

# Construction Changes: A True Story of Money, Power, and Turmoil

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*Certainty of change is a constant of the construction process. Construction “rarely proceeds as planned,” because “there are always unexpected events and conditions that occur during construction and impact the contractor’s ability to complete the project as planned.”<sup>1</sup> To those unschooled in the process, construction is perceived as organized “chaos,” where “even the most painstaking planning frequently turns out to be mere conjecture and accommodation to changes must necessarily be of the rough, quick, and ad hoc sort, analogous to ever-changing commands on the battlefield.”<sup>2</sup>*

## I. Introduction

On July 8, 2014, the U.S. Government Accountability Office (GAO) reported to Congress its dire findings regarding the U.S. Embassy construction project in Kabul, Afghanistan.<sup>3</sup> In 2009 and 2010, the Department of State (DOS) awarded two construction contracts with an aggregate cost of \$625.4 million.<sup>4</sup> The GAO found numerous shortcomings and deficiencies with respect to the projects. “Since the two contracts were awarded[,] . . . construction requirements have changed, costs have increased, and schedules have been extended.”<sup>5</sup> Specifically, the GAO determined that, because of multiple contract modifications (i.e., changes), project costs ballooned by nearly 24% and completion dates were delayed by almost two years.<sup>6</sup>

Cost overruns and schedule delays are hardly limited to the DOS or contingency environments. The GAO recently completed an audit of the Department of Veterans Affairs’ (VA’s) largest medical-center construction projects.<sup>7</sup> In its sobering report to Congress, the GAO found that costs exploded and schedules bloated, in large part, because of construction changes.<sup>8</sup> Project costs swelled from 59% to 144%, with an aggregate increase of almost \$1.5 billion.<sup>9</sup>

Schedule delays varied from fifteen months to more than six years.<sup>10</sup>

The purpose of this primer is to familiarize judge advocates with construction changes. As a roadmap, Part II provides an overview of Federal Acquisition Regulation (FAR) 52.243-4 (changes clause), including the authority to issue change orders, the scope of the changes clause, and fiscal and competition considerations. Part III discusses constructive changes and theories of liability against the Government premised on a contractor’s performance of additional work because of some fault or order of agency officials.

The roles of the legal advisor are as varied as they are immutable. In addition to being a steward of the public purse, the judge advocate must always be prepared to advise command and staff regarding risk management. When risk takes the form of construction changes, it can be especially perilous and chaotic. Contract changes are historically one of the most frequently litigated claims in public contracting.<sup>11</sup> Extensive mission and acquisition planning can mitigate the need and quantum of contract changes. Nevertheless, as German military strategist Helmuth von Moltke famously observed, “No battle plan survives contact with the enemy.”<sup>12</sup>

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<sup>1</sup> PHILIP L. BRUNER & PATRICK J. O’CONNOR, JR., BRUNER & O’CONNOR ON CONSTRUCTION LAW 499 (2002).

<sup>2</sup> *Id.* (quoting *Blake Const. Co., Inc. v. C.J. Coakley Co., Inc.*, 431 A.2d 569, 575 (D.C. 1981)).

<sup>3</sup> U.S. DEPT. OF DEF. INSPECTOR GENERAL, DODIG-2012-057, GUIDANCE NEEDED TO PREVENT MILITARY CONSTRUCTION PROJECTS FROM EXCEEDING THE APPROVED SCOPE OF WORK (2012).

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-13-302, VA CONSTRUCTION: ADDITIONAL ACTIONS NEEDED TO DECREASE DELAYS AND LOWER COSTS OF MAJOR MEDICAL-FACILITY PROJECTS (2003).

<sup>8</sup> *Id.*

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> See RALPH C. NASH, JR., GOVERNMENT CONTRACT CHANGES 86 (1st ed. Supp. 1981); CONT. & FISCAL LAW DEP’T, THE JUDGE ADVOCATE GEN.’S LEGAL CTR. & SCH., CONT. ATT’Y’S DESKBOOK 21-1 (2014).

<sup>12</sup> Kennedy Hickman, *Franco-Prussian War: Field Marshall Helmuth von Moltke the Elder*, ABOUT.COM (May 20, 2015, 9:00 AM), <http://militaryhistory.about.com/od/1800sarmybiographies/p/vonmoltke.htm>.

## II. Change Orders

### A. Background

It is axiomatic that, under common law, a party cannot unilaterally change the bargained for duties and obligations without breaching the contract.<sup>13</sup> In order to modify a contract, the parties must agree to the terms of the change and execute a bilateral modification supported by new consideration.<sup>14</sup> However, the Government does not avail itself of the normal rules of commercial contracts between private parties. Public contracting is distinct from its private counterpart by the prevalent and long-standing use of the changes clause, which allows the Government to unilaterally alter work within the general scope of the contract.<sup>15</sup>

The advent of the changes clause was born from the realities of the challenges inherent to construction and the limitations of bilateral modifications. It is commonplace and, oftentimes anticipated, that construction contracts will be repeatedly modified in order to adjust agency requirements, incorporate new technologies, account for unanticipated variables (e.g., site conditions), and correct errors in the plans and specifications.<sup>16</sup> Absent the changes clause, the fluidity of the construction process would be arrested by the back-and-forth nature of offers and counteroffers.<sup>17</sup> As noted by at least one commentator, bilateral modifications have the potential to fatally disrupt the construction process—under the guise of negotiations—by sanctioning delays, holding the project hostage and unduly leveraging the contractor's bargaining position.<sup>18</sup>

Accordingly, the Government has the power and the flexibility to unilaterally direct additions or deletions within the general scope of work through the change order process.<sup>19</sup> A change order is a written order, signed by the contracting officer, directing the contractor to make a change that the changes clause authorizes the contracting officer to order *without* the contractor's consent.<sup>20</sup> The contracting officer must issue a modification in writing.<sup>21</sup> When the change will result in an increase in the contractor's cost of performance, the contracting officer should make every effort to negotiate an equitable adjustment to the contract price and execute a bilateral modification.<sup>22</sup> The changes clause requires the contractor to tender its right to an equitable adjustment within

thirty days after receipt of a written change order.<sup>23</sup> However, in practice, requests for equitable adjustment submitted to the contracting officer prior to final payment are timely unless the late notice is prejudicial to the Government.<sup>24</sup>

Pursuant to FAR 43.205(d), all federal fixed-price construction contracts exceeding \$150,000 must incorporate the following changes clause:

(a) The Contracting Officer may at any time, by written order . . . make changes within the general scope of this contract. . . .

