

COMMONWEALTH OF PENNSYLVANIA

THE LANE CONSTRUCTION CORPORATION, : BEFORE THE BOARD OF CLAIMS  
General Contractors to the benefit of :  
HENKELS & McCOY, INC., Subcontractor :  
 :  
VS. :  
 :  
COMMONWEALTH OF PENNSYLVANIA, :  
DEPARTMENT OF TRANSPORTATION : DOCKET NOS. 1565 & 1642

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**FINDINGS OF FACT**

1. Claimant is the Lane Construction Corporation, General Contractor to the benefit of Henkels & McCoy, Inc., a Subcontractor to Lane, a Pennsylvania corporation with its principal office located at 185 Jolly Road, Blue Bell, PA 19422. (Complaint and Answer, paragraph 1)

2. Respondent is the Commonwealth of Pennsylvania, Department of Transportation with its Philadelphia District Office located at 200 Radnor Chester Road, St. Davids, PA 19087, and its Executive Offices located at 555 Forum Place, Harrisburg, PA 17101. (Complaint and Answer, paragraph 2)

3. On or about December 18, 1987, Project CMS No. 064046 (Contract 064046) was offered for public bid by PennDOT for the construction of roadways, bridges and traffic control and lighting on, inter alia, L.R. 1010, located in Montgomery County, PA. (Complaint and Answer, paragraph 4)

4. The area of construction at the L.R. 1010 Section D3T is a highly congested commercial zone with a large regional shopping mall, business office park and other commercial enterprises located at the interchange of the midcounty expressway and the Pennsylvania Turnpike's east/west and northeast extension highways which resulted in a high vehicle traffic use of the existing roadways in the construction area. (N.T. 29, 340)

5. The work contemplated under Contract No. 064046 had been contemplated for 20 to 30 years. (N.T. 347)

6. Four Addenda were issued to this Project proposal throughout the month of February, 1988, and on March 3, 1988, bids for this Project were opened. All bids were rejected by PennDOT. (Complaint and Answer, paragraph 5)

7. When Contract 064046 was first offered for public bid by PennDOT, it did not contain specifications or requirements for the bidder to construct manholes or duct banks necessary for Philadelphia Electric Company (hereinafter "PECO") to install electrical conduit for the provision of electrical service through and near the proposed area of construction. (N.T. 95-96)

8. Notwithstanding the fact the project had been under consideration for 20-30 years, addendum No. 1 dated February 16, 1988 was the first occasion by which PennDOT incorporated specifications and requirements for the bidder to construct manholes and duct bank work for the installation of conduit necessary for PECO electrical transmission lines underground through, in, and around the construction area. (N.T. 96-97)

9. On or about April 4, 1988 this same Project, with some revisions, was offered for public bid by PennDOT. (Complaint and Answer, paragraph 6; N.T. 9)

10. In none of the bid specifications or addenda promulgated by the PennDOT pertaining to contract number 064046, or in any of the plans, specifications, drawings, or documents incorporated by reference therein, was there any express mention prior to April 28, 1988 (when bids were opened by PennDOT), that duct bank crossings across Germantown Pike had to be performed in a time-critical fashion, at night, or in Stage I of the project. (N.T. 27; Exhibit P-1, P-2, P-3, P-4, P-5, P-6, P-7)

11. On April 28, 1988, the bids were opened, and thereafter, the Lane Construction Corporation was awarded the contract for general construction for PennDOT Contract 064046. (Complaint and Answer, paragraph 7; N.T. 9)

12. The Lane Construction Corporation put out for bid the manhole installation, duct bank installation, and duct bank crossing aspects of Contract 064046. (N.T. 98)

13. Henkels & McCoy is a national and international utility contractor with experience in the installation of electrical, gas, and telephone utilities. (N.T. 102)

14. Henkels & McCoy subcontracted the electrical work for PECO duct bank and manhole construction under Project L.R. 1010, Section D3T. They were very familiar with PECO's requirements. (Complaint and Answer, paragraph 8; N.T. 12-13)

15. Henkels & McCoy ordered and received a package of bid documents from the Department. The package included the proposed contract, the Utility Relocation Plans, and the Maintenance and Protection of Traffic Plans. (N.T. 270-271; Proposed contract is Plaintiff's Exhibit 1; Utility Relocation Plans are Defense Exhibit 27; Maintenance and Protection of Traffic Plans are Plaintiff's Exhibit 7)

16. Henkels & McCoy's role in Contract 064046 was to install electrical conduits for PECO's ultimate use. (N.T. 28, 108)

17. The contract addendum, issued by PennDOT prior to bid states, in part; "Utility will remove 34 KV circuit and 13 KV circuit on the east and west side of Germantown Pike after all conduit and manholes are completed on Germantown Pike. (Emphasis added) The areas have been broken down for information and scheduling." (N.T. 60; Plaintiff's Exhibit 2, page 43; Defense Exhibit 2, page 98)

18. Henkels & McCoy had to install the duct banks and manholes before the utility removed the aforesaid 34 KV and 13 KV lines. (N.T. 61)

19. PennDOT normally obtains utility agreements with its various utilities on a construction project such as D3T effective as of the Notice to Proceed date. (N.T. 348)

20. With respect to the D3T project, utility agreements were not signed with PECO until over a year into the project and such agreements were necessary before any PECO poles on the project could be relocated. (N.T. 349; Plaintiff's Exhibit 54)

21. 140 days after the Notice to Proceed on October 18, 1988, PECO changed its mind with respect to relocation of certain utility poles and changed its plan to relocate electrical service in the proposed duct run on the right side of Germantown Pike. (Plaintiff's Exhibit 54, pg. 140A)

22. The D-476 (Distribution of Contract Time) shows Structure 16483 and Structure 16484 to be built from June 8, 1989 to January 19, 1990. (N.T. 64; Defense Exhibit 4)

23. Ron Beck, PennDOT's Assistant Construction Engineer in charge of "Blue Route", testified that the duct bank crossings across Germantown Pike were "important to be done up front" but he is uncertain whether PennDOT knew that the duct bank crossings were to be performed in Stage I of the project. (N.T. 318, 349-350)

24. The daily master diary notes of PennDOT indicated as of September 2, 1988 - four months into the project - that it was still formulating the sequence of PECO operations, (emphasis added) as it states in pertinent part:

Attended meeting with PECO's Scott Browne, Chuck Hanna and Rex Mackey to discuss PECO plans/quantities. Letter to be sent addressing contract quantity discrepancies. Also discuss scheduling of PECO work/contract work. (See claimant's Exhibit number 53.)

