



King County

Metropolitan King County Council

King County Auditor's Office

Cheryle A. Broom, *King County Auditor*

King County Courthouse

516 Third Avenue, Room W1033

Seattle, WA 98104-3272

206.296.1655 Fax 206.296.0159

TTY 296-1024

www.kingcounty.gov/operations/auditor.aspx

MEMORANDUM

DATE: April 20, 2009

TO: King County Government Accountability and Oversight Committee

FROM: Cheryle A. Broom, County Auditor

SUBJECT: Data Center Relocation Monthly Oversight

Attached is the fourth Data Center Relocation monthly status report prepared by the Facilities Management Division (FMD) and the Office of Information Resource Management (OIRM). Oversight is being conducted by the King County Auditor's Office (KCAO) under the Capital Projects Oversight (CPO) program through monthly meetings with the project team, review and comment on status reports, and discussion of emerging risks on this project. This memo provides a review of the status of scope, schedule, budget, and risk for the Data Center Relocation project through January 2009.

Summary

As described in the December 2008 report, the scope of the project has been changed to remove the first-floor office space component. The project team continues to forecast completion of the project on schedule. As expected, the project will need a supplemental budget appropriation in 2009 which is currently anticipated to be \$1,387,018. We consider this to be a significant, but resolvable, budget risk which has potential to impact the project schedule. We recommend that the County Executive submit a supplemental budget request as soon as possible.

Scope

No new scope changes were considered in January. As described in the December 2008 report, an amendment to the data center lease has been agreed to in principle with the landlord to remove 3,982 square feet (s.f.) of office space. This will result in \$1,322,318 in rent savings over the life of the lease. The OIRM staff originally planned to occupy this office space will utilize existing OIRM space in the Chinook Building instead. The remaining data center space, including work space for the necessary on-site operators, is not altered by this scope change.

The County Executive will notify council of the intent to modify the lease by separate letter. No schedule for finalizing the lease amendment has been given.

Schedule

The baseline schedule for the project shows: commissioning of the data center on May 22, 2009; finishing the physical move of county equipment from Seattle to Tukwila on October 12, 2009; and completion of the secondary fiber installation by April 6, 2010. The project team continues to report that the project is on track to meet these milestones on or before the baseline schedule dates. Minor adjustments have made to move dates to adjust for furlough weeks and holidays. Based on the information available at this time, we do not have any major schedule concerns, unless cashflow constraints discussed in the Risk section below cause the project team to delay activities on the critical path.

As was reported last month, the contract for the relocation consultant was executed on December 18, 2008. The relocation consultant began working on the development of a high-level move strategy for the project during January. This will be followed by the development of detailed move plan for the mainframe computer and servers included in the project, which is scheduled to be completed by July 17, 2009. These deliverables will provide independent verification of the baseline schedule. We will monitor the results of the relocation consultant's work and report on the adjustments, if any, that they recommend to the project schedule.

An ongoing focus of oversight will be to understand and report on the cost impacts of any schedule delays which develop, and to recommend mitigation strategies, if needed, to the project team for consideration.

Budget

This project has a budget of \$18,886,113 based on the current appropriations. As was discussed in the December 2008 oversight report, the contingency budget appropriation originally included both contingency funds and estimated sales tax costs for the project. This was adjusted with the 2009 capital budget which moved the estimated sales tax amount of \$505,525 to the OIRM project budget, reducing the contingency project by the same amount to a total of \$1,238,607. The Budget Detail on page 5 of the attached report reflects this council-approved revision to the budget.

Through January, the project expenditures total \$1,260,570 or approximately 6.7% of the approved budget allocation. These expenditures do not include any tenant improvement costs which are due in one lump-sum payment to the landlord upon substantial completion of construction.

The revised forecast cost at completion reflects several refinements in project costs. It includes the impact of an unanticipated 0.6% increase in sales tax rates for equipment purchases. It also reflects the known cost of leasing a secondary fiber line until the permanent secondary fiber can be completed and the final negotiated cost for the relocation consultant contract.

