SOLICITATION/CONTRACT/ORDER FOR COMMERCIAL ITEMS
OFFEROR TO COMPLETE BLOCKS 12, 17, 23, 24, & 30

1. REQUISITION NUMBER: EQ1PSLP-17-0071

2. CONTRACT NO.: 47PB0017D0013

3. AWARD/EFFECTIVE DATE: 11/1/2017

4. ORDER NUMBER:

5. SOLICITATION NUMBER: GS-01P-17-BW-D-0005

6. SOLICITATION ISSUE DATE:

7. FOR SOLICITATION INFORMATION CALL:

a. NAME: kara.canty@gsa.gov

b. TELEPHONE NUMBER *(No collect calls)*: 617-565-2054

8. OFFER DUE DATE/ LOCAL TIME:

9. ISSUED BY CODE 1PQB

Acquisition Management Division (1PQ) Contract Operations Branch (1PQB) GSA/PBS
10 CAUSEWAY ST., RM 1100
BOSTON, MA 02222-1077 United States

10. THIS ACQUISITION IS ☐ UNRESTRICTED OR ☒ SET ASIDE: 100 % FOR:

☒ SMALL BUSINESS
☐ HUBZONE SMALL BUSINESS
☐ SERVICE-DISABLED VETERAN-OWNED SMALL BUSINESS
☐ WOMEN-OWNED SMALL BUSINESS (WOSB) ELIGIBLE UNDER THE WOMEN-OWNED SMALL BUSINESS PROGRAM
☐ EDWOSB
☐ 8 (A)

NAICS: 561210

SIZE STANDARD: $38.5 Million

11. DELIVERY FOR FOB DESTINATION UNLESS BLOCK IS MARKED
☐ SEE SCHEDULE

12. DISCOUNT TERMS:

☐ 13a. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)

13b. RATING:

14. METHOD OF SOLICITATION
☐ RFQ ☐ IFB ☒ RFP

15. DELIVER TO CODE 1PSLP

GSA, ASC -PROVIDENCE
J.O. PASTORE FEDERAL OFFICE BLDG.
2 EXCHANGE TERRACE, RM 102
PROVIDENCE, RI 02903

16. ADMINISTERED BY CODE 1PQB

Acquisition Management Division (1PQ) Contract Operations Branch (1PQB) GSA/PBS
10 CAUSEWAY ST., RM 1100
BOSTON, MA 02222-1077 United States

17a. CONTRACTOR/ OFFEROR CODE 178799370 FACILITY CODE

LOGISTICS & TECHNOLOGY SERVICES, INC.
305 CHURCH ST SW STE 810
HUNTSVILLE, AL 35801-4907
USA

TELEPHONE NO.

☐ 17b. CHECK IF REMITTANCE IS DIFFERENT AND PUT SUCH ADDRESS IN OFFER

18a. PAYMENT WILL BE MADE BY CODE BCFA

PBS Payments Branch
P.O. Box 17181
Ft. Worth, TX 76102-0181

18b. SUBMIT INVOICES TO ADDRESS SHOWN IN BLOCK 18a UNLESS BLOCK BELOW IS CHECKED ☐ SEE ADDENDUM

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT
	See below for additional information *(Use Reverse and/or Attach Additional Sheets as Necessary)*				

25. ACCOUNTING AND APPROPRIATION DATA: Please see attached

26. TOTAL AWARD AMOUNT *(For Govt. Use Only)*: $667,149.60

☒ 27a. SOLICITATION INCORPORATES BY REFERENCE FAR 52.212-1, 52.212-4. FAR 52.212-3 AND 52.212-5 ARE ATTACHED. ADDENDA ☐ ARE ☐ ARE NOT ATTACHED

☒ 27b. CONTRACT/PURCHASE ORDER INCORPORATES BY REFERENCE FAR 52.212-4. FAR 52.212-5 IS ATTACHED. ADDENDA ☐ ARE ☐ ARE NOT ATTACHED

☒ 28. CONTRACTOR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 1 COPIES TO ISSUING OFFICE. CONTRACTOR AGREES TO FURNISH AND DELIVER ALL ITEMS SET FORTH OR OTHERWISE IDENTIFIED ABOVE AND ON ANY ADDITIONAL SHEETS SUBJECT TO THE TERMS AND CONDITIONS SPECIFIED

☒ 29. AWARD OF CONTRACT: REF. GS-01-P-17-BW-I OFFER DATED 8/9/2017. YOUR OFFER ON SOLICITATION (BLOCK 5), INCLUDING ANY ADDITIONS OR CHANGES WHICH ARE SET FORTH HEREIN, IS ACCEPTED AS TO ITEMS: 0001 - 4021

30a. SIGNATURE OF OFFEROR/CONTRACTOR

Susan M. Smith, Director of Contracts

5 U.S.C. § 552(b)(6) [redacted]

(b) (6) [redacted]

30c. DATE SIGNED: 09/20/2017

31b. NAME OF CONTRACTING OFFICER *(Type or print)*: Justin Zagorski

31c. DATE SIGNED: 09/20/2017

19. ITEM NO.	20. SCHEDULE OF SUPPLIES/SERVICES	21. QUANTITY	22. UNIT	23. UNIT PRICE	24. AMOUNT

32a. QUANTITY IN COLUMN 21 HAS BEEN

☐ RECEIVED ☐ INSPECTED ☐ ACCEPTED, AND CONFORMS TO THE CONTRACT, EXCEPT AS NOTED: _____

32b. SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32c. DATE	32d. PRINTED NAME AND TITLE OF AUTHORIZED GOVERNMENT REPRESENTATIVE

32e. MAILING ADDRESS OF AUTHORIZED GOVERNMENT REPRESENTATIVE	32f. TELPHONE NUMBER OF AUTHORZED GOVERNMENT REPRESENTATIVE
	32g. E-MAIL OF AUTHORIZED GOVERNMENT REPRESENTATIVE

33. SHIP NUMBER	34. VOUCHER NUMBER	35. AMOUNT VERIFIED CORRECT FOR	36. PAYMENT	37. CHECK NUMBER
☐ PARTIAL ☐ FINAL			☐ COMPLETE ☐ PARTIAL ☐ FINAL	

38. S/R ACCOUNT NO.	39. S/R VOUCHER NUMBER	40. PAID BY

41a. I CERTIFY THIS ACCOUNT IS CORRECT AND PROPER FOR PAYMENT		42a. RECEIVED BY *(Print)*	
41b. SIGNATURE AND TITLE OF CERTIFYING OFFICER	41c. DATE	42b. RECEIVED AT *(Location)*	
		42c. DATE REC'D *(YY/MM/DD)*	42d. TOTAL CONTAINERS

SF1449 List of Accounting Strings

Accounting String	Amount Obligated
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA11.K08..MA0135ZZ.....	5 U.S.C. § 552(b)(4) [redacted]
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA11.K08..RI0010ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA14.K08..RI0010ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA47.K08..RI0010ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA45.K08..RI0010ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA47.K08..MA0158ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA45.K08..MA0158ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA47.K08..MA0076ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA45.K08..MA0076ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA12.K08..RI0009ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA12.K08..RI0010ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA14.K08..MA0135ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA12.K08..MA0135ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA47.K08..MA0135ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA45.K08..MA0135ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA11.K08..RI0009ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA14.K08..RI0009ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA47.K08..RI0009ZZ.....	
EK-47PB0017D0013.2017.192X.01.P0125300.PG61.PGA45.K08..RI0009ZZ.....	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
0001	Janitorial Services Janitorial Services SSA Fall River EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA11.K08. .MA0135ZZ..... Obligated (b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0002	Snow Removal Snow Removal SSA Fall River EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA14.K08. .MA0135ZZ..... Obligated (b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0003	Landscaping Landscaping SSA Fall River EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA12.K08. .MA0135ZZ..... Obligated (b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0004	Mechanical Maintenance Mechanical Maintenance & Repair Services at SSA Fall River EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA47.K08. .MA0135ZZ.....	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Obligated:(b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018				
0005	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at SSA Fall River EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA45.K08. .MA0135ZZ..... Obligated:(b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0006	Janitorial Services Janitorial Services at Providence Courthouse EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA11.K08. .RI0009ZZ..... Obligated:(b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0007	Snow Removal Snow Services Providence Courthouse EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA14.K08. .RI0009ZZ..... Obligated (b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
0008	Mechanical Maintenance Mechanical Maintenance & Repair Services at Providence Courthouse EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA47.K08. .RI0009ZZ..... Obligated (b) (4) PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4)	
0009	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Providence Courthouse EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA45.K08. .RI0009ZZ..... Obligated (b) (4) PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4)	
0010	Janitorial Services Janitorial Services Pastore Federal Building EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA11.K08. .RI0010ZZ..... Obligated (b) (4) PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4)	
0011	Snow Removal Snow Services Pastore Federal	12	MO	(b) (4)	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Building & USPO EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA14.K08. .RI0010ZZ..... Obligated (b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018				
0012	Mechanical Maintenance Mechanical Maintenance & Repair Services at Pastore Federal Building EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA47.K08. .RI0010ZZ..... Obligated (b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0013	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Pastore Federal Building EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA45.K08. .RI0010ZZ..... Obligated (b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0014	Mechanical Maintenance Mechanical Maintenance & Repair Services at Hastings Keith	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Federal Building EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA47.K08. .MA0158ZZ..... Obligated:(b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018				
0015	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Hastings Keith Federal Building EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA45.K08. .MA0158ZZ..... Obligated:(b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0016	Mechanical Maintenance Mechanical Maintenance & Repair Services at US Customs House EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA47.K08. .MA0076ZZ..... Obligated:(b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0017	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at US Customs House	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA45.K08. .MA0076ZZ..... Obligated (b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018				
0018	Landscaping Landscaping Services at Providence Courthouse EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA12.K08. .RI0009ZZ..... Obligated:(b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0019	Landscaping Landscaping Services at Pastore Federal Building EK-47PB0017D0013.2017.192X.01 .P0125300.PG61.PGA12.K08. .RI0010ZZ..... Obligated (b) (4) [redacted] PoP: 11/01/2017 - 10/31/2018	12	MO	(b) (4) [redacted]	
0020	Additional Services Rates - Unit Prices Additional Services Rate - Janitorial Services 60 Labor Hours (b) (4) [redacted] Additional Services Rate - Operations & Maintenance Services 115 Labor Hours	0	EA	$0.00	$0.00

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	(b) (4) Emergency Callback/Overtime Rate - Janitorial Services 60 Labor Hours (b) (4) Emergency Callback/Overtime Rate - Operations & Maintenance Services 115 Labor Hours (b) (4) Reimbursable Repair Rate - Normal Working Hours. Per hour rate for providing repair services in excess of (b) (4) for SSA Fall River & Customs House and (b) (4) for other buildings. 115 Labor Hours (b) (4) Reimbursable Repair Rate e - After Working Hours. Per hour rate for providing repair r services in excess of (b) (4) for SSA Fall River & Customs s House and (b) (4) for other buildings. 115 Labor Hours (b) (4) Administrative Fee - Percentage markup applies to all administrative, materials, , equipment and approved subcontractor costs under r Additional Service, Emergency Callback/OT and Reimbursable e Repair requests. Administrative Fee e for requests from $0k - $5k Percent (b) (4) dministrative Fee e for requests from $5k - $25k Percen (b) (4)				

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	PoP: 11/01/2017 - 10/31/2018				
0021	Above Standard Services (Janitorial) Carpet Extraction - Private Areas 1000 SF(b) (4)Window Washing Providence Courthouse 1 LS(b) (4) Window Washing Providence Pastore FB 1 LS (b) (4) Pressure Washing 10 SF (b) (4)Steam Cleaning 100 SF (b) (4) Tree Thinning SSA Fall l River 5 Each(b) (4) Machine Strip & Apply Four Coats of Finish to Resilient Office e Space Floors 100 SF (b) (4) Spray Buff Resilient t Office Floors 100 SF(b) (4) igh Cleaning 1000 SF(b) (4)Wipe Down n & Treat Wood Wall Surfaces 100 S (b) (4)Postal Lockbox Cleaning g ~ Pastore Federal Building 300 SF(b) (4) Postal Floor Cleaning g Pastore 300 SF(b) (4) linds Cleaning 50 EA (b) (4) PoP: 11/01/2017 - 10/31/2018	0	EA	$0.00	$0.00
1001	Janitorial Services Janitorial Services SSA Fall River PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4)	
1002	Snow Removal Snow Removal SSA Fall River PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4)	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
1003	Landscaping Landscaping SSA Fall River PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1004	Mechanical Maintenance Mechanical Maintenance & Repair Services at SSA Fall River PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1005	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at SSA Fall River PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1006	Janitorial Services Janitorial Services at Providence Courthouse PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1007	Snow Removal Snow Services Providence Courthouse PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1008	Mechanical Maintenance Mechanical Maintenance & Repair Services at Providence Courthouse PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1009	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Services at Providence Courthouse PoP: 11/01/2018 - 10/31/2019				
1010	Janitorial Services Janitorial Services Pastore Federal Building PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1011	Snow Removal Snow Services Pastore Federal Building & USPO PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1012	Mechanical Maintenance Mechanical Maintenance & Repair Services at Pastore Federal Building PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1013	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Pastore Federal Building PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1014	Mechanical Maintenance Mechanical Maintenance & Repair Services at Hastings Keith Federal Building PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1015	Fire Protection Fire Protection & Life Safety	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Equipment & Systems Maintenance Services at Hastings Keith Federal Building PoP: 11/01/2018 - 10/31/2019				
1016	Mechanical Maintenance Mechanical Maintenance & Repair Services at US Customs House PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1017	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at US Customs House PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1018	Landscaping Landscaping Services at Pastore Federal Building PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1019	Landscaping Landscaping Services at Providence Courthouse PoP: 11/01/2018 - 10/31/2019	12	MO	(b) (4) [redacted]	
1020	Additional Services Rates - Unit Prices Additional Services Rate - Janitorial Services 60 Labor Hours (b) (4) [redacted] Additional Services Rate - Operations & Maintenance Services 115 Labor Hours (b) (4) [redacted] Emergency	0	EA	$0.00	$0.00

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Callback/Overtime Rate - Janitorial Services 60 Labor Hours(b) (4) Emergency Callback/Overtime Rate - Operations & Maintenance Services 115 Labor Hours (b) (4) Reimbursable Repair Rate - Normal Working Hours. Per hour rate for providing repair services in excess of(b) (4) for SSA Fall River & Customs House and(b) (4) or other buildings. 115 Labor Hours (b) (4) Reimbursable Repair Rate e - After Working Hours. Per hour rate for providing repair r services in excess of(b) (4) for SSA Fall River & Customs s House and(b) (4) for other buildings. 115 Labor Hours (b) (4) Administrative Fee - Percentage markup applies to all administrative, materials, , equipment and approved subcontractor costs under r Additional Service, Emergency Callback/OT and Reimbursable e Repair requests. Administrative Fee e for requests from $0k - $5k Percen(b) (4) dministrative Fee e for requests from $5k - $25k Percent(b) (4) PoP: 11/01/2018 - 10/31/2019				

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
1021	Above Standard Services (Janitorial) Carpet Extraction - Private Areas 1000 SF(b) (4) indow Washing Providence Courthouse 1 LS(b) (4) Window Washing Providence Pastore FB 1 LS (b) (4) Pressure Washing 10 SF (b) (4) Steam Cleaning 100 SF (b) (4) Tree Thinning SSA Fall l River 5 Each(b) (4) Machine Strip & Apply Four Coats of Finish to Resilient Office e Space Floors 100 SF (b) (4) Spray Buff Resilient t Office Floors 100 SF(b) (4) igh Cleaning 1000 S (b) (4) Wipe Down n & Treat Wood Wall Surfaces 100 SF(b) (4) ostal Lockbox Cleaning g ~ Pastore Federal Building 300 SF(b) (4) Postal Floor Cleaning g Pastore 300 SF(b) (4) Blinds Cleaning 50 EA(b) (4) PoP: 11/01/2018 - 10/31/2019	0	EA	$0.00	$0.00
2001	Janitorial Services Janitorial Services SSA Fall River PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4)	
2002	Snow Removal Snow Removal SSA Fall River PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4)	
2003		12	MO	(b) (4)	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Landscaping Landscaping SSA Fall River PoP: 11/01/2019 - 10/31/2020				
2004	Mechanical Maintenance Mechanical Maintenance & Repair Services at SSA Fall River PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2005	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at SSA Fall River PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2006	Janitorial Services Janitorial Services at Providence Courthouse PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2007	Snow Removal Snow Services Providence Courthouse PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2008	Mechanical Maintenance Mechanical Maintenance & Repair Services at Providence Courthouse PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2009	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Providence Courthouse	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	PoP: 11/01/2019 - 10/31/2020				
2010	Janitorial Services Janitorial Services Pastore Federal Building PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2011	Snow Removal Snow Services Pastore Federal Building & USPO PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2012	Mechanical Maintenance Mechanical Maintenance & Repair Services at Pastore Federal Building PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2013	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Pastore Federal Building PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2014	Mechanical Maintenance Mechanical Maintenance & Repair Services at Hastings Keith Federal Building PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2015	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Services at Hastings Keith Federal Building PoP: 11/01/2019 - 10/31/2020				
2016	Mechanical Maintenance Mechanical Maintenance & Repair Services at US Customs House PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2017	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at US Customs House PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2018	Landscaping Landscaping Services at Providence Courthouse PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2019	Landscaping Landscaping Services at the Pastore Federal Building PoP: 11/01/2019 - 10/31/2020	12	MO	(b) (4) [redacted]	
2020	Additional Services Rates - Unit Prices Additional Services Rate - Janitorial Services 60 Labor Hours (b) (4) [redacted] Additional Services Rate - Operations & Maintenance Services 115 Labor Hours (b) (4) [redacted] Emergency Callback/Overtime Rate -	0	EA	$0.00	$0.00

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Janitorial Services 60 Labor Hours(b) (4) Emergency Callback/Overtime Rate - Operations & Maintenance Services 115 Labor Hours (b) (4) Reimbursable Repair Rate - Normal Working Hours. Per hour rate for providing repair services in excess of (b) (4) for SSA Fall River & Customs House and(b) (4) for other buildings. 115 Labor Hours (b) (4) Reimbursable Repair Rate e - After Working Hours. Per hour rate for providing repair r services in excess of(b) (4) for SSA Fall River & Customs s House and(b) (4) for other buildings. 115 Labor Hours (b) (4) Administrative Fee - Percentage markup applies to all administrative, materials, , equipment and approved subcontractor costs under r Additional Service, Emergency Callback/OT and Reimbursable e Repair requests. Administrative Fee e for requests from $0k - $5k Percen (b) (4)Administrative Fee e for requests from $5k - $25k Percent(b) (4) PoP: 11/01/2019 - 10/31/2020				
2021		0	EA	$0.00	$0.00

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Above Standard Services (Janitorial) Carpet Extraction - Private Areas 1000 SF(b) (4)Window Washing Providence Courthouse 1 LS(b) (4) Window Washing Providence Pastore FB 1 LS (b) (4) Pressure Washing 10 SF (b) (4)Steam Cleaning 100 SF (b) (4) Tree Thinning SSA Fall l River 5 Each(b) (4) Machine Strip & Apply Four Coats of Finish to Resilient Office e Space Floors 100 SF (b) (4) Spray Buff Resilient t Office Floors 100 SF(b) (4) igh Cleaning 1000 S (b) (4)Wipe Down n & Treat Wood Wall Surfaces 100 SF(b) (4) ostal Lockbox Cleaning g ~ Pastore Federal Building 300 S (b) (4) Postal Floor Cleaning g Pastore 300 SF(b) (4)Blinds Cleaning 50 EA(b) (4) PoP: 11/01/2019 - 10/31/2020				
3001	Janitorial Services Janitorial Services SSA Fall River PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4)	
3002	Snow Removal Snow Removal SSA Fall River PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4)	
3003	Landscaping	12	MO	(b) (4)	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Landscaping SSA Fall River PoP: 11/01/2020 - 10/31/2021				
3004	Mechanical Maintenance Mechanical Maintenance & Repair Services at SSA Fall River PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3005	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at SSA Fall River PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3006	Janitorial Services Janitorial Services at Providence Courthouse PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3007	Snow Removal Snow Services Providence Courthouse PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3008	Mechanical Maintenance Mechanical Maintenance & Repair Services at Providence Courthouse PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3009	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Providence Courthouse PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
3010	Janitorial Services Janitorial Services Pastore Federal Building PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3011	Snow Removal Snow Services Pastore Federal Building & USPO PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3012	Mechanical Maintenance Mechanical Maintenance & Repair Services at Pastore Federal Building PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3013	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Pastore Federal Building PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3014	Mechanical Maintenance Mechanical Maintenance & Repair Services at Hastings Keith Federal Building PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3015	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Hastings Keith	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Federal Building PoP: 11/01/2020 - 10/31/2021				
3016	Mechanical Maintenance Mechanical Maintenance & Repair Services at US Customs House PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3017	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at US Customs House PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3018	Landscaping Landscaping Services at Providence Courthouse PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3019	Landscaping Landscaping Services at Pastore Federal Building PoP: 11/01/2020 - 10/31/2021	12	MO	(b) (4) [redacted]	
3020	Additional Services Rates - Unit Prices Additional Services Rate - Janitorial Services 60 Labor Hours (b) (4) [redacted] dditional Services Rate - Operations & Maintenance Services 115 Labor Hours (b) (4) [redacted] Emergency Callback/Overtime Rate - Janitorial Services 60 Labor	0	EA	$0.00	$0.00

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Hours(b) (4) Emergency Callback/Overtime Rate - Operations & Maintenance Services 115 Labor Hours (b) (4) Reimbursable Repair Rate - Normal Working Hours. Per hour rate for providing repair services in excess of (b) (4) for SSA Fall River & Customs House and(b) (4) or other buildings. 115 Labor Hours (b) (4) Reimbursable Repair Rate e - After Working Hours. Per hour rate for providing repair r services in excess of(b) (4) for SSA Fall River & Customs s House and(b) (4) for other buildings. 115 Labor Hours (b) (4) Administrative Fee - Percentage markup applies to all administrative, materials, , equipment and approved subcontractor costs under r Additional Service, Emergency Callback/OT and Reimbursable e Repair requests. Administrative Fee e for requests from $0k - $5k Percent(b) (4) dministrative Fee e for requests from $5k - $25k Percent(b) (4) PoP: 11/01/2020 - 10/31/2021				
3021	Above Standard Services	0	EA	$0.00	$0.00

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	(Janitorial) Carpet Extraction - Private Areas 1000 SF(b) (4) indow Washing Providence Courthouse 1 LS(b) (4) Window Washing Providence Pastore FB 1 LS (b) (4) Pressure Washing 10 SF (b) (4)Steam Cleaning 100 SF (b) (4) Tree Thinning SSA Fall l River 5 Eac (b) (4) Machine Strip & Apply Four Coats of Finish to Resilient Office e Space Floors 100 SF (b) (4) Spray Buff Resilient t Office Floors 100 SF(b) (4) igh Cleaning 1000 SF(b) (4)Wipe Down n & Treat Wood Wall Surfaces 100 SF(b) (4) ostal Lockbox Cleaning g ~ Pastore Federal Building 300 SF(b) (4) Postal Floor Cleaning g Pastore 300 SF(b) (4) linds Cleaning 50 EA(b) (4) PoP: 11/01/2020 - 10/31/2021				
4001	Janitorial Services Janitorial Services SSA Fall River PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4)	
4002	Snow Removal Snow Removal SSA Fall River PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4)	
4003	Landscaping Landscaping SSA Fall River	12	MO	(b) (4)	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	PoP: 11/01/2021 - 10/31/2022				
4004	Mechanical Maintenance Mechanical Maintenance & Repair Services at SSA Fall River PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4005	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at SSA Fall River PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4006	Janitorial Services Janitorial Services at Providence Courthouse PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4007	Snow Removal Snow Services Providence Courthouse PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4008	Mechanical Maintenance Mechanical Maintenance & Repair Services at Providence Courthouse PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4009	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Providence Courthouse PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4010		12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Janitorial Services Janitorial Services Pastore Federal Building PoP: 11/01/2021 - 10/31/2022				
4011	Snow Removal Snow Services Pastore Federal Building & USPO PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4012	Mechanical Maintenance Mechanical Maintenance & Repair Services at Pastore Federal Building PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4013	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Pastore Federal Building PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4014	Mechanical Maintenance Mechanical Maintenance & Repair Services at Hastings Keith Federal Building PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4015	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at Hastings Keith Federal Building	12	MO	(b) (4) [redacted]	

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	PoP: 11/01/2021 - 10/31/2022				
4016	Mechanical Maintenance Mechanical Maintenance & Repair Services at US Customs House PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4017	Fire Protection Fire Protection & Life Safety Equipment & Systems Maintenance Services at US Customs House PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4018	Landscaping Landscaping Services at Providence Courthouse PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4019	Landscaping Landscaping Services at Pastore Federal Building PoP: 11/01/2021 - 10/31/2022	12	MO	(b) (4) [redacted]	
4020	Additional Services Rates - Unit Prices Additional Services Rate - Janitorial Services 60 Labor Hours [redacted] Additional Services Rate - Operations & Maintenance Services 115 Labor Hours [redacted] Emergency Callback/Overtime Rate - Janitorial Services 60 Labor Hours [redacted] Emergency	0	EA	$0.00	$0.00

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Callback/Overtime Rate - Operations & Maintenance Services 115 Labor Hours (b) (4) Reimbursable Repair Rate - Normal Working Hours. Per hour rate for providing repair services in excess of (b) (4) for SSA Fall River & Customs House and (b) (4) or other buildings. 115 Labor Hours (b) (4) Reimbursable Repair Rate e - After Working Hours. Per hour rate for providing repair r services in excess of (b) (4) for SSA Fall River & Customs s House and (b) (4) for other buildings. 115 Labor Hours (b) (4) Administrative Fee - Percentage markup applies to all administrative, materials, , equipment and approved subcontractor costs under r Additional Service, Emergency Callback/OT and Reimbursable e Repair requests. Administrative Fee e for requests from $0k - $5k Percent (b) (4) dministrative Fee e for requests from $5k - $25k Percent (b) (4) PoP: 11/01/2021 - 10/31/2022				
4021	Above Standard Services (Janitorial)	0	EA	$0.00	$0.00

ITEM NO., FORM OR STOCK NUMBER	DESCRIPTION OF ARTICLES OR SERVICES	QUAN-TITY	UNIT OF ISSUE	UNIT PRICE	AMOUNT
	Carpet Extraction - Private Areas 1000 S (b) (4) Window Washing Providence Courthouse 1 LS (b) (4) Window Washing Providence Pastore FB 1 LS (b) (4) Pressure Washing 10 SF (b) (4) Steam Cleaning 100 SF (b) (4) Tree Thinning SSA Fall l River 5 Each (b) (4) Machine Strip & Apply Four Coats of Finish to Resilient Office e Space Floors 100 SF (b) (4) Spray Buff Resilient t Office Floors 100 SF (b) (4) igh Cleaning 1000 SF (b) (4) Wipe Down n & Treat Wood Wall Surfaces 100 SF (b) (4) Postal Lockbox Cleaning g ~ Pastore Federal Building 300 SF (b) (4) ostal Floor Cleaning g Pastore 300 S (b) (4) Blinds Cleaning 50 EA (b) (4) PoP: 11/01/2021 - 10/31/2022				

SOLICITATION NUMBER: GS-01-P-17-BW-D-0005

SERVICE: CUSTODIAL AND BUILDING OPERATIONS & MAINTENANCE COMBINED SERVICES

LOCATION(S):

SSA Fall River (MA0135ZZ)
400 North Main Street
Fall River, MA 02720-2131

Hastings Keith FB (MA0158ZZ)
53 North Sixth Street
New Bedford, MA 02740-6110

U.S. Customs House (MA0076ZZ)
37 North Second Street
New Bedford, MA 02740-6329

Providence Courthouse (RI0009ZZ)
1 Exchange Terrace
Providence, RI 02903-1270

Pastore Federal Building (RI0010ZZ)
2 Exchange Terrace
Providence, RI 02903-1737

PERIOD OF PERFORMANCE: November 1, 2017 – October 31, 2018, with four (4) one (1) year options

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A. SOLICITATION/CONTRACT FORM

A.1 STANDARD FORMS

RESERVED

B. SERVICES, ORDERING AND PRICES

B.1 DESCRIPTION OF SERVICES

RECURRING SERVICES

ITEM NO.*	SCHEDULE OF SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE					TOTAL AMOUNT				
				BASE	OPTION 1	OPTION 2	OPTION 3	OPTION 4	BASE	OPTION 1	OPTION 2	OPTION 3	OPTION 4
	Janitorial Services SSA Fall River	12	Month										
	Landscaping Services at SSA Fall River	12	Month										
	Snow Services SSA Fall River	12	Month										
	Mechanical Maintenance & Repair Services at SSA Fall River	12	Month										
	Fire Protection & Life Safety Equipment & Systems Maintenance Services at SSA Fall River	12	Month										
	Janitorial Services at Providence CH	12	Month										
	Snow Services Providence CH	12	Month										
	Landscaping Services at Providence CH	12	Month										
	Mechanical	12	Month										

	Maintenance & Repair Services at Providence CH												
	Fire Protection & Life Safety Equipment & Systems Maintenance Services at Providence CH	12	Month										
	Janitorial Services Pastore FB	12	Month										
	Snow Services Pastore FB & USPO	12	Month										
	Landscaping Services at Pastore FB	12											
	Mechanical Maintenance & Repair Services at Pastore FB	12	Month										
	Fire Protection & Life Safety Equipment & Systems Maintenance Services at Pastore FB	12	Month										
	Mechanical Maintenance & Repair Services at Hastings Keith FB	12	Month										
	Fire Protection & Life Safety Equipment & Systems Maintenance Services at Hastings Keith FB	12	Month										
	Mechanical Maintenance & Repair Services at US	12	Month										

	Customs House												
	Fire Protection & Life Safety Equipment & Systems Maintenance Services at US Customs House	12	Month										

ADDITIONAL SERVICES**

ITEM NO.*	SCHEDULE OF SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE					TOTAL AMOUNT				
				BASE	OPTION 1	OPTION 2	OPTION 3	OPTION 4	BASE	OPTION 1	OPTION 2	OPTION 3	OPTION 4
	Additional Services Rate – Janitorial Services	60	Labor Hour										
	Additional Services Rate – Operations & Maintenance Services	115	Labor Hour										
	Emergency Callback/Overtime Rate – Janitorial Services	60	Labor Hour										
	Emergency Callback/Overtime Rate – Operations & Maintenance Services	115	Labor Hour										
	Reimbursable Repair Rate – Normal Working Hours. Per hour rate for providing repair services in excess of *$750.00 for SSA Fall River and Customs*	115	Labor Hour										

	House and $2,500.00 for other buildings.												
	Reimbursable Repair Rate – After Normal Working Hours. Per hour rate for providing repair services in excess of *$750.00 for SSA Fall River and Customs House and $2,500.00 for other buildings.*	115	Labor Hour										
	Administrative Fee – Percentage markup applies to all administrative (inclusive of any credit card fees), materials, equipment, and approved subcontractor costs under Additional Service, Emergency Callback/ OT and Reimbursable Repair requests.***												
	Administrative Fee for requests from $0k – $5k.		Percent										
	Administrative Fee for requests from $5k – 25k.		Percent										

ABOVE STANDARD SERVICES (JANITORIAL)

ITEM NO.*	SCHEDULE OF SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE					TOTAL AMOUNT				
				BASE	OPTION 1	OPTION 2	OPTION 3	OPTION 4	BASE	OPTION 1	OPTION 2	OPTION 3	OPTION 4
	Carpet Extraction – Private Areas	1000	SF										
	Window Washing Providence CH	1	LS										
	Window Washing Pastore FB	1	LS										
	Pressure Washing	100	SF										
	Steam Cleaning	100	SF										
	Tree Thinning SSA Fall River	5	Each										
	Machine Strip and Apply Four (4) Coats of Finish to Resilient Office Space Floors	100	SF										
	Spray Buff Resilient Office Space Floors	100	SF										
	High Cleaning	1000	SF										
	Wipe Down & Treat Wood Wall Surfaces	100	SF										
	Postal Lockbox Cleaning Pastore FB	300	SF										
	Postal Floor Cleaning Pastore	300	SF										
	Blinds Cleaning	50	EA										

C. DESCRIPTION/SPECIFICATION/STATEMENT OF WORK

INTRODUCTION

This is a Performance Based Service Contract and the success of the Contract depends on the satisfaction of the requirements, but also the satisfaction of our shared customer. Rather than a mere list of activities, this is a written expression of the GSA's expectation of the service to be performed by the Contractor. A higher level of effective communication between the Government and Contractor is essential for partnering and for the performance based service contract to succeed. The success of this Contract is shared between the Government and the Contractor.

More emphasis is placed on the Contractor's self-management of quality, not the usual external inspection by Government Inspectors, although that is a part of this Contract as well. All parties should act proactively to reduce service cost, therein providing an incentive for the Contractor.

The Contractor, through innovation, technology, or other means, shall perform the required maintenance of these facilities by following the Guiding Principles for Sustainable Existing Buildings:

1. Employ Integrated Assessment, Operation and Management Principles\
   a. In conjunction with the Contract Officer (CO) or designee establish operational performance goals for energy, water, material use and recycling, and indoor environmental quality, and ensure incorporation of these goals throughout the life of this Contract.
   b. Ensure that operating decisions are carried out with regard to sustainable operations.
   c. Meet ASHRAE standards as noted throughout the SOW for thermal comfort and indoor air quality.
   d. Use low emitting materials Volatile organic compounds (VOC) or other for maintenance. In particular, use products that have low pollutant emissions, adhesives, sealants, and solvents.
   e. Use products meeting or exceeding EPA's recycled content recommendations for building maintenance. For other products such as ceiling tiles, use materials with recycled content. For more information, see EPA's Comprehensive Procurement Guideline website.
   f. Use materials with the highest content level per USDA's bio-based content recommendations for maintenance of or use in the building.
   g. Use environmentally sustainable products that have a lesser or reduced effect on human health and the environment. See the Green Products Compilation.
   h. Provide salvage, reuse and recycling services for waste generated from building operations, maintenance, and repair and discarded equipment.
   i. Eliminate the use of ozone depleting compounds where alternative environmentally sustainable products are available consistent with the Clean Air Act.
2. Optimize Energy Performance – GSA is in the process of optimizing energy performance through advance metering and monthly reporting. Operate all equipment to optimize efficiency to reduce energy use and otherwise seek operating costs reductions wherever possible.
3. Protect and Conserve Water where possible inside and outside. Metering systems may be already installed or will be installed in government buildings to aid in reducing consumption.

Where available, use EPA's Water Sense-labeled products or other water conserving products.

4. Be aware that the building(s) and management involved with this Contract may be in the process of establishing new initiatives, instituting plans, and operational procedures to meet energy efficiency goals either through receiving an ENERGY STAR rating, Smart Building/ GSA link technology, or comparable programs. The Contractor will play an integral part of obtaining these goals and should be aware of the programs and processes.
5. The purpose of partnering is to adopt procedures wherein the Scope of Work where the Contractor and Government can work together in achieving Contract objectives. Partnering involves the development of a cooperative management team that seeks to identify common goals and objectives.

6. This is a fixed-price Contract and while working with the Government in obtaining goals the Contractor is motivated to find improved methods of performance in order to increase its profits. Results of an effective partnership should reflect a "mutual win" situation.

C.1. SCOPE OF WORK

C.1.1 GENERAL

The Contractor shall provide management, supervision, labor, materials, equipment, and supplies and is responsible for the efficient, effective, economical, and satisfactory operation, scheduled and unscheduled maintenance, and repair of equipment and systems located within the property line of the Social Security Administration Fall River, MA (Combined Services), Providence, Rhode Island Federal Building & Courthouse (Combined Services), John O. Pastore Federal Building & U.S. Postal Office (Combined Services), Hastings Keith Federal Building (Mechanical) and U.S. Customs House New Bedford, MA (Mechanical) building(s), to include the following:

1. Electrical systems and equipment.
2. Mechanical, plumbing, Building Automation System (BAS) where applicable (where BAS/ ECMS systems are connected to the GSA network, the Contractor's employees will need to obtain a GSA ENT account to access systems) and heating, ventilation, exhaust systems and air conditioning (HVAC) systems and equipment.
3. Fire protection and life safety systems and equipment.
4. All control systems that are within the scope of this Contract. All Building Automation Systems (BAS), Public Address Systems, and Computerized Lighting Systems that are within the scope of this Contract (BAS, and Computerized s Lighting Systems software maintenance is excluded).
5. Architectural and structural systems, fixtures, and equipment within the site (to the property line).
6. Service request desk operations as identified in Section C.2.18 to include record keeping using a computerized maintenance management system (CMMS) or by other means as well as other administrative functions.
7. Maintenance of landscape irrigation systems.
8. Mechanical equipment for window washing (wall glider, tracks, davits, pedestals and associated equipment). Locks, keycard systems, vehicle barrier systems and static and

dynamic bollard systems.

9. Dock levelers and roll-up and sliding garage doors.
10. ~~Elevator and vertical transportation systems, including locks and keycard systems~~
11. The Contractor shall maintain all fixed equipment and systems, including playground equipment associated with the Child Care Center. The Contractor shall repair systems upon request and according to work items identified by the annual Child Care Center survey.
12. Storm drainage systems - reduce storm water pollution by minimizing discharges and runoff to the storm sewer system and environment.
13. The Contractor shall complete roofing system investigations and repairs.
14. The Contractor shall maintain and repair U.S. flag pole, lighting and pulley system.
15. The Contractor shall maintain kitchen/concessions area drains if applicable.
16. The Contractor shall maintain conveying equipment, parking control equipment, and loading dock equipment.
17. Paper, soap, and hand-sanitizer dispensing equipment in restrooms.
18. Kitchen appliances and equipment (but ductwork above the ceiling, grease traps with associated piping, and any fire suppression or fire alarm equipment are included in the scope).

C.1.2 THE CONTRACTOR SHALL:

1. Be responsible to make the management and operational decisions to meet the quality standards required under this contract.
2. Use innovation, technology and other means and methods to develop and perform the most efficient services for the building.
3. Implement an effective Quality Control Plan (QCP).
4. Implement an effective service call system, as specified under the Special Requirements section of this contract that results in prompt, professional, and courteous resolution of tenant concerns.
5. Keep the Contracting Officer (CO) or designee informed of current status of the work being performed, provide work schedules, provide a major equipment and critical system break down or impairment form, and provide other pertinent information needed by the CO or designee.
6. Reduce the environmental impacts of work performed under this contract by using, to the maximum extent, environmentally sound practices, processes, and products.
7. Provide training to their employees that will stress stewardship in maintenance practices i.e., the proper use, disposal, recycling of chemicals, dispensing equipment and packaging. Provide documentation that their employees are completing training in the core competences and participating in continual educational training according to the Federal Building Personnel Training Act. Ensure that their employees are properly licensed and/or certified to operate necessary building systems or equipment for which licensed and/or certified personnel are required by federal, state or local law, codes or ordinances (H.16. Personnel Qualifications).
8. Federal Requirements: The Contractor shall comply with all applicable Federal, state and local laws, regulations and codes, including any supplements or revisions. The Contractor shall obtain all applicable licenses training, and permits. If a change in law or regulation requires the Contractor to implement an action that will result in an increase or decrease in Contract price, the Contractor shall implement the required action and within 30 calendar days submit to the CO or their designee a price proposal for such change. If the CO or their designee determines an equitable adjustment is substantiated a modification to the Contract will be issued.

C.1.3 EXCLUDED FROM THIS SCOPE ARE:

1. Security systems (does not include mechanical components of the door ,closers, keepers, hinges, etc.)
2. Telecommunication systems.
3. Equipment owned and operated by tenant agencies. Furnishings (not installed as fixtures).
4. associated piping, and any fire suppression or fire alarm equipment are included in the scope).
5. Equipment owned by servicing public utilities.
6. Upgrade of software or software licenses (to include building automation systems (BAS) and NCMMS).
7. Fitness center equipment.
8. Lawn sprinklers.
9. Additional services as needed by various agencies
10. Elevator and vertical transportation systems, including locks and keycard systems.

C.2. DEFINITIONS

C.2.1 GENERAL PROGRAM

The work specified in this specification shall be in accordance with all Federal, State, county and city laws, codes, and ordinances and shall follow the more stringent of them. In addition to compliance with these laws, the Contractor shall follow all applicable standard industry practices including, but not limited to, the Occupational Safety and Health Act (OSHA) and NIBS.

C.2.2 ABOVE STANDARD SERVICES

Above Standard Services are services not covered in the monthly price of the contract. Contractor prices include all applicable labor, materials, supplies, training/certifications, equipment (except as otherwise provided), supervision, and management.

C.2.3 ACCEPTANCE

“Acceptance” means an authorized representative of the Government has inspected and agreed that the work meets all requirements of this contract, to include documentation requirements.

C.2.4 ACTS OF GOD

These are unanticipated grave natural disasters or other natural phenomenon of an exceptional, inevitable, and irresistible character; the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

C.2.5 ADDITIONAL SERVICES

“Additional services” are services that the Contractor will provide at an additional cost to the Government, to include all labor, supervision, supplies and materials specifically identified as being outside the provisions of the basic services and included in the offeror’s overall pricing. The CO or their designee will issue a separate delivery order before work may proceed.

C.2.6 ADVANCED METERS

Advanced meters are those that have the capability to measure and record interval data (at least hourly for electricity), and communicate the data to a remote location in a format that can be easily integrated into an advanced metering system.

C.2.7 ADVANCED METERING SYSTEMS

A system that collects time-differentiated energy usage data from advanced meters via a network system on either an on-request or defined schedule basis. The system is capable of providing usage information on at least a daily basis and can support desired features and functionality related to energy use management, procurement, and operations, U.S. Department of Energy, EERE: Guidance for Electric Metering in Federal Buildings, (February 3, 2006).

C.2.8 APPROVAL

'Approval' means the Government has reviewed the submittals, deliverables, or administrative documents [e.g., insurance certificates, Material Safety Data Sheets (MSDS), etc.], and has determined that the documents conform to contract requirements. Government approval shall not relieve the Contractor of responsibility for complying with Federal, State, and local laws and regulations.

C.2.9 ARCHITECTURAL AND STRUCTURAL

"Architectural and structural" systems include all building structure, envelope, building improvements and finishes, and site improvements (e.g., paving, walkways, asphalt, etc.) to the property line.

C.2.10 BASIC SERVICES

The Basic Services of the contract consist of the recurring contract requirements for which the Contractor is paid as a base price, i.e., the requirements established by the contract statement of work and related general and administrative requirements that do not contain provisions for separate reimbursement. Indefinite Quantity requirements (Additional Services and Reimbursable Repairs) are requirements outside of Basic Services, for which payment is made on a case-by-case basis.

C.2.11 BUILDING

A reference to 'facility' and 'site' is interchangeable with 'building.' A man-made structure or edifice which services are performed within or on the exterior of the formation and is intended to support or shelter any use or continuous occupancy.

C.2.12 BUILDING AUTOMATION SYSTEM

The "building automation system" is a system controlling and monitoring building HVAC, and possibly other systems, to include all device, field, and global controllers, instrumentation, networking infrastructure, computers and peripherals, software, programming, database files, and licenses.

C.2.13 GSALINK

The GSALink initiative is one of GSA's strategic projects. The purpose of this initiative is to leverage automated building analytics technology to measure and substantially lower operational expenses in the existing owned building portfolio. GSALink is a hardware and software solution to capture real-time building systems point data, apply rules-based analytics software to the data, and spot trends and deficiencies while reporting actionable events to building operators, O&M contractors, and GSA Service Center property managers.

C.2.14 BUILDING OPERATION PLAN

The "building operating plan" is a mandatory plan that the Contractor prepares for Government approval that describes the Contractor's program for operating and maintaining the building, to include both normal circumstances and contingencies.

C.2.15 CLEANABLE SQUARE FEET

This is calculated by taking the Gross Square Feet minus walls (approx.1.5% of gross square feet) minus non-cleanable areas such as electrical closets, closets, mechanical rooms, storage rooms, raised floor computer rooms, etc.

C.2.16 COMMISSIONING

A practice used to optimize and verify performance of fundamental building systems.

C.2.17 ONGOING COMMISSIONING

The practice of optimizing system performance by continuing to fine-tune equipment so will result in actively preventing problems for the lifetime of the building. GSA's Ongoing Commissioning efforts will focus on maintaining the facility in the optimized state resulting from TBC and Re/Retro Commissioning efforts. GSA will achieve this through its relationship with its service providers (Operations and Maintenance/Custodial/Repair and Alterations/IT/Utilities) and the use of technology (networked systems/Advanced Meters/Smart Buildings).

C.2.18 COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM (CMMS)

A "computerized maintenance management system" is a database and application software package that automates the O&M and repairs record keeping requirements. A NCMMS is designed to enhance efficiency and effectiveness of maintenance activities. Typical features include planning, scheduling and monitoring of work orders and maintenance needs.

The National NCMMS (NCMMS) is a central repository (Database) for all maintainable GSA Assets. The NCMMS provides a mandatory, Agency-Wide means and method for processing and reporting all maintenance work done for GSA regardless of Region or Contractor.

C.2.19 CONSUMABLE PARTS

"Consumable parts" or components are parts or components that customarily require regular replacement rather than repair in a maintenance program and shall be disposed of properly. Examples include, but are not limited to: oil, grease, belts, filters, ballasts, lamps, etc.

The Contractor is responsible for any consumables (including fuel) used during day-to-day

operation of a generator, i.e., exercising the generator, testing, etc. Operation of a generator for an extended period or due to a power loss would be treated as a reimbursable expense. If the operation of the generator is caused by Contractor negligence, the Contractor shall be liable for the full cost of refueling, any other provisions notwithstanding.

C.2.20 CONTRACTING OFFICER (CO)

Contracting Officer (CO) has the overall responsibility for the administration of this contract. The CO alone, without delegation, is authorized to take actions on behalf of the Government to amend, modify or deviate from the contract terms, conditions, requirements, specifications, details and/or delivery schedules. However, the CO may delegate certain other responsibilities to authorized Government representatives.

C.2.21 CONTRACTING OFFICER'S REPRESENTATIVE (COR) OR DESIGNEE

Contracting Officer's Representatives (COR) or their designee shall be appointed by letter from the CO. CORs or designees will be the primary Government representatives for the administration of Contract, shall have proper training and experience in inspecting contracts, but will not have the authority to modify the contract.

C.2.22 CONTRACTOR

"Contractor" as used in this document refers to the company or firm awarded this contract.

C.2.23 CONTRACTORS OTHER THAN NORMAL WORKING/DUTY HOURS

Hours other than those identified as Normal Working Hours.

C.2.24 CONTROLS AND CONTROL SYSTEM

A "control system" is any low-voltage control, communication and monitoring system, including but not limited to stand alone devices, field and global controllers; instrumentation; networking infrastructure; computers and peripherals; software; programming; database files; and licenses. Examples are the BAS, Advance Metering System (AMS), and lighting control systems. Fire protection systems and security systems are excluded from this definition for purposes of this contract and are defined separately. Gateway devices and mapping software and files for data interchange between a control system and a fire protection or security system are considered part of the control system.

C.2.25 CUSTODIAL

A reference to 'custodial' is interchangeable with 'janitorial'. Custodial and related services can include cleaning, window washing, trash removal, recycling, landscaping, and maintaining a building or area.

C.2.26 DEFECTIVE SERVICE

A unit of service that does not conform with specified contract requirements.

C.2.27 EMERGENCY

The term “Emergency” includes bombings, and bomb threats, civil disturbances, fires, explosions, electrical failure, loss of water pressure, building flooding, sanitary and sewer line stoppage, chemical and gas leaks, medical emergencies, hurricanes, tornadoes, floods, and earthquakes. The term does not apply to civil defense matters such as potential or actual enemy attacks.

C.2.28 EMERGENCY CALLBACK

An “emergency callback” is a service request or other request for service placed outside of normal working hours and of such a nature that response cannot wait for the resumption of the next day’s normal working hours.

C.2.29 ENVIRONMENTALLY SUSTAINABLE

Products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, production, manufacturing, products and chemicals, packaging, distribution, reuse, operation, maintenance, or disposal of the product or service. Attributes of environmentally sustainable products include those that are energy efficient, water-efficient, biodegradable, environmentally preferable, non-ozone depleting, contain recycle content, non or less toxic, EPA-designated and biobased.

C.2.30 EXISTING DEFICIENCY LIST REPORT

The “existing deficiency list report” or “existing deficiency list” is a list of deficiencies that may exist in the equipment and systems covered by this performance work statement, as well as the Contractor's itemized price (including, but not limited to, labor, materials, overhead, and profit) for correcting each deficiency.

C.2.31 EXTERIOR

This includes entrances; landings; steps; sidewalks; parking areas; arcades; courts; planters; lawns; irrigation systems; fountains; security bollards; gates; fences; flagpoles; building-mounted, pole, and ground lighting; etc. located adjacent to the facility extending to the legal property line.

C.2.32 FEDERAL HOLIDAYS

“Federal holidays” for the purposes of this contract are New Year’s Day, Martin Luther King Day, President’s Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans’ Day, Thanksgiving Day, and Christmas Day. When Federal holidays fall on weekends, a weekday is typically designated as the holiday. Holidays that fall on Saturday are observed on the previous Friday and holidays that fall on a Sunday are observed on the following Monday. Veterans’ Day is always on the 11th of November and Thanksgiving is always the 3rd Thursday of November. Please find a link to Federal holidays at https://www.opm.gov/policy-data-oversight/pay-leave/pay-administration/fact-sheets/holidays-work-schedules-and-pay

C.2.33 FEDERAL EXECUTIVE HOLIDAYS, UNANTICIPATED

Unanticipated holidays declared by the president will count as Federal holidays. As long as the Contractor pays employees as if it were an anticipated Federal holiday, the Contractor will be paid for the unanticipated holiday as if it were a normal Federal holiday.

C.2.34 FEDERALLY EQUIPPED FOOD SERVICE

RESERVED

C.2.35 FIRE PROTECTION AND LIFE SAFETY SYSTEMS

"Fire protection and life safety systems " are systems and equipment installed in the building to (1) detect fire and products of combustion, (2) notify building occupants and emergency responders, (3) initiate smoke control systems (4) initiate fire suppression systems, (5) control or suppress fires and (6) facilitate or enhance emergency egress. These systems also may communicate with other major building systems for fire and smoke control, elevator recall, and utilities control. Life safety systems and equipment includes emergency lighting, exit signage, special egress door locking arrangements, and exit stair markings.

C.2.36 GUIDING PRINCIPLES FOR SUSTAINABLE EXISTING BUILDINGS

A practice of using processes that is environmentally responsible and resource-efficient throughout a building's life-cycle. The goal is to minimize and offset consumption of energy, water, and other resources and to eliminate all waste and pollution in building operations and activities. The result is to reduce the environmental impact of the Federal government, which will expand and complement the building design economy, utility, durability, and comfort. The common objective is to reduce the overall impact of the building environment on human health and the natural environment by:

- Improving energy efficiency and reductions in greenhouse gas emissions.
- Reducing water consumption intensity.
- Acquiring green products and services.
- Implementing pollution prevention measure, including reduction or elimination of the use of toxic and hazardous chemicals and materials.
- Implementing cost-effective waste prevention and recycling programs.
- Increasing diversion of solid waste.

C.2.37 GSA GREEN PURCHASING PROGRAM (GPP)

The GPP specifies requirements to promote the purchase of environmentally sustainable products and services.

C.2.38 GREEN CLEANING

Green Cleaning is a planned and organized approach to cleaning specifically designed to protect building occupants' and workers' health, while at the same time reducing environmental impacts.

C.2.39 INDEFINITE QUANTITY

"Indefinite quantity" provisions permit the Government to order work, in addition to the basic services, and upon acceptance permit additional payment to the Contractor.

C.2.40 LEED-EB

Leadership in Energy and Environmental Design for Existing Buildings (LEED) provides building owners and operators with a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions. Once a building has achieved LEED certification all future purchases and services must be evaluated and ensure compliance with LEED to maintain the certification.

C.2.41 MAINTENANCE REPAIR

Work required preventing a breakdown of a piece of equipment or system, or put equipment or systems back in service after a breakdown or failure.

C.2.42 MISCELLANEOUS WORK

"Miscellaneous work" is additional labor that is performed at the request of the agency at no additional cost to the Government (i.e., they are part of basic services). The Contractor may also have to provide consumable materials to complete the request. Miscellaneous work is treated as a Service Call and is included in the Basic Operations and Maintenance price quoted per month on Schedule B. During normal duty hours minor tasks related to routine, day-to-day operational requirements requested by the which will consist of, but not be limited to: making door keys; changing locks; hanging pictures, maps and bulletin boards; trimming door bases; and other similar functions as directed. Miscellaneous work shall be accomplished in the same time frame as routine service calls unless otherwise directed by the CO or designee. The Contractor will be paid at the hourly rate quoted for after normal duty hours only if authorized by the CO or their designee in advance for specific activities.

C.2.44 MODIFICATION OF CONTRACT

Modification is a bilateral or unilateral change in the terms of a contract.

C.2.45 NEGLIGENCE

"Negligence" is the failure to use due care under the circumstances. It is the doing of some act which a person of ordinary prudence would not have done under similar circumstances or failure to do what a person of ordinary prudence would have done under similar circumstances.

C.2.46 NON-REIMBURSABLE REPAIR

A "non-reimbursable repair" is a repair that is the Contractor's responsibility with no additional reimbursement from the Government.

C.2.47 NORMAL WORKING HOURS

"Normal working hours" is the hours of building operations under most circumstances when all services shall be provided to all occupants.

C.2.48 OCCUPANT EMERGENCY PLAN (OEP)

The lead agency in each building is responsible for development and enforcement of the building's "Occupant Emergency Plan" (OEP). The OEP details what the building tenants shall do in case of an emergency. The plan identifies floor wardens, shelter in place locations etc.

C.2.49 OPEN SYSTEMS

An “open systems” solution is based on industry standard open protocols. This environment and solution is typically designed, procured, installed and maintained in a manner that provides the building owner with as many competitive configuration options as possible while maintaining the integrity of the supported manufacture system. The solution must be procured and installed so that the result delivers device level interoperability amongst different manufactures residing on a common network. In addition, the solution must be maintained with no future need for the original (installing) contractor. Additions, modifications, and retrofits can easily, without significant additional cost, be made to the system without dependence on the original installing contractor nor require substantial engineering or other technical development. Contractors shall specify Open Systems solutions where feasible and reasonably possible.

C.2.50 OPERATIONS

“Operations” is the continual process of using building equipment systems to accomplish their function, optimize building performance, and improve energy efficiency. Operations includes analysis of requirements and systems capabilities, operating controls and control systems, responding to service requests, touring and observing equipment performance and condition, adjusting equipment, identifying needed maintenance and repairs to equipment, and maintaining lubrication and chemical treatments, etc.

C.2.51 ORDERING OFFICIAL

Ordering Officials are appointed by letter from the CO. Ordering Officials shall be the Government’s representative for the ordering of supplies and services.

C.2.52 PERFORMANCE BASED SERVICE CONTRACTING

The procurement strategy that seeks to issue technical requirements that set forth outcomes for performance instead of specific requirements on how to perform the service. This strategy shifts the risk of performance to the Contractor by allowing the Contractor to design the methods of achieving desired results as defined by the performance quality standards established by the Government.

C.2.53 PERFORMANCE WORK STATEMENT (PWS)

The Performance Work Statement details the work requirement and can be referred to as the specification.

C.2.54 PREDICTIVE MAINTENANCE

“Predictive maintenance” is a program of maintenance activities in which scheduling of maintenance derives from monitoring the operating condition, or changes in the operating condition, of equipment being maintained.

C.2.55 PREVENTATIVE MAINTENANCE (SCHEDULED AND UNSCHEDULED)

“Scheduled preventive maintenance” is a program of maintenance activities performed based on a fixed schedule or on equipment runtimes. “Unscheduled preventive maintenance” is all work

performed including adjustments and procedures necessary to sustain the proper operation of all building equipment and systems pending a scheduled procedure.

C.2.56 PRODUCT REFERENCE (SEE EXHIBIT 4 SUMMARY OF ENVIRONMENTALLY SUSTAINABLE PRODUCT ATTRIBUTES)

Use of “environmentally sustainable” products is mandatory for performance of this contract. As such, products identified as “environmentally sustainable” will be selected over those which do not carry such designations. The following factors should be considered when selecting products: environmental performance, cost performance, bio-based, recycled content, biodegradability, technical performance, and availability.

C.2.57 QUALITY ASSURANCE SURVEILLANCE PLAN (QASP)

The QASP is the Government’s surveillance method of monitoring and evaluating the Contractor's performance under a Performance Based Statement of Work (PBSOW).

C.2.58 QUALITY CONTROL PLAN

The “quality control plan” (QCP), is the Contractor’s complete written system for identifying and correcting deficiencies in the quality of services before the level of performance becomes unacceptable. Preparation of this document is the responsibility of the Contractor.

C.2.59 REPAIR

A “repair” is an act of restoring inoperable, dysfunctional or deteriorated equipment, systems, or material to a fully functional, non-deteriorated state. Repairs usually involve some combination of labor and replacement parts, components or materials.

C.2.60 SANITIZE

This is the process of removing dirt and certain bacteria so that the number of germs is reduced to a level that the spread of disease is unlikely.

C.2.61 SEQUENCE OF OPERATIONS

A “sequence of operations” is the control logic used to operate a system normally put into effect through a control program.

C.2.62 SERVICE CALLS

Service calls are considered standard service requirements, such as nonrecurring requests for rearranging of furniture in a conference room, special events support, spills, replenishing restroom supplies, etc.

C.2.63 SERVICE REQUESTS

A “service request” is a response to a GSA, tenant, or agency request or a response to an observation that some equipment, system or material covered by the contract is inoperable, dysfunctional, deteriorated, or not within normal operating parameters, or that performance standard of the contract is not being met. Service request response involves analysis of the

problem and adjustment of operating or monitoring controls or other immediate corrective action. A requirement to perform a repair may result from the analysis stage of a service request. Service requests may be generated automatically from interfaces to BAS or diagnostic software.

C.2.64 STANDARD SERVICES

Standard services are defined as all services that are included in the monthly price or as defined in the Contract document. Prices are to include all applicable labor, materials, supplies, training/certifications, equipment (except as otherwise provided), supervision, and management.

C.2.65 STEWARDSHIP

The act of stewardship is to take the responsibility for managing, conducting or supervising the quality, state or condition of a commercial building. A Stewardship program in addition to caring for the building, its occupants and visitors includes among other things a sense of shared responsibility, occupant participation and communications amongst building management, O&M personnel, cleaning personnel, occupants, contractors and others who have an impact on/in the building.

C.2.66 SUPERVISOR, ON-SITE

The term “on-site supervisor” means a person designated in writing by the Contractor who has authority to act for the contract on a day-to-day basis at the work site.