(b) If any such change causes an increase or decrease in the cost of, or the time required for, performance[,] . . . the Contracting Officer shall make an equitable adjustment in the contract price, the delivery schedule, or both, and shall modify the contract.

(c) The Contractor must assert its right to an adjustment under this clause within 30 days from the date of receipt of the written order. However, if the Contracting Officer decides that the facts justify it, the Contracting Officer may receive and act upon a proposal submitted before final payment of the contract.<sup>25</sup>

When confronted with construction issues, a judge advocate must be familiar with the change order process. As more fully set forth below, and detailed in Appendix A, the infancy of the change order process begins with the contracting officer's insertion of FAR 52.243-4 into the solicitation.<sup>26</sup> After the contract has been awarded, and construction has commenced, a need for a change may arise. It is immaterial whether the contractor agrees to perform the additional work.<sup>27</sup> Under the duty to proceed, the contractor must prosecute the change so long as it is within the general scope of the contract (i.e., in-scope).<sup>28</sup> A proposed change that is outside the general scope of the contract (i.e., out-of-scope), is a cardinal change, and will result in a breach of contract by the Government, relieve the contractor of its contractual obligations, and expose the Government to contract damages.<sup>29</sup> A judge advocate can minimize the risks

<sup>13</sup> See BRUNER, *supra* note 1, at 501.

<sup>14</sup> See *id.*

<sup>15</sup> 48 C.F.R. § 52.243-4 (2014). See also NASH, *supra* note 11, at 37.

<sup>16</sup> BRUNER, *supra* note 1, at 500.

<sup>17</sup> *Id.* at 502.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.* at 501.

<sup>20</sup> See BRUNER, *supra* note 1, at 509.

<sup>21</sup> See 48 C.F.R. § 53.243 (2014).

<sup>22</sup> See 48 C.F.R. § 43.102(b) (2014).

<sup>23</sup> 48 C.F.R. § 52.243-4 (2014).

<sup>24</sup> Watson, Rice & Co., HUD BCA No. 89-4468-C8, 90-1 BCA ¶ 22,499.

<sup>25</sup> 48 C.F.R. § 52.243-4 (2014).

<sup>26</sup> See *id.*; BRUNER, *supra* note 1, at 509.

<sup>27</sup> See 48 C.F.R. § 52.243-4 (2014); FEDERAL PUBLICATIONS SEMINARS, BASICS OF GOVERNMENT CONTRACTING 12-2 (2003).

<sup>28</sup> 48 C.F.R. § 52.243-4 (2014); NASH, *supra* note 11, at 97.

<sup>29</sup> See DONALD P. ARNAVAS & WILLIAM J. RUBERRY, GOVERNMENT CONTRACT GUIDEBOOK 10-7 (1986).

associated with the change order process by working closely and proactively with the contracting officer.

## B. Authority to Issue Change Orders

The contracting officer is central to the change order process. Generally, only a contracting officer acting within the scope of his authority can execute a modification and legally bind the Government.<sup>30</sup> Unlike private contract law, courts do not recognize the doctrine of apparent authority vis-à-vis the Government.<sup>31</sup> As such, a change order can only arise from actual authority. Any contract change directed by a Government official who is not a contracting officer is not authorized.<sup>32</sup> As a practical matter, a contracting officer can ratify the actions of a Government official, whose conduct induced the contractor to perform additional work, by accepting the contractor's performance and certifying final payment.<sup>33</sup>

In theory, the principle of actual authority should be simple. In reality and in practice it is not. Government officials and representatives—such as Army senior leaders, construction managers, design professionals, project superintendents, inspectors, and contracting officer representatives—regularly visit a construction site. When these individuals interact with the contractor, there is always the specter of concern and confusion regarding owner-directed changes.<sup>34</sup>

For example, consider the construction of a new headquarters building. During a site visit and meeting with the contractor, a senior leader expresses concerns regarding the configuration and layout of conference rooms. Erroneously believing that the senior leader has apparent authority to bind the Government, the contractor reconfigures the conference rooms at significant expense. When the contractor submits an equitable adjustment for the additional work, the contracting officer appropriately denies the request.

<sup>30</sup> 48 C.F.R. § 43.102 (2014); Hensel Phelps Constr. Co., GSBCA Nos. 14744, 14877, 01-1 BCA ¶ 31,249.

<sup>31</sup> Winter v. Cath-dr /Balti Joint Venture, 497 F.3d 1339, 1345 (Fed. Cir. 2007).

<sup>32</sup> *Id.*; see also NASH, *supra* note 11, at 86.

<sup>33</sup> *Id.* Implied ratification occurs where an unauthorized agent directed the contractor to perform additional work; the Government was aware of the contractor's performance; and the Government received the benefits thereof. William v. United States, 130 Ct. Cl. 435, 447 (1955).

<sup>34</sup> BRUNER, *supra* note 1, at 596. "[T]here is substantial opportunity for confusion over the authorization behind any communication . . . as either a 'directive' or a mere 'request.'" *Id.*

<sup>35</sup> 48 C.F.R. § 43.104 (2014). Although only a contracting officer acting within his scope of authority may execute a contract modification, he may expressly delegate approval authority to an administrative contracting officer. 48 C.F.R. § 43.202 (2014).

<sup>36</sup> FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-3.

Consequently, whenever Government officials, including contracting officer representatives, communicate a potential alteration to the work, the contractor must immediately notify the contracting officer to confirm that the Government is officially directing the change.<sup>35</sup>

## C. Scope Determinations and Cardinal Changes

A contracting officer's authority to direct changes to the work is not limitless. A proposed change must be within the general scope of the contract.<sup>36</sup> The determination regarding what constitutes an in-scope change is as much art as it is science. In the seminal case of *Freund v. United States*, the Supreme Court reasoned that whether a change fell within the general scope of the contract was a function of foreseeability.<sup>37</sup> While changes are anticipated on construction projects, it is unreasonable to expect parties to foresee changes that alter the character and the essence of their contractual understanding, unless such risk is contractually assumed.<sup>38</sup>

A change that is outside of the general scope of the contract is often referred to as a cardinal change or abandonment. A cardinal change is a "substantial deviation that changes the nature of the bargain," and an alteration so profound that it constitutes a breach of contract.<sup>39</sup> Whether a particular change will result in abandonment of the contract must be "analyzed on its own facts and in light of its own circumstances."<sup>40</sup> Courts and boards will consider the following factors: (1) individual and cumulative impact of changes; (2) degree of added complexity and difficulty of the work; (3) disruption caused to the contractor's performance; (4) overall impact upon contract cost and time of performance; and (5) effect of change on compensation or risk allocation.<sup>41</sup>

<sup>37</sup> *Freund v. United States*, 260 U.S. 60 (1922). An in-scope change includes all work "fairly and reasonably within the contemplation of the parties when the contract was entered into." *Id.* at 63.

