

COMMONWEALTH OF PENNSYLVANIA

NELLO CONSTRUCTION COMPANY, : BEFORE THE BOARD OF CLAIMS
A DIVISION OF GITO, INC. :
 :
VS. :
 :
COMMONWEALTH OF PENNSYLVANIA, :
DEPARTMENT OF GENERAL SERVICES : DOCKET NO. 3661 (ALL)

SUMMARY OF THE CASE

Plaintiff, Nello Construction Company (Nello), asserts claims for damages, a penalty and attorney fees against the Department of General Services (DGS). These claims arise from the construction of a visitors' center, museum and attendant facilities for the Pennsylvania Historical and Museum Commission. Nello acted as the lead contractor on the project. Nello asserts that DGS is responsible for numerous construction delays that occurred during the project, which resulted in increased costs and loss of productivity for which Nello is now entitled to payment in the form of damages.

Nello filed its first claim with the Board of Claims on August 27, 2003, Docket No. 3661, seeking \$462,173.55 in delay damages and costs (later amended to \$462,010.48), \$4,827.30 for electrical costs, \$7,087.74 for insurance costs, and \$2,144.02 in reimbursement for custom floor mats. In addition, Nello requests that the Board award days for extension-of-time-requests recorded during the project as Request Nos. 4, 6, 7, 8 and 11. On October 1, 2003, DGS filed an answer, new matter and counterclaim, seeking in its counterclaim \$41,620.00 in damages because of Nello's alleged failure to properly install and flush a geothermal well system.

Nello filed a second claim on October 27, 2003, Docket No. 3667, requesting only that the Board award days for an extension-of-time-request recorded as Request No. 12. In a third claim filed on November 5, 2003, Docket No. 3673, Nello requests only that the Board award days for extension-of-time-requests recorded as Request Nos. 14 and 15. In a fourth claim filed on November 18, 2003, Docket No. 3677, Nello requests only that the Board award days for an extension-of-time-request recorded as Request No. 16. By Order dated December 6, 2004, the Board consolidated the four claims under Docket No. 3661.

The case was heard by a panel from June 13 through June 16, 2005, in the Harrisburg offices of the Board of Claims. The panel issued its report on February 8, 2006.

FINDINGS OF FACT

1. Plaintiff Nello is a Pennsylvania corporation with offices located in Canonsburg, Washington County, Pennsylvania. "Nello Construction Company" is a registered, fictitious business name for Gito, Inc., which conducts its operations through Nello. (Joint Exhibit 1; N.T. 25-26 (parties' stipulations of fact))

2. Defendant DGS is a Commonwealth agency with its main offices located in Harrisburg, Pennsylvania. (Joint Exhibit 1)

3. On June 7, 2001, Nello and DGS entered into Contract No. DGS 947-8.1 ("Contract"). (Exhibit P-1; Joint Exhibit 1) The Contract project, known as the "Old Economy Village Visitors' Center," required the construction of a visitors' center, museum, offices and attendant facilities located on property in or near the Borough of Ambridge, in Beaver County, Pennsylvania. (Exhibit P-1; N.T. 42-43) The value of the contract was \$2,433,000.00. (Exhibit P-1 (Contract))

4. As defined in Section 104 of the Commonwealth Procurement Code, 62 Pa. C.S.A. §104, the Pennsylvania Historical and Museum Commission is the "using agency" for whose benefit the Contract project was implemented. (N.T. 406)

5. The initial job conference for the project was held on June 28, 2001, at which time Nello received a notice-to-proceed from DGS. Article 4 of the Contract states that the work on the project was to be completed on or before 335 calendar days from the date of the initial job conference; thus, the Contract completion date was May 29, 2002. (Exhibit P-1 (Contract); Joint Exhibit 1)

6. Attending the initial job conference were representatives of the Pennsylvania Historical and Museum Commission, DGS, the professional architectural firm of Susan Maxman & Partners (Maxman), Nello, and Wayne Crouse, Inc., the contractor responsible for installation of the facility's HVAC system. (Exhibit P-3)

7. For reasons described in subsequent parts of this opinion, work on the project was subject to various delays, requiring Nello to submit to DGS several extension-of-time requests ("EOTRs"). Although disputes exist between the parties regarding the manner in which, and duration for which, several of these EOTRs were granted, DGS granted the following EOTRs for the indicated number of days and with the new Contract completion date:

<u>Nello Request</u>	<u>Date Granted</u>	<u>Number of Days</u>	<u>New Completion Date</u>
EOTR No. 5	June 19, 2002	29 days	June 27, 2002
EOTR No. 6	Aug. 13, 2002	65 days	Aug. 31, 2002
EOTR No. 11	Oct. 17, 2002	9 days	Sept. 9, 2002
EOTR No. 14	Jan. 10, 2003	63 days	Nov. 11, 2002
EOTR No. 15	Jan. 10, 2003	54 days	Jan. 4, 2003

EOTR No. 6

(recalculation) Sept. 5, 2003 26 days
(recalculation adding 26 days to original extension)

Jan. 30, 2003

Total of extensions granted: 246 days

(Joint Exhibit 1)

8. Final inspection on the project occurred on January 30, 2003. Thus, the project, which was to have been completed within 335 days, or by May 29, 2002, was not completed for 581 days, or 246 days past the original Contract completion date. (Joint Exhibit 1)

Delays Related to the Redesign of the HVAC System

9. The initial design of the facility's HVAC system was performed by Maxman, DGS's professional architectural firm in charge of the overall project. That design had been completed before the initial job conference on June 28, 2001, and before work commenced on the project. (N.T. 54, 595-96)

10. The contractor responsible for submitting the HVAC shop drawings to Maxman was Wayne Crouse, Inc. (N.T. 579-584)

11. Shortly after the initial job conference and the commencement of construction, the Pennsylvania Historical and Museum Commission requested a redesign of the HVAC system in order to ensure a "more elaborate integrated technology oriented system." (Exhibit P-17 (job conference minutes No. 5 of 9/6/01); N.T. 45 (testimony of George Leasure, president of Nello)) The Commission requested the change in order to have installed a HVAC system that the Commission contemplated would eventually be used in its other facilities throughout the state. (N.T. 583)

12. On or about September 4, 2001, DGS issued a change order to Wayne Crouse, Inc., in order to allow the contractor to begin preparing his cost estimates for the requested changes in the HVAC system. (Exhibit P-17 (job conference minutes No. 5 of 9/6/01))

13. The change order for the HVAC system required Wayne Crouse, Inc., to submit to Maxman documents detailing the equipment to be installed and the performance specifications of that equipment. Crouse had difficulty finding a manufacturer whose equipment met the required performance specifications. Crouse submitted the first of what were to be several submittals for this equipment on October 15, 2001. Many of the submittals were returned and final approval of some of the equipment did not occur until June 17, 2002. (Exhibit DGS-13 (p. 18); N.T. 579-82)

14. By early January 2002, Nello had constructed much of the foundation and was prepared to pour the concrete slab for the facility's first floor. By letter dated January 8, 2002, DGS instructed Nello not to install the concrete slab because some of the as yet unapproved

HVAC equipment might have to be installed in the basement by lowering it through an opening in the first floor. (Exhibit P-6.14; N.T. 51-53)

15. By letter dated January 24, 2002, DGS informed Nello that the issue of how to install HVAC equipment in the basement had been resolved and that installation of the first floor slab could proceed. (Exhibit P-6.22) On February 8, 2002, Nello submitted EOTR No. 5, requesting a 30-day extension because of the delay. By letter dated June 19, 2002, DGS approved an extension of 29 days. (Exhibits P-6.24, 6.28)

16. Because of the complexity of the HVAC control system and the need for Maxman to approve each component of the equipment that was to constitute the new HVAC system, the requested upgrade of the HVAC system by the Pennsylvania Historical and Museum Commission resulted in substantial delays in installing the system and in coordinating and completing other aspects of the construction project. (N.T. 101-119; Exhibits P-12.3 – 12.8)

17. Throughout the construction project, DGS and all other involved parties essentially agreed and acknowledged that the request for an upgraded HVAC system resulted in delays in the approval and installation of that system and in the timely preparation and completion of other work on the project:

A. By letter to Maxman dated January 10, 2002, DGS stated that because of the HVAC submittal, review and approval process, the HVAC equipment was not scheduled to be delivered to the job site until April or May 2002. (Exhibit P-12.3)

B. In intra-department e-mails sent May 3, 2002, DGS employees acknowledged that the requested changes to the HVAC system had necessitated a complex and lengthy review and approval process of the HVAC system and its components, that the process could not be accomplished quickly, and that the delays caused by the process had affected the coordination and completion of other construction tasks. (Exhibits P-12.7 – 12.8)

C. In a letter to DGS dated August 14, 2002, Nello stated that the problems caused by the HVAC change order had delayed work on several types of construction tasks. (Exhibit P-12.9 – 12.10)

D. In an e-mail from Maxman to DGS dated August 19, 2002, Maxman agreed that the HVAC system had to be installed before Nello could complete such interior work as finishing the drywall, installing windows and storing certain building materials. (Exhibit P-12.11)

E. By letter to Nello dated August 23, 2002, DGS acknowledged that the changes necessitated by the HVAC change order had affected work on the project and that Nello had the right to file for additional costs and damages. (Exhibit P-12.12)