25. Stage 4 construction work could not commence until all other ramps and roadways were open to traffic. (N.T. 63)

26. Sheet five of nine and sheet six of nine of the Utility Relocation Plans show PECO poles in conflict with Ramps B and D. (N.T. 68; Defense Exhibit 27)

27. The contract calls for these poles to be removed "after new facilities in service." (Defense Exhibit 2, page 98)

28. The PECO poles had to be removed before certain ramps and structures could be constructed. (N.T. 69)

29. The Utility Relocation Plans showed certain poles to be removed. (N.T. 283)

30. These are the same poles listed on page 98 of the utility writeup in the contract. (Defense Exhibit 2; N.T. 283)

31. Henkels & McCoy's contract was with Lane Construction, the general contractor. (N.T. 202)

32. Mr. Lepore, a Henkels & McCoy employee, was one of the individuals responsible for Henkels & McCoy's bid to Lane Construction Company. (N.T. 28, 108)

33. Clarence Hilyard, a project manager for Henkels & McCoy, specifically prepared the duct bank installation, manhole installation, and duct bank crossing aspects of the project bid as indicated by item number 2129-1901; 2129-1902; 2129-1903; 2129-1904; 2129-1905; 2129-1906; 2129-1907; and 2129-1908. (Plaintiff's Exhibits 1 and 2; N.T. 14)

34. Clarence Hilyard, Henkels & McCoy's estimator, received bid documents from Mr. Lepore and not directly from the Department. (N.T. 57)

35. Mr. Lepore gave Mr. Hilyard a copy of the PECO drawings and the Maintenance and Protection of Traffic (MPT) plans. (N.T. 105)

36. Mr. Lepore did not give the Utility Relocation Plans (Defense Exhibit 27) to Mr. Hilyard. These plans showed certain PECO poles to be removed which conflict with the construction of Ramps B and D. (N.T. 67-69, 282; D-27)

37. The contract calls for the utility poles to be relocated or replaced if, in fact, they were to be relocated or replaced. (N.T. 281)

38. Mr. Lepore reviewed the Utility Relocation Plans (Defense Exhibit 27) but did not rely on them. (N.T. 282)

39. The utility relocation plans show some of the poles in conflict with the new roadways and structures. (N.T. 67-69, 283; D-27)

40. Item 0901-0001 - Maintenance and Protection of Traffic during construction includes project staging information. (Defense Exhibit 1)

41. Mr. Lepore read this part of the contract prior to submitting the bid. (N.T. 285)

42. On cross, Mr. Hilyard admitted that he did not read Item 0901-0001 Maintenance and Protection of Traffic during construction, pages 129 to 131 of the contract specifications covering stages one, two, three and four, prior to assembling the bid to Lane for the PECO duct work. (N.T. 69-70; Exhibit D-1)

43. Item 0901-0001, Maintenance and Protection of Traffic during construction states that Ramps B and D are to be constructed in Stage 2, Phase A and B. (N.T. 70; Defense Exhibit 1, page 130)

44. The staging shows when the structures and ramps are to be done. (N.T. 285)

45. Mr. Lepore saw that certain poles conflicted with ramps and structures when he reviewed the Utility Relocation Plan prior to submitting the bid. (N.T. 289)

46. Mr. Hilyard did not review the D-476 (distribution of contract time) prior to the bid. (N.T. 82)

47. Mr. Lepore saw that the D-476 included the date when these structures were to be started. (N.T. 290)

48. Henkels & McCoy did not coordinate with PECO prior to submitting its bid. (N.T. 53)

49. On a typical construction project, the subcontractor cannot decide when it is going to perform its work. (N.T. 56)

50. The general contractor coordinates the work of the subcontractor. (N.T. 57)

51. Notice to proceed on the Contract 064046 occurred on May 31, 1988. (Claimant's Exhibit 1)

52. According to a letter from Henkels & McCoy to Lane, dated November 16, 1989, Henkels & McCoy was aware at the start of work on the Project that the PECO duct bank had to be constructed first in order to have PECO remove its overhead line and allow construction of the bridge and the setting of steel. (N.T. 239; Plaintiff's Exhibit 25)

53. Mr. Hilyard testified, that in preparing his bid, he coordinated the duct bank crossing at manholes 752 and 751 and at manholes 755 and 757 with PennDOT's maintenance and protection of traffic plans. (N.T. 32-33; Exhibit P-7)

54. Using Plaintiff Exhibit 10, Mr. Hilyard established that he planned the installation of duct bank crossing Germantown Pike between manhole 752 (eastside) to manhole 751 (westside) in stage four phase A and stage four phase B (emphasis added) when these areas would be under traffic protection. (N.T. 32-33; Plaintiff Exhibit 10)

55. According to Defendant's Exhibit 19 and Plaintiff's Exhibit 17, the Maintenance and Protection of Traffic in Stages I, II and III are such that the crossing between manhole 755 and 757 could be performed in conformance with the Maintenance and Protection of Traffic Plans as listed below:

(a) The western side, behind barrier, from manhole 757 east to concrete traffic barrier in Stage II. (P-7, sheet 33; D-19, sheet 1)

(b) The center portion of the crossing in Stage III phase B, but outside any concrete traffic barrier, but in a work area protection zone controlled by temporary traffic control signals. (P-7, sheet 34; D-19, sheet 3)

(c) The eastern side of the Germantown Pike, the eastern end of the crossing into manhole 755 completed in Stage III, phase C, but outside concrete traffic barrier, but within channelizing devices and a work area protection zone. (P-7, sheet 35; D-19, sheet 14)