C.2.67 TOUR

A “tour” is generally a scheduled walkthrough of equipment rooms and installations including computer rooms, restrooms, etc. by Contractor operating personnel for the purpose of ensuring that equipment is running properly, ensuring that equipment rooms are in good order and without safety hazards, and making any necessary adjustments to operating controls or to lubricate equipment. A tour may also involve a combination of such physical visits in addition to using automated systems for the monitoring of equipment and systems. Equipment log sheets are a part of the tour plan/program. All tours are "inspection" work orders in the NCMMS and will comply with all work order requirements.

C.2.68 VERTICAL TRANSPORTATION SYSTEM

“Vertical transportation systems” include elevators, escalators, dumbwaiters, lifts, etc.

C.2.69 WATCH

A “watch” involves performing certain tasks required for the operation of the HVAC equipment (central systems over 300 tons), boilers, compressors, and related equipment in a centralized location. Watches include, but are not limited to starting equipment, checking at designated intervals all operating equipment in the area, recording readings, shifting equipment and loads, making adjustments at the central control center, taking water samples, making tests, and adding chemicals as required.

C.2.70 ABILITYONE COMMISSION (THE COMMISSION) - FORMERLY KNOWN AS THE

COMMITTEE FOR PURCHASE FOR PEOPLE WHO ARE BLIND OR SEVERELY DISABLED.

C.2.70.1 COMMISSION FOR PURCHASE FOR PEOPLE WHO ARE BLIND OR SEVERELY DISABLED

This is the independent Government Agency responsible for the AbilityOne Commission and Program. For more information, go to website http://www.AbilityOne.gov.

C.2.70.2 COMMUNITY REHABILITATION PROGRAMS (CRP)

CRP is the local nonprofit agencies that are associated with NISH and perform the work under the AbilityOne Program by employing people with severe disabilities. The local CRP are in essence the Contractors who perform the work under the contracts.

C.2.70.3 CONTRACTING ACTIVITY (CA)

The 'AbilityOne' term for Federal Government agencies contracting under the AbilityOne Program.

C.2.70.4 FAIR MARKET PRICE (FMP)

The term is used for the price established by the Commission for providing a service defined by the Government's Statement of Work at a specific location. The Fair Market Price (FMP) must be established in reference to actual market prices for the same or similar services. Any new service being added to the Procurement List will have an initial FMP established.

C.2.70.5 FOLLOW-ON YEAR (FOY)

The term is used instead of contract option year. As long as the requirement exists, the Contracting Activity is required to continue purchasing the service from the Nonprofit Agency designated by the Commission, unless and until the Commission directs otherwise. The Commission may direct the transfer of the service to another Nonprofit Agency (NPA).

C.2.70.6 IMPASSE

An Impasse exists when an issue, controversy, or disagreement occurs and the Contracting Activity (CA), NISH or the Community Rehabilitation Programs (CRP) is unable to proceed with a contract action. The AbilityOne Impasse and Disputes Resolution procedures (published separately by the Commission) are generally used before the Contracts Disputes Act of 1978 to resolve disagreements (http://www.AbilityOne.gov).

C.2.70.7 NISH

This is the Central Nonprofit Agency (CNA) designated by the Commission to assist in creating employment opportunities for people with severe disabilities. NISH is not a Government Agency. For more information go to the website http://www.nish.org.

C.2.70.8 PROCUREMENT LIST (PL)

This is the list of services and products that are performed under the AbilityOne Commission as mandatory source acquisitions. Services are added to the Procurement List by the Commission and are listed by type and location.

C.2.70.9 PURCHASE EXEMPTION

If a CRP and/or workshop can no longer perform at the targeted price and/or FMP, then NISH may

grant a purchase exemption to the CO to accomplish the required work commercially.

C.3. REFERENCES

The following publications are incorporated by reference as setting quality, performance, and design standards for work required in this document. Unless a specific date is provided, references are for the current edition published at the time of issue of the solicitation, to include any addenda or errata published by the issuing organization. The Contractor is responsible for obtaining access to all referenced documents at their own expense, the exception of the Public Building Service Operations and Maintenance standards 2012, the Facilities Standards for the Public Buildings Service (PBS P100), and the U.S. Courts Design Guide, which will be provided by the Government.

- Public Buildings Service Operations and Maintenance Standards 2012
- Facilities Standards for the Public Buildings Service (PBS P100)
- U.S. Courts Design Guide
- SMACNA Sheet Metal and Air Conditioning Contractors National Association HVAC Systems Testing, Adjusting & Balancing
- AHERA Asbestos Hazard Emergency Response Act
- ASHRAE Guideline 1HVAC Commissioning Process
- ASHRAE Guideline 4 Preparation of Operating and Maintenance Documentation for Building Systems
- ANSI/ASHRAE Standard 15 Safety Code for Mechanical Refrigeration
- ANSI/ASHRAE Standard 34 Number Designation and Safety Classification of Refrigerants
- ANSI/ASHRAE Standard 55, Thermal Environmental Conditions for Human Occupancy
- ANSI/ASHRAE Standard 62, Ventilation for Acceptable Indoor Air Quality
- ANSI/ASHRAE Standard 100, Energy Conservation in Existing Buildings/Commercial
- ANSI/ASHRAE Standard 111, Practices for Measurement, Testing, Adjusting, and Balancing of Building Heating, Ventilation, Air-Conditioning, and Refrigeration Systems;
- American Society of Mechanical Engineers ASME A17.1/CSA B44, Safety Code for Elevators and Escalators
- American Society of Mechanical Engineers ASME A17.2, Inspector's Manual for Elevators
- ASME Boiler and Pressure Vessel Code
- ASME CSD-1 Control and Safety Devices of Automatically Fired Boilers
- National Board of Boiler and Pressure Vessel Inspectors, National Board Inspection Code
- OSHA 29 CFR 1910 and 29 CFR1926
- Clean Air Act

- Clean Water Act
- EPA Green Book
- EPA Purple Book
- GSA SEMS Sustainable Environmental Management System (GSA.GOV/SEMS)
- International Building Code
- International Fire Code
- International Plumbing Code
- International Mechanical Code
- NETA Maintenance Testing Specification for Electrical Power Distribution Equipment and Systems
- NFPA 10, Standard for Portable Fire Extinguishers
- NFPA 12, Standard on Carbon Dioxide Extinguishing Systems
- NFPA 12A, Standard on Halon 1301 Fire Extinguishing Systems
- NFPA 13, Standard for the Installation of Sprinkler Systems
- NFPA 14, Standard for the Installation of Standpipe and Hose Systems
- NFPA 17, Standard for Dry Chemical Extinguishing Systems
- NFPA 17A, Standard for Wet Chemical Extinguishing Systems
- NFPA 20, Standard for the Installation of Stationary Pumps for Fire Protection
- NFPA 22, Standard for Water Tanks for Private Fire Protection
- NFPA 24, Standard for the Installation of Private Fire Service Mains and Their
- Appurtenances
- NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
- NFPA 70, National Electrical Code (NEC)
- NFPA 70E,Standard for Electrical Safety in the Workplace
- NFPA 72, National Fire Alarm and Signaling Code
- NFPA 85, Boiler and Combustible Systems Hazards Code
- NFPA 92, Standard for Smoke Control Systems
- NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations
- NFPA 101, Life Safety Code
- NFPA 105, Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives

- NFPA 110, Standard for Emergency and Standby Power Systems
- NFPA 111, Standard on Stored Electrical Energy Emergency and Standby Power Systems
- NFPA 2001, Standard on Clean Agent Fire Extinguishing Systems
- NICET (National Institute for Certification in Engineering Technologies publications and issuances
- NIOSH (National Institute for Safety and Health publications and issuances
- DOE/EE-0157, International Performance Measurement and Verification Protocol
- NEMA TP-1,National Electrical Manufacturers Association.
- NEMA MG-1. National Electrical Manufacturers Association, Motors and Generators
- NEMA Application Guide for AC Adjustable Speed Drive Systems
- ANSI/IWCA I-14.1, Window Cleaning Safety Standard
- Safe Drinking Water Act, PL 99-339, as amended
- Title 40 CFR, Part 761, PCBs in Electrical Transformers
- Title 40 CFR, 141.43, Sections A and D, Environmental Protection Agency Safe Drinking Water
- ANSI/ASME A17.1 Safety Code for Elevators and Escalators
- OSHA 29 CFR 1910.1200, 29 CFR 1910.146, 29 CFR 1910.147, 29 CFR 1910.1030, 29 CFR 1910.1001, 29 CFR 1910.178
- Guideline 3-1990 and Addendum, or latest version, FAR 52.223-2, ARI Standard 700-1988, or latest edition, and Appendix A to 40, CFR, Part 82, Subpart F.
- Resource Conservation and Recovery Act
- Toxic Substances Control Act

C.4 GENERAL REQUIREMENTS

This contract is for custodial, operations & maintenance and related services with a Performance-Based Statement of Work (PBSOW). As a performance-based contract, the requirements are stated in terms of desired results with associated quality standards. The contract consists of two major functional areas: standard services and above standard services.

All references incorporated herein as Web sites (URL's) are accurate as of November 2012, and may be subject to change by their web publisher. Web pages are provided to the Contractor for additional clarity. A change to any Web site specified in this contract does not change or alter the contract objectives identified herein.

C.4.1 THE CONTRACTOR SHALL:

- Furnish all personnel, labor, equipment, materials, tools, supplies, supervision, management, training/certifications, and services, except as may be expressly set forth as Government furnished, and otherwise accomplish all actions necessary to or incident to, perform and

provide the work efforts described in the contract.

- Ensure that their employees are properly trained, licensed and/or certified to operate necessary building systems or equipment for which licensed and/or certified personnel are required by Federal, State, or local laws; codes, or ordinances.
- Be responsible to make the management and operational decisions to meet the quality performance standards required under this contract.
- Use innovation, technology and other means and methods to develop and perform the most efficient cleaning services for the building.
- Implement an effective Quality Control Plan (QCP).
- Implement an effective service call system that results in prompt, professional, and courteous resolution of tenant concerns.
- Keep the CO or their designee informed of current status of the work being performed, provide work schedules and provide other pertinent information needed by the CO or their designee.
- Reduce the environmental impacts of work performed under this contract by using, to the maximum extent, environmentally sound practices, processes, and products.
- Provide training/certifications for their employees that stress stewardship in cleaning practices i.e., the use, disposal and recycling of cleaning chemicals; and dispensing equipment and packaging. Current information on stewardship, training, educational materials and other issues can be found in ASTM E1971-05 or at the ASTM web site. Information on these items is also available on the web site: Stewardship for the Cleaning of Commercial and Institutional Buildings (www.astm.org) and ISSA's web site (www.issa.com).

C.4.2 COMMUNICATION REQUIREMENTS

- Tenant Meetings: The Contractor shall attend a minimum of Quarterly tenant meetings. The meetings will be on the agenda to communicate program specific information, improvements, or work that will impact the tenants.
- Quality Control Meetings: The Contractor shall attend Monthly meetings, which will be held between the Contractor and the CO or their designee. The purpose of these meetings will be to discuss the Contractor's performance, areas of deficiencies, areas of satisfaction, and tenant needs or concerns. The frequency of these meetings may be increased or decreased depending upon performance as determined by the CO or their designee.
- Partnering Meeting: The Contractor shall attend at least one partnering session with GSA after the Post-Award conference. Other sessions may take place during the course of the contract at the option of either GSA or the Contractor. The concept of "partnering" is working together towards a common interest or goal. Both parties will re-visit the idea of having a partnering session on the anniversary date of the contract. Each partnering session will be held at a mutually agreed upon time and location.
- Joint Service Inspections: The Contractor shall accommodate all requests by the Government to participate in the Contractor's inspection of work performed by Contractor personnel. Scheduling for these joint inspections shall be coordinated through the CO or their designee. This inspection shall be used with other measures of performance in discussions on Contractor

performance during the Quality Control Meetings.

C4.3 COMMUNICATION PLAN

The Contractor shall prepare and provide to the CO or their designee a communication plan, detailing how the Contractor plans on using technology (two-way digital communication) to communicate with GSA to receive and respond to service calls, emergencies, status of projects, etc. The plan shall be submitted as part of the bid package for the Government's review and approval.

C.4.4 PROTECTION AND DAMAGE

The Contractor shall make reasonable efforts to assist the Government to prevent hazardous conditions and property damage. To the extent that relevant conditions or activities are noted but are not associated with the Contractor's scope, the Contractor shall promptly report such conditions or activities to the CO or their designee, or to security personnel.

The Contractor shall protect Government's property, buildings, materials, equipment, supplies, records and data that are within the Contractor's control against unauthorized access, loss or damage.

The Contractor shall establish a system for on-site work force personnel to report potentially hazardous conditions in the building to the CO or their designee or other designated Government representatives, regardless of whether the condition is within the Contractor's responsibility.

The Contractor and Contractor's employees and subcontractors shall comply with the General Services Administration, Rules and Regulations Governing Public Buildings and Grounds (as posted in the building), and shall promptly report violations by employees, or as otherwise observed, to the CO or their designee, or security personnel.

C.5 JANITORIAL SERVICES

C.5.0 OBJECTIVES AND SCOPE

Custodial and related services provided by the Contractor are arranged and oversight is provided through one or more of the following entities: GSA's Regional Office, Service Centers, Field Offices, or Local Offices. These entities represent the Property Management organizations that have been adopted by GSA's regional leadership.

C.5.0.2 CLEANING HOURS

The performance of cleaning the Fall River SSA shall take place any time between the hours of 7:00 a.m. and 11:00 a.m.

The performance of cleaning the John O. Pastore Federal Building are between 3:00 p.m. – 7:00 p.m. and 4:00 p.m. – 8:00 p.m. at the Providence, RI Courthouse. Cleaning Services are required at both facilities during the hours of 8:00 a.m. to 5:00 p.m. The services required during these hours are limited in nature to address policing of the exterior, spot cleaning, and policing restrooms

in order to meet contract standards.

The hours shall not be changed unless authorized by the CO or their designee.

C.5.0.3 BUILDING INFORMATION DATA SHEET ESTIMATES
The figures contained in the Building Information Data Sheet are estimates. It is the Contractor's responsibility to notify the CO or their designee if it is believed that the information provided is incorrect.

C.5.1 GREEN CLEANING

The Contractor is required to conduct custodial and related services in a manner as to utilize industry best practices and guiding principles to minimize the Government's Environmental Footprint. This requires annual reporting of non-bio-based, bio-based, sustainable, and green products and materials.

The policy of GSA is to bring most, but not all, of its owned buildings into conformity with the most current and Government-accepted version of LEED for Existing Buildings (LEED-EB) current rating system by the U.S. Green Building Council (www.usgbc.org). Only in those instances where GSA is pursuing LEED-EB certification will additional LEED-EB scope requirements be added to this specification as specified in Section H.25 'LEED-EB.'

C.5.2 GREEN PURCHASING PLAN

C.5.2.1 SUSTAINABLE PRODUCTS

The Contractor shall use green cleaning products, processes and equipment, and shall demonstrate such capability by submitting a green cleaning plan, in accordance with Section C.7 & C.8 'Federal Requirements' & 'Submittals Chart (Contract Deliverables)', to the CO or their designee that describes methods, materials, and equipment used under the contract. Green cleaning is a planned and organized approach to cleaning that is designed to protect the occupants and workers' health and reduce the impact on human health and the environment.

The Contractor shall use safe and environmentally friendly products as referenced throughout this specification. Green cleaning products and processes include, but are not limited to bio-based products, products containing recycled content, environmentally preferable products and services, and otherwise environmentally friendly products and services that minimize the use of energy, water, and other resources. Chemical concentrates that require dilutions are preferable compared to ready-to-use products and should be used whenever possible. Dilution control equipment should be employed to ensure correct dilutions of concentrates and to protect workers from exposure to concentrated chemicals. Green cleaning products and processes shall be compliant with the Guiding Principles for Sustainable Existing Buildings.

For categories of items that are EPA-designated (e.g. Comprehensive Procurement Guidelines [CPG]) and USDA designated in the BioPreferred Program (visit http://www.biopreferred.gov/), and all other factors (such as price, performance, and availability) being equal, the Contractor shall selected the CPG item. For other purchases, unless the Contractor receives an exemption from the Contracting Officer, the Contractor shall select USDA designated products over products with other sustainable attributes. Products designated under Federal sustainable product programs –

USDA BioPreferred, EPA CPG, EPA Design for the Environment, and Department of Energy's EnergyStar and FEMP - can be found on www.sftool.gov. Sustainable products designated under third-party programs include but are not limited to Green Seal™ and Environmental Choice. Examples of green cleaning products that are available with environmental designations are found in Section J, Exhibit 9. This list is not all inclusive. For those categories of product not recognized by one of the aforementioned standard's, preference shall be given to products meeting the California Code of Regulations maximum allowable Volatile Organic Compounds (VOC) levels for the appropriate cleaning product category(California Air Resource Board/California Code of Regulations (CCR), Tile 17 CCR Section 94509 – (Topic cited; Standards for consumer products at www.calregs.com).

The Contractor shall also follow all applicable standard industry practices including, but not limited to those published by the National Institute of Building Sciences (NIBS), American Society of Testing Materials (ASTM), Carpet and Rug Institute (CRI), and applicable standards of the Environmental Protection Agency (EPA).

C.5.2.2 EXEMPTIONS

If cleaning products that meet the criteria above are (1) not reasonably available within a reasonable period of time; (2) fail to meet the performance standards set forth in the specification or fail to meet the reasonable performance standards of GSA; or (3) are available only at an unreasonable price, only then can the custodial Contractor use other types of products. In these cases the Contractor shall continue to use, to the extent possible, the safest and most environmentally friendly products. Exemptions can be granted to the Contractor only by the CO or their designee.

C.5.2.3 PROOF OF COMPLIANCE

The Contractor must, at all times during the performance of this contract, maintain a cut sheet or other documentation of compliance with product purchasing activities as stated within this specification to include Section J, Exhibits 6,7, and 9. The Contractor shall provide copies of such documentation to the CO or their designee upon request.

C.5.3 STANDARD SERVICES

C.5.3.1 INTERIOR SERVICES

The Contractor shall provide interior standard services for the work items listed below.

C.5.3.1.0 PERFORMANCE STANDARDS

The Contractor through innovation, technology, or other means shall perform the work in this contract to meet the quality and performance standards in this Section. Evaluations of the Contractors work shall be based on the standards in this Section and conducted in accordance with the Government's 'Quality Assurance Surveillance Plan (QASP).'

C.5.3.1.1 FLOOR CARE

The Contractor shall provide a floor maintenance schedule to the CO or their designee in accordance with Section C.7 & C.8 'Federal Requirements' & 'Submittals Chart (Contract Deliverables)'.

- Bare Floors: Floors, base moldings, and grout shall be clean and free of debris including but

not limited to dirt, water streaks, mop marks, string, gum, tar, and other foreign matter. The floors shall maintain their natural luster and not have a dull appearance.

Wet mopping of bare floors shall be cleaned using disinfectant cleaner(s) with additional scrubbing, if necessary. These floors shall be slip resistant. Surfaces, baseboards, and corners shall be clean and dry. Walls, baseboards, and other surfaces shall be free of splashing and markings from the equipment. There shall be no visible buildup of finish in corners or crevices.

Mops and cleaning rags shall be cleaned and sanitized before and after each day of use. Mops and cleaning rags used in restrooms including diapering areas in restrooms and Child Care centers) shall not be used to clean any other areas.

- Asbestos Containing Building Material (ACBM) Floors: Cleaning of flooring that may contain asbestos material, such as Vinyl Asbestos Tile (VAT), shall comply with the methods prescribed in the National Institute of Building Sciences (NIBS) Guidance Manual, 'Asbestos Operations and Maintenance Work Practices.' The Contractor shall have a copy of the NIBS Guidance Manual. Upon request, the Government shall make available to the Contractor any asbestos sampling results.
- ADP/Data Center Floors: Damp mopping shall be the only method of wet cleaning for floors in Automated Data Processing (ADP)/Data Center spaces.
- Asphalt Floors: Damp mopping shall be the only method of wet cleaning for floors containing asphalt material.
- Granite and Marble Floors: All applicable floor areas shall be maintained in accordance with industry standards, and the standard identified in the Contractor's 'Quality Control Plan.'
- Loading Dock Floors: Spill residues and clean-up materials shall be disposed of in accordance with the Environmental Protection Agency (EPA) and/or State and local regulatory agency requirements.
- Postal Floors: The quality standard for providing standard service is the same as that described in Section C.5.1.20 'Postal Space.'
- Stripping Floors: The old finish or wax shall be removed in accordance with standard commercial practices. Spots shall be eliminated. There shall be no evidence of gum, burns, scuffmarks, or wax build-up in corners or crevices. UNDER NO CIRCUMSTANCES SHALL BURNISHING OR DRY STRIPPING METHODS BE USED ON ACBM FLOORING.
- Finishing Floors: Walls, baseboards, and other surfaces shall be free of finish residue and marks from equipment. Floors shall be free of streaks, mop strand marks, and skipped areas. The applied finished area shall have a uniform luster.
- Sealing Floors: Sealant must adhere to the floor. Floor areas must be evenly coated with a slip resistant seal.
- Wood Floors: There shall be no water solutions used on wood flooring. There shall be no dry stripping methods used on wood flooring.

C.5.3.1.2 CARPETS AND RUGS

- Extraction (Public Areas Only): Build-up spills and crusted materials shall be removed along with spots and smears. There shall be no areas of deterioration or fuzzing to the carpets and rugs as a result of harsh brushing or scrubbing. Cleaned areas of carpets and rugs shall be reasonably blended with surrounding carpets. The Contractor shall coordinate with the CO or their designee the times when carpet shall be cleaned. The carpet shall be dry before customers occupy the building on the next business day. The Contractor shall take measures to prevent the growth of mold. Moving of duplicating equipment, computer equipment, and similar types of electric and electronic equipment is to be coordinated with the CO or their designee and customer, as required, prior to cleaning of the carpet. Any furnishings moved are to be returned to their original positions.
- Spot Cleaning: Carpet surfaces shall be free of removable spots, soiled traffic patterns, dirt, dust, debris, gum, and crusted materials.
- Vacuuming: Carpet surfaces are to be free of dirt, dust, and other debris. Vacuuming shall be done at a frequency that will protect the integrity of the carpet and prolong wear. The Contractor shall utilize at a minimum HEPA vacuum cleaners that meet the requirements of the Carpet and Rug Institute's 'Seal of Approval/ Green Label Vacuum' Program.'

C.5.3.1.3 FLOOR MATS AND RUNNERS

The Government shall furnish all mats and runners. The CO or their designee shall approve all mats and runners.

Mats and runners shall be laid out as specified by the CO or their designee at main entrances, main lobbies, and main and secondary corridors at all times, and must have finished edges. They shall be a minimum of 10 feet in length in the primary direction of travel. Replacement mats and runners shall be the same type as the original mats and runners. Mats and runners shall be free of removable spots, soiled traffic patterns, dirt, debris, gum, and crusted materials. There shall be no areas of deterioration or fuzzing as a result of harsh brushing or scrubbing. They shall receive scheduled cleanings and routine inspections based upon the manufacturer's instructions. Any mats and runners that are found to be non-repairable or cannot be cleaned shall be brought to the attention of the CO or their designee so they can be replaced. Mats and runners shall be stored in accordance with the ANSI/ASEE A1264.2-2006 'Provision of Slip Resistance on Walking/Working Surfaces Guidelines.'

The use of larger mats and runners, where appropriate, as opposed to several smaller mats and runners, is preferred to eliminate overlapping and to reduce potential tripping hazards.

In the event of wet or inclement weather mats and runners are used, the mats and runners shall be placed at entrances and at other areas identified by the CO or their designee prior to the building occupants reporting to work. Wet or inclement weather mats and runners shall be removed, cleaned, and stored by the Contractor when the CO or their designee determines that they are no longer required.

C.5.3.1.4 RESTROOMS, SHOWER ROOMS, LOCKER ROOMS AND HOLDING CELLS

- Cleaning: All areas shall be cleaned using a disinfectant cleaner. Fixtures shall maintain a

high level of luster and be free of dust, mold, mildew, streaks, and encrustations. Partitions, doors, vents, sills, and walls shall be free of dust, dirt, bodily fluids and waste, and graffiti. Shower curtains shall be cleaned and free of mold and dirt.

Restrooms shall be free of discarded material and trash shall be emptied to prevent the containers from overflowing.

- Dispensers: The Government shall provide dispensers, including dispensers in tenant break rooms. The Contractor shall replenish supplies and fill dispensers as a standard service. The supplies for the provided dispensers shall be compatible with the dispenser's manufacturer's requirements. Supplies including dispenser construction and efficiency shall be consistent with the safe and environmentally friendly products requirements referenced throughout this specification. Hand soaps shall not contain antibacterial agents except where required by Federal, State, local requirements and health codes. Monies collected from tampon and sanitary napkin dispensers shall be retained by the Contractor who shall provide and replenish the product at their expense.
- Floors: The quality standard for providing standard service is the same as that described in Section C.5.3.1.1 'Floor Care.'
- Receptacles: The Government shall provide receptacles. The Contractor shall empty, clean, and sanitize the sanitary napkin and waste receptacles. Sanitary napkin disposal containers shall be lined with new receptacle bags. Disposal of waste shall be treated the same as Blood Borne Pathogens as specified in 29 CFR §1910.1030 (http://www.access.gpo.gov/nara/cfr/waisidx_06/29cfr1910a_06.html).

C.5.3.1.5 FIXTURES

- Clean and Sanitize: All fixtures and surfaces (washbasins, urinals, modesty panels, toilets, shower stalls, etc.) shall be clean with no dust, spots, soiled substances, discoloration, mold, build-up, or excess moisture.
- Drinking Fountains: All fountains shall be free of dirt, watermarks, and all other debris or encrustations. Drinking fountains shall be sanitized and present a lustrous appearance.

C.5.3.1.6 SURFACES

- Horizontal Surfaces: All surfaces shall be free of dust, dirt, oil spots, or smudges. Cabinets and desks with papers, computers, and keyboards shall not be disturbed. Surfaces should be damp mopped or wiped with a germicidal cleaner. Contact time should be consistent with the manufacturer's recommendations.
- Metal, Brass and Woodwork: Surfaces (including corners, crevices, moldings, ledges, hand rails, grills, doors, door knobs, door frames, kick plates, etc.) shall be free of dust, streaks, spots, hand marks, oil, smudges, dirt, soiled substances, encrustation, and streaks.
- Glass Cleaning: All glass, clear partitions, mirror surfaces, bookcases, and other glass (within approximately 70 inches' of the floor) shall be clean and free of dirt, dust, streaks, smudges, watermarks, spots, grime, and shall not be cloudy. There shall be no water spots on the glass or adjacent fixtures and furniture.

C.5.3.1.7 WALLS

All wall surfaces shall be free of smudges, marks, dirt, and spots. Cleaning shall not cause discoloration.

C.5.3.1.8 HIGH CLEANING

High Surfaces: Surfaces between 70 inches and 108 inches shall be cleaned and free of dirt, dust, and cobwebs. Where glass is present, both sides shall be clean and free of streaks. Included in high cleaning are door closers, book cases, cabinets, bulletin boards, artwork, and wall surfaces This does not include the removal of vents, tiles, or fixtures.

C.5.3.1.9 DUSTING

Surfaces shall be dust free with a preference to using a micro-fiber or damp cloth, or backpack vacuum fitted with the appropriate dusting tool.

C.5.3.1.10 TRASH, WASTEBASKETS AND ASH RECEPTACLES

All trash (including restrooms) shall be collected and removed to a location designated by the CO or their designee. Trash containers shall be emptied and kept clean, odor-free, and free of dirt, dust, debris, residue, and spilled material. Plastic liners for all trash and debris containers shall not be torn, worn, or contain residue. All ash receptacles shall be free of dust, ashes, odors, tar, streaks, and tobacco residue.

The Contractor shall notify the CO or their designee of any item or material identified by the Environmental Protection Agency (EPA) and State and local regulatory agencies as hazardous waste, hazardous materials, or Universal Waste observed in the trash receptacles. Typical prohibited wastes include but are not limited to fluorescent light bulbs, thermostats, thermometers, most chemicals, and batteries as specified in 40 CFR § 260-273.

C.5.3.1.11 RECYCLABLES

The Contractor shall provide all labor, and the means to collect and transport recyclable materials from recycling bins and containers located throughout the building to storage and loading areas as designated by the CO or their designee and as described in Section 4.8.2.0 'Recycling.'

C.5.3.1.12 ELEVATORS, ESCALATORS, AND STAIRWAYS

Door Tracks: Tracks shall be clean and free of dirt, debris, built up grime, dust, smudges, and other extraneous matter.

Exterior and Interior Surfaces: Surfaces shall be clean and free of finger marks, smudges, and spills. Carpets and floors shall be free of removable spots, dirt, and debris. Floors requiring a finish shall be maintained at a high luster.

Exposed Surfaces, Treads, Risers and Landings: Stairways, escalators, entrances, landings, railings, risers, ledges, grills, doors, radiators, and surrounding areas shall be free of dirt, dust, litter, and debris.

C.5.3.1.13 PLATE GLASS

All interior glass (to include glass over and in and vestibule doors and side lights, all plate glass around entrances, lobbies, and vestibules) shall be clean and free of dirt, grime, streaks, moisture,

and shall not be cloudy. Plate glass does not include windows separating interior and exterior of the building.

C.5.3.1.14 WINDOW WASHING
All windows shall be cleaned per ab additional service request. Cleaning frequencies that are above standard shall be completed on a reimbursable basis to the Contractor. Cleanings of both sides of the windows shall be coordinated to maximize cost effective operations as directed by the CO or their designee. The Contractor shall comply with ANSI/IWCA I-14.1, and all Federal, State and local regulations.

C.5.3.1.15 BLINDS AND COVERINGS (NOT INCLUDING DRAPES, CURTAINS AND UNIQUE COVERINGS)
Dusting of Blinds and Coverings: All blinds, coverings, cord tapes, and valances shall be clean and free of dust and spots. Blinds and coverings that are not operating properly shall be reported to the CO or their designee for repair.

C.5.3.1.16 FINE ARTS COLLECTION
The Contractor shall work with the CO or their designee to identify artworks in the building which are considered part of GSA's Fine Arts Collection. The Contractor shall work with the CO or their designee and Regional Fine Arts Officer to determine the best way to ensure that regular maintenance such as floor polishing, dusting, and window washing are accomplished in these areas; and to identify and help mitigate site-specific hazards such as pests that may damage the artworks.

C.5.3.1.17 POLICING INSIDE AREAS
Areas: All building areas shall be free of papers, trash, and other discarded materials.

C.5.3.1.18 INTERIOR AND ATRIUM PLANTS (GOVERNMENT PLANTS)
Plants shall be free of dust and dead leaves and properly hydrated. Fertilize, prune, and treat for infestation. Any dead or withered plants, due to the Contractor's neglect, shall be replaced by the Contractor at no additional expense to the Government. Plants that are the personal property of tenants are excluded.

C.5.3.1.19 CONCESSIONS (CAFETERIAS, SNACKBARS AND VENDING MACHINE AREAS)
Cleaning: All public areas (cafeteria furniture, seating areas, snack bars, and vending machine areas) shall be clean, sanitized, and free of spillages, food crumbs, spots, smudges, marks, and soil. Floors shall be maintained using the floor care standard requirements in this contract. Floors in serving and kitchen areas shall be cleaned only if open during the normal scheduled cleaning hours, except in Federally-equipped food service facilities. In Federally-equipped food service facilities the cleaning of kitchens and areas behind serving tables, and salad and soup bars is the responsibility of the Concessions Contractor.

C.5.3.1.20 POSTAL SPACE

- Cleaning: Postal space areas include, but are not limited to, service and box lobbies, swing rooms, work rooms, restrooms, locker rooms, supply rooms, vestibules, and loading docks. All

areas shall be cleaned in accordance to the standard service requirements. The United States Postal Service is responsible for the painting of the floor in work rooms. GSA can perform this work at the request of the Postal Service on a reimbursable basis.

- Flooring: All postal floors shall be free of dirt, dust, debris, and other foreign matter. If stripping and refinishing is required, finish or wax shall be removed and reapplied in accordance with standard commercial practices. UNDER NO CIRCUMSTANCES SHALL BURNISHING, HIGH SPEED BUFFING, OR DRY STRIPPING METHODS BE USED ON ACBM FLOORING.
- Asphalt Floors: Floors containing asphalt material shall be free of dirt and foreign matter. Damp mopping shall be the only method of wet cleaning. There shall be no buildup of finish in corners or crevices. If asbestos flooring is present, the Contractor shall comply with the methods prescribed in the NIBS Guidance Manual.
- Asbestos Operations and Maintenance Work Practices: The Contractor shall have a copy of the NIBS Guidance Manual. If asphalt plank is present, it shall be maintained in accordance with the manufacturer's instructions.

C.5.3.1.21 FITNESS CENTERS, HEALTH UNITS AND LABORATORIES

- Cleaning: Areas such as the fitness centers, health units, and laboratories shall be cleaned in accordance to the standard service requirements.
- Surfaces: All metal (door frames, handles, and fixture) and glazed surfaces (including partitions), shall be sanitized and made free of smears, finger marks, and streaks.
- Equipment: All vinyl surfaces of exercise equipment and exercise mats shall be free of dust, dirt, spots, streaks, and smudges. Cleaning shall be performed under and around without moving or lifting items. Shower curtains surfaces shall be cleaned and free of mold and dirt. Locker exterior surfaces shall be free of dust and streaks.

C.5.3.2 EXTERIOR SERVICES

The Contractor shall provide exterior standard services for the work items listed below.

C.5.3.2.0 PERFORMANCE STANDARDS

The Contractor shall provide all resources, labor, tools, equipment, transportation, hauling away, disposal, training, supplies, materials, and oversight to ensure that quality and performance standards are successfully achieved.

C.5.3.2.1 PLATE GLASS

All exterior glass (to include spandrel glass, glass over and in exterior and vestibule doors, and all plate glass around entrances, lobbies, and vestibules) shall be clean and free of dirt, grime, streaks, moisture, and shall not be cloudy. Plate glass does not include windows separating interior and exterior of the building.

C.5.3.2.2 WINDOW WASHING

Both sides of the glass shall be clean and free of dirt, grime, streaks, moisture, and shall not be cloudy. Window sashes, sills, woodwork, and other surroundings of interior glass shall be wiped

free of drippings and other watermarks. Windows shall be cleaned per an additional service request. Cleaning frequencies that are above standard shall be completed on a reimbursable basis to the Contractor. Cleanings of both sides of the windows shall be coordinated with the CO or their designee to maximize cost effective operations. Window washing shall be in accordance with ANSI/IWCA I-14.1 as well as all Federal, State and local regulations.

The Contractor shall submit to the CO or their designee a written Window Washing Safety Plan, as specified in the IWCA requirements and Section C.6 & C.7 'Federal Requirements' & 'Submittals Chart (Contract Deliverables)'.

C.4.3.2.3 CANOPIES
Cleaning: All canopies and anything affixed to or included in the surfaces of canopies shall be clean and free of all dirt, dust, cobwebs, nests, bird excrement, trash, and debris.

C.5.3.2.4 HARD SURFACE AREAS
Cleaning: All areas (sidewalks, brick areas, around light poles, hard surfaces, parking lots, surface parking, garages, dock areas, moats, platforms, driveways, ramps, lanes, etc.) shall be clean and free of dirt, debris, gum, litter, gravel, weeds, oil, and grease. No residual dirt shall remain after the removal of the debris. Spill residues and clean-up materials shall be disposed of in accordance with the Environmental Protection Agency (EPA), and State and local regulatory agency requirements.

C.5.3.2.5 ASH RECEPTACLE AND TRASH CONTAINERS
Cleaning: All solid waste/trash shall be collected and removed to a location designated by the CO or their designee. Trash containers and ash receptacles shall be emptied and kept clean, odor-free, and free of dirt, dust, ash, cigarette butts, debris, residue, and spilled materials. Sand in ash receptacles shall be replenished as necessary. Plastic liners for all trash containers shall not be torn, worn, or contain residue.

C.5.3.2.6 SURFACES (SIGNS, VENDING MACHINES, TABLES, ETC)
Cleaning: Surfaces shall be clean, with no dirt, dust, residue, streaks, spots, soil substances, discoloration, or cloth streaks. Surfaces should be damp mopped or wiped with a germicidal cleaner. Contact time should be consistent with the manufacturer's recommendations. Spill residue and clean-up materials used shall be disposed of properly.

C.5.3.2.7 GRAFFITI REMOVAL
Remove graffiti using normal cleaning methods (e.g., normal graffiti removal cleansers or solvents.) Graffiti that cannot be removed with such methods shall be reported to the CO or their designee.

C.5.3.2.8 EXCREMENT REMOVAL (HUMAN, BIRD AND ANIMAL)
Cleaning: All steps, stairs, entrances, sidewalks, arcades, landings, balconies, and ledges shall be cleaned of all excrement while following established safety precautions as outlined in the Center of Disease Control protocols. Knowledge of safety requirements in cleaning areas contaminated by bat, pigeon, or other avian pest excrement is required. The Contractor shall fully train all employees designated to perform these services in accordance with Occupational Safety and Health Administration (OSHA) standards and OSHA approved Federal, State, and local

regulations.

C.5.3.2.9 POLICING OUTSIDE AREAS

- Policing: All areas including lawn, grounds, planted areas, sidewalks, hard surfaces, parking areas, garages, docks, platforms, driveways, ramps, lanes, etc., shall be cleared of gum, litter, debris, paper, trash, and other discarded materials.
- Unimproved Grounds: All areas shall be cleared of trash, debris, and other discarded material each time the native grasses, weeds, etc. are cut.
- Fence Lines: Fence lines shall be cleared of trash, debris, and other discarded materials.

C.5.3.3 SNOW AND ICE REMOVAL

The Contractor shall perform snow and ice removal services for the snow and ice removal program. Work that is performed outside of normal building hours should be included in the line item price under the snow removal CLINs. Snow and ice removal from entrances, steps, landings, sidewalks, vehicular courts, driveways, plaza areas, roadways, parking areas, handicapped accessibility areas, and approaches are included in the standard service price. This does not include snow and ice removal requiring heavy equipment (ride-on equipment such as front end loaders, backhoes, bobcats, snow plows, etc.). Equipment provided by the Government that is damaged by the Contractor due to neglect shall be repaired or replaced by the Contractor. The Contractor shall be responsible for all costs incurred.

- During normal working hours snow and ice removal not requiring heavy equipment will be performed at no additional cost. This work is to be performed via diversion of workforce. Outside of normal working hours snow and ice removal not requiring heavy equipment hours are to be estimated and included in the line item price for snow removal requiring heavy equipment.
- The Contractor shall submit a detailed snow removal plan that meets the needs of the GSA. At a minimum, the snow removal plan shall include the following items:
    - Coordination measures (to ensure appropriate levels of effort for the conditions of the building)
    - Equipment
    - Personnel
    - Snow removal event triggers
    - Treatment areas requiring de-icing
    - Approved materials and chemicals
    - Safety plan
    - Notification procedures

Chemicals and/or sand shall be used to reduce safety hazards due to ice and snow. All chemicals used shall be certified by EPA's 'Design for the Environment.' Products with no comparable substitute shall comply with Federal specifications and local codes and be approved by the CO or their designee prior to the first inclement weather event. No sodium chloride or calcium chloride salt shall be used due to environmental risk. Less disruptive chemicals such as magnesium chloride, potassium acetate, and potassium chloride are viable alternatives. The Contractor shall ensure there is an adequate supply of chemicals and sand on site or readily available to cover unexpected snow and ice occurrences.

The Contractor shall furnish the necessary heavy equipment and other items needed to clear or haul snow and ice from parking areas, roads, driveways, plaza areas, etc., when an order is issued. Heavy equipment includes ride-on equipment such as front end loaders, backhoes, bobcats, snow plows, etc.

The Contractor shall use caution when snow removal is in progress to prevent any damage to the buildings, grounds, vegetation, landscape areas, sidewalks, roads, fire hydrants, shrubs, signs, and other protrusions. The Contractor shall be held liable for any damages incurred to Government property during the performance of work. All locally prescribed safety regulations, laws, and practices shall be carefully observed in performance of the work.

C.5.3.4 GROUNDS MAINTENANCE

The Contractor shall perform grounds maintenance standard services for the work items listed below. Contractor shall use recovered organic materials for fertilizer whenever possible.

C.5.3.4.0 LANDSCAPE EROSION MANAGEMENT
The Contractor shall employ environmentally sustainable, low-impact strategies such as temporary and permanent seeding, mulching, earth dikes, silt fencing, sediment traps and sediment basins to correct existing erosion such as typically found as the result of foot traffic killing the vegetation, steep slopes where sheet flow from storm water exceeds existing vegetation holding power, or point storm water outflow that exceeds the holding power of the vegetation covering the soil.

C.5.3.4.1 GROUNDS MAINTENANCE SERVICES
General: Maintain all plants, trees, shrubs, ground covers, and lawns in a manner that prolongs life and sustains a healthy appearance. The Contractor shall seek to prevent pollution by, among other things, reducing fertilizer and pesticide use to protect the environment, using integrated pest management techniques, recycling green/landscape waste, and minimizing runoff. Grounds maintenance services in the standard services shall benefit the environment and generate cost savings to the Federal Government by preserving and protecting the native plants and wildlife habitats entrusted to us.

C.5.3.4.2 COMPOSTING
To reduce the amount of material being disposed of in landfills, the Contractor is required to compost, to the greatest extent possible, yard waste generated by the Contractor's operations. The Contractor shall not compost material on-site unless authorized by the CO or their designee. The Contractor shall utilize an approved recycling or composting facility or compost the material at

the Contractor's own facility. Where applicable, the Contractor shall work with on site cafeterias and wet stands to recover and compost all possible materials. The Contractor is responsible to pay for composting services for landscaping debris.

C.5.3.4.3 TREES AND SHRUBS

- Maintenance: Tree supports shall be kept in good condition, functioning at all times and be removed when no longer needed. All trees and shrubs shall be fully protected. Tree stakes, tree ties, and guy wire shall be of materials that are comparable to those existing on site, and shall be replaced or repaired by the Contractor as needed. Supports or braces are to be repositioned as often as necessary to prevent damage to the tree or shrub trunk. Sand pans can be used for trees and shrubs to protect the plant trunk from the mower, and help to avoid over watering. Keep shrubs and trees trimmed to present an attractive appearance.
- Trimming: To promote optimum efficiency and safety for all foot and vehicular traffic, trees and shrubs shall be kept trimmed to clear all roads, drives, and walking areas. Any limbs and branches touching or brushing buildings, fences, or other structures are also to be trimmed to provide clearance and free air circulation around the plant. The trimming of trees shall comply with the requirements in Section C.4.4.6 'Tree Trimming.'
- Pruning: Trees and shrubs shall be pruned by the Contractor to remove dead or diseased foliage or branches to help control or direct growth, increase quality, and to add structural strength to the trees and shrubs.
- Survey: A certified grounds maintenance professional shall provide a survey of the trees and an evaluation of their condition.

This shall be completed within 30 days from the start date of each year the contract is in effect. The evaluation shall include a plan and price list for any special treatment not covered by this contract. Soil samples shall be taken and analyzed at the Contractor's expense by an approved testing laboratory from areas where plant health problems occur. Recommendations of the testing laboratory should also be submitted with a plan and price list for any special treatment not covered by this contract. Plans and price lists shall be submitted to the CO or their designee.

C.5.3.4.4 MULCHING

Contractor shall maintain and replace existing mulch as necessary. Replacement mulch shall be commercial grade shredded hardwood bark, or equivalent, including rubber. It shall be free of sticks, stones, clods, or other foreign materials. A sample of proposed mulch and chips shall be submitted to and approved by the CO or their designee prior to use. All areas to be mulched shall be raked, debris removed, edges reestablished, and any excessive mulch buildup worked into existing soil or removed, at the discretion of the CO or their designee, prior to mulch application.

C.5.3.4.5 MOWING AND EDGING

Contractor shall mow and edge all turf areas at a frequency and method that ensures that all areas present an attractive appearance at all times. Mulching mowers shall be used; however, non-mulching mowers are permitted at some sites and shall be approved by the CO or their designee. Grass clippings shall be cleared from walkways and roadways and blown onto the grass. As

appropriate, grass clippings shall be left in place, composted, or mulched as coordinated by the CO or their designee.

C.5.3.4.6 LEAF REMOVAL

The Contractor shall remove leaves, as necessary, to maintain a neat and clean appearance. Leaves should be composted as appropriate. Throughout the year, the Contractor shall remove minor accumulations due to isolated leaf drop and shall check all storm drain openings on the premises and remove any leaves or debris that have accumulated. Care shall be taken to remove leaves in existing mulched areas to maintain a neat and clean appearance without substantial reduction in mulch depth or damage to herbaceous or woody plant material.

C.5.3.4.7 OVER SEEDING, DETHATCHING AND PLUGGING

Over-seed, dethatch, and plug as necessary to prevent bare areas and promote even growth of turf areas following common and local landscaping practices.

C.5.3.4.8 FERTILIZATION

All lawns, trees, and ground cover shall be fertilized consistent with common local landscaping practices. Application by the Contractor shall employ the best practices to minimize chemical runoff. Fertilizer used shall be of a balanced type that supplies all nutrients required for providing sustainable growth and development. The fertilizer application rate for the trees will be determined by tree type, girth, and height. Prior to application, the Contractor shall schedule time of application with the CO or their designee.

C.5.3.4.9 FLOWERBEDS AND PLANTS

Flowerbeds are to be free from weeds and debris. Replacement plants shall be supplied by the Government. Plants supplied by Contractor shall be approved by the CO or their designee and shall be arranged in an attractive and professional manner. Preference shall be given to the use of native perennials instead of annuals.

C.5.3.4.10 PLANT REPLACEMENTS

The Contractor shall be responsible for all costs associated with the replacement of all planted materials that have been damaged as a direct result of the Contractor's lack of oversight, neglect, or lack of proper care and maintenance. The Contractor shall use replacement plants that are native to the area to help further reduce the use of irrigation water.

C.5.3.4.11 SOIL AND GROUND COVERS

- Aeration: Soil shall be aerated (frequency is dependent on the type of soil and grass but no less than one aeration per year) by manual or mechanical methods of piercing the ground to provide an adequate air supply to the soil and promote sustained plant life.
- Cultivation: Soil shall be cultivated to ensure the topsoil is loose for the purposes of gas exchange, water penetration, and soil aeration.
- Groundcover: All areas shall be maintained to promote healthy and sustained growth. Ground cover must present a neat appearance.

C.5.3.4.12 UNIMPROVED GROUNDS

Contractor shall mow unimproved grounds to present a neat, well-maintained appearance. Height of weeds, native grasses, etc. on unimproved grounds including Land Ports of Entry shall not exceed 6 inches in height.

C.5.3.4.13 FENCE LINES

Maintenance: Grass, native grasses, weeds, and other growths at fence lines including Land Ports of Entry, shall be controlled and not exceed 6 inches in height. Any chemical treatment used must be approved by the CO or their designee prior to use. Application of any chemicals must be accomplished by a Licensed Pest Control Operator. Application of chemicals shall be documented in a record log book on the types of pesticides applied and date(s) of application.

C.5.3.4.14 WEEDS

Maintenance: All area sidewalks, parking lots, and roadways (excluding unimproved grounds) are to be free of weeds and unwanted growths.

C.5.3.4.15 IRRIGATION

Initial Deficiency Walk-Through: The Contractor shall conduct a walk-through to inspect all irrigation systems (sprinklers, rain and freeze sensors, and drip systems) and submit a list of all damages to those systems to the CO or their designee.

C.5.3.4.16 WATERING

- Watering: All watering cycles shall be conducted at times that minimize inconvenience to the building occupants and visitors and maximize percolation. Watering shall be performed to minimize run-off into drains and sewers. Entrances and exits shall not be wet during the arrival and departure of occupants and visitors. Watering shall be accomplished using a drip, soaker hose, or another water-saving irrigation system device. The Contractor shall operate watering systems that use automatic timers coupled with rain/freeze sensors in an efficient manner that considers local weather and local mandates. During periods of water restrictions, watering guidelines by the local water district shall apply. The Contractor shall not be responsible for the replacement of landscaping materials that die as a result of a lack of proper access to water during these periods of water restrictions by municipalities.
- Hand Watering: When mechanical irrigation is not available or is malfunctioning, the Contractor shall use alternative hand watering methods, such as gator bags, or equivalents to ensure, promote, and maintain healthy growth. Watering shall be performed to minimize run-off into drains and sewers.

C.4.3.4.17 ADJUST, CLEAN AND SET AUTOMATIC CONTROLLERS

Irrigation systems with automatic controllers shall be adjusted, cleaned, and set for the most energy efficient watering periods. When watering lawns, the Contractor must make sure that the sprinklers and drip heads are clean and adjusted so that the water ejects evenly and covers all lawn areas and shrubs. The Contractor must ensure irrigated water does not spray on to paved areas or walkways and run-off into drains and sewers.

Irrigation systems that are damaged by the Contractor due to neglect shall be repaired by the

Contractor. The Contractor shall be responsible for all costs incurred to repair and test the system. Repairs shall be performed by qualified personnel such as the Contractor, the Contractor's sub-contractor, or the O&M Contractor. All repairs shall be performed using industry practices.

The Contractor shall be responsible to notify the Government in the event of operational malfunctions, breakages, or failures to the irrigation system, which affects the Contractor's ability to provide proper irrigation to building's landscaping. Failure to make timely notification to the CO or their designee shall result in the Contractor replacing damaged landscaping materials.

C.5.3.4.18 INTEGRATED PEST MANAGEMENT PLAN (IPM)
The Contractor shall utilize the Integrated Pest Management Plan for controlling pests and disease to ensure that the landscapes, trees, and shrubs are free of disease and pest infestation. The contractor shall provide monthly reports to the CO or their designee.

C.5.4 ABOVE STANDARD SERVICES

The Contractor shall provide interior and exterior above standard services to fulfill the Government's intermittent need for work. These services are in addition to the services specified as a standard service.

The Contractor shall not divert workforce to accomplish above standard services.

Submit to the CO or their designee after contract award a commercial price list for above standard service listed item(s). The commercial price(s) shall include the duration that the price is valid, minimum quantities to be ordered and any other stipulations that may apply. Unless otherwise requested by the Ordering Official, commercial prices for these services should be given by the square foot for any work defined in terms of its floor space. Work items whose unit of quantity is listed as 'each' should be on a "per item" basis (per blind, per window, per tree, etc.). However, the Ordering Official may request that the Contractor provide the work line items on another basis, 'such as per job' translated as quantity times unit price.

The Government reserves the right to obtain supplies and services from other sources if prices are found not to be fair and reasonable, based on competitive fair market prices.

C.5.4.1 CARPET EXTRACTION (PRIVATE AREAS)
The quality standard for providing above standard service is the same as that described in Section C.5.3.1.2. 'Carpets and Rugs.'

C.5.4.2 WINDOW WASHING
Cleaning: The windows shall be clean and free of dirt, grime, streaks, moisture, and shall not be cloudy. Window sashes, sills, woodwork, and other surroundings of glass shall be wiped free of drippings and other watermarks. The quality standard for providing above standard service is the same as that described in Section C.4.3.1.14. 'Window Washing.'

C.5.4.3 POSTAL LOCK BOXES AND MAIL CASES
Cleaning: All glass view plates and other surfaces of the lock boxes and mail cases shall be free of

dirt, dust, streaks, and spots. Coordination with the CO or their designee and the postal lock box manager is required.

C.5.4.4 WASHING BLINDS AND COVERINGS (NOT INCLUDING DRAPES, CURTAINS AND UNIQUE COVERINGS)

Contractor shall wash both sides of the blinds and coverings. Blinds and coverings that are not operating properly shall be reported to the CO or their designee for repair. The Contractor shall coordinate this requirement with the CO or their designee.

C.5.4.5 PRESSURE WASHING AND STEAM CLEANING

Cleaning: The Contractor shall remove all dirt, debris, residue, gum, grease, and tar from the exterior areas of the building(s) with the approval of the CO or their designee. Clean-up shall be done in an environmentally sound manner to minimize the amount of waste washed into the storm sewers or onto the grounds.

C.5.4.6 TREE THINNING

Tree thinning shall reduce the density of live branches towards developing the natural branching structure. Thinning shall result in an even distribution of branches on individual limbs and throughout the crown, to provide free air circulation through the remaining limbs and branches. Not more than 25 percent of the crown should be removed annually.

Tree maintenance shall be performed only by arborists or arborist trainees who, through related training, on-the-job experience, or both, are familiar with the practices and hazards of arboriculture and the equipment used in such operations. This standard shall not take precedence over arboricultural safe work practices. Operations shall comply with applicable Occupational Safety and Health Administration (OSHA) standards, ANSI Z133.1, as well as State and local regulations.

Climbing spurs shall not be used when climbing and pruning trees. Tree branches shall be removed in a manner not to cause damage to other parts of the tree, other plants, or property. Branches too large to support with one hand shall be precut to avoid splitting of the wood or tearing of the bark. Where necessary, ropes or other equipment shall be used to lower large branches or portions of branches to the ground.

C.5.4.7 GOVERNMENT FURNISHED TREES AND PLANTS (PLANTED IN GROUND OR PLANTERS)

Government furnished trees and plants shall be planted in the ground or in planters as approved by the CO or their designee.

C.5.5 SERVICE CALLS

Contractor shall provide adequate staff to respond to service calls during building(s) operating hours (see Section J, 'Building Information Sheet') and during the Contractor's regular cleaning schedule. Historically, custodial related service calls for this building(s) have been 25 hours per month. Contractors shall detail in their Quality Control Plan (QCP) how they will monitor and respond to service calls.

Service calls shall be monitored and satisfactorily responded to in a timely manner. The Contractor shall include a method of recording customer calls, the time to complete the service call, and the corrective action taken. These records shall be made available for review by the CO or their designee.

The costs of all service calls shall be reimbursed to the Contractor if the request is outside the building(s) operating hours and outside the Contractor's regular cleaning schedule.

The Contractor shall respond to all service call requests (custodial issues, moving, arranging and rearranging furniture within a conference room, special event support, etc.) using building specific service call procedures.

Service calls that the CO or their designee determines to be urgent (spilled water in traffic areas, lack of toilet supplies, etc.) shall be handled immediately.

C.5.6 SOLID WASTE/TRASH/RECYCLING MANAGEMENT

A solid waste/trash reduction and recycling management program, which is part of providing standard services, includes identifying and properly segregating all recyclable materials, composting materials, and Universal Wastes.

The Contractor shall not collect hazardous materials unless specifically contracted to recycle them. Typical prohibited wastes include but are not limited to; thermostats, thermometers, most chemicals, and batteries (nickel-cadmium and small, sealed lead acid batteries in electronic equipment, mobile phones, portable computers). In addition, electronic equipment such as computers and printers shall not be discarded in the trash containers. The Contractor shall notify the CO or their designee of any prohibited or unauthorized items observed in the trash receptacles.

C.5.6.1.0 SOLID WASTE/TRASH AUDITS

A solid waste/trash stream audit is necessary for all buildings. The Contractor shall verify with the CO or their designee to confirm whether the building has been audited. Buildings that have been audited do not require re-auditing. A waste stream audit at the building is required to determine the profile (amount and composition) of the solid waste/trash stream; identify efficient methods for the collection, storage, and transfer of wastes for disposal recycling, and composting; determine the right service level for solid waste/trash collection and removal to minimize waste shipments; and obtain a more accurate picture of GSA's solid waste/trash generation levels in order to comply with Executive Order 13514 solid waste/trash diversion provisions.

C.5.6.1.1 EXTENT OF WORK

At the beginning of a base year contract, the Contractor shall perform a solid waste/trash audit of the building(s). The Contractor shall submit the audit findings to the CO or their designee and Solid Waste/Trash Program Manager for review. Based on the findings, the Contractor shall partner with the Government to set up a solid waste/trash management program that is cost effective and will maximize the amount of waste diverted to recyclers and away from the landfills and incinerators. Contractor will develop a written report and analysis of the conclusions drawn from this audit, including recommendations for improving the economy and efficiency of waste

collection, storage, transfer, and disposal (including recycling and composting). Refer to Section J, Exhibit 10, 'PBS Waste Audits.' The audit shall be completed and a Report provided to GSA within 60 calendar days of completion of the audit, unless additional time is authorized by the CO or their designee.

The Government may at its discretion perform solid waste/trash audits and share results with the Contractor. Based on these reports, the Contractor shall partner with the Government to implement best practices solid waste/trash audit recommendations.

C.5.6.1.2 SOLID WASTE/TRASH REMOVAL AND DISPOSAL

All solid waste/trash collected as a requirement of this contract shall be removed from the premises and transported to a solid waste/trash disposal facility that has been certified by the appropriate state agency responsible for solid waste/trash management or by the Environmental Protection Agency (EPA).

The custodial Contractor shall provide solid waste/trash removal and disposal services as described herein.

The Contractor shall collect and transport all solid waste/trash and debris to designated locations on the loading dock or other areas (holding areas) for removal from the premises. Holding areas for solid waste/trash accumulation shall be identified by the CO or their designee. If trash compactors are used at the building, the Contractor shall operate the compactor. The door is interlocked with the compactor and will not operate unless the door is closed. The Custodial Contractor shall ensure that the appropriate Contractor personnel receive training in the safe and proper operation of the compactor.

The Contractor shall provide a sufficient number of waste removal containers to accommodate all trash generated between pick-up dates. The CO or their designee shall approve all container styles, types, and storage locations prior to placement. The Contractor shall be responsible for the delivery, maintenance, repair, cleanliness, labeling, and removal of storage containers and equipment throughout the contract period. The containers must be kept free of holes, pests, grease, oils, and odors, etc. The Contractor will report any pest infestation in or around the containers to the CO or their designee. All Contractor-supplied equipment and materials shall remain the property of the Contractor during and subsequent to the contract period.

The overflow of materials from containers and dumpsters shall be picked up from the ground and floor area used to collect and consolidate the materials. The Contractor shall remove all hydraulic fluids and oil spillages caused either by the collection vehicles, or released from containers at the designated centralized collection site (loading dock, etc.). Spill residue and clean-up materials shall be disposed of in accordance with the EPA, and State and local regulatory agency requirements.

The Contractor shall perform collection, removal, recycling and related activities in accordance with the strategies agreed upon by the Government and Contractor based on the solid waste/trash audit Final Report. See Section C.5.6 'Solid Waste/Trash/Recycling Management' for additional details. The Contractor is responsible for all costs of trash removal. The Contractor shall be responsible

for loading containers onto collection vehicles.

C.5.6.1.3 SOLID WASTE/TRASH RECORDS AND REPORTS
Reporting requirements are defined in Section C.5.7 'Environmental Reporting.'

C.5.6.1.4 PICK-UPS ON CALL

Additional or special pick-ups of solid waste/trash may be required on an irregular basis. Pick-ups shall be accomplished within 24 hours of notification by the CO or their designee. Payment for these pick-ups shall be based on a price per pick-up.

C.5.6.2.0 RECYCLING
It is the intent of the Government to keep the maximum amount of materials from the landfills through aggressive recycling. To the extent practicable, both the Government and Contractors shall pursue Government and Contractor revenue sharing opportunities.

