



UNITED STATES
CIVILIAN BOARD OF CONTRACT APPEALS

DENIED: April 28, 2008

CBCA 385

MINNEAPOLIS COMMUNITY DEVELOPMENT AGENCY
and THE CITY OF MINNEAPOLIS,

Appellants,

v.

GENERAL SERVICES ADMINISTRATION,

Respondent.

Lawrence A. Moloney of Southern Minnesota Regional Legal Services, Inc., Saint Paul, MN, counsel for Appellant.

Robert C. Smith, Office of General Counsel, General Services Administration, Washington, DC; and Paul J. Maxse, Office of Regional Counsel, General Services Administration, Chicago, IL, counsel for Respondent.

Before Board Judges **BORWICK**, **DeGRAFF**, and **GOODMAN**.

DeGRAFF, Board Judge.

“Most of the disputes in the world arise from words.” *Morgan v. Jones*, (1773) 98 Eng. Rep. 587, 596 (K.B.). As the appeal pending before us shows, words are no less troublesome in the contract disputes of today than they were when Lord Mansfield, Chief Justice was developing common law to govern commercial transactions.

In March 1993, the General Services Administration (GSA) entered into a Development Agreement with the City of Minneapolis (the City) and the Minneapolis

Community Development Agency (MCDA). The Development Agreement explained that MCDA would assemble a development site, remediate environmental contamination on the property, and convey the property to GSA in late November 1993. After the conveyance, GSA would select a contractor to design and build a courthouse and an underground parking garage on the site. When the parties entered into their agreement, they knew the site was contaminated with petroleum hydrocarbons.

MCDA did not finish remediating the environmental contamination at the site by the end of November 1993, which led the parties to amend the Development Agreement in January 1994. The amended Development Agreement said GSA would modify the design/build contract to require the contractor to develop an environmental contamination remediation plan and MCDA would pay the cost of the modification.

In June 1994, MCDA told GSA it would not pay for a remediation plan based upon either of the two concepts developed by the design/build contractor, and an MCDA consultant subsequently developed a remediation plan. In August 1994, GSA asked the design/build contractor to prepare a proposal to modify the contract to include the work required by MCDA's consultant's plan, which it did. In September 1994, GSA and the design/build contractor reached a negotiated agreement regarding the price of the contract modification and MCDA deposited \$2,420,295 with GSA to pay the cost of the modification. Part of the cost of the modification included costs caused by delays to the design/build contractor's progress which caused a ninety-day delay to the contract completion date.

In April 1999, MCDA and the City sent the contracting officer a certified claim for \$2,693,055.50, alleging GSA had breached the parties' agreement by adopting a remediation plan which exceeded the scope of the required remediation, by failing to allow the City and MCDA to consult with the design/build contractor during the development of foundation design plans, and by not limiting the cost of the project. The City and MCDA also said they were not responsible for any of the delay to the completion of the construction of the project or costs related to the delay. Appellants did not identify any differences, for purposes of this claim, between the rights and obligations of the City and those of MCDA.

The contracting officer denied the claim and this appeal followed. The Board held a hearing in May 2007, and the parties finished their briefing in January 2008.

Findings of Fact

The parties sign a memorandum of understanding, discover environmental contamination, and draft a development agreement

In 1990, GSA began the process of selecting a site for a new courthouse in Minneapolis, Minnesota, and part of this process involved discussions between GSA and MCDA. Appeal File, Exhibits 1, 2.¹ In November 1990, MCDA drafted a memorandum of understanding which said MCDA would acquire a site and convey it to GSA at no cost. The parties realized the cost of the project would exceed the amount of federal funds available, and the draft memorandum said MCDA would provide funds, referred to as its project obligation, to help defray the project's cost. The draft also said MCDA would not make any warranties or representations regarding environmental conditions at the site. Exhibit 2.

The proposed project site was one city block square. The Flour Exchange Building was located in the northeast corner of the block. To the west of the Flour Exchange Building was a parking garage which was used by the City. Within the basement of the garage were two underground fuel storage tanks. To the west of the Flour Exchange Building and to the north of the City garage was one additional underground fuel storage tank. Two more underground tanks were located in the southwest part of the site, under the Court Park parking garage, which was a privately-owned parking garage. The remainder of the site contained a surface parking lot and a three-story brick building. In order for the proposed project to be constructed, the block would have to be cleared of all existing structures except the Flour Exchange Building. Exhibits 2, 8, 37; Transcript at 19-20.

In April 1991, MCDA met with STS Consultants (STS) regarding the proposed site and STS gave MCDA a proposal for providing geotechnical engineering services for the project. The services were to include subsurface exploration and evaluation of the foundation bearing soils, and providing recommendations for foundation design and constructability of the project. STS said that because of the potential for petroleum leakage from underground storage tanks, all soil samples would be screened for the presence of petroleum hydrocarbons. Exhibit 6. STS is a firm with extensive experience in dealing with petroleum contamination and had an existing contractual relationship with MCDA to deal with contamination issues. Transcript at 14.

¹ All exhibits are found in the appeal file, unless otherwise noted.

The parties signed the final version of the memorandum of understanding in May 1991. The memorandum explained the parties intended to enter into a binding Development Agreement, and said the estimated date for MCDA to convey the property to GSA was January 1, 1993. Exhibits 7, 9.

In June 1991, STS sent its subsurface exploration report to MCDA, and MCDA provided the report to GSA. STS made nine soil borings in the course of its exploration. Although a complete copy of the report is not contained in our record, the portion we have shows STS found groundwater and possible soil contamination due to the presence of gasoline. In addition, the report mentions the presence of several petroleum storage tanks. Exhibits 8, 51 at 816.

MCDA prepared a draft Development Agreement and gave it to GSA in early July 1991. According to this draft, GSA, MCDA, and the City were aware of the existence of a gasoline release on the site and MCDA, would be responsible for remediating this condition. The draft said GSA's obligation to accept conveyance of the property would be conditioned upon review and approval by GSA of environmental conditions, among other things, and established times within which GSA would have to make any objections to such conditions. If MCDA could not cure the objectionable conditions, GSA could terminate the agreement, waive its objections, or accept conveyance of the property. If GSA accepted the property, the draft said the amount of money needed to cure the conditions would be taken into consideration when determining the amount of MCDA's project obligation. The draft Development Agreement said MCDA would not make any warranties or representations regarding environmental conditions at the site, except to disclose any actual knowledge it had of such conditions. Exhibit 9.

In mid-September 1991, GSA supplied MCDA with its proposed changes to the draft Development Agreement. Exhibit 12. Among other things, GSA wanted to include language which said that before MCDA conveyed the property to GSA, MCDA would ensure remediation of "any and all" environmental hazards and which also said such hazards included, but were not limited to, gasoline and other hydrocarbon leaks discovered during initial soil testing. Also, GSA wanted the agreement to provide that if GSA objected to conditions which MCDA could not cure within ninety days, GSA could decide to accept conveyance of the property if the amount required to correct the condition was added to MCDA's project obligation. Exhibit 12 at 290.

By the end of December 1991, the parties had agreed upon several additions to the text of the draft agreement. MCDA acknowledged the existence of an adverse environmental condition consisting of a release of gasoline and/or other hydrocarbons. MCDA said before it conveyed the property to GSA, it would assure remediation of this and

any other adverse environmental condition “theretofore identified” by GSA. Also, at closing MCDA would deliver an agreement to hold GSA harmless from liability in connection with the existence or remediation of such conditions. Exhibit 14.

STS completes its remedial investigation and corrective action design

On June 12, 1992, STS provided MCDA with the results of its remedial investigation of the building site. In order to prepare this report, STS made eight additional soil borings in January and February 1992. The results of the investigation showed the presence of petroleum-impacted soils and groundwater perched on a clay layer above bedrock. STS said the affected area appeared to be limited to the northeast part of the site. STS’s report included a diagram of the contour of the groundwater. STS recommended removing the underground storage tanks, as well as treating the petroleum-impacted soils and the contaminated groundwater. Regarding affected soils, STS recommended excavating and treating contaminated soil which had already been identified and which would be identified when the storage tanks were removed. STS recommended stockpiling the excavated affected soil, which it expected to be approximately 400 cubic yards, and transporting it to a treatment facility. In addition, STS recommended installing a soil vapor extraction system to remove petroleum vapors from affected soil which remained at the site. Regarding affected groundwater, STS recommended creating a collection sump and installing a pumping system to remove the groundwater from the saturated sands. The extracted groundwater would then be pumped to treatment equipment. The proposed treatment equipment could involve transporting the groundwater to an approved disposal location, using charcoal filters to remove the contaminants on site, or using an air stripper equipped with a charcoal filter to remove contaminants from a discharge stack. STS’s recommendations were contingent upon gaining access to the site after demolition of the existing structures on the property, when excavation could begin. Exhibits 18, 51 at 816. MCDA provided the STS report to GSA in early July 1992. Exhibit 506.

On October 19, 1992, STS gave MCDA its corrective action design for the project site. Exhibit 19. The ongoing operation of the City parking garage limited the area which STS could affect with its design. Transcript at 23-24. STS decided it was not feasible to remove and treat all of the affected soils. Also, STS decided bioremediation would not be the most cost-effective treatment method when taking into account the physical constraints at the site. Exhibit 20. Bioremediation is the process by which, over time, petroleum contamination is broken down by naturally-occurring bacteria in the soil, which are sometimes assisted by the introduction of additional oxygen and nitrogen. Transcript at 44-45. The process requires that the site conditions allow some control over factors such as moisture, nutrients, soil chemistry, and permeability. Exhibit 19.

STS's design included a soil vapor extraction system to remediate the soil on the site. The soil vapor extraction system consisted of wells which would be used to pull air and volatilized petroleum compounds through the contaminated soil. STS said this system would "remove residual vapors from the soil so that when the groundwater treatment is complete, no residual compounds will be contained within the soil." To remediate the groundwater at the site, STS's design included a groundwater sparging, extraction, and treatment system. Exhibit 19 at 426. STS determined the majority of contaminants at the site were in the groundwater and the extraction system consisted of wells from which contaminated groundwater would be pumped. Groundwater extraction would be the primary means of contaminant removal at the site. The groundwater sparging system consisted of wells through which air would be forced into the contaminated soil below the contaminated groundwater. Sparging would be used as a form of treatment for the groundwater if the recovery rates at the extraction wells were limited and also used as a means of pretreating extracted water. STS proposed to install its system in the basement level of the existing City garage at the site, to operate the system for approximately four months, to remove it when demolition began, and to reinstall the system after demolition if remediation was not completed. The estimated cost of this system was approximately \$51,000. Exhibit 19; Transcript at 223-24.

A few days later, MCDA provided STS's corrective action design to the Minnesota Pollution Control Agency (MPCA). Exhibit 20. MPCA reviewed the STS reports and recommendations, and approved the corrective action design with modifications and comments on February 22, 1993. MPCA said the full extent of soil contamination and groundwater within the perched aquifer had not been fully determined, and additional work would be required by MCDA in order to determine the full lateral and vertical extent of the groundwater. MPCA also provided specific guidance as to cleanup goals and monitoring requirements. MPCA understood a final design for the new courthouse had not yet been selected, and knew the design could determine the amount of soil excavation which would be required. MPCA said it appeared STS's proposed corrective action design would be used "at least as a temporary remediation effort depending upon the final outcome of the building design process." Based upon conversations with STS, MPCA said it appeared that excavation to bedrock might be necessary. If so, MPCA said it would ask that the clay deposit on top of the bedrock not be excavated because the clay acted as a barrier to the migration of petroleum contamination. Also, deep excavation could require dewatering of contaminated groundwater. MPCA cautioned that if deep basements were to be constructed, "the potential for migration of petroleum vapors into these deep structures should be considered in the building design" because the contaminated clay deposit would remain at the site. Exhibit 21.

MPCA also said its approval of the corrective action design qualified MCDA's cleanup costs to be eligible for reimbursement from the Minnesota Petroleum Reimbursement Fund (the Petrofund). Exhibit 21; Transcript at 43. The Petrofund was established by the state in the mid-1980s to reimburse owners of underground storage tanks for the cost of cleaning up their sites. In the beginning of the program, MPCA required the near-total cleanup of contaminated sites. As time went on, however, MPCA became the owner of orphaned contaminated sites and it became much more aware of the cost of total remediation. As a result, it began to allow some contaminants to remain in place if there would be no affect upon future users of the groundwater or the soils. MPCA realized that instead of spending hundreds of thousands of dollars to remediate a site, it could allow bioremediation to occur over a period of time. Transcript at 43-44.

GSA issues a request for proposals and the parties sign the Development Agreement

On November 27, 1992, GSA issued a request for proposals (RFP) for designing and constructing the project. The deadline for submitting a proposal was February 16, 1993. Exhibits 25 at 613, 46 at K-1.

GSA, MCDA, and the City entered into the Development Agreement on March 19, 1993. The agreement said that after remediation of environmental conditions, MCDA would convey title to the project site property to GSA. The project to be designed and built by the GSA contractor would include a courthouse with an underground parking garage and a second underground parking garage beneath a public plaza. GSA would lease the second garage to the City for operation as a municipal parking garage. Approximately \$90 million in federal funds and \$9.6 million in MCDA funds (the project obligation) would be used for the project. Exhibit 22.

The Development Agreement said GSA, MCDA, and the City were "aware of the existence of petroleum hydrocarbons on the Property, the remediation of which for all purposes of this Agreement shall be the responsibility of MCDA." Exhibit 22 at 468, 470-71. Section 4.03 of the agreement said the extent of GSA's obligation to accept conveyance of the property was conditioned upon GSA's review and approval of, among other things, environmental matters and conditions. After the agreement was signed, MCDA was to carry out at its expense soil, environmental, and other tests as MCDA and GSA deemed reasonably necessary. The agreement explained how the parties would proceed if GSA objected to any of the test results. Exhibit 22 at 477. MCDA agreed to clear the property of all structures and improvements and to convey it to GSA "ready for commencement of construction of the Project." Exhibit 22 at 478, 589-90.

Section 4.03(b)(iv) of the Development Agreement provided:

The MCDA acknowledges the existence on the Property as of the date of this Agreement of an adverse environmental condition consisting of petroleum hydrocarbons discovered in the course of initial soil testing. Prior to conveyance of the Property to GSA the MCDA shall assure remediation of all adverse environmental conditions theretofore identified by MCDA, the City or GSA. At closing the MCDA will deliver an undertaking to hold harmless and defend GSA from liability in connection with the existence or remediation of adverse environmental conditions theretofore identified by MCDA, the City or GSA.

Exhibit 22 at 479.

Section 8.04 read as follows:

Cost Containment. GSA's mission is to provide quality space in a timely manner and to ensure the best value to the government and the public. GSA will strive to maximize the efficiency and effectiveness of its procurement process in order to deliver the greatest value to the public and minimize the construction cost. This concern shapes GSA actions throughout the procurement, construction and operation of a Federal facility. GSA will solicit the assistance of MCDA and the city in cooperative efforts to minimize Project and Plaza Garage costs, and thereby GSA, MCDA and City expenditures, throughout the life of the Project and Plaza Garage.

Exhibit 22 at 498.

The Development Agreement contained a timetable which contained estimated dates for upcoming events, such as the beginning of demolition activities and the receipt of best and final offers (September 1, 1993), closing the conveyance of the property to GSA (November 23, 1993), award of the design/build contract (December 15, 1993), and completion of the project (June 15, 1996). Exhibit 22 at 537.

STS's corrective action design is implemented and the remediation effort begins

In March or April 1993, STS made another exploration of the site and drilled four additional borings. Exhibit 51 at 817. The STS system for remediating conditions at the site was put in place by a well drilling company in April and began operating in mid-May 1993. Exhibit 28 at 645. The system contained four drilled wells. Three of the wells were to be

used for the combined tasks of vapor extraction, air sparging, and groundwater extraction, and one well was to be used for vapor extraction and air sparging. The system also contained pumps, a blower, a compressor, a groundwater treatment vessel, and an electrical control system. Exhibit 28 at 639-42. When STS designed and installed this system, it did not know the Development Agreement called for MCDA to convey the site to GSA in November 1993. Transcript at 102.

At the end of June, in accordance with the Development Agreement, GSA noted its objections to the presence of the underground storage tanks and the presence of gasoline and soil contamination due to leaks from the tanks. Exhibit 23. In early August, MCDA responded to GSA's objections and said the tanks would be removed as part of MCDA's site clearance activities in September. MCDA also told GSA of MPCA's approval of the STS corrective action design. In addition, MCDA said it expected the corrective action being taken would be completed by the closing date. Exhibit 26.

In late September 1993, the STS remediation system was removed to make way for demolition of existing structures on the site. One underground storage tank was removed from the site on October 15. Exhibits 35, 37 at 676. In a supplemental report dated October 21, STS recommended the system be reinstalled after demolition was complete because its analysis of groundwater showed its contamination had not been sufficiently remediated when the system was removed. Exhibit 28 at 649-50.

In mid-October, MCDA asked GSA if it intended to award the design/build contract on December 15, as scheduled in the Development Agreement. If GSA planned to delay the award of the contract, MCDA wanted to delay the conveyance of the property to GSA, which was supposed to occur in late November. MCDA said it was in the process of evaluating the results of its remediation efforts and might require added time to clean up the site to MPCA's standards. Exhibit 27.

In response, GSA expressed its concerns to MCDA about the timing of the pollution remediation effort. GSA explained it could not award the design/build contract before it had title to the property, and could not take title to the property until the adverse environmental conditions were remediated. Also, GSA noted that closing the conveyance of the property was supposed to occur fifteen days prior to contract award, which was scheduled for December 20. GSA said it needed to resolve this issue as soon as possible, because it might affect GSA's ability to award the design/build contract on schedule. Finally, GSA asked MCDA when it anticipated completing the remediation work. Exhibit 30.

GSA spoke with MCDA about these concerns on November 8, and again on November 10. Exhibits 30, 509. On November 10, GSA said MCDA's suggestion to delay

the closing date was an unworkable alternative because it would seriously affect the project's schedule. GSA said it had worked to keep the project on schedule and asked MCDA to expedite the remaining demolition and remediation work and do whatever it needed to do in order to convey the property to GSA at the end of November. MCDA said it would have additional information about the remediation efforts at the end of the following week, and GSA asked MCDA to share its information with GSA. GSA emphasized the importance of receiving a clean site in accordance with the Development Agreement. Exhibit 509.

Two underground storage tanks were removed from the site on November 11, 1993. Although the soil appeared to be clean, it emitted a rather strong odor of petroleum when it was disturbed. The depth of soil contamination was considerably greater than GSA's architect had been led to believe by MCDA in a conversation the previous week. GSA's architect was The Leonard Parker Associates (TLPA), which provided GSA with design and construction quality management services for the project. Exhibits 29, 31; Transcript at 342. STS said remediation would be completed thirty to sixty days after November 23, which was apparently when it anticipated reinstalling its system. The remaining underground storage tanks were scheduled to be removed on November 15. Exhibits 31, 537.

On November 15, 1993, MCDA, MPCA, STS, the demolition contractor, and the well drilling contractor met to discuss the reinstallation of the remediation system. They decided to install several new system components, including a soil vapor extraction intercept trench to capture the off-site migration of petroleum vapors and nineteen air sparging points to force air into the groundwater. In addition, the initial STS plan was to excavate all of the contaminated soil around two underground storage tanks in the southwest part of the site. However, when the tanks were removed, all of the contaminated soil could not be removed without collapse of the adjacent street and sidewalk. Therefore, STS planned to install the soil vapor extraction system to treat the soil which could not be removed. Also, accessible contaminated soils above the water table were to be excavated, a forced air system was to be put in place to treat contaminated soil which had been excavated, and a large-diameter groundwater extraction well was to be installed. Due to a threat of litigation by the Flour Exchange Building, no groundwater had been extracted since demolition had begun. Exhibit 37 at 681-87; Transcript at 41.

Demolition work on the site was completed on November 19, 1993. On November 24, STS reinstalled the venting and air sparging system, with the additions and modifications discussed on November 15. Exhibit 537; Transcript at 48-49. Because MPCA had attended the November 15 meeting, because MPCA typically takes months to approve a remediation plan, and because STS understood MCDA wanted to maximize the amount of remediation at the site before it was conveyed to GSA, STS did not seek MPCA's

formal approval for the additions and modifications to the remediation system. Transcript at 49. STS did not believe it needed to obtain MPCA's approval at this time. Transcript at 54-55.

On November 23, the day before STS reinstalled its system, GSA, MCDA, and MPCA representatives participated in a conference call to discuss remediation. In a letter sent to MCDA the next day, GSA said it had serious concerns regarding MCDA's efforts to fulfill its Development Agreement obligations. During the conference call, GSA understood MCDA and MPCA to suggest it was GSA's responsibility to remediate the adverse conditions before the property was conveyed to GSA. GSA disagreed and said the suggestion was contrary to MCDA's commitments to GSA. Until recently, GSA said, it understood remediation efforts were moving forward and the property would be conveyed to GSA at the end of November. GSA said it would not take title to the site in its current condition and could not award a design/build contract before it had title and received the financial contribution from the City and MCDA. GSA pointed out the lack of timely remediation could jeopardize the design/build procurement. GSA said it was inappropriate for MCDA to suggest GSA either assume responsibility for excavation or remediation of soil and groundwater, or amend the RFP and place additional limitations or obligations upon prospective design/build contractors. GSA said the RFP did not include restrictions on excavation of the site and the entire site had to be available for development without any restrictions on the depth of excavation or foundation work. GSA wanted the City and MCDA to tell GSA what they intended to do to resolve the remediation issue. Exhibit 32.