F. By letter to DGS dated October 9, 2002, Nello stated that some aspects of its interior work were being delayed because of continuing work on the HVAC installation. (Exhibit P-12.22)

G. In an intra-department e-mail sent June 11, 2003, DGS noted that as of January 30, 2003, the date of the final inspection, the HVAC system was still not completely operational. (Exhibit P-12.51)

18. The change order issued by DGS in order to satisfy the Pennsylvania Historical and Museum Commission's request for a redesigned, more technologically sophisticated HVAC system resulted in lengthy delays in reviewing, approving and installing the HVAC components. (Exhibits P-12.3, 12.5, 12.7 – 12.9; N.T. 423-424; Board Finding)

19. The delays in reviewing, approving and installing the HVAC components required by the HVAC change order impeded and delayed Nello Construction's scheduling and coordination of work, delayed the scheduled finishing of interior work such as walls, ceilings and windows, and delayed the installation of numerous miscellaneous fixtures. (Exhibits P-12.9 – 12.11, 12-.6 – 12.19, 12.22, 12.32; N.T. 101-135)

20. In defense of this claim, DGS asserts that Wayne Crouse, Inc., was responsible for all or part of the delay in approving and installing the new HVAC system. (DGS Proposed Findings of Fact 25-30, Post Trial Brief of the Commonwealth at 2-3) However, DGS did not present persuasive evidence that, given the complexities of the redesigned HVAC system, Wayne Crouse, Inc., took an unreasonable length of time to submit acceptable cost and equipment-performance specifications and other submittals to Maxman for approval. (N.T. 579-584, 587; Board Finding)

Delays Related to the Unsuitable Soil Conditions

21. On or about January 8, 2002, Nello, while excavating on the work site, encountered unsuitable silt and sand at the sub-grade level of the parking lot. Nello immediately informed Maxman of the problem and requested further instructions. (Exhibit P-7.3; N.T. 63-64)

22. By facsimile to Maxman dated January 17, 2002, Civil & Environmental Consultants, an independent consultant retained by DGS, recommended that the unsuitable material be over-excavated and that the site be refilled with a more stable material. Maxman faxed a copy of the letter to Nello on the same day. (Exhibits P-7.2 – 7.7; N.T. 64-68)

23. By letter to Maxman dated February 4, 2002 (erroneously showing "2001" on the first page), Civil & Environmental Consultants made additional recommendations regarding the unsuitable soil conditions. (Exhibits P-7.9 – 7.11)

24. By letter to Maxman dated April 9, 2002, Civil & Environmental Consultants made additional recommendations regarding the unsuitable soil conditions. Maxman faxed a copy of the letter to Nello on April 11, 2002. (Exhibits P-7.12 – 7.15)

25. On April 11, 2002, Maxman faxed to Nello a request for a change order in order to proceed with remediation of the unsuitable soil conditions. Nello faxed the signed request to DGS on April 11 or 12, 2002. (Exhibits P-7.17 – 7.18)

26. In an e-mail to the Pennsylvania Historical and Museum Commission dated April 12, 2002, DGS stated that it was ready to proceed with the excavation of the unsuitable soil material and that it was awaiting information from the Commission on how the excavation would be funded. (Exhibit P-7.18)

27. On or about June 12, 2002, DGS received a second request for a change order from Nello containing a revised change order cost amount. (Exhibit P-7.21)

28. By letter dated June 14, 2002, DGS informed Nello that the change order had been approved and that Nello could proceed with excavation of the unsuitable soil material. (Exhibit P-7.22)

29. Nello commenced work on the excavation project on or about June 21, 2002. (Exhibit P-7.34; N.T. 74-76)

30. The need to excavate and refill areas of the work site delayed Nello's completion of the geothermal well system, the installation of storm sewers and sidewalks, and the laying of asphalt in the parking lot. (Exhibit P-7.34; N.T. 76-80)

31. DGS's delay in approving the change order allowing work to commence on the excavation project resulted in delays for Nello in completing the geothermal well, in constructing storm sewers and sidewalks, and in laying asphalt in the parking lot. (Exhibits P-7.22, 7.34 - 7.37, 8.2 – 8.4, 9.3 – 9.5; N.T. 76-80, 139)

32. Because of the delays caused by the excavation project and DGS's delay in approving a change order to perform that work, Nello could not finish installation and air-pressure testing of the geothermal well system until July 1, 2002. The testing and filling of the wells was a critical path item in the project schedule. (Exhibits P-7.36 – 7.37, 7.39; N.T. 139)

33. On June 21, 2002, Nello submitted to DGS EOTR No. 6, requesting a 163-day extension encompassing the time from January 8, 2002, when the unsuitable soil conditions were discovered, to June 21, 2002, when Nello commenced excavation. The request form also cited DGS's delay in approving a change order to allow work to commence work on the excavation project. (Exhibit P-7.34)

34. By letter dated August 13, 2002, DGS approved EOTR No. 6, but for only 65 days. (Exhibit P-7.40)

35. On July 25, 2002, Nello submitted EOTR Nos. 7 and 8, both requesting extensions of time because of delays caused by the excavation project. DGS denied these requests. (Exhibits P-8.2, 8.6, 9.3, 9.7)

36. On September 9, 2002, Nello submitted EOTR No. 11, requesting an extension of 203 days and again citing the delay caused by the excavation project. By letter dated October 17, 2002, DGS granted an extension of 9 days. (Exhibits P-10.2, 10.5)

Delays Related to the Redesign of the Building Foundation

37. As of August 16, 2001, Maxman had approved Nello's rebar shop drawings that were related to the design of the building foundation. (Exhibit P-5.4; N.T. 587-588)

38. Sometime after August 16, 2001, Nello discovered that the root systems of some trees located on a neighboring property were encroaching into the area to be excavated for the building foundation. Continuing excavation according to the original excavation plans might have resulted in the destruction of the trees. (N.T. 150-151, 576-577.) In order to avoid destroying the trees and to avoid having the necessary excavation encroach on the neighboring property, DGS authorized Maxman to redesign a part of the foundation in order to reduce the amount of required excavation. (N.T. 150-151, 269-271, 577) Ultimately, Maxman's redesign affected 30%-40% of the building's foundation. (N.T. 145-146)

39. On September 4, 2001, Maxman, whose responsibility it was to issue new design drawings for the redesigned foundation, sent to Nello two such drawings and requested that Nello submit new rebar shop drawings for Maxman's review. (Exhibits P-5.5 – 5.7; N.T. 148)

40. By correspondence dated September 28, 2001, Maxman disapproved the initial set of rebar shop drawings and requested that Nello submit new drawings. (Exhibits P-5.9 – 5.14)

41. A prolonged discussion ensued between Nello and Maxman, revolving around the issue of how to construct a redesigned foundation. (Exhibits P-5.15 – 5.57; N.T. 145-150, 576-579) Nello submitted two additional sets of rebar shop drawings, which Maxman also disapproved. (Exhibits P-5.19 – 5.22, 5.42 – 5.45; N.T. 578-579)

42. On December 17, 2001, Maxman issued a second set of design drawings for the redesigned portion of the foundation, making material changes to the previous design. On December 18, 2001, Nello submitted new rebar shop drawings, the fourth set, which Maxman approved on the same day. (Exhibits P-5.50 – 5.57; N.T. 587-591)

43. Todd Woodward, Maxman's project architect, acknowledged that because the new design drawings issued on December 17, 2001, made material changes to the previous design drawings, Nello could not have issued acceptable rebar shop drawings until after it received the second set of design drawings. (N.T. 588-590)

44. DGS did not present persuasive evidence that Nello delayed approval and subsequent construction of the redesigned building foundation by failing to submit acceptable rebar shop drawings in a timely manner. (N.T. 578-579, 587-591; Board Finding)

45. On January 9, 2002, Nello submitted EOTR No. 4, requesting an extension of time of 57 days and citing as the reason the delay caused by the redesign of the building foundation. The request stated as the beginning date of delay November 7, 2001, the date on which Nello was prepared to begin constructing the section of the foundation that was redesigned, and as the ending date of delay January 3, 2002, the date on which Nello constructed the redesigned section of the foundation. (Exhibit P-5.58) By letter dated May 29, 2002, DGS denied the request. (Exhibit P-5.59)

46. DGS's decision to redesign part of the building foundation delayed Nello's completion of the foundation and also delayed the commencement and completion of subsequent work that depended on a finished foundation. (Exhibit P-5.58; N.T. 150-152)

Delays Related to the Lack of Three-Phase Permanent Electrical Power

47. DGS was responsible for providing a three-phase permanent electrical power source at the work site. (Exhibit P-21; N.T. 162-165, 198, 292-293)

48. Equipment for the building's elevator system was scheduled to be delivered in December 2001. (Exhibit P-11.6) Three-phase permanent electrical power was necessary to install the elevator system, which in turn had to be installed before the completion of certain other interior finishing work. (Exhibit P-11.4; N.T. 162-163)

49. By letter dated August 23, 2002, DGS informed Nello that "field staff has provided that permanent power should be in place within the next 3 weeks." (Exhibit P-21)

50. DGS did not make three-phase permanent electrical power available on the work site until sometime in late September or early October 2002. The contractor responsible for installing the elevator system began work on or about October 7, 2002. (Exhibit P-11.6)