C.5.6.2.1 EXTENT OF WORK
The Contractor shall remove all hydraulic fluid and/or oil spillage caused either by the collection vehicles, or released from containers at the designated centralized collection site (loading dock, etc.). Sorbent use for cleanup shall contain post consumer recycle content minimum as required. The minimum depends on the type of sorbent used: see the EPA/CGP website for details. Spill residue and clean-up materials shall be disposed of in accordance with the Environmental Protection Agency (EPA), and State and local regulatory requirements.

Unless specifically contracted to recycle items or material identified by the EPA and State and local regulatory agencies as hazardous waste, hazardous materials, or Universal Waste, the Contractor shall not collect these items. Typical prohibited wastes include but are not limited to fluorescent light bulbs, thermostats, thermometers, most chemicals, and batteries. Electronic equipment, such as computers, shall not be discarded in the recycle bins. The Contractor shall notify the CO or their designee of any prohibited or unauthorized items observed in the trash or recycling receptacles.

The Contractor shall furnish all necessary labor and supervision to provide recycling services as described herein. All recyclable materials shall be collected for removal from the premises. Overflow of materials from containers shall be picked up from the floor of the area used to collect and consolidate the materials.

Arrange for the removal of recyclables from the premises. Be responsible for all fees, if any, associated with recycling.

Remove all recyclable materials to a storage area designated by the CO or their designee. Recyclable materials may be found in

- ☒Central recycling bins and containers (located in common areas such as hallways, break rooms, conference rooms, snack bars, cafeteria and/or restrooms, outside areas, etc.)
  - ☐Desk side recycling bins and containers.

➢ ☐Both.

- Place recyclable materials in containers, dumpsters, or compactors provided by recycler. The Contractor shall monitor the containers, dumpsters, and compactors to prevent littering in the holding area. No trash shall accumulate in the holding area.
- Bale corrugated materials, if a baler is available.
- Ensure that all custodial staff involved in the recycling program fully understands the recycling procedures and requirements.
- Coordinate additional pickups within 24 hours of notification by the CO or their designee.
- Retain any proceeds that result from the sale of recyclable materials covered by this contract. Verification of the amount of proceeds received from the sale of recycled materials shall be furnished to the CO or their designee upon request. See Section C.5.6.2.7 'Recycling Proceeds' for additional details.
- To the extent practicable, both pursue Government and Contractor revenue sharing opportunities.
- Comply with reporting requirements specified herein in Section C.5.7, 'Environmental Reporting'.

C.5.6.2.2 RECYCLABLE MATERIALS DISPOSITION

The Contractor shall ensure that all recyclable materials are recycled and not placed in landfills and incinerators. The CO or their designee may direct the Contractor to participate in joint efforts with State, city, and local governments regarding recycling.

C.5.6.2.3 RECYCLABLES

Collection and Pickups: The Contractor shall ensure that recyclables are collected and placed in the designated holding areas on a schedule that will maximize the quantity of materials removed from the premises as scheduled. Additional collections of recyclable materials may be required on an irregular basis and will be coordinated with the CO or their designee.

C.5.6.2.4 PICK-UPS ON CALL

Additional or special pickups of recyclables may be required on an irregular basis. Pickups shall be accomplished within 24 hours of notification by the CO or their designee. Payment for these pickups shall be based on a price per pickup.

C.5.6.2.5 RECYCLING CONTAINERS

- Individual Deskside and Central Collection Containers: The Government shall provide the collection containers.
- Central Collection Containers: Container(s) shall be placed in the areas designated by the CO or their designee, where trash is collected. Government approved container(s) shall be placed on each floor to receive the collection of recyclable materials. Full containers with recyclables are to be transported by the Contractor to the dock or designated area for pickup by the

recycling Contractor.

- Recycling Collection Containers: The Government shall provide the necessary Government approved collection containers/bins and other equipment for use throughout the building for the collection of recyclable materials. These are the mobile type containers/bins and other equipment that the Contractor shall use to collect recyclables from deskside and/or central recycling containers. These containers shall be in sufficient quantities for the collection of recyclable material prior to removal to the designated holding area.
- Storage Containers: The Government shall provide the necessary storage containers and other equipment, such as compactors, dumpsters, etc., for use in designated holding areas. Containers shall be in sufficient quantities for the collection and storage of the recyclable materials in the holding area prior to removal from the premises by the recycling Contractor.
- Containers and Equipment Responsibility: The Contractor shall be responsible for the removal of recyclables from the collection containers and moving them to the holding area throughout the contract period. The containers, excluding those used to collect paper, shall be labeled, lined and free of residue and any plastic liners shall not be torn, worn or contain residue. Containers shall be kept free from holes, vermin, or foreign matter that might cause injury or stain clothing or furniture, and the containers must not emit unpleasant odors. If any container emits an unpleasant odor, as identified by the CO or their designee, it shall be immediately corrected by the Contractor at their expense. Recyclable materials shall not be handled, stored or transported in any manner that causes safety or health hazards.

All Government supplied equipment and materials shall remain the property of the Government. The Contractor shall be accountable for all recycling equipment and containers belonging to the Recycling Contractor and shall use them only for the intended purpose.

C.5.6.2.6 RESTRICTION ON USE

Recyclable paper purchased under this contract shall be used or sold as recyclable paper only; i.e., for processing at a pulp mill to be made into new paper products. The Contractor shall not use, allow access to, or offer for resale any papers, documents, or file record materials for the information contained therein.

C.5.6.2.7 RECYCLING PROCEEDS

The Contractor shall use the proceeds received from the sale of recycling material(s) to lower the cost of trash removal or recycling at the location. In the instance of subcontracted work, funds received by the subcontractor will be remitted back to the Contractor for return to the Government. If proceeds are not used to reduce the cost of trash or recycling, the CO or their designee will provide guidance for depositing of these funds.

C.5.6.2.6 RECYCLING RECORDS AND REPORTS

Reporting requirements are defined in Section C.5.7 'Environmental Reporting.'

C.5.7 ENVIRONMENTAL REPORTING

The Contractor shall provide all necessary information required in this Section to comply with environmental and green purchasing reporting requirements, and agency sustainability goals in this specification.

The Contractor shall submit to the CO or their designee the following reports.

C.5.7.0 RECYCLING AND WASTE REPORTS

- Monthly Recycling Report: The Contractor shall submit a monthly Recycling Report (See Section J, Exhibit 8) listing the types, weights, and costs or revenues. Include in the report are single stream recycling, commingled recycling, and composting. Reports shall be submitted by the 15th of each month and upon request by the CO or their designee.
- Waste Hauling Reports: The Contractor shall submit a monthly Waste Hauling Report (See Section J, Exhibit 8) showing the weight of trash hauled and the associated trash hauling costs. The report shall be submitted by the 15th of each month and upon request by the CO or their designee. Report shall include the waste type, name and final disposition destination. All Hazardous and Universal Waste shipping documentation shall be maintained for the life of the building. If the Contractor performs non-hazardous solid waste management for the entire building, they shall also report on these solid waste and recycling activities.

C.5.7.1 REPORT CALCULATIONS

The recycling and waste hauling reports above shall contain sufficient data to calculate waste diversion and waste removal costs. When actual weights are not known, the Contractor shall use EPA's Standard Volume-to-Weight Conversion Factors. Deductions shall be made and reported for volumes that are not filled to capacity (i.e., half full, 3/4 full, etc.) and conversions adjusted accordingly.

C.5.7.2 GREEN PURCHASE REPORTS

The Contractor shall submit information on green purchasing practices specific to the performance of this contract. Records showing the monthly cost of green cleaning products and materials purchased shall be provided to the USDA and the CO or their designee by the Contractor so that this report can be submitted by the CO or their designee as required by the Resource Conservation and Recovery Act (RCRA), USDA, and EO 13514. Reportable information and formats are provided in Section J, Exhibits 6 and 7 for the following:

- Bio-based: For categories of items that are EPA-designated (e.g. Comprehensive Procurement Guidelines [CPG]) and USDA designated in the BioPreferred Program (visit http://www.biopreferred.gov/), and all other factors (such as price, performance, and availability) being equal, the contractor shall selected the CPG item. For other purchases, unless the contractor receives an exemption from the Contracting Officer, the contractor shall select USDA designated products over products with other sustainable attributes.

  The Contractor shall provide a list of USDA-designated bio-based products purchased October 1-September 30, during the previous fiscal year. Information will include the types and dollars spent on these products. The Contractor shall submit the report in accordance with Federal Acquisition Regulation (FAR) Clause 52.223-2 no later than October 31 of each year during contract performance and at the end of contract performance. The reports shall be submitted to the USDA designated location and a copy to the following e-mail address PBSbiobasedreporting@gsa.gov.
- Non bio-based: The Contractor shall submit a report of all non-bio-based products to include: Green Seal, DfE, CPG, and Environmental Choice (low VOC, Non-Ozone Depleting), as well

as non-green (Hazardous/Toxic) products to the CO or their designee no later than October 31 of each year during contract performance and at the end of contract performance. Report shall include the cost of cleaning products and materials purchased under this contract.

C.5.7.3 INTEGRATED PEST MANAGEMENT REPORT
The Contractor shall provide to the CO or their designee with a list of chemicals and their purchase prices that are used to control pests in the building.

C.5.7.4 SUPPORT DOCUMENTATION
The Contractor shall maintain documentation to support all the above reported activities. Information may include receipts or other records related to pick-up dates, weights, and associated fee schedules. Records and receipts obtained shall be made available to the CO or their designee upon request.

C.5.7.5 REPORTING FORMATS
Reports prepared by the Contractor shall be submitted to the Government electronically, using the forms in Section J. The Contractor shall submit reports in electronic form. If printed, the Contractor's reports shall be printed double-sided on paper containing a minimum of 30 percent post consumer recycled content.

C.5.8 INTEGRATED PEST MANAGEMENT

The Integrated Pest Management (IPM) Plan is a part of the standard services provided by GSA, which consists of a preventive maintenance process. The plan coordinates many different programs to reduce sources of pests on a long-term basis for both the interior and exterior areas of a building. The Pest Control requirement is specified in 7 U.S.C. 136r-1 7 USC § 136r–1 - Integrated Pest Management | LII / Legal Information Institute . The Contractor shall have a plan that employs practices and techniques, as they relate to cleaning, trash, and materials handling, that reduce the sources of food and water, harborage, and access routes used by pests in and around the building.

C.5.8.0 PREVENTIVE PEST MAINTENANCE
The Contractor shall implement a preventive maintenance program that identifies and corrects conditions that contribute to pest infestation. Some of the most effective EXAMPLES include but are not limited to:

- Self-contained compactors rather than dumpsters or stationary dumpsters for storing solid waste/trash awaiting pickup, wherever possible.
- Pressure washing of trash rooms, loading docks, and food preparation facilities. The Contractor shall ensure that run-off into drains and sewers is minimized when using pressure washing devices.
- Food preparation and storage areas remain clean.
- Dedicated, tightly covered receptacles for food waste in indoor areas with chronic pest problems.
- Replacement of dense ground cover in landscapes with chronic rodent problems.

- Employ techniques that may include, but are not limited to, keeping containers closed, removal of debris, etc.

C.5.8.1 INITIAL PEST ASSESSMENT

A certified pesticide applicator or licensed IPM Contractor shall conduct a thorough, initial assessment of the ☒ interior space and/or ☒ exterior grounds and paved areas. Access to building space shall be coordinated with the CO or their designee. The CO or their designee must inform the Contractor of any restrictions or areas requiring special scheduling. The purpose of the initial assessment is for the custodial Contractor to identify areas or practices that may contribute to pest infestation.

A written report detailing the findings of the initial assessment shall be submitted to the CO or their designee within fifteen (15) calendar days of the start of the contract. Throughout the life of this contract, the Contractor shall be responsible for notifying the CO or their designee in writing about any sanitary or procedural modifications deemed necessary to eliminate pest infestation.

C.4.8.2 RECOMMENDATIONS FOR PEST MANAGEMENT AND CONTROL

Application of chemical and non-chemical pesticides and trapping methods to address current pest infestations (pest populations) is not a part of this base contract. As required above, the Contractor shall submit an assessment of practices that may contribute to pest infestations (pest populations). The report shall also include recommendations for getting rid of current pest infestations. Eradication methods recommended shall include non-pesticide practices where possible (vacuum or trapping methods). Each control recommendation shall include a price which the Contractor would charge separately from this contract. Prices shall reflect service from personnel qualified to apply chemical and non-chemical pesticides. In the event that pesticide application or trapping methods are required on a regular basis, this contract may be modified to include those services. The GSA may choose to obtain these services from a separate vendor.

C.5.8.2 PESTS INCLUDED AND EXCLUDED

The Contractor shall adequately suppress indoor populations of rats, mice, cockroaches, ants, flies, and any other arthropod pests not specifically excluded in this exhibit. This includes populations of these pests that are located outside of the specified facilities, but within the property boundaries of the facilities.

The following pests are excluded from this contract and should be ordered by the region under a specialized contract:

- Birds
- Mosquitoes
- Snakes
- Vertebrates that are not commensal rodents
- Bats
- Termites

- Other wood-destroying organisms
- Bed Bugs

C.5.8.3 INITIAL PEST ASSESSMENT

A certified pesticide applicator or licensed IPM Contractor shall conduct a thorough, initial assessment of the ☒ interior space and/or ☒exterior grounds and paved areas. Access to building space shall be coordinated with the CO or their designee. The CO or their designee must inform the Contractor of any restrictions or areas requiring special scheduling. The purpose of the initial assessment is for the custodial Contractor to identify areas or practices that may contribute to pest infestation.

A written report detailing the findings of the initial assessment shall be submitted to the CO or their designee within 30 calendar days of the start of the contract. Throughout the life of this contract, the Contractor shall be responsible for notifying the CO or their designee in writing about any sanitary, structural, or procedural modifications deemed necessary to eliminate pest infestation.

C.5.8.4 PEST CONTROL PLAN

Prior to initiation of services, the Contractor shall submit to the CO or their designee for approval a written Pest Control Plan within 30 calendar days following the initial assessment. The plan should include integrated methods, routine site inspections and maintenance, routine pest inspections, pest populations monitoring, evaluation of the need for pest control and one or more pest control methods. The plan shall also include a specification of the circumstances under which an emergency application of pesticides can be applied and a communications strategy directed to building occupants.

The Pest Control Plan shall consist of the following parts:

- Proposed Materials and Equipment for Service including labels and Material Safety Data Sheets (MSDS) for all pesticides to be used. A list of the brand names of trapping devices, pesticide application equipment, rodent bait boxes, insect and rodent trapping devices, pest monitoring devices, pest detection equipment, and any other pest control devices or equipment that may be used to provide service. The use of green and sustainable methods and applications is preferred whenever possible. A list of chemicals used and the purchase price for these chemicals.
- Proposed Methods for Monitoring and Detection including describing those methods and procedures to be used for identifying sites of pest harborage and access and for making objective assessments of pest population levels throughout the term of the contract.
- An inspection schedule for each building or site. Frequency of contract visits shall depend on the specific pest control needs of each premise. Large office facilities or specified office areas within such facilities with a history of pest infestations will be visited more frequently.
- A description of any structural or operational changes that would facilitate the pest control effort.
- A copy of the Commercial Pesticide Applicator Certificate or License for every Contractor representative who will be performing on-site service.

C.5.8.5 PESTICIDE APPLICATION

The Contractor shall not apply any chemical or non-chemical pesticide products that have not been included in the Pest Control Plan or approved in writing by the CO or their designee. The Contractor shall provide to the CO or their designee with a list of chemicals and purchased price as specified in Section C.5.9 'Environmental Reporting.' If the CO or their designee has concerns or questions regarding chemicals being used, the CO or their designee should contact the Integrated Pest Management Coordinator in GSA's National Capital Region. The Contractor shall employ the least hazardous materials, most precise application technique, and minimum quantity of pesticide necessary to achieve control. Pesticides used by the Contractor must be registered with the U.S. Environmental Protection Agency, state and/or local jurisdiction. Transport, handling, and use of all pesticides shall be in strict accordance with the manufacturer's label instructions and all applicable Federal, State, and local laws and regulations. All chemicals shall be in the original manufacturer's containers and properly labeled.

Chemical pesticides shall not be applied in any Child Care center without prior coordination and consent of the Child Care Director. Posting and notifying the Child Care Director must be initiated at least 24-48 hours in advance of using any chemical pesticides. Only qualified, trained, and certified personnel or licensed Contractors shall apply any chemicals. Uncertified individuals working under the supervision of a certified pest applicator or licensed Contractor shall not be permitted to provide service under the terms of this contract. Chemicals shall be applied with extreme care to avoid hazard to any person or animal in the immediate or adjacent areas, or property damage.

Pesticide application shall be according to need and not by schedule. As a general rule, application of pesticides in any area shall not occur unless visual inspections or monitoring devices indicate the presence of pests in that specific area. In no case shall extremely toxic materials be permitted. The Contractor shall not store any pesticide products on Government property. Any emergency applications of chemical pesticides must be approved by the CO or their designee prior to application.

C.5.8.6 STRUCTURAL AND PROCEDURAL RECOMMENDATIONS

Structural modifications for pest control will be the responsibility of the Government. However, throughout the life of this contract, the Contractor shall be responsible for notifying the CO or their designee in writing about concerns with any structural, sanitary, or procedural modifications deemed necessary to eliminate food and water sources, harborage, or access routes that would allow building infestation by pests in and around the building.

C.5.8.7 RECORD KEEPING

The Contractor shall be responsible for maintaining a pest control logbook or file for each building or site specified in this contract. These records will help with monitoring pest locations and actions taken to prevent or mitigate further infestations. The log shall include pesticide information on whether chemical and non-chemical methods were used to control pests. Where chemicals are applied the log shall specify the type, quantity, price, and circumstances for using pesticide(s). These records shall be kept on Government property and maintained by the Contractor.

Each log book or file shall contain at least the following items:

- A copy of the Pesticide Control Plan. The plan shall provide labels and MSDS for all chemical pesticides used and purchase price, brand names of all pest control devices and equipment used, and the Contractor's service schedule for the inspection and/or treatment of the building. Reporting requirements for the plan are defined in Section C.5.7 'Environmental Reporting.'
- Completed copies of GSA Form 3638, Pest Control Work and Inspection Report, or an equivalent form such as another Contractor service report forms that is approved by the CO or their designee. The report form shall be used to advise the Contractor of routine service requests and to document the performance of all work. The Contractor shall also document on the GSA Form 3638 or equivalent all information on pesticide application that is required by statute in the jurisdiction where service is actually performed. Upon completion of a service visit to a building, the Contractor's representative performing the service shall complete, sign, and date the GSA Form 3638 or equivalent form.

C.5.8.8 MANNER AND TIME TO CONDUCT SERVICE

Routine pest control services that do not adversely affect tenant's health or productivity shall be performed during the tenants' normal working hours. The Contractor shall notify the CO or their designee, and the CO or their designee shall provide notice to occupants at least 72 hours before application of any pesticides during normal conditions and within 24 hours in emergency situations. An emergency is an exceptional circumstance that poses a clear (or at least perceived) health and safety risk or where operations are severely disrupted. Examples of the first involve some outdoor animal (e.g., bird, snake, bat, or squirrel) that has gotten into indoor space and cannot get out, or a nest of bees or wasps are discovered on the grounds. An example of the second would be a swarm of winged termites or ants emerging into occupied space, which might be completely harmless, but nevertheless are alarming to the occupants. When it is necessary to perform any work outside of the tenant's normal working hours, the Contractor shall notify the CO or their designee at least one day in advance.

C.5.8.9 INSECT CONTROL

The Contractor shall provide the CO or their designee with signs, placards, literature, or other information so that the CO or their designee can inform building occupants of the nature of the pest application. The information will include at a minimum a brief explanation regarding the reason for the pest application, the safety of the products being used and contact information should the building occupants have questions.

Non-pesticide Products and Use: The Contractor shall use non-pesticide methods of control wherever possible. For example:

- Portable vacuums with HEPA or MICRO filtration
- Trapping devices
- Chemical Pesticide Products and Use: When it is determined that chemical pesticides must be used in order to obtain adequate control, the Contractor shall employ the least hazardous material, most precise application technique, and minimum quantity of pesticide necessary to achieve control. The Contractor shall minimize the use of liquid pesticide applications

wherever possible, for example:

- Bait stations and other types of bait formulations rather than sprays.
- As a general rule, liquid, aerosol, or dust formulations shall be applied only as crack and crevice treatment.
- Application of pesticide liquids, aerosols, or dust to exposed surfaces and pesticide space sprays (including fogs, mists, and ultra-low volume applications) shall be restricted to unique situations where no alternative measures are practical.

The Contractor shall obtain the approval of the CO or their designee prior to any application of pesticide liquids, aerosols, or dust to exposed surfaces, or any space spray treatments. Other than crack and crevice treatments, no liquid, aerosol, or dust applications shall be made while tenant personnel are present.

C.5.8.8 RODENT CONTROL

- Indoor Trapping: Generally, rodent control inside buildings shall be accomplished with trapping devices only. All such devices shall be concealed out of the general view and in protected areas so as not to be affected by routine cleaning and other operations. Traps shall be checked on a schedule approved by the CO or their designee. The Contractor shall be responsible for disposing of all trapped rodents and all rodent carcasses in an appropriate manner.
- Use of Rodenticides: In extreme cases, when rodenticides are deemed essential for adequate rodent control inside buildings, the Contractor shall obtain approval from the CO or their designee prior to making any interior rodenticide treatment. All rodenticides, regardless of packaging, shall be placed either in locations not accessible to children, pets, wildlife, and domestic animals or in EPA-approved tamper-resistant bait boxes. As a general rule, rodenticide application outside buildings shall emphasize the direct treatment of rodent burrows wherever feasible.
- Use of Bait Boxes: All bait boxes shall be maintained in accordance with EPA regulations, with an emphasis on the safety of non-target organisms. The Contractor shall adhere to the following points:

- All bait boxes shall be placed out of the general view, in locations where they will not be disturbed by routine operations.
- The lids of all bait boxes shall be securely locked or fastened shut.
- All bait boxes shall be securely attached or anchored to floor, ground, wall, or other immovable surface, so that the box cannot be picked up or moved.
- Bait shall always be secured in the feeding chamber of the box and never placed in the runway or entryways of the box.
- All bait boxes shall be labeled on the inside with the Contractor's business name and address and dated by the Contractor's technician at the time of installation and each servicing.

C.5.8.9 SAFETY AND HEALTH
All work shall comply with the applicable requirements of 29 CFR §198 and State and municipal safety and health requirements http://www.access.gpo.gov/nara/cfr/waisidx_06/29cfr198a_06.html, Where there is a conflict between applicable regulations, the most stringent shall apply.

C.5.9 CHILD CARE CENTERS

RESERVED

C.5.9.0 PRODUCTS
RESERVED

C.5.9.1 STANDARDS
RESERVED

C.5.9.2 GUIDANCE
RESERVED

C.5.9.3 SAFETY
RESERVED

C.5.9.4 CLEANING REQUIREMENTS
RESERVED

C.5.9.5 QUALITY STANDARDS FOR CHILD CARE
RESERVED

C.5.10 QUALITY CONTROL PLAN (QCP)

The Contractor shall establish and implement a complete Quality Control Plan (QCP) to ensure the requirements of the contract are met. The QCP is a written document that specifies a system for determining whether or not cleaning service requirements are being met and identifying and correcting deficiencies in the quality of services before the level of performance becomes unacceptable. The QCP also identifies opportunities where the Contractor can make improvements in how services are provided.

The QCP is a living document and may be subject to change depending on the needs of the contract. When the contract is revised, the Contractor is required to provide an updated QCP, maintenance schedule and listing of current employees to the CO or their designee for acceptance. See Section C.7 & C.8 'Federal Requirements' & 'Submittals Chart (Contract Deliverables)', to find the time frame to submit the QCP.

The QCP shall include the following, at a minimum:

- How the Contractor will control quality and quantity of supplies and services.
- Define the roles and responsibilities of the Contractor's operating personnel.
- How project management, inspections, plan implementation, process improvement changes,

correction of deficiencies, and Section C.5.1 'Green Cleaning' of this contract will be accomplished.

- An inspection plan or checklist tailored to the specific building(s) being cleaned and serviced under this contract. The inspection plan or checklist shall detail how services at the work site shall be inspected to ensure that the outcome of the work meets all the quality standards set forth in the contract and shall include, but is not limited to:
- Date of inspection performed
- Location of inspection
- Description of findings
- Description of action(s) taken (if necessary)
- Signature and date of completion
- A written training program to ensure that the Contractor's employees are capable of successfully accomplishing all work task(s) under this contract.
- A Strike Contingency Plan for separation of employees and employee absences.
- How Contractor shall monitor deficiencies of work output in relation to the performance standards, methods of informing employees of deficiencies in their area(s) of responsibility, and a process to ensure that the deficiencies are corrected and do not reoccur.
- How Contractor shall measure and document performance against the scope of work.
- Service calls and how they shall be monitored and responded to in a timely manner as required in Section C.5.5 'Service Calls' in the specification.
- A Communication Plan for the Contractor to communicate with GSA to receive and respond to service calls and customer complaints, as required in Section C.4.3 'Communication Plan' in the specification.
- Contractor incentives.
- How the Contractor will utilize the Government's approved tenant survey results to improve the delivery of custodial and related services.

C.5.11 CLEANING SCHEDULES

The cleaning schedule is considered the Contractor's efficient approach to the work, and shall not limit the Contractor to specific levels of staffing, means or methods. Changes necessary for achieving the contract performance work statement requirements shall be the responsibility of the Contractor. Cleaning schedules and any revisions are to be submitted to the CO or their designee.

The Contractor's cleaning schedule shall, as a minimum, include the following frequency:

- Daily cleaning
- Periodic cleaning
- Weekly cleaning

- Monthly cleaning
- Other frequencies

C.6 BUILDING OPERATIONS AND MAINTENANCE SERVICES

C.6.0 EXISTING DEFINICIENCY INSPECTION/INITIAL DEFICIENCY LIST

The existing deficiency inspection and list is meant to identify and document all deficiencies that exist in the equipment and systems covered by this performance work statement, but that will not be repaired during routine preventative maintenance and includes the Contractor's itemized price (including, but not limited to labor, materials, overhead, and profit) for correcting each deficiency. This inspection is required to be documented in the NCMMS.

C.6.0.1 INITIAL INSPECTION

The Contractor and the CO or their designee shall make a complete and systematic initial inspection together during the startup or transition phase of the contract that will include all mechanical, electrical, fire protection and life safety systems, environmental systems, including but not limited to USTs and structural stormwater best management practices (including drains, oil/water separators, etc.) and utility systems and equipment, windows, doors, and other structural features for which maintenance and repairs are covered by this performance work statement. The purpose of this inspection shall be to discover and list in an existing deficiency list report all deficiencies that may exist in the equipment and systems covered by this performance work statement, as well as the Contractor's itemized price (including, but not limited to labor, materials, overhead, and profit) for correcting each deficiency. The Government may elect to have all or any part of this work performed by the Contractor (at the price or prices quoted), by Government employees, or by other Contractors. The existing deficiency list report shall not include any items that would be replaced, repaired, or adjusted during the performance of normal preventive or predictive maintenance.

C.6.0.2 INITIAL DEFICIENCY LIST

The Contractor shall submit an initial deficiency list report not later than 90 days after award of the Contract to the CO or designee. Any dispute between the Government and the Contractor as to classification of initial deficiency list report items will be resolved under the Disputes Clause in this document. The Contractor’s itemized estimates for correcting each deficiency shall remain in effect for 90 days after submission of the initial deficiency list report. Deficiencies discovered after the submission of the initial deficiency list report will not be considered pre-existing for purposes of this Contract, unless equipment is operational and cannot be secured and inspected. Any piece of equipment or system that cannot be inspected shall be highlighted at the beginning of the deficiency list stating why it cannot be secured and inspected. An estimate of when the Contractor reasonably expects to be able to inspect the piece of equipment shall be provided. When an existing deficiency in an item is corrected, the Contractor shall assume full responsibility for the subsequent repair of the item as covered under the terms of this Contract at no additional cost to the Government. Nothing in initial deficiency list clause shall be construed as diminishing the obligations imposed by this Contract upon the Contractor to operate any deficient item (to the extent operable) or to adjust or maintain any such item.

C.6.1 STARTUP PHASE/TRANSITION PHASE

C.6.1.1 STARTUP PHASE

The Contractor shall provide within 60 days of startup services assistance in transitioning between the construction Contractor's temporary operations and the O&M Contractor's initial operations. During this period, the building is expected to be primarily unoccupied except for security personnel and transient GSA, Agency, or Contractor personnel carrying out functions related to completing construction punch lists or in preparation of initial occupancy by tenants. During this period as equipment is accepted by the Government and officially (in writing) turned over to the Contractor for operations, the Contractor shall:

1. Operate HVAC equipment to maintain conditions sufficient to avoid damage to finishes, especially millwork.
2. Manage warranties, in cooperation with the construction manager.
3. Develop the Building Operating Plan.
4. Assist with commissioning activities (note: commissioning schedules will be made available on request by the CO or designee).
5. Provide site access and escort to Agency personnel and Contractors as necessary. If such services take more than 20 hours per week then the Contractor will be reimbursed by GSA for the additional time in accordance with the additional services provisions in this document.
6. Inspect all major or exposed (rooftop – recommend scheduling along with retuning effort, outside, machine room) HVAC equipment for cleanliness, absence of rust, accessibility for maintenance purposes, and other visible problems.
7. Inspect machine rooms for Occupational Safety and Health Administration (OSHA) compliance.
8. Complete the building equipment inventory as required in this document, to include all equipment attributes used by the NCMMS if applicable and develop a Preventive Maintenance Schedule on equipment inventory.
9. Inventory any stock of materials and repairs parts provided as part of the construction Contract to the Government for safekeeping.
10. Identify defects in equipment and systems covered by this Contract that were not previously identified in punch list records and notify the Government of such defects for inclusion in the punch list. If such deficiencies are determined to be out of scope for inclusion in the construction Contractor's punch list, the Contractor shall compile such items in an initial deficiency list report as well as provide an itemized estimate for correcting each deficiency as described in Section C.5.0, Existing Deficiency Inspection/Initial Deficiency List.
11. Contractor shall train employees on all equipment operated and maintained by Contractor including new equipment added during construction or renovation. The Contractor shall maintain records of the training and make records available to upon request.
12. Complete the government-furnished NCMMS training.
13. Complete the Energy and Water Efficiency Use Plan for the upcoming year.

C.6.1.2 STARTUP PHASE SCHEDULE

Within 30 days of the startup phase, the Contractor shall submit a schedule and staffing plan to the CO or their designee for the startup phase. This plan shall describe, by week, work to be accomplished. At the end of each week during the startup phase, the Contractor shall submit a

letter report describing work accomplished during the startup phase.

C.6.1.3 ADJUSTMENTS AND CORRECTIONS

The Contractor shall be responsible for making immediate adjustments or corrections that fall within the scope of routine preventive maintenance required by this Contract at no additional cost to the Government. This includes, but is not limited to: making adjustments to controls; adjusting the BAS software, e.g., correcting set points; reloading programs; restoring equipment being operated manually to automatic operation (this does not include changing established sequences of operation or programming sequences); applying lubricants; cleaning fan housings, fans, coils, dampers, air handling unit (AHU) Sections, and equipment rooms; and replacing consumable parts or components. The Contractor shall identify for the Government all alarm points with originating point identification information (device ID, point number, description), so that the Government, at its discretion, may arrange for automatic generation of work orders from alarm conditions.

C.6.2 PHASE-OUT TRANSITION PERIOD

When the Contract ends, the Contractor shall cooperate with the incoming Contractor during a phase-out period. For planning purposes, the Contractor shall assume a phase-out period of 60 days.

During this phase-out period, the Contractor shall:

1. Assist the CO or their designee and incoming Contractor for a seamless transition in operations and maintenance with no adverse effect on the building tenants;
2. Provide GSA and the successor Contractor with access to all records and official documentation (both hard copies and electronic as applicable) required by this Contract;
3. Provide training to the successor Contractor on methods of accessing and programming the building automation system (BAS) and other control systems; and
4. Show the successor Contractor where all archived programs and systems literature are maintained. On the last performance day of the Contract, the Contractor shall turn over to the CO or their designee all keys and identification badges or cards.
5. Coordinate and complete disposal, cleanup, and transfer of all materials according to applicable laws.
6. Provide all data records (database files, spreadsheets, etc.) relating to building systems, assets, work orders, permits, work activities, etc. to GSA. GSA owns all data compiled under this Contract or ancillary to this Contract.

C.6.3 DEFICIENCY LIST COMPLETION AND WITHHOLDING OF FINAL PAYMENT

The Government may create a deficiency list of unmet Contractual requirements at or near the time of termination of the Contract. The Government may employ the services of another Contractor in the development of the list and upon completion provide the Contractor with a copy of work not completed, to include the monetary value the Government has assigned for each item. The Government retains sole discretion over whether to charge the Contractor for the monetary value of the list in whole or in part or to request corrections by the Contractor. If the Government elects to request corrections by the Contractor, the Contractor shall have until the end of the Contract period to perform such corrections and may invoice for funds withheld on acceptance of the corrections by

the Government. Nothing in this Section shall be construed to limit the Contractor's liability or restrict the Government from reporting unsatisfactory or problematic performance by the Contactor.

C.6.4 GENERAL AND ADMINISTRATIVE REQUIREMENTS

C.6.4.1 MINIMUM STAFFING AND ABILITY TO CONTACT AND COMMUNICATE WITH THE CO OR DESIGNEE

The Contractor shall:

- Provide qualified staff and onsite technicians to ensure services are continued without disruption to the tenant. The Contractor must be able to respond immediately to a variety of service requests involving multiple trades, including the operation of building control and energy management systems. Technicians shall be certified and properly licensed to work on buildings systems, where applicable, in accordance with Federal, State, or Local laws, codes, or ordinances. See paragraph H.16 Personnel Qualifications for additional information.

(1) Project Manager - The project manager is a person, designated in writing by the Contractor, who has complete authority to act for the Contractor in every detail during the term of the Contract. The Project Manager shall have the authority to accept notices of deductions, inspection reports and all other correspondence on behalf of the Contractor. The Project Manager's physical location and availability shall be approved by the CO or designee.

(2) Onsite Supervisor - The onsite supervisor is a person, designated in writing by the Contractor, who has complete authority to act for the Contractor on a day-to-day basis at the work site. The onsite supervisor shall have the authority to direct the workforce and the work to be accomplished under this Contract on behalf of the Contractor. The onsite supervisor's physical location shall be at the work site. When multiple shifts are required, the Contractor shall designate a minimum of one onsite supervisor for each shift. These individuals may be classed as working supervisor if so desired by the Contractor and may perform the functions of mechanic and supervisor concurrently.

- Maintain communication with the Government during normal duty hours and after hours for emergencies. (See Section C.6.4.2, Communication Equipment).
- Immediately notify the CO or their designee of any recognized safety hazard that might severely affect the building occupants.
- Develop and submit to the CO or their designee within 30 days of Contract award a list of key personnel and emergency contact information (which may include subcontractor contacts, as applicable).
- Shall have all Contract employees, including subcontractor employees, sign in and out, upon entering or exiting the building using a log established at each building for security and Contract administration purposes.

C.6.4.2 COMMUNICATION EQUIPMENT

The Contractor shall provide key operational personnel (managers, supervisors, and duty mechanics) with portable electronic means to communicate with GSA for service requests,

emergencies, status of projects, etc. Electronic communication methods are the following:

1. Phone/Emails/Text messaging smart phone or tablet devices. The Contractor is responsible for all initial and monthly costs associated with the device. In areas where cellular service is unavailable, or unreliable, special exceptions may be made by the CO or designee on a case by case basis.
    a. Such devices must be on the list of GSA approved devices and are to be processed through GSA's procedures for remote mobile management. This will allow for mobile access to GSA email, and the NCMMS mobile environment for work order management. The process for this, and the list of currently approved devices is available upon request.
2. Fax. Receiving and sending faxes is acceptable as a secondary communication method for locations that have problems with wireless device signal strength. However, delaying faxes because of combined usage of voice and fax on the same line is not acceptable.

C.6.4.3 ONSITE RECORDS

The Contractor shall ensure that all records required by the Contract, or produced in performance of work under the Contract, are maintained in an organized manner onsite in electronic format and are made available to the Government when requested. The Contractor shall receive, maintain and gather data, as well as other materials including records and manuals, related to the support and operation of Government facilities. The Government retains ownership of all databases, information, and other materials received or developed by the Contractor in support of this Contract at all times. To the greatest extent practicable, the NCMMS shall be used for records documentation.

C.6.4.4 SERVICE REQUESTS AND ADMINISTRATIVE SUPPORT

The Contractor shall operate a service request and administrative support function during normal working hours, to act as a central point of contact for the Government and building occupants to take service requests, and track and maintain service request records in the NCMMS. This includes service requests for work not under the scope of this Contract (i.e., performing a central service request desk function for the facility, regardless of who is responsible for responding to the service request).

All service requests and resultant work orders shall be documented in the NCMMS and annotated with cause and resolution information, time of receipt, work start, and completion, as well as time to complete any necessary action.

C.6.4.5 USE OF NCMMS

GSA's goal is to use Government-furnished NCMMS in all locations.

The Contractor will perform only as an end user in the NCMMS. ALL system programming is the burden of the Government.

The NCMMS is the system of record for the equipment/asset list, preventive maintenance schedule, and work orders. All data in the NCMMS belongs to GSA, and the Government may use NCMMS for reports, quality assurance, and data calls. Additionally, Contractor shall provide

reports, data, etc, when requested by the CO or his/her designee.

All personnel requiring access to GSA's NCMMS will be required to obtain government access account ENT credential and will need to maintain an up to date system profile. At a minimum this will entail logging into the GSA system at least every 90 days to maintain an active profile, as well as completing annual GSA IT Security Training courses through GSA's Online University (https://gsaolu.gsa.gov).

The Contractor shall utilize NCMMS to handle mobile work management practices to the greatest extent practicable. This includes using the NCMMS mobile application for: management and input of work orders, and documentation of time to complete work orders in real-time when possible.

The Contractor shall provide within the startup period, NCMMS transition services in order to assist transitioning between incumbent and incoming contractors. The purpose of this phase is to permit a transition that is seamless to the tenants and to assess incomplete maintenance work at the time of transfer. The contractor is to review the current schedule of maintenance and shall revalidate in line with accepted proposed maintenance schedule. The contractor shall be responsible for creating the preventive maintenance schedule in the NCMMS and entering data of past performance of maintenance for each piece of equipment where needed.

During the transition period the Contractor shall:

a. Revalidate NCMMS copy of equipment inventory. Provide work order history and document all deferred or open work orders. Provide a consolidated list of work orders that are deferred, open, or pending completion.
b. Input the preventive maintenance schedule into the National NCMMS. Cross-check PM schedules and guides used by contractor versus PM guides and schedules in the NCMMS. The new periodic maintenance schedule and guides shall be based off of the last time PMs were performed and in accordance with the requirements of the contract.
c. Complete the government-furnished 1-day (9 hour) NCMMS training for NCMMS administrator (1 person per contract at management level). Complete the 2 day (18 hour) NCMMS training for scheduler and end user (1 person per contract). Training may be accomplished in segments over separate periods of time.

After GO LIVE the Contractor shall:

GLa. Use the NCMMS to provide current contract monthly submittal requirements, such as monthly reporting and identify completion of scheduled work orders, contract reports of accomplishment of services instead of the current manual reporting where able to replace with NCMMS functions and provide to the CO or designee.

GLb. Audit the NCMMS inventory in an ongoing basis, and annotate in the NCMMS equipment needed to be added or changed. Provide change recommendations and make changes as directed by the implementation process and at the direction of the CO or his or her designee.

GLc. Maintain equipment data in the NCMMS including Equipment ID, Equipment Type, Equipment Description, Asset Identification Code, Manufacturer, Model Number, Serial

Number, Equipment Status, Building Number, and Location (including floor, room, and location description).

C.6.5 BUILDING OPERATION PLAN

C.6.5.1 BUILDING OPERATION PLAN

The Contractor shall revise or prepare and submit for approval to the CO or designee, not later than the end of the startup or transition phase a building operating plan outlining their operating and general maintenance procedures for all major building equipment and systems (See Section C.6.4.2, Components of the Building Operating Plan, below). The purpose of the building operating plan is to be a standalone document that is a vehicle for the Contractor to document their plan for operating and maintaining the building and it is also a repository for several documents required throughout the Contract. One of the objectives of this plan is that if key personnel are not available then authorized staff should be able to refer to the BOP and manage and operate the building. The BOP contains critical information such as: who to contact, emergency procedures, energy plan, hours of operation, locations of emergency shut off valves, the location of OEP, COOP, Drawings, and equipment Inventory. The Contractor shall execute the Contract requirements in accordance with the approved building operating plan. The Contractor shall coordinate with the CO or their designee in developing the components of the plan in accordance with the building operating plan template provided by the CO or designee. The building operating plan shall be submitted as an electronic file (MS Word) with regular updates that reflect current personnel, subcontractors, equipment, systems, and operating procedures. The Contractor shall annually review and update the building operating plan and submit an electronic file (MS Word or searchable PDF) of the complete updated building operating plan on the anniversary of the Contract start date of each Contract year. If the Contractor fails to submit a satisfactory building operating plan at the end of the startup phase, the Government may suspend payments until a satisfactory plan is submitted.

C.6.5.2 COMPONENTS OF THE BUILDING OPERATING PLAN (BOP)

The components of the building operating plan are not additional requirements but a compilation of requirements stated throughout the SOW. Some of the information/documents will be provided by the CO or designee to complete this plan, such as OEP, COOP, drawings, etc. The building operating plan shall contain:

1. Contact information (Local and corporate).
2. Description of staffing, responsibilities, and work schedules.
3. Standard operating procedures for operating building systems, to include at a minimum:
   a. Startup and shutdown times and procedures relative to various environmental conditions.
   b. Procedures to accommodate tenant overtime utility requests. Provide listings of mechanical equipment, hours of operation and separate procedures for heating and cooling.
   c. Energy Conservation, Management and Control Systems, Peak load demand management procedures, AMS data for conservation strategies (if applicable).
   d. Other operating strategies to maximize efficiency and minimize energy consumption.
   e. Descriptions of major mechanical equipment and sequences of operations for equipment systems such as schedules, settings, start-ups, shut-down, control sequences, etc.

f. Locations of all major utility shutoffs, including gas, electric, and water.
g. Locations of all electric rooms and a narrative of the areas served by each to include emergency generators, substations and transformers, equipment that is on the emergency generator

4. Architectural and Structural systems maintenance (facade, roof, gutters, drains, windows etc)
5. Tour and watch locations, sign-in and documentation procedures.
6. Maintenance schedules, procedures, and a reference to which preventive or predictive maintenance standards or guides the Contractor will use. For fire protection and life safety systems include specific references to which inspection, testing, or maintenance shall be performed each week, month, quarter, semi-annually, annually, 5 years, etc., in a format for the applicable NFPA code or standard.
7. List of test equipment to be maintained onsite to support troubleshooting, sensor calibrations, etc.
8. Vertical Transportation, if applicable, escalators, elevators, dumb waiters or note Contractor information.
9. A description of how building equipment data is maintained and updated. Service request and repair procedures, to include staffing and procedures for the service requests, during operating hours, after hours, and emergency function, if applicable.
10. Safety, Security, Disaster Emergency Response, Recovery and Reporting Procedures Reference the location or incorporate contingency plans for:
    a) Loss of the Contractor's onsite personnel (i.e., strike, walkout, injury, abrupt resignation).
    b) Civil disturbance or major security threat.
    c) Natural disasters, bombing, or other event that damages the building's structure or utilities.
    d) Floods, including flooding caused by plumbing breaks.
    e) Hazardous materials including asbestos, lead paint, leaks or spills, water management
    f) Utilities curtailment plans and shut off locations.
    g) Inoperability and impairment of fire protection and life safety systems (including fire watch and impairment procedures (e.g., red tags, etc.).
    h) Location of fire alarm control unit/fire control room/instructions to operate PA system in emergency if applicable.
    i) Location of incoming municipal fire protection water supply
    j) Location of fire sprinkler riser rooms
    k) Location of fire pump.
    l) Location of sump and sewage ejector pumps and emergency procedures.
    m) Pressure booster and reducing stations, back flow preventers.
    n) Underground Storage Tanks.
    o) Confined Space Locations.
    p) Portable Fire Extinguisher Locations
    q) Defibrillator Locations
    r) Radon mitigation program if applicable.
11. Other contingency plans as necessary to support the Government's Continuity of Operations (COOP), Occupant Emergency (OEP), and Shelter in Place planning for the site. Description of environmental regulatory requirements such as Air Quality Management District and include rules that apply to equipment in the building, which permits are necessary, inspection and certification requirements and other essential information. Identify how the administrative and technical requirements will be managed for the timely accomplishment of all Contract

requirements.

12. Assignments of Responsibilities: Identify personnel with Quality Control Plan functions and the personnel with authority to commit funds, and the dollar level of that authority for this Contract.
13. Description of demand response or utility curtailment programs in which the building participates, to include communications protocols and curtailment activities.
14. Location of equipment inventory list.

C.6.6 EQUIPMENT INVENTORY

The Contractor shall:

1. Maintain and update the building equipment inventory and equipment labeling.
2. Maintain equipment inventory and maintenance records in the NCMMS.
3. Maintain the same asset identification system currently used for new and replacement equipment unless a national asset identification standard is provided. Some asset identification systems include bar-coding, Radio Frequency identification (RFID), or other equipment tagging.
4. Collect and maintain an inventory of: (1) all equipment of types that require maintenance or certifications pursuant to the PBS Maintenance Standards or applicable code requirements, (2) equipment which is operated through a sequence of operations, (3) electronic controllers and network devices, (4) sensors, (5) Agency owned sensors , if applicable.
5. Collect and maintain the following equipment data: Equipment ID, Equipment Type, Equipment Description, Asset Identification Code, Manufacturer, Model Number, Serial Number, Equipment Status, Building Number, and Location (Exhibit J. 15).
6. The Contractor shall provide all data to GSA in a format approved by the CO or designee with certification that the inventory is complete and accurate. For all sites using the NCMMS, the NCMMS the required format for providing inventory data.
7. The Contractor shall annually certify that the Maintained Building Equipment Inventory is up-to-date and submit the certified inventory to the CO or designee.
8. The Contractor shall update equipment data when equipment is added, removed, or retrofitted as part of a project, or discovered by GSA or the Contractor.
9. The Contractor shall review and update equipment records including asset information, maintenance records and preventive maintenance records any time maintenance is performed on a piece of equipment.
10. The Contractor shall report to the CO or their designee changes to the asset inventory and preventative maintenance schedule within five working days of collecting and gathering equipment information.

Omissions on existing inventory do not relieve the Contractor from the responsibility for the maintenance of the equipment. If the inventory data does not meet Contract requirements, action to withhold payments will take place. The Contractor may request equitable adjustment pertaining to physical changes in building equipment and submit to the CO or designee for consideration.

C.6.7 MONTHLY PROGRESS REPORTS

The Contractor shall develop a monthly progress report using NCMMS data or other reporting system data, describing the status of maintenance and operations as of the last day of the performance month. The report shall be submitted to the by the 5th working day of the subsequent

month.

This report shall include:
Work Order status of all types of maintenance, repairs, service calls (highlight overdue and tenant complaints), to include deferred, completed, and active (include estimated completion date), by type of work i.e., reimbursable, repair, and work orders resulting from testing and inspections, and any equipment out of service.

1. Explanation of any equipment, designed to be controlled by the BAS, operating in manual mode as of the end of the performance month, and of any other overrides to sequences of operations in effect as of the end of the performance month.
2. Operating schedule changes (manual or programmed)
3. Description of any lost time accidents or other safety problems, including incidents involving hazardous materials that occurred during the performance month
4. Copies of quality control inspections performed during the month attached to the report.
5. Building Management Support Services (utility hours/miscellaneous work) provided during the month.
6. Copy of arrival and departure reports
7. Monthly water treatment test results
8. Recalibration documentation of advanced metering equipment.
9. When testing is performed, the Contractor shall submit results with the next monthly progress report
10. Refrigerant control logs shall be updated as required, and a copy sent with the monthly report.
11. The Contract shall record the fuel levels monthly and report findings in the Monthly Progress Report
12. Review of energy performance trends as of the end of the performance month and description of likely causes of significant changes from the same month 1 year prior.
13. Check and record diesel fuel levels

C.6.8 PERFORMANCE REVIEW MEETINGS

The Contractor shall meet with the CO or their designee and other Government representatives, at the discretion of the CO or designee, to review Contract performance.

C.6.9 EQUIPMENT CONDITION ASSESSMENT

During the performance of the requirements of this Contract the Contractor shall note the condition and efficiency of building equipment and systems on an ongoing basis in the NCMMS. Any equipment or systems that the Contractor determines are reaching the end of their life cycle shall be brought to the attention of the CO or their designee. When requested, the Contractor shall complete and submit to the CO or their designee an itemized equipment condition assessment with their recommendation for equipment or system upgrades or replacements (that has

reached end of their life cycle) , including a text description of each recommended upgrade or replacement and their life cycle cost analysis that shall include estimated project cost. The equipment condition assessment reports shall be produced in Word, Excel, or PDF format and submitted electronically as an email attachment to the CO or their designee.

C.6.10 OCCUPANT FEEDBACK PROGRAM
RESERVED

C.6.11 REFERENCE LIBRARY

The Contractor shall maintain a comprehensive reference library that includes building design or record documents, renovation or equipment retrofit design or record documents, maintenance reference documents, applicable NFPA codes and standards, fire protection system as-built drawings, fire protection system operations and maintenance manuals with copies of approved submittals, fire protection system parts list, fire protection system zoning scheme, fire protection system sequence of operation matrix, HVAC Operations Manual (if one has been developed), building operating plan, energy and other building technical studies, hazardous materials surveys, and other documents necessary to document the design, function, and condition of the building. The Contractor shall safeguard this information in accordance with the provisions of Section H.6., Sensitive but Unclassified Building Information (SBU).

C.6.12 REVIEW OF DESIGN DOCUMENTS

Utilizing the most qualified onsite personnel familiar with the operations of the facilities covered under the scope of this Contract, the Contractor shall review design and construction project documents as requested by the CO or designee. The purpose of this review is to allow the Contractor to comment on any negative impact the proposed project may have on their ability to efficiently operate the building equipment or systems. When requested to perform these services, the Contractor will be compensated for the actual time required spent at the hourly specified in Section B of this Contract. Report number of hours provided in the Monthly Progress Report C.6.7. The Contractor should also be allowed to provide input or propose ideas that may improve the operations and provide value engineering.

C.6.13 BUILDING MANAGEMENT SUPPORT SERVICES (MISCELLANEOUS AND UTILITY ESCORT SERVICES)

The Contractor shall provide reasonable and competent assistance during normal working hours to GSA personnel or other GSA Contractors performing energy studies, engineering studies, building condition evaluations, fire protection facility surveys, project designs within the building, and other access needs. Such assistance shall include escorting investigatory personnel through spaces in the building in accordance with building security requirements, explaining the operation and condition of equipment and systems to investigatory personnel, and providing access to trend data, maintenance records, reference library materials, and other pertinent building technical data to investigatory personnel. The CO or their designee shall inform the Contractor as far in advance as possible of the actual date and time these services are needed. At the discretion of the CO or designee the contractor may be directed to use Miscellaneous Work hours to perform these services. When not directed to use Miscellaneous Work hours to perform these services the Contractor will be compensated for the actual time required to escort the GSA personnel or

Contractor at the hourly rate specified in Section B of this Contract. Report number of hours provided in the Monthly Progress Report C.6.7.

C.6.14 INSPECTION ASSISTANCE FOR SPACE BUILD OUTS

When tenant improvement or space alteration work is completed in the building, the CO or their designee may request that the Contractor inspect the space to verify that all offices have appropriately zoned air supply and return ductwork and diffusers, appropriately zoned lighting circuits, and all zone HVAC/lighting controls have been adjusted appropriately and labeling of breakers in electrical panels and outlet cover circuit designations are complete.
Obvious problems or conditions that may potentially affect the efficient operation of the building or create a negative impact on the tenant shall be immediately reported to the CO or their designee.

C.6.15 EMERGENCY SHUTDOWN INSTRUCTIONS AND TOUR CHECKLISTS

Emergency shutdown instructions (including contact name and telephone numbers) and tour inspection checklists and Lock-Out-Tag-Out procedures shall be posted by the Contractor in all mechanical rooms and or electrical rooms, as applicable to the equipment in the given room. Such instructions and checklists shall be posted in an accessible and conspicuous location. All instructions and checklist will be recorded in the NCMMS.

C.6.16 LABELING OF ELECTRICAL CIRCUITS

The labeling of the electrical circuits shall be maintained up to date. When another Contractor (not the O&M Contractor) adds or modifies electric circuits the O&M Contractor shall inform the CO or their designee the compliance of annotating the changes to the panel and the update to the single line diagrams using the original electronic file format.

C.6.17 OPERATIONAL REQUIREMENTS

C.6.17.1 GENERAL

The Contractor shall provide building operations services for all systems covered by this Contract, so as to maintain uninterrupted utilities services, and environmental conditioning to tenants during normal working hours, and at other times as described in this document, so as to preserve the asset value of the facility and its systems and to otherwise minimize operating costs to the Government without compromising other Contract objectives or requirements. The Contractor shall be briefed by the property manager on GSA's policy regarding overtime utilities to better understand what is considered standard and above standard services. Some or all of these requirements are to be documented or referenced in the Building Operating Plan, see Paragraph C.6.4.2.

C.6.17.2 EXTENDED OPERATING HOURS

The following areas of the building regularly operate during hours outside of normal working hours; supporting equipment shall be operated and maintained by the Contractor so as to support these extended operating hours.

Areas of the building with extended operating hours may change during the performance period of

the Contract. The Contractor will be notified of these changes as soon as possible.

C.6.17.3 CONTINUITY OF OPERATIONS (COOP)
The Contractor shall operate the facility and participate in emergency operations in support Occupant Emergency Plan (OEP) as specified in Section H.22.

C.6.17.4 EMERGENCY OPERATIONS PLAN
The Contractor shall be responsible for developing an emergency operations plan within the building operating plan and shall become thoroughly familiar with the Government's occupant emergency plan and other regional plans as applicable. The Contractor's plan shall include the following information: position and contact phone number of each Contractor person, what each position is responsible for in each emergency, general administrative support the Contractor will provide during emergencies and any subcontractor support and contact information.

C.6.17.5 TENANT ENVIRONMENT
Lighting levels shall be adjusted under the guidance of the CO or their designee where they can be adjusted without changing fixtures (e.g., tuning dimmable ballasts, de-lamping). The Contractor should note that while the PBS P100 establishes target lighting levels, light quality, specific tenant requirements, energy conservation, and other individual factors also have an impact on requirements. Environmental standards shall meet ASHRAE Standard 55-2004, Thermal Environmental Conditions for Human Occupancy and ASHRAE 62.1-2007, Ventilation for Acceptable Indoor Air Quality (Guiding Principles) and be maintained throughout normal working hours in the most efficient sequence and equipment startup shall occur efficiently in order to fully attain environmental conditions at the beginning of normal working hours. The contractor shall comply with the FMR 102-74.185, and strive to achieve temperature settings of 74°F and 78°F ± 2°F in the summer months and 68°F and 72°F± 2°F in the winter months per Executive Order 13423. These recommended temperature settings are for the entire building not individual offices. The Contractor shall report significant changes in the operating conditions to the CO or designee. If the building is incapable of meeting the standards and changes of ASHRAE Standards 55 and 62, such deviation shall be explicitly reported to the CO or their designee.

C.6.17.6 ENERGY AND WATER EFFICIENCY
The Contractor shall operate equipment and systems as efficiently as possible without compromising service to the tenants. Failure to operate equipment prudently (e.g., unnecessarily setting demand peaks, simultaneously heating and cooling, operating equipment when not needed, overriding set point unnecessarily, or failing to correct underlying conditions) may result in deductions. The CO or their designee will provide the Contractor with Operational Performance Targets (See Exhibit 10) for energy and water, where data is available within the first quarter of the award of the Contract. The Contractor shall populate the Building Energy and Water Efficiency Use Plan Exhibit 18 or Annual Building Energy and Water Efficiency Report Exhibit 20 provided by CO or their designee to achieve the yearly energy and water targets. The plan shall identify measures to conserve energy, any operational or physical changes to the system, plant, or equipment, and optimization opportunities to reduce consumption or cost. The Contractor shall report monthly and annually (Exhibit 19&20) energy and water usage as compared to the previous year and document energy and water saving initiatives and reasons why performance goals were or were not met. The report shall be submitted to the CO or their designee by the 5th working day

of the subsequent month. The Contractor is to make full use of available analytic tools (e.g., BAS, AMS, GSAlink data) to diagnose problems and identify operational improvements. The Contractor, in coordination with the CO or designee, shall pursue the use of energy-efficient replacement parts and equipment items (not limited to Energy Star ® or FEMP-designated Energy Efficient products, Water Sense, Design for the Environment products) that will meet or exceed the requirements of this statement of work. In cases where equipment is being replaced or upgraded to high efficiency models the Contractor shall investigate all potential energy rebates that would be advantageous to the government. Any rebates received from a service utility provider shall be assigned to the Government.

C.6.18 SYSTEM PERFORMANCE STANDARDS OR PROCEDURES

C.6.19 SERVICE REQUESTS

C.6.19.1 GENERAL

The Contractor shall respond to service requests and initiate corrective actions and identify any repair requirements during normal working hours. The Contractor shall respond to emergency service requests (during normal working hours) and callback (after hours) work requests at all times. The Government (or, where applicable, the tenant Agency) may transmit work orders to the Contractor for service request or emergency service request and callback orally, by email, by creation of a work order by a Government employee or representative, or by generating an automated work order. The Contractor shall respond according to specified service response times.

C.6.19.2 EMERGENCY SERVICE REQUEST

Emergency service requests are service requests where the work consists of correcting failures that constitute an immediate danger to personnel or property, including but not limited to: broken water pipes, electrical power outages, electrical problems that may cause fire or shock, gas or oil leaks, major air conditioning or heating problems, etc., or any work considered by the CO or their designee to be of an emergency nature. The Contractor shall respond to emergency service request immediately (within the shortest possible time consistent with the mechanic's location) during normal working hours and within 15 Minutes. The Contractor shall remain on the job until the emergency situation has been secured and adequate temporary repairs have been made. Permanent repair shall be governed by the repairs provisions in this document.

C.6.19.3 EMERGENCY CALL BACK (AFTER HOURS)

Emergency call back requests are service requests where the work consists of correcting failures that constitute an immediate danger to personnel or property, including, but not limited to: broken water pipes, electrical power outages, electrical problems that may cause fire or shock, gas or oil leaks, major air conditioning, heating problems or fire alarm malfunctions, etc., or any work considered by the CO or their designee to be of an emergency nature. The Contractor shall respond to emergency call back service request immediately (within the shortest possible time consistent with the mechanic's location) after working hours within 1 hour. The Contractor shall remain on the job until the emergency situation has been secured and adequate temporary repairs have been made. Permanent repair shall be governed by the repairs provisions in this document. The Contractor shall provide a written accounting of any emergency call back, to include costs incurred and plan for permanent correction of the problem, to the CO or their designee the morning

of the next working day.