<sup>38</sup> BRUNER, *supra* note 1, at 526. See also *Becho, Inc. v. United States*, 47 Fed. Cl. 595, 601 (2000).

<sup>39</sup> BRUNER, *supra* note 1, at 527. In *Wunderlich Contracting Co. v. United States*, the court stated:

There is no exact formula for determining the point at which a single change or a series of changes must be considered to go beyond the scope of the contract and necessarily in breach of it. Each case must be analyzed on its own facts and in light of its own circumstances, giving just consideration to the magnitude and quality of the changes ordered and their cumulative effect upon the project as a whole.

351 F.2d 956, 966 (Ct. Cl. 1965).

<sup>40</sup> *Edward R. Marden Corp. v. United States*, 442 F.2d 364, 369 (Ct. Cl. 1971).

<sup>41</sup> BRUNER, *supra* note 1, at 532.

The mere number of changes, without more, does not necessarily cause a cardinal change.<sup>42</sup> A single change order may appear innocuous, but the aggregate impact of multiple changes may constitute a cardinal change.<sup>43</sup> Referred to by contractors as “death by a thousand cuts,” multiple changes can result in abandonment when they alter the very character of, and materially impact, the contractor’s work.<sup>44</sup> Conversely, substantial changes in the work may be within the general scope of the contract, provided the parties entered into a broad contract that contemplated such changes.<sup>45</sup>

A contracting officer has the authority to direct the performance of additional work that is within the general scope of the contract; however, a contracting officer cannot direct the performance of work that is outside the general scope of the contract.<sup>46</sup> Regardless, a contractor may simply elect to perform an out-of-scope change (i.e., a cardinal change) and seek compensation under the changes clause.<sup>47</sup> As set forth below in sections II.E and II.F, the contractor’s performance of a cardinal change potentially raises significant fiscal and competition concerns for the command, the awarding authority, and the legal advisor.

#### D. Contractor Duty to Proceed

From the contractor’s perspective, whether a proposed change is within the general scope or is a cardinal change is, in some respects, a distinction without a difference and an exercise in semantics. Under the changes clause, a contractor is required to execute the change order, irrespective of whether it disputes the contracting officer’s pricing of the equitable adjustment or otherwise consents to the additional work.<sup>48</sup> A contractor’s refusal to proceed with the proposed change constitutes a material breach and is a basis for termination for default.<sup>49</sup> Disagreements regarding pricing of change orders are resolved through the contract’s dispute

clause.<sup>50</sup> The contractor is not excused from proceeding with the contract as changed.<sup>51</sup>

Importantly, the duty to proceed only concerns claims arising under the contract, (i.e.—its applicability is limited to in-scope changes).<sup>52</sup> Because a cardinal change is by definition outside the scope of the contract, a contractor has no contractual duty to perform the proposed change.<sup>53</sup> Nevertheless, a contractor may perform work it believes to be out-of-scope so long as it is satisfied with the equitable adjustment.<sup>54</sup> Such willingness to perform work is occasionally motivated by more than just pecuniary interests. A contractor’s refusal to proceed with the work brings great risk. Before rejecting a change order, a contractor must forecast with near mathematical certainty how a disinterested fact-finder such as a court or a board at some future date would classify the change as outside or within the general scope of the contract.<sup>55</sup> Should the contractor’s prediction be wrong and the contractor stop work, then the contractor would have breached his duty to proceed and defaulted on the contract.<sup>56</sup>

#### E. Proper Funds Must be Available

Aside from this “contractor’s dilemma,” the proper classification of a change as in-scope or out-of-scope will have significant fiscal and competition ramifications. If a change is within the general scope of the contract, it is an antecedent liability and the Government must obligate funds available at the time of the original contract award.<sup>57</sup> Alternatively, if a change is out-of-scope, then it is a new acquisition and a new requirement.<sup>58</sup> Therefore, the Government must obligate funds current when the contracting officer executes the modification.<sup>59</sup> Obligation of the incorrect year funds may result in an Anti-Deficiency Act

<sup>42</sup> PCL Constr. Serv. Inc. v. United States, 47 Fed. Cl. 745, 805 (2000) (finding a series of contract modifications did not constitute cardinal change).

<sup>43</sup> BRUNER, *supra* note 1, at 528.

<sup>44</sup> *Id.* at 529.

<sup>45</sup> AT&T Communications, Inc. v. Wiltel, Inc., 1 F.3d 1201, 1207 (Fed. Circ. 1993) (affording more latitude where the contract was for a state-of-the-art product); E.L. Hamm & Assocs., Inc., ASBCA No. 43792, 94-2 BCA ¶ 26,724 (finding a change from lease to lease/purchase was out-of-scope).

<sup>46</sup> FAR 43.201 (2014).

<sup>47</sup> ARNAVAS, *supra* note 29, at 10-7.

<sup>48</sup> *Id.* at 10-9.

<sup>49</sup> *Id.*

<sup>50</sup> The Contract Disputes Act of 1978 establishes the procedures for claims arising out of and relating to Government contracts. 48 C.F.R. § 52.233-1 (2014). Contractors must submit claims in writing to the contracting officer for a decision. 41 U.S.C. § 7103 (2014). The contracting officer is required to issue a decision within sixty days of receipt of the claim or notify the

contractor when a decision will be issued. *Id.* If the contractor disagrees with the contracting officer’s decision regarding the claim, it may (1) appeal the decision to the applicable agency board of contractor appeals within ninety days of receipt of the decision; or (2) bring suit in the United States Court of Federal claims within twelve months. 41 U.S.C. §§ 7101–7108 (2014).

<sup>51</sup> See 48 C.F.R. § 52.243-4 (2014).

<sup>52</sup> ARNAVAS, *supra* note 29, at 10-9.

<sup>53</sup> FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-6.

<sup>54</sup> See ARNAVAS, *supra* note 29, at 10-7.

<sup>55</sup> NASH, *supra* note 11, at 101.

<sup>56</sup> *Id.*

<sup>57</sup> 3 U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-08-978SP, PRINCIPLES OF FEDERAL APPROPRIATIONS LAW ch. 14, pt. C, at 14-46 (3d ed. 2008).