An MCDA memorandum dated November 30, 1993, summarizes a discussion among GSA, MPCA, and MCDA. In response to the RFP, some offerors proposed excavating the entire site down to bedrock. MPCA said if there was no longer any contamination at the site, there would be no problem with excavating the clay over the bedrock and removing the groundwater, so long as MPCA approved the excavation method. In addition, caissons drilled to bedrock would be acceptable if they were sealed. GSA said it had not provided the STS corrective action design to offerors because it assumed MCDA would turn over a clean site. However, MCDA understood GSA was considering making information regarding the remediation effort available to offerors, reopening negotiations, and asking for new best and final offers. MCDA proposed to continue soil and groundwater venting and sparging, and said it expected to reach MPCA approval limits in two weeks. Exhibit 511.

On December 3, 1993, MCDA responded to GSA's November 24 letter. MCDA said it fully accepted its responsibility for remediation as required by the Development Agreement. It also said completing the remediation of a petroleum release could take an extended period of time if, as at the project site, groundwater was affected. MCDA underscored that its obligation was to assure remediation was accomplished. MCDA said

discussions among GSA, MCDA, and MPCA after November 24 appeared to have established that a remediation plan could be in place which would have necessary water and soil remediation activities completed off-site or in some other manner which would not require GSA to amend the RFP. MCDA said it would bear the cost of such remediation activities. Exhibit 35.

Representatives from GSA, MCDA, MPCA, STS, TLPA, and Sverdrup Corporation (a consultant to TLPA) met on December 16 to discuss conditions at the site, remediation efforts, and conveyance of the property to GSA. STS said it had excavated contaminated soil which would have to be cleaned and taken to a disposal site. Soils above groundwater could be treated within thirty to sixty days using the current STS system. However, soil in contact with groundwater would continue to be affected. Between 250,000 and 1,000,000 gallons of groundwater on the site were near the Flour Exchange Building and pocketed above the clay layer. STS was air sparging the water, but could not extract the water due to a threatened suit by the Flour Exchange Building and this meant the remediation process was going to take longer than expected. GSA was ready to award a contract and did not believe offerors should have to pay for any additional design effort due to the current conditions at the site. MCDA acknowledged that developing a remediation system after award would be a change to the contract, and said it would pay for added costs caused by the change. MCDA and GSA agreed that the Development Agreement would be amended to say GSA would inform the design/build contract offerors that the contractor would be required, after award, to design a remediation system together with GSA, MCDA, and MPCA. The cost of designing the system and associated administrative costs would be borne by MCDA. Exhibit 36.

On December 20, 1993, STS provided MCDA a report regarding the activities it had undertaken at the project site during and immediately after demolition. The system components mentioned on November 15 were in place and operating, except STS had not been able to extract and treat groundwater. During installation of the remediation system components, approximately 590 cubic yards of contaminated soil were removed in addition to the approximately 160 cubic yards which were removed from around four of the storage tanks. STS had recently made twenty-three additional soil borings, which showed there were several small areas where contaminated soils remained in place. Exhibit 37.

GSA amends the RFP, the parties amend the Development Agreement, and MCDA conveys the property to GSA

GSA issued amendment 12 to the RFP on December 21, 1993. The amendment said GSA was reopening negotiations and established January 11, 1994, as the revised date for best and final offers. The amendment said there were at least two areas of contamination

at the site, explained the City and MCDA were working to remediate these problems, and said the exact condition of the site would not be known at the time the design/build contract was awarded. The amendment also said any further remediation efforts and/or additional foundation work required to be performed by the design/build contractor would be addressed through a contract modification. Also, before construction, if required, the contractor in consultation with GSA, the City, MCDA, and MPCA would submit plans for design modifications related to foundation work and remediation efforts so the selected design could be constructed on the site without worsening any existing adverse environmental conditions and/or to allow remediation efforts to continue for as long as they were needed. Amendment 12 included three reports prepared by STS regarding conditions at the site and one report prepared by the contractor who removed the underground storage tanks. Exhibit 38. GSA issued amendment 13 to the RFP on December 29, to provide offerors with a copy of the STS report dated December 20. Exhibit 40.

In early January 1994, GSA provided the City and MCDA with a draft amendment to the Development Agreement. The draft said the Development Agreement required MCDA to remediate all adverse environmental conditions identified before the property was conveyed to GSA. It also said that after the parties signed the Development Agreement, they became aware of contaminants other than petroleum at the site. The draft amendment said the parties realized the conveyance of the property and construction of the project would be unduly delayed if they had to wait until MCDA remediated all adverse environmental conditions at the site. Therefore, said the draft, the parties wanted to amend the Development Agreement to provide that MCDA would fund remediation of all adverse environmental conditions and related site preparation after award of the design/build contract. Exhibit 41.

GSA's draft amendment to the Development Agreement said GSA would issue a contract modification telling offerors of the conditions at the site. After award, GSA would tell the contractor that its development of foundation design plans would be prepared in consultation with GSA, MCDA, the City, and MPCA, in order to address the remediation effort to be undertaken by the contractor and/or MCDA to remove contaminated soil; to remove, treat, and/or seal the property from contaminated groundwater; and/or to isolate the site from adjacent properties. The foundation design plans would be made available to the City, MCDA, and MPCA for review, consultation, and comment. MCDA would pay all costs reasonably associated with the remediation effort. The draft also said the contractor would not be required to alter its awarded design, the remediation plan, or the project schedule in order to achieve a less costly remediation effort. GSA would issue a contract modification to carry out the remediation efforts in conjunction with the excavation and foundation phases of construction, and MCDA and the City would pay the cost of the contract modification, including but not limited to design, construction, overhead and profit,

delays, and all associated administrative costs of GSA. The draft amendment said MCDA would participate with the City, GSA, and MPCA in reviewing the contractor's foundation design plans and MCDA would comment on the plans in order to ensure they identified all remediation efforts associated with the site. The draft also said MCDA would provide the design/build contractor with an approved site for disposing of contaminated soil. Exhibit 41.

An attorney for the City and MCDA revised the draft and returned it to GSA and MCDA on January 7. Among other things, the revised draft limited MCDA's responsibility to the remediation of contamination caused by petroleum. It also said the standard for remediation would be the rules, regulations and determinations of MPCA. Also, it required the foundation design plans to be made available to the City, MCDA, and MPCA for review, consultation, comment, and approval. The revision eliminated the provision contained in the draft which said the design/build contractor would not be required to alter its awarded design, the remediation plan, or the project schedule in order to achieve a less costly remediation effort. The revision also said MCDA and the City would participate with GSA and MPCA in reviewing the contractor's site foundation design plans. In addition, MCDA and the City would make sure the contractor's plans would be coordinated with MCDA's remediation efforts. Regarding payment of the cost of the contract modification, the revision said MCDA and the City would pay the reasonable cost of the modification, including design, construction, overhead, and profit, but not delay costs or GSA's administrative costs. The revision said MCDA would continue its petroleum contamination remediation efforts following award of the design/build contract. The revision to the draft amendment also said GSA would use its best efforts to cause the design/build contractor to implement the least costly remediation design. The revision said MCDA would decide whether to approve paying for the excess cost of disposing of contaminated soil. Exhibit 42. The attorney who drafted the revisions said the purpose of giving the City and MCDA the right to approve the foundation design plans was to protect against writing a "blank check." Exhibit 513 at 2.

On January 11, 1994, GSA told MCDA the revisions to the draft amendment were unacceptable because they did not represent the agreement reached by the parties on December 16, 1993. GSA said the result of the December 16 meeting was an acknowledgment by MCDA that it could not convey a remediated site on the date the conveyance was supposed to occur, and a major concession by GSA to accept a contaminated site in exchange for MCDA's agreement to fund a remediation plan to be designed and implemented by GSA's design/build contractor pursuant to a contract modification. GSA objected to limiting MCDA's responsibility for remediation to contamination caused by petroleum hydrocarbons. It also objected to allowing MCDA to fulfill its responsibility by approving the least expensive remediation method. In addition, GSA objected to MCDA's position that it would not pay delay and administrative costs

associated with the remediation effort. GSA also said it could not assure MCDA access to the site in order to continue its remediation efforts after the design/build contractor began its work because MCDA's presence on the site could interfere with construction. Exhibit 43.

The parties signed the amended Development Agreement on January 14, 1994. Section 13.01 said MCDA agreed to pursue and fund remediation of contamination. It also provided, "The definition of contamination and the standard of remediation for all purposes of this Agreement shall be in accordance with the rules, regulations and determinations of the [MPCA]." Contamination was limited to contamination identified before January 14, 1994, or subsequently identified as the result of excavation for construction or as the result of implementation of remediation. The amendment said if MCDA performed the obligations imposed by the amendment, this would satisfy the responsibilities imposed upon MCDA by the second sentence of section 4.03(b)(iv) of the Development Agreement. Exhibit 46 at 776.

The general thrust of the amended agreement was that GSA would tell the design/build contractor about the environmental condition of the property, the design/build contractor would develop a remediation plan and a foundation plan which addressed the remediation effort to be undertaken by the contractor, GSA would issue a contract modification to effect the remediation effort, and MCDA would pay the cost of the modification. Exhibit 46. The language of several portions of the amended agreement are important to a resolution of this appeal and we set these out in the following paragraphs.

Section 13.03 of the amended Development Agreement read as follows:

Plan Development and Approval. The Design/Build Contractor, immediately after award of the Design/Build Contract, will be advised in writing by GSA that its development of the design plans for the foundation of the Project and the Plaza Garage will be prepared in consultation with GSA, MCDA, the City and MPCA in a manner which addresses the necessary Contamination remediation effort to be undertaken by the Design/Build Contractor in conjunction with the excavation and foundation phase of construction. The Design/Build Contractor will develop a remediation plan which may include but shall not necessarily be limited to removing remaining contaminated soil and/or contaminants, removing, treating and/or sealing the Property from the contaminated groundwater located in portions of the Property, and/or isolating the Property from adjacent properties. The foundation design plans and the remediation plan, including cost itemization in reasonable detail and specificity of all costs, if any, above and beyond the costs in the fixed price

contract which are reasonably associated with the remediation effort, will be made available to the City and the MCDA for review, consultation and comment. The MCDA and the City will participate with GSA and MPCA in reviewing the selected Design/Build Contractor's site foundation design plans including the remediation plan, and will receive all relevant information relating thereto. The MCDA and the City will constructively comment on the plans being developed. The MCDA and the City shall be afforded reasonably adequate time within the parameters of the project schedule as determined by GSA, for their review, consultation and comment. GSA will use its best efforts on behalf of the project and the parties involved to direct the Design/Build Contractor to develop a reasonable and effective foundation plan and remediation plan which provides the greatest value to GSA, MCDA and the City. GSA shall have sole authority to approve and determine (a) the appropriate foundation plan (subject to rights of the City regarding the Plaza Garage . . .); and (b) the appropriate remediation plan subject to MPCA approval.

Exhibit 46 at 777.

Section 13.04 of the amended Development Agreement read in relevant part as follows:

Contract Modification. A contract modification for the design of a remediation plan will be issued. Upon approval of the remediation plan by MPCA, the GSA will issue a contract modification to the Design/Build Contractor in accordance with GSA's procurement and contract rules and regulations to effect the appropriate approved remediation efforts in conjunction with the excavation and foundation phase of construction. The MCDA acknowledges responsibility for and agrees to pay the cost of such contract modification(s), including but not limited to design, construction, overhead and profit costs, delay costs and all associated management and inspection costs to GSA. No delay costs or management and inspection costs shall be incurred with respect to any period prior to award of the Design/Build Contract.

Exhibit 46 at 778.

GSA agreed to permit MCDA to pursue remediation activities on the property and the parties agreed to use their best efforts to ensure cooperation with the design/build contractor regarding their activities so, for example, off-site activities under MCDA's

control would not adversely affect the contractor's performance of the design/build contract. At any time, GSA could terminate the permission it was granting to MCDA to carry out its remediation activities. MCDA agreed to provide the design/build contractor with an approved site for MCDA's storage, treatment, or disposal of contaminated soil, if necessary. Exhibit 46 at 778-79.

Section 13.07 of the amended Development Agreement read as follows:

Cost Containment; Contract Administration. The MCDA and the City acknowledge that they may not compel GSA to have the Design/Build Contractor to [sic] alter the awarded design, including but not limited to foundation design or the project schedule, in order to achieve a less costly remediation effort. All matters affecting the Design/Build Contract administration shall be the sole responsibility and authority of GSA and the GSA contracting officer, with the exception of funding to be provided by the MCDA. All parties acknowledge the need for expediency in developing a remediation plan and will pursue all reasonable efforts to develop a MPCA approved remediation plan within the project's established work schedule.

Exhibit 46 at 779.

Section 13.08 of the amended Development Agreement read as follows:

Funding. The MCDA's funds to pay the cost of the contract modification(s) as set out in Section 13.04 will be transferred to GSA within five (5) working days prior to the issuance of the contract modification(s), as a further contribution for deposit in the Federal Building Fund set up for use on the Project. The transfer of such funds shall not be contingent upon which design or remediation plan/design/effort is selected. Furthermore, the MCDA and the City acknowledge that the current foundation plans and the resulting remediation plans and costs shall not be a condition/factor in determining the award of the Design/Build Contract.

Exhibit 46 at 779.

On January 19, 1994, MCDA conveyed the project site property to GSA. Exhibit 537.

On February 4, Sverdrup sent GSA a technical memorandum which contained Sverdrup's review and evaluation of documents generated by other consultants who had

explored environmental issues at the project site. Based upon its review, Sverdrup did not believe the groundwater at the site was contained within a depression in the clay layer immediately above the bedrock, which is how the location of the groundwater was shown in the STS June 12, 1992 report. The groundwater appeared to be recharging from some unknown source, and this meant there was a possibility of the presence of a nearly constant supply of groundwater which could enter a construction excavation. Sverdrup also commented on the remediation efforts undertaken and said the STS system was performing as intended. However, Sverdrup also said the system appeared to be a slow means of removing contamination. Exhibit 51.

GSA awards the design/build contract and requests a proposal to design a plan to remediate conditions at the site, while MPCA continues its oversight

On February 14, 1994, GSA accepted the best and final offer presented by BPT Courthouse Associates (BPT). BPT's concept was to build the new courthouse on the north part of the site. It would be thirty stories tall and have an underground parking garage. On the south part of the site, BPT would construct the public plaza and beneath it, a deep underground parking structure. GSA's acceptance told BPT it was not to proceed with its work until it received a notice to do so. Exhibits 52, 120. A few days later, GSA, through TLPA, asked Sverdrup to prepare a request for proposals to accomplish the remediation of the conditions at the project site, which Sverdrup did. So far as our record shows, GSA never issued this request for proposals. Exhibit 53. On March 17, GSA gave BPT notice to proceed to perform the design/build contract. The notice to proceed told BPT it had 915 calendar days to complete its work and that its performance period began running when it received the notice on March 18. Exhibit 54.

On March 18, GSA gave BPT a request for a proposal to change the terms of the contract (the remediation RFP) and asked for a response within ten days. GSA said BPT's response should include an itemized cost breakdown and documentation to support any delay which would result from the change to the contract. The remediation RFP described the work required by the change as follows:

The contractor shall perform all services necessary for the design of the remediation of the site of the New Federal Building - United States Courthouse in Minneapolis, Minnesota. Remediation of the site shall include, but not be limited to the removal of contaminants in the soil and groundwater to the levels acceptable to the General Services Administration and the Minnesota Pollution Control Authority and, if applicable, redesign of the building foundation system. Work shall include, but not be limited to, related planning, additional exploration, and engineering design. Remediation shall

take into consideration limiting the impact upon completed construction. Provide construction documents, plans, specifications, and all other necessary documentation for remediation.

Exhibit 54 at 847. BPT told GSA it wanted to talk to MPCA and would need more than ten days to respond to the remediation RFP. Exhibit 54 at 866.

On March 22, BPT transmitted the remediation RFP to its architect and its construction contractor, Turner Construction Company (Turner). The transmittal included a copy of the amended Development Agreement. Exhibit 55. The record does not establish when BPT received a copy of the amended Development Agreement.

As GSA was proceeding to award the design/build contract, MPCA continued to monitor the activities at the project site. On February 28, 1994, MPCA wrote to MCDA regarding the remediation effort. MPCA said it thought the original STS corrective action design was a feasible method for reducing the contamination levels at the site because treating the soil and groundwater in place instead of moving it to another location minimized the risk to public health and the liability of the responsible party.² MPCA said it had been told that “most of the soil beneath the property would most likely have to be removed” when the site was developed, and treating the soil in place before it was removed would reduce or eliminate the need to treat the soil when it was excavated. MPCA also said it had been told the contractor might find it necessary to excavate through the clay layer above bedrock, and had warned of the consequences of removing the clay which held the perched, contaminated groundwater. MPCA said it approved the STS design based upon MPCA’s understanding that the date upon which the property was to be conveyed to GSA was not known and sufficient time was available to meet MPCA’s cleanup goals. Exhibit 53 at 838-39.

MPCA reviewed in its letter the remediation work which had been accomplished, which consisted of removing the underground storage tanks, excavating 160 cubic yards of contaminated soil stored at the site, installing the STS system, and removing the STS system so demolition could take place and the site could be cleared before it was conveyed to GSA. After the site was cleared, a remediation system was installed by STS which MPCA had not approved. During the installation process, an additional 590 cubic yards of contaminated soil were excavated and stored at the site and efforts were currently being made by MCDA to remediate all of the excavated contaminated soil. Exhibit 53 at 839-40.

² The City was the responsible party for purposes of paying the cost of dealing with the contamination present at the site. Exhibit 515 at 1538.

In its February 28 letter, MPCA said it had not approved the excavation of the additional contaminated soil, the new remediation plan, or the treatment of the excavated soil, and would not likely have done so. MPCA said it would have required modifications to all of the systems MCDA had put in place. Because development would begin soon, MPCA said it was not likely the soil could be remediated in place to the extent it would not require further treatment, which meant there was little financial gain to be made from the remediation efforts which were being carried out at the site. MPCA explained that MCDA's reimbursement from the Petrofund was quite likely going to be reduced because MPCA did not approve of the actions which were taken after the site was cleared, because the approved remediation system was in place for only four months, and because MPCA had not agreed to the excavation of any more than 400 cubic yards of contaminated soil. Exhibit 53 at 840-41. The policy of the Petrofund was to reimburse for the excavation and treatment of no more than 400 cubic yards of contaminated soil per site. Transcript at 50-52, 154.

In a section headed "MPCA Requirements," the February 28 letter reiterated MPCA's concern about excavating all of the soil, including the clay layer, above bedrock because this could cause contaminated groundwater to migrate to bedrock. Such migration would be unacceptable to MPCA, and MPCA understood BPT was going to work with MCDA and MPCA to mitigate this concern. MPCA said discussions with BPT could also include "the necessity of having to potentially mitigate the accumulation of organic vapors into the future building." MPCA noted the analysis of a groundwater sample collected by Sverdrup showed the presence of semi-volatile substances which exceeded allowable limits and which were not found in fuel products, and set out sampling and testing requirements. MPCA said contaminated soil remaining at the site would have to be removed due to future construction activities, and also said soil removed due to excavation activity would have to be screened, sampled, and stored. Excavated soil which was contaminated with more than ten parts per million of petroleum product would have to be separated from other soil, sampled, and analyzed. Exhibit 53 at 841-42.

MPCA did not believe MCDA had acted illegally or neglected the environmental concerns at the site, and did not intend to take any enforcement action against the City or MCDA. Exhibit 515. MPCA's main objection to reinstalling the system was that doing so made no sense because the site was to be excavated soon. Given no time constraints, MPCA thought the STS system most likely would have been successful. However, because construction was to begin in three months, MPCA did not see a large benefit would be achieved by reinstalling the system. The bulk excavation required for construction would achieve the remediation objective. Transcript at 245, 305-07.

MPCA's concern regarding the excavation of more than 400 cubic yards of soil stemmed from the fact that the Petrofund was not likely to reimburse MCDA for removing

more than this amount of soil. Transcript at 243-44. MCDA had known of the 400 cubic yard limit and made the decision to remove more soil, knowing it would not be reimbursed, because leaving the contaminated soil in place made no sense to MCDA. Transcript at 153-54.

STS understood MPCA's concern regarding the excavation of more than 400 cubic yards of soil was strictly financial, not environmental. Transcript at 50-52. STS also knew the semi-volatile substances which were not found in fuel products would need to be dealt with in order to have an acceptable site. These substances were not susceptible to treatment by the soil vapor extraction and air sparging techniques used by the STS remediation system, so STS would need to devise another method to deal with these contaminants. Transcript at 104-05.

STS responded to MPCA on April 19, and explained how it would screen, sample, remove, store, and analyze soils. STS explained its plan to use some soils as controlled fill and to use soil vapor extraction to treat stockpiled contaminated soil. Exhibit 68. On May 26, MCDA provided GSA with STS's April 19 response and GSA forwarded the response to BPT. Exhibit 82.

BPT responds to the request for proposals and MCDA rejects BPT's alternative plans

If GSA had known exactly what it wanted BPT to do to remediate the site, it would have issued a remediation RFP which set out GSA's requirements. In issuing the remediation RFP as it did, GSA intended for BPT to develop a proposal which contained its own means and methods for designing a system to remediate the site. GSA did not want to influence BPT's response. Transcript at 414.

