GRINNELL FIRE PROTECTION
SYSTEMS COMPANY

CONTRACT NO. V514C-496

VABCA-5672 AND
5859

VA MEDICAL CENTER
BATH, NEW YORK

Kevin D. Szczepanski, Esq., Beardsley, Beardsley, Cowden & Glass, Architects & Engineers, P.C., Auburn, New York, for the Appellant.

Rheba C. Heggs, Esq., Trial Attorney; ***Charlma J. Quarles, Esq.,*** Deputy Assistant General Counsel; and ***Phillipa L. Anderson, Esq.***, Assistant General Counsel, Washington, D.C., for the Department of Veterans Affairs.

OPINION BY ADMINISTRATIVE JUDGE KREMPASKY
(PURSUANT TO RULE 12.3)

INTRODUCTION

These are timely appeals of the Department of Veterans Affairs' (VA or Government) Contracting Officer's final decisions denying Appellant's, Grinnell Fire Protection Systems Company's (Grinnell), claims for equitable adjustment for flushing the fire protection system at the VA Medical Center in Bath, New York (VAMC Bath) and for installation of additional sprinklers. Grinnell seeks $17,079 and $6,766 for the system flushing and the additional sprinkler installation respectively. The parties dispute whether the Contract No. V514C-496 (Contract) required the system flushing and the installation of the additional sprinklers.

Appellant has elected to process its appeals under the provisions of

Rule 12.3, "Small Claims (Accelerated)" procedures. The parties have waived hearing in these appeals and have elected to submit this matter for decision on the written record under Rule 11.

The record consists of the Complaints, Answers and the consolidated Appeal File consisting of 31 tabbed exhibits for these appeals. Each party, pursuant to the Board's PRESUBMISSION ORDER and Rule 11, has also submitted supplementary evidence consisting of additional documents and affidavits. Appellant has submitted four affidavits: 1) the Schedule of Costs; 2) the Affidavit of Harvey Stoler, Grinnell's District Manager; 3) the Affidavit of Russell P. Fleming, Vice President of Engineering, National Fire Sprinkler Association, Inc.; and, 4) the Affidavit of Gerald Welch, Grinnell Design Engineer. The Government has submitted two affidavits: 1) the Affidavit of Kenneth S. Faulstich, VA Fire Protection Engineer and 2) the Affidavit of Mark D. Simonson, VA Contracting Officer. Finally, the parties have submitted a JOINT COMPREHENSIVE PREHEARING STATEMENT OF FACTS consisting of 24 paragraphs. All 24 of those paragraphs are uncontroverted; as provided in the PRESUBMISSION ORDER, the Board considers these uncontroverted paragraphs to be stipulations of fact.

The parties have submitted single, simultaneous briefs. Both entitlement and quantum are before the Board.

SUMMARY FINDINGS OF FACT

In accordance with Rule 12.3(ii), the evidence in the record supports the following summary of relevant facts.

General

The Contract was awarded to Grinnell for replacement of the fire protection sprinkler system in four buildings at VAMC Bath on January 16, 1998 in the amount of $228,900. Notice to Proceed was issued on February 9, 1998; the Contract completion date was August 10, 1998.

There were four bidders for the Contract. The prices proposed by the other three bidders were $448,000, $468,395 and $468,400; the Government estimate was $308,000. Grinnell provided written verification of its bid at the request of the Contracting Officer on October 1, 1997.

Grinnell is an experienced installer of fire protection systems and has previously participated in Federal contracts as either a prime or subcontractor.

The Contract contained the usual provisions found in VA construction contracts including the clauses at: FAR 52.236-21 SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION; VAAR 852.236-91, SPECIAL NOTES; VAAR 852.236-77, REFERENCE TO STANDARDS; and, VAAR 852.236-88, CONTRACT CHANGES.

Grinnell did not visit the site of the work and made no inquiry to the Contracting officer concerning the Contract requirements prior to submitting its bid.

System Flushing

Contract Drawing FP –10 contains 18 "General Notes" providing specific directions regarding the Contract work. General Note 13 on the Drawing states: "The contractor, upon installing the flush provisions shall flush the system per NFPA-13 in each building and report all results to the engineer and owner."