<sup>58</sup> *Id.*

<sup>59</sup> *Id.*

(ADA) violation if the unauthorized commitment is uncorrectable.<sup>60</sup>

## F. Competition Requirements

The intersection of contract modifications and competition rules is potentially wrought with more danger than just fiscal hazards and flash reports.<sup>61</sup> The Competition in Contracting Act (CICA) requires agencies, when procuring goods and services, to do so using full and open competition through the use of competitive procedures.<sup>62</sup> CICA does not require every modification to be competitively awarded.<sup>63</sup> Nevertheless, agencies and contractors cannot skirt competition rules through the changes clause. In *Cray Research, Inc. v. Department of Navy*, the court fashioned the “scope of the competition” test to determine when out-of-scope changes must be competed.

The “cardinal change” doctrine prevents government agencies from circumventing the competitive process by adopting drastic modifications beyond the original scope of the contract. The basic standard is whether the modified contract calls for essentially the same performance as that required by the contract when originally awarded so that the modification does not materially change the field of competition.<sup>64</sup>

A contracting officer must competitively award an out-of-scope change to an existing construction project if it materially departs from the scope of the original procurement.<sup>65</sup> This fact-driven analysis focuses on the scope of the entire original procurement process relative to the scope of the modification.<sup>66</sup> A cardinal change does not have to be competed provided the original solicitation adequately advised offerors of the “potential for the type of changes . . . that . . . occurred, or whether the modification is of a nature which potential offerors would reasonably have anticipated.”<sup>67</sup> The ramifications of a CICA violation vary depending on the circumstances. An aggrieved party can successfully protest the agency decision, stay the construction project, and require the awarding authority to compete the

new requirement.<sup>68</sup> Responsible agency officials may also face adverse administrative action.

Consider the following illustration: The Army previously awarded a contract for repairs and improvements to an existing barracks building. The original solicitation was tailored narrowly and only specified electrical and mechanical upgrades to the building interior and made no reference to exterior site work. During construction, the contracting officer issues a change order directing the contractor to significantly expand the barracks parking lot. Although the proposed change constitutes a cardinal change, the contractor agrees to perform the additional work. However, upon learning of the modification, a competitor of the contractor files a complaint alleging a violation of CICA. The barracks renovation project is enjoined pending the court’s ruling on the merits. After trial, the court finds potential offerors could not have reasonably anticipated the nature of the change at the time of the original award. The court enters judgment for the plaintiff and orders the Army to compete the barracks parking lot expansion as a new requirement.

## III. Constructive Changes

A judge advocate’s navigation of the change order process, with legal acumen, does not necessarily guarantee project success or negate all risk to his command or awarding authority. When describing the turmoil and the unpredictability associated with large construction projects, one court noted, “[E]xcept in the middle of a battlefield, nowhere must men coordinate the movement of other men and all materials in the midst of such chaos and with such limited certainty of present facts and future occurrences as in a huge construction project.”<sup>69</sup> Chaos and turmoil on a construction project can take on many shapes and pose numerous challenges for the Government and the contractor alike. During the course of construction, a contractor may encounter constructive changes that impact the contractor’s work and cost of performance.<sup>70</sup>

Unlike formal change orders, where the contracting officer can unilaterally modify the contract, constructive changes are neither derived from the FAR nor directed under

<sup>60</sup> See 31 U.S.C. § 1341(a)(1) (2014). Consider a construction project that is funded with Operations & Maintenance, Army (OMA) funds. It is awarded in fiscal year one (FY1), and, in fiscal year two (FY2), the contracting officer issues a change order to address differing site conditions. If the change is within the general scope of the contract, then the change order must be funded with FY1 OMA funds. If the change is out-of-scope, then it must be funded with FY2 OMA funds.

<sup>61</sup> Once it is determined that there has been an Anti-Deficiency Act (ADA) violation, the agency head must immediately submit a report to the President and Congress detailing all relevant facts and actions taken, i.e.—a flash report. 31 U.S.C. §§ 1351, 1517(b) (2014).

<sup>62</sup> 41 U.S.C. § 253(a)(1)(A) (2006).

<sup>63</sup> *AT&T Communications, Inc. v. Wiltel, Inc.*, 1 F.3d 1201, 1205 (Fed. Circ. 1993).

<sup>64</sup> *Cray Research, Inc. v. Dep’t of Navy*, 556 F. Supp. 201, 203 (D.D.C. 1982).

<sup>65</sup> *AT&T Communications*, 1 F.3d at 1205. See, e.g., *Memorex Corp.*, B-200722, 81-2 CPD P 334 (Oct. 23, 1981) (finding a change of a contract from purchase to lease-to-ownership is a cardinal change requiring competitive procurement).

<sup>66</sup> *BRUNER*, *supra* note 1, at 541.

<sup>67</sup> *AT&T Communications*, 1 F.3d at 1207.

<sup>68</sup> See *Cray Research*, 556 F. Supp. at 203.

<sup>69</sup> *Blake Const. Co., Inc. v. C.J. Coakley Co., Inc.*, 431 A.2d 569, 575 (D.C. 1981).

<sup>70</sup> See *FEDERAL PUBLICATIONS SEMINARS*, *supra* note 27, at 12-8.

the changes clause. A constructive change occurs when, absent a change order, a contractor is required to perform work beyond the scope of the contract because of some fault or order of the Government.<sup>71</sup> Because the contracting officer erroneously believes that the work is already specified in the contract, he will not issue a written change order.<sup>72</sup> Notwithstanding the absence of a change order, claims for constructive changes have traditionally been addressed through the changes clause.<sup>73</sup> The rationale is that, because of some Government action or inaction, the contractor has been required to perform additional work against its will and at the express or implied direction of the contracting officer.<sup>74</sup> In *Len Co. & Associates v. United States*, the court stated the following:

We, as well as the Armed Services Board of Contract Appeals, have held that, if a contracting officer compels the contractor to perform work not required under . . . the contract, his order to perform, albeit oral, constitutes an authorized . . . unilateral change . . . and entitles the contractor to an equitable adjustment.<sup>75</sup>

The most common constructive changes arise from the following situations: (1) contract misinterpretation; (2) Government interference or failure to cooperate; (3) defective specifications; (4) nondisclosure of superior knowledge; and (5) constructive acceleration.<sup>76</sup>

Irrespective of the type of constructive change, a contractor must assert its right to an equitable adjustment for a constructive change within thirty days of notifying the Government that it has experienced a constructive change.<sup>77</sup> The content of the notice must assert a positive, present intent to seek recovery as a matter of legal right.<sup>78</sup> Similar to formal

change orders, requests for equitable adjustment raised after final payment are untimely.<sup>79</sup>

#### A. Contract Misinterpretation

A constructive change may arise where, after contract award and during construction, the Government and the contractor encounter an ambiguity in the contract designs and specifications.<sup>80</sup> The Government may demand that the contractor perform the work in such a manner as to make it more costly.<sup>81</sup> A constructive change can result where: (1) a Government official authorized to interpret the contract documents directs the contractor to perform in accordance with the official's interpretation; (2) the contractor performs the disputed work against its will; and (3) the official's interpretation is later shown to be incorrect.<sup>82</sup> The resultant constructive change triggers the contractor's right to an equitable adjustment of the contract price.