The project team is reporting that the cost for tenant improvements at the Sabey data center will be increasing beyond the \$9.5 million in the county's lease agreement due to scope of work changes claimed by the landlord for the county's tenant improvement

work. This claim resulted from differing interpretations of county-prepared specifications included in the work letter agreement attached to the lease. We will research and analyze this further and report on our findings in future oversight reports. Although a final lease amendment reflecting this increased cost has not been executed, the project team, with representation from the County Prosecutor's Office, have met with the landlord and agreed in principle on the scope and cost of the change eligible for additional compensation under the terms of the lease. This is the \$241,527 pending item shown in the contingency detail on page 5 of the attached report.

The project team is currently forecasting a \$1,387,018 deficit at project completion unless a 2009 supplemental budget increase is approved. This amount is equal to the estimated 2009 appropriation anticipated by the project team and reported in the staff report to council as part of the 2008 appropriation request. The project team did not pursue full appropriation for the project at that time or with the 2009 capital budget submittal, because some project costs were uncertain. The project team is working with the Office of Management and Budget (OMB) on the 2009 supplemental budget request, which they anticipate will be transmitted to council in May.

Risk

As of January, the project faces a significant, but resolvable, budget risk which has potential to impact the schedule. The current project appropriation, as anticipated, is not sufficient to pay for the project through completion even if all available contingency is used. The project team is working closely with OMB on a supplemental budget request to correct this issue. They are currently refining their forecasts of final project costs and anticipate transmittal of a supplemental budget request to council next month.

We believe that submitting the supplemental appropriation request this late is a risky strategy. Because of the time ordinarily needed to review and schedule supplemental budget requests for council consideration, the project could potentially run out of money before council acts to appropriate additional funds. The cashflow estimates of anticipated expenditures shown on page 6 of the attached report indicate that the project will have expended all of the appropriated funds by late summer. This could put the relocation schedule at risk if the project needs to be delayed while awaiting additional appropriation.

Recommendation

The County Executive should submit the supplemental 2009 budget appropriation request to council as soon as possible. The submittal should be based on the best available information on the forecast project costs at completion to justify the request.

We further recommend that documentation of the assumptions used in developing the estimate be provided to our office, so that we can evaluate and comment upon the adequacy of the project contingency available to support the remainder of the project.

In the event that council action on the supplemental budget request is delayed beyond August, additional actions may be needed to mitigate the impacts of potential cashflow constraints on project delivery. We will continue to monitor the cash flow and schedule

projections and the schedule for action on the appropriation request and make additional recommendations if needed.

Closing

We appreciate the collaborative efforts of FMD and OIRM and OMB in providing for effective oversight of the Data Center Relocation project consistent with council intent. No formal presentation of this monthly report has been scheduled for the Government Accountability and Oversight Committee. As with all CPO reports, this will be placed on the KCAO Web site so it will be available to the public. Should you have questions or comments on the report, please contact me or Tina Rogers, the Capital Projects Oversight Manager.

CB:TW/TR

Attachments: Data Center Relocation, Facilities Management Division & Office of Information Resource Management, January 2009 Monthly Reporting

cc: Metropolitan King County Councilmembers
Ron Sims, County Executive
David Martinez, County Chief Information Officer
Jim Buck, County Administrative Officer Designee
Bob Cowan, Budget Office Director
Kathy Brown, Director Facilities Management Division
Saroja Reddy, King County Council Policy Staff Director
Mike Alvine, Senior Principal Legislative Analyst
Mark Melroy, Senior Principal Legislative Analyst

DATA CENTER RELOCATION
Facilities Management Division & Office of Information Resource Management
January 2009 Monthly Reporting



