.06	PROJECT ENGINEER	\$111.88
TECT2X	TE-3(04)	\$73.37	PROJECT ENGINEER	\$79.41
TAMS2	TE-3(04)	\$69.06	PROJECT ENGINEER	\$143.25
TECT3X	TE-3(04)	\$73.37	PROJECT ENGINEER	\$75.21
CJM3G	TE-3(04)	\$73.37	PROJECT MANAGER	\$95.63
CJM1G	TE-3(04)	\$73.37	PROJECT MANAGER	\$106.88
A12	TE-3(04)	\$73.37	RESIDENT ENGINEER	\$92.65
HNTB2X	TE-3(04)	\$73.37	RESIDENT ENGINEER	\$84.49
D&D3	TE-3(04)	\$73.37	RESIDENT ENGINEER	\$80.78
DICEAS2C	TE-3(04)	\$73.37	RESIDENT ENGINEER	\$66.22
AIE8	TE-3(04)	\$73.37	SR. ENGINEER	\$81.75
AIE13	TE-3(04)	\$73.37	SR. ENGINEER	\$81.75
BAKER3(UITE-3(04) C)	TE-3(04)	\$73.37	SR. ENGINEER	\$91.41
AIE33	TE-3(04)	\$73.37	SR. ENGINEER	\$86.95
DG3	TE-3(04)	\$73.37	SR. ENGINEER	\$87.42
AIE31	TE-3(04)	\$73.37	SR. ENGINEER	\$104.05
CJM2B	TE-3(04)	\$73.37	SR. ENGINEER	\$90.00
PBCS7	TE-3(04)	\$73.37	SR. ENGINEER	\$140.97
CJM2D	TE-3(04)	\$73.37	SR. ENGINEER	\$87.50
AIE12	TE-3(04)	\$73.37	SR. ENGINEER	\$104.05
CJM4B	TE-3(04)	\$73.37	SR. ENGINEER	\$101.38
AIE18	TE-3(04)	\$73.37	SR. ENGINEER	\$86.95
DICEAS3A	TE-3(04)	\$73.37	SR. ENGINEER	\$79.45
AIE6	TE-3(04)	\$73.37	SR. ENGINEER	\$117.67
AIE14X	TE-3(04)	\$73.37	SR. ENGINEER	\$104.05
AIE15X	TE-3(04)	\$73.37	SR. ENGINEER	\$104.05
PBCS3	TE-3(04)	\$73.37	SR. ENGINEER	\$101.60

Consultant Code	CDOT Title	CDOT Total	Consultant Title	Consultant Total
AIE7	TE-3(04)	\$73.37	SR. ENGINEER	\$104.05
TECT2	TE-3(04)	\$73.37	SR. ENGINEER	\$95.66
AIE16	TE-3(04)	\$73.37	SR. ENGINEER	\$91.66
F&O7	TE-3(04)	\$73.37	SR. ENGINEER	\$89.91
BAKER1(UITE-3(04) C)		\$73.37	SR. ENGINEER	\$93.88
AIE19	TE-3(04)	\$73.37	SR. ENGINEER	\$86.95
AIE15	TE-3(04)	\$73.37	SR. ENGINEER	\$91.66
AIE32	TE-3(04)	\$73.37	SR. ENGINEER	\$81.75
BAKER4(UITE-3(04) C)		\$73.37	SR. ENGINEER	\$86.47
HNTB3X	TE-3(04)	\$73.37	SR. ENGINEER	\$151.79
HNTB2	TE-3(04)	\$73.37	SR. ENGINEER	\$175.10
WD2	TE-3(05)	\$77.46	ARCHITECT	\$66.10
DTC3X	TE-3(05)	\$77.46	PROJECT ENGINEER	\$91.68
HH1	TE-3(05)	\$77.46	PROJECT ENGINEER	\$124.63
WD3	TE-3(05)	\$77.46	PROJECT ENGINEER	\$91.25
V2	TE-3(05)	\$77.46	RESIDENT ENGINEER	\$123.75
D&D4	TE-3(05)	\$77.46	RESIDENT ENGINEER	\$83.25
WS2	TE-3(05)	\$77.46	SR. ENGINEER	\$105.38
WD9	TE-3(05)	\$77.46	SR. ENGINEER	\$119.63
HH5	TE-3(05)	\$77.46	SR. ENGINEER	\$150.00
WD10	TE-3(05)	\$77.46	SR. ENGINEER	\$113.00
HH7	TE-3(05)	\$77.46	SR. ENGINEER	\$95.75
DTC2X	TE-3(05)	\$77.46	SR. ENGINEER	\$126.59
WD4	TE-3(05)	\$77.46	SR. ENGINEER	\$117.88
HH3	TE-3(05)	\$77.46	SR. ENGINEER	\$97.00
HH6	TE-3(05)	\$77.46	SR. ENGINEER	\$110.25
HH2	TE-3(05)	\$77.46	SR. ENGINEER	\$97.00
CTE2	TE-3(06)	\$79.78	PROJECT ENGINEER	\$112.38
CTEE2	TE-3(06)	\$79.78	PROJECT ENGINEER	\$138.38
URS 1	TE-3(06)	\$79.78	PROJECT ENGINEER	\$101.71
WG1	TE-3(06)	\$79.78	PROJECT ENGINEER	\$106.15
CTEE3	TE-3(06)	\$79.78	SR. ENGINEER	\$114.97
CTEE5	TE-3(06)	\$79.78	SR. ENGINEER	\$116.29
CTEE12	TE-3(06)	\$79.78	SR. ENGINEER	\$130.65
CTE4	TE-3(06)	\$79.78	SR. ENGINEER	\$112.38
TK1C	SUPV ENG(02)	\$80.76	PROJECT MANAGER	\$87.23
BAKER1	SUPV ENG(03)	\$83.19	PROJECT MANAGER	\$144.53