A contract provision is ambiguous if it is susceptible to different interpretations and each interpretation is harmonious with the contract terms and the parties' objective and ascertainable intent.<sup>83</sup> When confronted with an ambiguity, the parties must rely upon intrinsic evidence and contract interpretation principles to resolve the disputed terms.<sup>84</sup> If after an examination of the four corners of the contract the ambiguity persists, the parties may consider extrinsic evidence.<sup>85</sup>

If an ambiguity cannot be resolved through intrinsic and extrinsic evidence, courts have fashioned two allocation of risk rules to interpret the disputed contract provisions. First, under the rule of *contra proferentum*, the ambiguity must be

<sup>71</sup> *Miller Elevator Co. v. United States*, 30 Fed. Cl. 662, 678 (1994).

<sup>72</sup> BRUNER, *supra* note 1, at 549.

<sup>73</sup> *Id.* at 550.

<sup>74</sup> NASH, *supra* note 11, at 208.

<sup>75</sup> *Len Co. Assocs. v. United States*, 385 F.2d 438, 443 (Ct. Cl. 1967).

<sup>76</sup> FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-8.

<sup>77</sup> 48 C.F.R. § 52.243-4(b) and (e) (2014). Except for claims based on defective specifications, a contractor cannot recover costs incurred more than twenty days prior to notification to the Government of the constructive change. 48 C.F.R. § 52.243-4(d) (2014).

<sup>78</sup> FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-8.

<sup>79</sup> *Design & Prod., Inc. v. United States*, 18 Cl. Ct. 168, 193 (1989).

<sup>80</sup> *See* ARNAVAS, *supra* note 29, at 10-16.

<sup>81</sup> *See* FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-9.

<sup>82</sup> *J.F. Allen Co. & Wiley W. Jackson Co. v. United States*, 25 Cl. Ct. 312, 320 (1992).

<sup>83</sup> *Bennett v. United States*, 178 Ct. Cl. 61, 64 (1967).

<sup>84</sup> *See, e.g., Big Chief Drilling Co. v. United States*, 26 Cl. Ct. 1276, 1298 (1992) (holding all contract terms must be given their plain meaning so as to not render any part inconsequential). Construction contracts contain order of precedence clauses to settle discord between battling contract terms. 48 C.F.R. §§ 52.215-8; 52.236-32 (2014). For instance, if there is a conflict between the drawings and the specifications, as a matter of law and contract, the specifications trump the drawings. *Id.* Where a detail of work is omitted from the drawings or specifications, but contained in the other, then the contract must be interpreted as if the detail were in both the drawings and specifications. 48 C.F.R. § 52.236-21 (2014).

<sup>85</sup> FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-12. An authorized Government representative can provide clarifying statements to help interpret ambiguous contract language; however, such statements cannot contradict express and clear contract terms. *Turner Constr. Co. v. Gen. Servs. Admin.*, GSBICA No. 11361, 92-3 BCA ¶ 25,115. Custom and trade usage may provide context that can help explain ambiguous terms; however, it cannot be used to contradict unambiguous ones. *W.G. Cornell Co. v. United States*, 376 F.2d 299, 306 (Ct. Cl. 1967). The prior course of dealing between the contractor and the Government, as well as their actions during the course of performance, may evidence the parties' understanding of ambiguous contract terms. *Macke Co. v. United States*, 467 F.2d 1323, 1325 (Ct. Cl. 1972) ("[H]ow the parties act [during performance] is often more revealing than the dry language of the [contract] by itself."); *Superstaff, Inc.*, ASBCA No. 46112, 94-1 ¶ 26,574.

construed against the drafter.<sup>86</sup> Second, where a solicitation contains an ambiguity that is patent (i.e., obvious), an offeror has a duty to seek clarification prior to award.<sup>87</sup> A contractor's failure to seek clarification of a patent ambiguity will materially prejudice any subsequent claim for an equitable adjustment.<sup>88</sup>

A judge advocate may not possess the necessary technical expertise in the fields of architecture, engineering, or construction methods. Nevertheless, when faced with a contract misinterpretation issue, a legal advisor should advise the contracting officer regarding the use of intrinsic and extrinsic evidence as well as the applicability of allocation of risk principles to help resolve the ambiguity.

## B. Government Interference or Failure to Cooperate

In addition to ambiguous contract terms, a constructive change can manifest from the Government's failure to properly administer the contract.<sup>89</sup> Liability is premised on the theory that Government interference caused the contractor to perform work not required under the contract and to incur additional costs.<sup>90</sup> For example, courts and boards have allowed equitable adjustments for constructive changes where the Government: imposed hyper-technical inspections;<sup>91</sup> disapproved substitute items that were equal in quality and performance to the contract requirements;<sup>92</sup> unjustifiably disapproved or unreasonably delayed approval of shop drawings;<sup>93</sup> and failed to prevent interference by another contractor.<sup>94</sup> Likewise, an agency's failure to make a worksite available to the contractor has been held to violate the Government's implied duty to cooperate.<sup>95</sup> As the resident legal sentinel, the judge advocate must ensure Government officials—who are responsible for contract administration—do not unwittingly interfere with the contractor's performance by exercising their judgment and discretion in a manner that is inconsistent with the contract and the Government's implied duty to cooperate.

<sup>86</sup> *Sturm v. United States*, 421 F.2d 723, 727 (Ct. Cl. 1970); *Peter Kiewit Sons' Co. v. United States*, 109 Ct. Cl. 390, 418 (1947). See also FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-16.

<sup>87</sup> *Hensel Phelps Constr. Co.*, ASBCA No. 49716, 00-2 BCA ¶ 30,925.

<sup>88</sup> RALPH C. NASH, JR. ET AL., *THE GOVERNMENT CONTRACTS REFERENCE BOOK* 216 (3d ed. 2007).