Project Summary

The Data Center Relocation Project will create a dedicated King County facility in the new Sabey Data Center located in Tukwila, Washington. The project will develop approximately 7,500 s.f. of data space and 580 s.f. of storage. The total budget is \$18.8 million which includes \$9.9 million for tenant improvements. The Data Center currently resides in leased space in the Seattle Municipal Tower. Over the next 12 months the Facilities Management Division, Office of Information Management and the Sabey Company will collaborate on designing, constructing, equipping and relocating approximately 60% of the server capacity for King County government to this new, state-of-the-art facility. In addition, the project will provide 2 distinct, secure fiber lines to serve as the main and secondary connections between the Data Center and King County's wide area network in downtown Seattle. This new fiber line system will accommodate 100% of the County's needs with capacity for growth.



King County

Progress Highlights

- Sabey submitted 100% construction documents this month.
- Relocation Consultant work began this month.
- A 2009 supplemental budget request is planned for the 2nd quarter of 2009.
- The Communication Protocol Document is in the final stages of review.
- The project continues to work cooperatively with the City of Seattle on installation of fiber lines. The work continues on schedule.
- There were no new project risk items identified in the month of January.

Feature of the month

Fiber Cable Links for the Sabey Data Center

The Sabey Data Center will be linked by two distinct fiber paths, providing King County government with long-term safety and reliability through true redundancy to this state-of-the-art facility. Features of the fiber paths are summarized below.

Main Fiber Cable Link

The main fiber cable is linked between Sabey Building 5 and the Seattle Municipal Tower (SMT) via Sabey Building 2 and the King County (KC) Airport.

This main link will include three components and will be formed by constructing the following:

- Installing new fiber cable between the KC Data Center site at Sabey Building 5 and the existing KC presence at Sabey Building 2,
- Constructing another new KC fiber between KC Airport and SMT,
- Utilizing existing KC fiber between Sabey Building 2 and KC Airport

Secondary Fiber Link

The secondary fiber link will be constructed between Sabey Building 5 and King Street Center via the 1st and 4th Ave. S. corridors back to King Street Center. The estimated cable distance for this is approximately 15 miles.

In addition, the county is leasing fiber to provide the redundant temporary secondary fiber connection until the KCWAN permanent secondary fiber link is complete. This temporary fiber (12 strands) is leased from AboveNet through our lease with Sabey.

Status of the work

- Abovenet has received all approvals from City of Seattle and SMT building; saw cutting should begin next week; splicing of the temporary secondary fiber along the backbone continues.
- KCWAN fiber: Main fiber link - permits complete; negotiations with contractor continuing; installation of fiber planned to begin in 2 weeks. Permanent secondary fiber - permit package being worked with all agency jurisdictions