Consultant Code	CDOT Title	CDOT Total	Consultant Title	Consultant Total
GARG1C	SUPV ENG(03)	\$83.19	PROJECT MANAGER	\$93.21
DICEAS1B	SUPV ENG(03)	\$78.30	PROJECT MANAGER	\$112.89
DG1X	SUPV ENG(03)	\$78.30	PROJECT MANAGER	\$149.99
DTC1X	SUPV ENG(03)	\$78.30	PROJECT MANAGER	\$109.22
O&G1	SUPV ENG(03)	\$83.19	PROJECT MANAGER	\$103.85
TECT1X	SUPV ENG(03)	\$83.19	PROJECT MANAGER	\$103.07
MAG1	SUPV ENG(03)	\$83.19	PROJECT MANAGER	\$119.49
CJMX1	SUPV ENG(03)	\$83.19	PROJECT MANAGER	\$117.15
TK1A	SUPV ENG(03)	\$83.19	PROJECT MANAGER	\$84.70
CJM1F	SUPV ENG(03)	\$78.30	PROJECT MANAGER	\$105.00
TECT1	SUPV ENG(04)	\$87.83	PROJECT ENGINEER	\$141.40
AIE2	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$124.06
AIE5	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$104.05
AIE1	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$128.82
CJM2F	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$112.50
DICEAS1C	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$99.14
PBCS1	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$126.09
HNTB1	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$92.48
BL1	SUPV ENG(04)	\$82.66	PROJECT MANAGER	\$123.63
DICEAS1A	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$122.83
TAMS(HM D)3	SUPV ENG(04)	\$82.66	PROJECT MANAGER	\$159.13
DG2	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$112.31
F&O1	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$124.13
AIE3	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$128.82
AIE4	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$124.06
GM2-1	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$87.84
CJM1H	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$105.00
CJM1E	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$105.00
D&D1	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$81.34
TAMS1	SUPV ENG(04)	\$82.66	PROJECT MANAGER	\$121.00
DG1	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$155.85
BAKER2(UI C)	SUPV ENG(04)	\$87.83	PROJECT MANAGER	\$93.88
WD7	SUPV ENG(05)	\$90.47	PROJECT MANAGER	\$172.50
D&D2	SUPV ENG(05)	\$90.47	PROJECT MANAGER	\$83.81
WD8	SUPV ENG(05)	\$90.47	PROJECT MANAGER	\$102.50
WS1	SUPV ENG(05)	\$90.47	PROJECT MANAGER	\$128.63
WD1	SUPV ENG(05)	\$90.47	PROJECT MANAGER	\$83.38

Consultant Code	CDOT Title	CDOT Total	Consultant Title	Consultant Total
V1	SUPV ENG(05)	\$90.47	PROJECT MANAGER	\$91.46
DTC1	SUPV ENG(05)	\$90.47	PROJECT MANAGER	\$147.04
TRC1A	SUPV ENG(05)	\$90.47	PROJECT MANAGER	\$130.87
CTE1	SUPV ENG(06)	\$93.18	PROJECT MANAGER	\$136.55
CTEE1	SUPV ENG(06)	\$93.18	PROJECT MANAGER	\$151.19