(N.T. 33-35; P-7; D-19)

56. Henkels & McCoy could do work behind the barrier in Stage II of the crossing between manhole 757 and 755. (Record)

57. Henkels & McCoy could not do work behind barriers in Stage III, Phase B and Stage III, Phase C. (N.T. 263-264)

58. Due to the lack of a PECO agreement regarding relocation of its electrical utility poles and due to the change of its plan to relocate service in the proposed duct run on Germantown Pike, "this caused [sic] additional scheduling problems with installation of duct under S-16490 during Phase I which would properly take place in Stage III or a temporary placement overhead." (Plaintiff's Exhibit 54)

59. The Plaintiff has submitted timely claims at No. 1565 containing three counts, Count I and II pertaining to manhole crossings at 751-752 and 755-757 and Count III lowering of manholes 751 and 752, and at No. 1642 containing two counts. Count I pertaining to the relocation of manhole 750 and Count II with difficult and additional excavation, shoring and conduit installation to avoid a concrete "kicker block" at a large water main at relocated manhole 750 and with the tunneling out of manhole 750. (Plaintiff's Statement of Claim)

60. Section 102.05 of the Department's 408 Specifications (1987 edition) states, as follows, in part:

102.05 EXAMINATION OF PROPOSAL FORMS, PLANS, SPECIFICATIONS, SPECIAL PROVISIONS, AND SITE OF WORK -- The Department's plans and specifications are complete and are prepared so any competent contractor is able to complete the proposed work. The bidder is required to carefully examine the proposal forms, plans, specifications, and project site before submitting a proposal. The submission of a proposal will be considered proof that the bidder has made such examination and understands the conditions to be encountered; the character, quality, and quantities of work to be performed; the material to be furnished; and the requirements of the plans, specifications, and proposal form. The Department will make no allowance or concession for a bidder's failure to make the required examination.

61. On cross, Mr. Lepore established that when the project started, Henkels & McCoy started the duct bank construction on the east side off the Germantown Pike, off the road and the concrete traffic barriers were in place. Also, Henkels & McCoy learned that PECO's 13KV feed was going to come up from Chemical Road to feed Corson Lane. The work started with manholes 751 and 752 which were located at Corson Lane off the side of the road and then proceeded with the conduit bank that went north from Chemical Road to Plymouth Road. (N.T. 241-243; Exhibit P-6, D-27, D-17)

62. Due to a major conflict with a 20-inch Philadelphia Suburban Water Company waterline at Station 75+00 on the east side of the Germantown Pike, the duct bank construction was stopped on February 14, 1989. While the water line was relocated at night, Henkels & McCoy's crews stopped work at Chemical Road and shifted to the manhole crossing at manhole 755 and 757 at Plymouth Road since PECO now planned the 13KV feed to Corson's Lane from the Plymouth 13KV line. Also, PECO changed its plan pole relocation north of the turnpike and caused additional scheduling problems shifting work from Stage III to Stage II. (N.T. 242-244; Plaintiff Exhibit 55)

63. Relocation of the 20-inch waterline in conflict with the new duct bank was not a part of the contract plans. In order to keep the job moving and accommodate PECO's change to a 13KV feed from Plymouth Road, Henkels & McCoy was directed to construct the duct bank crossing between manhole 755 and 757 at night and work would start on February 27, 1989. (N.T. 243-244; Plaintiff Exhibit 55, master diary 266V)

64. Contrary to the sequence they had used to prepare their bid to Lane, (emphasis added) Henkels & McCoy was required to resequence their work and construct the first duct bank crossing of the Germantown Pike from manhole 757 to manhole 755. Rather than the estimated five or six days to make this type of crossing, it took 46 days. They started at night on February 27, 1989. (N.T. 33-34, 125-128, 242-243; Plaintiff Exhibit 54 and 55)

65. Henkels & McCoy's force account summary for the 10 duct bank work between manholes 755 and 757 show a total cost of \$112,789.94 for approximately 225 feet of 10 duct bank, contract item number 2129-1908. (N.T. 214-215; Exhibit P-6; P-16; D-27, sheet 6)

66. Contract item #2129-1908 PECO 10 duct bank is priced at \$140.00 per linear foot and the 225 feet of 10 duct has a contract value of \$31,500.00 completed in place. Claim No. 1565 Count II manhole 755 to manhole 757 duct bank crossing should be reduced by \$31,500.00 to \$81,289.94. (Complaint No. 1565, Count II; Exhibit P-1 and P-16; Record)

67. The duct bank crossing between manhole 751 and 752 was performed between May 2, 1989 and July 13, 1989. (Complaint No. 1565, Count I and Exhibits; Claimant's Exhibit No. 24)

68. This crossing would have taken five to six days as planned by Henkels & McCoy in Phase IV. (N.T. 133)

69. Henkels & McCoy calculated the extra material, labor, and equipment cost for the duct bank crossing from 751 and 752 to be \$124,655.19. (N.T. 129-131, 148-151; Claimant's Exhibit No. 25)

70. Henkels & McCoy installed two other duct bank crossings of roadways that were not done at night. (emphasis added) One crossing of Germantown Pike at Chemical Road from manhole 750 to manhole 495, north side of Chemical Road, and from manhole 495 to a PECO pole across Chemical Road on the south side at Station 134+25R±. (N.T. 293-294; Plaintiff's Exhibit 9; Defendant's Exhibit 5 of 9)

71. The first verbal notification from Henkels & McCoy to the Department that the work in Claim 1565, Counts I and II would be claimed as force account work, was made on September 25, 1989. (N.T. 252-254; Defense Exhibit 28)

72. The first written notification that Henkels & McCoy intended to file a claim on this project was dated November 20, 1989. (N.T. 335; Defense Exhibit 25)

73. PennDOT changed the elevations for manholes No. 751 and 752 so that those manholes had to be lowered approximately three feet and 1.05 feet lower than originally designed by PennDOT. (N.T. 143-146; Claimant's Exhibit No. 22)