Project Milestone Chronology

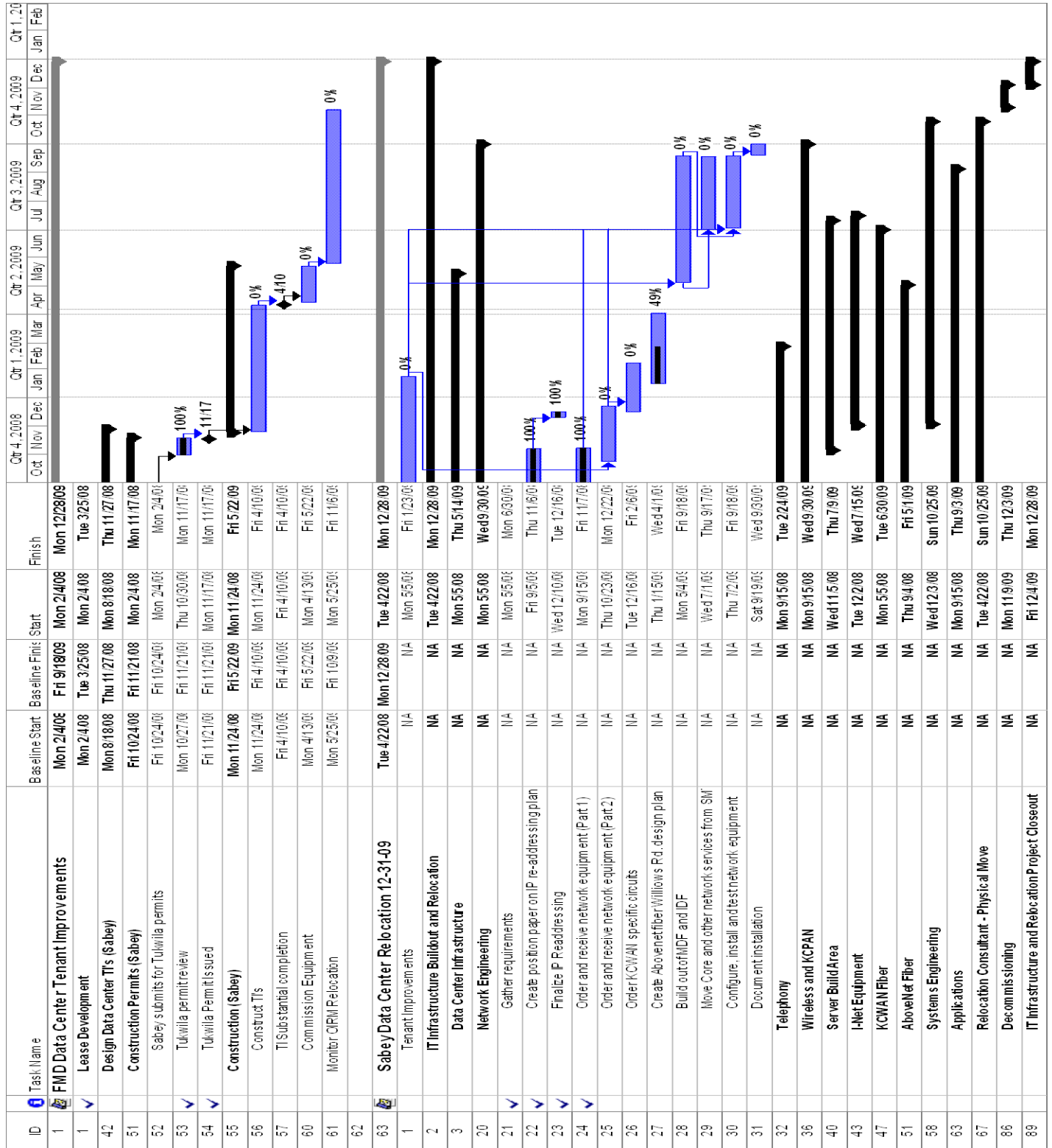
• July 2008	Data Center Legislation Approved
• August 2008	King County Lease with the Sabey Data Center LLC
• August 2008	Sazan Contract – CM and Technical Consultant
• October 2008	Monthly Reporting to Auditor's Office and County Council
• November 2008	MOU Between FMD, OIRM and the Budget Office
• November 2008	Contingency Review Process established
• November 2008	Responsibility Matrix established
• December 2008	Relocation Consultant Contract Finalized
• January 2009	Conditional Design approval