51. The failure of DGS to supply three-phase permanent electrical power to the work site delayed installation of the elevator system, which in turn delayed Nello's completion of work involving the installation of concrete masonry units, drywall framing, acoustical ceilings, flooring and other finishing work. (N.T. 162-163)

52. On October 9, 2002, Nello submitted EOTR No. 12, requesting an extension of time of 301 days for work delayed by DGS's delay in providing three-phase permanent electrical power. (Exhibit P-11.2) By letter dated December 16, 2002, DGS denied the request. (Exhibit P-11.5)

Damages

53. Part of Nello Construction's claim for damages is based upon the additional costs and expenses incurred from May 29, 2002, the originally contemplated date of contract completion, to January 30, 2003, the date of final inspection. (Exhibit P-24, P-42; N.T. 201-202) Those damages consist of the following categories:

- A. Extended field supervision costs of \$69,930.00. (Exhibits P-24.18, 24.20)
- B. Extended project management costs of \$33,632.00. (Exhibits P-24.22, 24.24, 24.26)
- C. Extended general conditions costs of \$29,603.86. (Exhibits P-24.28 – 24.32)
- D. Extended home office and administrative costs of \$90,680.52.¹ (Exhibits P-24.34 – 24.39, P-42.125 – 42.126; N.T. 217-218)
- E. Loss of productivity costs of \$176,777.22. (Exhibits P-24.41 – 24.45)
- F. Wage escalation costs of \$19,385.93. (Exhibits P-24.47 – 24.56)
- G. 10% profit on total extended costs of \$42,000.95. (10% of A-F)

Total costs compiled in Exhibit P-24 and P-42: \$462,010.48.

54. The costs and expenses identified in paragraph 53 were compiled by George Leasure, president of Nello Construction Company. Mr. Leasure testified at length concerning how those costs and expenses were calculated. With minor exceptions as subsequently noted, the Board finds his testimony and the supporting exhibits to be credible evidence.

55. The construction delays caused by DGS, the delays on the part of DGS in processing EOTRs, and the sometimes unrealistic completion dates for the project resulted in losses of productivity on the part of Nello. Those losses of productivity were caused by the need to accelerate work, the need to perform work out of sequence in order to remain within schedule deadlines, the idling of equipment and workers while awaiting directions from DGS, and changes in the type of work that had to be performed on various aspects of the project. (Exhibit P-80; N.T. 45-47, 228-234, 348-349, 352-359)

56. David Williamson, P.E., testifying on behalf of Nello as an expert on the analysis of damages in construction claims, presented credible, substantial testimony and documentary evidence supporting Nello's claims for damages. Mr. Williamson's testimony and expert report support the following findings:

¹ In Exhibits P-24.34 – 24.39, Nello originally calculated its damages for extended home office and administrative costs as \$90,828.76. (Exhibit 24.35) However, as confirmed by Mr. Leasure during his testimony, the correct figure is \$90,680.52, the amount shown in Exhibits P-42.125 – 42.126.

A. DGS's practice of disposing of EOTRs after the expiration of the delay, and in some cases after the expiration of the then-current contract completion date, caused Nello to accelerate work and to over-man projects in an effort to meet what were unrealistic completion dates. (Exhibit P-80 (pp. 3-4))

B. Nello's claimed costs for extended field supervision, extended project management and extended general conditions costs are not based upon the "total cost" method of calculating damages. Because Nello is claiming costs only for the period from May 29, 2002, to January 30, 2003, the claims for damages are lower than they would be under the total cost method. For these categories of damages, Nello is claiming \$133,165.86, in contrast to a figure of \$181,006.00 if one were to use the total cost method. (Exhibits P-80 (p. 5), P-24.18, P-24.22, P-24.24, P-24.32; N.T. 349-350)

C. Nello's claimed costs for loss of productivity are not based upon the "total cost" method of calculating damages. For this category of damages, Nello is claiming \$176,777.22, in contrast to the \$221,748.00 figure if one were to use the total cost method. (Exhibit P-80 (p. 6), P-24.45; N.T. 349-351)

D. Nello sustained losses of labor productivity because of delays on the project. These include losses of productivity involving the installation of grade beams, the excavation of the foundation, installation of pile caps and piers, laying of the first-floor concrete slab, installation of the first-floor deck, and installation of drywall, siding, rough carp, and soffit and fascia. (Exhibit P-80, pp. 7-13)

57. DGS did not offer evidence seriously contesting the amount of damages claimed by Nello or the manner in which those damages were calculated. (N.T. 18, 301-318, 359-362; Board Finding)

58. Nello incurred the damages set forth in paragraph 53 above as a result of delays that occurred because of: (1) DGS's change order to redesign the HVAC system; (2) the excavation of the unsuitable soil conditions and DGS's delay in approving a change order to perform that work; (3) DGS's decision to redesign part of the building foundation; and (4) DGS's failure to supply to the work site three-phase permanent electrical power in a timely manner. (Exhibit P-24; N.T. 199-242, 303-306, 313-318; Board Finding)

59. In addition to the foregoing damages, Nello is requesting damages in the amount of \$4,827.30 for extended electrical power use for the period after May 29, 2002. (N.T. 243-245)

60. The Contract prohibited the use of electric-resistance heating for temporary heating purposes. (Exhibit P-1.2 (§ 01500, part 1, par. 1.04); N.T. 243) However, for the time period in question no other practical heating system was available. (N.T. 244-245)

61. Because of the extension of the Contract, in turn caused by the delays resulting from DGS's actions and inactions as described in Finding of Fact 55, Nello incurred costs of \$4,827.30 for extended electrical power use for the period after May 29, 2002. (Board Finding)

62. However, the amount claimed by Nello for this extended electrical power use is included in the costs listed in the extended general conditions category of damages. Thus, the amount claimed here for extended electrical power use is duplicative of the cost for extended electrical power use included in the costs for the extended general conditions category of damages. (Exhibit P-24.30; N.T. 245; Board Finding)

63. In addition to the foregoing damages, Nello is requesting damages of \$7,087.74 for extended insurance coverage for the period after May 29, 2002. However, part of this amount is duplicative of the amount claimed for extended insurance costs in the amount claimed for extended general conditions (\$29,603.86). The costs claimed for extended general conditions include insurance premiums of \$3,029.00. (Exhibit P-24.29; N.T. 246-248, 302-303)

64. Under the Contract, Nello was required to provide insurance coverage for the duration of work performed pursuant to the Contract. (Exhibit P-1 (General Conditions of the Construction Contract § 9.9); Exhibit P-34.12; N.T. 246) Article 4 of the Contract states that the work to be done pursuant to the Contract commences on the effective date of the Contract, i.e., June 7, 2001. (Exhibit P-1 (Standard Form of Agreement))

65. The Contract states that the initial job conference for the project was to be held within 30 days of the effective date of the Contract. (Exhibit P-1 (General Conditions of the Construction Contract § 7.3) DGS held the initial job conference on June 28, 2001, within the 30-day time limit. (Joint Exhibit 1; Board Finding)

66. The original Contract completion date was May 29, 2002. The expiration date of Nello's builders risk insurance policy was May 1, 2002. (Exhibits P-34.13, 34.14) Nello could renew this policy only in annual increments. (Exhibit P-34.25; N.T. 247)

67. Because Nello's builders risk insurance policy expired on May 1, 2002, before the original Contract completion date of May 29, 2002, Nello was required to extend its insurance coverage by purchasing a second full year of coverage. Nello did not incur damages for extended insurance costs because of the extension of the Contract work through January 30, 2003. (Board Finding)

68. DGS did not delay the initial job conference past the 30-day limit stated in the Contract; thus, the scheduling of the initial job conference had nothing to do with Nello having to purchase a second full year of insurance coverage. (Board Finding)

69. In addition to the foregoing damages, Nello is requesting damages of \$2,144.02 for reimbursement for the cost of custom-color floor mats placed in the building entrances. (Exhibit P-35) The Contract lists acceptable manufacturers for this product and provides that unless the specifications require a specific color (they do not), Nello was to provide to Maxman, the design professional, a list of the "full range" of the manufacturer's colors and other characteristics. (Exhibit P-1.2 (§ 12690, part 1, par.1.3(C)); N.T. 248-249, 585-586)

70. The Contract specifications also provide that, unless otherwise indicated in the specifications, Nello was to provide “colors, patterns and profiles” selected by the design professional from the “manufacturer’s standards.” (Exhibit P-1.2 § 12690, part 2, section 2.2(A))

71. The Contract specifications do not specify a color for floor mats and Nello gave to Maxman a list of the manufacturer’s floor mats that included standard and more expensive custom colors. The list supplied indicated which were the custom colors and the fact that those colors were more expensive. Maxman selected charcoal, a custom color, having an extra cost of \$2,144.02. (N.T. 248-251, 585-586, 601-602).