74. The change to the elevations of manhole numbers 751 and 752 were not promulgated until July 6, 1988 and well after the D3T project was bid. (Claimant's Exhibit No. 20 and N.T. 133-134)

75. The additional three feet of excavation for manhole 751 and the additional 1.05 feet excavation at manhole 752 was in solid rock. (N.T. 143-144)

76. Because the elevations between the two manholes were lowered respectively, the trench between those two manholes also had to be lowered and this necessitated the excavation of solid rock in the bottom of the trench. (N.T. 143-146)

77. This excavation of rock would not have been necessary but for the change in elevation to manholes number 751 and 752 respectively. (N.T. 143-146)

78. On December 6, 1988, Henkels & McCoy notified Lane Construction Company that the change in elevations to those two respective manholes would necessitate--for just the lowering of those manholes alone--extra work in the amount of \$13,341.30. (Claimant's Exhibit No. 17)

79. On February 14, 1989, PennDOT denied Henkels & McCoy's request for reimbursement for the lowering of the manholes number 751 and 752 respectively and demanded that it revise and resubmit a "more reasonable request." (Claimant's Exhibit No. 18)

80. With regard to claim 1565, Count III, the Department agreed to pay the amount of \$12,769.60 for the extra depth excavation of manholes 751 and 752 and the connecting duct bank. (N.T. 376; Plaintiff's Exhibit 42)

81. Henkels & McCoy was unable to calculate a unit price for the excavation of rock occasioned by PennDOT's changing of the manhole elevations and computed the cost for the extra excavation of rock on a force account basis in an amount of \$51,705.92. (N.T. 146-148; Claimant's Exhibit No. 23)

82. Section 110.03 of the Department's 408 Specifications (1987) edition, states as follows, in part:

(a) General. Work identified in Sections 104.02 and 104.03 will be paid, if authorized in writing by the District Engineer, as additional work, extra work, or extra work on a force account basis. Compensation will be limited to the work authorized in writing and actually performed. Work performed prior to written authorization will be at the Contractor's risk.

83. Claim 1565, Count I - 751-752 duct bank crossing was not authorized in writing. (N.T. 323)

84. Claim 1565 - Count II - 755-757 duct bank crossing was not authorized in writing, but was directed to be done out of sequence as bid. PennDOT knew or should have known that resequencing the work and directing it be done at night would require extra work. (N.T. 33-34, 324)

85. Claim 1565 - Count II - work was performed prior to authorization. (N.T. 324)

86. Claim 1565 - Count III - the lowering of duct bank 751 to 752 was directed but not authorized initially as extra work. (N.T. 324)

87. Claim 1565 - Count III - work was performed prior to authorization. (N.T. 324)

88. The Department has admitted that it has benefited from reasonable and necessary work for extra depth excavation of manhole 751 and 752 when relocating the duct bank. (N.T. 376; Claimant's Exhibit 43)

89. The Claim at No. 1642 pertains to PennDOT's relocation of manhole 750 due to conflicts with Texas Eastern Pipelines and other utilities in the area where the manhole was originally placed. (Claimant's Exhibits 34, 35, and 36)

90. The manhole not only had to be moved in both a southerly and easterly direction from this Plan, but it was also lowered 4 to 5 feet due to conflicts. (N.T. 164-168; Claimant's Exhibits 31, 32, 34, 35 and 36)

91. By lowering manhole 750 and moving it both in a south and east direction from original Plan, Henkels & McCoy was required to bend the conduit pursuant to PECO specifications and standards and wind the conduit between and among several utilities between a creek located near the Conrail Bridge and Germantown Pike back to the relocated position of the manhole. (N.T. 164-169; Claimant's Exhibit 4)

92. PennDOT's relocation of the manhole to avoid certain utilities resulted in extra and additional work between the creek and the as-built position of the manhole, and additional excavation due to the lowering of the manhole. These costs amounted to \$84,149.32. (N.T. 174; Claimant's Exhibit 31)

93. PennDOT authorized Henkels & McCoy to keep force account records for the special conduit between the creek and the relocated manhole. (N.T. 183, 229)

94. Henkels & McCoy kept force account records for this particular conduit. (Claimant's Exhibit 41)

95. PennDOT agreed that extra and additional work resulted from its relocation of manhole 750. (N.T. 268-269)

96. By relocating manhole number 750, these additional and extra work items included cost for additional mobilization, stand-by time, excavation and measures to avoid interference with other underground structures and utilities. (Claimant's Exhibit 36)

97. Relocating manhole number 750 to its new position took 49 days due to the numerous conflicts that had to be avoided by Henkels & McCoy, the additional excavation and the intricate bending of the duct bank as per PECO specifications. (Claimant's Exhibit 41; N.T. 179-184)

98. The distance between the creek to the relocated manhole was approximately 118 linear feet and normally this would have taken Henkels & McCoy one to two days to complete if it were not for the change in location of the manhole. (N.T. 410)

99. PennDOT admits that extra and additional work was occasioned by its relocation of manhole 750 and simply disputes the amount that is due and owing to Henkels & McCoy due to the relocation. (N.T. 370-371)

100. PennDOT paid Henkels & McCoy approximately \$16,520.00 for this 118 linear feet of conduit on a unit price basis and Henkels & McCoy acknowledges receipt of such payment. (N.T. 177)

101. After manhole number 750 was relocated to its existing position, a concrete "kicker" or thrust block protecting the Philadelphia Suburban Water Company water main was within several feet of the manhole outlet from which conduit was to proceed across Germantown Pike to manhole number 495. (N.T. 178-184)

102. Due to the conflict with the thrust block, Mr. Lepore met with Elmer SHEMELEY (PennDOT) and explained that the conduit would have to come out of the side of the manhole and around the thrust block so that it could eventually meet with manhole 495 across Germantown Pike. (N.T. 178-184)

103. Henkels & McCoy had to obtain permission from PECO to core drill through the side of the manhole such that the duct bank could exit the manhole to avoid the concrete kicker. (N.T. 178-184)