Summary Schedule

Activity	Baseline		Actual		Current Forecast	
	Start	Finish	Start	Finish	Start	Finish
Lease Development	2/4/08	8/15/08	2/4/08	8/15/08		
Design TI's	8/18/08	11/21/08	8/18/08	11/12/08		
Permits	10/24/08	11/21/08	10/30/08	11/18/08		
Construct TI's	11/24/08	4/10/09	11/19/08			3/31/09
Commissioning	4/13/09	5/22/09			4/2/09	4/24/08
Data Center Infrastructure	5/5/08	5/11/09	5/5/08			5/14/09
Network Engineering	5/5/08	9/30/09	5/5/08			10/20/09
Telephony	9/15/08	6/22/09	9/15/08			6/24/09
Wireless & KCPAN	9/15/08	10/7/09	9/15/08			9/30/09
Server Build Area	11/12/08	7/25/09	11/15/08			7/9/09
I-Net Equipment	3/9/09	6/29/09			3/13/09	7/15/09
KCWAN Fiber-Primary Line	5/5/08	6/15/09	5/5/08			6/30/09
KCWAN Fiber-Secondary Line	5/5/08	4/6/10	5/5/08			4/6/10
Temporary Fiber (AboveNet)	9/4/08	4/30/09	9/4/08			5/1/09
Systems Engineering	12/3/08	9/23/09	12/3/08			10/25/09
Applications	9/15/08	8/10/09	9/15/08			9/3/09
Relocation Consultant Physical	4/22/08	10/12/09	4/22/08			10/25/09

Schedule Detail

- ✦ Tenant Improvement work is on track according to Sabey's proposed construction schedule.
- ✦ January schedule updated to include KC furlough days.



Budget Detail:

Budget expenditures are tracking consistently with the schedule and planned expenditure levels.

Budget Detail Notes:

1. Projected Balance is equal to original planned supplemental appropriation request. At the time of the 2008 appropriation, portions of the project were too early in development to precisely define the total costs. The balance showing this month will be reconciled through the planned supplemental budget request to be transmitted in May 2009.
2. The current budget line item detail totaling \$18,886,113 equals the appropriations to date. This is the cost baseline and it will not change unless formally recognized in this report.
3. Contingency

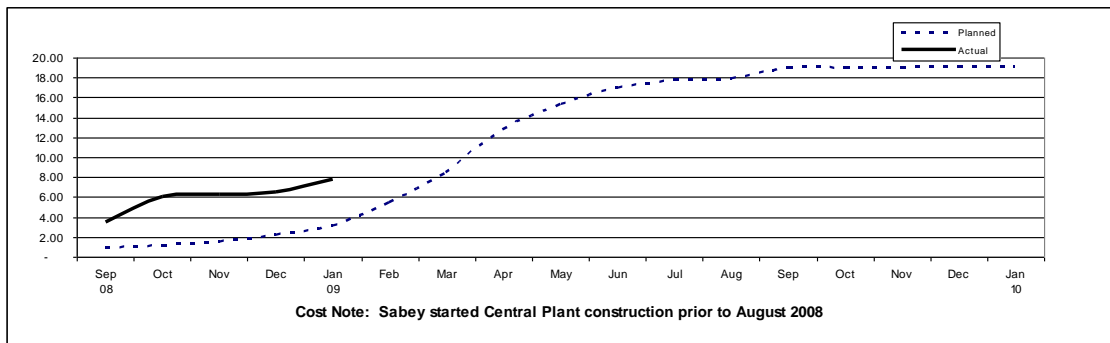
Contingency Budget	\$1,238,607
Proposed transfer to project 377219 in 09 Supplemental	\$ (85,930)
Subtotal (Estimate to complete)	\$1,152,677
Pending items	\$ (241,527)
Contingency available	\$ 911,150

Contingency has not been utilized for items anticipated to be included in the future supplemental appropriation request. The contingency available in relation to remaining cost risk is being continuously monitored.

4. Abovenet Fiber: An amendment to the lease was negotiated requiring that an additional three months of fiber rent costs payable to the landlord, causing the cost line item to exceed its budgeted amount.