72. The Contract specifications do not require Nello to bear the extra cost of custom-color floor mats. (Board Finding)

Request for a Penalty and Award of Attorney Fees Pursuant to Section 3935 of the Commonwealth Procurement Code, 62 Pa.C.S.A. § 3935

73. Nello incurred \$94,549.14 in attorney fees in pursuing this litigation. (Exhibit P-37) Nello’s claim for a penalty and attorney fees is based on its argument that DGS’s processing of EOTRs was untimely and arbitrary, and that this behavior constituted “bad faith” as contemplated in Section 3935 of the Commonwealth Procurement Code. Nello also argues that DGS’s threat to withhold liquidated damages, when DGS knew that Nello was working after delays that were not Nello’s responsibility, was “bad faith” behavior as contemplated in Section 3935. (Claimant Nello Construction Company’s Proposed Findings of Fact 160-172)

74. DGS processed the following EOTRs complained of by Nello as indicated:

EOTR No. 4 (Exhibit DGS- 4)

Beginning date of delay:	November 7, 2001
Ending date of delay:	January 3, 2002
Date of receipt:	January 11, 2002
Date of final disposition:	May 28, 2002 (disapproved)

EOTR No. 5 (Exhibit P-6.23 – 6.28)

Beginning date of delay:	January 8, 2002
Ending date of delay:	February 6, 2002
Date of receipt:	February 11, 2002
Date of final disposition:	June 19, 2002 (partially approved)

EOTR No. 6 (Exhibit DGS-5)

Beginning date of delay: January 8, 2002
Ending date of delay: June 21, 2002
Date of receipt: June 25, 2002
Date of final disposition: August 12, 2002 (partially approved)

EOTR No. 7 (Exhibit DGS-6)

Beginning date of delay: January 8, 2002
Ending date of delay: July 25, 2002
Date of receipt: July 29, 2002
Date of final disposition: August 21, 2002 (disapproved)

EOTR No. 8 (Exhibit DGS-7)

Beginning date of delay: January 8, 2002
Ending date of delay: July 25, 2002
Date of receipt: July 29, 2002
Date of final disposition: August 21, 2002 (disapproved)

EOTR No. 11 (Exhibit DGS-8)

Beginning date of delay: February 19, 2002
Ending date of delay: September 5, 2002
Date of receipt: September 17, 2002
Date of final disposition: October 16, 2002 (partially approved)

EOTR No. 12 (Exhibit DGS-9)

Beginning date of delay: December 18, 2001
Ending date of delay: October 7, 2002
Date of receipt: October 15, 2002
Date of final disposition: December 12, 2002 (disapproved)

EOTR No. 14 (Exhibit DGS-10)

Beginning date of delay: January 3, 2002
Ending date of delay: November 12, 2002
Date of receipt: November 20, 2002
Date of final disposition: January 10, 2003 (partially approved)

EOTR No. 15 (Exhibit DGS-11)

Beginning date of delay:	January 29, 2002
Ending date of delay:	November 6, 2002
Date of receipt:	November 20, 2002
Date of final disposition:	January 10, 2003 (partially approved)

EOTR No. 16 (Exhibit DGS-12)

Beginning date of delay:	April 1, 2002
Ending date of delay:	April 21, 2003
Date of receipt:	On or about April 25, 2003
Date of final disposition:	November 4, 2003

75. EOTRs from a contractor must be reviewed by the DGS regional office, DGS's construction inspection manager on the particular project, the project professional, and the appropriate DGS officials in the agency's Harrisburg offices. (N.T. 500-501)

76. The Contract requires that the contractor submit an EOTR within ten days after the event which caused the alleged delay. (Exhibit P-1 (General Conditions of the Construction Contract §§ 7.7, 7.10))

77. The Contract states that DGS will respond to an EOTR within 45 days of its receipt. (Exhibit P-1 (General Conditions of the Construction Contract §§ 7.7, 7.10))

78. Neither party complied with their contractual timing obligations for EOTRs all of the time. (F.O.F. ¶¶74-77; Board Finding)

79. The length of time needed for DGS officials to process an EOTR will vary, depending on DGS's work load, the nature and quantity of the supporting documents the contractor must supply, the nature of the alleged delay, contract requirements, the design professional's review and whether funding is necessary and available. (N.T. 499-502)

80. DGS did not summarily deny Nello's EOTRs, but granted a number of EOTRs, at least in part. DGS granted EOTRs sufficient to extend the time of contract performance to the date of final inspection, January 30, 2003. DGS ultimately did not withhold liquidated damages. (F.O.F. ¶¶74-80; Board Findings)

81. Article 4 of the Contract provides that Nello will pay to DGS liquidated damages of \$750.00 per day for each and every day after the Contract completion date that Nello does not complete work on the project, until such date that the work is completed and accepted. (Exhibit P-1 (Contract). On January 30, 2003, the date of final inspection, DGS withheld \$18,750.00 in liquidated damages. (Exhibit P-15.2; N.T. 179-184.)

82. However, because the EOTRs granted by DGS ultimately extended the Contract completion date to the date of final inspection, Nello was not held liable for any liquidated damage penalties, and DGS reimbursed Nello for the amount of the withheld liquidated damages. (N.T. 258-59)

83. Nello has not established by a preponderance of evidence that DGS acted in an arbitrary or vexatious manner when considering and acting upon Nello's EOTRs or liquidated damages. (F.O.F. ¶¶74-82; Board Finding)

DGS's Counterclaim for Costs Incurred for Removing Contaminants from the HVAC System

84. The Contract required Nello to drill, install, pressure-test, flush and fill a geothermal well system as part of the facility's heating and cooling system. The system consisted of 54 wells (vertical pipes) drilled to a depth of 250 feet and connected by horizontal pipes. (Exhibit P-63; N.T. 81-84)

85. The Contract specifications provide that when the pipes of the geothermal well system were installed, the pipes were to be pressure tested with air or water, and that after insertion into the ground the pipes were to be flushed with water in order to ensure that the pipes contained no sediment. (Exhibit P-1.2 (§ 02680, part 2, par. 2.3); N.T. 81-84)

86. Because of the unsuitable soil conditions and the delay in excavating and refilling those portions of the work site, the installation and testing of the geothermal well system was delayed for several months. Although the installation of the system was to be completed in January 2002, Nello could not install the horizontal pipes of the system until July 2002. (Exhibits P-7.36, N.T. 84-86, 326-327)

87. From July 9 through July 11, 2002, Chesapeake Geosystems, a contractor working for Nello, air-pressure tested the geothermal well system and noted that the test results were satisfactory. (Exhibits P-53.1 – 53.4; N.T. 318-319)

88. Because of the volume of water required in order to flush the geothermal well system's pipes a permanent water supply and functioning sewer system were required (Exhibits P-13.2, P-13.4, P-20, P-21; N.T. 139-142, 610) By letter to Nello dated Aug. 27, 2002, DGS acknowledged that a permanent water system and operable sewer system were necessary in order to flush the system, and DGS informed Nello that a change order had been submitted to install the water meter needed to receive a permanent water supply. (Exhibit P-21; N.T. 158-159)

89. DGS did not make available a permanent water supply and sewer system until on or about November 6, 2002. Consequently, at the time the geothermal well system's pipes were installed, Nello could not have flushed the pipes with water, as was required by the Contract specifications. (Exhibit P-13.2; N.T. 142, 319-320, 615)

90. On November 6 and 7, 2002, Chesapeake Geosystems, a contractor working for Nello, pressure tested the geothermal well system and flushed the pipes of the system. (Exhibits P-61, P-63; N.T. 610, 612-614) William Eisentraut, Nello's project manager, observed the flushing process and confirmed that Chesapeake Geosystems flushed the system according to the proper specifications. (N.T. 609-611)

91. In a letter to Nello dated November 14, 2002, Chesapeake Geosystems stated that the system was operational and was awaiting the completion of the facility's interior piping in order to be hooked up to the interior HVAC system. (Exhibit P-54)

92. In September 2003, DGS was informed that the HVAC system was not controlling the building's temperature, in part because of sediment found to be contaminating the system. (N.T. 378-380) After investigating the problem, DGS suspected that the sediment had entered the HVAC system through the pipes of the geothermal well system. (N.T. 381, 391-392)

93. The cost of cleaning the contaminants from the HVAC system was \$41,620.00, which DGS paid pursuant to an emergency contract with a newly retained contractor, McKamish, Inc. (Exhibit DGS-2; N.T. 382-385) It is this amount which DGS asserts as a counterclaim against Nello, on the basis that Nello did not properly flush the geothermal well system. (Answer with New Matter pars. 59-65; DGS Proposed Findings of Fact 46-53; Post Trial Brief of the Commonwealth at 6-7)

94. DGS acknowledged that sediment contamination of the HVAC system may have entered the HVAC system through the Borough of Ambridge's aged water system. It is not uncommon for such older water systems to carry sediment and other contaminants. (Exhibit P-62; N.T. 398-400, 479-481)

95. It is the recommended practice within the industry to include in a geothermal well system strainer/filter devices in order to prevent contaminants from circulating in the system. The Contract specifications did not require such strainer/filter devices; no strainer/filter devices were installed at the time the system was constructed; but after discovering sediment in the HVAC system, DGS recommended that strainer/filter devices be installed. (Exhibits P-62, P-69; N.T. 398-400, 481-482.)