On March 25, 1994, a meeting was attended by representatives from GSA, BPT, Turner, MPCA, Sverdrup, TLPA, MCDA, STS, GME Consultants (BPT's geotechnical engineer), and Ericksen, Roed/Johnston-Sahلمان and Associates (BPT's structural engineer). The attendees discussed the status of the site, MCDA's current remediation efforts, MPCA's awareness of remediation efforts, MPCA's remediation goals for the project, and design and construction issues. Exhibits 56-58. BPT had engaged GME, a competitor of STS, to help formulate a response to the remediation RFP. Transcript at 122; Exhibit 58.

The meeting attendees discussed the contaminated soil stored on site, which they thought was close to being clean. The groundwater, located in the northeast corner of the site, was contaminated and current efforts would not remediate it. The water could not be removed due to concerns about how this would affect the Flour Exchange Building. GSA

was concerned that petroleum vapors from contaminated groundwater could affect the operation of the new construction. STS felt a permanent venting system would have to be installed to protect the courthouse from vapors in the future. MPCA said excavation had to comply with its requirements and if additional contaminants were encountered, excavation would have to stop until it approved the remediation actions to be taken. If contaminated soils were not removed, they would have to be monitored and remediated until they reached an acceptable level of contamination. MPCA also said if all the excavated soils were clean or if all contaminated soils above the groundwater were removed during excavation, the groundwater could remain in place and be allowed to remediate naturally. If all contaminated soils were not removed, the soils and groundwater would require further remediation. STS thought the soils would be free of contaminants within a short period of time and did not think soil contamination would cause a problem for construction. Exhibits 56-58.

After MPCA said the contaminated groundwater could remain in place if the contaminated soils were remediated, the discussion at the meeting concentrated on methods of construction. BPT provided a foundation plan sketch which showed the elevations of planned excavation across the site. The south part of the site would be excavated to greater depths than would the north part of the site. In the south, the foundation was to be slab-on-grade, one or two feet above bedrock. In the north, excavation would remain ten to eighteen feet above bedrock, and the foundation would be four-feet to six-foot diameter caissons set into rock. The parties then discussed methods of drilling the caissons that would be acceptable to MPCA. STS outlined a method for sealing the caissons to prevent polluted water from penetrating below the clay layer and MPCA said it would approve this method if it got a sketch showing the process. BPT planned to begin excavation in June or July 1994, and would provide MPCA with the sketch it wanted. Exhibits 56-58.

On March 29, based upon the discussion at the March 25 meeting, GME sent a letter to BPT which provided options for remediating the site in ways which would eliminate liability to BPT and its team members for the environmental conditions at the site. GME explained it had considered pumping and treating the contaminated water, air sparging and venting the soil, and bioremediation. However, GME concluded each of these remediation methods could be a long-term process and would leave some residual levels of contaminants. Also, each of these methods would have to be employed after construction, which would not alleviate the risks during construction. Moreover, each of these remediation methods could be difficult to install, operate, and maintain due to the presence of the new construction and the Flour Exchange Building. Exhibit 58.

GME also considered removing only unsaturated contaminated soils and leaving the contaminated groundwater in place, which MPCA said it would approve. This method

would require underslab venting and monitoring for an extended period of time due to the volatilization of petroleum from the saturated soils and groundwater. This would leave in place a long-term, latent liability because the water could spread or might have to be remediated later if standards and requirements changed. It could also give rise to claims by the owners of the Flour Exchange Building. Another option was to isolate the site by constructing a slurry wall around the entire site. After this was accomplished, all groundwater and contaminated soil could be removed from the site. Exhibit 58.

In its March 29 letter, GME also told BPT that, based upon a conversation with a representative of MPCA, it understood the Petrofund would not reimburse any more costs incurred in order to remediate conditions at the site because MPCA had previously approved one reimbursable remediation system for the site which MPCA thought would have cleaned the site to MPCA standards if it had been left in place. Exhibit 58.

On March 31, 1994, GSA told BPT it could have more time to respond to the remediation RFP and asked BPT to submit its response at its earliest convenience. Exhibit 61. On April 6, GSA met with BPT to provide GSA's comments on BPT's preliminary building design concepts. GSA's comments, which amounted to ten pages, spelled out the strengths and weaknesses of various aspects of BPT's preliminary courthouse design. Exhibit 64.

Ericksen wrote to BPT on April 7. Based upon recent meetings with MPCA and MCDA, Ericksen said it had worked to define a program which would remove all contaminated soils above the groundwater and prevent the groundwater from entering below the clay layer. Soils adjacent to the west wall of the Flour Exchange Building could remain in place because the existing data showed contamination levels there were below acceptable limits. Ericksen believed by using a grout curtain, a four-inch to six-inch wide barrier, along the south and west sides of the Flour Exchange Building, it could isolate the contaminated groundwater, remove contaminated soils as necessary, and comply with MPCA's requirements. Creating a grout curtain would eliminate the need to dewater below the Flour Exchange Building and would prevent the contaminated water from flowing into excavated areas. If it became necessary to remove all of the contaminated soils and water down to bedrock, this could be accomplished by adding a grout curtain around the perimeter of the site where sheet piles and wooden lagging were to be installed as a temporary retention system for the roadways around the site. Exhibit 63. Also, Ericksen recommended making more soil borings to investigate environmental conditions near the south edge of the Flour Exchange Building, where there seemed to be a gap in the available data. Exhibit 63 at 945.

Turner reviewed Ericksen's April 7 letter and provided comments to BPT on April 13. Turner was concerned about the unknown health hazards and potential liability

of creating a grout curtain around only the Flour Exchange Building. Turner liked the idea of using a grout curtain to dam the water and then completely removing the contaminated soils and the clay layer down the surface of the rock. Turner said it was ready to proceed immediately, assuming it received appropriate hold harmless and indemnification language from BPT and GSA with regard to removing the contaminated material. Turner also proposed to accomplish the work on an expedited schedule in order to minimize the impact of the remediation work on the overall construction schedule. Exhibit 65.

On April 14, 1994, GME summarized for BPT the alternatives which they had discussed. GME described the goals as being technically responsive to GSA and MPCA, while mitigating "100% of the risk associated with the remediation of the contaminated soil." GME's summary included Alternatives A and B, discussed in the following paragraphs. Exhibit 66.

Alternative A was to remove all or nearly all of the contaminated soil and groundwater from the site. This would satisfy MPCA and reduce the exposure of BPT and its subcontractors from the possibility of contaminants migrating to or from the site and vapors coming into the courthouse. Either the pile and lagging system would be redesigned to allow excavation to bedrock and a grout curtain installed behind the wall, or a structural slurry wall would be installed around the perimeter of the site. Then, all soil would be excavated to bedrock, the site would be dewatered, and the sand and clay would be excavated. No special approval would be needed to install the caissons and no vapor venting system would be needed. If BPT could not obtain indemnification from environmental contamination claims, this alternative would be considered. Exhibit 66.

Alternative B was based upon MPCA saying at the March 25 meeting that the contaminated groundwater could remain in place so long as the contaminated soil above the groundwater was removed. GME recommended asking MPCA for written approval of such a plan and also asking MPCA to confirm that soils which were contaminated with less than ten parts per million of petroleum product would not have to be excavated. Alternative B called for excavating contaminated soil to within one foot of the perched groundwater. GME recommended asking MPCA if contaminated soil near the west wall of the Flour Exchange Building could remain in place above the groundwater. If MPCA would approve this procedure, the soldier pile system would not have to be redesigned and the Flour Exchange Building would not need to be underpinned. Alternative B also included a grout curtain which would be installed parallel to the walls of the Flour Exchange Building, behind the pile and lagging and down to bedrock. Caissons and soldier piles would be installed in a method that satisfied MPCA and a vapor venting system would be installed. Alternative B would require BPT to obtain indemnification from environmental contamination claims. Exhibit 66.

On April 15, GME sent a letter to MPCA which contained a written description of the foundation construction, so MPCA could confirm its verbal approval to install caissons to bedrock through contaminated soil. GME explained its proposed procedure for installing the caissons and attached a diagram showing the steps involved in the installation. GME also provided a description of the proposed excavation plan and STS boring logs to show where contaminated soils had been found. GME said a key element of the excavation plan was its understanding that MPCA would allow contaminated soil to remain in place provided it was contaminated with less than ten parts per million of petroleum product. Exhibits 58 at 899-901, 67. On April 21, BPT asked GSA to confirm that MPCA agreed with the concepts contained in the GME letter. Exhibit 69. GME subsequently made twenty-four additional borings across the site because nearly all of the previous borings had been made in the two areas near where the underground fuel storage tanks had been located. GME's work was done entirely at BPT's expense. Exhibits 68, 91, 120.

On April 21 or 22, BPT provided GSA with a copy of GME's April 14 letter, which contained Alternatives A and B. BPT said it was in the process of preparing price estimates as well as preliminary estimates of the delays to construction associated with each alternative. Exhibit 70. Turner provided BPT with schedules related to the remediation effort and an estimate that the remediation effort would cost approximately \$3.2 million. This included \$97,000 in overtime pay which Turner would expend in an effort to make up delay days. Turner wanted to make up any lost time before December 1994, so it would not experience the ripple effect of the delay in the winters of 1994-1995 and 1995-1996. Exhibits 71, 73.

Sverdrup reviewed the alternatives proposed by GME and provided GSA with its comments on April 29. Sverdrup did not like Alternative B because, although it might be less costly than Alternative A, GSA would end up with a site which would require constant monitoring, which might require continuous venting of vapors, and which could produce liability issues in the future. Sverdrup divided Alternative A into A-1, which proposed the installation of a grout curtain behind the pile and lagging system, and A-2, which proposed the installation of a structural slurry wall. Sverdrup preferred Alternative A-2 because it would cut off water flowing into the site and also act as a structural system for the underground parking garages. Exhibit 72.

On May 3, Turner provided BPT with a draft scope of work for bidding the excavation, sheeting and bracing, and site remediation work based upon Alternative A. The work included isolating the site by installing a grout wall completely around the site's perimeter to cut off the potential flow of groundwater and soil vapors, and removing all contaminated materials down to bedrock and then backfilling with clean soil. Turner's draft included a substantial amount of detail describing how this work would be accomplished.

Exhibit 74. On May 19, Turner told BPT it expected a delay to its planned construction start date. It also told BPT this delay would cause other delays because it would shift work into the winter months which the best and final offer anticipated would be performed before winter. Turner also said it could not proceed with the design upon which its best and final offer was based, and it was continuing to work with GME and expected to have estimated prices for GME's alternatives available on May 24. Exhibit 76.

In a letter to BPT dated May 19, GSA said it was concerned that BPT had not yet responded to the remediation RFP. GSA asked for a response within ten days and said it could then continue the dialog with BPT, the City, MCDA, and MPCA. Exhibit 75.

GME completed a preliminary comprehensive corrective action plan for the site for purposes of MPCA's review, and provided the plan to BPT on May 19. The plan was preliminary because GME said it would need additional information before it could prepare a final plan. GME discussed the technical design of its Alternatives A and B, both of which would satisfy MPCA's requirements, and explained how the designs would be constructed. Alternative B was different from the Alternative B discussed in GME's April 14 letter to BPT. Instead of isolating only the Flour Exchange Building, Alternative B now called for isolating the north part of the site. This involved constructing a cutoff wall beginning at the southwest corner of the Flour Exchange Building and running east to west across the site, and then jet grouting around the west and north sides of the site and along the west wall and the southwest corner of the Flour Exchange Building. GME estimated it would take eight weeks to clean up the site using Alternative A and six weeks using Alternative B. Exhibit 77.

MCDA wrote to GSA on May 20. The amendment to the Development Agreement said BPT would develop a foundation plan in consultation with GSA, MCDA, the City, and MPCA. MCDA was concerned that GSA was not following this process. In MCDA's view, GSA would not fulfill the terms of the amendment if it were to present MCDA with a plan prepared by BPT or Turner without input from MCDA, even if GSA had not approved the plan. MCDA had received a copy of a Turner document which showed GME's Alternative A. In MCDA's view, such a concept would go far beyond what it called the "limited purpose and scope of remediation" called for by the amended agreement. MCDA described the actions needed to fulfill its responsibilities as perhaps including the removal of any "very localized soil contamination discovered during further excavation" and the "possible need to continue the perched water treatment." It also characterized as "minimal" the financial obligations imposed upon it by the amended agreement. Exhibit 519. MCDA gave the City Council a copy of its letter to GSA and said it was concerned GSA planned to demand a high price for wholly unnecessary remediation work. Exhibit 520.

Turner told BPT on May 23 that it would incur \$57,860 in costs related to preparing the design of a remediation plan. Exhibit 78. GME's estimated costs for the engineering and consulting work needed to remediate the site were \$116,000 for Alternative A and \$105,000 for Alternative B. Exhibit 79.

TLPA, MPCA, MCDA, Turner, and BPT met on May 26 to review Turner's scope of work for excavation, sheeting and bracing, and soil remediation. As we said earlier, this scope of work was based upon Alternative A. At the meeting, neither MPCA nor MCDA expressed any serious problems with Turner's proposal. MCDA and MPCA felt that isolating the north part of the site along the west, north, and east sides and removing soil below the planned level of the slab on the north part of the site was not necessary for remediation purposes. MPCA said it would not approve the plan as proposed by Turner because the plan went beyond what MPCA would require of MCDA. However, MPCA would not object to Turner's proposal so long as GSA and MCDA agreed as to the scope of work, GSA and MCDA developed a plan defining who was responsible for disposing of soil, and MPCA's requirements were met during excavation and off-site remediation. Costs were not discussed during this meeting. Exhibits 84, 86. Based upon the meeting, Turner provided BPT with a revision of the draft scope of work it prepared earlier in the month. The revision, like the draft, called for the site to be completely isolated and excavated. Exhibits 81, 87.

Also on May 26, Turner provided BPT with estimated construction costs for Alternatives A and B. The estimates were based upon MPCA's approval of a GME design and Turner beginning work on July 5. Turner expected a four-month delay to the completion of construction work. The cost of soil remediation for each of Turner's plans was approximately \$2.5 million, plus additional amounts for working in winter weather, added staffing and administrative costs, profit, bond, and contingencies. The total estimated costs were between approximately \$4.3 and \$4.5 million. Exhibits 85, 522.

On May 26, GSA responded to MCDA's May 20 letter. GSA said it had been following the procedures established in the amendment to the Development Agreement. GSA said it had not yet received a specific recommendation from BPT regarding remediation, and understood BPT was still discussing possible approaches with MPCA. BPT's ideas needed to be refined and developed, and additional meetings would be held with MPCA, the City, and MCDA to discuss the issue further. The statements MCDA made in its letter gave GSA the impression that MCDA was committed to an outcome which would minimize MCDA's costs and increase GSA's risks. GSA said it viewed this outcome as contrary to the amended agreement. Exhibit 521.

On May 27, BPT's architect provided BPT with its estimate of the cost of responding to the remediation RFP. Assuming there would be no modification to the design of the building and the design schedule remained unchanged, the architect estimated its costs would be approximately \$240,000. Exhibit 88. The architect later revised its estimate to \$57,817.94 for costs related only for the design phase. Exhibit 92.

On June 1, BPT provided GSA with a proposal in response to the remediation RFP. The proposal, which is dated May 27, included \$538,222 for the design costs of Alternative A and \$524,912 for the design costs of Alternative B. Exhibit 89. The following day, BPT sent GSA Turner's May 26 cost estimates for delay and construction associated with the remediation design concepts. Exhibit 90.

On June 2, GSA, MPCA, MCDA, BPT, Turner, GME, STS, TLPA, and Sverdrup met to review and evaluate the alternative remedial action design concepts developed by Turner, GME, and BPT. GME explained Alternatives A and B, and BPT recommended Alternative A. BPT anticipated a two-month delay to remediate the soil and install a grout wall around the site, and said it expected an added one-month delay because the initial delays would probably prevent closing the building before winter. Also, said BPT, there might be one more month of delay due to negotiations about the remedial design to be used. The attendees at the meeting discussed the location of groundwater at the site and how to prevent it from flowing into the construction excavation. They discussed the possibility of developing a third option, in addition to the two alternatives developed by BPT. They discussed the fact that the stockpiled contaminated soil, which had been receiving treatment using STS's remediation system since 1993, was still contaminated. GME pointed out that MPCA could always reopen its file regarding a site and the owner would be responsible for the cost of any additional work required at the site. Throughout the meeting, the participants discussed the indemnification of BPT and Turner. Exhibit 91.

Before the June 2 meeting, MCDA asked STS to develop a conceptual design for a remediation system. Transcript at 77-78. At the meeting, MCDA said it would not pay for either Alternative A or B, because it believed each alternative exceeded what was needed in order to remediate the conditions at the site. MCDA felt GSA wanted more than the minimal cleanup which MPCA would allow. Exhibit 91; Transcript at 143. MPCA felt although Alternative A was one way of remediating the contamination at the site, there were more practical methods which would accomplish the same result for far less money. Transcript at 313. BPT felt MCDA was oversimplifying the remediation effort. MCDA said it would not budge from the position that BPT's proposals were beyond what was required. Exhibit 91. GSA was looking for a solution to remediate the site and was amenable to anyone coming up with a plan. Transcript at 366. GSA suggested MCDA provide a remedial design and give it to BPT to implement, and MCDA asked STS to

provide such a design. Exhibit 91. Everyone agreed STS and MCDA would prepare a remediation plan which would meet MPCA's requirements. STS asked for GME's boring log information so it could develop its design. GSA said there would be another meeting when STS completed its design. As of June 2, BPT had not been reimbursed by anyone for the work it and its team had done in order to respond to the remediation RFP. Exhibit 91.

Turner begins work and STS begins developing a remediation design plan

On June 6, 1994, Turner began demolition of the foundations and foundation walls which remained along the perimeter of the site, and started mobilizing for its pile driving operation. Turner said until the remediation issue was resolved, it could install soldier piles until it had to penetrate the clay layer or until it had to remove soil. Some demolition work could not proceed because Turner did not want to increase costs by excavating soil, moving it to a stockpile on site, and then moving it to another location. Turner provided BPT with a schedule which showed the work it planned to accomplish during the next three or four weeks, and showed which work it could not do without excavating soil or without an approved remediation plan. Exhibits 93, 98.

Also on June 6, GSA spoke with MCDA. MCDA said as a last resort, it was prepared to indemnify BPT. However, MCDA hoped GSA could help avoid this by negotiating with BPT. Exhibit 94.

On June 8, BPT provided STS with the courthouse basement plan as it was submitted to GSA pre-award. BPT said every column shown on the plan would be built over a caisson socketed into rock. BPT also showed on the plan the approximate location of the wall between the portion of the site to be excavated to bedrock and the portion to be excavated to a lesser depth. Exhibit 95.

Also on June 8, BPT told GSA it would be willing to implement a soil remediation plan designed by MCDA if the plan was approved by MPCA and GSA, if MPCA would consider the site clean if the plan was implemented, if BPT was indemnified for claims related to contamination, and if BPT was given time to review the plan and determine its effect upon construction and the schedule. Exhibit 97.

On June 9, GSA, MPCA, MCDA, BPT, Turner, GME, STS, TLPA, and Sverdrup met to review and evaluate the additional remediation plan being developed by STS on behalf of MCDA. STS said it had not been able to complete its plan because it had not received all of the information it had requested from GME and BPT. It had been able to use drawings BPT provided, but it needed additional information regarding the area and elevations of the lower levels of the new courthouse building and the Flour Exchange

Building, additional plans of details of the courthouse, and additional subsurface information from GME. Turner gave STS the estimated elevations of the floor of the new courthouse building and the bottom of the footings of the Flour Exchange Building, which showed the floor elevation would be twelve feet lower than the elevation of the bottom of the footings. Although we are not sure when STS received GME's boring logs, it had them at this meeting. Exhibits 98, 528.

At the June 9 meeting, STS said the installation of Turner's pile and lagging retention system would not require any special construction methods because the soldier piles would not penetrate the clay layer. However, a special construction method would be needed when caissons were installed in areas of contaminated soils and groundwater. BPT had provided STS with drawings of typical caisson construction, but STS did not believe all of the elements shown on the drawings were necessary. STS asked Turner about its plan to underpin the Flour Exchange Building and they agreed underpinning was necessary only at the building's southwest corner. Exhibit 98.

STS expressed concern about the possibility of contaminated groundwater entering the excavation from beneath the Flour Exchange Building and, in general, the movement of groundwater from the north part of the site to the south part of the site, where excavation would be significantly deeper. STS noted the groundwater at the site had risen between six and nine inches since demolition occurred. STS suggested installing a grout cutoff wall running east to west to separate the north and south parts of the site. MPCA shared STS's concern and said a wall would be necessary, at a minimum, along the south side of the Flour Exchange Building. BPT suggested the wall serve as the underpinning of the Flour Exchange Building, instead of the soldier piles and lagging BPT currently planned to use. Exhibit 98.

TLPA asked if a vapor barrier would be installed beneath the courthouse garage where contaminated soil was being left in place. STS thought there were no confined spaces below grade, so no barrier would be necessary. However, when STS realized there were going to be rooms below grade, STS said it might be more cost effective to ventilate the confined areas than to use a vapor barrier. Exhibit 98. In STS's view, an underslab venting system was needed to capture any vapors from the contaminated groundwater and soils, and to prevent vapors from migrating to occupied areas of the building. STS thought such a system was a reasonable and proper element of the remediation plan. Transcript at 108-09. So did GSA's on-site project manager, who was an expert in commercial construction. Transcript at 562, 581.