The Contract specifications in the three sections pertaining to installation of the fire protection system incorporate various national standards and requirements into the Contract specifications. Included among these are standards published by the National Fire Protection Association (NFPA). The incorporated NFPA standards are identified by a number (NFPA-__) and a title. The incorporation is accomplished in each of the applicable specification sections by a paragraph entitled "Applicable Publications" which, in each case, begins with the following subparagraph:

> The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.

Section 15050 of the Contract specifications, "Basic Methods and Requirements (Mechanical)" in paragraph 1.5 F., incorporates NFPA standards as follows:

National Fire Protection Association (NFPA)

13	Installation of Sprinkler Systems
14	Standpipe and Hose Systems
101	Life Safety Code

In paragraph 1.05 E., Specification Section 15330, "Automatic Sprinkler System" lists the incorporated NFPA standards thusly: "13-1985-Sprinkler Systems and

24-1984-Private Fire Service Mains and Their Appurtenances." Finally, paragraph 1.5 B. of Specification Section 15500, "Fire Protection", incorporates the following NFPA standards:

13	Installation of Sprinkler Systems
13	Inspecting, Testing, and Maintenance of Sprinkler Systems
14	Installation of Standpipe and Hose Systems
72H	Testing Procedures for Local, Auxiliary, Remote Station, and Proprietary Protective Signaling Systems

No other NFPA standards are specifically incorporated into the Contract.

General Note 8 of Drawing FP-10 states: "All work shall be in conformance with applicable provisions of NFPA 13 and 14.

Responding to oral direction from the VA to flush the fire protection system, Grinnell, on April 21, 1998, submitted a change order proposal in the amount of $21,255 to flush the fire protection system, citing the 1996 Edition of NFPA-13 in support of its position that the Contract did not require flushing.

NFPA-13-1985, Paragraph 1-11, "Flushing of Underground Connections" requires that underground water mains and lead-in connections be flushed before connection to the sprinkler piping. Paragraph 3-8.2 states, in part: "All sprinkler systems shall be arranged for flushing." The paragraph also includes the provision: "(See NFPA-13A, Inspection, Testing, and Maintenance of Sprinklers)." NFPA-13-1985, in Appendix D provides that the reference to NFPA-13A does not make NFPA 13A a part of NFPA-13 requirements. Nothing in NFPA-13-1985, in the circumstances applicable to the Contract, requires

flushing of fire protection system piping after installation of the piping or sprinkler heads.

NFPA-13-1996 flushing requirements are essentially the same as those stated in NFPA-13-1985. However, NFPA-13-1996 incorporates NFPA-25-1995, "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" as part of NFPA-13-1996 requirements. Although not disclosed in the record, NFPA-25 apparently replaced NFPA-13A sometime after publication of NFPA-13-1985.

The Contract Specifications require compliance with NFPA-13-1985 in the design and installation of the sprinkler system, including testing; however, they have no specific reference to flushing. The VA, after consulting its architect-engineer, determined that the Contract required flushing of the fire protection piping. In particular, the VA cited the "Automatic Sprinkler System Handbook (Handbook)", Section 4-13 as requiring flushing when a fire protection system is changed from dry to wet or vice versa. The cited Handbook section, titled "Provision for Flushing Systems", in relevant part, states: "It is important to ***provide*** for flushing, particularly … where the systems has been changed from a wet system to a dry system or vice versa." (Emphasis added) The Handbook is neither incorporated into NFPA-13-1985 nor is it incorporated by reference into the Contract.

NFPA Standard #25, "Standards for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems" sets procedures for periodically testing fire protection systems to determine if foreign material is present in the system. If foreign material is found, NFPA-25 directs system flushing and provides flushing procedures to insure the foreign material would

not restrict the flow of water to sprinkler heads. NFPA characterizes this testing and flushing procedure as a maintenance activity.

The work required in the Contract involved conversion of parts of the fire protection system from wet to dry and *vice versa*.