C.6.19.4 URGENT SERVICE REQUEST RESPONSE

Urgent service requests are those service requests where the work consists of correcting failures that interrupt or otherwise adversely impact either GSA operations or building occupant operations, but do not pose immediate danger. Examples of these types of service requests include, but are not limited to, inoperative electrical circuits, temperature complaints, inoperative lighting above a work station, flush valve stuck open, any malfunctions to equipment that affect the operations of building occupants, or any work considered by the CO or their designee to be of an urgent nature. The Contractor shall respond to urgent work requests within 1 hour during normal working hours. The Contractor shall remain on the job until the urgent repairs have been made. Permanent repair shall be governed by the repairs provisions within this document.

C.6.19.5 ROUTINE SERVICE REQUEST RESPONSE

The Contractor shall respond promptly to routine work requests (i.e. plumbing & lighting issues) and complete the required work within 4 hours of notification. The Contractor shall immediately notify the CO or their designee with a written extension when the routine service call cannot be completed within the specified timeframe.

C.6.20 TOURS

C.6.20.1 GENERAL

The Contractor shall tour major building equipment at set frequencies. Log sheets associated with major operating equipment shall be completed at the time of tours and the information recorded in the NCMMS. At the commencement of Contract performance, CO or their designee will direct the Contractor to include on the log sheets established design condition numbers for reference against actual readings at the time tours are performed. Paper log sheets need not be used for equipment monitored and data logged by the BAS, if such monitoring and data logging provides a sufficient database of operating data to allow for analysis of trends in equipment performance and troubleshooting. The Contractor shall document all tours completed in the NCMMS. All findings noted during the tour shall be entered as remarks on the tour sheet and a work order shall be initiated for corrective action by the Contractor.

C.6.20.2 OPERATING LOGS AND TOUR CHECK SHEETS

Operating logs and tour sheets shall be maintained by the Contractor for major equipment. Information recorded on the logs shall be adequate to track the operating hours and performance history of the equipment and the information recorded in the NCMMS. Tour check sheets shall be stationed at major points for building tours (for example, air handler rooms). These shall be checked, initialed and dated by the Contractor when tours are performed. There shall be different checklist columns on a standard tour check sheet for each frequency. Tour sheets shall contain columns for major operating parameters and shall indicate the tolerance bands for acceptable performance, where available.

C.6.20.3 TOUR FREQUENCIES

Minimum:

1. DAILY: Major HVAC equipment (when in operation), including boilers, chillers, cooling towers, pneumatic control air compressors, and air handler rooms. Fire alarm system control units (e.g. fire alarm system control units shall not have any unwanted trouble conditions). Steam system reducing and regulating stations. Special HVAC for critical functions.
2. WEEKLY: Distributed HVAC equipment including package units and external condensers, pumps, motors, sewage ejectors, fire pumps, and generators.
3. TWICE PER MONTH: Battery systems and uninterruptible power systems (UPS).
4. MONTHLY: Transformers, secondary electrical rooms, switchgear and primary electrical equipment rooms, condensate drip pans and roofs.

C.6.20.4 CONDENSATE DRIP PANS

The Contractor shall conduct inspections of the condensate drip pans of all air handling units, A/C package units, window A/C units, and other equipment items and or systems that physically have drip pans to ensure that they drain properly. Such inspections shall be conducted in accordance with the tour program and be performed no less frequently than monthly. Pans that are not level or that leak shall be reported to the CO or designee. All drip pans shall be treated with an appropriate biocide to control the growth of algae, etc. If any condensate pans are inaccessible, the Contractor shall notify the CO or their designee immediately.

C.6.20.5 MONITORING OF CENTRAL PLANT EQUIPMENT

Where central plant equipment is not (1) controlled through a sequence of operations programmed in a BAS, and (2) centrally alarmed with alarm paging, operational watch procedures, in addition to tour requirements specified elsewhere in this document, shall be performed as follows:

1. Monitoring the starting, stopping, and loading of equipment.
2. Checking all operating equipment in the watch area every 2 hours.
3. Recording operating data in appropriate logs or records every 2 hours.
4. Making adjustments at the central control panel in response to changing operating conditions.

For fire protection and life safety systems, tour frequencies shall be in accordance with the requirements in the applicable NFPA code and standards.

C.6.21 DEMAND RESPONSE PROGRAMS

The Government may participate in any of the available demand response programs or critical peak pricing tariffs administered by utilities, State agencies, or third-party administrators. If the Government participates in such a program and advises the Contractor of the requirements of the program, the Contractor shall cooperate fully in the implementation of the program.

C.6.22 CURTAILMENT PROGRAM

The Contractor shall develop a curtailment program in consultation with the CO or their designee and subject to approval; the program shall be described in the BOP (C.6.4.2). The Contractor shall implement all approved curtailment measures (which might typically include turning off unnecessary lighting, implementing temperature setback programs, etc.) immediately on

notification of a curtailment, in accordance with the plan. Failure to diligently manage systems in accordance with such programs may result in performance deductions for excess costs.

C.6.23 BAS ALARM RESPONSE

The Contractor shall maintain all BAS systems using qualified employees. BAS alarms shall be treated as service requests and responded to accordingly. Any major adjustments to set points to accommodate tenant comfort shall be approved in advance by the CO or designee. Repetitive or associated alarms may be treated in the aggregate and tracked under the work order system established in the NCMMS. Communications for alarms set up for remote notification shall be tested on a recurring basis.

C.6.24 ADVANCED METERING PROGRAM

GSA's purpose for installing these meters is to monitor, identify, and implement opportunities to reduce energy usage at the building(s) and, in some cases, to verify that the utility companies are billing correctly. In many cases, the AMS will be connected to the BAS. It shall be the Contractor's responsibility to partner with GSA to fully utilize the AMS to develop and implement strategies that will result in overall energy reductions per Section C.6.17.6. The Contractor shall have all access to the AMS and be trained in its use as stipulated in H.16.3.16, Qualifications of AMS, BAS Technicians. The Contractor shall be trained in its use of advanced meters and shall demonstrate minimum competency in developing energy/water usage graphs and where electric advanced meters are capable of measuring power quality, the contactor shall be sufficiently familiar with the software module to utilize this information when troubleshooting electric power issues such as transients, voltage disturbances, power factors, and harmonics.

C.6.24.1 VERIFICATION AND CALIBRATION

The Contractor shall verify daily that each of the advanced meters is functioning properly and are communicating to the regional and/or central office server. Where advanced meters are connected through the BAS, the Contractor shall verify- daily, proper information and data sharing. Any communication failures shall be corrected prior to any loss of data. In the event of a communications failure, the Contractor should refer to both the manufacturers and GSA's troubleshooting guides. The Contractor shall be responsible for the recalibration of the advanced meters in accordance with the manufacturer's recommended frequency or sooner if there is evidence that the meters are not reading correctly. Calibration shall be scheduled in advance along with other building preventive maintenance tasks. Documentation of the recalibration shall be submitted with preventive maintenance reports. Where weather sensing equipment is installed as part of the AMS, Contractor shall ensure proper daily communication and shall recalibrate in accordance with the manufacturer's recommended frequency.

C.6.25 PROTECTION AND DAMAGE

The Contractor shall make reasonable efforts to assist the Government to prevent hazardous conditions and property damage and to maintain security. The Contractor shall promptly report such conditions or activities to the CO or their designee or Federal Protective Service (FPS) personnel. The Contractor shall protect Government property, buildings, materials, equipment, supplies, records, and data within the Contractor's control against unauthorized access, loss, or damage and excessive energy consumption. The Contractor shall establish a system for onsite

work force personnel to report potentially hazardous conditions in the building to the CO or designee. The Contractor and Contractor's employees and subcontractors shall comply with the GSA's Rules and Regulations Governing Public Buildings and Grounds (as posted in the building) and shall promptly report violations by employees, or as otherwise observed, to the CO or their designee or security personnel. The Contractor shall provide reasonable assistance to security or emergency response personnel as needed.

C.6.26 NEGLIGENCE

The Contractor shall provide all labor, materials and equipment necessary for the protection of Government personnel, equipment, furnishings, buildings, and facility accessories (such as parking lots, fences, etc.) from damage caused by Contractor's negligence. Any items damaged due to work performed by the Contractor or subcontractor working for the Contractor shall be repaired or replaced to its original condition and finish at no additional cost to the Government. If equipment shall be operated beyond normal conditions to prevent damage to equipment, the Contractor will be responsible to pay for additional energy used as a result of negligence.

C.6.27 KEY CONTROL

The Contractor shall follow the building's key control program. Keys issued to the Contractor or the Contractor's personnel or subcontractors shall be signed for and not transferred to other personnel unless recorded in the key control log. The Contractor is financially liable for the cost of rekeying if keys are lost or not recovered from terminated employees or subcontractors.

C.6.28 DISRUPTIVE OR HAZARDOUS TOOLS

The CO or their designee shall approve use of impact tools and power-actuated tools during normal working hours. Burning or welding equipment may be used only with written permission from the property management office or CO or designee. A Welding and Burning Permit (GSA Form 1755 or equivalent) shall be issued in advance for each day welding or burning is performed.

C.6.29 SCHEDULED DISRUPTION TO UTILITIES, LIGHTING, FIRE PROTECTION & LIFE SAFETY SYSTEMS, OR SPACE CONDITIONING

Any work that will disrupt utilities, fire protection and life safety systems, lighting or space conditioning for building tenants shall be scheduled and approved in advance with the CO or their designee and is generally required to be performed outside of normal working hours.

C.6.30 PLUMBING AND RESTROOMS

Plumbing systems shall be maintained, repaired, and kept functional to the point of service delivery as defined by the utility company. The Contractor shall ensure all system drains, including storm drainage and roof drains, remain clear and unobstructed. The Contractor shall take any necessary steps to prevent odors emitting from drains or other plumbing systems into occupied space, to include keeping water in traps appropriately maintained. The Contractor shall clear toilet and sink blockages, as necessary. Such requests will be transmitted to the Contractor by the CO or their designee through service request procedures.

When replacing plumbing fixtures, use the most reduced water usage device as approved by the CO or designee. (For additional information see: http://www.epa.gov/watersense/)

C.6.31 MAINTENANCE PROGRAM

C.6.31.1 GENERAL

The Contractor shall establish an effective system for scheduling and performing scheduled preventive maintenance on all building equipment and systems requiring a preventive maintenance procedure covered under the scope of this Contract. The Contractor shall submit this system to the CO or designee, including the list of items receiving a preventive maintenance procedure as well as the specific maintenance standard or guide describing the preventive maintenance procedure and frequency (see Section C.6.31.2, Maintenance Standard, below), for approval within 60 days prior to Contract start date.

C.6.31.2 MAINTENANCE STANDARD

As part of the Contractor's established system for scheduling and performing scheduled preventive maintenance (See C.6.31.1, General, above), the Contractor shall propose to the CO or designee, preventive or predictive maintenance standards or guides for each piece of equipment where the manufacturer/designer recommends preventive maintenance. Minimally, the preventive or predictive maintenance standards or guides proposed by the Contractor shall be based on; manufacturer's recommended maintenance or the most current Public Buildings Service Operations and Maintenance Standards 2012 (PM Guide) or guides proposed by Contractor. The preventive or predictive maintenance standards proposed by the Contractor may be based on a combination of equipment manufacturer's recommendations, the PBS O&M Standards, (PM Guide), sensor technology, diagnostic software, Contractor's experience and other sources. The equipment requiring Contractor proposed preventive or predictive maintenance standards or guides shall include all of the building equipment when any of the following equipment characteristics apply:

1. The equipment normally requires periodic replacement of consumable components.
2. The equipment normally requires periodic or occasional cleaning.
3. The equipment has moving parts.
4. The equipment is prone to failure before overall obsolescence of the system it serves.
5. The equipment is of a type itemized in the NETA, Maintenance Testing Specifications.
6. The equipment requires inspection, testing, and maintenance in accordance with NFPA codes and standards.
7. The equipment requires maintenance in accordance with any other provision of this Contract.
8. The contractor shall schedule preventive maintenance on new equipment in the NCMMS system when the extended maintenance service is completed by the installer and ensure that all pertinent warranty information and proposed maintenance plans are sufficient to uphold our obligations under the warranties.

The Contractor shall not use any Contractor-proposed preventive or predictive maintenance standards or guides or any of the Public Buildings Service Operations and Maintenance Standards guides to perform inspections, testing, and preventive maintenance on fire protection and life safety systems and equipment. The Contractor shall be required to use the NFPA Codes and Standards specified in this document to perform inspections, testing, and preventive maintenance of fire protection and life safety systems and equipment. In addition, the Contractor shall be required to follow the specific testing and inspection frequencies and methods specified in such NFPA Codes and Standards. The Contractor shall record such inspection and testing services on the appropriate NFPA inspection and testing forms

C.6.31.3 APPLICATION OF DIAGNOSTIC SOFTWARE

GSA is fielding diagnostic and optimization software to detect problems and inefficiencies in equipment operation. The Contractor shall act on the recommendations of such diagnostic and optimization software reporting. This may include using the results of the diagnostic and optimization software to manually generate a service request, or to respond to a service request automatically generated by the diagnostic program application. The failure of the Government to implement such diagnostic programs does not relieve the Contractor of responsibility for detecting, diagnosing, and correcting deficiencies and inefficiencies.

C.6.31.4 BAS CONTROL SYSTEMS

Control systems shall be maintained as designed. The Contractor is responsible for all system hardware; for keeping software functioning and for reloading software in computers or controllers (application specific controllers -ASC) as necessary; for making set point adjustments as necessary and appropriate; for other than reloading programs and for making operator level changes such as set point adjustments. The Contractor is also responsible for periodic backups when the OCIO's office does not provide this function. The Contractor is not responsible for upgrading software but should inform GSA of software update revisions and patches. The Government may upgrade or change control system software or reprogram control systems during the performance period of the Contract. If the Government provides operator level training and operator level documentation for the Contractor's use, the Contractor shall not claim additional payment for changing to the new or upgraded software or control programs. The Contractor shall not modify sequences of operation or control programs or run systems manually without prior approval of the CO or their designee and regional subject matter expert (SME).

C.6.31.4.1 BAS OPERATING STANDARDS

All computers networked with building monitoring and control systems located inside GSA facilities, or which provide storage of and/or access to GSA data, which includes data related to energy usage, industrial systems controls, physical access controls, lighting controls are required to be hosted exclusively on GSA's physical network and system infrastructure, unless otherwise excepted. The contractor shall maintain the following minimum standards:

C.6.31.4.1.1 GSA-HOSTED SYSTEMS REQUIREMENTS

1. All building monitoring and control systems, applications and devices will be implemented as designated in the P100 (2011 or newer) and the PBS Building Technology Policy. Additionally, all government IT systems are required to meet FISMA standards for IT security.
2. All building systems software, server and workstations based, will be hosted on Government furnished equipment (GFE)
3. All IP traffic is managed by GSA, and IP addresses as well as all routing and switching equipment will only be furnished exclusively by GSA.
4. All vendors provided software that has an End User License Agreement must be presented to and approved by GSA Office of the General Counsel before that software is purchased.
5. Operations and Maintenance contractors will be responsible for supporting all cabled path ways to include copper and fiber cabling, necessary to enable IP network communication among system devices and network components, to include all break/fix requirements. All new

cabling, to include break fix, should be done in accordance with PBS Telecommunications Distribution and Design Guide.

6. Operations and Maintenance contractor is responsible for software and security updates to all vendor provided systems devices.
7. Operations and Maintenance contract staff must receive preliminary favorable and ultimately completely favorable adjudication of their National Agency Check with Inquiries clearance in accordance with the HSPD-12 directive to obtain a GSA ENT user credential, which is required for all system access.
8. At no time should a GSA hosted building monitoring and control systems be made accessible to the public internet or via any 3rd party network connection.

C.6.31.4.1.2 EXCEPTED SYSTEMS REQUIREMENTS (NOT HOSTED ON GSA'S SYSTEM INFRASTRUCTURE)

1. An approved antivirus software subscription shall be kept in effect and the software used at all times.
2. All internet connectivity to the building control systems must be approved by GSA's Office of the Chief Information Officer.
3. All vendors provided software that has an End User License Agreement must be presented to and approved by GSA Office of the General Counsel before that software is purchased.
4. Contractor personnel shall be prevented from using the system to connect to Web sites not reasonably related to building operations.
5. Antivirus and spyware scans shall be conducted monthly.
6. The Operations and Maintenance contractor is responsible for keeping all workstation and server operating systems updated, to include Windows (or other operating system), JAVA, Adobe and all other standard software. Critical updates shall be downloaded and installed monthly.
7. Complete data backup to a CD, DVD or flash drive, to include trend logs and control software, shall be conducted whenever a software or programming change is made but no less frequently than monthly.
8. Disk drive maintenance to include defragmentation shall be performed quarterly
9. Operations and Maintenance contractor is responsible for software and security updates to all vendor provided systems devices.

C.6.31.4.1 REPORTING

The Contractor is responsible for notifying the Government if a sequence of operations or its implementation as a control program is not producing the desired results or is resulting in unnecessary energy use. The Contractor is responsible for notifying the CO or their designee if any systems are running out of sequence or manually. All instances shall be reported to the CO or their designee immediately and documented in the monthly report. The Contractor is responsible for retaining an adequate level of expertise to manage the control systems. If the Contractor does not have a manufacturer trained or equivalent BAS operator onsite, the Contractor shall enter into a subcontract, including regular scheduled support (not merely support on a contingency basis), or remote access; with a firm that has these skills. On a no less than an annual basis the Contractor is to provide a report by a qualified subcontractor verifying that all BAS system level sensors have been tested and calibrated to ensure accurate system readings / measurement and operation.

C.6.31.5 SMART BUILDING TECHNOLOGY

C.6.31.6 ONGOING COMMISSIONING/RE-TUNING

The Contractor shall conduct the six step Re-Tuning procedure described in the Pacific Northwest National Laboratory (PNNL) (http://retuningtraining.labworks.org/training/lms/). The initial frequency of the Re-Tuning is semi-annually. After completing two Re-Tuning cycles the CO or their designee in consultation with the Contractor will determine the appropriate frequency of the Re-Tuning effort based on the size and complexity of the facility.

C.6.32 WATER TREATMENT

C.6.32.1 GENERAL

The Contractor shall provide equipment, chemicals, and services (including application) required to control corrosion, scale, algae, and bacterial growth in all HVAC equipment and systems throughout the building. The Contractor shall be responsible for conformity with all pertinent Local sanitation district regulations, air quality district regulations, and other environmental regulations. Water treatment shall be performed and safety equipment (e.g., emergency eyewash stations) maintained in accordance with OSHA standards.

C.6.32.2 TOLERANCES

Water shall be kept within tolerance bands in accordance with Exhibit 9 Water Treatment.

C.6.32.3 INITIAL REPORT AND DEVELOPMENT OF PROGRAM

The Contractor shall perform a comprehensive initial water treatment analysis (laboratory analysis) within the first month of the Contract to assist in developing the water treatment plan. The Contractor shall propose a water treatment plan to be approved by the CO or designee.

C.6.32.4 COOLING TOWER WATER MANAGEMENT PLAN

The Contractor shall perform a comprehensive water treatment per the appendix in Exhibit J.9. This exhibit establishes mandatory standards for water in HVAC and domestic water systems in GSA facilities, along with information related to the intent of the standards and guidelines that in most circumstances can be used to construct a water treatment program.

C.6.32.5 CORROSION MONITORING

The Contractor shall install coupon racks, or an equivalent electronic monitoring system for corrosion, in condenser water loops, heating hot water loops, and the building main chilled water loop, if not already present, not later than 30 calendar days after submission of the water treatment plan (For the primary condenser water system, the installation of the water treatment monitoring system described elsewhere in this document meets this requirement). The Contractor shall propose the type and manufacture of the proposed coupon racks to be installed to the CO or their designee for final approval before installation. If coupon racks are present the Contractor may use such existing equipment, but is responsible for bringing it into conformity with all requirements in this document. The minimum quantity of coupons and frequency of inspections shall be described in the water treatment plan. Laboratory analysis of coupons shall be no less frequent than quarterly

for major systems (e.g., primary building condenser and chilled water loops, as opposed to specialized systems serving limited areas), and annually for other systems. At a minimum, two coupon racks shall be installed for each loop, and used to monitor mild steel and copper. Coupon racks will be the property of the Government upon installation. The Contractor shall have responsibility for maintaining (and if necessary replacing) the coupon racks for the duration of the Contract. The liability threshold for repairs does not apply to this equipment; the Contractor has full responsibility. Acceptable corrosion rates are established in the most current Public Buildings Service Operations and Maintenance Standards. Molybdenum shall not be used in GSA buildings.

See Section C.6.38.3 Water-Based Fire Protection Systems, which references NFPA 25 for information regarding evaluating corrosion of water-based fire protection systems. Contractors during their inspection of water-based fire protection systems shall verify such systems are free from corrosion.

C.6.32.6 MONTHLY TESTING

The Contractor shall provide a qualified independent water treatment specialist to draw a set of water samples monthly. Tests shall be performed as described in the water treatment plan. Samples shall be analyzed and a monthly report containing all pertinent information, relative to the conditions found, shall be submitted to the CO or their designee with the monthly progress report. In facilities where makeup water is metered, makeup water quantities used shall be tracked and reported. Types and quantities of chemicals used shall be tracked and reported.

C.6.33 OIL ANALYSIS AND OIL CHANGES

C.6.33.1 PERIODIC OIL ANALYSIS

The Contractor shall establish and implement an oil analysis program incorporating the manufacturer's recommendations. Documentation shall include periodic oil analysis tests to be performed at least annually, diagnostic standards, and thresholds for oil changes. Oil analysis shall be conducted to maintain a consistent methodology for data collection, analysis, and historical trending. Periodic oil analysis shall include, but is not limited to, chillers of 50 tons or greater cooling capacity. Periodic oil analysis shall be performed prior to annual maintenance requirements so that results may be considered in performing maintenance. When testing is performed, the Contractor shall submit a written report with the next monthly progress report. Where oil analysis indicates a need for corrective action, an appropriate work order shall be created in the NCMMS and the appropriate corrective action taken by the Contractor.

C.6.33.2 OIL AND REFRIGERANT ADDITIVES

Oil and refrigerant additives shall not be used.

C.6.34 LAMPS AND BALLASTS

The Contractor shall replace failed lamps, to include appropriate ballasts if required, with the most efficient products available in accordance with existing building standards defined by the P100 or CO or designee. In lieu of such standards, lamps shall be replaced with the most efficient products available matching type and color temperature. The Contractor shall establish and implement a lamping and ballasts recycling program for fluorescent tubes and light bulbs in accordance with Environmental Protection Agency (EPA) and GSA standards.

The use of bulb crushers is strictly prohibited.

All handling, storage, labeling and disposal of mercury containing tubes and bulbs shall be in compliance with Universal Waste Rule guidelines (http://www.epa.gov/osw/hazard/wastetypes/universal/index.htm)

The Contractor shall maintain the mercury content of all mercury-containing lamps below 75 pictograms per lumen hour, on weighted average, for all mercury-containing lamps acquired for the existing building and associated grounds. Screw-based compact fluorescent lamps may be excluded from this calculation if they meet the voluntary standards by NEMA. If the Contractor cannot find replacement lamps to meet this requirement while maintaining building standard lighting, the Contractor shall immediately bring this to the attention of the CO or designee. The Contractor shall maintain documentation of all purchases of mercury-containing lamps and provide the information within the monthly progress report to the CO or designee.

C.6.35 ARCHITECTURAL AND STRUCTURAL SYSTEMS MAINTENANCE

C.6.35.1 GENERAL

The Contractor shall maintain, repair, replace, modify, and restore all of the architectural and structural components of the building. In general, these components include walls, floors, doors, windows, docks, levelers, lighting, and all items that are part of or otherwise associated with them. The Contractor shall conduct routine inspection and minor maintenance and repair of interior and exterior architectural and structural systems components. All replacement items and parts shall be either the same quality or better than the manufacturer's original parts.

C.6.35.2 MAINTENANCE AND REPAIR

The Contractor shall perform all architectural and structural maintenance and repairs or replacements to all equipment, electrical and mechanical systems, structures, architectural finishes, and utilities, located on, within, or beneath, this facility's interior and exterior extending to the legal property line. The Contractor shall ensure the building is free of missing components or defects that could affect the safety, appearance, or intended use of the facility or could prevent any electrical, mechanical, fire protection and life safety, plumbing or structural system from functioning in accordance with its design intent.

C.6.35.3 REPAIR AND REPLACEMENT WORK

Repair and replacement work shall be complete, including touch-up painting and operational checks. The quality of the work shall ensure that repaired areas are fully compatible with and match adjacent surfaces or equipment. All replacement items shall be consistent with design documents and match existing equipment in quality, dimension, and material, quality of workmanship, finish, and color.

C.6.35.4 PAINTING

Painting is considered "touch-up," for purposes of this Contract, when it is to repair a specific damaged area of paint. Painting should extend to logical break points such as the floor ceiling

corner, doorway etc. to avoid a patched look.

Repainting to correct for normal wear and tear to painted surfaces over time is not required. Restriping of parking areas, driveways, roads, and vehicle inspection areas is required where striping is damaged or worn in a specific location, but not for general wear and tear of a large area over time. Repairs to pavement are required where a specific location is damaged but not where an extensive area is degraded. Painting in mechanical areas needed for OSHA compliance, consistent equipment appearance, or other safety reasons is required. If the Contractor must disturb materials he suspects may contain lead-based paint, the Contractor must immediately report the condition to the CO or designee. The machinery rooms including floors and the equipment located within the machinery rooms shall be painted as necessary to maintain the appearance of the room and equipment. When painting, the contractor must comply with the ANSI color coding system outlined in the ASNI A13.1, Scheme for the Identification of Piping Systems, and maintain the identity (identification number) of the equipment.

C.6.35.5 INTERIOR SIGNAGE AND DIRECTORIES

The Contractor shall maintain and update building directories, to include electronic directories and tenant common corridor signage but not electronic directories that belong to our building tenants. The Contractor shall repair damaged interior or exterior signage in accordance with the repairs provisions in this document. Other changes to interior or exterior signage may be ordered from the Contractor as reimbursable items under the additional services provisions in this document.

C.6.35.6 FINISHES MAINTENANCE

The Contractor shall ensure finishes are maintained to the manufacturer's specifications and levels that preserve a professional appearance and the integrity of the protected surface. The Contractor shall provide touch-up paint on repaired surfaces that seamlessly matches the surface and condition prior to degradation and repair.

C.6.35.7 HISTORIC BUILDING PRESERVATION

The Contractor shall provide services that protect and preserve the historical integrity of the building. The Contractor shall consider any building 50 years old as historically significant, regardless of National Register status. The Contractor shall ensure any alteration of the building performed by the Contractor or their subcontractor protects the architectural integrity and compatibility with existing building structural accoutrements. The Contractor shall consult with the CO or their designee and obtain a copy, if available, of the building Historic Building Preservation Plan (HBPP) or Historic Structure Report (HSR) prior to any renovation work performed under this Contract on a building 50 years old or older. It may be possible that an HBPP has not been developed for the buildings at the time of this Contract award. In addition to the HBPP or HSR, the Contractor shall obtain a copy of The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings. These documents shall be followed for Government purposes in the preservation of buildings. The Contractor and CO or their designee shall examine the requirements of any applicable documents for maintenance recommendations and specifications. If a conflict exists between applicable documents and Contract requirements, the Contractor shall not proceed until directed to do so by the CO or designee. The Contractor shall protect any work of art (painting, sculpture, carving, etc.) in the project area or close vicinity from possible damage during any renovation to the structure.

C.5.35.8 VERTICAL TRANSPORTATION AND ASSOCIATED EQUIPMENT

The Contractor is responsible for maintaining fire protection equipment and systems and ventilation and exhaust systems within hoist ways, elevator lobbies, and elevator machine rooms. The Contractor shall provide assistance in performing elevator testing, including after normal work hour requirements.

The Contractor is responsible for maintaining lighting, electrical equipment not directly part of elevator systems, and HVAC systems associated with elevator machine rooms and systems.

C.6.35.8 VERTICAL TRANSPORTATION AND ASSOCIATED EQUIPMENT

RESERVED

C.6.35.9 FLAG PROCEDURES

The Contractor will raise, lower, and place at half-staff the United States Flag, Agency pennants, and other flags (POW flag). This service shall be provided when directed by the CO or their designee and shall comply with requirements in the Flag Policy.

C.6.36 REPAIRS

C.6.36.1 GENERAL

The Contractor shall perform reimbursable and non-reimbursable repairs as described in this document. Repairs are handled on a shared liability basis (See shared liability math example in C.6.36.3 Reimbursable Repairs). Relatively small value repairs (non-reimbursable repairs) are the responsibility of the Contractor in their entirety, and larger repairs (reimbursable repairs) shall be approved and funded by the Government for the cost amount above the Contractor threshold. If damage is caused by Contractor negligence, the Contractor shall be liable for the full cost of repair, any other provisions notwithstanding. The intent of this Contract is to ensure that most repairs will be accomplished by in-house Contractor personnel. However, the Government recognizes that occasionally there are certain specialized repairs that require specialized skills outside the skill sets of the in house O&M personnel. If the Contractor identifies a repair that they believe is of such a specialized nature that a specialized subcontractor is required to properly complete the repair, the Contractor shall provide written justification in advance, to the CO or designee, for approval of the need to use a subcontractor. The Contractor shall not use subcontractors to perform non-reimbursable repairs unnecessarily or with the intent of driving up the repair cost so the Government shall cover part of it. If approved, the cost of the subcontractor's labor and material will be treated as a repair part for the purposes of calculating the repair threshold. The subcontractor's cost shall be fair and reasonable and approved in advance by the CO or designee. All repairs shall use supplies, materials, and parts of the highest quality available that are appropriate for the repair of the given equipment or system. Any replacement parts used during the course of this Contract shall be of comparable or higher quality. Energy-consuming items shall be the most efficient in their class. The Contractor shall stock commonly used items and have a network of suppliers that will deliver ordered items without any delay. Any replacement motors shall be of premium efficiency. Whenever motors are replaced, motor size shall be recalculated and replacement motor selection shall reflect the appropriate size.

C.6.36.2 NON-REIMBURSABLE REPAIRS

A non-reimbursable repair is a repair requiring no more than $750.00 or $2,500.00 in cost for repair parts and materials only (including any approved subcontracting costs). The cost of consumable parts and materials shall not be calculated as part of the Contractor's repair parts and material costs. Non-reimbursable repairs are entirely the Contractor's responsibility with no reimbursement from the Government.

Non-reimbursable repairs shall be completed within 8 hours of identification of the problem unless an extension is approved by the CO or designee. The work order shall be put into a status field in NCMMS or other approved electronic records tracking system to indicate the nature of any delay, with appropriate remarks.

C.6.36.3 REIMBURSABLE REPAIRS

Reimbursable repairs will be identified as single incident, not an accumulation of various repairs (bundling). If a repair exceeds the non-reimbursable repair cost threshold established above and has been approved and verified by the CO or designee, it becomes a reimbursable repair. Reimbursable repairs are reimbursable to the Contractor, once approved by the CO or designee, for the portion (shared liability) of the cost exceeding the non-reimbursable threshold of $750.00 or $2,500.00 (See repair shared liability example below)

C.6.36.4 MISCELLANEOUS WORK

The Contractor shall provide 20 hours and up to $150.00 of parts and supplies per calendar month for the Providence Courthouse, Pastore Federal Building and Hastings Keith Federal Building. 5 hours and up to $150.00 of parts and supplies per calendar month for the Customs House and SSA Fall River (hours and dollar amounts are cumulative to succeeding months) when requested by the CO or designee, to accomplish discretionary work in the buildings covered by this Contract. The Contractor shall furnish the labor, tools and consumable materials as necessary to perform the work. Miscellaneous work may be required for work that makes use of any of the trades normally employed in performing operations and maintenance services under this Contract and does not include tasks associated with the performance of services covered under the scope of this Contract. The Contractor shall create and process NCMMS work orders for all miscellaneous work, and accurately record hours of labor expended. Any unused hours will be carried over to the following month.

C.6.36.5 REPAIR SHARED LIABILITY EXAMPLE:

A repair is identified and estimated by the Contractor to cost $1,200.00 for repair parts and materials only. The CO or their designee will verify and approve both the need for the repair and the $1,200.00 estimated cost of repair parts and materials. In this example, the Contractor will pay the first $750.00 of the repair and GSA will pay the remaining $450.00.

Total estimated approved cost for repair parts and materials to complete repair	$1,200.00
Contractor's shared liability amount to be subtracted (same amount as the non-reimbursable threshold)	-$750.00
Total to be paid by GSA to the Contractor for the repair	$450.00

The required completion date for reimbursable repairs shall be established when the CO or their designee approves the work, as mutually agreed upon by the CO or their designee and the Contractor. The Contractor shall attempt to complete work as promptly as feasible. Immediately upon identification of a reimbursable repair, the Contractor shall create a work order in the NCMMS and defer it by putting it in a "hold" status

C.6.36.6 APPROVAL OF WORK

When the Contractor determines that a repair is needed that exceeds the non-reimbursable repair threshold, the Contractor shall immediately notify the CO or designee. The CO or their designee shall issue a task order to the Contractor before the Contractor may proceed with the repair. The Contractor may defer performance of the reimbursable repair by placing the corresponding work order into a "waiting for funding" status from the time a valid proposal is given to the CO or their designee until the time an order is given to the Contractor. The time during which the work order is thus deferred will not count against the Contractor in calculating timeliness. The CO or their designee may prohibit the use of subcontractors if the CO or their designee determines the Contractor is unnecessarily driving up the cost of the work and the Contractor's own employees have the skills necessary to perform the work.

C.6.36.7 INVOICING

The Contractor shall invoice the Government for completed reimbursable repairs authorized orally, on a single itemized and consolidated invoice at the end of each month of performance. If the Contractor directly purchased parts or components, copies of receipts shall be attached. Reimbursable repairs authorized by task order may be invoiced separately upon completion and acceptance of work. Invoices shall also contain references to NCMMS work order numbers.

C.6.36.8 ORDERING REPAIRS FROM OUTSIDE SOURCE

The Government reserves the right to order repairs from an outside source. If the repair is a reimbursable repair, the Government will inform the Contractor of the outside source's price, and deduct the outside source's price, whichever is less, from the Contractor's payments.

C.6.36.9 FORCE MAJEURE (UNCONTROLLABLE EVENTS)

Deficiencies or breakdowns caused by vandalism, misuse, abuse, or acts of God including natural disasters are fully reimbursable. The Contractor will be reimbursed under the additional services provisions described in this document or the Government will have the work performed by other means at no cost to the Contractor.

C.6.36.10 WARRANTIES

The Contractor shall contact installers or manufacturers, as appropriate, for work that is covered under a warranty and maintain records of warranty service. The Contractor shall avoid actions that would invalidate a warranty, unless authorized by the CO or designee. If an installer or manufacturer fails to comply with the terms of a warranty, the Contractor shall immediately notify the CO or designee.

C.6.36.11 QUALITY OF MATERIALS AND REPLACEMENT PARTS

Replacement components and materials shall be of similar or better quality than the components

replaced, considering energy efficiency, operational characteristics, power quality, control and data acquisition, maintainability, and durability. The CO or their designee may require replacement of components with components from the same manufacturer to maintain consistency throughout the building. Materials and parts that are visible to building occupants shall be to building standard and maintain the same appearance as similar materials and parts in the occupied space. Components of control systems shall be replaced so as to maintain the tie-in to the control system with no degradation of data throughput, memory, point capacity, data acquisition, or programmability. Motors shall be replaced with premium efficiency motors as defined by the NEMA MG-1 standard or in compliance with Local utility guide demand-side management rebate guidelines old transformers shall be replaced with NEMA-rated class one efficiency transformers in accordance with the NEMA TP-1 standard. Replacement of variable frequency drives shall be done in accordance with recommendations found in NEMA, Application Guide for AC Adjustable Speed Drive Systems. Energy Star-rated equipment shall be installed where available and when there is no engineering or operational reason not to select an Energy Star product.

C.6.37 SAFETY AND ENVIRONMENTAL MANAGEMENT

C.6.37.1 GENERAL

The contractor shall use to the extent practicable, the safest and most environmentally friendly products and processes available. The contractor shall be cognizant of and comply with all federal, state, and local laws and regulations related to building management (permitting, inspection, testing and personnel safety; control of hazardous substances, certification) to include materials and associated systems used or removed in the performance of this contract. Contractor shall comply with all such requirements, including record keeping. The contractor shall comply with all federal, state, and local environmental and safety laws and regulations that relate to the maintenance and operation of equipment and systems within the scope of this contract. The contractor will be responsible for any fines or penalties levied by any environmental or regulatory authority resulting from their action or inaction, (not actions or inactions from a third party or the government) and may be charged the cost as a performance deduction under the adjusting payments clause. The contractor's maintenance, operations, materials and processes shall use green products and processes including, but not limited to products containing recycled content, environmentally sustainable products and services, bio-based products, and products and services that minimize the use of energy, water, and other resources.

C.6.37.2 SCHEDULING AND RECORD KEEPING

The contractor shall maintain copies of all tests, certifications, permits and other required records, and provide copies to the co and designee. In addition, all required safety and environmental tests; certifications, permits, and other procedures required in this document shall be scheduled in the NCMMS work order system and documented in the NCMMS.

C.6.37.3 REFRIGERANTS

C.6.37.3.1 CONTROL AND CERTIFICATION

The Contractor shall control refrigerants and maintain records in accordance with EPA, GSA, and air quality management district standards. The Contractor shall take appropriate immediate action and report leaks to the CO or designee. The Contractor shall maintain and test refrigerant

monitors, alarms and purge ventilation systems as part of the maintenance program. Testing shall use appropriate media to test sensors as well as alarm circuitry. Refrigerant control logs shall be updated as required, and a copy sent to the CO or designee. The Contractor shall also maintain a set of logs onsite and make this set of logs available to government inspection.

C.6.37.3.2 CERTIFIED HANDLERS

Contractor employees who come into contact with refrigerants in the course of their duties shall be certified to handle such refrigerants (EPA Section 608 Technician Certification Program). If equipment containing chlorofluorocarbon (CFC) or hydro chlorofluorocarbon (HCFC) refrigerants is removed from operation under this Contract, the Contractor shall recover all refrigerant in the equipment, seal it in appropriate storage containers, reclaim and reuse it as directed by the CO or designee, or dispose of it within EPA guidelines. In the event of fines or penalties levied by the EPA or an AQMD, the Contractor may be charged the cost as a performance deduction under the Adjusting Payments clause.

C.6.37.4 LOCAL AIR QUALITY MANAGEMENT OPERATING PERMITS

The Contractor shall be familiar with the requirements of the Local Air Quality Management District (AQMD), and shall ensure operating permits for boilers; generators and other emissions-producing equipment regulated by the district are up to date and have copies available to the CO or designee. In the event of fines or penalties levied by an AQMD, the Contractor may be charged the cost as a performance deduction under the Adjusting Payments clause.

C.6.37.5 FUEL STORAGE TANKS

The Contractor shall:

1. Comply with all Federal, State, and Local requirements for the periodic inspection, monitoring, permitting, certification, registration, maintenance, personnel training and recordkeeping for underground and/or above ground storage tanks.
2. Comply with any additional responsibilities required by the facility's Spill Prevention, Control and Countermeasure (SPCC) Plan including, but not limited to inspections, training, and recordkeeping if the facility must comply with SPCC requirements. Contractor shall update the SPCC plan as required.
3. Validate the inventory of all tank systems and assess tanks for compliance with current environmental design and installation standards at the commencement of the Contract.
4. Notify the CO or their designee not later than the end of the Startup and beginning of the Transition Phase and record within the Existing Deficiency/Initial Inspection Deficiency list observed instances of non-compliance to include but not limited to required registration documentation and monitoring systems.
5. Record the fuel levels monthly and report findings in Monthly Progress Report.
6. Record monthly usage logs and follow all fuel unloading procedures.
7. Contractor shall ensure that on-site personnel are trained and certified to the appropriate level of Underground Storage Tank Operator training.

C.6.37.6 SOLID WASTE AUDIT

At the beginning of a base year Contract, the Contractor shall perform a solid waste audit of the building and submit the findings to the CO or their designee and the government's Solid Waste

Program Manager. Based on the findings, the Contractor shall partner with the Government to set up a recycling program that is cost effective to the government and will maximize the amount of waste diverted from the landfill. Recycling Contractor shall participate in all established recycling programs for common items such as plastic, cardboard, glass, and paper products. The Government may perform solid waste audits at their discretion and the Contractor shall partner with the Government to implement best practices solid waste audit recommendations. (See Exhibit 10.)

C.6.37.7 POLYCHLORINATED BIPHENYL (PCB) CONTROL

The Contractor shall inspect all transformers containing polychlorinated biphenyls (PCBs) and maintain records of such inspections in accordance with State, Local, and EPA regulations. The CO or their designee shall be notified immediately if any such equipment is found to contain PCBs, or suspected to contain PCBs. Equipment verified to contain PCBs, except lighting ballasts, shall be labeled as containing PCBs. Any transformer leaks of PCBs shall be reported immediately to the CO or designee. The Contractor shall inspect all leaks in accordance with State, Local, and EPA regulations. The Contractor shall properly dispose of caulk that contains PCBs. The Contractor shall take immediate action to contain all leaks. There may be light ballasts containing PCBs in the buildings covered by this Contract. Replacement and proper disposal of all burned-out ballasts, including PCB ballasts, shall be the responsibility of the Contractor. Fluorescent lamps, batteries, and other items in any quantity subject to the Universal Waste Rules for Hazardous Waste Management and disposal shall be recycled or disposed of properly.

C.6.37.8 FACILITY HAZARDS

The Contractor shall assist in identifying facility health and safety hazards and report all hazards in writing to the CO or their designee on GSA Form 3614, GSA Notice of Unsafe/Unhealthful Workplace Conditions. The Contractor shall take immediate action to control hazards that present an imminent danger.

C.6.37.9 WORKPLACE SAFETY

The Contractor shall develop a site-specific occupational safety and health program specifically addressing applicable components of 29 CFR 1910 and 29 CFR 1926. The safety and health program shall be submitted to the CO or their designee for review and approval 30 days after award. By approving the program, GSA assumes no responsibility for the Contractor's occupational safety and health program.

C.6.37.10 ELECTRICAL SAFETY

The Contractor shall comply with National Fire Protection Association (NFPA) 70: National Electrical Code and NFPA 70E: Standard for Electrical Safety in the Workplace, when working on or around electrical equipment or systems or switchgear equipment. The Contractor shall ensure that any and all areas restricted to qualified personnel are secured and properly labeled.

C.6.37.11 FALL PROTECTION

The Contractor shall develop specific fall protection procedures for work on roofs, equipment, and other areas at elevation. The Contractor shall ensure fall protection equipment is provided to their employees and that employees are adequately trained.

C.6.37.12 POWERED PLATFORMS

The Contractor shall inspect, test, and maintain all permanently installed powered platforms in accordance with 29 CFR 1910.66, and provide copies of such certifications to the CO or designee.

C.6.37.13 LOCKOUT/TAGOUT

The Contractor shall develop a lockout/tag out program in accordance with 29 CFR 1910.147. The program shall include all anticipated energy sources, including but not limited to, electric City, steam, pressurized fluids, and mechanical energy. The Contractor shall communicate the Lockout/Tagout program to all other affected Contractors.

C.6.37.14 CONFINED SPACES

The Contractor shall identify and label all confined spaces in accordance with OSHA requirements. Contractor shall record all identified confined spaces in the NCMMS as hazards.

C.6.37.15 ASBESTOS MANAGEMENT

The Contractor shall be expected to occasionally perform Class III and Class IV asbestos work as defined in 29 CFR 1926.1101. The Contractor shall be prepared to deal with asbestos on a small-scale, short-duration basis to effect emergency repairs and to clean up small spills. The Contractor shall protect building tenants, visitors, and employees from asbestos exposure. The Contractor shall comply with applicable OSHA regulations and all applicable Federal, State, and Local asbestos regulations. The Contractor shall immediately become familiar with, comply with, and recommend any appropriate changes to the Government Asbestos Management Plan for the building. If the Contractor must disturb materials he suspects may contain ACM, the Contractor must immediately report the condition to the CO or designee. Contractor personnel who perform the abovementioned work shall have been appropriately trained in accordance with 40 CFR Part 763.

C.6.37.16 HAZARDOUS MATERIALS

C.6.37.16.1 MSDS

The Contractor shall make material safety data sheets (MSDS) available to their employees in accordance with 29 CFR 1910.1200. MSDS shall also be made available to the CO or their designee on request. The Contractor shall prepare and submit a hazardous materials inventory as an appendix to the building operating plan. The inventory shall itemize all hazardous materials by specific type as sold with individual MSDS and include information pertaining to approximate quantities of each type and exact locations where hazardous materials are to be stored on the premises.

C.6.37.16.2 DISPOSITION OF HAZARDOUS WASTE

Hazardous Wastes not subject to the Universal Wastes Rule shall be managed in accordance with 40 CFR 260. Universal Wastes (fluorescent lamps, certain batteries and pesticides) in any quantity subject to the Universal Waste Rules shall be recycled or disposed of as Hazardous Waste. Preference is given to recycling of intact items.

C.6.37.16.3 RECYCLED CONTENT PRODUCT PURCHASE ANNUAL REPORTING

The Contractor shall provide reports, estimating the percentage of total recovered material used in Contract performance, including, if applicable, the percentage of post-consumer material content,

to the CO or their designee in compliance with the Contractor schedule.

C.6.37.17 BOILER/PRESSURE VESSEL OPERATION AND INSPECTION STANDARDS

C.6.37.17.1 BOILER OPERATION AND INSPECTIONS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS INCLUDING BUT NOT LIMITED TO:

1. ASME Boiler and Pressure Vessel Code.
2. National Board Inspection Code.
3. Environmental Protection Agency and Local AQMD requirements.
4. ASME CSD-1, Control & Safety Devices for Automatically Fired Boilers.
5. NFPA 85, Boiler and Combustible Systems Hazards Code.

C.6.37.17.2 INSPECTIONS AND TESTS

Boiler inspections shall include internal and external (operating) inspections and tests described in Chapter 2, Inspection of Boiler and Pressure Vessels, of NBIC. The Contractor shall require the inspector to complete GSA Form 349 (Inspection Report of Boiler) or an equivalent approved form for each boiler inspected. The Contractor shall have unfired pressure vessels with design operating pressure in excess of 60 pounds per square inch (psi) and a capacity in excess of 15 gallons inspected annually. The Contractor shall complete GSA Form 350 (Inspection Report of Unfired Pressure Vessels) or an equivalent approved form for each unfired pressure vessel inspected. A GSA Form 1034 (Certificate of Inspection) or an equivalent approved form shall be completed and posted on or near the equipment. Inspections shall be made by inspectors certified by the National Board of Boiler and Pressure Vessel Inspectors, who shall be employed by an independent firm specializing in boiler and unfired pressure vessel inspections.

C.6.37.17.3 BACKFLOW PREVENTION DEVICES

The Contractor shall maintain all existing backflow prevention devices and certify them as prescribed by Federal, State, and Local laws, ordinances, and regulations. If no Local requirement exists, a certified inspector shall inspect all existing backflow prevention devices on an annual basis, record the inspection as a work order in the NCMMS and provide certification of proper operation to the CO or designee. While the Government will generally pass on to the Contractor backflow testing notices received from Local water districts or other Local authorities, the Contractor is responsible for timely completion and submission of such test results regardless of receipt of such notices. In addition to other requirements, backflow prevention devices used on water-based fire suppression systems shall be inspected, tested, and maintained in accordance with NFPA 25.

C.6.37.17.4 POTABLE WATER SYSTEMS

The Contractor shall comply with The Safe Drinking Water Act, PL 99-339, as amended, and the Environmental Protection Agency Safe Drinking Water regulations (40 CFR 141.43, Sections A and D), which address the quantity of lead allowable in new installations or repairs to existing drinking water systems and or plumbing. Potable water systems that are repaired, modified, serviced, or breeched in any way shall be disinfected and flushed as needed prior to returning the system to service. Contractor is required to comply with all Federal, State, and Local codes in the operation, treatment, and testing of potable water systems.

C.6.37.18 LABELING AND SIGNAGE

The Contractor shall maintain the labeling of existing equipment, pipes, storage areas, containers, confined space, and workspaces as well as associated signage, in accordance with OSHA standards to ensure labels are visible and not obliterated. Any equipment, pipes, etc., newly installed by the Contractor require labeling and signage per OSHA standards shall be labeled immediately upon completion of the installation and maintained throughout the Contract period.

C.6.37.19 ROOF ANCHORAGE POINTS

The Contractor shall provide for an annual inspection of designated roof anchorage points by qualified personnel. Anchorages shall be inspected in accordance with the anchor manufacturer's requirements and additional requirements contained in the installation certification. Copies of the inspection reports shall be provided to the CO or designee. If an area of suspicion is identified, the anchorage shall be tagged "out of service" and immediately reported to the CO or designee. ANSI/IWCA I-14 may be consulted for further guidance.

C.6.38 FIRE PROTECTION AND LIFE SAFETY EQUIPMENT AND SYSTEMS

C.6.38.1 GENERAL

Each of the requirements listed below shall apply to all of the paragraphs in Section C.38

1. The Contractor is responsible to utilize the latest edition of the applicable NFPA code or standard, in effect at the time of contract award, throughout the term of the contract.
2. The Contractor shall ensure all fire protection and life safety systems and equipment are kept operational at all times, except while being tested or repaired.
3. The Contractor shall ensure all maintenance and preplanned impairments of the fire protection and life safety systems and equipment have been authorized and approved by the CO or their designee prior to the Contractor performing any work.
4. The Contractor shall utilize technicians that meet the applicable requirements in Section H16.3.
5. The Government reserves the rights to have the Contractor remove any employee that poses a threat to the health, safety, or security of the building occupants.
6. The Government reserves the rights to conduct any test or inspection it deems necessary to ensure all contract performance requirements are being met.
7. The Contractor shall comply with all appropriate safety code requirements. If the Contractor encounters equipment that is in a condition that may endanger life or property, the Contractor shall immediately notify the CO or their designee of the condition requiring immediate action. Within 24 hours following the notification of the CO, the Contractor shall provide to the CO or their designee a written report of the hazardous condition and recommended corrective action.
8. The Contractor is responsible for meeting the inspection and testing frequencies, test methods, and documentation requirement for each fire protection and life safety system referenced in the applicable NFPA code or standard.
9. The Contractor is responsible for providing all tools, supplies, and equipment necessary to properly perform inspections, tests, and maintenance of the fire protection and life safety equipment and systems in accordance with applicable NFPA code or standard.
10. The Contractor shall be responsible to leave areas where they perform work neat, clean, and orderly.
11. The Contractor shall document all inspections, test results, and maintenance performed on the suggested inspection, testing, and maintenance forms referenced in the applicable NFPA code

or standard. These completed forms shall be included with the Contractor's Monthly Progress Report.

12. Any deficiency identified by the Contractor during a required inspection shall be entered into NCMMS as a work order; evidence of correcting such deficiency, unless funding is not available, shall be provided with the subsequent Contractor's Monthly Progress Report after correction action is completed.

C.6.38.2 FIRE ALARM SYSTEM SERVICES

Services include, but are not limited to; the performance, inspection, testing, and preventive maintenance or repair of a variety of fire alarm and notification systems, equipment and components such as manual alarm devices, smoke and heat detectors, tamper switches, pressure switches, water flow switches, remote and graphic annunciations, main fire alarm panel and components, voice alarm systems, speakers, horns, and other audible and visual devices, wiring circuits and junctions, supervising station alarm system transmission equipment, emergency power supplies and all other ancillary devices that operate related equipment (e.g., HVAC shutdown, dampers, elevator recall, door closing devices and door unlocking devices.

All fire alarm system inspections, tests, maintenance, and repairs performed under this contract shall comply with the NFPA 72, National Fire Alarm and Signaling Code.

Fire alarm system testing, maintenance and repair shall be performed during normal business hours when it does not interfere with building operations. When such testing, maintenance or repair will interfere with building operations; it shall be performed after normal business hours without additional costs to the government, unless approved otherwise by the CO or designee. The Contractor shall provide a fire watch in areas left unprotected or if the system is out of service for more than 4-hours in a 24 hour timeframe. The fire watch shall remain in place until the fire alarm system is completely restored during the performance of routine service and testing procedures. If the system cannot be restored through no fault of the Contractor's, a fire watch still shall be provided until the system is restored, however the Contactor may seek reimbursement for the fire watch with the COR or designee.

It is essential that the Contractor carefully schedule with the property manager and CO or their designee all non emergency shutdowns of the fire alarm system and that back up protection be provided by the Contractor (e.g., arrangement of additional personnel stationed in the areas affected and at the fire alarm system control panel) any time that the fire alarm system is out of service for more than 4 hours. The affected portion of the system shall be tested to ensure that the protection has been properly restored.

<u>IN NO CASE SHALL THE FIRE ALARM SYSTEM BE LEFT IN A DISABLED CONDITION WITHOUT NOTIFYING THE CO OR THEIR DESIGNEE AND PROVIDING A FIRE WATCH!</u>

C.6.38.3 WATER-BASED FIRE SUPPRESSION SYSTEMS

Services consist of, but are not limited to; the performance , inspection, testing, and preventive maintenance or repair services of all mechanical devices, including valves, sprinklers, couplings, piping, hose connections, water motor gongs and alerting devices, tamper switches, pressure switches, water flow switches, standpipes, backflow preventers, private fire service mains, water

storage tanks, fire pumps, and test headers.

All water-based fire extinguishing system inspections, tests, maintenance, and repairs performed under this contract shall comply with the NFPA 25, Inspection, Testing, and Maintenance of Water-Based Fire Extinguishing Systems.

Water-based fire suppression system testing, maintenance and repair shall be performed during normal business hours when it does not interfere with building operations. When such testing, maintenance or repair will interfere with building operations; it shall be performed after normal business hours without additional costs to the government, unless approved otherwise by the CO or designee. The Contractor shall provide a fire watch in areas left unprotected or if the system is out of service for more than 4-hours in a 24 hour period. The fire watch shall remain in place until the water-based fire suppression system is completely restored to service during the performance of any routine service and testing procedures. If the Contractor believes they were not able to restore sprinkler service due to circumstance outside of their control, the Contractor may request reimbursement for that portion or the fire watch from the CO or designee.

It is essential that the Contractor carefully schedule with the property manager and CO or their designee all non-emergency shutdowns of the sprinkler system and that back up protection be provided by the Contractor any time the sprinkler system is out of service for more than 4 hours. The affected portion of the system shall be tested to ensure that the protection has been properly restored.

IN NO CASE SHALL THE FIRE ALARM SYSTEM BE LEFT IN A DISABLED CONDITION WITHOUT NOTIFYING THE CO OR THEIR DESIGNEE AND PROVIDING A FIRE WATCH!

C.6.38.4 FIRE-RATED DOOR ASSEMBLIES
Services consist of, but are not limited to, the inspection, testing, and maintenance of all fire-rated door assemblies. All fire-rated door assemblies inspections, tests, and maintenance performed under this contract shall comply with the NFPA 80, Standard for Fire Doors and Other Opening Protectives. Please note that the inspection of fire-rated door assemblies shall also meet the requirements in NFPA 101, Life Safety Code.

C.6.38.5 FIRE DAMPER AND COMBINATION FIRE/SMOKE DAMPERS
Services consist of but are not limited to, the inspection, testing, and maintenance of all fire dampers, radiation dampers, and combination fire/smoke dampers. All fire damper, radiation damper, and combination fire/smoke damper inspections, tests, and maintenance performed under this contract shall comply with the NFPA 80, Standard for Fire Doors and Other Opening Protectives. Please note that maintenance of combination fire/smoke dampers shall also meet the requirements contained in NFPA 105, Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives.

C.6.38.6 SMOKE DOORS ASSEMBLIES
Services consist of, but are not limited to; the inspection, testing, and maintenance of all smoke door assemblies. All smoke door assemblies inspections, tests, and maintenance performed under this contract shall comply with the NFPA 105, Standard for the Installation of Smoke Door

Assemblies and Other Opening Protectives.

C.6.38.7 SMOKE DAMPERS
Services consist of, but are not limited to, the inspection, testing, and preventive maintenance of all smoke dampers. All smoke damper inspections, tests, maintenance, and repairs performed under this contract shall comply with the NFPA 105, Standard for the Installation of Smoke Door Assemblies and Other Opening Protectives.

C.6.38.8 PORTABLE FIRE EXTINGUISHERS
Services consist of, but are not limited t; the inspection, testing, and preventive maintenance of all portable fire extinguishers. All portable fire extinguisher inspections, tests, and maintenance performed under this contract shall comply with the NFPA 10, Standard for Portable Fire Extinguishers.

C.6.38.9 NON-WATER-BASED FIRE EXTINGUISHING SYSTEMS
Services consist of, but are not limited to, the inspection, testing, and preventive maintenance of the following types of non-water-based fire extinguishing systems:

1. Carbon dioxide extinguishing systems, NFPA 12, Standard on Carbon Dioxide Extinguishing Systems.
2. Halogenated extinguishing systems, NFPA 12A, Standard on Halon 1301 Fire Extinguishing Systems.
3. Dry chemical extinguishing systems, NFPA 17, Standard for Dry Chemical Extinguishing Systems.
4. Wet chemical extinguishing systems, NFPA 17A, Standard for Wet Chemical Extinguishing Systems.
5. Fire extinguishing systems, NFPA 96, Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations.
6. Clean agent fire extinguishing systems, NFPA 2001, Standard for Clean Agent Fire Extinguishing Systems.

C.6.38.10 SMOKE CONTROL SYSTEMS
Services consist of, but are not limited to; the inspection, testing, and preventive maintenance of smoke control systems. All smoke control system inspections, tests, maintenance, and repairs performed under this contract shall comply with the NFPA 92, Standard for Smoke Control Systems.

C.6.38.11 EMERGENCY AND STANDBY POWER SYSTEMS
Services consist of, but are not limited to; the inspection, testing, preventive maintenance, and exercising of equipment per the manufacturer's recommendations for the following types of emergency and standby power systems:

1. Emergency power supply systems, NFPA 110, Standard for Emergency and Standby Power Systems.
2. Stored electrical energy emergency and standby power systems, NFPA 111, Standard on Stored Electrical Energy Emergency and Standby Power Systems.

C.6.38.12 EMERGENCY LIGHTING SYSTEMS AND EXIT SIGNAGE

Services consist of, but are not limited to; the inspection, testing, and preventive maintenance of emergency lighting systems, emergency lighting equipment, and exit signage. All emergency lighting systems, emergency lighting equipment, and exit signage inspections, tests, maintenance, and repairs performed under this contract shall comply with the NFPA 101, Life Safety Code.