104. The duct bank had to be intricately run through several utilities to avoid the Philadelphia Suburban Water Company thrust block an unknown concrete obstacle; while at the same time being twisted from a vertical position (two ducts side by side four high) to a horizontal position (four ducts side by side by two high) as it proceeded across Germantown Pike. (N.T. 178-184)

105. Henkels & McCoy submitted through Lane Construction Company a submittal for force account payment for the extra and additional work occasioned by the relocation of manhole 750 and having to make special accommodations coming out of manhole 750 to the center of Germantown Pike in an amount of \$107,794.86. (Claimant's Exhibit number 50)

106. To date, PennDOT has refused to pay Henkels & McCoy the above amount although it agreed to do so by its September 23, 1991 letter. (N.T. 183, 184; Claimant's Exhibit 49)

107. Before proceeding with the work, Louis Lepore obtained the permission of Elmer Shemeley orally to proceed on a force account basis from manhole 750 to a marked position in Germantown Pike. (N.T. 178-184)

108. Henkels & McCoy provided PennDOT with written notice that the change in location of manhole 750 and avoidance of utilities coming out of manhole 750 occasioned extra and additional work and it requested written authorization on a force account basis for the extra or additional work to be performed. (Claimant's Exhibits number 46 and 47 respectively)

109. More than 90 days after the June 6, 1991 request for force account authorization for the extra or additional work, PennDOT approved the duct bank installation on a force account basis for manhole number 750 to the center of Germantown Pike and allowed force account records to be kept for the entire duct bank installation. (Claimant's Exhibit number 49)

110. The Department examined the force account records and determined that only 12 of the 27 days needed to complete the work were impacted or affected by obstructions. (N.T. 326, 327; Plaintiff's Exhibit 42)

111. The Department then calculated the financial impact to Henkels & McCoy as \$23,792.83, including force account markups for the impacted work. (Plaintiff's Exhibit 42, Attachments 2 and 3)

112. On Claim No. 1642, Count I, Claimant has claimed \$84,149.32 of which \$16,520.00 has already been paid by the Department. The Plaintiff's claimed amount is a reasonable and ordinary charge for the work performed. (Board Finding)

113. The Claimant is due \$67,629.32 (\$84,149.32 - \$16,500.00) on its claim at No. 1642 Count I. (Board Finding)

114. On claim No. 1642 Count II, force account records amounting to \$23,645.54 adequately compensates Henkels & McCoy for the extra work claimed in this count. (Plaintiff's Exhibit No. 50; N.T. 184, 185)

115. The claim of No. 1565 at Count I is based upon work which Claimant should have accounted for in its bid to Lane and which was identifiable in the plans and specifications, to be completed prior to Phase IV when the Claimant planned the work. Claimant is entitled to no recovery upon Count I No. 1565. (Board Finding from evidence; Record)

116. Claim No. 1565, Count II is based on extra work caused by unplanned utility conflict with duct bank construction that required the Claimant to work outside the planned sequence bid, at night and is entitled to \$81,289.94. (Record)

117. Henkels & McCoy's force account calculations upon Count III at No. 1565 in the amount of \$51,705.92 are fair and reasonable and represent extra and additional work issued as a result of PennDOT's change in elevations and the work encountered.

118. Summary of award

No. 1565		
Count I	0	
Count II	\$81,289.94	FF65 & 66
Count III	<u>\$51,705.92</u>	FF 81
Total - \$132,995.86		

No. 1642		
Count I		
(\$84,149.32 less credit of \$16,520.00)	\$67,629.32	FF 113
Count II	<u>\$23,645.54</u>	FF 114
Total - \$91,274.86		

119. Interest shall run upon the award of Count II and III of Docket No. 1565 from December 4, 1991, and upon Counts I and II of Docket No. 1642 from June 25, 1993.

## CONCLUSIONS OF LAW

1. The Board of Claims has jurisdiction over the subject matter and parties to this action. **72 P.S. Section 4651-1 through 10.**
2. A bidder is required to carefully examine the proposal forms, plans, specifications and project site before submitting a proposal.
3. The Contract must be construed in accordance with the plain meaning of its language. Every part of the Contract must be considered, and it is not the function of the Court of this Board to rewrite the Contract.
4. Henkels & McCoy is not entitled to recover any damages at Counts I, No. 1565, because it did not carefully examine the proposal forms, plans, specifications and project site before submitting a proposal as required by 408 Specification 102.05 (1987 edition).
5. The information necessary to determine when the duct bank and manhole would have had to be done are within the Proposal form and the Utility Relocation Plan.
6. The work claimed under Count I, No. 1565 was work required under the plans and specifications. The work claimed under Count II was done out of sequence as bid because of unplanned conflict with the 20-inch waterline and PECO's change in feed of 13KV to Corson Lane. The work was directed to be done at night.
7. If Henkels & McCoy had examined the documents carefully, it would have seen that the work had to be completed before certain poles and lines were removed. In turn, those poles and lines had to be removed before certain ramps and structures were completed and before the start of Phase IV.
8. Henkels & McCoy did not receive written authorization from the Department to perform the work on a force account basis but in fact performed the work needed to complete the project with the Department's knowledge of same.
9. Initially, Henkels & McCoy did not notify the Department of any disagreement pursuant to 110.03(e).
10. Henkels & McCoy are entitled to be compensated for the additional depth excavation for the PECO manholes 751 and 752 and the PECO duct bank structure connecting the two manholes.

11. Henkels & McCoy introduced sufficient evidence to support its claims for damages as a result of resequence of work between 755 and 757 required by PennDOT to avoid a large water main and PennDOT lowering manholes 751 and 752 said direction to lower such manholes having been received well after D3T Project had begun and Henkels & McCoy's bid submitted.

12. Plaintiff should be compensated for these Claims because of additional work performed by which the Commonwealth admittedly received benefit with interest at 6% per annum from December 4, 1991.

13. Under the circumstances the Claimant is entitled to \$81,289.94 and \$51,705.92 based upon force account calculations as adjusted which were fair and reasonable with interest from December 4, 1991 for Claim 1565, Counts II and III.