<sup>89</sup> See, e.g., *R&B Bewachungsgesellschaft GmbH*, ASBCA No. 42213, BCA ¶ 24,310. Notwithstanding, when performing a sovereign act, a Government's actions will not give rise to a breach of the implied duty of noninterference and failure to cooperate. *Orlando Helicopter Airways, Inc. v. Widnall*, 51 F.3d 258, 262 (Fed. Cir. 1995) (finding a criminal investigation of a contractor was a sovereign act and did not give rise to a constructive change).

<sup>90</sup> *SIPCO Services & Marine v. United States*, 41 Fed. Cl. 196, 217 (1998).

<sup>91</sup> *Id.* at 223 (finding a constructive change where a contracting officer technical representative imposed additional quality control testing that slowed contractor performance). See also *Grumman Aerospace Corp.*, ASBCA No. 50,090, 01-1 BCA ¶ 31,316 (finding an agency's unilateral

## C. Defective Specifications

Some constructive changes arise during contract administration, while the genesis of others is conceived from mistakes made during the initial design and lay dormant until contractor performance. The Government may be liable for errors and omissions in its plans and specifications under two different but related theories of liability. First, a basic tenant of public construction law is that the Government impliedly warrants to a contractor the adequacy and the sufficiency of the Government-furnished plans and specifications.<sup>96</sup> Second, under the theory of impracticability or impossibility, the Government may be liable for increased performance costs associated with the contractor's attempts to conform its work to defective specifications.<sup>97</sup>

### 1. Spearin Doctrine

When the Government furnishes specifications, it impliedly warrants that the contractor can follow the contract drawings and specifications and perform without undue expense. In order to recover under the implied warranty of specifications, a contractor must show the following: (1) It was actually misled by the error in the design specifications; (2) It reasonably relied upon the defective design specifications and complied fully with them; (3) The defective design specifications caused increased costs; and (4) The contractor did not have actual or constructive knowledge of the defect prior to award.<sup>98</sup>

The seminal case regarding the implied warranty of specifications is *United States v. Spearin*.<sup>99</sup> In *Spearin*, the Government contracted for the construction of a naval dock which included relocating a sewer main.<sup>100</sup> After the contractor relocated the sewer main in accordance with the Government-furnished plans and specification, it overflowed

change to the inspection method constituted a constructive change that entitled the contractor to recover the costs associated with the extra effort); *Neal & Co., Inc. v. United States*, 36 Fed. Cl. 600, 632 (1996) (holding "nit-picking punch list" to be an overzealous inspection).

<sup>92</sup> *Page Constr. Co.*, AGBCA No. 92-191-1, 93-3 BCA ¶ 26,060.

<sup>93</sup> *Vogt Bros. Mfg. Co. v. United States*, 160 Ct. Cl. 687, 706 (1963).

<sup>94</sup> See *Northrop Grumman Corp. v. United States*, 47 Fed. Cl. 20, 78 (2000).

<sup>95</sup> *Summit Contractors, Inc. v. United States*, 23 Cl. Ct. 333, 336 (1991).

<sup>96</sup> *United States v. Spearin*, 248 U.S. 132, 136 (1918).

<sup>97</sup> *Oak Adec, Inc. v. United States*, 24 Cl. Ct. 502, 504 (1991).

<sup>98</sup> FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-20.

<sup>99</sup> *Spearin*, 248 U.S. at 132.

<sup>100</sup> *Id.* at 133.

and flooded the project.<sup>101</sup> The Government terminated the contractor for default, and the contractor sued for breach of contract.<sup>102</sup> On appeal, the Supreme Court held,

Where one agrees to do . . . a thing possible to be performed, he will not be excused or become entitled to additional compensation, because unforeseen difficulties are encountered. . . . But if the contractor is bound to build according to plans and specifications prepared by the owner, the contractor will not be responsible for the consequences of defects in the plans or specifications.<sup>103</sup>

The linchpin of the implied warranty of specifications is that liability follows responsibility. Under *Spearin* and its progeny, the assignment of liability hinges largely on whether the Government furnished the contractor with design—vice performance—specifications.<sup>104</sup> Design specifications state precisely how the contractor will perform the work and prohibit any contractor deviations.<sup>105</sup> Consequently, the Government accepts general responsibility for design errors and omissions.<sup>106</sup> By contrast, performance specifications simply state the objectives.<sup>107</sup> The contractor has discretion and responsibility regarding how to perform the work and achieve the stated goals.<sup>108</sup> As such, the contractor assumes the risk of any errors or omissions in the plans and specifications.<sup>109</sup> The applicability of the *Spearin* doctrine is more nuanced and difficult where plans and specifications are composite (i.e., have both design and performance qualities).<sup>110</sup> In such instances, courts and boards will test each portion of the specification to determine whether the

Government or the contractor was responsible for the design error.<sup>111</sup>

## 2. *Impracticability or Impossibility*

A constructive change may also arise from defective specifications under a theory of impracticability or impossibility.<sup>112</sup> Unlike the implied warranty of specifications, it is immaterial whether the specifications are design or performance.<sup>113</sup> Instead, in order to establish a claim for impossibility or impracticability, a contractor must show the following: (1) The contractor experienced an unforeseen or unexpected occurrence;<sup>114</sup> (2) The contractor did not assume the risk of the unforeseen occurrence by agreement or custom;<sup>115</sup> and (3) Performance is commercially impracticable or impossible.<sup>116</sup> It is not necessary to make a showing of actual or literal impossibility.<sup>117</sup> Something is impractical when it can only be done at an excessive or unreasonable cost.<sup>118</sup> Some courts and boards apply the “willing buyer” test to determine whether performance is commercially impractical. That is, a contractor must show that there are no buyers willing to pay the increased cost of production plus a reasonable profit.<sup>119</sup>

Thus, whenever a contractor experiences difficulties performing its work in accordance with the plans and specifications, a legal advisor should ensure that these concerns are neither trivialized nor casually dismissed by project officials as the responsibility of the contractor. The Government may be liable for the additional work due to design error or impracticability.

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<sup>101</sup> *Id.* at 134.

<sup>102</sup> *Id.* at 135.

<sup>103</sup> *Id.* at 138.

<sup>104</sup> See NASH, *supra* note 11, at 266.

<sup>105</sup> *Id.*

<sup>106</sup> *Id.* at 272.

<sup>107</sup> See *Interwest Constr. v. Brown*, 29 F.3d 611, 615 (Fed. Cir. 1994).

<sup>108</sup> FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-19.

<sup>109</sup> Aerodex, Inc., ASBCA No. 7121, 1962 BCA ¶ 3492, *aff'd*, 1964 BCA ¶ 4057.

<sup>110</sup> See NASH, *supra* note 11, at 273.