C.6.39 MAINTENANCE AND REPAIR OF VERTICAL TRANSPORTATION SYSTEMS

RESERVED

C.7 QUALITY ASSURANCE

C.7.1 QUALITY CONTROL PROGRAM

A Quality Control Plan (QCP) shall be developed and submitted for approval to the CO or their designee 15 days prior to the start of the Contract. Upon approval, the Contractor shall implement the QCP to ensure Contract compliance, and to ensure that potential problems with building equipment and systems are identified, documented in a NCMMS, and resolved prior to failure. An acceptable QCP shall include, at a minimum, inspections by onsite supervisory personnel and by one or more qualified outside parties. The system of checklists, inspection methodology, and frequencies shall be documented by the Contractor. The Contractor shall maintain a Local file of all quality control inspections conducted by the Contractor, including the corrective actions taken and submit copies of quality control inspections monthly in the Monthly Progress Report. All documentation shall be made available to the Government upon request during the term of the Contract. The QCP shall include, at a minimum, the program of outside inspections, work orders sampling methodology, and a program for verifying compliance with each Contract requirement.

C.7.2 GOVERNMENT QUALITY ASSURANCE SURVEILLANCE PROGRAM

The Government may inspect the Contractor using a quality assurance program through random inspections, scheduled inspections, or any other method of inspection that the Government determines reflects the actual successful performance of this Contract. As part of the Government's quality assurance program, the Government may:

1. Review and, if warranted, reject any reports or other submittals required from the Contractor.
2. Review performance and service records, including, if applicable, but not limited to monthly progress reports, BAS data, NCMMS data, Advance metering System, (AMS) data and any computerized or hardcopy records maintained by the Contractor documenting performance under this Contract, and require correction of any unsatisfactory conditions noted.
3. Determine the adequacy of the Contractor's quality control program and documentation and the overall success of this program. The Government may order improvements if it determines the programs are insufficient or ineffective.
4. Obtain tenant satisfaction survey information and require improvements in service on the basis of such information to the extent such results correlate with deficiencies in Contract requirements.
5. Conduct random and routine physical inspections of facility equipment and systems, to include programs and files maintained on computers and Contractor onsite offices and work areas, and require correction of deficiencies noted.
6. Perform inspections with Government personnel or independent third party inspectors.

C.7.2.1 CONTRACT PERFORMANCE

Contractor performance will be evaluated on the basis of the performance success or deficiencies, success or failure in meeting other Contract requirements, and the Contractor's record of correcting deficiencies when noted. While corrective actions will be noted, a record of significant performance deficiencies may lead to a performance evaluation that is less than satisfactory even if the Contractor takes corrective action.

C.7.2.2 METHODS

The use or nonuse of any quality assurance methods (e.g., a measurement and verification (M&V) program) by the Government will not constitute a waiver of or excuse from Contract requirements. The Government may implement or change quality assurance measures at any time during the term of the Contract.

C.7.2.3 RECORDS AND FILES

All records and files that this Contract requires the Contractor to maintain shall be made readily accessible to Government representatives, including third party Contract inspectors, on request. All records and files utilized or generated during the course of the Contract by the Contractor, including all standard operating procedures and building operating plans, shall become the property of the Government (this excludes employee personnel files and company financial information)

C.7.2.4 COOPERATION – INSPECTIONS

The Contractor shall instruct all onsite personnel to cooperate with the Government or third party Contract inspector requests for records access and information. This includes answering honestly and comprehensively all questions related to performance of work. The Contractor shall provide personnel to enable inspectors, including third party Contract inspectors, to perform inspections of equipment. The Contractor shall notify the CO or their designee at least 2 weeks in advance when equipment is to be opened and available for inspection by the Government. The Contractor shall open and operate the equipment for observation by all inspectors at no additional cost to the Government provided the Government requests the service at least 48 hours in advance. Most inspections will be performed during normal working hours. However, the Contractor shall provide personnel to enable access for inspectors who need to conduct observation and testing after normal hours to avoid possible disruption to tenants.

C.7.2.5 CPARS

GSA uses the CPARS or similar performance measuring system to formally evaluate the Contractors performance. Evaluations are generally conducted annually or more frequently on or about the anniversary date of the Contract and also at the end of the Contract period.

The QCP shall be submitted by the Contractor to the CO or their designee for review and acceptance. The Contractor is not authorized to start work until the QCP is accepted and the proper security clearances obtained. Refer to Section H of the solicitation, in regard to proper security clearance requirements.

C.8 FEDERAL REQUIREMENTS

The Contractor shall comply with all applicable Federal, state and local laws, regulations and codes, including any supplements or revisions as specified in the table below. The Contractor shall obtain all applicable licenses, training, and permits. If a change in law or regulation requires the Contractor to implement an action that will result in an increase or decrease in Contract price, the Contractor shall immediately notify the Contracting Officer in writing. This notification shall include any associated proposed cost increases or decreases to occur on the contract. The Contracting Officer will then review the proposal and determine if a modification to the contract shall be made to implement the suggested changes. The Contractor shall take no action until a modification is received from the Contracting Officer. Any and all changes made without the express permission of the contracting officer, either through modification to the contract or in writing, are made at risk.

PUBLICATION	TITLE	PORTION
EPACT 05	Title I Energy Efficiency Title IX Research and Development http://www1.eere.energy.gov/femp/regulations/epact2005.html	All Applicable Sections of these Titles
EISA 07	Title III Energy Savings Through Improved Standards for Appliances and Lighting. Title IV Energy Saving and Buildings Industry. Title V Energy Savings in Government and Public Institutions. Federal Energy Management Program: Energy Independence & Security Act	All Applicable Sections of these Titles
Executive Order 13423	Strengthening Federal Environmental, Energy, and Transportation Management and all implementing guidance documents. http://edocket.access.gpo.gov/2007/pdf/07-374.pdf	ALL
Executive Order 13514	Federal Leadership in Environmental, Energy, and Economic Performance http://edocket.access.gpo.gov/2009/pdf/E9-24518.pdf	ALL
FAR	Federal Acquisition Regulation	All Applicable

FAR Clause 52.223-2	https://www.acquisition.gov/far/current/html/52_223_226.html	Sections and Clauses Clauses 1 and 2
29 CFR Part 1910	OSHA General Industry Standards (http://www.access.gpo.gov/nara/cfr/waisidx_06/29cfr1910a_06.html)	ALL
40 CFR	Protection of the Environment http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?sid=cb067c6143d1efa48ac4d1222120a7b6&c=ecfr&tpl=/ecfrbrowse/Title40/40tab_02.tpl	
41 CFR Part 102-74, Subpart C. - FMR	Facility Management http://www.access.gpo.gov/nara/cfr/waisidx_06/41cfr102-74_06.html	
ANSI-IWCA.I-14.1	http://webstore.ansi.org/FindStandards.aspx?SearchString=ansi&SearchOption=1&PageNum=0&source=google&adgroup=ansi&keyword=ANSI%2F&gclid=CJnM65r-rqQCFUNM5QodRnhXyw	
ANSI/ASEE A-1264.2-2006	www.ANSI.org	
ANSI Z245.1	Mobil Refuse Collection and Compactor Equipment-Safety Requirements http://webstore.ansi.org/ansidocstore/product.asp?sku=ANSI+Z245.1-2007	
ASTME 1971-05	http://www.astm.org/Standards/E1971.htm	
GSA Green Purchase Plan	http://insite.gsa.gov/portal/content/520186	
Guiding Principles for Sustainable Existing	http://www.wbdg.org/references/fhpsb_existing.php	

Buildings		
Bio-Based Products Certification and Purchase Clauses	http://www.dm.usda.gov/procurement/programs/biobased/biobaseditems.htm	
Comprehensive Procurement Guidelines (CPG)	http://www.epa.gov/cpg/about.htm	
Green Seal Certification	http://www.greenseal.org/	ALL
Design for the Environment Labeling	http://www.epa.gov/dfe/	ALL
LEED- EB credits	https://www.usgbc.org/ShowFile.aspx?DocumentID=3617	ALL
Property Managers Child Care Desk Guide	http://pbsportal.pbs.gsa.gov:7777/portal/page?_pageid=739,357643&_dad=portal&_schema=PORTAL	
PBS P 5800.36A	GSA Property Management Business Practice Handbook http://insite.gsa.gov/portal/content/522198	
Green Products Compilation Database	sftool.gov	

The Contractor shall give preference to environmentally sustainable supplies and products. For the purpose of this specification, environmentally sustainable shall include, but not be limited to:

- EPA's Environmentally Preferable Purchasing List.
- Comprehensive Procurement Guideline (CPG) items and their associated Recovered Materials Advisory Notices (RMANs). Items such as seat covers and towels shall contain 40 - 100% recovered fiber with 40 - 60% from post consumer fiber and toilet tissue shall contain 20 - 100% recovered fiber, with 20 - 60% from post consumer fiber). Trash bags, mulch and hoses are specified on the CPG list.
- Concentrated and ready-to-use cleaning chemicals (spray bottles must be labeled with the contents) that use ecologically sound packaging and are phosphate-free, non-corrosive, non-combustible, non-poisonous, non-reactive, and non-aerosol; contain no carcinogens, mutagens or teratogens; contain no ozone-depleting substances; and are bio-based and fully biodegradable. Such products shall have lower toxicity, and reduced potential for skin, eye, and, respiratory irritation than comparable products used for the same purpose and shall contain no unnecessary dyes or fragrances.
- Green Seal Certified and/or EPA's 'Design for the Environment' label.
- United States Department of Agriculture (USDA) bio-based designation.

- Floor finishes and floor maintenance products that are free of metals, such as zinc, arsenic, lead, cadmium, cobalt, chromium, mercury, nickel, or selenium.

The Contractor shall furnish to the CO or their designee all Material Safety Data Sheets (MSDS); see 'Prior to the Start of Work,' chart below for any materials used in the performance of this contract. All new products used during the life of the contract must have MSDS provided to the CO or their designee prior to bringing and/or using these products on site. The Contractor shall use only commercially available products that meet Federal, State, and local codes. These requirements shall include those identified in Executive Order 13423.

The Contractor shall maintain the MSDS in a location accessible to all employees (in accordance with 29 CFR §1910.1200) and shall advise the CO or their designee of its location. The MSDS shall be available for inspection by the CO or their designee on request. The Contractor shall take every precaution to ensure that environmentally sustainable products are used. Information can be obtained from Federal, State, and local agencies concerning safe chemical cleaning materials. An inventory list of products to be used under this contract shall be provided to the CO or their designee. This list shall be updated, with a copy provided to the CO or their designee, throughout the term of the contract. The CO or their designee shall contact the Contractor immediately if any item is deemed inappropriate for use under this contract.

C.9 SUBMITTALS (CONTRACT DELIVERABLES)

PRIOR TO THE START OF WORK

DELIVERABLE	REF	DELIVERABLE DUE	DUE DATE	Rec'd
Section C				
Communication Plan	C.4.3	15 days		
Inventory List of Products (non-hazardous)	C.5.1	5 days		
Green Cleaning Plan	C.5.2.1	5 days		
Cleaning Schedules -Floor Maintenance -Window Cleaning -Blind Dusting -Work Plan	C.5.13	5 days		
Startup/Transition Phase including staffing plan, etc.	C.6.1	15 Days prior to Contract start date.		
List of key personnel and emergency contact information, which may include subcontractor contacts as applicable	C.6.4.1	The Contractor must develop and submit to the CO within 15 days of Contract award.		
Preventive maintenance system.	C.6.31.1	15 days prior to contract start date.		
Hazardous Materials Inventory	C.6.37.16	5 days		
Material Safety Data Sheets (MSDS) with Inventory List of Products	C.6.37.16.1	5 days		

Quality Control Program	C.7.1	Develop and submit for approval 15 days after Notice of Award.		
Section H				
Security Clearances/Forms	H.2	15 days		
Strike contingency plan (SCP) submission.	H.21	SCP must be submitted 5 calendar days prior to Contract start date and updated annually.		

AFTER THE START OF WORK

DELIVERABLE	REF	DELIVERABLE DUE	DUE DATE	Rec'd
Section C				
Periodic IPM Inspection	C.5.1	Quarterly		
Existing Deficiency Inspection/Initial Deficiency List	C.6	Report due not later than 30 days after award of the Contract.		
Startup/Transition phase including staffing plan	C.6.1	Within 15 days of the startup phase.		
List of Environmentally Sustainable Products and Equipment	C.8	5 days		
Initial Pest Assessment	C.5.10.3	15 days		
Pesticide Control Plan	C.5.10.7	15 days after Assessment or as required by the CO		
Window Washing Safety Plan	C.5.3.2.2	10 days		
Snow and Ice Removal Plan with List of Chemical Products	C.5.3.3	10 days		
Erosion and Sediment Control Plan (if required)	C.5.3.4.0	30 days		
Soil Sample	C.5.3.4.3	10 days		
BAS System Calibration Report	C.6.31.4.1	Annually.		
Initial report and development of water treatment program.	C.6.32.3	Within the first month of the contract		
Electrical safety	C.6.37.10	Deficiencies must be reported within 30 days after Contract award.		
Labeling and signage.	C.6.37.18	Labeling program per OSHA standards within 30 business days after start of Contract.		
Safety & Health Program Details	C.6.37.8	Written plan must be submitted within 30 days after Contract award.		
Workplace safety plan.	C.6.37.9	A safety and health plan must be submitted for review and approval within 30 days after award.		

Section H				
Written Notice of Designation of Contractor's Representative	H.1.1	5 days		
Exposure Control Program	H.1.4	30 days		
Request for Sensitive But Unclassified (SBU) information	H.7	As required by the CO		
-Bio-based as Required by USDA (see Exhibit 6)	H.13.1	Annually by 31 October		
Green Cleaning Training	H.13.1	5 days after completion of training		
-Non Bio-based (see Exhibit 7)	H.13.2	Annually by 31 October		
Asbestos Training Certification	H.14	Training within 60 calendar days after start. Certify completion within 5 days of training.		
Asbestos Awareness Certification	H.14	5 days after completion training		
State licensing – if required.	H.16.5	Within 90 calendar days of beginning employment.		

ONGOING OR RECURRING

DELIVERABLE	REF	DELIVERABLE DUE	Due Date	Rec'd
Solid Waste/Trash Monthly Report	C.5.9.0	Monthly and As Required		
Establish Reference Library	C.6.11	Ongoing		
Review of design and construction documents.	C.6.12	Review as requested		
Provide Building Management Support Services	C.6.13	Upon Request		
Inspect Space Build-outs	C.6.14	As required		
Emergency Shutdown Checklist	C.6.15	Posted in Mechanical / Electrical rooms		
Labeling Electrical Circuits	C.6.16	Ensure added or modified circuits are labeled.		
Phase out transition.	C.6.2	On the last performance day of the Contract, Contractor must turn over keys and identification badges or cards.		
Lamps and ballasts containing mercury record	C.6.34	Report in accordance with Universal Waste Guidelines Document monthly all purchases of mercury-containing lamps within the monthly progress report		
Repairs using subcontractors.	C.6.36	Must provide justification for subcontract need in advance.		

Fire protection systems on line at all times unless approval is given during maintenance periods.	C.6.38	Advance notification and approval per occurrence. This covers all fire system requirements.		
Equipment inventory update.	C.6.6	The Contractor must update and verify the equipment inventory on an annual basis.		
Monthly Progress Reports.	C.6.7	On a monthly basis, not later than the fifth working day of the subsequent month.		
Progress Review Meetings	C.6.8	At the discretion of the CO or designee		
Equipment condition assessment.	C.6.9	On an ongoing basis during the performance of the Contract as requested.		
Emergency service request and callback repair plan report	C.16.9.2	Written accounting of any emergency callback the morning of the next working day.		
Fire damper and combination fire/smoke dampers: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 80 and NFPA 105.	C.3.38.5	Throughout the year. Documentation of the subject inspection, maintenance, and testing results must be recorded in accordance with the requirements of NFPA 80 and NFPA 105.		
Recycling Monthly Report	C.5.9.0	Monthly and As Required		
Energy and Water Efficiency	C.6.17.6	Operational Performance Targets Monthly Energy and Water Efficiency Use Plan Annual Energy and Water Efficiency Use Plan		
Emergency service request or callback after hours.	C.6.19.3	Respond to emergency service requests immediately and after hour callbacks within 1 hour		
Urgent service request	C.6.19.4	Respond to urgent service requests within 1 hour during regular working hours.		
Routine service request - response extension request.	C.6.19.5	Respond to routine service request within 4 hours. (*Contractor must immediately notify with a written extension request*)		
BAS System Calibration Report	C.6.31.4.1	Annually.		
Monthly water treatment testing or makeup water	C.6.32.6	Monthly within the monthly		

chemical tracking.		progress report		
Periodic oil analysis.	C.6.33.1	At least annually, with results submitted within the next monthly progress report		
Warranties not honored by manufacturer.	C.6.36.1	Contractor must immediately notify CO if an installer or manufacturer fails to comply with the terms of a warranty.		
Reimbursable repairs completion date.	C.6.36.3	Mutually agreed upon by the CO or their designee and the Contractor.		
Fire alarm system: If the Contractor must disturb materials he suspects may contain ACM.	C.6.37.15	The Contractor must immediately report the condition to the CO or designee.		
Hazardous materials: material safety data sheets – hazardous materials inventory.	C.6.37.16	MSDSs must be made available on request. The Contractor must prepare and submit hazardous materials inventory as an appendix to the building operating plan. This must be updated and resubmitted annually by September 30 of each year.		
Boiler Inspection and Tests	C.6.37.17.2	Boilers must be inspected annually and Forms 349, 350 and 1034 completed as required.		
Backflow prevention devices – annual inspection certificate.	C.6.37.17.3	Annually.		
Scheduling and record keeping of permits, personnel safety, control of hazardous substances, certifications, and records	C.6.37.2	Furnish copies as requested.		
Refrigerant control and certification log.	C.6.37.3.1	Refrigerant control logs must be updated and inspected as required.		
AQMD operating permits.	C.6.37.4	Copies made available immediately upon request.		
Polychlorinated biphenyl (PCB) control transformer leaks.	C.6.37.7	Immediate notification.		
Fire alarm system: If the Contractor must disturb materials he suspects may contain lead-based paint.	C.6.38.1	The Contractor must immediately report the condition to the CO or designee.		
Smoke control systems: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation	C.6.38.10	Throughout the year. Documentation of the subject inspection, maintenance, and		

requirements outlined in NFPA 92A.		testing results must be recorded in accordance with the requirements of NFPA 92A.		
Emergency and standby power systems: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 110 and NFPA 111.	C.6.38.11	Throughout the year. Documentation of the subject inspection, maintenance, and testing results must be recorded in accordance with the requirements of NFPA 110 and NFPA 111.		
Emergency lighting systems and exit signage: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 101.	C.6.38.12	Throughout the year. Documentation of the subject inspection, maintenance, and testing results must be recorded in accordance with the requirements of NFPA 101.		
Fire alarm system: If the Contractor encounters equipment that is in a condition that may endanger life or property.	C.6.38.2	The Contractor must immediately notify the CO or their designee of the condition requiring immediate action. Within 24 hours the Contractor must provide a written report to the COR of the hazardous condition and recommended corrective action.		
Fire alarm system: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies and testing methods outlined in NFPA 72.	C.6.38.2	Throughout the year. Documentation of the subject inspection, maintenance and testing results must be recorded on the applicable Inspection and Testing Form from NFPA 72.		
Water-based fire suppression systems: If the Contractor encounters equipment that is in a condition that may endanger life or property.	C.6.38.3	The Contractor must immediately notify the COR of the condition requiring immediate action. Within 24 hours that Contractor must provide a written report to the CO or their designee of the hazardous condition and recommended corrective action.		
Water-based fire suppression systems: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, and testing methods outlined in NFPA 25.	C.6.38.3	Throughout the year. Documentation of the subject inspection, maintenance, and testing results must be recorded on the applicable “suggested form,” as found in the current edition of NFPA 25.		
Water-based fire suppression systems: If the Contractor must disturb materials he suspects may contain ACM.	C.6.38.3	The Contractor must immediately report the condition to the CO or designee.		

Fire-rated door assemblies: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 80.Inspection of fire-rated door assemblies shall also meet the requirements in NFPA 101.	C.6.38.4	Throughout the year. Documentation of the subject inspection, maintenance, and testing results must be recorded in accordance with the requirements of NFPA 80 and NFPA 101.		
Smoke doors and assemblies: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 105.	C.6.38.6	Throughout the year. Documentation of the subject inspection, maintenance, and testing results must be recorded in accordance with the requirements of NFPA 105.		
Smoke dampers: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 105.	C.6.38.7	Throughout the year. Documentation of the subject inspection, maintenance and testing results must be recorded in accordance with the requirements of NFPA 105.		
Portable fire extinguishers: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 10.	C.6.38.8	Throughout the year. Documentation of the subject inspection, maintenance, and testing results must be recorded in accordance with the requirements of NFPA 10.		
Non-water-based fire extinguishing systems: The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in the applicable NFPA standard.	C.6.38.9	Throughout the year. Documentation of the subject inspection, maintenance, and testing results must be recorded in accordance with the requirements of the applicable NFPA standard.		
NCMMS Complete NCMMS audit	C.6.4.5	The Contractor shall provide all hardware and software to support and maintain an automated database of building maintenance and repair activities using a NCMMS or other government approved records management / tracking system		
Radon mitigation program	C.6.5.2	Program must be described in the building operation plan.		
Qualification of employees (May 1989) paperwork.	H.1.6	As requested.		
The collection and submission of GSA Form 139, record Presence.	H.8	Submit each month with monthly report		
Submission of resumes for new employees.	H.16.4	The Contractor must submit resumes for all personnel prior to		

		personnel beginning work.		
State licensing – if required.	H.16.5	Within 90 calendar days of beginning employment.		
Price proposal for additional services work.	H.19.2	Within 48 hours of the request.		

D. PACKAGING AND MARKING

RESERVED

E. INSPECTION AND ACCEPTANCE

RESERVED

F. DELIVERIES OR PERFORMANCE

F.1.1 Plans to be Provided for COR Approval Prior to Notice to Proceed

Safety Inspection /Test Schedules: No later than thirty (30) calendar days after notice of award the Contractor shall submit to the COR the safety inspections and test schedules as required for appropriate building equipment systems (fired/unfired pressure vessels, eddy current test, switchgear, etc.). Indicate what tests will be performed during or outside of normal working hours or any unusual conditions or problems.

F.1.2 Annual Reports Required After Contract Start

Electrical Safety – Arc Flash Analysis Report: The Contractor shall have all electrical equipment and systems inspected in accordance with NFPA 70 and 70E.inspected within 12-months from start date.

F.1.3 Other Reports

The Contractor shall provide any other reports required by the Government during the term of the contract (Please see section C.9).
Switchgear Load Test Result
As Required

G. CONTRACT ADMINISTRATION DATA

RESERVED

H. SPECIAL CONTRACT REQUIREMENTS

H.1 CONTRACTOR RESPONSIBILITIES

H.1.0 SUPERVISORS

A supervisor shall be available at all times when the contract work is in progress to receive notices, reports, or requests from the CO or their designee. The Contractor shall furnish the CO or their designee with a list of telephone numbers where an authorized representative may be contacted seven (7) days per week at any hour of the day or night to provide required services.

H.1.1 COMMUNICATION

The Contractor is responsible for complying with the agreed upon Communication Plan required in Section C.4.3 of the specification. The Contractor shall provide key operational personnel (managers or supervisors) with portable electronic means to communicate with GSA (and PBS National Contact Center) for service calls, emergencies, status updates of projects, etc. It is the Contractor's responsibility to ensure that any communication devices provided work effectively in the building. Electronic receiving and transmitting methods may include the following:

- A text-messaging device used to send and receive messages. The Contractor is responsible for all costs associated with the electronic messaging device. Some examples are two-way pager (Nextel), cell phone with text messaging, BlackBerry, etc.
- The use of Fax receiving and sending equipment is acceptable only as secondary communication method for locations that have problems with no or poor quality wireless device signal strength. Delayed receipt due to combined usage of voice and fax on the same line is not acceptable.

H.1.2 TRAINING

The Contractor shall provide employees with training to broaden their technical skills, improve customer service, and to promote personal development. Training provided shall embrace the concepts of providing and maintaining quality cleaning that is safe, healthy, and sustainable. www.issa.com as well as other cleaning groups offers their members educational materials on these items.

H.1.3 UNIFORMS

All employees shall wear distinctive, uniform clothing for ready identification. Uniforms shall be neat, clean, in good repair, and have a badge or monogram with the Contractor's name on it.

H.1.4 EXPOSURE CONTROL PROGRAM

PERSONAL PROTECTIVE EQUIPMENT (PPE)
The Contractor shall provide all employees with proper PPE when required by Federal, State and local laws and regulations.

BLOOD BORNE PATHOGENS
The Contractor shall provide appropriate training to their employees and all necessary equipment

and services required to perform clean-up of blood borne pathogens and fully comply with the requirements of the Blood Borne Pathogen Standard listed in 29 CFR §1910.1030.

H.1.5 KEY CONTROL

The Contractor shall follow the building's key control program. Keys issued to the Contractor, the Contractor's personnel, or subcontractors shall be signed for and not transferred to other personnel unless recorded in the key control log. The Contractor is financially liable for the cost of rekeying if keys are lost or not recovered from employees or subcontractors.

H.1.6 QUALIFICATIONS OF PERSONNEL

QUALIFICATIONS OF SUPERVISORY EMPLOYEES

Supervisory contract employees shall have a minimum of 3 years of experience with managing and related services in building(s) of similar size and complexity. The Contractor shall provide employee resumes covering these positions to the CO for approval. At the discretion of the CO or their designee formal training may be substituted for experience. The on-site supervisor is required to be fully conversant in English.

QUALIFICATIONS OF CONTRACTOR PERSONNEL

The Contractor shall provide appropriate training to their employees. The personnel employed by the Contractor shall be capable employees, who are trained and qualified in one or more related type service requirements.

The building(s) shall be fully staffed, beginning the first day of work under the contract, unless authorized by the CO or their designee. The Contractor's employees shall be familiar with the operation of the building(s) fire alarm system. In the event of a fire, the Contractor shall leave the building and not enter until authorized by Fire officials. The Contractor's staff shall also be familiar with the building's Occupancy Emergency Plan, which includes the shelter in place program. Further information on the program shall be provided by the CO or their designee.

H.1.7 MISCELLANEOUS REQUIREMENTS

The Custodial Contractor shall:

- Ensure that the Contractor's employees use lights and faucets only in those areas where and when the work is actually being performed. Once leaving, all lights and water faucets in the work area shall be turned off.
- Ensure that workers do not adjust mechanical equipment controls for heating, ventilation and air conditioning systems.
- Ensure that the Contractor's employees participate in building fire and civil defense drills.
- Ensure that the reporting of fires, hazardous conditions, and items in need of repair (e.g., inoperative lights, broken windows or doors, torn carpets, leaking sinks, urinals or commodes, dead trees or shrubs, etc.), to the CO or their designee.
- Ensure if applicable, rooms are locked after cleaning and that keys are returned to the designated office.

- Ensure that lost and found articles by the Contractor's employees are turned in to the CO or their designee.
- Ensure that the Contractor employees notify the security officer on duty when unauthorized or suspicious person(s) are seen on premises.
- Ensure that the Contractor's employees notify CO or their designee of any observed hazardous material, or Universal Waste materials in the trash or recycling receptacles.
- Ensure that the Contractor's employees raise, lower, and half-staff the United States Flag, agency pennants, and other flags (POW flag). This service shall be provided when directed by the CO or their designee and shall comply with requirements in the Flag Policy.
- Ensure that the Contractor's employees adhere to GSA's 'No Smoking Policy'

H.2. SECURITY

The General Contractor and the designated Contractor Suitability Clearance Point of Contact (CSC POC) shall comply with all security requirements and directions provided by the GSA OMA Boston Office. All contractor employees who receive a favorable suitability determination, security clearance, and/or meet all security requirements, as required by Homeland Security Presidential Directive -12 (HSPD-12) prior to reporting to work or performing work under this contract. Contractor employees that cannot obtain a favorable security determination, security clearance, or meet security requirements, will not be permitted to work on GSA contracts or in GSA controlled facilities.
If the GSA Contracting Officer (CO), Contracting Officers Technical Representative (COTR), Project Manager (PM) or Contractor Suitability Clearance POC receives an unfavorable or unsuitable report on any employee, or if a prospective employee to be unsuitable or unfit for his/her assigned duties, the GSA OMA Boston Office will immediately advise the CSC POC that such employee will not be allowed to work or be assigned to work under the contract.

The Government has full and complete control over granting, denying, withholding or terminating clearances for all contractor employees. A temporary contractor is a non-federal employee performing only project work on Federal premises on a non-recurring, or intermittent basis from 1 calendar day up to 180 calendar days. These individuals must receive a Special Agreement Check (SAC) Favorable Suitability Determination. However, the granting of a temporary clearance shall not be considered, as assurance that National Agency Check with written Inquiries (NACI) Long-Term Suitability Adjudication will follow. The granting of either temporary (SAC) or long term (NACI) adjudication shall not prevent, preclude, or bar the withdrawal or termination of any such clearance by the Government.

For FY 2015, the Office of Personnel Management (OPM) is implementing the Federal Investigative Standards (FIS) according to the phased Federal Investigative Standards Implementation Plan issued by the Suitability and Security Executive Agents. Consistent with the Initial Operating Capability (IOC) requirements of the FIS Implementation Plan, OPM is conducting Tier 1 investigations in lieu of the former National Agency Check and Inquiries (NACI) (SF 85) product and Tier 2 investigations in lieu of the former Moderate Risk Background Investigation (MBI) (SF 85P). During this transition, the terms NACI and Tier 1 Investigation are interchangeable.

Homeland Security Presidential Directive (HSPD)-12 is the "Policy for a Common Identification Standard for Federal Employees and Contractors" (the Directive) and became effective August 27, 2004. The Directive requires all Federal governmental departments and agencies to conduct background investigations and adjudicate the results (HSPD-12 compliant suitability determinations) for all contract employees requiring routine unescorted access to Federally-controlled facilities and/or information systems for more than 6 months **before consideration can be made for the issuance of identification cards.**

H.2.1 SECURITY REQUIREMENTS AND PERSONAL IDENTITY VERIFICATION PROCEDURES (NON-CLASSIFIED CONTRACT)

FAR 52.204-9 PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL (SEPT 2007)

1. The Contractor shall comply with Agency personal identity verification procedures identified in the Contract that implement Homeland Security Presidential Directive-12 (HSPD-12), Office of Management and Budget (OMB) guidance M-05-24 and Federal Information Processing Standards Publication (FIPS PUB) Number 201.
2. The Contractor shall insert this clause in all subcontracts when the subcontractor is required to have routine physical access to a Federally-controlled facility and/or routine access to a Federally-controlled information system.

Temporary Contractor. A non-federal employee performing only project work on Federal premises on a non-recurring, or intermittent basis from 1 to 180 calendar days. These individuals must receive a Special Agreement Check (SAC) resulting in a Favorable Determination.

1. The process is as follows:

   a. The GSA Office of Mission Assurance (OMA) Boston provides the following information to the CSC POC:
   b. GSA Contractor Information Worksheet (CIW) with sections 2 through 5 completed.
   c. OF 306 Declaration for Federal Employment

2. The CSC POC, working with the applicant, ensures completion of the CIW and OF-306 for transmission electronically to R1HSPD12.Security@GSA.GOV.

3. The CSC POC will send the CIW with Section 1 completed entirely to the R1HSPD12.Security@gsa.gov in a password protected file. Multiple files can be included in one email in the format: Last Name, First Name, Middle Initial and last 4 of the Social Security Number (i.e. Smith, John E. 5077). A second email containing the password must follow.

4. Questions 1-13 of the OF 306, and if applicable, Question 16 for continuation purposes. Original signature and date of the applicant are required on page 2, Question 17a. Except where a signature is required, all fields are to be typed. The CSC POC will then submit the form as an attachment in an e-mail following the process in paragraph 3 above.

5. The following requirements apply to U.S. Citizens born in a foreign country, foreign born citizens and dual citizenship holders and is required in addition to the above documentation.

   a. If the applicant is a U.S. Citizen and was born in a foreign country, they must submit either a copy of the front page of their U.S. Passport or a copy of their U.S. Citizenship Naturalization Document.
   b. If the applicant is a foreign born citizen and is now a U.S. Naturalized Citizen, they must submit a copy of their U.S. Citizenship Naturalization Document.
   c. If the applicant is a foreign born citizen and resides in the U.S., they must submit a copy of their USCIS Alien Registration Document.

6. Upon receipt of a completed Contractor Information Worksheet (CIW), OMA Boston Office will input data into GCIMS and mark the individual as Applicant.

7. CIW data being entered in GCIMS enrolls the individual in USAccess where the individual will be able to schedule an appointment for fingerprinting at one of over 200 enrollment stations nationwide, http://www.fedidcard.gov/centerlist.aspx. Fingerprint submissions are to be completed electronically utilizing OPM's Fingerprint Transaction System (FTS). Submission of electronic fingerprints through FTS improves efficiency, timeliness of results, and quality of the print. OPM will only accept Standard Form 87 (SF-87) fingerprint charts from those applicants residing greater than 100 miles (one way) from the nearest enrollment station. The SF 87 has been revised to support billing requirements of the Department of the Treasury and OPM processing enhancements. Modifications to the SF 87 include the addition of four fields:

   a. Submitting Office Number (SON)
   b. Security Office Identifier (SOI)
   c. Intra-Governmental Payment, Collection Code (IPAC)
   d. Miscellaneous Identification Number (MNU)

8. OPM converts the SF 87 to an image and electronically transmits the image to the Federal Bureau of Investigation (FBI).

9. GSA OMA Boston Office may accept faxed documents on a case-by-case basis. Due to Privacy Act Regulations you must contact the OMA office and request the fax number. Except where a signature is required, all fields are to be typed. Hand-written forms will not be accepted.

10. OMA Boston does NOT make adjudication or suitability determinations, only ensures the appropriate parties are aware of what documentation is required.

11. The OPM Contractor Investigation Team shall complete the SAC suitability determination as required under the GSA, OPM MOU. Upon completion of the investigation, OPM electronically forwards the results of the suitability determination to the OMA Boston Office. Suitability Determinations may be either:

a. Favorable. The applicant is determined to be suitable to perform work in the building for up to 180 calendar days.
b. Unfavorable. The applicant is determined to be unsuitable to perform work in the building. This determination is frequently based upon an inconsistency between the forms submitted by the applicant and the law enforcement checks.

12. The GSA OMA Boston Office then emails the CO, COTR, and the CSC POC the results of the suitability determination. Applicants may not begin work on-site prior to a Favorable Suitability Determination. An Unfavorable Suitability Determination is final.

13. If work is to be performed after building operating hours, the GSA OMA Boston Office must provide the local DHS/FPS Official the following information in writing:

a. Building name and location of work (i.e. room number, floor and agency)
b. Name and address of Contractor Company
c. Last, First and Middle name of all Temporary Contractor(s)
d. Dates and times of activity.

Long Term Contractor - U.S. or Naturalized Citizen or Non-U.S. Citizen legally residing in U.S. A non-federal employee performing work on Federal premises on a recurring basis for 181 calendar days or more (mechanical, janitorial, elevator, IDIQ construction contractor and cafeteria worker). These individuals must receive a National Agency Check with Written Inquiries (NACI)/Tier 1 Investigation Favorable Suitability Determination. Applicants may not begin work on-site prior to a Favorable Suitability Determination.

In order to be eligible for a NACI/Tier 1 Investigation determination, the employee must have been residing in the U.S. for 3 or more consecutive years. If U.S. residency has been less than three years, the employee will be processed as a temporary contractor.

The NACI/Tier 1 Investigation process is as follows:

1. The GSA OMA Boston Office provides the following to the CSC POC:

a. Contractor Information Worksheet (CIW) with sections 2 through 5 completed.
The CSC POC, working with the applicant, ensures completion of the CIW and returns the completed encrypted (password protected) form electronically to R1HSPD12.Security@GSA.GOV.

2.
a. The CSC POC will send the CIW with Section 1 completed entirely to the R1HSPD12.Security@gsa.gov in a password protected file. Multiple files can be included in one email in the format: Last Name, First Name, Middle Initial and last 4 of the Social Security Number (i.e. Smith, John E. 5077). A second email containing the password must

follow.

b. Entry of the CIW data into GCIMS by OMA Boston automatically initiates the background investigation process. GCIMS will automatically feed the CIW information to OPM.

3. OPM shall:

a. OPM staff will verify the necessity of an investigation.
b. Initiate and invite the applicant to complete the SF-85, via E-QIP. The applicant and CSC POC will be notified via e-mail sent to their e-mail address contained in Section 1 of their submitted CIW.

4. The applicant must:

a. Complete the E-QIP questionnaire. **The applicant has 7 calendar days to login to the E-QIP system and establish an account, followed by another 7 calendar days to complete the E-QIP application. If the applicant does not respond timely, the system will terminate the applicant's invitation.** If an application is terminated, the GSA OMA Boston Office will email the CO, COTR/PM, and CSC POC of the termination and the entire application process must begin again. The applicant must:

   i. Complete the E-QIP application
   ii. Complete questions 1-13 of the OF 306, and if applicable, Question 16 for continuation purposes. Original signature and date of the applicant are required on page 2, Question 17a. Except where a signature is required, all fields are to be typed.
   iii. Complete GSA form 3665, print, sign and date.
   iv. Scan and attach applicable documentation to the SF85 in eQip.
   v. Digitally sign 2 signature pages of the E-QIP application (CEL & REL)
   vi. Release the document within E-QIP (Release to Agency)

b. A copy of two documents that establish "proof of identity" as listed in page 2 of the Form I-9 Employment Eligibility Verification must be provided at the time of fingerprinting. Additional information will be provided when scheduling the fingerprinting appointment at an MSO station.

c. The following requirements apply to U.S. Citizens born in a foreign country, foreign born citizens, and dual citizenship holders and are required in addition to the above documentation.

   i. If the applicant is a U.S. Citizen and was born in a foreign country, they must submit either a copy of the front page of their U.S. Passport or a copy of their U.S. Citizenship Naturalization Document.

   ii. If the applicant is a foreign born citizen and is now a U.S. Naturalized Citizen, they must also submit a copy of their U.S. Citizenship Naturalization Document.

iii. If the applicant is a foreign born citizen and resides in the U.S., they must also submit a copy of their USCIS Alien Registration Document. If the applicant claims dual citizenship, they must sign, date and submit the DHS ICE Citizenship Declaration Form.

5. In addition to the CIW initiating the eQip process, it also enrolls the individual in US Access where the individual will be able to schedule an appointment for fingerprinting at one of over 200 enrollment stations nationwide, http://www.fedidcard.gov/centerlist.aspx. Fingerprint submissions are to be completed electronically utilizing OPM's Fingerprint Transaction System (FTS). Submission of electronic fingerprints through FTS improves efficiency, timeliness of results, and quality of the print. OPM will only accept Standard Form 87 (SF-87) fingerprint charts from those applicants residing greater than 100 miles (one way) from the nearest enrollment station. The SF 87 has been revised to support billing requirements of the Department of the Treasury and OPM processing enhancements. Modifications to the SF 87 include the addition of four fields:

   a. Submitting Office Number (SON)
   b. Security Office Identifier (SOI)
   c. Intra-Governmental Payment, Collection Code (IPAC)
   d. Miscellaneous Identification Number (MNU)

6. OPM reviews the eQip package, including attached forms to ensure all required information has been provided. If errors or omissions are detected, OPM will reject the eQip submission back to the contractor for correction. Once corrected, the contractor will again submit to OPM via eQip in accordance with paragraph 5.

7. OPM will then complete the preliminary suitability portion, as required under the GSA/ OPM Memorandum of Agreement (MOA). Upon completion of that investigation, OPM electronically forwards the results of the preliminary suitability determination to the GSA OMA Central Office for input into GCIMS and forwards the eQip package to the Federal Investigation Section (FIS) of OPM for final suitability processing. Suitability Determinations may be either:

   a. Pre-Favorable. The applicant is determined to be suitable to perform work in the building up to 180 calendar days. If the applicant has not received a Favorable 5 Year NACI/Tier 1 Investigation by the end of the 180 calendar days, he/she may continue to work under the existing determination until further notice.

   b. Unfavorable. The applicant is determined to be unsuitable to perform work in the building. This determination is frequently based upon an incongruity between the forms submitted by the applicant and the law enforcement checks. The applicant may appeal this decision within 30 calendar days. All appeals on Unfavorable Suitability Determinations are handled by OPM.

   c. Clarification. The applicant must contact the OPM Federal Investigative Service (OPM-FIS) within 15 calendar days to provide additional information in order to complete the

background investigation for a suitability determination. Failure to respond within the above time-frame will result in an Unfavorable Suitability Determination.

d. Favorable NACI/Tier 1 Investigation. Upon completion of OPM investigation and final Favorable Suitability Determination by OPM, the CO, COTR/PM, and CSC POC will receive notification from GSA OMA Boston Office of the applicant's NACI/Tier 1 Investigation determination.

8. The OMA Boston Office emails the CO, COTR, and the CSC POC the result of the suitability determination.

9. In the event the applicant receives an Unfavorable or Clarification Suitability Determination, the applicant is afforded an opportunity to explain and correct any inconsistencies by providing additional supporting documentation to OPM FIS, which may or may not change the suitability determination.

10. If work is to be performed after building operating hours, the GSA OMA Boston Office must provide the local DHS/FPS Official the following information in writing:

a. Building name and location of work (i.e. room number, floor, and agency)
b. Name and address of Contractor Company
c. Last, First and Middle name of all Contractor(s)
d. Dates and times of activity.

H.2.3 GSAR 552.237-71 QUALIFICATIONS OF EMPLOYEES (MAY 1989)

1. The Contracting officer or a designated representative may require the Contractor to remove any employee(s) from GSA controlled buildings or other real property should it be determined that the individual(s) are either unsuitable for security reasons or otherwise unfit to work on GSA controlled property.

2. The Contractor shall fill out and cause each of its employees performing work on the Contract work to fill out, for submission to the Government, such forms as may be necessary for security or other reasons. These forms shall be completed electronically unless that would create a hardship for the individual. Upon request of the Contracting Officer, the Contractor and its employees shall be fingerprinted.

3. Each employee of the Contractor shall be a citizen of the United States of America, or an alien who has been lawfully admitted for permanent residence as evidenced by Alien Registration Receipt Card Form I-151 or who presents other evidence from the Immigration and Naturalization Service that employment will not affect his immigration status.

H.2.4 SUITABILITY DETERMINATIONS

1. With GSAs concurrence, a Contract employees requiring routine unescorted access to Federally-controlled facilities and/or information systems for <u>more than 6 months</u> will be required to undergo a NACI/Tier 1 Investigation suitability determination before a PIV card is issued. Prior to the time that an identification card is issued, such employees will be required to comply with normal facility access control procedures, including sign-in, temporary badging, and escorted entry, as

applicable.

2. Failure of a Contract employee to receive a favorable suitability determination shall be cause for removal of the employee from the work site and from other work in connection with the Contract.

3. Contract employees working less than 6 months (Temporary Contractor) may, at the Government's option, be required to undergo a lesser form of suitability determination. Prior to the time that an identification card is issued, if at all, such Temporary Contractor will be required to comply with normal facility access control procedures, including sign-in, temporary badge, and escorted entry, as applicable.

4. Temporary Contractors who have not received a favorable suitability determination shall be escorted by government employees at all times while in non-public space, as directed by the CO or their designee.

5. The Government, at its sole discretion, may grant temporary suitability determinations to Regular or Temporary Contractor. However, the granting of a temporary suitability determination to any such employee shall not be considered as assurance that a favorable suitability determination will follow.

6. The CO or their designee shall provide the Contractor with required forms for obtaining necessary clearances. The Contractor shall be required to cause such forms to be returned to the Government for processing not later than 14 days following being provided by the Government.

7. The Contractor shall be responsible for planning and scheduling its work in such a manner as to account for facility access issues. Difficulties encountered by the Contractor in gaining access to facilities by its employees and subcontractors shall not be an excuse to any Contractor performance under the Contract.

H.2.5 COMPLIANCE WITH SECURITY REQUIREMENTS

1. The Contractor shall comply with all GSA and tenant Agency security requirements in the building(s) where work is being performed.

2. When a controlled personnel identification access system is used by a tenant Agency at a site where work is performed, the tenant Agency will be responsible for providing any required access credentials. Credentials shall be displayed at all times or as otherwise required by the tenant Agency. The Contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct, appearance, and integrity and shall be responsible for taking such disciplinary action with respect to its employees as may be necessary.

H.3. IDENTIFICATION CREDENTIAL

1. The determination of if an individual receives a HSPD-12 credential is based on whether the COR/COTR communicates the need with their Branch Chief who works with OMA for final approval. At all times while working on the contract, a Contract and subcontractor employees, shall have in his or her possession the specific Government PIV credential issued to him or her. The PIV credential shall be displayed and be visible at all times while on Government property. The CO or designee, Government law enforcement, or security person shall periodically verify passes of Contractor employees with their personnel identification. Contractor employees shall

comply with security verification procedures at all times.

2. As required by the Government, the Contractor shall make his employees available for photo identification badges, on a schedule to be worked out with the CO or designee. The Government will make the identification credentials after a favorable security determination has been received for the Contractor's employees. Each PIV credential shall have an expiration date and Contractor employees shall sign each badge at the time of photographing.

3. The Contractor shall be responsible for ensuring that all PIV credentials are returned to the CO or their designee whenever his employees leave the Contract (when the Contract has been completed, employees leave the company, or employees are dismissed or terminated). The Contractor shall notify the CO or their designee whenever employee badges are lost.

4. The Contractor will be responsible for paying the Government for replacement credentials at the current cost per badge.

H.4. ESCORT REQUIREMENTS

Contractors being escorted for 15 cumulative days or less must be escorted at all times by a federal employee, FPS Security contractor, or GSA contractor who is in possession of a GSA issued PIV credential. Prior review and approval by Zonal Help Desk through the submission of personal information is required for tracking purposes. Escorted personnel must be within line of site from the escort at all times. Contractors may be approved for escorted access up to 15 cumulative days within a 6 month period. If they need to work for more than 15 cumulative days in GSA facilities, they must submit documentation to receive a background investigation for unescorted access. Escorts are responsible for the whereabouts and activities of escorted personnel at all times, and must remain within line of sight of escorted individuals at all times while in non-public space. GSA PMs/CORs should consider the type of project and proximity to escorted contractors when determining the number of personnel reasonably escorted by the same escort. It is suggested that 5-7 people per escort is typically manageable.

EMERGENCY SITUATION SECTION

The contractors needed to mitigate emergency situations--broken pipes, failure of HVAC units, elevator repairs, etc. must be escorted at all times, however they are not required to have prior approval from the Zonal Help Desk. Property/building management staff may authorize access for these individuals in these types of situations.

H.5. STANDARDS OF CONDUCT

The Contractor shall be responsible for maintaining satisfactory standards of employee competency, conduct, appearance, and integrity and shall be responsible for taking disciplinary action with respect to his employees as necessary. The Contractor is responsible for ensuring that his employees do not disturb papers on desks, open desk drawers or cabinets, or use Government telephones, except as authorized. Each employee is expected to adhere to standards of behavior that reflect favorably on his or her employer and the Federal Government. No smoking is allowed in the building.

H.6. REMOVAL FROM CONTRACT WORK

1. As provided in the clause entitled "Qualifications of Employees," the Contracting officer or a designated representative may require the Contractor to remove any employee(s) from GSA controlled buildings or other real property should it be determined that the individual(s) is either unsuitable for security reasons or otherwise unfit to work on GSA controlled property. This shall include, but not be limited to, instances where an employee is determined, in the Government's sole discretion, to be incompetent, careless, insubordinate, unsuitable, or otherwise objectionable.

2. When the Government deems the employee's continued employment to be contrary to the public interest, inconsistent with the best interests of security, or when the employee is identified as a potential threat to the health, safety, security, general well-being, or operational mission of the facility and its population.

3. The CO may also request the Contractor to immediately remove any employee from the work site if it is determined that individuals are being assigned to duty who have been disqualified for either suitability or security reasons or who are found to be unfit for performing duties during their tour of duty.

4. Contractor employees who are removed from Contract work shall be required to leave the work site immediately.

5. The Contractor shall comply with any removal request. For clarification, a determination to remove an employee will be made for, but is not limited to, incidents involving the most immediately identifiable types of misconduct or delinquency as set forth below:

a. Failure to receive a suitability determination, temporary clearance, or clearance from GSA or a tenant Agency.
b. Violation of Federal, State, or Local law.
c. Violation of the Rules and Regulations Governing Public Buildings and Grounds, 41 CFR 101-20.3. This includes the carrying or possession of explosives or items intended to be used to fabricate an explosive or incendiary device.
d. Neglect of duty, including sleeping while on duty, unreasonable delays, or failure to carry out assigned tasks, conducting personal affairs during official time or refusing to render assistance, or to cooperate in upholding the integrity of the security program at the work site.
e. Falsification or unlawful concealment, removal, mutilation, or destruction of any official documents or records, or concealment of material facts by willful omissions from official documents or records.
f. Disorderly conduct, use of abusive or offensive language, quarreling, intimidation by words or actions, fighting, or participation in disruptive activities that interfere with the normal efficient operations of the Government.
g. Theft, vandalism, immoral conduct, or any other criminal actions.
h. Selling, consuming, or being under the influence of intoxicants, drugs, or substances that produce similar effects while in or on federally controlled property.
i. Improper use of Government identification.
j. Unauthorized use of communication equipment on Government property.
k. Violation of security procedures or regulations.
l. Violation of Title 18,U.S.C.,Section 930, which prohibits the knowing possession or the

causing to be present of firearms or other dangerous weapons in Federal facilities and Court facilities.

The CO or their designee will make all determinations regarding the removal of any employee from work site, except under certain conditions. When a CO or their designee is not available, either during the day or after hours, or in situations where a delay would not be in the best interest of the Government or is identified as a potential threat to the health, safety, security, general well-being, or operational mission of the facility and its population, the CO or their designee will have the authority to immediately remove the Contract employee from the work site.

Law enforcement officers of the Department of Homeland Security/Immigration and Customs Enforcement/Federal Protective Service (DHS/ICE/FPS) will have the authority to immediately remove any Contract employee from the work site who is found to be in violation of any of the items mentioned above and where a delay in removal would not be in the best interest of the Government or security or is identified as a potential threat to the health, safety, security, general well-being, or operational mission of the facility and its population. The CO or their designee will be notified as soon after the incident as practical or at the beginning of the next business day if an action happened after hours. The CO or their designee will make all official notifications to the Contractor. In the event of a dispute, the CO or their designee will make a final determination. Specific reasons for removal of an employee will be provided to the Contractor in writing by the CO or designee.

The Contractor is responsible for providing replacement employees in cases where Contract employees are removed from working at the work site or on the Contract.

H.7. SENSITIVE BUT UNCLASSIFIED (SBU) BUILDING INFORMATION

1. GSA Contractors that do not have HSPD-12 compliant clearances cannot obtain Sensitive but Unclassified (SBU) information (Privacy Act data, building information, and financial information) through GSA's IT systems.
2. Contractors and prospective bidders with a need to know that do not have HSPD-12 clearances and access rights to GSA IT systems can be provided SBU building information, drawings, etc., in accordance with GSA Order 3490.1A, which provides for the dissemination of paper and electronic SBU building information for all Federally controlled space (owned, leased, and delegated).
3. SBU information includes, but is not limited to:
   a. Paper and or electronic documentation of the physical facility information.
   b. Building designs (such as floor plans).
   c. Construction and renovation or alteration plans and specifications.
   d. Equipment plans and locations.
   e. Building operating plans.
   f. Information used for building service Contracts and or Contract guard services.
4. For all GSA controlled facilities, any other information considered a security risk shall be considered covered under this category.

5. All SBU building information, either in electronic or paper format, shall have specific imprinting on each page to designate it as Government property and indicate the prohibition of copying, dissemination, and distribution.
6. Contractors authorized to receive SBU information shall provide the following identification:
   a. A copy of a valid business license.
   b. Verification of a valid DUNS Number.
   c. A valid IRS Tax ID Number.
   d. A valid State driver's license with photograph.
7. Contractors shall sign a Document Security Notice when they receive SBU information.
8. Contractors shall be responsible for safeguarding SBU information. At the completion of work, secondary and other Disseminators shall be required to turn over their Document Security Notice dissemination records to GSA to be kept with the permanent files.
9. Authorized Contract users shall destroy all SBU information and documents when no longer needed. Destruction shall be done by burning or shredding hardcopy, and or physically destroying CDs, deleting and removing files from the electronic recycling bins, and removing material from computer hard drives using a permanent erase utility or similar software.
10. All authorized Contract users of SBU building information shall notify the GSA Disseminator in writing that they have properly disposed of the SBU building information and documents.
11. The GSA Disseminator shall maintain all records of SBU building information disposal (along with the signed Document Security Notices) in accordance with the GSA system of keeping long-term records and plans. All Document Security Notices and Records of Disposal shall be kept with the permanent files.

H.8. RECORDING PRESENCE

Each Contract employee shall sign in when reporting for duty and sign out when leaving at the end of the workday and follow card access requirements as directed by the CO or designee. The Contractor shall accumulate GSA Form 139 (Record of Time of Arrival and Departure from Building) or other designated form for use in recording presence each calendar week, certify in writing on each form that the information shown is true and correct and, and within 5 calendar days of week's end, turn them over to the CO or designee.

H.9. GOVERNMENT FORMS

The various Government forms mentioned in this document such as personal history forms, sign-out forms, inspection forms, etc., may be obtained from the CO or designee.

H.10. OTHER CONTRACTORS

The Government may undertake or award other Contracts for additional work, and the Contractor shall fully cooperate with such other Contractors or Government employees. The Contractor shall carefully schedule his own work, in conjunction with the additional work, as may be directed by the CO or designee. In addition, the Contractor shall not commit or permit any act that will interfere

with the performance of work by another Contractor or by Government employees.

H.11. ORDINANCES, TAXES, PERMITS, AND LICENSES

Without additional expense to the Government, the Contractor shall fully comply with all Local, City, State, and Federal laws, regulations, and ordinances. The Contractor will also be liable for all applicable Federal, State, and Local taxes and shall obtain and pay for all permits and licenses governing performance under the Contract.

H.12. DISCREPANCY IN THE SPECIFICATIONS

In any case of discrepancy in the specifications, the matter shall be immediately submitted to the CO. The decision of the CO as to the proper interpretation of the specifications shall be final in accordance with the Disputes Clause of this Contract.

H. 13. AFFIRMATIVE PROCUREMENT PROGRAM (APP)

H.13.1 STANDARDS

As a Federal procuring agency, the GSA is required by the Resource Conservation and Recovery Act (RCRA), Section 6002 and Executive Order (EO) 13423 Strengthening Federal Environmental, Energy, and Transportation Management to procure and use products containing post-consumer content (recycled material); environmentally preferable; and bio-based products. RCRA Section 6002 and Letter 92-4 requires Federal agencies to develop and implement their own Affirmative Procurement Program to facilitate the procurement of these products.

Green Purchases

In addition to those regulatory requirements specified in Section C of the specification, the following considerations and sources shall be used by the Contractor.
This includes:

- Compliance with appropriate clauses and subparts of FAR 7, 11, 12, 13, and 23.
- Cleaning chemicals, tools, equipment, supplies, or materials that shall be selected with consideration to minimizing the impact on both human health and safety as well as reducing other potential environmental impacts.
- Cleaning processes, work practices, and procedures shall minimize exposures to workers and building occupants and contribute to the promotion of environmental stewardship.
- Additional information on environmentally preferable products may be found through sources such as the U.S. EPA's Environmentally Preferable Purchasing Program's website: http://yosemite1.epa.gov/oppt/eppstand2.nsf.

Recycle Content Certification

In accordance with the FAR 52.223-9, Certification and Estimate of Percentage of Recovered Material Content for EPA-Designated Items, purchased for the performance of work with this contract, the Contractor shall provide the required certification and estimate to the CO or their designee at contract completion.

Recycle Content Product Purchase Annual Reporting

The Contractor shall provide an interim annual report, estimating the percentage of total recovered material used in contract performance, including, if applicable, the percentage of post-consumer material content. The Contractor shall provide the report to the CO or their designee in compliance with the Contractor schedule.

Green Cleaning Training

The Contractor shall provide training to their employees that stress proper stewardship in green cleaning practices. The Contractor shall submit written certification to the CO or their designee within five (5) days of the completion of training. Information on stewardship, training, and other issues can be found in ASTM E1971-05, Standard Guide for Stewardship for the Cleaning of Commercial and Institutional Buildings www.astm.org/. The focus of this training is to address appropriate cleaning activities and processes to maximize eco-efficiency and to minimize adverse impacts on the building occupants, cleaning personnel, the building structure itself, and the environment. Adherence to the principles set forth in this guide can lead to greater tenant and occupant satisfaction, reduced operational costs, and greater productivity (for occupants and cleaning personnel).

H.14. ASBESTOS AWARENESS TRAINING

The Contractor shall ensure that all employees, including replacement workers, receive asbestos training and refresher training in accordance with CFR 40-763 and 29 CFR 1910. The Contractor shall follow all instructions for each asbestos class job as outlined in 29 CFR 1910. The training shall be conducted, at no additional expense to the Government, at least 60 calendar days after the start date of the Contract. The Contractor shall submit written certification to the CO or their designee within 5 days of the completion of training.

H.15. UNIFORMS

All trade workers shall wear a uniform with the Contractor's logo while working within the building.

H.16. PERSONNEL QUALIFICATIONS

H.16.1 PERSONNEL TRAINING

The Contractor shall establish training program to assure employees working in a Federal building have the knowledge, skills and abilities to perform the work required by this Contract. The Contractor shall provide training and/or document training that conforms to the core competencies of the Federal Buildings Personnel Training Act of 2010 and provide documentation to the CO or designee.

H.16.1.1 RE-TUNING TRAINING

The Contractor must ensure that all Mechanical Engineers, Mechanical Supervisors, Operating Engineers, HVAC Mechanics, and Control Technician employees, including replacement workers, receive Building Re-Tuning Training, (http://retuningtraining.labworks.org/training/lms/), a 5-6 hour on line course and refresher training every two years in accordance with the Federal Buildings Personnel Training Act of 2010. The training must be conducted, at no additional expense to the Government, at least 60 calendar days after the start date of the Contract. The Contractor must submit written certification to the CO or their designee within 5 days of the completion of training for

each employee identified above.

H.16.2 QUALIFICATIONS OF PROJECT MANAGER AND ONSITE SUPERVISORY PERSONNEL

H.16.2.1 QUALIFICATIONS OF PROJECT MANAGER

The Project Manager shall possess at a minimum at least 5 years of recent (within the past 7 years) experience in the management and supervision of building mechanical maintenance operations for buildings of the approximate size and characteristics of the buildings to be covered by this Contract. A detailed resume containing the information specified in this document shall be submitted to the CO or their designee for approval prior to the assignment of the project manager to the Contract. Both new and replacement project manager's shall meet these qualification standards. Minimally, the resume shall contain:

1. The full name of the proposed project manager.
2. A detailed description of the previous 7 years' employment history of the proposed project manager.
3. The names and addresses of the companies for whom the proposed project manager worked for the past 7 years, along with the names and telephone numbers of the immediate supervisors.