96. DGS did not establish by a preponderance of evidence that the contamination of the HVAC system was the result of Nello having failed to properly test and flush the pipes of the geothermal well system. (N.T. 377-402, 429-436; Board Finding)

CONCLUSIONS OF LAW

1. The Board of Claims has exclusive jurisdiction to hear and determine this matter as a claim against the Commonwealth of Pennsylvania, Department of General Services, arising from a contract entered into with the Commonwealth. Board of Claims Act, 72 P.S. § 4651-1 – 4651-10, repealed by Act of December 3, 2002, P.L. 1147, No. 142 (current law now codified at Sections 1701-1751 of the Commonwealth Procurement Code, 62 Pa.C.S.A. §§ 1701-1751).
2. The Board of Claims has jurisdiction over the parties as well as the subject matter of the claim asserted by Plaintiff, Nello Construction Company. Id.
3. In a claim for recovery on a breach of contract, it is the asserting party's burden to show that the facts exist to support the requested recovery. Paliotta v. Department of Transportation, 750 A.2d 388 (Pa. Cmwlt. 1999).
4. A contractor may be compensated for damages such as increased labor costs, loss of productivity and overhead costs resulting from delays in contract performance caused by a government agency. Larry Ambruster and Sons v. State Public School Building Authority, 505 A.2d 395 (Pa. Cmwlt. 1986); Tony Depaul & Son v. City of Philadelphia, 24 Phila. Co. 405, 1992 WL 1071420 (C.P. of Phila. August 20, 1992).
5. A victim of an agency's breach of contract may recover for loss of profits if the evidence is sufficient to afford a basis on which to estimate their extent. C.J. Langenfelder & Son v. Department of Transportation, 404 A.2d 745 (Pa. Cmwlt. 1979).
6. Damages need not be proven with mathematical certainty; rather, a contractor need only provide evidence that affords a sufficient basis for calculating damages with reasonable certainty. Pennsylvania Department of Transportation v. James D. Morrissey, Inc., 682 A.2d 9 (Pa. Cmwlt. 1996).
7. If a defendant does not contest a plaintiff's methodology for calculating damages or the evidence supporting the plaintiff's damage claims, that methodology and evidence affords a reasonable basis for awarding damages. Acchione and Canuso, Inc. v. Department of Transportation, 501 Pa. 337, 461 A.2d 765 (1983).
8. DGS is liable for the construction delays that resulted from the redesign of the facility's HVAC system.
9. DGS is liable for the construction delays that resulted from the need to excavate the unsuitable soil material from the work site and to refill the area with a more stable material.
10. DGS is liable for the construction delays that resulted from the redesign of a portion of the facility's building foundation.
11. DGS is liable for the construction delays that resulted from its failure to provide a three-phase permanent electrical power source to the work site in a timely manner.

12. DGS is liable for the delays in constructing, testing and flushing the geothermal well system that resulted from its failure to provide permanent water and sewer systems in a timely manner.

13. DGS is liable to Nello for \$69,930.00 in damages for extended field supervision costs incurred from May 29, 2002, the original Contract completion date, to January 30, 2003, the date of final inspection.

14. DGS is liable to Nello for \$33,632.00 in damages for extended project management costs incurred from May 29, 2002, the original Contract completion date, to January 30, 2003, the date of final inspection.

15. DGS is liable to Nello for \$26,574.86 in damages for extended general conditions costs incurred from May 29, 2002, the original Contract completion date, to January 30, 2003, the date of final inspection. DGS is not liable for the \$29,603.86 claimed by Nello. Nello's claim for extended general conditions costs includes insurance premiums of \$3,029.00 for extended insurance costs for the period after May 29, 2002 (Exhibit P-24.29; N.T. 46-248, 302-303). The Board has determined that DGS is not liable for those extended insurance costs. Therefore, Nello's damages in this category equal \$26,574.86(\$29,603.86 - \$3,029.00).

16. DGS is liable to Nello for \$90,680.52 in damages for extended home office and administrative costs incurred from May 29, 2002, the original Contract completion date, to January 30, 2003, the date of final inspection.

17. DGS is liable to Nello for \$176,777.22 in damages for loss of productivity costs incurred from May 29, 2002, the original Contract completion date, to January 30, 2003, the date of final inspection.

18. DGS is liable to Nello for \$19,385.93 in damages for wage escalation costs incurred from May 29, 2002, the original Contract completion date, to January 30, 2003, the date of final inspection.

19. DGS's liability for the total of the extended costs listed in Conclusions of Law 13 - 18 is \$416,980.53.

20. DGS is liable to Nello for \$41,698.05 in damages representing a 10% profit on the total of the extended costs incurred from May 29, 2002, the original Contract completion date, to January 30, 2003, the date of final inspection. DGS's liability for the total of the extended costs plus a 10% profit is \$458,678.58.

21. DGS is not liable to Nello for its separate claim of \$4,827.30 for electrical costs incurred after the original Contract completion date of May 29, 2002, since this same claim is included in the amount of Nello's extended general conditions category of damages. (See Conclusion of Law 15.)

22. DGS is not liable to Nello for its claim of \$7,087.74 for extended insurance coverage for the period after the original Contract completion date of May 29, 2002.

23. Section 12690, part 1, subsection 1.3(C); and section 12690, part 2, subsection 2.2(A), of the Contract's specifications are ambiguous on the question of whether or not a contractor is liable for the full cost of any floor mat selected by a design professional pursuant to those specifications.

24. Absent other factors that clarify its meaning, an ambiguous provision will be construed against the drafting party. Department of Transportation v. E-Z Parks, 620 A.2d 712 (Pa. Cmwlth. 1993); Department of Transportation v. Mosites Construction Co., 494 A.2d 41 (Pa. Cmwlth. 1985).

25. DGS is liable to Nello for \$2,144.02 as reimbursement for the extra cost of supplying custom-color floor mats.

26. A plaintiff who recovers damages in a proceeding brought before the Board of Claims may receive a penalty equal to 1% per month of an amount that was withheld in "bad faith." An amount shall be deemed to have been withheld in bad faith to the extent that the withholding was "arbitrary or vexatious." Section 3935(a) of the Commonwealth Procurement Code, 62 Pa.C.S.A. § 3935(a).

27. For purposes of awarding a penalty under Section 3935(a) of the Commonwealth Procurement Code, a withholding of an amount is "arbitrary or vexatious" if the withholding is based on whim, convenience or emotion, as opposed to reason, or if the withholding is primarily intended to irritate or annoy an opposing party. Withholdings made in good faith or premised on mistakes of fact or law will not result in a penalty. Cummins v. Atlas Railroad Construction Co., 814 A.2d 742 (Pa. Super Ct. 2002).

28. A plaintiff who recovers damages in a proceeding brought before the Board of Claims may receive an award of attorney fees if it is found that the government agency acted in "bad faith." Section 3935(b) of the Commonwealth Procurement Code, 62 Pa.C.S.A. § 3935(b).

29. For purposes of awarding attorney fees under Section 3935(b) of the Commonwealth Procurement Code, an agency's actions will be deemed to be in bad faith if those actions are found to perpetuate fraud, dishonesty, or a corruption of the agency's legitimate purpose. Cummins v. Atlas Railroad Construction Co., 814 A.2d 742 (Pa. Super Ct. 2002).

30. DGS's actions during the time period relevant to this matter were not arbitrary, vexatious or pursued in bad faith. DGS is not liable for a penalty and attorney fees as provided for in Section 3935 of the Commonwealth Procurement Code.

31. DGS is liable for payment of prejudgment interest on the aggregate amount of Nello's extended cost damages set forth in Conclusion of Law 20 (\$458,678.58). Prejudgment interest is payable at the statutory rate for judgments (6% per annum) beginning on March 5, 2003, the date on which Nello presented its claim to DGS's contracting officer, and running

through the date of this Opinion and Order. 41 P.S. § 202 (legal rate of interest); Section 1751 of the Commonwealth Procurement Code, 62 Pa.C.S.A. § 1751.

32. The 6% per annum statutory rate of interest for judgments equals a daily rate of interest of .000164 (.06 divided by 365 days). The number of days for which Nello is entitled to prejudgment interest on its aggregate amount of extended costs damages is 1112 days (March 5, 2003 to March 20, 2006). Thus: \$458,678.58 (aggregate extended cost damages) x .000164 x 1112 days = \$83,648.29 in prejudgment interest.

33. DGS is liable for payment of prejudgment interest on the amount of Nello's claim for reimbursement for the extra cost of custom-color floor mats (\$2,144.02). Prejudgment interest is payable at the statutory rate for judgments (6% per annum) beginning on January 9, 2003, the date on which Nello presented its claim to DGS's contracting officer, and running through the date of this Opinion and Order. 41 P.S. § 202 (legal rate of interest); Section 1751 of the Commonwealth Procurement Code, 62 Pa.C.S.A. §1751.

34. The 6% per annum statutory rate of interest for judgments equals a daily rate of interest of .000164 (.06 divided by 365 days). The number of days for which Nello is entitled to prejudgment interest on the reimbursement for the extra cost of custom-color floor mats is 1167 days (January 9, 2003 to March 20, 2006). Thus: \$2,144.02 (extra cost of floor mats) x .000164 x 1167 days = \$410.34 in prejudgment interest.

35. DGS is liable to Nello for a total judgment, including prejudgment interest, of \$544,881.23 (\$458,678.58 + \$83,648.29 + \$2,144.02 + \$410.34).

36. DGS is liable for post-judgment interest on the total outstanding judgment at the statutory rate for judgments (6% per annum) beginning on the date of the attached Order and continuing until the judgment is paid in full.