D. CONSULTANT WORKLOAD, REGULAR CONTRACTS

**CDOT ENGINEERING CONSULTANTS
ACTIVE WORK ASSIGNMENTS RANKED BY FEE
BETWEEN OCTOBER 1, 2002 AND JUNE 30, 2004**

CONSULTANT NAME	TOTAL FEE	PROJECTS
PARSONS, BRINCKERHOF, QUADE & DOUGLAS, INC.	\$44,466,739	6
HNTB CORP.	\$41,481,800	6
DMJM + HARRIS, INC.	\$36,647,294	5
URS CORPORATION AES	\$29,905,185	4
BAKER ENGINEERING	\$21,774,400	5
STV, INC.	\$19,999,020	2
O&G INDUSTRIES, INC.	\$18,145,400	1
CONSOER TOWNSEND ENVIRONDYNE ENGINEERS, INC.	\$15,087,030	5
CLOSE, JENSEN & MILLER, PC	\$14,990,020	3
PB FARRADYNE, INC.	\$13,366,671	1
JAMES P. PURCELL ASSOCIATES, INC.	\$10,601,810	6
LICHTENSTEIN CONSULTING ENGINEERS	\$10,023,243	1
HARDESTY & HANOVER, LLP	\$9,728,270	3
PARSONS TRANSPORTATION GROUP	\$7,842,350	4
TECTONIC ENGINEERING & SURVEY CONSULTANTS, PC	\$7,421,800	5
BERGER,LEHMAN ASSOCIATES, PC	\$7,266,402	2
MAGUIRE GROUP	\$6,434,300	2
LTK CONSULTING SERVICES, INC.	\$5,399,570	1
VOLLMER ASSOCIATES LLP	\$4,977,390	2
AI ENGINEERS, INC.	\$4,970,051	3
SEA CONSULTANTS	\$4,608,885	1
FUSS & O'NEILL, INC.	\$4,582,000	1
DEWBERRY - GOODKIND, INC	\$4,363,590	3
TAMS CONSULTANTS, INC.	\$4,260,925	1
WILBUR SMITH ASSOCIATES, INC.	\$2,784,490	5
DECARLO AND DOLL, INC	\$2,185,312	2
WASHINGTON GROUP INTERNATIONAL	\$2,123,880	2
GANNETT FLEMING TRANSIT AND RAIL SYSTEMS	\$1,929,238	1
A. DICESARE ASSOCIATES PC	\$1,882,873	4
CLOUGH HARBOR & ASSOCIATES, LLP	\$1,766,490	2
URBITRAN ASSOCIATES, INC.	\$1,603,140	1
IBI GROUP	\$1,500,000	1
GARG CONSULTING SERVICES, INC.	\$1,468,390	1

CONSULTANT NAME	TOTAL FEE	PROJECTS
KTA-TATOR, INC.	\$1,412,440	1
EARTH TECH, INC.	\$1,365,690	1
WENDEL DUCHSCHERER ARCHITECTS & ENGINEERS MACRO CORPORATION	\$1,190,800	1
LUCHS CONSULTING ENGINEERS, LLC	\$942,810	1
DESMAN, INC.	\$783,570	1
VANASSE, HANGEN, BRUSTLIN, INC.	\$717,770	1
BSC GROUP - CONNECTICUT, INC.	\$699,820	1
MCFARLAND-JOHNSON, INC.	\$601,530	2
GM2 ASSOCIATES, INC.	\$417,660	1
CME ASSOCIATES, INC.	\$354,480	2
A-N CONSULTING ENGINEERS, INC.	\$283,930	1
FAY, SPOFFARD & THORNDIKE OF NEW YORK, INC.	\$278,300	1
DIVERSIFIED TECHNOLOGY CONSULTANTS, INC.	\$180,730	1
CONKLIN & SOROKA, INC	\$176,940	1
	\$166,540	1
COUNT		48
TOTAL	\$375,160,968	109