In two letters to Grinnell contemporaneous with the parties' debate about whether the Contract required system flushing, Mr. Fleming, the Vice President of Engineering of the National Fire Sprinkler Association (NFSA), opined that neither NFPA-13 nor the "Automatic Sprinkler Systems Handbook" required flushing in the circumstances relevant to this Contract. Mr. Fleming maintained that flushing must be expressly specified by an owner because flushing of sprinkler piping in the Bath VAMC circumstance would not be standard industry practice as part of an installation or modification of a fire protection system.

Mr. Fleming, who is also a member of the NFPA Technical Correlating Committee on Automatic Sprinklers, reiterates this position in his affidavit. He states in paragraphs 5 and 6:

> 5. Finally, I understand General Note 13 of the contract between the VA and Grinnell (the "Contract") required Grinnell to "flush the system per NFPA-13 in each building and report all results to the engineer and owner." In my opinion, this statement is ambiguous because NFPA 13 does not require flushing except for underground mains or lead-in connections, nor does it detail the procedures for flushing, which are found in NFPA 25.

> 6. If the VA had wanted Grinnell to flush the sprinkler system, it should have clearly and unambiguously detailed its flushing requirements in the Contract. At a bare minimum, it should not have required flushing "per NFPA 13" because that section does not require flushing under the circumstances at issue here – a new and/or revamped sprinkler system.

Mr. Faulstich, VA's Fire Protection Engineer, concurs with Mr. Fleming's assessment, stating in his affidavit:

> I have reviewed the Rule 4 Appeal File for VABCA 5672, the Contract, the specifications, drawings and National Fire Protection Association Standard 13, 1985 edition. Based upon my review, and my experience with the installation and maintenance of automatic fire sprinkler systems, the direction on Note 13 of Drawing FP-11, which instructed the contractor "flush the system" after installation of flush provisions in accordance with NFPA 13 is unclear and inconsistent with industry practice and standards. The only "flushing" required by NFPA 13 is that of underground mains and lead-in connections to ensure thorough cleaning before connection to the water supply. The VA Medical Center required the contractor to completely flush all piping, not merely underground mains and lead-in connections, and instructions for complete system flushing are found in NFPA 25, not NFPA 13. Therefore, the direction on Note 13 of Drawing FP-11 is clearly inconsistent with standards and practices of automatic fire sprinkler protections systems that have been in place for over 20 years.

Based upon its interpretation of the Drawing FP-10 and NFPA-13 requirements as an instruction not to flush the fire protection system, Grinnell did not include costs for system flushing in its bid. The VA, and the VA's architect-engineer who prepared the Contract Specifications and Drawings,

intended that system flushing be part of the Contract because of the VA's previous experience where the fire protection system in another part of VAMC Bath was replaced and subsequently did not work properly because of debris in the lines.

Additional Sprinklers

Certain existing sprinkler heads within the buildings at VAMC Bath in which Contract work was to be performed were hidden from view because they were above dropped ceilings.

The IFB, in the SF 1442, Scope of Work, states:

> Contractor shall completely prepare site and furnish all labor, tools, materials and equipment necessary and perform all work to Remove/retrofit/replace existing sprinkler systems in Buildings 30, 33, 34 and 35 from point of entry. Removal includes standpipe, branch lines, hangers, and sprinkler heads. New installation includes standpipe (risers) branch lines, hangers, brackets, sprinkler heads, flush valves, control valve station, inspector test connections, sanitary waste riser, chases and other items as detailed on the drawings.
>
> Work shall include ***installation of complete and functional wet/dry sprinkler system in each building to provide total sprinkler protection of all areas of each building*** in accordance with NFPA requirements.
>
> System will provide total coverage for main building, attics, basements and ***porches*** as detailed and specified. (emphasis added)

The Contract Specifications, in the "Statement of Bid Item", states, in part:

> Work to be accomplished will include removal/retrofit/replacement of existing sprinkler system in each building from point of entry. Removal includes standpipe, branch lines, hangers, and sprinkler heads. New installation includes standpipe (risers) branch lines, hangers, brackets, sprinkler heads, flush valves, control valve station, inspector test connections, sanitary waste riser, chases and other items as detailed on the drawings.
>
> Work shall include ***installation of complete and functional wet/dry sprinkler system in each building to provide total sprinkler protection of all areas of each building*** in accordance with NFPA requirements.
>
> System will provide total coverage for main building, attics, basements and ***porches*** as detailed and specified.