37. Nello is not liable to DGS for the \$41,620.00 in damages asserted in DGS's counterclaim.

OPINION

Plaintiff Nello has brought four claims against Defendant DGS, which as previously noted have been consolidated into the present case. The claims arise from the Contract entered into by Nello and DGS on June 7, 2001, for the construction of a visitors' center, museum, parking lot and other attendant facilities to be built in the Borough of Ambridge, Beaver County, on behalf of the Pennsylvania Historical and Museum Commission. The initial value of the

Contract was \$2,433,000.00 and, with a contractually mandated duration of 335 days from the initial job conference within which to complete the work, the contemplated contract completion date was May 29, 2002. In fact, because of various delays, final inspection on the project did not occur until January 30, 2003, some 246 days past the contemplated contract completion date. Nello requests damages of \$462,010.48 for costs and expenses resulting from construction delays caused by DGS's actions and inactions, \$4,827.30 for extended electrical costs resulting from delays caused by DGS, \$7,087.74 for extended insurance costs resulting from delays caused by DGS, and \$2,144.02 as reimbursement for the extra cost of providing custom floor mats. Nello also requests a penalty and attorney fees in accordance with Section 3935 of the Commonwealth Procurement Code, 62 Pa.C.S.A. § 3935. As is subsequently noted, DGS denies its liability for some of the construction delays, contests certain of Nello's damage claims, and asserts a counterclaim for \$41,620.00 based on Nello's alleged failure to properly install and flush a geothermal well system.

Nello asserts construction delays for which DGS is liable in the following areas: (1) delays caused by a change order issued by DGS shortly after work on the project commenced, which required the installation of a redesigned HVAC system requested by the Pennsylvania Historical and Museum Commission; (2) delays caused by DGS's failure to promptly issue a change order to allow the excavation of a large portion of the work site in order to remove unsuitable, subsurface soil material and to refill the excavated areas with more stable material; (3) delays caused by DGS's decision to redesign a part of the building foundation, in order to avoid damaging trees that were located on an adjacent property but whose root systems were encroaching into the project's excavation area; (4) delays caused by DGS's failure to provide access to a three-phase, permanent electrical power source in a timely manner; and (5)

delays caused by DGS's failure to provide access to a permanent water and sewer system in a timely manner.² With exceptions as will be noted, Nello's claims for damages are not separately assigned and calculated based on each of the foregoing delays, but are instead calculated based on the costs and expenses incurred from May 29, 2002, the original contract completion date, to January 30, 2003, the date of final inspection. Consequently, the Board will consider in order: (1) issues of DGS's alleged liability in regard to each category of delay, (2) issues related to Nello's claimed damages, (3) issues relating to Nello's request for a penalty and attorney fees, and (4) DGS's counterclaim.

DGS's Liability for Delays Related to the Redesign of the HVAC System

The evidence presented firmly establishes that it was the redesign of the facility's HVAC system that was the cause of the most prolonged delays on the construction project. The preponderance of the evidence also supports the conclusion that it was DGS's change order, issued shortly after commencement of work in order to implement the Pennsylvania Historical and Museum Commission's request to substitute a newly available and more technologically sophisticated heating and cooling system than had been originally specified, that delayed installation of the HVAC system and resulted in an ongoing series of delays in construction of the facility.

Prior to the initial job conference on June 28, 2001, Maxman, the project's architectural professional, had in place a design for the HVAC system. Although Wayne Crouse, Inc., the HVAC contractor, had not yet submitted to Maxman documents on the types and cost of

² Nello's allegations of delay because of DGS's failure to provide timely access to a water and sewer system are pertinent to work required to install and flush the facility's geothermal well system. Because those allegations of delay implicate many of the same facts as does DGS's counterclaim for damages based on Nello's alleged failure to properly install and test the system, those allegations of delay will be discussed in the section of this opinion addressing DGS's counterclaim.

proposed equipment, nothing in the record indicates that Maxman or the contractors anticipated any extraordinary delays associated with the original system. DGS issued its change order on or about September 4, 2001, in order to accommodate the Pennsylvania Historical and Museum Commission's request for a more sophisticated heating and cooling system, one which involved technology and equipment that had only recently become available on the market. The Commission apparently intended the redesigned HVAC system to become the standard model that was to be installed in other Commission facilities throughout Pennsylvania.

Because of the complexity of the new HVAC controls and the need to evaluate the suitability of new system components, there ensued a lengthy review process involving engineers working for Maxman, Wayne Crouse, Inc., and the manufacturers of the new HVAC equipment. The prolonged review process delayed installation of the HVAC system and interfered with the timely completion of much of the work on the facility including the laying of the first-floor slab; installation of drywall, ceilings, windows and other fixtures; and the storing onsite of building materials that required an operable heating and cooling system. Throughout the project, all parties, including DGS employees, acknowledged that the delays in approving and installing the redesigned HVAC system interfered with the coordination and completion of much of the work for which Nello was responsible. In fact, some of the equipment necessary for the system was not approved for installation until June 2002, and DGS acknowledged that on January 30, 2003, the date of the final inspection, the HVAC system was not yet completely operational.

DGS's defense to its liability for these delays is to argue that, under the Contract, Wayne Crouse, Inc., was responsible for the timely submission of equipment specifications and for obtaining the timely approval of such equipment, and that because it did not do so, Nello's cause of action is against Crouse, not DGS. (Post Trial Brief of the Commonwealth at 2-3) As

previously noted, it is true that some of the equipment necessary for the redesigned HVAC system was not approved until June 2002, some nine months after DGS issued its change order. Nonetheless, for two reasons this argument is unpersuasive. First, DGS ignores the fact that it was the Pennsylvania Historical and Museum Commission's request for a redesigned HVAC system, and the subsequent change order issued to implement that request, that required a lengthy review process which delayed installation of the system. DGS presents its argument as though no change in the original plans for the HVAC system had ever occurred. Second, at the trial, DGS presented no evidence showing that Wayne Crouse, Inc., took an unreasonable amount of time to submit equipment specifications and to obtain approval of those specifications. In fact, as previously noted, testimony of those familiar with the project supports the conclusion that it was the complexity of the changes to the HVAC system and of the subsequent review process that were responsible for the lengthy delays. Thus, the Board concludes that DGS was responsible for the construction delays resulting from the request for a redesigned HVAC system.

DGS's Liability for Delays Related to the Unsuitable Soil Conditions

On or about January 8, 2002, Nello encountered on the work site unsuitable soil conditions in the form of sand and silt. On January 17, 2002, DGS's consultant, Civil & Environmental Consultants, recommended that the material be excavated and the excavated area be refilled with a more stable material. DGS did not notify Nello that it could proceed with the excavation until June 14, 2002, in part at least because DGS was waiting for the Pennsylvania Historical and Museum Commission to verify that funding was available to pay for the extra work. Nello commenced excavation on June 21, 2002. This delay contributed to delays in

completing construction of the geothermal well system; in installing storm sewers, sidewalks and curbs; and in laying asphalt in the parking lot.

In its proposed findings of fact, DGS makes no recommendations on this issue. In its post-trial brief, DGS does not argue that it is not liable for the delays necessitated by the excavation of the unsuitable soil material and points out no contract provision to the contrary. Accordingly, the Board concludes that DGS is liable for the construction delays resulting from the need to excavate the unsuitable soil material and the delay in issuing a change order to authorize that excavation.

DGS's Liability for Delays Related to the Redesign of the Building Foundation

Shortly after August 16, 2001, Nello discovered that the roots of some trees located on an adjacent property were encroaching into an area of the work site that was to be excavated as part of the building foundation. In accordance with DGS's decision, Maxman had to redesign approximately 30%-40% of the building foundation, in order to avoid harming the encroaching trees. On September 4, 2001, Maxman sent new design drawings to Nello and requested that Nello submit new rebar shop drawings to reflect the design changes. There ensued between Nello and Maxman an extended period of discussion regarding how the foundation should be redesigned. During this time, Maxman rejected three sets of Nello's rebar shop drawings. However, on December 17, 2001, Maxman issued a second set of redesign drawings for the affected part of the building foundation. At this point, Maxman and Nello had apparently resolved their differences on how the foundation redesign should be implemented. On December 18, 2001, Nello submitted a final set of rebar shop drawings, which Maxman immediately approved.

The need to redesign this area of the foundation resulted in a delay in completing the foundation from November 7, 2001, the date on which Nello was prepared to work on this area of the foundation, until January 3, 2002, the date on which Nello commenced work on the area. In addition, the problems with the foundation delayed completion of related surface work that depended on a completed foundation, e.g., the installation of sidewalks and curbs.

DGS does not generally deny its liability for this period of delay, but instead argues that the delay was caused by Nello's failure to submit timely and technically correct rebar shop drawings to Maxman, the architectural professional. DGS points out that Nello had to submit multiple sets of shop drawings (four sets, to be exact) before it received approval to proceed from Maxman, and that because the submission of such drawings was Nello's responsibility, Nello is solely responsible for the delay caused by its failure to timely submit acceptable drawings.

DGS's argument ignores two critical facts. The first is that the need to redesign the affected portion of the building's foundation resulted from DGS's desire to avoid the possibility of harming a neighboring property's trees. Second, DGS fails to note that on December 17, 2001, Maxman issued new design drawings for the redesigned portion of the foundation; drawings that contained material changes to the previous redesign drawings sent to Nello on September 4, 2001. Todd Woodward, Maxman's representative who testified at the trial, acknowledged that Nello could not have issued final rebar shop drawings until it received final redesign drawings on December 17, 2001. Thus, Nello cannot be held liable for this period of delay, for it appears that during the discussions between Nello and Maxman, it was decided that some changes had to be made to the original redesign drawings, only after which could Nello

submit final rebar shop drawings. Accordingly, the Board concludes that DGS is liable for the period of delay caused by the redesign of the building foundation.