E. CONSULTANT CONTRACTS ON-CALL

PS.	START DATE	FINAL END DATE	CONSULTANT NAME
5006	1/15/1998	1/26/2005	CLOSE, JENSEN & MILLER, PC
5007	1/15/1998	1/26/2005	KEYES ASSOCIATES, LLP
5343	12/1/2000	11/30/2004	JAMES P. PURCELL ASSOCIATES, INC.
5571	3/1/2003	2/28/2006	MAGUIRE GROUP
5587	5/31/2003	5/31/2006	DMJM + HARRIS, INC.
5152	10/1/1999	6/30/2004	FITZGERALD & HALLIDAY, INC.
5157	10/1/1999	6/30/2004	VANASSE, HANGEN, BRUSTLIN, INC.
5344	11/1/2000	10/31/2004	TRC ENVIRONMENTAL CORP.
5353	1/1/2001	12/31/2004	HRP ASSOCIATES, INC.
5355	1/1/2001	12/31/2004	MAGUIRE GROUP
5357	1/1/2001	12/31/2004	CONSULTING ENVIRONMENTAL ENGINEERS
5358	1/1/2001	12/31/2004	GEI CONSULTANTS, INC.
5618	6/1/2004	5/31/2007	DIVERSIFIED TECHNOLOGY CONSULTANTS, INC.
5008	5/1/1998	5/1/2005	DMJM + HARRIS, INC.
5560	11/4/2002	11/3/2005	ROBERT W. HUNT, CO.
5239	6/23/2000	6/14/2005	H.W. LOCHNER, INC.
5161	10/1/1999	6/30/2004	PUBLIC ARCHEOLOGY SURVEY TEAM, INC.
5162	10/1/1999	9/30/2004	TAMS CONSULTANTS, INC.
5614	12/1/2003	11/3/2006	AEROMETRIC, INC.
5371	5/15/2001	5/14/2004	HARTFORD COUNTY TITLE SERVICES, INC.
5345	12/15/2000	12/14/2003	BARAKOS-LANDINO
5171	11/1/1999	10/31/2004	PARSONS TRANSPORTATION GROUP

PS.	NOMINAL LIMITING AMOUNT	NOMINAL MONTHLY AMOUNT	INVOICES 10/1/02 – 9/1/03
5006	\$3,000,000	\$14,019	\$379,555
5007	\$3,000,000	\$14,019	
5343	\$3,000,000	\$24,658	\$237,115
5571	\$3,000,000	\$32,877	
5587	\$3,000,000	\$32,847	
5152	\$2,000,000	\$13,841	
5157	\$2,000,000	\$13,841	
5344	\$3,600,000	\$29,589	
5353	\$4,551,150	\$37,407	
5355	\$5,000,000	\$41,096	
5357	\$6,500,000	\$53,425	
5358	\$6,500,000	\$53,425	
5618	\$6,000,000	\$65,814	
5008	\$5,000,000	\$23,465	\$348,335
5560	\$4,325,640	\$47,404	
5239	\$6,000,000	\$39,626	\$303,887
5161	\$1,600,000	\$11,073	
5162	\$1,000,000	\$6,572	
5614	\$1,500,000	\$16,854	
5371	\$500,000	\$5,479	
5345	\$1,500,000	\$16,453	\$61,045
5171	\$1,000,000	\$6,572	\$88,798
	\$73,576,790	\$600,352	\$1,418,734 1.9%

PS.	TYPE	MONTHS
5006	ENGINEERING & DESIGN	84
5007	ENGINEERING & DESIGN	84
5343	ENGINEERING & DESIGN	47
5571	ENGINEERING & DESIGN	35
5587	ENGINEERING & DESIGN	36
5152	ENVIRONMENTAL	56
5157	ENVIRONMENTAL	56
5344	ENVIRONMENTAL	47
5353	ENVIRONMENTAL	47
5355	ENVIRONMENTAL	47
5357	ENVIRONMENTAL	47
5358	ENVIRONMENTAL	47
5618	ENVIRONMENTAL	35
5008	FACILITIES DESIGN	84
5560	INSPECTION SERVICES (RESEARCH)	36
5239	RAILROAD ENGINEERING	60
5161	STUDIES	56
5162	STUDIES	59
5614	SURVEYING	35
5371	TITLE SEARCH (40 YEAR)	36
5345	TRAFFIC, RR FORCE ACCT	36
5171	WETLANDS SERVICES, BUR. OF PLANNING	59