Section 15330, "Automatic Sprinkler System", of the Contract specifications requires design and installation of the fire protection system in accordance with NFPA-13-1985 and it required Grinnell to submit a complete layout drawing of the sprinkler system. General Note 9 of Contract Drawing FP-10 states: "Provide layout shop drawings for new systems and for modification of existing systems." There is no evidence in the record that Grinnell visited VAMC Bath prior to preparation of its layout drawings for the sprinkler system.

In its Contractually required submittal showing the layout of the sprinklers to be replaced and installed, Grinnell did not include fourteen sprinklers in Buildings 34 and 35. The VA approved Grinnell's layout drawings.

The VA, by letter of December 3, 1998, directed Grinnell to install the sprinklers not depicted on the Grinnell's layout submittal. Grinnell responded on December 6, 1998 by stating that it would perform the work "under protest"

because the sprinklers were not detailed on the Contract drawings nor on its sprinkler layout submittal. Grinnell submitted a claim for the installation of four additional sprinklers in Building 34 of $3,308. Grinnell subsequently submitted a claim for installation of eight additional sprinklers not reflected on the layout drawing in Building 35 in the amount of $6,660, comprised of a claim of $3,460 for the sprinkler installation and $3,200 for "Additional Engineering and Drawings."

Grinnell has modified its additional sprinkler claim during the course of proceedings here to a claim of $6,766 for installation of fourteen additional sprinklers, eight in Building 34 and six in Building 35. The amount claimed by Grinnell is for labor and materials for the installation; the claim for additional engineering and drawings has apparently been dropped.

The Contract drawings for Buildings 34 and 35 depict neither the existing sprinkler heads to be removed nor the heads to be installed. The drawings, respectively, contain the following notes:

> THE CONTRACTOR SHALL REMOVE ALL EXISTING SPRINKLER HEADS LOCATED UNDER THE CEILING WITHIN BUILDING 34 ON THE FIRST FLOOR. PROVIDE VIKING MODEL M, QUICK RESPONSE, ORDINARY HAZARD HEADS IN THEIR PLACE. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COUNT OF ACTUAL HEADS.
>
> THE CONTRACTOR SHALL REMOVE ALL EXISTING SPRINKLER HEADS LOCATED UNDER THE CEILING WITHIN BUILDING 35 ON THE FIRST, SECOND AND THIRD FLOORS. PROVIDE VIKING MODEL M, QUICK RESPONSE, ORDINARY HAZARD HEADS IN THEIR PLACE. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COUNT OF ACTUAL HEADS.

The installation of the fourteen sprinklers was necessary for the fire protection system to meet NFPA-13-1985 coverage requirements.

Twelve of the fourteen "trapped" sprinkler heads were located in the "back" or north porches of buildings 34 and 35. The other two heads were in rooms adjacent to the porches. These porches had been previously enclosed and it is clear from the Contract Drawings that the porches were to be covered by the fire protection system.

Quantum

Grinnell claims for labor costs in both appeals at a fully burdened rate of $58.00 per hour. This rate is derived thusly:

Wage and Benefit Cost	$29.35
Insurance and Taxes	6.90
Truck Expense	6.80
Supervision	2.10
Tools and Equipment	2.75
Subtotal	47.90
Overhead @ 10%	4.79
Subtotal	52.69
Profit @ 10%	5.27
Total	57.96 (58.00)

The wage and benefit cost in Grinnell's calculation of its fully burdened labor rate is based on the Contract wage rate for sprinkler fitters.

Grinnell expended 288 labor hours in flushing the VAMC Bath fire protection system and incurred $376.00 of material costs in that effort.

Installation of the fourteen sprinklers in Buildings 34 and 35 required 105 hours of labor effort and $676 in material costs.