DGS's Liability for Delays Related to the Lack of Three-Phase, Permanent Electrical Power

DGS was responsible for supplying to the work site a three-phase, permanent electrical power source, which was necessary in order to install the facility's elevator system. The elevator equipment was scheduled to be delivered to the work site in December 2001. The necessary power supply was not available until sometime in late September or early October 2002. The contractor responsible for installing the elevator system commenced work on or about October 7, 2002.

As with the case of the delays caused by the excavation of unsuitable soil materials, DGS makes no recommendations on this issue in its proposed findings of fact, nor does DGS point out a contract provision to the contrary or argue that it is not responsible for the failure to supply a three-phase permanent power source to the work site in a timely manner. The Board finds that DGS is liable for this period of delay also.

DGS's Liability for Nello's Claimed Damages

Pennsylvania case law provides that a contractor may be compensated for damages such as increased labor costs, loss of productivity and overhead costs resulting from delays in contract performance caused by a government agency. Larry Ambruster and Sons v. State Public School Building Authority, 505 A.2d 395 (Pa. Cmwlth. 1986); Tony Depaul & Son v. City of Philadelphia, 24 Phila. Co. 405, 1992 WL 1071420 (C.P. of Phila. August 20, 1992). A victim

of an agency's breach of contract may recover lost profits if the evidence is sufficient to afford a basis on which to estimate their extent. C.J. Langenfelder & Son v. Department of Transportation, 404 A.2d 745 (Pa. Cmwlth. 1979). It is settled, of course, that damages need not be proven with mathematical certainty; rather, a contractor need only provide evidence that affords a sufficient basis for calculating damages with reasonable certainty. Pennsylvania Department of Transportation v. James D. Morrissey, Inc., 682 A.2d 9 (Pa. Cmwlth. 1996).

Here, Nello presented extensive and specific evidence regarding its costs and expenses that resulted from the extension of Contract work for an additional 246 days past the originally contemplated Contract completion date. The testimony on damages of George Leasure, president of Nello, was corroborated in respect to some of the claimed damages by the testimony of David Williamson, P.E., Nello's expert witness for damage claims, who concluded that Nello's extended costs and expenses had resulted from the many construction delays on the project and the manner in which DGS dealt with change orders. Mr. Williamson also noted that the damages claimed by Nello were reasonable and were significantly lower than those that would be produced using the "total cost" method of calculating damages.

Although DGS has contested its liability in regard to some of the delays on the project, it did not offer evidence on damages and did not seriously contest the methodology used by Nello to calculate the extended costs that form the greatest part of Nello's total damages claim. With exceptions that will be noted, DGS likewise did not contest the amount of damages claimed by Nello in the several categories of extended costs. The Board notes that if a party does not contest a plaintiff's methodology for calculating damages or the evidence supporting the plaintiff's damage claims, that methodology and evidence affords a reasonable basis for awarding damages. Acchione and Canuso, Inc. v. Department of Transportation, 501 Pa. 337, 461 A.2d 765 (1983).

DGS does challenge Nello's calculation of its extended home office and administrative costs of \$90,680.52. DGS argues that the Board should adopt a formula set forth in Manshul Construction Corp. v. Dormitory Authority, 79 A.D.2d 383, 436 N.Y.S.2d 724 (N.Y. App. Div. 1981), to determine these costs. That formula calculates such costs in the following manner: (1) Estimate the actual cost of the work done after the scheduled contract completion date by deducting from the contract price the portion allocable to overhead and profit; (2) allocate a percentage of this cost for overhead and allow this as excess overhead due to delay; and (3) add to this a profit percentage based on the excess overhead. Id. at 391-92, 436 N.Y.S.2d at 731. By DGS's calculation, this formula yields an extended home office and administrative costs figure of \$57,197.61, compared to Nello's claim for \$90,680.52.

In contrast, the method used by Nello is modeled on the "Eichleay formula" for calculating home office and administrative overhead costs. This formula seeks a ratio between the billings for the contract at issue to the company's total contract billings during the period of the contract at issue; multiplies this ratio by the total company overhead during the contract period to determine the overhead allocable to the contract at issue; divides this allocable overhead by the actual days of contract performance to determine a daily rate for overhead; then multiplies this daily rate by the number of days of owner-caused delays to find the extended home office overhead/administrative cost attributable to the delay period. Eichleay Corp., ASBCA No. 5183, 60-2 B.C.A. (CCH) par. 2688; 1960 WL 538 (July 29, 1960). Although often criticized and subject to variation, this formula is still utilized by the federal courts. See, e.g., Net Construction v. C & C Rehab and Construction, 256 F. Supp.2d 350 (E.D. Pa. 2003); In re Stein, 57 B.R. 1016 (E.D. Pa. 1986).

This Board first recognizes that neither method is perfect. The Eichleay formula has the benefit of using actual dollar and cent figures of the contractor to determine an actual ratio of overhead to contract billings for a period relevant to the contract at issue. In other words, if the contractor provides us with reliable company-wide figures for a period relevant to the contract, we can determine the overhead percentage that it actually experienced on a company-wide basis during the contract period and could reasonably expect from the project at issue. On the other hand, this formula has been criticized because, among other things, overhead experienced on other projects during a surrounding time period may have been adversely or beneficially affected by several other outside factors such that the overall ratio is not necessarily indicative of the overhead experienced on the contract at issue. The Manshul formula, in contrast, does not provide the variable that may be introduced by work experience on other contracts. However, it does require certain assumptions be made which include assumptions as to the total overhead and profit margin (15% in Manshul) and a further assumption that overhead and profit are to be equally divided.³

While both formulations are reasonable, and both have their faults, we find that in this instance the Eichleay formula (as presented by Nello) presents the more accurate formulation of home office overhead and administrative cost experienced by Nello during the delay period respecting the contract at issue. First of all, the Manshul court itself acknowledges that it was dealing to some extent with arbitrary figures respecting overhead and profit, and it is appropriate to do so only in the absence of proof of a mathematical basis for computing damages. Manshul, 79 A.D.2d at 391, 436 N.Y.S.2d at 730. In the instant case, Nello has presented us with reliable

³ In Manshul, the appellate court stated that there was a 15% total overhead and profit mark-up allowed by the contract. In this case, the parties have not identified a similar provision in the Contract. The Board does note that there is a stated percentage mark-up to bill out for change orders. However, importing the maximum amount allowed for change order mark-up to the base contract, while not unreasonable, would itself be an assumption.

financial statements respecting the company's overall billings and overhead for the contract period in question that have allowed a reliable mathematical calculation of the overhead percentage that the company actually experienced in its operations for the relevant time period.⁴ Accordingly, we will adopt Nello's calculation of extended home office overhead and administrative costs of \$90,680.52 as the amount of extended home office and administrative costs that it experienced during the delay period.

DGS also challenges Nello's right to recover damages on its insurance, electrical and floor mat claims. First, DGS argues that Nello is not entitled to recover the cost of purchasing builders risk insurance for an additional year, in order to have coverage for the period past the original Contract completion date, because the evidence shows that Nello would have had to purchase that insurance regardless of the construction delays and the extension of the Contract for an additional 246 days. The Board agrees. The Contract specifies that Nello was required to maintain insurance coverage for the duration of the Contract. Nello's initial policy expired on May 1, 2002, but the original Contract completion date was May 29, 2002. Thus, in order to be in compliance with the Contract, Nello had to purchase an additional policy for the period beginning after May 1, 2002. Because it could purchase that policy only in a yearly increment, it was forced to purchase a full additional year of coverage. The construction delays and extension of the Contract were not the cause of this added expenditure. Nello's other argument, that DGS's delay in holding the initial job conference was somehow responsible for Nello having to renew its insurance coverage, is without merit. DGS held the initial job conference on June 28,

⁴ Plaintiff, Nello has provided audited financial statements for its fiscal year ended July 1, 2002 and reviewed statements for its fiscal year ended July 31, 2001. It utilized appropriate numbers in these statements to arrive at total billings and total overhead for the relevant contract period. See Exhibits P-45.1, P-45.2, P-42.125 – 42.129.

2001, within 30 days of the effective date of the Contract (June 7, 2001), as was required by section 7.3 of the General Conditions of the Construction Contract.

Second, DGS points out that Nello's claim for electrical costs incurred past the original Contract completion date are duplicative of costs included in its delay damages and therefore this separate claim should be disallowed. In his testimony, George Leasure confirmed that this claim for electrical costs is also included as part of the damages in the extended general conditions category of damages. Because the Board has determined that Nello is entitled to recover extended general conditions damages, there can be no separate damage award based on this claim.