H.16.2.2 QUALIFICATIONS OF ONSITE SUPERVISOR

The Onsite Supervisor shall also possess at least 5 years of recent (within the past 7 years) experience in directing operation and maintenance of equipment in a supervisory capacity for equipment of the approximate size, complexity, and other characteristics of the equipment to be operated and maintained under this Contract. A detailed resume containing the information specified in this document shall be submitted to the CO or their designee for approval prior to the assignment of any supervisor to the Contract. Both new and replacement onsite supervisors shall meet these qualification standards. Minimally the resume shall contain:

1. The full name of the proposed supervisor.
2. A detailed description of the previous 7 years' employment history of the proposed supervisor.
3. The names and addresses of the companies for whom the proposed supervisor worked for the past 7 years, along with the names and telephone numbers of the immediate supervisors.

H.16.3 QUALIFICATIONS OF TECHNICIANS

General Requirements

Technicians engaged in the work to be accomplished under this contract, except for general maintenance workers and laborers, must possess at least 5 years of recent (within the past 7 years) experience in the operation and maintenance of equipment and systems comparable in complexity to systems covered by this contract. All personnel or sub-contractor personnel must possess all required registrations, certifications and licenses required by State and local jurisdictions, and any specific requirements noted below. The Contractor shall provide to the CO or their designee documentation of the certificates of training, licenses, and permits for all new employees not later than 7 days prior to that person beginning work under the terms of this contract. The Contractor shall ensure that all certificates of training, licenses, permits, and bonds are current and valid. All offers must include documentation and proof of any required certifications (e.g., including certification number and expiration date) and qualifications for each employee.

H.16.3.1 Qualifications of Fire Alarm System Technicians

1. Technicians performing contract work involving the inspection, testing, and preventive maintenance or repair of fire alarm systems shall be certified by the National Institute for Certification in Engineering Technologies (NICET) and possess at least a NICET Level 2 (Associate Engineering Technician) in Fire Protection Engineering Technology, Fire Alarm Systems. The Contractor shall submit to the CO or their designee the NICET level certification number and expiration date for each field technician and inspector responsible for performing fire alarm system preventative maintenance and repair services required under the terms of this contract.
2. Technicians modifying the programming software of the fire alarm system shall also be factory trained and certified by the system manufacturer for the specific type and brand of fire alarm system being serviced. The Contractor shall submit to the CO or their designee the factory trained certification number and expiration date for each specific manufacturer's equipment for each technician responsible for performing programming of the fire alarm system.

H.16.3.2 Qualifications of Water-Based Fire Suppression System Technicians

Technicians performing contract work involving the inspection, testing, and preventive maintenance or repair of water-based fire suppression systems shall be certified by the National Institute for Certification in Engineering Technologies (NICET) and possess at least a NICET Level 2 (Associate Engineering Technician) in Fire Protection Engineering Technology, Inspection, and Testing of Water-Based Systems. The Contractor shall submit to the CO or their designee the NICET level certification number and expiration date for each field technician and inspector responsible for performing water-based fire suppression system preventative maintenance and repair services required under the terms of this contract.

H.16.3.3 Qualifications of Dry Chemical and Wet Chemical Extinguishing System Technicians

Technicians performing contract work involving the inspection, testing, and preventive maintenance of dry chemical and wet chemical extinguishing systems shall be trained in the manufacturer requirements and have passed a test confirming the individual's knowledge and competence on these systems. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the manufacture or testing organization confirming the technician has been trained and passed a test, for each field technician and inspector responsible for performing dry chemical and wet chemical extinguishing system preventative maintenance and repair services required under the terms of this contract.

H.16.3.4 Qualifications of Clean Agent Fire Extinguisher System Technicians

Technicians performing contract work involving the inspection, testing, and maintenance of clean agent fire extinguisher systems shall be trained in all aspects of safety related to the systems and possess a current training certificate for inspecting, testing, and maintaining these components from a manufacturer or a certificate by an organization acceptable to the CO. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the manufacture or testing organization confirming the technician has been trained, for each field technician and inspector responsible for performing the inspection, testing, and maintenance of clean agent fire extinguisher systems required under the terms of this contract.

H.16.3.5 QUALIFICATIONS OF HALOGENATED EXTINGUISHING SYSTEM TECHNICIANS
Technicians performing contract work involving the inspection, testing, maintenance, decommissioning and removal of halogenated extinguishing systems shall be trained in all aspects of safety related to halon systems and possess a current training certificate for inspecting, testing, and maintaining these components from a manufacturer or a certificate by an organization acceptable to the CO. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the manufacture or testing organization confirming the technician has been trained, for each field technician and inspector responsible for performing the inspection, testing, maintenance, decommissioning and removal of halogenated extinguishing systems required under the terms of this contract.

H.16.3.6 QUALIFICATIONS OF CARBON DIOXIDE EXTINGUISHING SYSTEM TECHNICIANS
Technicians performing contract work involving the inspection, testing, maintenance of carbon dioxide extinguishing systems shall be trained all aspects of safety related to carbon dioxide extinguishing systems, the operation and functions performed, and possess a current training certificate for inspecting, testing, and maintaining these components from an equipment manufacturer, installation company, or a certificate by an organization acceptable to the CO. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the equipment manufacture or testing organization confirming the technician has been trained, for each field technician and inspector responsible for performing the inspection, testing, and maintenance of carbon dioxide extinguishing systems required under the terms of this contract.

H.16.3.7 QUALIFICATIONS OF VENTILATION SYSTEM FIRE EXTINGUISHING SYSTEM TECHNICIANS
Technicians performing contract work involving the inspection, testing, maintenance of fire extinguishing systems shall be trained and possess a current training certificate for inspecting, testing, and maintaining ventilation systems from an equipment manufacturer. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the equipment manufacture confirming the technician has been trained, for each field technician and inspector responsible for performing the inspection, testing, and maintenance of fire extinguishing systems required under the terms of this contract.

H.16.3.8 QUALIFICATIONS OF SMOKE CONTROL TECHNICIANS
Technicians performing contract work involving the inspection, testing, and maintenance of smoke control systems shall be trained and possess a current training certificate for inspecting, testing, and maintaining these components from a manufacturer or a certificate by an organization acceptable to the CO. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the manufacture or testing organization confirming the technician has been trained, for each field technician and inspector responsible for performing the inspection, testing, and maintenance of smoke control systems required under the terms of this contract.

H. 16.3.9 QUALIFICATION OF FIRE DAMPER, SMOKE DAMPER, AND COMBINATION FIRE/SMOKE DAMPER TECHNICIANS
Technicians performing contract work involving the inspection, testing, and maintenance of fire dampers, smoke dampers, radiation dampers, and combination fire/smoke dampers shall be

trained and possess a current training certificate for inspecting, testing, and maintaining these components from an equipment manufacturer or a certificate by an organization acceptable to the CO. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the equipment manufacture or testing organization confirming the technician has been trained, for each field technician and inspector responsible for performing the inspection, testing, and maintenance of fire dampers, smoke dampers, radiation dampers, and combination fire/smoke dampers required under the terms of this contract.

H.16.3.10 QUALIFICATIONS OF FIRE-RATED AND SMOKE DOOR ASSEMBLIES TECHNICIANS
Technicians performing contract work involving the inspection, testing, and maintenance of fire-rated door assemblies and smoke door assemblies shall be trained and possess a current training certificate for inspecting, testing, and maintaining these components from an equipment manufacturer or a certificate by an organization acceptable to the CO. The Contractor shall submit to the CO or their designee he certification document and expiration date, issued by the equipment manufacture or testing organization confirming the technician has been trained, for each field technician and inspector responsible for performing the inspection, testing, and maintenance of fire-rated door assemblies and smoke door assemblies required under the terms of this contract.

H.16.3.11 QUALIFICATIONS OF PORTABLE FIRE EXTINGUISHER TECHNICIANS
Technicians performing contract work involving the preventive maintenance and recharging of portable fire extinguishers shall be trained and possess a current training certificate for the specific type and brand of portable fire extinguisher being services or possess a current training test certificate by an organization acceptable to the CO. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the manufacture or testing organization confirming the technician has been trained and passed a test, for each field technician and inspector responsible for performing dry chemical and wet chemical extinguishing system preventative maintenance and repair services required under the terms of this contract. Please note that these requirements do not apply to persons performing 30-day (i.e., monthly) inspections to determine if the unit is in place, charged, and ready for use.

H.16.3.12 QUALIFICATION OF EMERGENCY AND STANDBY POWER SYSTEM TECHNICIANS
Technicians performing contract work involving the inspection, testing, and maintenance of emergency and standby power systems shall be trained and possess a current training certificate for inspecting, testing, and maintaining these components from an equipment manufacturer or a certificate by an organization acceptable to the CO. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the equipment manufacture or testing organization confirming the technician has been trained, for each field technician and inspector responsible for performing the inspection, testing, and maintenance of emergency and standby power systems required under the terms of this contract.

H.16.3.13 QUALIFICATIONS OF EMERGENCY LIGHTING EQUIPMENT AND EXIT SIGNAGE TECHNICIANS
Technicians performing contract work involving the inspection, testing, and maintenance of emergency lighting equipment and exit signage shall be trained and possess a current training certificate for inspecting, testing, and maintaining these components from an equipment manufacturer or a certificate by an organization acceptable to the CO. The Contractor shall submit to the CO or their designee the certification document and expiration date, issued by the

equipment manufacture or testing organization confirming the technician has been trained, for each field technician and inspector responsible for performing the inspection, testing, and maintenance of emergency lighting equipment and exit signage required under the terms of this contract.

H.16.3.14 QUALIFICATIONS OF HVAC TECHNICIANS

All HVAC personnel designated to work on, operate, maintain, and (or) repair HVAC equipment or systems shall maintain a minimum of 16 hours of continuing education annually from a NATE, HVAC Excellence, or UA Star recognized provider program. All HVAC personnel designated to work on, operate, maintain, and (or) repair HVAC equipment or systems shall possess one or more of the following certifications:

1. North American Technician Excellence (N.A.T.E.) HVACR Service Technician Certification
2. HVAC Excellence Professional Level Certification
3. UA Star HVACR Mastery Certification

H.16.3.15 QUALIFICATIONS OF AMS, BAS TECHNICIANS

All personnel involved in the operation, adjustment and maintenance of all AMS, BAS, and EMS systems must be trained and qualified. The Contractor must provide to the CO or their designee documentation of the level of experience, including any certificates of training, for all employees who will be involved in this function. Technicians modifying AMS, BAS, and EMS systems must be factory trained and currently certified for the operating system, including software version, of the particular BAS and AMS systems and must provide documentation of this certification to the CO or designee.

Technicians maintaining systems that have been migrated behind the GSA firewall will be required to obtain HSPD-12 PIV card credentials and will need to maintain an up to date system profile. This will entail logging into the GSA system at a minimum of every 90 days to maintain their profile.

H.16.3.16 QUALIFICATIONS OF ELECTRICAL TECHNICIANS

Technicians performing Contract work involving the inspection, testing, and maintenance of the electrical switch gear must meet the qualification requirements of the American National Standards Institute/International Electrical Testing Association ETT-2000, Standard for Certification of Electrical Testing Technicians and hold at least a Level 3 or 4 (See Exhibit 13).
The Contractor shall provide documentation to the CO or their designee on qualifications identified in this standard. Certification can be obtained through; the ANSI/NETA Certification program (http://www.netaworld.org/press-release/251) or Electrical Testing Technician Certification Institute (http://www.ettci.org/).

H.16.4 SUBMISSION OF RESUMES FOR NEW EMPLOYEES

The Contractor shall submit to the CO or their designee the resumes of all personnel before they begin work during the performance periods of the Contract. The CO or their designee may deny permission to employ personnel if qualifications indicate a material degradation from the skill levels indicated in the Contractor's proposal for the Contract, or if skills or reliability concerns are such that the CO or their designee believes the protection of building equipment may be jeopardized.

H.16.5 STATE LICENSING

All personnel shall be licensed and certified, or become licensed and certified within 90 calendar days of beginning employment, to perform work within their normal duties, where such licensing is required by the State for non-Federal locations. Contractor personnel shall also conform to all other licensing and certification requirements as described elsewhere in this document or in the Public Buildings Service Operations and Maintenance Standards.

H.16.6 COMPLIANCE WITH FEDERAL, STATE, AND LOCAL CODES

The Contractor shall comply with all applicable Federal, State and Local laws, regulations and codes. The Contractor is responsible for determining which requirements are applicable, and complying appropriately; the Contractor may ask advice of the CO or their designee in this regard. GSA also has a policy of voluntary conformity to certain State and Local code requirements even when permission or approvals from Local regulators are not required; the Contractor shall ask the advice of the CO or their designee when such issues arise.

H.17. GOVERNMENT-FURNISHED MATERIALS

The following items are furnished by the Government:

1. Electrical power at existing outlets for the Contractor to operate equipment that is necessary in the conduct of its work.
2. Hot and cold water as necessary, limited to the normal supply provided in the building. No special heating or cooling of the water will be provided.
3. Space in the building, including locker rooms, if available. Any existing equipment within GSA space, such as lockers, tables, benches, chairs, etc., placed within the building by the Government may be used by the Contractor during the term of the Contract, provided authorization is received from the CO or designee. This space and equipment shall be kept neat and clean and returned to the Government at the expiration of the Contract in reasonably the same condition as at the time of entering into the Contract.
4. Space in the building for the storage of an inventory of supplies and equipment that will be used in the performance of work under the Contract. The Contractor shall maintain this space in a clean, neat, and orderly condition. Under no circumstances may the Contractor store flammable or explosive liquids (naphtha, gasoline, etc.) in the building. The Government will not be responsible in any way for damage or loss to the Contractor's stored supplies, materials, replacement parts, or equipment.
5. Space in the building, when available, and furniture and furnishings (to include telephones for restricted use) for a supervisor's office to be used for official business only in the performance of this Contract. If the Government supplies telephones, they shall only be used for communication related to the Contract. The Contractor or the Contractor’s employees shall not use Government property in any manner for any personal advantage, business gain, or other personal endeavor.
6. Custodial closets, where available, at various points throughout the building, for storing equipment, including mops, brooms, dust cloths, and other items. These closets and the stored equipment shall be kept clean and organized by the Contractor. Sinks and buckets shall be kept clean and free of standing water and hoses shall not be left connected to faucets when not in use.
7. Heating and air conditioning of the space to be cleaned will be provided only during normal building operating hours.

H.17.1 REQUIREMENTS FOR NETWORK CONNECTION

Government-furnished network equipment and computer hardware must be used in all cases for PBS IT systems. Network equipment- includes any equipment that has IP routing and switching functionality.

1. Computer hardware- includes, but is not limited to servers, PCs, laptops and their peripherals (monitors, mice and keyboards).
2. Proprietary system hardware/software can be vendor provided, but is subject to network and system testing, review and approval for connection to GSA's network and acceptance of the PBS CIO.

Government Furnished Equipment: PBS CIO will make every effort to provide one desktop and/or one laptop to newly integrated Building Automation Systems (to the GSA network) sites for the purposes of giving new GSA users access to the building monitoring and control systems. Please note: availability of hardware is depending on the availability of budgeted funds dedicated for this purpose, which may or may not be renewed on an annual basis. Existing GSA workstation refreshes will still be coordinated through regional local OCIO's office. No hardware (workstations, servers, switches) will be provided unless an approved network diagram is submitted.

Use of Government Information Technology:
Contractor personnel requiring access to GSA's Network shall comply with all Federal Information Technology (IT) regulations regarding Trusted Internet Connection (TIC) in conjunction with PBS and GSA Chief Information Officer (CIO) IT policies, i.e., all PBS IT systems needing network connectivity must reside on the GSA network.

Reference documentation related to building monitoring and control systems (BMC): Please reference the Technology Policy for PBS-Owned Buildings Monitoring and Control Systems and Building Technologies Technical Reference Guide for guidance related to the technical integration of building monitoring and control systems (BMC) to the GSA network and within its GSA's information technology (IT) environment.

H.18. CONTRACTOR-FURNISHED MATERIALS

1. The Contractor shall provide all labor, services, supplies, material, and equipment necessary to efficiently and effectively perform the requirements of this Contract, except as explicitly stated within this document.
2. The Contractor shall provide at his or her expense an onsite computer with broadband Internet service or a fax machine and services with receiving and sending capability in order to receive service requests via fax.

H.19. ADDITIONAL SERVICES INDEFINITE QUANTITY PROVISIONS

H.19.1 GENERAL

The CO or their designee may order additional services at his or her discretion. Additional services may include any services related to O&M and repairs, systems upgrades, system operation, or tenant services within covered facilities but not covered within basic services (i.e., not already a requirement of the Contract).

H.19.2 PRICE PROPOSAL FOR ADDITIONAL SERVICES WORK

At the request of the CO or designee, the Contractor shall provide a price proposal to accomplish an additional services job within 48 hours of the request. The price proposal shall follow the pricing guidelines described in this document. Price proposals for additional services become firm fixed price on acceptance and order by the Government. Although price negotiation and determination of price reasonableness is made on the basis of labor, materials, and subcontract costs following the pricing guidelines described in this document, the price accepted is not adjusted after completion of work to actual man-hours or actual materials cost.

H.19.3 PRICING

The Contractor's price proposal for an Additional Services job shall follow the guidelines described below.

H.19.4 PARTS AND MATERIALS

If parts or materials are required for a project, the Government may provide the parts or materials, or the Contractor may be asked to provide the parts and materials. Parts and materials shall be priced at estimated actual cost marked up by the Standard Coefficient in the price schedule if stated. The CO or COR may accept a different markup rate for parts and materials if the Contractor can demonstrate unusual costs or difficulties in obtaining the parts or materials.

Price proposals must use the labor rates established in the Price Schedule, unless work is subcontracted. When subcontracting work is contemplated, the contractor shall request a minimum of three (3) proposals.

If work is construction in nature, and exceeds $2,000.00 in price, then the Additional Services order must incorporate an appropriate Davis-Bacon wage determination. If the order does not incorporate such a determination, the Contractor should bring this to the attention of the CO or COR.

No individual order for construction services will exceed $30,000.00 inclusive of the total contract price including any and all changes.

H.19.5. LABOR

Price proposals shall use the labor rates established in the price schedule, unless work is subcontracted. The labor categories in the price schedule correlate with the categories in the Service Contract Act Directory of Occupations. The rate will be determined by the nature of the work, not the usual job classification of the individuals performing the work.

H.19.6 SUBCONTRACTS

If work is to be subcontracted, the subcontracted part of the work is to be priced at actual cost to the Contractor, marked up by the standard coefficient in the price schedule.

H.19.7 COST DOCUMENTATION

If the Contractor provides the parts and materials, or if work is subcontracted, the Contractor shall furnish on request copies of invoices, vendor quotes, or receipts, either with the Contractor's proposal or as substantiating documentation with the Contractor's invoice after completion of work.

H.19.8 COMPETITIVE BIDS

If a single part or component, or a single type (line item) of parts, components, or materials for a project is anticipated to equal or exceed $2,500.00, the CO or their designee require that the Contractor obtain three bids from suppliers and include documentation of these bids with his proposal. If subcontract work is anticipated to cost more than $2,500.00, the CO or their designee require that the Contractor obtain three bids from potential subcontractors and include documentation of these bids with his proposal.

H.19.9 METHOD OF ORDERING AND INVOICING

The CO or their designee may order work priced at less than $2,500.00 orally. The CO or their designee shall issue a Task Order (GSA Form 300) for work costing $2,500.00 or more.

H.20. AWARD FEE

RESERVED

H.21. STRIKE CONTINGENCY PLAN (SCP)

The Contractor shall prepare a Strike Contingency Plan (SCP) to be used in the event of a strike by his employees. The SCP shall be submitted to the CO or their designee 5 calendar days prior to Contract start date and updated annually. At a minimum, the SCP shall include the following information:

1. Support Personnel: The SCP shall describe in detail how the Contractor shall staff the building to provide the services defined in this document in the event of strikes by his employees. This includes HSPD-12.
2. License and Certifications: The SCP shall describe in detail how the Contractor will provide personnel that meet experience requirements, assuring the Government that all temporary or replacement employees (including subcontractor employees) shall meet the experience and license requirements defined in this document.

H.22. OCCUPANCY EMERGENCY PLAN (OEP)

The Government's Occupant Emergency Plan (OEP) is used by the CO or their designee during building emergencies. Designated Contractor personnel, including, the onsite supervisors, shall be thoroughly familiar with the Government's OEP and shall be trained by the Contractor to fully understand their responsibilities relative to each emergency plan. The Contractor shall participate in fire and other emergency drills. The Contractor shall be required to perform the services required by the Contract and as identified by the CO or their designee o the extent allowed during all emergency situations, including, but not limited to fires, accident and rescue operations,

Contractor personnel strikes, civil disturbances, natural disasters, and utility service outages.

H.23. CONTRACTOR PANDEMIC PLAN

The Government is required by the National Strategy for Pandemic Influenza Preparedness and to have a plan that safeguards its employees and provides for continued operations in the event of an influenza pandemic. The Contractor shall also prepare a plan that outlines the steps that they must take to prevent and reduce the spread and mitigate the potential effect of an influenza pandemic on facilities operations. Given the unpredictable length and severity of a pandemic, the Contractor's plan shall link their planned actions to the periods and phases established the World Health Organization for a pandemic cycle. For information on the phases of a pandemic cycle see http://www.who.int/csr/disease/avian_influenza/phase/en/. The plan shall be submitted to the CO or his/her designee within thirty (30) calendar days of the start of the Contract. See components of Pandemic Planning at http://www.ed.gov/admins/lead/safety/emergencyplan/pandemic/planning-guide/basic.pdf

H.24 CONSERVATION

Conservation is a planned and organized approach designed to conserve non-renewable sources. The Contractor shall ensure that work under this contract is performed in a manner that conserves energy, water, and other Government resources. Contractor shall take the necessary steps through training, communication, and implementing appropriate procedures in their use of natural resource consuming equipment and processes. This will preserve resources and support GSA's sustainability goals.

The Contractor shall ensure that their employees support the Government's efforts to comply with Section 102 of the Energy Policy Act of 2005 (EPAct), the Energy Independence and Security Act of 2007, Executive Order (EO) 13154, and EO 13423 which requires the Government to reduce Agency energy use.

The Contractor shall employ practices that reduce dependency on non-renewable sources of energy. The Contractor's personnel shall turn off lights in unoccupied areas where possible, once the area is cleaned. The Contractor shall close window blinds when practical, especially in the summer time, over long weekends, and during extended closures of the building.

The Contractor shall use their equipment in an efficient manner by turning it off during times it is not in use. When replacing existing equipment, the Contractor shall strive to acquire replacement equipment in the top 25% of efficiency as per the Energy Star guidelines. The Contractor shall never turn off or unplug Government equipment in the space they are cleaning without prior written approval by the CO or their designee.

The Contractor shall employ products, equipment and practices that eliminate wasteful use of water.

H.25 LEED-EB

This building shall seek Leadership in Energy and Environmental Design (LEED) certification, which requires more stringent guidelines and record keeping. Criteria for specific LEED existing

buildings (EB) credits will be provided by the LEED-EB Project Manager or designee. More information on LEED-EB is found at www.usgbc.org.

I. CONTRACT CLAUSES

52.212-1 INSTRUCTIONS TO OFFERORS-COMMERCIAL ITEMS

52.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS

52.212-5 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS—COMMERCIAL ITEMS.

As prescribed in 12.301(b)(4), insert the following clause:

CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS—COMMERCIAL ITEMS (JAN 2017)

(a) The Contractor shall comply with the following Federal Acquisition Regulation (FAR) clauses, which are incorporated in this contract by reference, to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

(1) 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (JAN 2017) (section 743 of Division E, Title VII, of the Consolidated and Further Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions)).

(2) 52.209-10, Prohibition on Contracting with Inverted Domestic Corporations (Nov 2015).

(3) 52.233-3, Protest After Award (AUG 1996) (31 U.S.C. 3553).

(4) 52.233-4, Applicable Law for Breach of Contract Claim (OCT 2004)(Public Laws 108-77 and 108-78 (19 U.S.C. 3805 note)).

(b) The Contractor shall comply with the FAR clauses in this paragraph (b) that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

__ (1) 52.203-6, Restrictions on Subcontractor Sales to the Government (Sept 2006), with Alternate I (Oct 1995) (41 U.S.C. 4704 and 10 U.S.C. 2402).

__ (2) 52.203-13, Contractor Code of Business Ethics and Conduct (Oct 2015) (41 U.S.C. 3509)).

__ (3) 52.203-15, Whistleblower Protections under the American Recovery and Reinvestment Act of 2009 (June 2010) (Section 1553 of Pub. L. 111-5). (Applies to contracts funded by the American Recovery and Reinvestment Act of 2009.)

_x_ (4) 52.204-10, Reporting Executive Compensation and First-Tier Subcontract Awards (Oct 2016) (Pub. L. 109-282) (31 U.S.C. 6101 note).

__ (5) [Reserved].

_x_ (6) 52.204-14, Service Contract Reporting Requirements (Oct 2016) (Pub. L. 111-117, section 743 of Div. C).

_x_ (7) 52.204-15, Service Contract Reporting Requirements for Indefinite-Delivery Contracts (Oct 2016) (Pub. L. 111-117, section 743 of Div. C).

_x_ (8) 52.209-6, Protecting the Government's Interest When Subcontracting with Contractors Debarred, Suspended, or Proposed for Debarment. (Oct 2015) (31 U.S.C. 6101 note).

_x_ (9) 52.209-9, Updates of Publicly Available Information Regarding Responsibility Matters (Jul 2013) (41 U.S.C. 2313).

__ (10) [Reserved].

__ (11)(i) 52.219-3, Notice of HUBZone Set-Aside or Sole-Source Award (Nov 2011) (15 U.S.C. 657a).

__ (ii) Alternate I (Nov 2011) of 52.219-3.

__ (12)(i) 52.219-4, Notice of Price Evaluation Preference for HUBZone Small Business Concerns (OCT 2014) (if the offeror elects to waive the preference, it shall so indicate in its offer) (15 U.S.C. 657a).

__ (ii) Alternate I (JAN 2011) of 52.219-4.

__ (13) [Reserved]

_x_ (14)(i) 52.219-6, Notice of Total Small Business Set-Aside (Nov 2011) (15 U.S.C. 644).

__ (ii) Alternate I (Nov 2011).

__ (iii) Alternate II (Nov 2011).

__ (15)(i) 52.219-7, Notice of Partial Small Business Set-Aside (June 2003) (15 U.S.C. 644).

__ (ii) Alternate I (Oct 1995) of 52.219-7.

__ (iii) Alternate II (Mar 2004) of 52.219-7.

_x_ (16) 52.219-8, Utilization of Small Business Concerns (Nov 2016) (15 U.S.C. 637(d)(2)and (3)).

_x_ (17)(i) 52.219-9, Small Business Subcontracting Plan (Jan 2017) (15 U.S.C. 637(d)(4)).

__ (ii) Alternate I (Nov 2016) of 52.219-9.

__ (iii) Alternate II (Nov 2016) of 52.219-9.

__ (iv) Alternate III (Nov 2016) of 52.219-9.

__ (v) Alternate IV (Nov 2016) of 52.219-9.

_x_ (18) 52.219-13, Notice of Set-Aside of Orders (Nov 2011) (15 U.S.C. 644(r)).

_x_ (19) 52.219-14, Limitations on Subcontracting (Jan 2017) (15 U.S.C. 637(a)(14)).

_x_ (20) 52.219-16, Liquidated Damages—Subcon-tracting Plan (Jan 1999) (15 U.S.C. 637(d)(4)(F)(i)).

__ (21) 52.219-27, Notice of Service-Disabled Veteran-Owned Small Business Set-Aside (Nov 2011) (15 U.S.C. 657 f).

_x_ (22) 52.219-28, Post Award Small Business Program Rerepresentation (Jul 2013) (15 U.S.C. 632(a)(2)).

__ (23) 52.219-29, Notice of Set-Aside for, or Sole Source Award to, Economically Disadvantaged Women-Owned Small Business Concerns (Dec 2015) (15 U.S.C. 637(m)).

__ (24) 52.219-30, Notice of Set-Aside for, or Sole Source Award to, Women-Owned Small Business Concerns Eligible Under the Women-Owned Small Business Program (Dec 2015) (15 U.S.C. 637(m)).

_x_ (25) 52.222-3, Convict Labor (June 2003) (E.O. 11755).

_x_ (26) 52.222-19, Child Labor—Cooperation with Authorities and Remedies (Oct 2016) (E.O. 13126).

_x_ (27) 52.222-21, Prohibition of Segregated Facilities (Apr 2015).

_x_ (28) 52.222-26, Equal Opportunity (Sept 2016) (E.O. 11246).

_x_ (29) 52.222-35, Equal Opportunity for Veterans (Oct 2015)(38 U.S.C. 4212).

_x_ (30) 52.222-36, Equal Opportunity for Workers with Disabilities (Jul 2014) (29 U.S.C. 793).

_x_ (31) 52.222-37, Employment Reports on Veterans (FEB 2016) (38 U.S.C. 4212).

_x_ (32) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496).

_x_ (33)(i) 52.222-50, Combating Trafficking in Persons (Mar 2015) (22 U.S.C. chapter 78 and E.O. 13627).

__ (ii) Alternate I (Mar 2015) of 52.222-50 (22 U.S.C. chapter 78 and E.O. 13627).

_x_ (34) 52.222-54, Employment Eligibility Verification (OCT 2015). (Executive Order 12989). (Not applicable to the acquisition of commercially available off-the-shelf items or certain other types of commercial items as prescribed in 22.1803.)

__ (35) 52.222-59, Compliance with Labor Laws (Executive Order 13673) (OCT 2016). (Applies at $50 million for solicitations and resultant contracts issued from October 25, 2016 through April 24, 2017; applies at $500,000 for solicitations and resultant contracts issued after April 24, 2017).

Note to paragraph (b)(35): By a court order issued on October 24, 2016, 52.222-59 is enjoined indefinitely as of the date of the order. The enjoined paragraph will become effective immediately if the court terminates the injunction. At that time, GSA, DoD and NASA will publish a document in the Federal Register advising the public of the termination of the injunction.

_x_ (36) 52.222-60, Paycheck Transparency (Executive Order 13673) (OCT 2016).

_x_ (37)(i) 52.223-9, Estimate of Percentage of Recovered Material Content for EPA–Designated Items (May 2008) (42 U.S.C. 6962(c)(3)(A)(ii)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

__ (ii) Alternate I (May 2008) of 52.223-9 (42 U.S.C. 6962(i)(2)(C)). (Not applicable to the acquisition of commercially available off-the-shelf items.)

_x_ (38) 52.223-11, Ozone-Depleting Substances and High Global Warming Potential Hydrofluorocarbons (JUN 2016) (E.O. 13693).

_x_ (39) 52.223-12, Maintenance, Service, Repair, or Disposal of Refrigeration Equipment and Air Conditioners (JUN 2016) (E.O. 13693).

__ (40)(i) 52.223-13, Acquisition of EPEAT®-Registered Imaging Equipment (JUN 2014) (E.O.s 13423 and 13514).

__ (ii) Alternate I (Oct 2015) of 52.223-13.

__ (41)(i) 52.223-14, Acquisition of EPEAT®-Registered Televisions (JUN 2014) (E.O.s 13423 and 13514).

__ (ii) Alternate I (Jun 2014) of 52.223-14.

__ (42) 52.223-15, Energy Efficiency in Energy-Consuming Products (DEC 2007) (42 U.S.C. 8259b).

__ (43)(i) 52.223-16, Acquisition of EPEAT®-Registered Personal Computer Products (OCT 2015) (E.O.s 13423 and 13514).

__ (ii) Alternate I (Jun 2014) of 52.223-16.

_x_ (44) 52.223-18, Encouraging Contractor Policies to Ban Text Messaging While Driving (AUG 2011) (E.O. 13513).

_x_ (45) 52.223-20, Aerosols (JUN 2016) (E.O. 13693).

_x_ (46) 52.223-21, Foams (JUN 2016) (E.O. 13693).

_x_ (47)(i) 52.224-3, Privacy Training (JAN 2017) (5 U.S.C. 552a).

__ (ii) Alternate I (JAN 2017) of 52.224-3.

_x_ (48) 52.225-1, Buy American—Supplies (May 2014) (41 U.S.C. chapter 83).

__ (49)(i) 52.225-3, Buy American—Free Trade Agreements—Israeli Trade Act (May 2014) (41 U.S.C. chapter 83, 19 U.S.C. 3301 note, 19 U.S.C. 2112 note, 19 U.S.C. 3805 note, 19 U.S.C. 4001 note, Pub. L. 103-182, 108-77, 108-78, 108-286, 108-302, 109-53, 109-169, 109-283, 110-138, 112-41, 112-42, and 112-43.

__ (ii) Alternate I (May 2014) of 52.225-3.

__ (iii) Alternate II (May 2014) of 52.225-3.

__ (iv) Alternate III (May 2014) of 52.225-3.

__ (50) 52.225-5, Trade Agreements (OCT 2016) (19 U.S.C. 2501, et seq., 19 U.S.C. 3301note).

_x_ (51) 52.225-13, Restrictions on Certain Foreign Purchases (June 2008) (E.O.'s, proclamations, and statutes administered by the Office of Foreign Assets Control of the Department of the Treasury).

__ (52) 52.225-26, Contractors Performing Private Security Functions Outside the United States (Oct 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

__ (53) 52.226-4, Notice of Disaster or Emergency Area Set-Aside (Nov 2007) (42 U.S.C. 5150).

__ (54) 52.226-5, Restrictions on Subcontracting Outside Disaster or Emergency Area (Nov 2007) (42 U.S.C. 5150).

_x_ (55) 52.232-29, Terms for Financing of Purchases of Commercial Items (Feb 2002) (41 U.S.C. 4505, 10 U.S.C. 2307(f)).

_x_ (56) 52.232-30, Installment Payments for Commercial Items (Jan 2017) (41 U.S.C. 4505, 10 U.S.C. 2307(f)).

_x_ (57) 52.232-33, Payment by Electronic Funds Transfer—System for Award Management (Jul 2013) (31 U.S.C. 3332).

_x_ (58) 52.232-34, Payment by Electronic Funds Transfer—Other than System for Award Management (Jul 2013) (31 U.S.C. 3332).

_x_ (59) 52.232-36, Payment by Third Party (May 2014) (31 U.S.C. 3332).

__ (60) 52.239-1, Privacy or Security Safeguards (Aug 1996) (5 U.S.C. 552a).

__ (61) 52.242-5, Payments to Small Business Subcontractors (JAN 2017)(15 U.S.C. 637(d)(12)).

__ (62)(i) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. Appx. 1241(b) and 10 U.S.C. 2631).

__ (ii) Alternate I (Apr 2003) of 52.247-64.

(c) The Contractor shall comply with the FAR clauses in this paragraph (c), applicable to commercial services, that the Contracting Officer has indicated as being incorporated in this contract by reference to implement provisions of law or Executive orders applicable to acquisitions of commercial items:

_x_ (1) 52.222-17, Nondisplacement of Qualified Workers (May 2014)(E.O. 13495).

_x_ (2) 52.222-41, Service Contract Labor Standards (May 2014) (41 U.S.C. chapter 67).

_x_ (3) 52.222-42, Statement of Equivalent Rates for Federal Hires (May 2014) (29 U.S.C. 206 and 41 U.S.C. chapter 67).

_x_ (4) 52.222-43, Fair Labor Standards Act and Service Contract Labor Standards-Price Adjustment (Multiple Year and Option Contracts) (May 2014) (29 U.S.C. 206 and 41 U.S.C. chapter 67).

_x_ (5) 52.222-44, Fair Labor Standards Act and Service Contract Labor Standards—Price Adjustment (May 2014) (29 U.S.C. 206 and 41 U.S.C. chapter 67).

__ (6) 52.222-51, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment—Requirements (May 2014) (41 U.S.C. chapter 67).

__ (7) 52.222-53, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services—Requirements (May 2014) (41 U.S.C. chapter 67).

_x_ (8) 52.222-55, Minimum Wages Under Executive Order 13658 (Dec 2015).

_x_ (9) 52.222-62, Paid Sick Leave Under Executive Order 13706 (JAN 2017) (E.O. 13706).

__ (10) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations (May 2014) (42 U.S.C. 1792).

_x_ (11) 52.237-11, Accepting and Dispensing of $1 Coin (Sept 2008) (31 U.S.C. 5112(p)(1)).

(d) Comptroller General Examination of Record. The Contractor shall comply with the provisions of this paragraph (d) if this contract was awarded using other than sealed bid, is in excess of the simplified acquisition threshold, and does not contain the clause at 52.215-2, Audit and Records—Negotiation.

(1) The Comptroller General of the United States, or an authorized representative of the Comptroller General, shall have access to and right to examine any of the Contractor's directly pertinent records involving transactions related to this contract.

(2) The Contractor shall make available at its offices at all reasonable times the records, materials, and other evidence for examination, audit, or reproduction, until 3 years after final payment under this contract or for any shorter period specified in FAR subpart 4.7, Contractor Records Retention, of the other clauses of this contract. If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 3 years after any resulting final termination settlement. Records relating to appeals under the disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are finally resolved.

(3) As used in this clause, records include books, documents, accounting procedures and practices, and other data, regardless of type and regardless of form. This does not require the Contractor to create or maintain any record that the Contractor does not maintain in the ordinary course of business or pursuant to a provision of law.

(e)(1) Notwithstanding the requirements of the clauses in paragraphs (a), (b), (c), and (d) of this clause, the Contractor is not required to flow down any FAR clause, other than those in this paragraph (e)(1) in a subcontract for commercial items. Unless otherwise indicated below, the extent of the flow down shall be as required by the clause—

(i) 52.203-13, Contractor Code of Business Ethics and Conduct (Oct 2015) (41 U.S.C. 3509).

(ii) 52.203-19, Prohibition on Requiring Certain Internal Confidentiality Agreements or Statements (Jan 2017) (section 743 of Division E, Title VII, of the Consolidated and Further

Continuing Appropriations Act, 2015 (Pub. L. 113-235) and its successor provisions in subsequent appropriations acts (and as extended in continuing resolutions)).

(iii) 52.219-8, Utilization of Small Business Concerns (Nov 2016) (15 U.S.C. 637(d)(2) and (3)), in all subcontracts that offer further subcontracting opportunities. If the subcontract (except subcontracts to small business concerns) exceeds $700,000 ($1.5 million for construction of any public facility), the subcontractor must include 52.219-8 in lower tier subcontracts that offer subcontracting opportunities.

(iv) 52.222-17, Nondisplacement of Qualified Workers (May 2014) (E.O. 13495). Flow down required in accordance with paragraph (l) of FAR clause 52.222-17.

(v) 52.222-21, Prohibition of Segregated Facilities (Apr 2015)

(vi) 52.222-26, Equal Opportunity (Sept 2016) (E.O. 11246).

(vii) 52.222-35, Equal Opportunity for Veterans (Oct 2015) (38 U.S.C. 4212).

(viii) 52.222-36, Equal Opportunity for Workers with Disabilities (Jul 2014) (29 U.S.C. 793).

(ix) 52.222-37, Employment Reports on Veterans (Feb 2016) (38 U.S.C. 4212)

(x) 52.222-40, Notification of Employee Rights Under the National Labor Relations Act (Dec 2010) (E.O. 13496). Flow down required in accordance with paragraph (f) of FAR clause 52.222-40.

(xi) 52.222-41, Service Contract Labor Standards (May 2014) (41 U.S.C. chapter 67).

(xii)
52.222-50, Combating Trafficking in Persons (Mar 2015) (22 U.S.C. chapter 78 and E.O 13627).Alternate I (Mar 2015) of 52.222-50 (22 U.S.C. chapter 78 and E.O 13627).

(xiii) 52.222-51, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment-Requirements (May 2014) (41 U.S.C. chapter 67).

(xiv) 52.222-53, Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services-Requirements (May 2014) (41 U.S.C. chapter 67).

(xv) 52.222-54, Employment Eligibility Verification (Oct 2015) (E.O. 12989).

(xvi) 52.222-55, Minimum Wages Under Executive Order 13658 (Dec 2015).

(xvii) 52.222-59, Compliance with Labor Laws (Executive Order 13673) (Oct 2016) (Applies at $50 million for solicitations and resultant contracts issued from October 25, 2016 through April 24, 2017; applies at $500,000 for solicitations and resultant contracts issued after April 24, 2017).

Note to paragraph (e)(1)(xvii): By a court order issued on October 24, 2016, 52.222-59 is enjoined indefinitely as of the date of the order. The enjoined paragraph will become effective immediately if the court terminates the injunction. At that time, GSA, DoD and NASA will publish a document in the Federal Register advising the public of the termination of the injunction.

(xviii) 52.222-60, Paycheck Transparency (Executive Order 13673) (Oct 2016)).

(xix) 52.222-62, Paid Sick Leave Under Executive Order 13706 (Jan 2017) (E.O. 13706).

(xx)(A) 52.224-3, Privacy Training (Jan 2017) (5 U.S.C. 552a).

(B) Alternate I (Jan 2017) of 52.224-3.

(xxi) 52.225-26, Contractors Performing Private Security Functions Outside the United States (Oct 2016) (Section 862, as amended, of the National Defense Authorization Act for Fiscal Year 2008; 10 U.S.C. 2302 Note).

(xxii) 52.226-6, Promoting Excess Food Donation to Nonprofit Organizations (May 2014) (42 U.S.C. 1792). Flow down required in accordance with paragraph (e) of FAR clause 52.226-6.

(xxiii) 52.247-64, Preference for Privately Owned U.S.-Flag Commercial Vessels (Feb 2006) (46 U.S.C. Appx. 1241(b) and 10 U.S.C. 2631). Flow down required in accordance with paragraph (d) of FAR clause 52.247-64.

(2) While not required, the Contractor may include in its subcontracts for commercial items a minimal number of additional clauses necessary to satisfy its contractual obligations.

(End of clause)

52.222-43 FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT LABOR STANDARDS—PRICE ADJUSTMENT (MULTIPLE YEAR AND OPTION CONTRACTS).

As prescribed in 22.1006(c)(1), insert the following clause:

FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT LABOR STANDARDS—PRICE ADJUSTMENT (MULTIPLE YEAR AND OPTION CONTRACTS) (MAY 2014)

(a) This clause applies to both contracts subject to area prevailing wage determinations and contracts subject to collective bargaining agreements.

(b) The Contractor warrants that the prices in this contract do not include any allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

(c) The wage determination, issued under the Service Contract Labor Standards statute, (41 U.S.C. chapter 67), by the Administrator, Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, current on the anniversary date of a multiple year contract or the beginning of each renewal option period, shall apply to this contract. If no such determination has been made applicable to this contract, then the Federal minimum wage as established by section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended, (29 U.S.C. 206) current on the anniversary date of a multiple year contract or the beginning of each renewal option period, shall apply to this contract.

(d) The contract price, contract unit price labor rates, or fixed hourly labor rates will be adjusted to reflect the Contractor's actual increase or decrease in applicable wages and fringe benefits to the extent that the increase is made to comply with or the decrease is voluntarily made by the Contractor as a result of:

(1) The Department of Labor wage determination applicable on the anniversary date of the multiple year contract, or at the beginning of the renewal option period. For example, the prior year wage determination required a minimum wage rate of $4.00 per hour. The Contractor chose to pay $4.10. The new wage determination increases the minimum rate to $4.50 per hour. Even if the Contractor voluntarily increases the rate to $4.75 per hour, the allowable price adjustment is $.40 per hour;

(2) An increased or decreased wage determination otherwise applied to the contract by operation of law; or

(3) An amendment to the Fair Labor Standards Act of 1938 that is enacted after award of this contract, affects the minimum wage, and becomes applicable to this contract under law.

(e) Any adjustment will be limited to increases or decreases in wages and fringe benefits as described in paragraph (d) of this clause, and the accompanying increases or decreases in social security and unemployment taxes and workers' compensation insurance, but shall not otherwise include any amount for general and administrative costs, overhead, or profit.

(f) The Contractor shall notify the Contracting Officer of any increase claimed under this clause within 30 days after receiving a new wage determination unless this notification period is extended in writing by the Contracting Officer. The Contractor shall promptly notify the Contracting Officer of any decrease under this clause, but nothing in the clause shall preclude the Government from asserting a claim within the period permitted by law. The notice shall contain a statement of the amount claimed and the change in fixed hourly rates (if this is a time-and-materials or labor-hour contract), and any relevant supporting data, including payroll records, that the Contracting Officer may reasonably require. Upon agreement of the parties, the contract price, contract unit price labor rates, or fixed hourly rates shall be modified in writing. The Contractor shall continue performance pending agreement on or determination of any such adjustment and its effective date.

(g) The Contracting Officer or an authorized representative shall have access to and the right to examine any directly pertinent books, documents, papers and records of the Contractor until the expiration of 3 years after final payment under the contract.

(End of clause)

52.223-1 Biobased Product Certification

52.223-2 Affirmative Procurement Of Biobased Products Under Service And Construction Contracts.

As prescribed in 23.406(b), insert the following clause:

Affirmative Procurement of Biobased Products Under Service and Construction Contracts
(Sept 2013)

(a) In the performance of this contract, the contractor shall make maximum use of biobased products that are United States Department of Agriculture (USDA)-designated items unless-

(1) The product cannot be acquired-

(i) Competitively within a time frame providing for compliance with the contract performance schedule;

(ii) Meeting contract performance requirements; or

(iii) At a reasonable price.

(2) The product is to be used in an application covered by a USDA categorical exemption (see 7 CFR 3201.3(e)). For example, all USDA-designated items are exempt from the preferred procurement requirement for the following:

(i) Spacecraft system and launch support equipment.

(ii) Military equipment, i.e., a product or system designed or procured for combat or combat-related missions.

(b) Information about this requirement and these products is available athttp://www.biopreferred.gov.

(c) In the performance of this contract, the Contractor shall-

(1) Report to http://www.sam.gov, with a copy to the Contracting Officer, on the product types and dollar value of any USDA-designated biobased products purchased by the Contractor during the previous Government fiscal year, between October 1 and September 30; and

(2) Submit this report no later than-

(i) October 31 of each year during contract performance; and

(ii) At the end of contract performance.

The Environmental Point Of Contact For This Contract Is: PBSbiobasedreporting@gsa.gov.

(End of clause)

52.223-3 HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA (JAN 1997).

52.223-4 RECOVERED MATERIAL CERTIFICATION (MAY 2008).

52.223-5 POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION (MAY 2011).

52.223-7 NOTICE OF RADIOACTIVE MATERIALS (JAN 1997).

52.223-9 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED ITEMS (MAY 2008).

52.223-10 WASTE REDUCTION PROGRAM (MAY 2011).

52.223-11 OZONE-DEPLETING SUBSTANCES (JUN 2016).

52.223-15 ENERGY EFFICIENCY IN ENERGY-CONSUMING PRODUCTS (DEC 2007).

52.223-17 AFFIRMATIVE PROCUREMENT OF EPA-DESIGNATED ITEMS IN SERVICE AND CONSTRUCTION CONTRACTS (MAY 2008).

52.223-19 COMPLIANCE WITH ENVIRONMENTAL MANAGEMENT SYSTEMS (MAY 2011).

52.225-13 RESTRICTIONS ON CERTAIN FOREIGN PURCHASES (JUNE 2008)

52.225-25 PROHIBITION ON CONTRACTING WITH ENTITIES ENGAGING IN CERTAIN ACTIVITIES OR TRANSACTIONS RELATING TO IRAN-REPRESENTATION AND CERTIFICATIONS (OCT 2015)

52.233-4 APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM (OCT 2004).

GSAM 552.212-4 CONTRACT TERMS AND CONDITIONS-COMMERCIAL ITEMS.

Alternate II (FAR Deviation) (Nov 2009). When a commercial item contract is contemplated and the contract will include the clause at FAR 52.212-4, insert this Alternate II instead of subparagraph (g)(2) of the FAR clause.

(g)(2) The due date for making invoice payments by the designated payment office is the later of the following two events:

(i) The 10th day after the designated billing office receives a proper invoice from the Contractor. If the designated billing office fails to annotate the invoice with the date of receipt at the time of receipt, the invoice payment due date shall be the 10th day after the date of the Contractor's invoice; provided the Contractor submitted a proper invoice and no disagreement exists over quantity, quality, or Contractor compliance with contract requirements.

(ii) The 10th day after Government acceptance of supplies delivered or services performed by the Contractor.

552.212-71 CONTRACT TERMS AND CONDITIONS APPLICABLE TO GSA ACQUISITION OF COMMERCIAL ITEMS.

As prescribed in 512.301(a)(1), insert the following clause:

Contract Terms and Conditions Applicable to GSA Acquisition of Commercial Items (Jun 2016)

(a) The Contractor agrees to comply with any clause that is incorporated herein by reference to implement agency policy applicable to acquisition of commercial items or components. The clause in effect based on the applicable regulation cited on the date the solicitation is issued applies unless otherwise stated herein. The clauses in paragraph (b) of this section are incorporated by reference:

(b) Clauses.

552.203-71 Restriction on Advertising

552.211-73 Marking

552.215-70 Examination of Records by GSA

552.215-71 Examination of Records by GSA (Multiple Award Schedule)

552.215-72 Price Adjustment—Failure to Provide Accurate Information

552.219-70 Allocation of Orders—Partially Set-Aside Items

552.228-70 Workers' Compensation Laws

552.229-70 Federal, State, and Local Taxes

552.232-8 Discounts for Prompt Payment

552.232-23 Assignment of Claims

552.232-71 Adjusting Payments

552.232-72 Final Payment

552.232-73 Availability of Funds

552.232-78 Payment Information

552.237-71 Qualifications of Employees

552.238-71 Submission and Distribution of Authorized FSS Schedule Price List

552.238-74 Industrial Funding Fee and Sales Reporting

552.238-75 Price Reductions

552.238-81 Modifications (Multiple Award Schedule)

552.242-70 Status Report of Orders and Shipments

552.246-73 Warranty—Multiple Award Schedule

552.246-76 Warranty of Pesticides

(End of clause)

552.212-72 CONTRACT TERMS AND CONDITIONS REQUIRED TO IMPLEMENT STATUTES OR EXECUTIVE ORDERS APPLICABLE TO GSA ACQUISITION OF COMMERCIAL ITEMS.

As prescribed in 512.301(a)(2), insert the following clause:

Contract Terms and Conditions Required to Implement Statutes or Executive Orders Applicable to GSA Acquisition of Commercial Items (Jun 2015)

The Contractor agrees to comply with any provision or clause that is incorporated herein by reference to implement provisions of law or Executive Orders applicable to acquisition of commercial items or components. The provision or clause in effect based on the applicable regulation cited on the date the solicitation is issued applies unless otherwise stated herein. The following provisions and clauses are incorporated by reference:

[The contracting officer should either check the provisions and clauses that apply or delete the provisions and clauses that do not apply from the list. The contracting officer may add the date of the provision or clause if desired for clarity.]

(a) Provisions.

552.223-72 Hazardous Material Information

(b) Clauses.

552.223-70 Hazardous Substances

552.223-71 Nonconforming Hazardous Material

552.223-73 Preservation, Packaging, Packing, Marking, and Labeling of Hazardous Materials (HAZMAT) for Shipments.

552.238-70 Identification of Electronic Office Equipment Providing Accessibility for the Handicapped

552.238-72 Identification of Products that have Environmental Attributes

(End of clause)

J. LIST OF ATTACHMENTS
(LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS)

EXHIBIT 1 QUALITY ASSURANCE SURVEILLANCE PLAN (QASP)

INTRODUCTION

This Quality Assurance Surveillance Plan (QASP) is designed to provide the General Services Administration (GSA) with an effective surveillance method of monitoring and evaluating the Contractor's performance under a Performance-Based Statement of Work (PBSOW) for operation and maintenance services.

In accordance with Federal Acquisition Regulation (FAR) Part 37.601, performance-based Contracting methods are intended to ensure that the required performance quality levels are achieved and that the total payment is related to the degree that services performed or outcomes achieved meet Contract standards. GSA's role in quality assurance is to ensure that the Contractors are achieving the quality levels established in the operation and maintenance services Contracts and focuses on the Contractors' QCP. GSA periodically validates the execution of the Contractors' quality control programs by reviewing such areas as the Contractors' inspection forms, service request logs, tenant reports, tenant satisfaction surveys, and the timeliness of corrective actions.

Inspections conducted through the QASP and histories of Contractor performance in the Contractor "Performance Assessment Reporting System (CPARS)" or successor system assist GSA in obtaining those services that are contracted and delivered as agreed upon. The systems also help ensure that contract awards and deductions are executed in accordance with the contract requirements. The regional Property Management operations office is responsible for capturing the appropriate Contractor performance information that will be entered into CPARS by the CO or their designee.

A. PURPOSE OF THE QASP

The QASP is intended to accomplish the following:

1. Define the roles and responsibilities of participating Government officials.

2. Identify the performance objectives based upon the PBSOW in accordance with FAR Part 46.401(a) (1).

3. Identify the performance quality level standards in accordance with FAR Part 37.601(a) (2).

4. Describe the methods of surveillance for GSA to identify quality levels in accordance with FAR Part

46.401(a) (2).

5. Establish a method to provide feedback to the Contractor regarding quality and timeliness of the service performance, i.e., copies of inspection forms, copies of tenant reports, data on tenant satisfaction scores; and any other drivers or measures of performance that are required by the CO or designee

6. Establish timeframes for communication and performance improvement if needed.

7. Establish specified procedures for changes to the Contract price when services are not performed or do not meet Contract requirements in accordance to FAR Part 37.601(a) (3).

8. Ensure the Contractor has developed and implemented a QCP establishing procedures and responsibilities for controlling the quality of work performed.

B. ROLES AND RESPONSIBILITIES OF GOVERNMENT OFFICIALS

The following Government officials will participate in assessing the quality of the Contractor's performance. Their roles and responsibilities are described as follows:

1. *Kevin Whitman* or person designated by the CO will serve as the designee or COR. The COR is responsible for monitoring, assessing, recording, and reporting on the performance of the Contractor. The CO or their designee shall have the primary responsibility for completing forms that will be used to evaluate the Contractor's performance. In addition, the COR or designee shall use the Contractor Performance System (CPS) to document the Contractor's performance.

2. *Kevin Whitman* or person designated as the CO will have overall responsibility for overseeing the Contractor's performance. The CO shall be responsible for monitoring the Contractor's performance in the areas of Contract compliance and Contract administration. The CO will review the COR or designee's written inspections and assessments of the Contractor's performance and resolve any discrepancies that may arise between the Contractor and COR or their designee. In addition, the CO shall use the Contractor Performance System (CPS) to document the Contractor's performance.

C. TYPES OF WORK TO BE PERFORMED

1. The Contractor's performance in providing the following custodial and building operations & maintenance combined services shall be evaluated by the government:

a. Standard Services
   i. Interior
   ii. Exterior
   iii. Snow and Ice Removal
   iv. Grounds Maintenance

b. Above Standard Services
c. Service Calls
d. Communication Plan
e. Solid Waste/Trash Disposal and Removal
f. Recycling
g. Environmental/Recycling Reporting
h. Integrated Pest Management Plan
i. Child Care Center
j. Existing deficiency list
k. Building Operating Plan
l. Equipment Inventory
m. Monthly Progress Reports
n. Reference Library
o. Building Management Support Services
p. Operational Requirements
q. Service Requests
r. Tours
s. Maintenance Program
t. Water Treatment
u. Oil Analysis
v. Lamp and Ballast Replacements
w. Repairs
x. Safety and Environmental
y. Fire Protection and Life Safety Equipment and Systems
z. Other services as described in Section C

D. METHODS OF SURVEILLANCE

The method of surveillance is based on the performance criteria of the Contract terms and specifications. Each requirement will describe the tasks to be performed and the standard for successful performance. GSA intends to monitor and evaluate the Contractor's performance based on any or all of the following surveillance methods:

1. Periodic Surveillance Inspections: This method consists of selected surveillance tasks by the Government that do not require 100 percent inspection, or are performed on a random basis. The CO or their designee will evaluate the Contractor's reports, surveys, etc. on a weekly, biweekly, monthly, or quarterly basis.

2. Tenant Interviews: All tenant concerns received through the CO or their designee will be documented and evaluated on a planned schedule developed by the CO or designee. This method may help the CO or their designee focus on areas that may require further action from the CO.

3. Service Request Documentation: This method of surveillance will provide information to the CO or designee, such as identification of the types of service requests received the frequencies of service requests, corrective action taken, timeliness of completion, and any other pertinent data. At a minimum, this method shall be performed on a monthly basis.

4. Tenant Satisfaction Surveys: The Gallup Organization conducts surveys for one-third of GSA's tenants in Government-owned and leased buildings. These surveys gather important data in many areas, including specific categories pertaining to the operation and maintenance of GSA's buildings. The surveys provide the CO or their designee with satisfaction scores that can be further evaluated to determine if there are any weaknesses within the various programs. There are various measures that can be taken, such as reviewing the survey's comments, obtaining further feedback from the tenants, or sharing the scores with the Contractor to establish a plan of action.

E. QUALITY ASSURANCE FORMS AND REPORTS

Inspection Form: The GSA-3423 form will be used to document and evaluate the Contractor's performance. The COR will evaluate each event in accordance with the performance standards and performance requirements stated in the PBSOW. All tasks that are considered to have unacceptable performance shall be substantiated and documented on the GSA-3423 form. The form will be completed and submitted to the Contractor within 24 hours. The Contractor shall return the GSA-3423 form identifying the corrective action taken within time allotted by the COR.

Inspection of Services Clause: The CO shall fill in applicable commercial or non-commercial clause as appropriate, i.e., FAR Part 52.246.4 paragraphs (e) and (f).

F. ANALYSIS OF SURVEILLANCE RESULTS

Monthly CO Report: At the end of each month the COR will summarize the overall results of the Contractor's performance for the previous month and send to the CO. If appropriate, the CO may investigate the event(s) further to determine if all the facts and circumstances surrounding the event(s) are accurate. The CO may discuss with the Contractor an event or trend that indicates unacceptable performance.

DRAFT QASP STANDARDS – COMBINED SERVICES

CUSTODIAL

Performance-based Task	Services to be inspected	Standard for successful performance	Quality Assurance Surveillance Method	Corrective Action/Deduction
SECTION C				
Contractor shall provide interior custodial services.	FLOOR CARE BARE FLOORS (lobbies, corridors, restrooms, etc.) ADP Floors	Floors, base moldings and grout shall be clean and free of debris, including but not limited to, (dirt, water streaks, mop marks, string, gum, tar and other foreign matter). The floors shall maintain their natural luster and not have a dull appearance. Damp mopping shall be the only method of wet cleaning for floors in Automated Data Processing (ADP) space. Damp mopping shall be the only method of wet cleaning for floors containing asphalt material.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	Positive: Favorable report in CPARS Negative: Contract remedy as prescribed in 52.212-4(a) This applies to the entire QASP.