Cost Element	Description	Current Budget	Expenditures	Encumbrances	Current Balance	Estimate to Complete	Estimate at Completion	Projected Balance
395657	FMD Data Center Relocation							
001	Design	646,580	499,306	147,274	-	10,000	656,580	(10,000)
003	Construction	9,632,053	10,587	-	9,621,466	9,500,000	9,510,587	121,466
004	Equipment/Furnishings	268,984	268,983	-	1	-	268,983	1
005	Contingency				-	-	-	-
006	1% for Art				-	-	-	-
007	County Force Design				-	-	-	-
009	Project Management	208,596	265,119	-	(56,523)	46,400	311,519	(102,923)
	Totals	\$ 10,756,213	\$ 1,043,995	\$ 147,274	\$ 9,564,944	\$ 9,556,400	\$ 10,747,669	\$ 8,544
377219	OIRM Data Center Relocation							
101	Data center Infrastructure	730,936	-	-	730,936	565,447	565,447	165,489
102	Network Engineering	1,883,060	125,088	-	1,757,972	1,702,747	1,827,835	55,225
103	Telephony	28,276	-	-	28,276	29,210	29,210	(935)
104	Wireless & KCPAN	5,914	-	-	5,914	5,431	5,431	483
105	Server Build Area	10,890	-	-	10,890	-	-	10,890
106	I-Net Equipment	107,101	-	-	107,101	107,691	107,691	(590)
107	KCWAN Fiber	1,839,866	-	-	1,839,866	1,850,003	1,850,003	(10,137)
108	Abovenet Fiber	704,861	-	1,261,786	(556,925)	217,073	1,478,859	(773,998)
109	Systems Engineering	-	-	-	-	136,875	136,875	(136,875)
110	Relocation Consultant	1,000,000	-	1,366,404	(366,404)	-	1,366,404	(366,404)
111	OIRM Labor	580,390	91,487	-	488,903	913,543	1,005,030	(424,640)
		\$ 6,891,293	\$ 216,575	\$ 2,628,190	\$ 4,046,528	\$ 5,528,020	\$ 8,372,785	\$ (1,481,492)
377220	OIRM Data Center Contingency							
005	Contingency on 377219 budgets	1,238,607	-	-	1,238,607	1,152,677	1,152,677	85,930
	Grand Total All Projects	18,886,113	1,260,570	2,775,464	14,850,079	16,237,097	20,273,131	(1,387,018)

Cashflow: Actual Versus Planned Expenditure



- ⊕ Original legislation included a supplemental appropriation in 2009.
- ⊕ Expenditures reported from IBIS/ARMS as of 30th each month
- ⊕ Cashflow will be refined as new encumbrance data from consultants is received. .

Planned Contract Listing

Description of each contract	Estimated Amount	Estimated Timeframe	Possible Vendor List
The contract would focus on consulting services for planning, scheduling and executing the relocation of the King County Enterprise Data Center. A sole source waiver has been received	\$1.5M	12/08 - 12/09	HP
Blanking panels and shelving for cabinets, power cords, patch cables, horizontal power, MDF caging	\$33,000	1/09-6/09	Graybar
Digital KVM and associated equipment, console controllers	\$324,000	1/09-6/09	Net IG (Carlyle)
Network switches	\$1.7M	3/09-8/09	Cisco
I-Net switch	\$86,000	3/09-6/09	Ericsson (Marconi)
Other move related expense (e.g., surplus)	\$20,000	9/09-10/09	Emerald City Movers
Telephony, voice circuits	16,500	8/09 - 12/09	Qwest
Telephone testing	\$10,500	8/09 – 12/09	Cochran electric
Decommissioning of SMT	TBD	9/09-12/09	DoIT (City of Seattle usually requests their own inside staff)
Decommissioning Fortress Co-location (Auxiliary Server Room I and II)	TBD	9/09-10/09	Fortress
Closeout of lease at Fortress Co-location	TBD	9/09	Fortress with assistance of FMD
Seed equipment for distributed moves requiring minimal downtime	\$170,400	5/09 – 10/09	HP, Dell
Construction Management and Design Oversight.	\$197,000	09/08 – 07/09	Sazan Group Inc.
'Tenant Contribution' to lease Tenant Improvement	\$9,500,000	5/09 – 6/09	Sabey Data Center –