<sup>111</sup> *Monitor Plastics Co.*, ASBCA No. 14447, 72-2 BCA ¶ 9626.

<sup>112</sup> BRUNER, *supra* note 1, at 566.

<sup>113</sup> *Oak Adec, Inc. v. United States*, 24 Cl. Ct. 502, 503 (1991) (finding the use of performance specifications does not automatically shift the risk of non-performance on the contractor for purposes of commercial impracticability).

<sup>114</sup> An unforeseen or unexpected occurrence may be caused by unanticipated technical difficulties that significantly increase the contractor’s work and cost of performance. *Id.* For example, contractor performance may be frustrated because the specifications require performance beyond the state of the art. FEDERAL PUBLICATIONS SEMINARS, *supra* note 27, at 12-21. Courts and boards will consider the contractor’s efforts and the ability of other contractors to meet the specifications as evidence of an unforeseen or unexpected occurrence. *Id.*

<sup>115</sup> A contractor may assume the risk associated with a defective specification by participating in its formulation. *Costal Indus. v. United States*, 32 Fed. Cl. 368, 373 (1994). In *J.A. Maurer, Inc. v. United States*, the court found that the contractor assumed the risk of impossible performance by proposing to extend the state of the art. *J.A. Maurer, Inc. v. United States*, 485 F.2d 588, 594 (Ct. Cl. 1973).

<sup>116</sup> *Id.* See also *Hobbs Construction & Development, Inc.*, ASBCA No. 34890, 91-2 BCA ¶ 23,755 (finding where contract performance was impossible, a contractor was awarded compensation for its unsuccessful efforts to meet the specification tolerances). When deciding whether performance is commercially impracticable or impossible, a contractor must show that the increased cost of performance is commercially senseless. See *Fulton Hauling Corp.*, PSBCA No. 2778, 92-2 BCA ¶ 24,858.

<sup>117</sup> *Natus Corp. v. United States*, 178 Ct. Cl. 1, 9 (1967).

<sup>118</sup> *Id.*

<sup>119</sup> RALPH C. NASH, JR., *GOVERNMENT CONTRACT CHANGES*, 13-37 to 13-39 (2d ed. 1989).

#### D. Nondisclosure of Superior Knowledge

Quite distinct from theories of design error and impracticability, the Government has a basic duty to disclose vital information of which the contractor is ignorant.<sup>120</sup> The claim for a constructive change is premised on the following elements: (1) The Government possesses knowledge of vital facts regarding a solicitation or contract; (2) The contractor does not know nor should have known of the facts; (3) The Government knew or should have known of the contractor's ignorance; and (4) The Government failed to disclose the facts to the contractor.<sup>121</sup>

The court's decision in *Miller Elevator Co. v. United States* is instructive and offers a cautionary tale to the legal advisor.<sup>122</sup> In *Miller Elevator Co.*, the Government awarded a three-year elevator maintenance contract.<sup>123</sup> Sixteen months after contract award, the Government awarded another contract to renovate the building.<sup>124</sup> The renovations significantly increased the contractor's work under the maintenance contract; accordingly, the contractor requested an equitable adjustment for the additional costs.<sup>125</sup> The contracting officer denied the claim, and the contractor brought suit.<sup>126</sup> In finding for the contractor, the court held that the Government was aware of the anticipated renovation at the time of award; the contractor did not know nor should have known of the renovation; and the Government did not disclose this vital information to the contractor.<sup>127</sup> In light of the court's ruling, a judge advocate should coordinate with the requiring and the awarding authorities to ensure that vital information—which will materially impact the work—has been provided to the contractor in a timely manner.

<sup>120</sup> See *Miller Elevator Co. v. United States*, 30 Fed. Cl. 662, 678 (1994).

<sup>121</sup> *Id.* at 675. The information held by the Government must have a direct bearing on the cost or duration of contract performance. *Bradley Const., Inc. v. United States*, 30 Fed. Cl. 507, 510 (1994). The amount of interference caused by the nondisclosure is a factor in determining whether the information is vital. *Johnson & Erector Co.*, ASBCA No. 23689, 86-2 BCA ¶ 18,931; *Numax Elec., Inc.*, ASBCA No. 29080, 90-1 BCA ¶ 22,280 (finding an agency breached its duty to disclose by failing to inform a contractor that all previous contractors had been unable to manufacture in accordance with the specifications). There is no breach of the duty to disclose vital information if the contractor knew or should have known of the information. *H.N. Bailey & Assoc. v. United States*, 449 F.2d 376, 383 (Ct. Cl. 1971).

<sup>122</sup> *Miller Elevator Co.*, 30 Fed. Cl. at 662.

<sup>123</sup> *Id.* at 666.

<sup>124</sup> *Id.*

<sup>125</sup> *Id.* at 667.

<sup>126</sup> *Id.*

<sup>127</sup> *Id.* at 676-78.

<sup>128</sup> See 48 C.F.R. § 52.243-4 (2014); *United Construction and Supply v. United States*, 1997 U.S. App. LEXIS 29365 \*8 (1997).

#### E. Constructive Acceleration

Under the changes clause, the Government may issue a change order that directs the contractor to accelerate its work schedule.<sup>128</sup> A claim of constructive acceleration arises when the Government requires the project to be completed within the original schedule notwithstanding the encountering of an excusable delay<sup>129</sup> by the contractor.<sup>130</sup> In order to establish a claim for constructive acceleration, a contractor must establish the following: (1) an excusable delay; (2) notice to the Government of such delay and request for an extension of time; (3) Government refusal of the request for schedule relief; (4) an express or implied order by the Government to accelerate; and (5) reasonable efforts by the contractor to accelerate which resulted in increased costs.<sup>131</sup>

Courts and boards have found constructive acceleration when the Government threatens termination<sup>132</sup> or liquidated damages<sup>133</sup> in response to a contractor's request for a schedule extension due to an excusable delay event.<sup>134</sup> However, a denial of a delay request simply because of insufficient information is not tantamount to an order to accelerate.<sup>135</sup> It is not necessary for the contractor's acceleration efforts to be successful; a reasonable attempt to meet the completion date is sufficient.<sup>136</sup>

In *Larry Azure v. United States*, the Government executed a contract for the construction of erosion control works on a drain way that emptied into a river.<sup>137</sup> After experiencing heavy rains and severe weather conditions, the contractor requested an extension of the project schedule.<sup>138</sup> However, the contracting officer refused to act on the extension until after completion of the project.<sup>139</sup> The contractor submitted a claim for a constructive change, which was ultimately denied by the contracting officer.<sup>140</sup> After the

<sup>129</sup> An excusable delay is typically a delay that is unforeseeable and beyond the control of the contractor. See, e.g., 48 C.F.R. §§ 52.249- 10 (2014). See also *NASH, ET AL.*, *supra* note 88, at 237.