Turner continued to be concerned about indemnification and said it would not mind if MCDA used another contractor to perform the remediation work, so long as Turner had

control of the construction schedule. MCDA said if it used another contractor, it would have to solicit bids and this could take up to two months. Exhibit 98.

At the June 9 meeting, Turner explained it was performing demolition work, but it did not know which soil was considered contaminated so it could not move any soil away from the site and the stockpiled soil would soon begin to congest Turner's work area. BPT asked if MCDA could remove stockpiled contaminated soil and MPCA said this should not be a problem. STS thought the removal could begin immediately using trucks hired by MCDA, and said it would be available to monitor the soils being removed. Turner felt coming to some resolution about remediation as soon as possible was important so it could create a schedule, and BPT explained that construction of the courthouse was critical path work, and it was to be built on the north part of the site where there was known to be contamination. Exhibit 98.

Near the end of this meeting, BPT asked STS what it needed in order to develop its remedial design. STS said it needed the retention system design, caisson design, location and design of the grout wall to run across the site from east to west, elevations of the foundations of the Flour Exchange Building and the elevations where BPT would underpin the building, the location and elevation of below-grade enclosed areas, a plan of the drain tile system, and a plan of a ventilation system of the enclosed areas. Exhibit 98.

There was another meeting held on June 13. Sverdrup attended on behalf of GSA. Also in attendance were MCDA, STS, GME, Turner, and Ericksen. The purpose of the meeting was to provide STS with information so it could design its remediation plan, and STS had many of its questions answered. STS needed foundation, footing, and basement plans from BPT, and BPT said it could provide STS with a copy of BPT's best and final offer plans. However, preliminary building design plans were not due from BPT to GSA until mid-July, and final design plans were not due until September. BPT's best and final offer plans were preliminary design plans which showed the amount of excavation work BPT would perform in order to construct the building. The foundation design plans could be finished while the excavation work was taking place. Exhibits 101-03, 105, 525, 528; Transcript at 569.

STS said the caisson design outlined by GME was acceptable and STS would decide which locations needed to use the design and how to deal with the spoils from the installation, recognizing that the exact locations of caissons and pilings were in the process of being designed by BPT. After this June 13 meeting, GSA determined BPT's plans could not be released, but could be reviewed by STS at the offices of Turner, TLPA, or GSA. Exhibits 101-03, 105, 525, 528. GSA did not release the plans due to security concerns. Exhibit 553.

Also discussed at the June 13 meeting was the system of underpinning at the southwest corner of the Flour Exchange Building proposed by BPT in its best and final offer. STS said it would recommend an underpinning system to be used and the extent of the underpinning which was needed. The cutoff wall which STS was to design to divide the north and south parts of the site would most likely be connected to the underpinning in order to provide a continuous barrier. Elevator shafts would penetrate the clay layer to rock and STS's plan would provide for this installation. In addition, STS would provide a plan for venting the occupied spaces in the courthouse basement and electrical vaults. Turner said the electrical vault would be located above the most contaminated part of the site and asked STS to evaluate the system for venting vapors below and around this area. BPT planned to use perimeter drains and STS was to decide how to deal with vapors and groundwater collected in the drain lines, especially along the Flour Exchange Building. STS said it had enough information to prepare a plan by June 17. Exhibits 101-03, 105, 525, 528.

Another item discussed at the June 13 meeting was the removal of soil from the site. The removal of the soil which had been stockpiled during previous remediation efforts was going well. The affected soils in the middle of the site needed to be removed as soon as possible. STS said Turner could begin driving piles to bedrock on the west side of the site the next day. Turner had placed seismic recording devices and crack gauges in the Flour Exchange Building and notified the owner that pile driving would begin on June 14. BPT and Turner continued to discuss the indemnification issue. MCDA said it was having a meeting on the afternoon of June 13 to discuss how it would contract for the remediation work at the site. Exhibits 101-03, 105, 525, 528.

On June 14, STS wrote to MCDA about the environmental aspects of the installation of the soldier pile and lagging system. STS thought the only contaminated soil which might be encountered would be along the east edge of the north side of the project, and that no contaminated groundwater would be encountered. Exhibit 104.

On June 16, MPCA sent a letter to MCDA saying it had recently completed a review of several pieces of information regarding the actions to be taken in response to the petroleum tank releases at the site. MPCA did not object to the method of caisson installation proposed by GME. MPCA reviewed STS's April 19 response to MPCA's February 28 letter, and said it did not oppose the actions proposed by STS on April 19, with certain modifications. MPCA's letter went on to explain that if contaminated soil was exposed when excavation was completed to the final construction grade, excavation should continue until contamination levels fell below ten parts per million, but should not continue into the clay layer or below the soil under the perched groundwater. MPCA said it was not sure how excavated soil which required additional treatment would be handled, but it would have to approve a method for handling this material. MPCA mentioned that Turner had

prepared two preliminary conceptual remediation designs and STS was working to develop a plan, and MPCA said it would continue to work with everyone to develop a remediation plan which would address all identified contamination at the site. Exhibits 108, 115.

On June 17, Turner notified BPT that its excavation subcontractor had completed all it could do and would stop work at the site in the afternoon. The existing perimeter foundation walls and below grade walls had been demolished on the north, west, and south sides of the site. None of the soil and building materials could be moved offsite as would typically be done, due to the remediation issue not being resolved. The materials should have been removed and Turner should have begun bulk excavation on June 13, but it could not do so until the remediation and indemnification issues were resolved. Exhibits 109-10, 115, 124.

STS drafts a work plan and construction activities occur (June 17 - July 5)

On June 17, 1994, STS provided MCDA, TLPA, Sverdrup, GSA, and BPT with a work plan for the remediation effort. The work plan contained four and one-half double-spaced pages of text. It said in areas where contaminated soils and groundwater were present, caissons would be installed in accordance with a procedure developed by GME. It explained how contaminated spoils from the caisson installation would be handled. The work plan gave several options for underpinning at the southwest corner of the Flour Exchange Building, pointed out there were environmental concerns in the area of the underpinning, and said the underpinning had to tie into the groundwater flow cutoff wall which was to be constructed east to west most of the way across the site. The work plan also said elevator shafts to be constructed within or near the contaminated area would be surrounded by a groundwater control wall in order to allow construction to occur. STS recommended the installation of an underslab vent system beneath the electrical vault and occupied spaces below ground. STS described this system as consisting of four-inch perforated pipes installed fifteen feet apart under the slab, and said the system would provide passive venting when connected either to the parking garage area or the exhaust vent system. Regarding the perimeter drain lines, STS recommended venting the sump into which the drain lines emptied, although it did not expect any vapors or contaminated water would enter the drain lines. Exhibit 111.

Also on June 17, STS sent MCDA the specifications for the grout cutoff wall to be installed across most of the site running east to west in order to impede groundwater from flowing into the south part of the site, and to be installed around the elevator shafts. STS's document was one which MCDA could use to solicit bids for the construction of the wall, which it did. Exhibits 112, 528.

GSA, MPCA, MCDA, BPT, Turner, GME, STS, TLPA, and Sverdrup met on June 24, 1994. The purpose of the meeting was to review STS's June 17 work plan, to discuss the issue of indemnification, and to discuss how to allow construction activity to continue. MCDA had not shown GSA its solicitation for construction of the grout cutoff wall before it issued the solicitation. GSA said it would not agree to take a piecemeal approach to remediation and wanted to review and approve a complete remedial design package. GSA emphasized that the remediation work had to be coordinated with the construction schedule and said the remediation issue needed to be resolved because of the effect on the schedule. GSA also said it did not want to move ahead with a remediation plan until the issue of vapors accumulating in the building was addressed. Exhibit 115.

MPCA said it was not concerned with the issue of vapor control and would have no comment on this. MPCA also said it was only obligated to comment on issues related to contamination, and was not concerned with work in areas where no contamination had been discovered. It said its June 16 letter to MCDA addressed caisson construction and the removal of soil from the site, and that it had commented on action levels for the site, monitoring requirements, and the sampling of excavated material. MPCA said it had given as much approval – although, it noted, it did not want to use the word “approval” – as was required for the remediation of the site. Exhibit 115.

At the June 24 meeting, Turner explained what work it had performed and how it had been affected by the lack of remediation. Turner needed to work in the north part of the site where contamination had been found and where the courthouse would be located. Turner said it would not continue to work without the indemnification issue being resolved. This issue could not be addressed at the meeting because MCDA had not drafted any indemnification language, but it said it would do so by June 27. Turner also explained it could not drive piles into bedrock on the west side of the site because it had not been told it was permitted to do so. MPCA said it had no objection to Turner driving piles along the west side of the site. The attendees at the meeting also discussed how contaminated soil could be hauled from the site and MPCA clarified its requirements for this work. Exhibit 115.

At this meeting, STS said it could provide a more complete remediation plan if it had structural drawings, but it understood drawings had not yet been developed by BPT. GSA noted that STS had been given access to the available project drawings. Sverdrup pointed out that, even without complete drawings, STS should be able to develop typical details of a remediation design. Sverdrup also thought MPCA should be willing to put in writing its position that contaminated soils and groundwater could be left in place on the site because its regulations were not completely clear regarding this point. MPCA said it had allowed

contaminated soils and groundwater to remain in place on other sites and would not provide a written statement such as the one requested by Sverdrup. Exhibit 115.

Regarding STS's June 17 work plan, the attendees at the June 24 meeting agreed it explained the special procedure for caisson construction in contaminated areas. They also agreed the remediation plan should include an excavation plan to show which soils would have to be removed and which soils could remain in place. Regarding underpinning of the Flour Exchange Building, STS said it did not know enough about the proposed underpinning system to be able to explain how to tie in the groundwater flow cutoff wall, and the design of the cutoff wall was briefly discussed. Regarding the building's drain line system, BPT said it had not yet developed the details of the system and STS said it could not comment on how the system could be affected by the contaminated materials which would remain at the site. As for elevator shafts, STS said it saw on the drawings that three shafts would need to be constructed in an area containing contaminated materials. The meeting attendees felt STS could provide BPT with sufficient details so the shafts could be constructed. Regarding underslab venting, Sverdrup thought it should be installed beneath all below-grade rooms. BPT said it would install the pipe as suggested in STS's work plan and vent it into the parking garage. Although MPCA said earlier in the meeting it would have no comment on the issue of vapor control, during the discussion of vapor control MPCA said it would be "the responsibility of MCDA to pay for any and all costs related to the installation of an active vapor control system." STS agreed to revise its work plan for everyone to review on July 6. Exhibit 115.

GSA drafted a letter during the June 24 meeting and sent it to BPT. The letter said Turner could continue its pile driving operations along the west side of the site. Also, GSA asked BPT if it would allow MCDA to remove contaminated soils from the site for storage and treatment. GSA suggested BPT agree to do this because it would help preserve the construction schedule and MPCA had not objected to STS's proposed methods for monitoring soil excavation. Exhibit 116.

Turner said it would resume installation of the pile and lagging retention system along the west, south, and east sides of the site, and would begin bulk excavation and removal of non-contaminated soils. It also agreed to excavate contaminated material and load it into trucks provided by MCDA. Turner said it would agree to do these things with the understanding that some sort of indemnification agreement would be in place by July 9, and that STS would be on site to monitor the excavated soils. Turner said it would be ready to install caissons beside the Flour Exchange Building in two weeks, but could do so only if a soil remediation plan and indemnification agreement were in place. Turner also said it had experienced delays that could affect its schedule and costs. Exhibit 117.

On June 27, an attorney for the City and MCDA sent proposed indemnification language to the attorneys for BPT, Turner, and GSA. MCDA was willing to indemnify BPT and Turner, but no one else. Exhibit 528.

GME completed a geotechnical report for BPT on June 28. The report described the construction planned for the site, the topography, the geology, the soil conditions, the groundwater encountered, and other features of the site. GME's report said the remediation plan being developed by STS was much the same as BPT's Alternative B. GME explained that, based upon MPCA stating at the June 24 meeting that contaminated soil could be left in place along the Flour Exchange Building, the west wall of this building would need underpinning only at its southwest corner where it was near the new courthouse, and would not need underpinning all along its west wall as described in Alternative B. Also, instead of isolating the north part of the site as described in Alternative B, the plan being developed by STS would contain a grout wall which would run from east to west across most of the site in order to isolate the part of the site where contaminated groundwater was found from the part of the site where deeper excavation was to take place, and would contain cutoff walls around the elevator pits in the north part of the site. Exhibit 120.

Turner returned to work on June 30 in areas not affected by contamination. Exhibit 124. On July 1, Turner informed BPT that the STS remediation plan was not scheduled to be approved until July 15, which suggested to Turner that MCDA did not fully understand the urgency of the situation. Turner also said that due to liability concerns, it was not going to be able to load contaminated material into MCDA trucks until a remediation plan was in place. Turner told BPT that the time for submitting bids to MCDA to construct the grout wall expired without anyone submitting a bid. Exhibit 121.

Turner and BPT reviewed the STS work plan and provided GSA with a list of comments on July 5. Turner and BPT thought the remediation plan should provide procedures for how to handle contaminated groundwater and soils, assign responsibility for emergency response and quality assurance, set out training and health safety requirements, and explain the logs and reports which would need to be prepared in connection with excavation and construction. Exhibit 123.

STS continues its work and construction activities occur (July 6 - 25)

On July 6, 1994, STS provided MCDA with its "Construction Soil Remediation Plan," which was a substantial revision of its June 17 work plan. This construction plan contained nearly eleven double-spaced pages of text. Section 1 of the construction plan covered general excavation work. STS said the air sparging and ventilation system had partially remediated the conditions at the site, and STS anticipated there would be limited

areas of contaminated soils encountered. Soils would be classified according to the levels, if any, of petroleum they contained, and then handled in accordance with MPCA's February 28 and June 16, 1994 letters, which STS attached. STS also attached a diagram prepared by Ericksen which showed the anticipated depths of excavation, and STS drawings which showed the estimated extent of contamination at the site. Section 1 included a decision tree which showed how to determine the proper method for handling soils. It also explained how trucks hauling soils would be tagged according to their contents and how the air would be monitored, and contained requirements for reporting and site safety. Section 2 consisted of STS's June 14 letter, which dealt with the installation of piles and lagging. Section 3 covered caisson installation and was nearly identical to STS's June 17 work plan. Section 4 covered underpinning at the Flour Exchange Building and was much the same as the work plan. It referred to the underpinning mentioned in BPT's best and final offer. Section 5 covered the groundwater flow cutoff wall and elevator shafts. In addition to the information contained in the work plan, this July 6 plan contained STS's specifications for the cutoff wall and several STS drawings related to the cutoff wall. One drawing showed the cutoff wall beginning near the southwest corner of the Flour Exchange Building and extending slightly to the south and to the east, as well as west most of the way across the site. The plan said three groundwater cutoff walls would also be constructed to surround each of three elevator pits. Section 6 covered the electrical vault and occupied basement areas and was much the same as the work plan, except it provided a typical detail of the vent system and also called for placing a vapor barrier directly below the floor concrete. Section 7 covered drain lines and was the same as the work plan. Section 8 covered groundwater handling and said the only place contaminated water would be found was in the elevator pits. STS suggested either having this water removed by someone authorized to do such work or mixing the contaminated water with clean soils and then treating the soils as if they were contaminated. Exhibit 125.

By July 6, Turner had installed sheet pile and lagging along the north side of the site and two-thirds of the way along the west side of the site. Concrete rubble from demolition was piled in the middle of the site and soil was stockpiled at the south end of the site. Turner began bulk excavation in the south part of the site on July 6, and its excavation subcontractor hauled the excavated material to a location where the Minnesota Department of Transportation (MDoT) needed fill dirt. Shortly before noon on July 7, MDoT stopped Turner's subcontractor from depositing the excavated materials because MDoT was concerned that the soil was contaminated. After MPCA called MDoT, MDoT agreed to accept the excavated material if it received an explanatory letter regarding the soil. There was no hauling of excavated materials on July 8. By then, Turner had installed sheet pile along most of the west side of the site. Exhibits 126, 528.

There was a meeting at the job site on July 12 to discuss the procedure for excavating and removing material so Turner could resume its excavation work. STS agreed it would be at the site whenever excavation occurred and would test and monitor material at the site. GME would monitor and test the material at the MDoT site and would complete a manifest for each load. Turner agreed to meet with MDoT on July 13, to explain this process so hauling could resume. Excavation and hauling began again on July 14. During excavation, perched water was encountered at a higher elevation than expected. Exhibits 127-28, 528.

Sverdrup reviewed STS's July 6 construction plan, which it understood to be an option in addition to those presented by BPT. Instead of being based upon MPCA's approval of a remediation plan, Sverdrup noted, the STS construction plan relied upon MPCA's lack of disapproval of leaving contaminated soil and water in place. Sverdrup reviewed the construction plan in order to determine the degree to which it mitigated the risks of leaving such material in place. Sverdrup was not convinced the STS construction plan accounted for all of the contaminated areas at the site, and the levels of contamination in the groundwater remained above the recommended regulated concentrations. The most likely risk of leaving contaminated groundwater and soil in place was the presence of vapors during and after construction. Sverdrup felt the remediation plan ought to include more specific requirements for air monitoring during construction. Sverdrup also felt the cutoff wall needed to be extended and the remediation plan ought to provide additional details about elevator shaft construction. It also made suggestions for adding details about the vent system and the drain lines and said the remediation plan should explain what would happen if contaminated water entered the drain lines. Exhibits 129, 132.

GME also reviewed STS's July 6 construction plan. GME understood GSA wanted "zero impact" from environmental concerns. However, such a result could not be obtained unless all contaminated material was removed from the site. GME recommended that GSA and BPT aggressively pursue indemnification if contaminated material was to be left in place. Like Sverdrup, GME was not convinced the STS construction plan identified all of the areas of contamination at the site. Also, GME did not believe MPCA would allow remediated soil to be handled as non-contaminated soil, which was something the STS construction plan permitted. GME recommended keeping a record of all soil removed from the site. In addition, GME did not agree with STS's idea for monitoring of vapors during construction because the standard of exposure STS proposed to use was not a standard imposed by any regulatory agency. GME recommended redesigning STS's proposed underslab vent system to improve the flow of vapors and thought the system might need to be installed under the entire building and be designed so it could be converted from a passive system to an active system. GME noted the STS construction plan did not include any method for dealing with contaminated groundwater if it entered the perimeter drain line system, and GME thought the remediation plan should assume this could happen. Also, STS

needed to explain what to do if contaminated ground water was encountered unexpectedly during construction. Exhibit 131.

In a July 14 conference call, GSA, Sverdrup, MPCA, TLPA, STS, GME, MCDA, BPT, and Turner, discussed the July 6 STS construction plan. GSA said the plan was incomplete and, therefore, not acceptable. STS said it would resolve one of GSA's concerns by revising a drawing which showed the areas of contamination at the site. GSA said its largest concern was that contamination was going to be allowed to remain on the site. BPT asked that the cost of insurance for the remediation work be included in the cost of the work because it did not carry liability insurance for remediation, and also asked that indemnification be extended to its architect. Based upon MCDA agreeing to this term, BPT said it would develop a price for the July 6 STS construction plan during the week of August 1. As of July 14, BPT had experienced a thirty-day delay to its construction schedule. Exhibits 133, 531, 537.

BPT, Turner STS, MPCA, MCDA, attorneys for the City and MCDA, GSA, Sverdrup, and GME met on July 19. GSA's goal was to get the construction project back on schedule and moving forward, and resolve differences of opinion about delays and price later. GSA explained how it thought the process of remediating the site was supposed to occur. To begin, MCDA would develop a remediation plan and BPT would propose a price for implementing the plan. Then, the City and MCDA would deposit their funds with GSA and BPT would begin to implement the plan with the final price to be determined later. Following this, GSA would negotiate a final price with BPT, and MCDA and GSA could debate whether the price was too high. GSA wanted to know whether MCDA was prepared to follow this process. GSA was concerned that if MCDA decided it did not like BPT's price proposal for the STS construction plan, it would want to develop yet another plan and create additional delay. Exhibits 133, 137-38, 532-33.

At the July 19 meeting, BPT said it was prepared to provide a proposed price for the STS construction plan based upon an indemnification agreement being in place. The City felt that due to BPT's increasing demands regarding indemnification, delays related to the indemnification issue were not the City's responsibility. GSA disagreed. GSA said indemnification of BPT had been a part of the process from the time GSA agreed to allow MCDA to formulate a plan in addition to the BPT alternatives. GSA said the City originally had an obligation to turn over a clean site. When this did not happen, GSA issued a request for proposals to ask BPT for a remediation design. When the City and MCDA objected to the costs associated with BPT's proposed designs, GSA agreed to allow STS to design a plan, provided MCDA would work with BPT to see if they could agree upon a suitable indemnification arrangement. Because BPT would not be designing the plan it would be asked to implement, it wanted to be indemnified. GSA and GME pointed out that if all of

the contaminated soil and water were removed as BPT proposed to do, there would be no potential for future migration of contamination and no need for indemnification. When MCDA said it would need to examine BPT's claims for delay and the cost of the delay, GSA stressed that this needed to occur after it told BPT to proceed with the work. Otherwise, the delay would continue to grow. Exhibits 133, 137-38, 532-33.