DISCUSSION

System Flushing

Grinnell rests its claim for an equitable adjustment for flushing the fire protection system at VAMC Bath on the language of General Note 13 which states: "The contractor, upon installing the flush provisions shall flush the system per NFPA-13 in each building and report all results to the engineer and owner." Since NFPA-13 does not address system flushing, Grinnell argues it was not obliged to perform such work. Stripped to essentials, Grinnell's position is that it reasonably read General Note 13 and NFPA-13 together as saying: "Flush but don't flush." We find this interpretation, one that renders General Note 13 a nullity, to be nonsensical in light of the language of the entire Contract.

We concur in the parties' assessment that General Note 13 is not a model of precise specification drafting. However, the well-established principles of Contract interpretation lead us to conclude, when the Contract is read as a whole and giving effect to all its parts, that Grinnell was obligated to flush the fire protection system it installed at VAMC Bath. ***Brant Construction Management***, VABCA No. 5391, 98-2 BCA ¶ 30,073; ***Metric Constructors, Inc. v. National Aeronautics And Space Administration***, 169 F.3d 747 (Fed. Cir. 1999)

General Note 13 is clearly directive in intent; the instruction is to "flush the system" after installation of the provisions for flushing and to report the results of the flushing to the VA. The "per NFPA-13" language in General Note 13 does not, as Grinnell would have us find, abrogate the clear Contractual obligation to flush the system. The Contract Specifications identify NFPA-13 as the NFPA standard for maintaining and flushing fire protection systems as well as the standard applicable to installation of such systems. Thus, the VA's requirement that the system be flushed after installation of flush provisions is clear and

unequivocal in the context of this Contract. To conclude otherwise, would require us to violate the established rules of Contract interpretation and ignore the express Contract direction to "flush the system."

Even if we were to accept Grinnell's internally inconsistent reading of General Note 13, it gives rise to a patent ambiguity. An ambiguity is patent if a reasonable and prudent contractor knew or should have known that a Contract provision is obviously ambiguous. This is true even if, as is the case here, the ambiguity arises as a result of the ineptitude of the Government's specification writer. Where the ambiguity is patent, the Contractor is obligated to seek clarification of the ambiguity from the Contracting Officer before it can rely on its interpretation of the ambiguous provision. ***Roy Kay, Inc.***, VABCA No. 5113, 97-2 BCA ¶ 27,271; ***General Elevator Company, Inc.***, VABCA Nos. 3666, 3678, 93-2 BCA ¶ 25,685; ***George E. Newsom v. United States***, 676 F.2d 647 (Ct. Cl. 1982); ***Beacon Construction Co. v. United States***, 324 F.2d 501 (Ct. Cl. 1963)

We determine whether an ambiguity in a contract is patent on a case-by-case basis in light of the entire contract and all relevant circumstances, including the context of the parties' understandings. ***Newsom v. United States***, 676 F.2d 647; ***Metric Constructors, Inc. v. National Aeronautic and Space Administration***, 169 F.3d 747.

General Note 13 directs that this system flushing was to be done "per NFPA-13." NFPA-13-1985, incorporated as part of the Contract specifications, contains no standards or requirements relating to flushing of fire protection systems applicable here. Moreover, system flushing, within the fire protection system industry, is considered a maintenance requirement, not a normal aspect of the installation of a fire protection system installation. These two factors

apparently led Grinnell to conclude that it had no obligation to flush the system notwithstanding General Note 13's direction to flush the system.

However, the Contract specifications incorporating it into the Contract identified NFPA-13 both as the standard for installation of sprinklers and the standard for inspection, testing, and maintenance of automatic sprinklers, an error on the part of the specification writers that should have been obvious to an experienced installer of fire protection systems such as Grinnell. Coupled with the expressly directive nature of General Note 13 wherein flushing of the system is directed after installation of the flush provisions (an installation specified by NFPA-13), the obvious mistake in identifying the NFPA system flushing standard, in the factual context presented here, leads us to conclude that the only prudent course of action for Grinnell to take would have been to ask the VA whether it intended system flushing to be included in the Contract price rather than unilaterally concluding that it was not required to flush the system. This is particularly true in light of the substantial labor effort (and cost) required for system flushing and the fact that Grinnell had the opportunity to review its bid and the contract requirements when it verified its bid at the request of the VA.