F. ON-CALL INVOICES

CONSULTANT NAME	PROJECT	TYPE	MONTH- YEAR	AMOUNT
BARAKOS-LANDINO	170-2320	ENGINEERING & DESIGN	10/1/2002	\$2,402.40
BARAKOS-LANDINO	170-2320	ENGINEERING & DESIGN	10/1/2002	\$2,402.40
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	10/1/2002	\$27,282.11
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	10/1/2002	\$4,026.25
H.W. LOCHNER, INC.	300-0033	ENGINEERING & DESIGN	10/1/2002	\$26,903.76
H.W. LOCHNER, INC.	303-0005	BRIDGE DESIGN	10/1/2002	\$10,780.00
PARSONS TRANSPORTATION GROUP	165-0319	WETLANDS	10/1/2002	\$1,969.00
PARSONS TRANSPORTATION GROUP	076-0194	WETLANDS	10/1/2002	\$650.00
PARSONS TRANSPORTATION GROUP	076-0194	WETLANDS	10/1/2002	\$2,864.40
			Total	\$79,280.32
BARAKOS-LANDINO	170-2320	ENGINEERING & DESIGN	11/1/2002	\$978.93
BARAKOS-LANDINO	170-2320	ENGINEERING & DESIGN	11/1/2002	\$978.93
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	11/1/2002	\$25,850.73
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	11/1/2002	\$5,208.18
DMJM + HARRIS, INC.	135-0216	ENGINEERING & DESIGN	11/1/2002	\$166,437.67
H.W. LOCHNER, INC.	300-0087	ENGINEERING & DESIGN	11/1/2002	\$17,412.28
H.W. LOCHNER, INC.	300-0087	ENGINEERING & DESIGN	11/1/2002	\$9,386.84
JAMES P. PURCELL ASSOCIATES, INC.	059-0152	ENGINEERING & DESIGN	11/1/2002	\$36,888.41
JAMES P. PURCELL ASSOCIATES, INC.	173-H137	ENGINEERING & DESIGN	11/1/2002	\$29,082.75
PARSONS TRANSPORTATION GROUP	165-0319	WETLANDS	11/1/2002	\$1,969.00
PARSONS TRANSPORTATION GROUP	165-0319	WETLANDS	11/1/2002	\$2,133.00
PARSONS TRANSPORTATION GROUP	050-0194	ENVIRONMENTAL	11/1/2002	\$1,928.37
PARSONS TRANSPORTATION GROUP	165-0319	WETLANDS	11/1/2002	\$3,938.71
PARSONS TRANSPORTATION GROUP	076-0194	WETLANDS	11/1/2002	\$1,299.54
			Total	\$303,493.34
BARAKOS-LANDINO	173-0336	HWY DESIGN	12/1/2002	\$1,608.00
BARAKOS-LANDINO	173-0341	TRAFFIC	12/1/2002	\$1,608.00
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	12/1/2002	\$21,536.76

CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	12/1/2002	\$3,868.01
DMJM + HARRIS, INC.	118-0155	ENGINEERING & DESIGN	12/1/2002	\$3,556.67
DMJM + HARRIS, INC.	135-0216	ENGINEERING & DESIGN	12/1/2002	\$13,175.51
H.W. LOCHNER, INC.	300-0033	ENGINEERING & DESIGN	12/1/2002	\$13,621.82
JAMES P. PURCELL ASSOCIATES, INC.	059-0152	ENGINEERING & DESIGN	12/1/2002	\$26,717.06
PARSONS TRANSPORTATION GROUP	165-0319	WETLANDS	12/1/2002	\$2,133.00
PARSONS TRANSPORTATION GROUP	165-0319	WETLANDS	12/1/2002	\$436.00
PARSONS TRANSPORTATION GROUP	015-0272	ENVIRONMENTAL	12/1/2002	\$1,456.11
PARSONS TRANSPORTATION GROUP	165-0319	WETLANDS	12/1/2002	\$4,265.70
			Total	\$93,982.64
BARAKOS-LANDINO	170-2320	ENGINEERING & DESIGN	1/1/2003	\$999.57
BARAKOS-LANDINO	173-0336	HWY DESIGN	1/1/2003	\$752.11
BARAKOS-LANDINO	173-0336	HWY DESIGN	1/1/2003	\$752.11
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	1/1/2003	\$30,435.49
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	1/1/2003	\$9,197.98
DMJM + HARRIS, INC.	094-0204	ENGINEERING & DESIGN	1/1/2003	\$682.50
DMJM + HARRIS, INC.	118-0155	ENGINEERING & DESIGN	1/1/2003	\$6,348.53
DMJM + HARRIS, INC.	165-0375	ENGINEERING & DESIGN	1/1/2003	\$4,269.50
DMJM + HARRIS, INC.	135-0216	ENGINEERING & DESIGN	1/1/2003	\$2,543.28
DMJM + HARRIS, INC.	135-0216	ENGINEERING & DESIGN	1/1/2003	\$1,000.16
DMJM + HARRIS, INC.	135-0216	ENGINEERING & DESIGN	1/1/2003	\$2,609.82
DMJM + HARRIS, INC.	165-0179	ENGINEERING & DESIGN	1/1/2003	\$9,142.05
H.W. LOCHNER, INC.	300-0033	ENGINEERING & DESIGN	1/1/2003	\$13,621.82
H.W. LOCHNER, INC.	300-0033	ENGINEERING & DESIGN	1/1/2003	\$15,002.90
JAMES P. PURCELL ASSOCIATES, INC.	059-0152	ENGINEERING & DESIGN	1/1/2003	\$25,372.78
PARSONS TRANSPORTATION GROUP	076-0194	WETLANDS	1/1/2003	\$14,529.00
PARSONS TRANSPORTATION GROUP	083-0220	ENVIRONMENTAL	1/1/2003	\$716.85
PARSONS TRANSPORTATION GROUP	076-0194	WETLANDS	1/1/2003	\$14,529.00
PARSONS TRANSPORTATION GROUP	050-0198	ENVIRONMENTAL	1/1/2003	\$716.85
			Total	\$153,222.30