MCDA asked if BPT would be more comfortable if the July 6 construction plan said contaminated soil below grade would be totally encapsulated. After some discussion, the group concluded there were problems with this approach because the encapsulated layer would be penetrated by caissons and elevator shafts, and because vapor emissions would not be controlled. Also, there would need to be a procedure developed for encapsulating the contaminated soil and BPT would have to provide a price for this work, which would take time. Also, GSA said if certain areas within the site were defined as contaminated and then sealed, MPCA ought to be willing to say the rest of the site was not contaminated and did not need to be tested. MPCA said it absolutely would not agree to this because although there were some areas it was relatively sure were contaminated, there were other areas about which it was unsure. GSA stressed that its main concern with MCDA's suggestion was time. Time was money, according to GSA, and to introduce another plan might produce something which was cheaper to construct, but more expensive overall because of delay costs. Exhibits 133, 137-38, 532-33.

The participants in the July 19 meeting discussed the July 6 STS construction plan. BPT said it expected to receive a document which was a complete remediation plan authored by STS, not an STS plan which referred to documents and letters and drawings prepared by others. GSA and BPT thought STS had been working to develop a remediation plan which contained its own design and which included the details needed to implement the plan and remediate the site. STS said it did not have all of the information it needed to design something that would, for example, tie into the new building, because most of BPT's design/build drawings had not yet been developed. BPT and GSA pointed out, however, that there were some things BPT could not design until it knew what STS had planned. Exhibits 133, 137-38, 532-33.

Regarding the specifics of the July 6 STS construction plan, STS agreed to remove references to GME and BPT, and to include references to GSA only if needed for clarity. It also agreed to revise a drawing contained in section 1 of the plan to show contaminated soils where all of the underground storage tanks had been located and to clarify the affected area near the Flour Exchange Building. Also, it would modify the decision tree contained in the plan and the truck tagging procedure. In addition, it would include benzene as a substance to be monitored. Regarding caissons, MPCA said the special installation method would need to be used in areas of perched groundwater, even if this was outside the area of

contaminated soil. MPCA also said STS's plan should specify precisely which caissons would need to be specially installed and which could be installed conventionally. STS said it would remove references to BPT's plan for underpinning the Flour Exchange Building. Regarding the cutoff wall, MPCA recognized BPT's concern about contaminated water flowing around the end of a wall which did not extend completely across the site, and acknowledged the advantage to be gained by extending the wall completely across the width of the site. MPCA did not say, however, that running the wall completely across the site was necessary. BPT said it would provide a price for extending the wall completely from the east to the west side of the site and would also provide a price for making the cutoff wall a structural element of the building. In addition, the parties concluded the description of the wall would be modified to show it would be pinned to rock if there was no clay layer. As for the vent system, STS would refine its design and prepare one which could shift from passive to active operation. In addition, a contingency plan was needed for handling contaminated groundwater which might infiltrate the south part of the site. Exhibits 133, 137-38, 532-33.

On July 20, BPT provided STS with its tentative architectural; structural; heating, ventilating, and air conditioning; and plumbing drawings for the project. Exhibit 134.

On July 25, BPT wrote to GSA to say it had not received a revised drawing from MCDA which had been approved by MPCA and which showed contaminated and non-contaminated areas of soil at the site. Until BPT received this drawing, it could not begin excavating again. Work was continuing on the pile and lagging along the south side of the site, but it was proceeding at an inefficient pace because soil could not be hauled away and had to be pushed aside in order to keep the operation moving. Exhibit 136.

STS revises its plan and others provide comments (July 26 - August 5)

On July 26, 1994, STS sent MCDA its "Environmental Construction Plan," which was a fairly extensive revision of the July 6 version of the plan. This construction plan contained fourteen double-spaced pages of text which did not refer to GME or BPT, and it attached drawings prepared only by STS. Section 1 of the revised plan addressed the excavation of contaminated soils in considerably more detail than did the July 6 version of the plan. It also referred to a revised decision tree for determining how to handle excavated soils and contained a procedure for tracking soils transported from the site and for preparing required reports. The information contained in the revised plan regarding site safety was substantially the same as that contained in the July 6 construction plan. The revised plan attached a revised STS drawing which showed the estimated extent of contamination at the site and added an affected area along the west side of the site. Section 2 of the revised plan addressed caisson installation and provided more specific information about where the

pecially installed caissons would be needed than did the July 6 construction plan. Section 3 of the revised plan addressed the groundwater flow cutoff wall. It attached a drawing which showed the wall beginning near the southwest corner of the Flour Exchange Building and extending south and then to the east, much the same as the July 6 plan. However, instead of running directly across the site to the west, the July 26 plan showed the wall heading northwest, completely surrounding all three elevator pits, and terminating several feet more to the west than it did in the July 6 construction plan. The length of this cutoff wall was a little more than 75% of the distance around the perimeter of the entire north part of the site. The revised plan stated the cutoff wall was not a structural wall. It also explained how to handle contaminated groundwater encountered within the elevator pits and encountered unexpectedly elsewhere. Section 4 discussed underpinning the southwest corner of the Flour Exchange Building, but did not discuss any of BPT's plans for underpinning. Section 5 of the revised plan covered underslab venting and expanded quite a bit upon the July 6 plan's discussion of occupied basement areas. The revised plan explained where to place the vent system and proposed to tie the vent system into the building's drain line system in order to allow for venting the drain lines. The revised plan did not contain a discussion of the installation of piles and lagging, which had been included in the July 6 plan. Exhibit 139.

In a teleconference which occurred on July 27, MCDA told GSA and Sverdrup the revised STS plan was available. MCDA also expressed some frustration that STS was being asked to hit a moving target. GSA reminded MCDA that any remediation plan had to be detailed and specific and approved by GSA. MCDA thought GSA was focusing too much on potential problems. GSA said the agreement between the parties presumed there would be a clean site and GSA's position reflected responsible building management. Exhibit 141.

Also on July 27, an attorney for the City and MCDA sent a revised draft of the indemnification agreement to GSA and BPT. This draft included BPT's architect within the coverage extended by the agreement. Exhibit 144. On July 28, MPCA approved MCDA's plan to use contaminated excavated soil as controlled fill in the construction of a parking area in a nearby town. MPCA also agreed with an STS letter dated July 22, which described the boundaries of the contaminated areas within the site. Exhibit 146.

On July 28, Sverdrup provided TLPA with comments on the July 26 STS revised plan. Most of Sverdrup's concerns were that the STS revised plan contained unclear or open-ended statements and did not always state exactly what work was supposed to be done, who was supposed to do the work, or what standards were to be applied to work which was performed. In addition, Sverdrup found some errors in the STS revised plan. Exhibit 145.

On July 29, STS, MCDA, an attorney for the City and MCDA, MPCA, Sverdrup, GSA, TLPA, Turner, and BPT met to discuss the Sverdrup comments on the July 26 STS revised plan. MPCA said it had not yet reviewed the revised plan. In addition to agreeing to make a number of clarifications and corrections to the revised plan, the meeting attendees agreed the plan should refer to the MPCA standard which would be used to screen soils at the site, should define more precisely the estimated area of contamination, and should state explicitly how STS would differentiate between possibly contaminated fill, clean fill, and other soils. They also agreed the plan needed to address how contaminated ground water would be handled and to say MCDA would provide a truck to haul away such water if it was encountered. In addition, they agreed the plan should say STS would prepare the reports required by the plan, including the reports regarding the special installation of caissons. They also agreed the plan would be revised to recognize that the construction schedule could require expanding the area where the special installation of caissons would be required and to recognize that the plans for the groundwater cutoff wall might need to be adjusted during construction. Also, the location of the stack for the underslab vent would have to be coordinated with BPT's architect. During this meeting, it came to light that there were apparently two plans being circulated.³ One had been supplied to GSA and BPT, and a second plan to MPCA for approval. Confusion as to which plan was intended needed to be resolved. STS said it would revise its plan within twenty-four hours after receiving written comments from GSA on August 4. Exhibits 148, 150, 535.

At the July 29 meeting, MCDA asked if BPT would permit MCDA to excavate the entire northeast area of the site, which was known to be contaminated, and haul the excavated material away. BPT was willing to allow MCDA to do this, but said it would need a day or two to get its equipment out of the way. The attendees agreed Turner would mark the bounds of the contaminated area and then MCDA would begin work. They also agreed to keep track of the number of truck loads of material which MCDA removed. Exhibit 535. On August 1, BPT explained to GSA that it would not be possible for MCDA to begin removing material, after all. BPT said everyone at the July 29 meeting apparently had forgotten the caissons would have to be installed next to the Flour Exchange Building before the contaminated soil in the northeast area of the site could be excavated. BPT said it would proceed to install the caissons even though there was no approved remediation plan which contained directions for the special installation of caissons. BPT did this based upon the statements MPCA had made at the July 29 meeting. BPT also said it would begin hauling non-contaminated soils from the site during the current week. This work could resume because it received a copy of MPCA's July 28 letter to STS which agreed with

³ The presence of a second plan is confirmed in a letter dated August 23, 1994, written by MCDA and sent to GSA. Exhibit 180.

STS's description of the boundaries of the contaminated areas within the site. Exhibits 149, 154.

On August 1, BPT told GSA it was developing a schedule which would bring the project nearly back on schedule by the end of 1994. Also, it was preparing a pricing proposal for the July 26 STS construction plan. The proposal would include all design, construction, and delay costs, and would assume an indemnification agreement was in place and work could begin by August 15. Exhibit 149.

On August 4, GSA provided MCDA with its written comments about STS's July 26 revised construction plan. The comments contained a summary of how GSA, Sverdrup, GME, BPT, and Turner understood the issues discussed at the July 29 meeting had been resolved. Also, the comments contained some issues and questions which they thought deserved to be considered by STS when it revised its plan. Some of these issues and questions related to the basis for STS's design of the underslab vent system and others related to the July 26 revised plan's omission of a discussion about the sheet pile and lagging system. Exhibits 152-56.

STS prepares its final plan and caisson installation begins

On August 9, 1994, STS transmitted a copy of a revised environmental construction plan which it said included revisions in response to GSA's August 4 comments. Exhibit 161. On August 10, GSA told MCDA it had received the August 9 STS plan and, after spending a short time glancing at it, realized it did not incorporate all of GSA's August 4 comments. GSA said it would circulate the August 9 STS plan and try to provide MCDA with comments by August 11. GSA also noted the indemnification issue had not yet been resolved. GSA told MCDA the cost of the construction delay would continue to rise dramatically in relation to the cost of the actual remediation effort if the issues related to the remediation plan and indemnification were not resolved. Whatever savings the city secured by rejecting BPT's plans had been offset by delay costs, said GSA, so little real savings were achieved. In order to minimize further delays, GSA asked that the City and MCDA deposit the amount of BPT's projected costs (\$4,358,023)⁴ with GSA so that GSA could issue a contract modification to BPT as soon as GSA received an acceptable remediation plan and the indemnification issue was resolved. GSA noted its increased management costs were not included in BPT's projected costs, and said the final cost of the contract modification would be negotiated later. Exhibit 163.

⁴ The derivation of this figure is discussed in the next section of our findings of fact.

On August 11, MPCA finished its review of the August 9 STS plan. MPCA did not either give or withhold its approval of the plan. Rather, it said it did not object to the implementation of the plan. MPCA also said the plan was consistent with its “verbally established goal” of removing contaminated soil from the site, and with its February 28 and June 16, 1994 letters to MCDA. MPCA emphasized it had not reviewed the sections of the plan which addressed site safety and underslab venting because MPCA said it had no authority to regulate these areas. However, MPCA also said, “as with any potential development of a contaminated property, special consideration should be taken in the design of the building in order to not allow for the potential migration to, and accumulation of organic vapors inside the future structure.” MPCA said it understood section 5 of the STS plan addressed “an organic mitigation plan designed to be implemented with the development of the courthouse.” Exhibit 168. It was within MPCA’s authority to survey and monitor structures in order to determine whether vapors from existing contamination were affecting the structures. It was not within MPCA’s authority, however, to require someone to construct a safe building. As MPCA’s representative recognized, someone constructing a building could either take vapor migration into account during construction or be liable for the consequences of not doing so. Transcript at 279-81, 285.

On August 12, Sverdrup provided GSA and TLPA with comments which resulted from reviewing the August 9 STS plan. Sverdrup’s comments noted omissions from the plan and discussed the revisions which STS made to the July 26 plan. For example, Sverdrup understood GSA had not been consulted about STS’s decision to include in the plan an elevation which would separate one class of soils from another in order to show the estimated area of contamination. Sverdrup explained there were several problems with the elevation included by STS in the August 9 plan and said a more reasonable elevation should have been selected. Many of Sverdrup’s comments pointed out where statements contained in the STS plan were vague or open-ended, and Sverdrup made suggestions as to how the statements could be revised. Some of Sverdrup’s comments pointed out differences between the revised text of the plan and the content of the drawings which were a part of the plan. Also, Sverdrup noted the August 9 STS plan did not address the procedures to be used when driving piles in contaminated areas. Exhibit 170.

GSA gave Sverdrup’s comments to MCDA on August 12. GSA reminded MCDA that the remediation plan had to be approved by GSA, and told MCDA the STS revised plan was unacceptable and needed to incorporate Sverdrup’s comments. Exhibit 536.

On August 23, MCDA sent STS’s revised environmental construction plan, dated August 22, to GSA. Exhibits 177, 180. On August 25, STS sent GSA a few pages which contained minor revisions to the August 22 plan. Exhibit 182. The August 22 plan, as

amended on August 25, satisfactorily incorporated GSA's August 12 comments. Exhibit 188.

On August 26, GSA approved the August 22 STS plan, as amended on August 25. GSA said its approval was contingent upon approval by MPCA, and explained that after MPCA approved the plan, GSA would ask BPT for a proposal to implement the plan. Also, GSA said it would not issue a contract modification to BPT until MCDA deposited the funds to pay for the modification. Exhibit 183.

MPCA wrote to MCDA on August 26, and said it had completed its review of the STS plan dated August 22, as amended on August 25. As it had done on August 11, MPCA neither gave nor withheld its approval of the plan. Rather, it said it did not object to the implementation of the plan. Exhibit 185.

While the STS plan was being finalized, reviewed, and approved, Turner resumed its construction activities. On August 10, BPT told GSA that Turner would soon begin installing five caissons next to the Flour Exchange Building using the special installation method authorized by MPCA in its June 16 letter to MCDA. Exhibit 165.

Turner began installing the first caisson on August 15 and encountered a problem almost immediately. The STS plan called for augering through the sand layer until saturated sand was reached. Then, bentonite would be added to make a slurry, the auger would be advanced one foot into the clay layer, a temporary casing would be installed, and the clay layer would be penetrated to bedrock. The bentonite was meant to seal the caisson to prevent contamination below the clay layer. When Turner followed these procedures as it began drilling a caisson in the contaminated area next to the Flour Exchange Building, water seeped into the caisson and rose to a depth five feet. At 7:45 the following morning, Turner, BPT, and the STS technician on site tried to contact someone from STS to come to the site and offer a solution to the problem. At 4:00 in the afternoon, an STS representative came to the job site and met with Turner, BPT, Sverdrup, and MPCA. On August 17, STS provided MCDA, Turner, BPT, Sverdrup, and MPCA a written recommendation for effecting a seal between the sand and the underlying bedrock in the first caisson, and a procedure for installing the remaining caissons. Exhibits 172, 501, 538.

During August, 1994, while the STS plan was being reviewed and finalized, and while BPT was attempting to continue its construction activities, discussions regarding indemnification continued without the issue being finally resolved. Exhibits 169, 174-176, 191, 501, 541.

Consideration of price and delay issues before the STS plan was approved

On August 8, 1994, Turner sent BPT its response to the July 26 STS plan. Turner explained which construction activities it would complete, how it would accelerate its work, and the assumptions it made when it calculated the time and cost of each activity. Assuming it would be able to begin work on August 15, 1994, Turner said the delay in receiving a remediation plan caused an overall delay of fifty-two calendar days and the work required by the July 26 remediation plan added twenty-four more days to the critical path schedule. Turner thought it could accelerate its work and recover all but fourteen days of the delay by the end of 1994, and work extended hours in order to recover the remaining fourteen days by November 1, 1995, and it explained how it would accomplish this. Turner also provided a detailed description of the costs it would incur to regain the schedule, the costs of implementing the remediation plan, and how it would accomplish these things. The total cost was \$3,198,000, which included \$403,000 for the direct cost of remediation activities; \$1,677,000 for recovering the schedule; \$450,000 for Turner's increased extended general conditions costs (direct field office overhead); \$52,000 for subcontractor remobilization and inefficiency; \$125,000 for remediation operations insurance; a \$200,000 contingency for acceleration, supervision, and support; plus a markup (profit and home office overhead) of \$291,000. Exhibit 159. Overall, BPT thought Turner's approach was good. BPT made a number of comments to Turner, however, and asked for specific information regarding some of Turner's proposed activities and costs. Exhibit 160.

On August 9, BPT sent GSA a summary of the costs it would incur in order to implement the July 26 STS plan and regain the schedule. The total was approximately \$4.3 million. In addition to Turner's costs of \$3,198,000, BPT included its architect's costs (\$45,672), GME's costs (\$155,000), legal fees (\$28,000), insurance (\$175,000), and BPT's overhead and profit (\$756,351). BPT said in order to proceed, it needed an approved soil remediation plan and indemnification for itself, its architect, and Turner. Also, GSA would have to issue another request for proposals to perform the work required by the STS plan (which BPT referred to as RFP 1A) and then issue a contract modification with the price to be determined later. Exhibit 162. At GSA's request, BPT subsequently separated which of these costs it considered remediation costs (\$1,395,943) and which it considered acceleration costs (\$2,962,080). Exhibit 171.

On August 19, BPT told GSA that progress on critical construction activities was at a standstill. BPT said Turner had installed the retention system and one caisson according to the STS plan. Excavation had started and stopped twice due to lack of proper delineation of contaminated areas and lack of an approved plan to show to those who might be able to receive excavated materials. BPT's August 9 prices were premised upon BPT receiving a

notice to proceed by August 11, which did not happen, so the pricing plan would have to be revised. Exhibit 176.

An August 22 narrative, prepared by Sverdrup and based upon a project schedule dated August 11, said there were seven items of work which needed to be added or changed due to remediation activities. The delay to the critical path amounted to forty-two calendar days. The direct costs associated with the work and the delay amounted to approximately \$2.2 million, including extended general conditions costs. Exhibit 178; Transcript at 457. If, however, the notice to proceed was not issued until September 30, the delay to the critical path would amount to eighty-four work days, and the direct costs associated with the work and the delay would amount to approximately \$3.4 million. Exhibits 179, 197. Two weeks later, BPT estimated the delay would amount to an additional 125 calendar days, which amounts to 84 work days ($125 \times 2/3$). Exhibit 194.

When MCDA sent the August 22 STS plan to GSA on August 23, MCDA said it was responsible only for the excavation and foundation construction matters covered by the plan. According to MCDA, the manner in which the plan addressed these matters had remained “materially unchanged” since July 6, and MPCA had given its “conceptual approval” before July 6 for carrying out activities related to these matters. MCDA said almost all of the changes made to the plan after July 6 addressed matters which were not MCDA’s responsibility and therefore MCDA could not be responsible for any delay to the project caused by such changes. Exhibit 180.

On August 25, Turner put BPT on notice, once again, of the delays it was experiencing due to the lack of an approved environmental remediation plan and what it called “evolving” site conditions, including the conditions encountered during caisson installation. Turner said it was in the process of preparing a logistical plan which would allow it to deviate from its planned approach and perform work out of sequence. Exhibit 181.

Consideration of price and delay issues after the STS plan was approved

On August 26, 1994, GSA sent RFP 1A to BPT. RFP 1A required BPT to perform all work necessary to implement the STS plan. GSA asked BPT to provide a response within ten work days and to include an itemized cost breakdown. Exhibit 186. GSA also told BPT that both GSA and MPCA had accepted the STS August 22 remediation plan, as amended on August 25, and said to use the plan as the basis for responding to RFP 1A. Exhibit 184.

Also on August 26, MCDA told GSA it was “imperative to commence construction immediately.” In order to achieve this, MCDA proposed to deposit with GSA \$490,000, which MCDA considered to be BPT’s “hard costs” of implementing the remediation plan, installing the caissons, underpinning the Flour Exchange Building, and a few other minor activities. In addition MCDA proposed to deposit related “soft costs” to the extent GSA determined such costs were fair and reasonable, to indemnify BPT, Turner, and BPT’s architect, and to begin expedited arbitration with GSA to resolve issues related to delay and the contents of the remediation plan. Exhibit 187. At a meeting on August 29, GSA said it could not proceed with the project in a piecemeal fashion because to do so would result in additional delays in the future. The only way to stop delays, said GSA, was for the City to deposit the full amount it was obligated to deposit. Exhibit 545.

On August 31, Turner again complained to BPT about its inability to accomplish any meaningful work. Turner told BPT it had studied the possibility of performing work out of the planned sequence of work, in an area which was supposedly not contaminated. However, it seemed to Turner that work in the area would be quite restricted until measures had been taken to make sure contaminants from other parts of the site did not migrate to the area. Also, Turner would need to have someone from MCDA monitor its progress to determine if it encountered contamination. Turner concluded it would proceed in such a manner if GSA directed BPT to do so, although accomplishing work in this way would be quite inefficient. Exhibit 191.