Additional Sprinklers

The Contract clearly requires Grinnell to furnish a complete, revised fire protection system meeting NFPA-13-1985 standards. Therefore, it is not a Contract change if the number of sprinklers required for an NFPA-13 compliant fire protection system exceeds the number of existing sprinklers. Grinnell avers that the Specification language required it only to replace existing, visible sprinklers because the Specification Section 01010 instruction is a "general" requirement and the Section's directions to remove/retrofit/replace the existing

system as detailed is a "specific" requirement that controls. This purported interpretation simply overreaches and is contrary to established standards of contract interpretation. Grinnell cannot focus on one part of a specification arguably limiting its Contract obligations and ignore the express language of the same specification obligating it to furnish a "complete and functional … sprinkler system." ***F&H Construction Company***, VABCA No. 3523, 1993 WL 97,571 (March 30, 1993); ***Zwick Construction Company***, ASBCA No. 22,624, 81-1 BCA 14,984.

Grinnell maintains that it had an obligation only to replace existing visible sprinklers or existing hidden sprinklers about which it was informed. Grinnell further avers that the fourteen sprinklers at issue here were invisible and that their existence is not disclosed in the pre-bid documents. As noted above, the Contract clearly imposed the obligation on Grinnell to furnish an NFPA-13 compliant fire protection system. The logic of Grinnell's argument that it was obligated to replace only sprinklers that were visible escapes us in light of the fact that Grinnell made no pre-bid site visit and the Drawings do not depict the location of any existing or new sprinkler heads. Without the site visit, there is no way Grinnell would know which sprinklers were visible or invisible. The sprinklers were required for an NFPA-13 compliant system and there was neither a pre-bid site visit nor a representation of existing sprinklers on the Drawings. Therefore, whether the sprinklers were visible or invisible was immaterial to Grinnell's bid. Although it represents that it did not include the sprinklers in its bid, we can only assume that Grinnell, an experienced fire protection system installer, bid utilizing its knowledge of NFPA-13 requirements and the size and layout of the buildings. Under the terms of the IFB and Contract, Grinnell bid to provide a fully functional and NFPA-13 compliant fire protection system; that is what it provided.

Finally, Grinnell notes that the VA approved its layout drawings depicting the system that did not include the disputed sprinklers in support of the proposition that the fourteen sprinklers at issue were beyond the Contract requirements. It is well settled in case law and clear under the terms of the Contract that the VA's approval of the submittals, in the absence of Grinnell specifically pointing out that it did not intend to install all sprinklers necessary to provide an NFPA-13 compliant system, did not relieve Grinnell of performing its obligations under the Contract. ***Kam Electrical Enterprises***, VABCA No. 2492, 89-1 BCA ¶ 21,558 (and cases cited therein); ***The Joseph Company, Inc.***, ENGBCA No.5887, 92-3 BCA ¶ 25,075.

Quantum

Based on the foregoing discussion it is unnecessary to review in detail the amount of Grinnell's claims for system flushing and sprinkler installation. However, we note that Grinnell's monetary claim includes costs that are not allowable and improperly applies overhead and profit mark-ups under the Contract CHANGES –SUPPLEMENT (FOR CHANGES COSTING $500,000 OR LESS) clause (VAAR 852.236-84). For this reason, if Grinnell were entitled to recovery on either of its claims, the amounts of any recovery would have been substantially less than the amounts claimed.

DECISION

For the foregoing reasons, the appeals of Grinnell Fire Protection Systems Company in VABCA-5672 and VABCA-5859 under Contract No. 514C-496 are **DENIED**.

DATE: **November 16, 1999**

_____
RICHARD W.KREMPASKY
Administrative Judge
Panel Chairman

I Concur.

_____
MORRIS PULLARA, JR.
Administrative Judge