14. As to action No. 1642, Count I, the Commonwealth and Claimant agreed that force account records would be kept for the relocation of manhole 750 and the duct bank run to manhole 752.

15. Claimant's testimony and evidence regarding the force account markups for this work was credible and persuasive.

16. Claimant has claimed \$84,149.32 of which \$16,520.00 has been paid, so the Claimant should be awarded \$67,629.32, with 6% per annum interest from June 15, 1993.

17. As to action No. 1642, Count II, the Claimant gave proper force account notice for work that is the basis for this Claim.

18. Claimant's testimony and evidence regarding the work to be performed and regarding the force account markup for this work was credible and persuasive.

19. Claimant should be awarded \$23,645.54 on this Claim with 6% interest per annum from June 15, 1993.

## OPINION

This case involves electrical duct work performed by Henkels & McCoy, a use Plaintiff, having executed a contract as a subcontractor for the Lane Construction Corporation, on Section D3T of L.R. 1010, the "Blue Route" (I-476). Henkels & McCoy claims that it is owed certain monies as a consequence of not being able to perform work as bid and planned, Docket No. 1565, Counts I and II, and certain other monies for additional work, Docket No. 1565, Count III and Docket No. 1642, Counts I and II.

Specifically and in summary, the claims are as follows:

Docket No. 1565 --

Count I - 751-752, duct bank crossing at night, in traffic.

Count II - 755-757, duct bank crossing at night, in traffic.

Count III - Lowering manholes 751 and 752 and the duct bank crossing between them.

Docket No. 1642 --

Count I - Lowering and relocation of manhole 750; relocation of 140 linear feet of duct bank.

Count II - Installation of duct bank from manhole 750 to centerline of Germantown Pike.

With regard to Counts I of Docket No. 1565, Henkels & McCoy allege that it was forced to perform certain work at night and in traffic, instead of behind barriers, because the Department failed to provide information on when this work had to be performed. In Count II, the Claimant was forced to do work out of the planned sequence because of an unplanned relocation of a 20-inch water main and the subsequent revision in PECO's 13KV feed to Corson Lane from Chemical Road to Plymouth Road feed.

The Commonwealth of Pennsylvania, Department of Transportation, contends Henkels & McCoy is entitled to no recovery upon three (3) counts for the three following reasons:

1. The Claimant failed to make a careful examination of the proposal forms, plans, specifications and project site, thereby breaching the contract.
2. The Claimant failed to obtain authorization for the force account work, thereby breaching the contract.
3. Scheduling and coordination of the work is the responsibility of the general contractor, not the Department.

It is the finding and opinion of this Board that all the necessary information to determine when the work in question had to be performed was in the proposed forms, plans and specifications.

Henkels & McCoy had to carefully review Item 0901-0001 Maintenance and Protection of Traffic during Construction (Defense Exhibit 1), the Utilities addendum (Defense Exhibit 2), the Schedule of Operations - Project Control System section of the contract (Defense Exhibit 3), all of which were contained in the proposal forms, and the Utility Relocation Plans (Defense Exhibit 27).

Mr. Hilyard, who bid this part of the project for Henkels & McCoy, never reviewed the Utility Relocation Plans. Mr. Lepore admitted that he never gave the plans to Mr. Hilyard for review. Mr. Hilyard admitted in his testimony that he did not review Item 0901-0001, Maintenance and Protection of Traffic during Construction which included the staging and phasing plans. (N.T. 69). (Defense Exhibit 1).

Mr. Hilyard admitted on cross examination that Henkels could not perform any of the duct bank or manhole work in Stage IV, even though this is how Henkels planned and bid the 751-752 duct work (Plaintiff's Exhibit 10; N.T. 71)

According to the Plaintiff's Exhibit 17 and Defendant's Exhibit 19, Henkels planned to install the 755 and 757 manholes and duct banks behind barriers according to the design in Stage 3, Phases A, B and C. These exhibits show that this work could have been performed within the design work areas in the stages identified by the maintenance and protection of traffic plans.

The contract requires a bidder to "carefully examine the proposal forms, plans, specifications and project site before submitting a proposal." (Section 102.05 of the Department's 408 Specifications, 1987 edition). In construction contracts, each and every part must be taken into consideration and given effect; the courts must interpret contracts as written as the parties have the

right to make their own contract and it is not the function of the court to rewrite it or give it a meaning in conflict with the plain language of the contract. Commonwealth of Pennsylvania, Department of Transportation v. Acchione and Canuso, Inc., 14 Cwlth. Ct. 596, 324 A.2d 828 (1974).

If Henkels & McCoy had conducted a proper examination, it would have identified: (1) the work it was bidding on (2) including the location of certain poles on the Utility Relocation Plans (3) the conflict between those poles and certain structures and ramps (4) when these ramps and structures were to be constructed. Henkels knew that the duct banks and manholes had to be installed before the lines and poles were removed, thus, Henkels could have and should have known that the duct banks and manholes had to be installed before the ramps and structures were to be completed prior to Phase IV and have bid the project accordingly. Having failed to make the proper examination, Henkels & McCoy can not be entitled to any damages upon Count I at Docket No. 1565. All of the information necessary to determine when the work in question had to be performed and thus reflected in the bid was in the proposed forms, plans and specifications. Henkels cannot be held responsible for the conflict between the duct bank it was constructing and the 20-inch water main that PennDOT failed to adequately address during the design of the project. This conflict caused Henkels to have its forces redirected to the crossing at Plymouth Road and to accomodate PECO's change in the feed to Corson Lane which was also revised due to the water main problem.

Moreover, where a public contract states the procedure in regard to additional work and extra work claims for such will not be allowed unless these provisions have been strictly followed. Commonwealth of Pennsylvania vs. Burrell Construction and Supply Co., Inc. 86 Cwlth. Ct. 62, 483 A.2d 589 (1984).

According to the contract, 408 Specifications 110.03(a) (1987 edition), the work must be authorized in writing and “work performed prior to written authorization will be at the contractor’s risk.”