On September 2, Turner told BPT it had extended by two weeks the date for receipt of bids for performing the caisson work, due to the lack of resolution of the soil remediation issue. Turner also explained this extension would not affect the schedule because the date it originally established for the submission of bids was based upon beginning soil remediation work on August 15. Turner had decided to extend the date for receipt of bids for performing foundation concrete work for the same reason. Exhibit 193.

Also on September 2, MCDA sent GSA a draft, preliminary analysis of the impact of the remediation plan on BPT’s schedule. The analysis was prepared by Kellogg, a construction consulting division of Peterson Consulting (Kellogg), which had been hired on August 30 to perform the analysis. Kellogg’s analysis was based upon a site visit, brief interviews with employees of MPCA and STS, and what Kellogg described as a “cursory review” of STS’s remediation plan, a Turner schedule logic diagram, a Turner schedule report, and Turner’s August 8 letter to BPT. Kellogg had not reviewed the project plans and specifications, the contract between GSA and BPT, or current information relating to progress. Kellogg concluded MCDA’s responsibility for delay depended upon whether it could establish the existence of any concurrent delay. Kellogg noted that Turner’s August 8 letter, which set out Turner’s plan to recover most of the schedule by the end of 1994, and

the remainder by November 1, 1995, was based upon Turner beginning work on August 15, and completing critical excavation, caisson, and foundation work before winter arrived. However, Turner had not been able to begin work on August 15, and Kellogg thought it was questionable whether Turner would be able to regain the schedule as it had planned to do. Kellogg said if soil remediation activities delayed the start of critical construction activities until the spring of 1995, the resulting delay could extend the completion of the project by up to one year. Exhibit 192.

Kellogg also provided a draft, preliminary analysis of the cost estimates set out in Turner's August 8 letter to BPT and the estimates set out in BPT's August 9 letter to GSA. In this analysis, Kellogg estimated the special installation method to be used for caissons would extend the completion date by approximately thirty days. As for its analysis of the Turner and BPT cost estimates, Kellogg thought BPT's estimate of the cost of remediation (\$1,395,943) was \$900,000 too high. Exhibit 192.

On September 7, GSA, MCDA, Sverdrup, and Kellogg met to discuss several subjects. GSA was very concerned because no agreement had been reached regarding indemnification. MCDA said it had directed its attorneys to finalize an agreement and there was supposed to be a meeting the following day to accomplish this. Also, GSA pointed out that the STS plan might need to be changed as construction progressed due to unforeseen circumstances. For example, it had come to GSA's attention on the morning of September 7, that Turner encountered contaminated soil at an elevation approximately sixteen feet above the elevation at which the STS remediation plan said such soil would be found. The primary focus of the September 7 meeting, however, was delay and price issues. Exhibit 197.

GSA had prepared a price estimate which it believed was fair and reasonable, and GSA had reviewed the Kellogg price estimate. GSA wanted to come to an agreement with MCDA at the September 7 meeting regarding an estimate so GSA could negotiate a price with BPT. According to GSA's price estimate, if the notice to proceed was issued on September 30, the delay to the critical path to completion of construction would amount to eighty-four work days and the cost of performing the work, including extended general conditions costs, would amount to \$2,233,033. GSA's notes of the meeting list each category of costs contained in the GSA estimate and state for each item whether the parties agreed to use the estimate as the basis for price negotiations with BPT. With only a few exceptions, they agreed to use the estimate as the basis for negotiations. They agreed GSA would examine BPT's actual costs of insurance, legal fees, and settlements reached with its subcontractors for remobilization. In addition, they agreed some of the costs included in the GSA estimate might be eliminated by an indemnification agreement. Also, they agreed the GSA estimate of BPT's daily general conditions costs would be the upper limit used by GSA

as the basis for its negotiations with BPT, and Kellogg would be available to assist GSA during negotiation of the general conditions costs. Regarding the GSA estimate of eighty-four work days of delay, MCDA reserved the right to challenge the actual number of days of delay at a later date and said it wanted to determine whether there had been any concurrent delays. Exhibit 197.

GSA's estimate also included an amount for TPLA's costs and \$10,000 per day for the costs GSA (not BPT) incurred due to delay, and said there would be additional GSA costs for management and inspection which would be determined as a percentage of the cost of construction. At the September 7 meeting, GSA explained it could not modify BPT's contract until MCDA deposited its funds with GSA and the funds had been accounted for by GSA's finance office. Pending the outcome of negotiations, MCDA agreed to deposit everything except the \$10,000 per day for GSA's delay costs. Exhibit 197. A few days later, in response to a suggestion made by GSA, MCDA said it would deposit the cost of the BPT contract modification, excluding GSA's delay costs, by September 23, and would reserve the right to dispute the costs after making the deposit. Exhibits 196, 552.

On September 12, BPT responded to RFP 1A. Its price was based upon several assumptions, such as being able to begin its operations on October 3 (which would result in a total delay of 125 calendar days) and having an indemnification agreement in place. BPT asked for a 125 calendar day extension of the contract completion date. Its price, which included the cost of the delay and extended general conditions costs, contained \$492,146 for its architect and structural engineer, and \$3,363,000 for Turner. Exhibit 199.

Turner had resumed its excavation operations on September 8. On September 12, STS found a localized area of "odorous soil" and sent samples for analysis. On September 13, STS found more such soil plus contaminated soil at random locations throughout the southwest part of the site and outside the area identified in the remediation plan as containing contaminated soil. Turner had no place to work productively until the conditions could be more thoroughly analyzed. Exhibits 201, 554.

Price negotiations occur, GSA accepts BPT's proposal, and MCDA deposits funds

Price negotiations between GSA and BPT occurred on September 15 and 16, 1994. Present were representatives from GSA, TLPA, Sverdrup, BPT, Turner, and Kellogg. An agreement was reached on September 16 regarding the price of the construction work to be performed by Turner. On the morning of September 17, negotiations continued and an agreement was reached regarding BPT's costs. On September 19, negotiations concluded regarding BPT's markup for profit and home office overhead. These negotiation sessions were thoroughly documented by contemporaneous notes and a summary prepared soon after

negotiations concluded by the representatives from TLPA, Sverdrup, BPT, and Turner who participated in the negotiations. According to this documentation, a representative from Kellogg was present during all negotiations with Turner and participated in all discussions. As negotiations progressed, if the representative from Kellogg wanted to raise or discuss an issue, he would confer in a separate room with a representative from MCDA to obtain input. Kellogg and MCDA did not voice any major objections to the negotiations. Exhibits 225, 267; Transcript at 378-79, 573.

The final negotiated price was \$2,292,406 plus a ninety-day extension of the final contract completion date. The price included extended general conditions costs and did not include other costs of the ninety-day delay or the cost of BPT's architect or its structural engineer. The price was conditioned upon MCDA providing indemnification and GSA providing a notice to proceed by September 20. Exhibit 225.

The negotiated price included the following for the cost of remediation:

\$ (18,000)	Credit for soil excavation and removal by MCDA
143,300	Premium for special installation of caissons
250,000	Groundwater cutoff wall at the Flour Exchange Building
54,000	Underslab venting system
137,500	Turner supervision and support (general conditions costs)
7,200	Turner insurance
57,400	Turner markup for profit and indirect overhead
4,000	Turner performance and payment bond

Exhibit 225.

The negotiated price also included the following for the direct costs of the ninety-day delay:

\$ 451,700	Temporary heat during the 1995-96 winter
60,000	Turner's subcontractors' remobilization and inefficiency costs
290,000	Cost escalation contingency
237,000	Turner supervision and support (general conditions costs)
13,200	Turner insurance
105,200	Turner markup for profit and indirect overhead
7,300	Turner performance and payment bond

Exhibit 225.

The total of the above, which were Turner's costs, is \$1,799,800. BPT's part of the negotiated price included \$307,828 for direct costs, including extended general conditions costs, and a markup of \$184,778. Adding Turner's costs to BPT's costs and markup results in a total of \$2,292,406. Exhibit 225. During negotiations, MCDA said it would construct the cutoff wall which was to run east to west across the site, so the negotiated price contained nothing for this wall. BPT's proposed, non-negotiated price for the construction of this cutoff wall had been \$196,500. Exhibit 204.

On September 19, GSA sent BPT another request for proposals, RFP 1A-1, which was a revision to RFP 1A. Essentially, RFP 1A-1 asked BPT to submit a price proposal which conformed to the price negotiations. Exhibit 205.

Also on September 19, MCDA deposited \$2,420,295 with GSA for the cost of the construction contract modification. This amount included the negotiated amount for Turner (\$1,799,800), slightly less than the negotiated amount for BPT (\$474,495), \$50,000 for BPT's architect, and \$96,000 for GSA's management and inspection costs. In addition, MCDA said it would pay for the added insurance needed by BPT. MCDA told GSA it had signed an indemnification agreement and was sending it to BPT for signature. Exhibits 555-56.

On September 21, BPT sent GSA its response to RFP 1A-1. The total price was \$2,292,406. Exhibit 208. On September 22, GSA accepted BPT's September 21 proposal for an increase in the contract price of \$2,292,406 and a ninety-day extension of the contract completion date. Exhibit 268.

Events subsequent to price negotiations

On September 22, 1994, MPCA notified GSA that the United States would not be a "responsible party" under state law for releases from the underground storage tanks which had been removed from the site. The letter also said GSA ought to be aware that petroleum contamination could still be present, and development plans ought to consider activities such as removal of soil and "the potential for vapors to enter structures." Exhibit 557.

By September 26, 1994, BPT had obtained the additional insurance it needed and told MCDA how to pay the premium. Also, the indemnification agreement had been signed by MCDA, BPT, BPT's architect, and Turner. BPT notified GSA of these events and GSA sent BPT a notice to proceed with the work required by RFP 1A-1. Exhibits 214-15, 217.

On October 17, 1994, an MCDA contractor was to begin constructing the cutoff wall which was to run from east to west across the site. This work was originally to be completed

in nine days, which was later extended to ten days. A temporary ramp ran into the site from the north side and provided one of Turner's subcontractors with access to the site. On October 24, MCDA said the ramp was in the way of the cutoff wall construction which, in MCDA's opinion, entitled its contractor to additional time to complete the cutoff wall construction. On October 25, BPT told MCDA that before the MCDA contractor was awarded its contract, it knew about the temporary ramp. BPT did not agree the presence of the ramp entitled MCDA's contractor to additional time to complete its work. It appears, however, the ramp was removed, the work was finished by October 28, and the ramp was replaced. Exhibits 227-28, 229, 231, 233. MCDA originally estimated the cost of the cutoff wall would be \$60,000. The actual cost of the wall was \$143,000 even though, according to STS, the cutoff wall was installed essentially as planned, with "minor location changes to allow constructability of the wall and the proposed caissons." Exhibits 233, 563.

In late December 1994, during construction of one of the elevator pits, MCDA's groundwater control contractor removed contaminated water from inside the cutoff wall which surrounded the elevator pits. On December 20, in an internal memorandum, MCDA said the quantity of water pumped out was "20,000+" gallons at a cost of \$1 per gallon. On January 19, 1995, in a letter to GSA, MCDA said the quantity of water pumped out was "47,000+" gallons at a cost of approximately \$50,000. Exhibits 236, 560. On May 3, 1995, STS said the cost of removing the water (29,000 gallons) was \$33,853. Exhibit 569. MCDA complained to GSA that this work was necessary only because GSA and BPT had made changes in the design and location of the elevator pad, and MCDA said it should not be responsible for the costs it incurred in removing the contaminated water from the site. Exhibit 236. GSA responded by saying MCDA knew the STS remediation plan was based upon preliminary building design documents and knew changes due to normal design development would occur. After the cutoff wall was installed, GSA explained, one such change was needed in order to meet an elevator manufacturer's requirements. In GSA's view, the terms of the STS remediation plan made MCDA responsible for removing the contaminated water. Exhibit 562.

On August 7, 1995, BPT told GSA it was substantially finished with the work outlined in the STS remediation plan and required by RFP 1A-1. Exhibit 246.

Delay analysis

BPT took from March 18 until May 26, 1994, to develop its alternative remediation concepts. GSA did not believe any time would have been saved if BPT had solicited MCDA's input while BPT was developing Alternative A, which was to isolate the entire site and remove all of the contaminated soil and water. In GSA's view, Alternative A was a product of the unresolved indemnification issue and was BPT's way of presenting a

remediation concept which it could implement if it was not indemnified. The development of this alternative went “hand in hand” with the unresolved indemnification issue. Transcript at 406-07, 419. GSA’s on-site project manager, who is an expert in commercial construction, did not believe BPT took an excessive amount of time to develop its alternative remediation concepts. Transcript at 558, 562, 568. A construction management and scheduling expert hired by GSA did not believe BPT took an unusual amount of time to develop its two concepts, considering it had to hire GME to provide expertise regarding remediation which BPT did not have, to become familiar with all of the information about the site, and to speak with MPCA about what would and would not be allowable. Transcript at 500-01.

The City and MCDA did not perform any schedule analysis to determine whether there was a delay to critical path activities and, if so, the duration or cause of the delay. GSA’s expert in construction management, whose area of expertise included critical path method scheduling, compared Turner’s as-planned schedule to an impact schedule he created by using information similar to the information available when price negotiations occurred in mid-September 1994. Transcript at 485, 505-06.

According to both the as-planned and the impact schedules, the work related to constructing the courthouse on the north part of the site was on the critical path to completion of the project. According to the as-planned schedule, Turner was supposed to begin work on June 10, 1994, finish the installation of sheet piles and the excavation for the courthouse on August 19, and complete the courthouse basement walls on November 29, 1994. The impact schedule showed Turner began work very close to June 10. However, according to the scheduling expert who prepared the impact schedule, Turner’s work started and stopped when it encountered remediation-related issues which needed to be resolved. This starting and stopping continued until the indemnification agreement was in place and GSA issued the notice to proceed on September 26. After GSA told BPT to proceed, Turner had to complete the sheet pile and excavation work. MCDA needed ten days to install the cutoff wall, and those days were added to the impact schedule. An additional ten days were added to the impact schedule to account for the special installation of caissons, five days were added to account for work related to dealing with contamination when constructing the elevator pits, and five days were added for performing courthouse wall concrete work in colder weather than originally planned. The impact schedule showed the courthouse walls would be finished on March 6, 1995, which is ninety-eight days later than the November 29 date shown in the as-planned schedule for completing this work. Thus, the scheduling expert concluded critical path activities were delayed by ninety-eight calendar days. Exhibit 262; Transcript at 503, 506-12, 517-18.

The scheduling expert concluded critical path activities were delayed by ninety-eight days due to the lack of resolution of the indemnification issue. He explained Turner was not in the business of environmental remediation and did not plan to assume the risk of dealing with environmental contamination when it began the project. Indemnification was an important issue and the project did not move forward until the issue was resolved in late September when MCDA, Turner, BPT, and BPT's architect entered into the indemnification agreement. Exhibit 262; Transcript at 503, 506-12, 517-18.

In the scheduling expert's opinion, if the indemnification issue had been resolved earlier, it would have probably been possible to use Alternative B, which BPT presented on June 2, because it was not much different from the plan which was developed by STS. Both Alternative B and the STS plan left most of the contaminated soil and water in place, made special provisions for the installation of the caissons, and used a grout cutoff wall. The expert thought if the indemnification issue had been resolved when BPT presented its two alternatives, one of which assumed there would be no indemnification and the other of which assumed there would be indemnification, the parties could have saved several months of time by moving ahead with Alternative B. Transcript at 519-21. Based upon his review of documents related to the present dispute, he recalled MCDA saying in June 1994 that it would indemnify BPT. However, in his opinion, an oral promise does not amount to actual indemnification from the point of view of a contractor trying to manage risk. Transcript at 553.

The scheduling expert also looked to see whether there had been any critical path delays caused by design work. He found all design packages were on schedule except for the foundation design package, which was not on schedule because of unresolved remediation issues. Finally, the scheduling expert looked at the list contained in the claim (discussed in the next section) of examples of delay which the City and MCDA said were caused by GSA and BPT. He did not find that any of these examples of delay had affected the project's critical path. Transcript at 549-50.

The claim

On April 9, 1999, the City and MCDA submitted a certified claim to GSA in the amount of \$2,693,055.50 plus interest. Exhibit 261. The bases for the claim are summarized in the following paragraphs.

The City and MCDA claimed GSA breached section 13.01 of the amended Development Agreement. They asserted GSA allowed BPT to take two months to propose an expensive remediation plan which exceeded the scope of remediation required by MPCA. Following the receipt of the BPT plan, they said, STS developed a remediation plan which

cost \$403,000 and which was approved by MPCA “*without modification* in two days.” Despite the approval of the STS plan, however, the City and MCDA said the plan implemented by GSA exceeded the scope of remediation required by MPCA. Exhibit 261 at 4-5.

The City and MCDA claimed GSA breached section 13.03 of the amended Development Agreement because the design plans for the building’s foundation were not prepared in consultation with the City and MCDA. The City and MCDA said Turner “routinely rejected requests by STS to participate in the development of the foundation design and refused to provide STS with full-size copies of relevant portions of plans.” The City and MCDA also said GSA insisted STS prepare its remediation plan without relevant design information, and routinely excluded the City and MCDA from remediation planning meetings. Exhibit 261 at 5-6.

The City and MCDA claimed GSA breached section 8.04 of the Development Agreement, which required GSA to limit project costs. Here, they again asserted GSA allowed BPT to take two months to propose an expensive remediation plan which exceeded the scope of remediation required by MPCA. Exhibit 261 at 6.

The City and MCDA claimed they were not responsible for any delay to the contract completion date, and they listed what they considered examples of delay caused by GSA or BPT. Among these are the length of time BPT took to prepare Alternatives A and B, the extravagance of Alternative A, STS’s lack of information vital to preparing its remediation plan, and BPT’s delay in beginning construction and its refusal to proceed with construction in the summer of 1994. The bases for many, if not most, of the examples set out in the claim are not supported in the evidence which is contained in our record. Some of the examples refer to events which occurred after price negotiations concluded and are, therefore, not relevant to the delay which had occurred when GSA modified BPT’s contract to extend the contract completion date by ninety days. Exhibit 261 at 6-9.

The amount requested by the City and MCDA in their claim is the sum of (a) \$32,000 for the cost of pumping water from the elevator pits in December 1994, (b) \$294,338 in lost profits because the parking garage opened eleven months later than it should have, and (c) \$2,366,717.50 of the \$2,420,295 which MCDA deposited with GSA in September 1994. Exhibit 261 at 9-10.

The City and MCDA arrived at the \$2,366,717.50 as follows. They divided the \$2,420,295 deposit into two parts: \$1,723,656 of what they called “time related costs” and \$696,639 of what they called “remediation or otherwise fixed costs.” They claimed the entire \$1,723,656, which consisted of \$1,219,900 of Turner’s costs, \$251,828 which they

said was the “settled amount” of BPT’s direct costs, \$14,716 for BPT’s contingency, \$141,212 for BPT’s home office overhead and profit, and \$96,000 for GSA management and inspection costs. They also claimed \$643,061.50 of the \$696,639 because, they said, \$308,300 of the \$696,639 was for the groundwater cutoff wall at the Flour Exchange Building and the underslab venting, which were not the responsibility of the City or MCDA; \$100,310 of the \$696,639 was for caisson installation work not related to remediation; and \$126,912.50 of the \$696,639 was for Turner’s extended general conditions attributable to remediation work for which the City and MCDA were not responsible.⁵ Exhibit 261 at Exhibit D.

The contracting officer denied the claim on August 9, 1999, and this appeal followed. Exhibits 258-59.

Discussion

In the claim, the City and MCDA requested the return of part of the \$2,420,295 deposit which was paid to GSA, plus \$32,000 for pumping water from the elevator pits in December 1994, and \$294,338 in lost profits because the parking garage opened eleven months later than expected. In their post-hearing briefs, the City and MCDA do not pursue the latter two claims. However, they do ask to recover the entire \$2,420,295 deposit. Their theories as to why they are entitled to recover the entire deposit and the facts which support these theories are the same as those advanced by appellants when they claimed they were entitled to the return of only part of the deposit.

Appellants bear the burden of proving their case by a preponderance of the evidence contained in our record. *McTeague Construction Co. v. General Services Administration*, GSCBA 14765, 01-1 BCA ¶ 31,203 (2000). We reach our decision by making the findings of fact set out above based upon a *de novo* examination of the evidence, and then applying the relevant legal principles and determining whether MCDA and the City have met their burden of proof. *Wilner v. United States*, 24 F.3d 1397 (Fed. Cir. 1994) (en banc).

The Development Agreement

In March 1993, when GSA entered into the Development Agreement, it was aware of the existence of petroleum hydrocarbons on the site. There was no reason GSA should

⁵ We are aware these latter three amounts do not add up to the total claimed for “remediation or otherwise fixed costs.” Exhibit 261. We cannot explain this discrepancy.

have been concerned about this contamination, however, because the agreement said MCDA would make sure all adverse environmental conditions identified by the parties were remediated before the property was conveyed to GSA in November 1993. When GSA took title, the property was supposed to be ready for construction to begin.

When appellants entered into the Development Agreement, they intended to remediate the conditions found at the site by installing an STS system which used soil vapor extraction to remediate contaminated soil, and sparging, extraction, and treatment to remediate contaminated groundwater. MPCA's approval of this system meant the Petrofund would reimburse MCDA's costs, which were estimated to be \$51,000.