BARAKOS-LANDINO	170-2320	ENGINEERING & DESIGN	2/1/2003	\$537.76
BARAKOS-LANDINO	170-2320	ENGINEERING & DESIGN	2/1/2003	\$537.76
BARAKOS-LANDINO	170-2320	ENGINEERING & DESIGN	2/1/2003	\$537.76
BARAKOS-LANDINO	173-0336	HWY DESIGN	2/1/2003	\$544.63
BARAKOS-LANDINO	173-0336	HWY DESIGN	2/1/2003	\$544.63
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	2/1/2003	\$29,254.96
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	2/1/2003	\$3,373.33
DMJM + HARRIS, INC.	165-0179	FACILITIES DESIGN	2/1/2003	\$6,196.39
DMJM + HARRIS, INC.	118-0155	ENGINEERING & DESIGN	2/1/2003	\$11,609.01
DMJM + HARRIS, INC.	135-0216	ENGINEERING & DESIGN	2/1/2003	\$10,421.93
H.W. LOCHNER, INC.	300-0033	ENGINEERING & DESIGN	2/1/2003	\$16,202.98
H.W. LOCHNER, INC.	300-0087	ENGINEERING & DESIGN	2/1/2003	\$502.90
H.W. LOCHNER, INC.	301-0069	RAILROAD ENGINEERING	2/1/2003	\$44,256.64
JAMES P. PURCELL ASSOCIATES, INC.	059-0152	ENGINEERING & DESIGN	2/1/2003	\$37,151.04
PARSONS TRANSPORTATION GROUP	076-0194	WETLANDS	2/1/2003	\$2,660.00
PARSONS TRANSPORTATION GROUP	076-0194	WETLANDS	2/1/2003	\$5,320.25
			Total	\$169,651.97
BARAKOS-LANDINO	173-0336	HWY DESIGN	3/1/2003	\$5,335.75
BARAKOS-LANDINO	173-0336	HWY DESIGN	3/1/2003	\$5,335.75
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	3/1/2003	\$25,336.29
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	3/1/2003	\$3,318.98
DMJM + HARRIS, INC.	118-0155	ENGINEERING & DESIGN	3/1/2003	\$4,654.06
DMJM + HARRIS, INC.	135-0216	ENGINEERING & DESIGN	3/1/2003	\$459.70
DMJM + HARRIS, INC.	163-0189	ENGINEERING & DESIGN	3/1/2003	\$6,196.39
H.W. LOCHNER, INC.	300-0033	ENGINEERING & DESIGN	3/1/2003	\$16,202.98
H.W. LOCHNER, INC.	300-0087	ENGINEERING & DESIGN	3/1/2003	\$484.90
PARSONS TRANSPORTATION GROUP	076-0194	WETLANDS	3/1/2003	\$1,764.86
PARSONS TRANSPORTATION GROUP	035-0175	ENVIRONMENTAL	3/1/2003	\$1,683.08
PARSONS TRANSPORTATION GROUP	076-0194	WETLANDS	3/1/2003	\$1,764.86
PARSONS TRANSPORTATION GROUP	050-0198	ENVIRONMENTAL	3/1/2003	\$1,683.08
			Total	\$74,220.68