Construction Notice in Count II is undisputed that no prior authorization for the work claimed in Count II was given or initially requested. However, PennDOT was well aware that their design failure in their location of the 20-inch waterline, and at PennDOT’s insistence, that duct work be done at night and out of sequence. PennDOT should have known that Henkels would experience extra cost.

Henkels & McCoy’s job foreman did not initially notify the Inspector-in-Charge of any disagreement with the Department as to whether or not the work was in fact extra work to be done on a force account basis immediately or in writing within 10 days as required by Section 110.03(e). In fact, the first notification the Department received was on September 25, 1989 -- more than two (2) months after the work was completed. The Board has determined that Henkels & McCoy is entitled to Eighty-One Thousand Two Hundred Eighty-Nine Dollars and Ninety-Four Cents (\$81,289.94) for the extra work involved in Count II.

Count III under claim 1565 involves the costs incurred by Henkels & McCoy for having to lower manholes 751 and 752 due to revised elevations.

Henkels & McCoy has demonstrated that the elevations to these respective manholes were lowered during the course of construction and after this job was bid. Manhole 751 was relocated to a depth of 3 feet lower than originally demonstrated by the original plans. Manhole 752 was relocated to a depth of 1.05 feet lower than originally specified by the plans.

After this job was begun, and while in the field, Mr. Lepore testified that new elevations “just showed up” directing that these two manholes be lowered to different depths.

Mr. Lepore further testified that the area in which these two manholes were to be located was solid rock. Lowering these manholes to their respective new depths required additional excavation not contemplated and not bid.

In this case, the Department of Transportation produced new plans in the field that directed the lowering of these two manholes. A benefit was conferred to PennDOT by the lowering of these manholes by Henkels & McCoy. PennDOT concedes that a benefit was received and that the contractor should be paid for the benefit. PennDOT, however, contends that the claim in Count III of Fifty-One Thousand Seven Hundred Five Dollars and Ninety-Two Cents (\$51,705.92) was based upon force account records that were not authorized and accordingly the Claimant should not be entitled to the force account markups. PennDOT asserts that compensation for this claim should be Twelve Thousand Seven Hundred Sixty-Nine Dollars and Sixty Cents (\$12,769.60).

Equitable estoppel can be applied to a governmental agency such as PennDOT. The Commonwealth of Pennsylvania v. Dixon Contracting Company, Inc., 471 A.2d 934 (1984). Equitable estoppel is a doctrine, a fundamental fairness designed to preclude a party from of

depriving another of the fruits of a reasonable expectation when the party inducing the expectation knew, or should have known that the other would rely. Defrank v. County of Green, 50 Cwlth. Ct. 30, 412 A.2d 663 (1980).

Henkels & McCoy, through Lane Construction Company, advised PennDOT that it requested payment for the extra excavation necessitated by the lowering of manhole 751 and 752 by letter dated December 21, 1988.

In that letter, Use-plaintiff, Henkels & McCoy, estimated that the additional excavation would cost \$14,408.60. By letter dated, February 14, 1989, PennDOT agreed that its changed plans would necessitate additional excavation as compared to the elevations shown on the initial drawings.

John Gallagher, Assistant District Engineer, wrote as follows:

The Department agrees that additional excavation is required due to the revised elevations shown on the drawing. However, the Department hereby rejects your request for additional payment based on the method used to justify your additional cost.

Thus, before any work commenced with respect to the additional excavation necessitated by PennDOT's revised elevations for these manholes, PennDOT conceded that extra and additional work was required. Actual work to lower these manholes began on June 4, 1989, and continued through the week of July 16, 1989.

As Mr. Lepore testified at hearing in this matter, the 3 extra feet of excavation for manhole 751 and the 1.05 extra feet of excavation for manhole 752 was in solid rock. Moreover, conduit had to be extended across Germantown Pike connecting these two manholes and this particular stretch of conduit again was through solid rock by virtue of the changed elevations directed by PennDOT.

Force account records were maintained, and they provide ample basis upon which PennDOT can verify the equipment, man hours, and material costs associated with the extra work occasioned by PennDOT's lowering these elevations.

PennDOT is estopped from denying payment for the extra and additional work it authorized. PennDOT clearly received a benefit for which Henkels & McCoy has not been fully compensated. PennDOT directed these two manholes to be lowered and they were lowered.

It is the opinion of this Board that the use of the force account was justified, reasonable and fair. Accordingly, an award of \$51,705.92 for the claim of Count III will be entered.

At Docket No. 1642, Count I, Henkels & McCoy has made claims for the relocation of manhole 750 in the amount of \$84,149.32 as set forth in Claimant's Exhibit 41 through 47.

By stipulation agreed to by the parties, it was established that PennDOT moved manhole 750 from station 74 + 60 in the westbound land of Germantown Pike to station 74 + 05 in a driveway to an adjacent industrial building complex. Manhole 750 was moved after field operations began due to the result of the discovery of a conflict with the originally planned location of this manhole and a thrust block for a 20" Philadelphia Suburban Water Company main.

When a conflict with existing utilities was found and it became necessary to move MH 750 from its planned location, Henkels & McCoy requested authorization to maintain force account records for this extra or additional work by four letters dated December 19, 1989; January 8, 1990; January 10, 1990; and February 12, 1990.

The above requests were made because the relocation of this manhole due to other conflicts created deviations from the original scope of work. Also, additional costs were to be incurred in demobilizing and remobilizing its labor forces. More specifically, costs were incurred for stand by time, extra excavation and myriad interferences with other underground structures. Pursuant to publication 408 §110, Henkels & McCoy maintained force account records which are part of Claimant's Exhibit 41.

The work incident to the relocation of manhole 750 was performed between January 3, 1990, and February 21, 1990.

Mr. Beck, a Resident Engineer for PennDOT testified during the hearing that PennDOT agreed that the relocation of manhole 750 would necessitate extra or additional work. This is confirmed by Claimant's Exhibit 49 which in part states:

. . .agreed to pay for the duct bank installation on a force account basis for the work in stage four phase A only. This phase is from manhole 750 to the center of Germantown Pike. . .It was agreed to at the field meeting that force account records would be kept for the entire duct bank installation.