Third, DGS asserts that Nello cannot recover on its claim for reimbursement for custom-color floor mats. Nello seeks \$2,144.02 as reimbursement for the extra cost of custom-color floor mats. Under the terms of the Contract, Maxman was responsible for selecting the specific type and color of floor mats to be installed in the facility. Nello was responsible for submitting the manufacturer's overall selection of floor mats to Maxman, from which Maxman was to select one type and color of mat. DGS points out that the section 12690, part 1, subsection 1.3(C) of the Contract's specifications required Nello to submit to Maxman the "full range" of manufacturer's colors, from which Maxman could make its selection; that Maxman did in fact select a color from Nello's submittal; and therefore the fact that Maxman selected a more costly custom color from Nello's submittal does not entitle Nello to additional payment. However, DGS's argument ignores the provision in section 12690, part 2, subsection 2.2(A), which, unless otherwise specified, apparently limits the contractor's responsibility to providing materials limited to the "colors, patterns and profiles" of the manufacturer's "standard" products. Thus, although subsection 1.3(C) requires the contractor to submit to the design professional a

selection showing the “full range” of colors and other characteristics, and although subsection 1.3(C) does not reference only “standard” products, subsection 2.2(A) nonetheless limits the contractor’s responsibility to supplying the manufacturer’s standard products.⁵ Consequently, Nello is entitled to reimbursement for the increased cost of the custom-color floor mats.

Penalty and Attorney Fees

Nello also seeks a penalty and attorney fees in accordance with Section 3935 of the Commonwealth Procurement Code, 62 Pa.C.S.A. § 3935, which provides in relevant part:

(a) Penalty.—If . . . a claim with the Board of claims . . . is commenced to recover payment due under this subchapter and it is determined that the government agency . . . has failed to comply with the payment terms of this subchapter . . . the Board of Claims . . . may award, in addition to all other damages due, a penalty equal to 1% per month of the amount that was withheld in bad faith. An amount shall be deemed to have been withheld in bad faith to the extent that the withholding was arbitrary or vexatious. . . .

(b) Attorney fees.—Notwithstanding any agreement to the contrary, the prevailing party in any proceeding to recover any payment under this subchapter may be awarded a reasonable attorney fee in an amount to be determined by the Board of Claims . . . together with expenses, if it is determined that the government agency . . . acted in bad faith. An amount shall be deemed to have been withheld in bad faith to the extent that the withholding was arbitrary or vexatious.

Nello requests this on the grounds that DGS unreasonably withheld approval of several EOTRs, that DGS unreasonably granted only partial extensions under other EOTRs, that DGS unreasonably delayed the processing of several EOTRs, and that DGS threatened to assess

⁵ To the degree these contract specifications are ambiguous regarding the question of a contractor’s responsibility for the cost of custom floor mats, the Board notes that in such a case the rule of contract construction is that, absent other factors that clarify the provision’s meaning, an ambiguous provision will be construed against the drafting party; in this case DGS. Department of Transportation v. E-Z Parks, 620 A.2d 712 (Pa. Cmwlth. 1993); Department of Transportation v. Mosites Construction Co., 494 A.2d 41 (Pa. Cmwlth. 1985).

liquidated damages even though DGS was aware that Nello was operating after delays that were not its responsibility.

Nello's argument on this issue is unpersuasive. For purposes of awarding a penalty under Section 3935(a) of the Commonwealth Procurement Code, a withholding of an amount is "arbitrary or vexatious" if the withholding is based on whim, convenience or emotion, as opposed to reason, or if the withholding is primarily intended to irritate or annoy an opposing party. Cummins v. Atlas Railroad Construction Co., 814 A.2d 742, 747 (Pa. Super Ct. 2002). Withholdings made in good faith or premised on mistakes of fact or law will not result in a penalty. Cummins, 814 A.2d at 746 (citing ATAP Construction v. Liberty Mutual Insurance Co., 1998 WL 341931, at *7 (E.D. Pa. June 25, 1998)). For purposes of awarding attorney fees under Section 3935(b), an agency's actions will be deemed to be in bad faith if those actions are found to perpetuate fraud, dishonesty, or a corruption of the agency's legitimate purpose. See Cummins, 814 A.2d at 747.

In this case, although DGS did not always process the EOTRs in a timely manner, the record shows that in several instances DGS processed the EOTRs in a time within or reasonably close to the 45 days required by the Contract. (See, for example, EOTR Nos. 6, 7, 8, 11, 12, 14, 15.) As explained during the trial by Martin Barkey, western regional director for the DGS Bureau of Construction, the time in which an EOTR may be processed will vary according to many factors: for example, the availability of funding, the need to acquire more information from the contractor, and the length and complexity of the required review by the design professional. Delays caused by such factors do not necessarily indicate arbitrary or vexatious conduct. Furthermore, to the degree that the delays in processing the EOTRs resulted in increased costs and losses of productivity on the part of Nello, Nello will be compensated for those expenses by

the award of damages. In regard to the manner in which DGS processed Nello's EOTRs, the evidence simply does not show that DGS engaged in a pattern of arbitrary or vexatious conduct that would justify an award of a penalty or attorney fees. As for the threats of liquidated damages and the \$18,750.00 actually withheld on the date of final inspection, the Board notes that DGS reimbursed Nello for the amount withheld. The Board does not find that DGS's actions in this regard rise to the level of "bad faith" conduct. Therefore, the Board will not award Nello a penalty and attorney fees under Section 3935.

DGS's Counterclaim

Finally, DGS seeks in its counterclaim \$41,620.00 in damages for the cost of hiring a contractor to purge the HVAC system of sediment and other contaminants found in the system sometime in September 2003. Those contaminants, along with other unrelated problems with the HVAC system, resulted in unsatisfactory temperature control throughout the facility. DGS correctly points out that the Contract specifications required Nello to flush the pipes of the geothermal well system at the time the pipes were installed. Because Nello did not, in fact, flush the external pipes of the geothermal well system at the time the Contract specified, and because sediment was later found in the building's internal HVAC system, DGS maintains that the sediment must have entered the system through the external pipes of the geothermal well system. Although DGS acknowledges that the pipes were flushed at a later date, it contends that "[t]his was obviously insufficient for the purpose since, when the well system was connected to the interior HVAC system, it did not work properly due to the presence of contaminants in the system." (Post Trial Brief of the Commonwealth at 7) Therefore, DGS reasons, Nello should be liable for the added cost of removing the sediment and other contaminants.

Although DGS's argument is supported by some evidence in the record, ultimately the Board finds it unpersuasive. As is related in the Findings of Fact, although Nello installed the vertical pipes of the geothermal well system in January 2002, it was unable to install the necessary horizontal pipes and to then test the completed system because of the need to excavate the sand and silt found on the work site that same month. That excavation was further delayed by DGS's delay in issuing the required change order. Consequently, Nello Construction could not pressure test or flush the geothermal well system's pipes at the time the vertical pipes were installed. The excavation project delayed completion of the geothermal well system until July 2002, when Nello was finally able to install the horizontal pipes. From July 9 to 11, 2002, Chesapeake Geosystems, a subcontractor for Nello, air pressure- tested the piping to ensure that the joints were secure, but it was as yet unable to flush the system with water because it required a permanent water supply and sewer system, and such systems were not yet available at the work site.

DGS did not make those systems available until November 2002. On November 6 and 7, 2002, Chesapeake Geosystems pressure-tested the well system and flushed the pipes in accordance with industry specifications, a fact that was confirmed at trial through the testimony of William Eisentraut, Nello's project manager. Upon completion of that process, Chesapeake Geosystems informed Nello that the geothermal well system was operational and was awaiting completion of the HVAC system in order to be connected to the facility's interior system. Although sediment was found in the system, the sediment was not found until September 2003. Employees for DGS acknowledged that the sediment could have been introduced through the Borough of Ambridge's water system. Furthermore, testimony at the trial established that it is the recommended practice within the industry to include in a geothermal well system

strainer/filter devices in order to prevent contaminants from circulating in the system. Although the Contract specifications did not require that such strainer/filter devices be installed, after sediment was discovered in the HVAC system, DGS employees acknowledged that such devices should have been installed in the geothermal well system. Strainers were subsequently installed.

In a claim for recovery on a breach of contract, it is the asserting party's burden to show that the facts exist to support the requested recovery. Paliotta v. Department of Transportation, 750 A.2d 388 (Pa. Cmwlth. 1999). Here, the preponderance of the evidence fails to show with any degree of certainty that the sediment found in the HVAC system originated from the exterior pipes of the well system due to improper flushing, as opposed to the lack of strainers and the aging Ambridge water system. On the evidence presented, the Board will deny DGS's counterclaim.

ORDER

AND NOW, this 20th day of March 2006, **IT IS ORDERED** and **DECREED** that judgment be entered in favor of Plaintiff, Nello Construction Company, and against Defendant, Commonwealth of Pennsylvania, Department of General Services, in the sum of \$544,881.23. This sum consists of: \$458,678.58 in aggregate extended cost damages; \$83,648.29 in prejudgment interest on the amount of aggregate extended cost damages; \$2,144.02 as reimbursement for the extra cost of custom-color floor mats; and \$410.34 in prejudgment interest on the amount of reimbursement for the extra cost of custom-color floor mats. In addition, Plaintiff is awarded post-judgment interest on the outstanding judgment at the statutory rate for judgments (6% per annum) beginning on the date of this Order and continuing until the judgment is paid in full.

IT IS FURTHER ORDERED that Defendant's counterclaim for damages in the amount of \$41,620.00 is **DENIED**. Each party herein will bear its own costs and attorney fees.

BOARD OF CLAIMS

Jeffrey F. Smith
Chief Administrative Judge

Ronald L. Soder, P.E.
Engineer Member

*_____
John R. McCarty
Citizen Member

*Citizen Member McCarty, upon motion of Plaintiff, recused himself from consideration of this matter.