JAMES P. PURCELL ASSOCIATES, INC.	059-0152	ENGINEERING & DESIGN	3/3/2003	\$52,161.08
			Total	\$52,161.08
BARAKOS-LANDINO	173-0336	HWY DESIGN	4/1/2003	\$250.03
BARAKOS-LANDINO	173-0336	HWY DESIGN	4/1/2003	\$250.03
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	4/1/2003	\$31,058.09
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	4/1/2003	\$3,392.57
H.W. LOCHNER, INC.	300-0033	ENGINEERING & DESIGN	4/1/2003	\$16,202.98
H.W. LOCHNER, INC.	301-0069	RAILROAD ENGINEERING	4/1/2003	\$30,751.50
PARSONS TRANSPORTATION GROUP	144-0173	ENVIRONMENTAL	4/1/2003	\$1,463.50
PARSONS TRANSPORTATION GROUP	050-0198	ENVIRONMENTAL	4/1/2003	\$1,463.50
			Total	\$84,832.20
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	5/1/2003	\$34,830.26
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	5/1/2003	\$2,198.79
H.W. LOCHNER, INC.	301-0069	RAILROAD ENGINEERING	5/1/2003	\$6,858.95
JAMES P. PURCELL ASSOCIATES, INC.	059-0152	ENGINEERING & DESIGN	5/1/2003	\$11,807.38
JAMES P. PURCELL ASSOCIATES, INC.	093-0153	ENGINEERING & DESIGN	5/1/2003	\$12,057.26
PARSONS TRANSPORTATION GROUP	014-0148	ENVIRONMENTAL	5/1/2003	\$1,116.63
PARSONS TRANSPORTATION GROUP	050-0198	ENVIRONMENTAL	5/1/2003	\$1,116.63
			Total	\$69,985.90
BARAKOS-LANDINO	014-0167	HWY DESIGN	6/1/2003	\$94.05
BARAKOS-LANDINO	173-0336	HWY DESIGN	6/1/2003	\$6,780.34
BARAKOS-LANDINO	014-0167	HWY DESIGN	6/1/2003	\$94.05
BARAKOS-LANDINO	173-0336	HWY DESIGN	6/1/2003	\$6,780.34
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	6/1/2003	\$20,020.01
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	6/1/2003	\$3,449.09
DMJM + HARRIS, INC.	414-0019	FACILITIES DESIGN	6/1/2003	\$76,230.68
H.W. LOCHNER, INC.	300-0087	ENGINEERING & DESIGN	6/1/2003	\$5,605.00
PARSONS TRANSPORTATION GROUP	109-0153	ENVIRONMENTAL	6/1/2003	\$1,807.82
PARSONS TRANSPORTATION GROUP	050-0198	ENVIRONMENTAL	6/1/2003	\$1,807.82
			Total	\$122,669.20
BARAKOS-LANDINO	014-0167	HWY DESIGN	7/1/2003	\$280.31
BARAKOS-LANDINO	173-0336	HWY DESIGN	7/1/2003	\$9,859.02
BARAKOS-LANDINO	173-0336	HWY DESIGN	7/1/2003	\$9,859.02
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	7/1/2003	\$31,683.33

CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	7/1/2003	\$2,247.29
H.W. LOCHNER, INC.	300-0033	ENGINEERING & DESIGN	7/1/2003	\$35,035.16
PARSONS TRANSPORTATION GROUP	144-0173	ENVIRONMENTAL	7/1/2003	\$1,826.59
PARSONS TRANSPORTATION GROUP	050-0198	ENVIRONMENTAL	7/1/2003	\$1,826.59
			Total	\$92,617.31
BARAKOS-LANDINO	014-0167	HWY DESIGN	8/1/2003	\$280.31
BARAKOS-LANDINO	014-0167	HWY DESIGN	8/1/2003	\$560.62
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	8/1/2003	\$35,191.22
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	8/1/2003	\$946.36
DMJM + HARRIS, INC.	118-0155	ENGINEERING & DESIGN	8/1/2003	\$9,410.31
DMJM + HARRIS, INC.	163-0189	ENGINEERING & DESIGN	8/1/2003	\$2,602.24
PARSONS TRANSPORTATION GROUP	014-0148	ENVIRONMENTAL	8/1/2003	\$1,275.19
PARSONS TRANSPORTATION GROUP	165-0319	WETLANDS	8/1/2003	\$872.31
PARSONS TRANSPORTATION GROUP	050-0198	ENVIRONMENTAL	8/1/2003	\$1,275.19
			Total	\$52,413.75
BARAKOS-LANDINO	014-0167	HWY DESIGN	9/1/2003	\$50.11
BARAKOS-LANDINO	014-0167	HWY DESIGN	9/1/2003	\$50.11
CLOSE, JENSEN & MILLER, PC	170-1867	BRIDGE DESIGN	9/1/2003	\$24,474.03
CLOSE, JENSEN & MILLER, PC	170-1227	BRIDGE DESIGN	9/1/2003	\$1,374.76
DMJM + HARRIS, INC.	163-0189	ENGINEERING & DESIGN	9/1/2003	\$10,788.20
H.W. LOCHNER, INC.	300-0033	ENGINEERING & DESIGN	9/1/2003	\$25,053.76
PARSONS TRANSPORTATION GROUP	035-0176	ENVIRONMENTAL	9/1/2003	\$1,267.75
PARSONS TRANSPORTATION GROUP	050-0198	ENVIRONMENTAL	9/1/2003	\$1,267.75
			Total	\$64,326.47
JAMES P. PURCELL ASSOCIATES, INC.	091-0108	ENGINEERING & DESIGN	10/1/2003	\$5,877.22
			Total	\$5,877.22
			Grand Total	\$1,418,734