	Asphalt Floors Granite and Marble Floors (Crystallization) Loading Dock Floors	All applicable floor areas shall be maintained in accordance with industry standards. Spill residue and clean-up materials shall be disposed of in accordance with the Environmental Protection Agency (EPA), and State and local regulatory agency requirements. Refer to the Standard Services – Interior Section on Postal Space The old finish or wax shall be removed and new sealant applied in accordance with standard commercial practices. Spots shall be eliminated. There shall be no evidence of gum, rust, burns, or scuffmarks, or wax build-up in corners or crevices. UNDER NO CIRCUMSTANCES SHALL BURNISHING, HIGH SPEED BUFFING	The Government may evaluate performance based on any or all of the following: tenant	

SECTION C CON'T	Postal Floors

	Sealing Wood Floors			
	CARPETED FLOORS	Free of visible dirt, dust, and other debris. No spots, smears, crusted material, or spills. No fuzzing caused by harsh rubbing or brushing of carpet.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation. The Government may evaluate performance	

SECTION C-Standard Services (Public Space) and Above Standard Service for other areas.	CARPET EXTRACTION	Build-up, spills, or crusted material is to be removed along with spots and smears. Cleaned areas of carpets and rugs shall be reasonably blended with surrounding carpets.	based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
SECTION C CON'T	MATS AND RUNNERS	Mats and runners shall be free of removable spots, soiled traffic patterns, dirt, debris, gum and crusted material. There shall be no areas of deterioration or fuzzing as a result of harsh brushing or scrubbing.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	

SECTION C CON'T	RESTROOMS, SHOWER ROOMS, LOCKER ROOMS, AND HOLDING CELLS	Areas shall be cleaned with a disinfectant cleaner. Fixtures shall maintain a high level of luster and be free of dust, mold, mildew, streaks, and encrustation. Partitions, doors, vents, sills, and walls shall be free of dust, dirt, bodily fluids, and waste and graffiti. Restrooms shall be free of discarded material and trash shall be emptied to prevent the containers from overflowing.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	.
	FIXTURES	Fixtures and surfaces (washbasins, urinals, modesty panels, toilets, shower stalls etc.) shall be clean with no dust, spots, soil substances, discoloration, rust, mold, build-up, or excess moisture.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	

SECTION C CON'T	SURFACES Metal, Brass, and Woodwork Glass Surfaces	Surfaces (including corners, crevices, moldings, ledges, hand rails, grills, doors, door knobs, door frames, kick plates, etc.) shall be free of dust, streaks, spots, hand marks, oil, smudges, dirt, soil substances, rust, encrustation, and streaks. All glass, clear partitions, mirror surfaces, bookcases, and other glass (within approximately 70 inches of the floor) shall be clean and free of dirt, dust, streaks, smudges, watermarks, spots and grime, and shall not be cloudy. There shall be no water spots on the glass or adjacent fixtures and furniture.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	WALLS	Free of smudges, marks, dirt, and spots with no discoloration.	The Government may evaluate performance based on any or all of the following: tenant satisfaction,	

			surveys, tenant interviews, periodic inspections, and service call documentation.	
SECTION C CON'T	HIGH SURFACES	Surfaces above 90 inches and above shall be cleaned free of dirt, dust, and cobwebs. Where glass is present, both sides shall be clean and free of streaks. This does not include removal of vents, tiles, or fixtures.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	

	TRASH, WASTEBASKETS, AND ASH RECEPTACLES	Trash containers shall be emptied and kept clean, odor-free and free of dirt, dust, debris, residue, and spilled material. Plastic liners for all trash, debris containers shall not be torn, worn, or contain residue. All ash receptacles shall be free of dust, ashes, odors, tar, streaks, and tobacco residue.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
SECTION C CON'T	ELEVATOR, ESCALATORS, AND STAIRWAYS	Door tracks shall be clean and free of dirt, debris, built up grime, dust, smudges, and other extraneous matter. Surfaces shall be clean and free of finger marks, smudges, and spills. Carpets and floors shall be free of removable spots, dirt, and debris. Floors requiring a finish shall be maintained at a high luster. Stairways, escalators, entrances, landings, railings, risers, ledges, grills, doors, radiators, and surrounding areas shall be free of dirt, dust, litter, and debris.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	

	PLATE GLASS (all glass - glass over and in exterior and vestibule doors, all plate glass around entrances, lobbies vestibules, and spandrel)	Shall be clean and free of dirt, grime, streaks and moisture, and shall not be cloudy.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	WINDOW WASHING	Windows shall be clean (minimum is annually) and free of dirt, grime, streaks and moisture, and shall not be cloudy. Window sashes, sills, woodwork, and other surroundings of interior glass shall be wiped free of drippings and other watermarks.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	

	BLINDS AND COVERINGS	All blinds and coverings, cord tapes, and valances shall be clean and free of dust and spots. Blinds and coverings shall be washed (minimum is annually) on both sides and coordinated with the COR.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	POLICING (All building areas both interior and exterior	All trash, and other discarded material shall be removed.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	INTERIOR AND ATRIUM PLANTS (government plants)	Plants shall be free of dust and dead leaves and be properly hydrated.	The Government may evaluate performance based on any or all of the following: tenant	

			satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	CONCESSIONS	Public areas shall be clean, sanitized, free of spillages, food crumbs, spots, smudges, marks, and soil		
	POSTAL SPACE	All postal floors shall be free of dirt, dust, debris, and other foreign matter. If stripping and refinishing is required, finish and wax shall be removed and reapplied in accordance with standard commercial practices. UNDER NO CIRCUMSTANCES SHALL BURNISHING, HIGH SPEED BUFFING OR DRY STRIPPING METHODS BE USED.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	FITNESS CENTERS, HEALTH UNITS, AND LABORATORIES	Areas such as the fitness centers, health units, and laboratories, shall be cleaned with disinfectant.	The Government may evaluate performance based on any or all of the following: tenant	

		All vinyl surfaces of exercise equipment and exercise mats shall be free of dust, dirt, spots, streaks, and smudges. All metal (door frames and handles, fixtures, equipment) and glazed surfaces (including partitions), shall be free of smears, finger marks, and streaks and shall maintain a uniform luster.	satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
SECTION C – Standard Services - Exterior	CANOPIES	Shall be clean and free of dirt, dust, cobwebs, nests, bird excrement, trash, and debris.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	HARD SURFACE AREAS (sidewalks, brick areas, hard	Shall be clean and free of dirt, debris, gum, litter,	The Government may evaluate	

	surfaces, parking areas, garages, docks, etc.)	gravel, weeds, oil, and grease. No residual dirt shall remain after the removal of the debris.	performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	EXTERIOR SURFACES (signs, vending machines, tables, etc.)	Shall be clean, with no dirt, dust, residue, streaks, spots, soil substances, discoloration, or rust.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	SNOW AND ICE REMOVAL	Shall be free of snow and ice which may cause slip hazard.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant	

			interviews, periodic inspections, and service call documentation.	
	GROUNDS MAINTENANCE	Maintain all plants, trees, shrubs, ground cover, and lawns in a manner that prolongs life and sustains a healthy appearance and free from pests. Entrances and Exits shall not be wet from watering, during the arrival and departure of occupants and visitors.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
SECTION C CON'T	RECYCLING	Paper shall be transported from recycling bins to storage containers in designated area.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	

SECTION C Contractor shall provide surveillance, trapping, extermination and pesticide application components of the integrated pest management (IPM) program	IPM INITIAL INSPECTION	Shall provide a thorough initial inspection of interior space and exterior grounds and paved areas. Shall identify all areas including equipment, structural features or practices that contribute to pest infestation.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	IPM PERIODIC INSPECTION	Shall conduct quarterly inspections to determine if treatment is required.	The Government may evaluate performance based on any or all of the following: tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	
	IPM PLANS	Shall obtain approval from the COR BEFORE treatment is rendered.	The Government may evaluate performance based on any or all of the following:	

			tenant satisfaction, surveys, tenant interviews, periodic inspections, and service call documentation.	

OPERATIONS AND MAINTENANCE

PERFORMANCE-BASED TASK	SERVICES TO BE INSPECTED	STANDARD FOR SUCCESSFUL PERFORMANCE	QUALITY ASSURANCE SURVEILLANCE METHOD	
SECTION C Existing Deficiency Inspection/List and equipment inventory.	A thorough and systematic initial inspection and inventory of all equipment and systems and the performance of an annual inventory to verify and update the inventory.	A complete and accurate deficiency list and inventory must be completed and submitted within the initial timeframe and an annual inventory must be scheduled and conducted to verify and update inventory.	The Government will evaluate performance based on tenant satisfaction, surveys, tenant interviews, periodic inspections, and service request documentation. This applies to the entire QASP.	Positive: Favorable report in CPARS Negative: Contract remedy as prescribed in 52.212-4(a) This applies to the entire QASP.
Startup Phase.	The Contractor must provide all start up services necessary to provide seamless operation of all building systems. Adjustment to controls, BAS	Submission and review of all required building documentation without failures in providing service to our customers.		

Staffing and ability to communicate with CO.	Contractor must staff and provide communication methods to ensure services are adequately provided to the tenant.	Quality and quantity of staffing and methods of communication ensure adequate response to all Contract requirements.		
Onsite records.	All records required by the Contract must be accurate and available for inspection.	Records must be organized, up to date, and reflect actual conditions.		
NCMMS	Service request record keeping using the computerized maintenance management system (NCMMS).	Maintenance records are accurate and current and are properly populated within the NCMMS to document historical maintenance efforts during the life cycle of the facility.		
Building Operating Plan (BOP).	BOP must detail all aspects of the Contractor's performance of the Contract and building equipment and system information. Energy consumption must be monitored by the Contractor for indicators of inefficient operation.	BOP must be submitted and address all items		
Monthly Progress Reports.	Reports of Contractor progress and activities must be provided monthly.	All reports must be thorough, accurate and submitted on time as required by the Contract.		
Reference library.	Information in the form of a reference library must be provided by the Contractor.	All required documents are to be included in the reference library and must be complete and up to date.		
Service Requests.	Service requests must be received, tracked,	All routine, emergency, and urgent service		

	and responded to in accordance with Contract requirements.	requests are responded to as required by the Contract and repairs are completed within specified timeframes.		
Energy and Water Efficiency Plan	Reports must contain monthly energy usage compared to last year and recommendations on improvement	Control systems must be operated to provide maximum efficiency as measured by energy consumption per gross sq. ft. while providing tenant comfort		
Tours.	Tours must be conducted and documented in accordance with Contract requirements.	All tours must be conducted and documented as required and will reflect actual conditions. Adjustments will be made as needed. Logs and check sheets must be adequate to track operating hours and equipment performance history.		
Leak testing.	Refrigerants and natural gas leaks must be avoided and detected as early as possible.	Leak testing for refrigerants and natural gas must be performed and documented in accordance with the BOP.		
Condensate pans	Condensate pans must be clear and algae free at all times.	On at least a monthly basis, tours must include inspection and treatment of condensate pans with appropriate biocide to ensure proper drainage.		
Disruptive or hazardous tool use, disruption to utilities, lighting and space	Tenants must not be unnecessarily disrupted during repairs or procedures.	All disruptive tool use during normal working hours must be approved by the CO or their designee		

conditioning.		and welding and burning must be approved via GSA Form 1755. The CO must approve in advance any work that will disrupt lighting, utilities, and space conditioning.		
Plumbing and restroom maintenance.	Plumbing and drain systems must be maintained and in good working order.	All drain systems must be clear and kept functional at all times.		
Maintenance program.   <u>SECTION C Cont</u>

Water treatment.	provide for an effective water treatment program including equipment, monitoring, reporting, etc.	The Contractor must perform water treatment, monitoring, and testing in accordance with the Contract requirements.		
Oil analysis and oil changes.	Oil analysis and oil changes must be documented.	The Contractor must perform initial and periodic oil analysis and oil changes in accordance with the Contract provisions.		
Lamp and ballast replacements.	Quality, energy-efficient replacement lamps and ballasts must be used by the Contractor.	The Contractor must perform lamp and ballast replacements in accordance with the Contract provisions		
Architectural and structural systems maintenance.	Interior and exterior building architectural and structural systems must be maintained in good repair.	The Contractor must conduct inspections, repairs, replacements, and touch up painting and patching to match existing finishes as required by Contract provisions.		
Interior signage and directories.	Signage must be up to date and in good repair.	Signage must be updated and repaired as required.		
Finishes maintenance.	All finishes must appear neat and have an aesthetically appealing appearance.	The Contractor must maintain and touch up building finishes in a professional manner.		
Repairs.	All repairs must be performed in a timely professional manner, using quality parts and materials.	The Contractor must perform repairs in accordance with the provisions of the Contract including timeliness of response, invoicing, thresholds, replacement		

		part quality standards, and warranty provisions.		
Safety and environmental management.	Scheduling and record keeping.	All required safety and environmental tests, certifications, permits and other procedures required in this document must be scheduled in the NCMMS work order system, and documented in the NCMMS. In addition, the Contractor must maintain copies of all such tests, certifications, permits and other required records.		
	Refrigerant control and certification.	The Contractor must control refrigerants and maintain records in accordance with EPA, GSA, and appropriate Air Quality Management District standards. The Contractor must take immediate action to contain refrigerant leaks and must report any leaks to the CO or designee.		
	AQMD operating permits.	The Contractor must be familiar with the requirements of the Local Air Quality Management District (AQMD), and shall be responsible for obtaining operating permits for boilers, generators, and other emissions-producing equipment regulated by the district.		
	Underground storage	The Contractor is		

SECTION C Cont.	tanks.	responsible for complying with all Federal, State, and Local requirements for the periodic inspection, monitoring, permitting, certification and maintenance of underground storage tanks.		
	Polychlorinated biphenyls (PCBs) control.	The Contractor must inspect all transformers containing (PCBs) and maintain records of such inspections in accordance with State, Local, and Environmental Protection Agency (EPA) regulations.		
	Hazardous waste.	The Contractor must be cognizant of, and comply with, all Federal, State, and Local laws and regulations related to the disposal (landfill, sewer discharge, etc.) of hazardous waste and materials used or removed in the performance of the Contract or discharged by the building, and must comply with all such requirements, to include record keeping requirements.		
	Electrical safety.	The Contractor must comply with NFPA 70E when working on or around electrical equipment or systems. The Contractor must ensure that areas restricted to qualified personnel are secured and properly labeled.		

	Lock out/tag out.	The Contractor must develop a lockout/tag out program in accordance with 29 CFR 1910. The program must include all anticipated energy sources, including but not limited to electricity, steam, pressurized fluids, and mechanical energy.		
SECTION C Cont.	Confined spaces.	The Contractor must identify and label all confined spaces in accordance with OSHA requirements. The Contractor must develop a confined space entry permit system for all permit- required confined spaces within 60 calendar days of commencement of the Contract.		
	Asbestos management.	The Contractor shall be expected to occasionally perform Class III and Class IV asbestos work as defined in 29 CFR 1910.26.1101. The Contractor must be prepared to deal with asbestos on a small scale, short duration basis to effect emergency repairs and to clean up small spills. The Contractor must protect building tenants, visitors, and employees from asbestos exposure. The Contractor must comply with applicable National Institute of Building Sciences (NIBS) and		

		OSHA standards.		
	Hazardous Materials.	The Contractor must make material safety data sheets (MSDSs) available to their employees in accordance with 29 CFR 1910.1200.		
	Boiler/pressure vessel operation and inspection standards.	All tests must be done in accordance with ASME Boiler and Pressure vessel Code, National Board Inspection Code (NBIC), EPA Local AQMD requirements, ASME CSD-1, and NFPA 85.		
	Backflow prevention devices.	Backflow prevention devices used on water-based fire suppression systems must be inspected, tested and maintained according to NFPA 25.		
SECTION C Cont.	Potable water systems.	The Contractor must comply with the Safe Drinking Water Act, PL 99-339, as amended, and the EPA Safe Drinking Water regulations (40 CFR 141.43, Sections A and D), that address the quantity of lead allowable in new installations or repairs to existing drinking water systems and/or plumbing. Potable water systems which are repaired, modified, serviced, or breeched in any way must be disinfected and flushed prior to returning the system to service.		

	Labeling.	The Contractor must label equipment, storage areas and workspaces in accordance with OSHA standards immediately after commencement of the Contract if such labels are not already in place.		
Fire Protection and Life Safety Equipment and Systems. <u>SECTION C Cont.</u> <u>SECTION C Cont.</u>	Fire alarm system.	The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, and testing methods outlined in NFPA 72. Documentation of the above mentioned inspection, maintenance, and testing results must be recorded on the applicable Inspection and Testing Form from NFPA 72. Fire alarm system testing, maintenance and repair shall be performed during normal business hours when it does not interfere with building operations. When such testing, maintenance or repair will interfere with building operations; it shall be performed after normal business hours without additional costs to the government, unless approved otherwise by the CO or designee The Contractor must provide a fire watch in areas left unprotected until the fire alarm system is completely restored to service. In no case shall		

SECTION C Cont.		the fire alarm systems be left in a disabled condition without notifying the CO or designee. The Contractor must ensure that the fire alarm system is maintained operable at all times except while being tested or repaired. It is essential that the Contractor carefully schedule with the building manager all non emergency shutdowns of the fire alarm system and that back up protection be provided by the Contractor (arrangement of additional personnel stationed at the fire alarm system control panel) any time the fire alarm system is out of service for more than 4 hours. In addition, regardless of the duration of the shutdown, the affected portion of the system must be tested to ensure that the protection has been restored. In addition, during any period in which there is no capability for the fire alarm system to transmit fire alarm signals to a supervising station, the Contractor must maintain a fire watch in accordance with GSA guidelines. The Contractor must utilize qualified personnel meeting the applicable requirements in Section		

		H16.3, Qualification of Technicians. in performing any task associated with this contract		
SECTION C Cont.	Water-based fire suppression system	The Contractor is responsible for meeting the inspection, maintenance, testing frequencies and testing methods outlined in NFPA 25. Water-based fire suppression system testing, maintenance and repair shall be performed during normal business hours when it does not interfere with building operations. When such testing, maintenance or repair will interfere with building operations; it shall be performed after normal business hours without additional costs to the government, unless approved otherwise by the CO or designee. The Contractor must provide a fire watch in areas left unprotected until the water-based fire suppression system is completely restored to service. In no case must any water based fire suppression system be left in a disabled condition without notifying the CO or designee. The Contractor must ensure that the sprinkler system is maintained and		

		operable at all times except while being tested or repaired. It is essential that the Contractor carefully schedule with the building manager and CO or their designee all non emergency shutdowns of the sprinkler system and that back up protection be provided by the Contractor any time the sprinkler system is out of service for more than 4 hours. In addition, regardless of the duration of the shutdown, the affected portion of the system must be tested to ensure that the protection has been restored.		
SECTION C Cont.	Fire Rated doors and assembles.	The Contractor must utilize qualified personnel meeting the applicable requirements in Section H16.3, Qualification of Technicians. in performing any task associated with this contract The Contractor must perform inspections, tests and maintenance or repairs in accordance with the current edition of NFPA 80 and NFPA 101. The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 80 and NFPA 101.		

SECTION C Cont.	Fire Damper and combination fire/smoke dampers.	The Contractor must utilize qualified personnel meeting the applicable requirements in Section H16.3, Qualification of Technicians. in performing any task associated with this contract The Contractor must perform inspections, tests, and maintenance or repairs in accordance with the current edition of NFPA 80. Maintenance of combination fire/smoke dampers must also meet the requirements contained in NFPA 105. The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 80. The Contractor must utilize qualified personnel meeting the applicable requirements in Section H16.3, Qualification of Technicians. in performing any task associated with this contract		
	Smoke door assemblies.	The Contractor must perform inspections, tests, and maintenance or repairs in accordance with the current edition of NFPA 105. The Contractor must utilize qualified personnel		

		meeting the applicable requirements in Section H16.3, Qualification of Technicians. in performing any task associated with this contract The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 105.		
SECTION C Cont.	Smoke dampers.	The Contractor must perform inspections, tests and maintenance or repairs in accordance with the current edition of NFPA 105. The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 105. The Contractor must utilize qualified personnel meeting the applicable requirements in Section H16.3, Qualification of Technicians. in performing any task associated with this contract The Contractor must perform inspections, tests, and maintenance or repairs in accordance with the current edition of NFPA		

		10. The Contractor must utilize qualified personnel meeting the applicable requirements in Section H16.3, Qualification of Technicians. in performing any task associated with this contract The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 10.		
SECTION C Cont.	Non-water based fire extinguishing systems.	The Contractor must perform inspections, tests and maintenance in accordance with the current edition of the applicable NFPA standards (e.g., NFPA 12, 12A, 17, 17A, 96, 2001, etc.). The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in the applicable NFPA standards (e.g., NFPA 12, 12A, 17, 17A, 96, 2001, etc.). The Contractor must utilize qualified personnel meeting the applicable requirements in Section H16.3, Qualification of		

		Technicians. in performing any task associated with this contract		
SECTION C Cont.	Smoke control systems.	The Contractor must perform inspections, tests, and maintenance or repairs in accordance with the current edition of NFPA 92. The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods. The Contractor must utilize qualified personnel meeting the applicable requirements in Section H16.3, Qualification of Technicians. in performing any task associated with this contract		
SECTION C Cont	Emergency and Standby Power Systems	The Contractor must perform inspections, tests, and maintenance or repairs in accordance with the current edition of NFPA 110 and NFPA 111 The Contractor must utilize qualified personnel meeting the applicable requirements in Section H16.3, Qualification of Technicians. in performing any task associated with this contract		
	Emergency lighting systems and exit signage.	The Contractor must perform inspections, tests, and maintenance or repairs in accordance with the current edition of NFPA 101.		

		The Contractor must utilize qualified personnel meeting the applicable requirements in Section H16.3, Qualification of Technicians. in performing any task associated with this contract The Contractor is responsible for meeting the inspection, maintenance, testing frequencies, testing methods, and documentation requirements outlined in NFPA 101.		
Miscellaneous work.	The Contractor must provide labor hours and parts and supplies as requested by the CO or designee.	The Contractor must provide labor hours as requested by the CO to perform tasks in a timely manner.		
Section H	Green Purchasing Tracking	Shall track and report and amounts of green cleaning products and materials purchased. Furnish records upon request		
	Recycle Content Product Purchase Annual Reporting	Annual report on recycle products if applicable		

EXHIBIT 2 BUILDING INFORMATION SHEETS

The following are building statistics for informational purposes only. The figures below are estimates only and are not guaranteed fully accurate. Contractor is cautioned to field verify the provided information during the site pre-bid walkthroughs. When necessary, feasible, and warranted, the CO or designee will provide access to assignment drawings and blueprints.

JANITORIAL

1. BUILDING DATA:

Name and building number:	Pastore Federal Building - RI0010ZZ
Location:	2 Exchange Terrace, Providence, RI
Number of stories:	3 + basement
Normal Building Operating Hours:	7:00 AM TO 5:00 PM
Population:	60

2. BUILDING STATISTICS:

INTERIOR

Gross	…….....	118,319 SF*
Rentable	…….....	107,393 SF*

GENERAL / PUBLIC SPACE

Granite Floor	…….....	0 SF
Concrete Floor	……	25,291 SF
Terrazzo Floor	……	0 SF
Wood/Parquet Floor	……	0 SF
Marble Floor	……	2,818 SF
VCT Floor	……	189 SF
Ceramic Tile	……	4,085 SF
Carpet / Carpet Tile	……..	5,466 SF
Garage Floor	……..	896 SF
Rubber Floor	…… ……	0 SF
Stairways	……..	5 FL
Windows	……..	SF
Windows	……	SF

Main Lobby ……..

VERTICAL TRANSPORTATION

Elevators	……..	2 QTY
Carpeted Elevators	……..	1 QTY
Uncarpeted Freight Elevators	……..	1 QTY

RESTROOMS

Square Footage	……..	4,283 SF

FIXTURES

Water Closets	……..	43 QTY
Urinals	……..	11 QTY
Sinks / Faucets	……	56 QTY
Water Fountains	……	5 QTY
Showers	……	3 QTY
Trash Bins	……	100 QTY
Paper Towel Dispensers	……	25 QTY
Sanitary Napkin Receptacles	……	10 QTY
Soap Dispensers	……	27 QTY

OFFICE SPACE[1]

Carpet / Carpet Tile	……...	38,508 SF
VCT Flooring	……	6,170 SF
Terrazzo	…… …….	0 SF
Concrete	…… …….	0 SF
Wood Parquet	…… …….	0 SF
Rubber	…… …….	0 SF
Ceramic Tile	……	0 SF
Window Blinds	……..	90 EA
Surfaces Requiring Dusting	…….....	0 SF

[1] Do not include courtroom or vacant space in these values

Trash Bins	…….....	100 QTY
Recycling Bins	……..	100 QTY

VACANT SPACE

Carpet / Carpet Tile	……...	0 SF
VCT Flooring	……	0 SF

EXTERIOR

Outside area to be policed	…….....	28,400 SF*
Paved and Parking lot area	…….....	7,400 SF*
Lawn Grass	……	0 SF
Edging	…… ……	0 LF
Shrubs	……..	0 QTY
Trees	……..	0 QTY
Planters	……..	0 QTY
Flowering Bushes	……..	0 QTY

SNOW	10 Year Average of Snow from October, 2007 – April, 2016	40	INCHES

1. BUILDING DATA:

Name and building number:	US Courthouse - RI0010ZZ
Location:	1 Exchange Terrace, Providence, RI
Number of stories:	5 + basement
Normal Building Operating Hours:	8:00 AM TO 6:00 PM
Population:	125

2. BUILDING STATISTICS:

INTERIOR

Gross …….....	143,353 SF*
Rentable …….....	122,679 SF*

GENERAL / PUBLIC SPACE

Granite Floor …….....	0 SF
Concrete Floor …….	21,315 SF
Terrazzo Floor …….	0 SF
Wood/Parquet Floor …….	2,696 SF
Marble Floor …….	19,772 SF
VCT Floor …….	254 SF
Ceramic Tile …….	3,934 SF
Carpet / Carpet Tile ……..	0 SF
Garage Floor ……..	0 SF
Rubber Floor ……	0 SF
Stairways ……..	6 FL
Windows ……..	SF
Windows Main Lobby ……..	SF

VERTICAL TRANSPORTATION

Elevators ……..	2 QTY
Carpeted Elevators ……..	1 QTY
Uncarpeted Freight Elevators ……..	1 QTY

RESTROOMS

Square Footage ……..	4,014 SF

FIXTURES

Water Closets ……..	43 QTY

Urinals ……..	11 QTY
Sinks / Faucets ……	56 QTY
Water Fountains ……	5 QTY
Showers ……	3 QTY
Trash Bins ……	100 QTY
Paper Towel Dispensers ……	25 QTY
Sanitary Napkin Receptacles ……	0 QTY
Soap Dispensers ……	27 QTY

OFFICE SPACE[2]

Carpet / Carpet Tile ……...	39,400 SF
VCT Flooring ……	8,1645 SF
Terrazzo ……	0 SF
Concrete ……	0 SF
Wood Parquet ……	0 SF
Rubber ……	0 SF
Ceramic Tile ……	0 SF
Window Blinds ……..	300 EA
Surfaces Requiring Dusting …….....	0 SF
Trash Bins …….....	150 QTY
Recycling Bins ……..	150 QTY

VACANT SPACE

Carpet / Carpet Tile ……...	0 SF
VCT Flooring ……	0 SF

EXTERIOR

Outside area to be policed …….....	28,500 SF*
Paved and Parking lot area …….....	7,500 SF*
Lawn Grass ……	0 SF
Edging ……	0 LF
Shrubs ……..	24 QTY
Trees ……..	8 QTY
Planters ……..	4 QTY
Flowering Bushes ……..	4 QTY

SNOW 10 Year Average of Snow from October, 2007 – April, 2016 40 INCHES

[1] Do not include courtroom or vacant space in these values

BUILDING DATA:

Name and building number:	SSA Trust Fund Building – MA0135ZZ
Location:	400 North Main Street, Fall River, MA
Number of stories:	1
Normal Building Operating Hours:	7:00 AM TO 5:30 PM ; Monday - Friday
Population:	21

1. BUILDING STATISTICS:

INTERIOR

Gross	…….....	7966	SF*
Rentable	…….....	7611	SF*

GENERAL / PUBLIC SPACE

Granite Floor	…….....	N/A	SF
Concrete Floor	……	N/A	SF
Terrazzo Floor	……	N/A	SF
Wood/Parquet Floor	……	N/A	SF
Marble Floor	……	N/A	SF
VCT Floor	……	N/A	SF
Ceramic Tile	……	156.08	SF
Carpet / Carpet Tile	……..	526.96	SF
Garage Floor	……..	N/A	SF
Rubber Floor	…… ……	899,12	SF
Stairways	……..	N/A	FL
Windows	……..	140.5	SF
Vision Panel		12	
Windows Main Lobby	Including vestibule doors and vision panels…… ……..	184	SF
Deal Windows	……..	144	SF
Glass Wall Main Lobby	……..	77	SF

VERTICAL TRANSPORTATION

Elevators	……..	N/A	QTY
Carpeted			

Elevators	……..	N/A	QTY
Uncarpeted Freight Elevators	……..	N/A	QTY

RESTROOMS

Square Footage	……..	540	SF

FIXTURES

Water Closets	……..	6	QTY
Urinals	……..	1	QTY
Sinks / Faucets	…… including breakroom……	7	QTY
Water Fountains	……	1	QTY
Showers	……	0	QTY
Trash Bins	……	4	QTY
Paper Towel Dispensers	…… including breakroom ……	5	QTY
Sanitary Napkin Receptacles	…… including breakroom ……	4	QTY
Soap Dispensers	……	7	QTY

OFFICE SPACE[3]

Carpet / Carpet Tile	……..	4343.83	SF
VCT Flooring	……	562.98	SF
Terrazzo	……	N/A	SF
Concrete	……	164.96	SF
Wood Parquet	……	N/A	SF
Rubber	……	N/A	SF
Ceramic Tile	……	327	SF
Window Blinds	……..	21	EA
Surfaces Requiring Dusting	…….....	1000	SF
Trash Bins	…….....	41	QTY
Recycling Bins	……..	35	QTY

VACANT SPACE

[1] Do not include courtroom or vacant space in these values

Carpet / Carpet Tile	……..	N/A	SF
VCT Flooring	…….	N/A	SF

EXTERIOR

Outside area to be policed	…….....	11000	SF*
Paved and Parking lot area	…….....	7750	SF*
Lawn Grass	…….	3250	SF
Paved and Parking lot area: 33 + 2 handicap upper lot & 15 lower lot (total 50)			
Edging	……. ……	800	LF
Shrubs	…(7 each in front on bldg. and 100 lf shrub 12each)…..	19	QTY
Trees	……. ……..	4	QTY
Planters	……. ……..	0	QTY
Flowering Bushes	……. ……..	5	QTY
SNOW	5 Year Average of Snow from October, 2011 – April, 2016	34.5	INCHES

MECHANICAL

The following are building statistics for informational purposes only. The figures below are estimates only. When necessary, the CO or designee will provide access to assignment drawings and blueprints.

1. BUILDING DATA:

Property Manager Contact information: Gerald E. Walsh Jr.
Contract Specialist Contact Information: Kara Canty
O&M Contractor contact information

Name and building number:	John O. Pastore Federal Building
Location:	2 Exchange Terrace Providence Rhode Island
Number of floors:	3+ Basement
Number of elevators	4
Age of Building:	80 years
Normal Building Operating Hours:	7:00am – 5:00 pm (Opening and Closing of Building)
Population of Building:	70
Number of Agencies:	6

List Agencies (Of special note are law enforcement and agencies with 24 hour operations)
GSA, US Postal, US Probation, USMS, USMS, US Attorneys,

2. BUILDING STATISTICS:

INTERIOR:	118,319	SF*
EXTERIOR		
Outside area to be policed	28,400	SF*
Paved and Parking lot area	7400	SF*

3. ENVIRONMENTAL (quantity)

Fuel Tanks (GSA Owned)	1
Underground/Above ground	above
Generators: (GSA Owned)	Yes
Firing Range	N/A

Asbestos: (location) No
Lead Based Paint: (location) No

NOTE TO CONTRACTOR: Asbestos, Lead, or any other hazardous material may be in the building particularly older ones) and has not been discovered yet so all suspicious material found should be treated assuming it is.

6. MAJOR ALTERATION PROJECTS

Buildouts/Prospectus/Agencies moving In/Out (possible impact)

7. BUILDING AUTOMATION SYSTEMS and OTHER CRITICAL EQUIPMENT

(Include manufacturer names, model #s, serial #s, tonnage KW, etc)

EMS/BAS/SMART Technologies:	Yes
CMMS:	Yes

CHILLERS: 2 Trane 130 Ton and 1 60 Ton Trane
UPS SYSTEMS:
GENERATORS: Onan 175 KW
Other important equipment/information:
Water Treatment (coupon racks?) Yes
Roof Anchorage Points and Systems No - How many?
Is Electrical Labeling up to date. Yes

8. HISTORICAL REPAIR, SERVICE CALL and TESTING DATA: (per year unless otherwise noted)

Number of Repairs Monthly	10
Number of Service Calls Monthly	12
Number and amount of Repairs over threshold for the past 2 year's	13

# of total repairs over the last year

9. Anniversary Dates of the Last Testing of:

Eddy Current : 2016

Hydro Testing of Fire extinguishers (if applicable) 3, 5, & 12 year

Bibb Hose and Obstruction Tests 3 & 5 year

10. HISTORICAL AND AESTHETIC ATTRIBUTES

Care should be taken to protect historical elements and artwork when performing work and maintenance around those items.

Artwork: No

Statues: No

Artifacts:

11. CAFETERIAS/CONCESSIONS

No

12. Energy Conservation (add or delete as necessary)

(All pertinent utilities with regards to possible conservation)

Water usage: Yes

Gas/Oil: No

Steam: No

Electrical usage: Yes

The following are building statistics for informational purposes only. When necessary, the CO or designee will provide access to assignment drawings and blueprints.

1. BUILDING DATA:

Property Manager Contact information: Gerald E. Walsh Jr.

Contract Specialist Contact Information: Kara Canty

O&M Contractor contact information

Name and building number:	Providence Federal Courthouse RI0009ZZ
Location:	1 Exchange Terrace Providence Rhode Island
Number of floors:	5 + Basement
Number of elevators	4
Age of Building:	110 years
Normal Building Operating Hours:	7:00 am -5:00 pm (Opening and Closing of Building)
Population of Building: 78	
Number of Agencies:	6

List Agencies (Of special note are law enforcement and agencies with 24 hour operations)

USDC,USMS,US Senate, US Trustees, USCAO, GSA

2. BUILDING STATISTICS:

INTERIOR:	143,353	SF*
EXTERIOR		
Outside area to be policed	28,500	SF*
Paved and Parking lot area	7,500	SF*

3. ENVIRONMENTAL (quantity)

Fuel Tanks (GSA Owned)	1
Underground/Above ground	1
Generators: (GSA Owned)	1
Firing Range	0

Asbestos: (location) Yes, basement

Lead Based Paint: (location) Yes, basement

NOTE TO CONTRACTOR: Asbestos, Lead, or any other hazardous material may be in the building particularly older ones) and has not been discovered yet so all suspicious material found should be treated assuming it is.

6. MAJOR ALTERATION PROJECTS

Buildouts/Prospectus/Agencies moving In/Out (possible impact)

7. BUILDING AUTOMATION SYSTEMS and OTHER CRITICAL EQUIPMENT

(Include manufacturer names, model #s, serial #s, tonnage KW, etc)

EMS/BAS/SMART Technologies: Yes
CMMS: Yes
CHILLERS: Trane 2 Rotary 130 Ton
UPS SYSTEMS:
GENERATORS: Olympian 200 KW
Other important equipment/information: 2 A.O. Smith 15 PSI gas fired Boilers
Water Treatment (coupon racks)? Yes
Roof Anchorage Points and Systems - How many? Yes, 30
Is Electrical Labeling up to date? Yes

8. HISTORICAL REPAIR, SERVICE CALL and TESTING DATA: (per year unless otherwise noted)

Number of Repairs Monthly	10
Number of Service Calls Monthly	12
Number and amount of Repairs over threshold for the past 2 year's	13
# of total repairs over the last year	

9. Anniversary Dates of the Last Testing of:

Eddy Current - 2016
Hydro Testing of Fire extinguishers (if applicable) 3, 5, & 12 year
Bibb Hose and Obstruction Tests 3 & 5 year

10. HISTORICAL AND AESTHETIC ATTRIBUTES

Care should be taken to protect historical elements and artwork when performing work and maintenance around those items.

Artwork: Yes
Statues: Yes
Artifacts: N/A

11. CAFETERIAS/CONCESSIONS

Yes

12. Energy Conservation (add or delete as necessary)

(All pertinent utilities with regards to possible conservation)

Water usage: Yes
Gas/Oil: Yes
Steam: N/A
Electrical usage: Yes

The following are building statistics for informational purposes only. The figures below are estimates only. When necessary, the CO or designee will provide access to assignment drawings and blueprints.

1. BUILDING DATA:

Property Manager Contact information: David Hall
Contract Specialist Contact Information: Kara Canty
O&M Contractor contact information

Name and building number:	SSA Fall River / MA0135ZZ
Location:	400 North Main Street, Fall River, MA
Number of floors:	1
Number of elevators	N/A

Age of Building:	42 Years
Normal Building Operating Hours:	8:00 a.m. to 5:00 p.m. (Monday - Friday (Opening and Closing of Building)
Population of Building:	20 employees with approx.500 public a week
Number of Agencies:	1

List Agencies (Of special note are law enforcement and agencies with 24 hour operations)
SSA

2. BUILDING STATISTICS:

INTERIOR:	7966	SF*
EXTERIOR		
Outside area to be policed	11000	SF*
Paved and Parking lot area	7750	SF*

3. CHILD CARE CENTERS ; N/A
Interior: special equipment (identify) No
Playground: No

4. ENVIRONMENTAL (quantity)

Fuel Tanks (GSA Owned)	N/A
Underground/Above ground	N/A
Generators: (GSA Owned)	N/A
Firing Range	N/A

Asbestos: (location) NO
Lead Based Paint: (location) NO

NOTE TO CONTRACTOR: Asbestos, Lead, or any other hazardous material may be in the building particularly older ones) and has not been discovered yet so all suspicious material found should be treated assuming it is.

6. MAJOR ALTERATION PROJECTS
Complete building renovation, new mechanicals, rubber roof and interior fixtures and finishes. Project started December 2015, completed June 2016

Buildouts/Prospectus/Agencies moving In/Out (possible impact) None planned

7. BUILDING AUTOMATION SYSTEMS and OTHER CRITICAL EQUIPMENT
(Include manufacturer names, model #s, serial #s, tonnage KW, etc)
EMS/BAS/SMART Technologies: Yes, Johnson Controls Niagara
CMMS: N/A
SERVICE PACK SYSTEM :

- RTU#1- TRAN, 7 TON, (MODEL) YHC120F3RMA0HCED4A10600AE0000E0000000000, (SERIAL) 160718622L.
- RTU#2- TRAN, 10 TON, (MODEL) YHC120F3RMA0HCED4A10600AE0000E0000000000, (SERIAL) 160710621L

UPS SYSTEMS:NONE
GENERATORS: NONE
Other important equipment/information:
Water Treatment (coupon racks?) NONE
Roof Anchorage Points and Systems - 2
Is Electrical Labeling up to date. YES

8. HISTORICAL REPAIR, SERVICE CALL and TESTING DATA: (per year unless otherwise noted)

Number of Repairs Monthly	5
Number of Service Calls Monthly	2
Number and amount of Repairs over threshold for the past 2 year's	10

# of total repairs over the last year

9. Anniversary Dates of the Last Testing of:
Eddy Current N/A

Hydro Testing of Fire extinguishers (if applicable) 3, 5, & 12 year; N/A (NO EXTINGUISHERS)
Bibb Hose and Obstruction Tests 3 & 5 year: UNK

10. HISTORICAL AND AESTHETIC ATTRIBUTES Care should be taken to protect historical elements and artwork when performing work and maintenance around those items.

Artwork: No
Statues: No
Artifacts:

11. CAFETERIAS/CONCESSIONS
No

12. Energy Conservation (add or delete as necessary)
(All pertinent utilities with regards to possible conservation)
Water usage: UNK
Gas/Oil: UNK
Steam: N/A
Electrical usage: UNK

The following are building statistics for informational purposes only. The figures below are estimates only. When necessary, the CO or designee will provide access to assignment drawings and blueprints.

1. BUILDING DATA:
Property Manager Contact information: David Hall
Contract Specialist Contact Information: Kara Canty
O&M Contractor contact

Name and building number:	US Customhouse / MA0076ZZ
Location:	32 North Second Street, New Bedford, MA
Number of floors:	2 plus basement
Number of elevators	None
Age of Building:	180 years
Normal Building Operating Hours:	8:00 a.m. to 5:00 p.m. (Monday - Friday (Opening and Closing of Building)
Population of Building:	Currently 2, in May 2017 possibly 10
Number of Agencies:	Currently 1, in May 2017 possibly 2

List Agencies (Of special note are law enforcement and agencies with 24 hour operations)

- US Customs Service
- NOAA - Seafood Inspections
- NOAA - Port Inspector

2. BUILDING STATISTICS: Region 1
INTERIOR:

Gross Area (sq. ft.): 8,344.5
Rentable Area (sq. ft.): 6,341.51
Usable Area (sq. ft.): 3,745.45

EXTERIOR

Outside area to be policed No grass area, cobble stone and bricks (weeds in-between).	1,874.33	SF*
Paved and Parking lot area	N/A	

3. CHILD CARE CENTERS N/A

Interior: special equipment (identify)	None
Playground:	None

4. ENVIRONMENTAL (quantity)

Fuel Tanks (GSA Owned)	0
Underground/Above ground	1 (decommissioned in place)

Generators: (GSA Owned) 0
Firing Range 0
Asbestos: (location) Yes, possibly within the 2nd floor carpet mastic.
Lead Based Paint: (location) Yes, throughout the building

NOTE TO CONTRACTOR: Asbestos, Lead, or any other hazardous material may be in the building particularly older ones) and has not been discovered yet so all suspicious material found should be treated assuming it is.

6. MAJOR ALTERATION PROJECTS; 2012 – new thermal windows installed throughout. November 2014 – New roof replacement with double floor attic insulation. Switched over from oil to natural gas building heat system Buildouts /Prospectus/Agencies moving In/Out (possible impact); November 2015 to current date - 5 out of the 7 total building offices are being reconditioned, along with a complete new natural gas central HVAC installation throughout. New tenants slated to move-in May 2016.

7. BUILDING AUTOMATION SYSTEMS and OTHER CRITICAL EQUIPMENT
(Include manufacturer names, model #s, serial #s, tonnage KW, etc)

1. Walk-in Cooler / Freezer, American Panel Corporation,
2. Evaporator, HeatCraft, Cooler, rooftop.
3. Evaporator, HeatCraft, Freezer, rooftop
4. Boiler / Furnace, Lochinvar – Knight Heating Boiler, Model:81-286, Natural Gas, 196k btu's
5. Boiler / Furnace, Lochinvar – Knight Heating Boiler, Model:81-286, Natural Gas, 196k btu's\
6. Boiler Heat Pump, Knight, Boiler #1
7. Boiler Heat Pump, Knight, Boiler #2
8. Boiler Heat Pump, Knight, house circulating system.
9. Skidmore side stream tank, boiler treatment tank, 125psi, 200 deg .F, 5 GPM.
10. RenewAir, energy recovery ventilation, EV450IN
11. Unit 1, Air Conditioner, Mitsubishi City Multi, PVFY-P12, 1-1/2 – 5 ton, Basement
12. Unit 2, Air Conditioner, Mitsubishi City Multi, PVFY-P12, 1-1/2 – 5 ton, Basement
13. Unit 3, Air Conditioner, Mitsubishi City Multi, PVFY-P12, 1-1/2 – 5 ton, Basement
14. Condensation pump for Unit 1, Air Conditioner, Mitsubishi City Multi
15. Condensation pump for Unit 2, Air Conditioner, Mitsubishi City Multi
16. Condensation pump for Unit 3, Air Conditioner, Mitsubishi City Multi
17. Unit 4, Air Conditioner, Mitsubishi City Multi, PVFY-P12, 1-1/2 – 5 ton, Attic
18. Unit 5, Air Conditioner, Mitsubishi City Multi, PVFY-P12, 1-1/2 – 5 ton, Attic
19. Unit 6, Air Conditioner, Mitsubishi City Multi, PVFY-P12, 1-1/2 – 5 ton, Attic
20. Condensation pump for Unit 4, Air Conditioner, Mitsubishi City Multi
21. Condensation pump for Unit 5, Air Conditioner, Mitsubishi City Multi
22. Condensation pump for Unit 6, Air Conditioner, Mitsubishi City Multi
23. TRAN, Condensing Unit, 4TTA3, 18-AC73D1-8, Attic Portico – 1st floor spaces
24. TRAN, Condensing Unit, 4TTA3, 18-AC73D1-8, Attic Portico – 2nd floor spaces
25. TRAN, Thermostat, touch screen programmable comfort control, TCONT800AS11AA, room #1
26. TRAN, Thermostat, touch screen programmable comfort control, TCONT800AS11AA, room #2/4
27. TRAN, Thermostat, touch screen programmable comfort control, TCONT800AS11AA, room #3
28. TRAN, Thermostat, touch screen programmable comfort control, TCONT800AS11AA, room #4
29. TRAN, Thermostat, touch screen programmable comfort control, TCONT800AS11AA, room #5
30. TRAN, Thermostat, touch screen programmable comfort control, TCONT800AS11AA, room #6
31. TRAN, Thermostat, touch screen programmable comfort control, TCONT800AS11AA, room #7
32. Modine, 1-550.29, steam hot water unit heater, Model # HSB
33. Water Heater Tank, Water Heater Innovations Inc., 30 gallon, electric
34. Fire Alarm Control Panel, FireLite Alarms, Honeywell, MS-9200UDLS/E
35. # 20- Fire Alarm Temperature Sensor, FireLite Alarms, Honeywell, h355 h355r h355ht
36. #21 -Fire Alarm Temperature Sensor, FireLite Alarms, Honeywell, h355 h355r h355ht
37. #22 -Fire Alarm Temperature Sensor, FireLite Alarms, Honeywell, h355 h355r h355ht
38. #23 -Fire Alarm Temperature Sensor, FireLite Alarms, Honeywell, h355 h355r h355ht
39. #1 -Fire Alarm Photoelectric Smoke Sensor, Wireless, FireLite Alarms, Honeywell, SD335,SD355T&AD355

40. #2 -Fire Alarm Photoelectric Smoke Sensor, Wireless, FireLite Alarms, Honeywell, SD335,SD355T&AD355
41. #9 -Fire Alarm Photoelectric Smoke Sensor, Wireless, FireLite Alarms, Honeywell, SD335,SD355T&AD355
42. #11 -Fire Alarm Photoelectric Smoke Sensor, Wireless, FireLite Alarms, Honeywell, SD335,SD355T&AD355
43. #12 -Fire Alarm Photoelectric Smoke Sensor, Wireless, FireLite Alarms, Honeywell, SD335,SD355T&AD355
44. #24 -Fire Alarm Photoelectric Smoke Sensor, FireLite Alarms, Honeywell, SD335,SD355T&AD355
45. #25 -Fire Alarm Photoelectric Smoke Sensor, FireLite Alarms, Honeywell, SD335,SD355T&AD355
46. #26 -Fire Alarm Photoelectric Smoke Sensor, FireLite Alarms, Honeywell, SD335,SD355T&AD355
47. #28 -Fire Alarm Photoelectric Smoke Sensor, FireLite Alarms, Honeywell, SD335,SD355T&AD355
48. #29 -Fire Alarm Photoelectric Smoke Sensor, FireLite Alarms, Honeywell, SD335,SD355T&AD355
49. #30 -Fire Alarm Photoelectric Smoke Sensor, FireLite Alarms, Honeywell, SD335,SD355T&AD355
50. #3/5 -Fire Alarm Wireless Gateway, FireLite Alarms, Honeywell
51. #4 -Fire Alarm Wireless Gateway Display Driver, FireLite Alarms, Honeywell.
52. #10 -Fire Alarm Manual Pull Station , FireLite Alarms, Honeywell, BG-12

EMS/BAS/SMART Technologies: No
CMMS:
CHILLERS:
UPS SYSTEMS:
GENERATORS:
Other important equipment/information:
Water Treatment (coupon racks?) 2 – boilers / furnaces
Roof Anchorage Points and Systems - How many? 0 - Central catwalk system.
Is Electrical Labeling up to date. Will be after alteration project is completed.

8. HISTORICAL REPAIR, SERVICE CALL and TESTING DATA: (per year unless otherwise noted)

Number of Repairs Monthly 2-3
Number of Service Calls Monthly 2-3
Number and amount of Repairs over threshold for the past 2 year's 20 ($250. Threshold)
# of total repairs over the last year 10

9. Anniversary Dates of the Last Testing of:

Eddy Current : N/A
Hydro Testing of Fire extinguishers (if applicable) 3, 5, & 12 year; 3=2014, 5=unk. 12= unk
Bibb Hose and Obstruction Tests 3 & 5 year: unk

10. HISTORICAL AND AESTHETIC ATTRIBUTES

Care should be taken to protect historical elements and artwork when performing work and maintenance around those items.

The building itself is historical. All work that would significantly impact the site is first brought to the attention of the GSA Regional Historic Preservation Officer having jurisdiction over this building.

Artwork: No
Statues: No
Artifacts: the building itself.

11. CAFETERIAS/CONCESSIONS

None

12. Energy Conservation (add or delete as necessary)
(All pertinent utilities with regards to possible conservation)

Water usage:unk
Gas/Oil:unk
Steam: N/A
Electrical usage: unk

The following are building statistics for informational purposes only. The CO will complete a Building Information Sheet for every building. The figures below are estimates only. When necessary, the CO or designee will provide access to assignment drawings and blueprints.

1. BUILDING DATA:

Property Manager Contact information: David Hall
Contract Specialist Contact Information: Kara Canty
O&M Contractor contact information

Name and building number:	Hastings Keith Federal Building / MA0076ZZ
Location:	53 North Sixth Street, New Bedford, MA
Number of floors:	2 plus basement
Number of elevators	1
Age of Building:	42 years
Normal Building Operating Hours:	8:00 a.m. to 5:00 p.m. (Monday - Friday (Opening and Closing of Building)
Population of Building:	44 Tenants / 500 public
Number of Agencies:	6

List Agencies (Of special note are law enforcement and agencies with 24 hour operations)

- SSA
- ODAR
- NOAA Port
- NOAA Fisheries
- USDA
- GSA

2. BUILDING STATISTICS: Region 1

INTERIOR:

Gross Area (sq. ft.): 40,138
Rentable Area (sq. ft.): 32,438
Usable Area (sq. ft.): 24,031.33

EXTERIOR

Outside area to be policed	33,000 SF*
Paved and Parking lot area	17,400 SF

3. CHILD CARE CENTERS N/A

Interior: special equipment (identify) None
Playground: None

4. ENVIRONMENTAL (quantity)

Fuel Tanks (GSA Owned)	0
Underground/Above ground	0
Generators: (GSA Owned)	0
Firing Range	0

Asbestos: (location) None
Lead Based Paint: (location) None

NOTE TO CONTRACTOR: Asbestos, Lead, or any other hazardous material may be in the building particularly older ones) and has not been discovered yet so all suspicious material found should be treated assuming it is.

6. MAJOR ALTERATION PROJECTS; 2004 building extension.

7. BUILDING AUTOMATION SYSTEMS and OTHER CRITICAL EQUIPMENT
(Include manufacturer names, model #s, serial #s, tonnage KW, etc)

EMS/BAS/SMART Technologies: Tracer Summit, BCU
CMMS:
CHILLERS: TRAN, 50 ton, model# CGAEC504AEA1ADFGRTW, Serial J97B80617
TRAN, 50 ton, model# CGAEC504AEA1ADFGRTW, Serial J97B80616
UPS SYSTEMS: NONE
GENERATORS: ONAN, 30 KW, natural gas, model 30.0EK-15R/11869F, Serial C760107975
Other important equipment/information:
Water Treatment (coupon racks?) NONE
Roof Anchorage Points and Systems - How many? 0
Is Electrical Labeling up to date. Yes.
8. HISTORICAL REPAIR, SERVICE CALL and TESTING DATA: (per year unless otherwise noted)
Number of Repairs Monthly 5-10
Number of Service Calls Monthly 20
Number and amount of Repairs over threshold for the past 2 year's 22 ($250. Threshold)
# of total repairs over the last year 50
9. Anniversary Dates of the Last Testing of:
Eddy Current : N/A.
Hydro Testing of Fire extinguishers (if applicable) 3, 5, & 12 year; 3-2014, 5-unk. 12- unk
Bibb Hose and Obstruction Tests 3 & 5 year: N/A
10. HISTORICAL AND AESTHETIC ATTRIBUTES
Care should be taken to protect historical elements and artwork when performing work and maintenance around those items.
Artwork: (SCULPTURE) "SEA FLOWER'
Statues: NONE
Artifacts: NONE
11. CAFETERIAS/CONCESSIONS
None

12. Energy Conservation (add or delete as necessary)
(All pertinent utilities with regards to possible conservation)
Water usage:unk
Gas/Oil:unk
Steam: n/a
Electrical usage: unk

GSA Form 1181A – Contract Cleaning Inspection Report

This form shall be filled out and submitted to the Contractor when deficiencies are found during the COR's inspections. (Below is provided as an example, original form should be used)

BUILDING	REPORT NO.		CONTRACT NO.		
INSPECTOR *(Print name)*			INSPECTOR'S SIGNATURE		
TIME STARTED	TIME COMPLETED		DATE OF INSPECTION		
INTERVIEWED BY		DATE	CONTRACTOR'S RECEIPT	TIME	DATE

WORK DESCRIPTION - LOCATION *(Room No., Corridor, Lobby or either)*	QUANTITY *(By measu or count)*	CHECK ONE		

GENERAL SERVICES ADMINISTRATION **GSA** FORM **1181A** (REV. 12-97)

Quality Deficiency Notice

This form shall be filled out and submitted to the contractor when deficiencies are found during the COR's inspections. (Below is provided as an example, original form should be

QUALITY DEFICIENCY NOTICE

NAME OF SUPPLIER AND ADDRESS	PRIME CONTRACTOR AND ADDRESS
CONTRACT NO.	LOT NO.
ORDER NO.	NSN

A deficiency exists in your quality control system. The nature of the deficiency is:

Immediate action is required to correct the deficiency and the condition that caused it. Shipping nonconforming material and/or failure to take acceptable corrective action on time may result in termination of your right to proceed with this contract. Nonconforming material will be returned to you at your expense.

Please provide a written response of correction action taken or to be taken to your OAS within 5 workdays after receiving this notice.

OAS NAME AND SIGNATURE	ADDRESS DATE
RECEIPT ACKNOWLEDGED	CERTIFIED RECEIPT NO.

SAMPLE

EVALUATION OF CORRECTION ACTION

☐ Corrective action verified and found acceptable.

☐ Corrective action not acceptable and/or not implemented (Explain below)

This matter is being referred to the Administrative Contracting Officer for action. Direct further correspondence on this matter to the ACO.

OAS NAME AND SIGNATURE	ADDRESS DATE
RECEIPT ACKNOWLEDGE	CERTIFIED RECEIPT NO.

GENERAL SERVICES ADMINISTRATION **GSA** FORM **3539** (11-84)

QASP Monthly Inspection Report

BUILDING NAME & LOCATION: Phillip Burton Federal Building & US Courthouse
CONTRACT NO.: _____GS-09P-06-KSD-0000__
CONTRACTOR NAME: ____XXX Cleaning Service____

Please report all deficiencies found during the previous month inspection(s). Attach copies of all GSA 3539 Forms submitted to the contractor with this form. If there were no deficiencies, please submit this form indicating there were no deficiencies reported for the month. This form will become a part of the official QA documentation.

DEFIENCIES & CORRECTIVE ACTIONS	COMMENTS
Documented on the Contract Cleaning Inspection Reports	All deficiencies minor, corrected by the Contractor

COR

Signature: _____ Date: _____

COR's Checklist for Inspections

	CUSTODIAL AND RELATED SERVICES	COMMENTS
	Service Call Logs	
	Tenant Reports	
	Integrated Pest Management (IPM) Quarterly Reports	
	Recycling and Solid Waste/Trash Hauling Reports	

NOTE: This checklist does NOT represent an all-inclusive list of items that may be reviewed during an inspection. It is provide ONLY as guidance for the CO or their designee.

EXHIBIT 4 BUILDING EXTERIOR AND HARDSCAPE PLAN

Used only when Contractor is required to provide pressure washing services

The Contractor shall submit to the CO a detailed Building Exterior and Hardscape Plan that addresses the listed work items. The plan helps ensure that grounds/site/building exterior management practices have the lowest environmental impact possible and that these practices preserve ecological integrity, enhance diversity and protect wildlife, while supporting building performance and integration into surrounding landscapes. At a minimum, the custodial and related services portion of the plan shall address the following items:

-Goals and Scope

-Responsible Party

-Guidance for Resources and Implementation

-Performance Measurement

-Training

-Maintenance Equipment

-Use of Chemical Concentrates and Dilution Systems

-Sustainable Building Exterior, Sidewalks, and Pavement Cleaning

-Paints and Sealants Used on the Building Exterior

-Snow and Ice removal (Snow and Ice Removal Plan can be substituted for this item)

-Cleaning of building exterior

-Cleaning equipment

-Cleaning of sidewalks, pavement, and other Hardscape

-Animal and vegetation pest control

-Landscape waste

-Fertilizer use

-Quality Assurance/Quality Control Processes

EXHIBIT 5 EROSION AND SEDIMENT CONTROL

IPM, Erosion Control, Landscape Management Plan[4]

Used only when Contractor is required to perform activities that disturbs the existing grounds conditions

The Contractor shall employ strategies such as temporary and permanent seeding, mulching, earth dikes, silt fencing, sediment traps and sediment basins to correct existing erosion such as typically found as the result of foot traffic killing the vegetation, steep slopes where sheet flow from storm water exceeds existing vegetation holding power, or point storm water outflow that exceeds the holding power of the vegetation covering the soil. The Contractor shall submit to the CO an IPM Erosion Control, Landscape Management Plan outlining how this will be accomplished. At a minimum, the custodial and related services portion of the plan shall address the following items:

-Goals and Scope

-Responsible Parties

-Guidance for Resources and Implementation

-Performance Measurement

-Training

-Chemical Treatment Purchasing and Application

-Integrated Pest Management (IPM)

-Erosion and Sediment Control

-Storm-Water Management Plan

-Landscape Management

-Composting

-Quality Assurance/Quality Control Processes

[4] This is a sample and is not intended to be comprehensive. Excerpts are from United States Green Building Council (USGBC.

EXHIBIT 6 GREEN PURCHASE REPORTS

Annual Contractor Reporting of Designated Bio-based Purchases

Section 9002 of the 'Farm Security and Rural Investment Act of 2002,' as amended by the 'Food, Conservation, and Energy Act of 2008, Pub. L. 110-246 (the Farm Bill)' requires Federal agencies to give a procurement preference to USDA-designated bio-based products and requires agency Contractors to report such purchases under service and construction contracts. The Federal Acquisition Regulation (FAR) Council subsequently published a bio-based final rule at 77 FR 23365, implementing the reporting requirement in the FAR at FAR 52.223-2, 'Affirmative Procurement of Bio-based Products Under Service and Construction Contracts' with an effective date of May 18, 2012. To facilitate collection of report data, the USDA, in consultation with the Chief Acquisition Officers Council, was tasked to develop a reporting template.