<sup>130</sup> *Fraser Construction Co. v. United States*, 384 F.3d 1354, 1361 (Ct. Cl. 2004).

<sup>131</sup> *Fru-Con Constr. Corp. v. United States*, 43 Fed. Cl. 306, 328 (1999).

<sup>132</sup> *Intersea Research Corp.*, IBCA No. 1675, 85-2 BCA ¶ 18,058.

<sup>133</sup> *Norair Eng'g Corp. v. United States*, 666 F.2d 546, 549 (Ct. Cl. 1981).

<sup>134</sup> See *BRUNER*, *supra* note 1, at 572-73.

<sup>135</sup> *Franklin Pavlov Constr. Co.*, HUD BCA No. 93-C-13, 94-3 BCA ¶ 27,078.

<sup>136</sup> *Fermont Div., Dynamics Corp.*, ASBCA No. 53,073, 01 BCA ¶ 11,139.

<sup>137</sup> *Azure v. United States*, 1997 U.S. App. LEXIS 29365 (Fed. Cir. 1997).

<sup>138</sup> *Id.*

<sup>139</sup> *Id.* at \*10.

<sup>140</sup> *Id.* at \*5.

contractor filed suit, the court found, *inter alia*: (1) The extreme amounts of rain constituted an excusable delay; (2) The Government's failure to timely grant the extension constituted a denial; (3) The Government's inaction was tantamount to an implied order to accelerate; and (4) The contractor took reasonable efforts to accelerate the work.<sup>141</sup> The court held the Government constructively accelerated the project schedule and equitably adjusted the contract price.<sup>142</sup>

Project delays are seldom a cause for celebration and merriment. Nevertheless, prior to the rejection of any requests for a schedule extension, a judge advocate should coordinate with the contracting officer to ascertain whether an excusable delay event negatively impacted the contractor's performance. Otherwise, the Government may be responsible for the costs of constructively accelerating the contractor's performance.

#### IV. Conclusion

Numerous audits and investigations of construction projects have been conducted by the Commission on Wartime Contracting in Iraq and Afghanistan,<sup>143</sup> the Inspector General for the Department of Defense,<sup>144</sup> the Special Inspector General for Iraq Reconstruction,<sup>145</sup> and the Special Inspector General for Afghanistan Reconstruction.<sup>146</sup> Whether the projects were in a garrison or a deployed environment, construction changes have resulted in unauthorized expenditures, swollen project costs, and considerable delays.<sup>147</sup> Suffice to say, if carelessly administered, the changes process can quickly metastasize and adversely impact a commander's fiscal resources and mission capabilities.<sup>148</sup>

Because of the unpredictability and the inevitability of contract changes, the construction process is viewed as *organized chaos*. However, as Sun Tzu said, "In the midst of chaos, there is also opportunity."<sup>149</sup> Contract changes will not necessarily imperil a construction project, but their mishandling undoubtedly will. In order to minimize risk and liability to his command or awarding authority, a judge advocate must (1) navigate the formal change order process and (2) guard against Government action that could result in a constructive change. After all, as Napoleon Bonaparte noted, "The battlefield is a scene of constant chaos. The

winner will be the one who controls that chaos, both his own and the enemies."<sup>150</sup>

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<sup>141</sup> *Id.* at \*11.

<sup>142</sup> *Id.* at \*22.

<sup>143</sup> See COMMISSION ON WARTIME CONTRACTING IN IRAQ AND AFGHANISTAN, TRANSFORMING WARTIME CONTRACTING: CONTROLLING COSTS, REDUCING RISKS (2011).

<sup>144</sup> See U.S. DEPT. OF DEF. INSPECTOR GENERAL, *supra* note 3.

<sup>145</sup> See COMMISSION ON WARTIME CONTRACTING IN IRAQ AND AFGHANISTAN, *supra* note 143, at 55.

<sup>146</sup> *Id.* at 80.

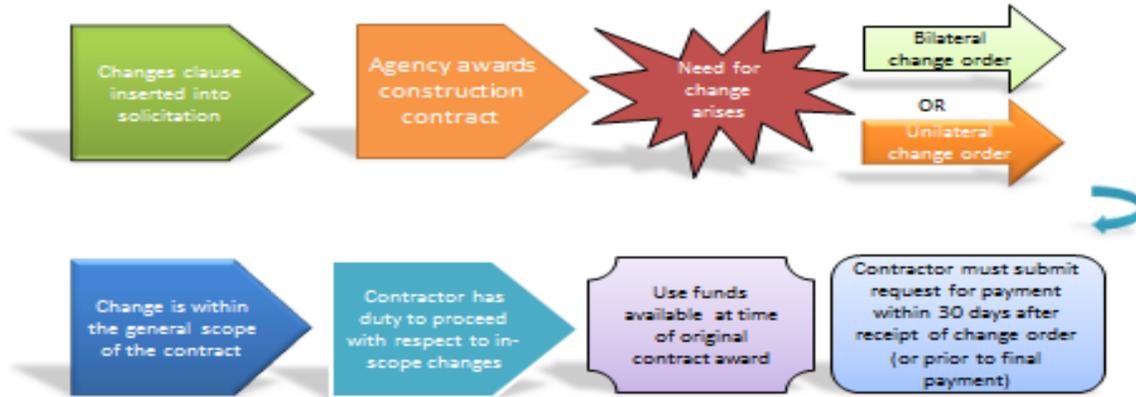
<sup>147</sup> See, e.g., U.S. DEPT. OF DEF. INSPECTOR GENERAL, *supra* note 3, at 3; U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 7, at 8.

<sup>148</sup> For example, significant delays in project completion of a detention facility or a medical treatment facility can impact a command's ability to hold detainees and provide medical care, respectively.

<sup>149</sup> *The Art of War*, HISTORY.COM, <http://www.history.com/topics/the-art-of-war> (last visited Jan. 10, 2016).

<sup>150</sup> *Napoleon Bonaparte Quote*, IZQUOTES.COM, <http://izquotes.com/quote/20614> (last visited Jan. 10, 2016).

**FLOWCHART OF A CHANGE THAT IS WITHIN THE GENERAL SCOPE OF THE CONTRACT**



**FLOWCHART OF A CHANGE OUTSIDE THE GENERAL SCOPE OF THE CONTRACT (CARDINAL CHANGE)**