Mr. Beck testified that PennDOT does not dispute that extra or additional work was performed, it disputes the amount of damages that Henkels & McCoy claims for this extra and additional work.

The relocation of manhole 750 from station 74 + 60 to station 74 + 05 resulted in the manhole being relocated about 55 feet farther than originally planned in both a southerly and easterly direction. PennDOT claims that it is responsible for only the extra length of duct bank installation occasioned by the relocation.

Moving this manhole was not just a simple matter of paying for additional linear footage. This is a grave oversimplification of what extra work was necessary after PennDOT moved the manhole.

Mr. Lepore testified, without any rebuttal during the hearing, that various utilities existed in the area where manhole 750 was relocated. These utilities had to be crossed under and over a sanitary sewer, Texas Eastern gas lines, and Philadelphia Suburban Water Company water lines. The conduit that Henkels & McCoy was installing for PennDOT had to be curved at specified angled bends which required additional excavation to get under and over and around these existing lines.

The various kicks and bends associated with avoiding these existing utility lines, required additional excavation, additional shoring and additional work to ensure that the PECO electrical lines could pass through the diverted conduit.

As Mr. Lepore testified, this was not just the matter of digging a trench an additional 35 to 50 feet. The avoidance measures that Henkels & McCoy had to undergo in this area of multiple utility conflicts significantly and materially changed the scope of work for this length of conduit run.

It was undisputed that Henkels & McCoy was authorized at a field meeting in January, 1990, to keep force account records for this work. Henkels & McCoy maintained these force account records (Claimant's Exhibit 41) and now PennDOT has refused to honor the force account figures.

The force account records maintained by Henkels & McCoy for this count amply demonstrate entitlement to \$84,149.32 for this extra work. However, PennDOT has paid \$16,520.00 which Henkels & McCoy acknowledge should be credited against this amount. Accordingly, an award of \$67,629.32 will be entered in favor of the Claimant upon Count I of Docket No. 1642.

The second count under Docket No. 1642 involves the extra and additional work necessitated by having to connect conduit out of manhole 750 across Germantown Pike to manhole 495.

When PennDOT relocated manhole 750, the new location was directly in front of a thrust block or "concrete kicker." Mr. Beck admitted at the hearing that the Philadelphia Suburban Water Company thrust block or concrete kicker was directly in front of the opening of the manhole from which the conduit was to emerge for ultimate tie-in to manhole 495. Mr. Beck further admitted it was impossible for the conduit to be bent around, over, or under the concrete kicker due to its proximity to the manhole.

Thus, PECO authorized Henkels & McCoy to core drill the manhole such that the conduit was permitted to emerge from the manhole on an angle. This permitted the conduit to bypass the concrete kicker on a more gradual angled approach for ultimate tie in with manhole 495.

Mr. Lepore testified that the relocation of manhole 750 occasioned additional difficulties when the PECO duct bank had to emerge from manhole 750 for ultimate tie in with manhole 495. Due to the utility intensive area in which manhole 750 was relocated, the duct bank again had to be bent, kicked, twisted, and routed in various angled positions and shapes so as to avoid all of these various utilities. These avoidance measures had to be employed in a three dimensional plane. Mr. Lepore characterized this as no easy task.

When the concrete kicker was encountered, a field meeting was held among Mr. Lepore, PECO officials, Lane Construction Company officials and Mr. Shemely of PennDOT. PennDOT agreed to pay on a force account basis for the extra and additional work occasioned by these thrust block avoidance maneuvers. PennDOT has refused to pay Henkels & McCoy for the \$23,645.54 of work claimed.

Mr. Beck quite candidly admitted to the relocation of manhole 750 and the problems that ensued thereafter. He testified this:

. . .was a substantial change in the scope of the work.  
So it was our intent with that depth of excavation  
under a kicker paying a force account for the work at  
the first meeting.

(N.T. 330)

Publication 408 §110.03 provides the requirements for the reimbursement for additional, extra work, and extra work on a force account basis. Henkels & McCoy fully complied with the provisions of §110.03 and it was authorized to proceed and perform the extra or additional work and maintain force account records.

PennDOT asserts that the work the Department agreed to pay for under the force account was in fact not performed or had to be performed under the contract. This Board is of the opinion, however, that each claim was in fact extra and additional work due to PennDOT's relocation of manhole 750.

Henkels & McCoy had to tunnel out of the manhole on an angle of its Eastside and not the Southside as planned. Henkels & McCoy not only had to avoid the Philadelphia Suburban Water Company thrust block, it had to cross two abandoned Texas Eastern Lines and a Bell Telephone duct bank that was in front of the duct bank to be installed by Henkels & McCoy.

Henkels & McCoy have fully complied with the terms of Section 110 of Publication 408 as incorporated into the contract between the parties. This Board is of the opinion the work was performed and should be paid as called for in the contract. Accordingly, an award will be entered upon Count II at Docket No. 1642 in the amount of \$23,645.54.

**ORDER**

**AND NOW**, this                      day of                      , 1998, it is hereby **ORDERED** and **DECREED** as follows: as to Count I of Docket No. 1565 an award is made in favor of the Defendant, Commonwealth of Pennsylvania, Department of Transportation and against the Plaintiff, The Lane Construction Corporation, General Contractor, to the benefit of Henkels & McCoy, Inc., Subcontractor; as to Counts II and III of Docket No. 1565 an award is made in favor of the Plaintiff and against the Defendant in the amount of \$132,995.86 with interest at 6% per annum from December 4, 1991; as to Counts I and II of Docket No. 1642, an award is made in favor of the Plaintiff and against the Defendant in the amount of \$91,274.86; interest at 6% per annum from June 15, 1993.

BOARD OF CLAIMS

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David C. Clipper  
Chief Administrative Judge

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Louis G. O'Brien, P.E.  
Engineer Member

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James W. Harris  
Citizen Member

Opinion Signed  
May 19, 1998