Gradually, appellants realized they might not be able to remediate the conditions at the site in time to convey the property to GSA as scheduled. STS's system began operating in mid-May 1993, but it had to be removed in late September 1993, so MCDA could demolish the existing structures on the property. A key component of the STS system was the removal of groundwater, but no groundwater was extracted after demolition began due to a threat of suit by the Flour Exchange Building. MCDA evaluated the results of the remediation efforts in mid-October and told GSA it might need more time to remediate the site. Shortly before the demolition work ended in mid-November, MCDA and STS decided to add several new components to the STS system when it was reinstalled in order to maximize the remediation effort.

Although appellants told GSA they fully accepted the responsibilities which the Development Agreement imposed upon them, they also told GSA remediation could take an extended period of time. GSA, however, needed to move forward with the design/build procurement as appellants knew from the timetable set out in the Development Agreement. Appellants made several suggestions as to how GSA could remedy the conditions at the site. GSA rejected the suggestion that it take title to the site in its then-current condition, that it amend the design/build solicitation to impose limitations upon excavation at the site, and that it assume responsibility for excavation and remediation of contaminated soil and groundwater. GSA reminded appellants they were obligated to remediate the site and to convey it in a condition which would allow construction to begin.

In mid-December 1993, when the parties began negotiating an amendment to the Development Agreement, GSA made clear to appellants that neither it nor its design/build contractor would bear any of the costs associated with remediating the site. GSA proposed that instead of bearing the cost of remediating the site before it was conveyed to GSA, appellants would bear the cost of a contract modification which required the design/build contractor to carry out remediation efforts in conjunction with the excavation and foundation

phases of construction after the site was conveyed to GSA. GSA proposed making the contractor's foundation plans available to appellants for review, consultation, and comment.

In response to GSA's proposed amendment to the Development Agreement, appellants suggested amending the Development Agreement in a manner which would limit their obligations to GSA. Instead of remediating all identified environmental conditions as required by the Development Agreement, they wanted to limit their responsibility to the remediation of contamination caused by petroleum. They wanted to approve the design/build contractor's foundation plans. They wanted to eliminate a provision proposed by GSA which said the design/build contractor would not be required to alter its awarded design, the remediation plan, or the project schedule in order to achieve a less costly remediation effort. They wanted GSA to use its best efforts to make sure the design/build contractor implemented the least costly remediation design. They did not want to pay delay costs or GSA's administrative costs.

The parties amended the Development Agreement in mid-January 1994. The amended agreement did not alter the relative positions of the parties, so far as responsibility for the cost of remediating the site was concerned. Section 13.04 said GSA would issue a modification to the design/build contractor to effect the appropriate remediation efforts in conjunction with the excavation and foundation phases of construction, and MCDA would pay the cost of the modification, including but not limited to design, construction, overhead and profit, delay costs, and all associated management and inspection costs.

Section 13.03 of the amended Development Agreement said immediately after award of the design/build contract, GSA would advise the contractor in writing that the contractor's development of the design plans for the foundation of the project and the garage would be prepared in consultation with GSA, MCDA, the City, and MPCA in a manner which addressed the remediation effort to be undertaken by the design/build contractor during the excavation and foundation phases of construction. According to appellants, GSA did not provide such written advice, and this failure constituted a breach of the amended Development Agreement and resulted in a delay to completion of the project. This breach, they say, resulted in a breach of section 8.04 of the Development Agreement and section 13.07 of the amended Development Agreement, which address cost containment. Appellants' Brief at 13-14, 24; Appellants' Reply Brief at 2.

BPT received the written advice required by section 13.03 of the amended Development Agreement because it received a copy of the entire amended agreement not later than March 22, when it provided a copy to its architect and to Turner. The record does not establish that anyone other than GSA provided BPT with the amended agreement. BPT had the amended agreement in hand within approximately one month after award of the

design/build contract, within four days after it received the notice to proceed, and several months before its preliminary construction plans were due, which left ample time for it to consult about foundation plans. For these reasons, we reject appellants' argument that GSA breached the amended Development Agreement and delayed BPT's progress by failing to advise BPT as required by section 13.03.

Sections 13.03 and 13.04 of the amended Development Agreement said GSA would modify BPT's contract to require it to design a remediation plan and to require it to remediate the site, and recognized BPT would undertake its remediation efforts in conjunction with the excavation and foundation phases of construction. In mid-February, GSA asked Sverdrup to draft a request for proposals for environmental cleanup at the site. Although Sverdrup produced a draft, GSA never used it, so far as our record shows.

According to appellants, GSA breached the amended Development Agreement in mid-February, when it asked Sverdrup to prepare the request for proposals for environmental cleanup. Even though GSA never issued the request for proposals which Sverdrup drafted, appellants complain because they were not involved in asking Sverdrup to prepare the draft. Appellants' Brief at 14. Section 13.07 of the amended Development Agreement said all matters affecting the administration of BPT's contract were solely within GSA's authority and area of responsibility. GSA's asking Sverdrup to draft a request for proposals to change the terms of the design/build contract falls squarely within the bounds of contract administration. GSA did not breach the amended agreement when it asked Sverdrup to prepare a request for proposals.

BPT's response to the remediation RFP

On March 18, 1994, GSA sent BPT the remediation RFP which asked BPT for a proposal to provide the services needed to design the remediation of the site including, if necessary, the services needed to redesign of the foundation plans. Although GSA originally asked BPT to provide its proposal in response to the remediation RFP within ten days, GSA later told BPT it could have additional time to respond.

BPT, Turner, GME, and Ericksen worked for several weeks to prepare a response to the remediation RFP. Although the remediation RFP did not ask BPT to develop a remediation plan or to redesign its foundation plans, BPT needed to develop its ideas about remediation to the point where it could provide a proposal, including a price proposal, to provide the services which would be needed to design the remediation of the site and to determine whether it would be necessary to redesign the foundation plans. During the time BPT's team was developing a response to the remediation RFP, the members of the team

were well aware of the possibility of a delay to the completion of the project and they were thinking of ways to overcome any delay.

On June 2, GSA, TLPA, Sverdrup, MPCA, BPT, Turner, GME, MCDA, and STS met to review and evaluate BPT's response to the remediation RFP. BPT's response included prices for providing the services needed to design the two remediation concepts which BPT had developed. One concept was to isolate the entire site and the other was to isolate the north part of the site.

Appellants contend GSA breached section 13.03 between March 18 and June 1, because GSA did not make sure BPT coordinated with appellants while BPT prepared its response to the remediation RFP. This breach, say appellants, resulted in delays and breaches of sections 8.04 of the Development Agreement and 13.07 of the amended Development Agreement, which address cost containment. Appellants make several factual assertions in support of their argument. They say although they attended a meeting with BPT on March 25, the purpose of this meeting was for BPT to gather, not share, information. They allege that soon after the March 25 meeting, BPT began secretly discussing and working on remedial designs. Appellants also say GSA neglected for many weeks to ask BPT for a progress report regarding BPT's response to the remediation RFP. Appellants complain because as BPT developed the two concepts it presented on June 2, it ignored STS and MCDA, who, according to appellants, were the most experienced and knew the most about the remediation issues at the site. Appellants complain because BPT contacted MPCA while it was preparing its response to the remediation RFP, but did not share any information or consult with appellants. All of these facts, say appellants, show GSA failed to coordinate BPT's efforts with appellants, and this failure constituted a breach of section 13.03 which resulted in delays and increased costs. Appellants' Brief at 14-17, 25-26; Appellants' Reply Brief at 2-4.

Section 13.03 did not obligate GSA to ensure BPT worked together with appellants between March 18 and June 1, when BPT prepared its response to the remediation RFP. Section 13.03 said BPT was to consult with GSA, MPCA, and appellants when it prepared its foundation design plans in a manner which addressed the necessary remediation effort, and said appellants were to participate with GSA and MPCA in reviewing, consulting about, and commenting on the foundation design plans and BPT's remediation plan, including the costs of these plans. When BPT prepared its response to the remediation RFP, the activity contemplated by Section 13.03 could not have taken place because the time had not yet arrived for preparing foundation design plans or a remediation plan. BPT planned to prepare its foundation plans while excavation was taking place. It was not scheduled to submit preliminary building design plans to GSA until mid-July, and final plans were not due until September. The remediation RFP did not change this schedule. Even if BPT had been

preparing foundation design plans between March 18 and June 1, it could not have consulted with appellants regarding the preparation of the plans in a manner which addressed the necessary remediation effort, because no one knew what the necessary remediation effort would be. The remediation RFP did not ask BPT to develop a remediation plan and BPT never had the opportunity to prepare a remediation plan because on June 2, appellants rejected both of the alternative concepts which could have formed the basis for a BPT remediation plan.

Although section 13.03 of the amended Development Agreement did not obligate GSA to ensure BPT worked together with appellants when BPT prepared its response to the remediation RFP, we consider below whether the factual assertions appellants make in support of their position show GSA's actions resulted in delays or additional costs.

Although appellants contend the purpose of the March 25 meeting was for BPT to gather, not share, information, this is not supported by the evidence contained in our record. On March 25, one week after BPT received the request for proposals, BPT, Turner, Ericksen, and GME met with GSA, Sverdrup, TLPA, MPCA, MCDA, and STS. They discussed the status of the site, MCDA's remediation efforts, the remediation goals for the project, and issues of design and construction. They discussed the fact that the contaminated groundwater in the northeast part of the site could not be remediated using the techniques which had been used to date, and could not be removed due to concerns about the Flour Exchange Building. MPCA said the contaminated groundwater could remain in place, which was a possibility MPCA had not mentioned before. BPT provided a foundation plan sketch which showed the elevations of planned excavation across the site. The foundation was to be a slab-on-grade one or two feet above the bedrock in the south part of the site. To the north, excavation would remain ten to eighteen feet above bedrock, and the foundation would be four-foot to six-foot diameter caissons set into bedrock. The parties then discussed methods of drilling the caissons that would be acceptable to MPCA. We conclude that at the March 25 meeting BPT gathered information and also provided information regarding its planned excavation and foundation work.

Appellants allege that soon after the March 25 meeting, BPT began secretly discussing and working on remedial designs while it was preparing its response to the request for proposals. Appellants complain because these discussions and this work occurred only among members of BPT's team. Between March 18 and June 1, GME and Ericksen gave BPT several ideas for remediation concepts. Some ideas were rejected and others were refined. After BPT's team members arrived at two concepts for remediating the site, they began preparing estimates of the cost of providing the services needed to design the remediation of the site based upon the two concepts. In addition, Turner prepared a scope of work for excavation, sheeting and bracing, and soil remediation based upon one of the

alternatives and met with MCDA about this scope of work in late May. Turner was also working on a plan to overcome delays to completion of the project. Between March 18 and June 1, BPT worked diligently to develop remediation design concepts which would allow it to prepare a proposal for providing the services needed to design the remediation of the site. As GSA realized, it was important that BPT be allowed to determine and propose the services it would need in order to remediate the site because it would be expected to carry out the remediation work. Two experts in commercial construction and in construction management and scheduling did not believe BPT took an excessive amount of time to develop its alternative remediation concepts in response to the request for proposals. The record does not establish that added costs or delay resulted because GSA allowed BPT to work with its team in order to develop its response to the remediation RFP.

Appellants say GSA did not ask BPT for any progress reports between March 18 and June 1. The record shows BPT contacted GSA on April 21 or 22 and told GSA of the alternatives developed by GME. BPT also told GSA it was in the process of preparing pricing and delay estimates based upon the alternatives. GSA contacted BPT on May 19, and asked for a response to the request for proposals so it could continue discussions with appellants and MPCA. On May 26, TLPA, MPCA, MCDA, Turner, and BPT met to review Turner's statement of work for excavation, sheeting and bracing, and soil remediation. GSA did not prod BPT for a response to the request for proposals, because GSA decided BPT should be allowed to determine the services which would be needed in order to respond to the request for proposals and GSA was not inclined to interfere with BPT's work. Even if GSA had kept in close contact with BPT, there is no evidence to show this would have caused BPT to respond sooner than it did. As we said in the previous paragraph, two construction experts did not think BPT took an inordinate amount of time to respond to the request for proposals. The record does not establish that added costs or delay resulted because GSA did not have more contact with BPT between March 18 and June 1.

Appellants complain because while BPT worked to develop the two design concepts which it presented on June 2, it ignored STS and MCDA, who, according to appellants, were more experienced and knew more about the issues at the site than did BPT. Although STS and MCDA knew a great deal about the site, the condition of the site had been well documented in various reports by the time BPT received the design/build contract and GSA had provided several of these reports to the design/build contract offerors. In addition, GME was a part of BPT's team and provided the same services as did STS. MCDA had known for three years that the site would have to be remediated, and had hired STS to design and implement a remediation plan nearly one year earlier. The site, however, was still contaminated and BPT was faced with a 915-day deadline for not only remediating the site, but also completing a major construction project. If BPT decided not to tread the path that had failed to lead to success in the past and decided instead to assemble its own team and

develop its own concepts, this was a reasonable course to follow. BPT had to bear the costs of responding to the remediation RFP, and it had no incentive to make this effort any more prolonged or costly than necessary. The record does not establish that BPT's costs would have been lower or that its work would have progressed faster if it had worked with STS and MCDA between March 18 and June 1.

Regarding contact with MPCA, the record establishes that in mid-April, GME sent a letter to MPCA which contained a description of foundation construction, so MPCA could confirm that it would approve installing caissons through contaminated soil, as it had said it would do at the March 25 meeting. GME provided a diagram of its proposed method for installing caissons. GME also provided MPCA with a description of the excavation plan and said a key element of the plan was GME's understanding that MPCA would allow some contaminated soil to remain in place. BPT's decision to confer with MPCA instead of appellants regarding the installation of the caissons is understandable because MPCA, not appellants, had the authority to decide whether the procedure would be acceptable and GME needed approval from MPCA, not appellants, in order to leave contaminated material in place at the site. We are not convinced costs were incurred or delays were experienced because BPT worked with MPCA regarding the procedure for installing caissons.

The June 2 meeting

BPT responded to the remediation RFP on June 1. GSA, TLPA, Sverdrup, MPCA, BPT, Turner, GME, MCDA, and STS met on June 2, to review and evaluate the two design concepts which BPT had developed. The importance to BPT of indemnification became clear and this subject was discussed throughout the meeting. BPT's Alternative A was to isolate the entire site by building a grout curtain cutoff wall around the site and excavating to bedrock. Its Alternative B, which assumed it would be indemnified against future claims, was to isolate the Flour Exchange Building and the north part of the site, and allow contaminated soil and water to remain in place if they did not need to be excavated during construction. MCDA rejected both ideas. Although our record contains no reason for its objection to Alternative B, other than to hint it might have been because it did not want to provide the indemnification associated with this alternative, MCDA objected to Alternative A as being more than the minimum cleanup which MPCA would allow to take place. MCDA said it would not pay for either alternative.

Before the June 2 meeting, appellants asked STS to develop a conceptual design for a remediation system, which gives the impression they did not come to the June 2 meeting prepared to follow the process contemplated by the amended Development Agreement which said the design/build contractor would develop the remediation design. Appellants' reaction to BPT's response to the remediation RFP is difficult to reconcile with the terms of the

amended Development Agreement. Section 13.03 said the design/build contractor's remediation plan could include, among other things, removing the remaining contaminated soil, removing and treating the contaminated groundwater, sealing the site from the contaminated groundwater, and isolating the site from adjacent properties. BPT's alternative responses to the request for proposals included removing the contaminated soil, sealing the site from the contaminated groundwater, and isolating the site from adjacent properties. Thus, BPT's concepts were well within the range of the acceptable remedial actions contemplated by GSA and appellants when they entered into the amended agreement. The amended Development Agreement did not require the design/build contractor to implement the least costly remediation design. Yet, appellants said they would not pay for either of BPT's two concepts. Instead of discussing either of BPT's concepts when they had the opportunity to do so on June 2, appellants flatly rejected BPT's ideas and said they would not pay for either of them.

Appellants contend GSA breached Section 13.03 of the amended Development Agreement, which said BPT would develop a remediation plan, when it asked MCDA and STS to replace BPT as the designer of the remediation plan. This breach, say appellants, resulted in a breach of section 8.04 of the Development Agreement and section 13.07 of the amended Development Agreement because appellants had to pay STS to develop a plan. Appellants' Brief at 4, 19, 26, 31-32; Appellants' Reply Brief at 5, 13. According to the record, at the June 2 meeting, after MCDA said it would not pay for either of BPT's concepts, GSA suggested that MCDA provide a remedial design which BPT could implement. MCDA then asked STS to provide such a design. Before the June 2 meeting, MCDA had asked STS to develop a conceptual design for a remediation system, and at the meeting, everyone agreed it would be acceptable if STS and MCDA provided the design. We cannot fault GSA for trying to find a solution to the problem which was created when appellants rejected both of BPT's concepts out of hand. In addition, there is no proof that STS's remediation plan design costs exceeded those appellants would have paid GSA for BPT's remediation plan design costs.

Appellants say GSA allowed BPT to develop its alternative concepts in order to protect BPT's team from liability instead of developing concepts to provide value and minimize costs as required by section 8.04 of the Development Agreement and section 13.07 of the amended Development Agreement. Appellants' Brief at 25; Appellants' Reply at 2-4. Clearly, BPT developed its alternative concepts with a view toward whether it would be indemnified against potential future liability. Alternative B called for leaving contaminated soil and water in place at the site, and this left BPT open to potential claims if the contaminants migrated from the site or into the new construction. BPT's insistence upon indemnification was understandable. Leaving contaminated materials in place at a site could create future risks and BPT's contract did not make it responsible for bearing such risks.

Appellants had no legitimate expectation that BPT would propose a remediation idea which would leave it exposed to potential liability for contamination-related claims, when the amended Development Agreement said appellants were to bear the cost of a contract modification to remediate the site.

The importance of an indemnification agreement became clear at the June 2 meeting, and GSA and BPT continued to emphasize its importance during the succeeding months. On June 27, appellants sent BPT draft language for an agreement which would indemnify BPT and Turner against potential future liability. On July 14, BPT asked that indemnification be extended to its architect. On July 27, appellants sent BPT another draft agreement which included BPT's architect. The parties continued to negotiate the terms of the agreement. MCDA signed the final indemnification agreement and sent it to BPT on September 19.

In the opinion of the scheduling expert who examined the delay to BPT's progress, the lack of an indemnification agreement caused the delay. Appellants contend there are three reasons they are not responsible for the cost of this delay. Appellants' Brief at 18-19, 29; Appellants' Reply at 9-11.

First, appellants say there should have been no delay to BPT's progress because appellants orally committed to indemnify BPT in June. In support of this position, appellants rely upon the recollection of an expert witness who reviewed documents related to the design/build contract, not the testimony of a fact witness. The contemporaneous written record does not show appellants orally committed to indemnify BPT in June. The record establishes that on June 6, appellants told GSA they were prepared to indemnify BPT as a last resort, although they hoped GSA would be able to help appellants avoid this. This was hardly a commitment to indemnify BPT.

Second, appellants say the delay which BPT experienced was not excusable since BPT knew of the contamination at the site when GSA awarded the design/build contract. Appellants say BPT should not have entered into the contract without taking into account the contamination at the site and the need for indemnification or insurance. If BPT did not assess this risk appropriately, this is a risk it ought to bear, say appellants. What BPT knew when it entered into the contract was what it had been told in the December 1993 amendment to the design/build RFP. In the amendment, GSA told offerors there were at least two areas of contamination at the site which appellants were working to remediate. GSA said the exact condition of the site would not be known when it awarded the design/build contract and also said it would modify the design/build contract if any further remediation efforts and/or foundation work was required so the contractor could perform such work. This information did not require BPT to take the possibility of contamination into account when it entered into the design/build contract with GSA because the amendment said if any work was required

by BPT to remediate the site, the contract would be modified to include such work. The contract, as awarded, did not include any work related to contamination remediation and therefore BPT appropriately did not take such work into account when it responded to the design/build RFP.

Third, appellants say they were not required by the terms of the amended Development Agreement to provide BPT with indemnification, so they cannot be responsible if the lack of indemnification caused a delay to BPT's progress. However, appellants were required to bear the cost of a contract modification to remediate the site. On June 2, BPT presented two remediation concepts, one of which called for removing all contaminated material from the site and the other of which called for leaving contaminated material in place and obtaining indemnification for potential future liabilities. Because appellants insisted at the June 2 meeting that the site be remediated in such a way as to leave contaminated material in place, and because this insistence led directly to the need to indemnify BPT, the cost of indemnifying BPT from future potential liability was appellants' cost to bear.

Turner's progress in June, July, and August

Despite the lack of indemnification, Turner accomplished some work in June, July, and August. Appellants contend they are not responsible for any delays to BPT's progress because Turner voluntarily suspended its work during these months and caused the delay which occurred. Appellants' Brief at 21. In order to evaluate appellants' argument, we reviewed the work Turner performed during these months.