G. CDOT OVERHEAD COST SAVINGS ANALYSIS FROM 1994 REPORT

“Analysis of In-House vs. Consultant Preliminary Engineering and Construction Inspection Costs”, Connecticut Department of Transportation, March 1994, pages 9 and 26

PRELIMINARY ENGINEERING SAVINGS, CONSULTING ENGINEER PROJECTS

RANGE	NO. OF PROJ.	AVG DIRECT % SAVINGS	AVG ALLOC. % SAVINGS	AVG. DIRECT SAVINGS	AVG. A-87 SAVINGS	AVG. TOTAL DIRECT SAVINGS	AVG. ALLOCATED COSTS SAVINGS	AVG. CONSULTANT DIRECT COSTS	AVG. CONSULTANT ALLOCATED COSTS	
\$0-\$1 MIL	63	12.8%	10.3%	\$9,633	\$2,629	\$10,616	\$8,553	\$75,271	\$83,253	
\$1-\$2 MIL	49	9.1%	6.6%	\$16,976	-\$878	\$18,708	\$13,548	\$186,499	\$206,013	
\$2-\$3 MIL	28	30.0%	28.1%	\$99,324	\$79,512	\$109,546	\$102,692	\$330,625	\$365,230	
\$3-\$4 MIL	13	59.3%	58.1%	\$294,968	\$288,057	\$325,055	\$319,337	\$497,276	\$549,964	
\$4-\$5 MIL	8	45.8%	44.4%	\$252,165	\$232,801	\$277,886	\$269,275	\$549,984	\$606,901	
SUM	161			\$673,066	\$602,121	\$741,811	\$713,405	\$1,639,655	\$1,811,361	
WEIGHTED AVERAGE		20.1%	17.8%	\$62,557	\$49,417	\$68,954	\$64,495	\$211,196	\$233,359	
TOTAL SAVINGS, DIRECT METHODOLOGY, 161 PROJECTS							\$10.07 million			
TOTAL SAVINGS, ALLOCATED COST METHODOLOGY, 161 PROJECTS							\$10.38 million	3.00% variance		

CONSTRUCTION INSPECTION SAVINGS, CONSULTING ENGINEER PROJECTS

RANGE	NO. OF PROJ.	AVG DIRECT % SAVINGS	AVG ALLOC. % SAVINGS	AVG. DIRECT SAVINGS	AVG. A-87 SAVINGS	AVG. TOTAL DIRECT SAVINGS	AVG. ALLOCATED COSTS SAVINGS	AVG. CONSULTANT DIRECT COSTS	AVG. CONSULTANT ALLOCATED COSTS
\$0-\$1 MILLION	34	34.7%	30.0%	\$37,581	\$30,739	\$38,325	\$36,136	\$108,268	\$120,585
\$1-\$2 MILLION	32	9.0%	2.1%	\$23,161	-\$8,994	\$23,620	\$5,876	\$257,339	\$284,942
\$2-\$3 MILLION	27	14.8%	8.0%	\$57,682	\$11,195	\$58,824	\$34,347	\$388,641	\$429,179
\$3-\$4 MILLION	14	26.6%	20.4%	\$139,595	\$86,688	\$142,359	\$118,096	\$525,225	\$577,825
\$4-\$5 MILLION	6	35.3%	29.6%	\$255,715	\$191,747	\$260,778	\$235,667	\$723,965	
TOTAL	113			\$513,734	\$311,375	\$523,906	\$430,122	\$2,003,438	
SUM		21.71%	15.62%	\$62,522	\$30,298	\$63,760	\$47,888	\$301,825	

TOTAL SAVINGS, DIRECT METHODOLOGY, 161 PROJECTS

\$10.06 million

TOTAL SAVINGS, ALLOCATED COST METHODOLOGY, 161 PROJECTS

\$7.71 million

-30.56% variance