On June 6, a few days ahead of schedule, Turner began demolition of the old foundations and foundation walls which remained along the perimeter of the site, and also began mobilization work for its pile driving operation. While the remediation issue was being resolved, Turner thought it could install soldier piles until it had to penetrate the clay layer or remove soil. Turner did not know which soil was considered contaminated so it could not move any soil away from the site, and the stockpiled soil soon began to congest Turner's work area. As of June 13, MCDA's removal of soil which had been stockpiled during previous remediation efforts was going well, but affected soils in the middle of the site needed to be removed as soon as possible. On June 17, Turner's excavator had completed all it could do for the time being and it left the job in the afternoon. The existing perimeter foundation walls and below grade walls had been demolished on the north, west, and south sides of the site. None of the soil and building materials had been moved offsite as would typically be done, however, due to the remediation issue not being resolved.

As of June 24, Turner needed to work in the north part of the site where contamination had been found and where the courthouse would be located. Turner did not want to continue to work without the indemnification issue being resolved, but appellants had not drafted an indemnification agreement. Turner could not drive piles into bedrock on the west side of the site because it had not been told it was permitted to do so. When MPCA said it had no objection to Turner driving piles along the west side of the site, Turner agreed to resume installation of the pile and lagging retention system along the west, south, and east sides of the site, and begin bulk excavation and removal of non-contaminated soils. It also agreed to excavate contaminated material and load it into trucks provided by MCDA. Turner agreed to perform this work with the understanding that some sort of indemnification agreement would be in place by July 9, and that STS would be on site to monitor the excavated soils. Turner planned to be ready to install caissons beside the Flour Exchange Building in two weeks if a soil remediation plan and indemnification agreement were in place.

Turner returned to work in areas not affected by contamination on June 30. By July 6, it had installed sheet pile and lagging along the north side of the site and two-thirds of the way along the west side of the site. Concrete rubble from demolition was piled in the middle of the site and soil was stockpiled at the south end of the site.

Turner began bulk excavation in the south half of the site on July 6, and its excavation subcontractor hauled the excavated material to a location where a state agency needed fill dirt. Shortly before noon on July 7, the state agency stopped Turner's subcontractor from depositing the excavated materials because the agency was concerned that the materials were contaminated. There was no hauling of excavated materials on July 8. By July 8, Turner had installed sheet pile along most of the west side of the site.

There was a meeting at the job site on July 12 to discuss the procedure for excavating and removing material so Turner could resume its excavation work. STS agreed it would be at the site whenever excavation occurred and would test and monitor excavated material at the site. GME would monitor and test the material at the state agency site and would complete a manifest for each load. Turner said it would meet with the state agency and explain this process so hauling could resume. Excavation and hauling began again on July 14. During excavation, Turner encountered perched water at a higher elevation than expected.

In late July, BPT told GSA excavation could not take place until MPCA approved a revised MCDA drawing which showed contaminated and non-contaminated areas of soil at the site. On August 1, BPT told GSA it could resume hauling non-contaminated soils from the site because it received a copy of a letter from MPCA to STS dated July 28, which agreed with STS's description of the boundaries of the contaminated areas within the site.

In August, while the STS remediation plan was being finalized, reviewed, and approved, Turner resumed its construction activities. On August 10, BPT told GSA that Turner would soon begin installing five caissons next to the Flour Exchange Building using the special installation method made necessary by the presence of contaminated soil and water. Turner began installing the first caisson on August 15, and encountered a problem almost immediately. While Turner was drilling a caisson in the contaminated area next to the Flour Exchange Building, water seeped into the caisson and rose to a depth of five feet. The next morning, Turner, BPT, and the STS technician on site tried to contact someone from STS to come to the site and offer a solution to the problem. That afternoon, an STS representative came to the job site. The following morning, August 17, STS provided a written recommendation for solving the problem with the first caisson and a procedure for installing the remaining caissons.

On August 19, BPT told GSA that progress on critical construction activities was at a standstill. BPT said Turner had installed the retention system and one caisson according to the STS plan. Excavation had started and stopped due to lack of proper delineation of contaminated areas and lack of an approved plan to show to those who might be able to receive excavated materials.

On August 31, Turner complained to BPT about its inability to accomplish any meaningful work. Turner told BPT it had studied the possibility of performing work out of the planned sequence of work, in an area which was supposedly not contaminated. However, it seemed to Turner that work in the area would be quite restricted until measures had been taken to make sure contaminants from other parts of the site did not migrate to the area. Also, accomplishing work in this way would be quite inefficient.

Turner had resumed its excavation operations by September 8. On September 12, STS found a localized area of odorous soil and sent samples for analysis. On September 13, STS found more such soil plus contaminated soil at random locations throughout the southwest part of the site and outside the area that was identified in the remediation plan as containing contaminated soil. Turner had no place to work productively until the conditions could be more thoroughly analyzed.

In summary, Turner started work a few days before the date it expected to begin. However, it stopped work several times when it encountered remediation-related issues which needed to be resolved. The starting and stopping continued until the indemnification agreement was in place and GSA issued the notice to proceed on September 26. During June, July, and most of August, Turner worked without having either a remediation plan or an indemnification agreement in place. It repeatedly expressed its concern about delays and tried to make plans to overcome these delays. Turner had no guarantee it would be

compensated for any delays it experienced, so it was not in Turner's interest to suspend its work voluntarily. We agree with the scheduling expert who concluded Turner's halting progress was not due to its voluntary decision to suspend its work.

STS's remediation plan

While Turner was working at the site in June, July, and August, STS was developing its remediation plan. Appellants say MPCA issued an approval letter for an STS remediation plan on June 16. Appellants' Brief at 20. This is not supported by the record. MPCA's June 16 letter said BPT had developed two preliminary concepts for a remediation plan, noted STS was working to develop a plan, and said it would need to review any such plan. Clearly, this letter did not amount to the approval of a remediation plan.

STS circulated an initial work plan on June 17. On July 6, STS produced its construction soil remediation plan, which was a substantial revision of its June 17 work plan. On July 26, STS completed its environmental construction plan, which was a fairly extensive revision of the July 6 plan. On August 9, STS finished a revised version of its environmental construction plan, and on August 22, STS completed additional revisions to the plan. STS made minor amendments to the plan on August 25. On August 26, MPCA and GSA approved the August 22 plan, as amended.

The concept which underlies the remediation plan developed by STS is very similar to BPT's Alternative B, which appellants summarily dismissed on June 2. Both Alternative B and the STS plan called for leaving contaminated water and some contaminated soil in place at the site. Like Alternative B, the STS plan included a cutoff wall running east to west across the site, beginning near the southwest corner of the Flour Exchange Building, to separate the relatively uncontaminated south part of the site where deep excavation would occur from the north part of the site where most of the contaminated soil and water were expected to be located. While Alternative B called for isolating the entire north part of the site, the STS plan extended the cutoff wall nearly all the way across the site and isolated only the area where the elevator pits were located within the north part of the site. The cutoff wall proposed by STS's plan was approximately 75% as long as the distance around the perimeter of the entire north part of the site. Alternative B called for underpinning the west wall of the Flour Exchange Building unless MPCA would allow contaminated soil to be left in place near this building. Based upon MPCA's decision, made after BPT presented Alternative B, that contaminated soil could be left in place near the Flour Exchange Building, the STS plan did not require underpinning the entire west wall. Although STS's plan included many details which Alternative B did not, Alternative B was only meant to set out a concept for a remediation design which BPT could have begun developing on June 2, while STS developed a complete remediation plan.

Appellants argue if they are responsible for the delay which occurred as the result of not having an indemnification agreement in place, GSA is responsible for concurrent delay which occurred as the result of not having an approved STS remediation plan in place until August 26. In support of this argument, appellants say that as of the June 2 meeting, STS had not received GME's boring logs or information regarding the location of foundation elements, caissons, elevator pits, and the depths of planned excavation. Appellants' Brief at 19-20. There is no reason, however, why STS had any need for such information as of the June 2 meeting because until this meeting, during which appellants rejected both of BPT's concepts, STS was not responsible for designing the remediation plan.

In support of their concurrent delay argument, appellants also say BPT delayed providing STS with GME's boring information and information regarding the foundation, elevators, and excavation. Appellants say STS did not receive the information it needed to develop a remediation plan until June 13. They also contend STS needed more detailed structural plans than BPT had developed as of June 24, in order to develop a system for controlling vapors in the building. Appellants' Brief at 3, 19-21, 30; Appellants' Reply Brief at 12.

The record shows STS asked for GME's boring logs on June 2. BPT was not obligated to provide this information because it had been developed entirely at BPT's expense. Nonetheless, GME provided its boring logs to STS by June 9. On June 8, BPT provided STS with the Level 1 basement plan as it had been submitted to GSA pre-award. BPT explained that every column shown on the plan would be built over a caisson socketed into rock, and showed on the plan the approximate location of the wall between the portion of the site to be excavated to bedrock and the portion to be excavated to a lesser depth.

On June 9, STS said it had been able to use the drawings BPT provided. It had concluded the installation of Turner's pile and lagging retention system would not require any special construction methods because the soldier piles would not penetrate the clay layer. BPT had provided STS with drawings of typical caisson construction. Turner and STS discussed Turner's plan to underpin the Flour Exchange Building and they agreed underpinning was necessary only at the southwest corner of the building. Turner gave STS the estimated elevations of the floor of the new building and the bottom of the footings located at the southwest corner of the Flour Exchange Building.

In a June 13 meeting, STS received answers to many of its questions. BPT explained it could provide STS with a copy of BPT's best and final offer plans. However, preliminary building design plans were not due from BPT to GSA until mid-July, and final design plans were not due until September. STS said the caisson design outlined by GME was acceptable and STS would decide which locations needed to use the design and how to deal with the

spoils from the installation, recognizing that the exact locations of caissons and pilings were in the process of being designed by BPT. Also discussed at the June 13 meeting was the system of underpinning at the southwest corner of the Flour Exchange Building proposed by BPT in its best and final offer. STS was going to recommend what system should be placed at this location and the extent of the underpinning. The cutoff wall which STS was to design to divide the north and south parts of the site would most likely be connected to the underpinning in order to provide a continuous barrier. Elevator shafts would penetrate the clay layer to rock and STS was to provide the design for this installation. In addition, STS would provide a plan for venting the occupied spaces in the basement and the electrical vaults.

STS said at a June 24 meeting that it could provide a more complete remediation plan if it had structural drawings, but it understood drawings had not yet been developed by BPT. STS had been given access to the available project drawings. STS saw on the drawings that three elevator shafts would need to be constructed in an area containing contaminated materials and the meeting attendees felt STS could provide BPT with sufficient details so the shafts could be constructed in this area.

The evidence does not establish GSA is responsible for any concurrent delay to the completion of the project which occurred because STS's plan was not in place until August 26. Between June 2 and June 13, GSA, BPT, and Turner gave STS the information it needed to prepare an acceptable remediation plan. Between June 2 and August 26, GSA, BPT, and Turner met numerous times with STS and provided STS with as much information as they had available. If BPT did not provide the plans STS wanted, this was because BPT reasonably did not yet have them. GSA, BPT, and Turner and their consultants reviewed STS's drafts promptly and provided relevant, useful feedback and suggestions. Based upon these facts, we are not persuaded that GSA was responsible for any concurrent delay which occurred as the result of not having the approved STS remediation plan in place until August 26.

Appellants argue if the initial STS remediation system, which called for air sparging and soil vapor extraction, had been left in place, it would have been able to remediate the site by the time BPT was ready to begin its construction work. Appellants imply that the remediation plan which STS developed in June, July, and August 1994 was not required in order to remediate the site to MPCA's standards and, therefore, the costs which resulted from implementing the plan were not necessary and exceeded the costs which the amended Development Agreement required appellants to pay. This, say appellants, resulted in a breach of section 13.01 of the amended Development Agreement, which said MCDA agreed to pursue and fund remediation of contamination, and which said the definition of

contamination and the standard of remediation were to be in accordance with the rules, regulations, and determinations of MPCA. Appellants' Reply Brief at 6.

STS's initial remediation system relied upon groundwater extraction as the primary means of removing contaminants from the site. However, when STS designed its system, it did not know it would be unable to remove groundwater due to the concerns of the Flour Exchange Building. Also, STS did not know the groundwater was recharging. In addition, when STS designed and began operating its system in mid-May 1993, it did not know the Development Agreement called for MCDA to convey the site to GSA in November 1993. MPCA approved the initial STS system based upon MPCA's understanding that the date upon which the property was to be conveyed to GSA was not known and based upon MPCA's belief that sufficient time was available to meet its cleanup goals.

In early February 1994, Sverdrup said the STS system was operating as intended, but appeared to be a slow means of removing contamination. At a meeting held March 25, 1994, GME understood MPCA to say the air sparging and soil vapor extraction system would have remediated the site if it had been left in place. However, we cannot conclude MPCA meant to say the system would have been able to remediate the site by the time BPT was ready to begin construction, because this conclusion would be contrary to the view MPCA expressed in late February 1994, when it said it was unlikely the STS system could remediate the contaminated soil before construction activities began in June 1994, and contrary to MPCA's statement that the STS system most likely would have been successful had there been no time constraints. In early June 1994, stockpiled contaminated soil, which had been receiving treatment using STS's remediation system since 1993 was still contaminated. Although the record does not demonstrate there was anything deficient about STS's system, the system was designed without STS having full knowledge of the conditions at the site and without STS knowing its system would have to complete its work within a short period of time.

The evidence does not establish the STS air sparging and soil vapor extraction system could have remediated the soil at the site by the time BPT was ready to begin construction in early June 1994. In addition, the STS system would not have remediated the contaminated groundwater and included no plan for dealing with this source of contamination. For these reasons, we reject appellants' argument that the implementation of the subsequent STS remediation plan constituted a breach of the amended Development Agreement by GSA.

Appellants also argue that the remediation plan which STS developed in June, July, and August 1994 contained an element which MPCA's standards did not require. The plan included an underslab vent system as a means of controlling petroleum vapors which could accumulate in the courthouse as a result of the volatilization of contaminants left in place at the site. The negotiated price of the amendment to BPT's contract included \$54,000 for this

system. Section 13.01 said MCDA agreed to pursue and fund remediation of contamination, and said the definition of contamination and the standard of remediation were to be in accordance with the rules, regulations, and determinations of MPCA. Appellants contend the underslab vent system was not required in order to remediate the site to MPCA's standards, and also contend the amended Development Agreement required them to pay only the costs necessary to remediate the site to such standards. Appellants conclude GSA breached section 13.01 of the amended Development Agreement because the cost of the underslab vent system was included in the \$2,420,295 deposit which they paid to GSA. Appellants' Brief at 21, 23, 30; Appellants' Reply Brief at 4.

Although it was not within MPCA's authority to require a property owner to construct a safe building, it was within MPCA's authority to survey and monitor structures for the presence of petroleum vapors which arose from the volatilization of contaminants. MPCA's standards allowed for a variety of methods for remediating a contaminated site, and it was within MPCA's authority to decide whether a remediation plan could include leaving contaminated soil and water in place at a site. This decision by MPCA depended in part upon whether the property owner intended to construct a building on the site and, if so, whether the owner had accounted for the possibility of harmful vapors accumulating below grade.

The first mention in our record of vapors and the need to account for them when the courthouse was constructed is contained in a letter written by MPCA in February 1993. MPCA cautioned that if deep basements were to be constructed and if the contaminated clay deposit would remain at the site, the building design should take into account the potential for migration of petroleum vapors into the basements. In a letter to MCDA dated February 28, 1994, in a section which addressed MPCA's requirements, MPCA said discussions with BPT could also include the necessity of having to mitigate the accumulation of organic vapors in the building.

On August 11, 1994, MPCA said it had not reviewed the sections of the STS remediation plan which addressed underslab venting because MPCA said it had no authority to regulate this area. However, MPCA also said that, as with the development of any contaminated property, special consideration should be taken in the design of the building in order not to allow organic vapors to migrate and accumulate inside the building. On September 22, 1994, MPCA notified GSA that because contamination could still be present, development plans ought to consider the potential for vapors to enter structures.

In discussing what needed to be done to remediate the environmental conditions at the site, MPCA consistently associated the idea of leaving contaminated material in place with the need to control the accumulation of vapors inside the new structure. STS, a firm with a great deal of expertise in dealing with petroleum contamination, considered the underslab

vent system to be a reasonable and proper element of its site remediation plan because the system was needed to protect the courthouse from the accumulation of vapors.

Appellants have not established that the underslab vent system was not required in order to remediate the site to MPCA's standards. Based upon the evidence contained in the record, we conclude MPCA's standards allowed leaving contaminated soil and groundwater in place at a construction site, so long as MPCA decided the volatilization of the contaminants left in place were not going to pose a hazard in the future. The STS plan alleviated this hazard by incorporating the underslab vent system. The costs of the underslab vent system, including design, construction, overhead and profit costs, delay costs, and associated management and inspection costs, were the direct result of the selection of a remediation effort which allowed contaminated material to remain at the site. If the contaminated soil and groundwater had been removed, no underslab vent system would have been needed. Appellants insisted upon a remediation effort which allowed contaminated material to remain, however, because they believed it would be less costly. As a result, the STS plan included an underslab vent system in order to ensure the safety of the occupants of the building and minimize the risk of future potential liability. The amended Development Agreement requires appellants to pay for such costs. For this reason, we reject appellants' argument that including the cost of the underslab vent system in the deposit which they paid to GSA constituted a breach of the amended Development Agreement by GSA.

Conclusion

When GSA, the City, and MCDA entered into the Development Agreement, appellants agreed to pay the cost of remediating all identified environmental conditions at the site and they engaged STS to develop a remediation system. The cost of the STS system would have been minimal and would have been reimbursed from the Petrofund. When STS developed its system, it did not know the full extent of the contamination at the site, did not know its system would be in place for only a few months, did not know it would not be able to remove contaminated groundwater, and did not know the groundwater was recharging. MPCA said it approved the STS design based upon MPCA's understanding that the date upon which the property was to be conveyed to GSA was not known and sufficient time would be available to meet MPCA's cleanup goals.

When it became clear the STS system was not going to be able to remediate the site within the time available, the parties began discussing an amendment to the Development Agreement. GSA made clear that neither it nor its design/build contractor would pay for any additional costs incurred because of the conditions at the site. MCDA acknowledged that developing a remediation system after award of the design/build contract would be a change to the contract, and said it would pay for added costs caused by the change.

Consistent with the discussions which led up to the amended Development Agreement, the amended agreement made appellants liable for delay costs and management costs as well as remediation costs. Section 13.04 said GSA would issue a modification to the design/build contract to effect the appropriate remediation efforts. MCDA acknowledged responsibility for and agreed to pay the cost of the modification, including but not limited to design, construction, overhead and profit costs, delay costs, and all associated management and inspection costs, to GSA.

After the parties amended the Development Agreement, MPCA told appellants the payments they received from the Petrofund were likely to be reduced because the reinstallation of the STS system after demolition was not likely to be effective. MPCA believed the bulk excavation which was going to occur at the site would achieve the remediation objective, although Petrofund reimbursement would not be available for the excavation of more than 400 cubic yards of contaminated soil. GME understood from MPCA that the Petrofund would not reimburse any more costs incurred in order to remediate conditions at the site.

After appellants realized the cost of BPT's remediation efforts might be greater than they anticipated and would not be reimbursed by the Petrofund, they said they would not pay for a remediation plan based upon either of BPT's concepts, and took the position that the amended Development Agreement required only the implementation of the least expensive, most minimal method of remediation possible. This is not what the amended Development Agreement said, however. When the parties negotiated the amended Development Agreement, appellants wanted it to provide that GSA would use its best efforts to cause the design/build contractor to implement the least costly remediation design, but GSA would not agree to this language. The amended Development Agreement allowed isolating the site, and as appellants knew, the design/build contract did not impose any constraints upon the design/build contractor's excavation or design and the entire site was supposed to be available for development. The amended Development Agreement said appellants could not compel GSA to have the design/build contractor alter the awarded design or the schedule in order to achieve a less costly remediation effort.

GSA understood that in order to achieve an economical solution to the contamination problem, it needed to take into account the overall project and consider the costs of delay and the costs of GSA's management and supervision as well as the cost of remediation. GSA, BPT, and Turner clearly understood that time was money, and they repeatedly expressed their concerns about delay. BPT and Turner considered whether they could accelerate their work and work extended hours in order to prevent a delay from occurring and regain the schedule.

Appellants were concerned about the cost of implementing the remediation plan. They refused to pay for either of BPT's alternative concepts. They did not move quickly to resolve the indemnification issue. They suggested piecemeal approaches to implementing a remediation plan and to moving the remediation work forward. They balked at paying the full amount required by section 13.08 of the amended Development Agreement, knowing their contribution was needed in order for the project to move ahead. All the while, BPT's progress was delayed and delay costs mounted.

GSA fulfilled its responsibility to contain the cost of remediating the site when it negotiated a price with BPT which did not include any more than was necessary to pay for the costs of remediation, including the costs of a ninety-day extension to the construction schedule caused by the delay to the completion of the project. As for the length of the delay, there is no doubt it was at least ninety days. The ninety-day extension to BPT's performance period is consistent with the delay estimates prepared before price negotiations occurred and with the analysis of the scheduling expert who provided his opinion regarding the delay.

GSA never agreed to accept responsibility for paying the cost of remediating the conditions at the site. In the Development Agreement and the amended Development Agreement, appellants agreed they would bear these costs. When appellants deposited \$2,420,295 with GSA, they did no more than they had agreed to do. They are not entitled to the return of this deposit.

Decision

The appeal is **DENIED**.

MARTHA H. DeGRAFF
Board Judge

We concur:

ANTHONY S. BORWICK
Board Judge

ALLAN H. GOODMAN
Board Judge