To comply with the reporting provisions of the Act, the Contractor shall file an annual report on purchases of designated bio-based products used under the performance of this contract.

Where To Submit:

CY2012: By December 31, 2012, for any contract that was awarded between May 18, 2012 and September 30, 2012, and which was reported to the Federal Procurement Data System – Next Generation (FPDS-NG), the Contractor shall submit bio-based purchases via the following USDA site: http://www.biopreferred.gov/FARReporting/FARReporting.xhtml.

Note: This is an interim reporting template and should be used only for contracts that meet the above criteria. Any other contracts will not pass the system validation test.

Future Reports: No later than October 31st in accordance with USDA reporting procedures, the Contractor is responsible for monitoring USDA progress on the development of a long-term reporting tool.

Note: The Contractor is responsible for monitoring USDA progress on the development of a long-term reporting tool.

All Reports: The Contractor shall provide a copy of each report to the CO or their designee and the Environmental Manager at PBSbiobasedreporting@gsa.gov.

Note: The US Department of Agriculture (USDA) bio-based products web site http://www.biopreferred.gov/ProductCategories.aspx.

EXHIBIT 7 GREEN PURCHASE REPORTS

Non Bio-based Purchase Report					
Report Period Covered:	Date Report Prepared:				
Building:					
Contract Number:					
Contractor:					
	Attributes and Cost				
	CPG	DfE	Green Seal	Env Choice	Other Green
Cleaners (Bathroom and spa cleaners Glass cleaners, etc.)					
Floor Cleaner					
Floor Finish			$8,000 (Sample Entry)		
Floor Stripper					$700 Low VOC (Sample Entry)
Hand cleaners and sanitizers					
Mulch and Compost	$7,500 (Sample Entry)				
Odor Control/Neutralizer					
Mobile equipment hydraulic oil					
Stationary equipment hydraulic oil					
Diesel fuel additives					
2-cycle engine oil					
Penetrating lubricants					
Greases					
Sorbents					
Adhesives and mastics					
Grease and graffiti removers					
Carpet and upholstery cleaners					
Laundry products					
Towels					
General purpose de-icer					
Wood and concrete sealers					

Resources Guide: Green Seal http://www.greenseal.org/FindGreenSealProductsAndServices.aspx
Design for the Environment (DfE) http://www.epa.gov/dfe/
EPA-CPG http://www.epa.gov/epawaste/conserve/tools/cpg/index.htm
SFTOOL Green Procurement Cleaning Products GSA Sustainable Facilities Tool

EXHIBIT 8 RECYCLING/SOLID WASTE/TRASH REPORT

Please use the worksheet below in order to complete the monthly recycling, solid waste and trash report.

Recycling Report
Template

EXHIBIT 9 EXAMPLES OF ENVIRONMENTALLY SUSTAINABLE PRODUCT ATTRIBUTES AND OFFERINGS

CUSTODIAL PRODUCTS					
Product	**Contents to Avoid**	**Product Availability**			
		CPG	**Bio-based**	**Design for the Environment**	**Green Seal**
Cleaner	EDTA, NTA, chlorine, hypochlorite, and phosphates; petroleum-based solvents (glycol ethers, phenolic compounds); ammonia, butyl cellusolve, d-limonene	X	✓	✓	✓
Floor Cleaner	Ammonium hydroxide and other caustic components; butyl; petroleum-based solvents (glycol ethers, phenolic compounds, mineral spirits, stoddard solvent)	X	✓	✓	✓
Floor Finish	Zinc, metal-crosslinked polymers, butyl ether, formaldehyde, nitrobenzene, phenol, petroleum-based solvents (glycol ethers, stoddard solvent)	X	✓*	✓	✓
Floor Stripper	Butyl cellosolve, monoethanolamine, sodium hydroxide	X	✓	✓	✓
Hand Soap	Anti-microbial agents (triclosan, alcohol)	X	✓	✓	✓
Mulch and Compost	Virgin materials	✓	✓	X	▪
Odor Control / Neutralizer	Formaldehyde, naphthalene, isopropyl alcohol, paradichlorobenzene, xylene, butane, ethanol, phenol	X	✓	✓	✓
Paper Towel	Virgin materials	✓	X	X	✓
Plastic Trash Can Liner	Virgin materials	✓	X	X	✓
Snow and ice removal products	Toxic, propylene glycol methyl ether, ethanol, ammonia	X	X	✓	X
Toilet Paper	Virgin materials	✓	X	X	✓
Upholstery and Rug Cleaner	Perchloroethylene, naphthalene, butyl cellosolve, propylene glycol methyl ether, ethanol, ammonia	X	✓	✓	✓
Vacuum Cleaner & Other Equipment	See CRI Green Label Standard for Vacuum Cleaners for additional guidance	X	X	X	X

✓ Product available

X Product currently not available

Notes:

When a product is Bio-based and CPG, Select CPG. Otherwise, if not exempted, bio-based shall be chosen over other attributes. On the GSA Advantage website some environmental product indicators, such as 'Non-Toxic' and 'Biobased', are specified by the product vendor and have not been independently verified. Prior to procurement, it is important to examine the Material Safety Data Sheet (MSDS) for each product in order to verify that the environmental indicators designated by the vendor are accurate.

EXHIBIT 10 PBS WASTE AUDITS

This exhibit is provided as a guide for additional considerations for post-audit monitoring, plan implementation, training and other ancillary activities that may assist GSA in meeting the listed objectives.

I. Background

GSA's Public Buildings Service (PBS) provides work environments for over one million Federal employees nationwide. The inventory consists of courthouses, laboratories, offices and border stations. Tenant activities in these buildings generate tons of solid waste/trash that PBS is obligated to properly dispose of and achieve a minimum waste diversion of 50%. Recycling composting and other alternatives to landfills and incineration are the preferred methods for disposal of solid waste/trash.

II. Objectives

1. Determine the most efficient methods to maximize reduction, recycling, and composting of solid waste/trash and to minimize waste shipments.

2. Achieve a minimum of 50% waste diversion through waste minimization, recycling, and composting.

3. Determine the right service level for solid waste/trash collection and removal

III. Extent Of Work

1. Contractor shall conduct a solid waste/trash audit to include:

   a. 100% of the waste and/or recycling collected in a 24 hour period must be audited (excluding durable goods or construction waste).

   b. The audit must represent a 24 hour period on a typical work day.

c. Use scales to weigh sorted waste, as weight is the preferred metric.

d. Determine the amount of recyclable materials being thrown away that could have been recycled and composted. At a minimum, the recyclable items within the waste/trash must be identified and separated into the following categories: Paper, Plastic, Cardboard, Glass, Metal/aluminum, and Wet Waste.

2. Contractor will develop a written report and analysis of the conclusions drawn from this audit, including recommendations for improving the economy and efficiency of waste collection, storage, transfer, and disposal (including recycling and composting). This report shall address, at a minimum:

a. Recommendations to maximize waste minimization, recycling, and composting to achieve at least 50% waste diversion.

b. Recommendations to right-size service level for solid waste/trash removal services to minimize trash shipments.

EXHIBIT 11 SUMMARY OF ENVIRONMENTALLY PREFERABLE PRODUCT ATTRIBUTES

PRODUCT USE	PREFERABLE CONTENTS	CONTENTS TO AVOID	NON-TOXIC OPTIONAL	BIOBASED OPTIONAL
Adhesive - Aerosol	Rubber-based; low-VOC	SARA 313 chemicals (cyclohexane, hexane, methylene chloride); petroleum distillates; CFCs	ü	X
Adhesive - Epoxy	Non-toxic; low-VOC	Isopropyl alcohol; SARA 313 chemicals (toluene)	ü	X
Adhesive Remover	Soy-based mixture; citrus extract; low-VOC	Aerosol; petroleum distillates	ü	ü
Coil Cleaner	Non-acid cleaners with non-toxic, biobased contents; low-VOC; if acid must be used acetic or phosphoric acid are preferable	Sulfuric acid, hydrofluoric acid, or similar caustic chemicals. SARA 313 chemicals (trichloroethylene)	ü	ü
Concrete/Wood Sealer	Water-based, latex-based, or biobased sealers; low-VOC	Acrylonitrile; SARA 313 chemicals (n-methyl-2-pyrrolidone)	ü	ü
Degreaser	Water or biobased (soy) degreasers; non-toxic; non-aerosol; low-VOC	Aerosol; petroleum distillates	ü	ü
Deicer (Road and Windshield)	Biodegradable windshield deicer; salt-free ice melt; magnesium chloride or calcium chloride; calcium magnesium or magnesium acetate	SARA 313 chemicals (methanol, isopropyl alcohol, ethylene glycol); aerosol; sodium chloride	ü	ü
Descaler	Enzyme-based descaler; urea; trisodium phosphate; low-VOC	Hydrochloric (muriatic) acid or similar caustic compounds (oxatic or hydrofluoric acid); sodium hypochlorite	ü	ü

Fuel Additive	Biobased; non-toxic	Petroleum distillates	ü	ü
Graffiti Remover	Biobased content (soy/corn); low-VOC	SARA 313 chemicals (toluene, xylene); acetone; isopropyl alcohol	ü*	ü
Grease / Lubricant	Biodegradable/biobased content (soy or vegetable oil); non-toxic; re-refined lubricating oils; low-VOC	Petroleum or mineral-based oils; metallic soaps or polyurea derivatives; sulfur, chlorine, zinc; amine phosphate or other irritants	ü	ü
Light Bulbs	Energy Star or FEMP fluorescent bulbs or tubes; reduced mercury content	Mercury	n/a	n/a
Mastic	Water or acrylic-based; non-toxic; low-VOC	Petroleum-distillates (mineral spirits)	ü	X
Paint	Remanufactured or recycled paint; water-based or latex-based; low-VOC	Aerosol; oil-based (alkyd) paints (mineral spirits, aliphatic hydrocarbons); SARA 313 chemicals (toluene, xylene, ethyl benzene); acetone	ü	X
Paint Remover	Biobased; non-toxic; low-VOC	SARA 313 chemicals (n-methyl-2-pyrrolidone, methanol, methylene chloride); isopropyl alcohol	ü*	ü
Spray Foam	CFC-free; biobased (soy); low-VOC	HCFCs; SARA 313 chemicals (formaldehyde)	X	ü*

ü Product available and offered through GSA Advantage
ü* Product available, but not currently offered through GSA Advantage
X Product currently not available

Notes:
a - On the GSA Advantage website some environmental product indicators, such as 'Non-Toxic' and 'Biobased', are specified by the product vendor and have not been independently verified. Prior to procurement, it is important to examine the Material Safety

EXHIBIT 12 MONTHLY REPORT TEMPLATE

MONTHLY REPORT FOR :	
TASK ORDER/CONTRACTOR #:	
DATE OF REPORT:	
FOR PERIOD:	

PREPARED BY

NAME:	
TITLE:	
CONTRACTOR:	
PHONE NUMBER:	

1. STATUS OF ALL WORKORDERS – Attach copy of NCMMS printout if available

2. EQUIPMENT WORKING OFFLINE

3. OPERATING SCHEDULE CHANGES

4. DESCRIPTION OF LOST TIME FOR ACCIDENTS OR OTHER SAFETY PROBLEMS

5. QUALITY CONTROL INSPECTIONS

6. BUILDING SERVICES, UTILITY MISCELLANEOUS HOURS

7. COPIES OF ARRIVAL AND DEPARTURE REPORTS

8. MONTHLY WATER TREATMENT AND OTHER TEST RESULTS

9. RECALIBRATION DOCUMENTATION OF ADVANCED METERS (2 X/yr)

10. REFRIGERATION CONTROL LOGS

11. FUEL LEVELS

BUILDING OPERATING PLAN

Insert Building Photo
(ABP Photo)

PREPARED FOR:
BUILDING NAME
ADDRESS, CITY & STATE
BUILDING NUMBER

REGION X

DATE

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10.21 ALL MAIN SHUT OFF LOCATIONS AND PROTOCOL

1.0 GENERAL GUIDANCE

This document presents the Building Operating Plan for (Enter bldg name and address City, State Zip Code)

This plan documents the procedures for the operation of all the mechanical and electrical equipment in the Building. Equipment is operated to maximize safety and to maintain comfort conditions. Electric, gas, and water usage is kept to a minimum without compromising either safety or comfort. The systems covered by this Building Operating Plan include:

1) Electrical systems and equipment
2) Mechanical systems and equipment
3) Fire Protection systems and equipment
4) Control Systems controlling all systems which themselves are within the scope
5) Architectural and Structural systems, fixtures, structures and equipment within the government owned site.
6) Vertical Transportation (Elevators / Escalators)

Excluded from this Building Operating System:

1) Security Systems
2) Telecommunication Systems
3) Equipment owned and operated by tenant agencies
4) Furnishings
5) Equipment owned by servicing public utilities

When levels of required services change, when building equipment changes, when operating procedures change, or when Agency requirements change, the plan shall be revised on a timely basis (within 10 working days) and submitted to the CO or designee.

The conservation of energy is not achieved at the expense of maintaining the required environmental or other special conditions described elsewhere in the building operating plan. Energy conservation is achieved through effective operational and maintenance practices as well as appropriate repairs or alterations to existing equipment or systems which reduce the overall cost of service. Energy conservation is achieved through the employment of good engineering and operating practices using accepted methods and procedures.
It is the tenant Agency's responsibility to ensure that lights and equipment are turned off when not needed, that ventilation is not blocked or impeded, and that windows and other building accesses are closed during the heating and cooling seasons. The operation of portable heaters, fans and other such devices in Government controlled space is prohibited unless authorized by the GSA

Building Manager.
There are no areas in the building authorized to maintain a level of lighting higher than that specified in the Federal Property Management Regulations or as directed by GSA.
There are no areas in the building authorized to maintain higher room temperatures during the heating season than those authorized by GSA.

Temperature- Heating/Cooling
The Contractor shall adhere to the temperature levels and energy conservation practices identified herein.

During normal working hours, temperature controls shall be set to maintain space temperatures in accordance with the latest guidelines issued by the American Society of Heating, Refrigeration and Air-Conditioning Engineers, Inc., (ASHRAE), Thermal Environmental Conditions for Human Occupancy.

During non-working hours heating temperature shall be set no higher than 55 degree Fahrenheit* and air-conditioning will not be provided except as necessary to return space temperatures to a suitable level during working hours and to assure the protection of the building and its systems.

*Minimum setback for temperatures and humidity control may vary from the established ASHRAE standards where it is necessary to maintain a specified set point as established by the architect and the Architectural Woodwork Institute (AWI) in order to maintain and protect the finished woodwork throughout the courtrooms and offices. These perimeters will be established and adjusted as necessary by the CO or their designee in order to maintain the building interior finishes.

Temperature levels stipulated by the Government are subject to change based on nationwide energy policies.

There are no night time set-backs for the chilled water, but at night the load is reduced because there is no demand for it. So the demand on the chillers is less.

General Contract Information

Service Provider:
Contract #:
Contact:
Base:
Option 1:
Option 2:

The Contractor shall provide all management, supervision, labor, materials, supplies, repair parts, tools, and equipment. They are also responsible to plan, schedule, coordinate and ensure effective and economical completion of all work and services specified in this Contract.

All mechanical specifications are a statement of the minimum level of work and services that are to

be provided in certain areas under this plan. They are not intended to be, nor shall they be construed as, limiting specifications or requirements. At a minimum, the Contractor will be required to take all steps and measures which would be taken by a prudent building owner to maximize the life expectancy of the property, including having a journeyman mechanic/technician(s) on-site for a minimum of 8 hours per day, 8:30am-5:00pm.

All mechanical, electrical, utility, interior and exterior architectural and structural systems in the buildings shall be operated and/or maintained at the highest level of efficiency compatible with the current energy conservations requirements, and maintained at an acceptable level, throughout the Contract performance period.

An "acceptable level" of maintenance is defined as the level of maintenance, that will preserve the equipment and structure in unimpaired operating condition; i.e. above the point where deterioration will begin, thereby diminishing the normal life expectancy of the equipment and/or structure. The Contractor is responsible for performing scheduled and unscheduled maintenance and maintenance repairs, as necessary, on a 24-hour a day, 365 days per year basis including emergency call-back service.

The Contractor shall maintain the machinery spaces, shops, and storerooms in a safe, clean, and orderly manner. When work is performed in these areas, the Contractor's personnel shall clean up all debris and leave the area in a presentable condition. The machinery rooms including floors and the equipment located within the machinery rooms shall be painted as necessary to maintain the appearance of the room and equipment. When painting, the Contractor must comply with the ANSI color coding system outlined in the ANSI A13.1, Scheme for the Identification of Piping Systems, and maintain the identity (identification number) of the equipment. The Contractor must obtain the approval of the CO or their designee before storing anything in machinery spaces.

Utilities

Utility Provider Information:

Utility Type: Electric
Utility Provider:
Account#
Accounting String:
Contract Period:

Utility Type: Electric (Lights & Plugs)
Utility Provider:
Account#:
Accounting String:
Contract Period:

Utility Type: Sewer Service
Utility Provider:
Account#:

Meter#:
Accounting String:
Contract Period:

Utility Type: Water Service
Utility Provider:
Account#:
Meter#:
Accounting String:
Contract Period:

Utility Type: Fire Protection
Utility Provider:
Account#:
Meter#:
Accounting String:
Contract Period:

Utility Type: Gas
Utility Provider:
Account#:
Meter#:
Accounting String:
Contract Period:
Deduction Meter-

Overtime/Reimbursable
Overtime utilities are provided upon request except with agencies that have computer rooms that require 24/7 cooling, which is billed quarterly.

OVERTIME UTILITIES

AGENCY	AREA REQUIRING OT	LOCATION	DURATION
_____	_____	_____	_____

Startup & Shutdown Times & Procedures

Normal Operating Hours:

Supervisory Building Manger:
Property Manager:
Engineer Tech:

Assistant Property Manager:

Number of Occupants:

Number of Parking Spaces:

Primary Tenant:

Classifications:
Building Number:
Construction Date:
Accessibility Compliant:
Security Level:
Tier Designation:
Congressional District:

Structure:
Design and Construction:

Gross Square Feet:
Rentable Square Feet:
Useable Square Feet:
Floors:

2.0 OPERATIONAL PROCEDURES AND SITE PLANS

This Section describes the procedures for operating the building's HVAC systems.

2.1 BOILER PLANT

As Applicable

2.2 CHILLER PLANT

As Applicable

2.3 DOMESTIC HOT WATER PLANT

As Applicable

2.4 HEATING BOILER PLANT

As Applicable

2.5 GENERAL PLUMBING AND DOMESTIC WATER SYSTEMS

As Applicable

2.6 WATER TREATMENT PLANS

As Applicable

2.7 FIRE ALARM SYSTEMS

As Applicable

Fire Protection Drawings-

Contractor Information
Service Provider:
Contract #:
Contact:
Base:
Option 1:
Option 2:

2.8 FIRE SUPPRESSION SYSTEMS

As Applicable

2.9 SITE PLANS AND DRAWINGS

As Applicable (Note to preparer: You may refer to location of applicable site plans and drawings.)

2.10 EQUIPMENT INVENTORY

As Applicable *(Note to preparer: You may refer to location or add as an attachment)*

3.0 HVAC EQUIPMENT DESCRIPTIONS AND SEQUENCES OF OPERATION

3.1 PENTHOUSE MECHANICAL ROOM

As Applicable

3.2 PENTHOUSE AIRHANDLERS

As Applicable

3.3 MAIN AIRHANDLERS

As Applicable

AFTER HOURS OCCUPANCY:
Air Handling Units:

AHU	Floor Serviced	Location

Mechanical Drawings-

Indoor Air Quality

4.0 ELECTRICAL DISTRIBUTION AND SPECIFICATIONS

4.1 EMERGENCY GENERATORS

As Applicable

4.2 MAIN ELECTRICAL SUBSTATIONS

As Applicable

4.3 ADDITIONAL SUBSTATIONS

As Applicable

4.4 LIGHTING CONTROL SYSTEMS

As Applicable

Lighting Settings:

Levels: (FYI: Lighting levels can be found in the FPMR. Please note that these levels are subject to change)

Lighting On/Off Times:

Site Lights:

Elevator Lobby lights:
Tower Lobby Lights:

Courtroom Lights:
Parking Garage Lights:

During the weekends no interior lighting comes on, only site lights come on.

Electrical Lighting Drawings (location):

5.0 ENERGY MANAGEMENT CONTROLS AND SPECIFICATIONS

5.1 BUILDING AUTOMATION SYSTEM

During normal working hours, ventilation shall be maintained in accordance with the latest guidelines from ASHRAE, Ventilation for Acceptable Indoor Air Quality. The Contractor's responsibility to comply with these requirements is limited by the capacity of the building's HVAC equipment, Building Automation System (BAS), and outside environmental conditions.

5.2 DUAL DUCT VAV TERMINALS

As Applicable

5.3 COOLING VAV TERMINALS

As Applicable

6.0 ARCHITECTURAL AND STRUCTURAL SYSTEMS MAINTENANCE

6.1 FAÇADE

As applicable

6.2 ROOFS

As Applicable

6.3 PARKING DECKS

As Applicable

6.4 RAIN GUTTERS

As Applicable

6.5 DRAINS

As Applicable

6.6 WINDOWS

As Applicable

6.7 VERTICAL TRANSPORTATION (ELEVATORS/ESCALATORS)

As Applicable

General Contract Information:
Service Provider:
Call Center:
Location Code for Kone:
Contract #:
Contact:

7.0 TOUR PROCEDURES AND MAINTENANCE DOCUMENTATION

7.1 TOUR PROCEDURES

Watches involve performing certain tasks required for the operation of boilers, compressors, and related equipment in a centralized location. Watches include, but are not limited to, starting equipment and loads, and making adjustments at the central control center, and taking water samples, making tests, and adding chemicals as required. A watch does not mean that the operator stays in the same location for an entire shift. The time spent is that required to perform the tasks.

7.2 DAILY CHECKLIST

As Applicable

7.3 WEEKLY CHECKLIST

As Applicable

7.4 SCHEDULED MAINTENANCE

As Applicable

7.5 CORRECTIVE MAINTENANCE AND REPAIRS

As Applicable

7.6 PLANNED PREVENTIVE MAINTENANCE

Preventive maintenance includes, but is not limited to greasing, oiling, adding refrigerant, changing filters, cleaning, adjusting, replacing belts, and replacing of other expendable items. It also includes scheduled work on items of equipment or systems required to provide continuing operation, to preclude unnecessary breakdowns and to prolong the life of equipment or systems. Such work will be required to be performed without disruption to the building occupants operations during their normal business hours. Disruptive work will be required to be performed during other than normal building hours.

8.0 SERVICE CALL, MAINTENANCE AND REPAIR PROCEDURES

8.1 TENANT REQUEST AND SERVICE CALLS

As Applicable

8.2 AFTER HOURS CALLS

As Applicable

8.3 EMERGENCY SERVICE CALLS

As Applicable

9.0 BUILDING SECURITY PROCEDURES

9.1 ACCESS, SIGNAGE AND IDENTIFICATION

As Applicable

9.2 MONITORING

As Applicable

9.3 BAGGAGE INSPECTIONS

As Applicable

9.4 LOADING DOCK ACCESS

As Applicable

9.5 PARKING LOT ACCESS

As Applicable

9.6 AFTER HOURS ACCESS

As Applicable

9.7 PATROLS

As Applicable

9.8 REPORTING INCIDENTS AND RESPONDING

Contract Employee Responsibilities:
The Contractors shall assume full responsibility and liability for compliance with all applicable regulations pertaining to the health and safety of personnel during the execution of work, and shall not hold the Government responsible for any action on its part or that of its employees or subcontractors, which results in illness, injury, accident, or death.

GSA Employees must report using the following procedures:
For accidents involving non-GSA employees or property damage accidents: use GSA Form 3620. The GSA supervisor in charge of the area should complete this report and gathering of necessary information and photographs, building, or equipment involved.

For accidents involving GSA employee injury/illness: use GSA form 3623, CA-1, and CA-2. The

supervisor of the injured/ill employee should complete the GSA Form 3623. Reporting on the CA-1 and CA-2 is the responsibility of the injured/ill employee. All reports are to be forwarded to the Ohio Service Center within 5 days of the incident. The FPS Contract guards are to also fill out an incident report for all types of injuries.

9.9 FIRE INCIDENT INVESTIGATIONS

As Applicable

10.0 EMERGENCY PLANS AND HAZMAT PROCEDURES

10.1 SHELTER IN PLACE LOCATIONS

As Applicable

10.2 BUILDING EVACUATIONS ROUTES & MEETING PLACES

As Applicable

10.3 BOMB OR BIOHAZARD CONDITIONS AND SYSTEM SHUTDOWN PROCEDURES

As Applicable

10.4 ELEVATOR EMERGENCY PROCEDURES

As applicable

10.5 FIRE EXTINGUISHER, DEFIBRILLATOR, AND PULL SWITCH LOCATIONS

As Applicable

10.6 ASBESTOS MANAGEMENT

As Applicable

10.7 HAZARDOUS MATERIAL AND HAZMAT WASTE MANAGEMENT

As Applicable

10.8 UNDERGROUND STORAGE TANKS

As Applicable

10.9 LEAD PAINT MANAGEMENT

As applicable

10.10 ENERGY LOAD CURTAILMENT PLANS

As Applicable

10.11 WATER CURTAILMENT PLANS

As Applicable

10.12 LOSS OF PERSONNEL

As Applicable

10.13 EMERGENCY NUMBERS

As Applicable

10.14 DISASTER AND RECOVERY PROCEDURES

As Applicable

10.15 FIRE PUMPS

As Applicable

10.16 SUMP PUMPS

As Applicable

10.17 SEWAGE EJECTORS

As Applicable

10.18 PRESSURE BOOSTERS

As Applicable

10.19 PRESSURE REDUCING STATIONS

As Applicable

10.20 BACKFLOW PREVENTORS

As Applicable

10.21 ALL MAIN SHUT OFF LOCATIONS & PROTOCOL

As Applicable

EXHIBIT 14 SMART BUILDING

GSA SMART AND SUSTAINABLE BUILDINGS

SMART TECHNOLOGIES – BACKGROUND AND PURPOSE

Background Because of current Government energy reduction executive orders and regulatory mandates, GSA Public Buildings Service has several programs in development and at various stages of implementation that O&M Contractors should be aware of. One of these programs includes Smart Building technologies. Currently, approximately 250 buildings in the GSA portfolio are undergoing Smart Technologies design and implementation enhancements. Some facility projects involve complete detailed design-built from the infrastructure to completed project designs. Others involve modest retrofits to update key building controls systems. A key objective of implementing Smart Technologies in GSA buildings is to capture and make available more real-time performance data about the individual building systems (HVAC/BAS, Lighting, and Advanced Meters). This data will be made available to O&M Contractors and building support personnel and will increase in significance over time as more details are learned as GSA analyzes this new trend of monitoring building performance at a detailed level. O&M Contractors should be aware that if they are involved in operational support of one of GSA's newer Smart Buildings, that tools, processes, data, and some procedures may need to be modified to meet GSA requirements for long-term improved operational efficiencies as a result of the investment the Government is making in these new technologies. O&M Contractors should continue to monitor developments in this area as more buildings in the GSA portfolio deploy Smart Technologies.

1.0 TREND TOWARD INTEGRATED BUILDING SYSTEM TECHNOLOGIES

New building technologies, and their convergence with traditional information technology, have altered the way in which facilities can be monitored, maintained, and operated. Trends in building systems technology have provided opportunities in the market place to alter the way facilities managers use real time data to operate their facilities more efficiently. Building Systems are getting increasingly more dependent on software, IT networks (physical and wireless), servers, internet access, and cloud-based/hosted solutions. This shift in domain expertise has outpaced traditional design and construction practices. As a result, building operations and maintenance staff need to adapt, be more proactive, and leverage the availability of real-time data to help them perform building systems support more effectively. This may involve more thorough planning and redefining some processes, procedures, and job roles in order to better operate the facilities that have these newer technology based systems.

GSA SPECIFIC SMART & SUSTAINABLE BUILDING OBJECTIVES RELATED TO O&M CONTRACT SUPPORT

C.22.1 CONTROL SYSTEMS

The Contractor shall maintain control systems and sequences as documented in facility operations plan. The Contractor will document all Integrated Building Systems set-points, schedules and alarms and present them to the Government for initial review and backup and annually thereafter. On an as-needed basis, submit a request to owner for additional recommended trending, monitoring, graphics, or control points with intent to improve building operations, energy efficiencies, and performance of O&M duties. Consider 80/20 rule focusing recommendations on 20% of building equipment that impact 80% of operating efficiency and costs

The Contractor shall be responsible for making set point adjustments as necessary and appropriate to meet GSA objectives in facility operations plan. This action requires the approved by CO or designee.

The Contractor shall be responsible for keeping building system software functioning and for upgrading/re-installing software on computers or building system controllers as necessary to keep current with manufacturer release levels and GSA IT support policies and procedures.

C.22.3 SMART BUILDINGS

The Government is taking proactive steps to converge a building's monitoring and control systems on common GSA-supported network infrastructure to enable access to real-time controls systems performance data (i.e. data points). If the facilities' building systems network was installed and maintained by GSA CIO, then this building has Government-furnished (GFE) network equipment and Smart Technologies deployed. This also means that the Contractor will potentially need to coordinate troubleshooting and support with building system Contractors (HVAC, Lighting, etc.) and GSA CIO to help identify and resolve issues.

INTEGRATED BUILDING SYSTEMS

Assist the Government by ensuring that all relevant equipment vendors, with equipment installed in facility, maintain their respective systems (i.e. HVAC, BAS, Lighting, Advanced Metering, etc.) in accordance with GSA Smart and Sustainable Buildings intended objectives (i.e. open systems running on a single GSA Building Systems data network)

The Contractor shall act as a liaison and facilitate efforts between their respective building-specific monitoring and control system subcontractors and work through the CO or their designee GSA with the Information Technology Office (PBS CIO) on issues related to O&M operations.

The Contractor shall make recommendations to the government (as applicable), on improvements to sequences of operations. Communications for alarms set up for remote notification shall be tested on a recurring basis.

The contractor shall be responsible for keeping manufacturer and/or O&M building system software (BAS, BMS software) functioning. This includes, but is not limited to, upgrading and/or re-installing manufacturer's building system software on GFE computers and manufacturer's building system controllers as necessary to keep current with manufacturer recommended release levels and to

keep in compliance with all applicable GSA IT support policies and procedures.

H.9.4 (QUALIFICATIONS OF TECHNICIANS) OR H.10 (QUALIFICATIONS OF BAS TECHNICIANS)

All Contract personnel involved in the operation, adjustment, and maintenance of all BAS systems including energy management systems, modern converged technologies (Smart and Sustainable Building Technologies) must be trained and qualified. The Contractor shall provide to the CO or their designee documentation of the level of experience, including any certificates of training, for all employees who will be involved in this function. This includes, but is not limited to, skill sets involving Internet Protocol (IP) based Building Automation Systems (BAS), Information Technology (IT) Ethernet networks, and Building Management expertise to effectively understand and recommend troubleshooting procedures in the new converged technologies environment. Contractors shall hire well-rounded resources capable of understanding converged technologies to better facilitate troubleshooting and building systems problem resolution.

The Contractor shall be proficient in applicable controls systems (e.g. JCI, Honeywell, Siemens, Delta, Automated Logic, Alerton, and Tridium). The Contractor shall be aware of building systems running on GSA IP Enterprise Network and capable of initiating trouble shooting if network communications is suspect. This means being familiar with procedure for logging GSA IT Help Desk ticket and following up to ensure ticket is being worked by assigned party. Some familiarization with the use of Integrated Control systems, GSA IP Addresses, function of network routers, function of network switches, networks communications, and BAS software will be necessary.

All BAS Technicians shall be certified in the building-specific integrated system controls certification (i.e. Tridium Niagara, JCI/Metasys, Siemens Apogee, etc.). GSA's intent is to align the correct BAS technician certification for the BAS installed in the building.

H.8 PERSONNEL TRAINING, H.8.2 – SMART AND SUSTAINABLE BUILDINGS (SSB) TRAINING

MANDATORY TRAINING (AT LEAST ONE STAFF MEMBER):

One-hour "GSA Smart and Sustainable Buildings (SSB) Overview"

- Module 1 - Includes GSA FMSP Smart and Sustainable Buildings Overview
- Module 2 - Includes PBS CIO Support Procedures

OPTIONAL TRAINING (RECOMMENDED FOR MORE IN DEPTH PROFICIENCY):

Penn State GSA Smart Buildings Course (http://smartenergyacademy.org/gridstar/)

DEFINITIONS

BUILDING AUTOMATION SYSTEM (BAS):

The "building automation system" is a system controlling and monitoring building HVAC, and possibly other systems, to include all device, field, and global controllers, instrumentation, networking infrastructure, computers and peripherals, software, programming, database files, and licenses.

CONTROLS AND CONTROL SYSTEM:
A "control system" is any low-voltage control, communication and monitoring system, including but not limited to stand alone devices, field and global controllers, instrumentation, networking infrastructure, computers and peripherals, software, programming, database files, and licenses. Examples are the Building Automation System (BAS), Advanced Metering System (AMS), and lighting control systems. Fire protection systems and security systems are excluded from this definition for purposes of this Contract and are defined separately. Gateway devices, mapping software and files for data interchange between a control system and a fire protection or security system are considered part of the control system.

GSALINK.:
The GSAlink initiative is one of GSA's strategic projects. The purpose of this initiative is to leverage automated building analytics technology to measure and substantially lower operational expenses in the existing owned building portfolio. GSAlink is a hardware and software solution to capture real-time building systems point data, apply rules-based analytics software to the data, and spot trends and deficiencies while reporting actionable events to building operators, O&M Contractors, and GSA Service Center property managers.

OPEN SYSTEMS:
An "open systems" solution is based on industry standard open protocols. This environment and solution is typically designed, procured, installed and maintained in a manner that provides the building owner with as many competitive configuration options as possible while maintaining the integrity of the supported manufacture system. The solution must be procured and installed so that the result delivers device level interoperability amongst different manufactures residing on a common network. In addition, the solution must be maintained with no future need for the original (installing) Contractor. Additions, modifications, and retrofits can easily, without significant additional cost, be made to the system without dependence on the original installing Contractor or require substantial engineering or other technical development. Contractors shall specify Open Systems solutions where feasible and reasonably possible.

GOVERNMENT-FURNISHED EQUIPMENT (GFE):
Any required computer or server hardware (i.e. PC, laptop) and peripherals (i.e. mouse, keyboard, monitor) and/or routing and switching equipment, used to provide GSA network connectivity, must be government-furnished and must be provided by the GSA.

APPLICABLE REFERENCES
Technology Policy for PBS-Owned Building Monitoring and Control Systems
(https://sharepoint.pbs.gsa.gov/pbs/energyit/ESI/Library%20of%20docs%20saved%20on%20this%20site/ImplementationGuide/Technology%20Policy%20for%20PBS-Owned%20Buildings%20Monitoring%20and%20Control%20Systems_4.5.11.pdf)

Building Technologies Technical Reference Guide
(https://sharepoint.pbs.gsa.gov/pbs/energyit/ESI/Library%20of%20docs%20saved%20on%20this%20site/ImplementationGuide/Building%20Technologies%20Technical%20Reference%20Guide_FINALDRAFT_6.7.11.doc

EXHIBIT 15 WATER TREATMENT

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1.0 INTRODUCTION

This appendix establishes mandatory standards for water in HVAC and domestic water systems in GSA facilities, along with information related to the intent of the standards and guidelines that in most circumstances can be used to construct a water treatment program that will be approved by GSA. Treatment standards are mandatory; procedural instructions in these guidelines are advisory unless required by law or regulation. Subject to GSA approval, maintenance Contractors generally may propose alternative programs where accompanied with sufficient technical data and implementation detail for GSA to determine the likelihood of success of such an alternative program. Any program approved by GSA may be subsequently disapproved if results are unsatisfactory.

Regardless of the complexity or size of a loop, a qualified water treatment Contractor or personnel should be consulted or employed to help the building maintenance personnel develop a water treatment program specific to the needs of each system. The treatment chemicals themselves should be purchased through a licensed supplier that specializes in commercial and/or industrial water systems. Many water treatment chemicals require licenses for specific uses and are regulated by Federal, state, and Local governments. Maintenance Contractors are responsible for selecting and submitting for approval an appropriate program, and for compliance with laws regarding chemical discharge and usage.

Maintenance Contractors are responsible for providing all instrumentation and test equipment necessary to monitor compliance with these standards (e.g., installation of coupon racks or other corrosion monitoring equipment where not already installed).

2.0 TYPES OF RECIRCULATION WATER LOOPS

There are five basic open and closed loop water systems used for the daily operation of commercial buildings. Each system is vital to the everyday operation of the buildings mechanical systems. The following open and closed loop water systems are described as follows.

2.1 OPEN LOOP COOLING WATER SYSTEM

An open loop cooling water system generally uses cooling towers to cool condenser water that serves chilled water central plants, water source heat pumps and computer room air conditioning units. There are cases where a waterside economizer “free cooling” system is used in place of a chiller to cool condenser water during periods of low ambient conditions. During “free cooling” mode the chilled condenser water is passed through a heat exchanger to cool the closed loop cooling or chilled water loop.

An open loop is exposed to outside contaminants and requires frequent maintenance, chemical tests, and chemical treatment that should be determined by a water treatment Contractor. In general, large systems require chemical tests be performed weekly and a water treatment Contractor to inspect the chemical systems monthly. The four main goals of maintaining an open loop cooling system are; inhibition of mineral scale, corrosion, minimizing bacterial contamination, and general fouling inhibition. See Section 3.0 for a detailed description of cause and effect when using chemical inhibitors.

2.2 CLOSED LOOP COOLING WATER SYSTEMS

A closed loop cooling water system can either be used for chilled water or condenser water. In a closed loop chilled or condenser water system the cooling water is circulated through the chiller or

heat exchanger where it is cooled then pumped through air handlers' cooling coils, fan coil units, computer rooms units, water source heat pumps, etc.

In view of the fact that a closed loop cooling water system will not be exposed to as much outside containments and no evaporation as in an open loop system, the dissolved mineral concentration in the system will remain relatively constant and there will be virtually no need for blow down. Once the system is filled, every effort should be made to limit the amount of water leakage from seals, water sampling, valve testing and other routine system maintenance. When water leaks out of the system, it will be replaced with untreated makeup water. This water introduces additional minerals and dissolved oxygen into the system. Consistent chemical treatment is sustained with the use of chemical tablet "slug" feed water treatment products.

The treatment program for closed loop cooling water systems requires less frequent testing. The goal of the closed loop program is to inhibit corrosion, inhibit mineral scale formation, and inhibit bacteria growth. See Section 3.0 for a detailed description of cause and effect when using chemical inhibitors.

2.3 STEAM AND CONDENSATE RECIRCULATION SYSTEMS

Steam systems are closed loop systems that produce either saturated low pressure or superheated high-pressure steam via a steam boiler. The condensate water, with the addition of makeup water, is re-circulated through the steam boiler. A steam system should have an automated water makeup, a mechanical deaerator, condensate pumps, feed water pumps, steam traps, low feed water flame cut off controls and chemical pot feeders for condensate and makeup water treatment. The steam system will be a collection of steam regulators, steam turbines, heat exchanges for heating purposes, or through an absorption chiller to indirectly produce chilled water for space cooling.

The evaporation of water and elevated temperatures cause most of the minerals present in tap water to bond with each other, causing an increase in system mineral concentration. The four main goals to maintaining a steam system is prevention of mineral scale formation, oxygen corrosion, general corrosion, and condensate corrosion. Biocides are not needed in a steam system because bacteria do not grow in high temperature environments. Alternatively, if steam is supplied by a Local utility, then the steam has already been chemically treated and further chemical treatment may not be necessary. See Section 3.0 for a detailed description of cause and effect when using chemical inhibitors.

2.4 CLOSED LOOP HOT WATER SYSTEMS

A closed loop hot water heating system is not exposed to a great deal of outside containments. Therefore, the dissolved mineral concentration in the system will remain relatively constant and there will be virtually no need for blow down. Once the system is filled, every effort should be made to limit the amount of water leakage from seals, water sampling, valve testing and other routine system maintenance. When water leaks out of the system, it will be replaced with untreated makeup water. This water introduces additional minerals and dissolved oxygen into the system. Consistent chemical treatment is sustained with the use of slug feed water treatment products.

The treatment program for this system is very similar to the closed loop cooling system. The key difference is that hot water systems require more corrosion inhibitor as a result of higher water temperatures. In fact, most hot water systems require two to three times the corrosion inhibitor of closed loop cooling water systems. The goal of a closed loop hot water treatment program is to

inhibit corrosion, mineral scale formation, and bacteria growth. See Section 3.0 for a detailed description of cause and effect on using chemical inhibitors.

2.5 DOMESTIC HOT AND COLD WATER SYSTEM

A domestic hot and cold water system provides potable water for washing and general domestic use. The water within these systems will contact food, people, or will be consumed, so there is no chemical treatment used for this system to prevent mineral scale or corrosion due to water supplied by the Local utility. The only water treatments used for these systems is the addition of water softeners and filtration systems. The reduction of the corrosive and scaling tendencies of oxygenated hard or softened water is done by repairing leaky fittings and fixtures, limiting the velocity of the circulating water, and/or limiting the operating temperature of the hot water system.

3.0 WATER CHEMICALS TREATMENT ADDITIVES

Environmental regulations, handling guidelines and the chemical additives for water systems should be provided by a certified Local water treatment consultant. It is the building operator's responsibility to ensure compliance with municipal by-laws, and environmental regulations when disposing of chemicals and handling accidental spills. Disposing of chemically treated water into the sewer system must be monitored in blow down logs and not allowed to exceed levels specified by municipal sewage utility by-laws.

The chemical additives suggested herein are organized by class to encompass a variety of chemical additives that are used in open and closed water loops and steam boiler systems.

3.1 MINERAL SCALE INHIBITOR

Mineral scale is the precipitation of dissolved minerals such as calcium carbonate onto the surfaces of the cooling tower, boiler, heat exchangers tubes, and piping. This mineral scale forms an insulating layer on the surfaces that inhibits heat transfer and restricts flow through the system. Mineral scale also promotes corrosion and fouling in open loop and steam systems. All re-circulating water and steam boiler systems should have a mineral scale inhibitor as part of their water treatment program.

Mineral scale inhibitors are separated into two main categories, sludge conditioners and dispersants. Sludge conditioners are typically used when there is a relatively high concentration of calcium and magnesium in the makeup water. Sludge conditioners are crystal modifiers that allow the minerals to precipitate but interfere with the structure of the crystal to help form a soft sludge that can be easily removed from the steam boiler or cooling tower through blow down. Dispersants are usually polymer-based molecules that help to keep the trace minerals in solution so that they do not precipitate into scale deposits. The mineral scale inhibitors are especially needed when there is little or no pretreatment of the makeup water or when filtration equipment is not reliable. Even with excellent control of the scale inhibitor, chemical scale formation still occurs.

Water treatment consultants use computer models to determine the type of scale inhibitor needed as well as the limits for system pH and total dissolved solids (TDS). These computer models take into account the specific operating parameters of the system and help the water treatment consultant to choose a specific water treatment program that will work.

Open Loop Cooling Water System:

An open re-circulating cooling water treatment program commonly uses a chemical additive that is a combination of a mineral scale inhibitor and a corrosion inhibitor. The type and dosage of mineral

scale inhibitor needed is dependent upon the concentration and composition of the minerals in the makeup water, the pH of the cooling water, and the temperature of the cooling water.

The overall scale inhibitor program for a cooling water system may consist of a mineral scale inhibitor additive (such as a polymer dispersant), acid for pH control, and limits for the total dissolved solids and/or conductivity of the cooling water. Acid feed and pH control will not be needed in every system.

Steam Systems with Re-circulating Water:

In steam boilers, the buildup of an insulating layer can lead to tube failure and efficiency losses. Calcium and magnesium are the most abundant forms of mineral scale found in a steam boiler system because the solubility of these two minerals decreases as the temperature increases. To minimize the potential for mineral scale formation, most steam boilers have some type of makeup water pretreatment to remove certain minerals from the water before it enters the boiler. The goal of most pretreatment equipment is to minimize the concentration of these two minerals in the makeup water so that there is a less significant chance that they will precipitate and form a crystal scale deposits. Even with good pretreatment, mineral scale inhibitors are needed in all steam boiler systems.

Dispersant mineral scale inhibitor programs are used in steam boilers that have good pretreatment and very low levels of calcium and magnesium in the makeup water. Dispersants are usually only used when the total hardness in the makeup water is greater than 5 ppm consistently. The dispersants are usually a polymer based molecule that helps keep the trace minerals in solution so that they do not precipitate into scale deposits.

Closed Loop Cooling Water and Hot Water (Heating) Systems:

In a closed loop system the mineral concentration is relatively stable because very little makeup water is needed. This helps to minimize the need for mineral scale inhibitors. In systems that have poor quality makeup water, with a total hardness above 300 ppm, it is best to pre-treat the water with softeners to remove calcium and magnesium from the makeup water. In most cases, pretreatment of the makeup water is not necessary. Closed loop cooling and hot water systems should be treated with a polymer dispersant mineral scale inhibitor. This scale inhibitor is usually combined with a corrosion inhibitor in a one-drum formulation.

3.2 CORROSION INHIBITOR

Open Loop Cooling Water Systems:

The corrosion inhibitor chemical treatment protects the metal piping from degradation over time. The type of corrosion inhibitor that is used depends upon the specific metallurgy present in the system as well as the chemistry of the makeup water and pH level in the water. Corrosion inhibitor additives are intended to provide a protective layer on the interior walls of piping which stops the occurrence of corrosion in the system. A certified chemical water treatment consultant should be contacted to determine the specific type and amount of corrosion inhibitor necessary for each building's distinct system.

In most cases, there is more than one type of metallurgy in a system, such as galvanized steel, copper, stainless steel, etc. Different metals require distinct chemicals to prevent corrosion, so it is important that the corrosion inhibitor portion of the program have additives that are specific to each type of metal. In most cases, blends of different corrosion inhibitors are used to ensure that all of

the metal is protected.

Closed Loop Cooling and Hot Water Systems:

Corrosion is the principal concern in a closed loop cooling and hot water systems. There are many different types of corrosion inhibitors available on the market, but the most common products are nitrite based. As with any corrosion inhibitor program, the type of program used is determined by the type of metals used throughout the system. Mild steel systems should be treated with nitrite, molybdate, or phosphonate type inhibitors. Systems containing copper should have some type of azole product.

If bacterial contamination is a problem, Nitrite programs should be avoided. The nitrite corrosion inhibitor can act as a food source for bacteria. The bacteria will convert the Nitrite into Nitrate and Ammonia. This will destroy the corrosion inhibitor function of the product. A certified chemical water treatment consultant will be able to find the best product for this type of system.

There is one difference between a closed loop cooling and heating systems, which is the dosage of the corrosion inhibitor. The corrosion inhibitor of closed loop hot water system will have dosage 2 – 3 times greater than the dosage for a closed loop cooling water system.

3.3 BACTERIA CONTAMINATION CONTROL

The control of the bacteria growth is the most important part of an open loop cooling and closed loop cooling and hot water treatment program because bacterial contamination can lead to fouling, mineral scale, and corrosion. Bacterial contamination is controlled through the use of biocides. Below is a description on bacterial contamination control that is used for open loop cooling, closed loop cooling, and closed loop hot water systems.

Open Loop Cooling Water Systems:

Open loop cooling water systems are inherently prone to bacterial contamination without a proper water treatment. High bacteria levels in a cooling water system can lead to bio-deposits (algae for example) and increased fouling that can reduce heat transfer in the heat exchangers and cooling tower. The bio-deposits and increased fouling can reduce water flow through the system if there is improper water treatment.

In view of the fact that open cooling water systems are highly susceptible to bacteria growth, the water treatment program should have some type of biocide chemical additive. Biocides kill living organisms and/or bacteria and can be categorized as either oxidizing or non-oxidizing. An oxidizing biocide, when applied at the correct dosage, will kill all types of bacteria. A non-oxidizing biocide targets certain bacteria and will not kill some types of bacteria.

A non-oxidizing biocide can be compared to an Anti-biotic that is used to treat bacterial infections in people. Over dosing a system or improper usage of a non-oxidizing biocide can create strains of bacteria in the cooling water system that are resistant to the biocide. Limit the program to the use of non-oxidizing biocides alone is never recommended. It is good practice to utilize both an oxidizing biocide and a non-oxidizing biocide to strictly control bacterial contamination. This method is more costly so some building managers chose to only utilize only oxidizing biocides.

The types of oxidizing biocide needed are dependent upon the physical limitations of the facility, safety concerns, costs, and maintained pH of the recirculation water. For example, bromine based oxidizing biocides should be used any time the pH of the water in the system is above 7.5. A water

treatment supplier or consultant can provide specific information regarding the different types of oxidizing and non-oxidizing biocides that will suit the needs of your system.

It is important to note that there are both Federal and state laws that regulate the usage and application of biocides for commercial and industrial usage. When choosing a water treatment supplier or consultant, make sure that they are properly licensed and registered in your area to provide guidance on the usage of biocides or pesticides. Also, it is important that you only use biocide products that are specifically approved for use in an open loop cooling water system.

Closed Loop Cooling and Hot Water Systems:

It is not uncommon for closed loop systems to experience bacterial contamination, especially if these systems are treated with nitrite. In general, the more makeup water a system needs, the more likely that system is predisposed to bacteria problems.

If a closed loop system has a bacteria problem or will not maintain a nitrite residual, there are basically two options to correct the problem. The first solution is to switch the corrosion Inhibitor program to a program that does not contain a food source for bacteria. The second best solution is to utilize non-oxidizing biocides to treat the bacteria problem. A non-oxidizing biocide should be used in a closed loop system because they do not react with the corrosion inhibitors and they do not promote corrosion themselves. An oxidizing biocide will degrade most corrosion inhibitors and they can increase corrosion rates in a closed loop system. It is always best to contact a licensed water treatment consultant that can help you to determine the dosages of biocide needed and which biocide will work for your system.

3.4 GENERAL FOULING INHIBITOR

A fouling inhibitor is added to an open loop cooling water system when the makeup water contains high levels of suspended particles or turbidity. This includes high levels of dirt, silt, Iron, or other colloidal particles present in the makeup water, which occurs in rare applications. If this is the case, it may be necessary to add a fouling inhibitor additive to the system. These inhibitors are similar to mineral dispersants but are designed to target suspended particles instead of dissolved minerals. Generally, the mineral dispersant treatment program will be sufficient to provide general system fouling inhibition. If the mineral dispersants are not sufficient, contact a licensed water treatment consultant to see if a fouling inhibitor is needed for the system.

3.5 OXYGEN CORROSION CONTROL

Steam Systems with Condensate Recirculation:

Due to the high temperatures produced by a steam boiler plant, the corrosive reaction between oxygen and carbon steel is greatly increased. The oxygen corrosion in a steam system usually causes internal pipe pitting and can lead to pipe failures and leaks very rapidly. In order to protect the steam system metal from oxygen pitting, it is very important to remove the oxygen from the makeup water using both mechanical deaeration and chemical processes.

At room temperature, water normally contains about 9 ppm of dissolved oxygen. As the temperature of the water increases, the solubility of oxygen in the water decreases. A mechanical deaerator is designed to raise the temperature of the feed water to just below boiling so that the oxygen concentration in the water drops from 9 ppm to less than 0.05 ppm. After the makeup water is mechanically depleted of its oxygen content, it is still necessary to reduce it further. The further reduction in oxygen content is done with an oxygen scavenger chemical, which will reduce

the concentration of oxygen to levels below 0.005 ppm.

There are many different types of chemicals used as Oxygen Scavengers. The most common Oxygen Scavenger is Sodium Bi-Sulfite. Contact a licensed water treatment consultant that will decide what product meets all the needs of a given steam system.

3.6 GENERAL CORROSION CONTROL

Steam Systems with Condensate Recirculation:

A steam system should include an Oxygen corrosion control treatment program along with a general system corrosion control treatment program. A general corrosion control chemical treatment program includes the addition of buffering agents to the boiler feed water to minimize the potential for corrosion throughout the system. This buffering agent is frequently in the form of alkali solution. The alkali species neutralize acids in the water and raise the pH to create a slightly Basic environment that is less corrosive to the metal piping.

Some makeup water has enough natural alkalinity and is able to provide the feed water system with sufficient buffering, to keep the pH of the steam boiler feed water at or above 10.2. When there is not enough natural Alkalinity in the steam boiler feed water, a Caustic chemical should be added to raise the pH above 10.2. A water treatment consultant will be able to test the feed water in the steam system to determine if Caustic feed is needed and what dosage is necessary to raise the pH above 10.2.

3.7 CONDENSATE CORROSION CONTROL

Steam Systems with Condensate Recirculation:

The feed water is heated to produce high or low-pressure steam by the boiler. When this occurs some of the alkali solution species will breakdown into Carbon Dioxide (CO_2) gas. The CO_2 vapor produced will leave the steam boiler, along with the steam and is dissolved into the condensed condensate water, after the energy from the steam is utilized. As the CO_2 dissolves into the condensate water it produces a carbonic acid and will dramatically increase the corrosiveness of the condensate return water. In order to protect the condensate return piping from corrosion, the condensate must be feed with corrosion control chemicals.

The two most common types of condensate water treatment are neutralizing and filming chemical additives. A neutralizing chemical additive will neutralize the Carbonic Acid in the condensate water and raise the pH above acidic levels. A filming chemical additive will provide a protective layer on the interior of the piping to keep the condensate return water from actually touching the metal. In most cases a neutralizing chemical additive will tend to be slightly more expensive, but these chemicals are usually more effective.

There are limitations to the type of condensate treatment implemented for steam systems. For example there are certain treatment programs are restricted if the steam is used for food preparation or direct contact humidification, a treatment product that is approved for use with food preparation or direct contact humidification should be used. Contact a licensed water treatment consultant or supplier for more information regarding which products can be used and for which systems these chemicals are allowed.

4.0 SETTING UP A WATER TREATMENT PROGRAM

The most important step to setting up a water treatment program is to know what systems are present in the building and what are the requirements for water properties such as pH, conductivity,

total dissolved solid (TDS), etc. The water property ranges, definitions and testing schedules are in Section 5. Many of these water chemistry properties can be monitored using stand-alone controllers or global building automation system (BAS) controls. A licensed water treatment consultant should be employed to model the building's water systems and develop an appropriate treatment plan for each system. There are many treatment plans available; below is a summary of typical plans used for each system, which are used by water treatment consultants in the United States.

4.1 OPEN LOOP COOLING WATER SYSTEMS

Monitoring conductivity as a measurement of the concentration of Total Dissolve Solids (TDS) is a crucial part of controlling an open loop water system. Conductivity limits should be set by a water treatment consultant and routinely monitored to ensure that mineral scale does not form. Cycles of concentration of the system should not exceed limits set by water treatment consultant. Automated blown down controls with a conductivity meter is recommended for open loop systems. The pH of the water should be routinely monitored especially if an acidic additive is used to control the pH. Corrosion inhibitor residual tests should also be run to verify that the system is receiving the correct dosage. Routine tests should be conducted daily, weekly, or monthly to monitor oxidizing biocide residuals and bacteria concentrations to ensure Micro-Bio levels are under control. In general, bacteria concentrations in the open loop cooling water system should be less than 100,000 cfu/ml (colony forming units per milliliter) at all times.

Corrosion Monitoring should be performed using a real time on-line monitoring device or corrosion coupons with a 90-day rotation schedule. Coupon test results should show mild steel corrosion rates less than 5.0 mils per year (MPY) and Copper Corrosion Rates less than 2.0 MPY at all times.

Recommended Corrosion and Scale Control Programs

Program 1:

Description: Multifunctional Molybdate Based Corrosion Inhibitor and Dispersant

Function: Corrosion Inhibition, Mineral Scale Inhibition

Components: Molybdate for Mild Steel Corrosion Control
Azole for Copper Corrosion Control
Dispersant for Mineral Scale Inhibition

Form: Liquid

Feed Location: Tower Basin or Header

Control Tests: Molybdate Residual or Test for Tracing Agent if present, Corrosion Monitoring

Program 2:

Description: All Organic Based Multifunctional Corrosion Inhibitor and Dispersant

Function: Corrosion Inhibition, Mineral Scale Inhibition

Components: Phosphonate for Mild Steel Corrosion Control
Azole for Copper Corrosion Control
Dispersant for Mineral Scale Inhibition

Form: Liquid

Feed Location: Tower Basin or Header

Control Tests: Organic Phosphate Test or Test for Tracing Agent if Present, Corrosion Monitoring

Program 3:

Description: Zinc Phosphate Multifunctional Corrosion Inhibitor and Dispersant

Function: Corrosion Inhibition, Mineral Scale Inhibition

Components: Zinc and Phosphate for Mild Steel Corrosion Control
Azole for Copper Corrosion Control
Dispersant for Mineral Scale Inhibition

Form: Liquid

Feed Location: Tower Basin or Header

Control Tests: Ortho-Phosphate or Test for Tracing Agent if present

Program 4:

Description: Stabilized Phosphate Corrosion Inhibitor and Dispersant

Function: Corrosion Inhibition, Mineral Scale Inhibition

Components: Phosphate for Mild Steel Corrosion Control
Azole for Copper Corrosion Control
Dispersant for Mineral Scale Inhibition

Form: Liquid

Feed Location: Tower Basin or Header

Control Tests: Ortho-Phosphate or Test for Tracing Agent if present, Corrosion Monitoring

<u>Bacteria Control Programs</u>

Program 1:

Description: Chlorine Bleach Oxidizing Biocide

Function: Oxidizing Biocide

Components: Sodium Hypochlorite

Form: Liquid

Feed Location: Tower Basin

Control Tests: Free Chlorine Residual, Bacteria Monitoring

Program 2:

Description: Stabilized Chlorine Oxidizing Biocide

Function: Oxidizing Biocide

Components: Stabilized Sodium Hypochlorite

Form: Liquid

Feed Location: Tower Basin

Control Tests: Free Chlorine Residual, Bacteria Monitoring

Program 3:

Description: Activated Bromine Oxidizing Biocide

Function: Oxidizing Biocide

Components: Separate Feed of Sodium Hypochlorite

Separate Feed of Sodium Bromide

Form: Both Liquid

Feed Location: Mix together in feed line to activate Bromine then feed to Tower Basin

Control Tests: Free Chlorine Residual, Bacteria Monitoring

Program 4:

Description: Stabilized Bromine Based Oxidizing Biocide

Function: Oxidizing Biocide

Components: Stabilized Bromine

Form: Liquid

Feed Location: Tower Basin

Control Tests: Free Chlorine Residual, Bacteria Monitoring

Program 5:

Description: Solid Chlorine Bromine Tablets

Function: Oxidizing Biocide

Components: Chlorine and Bromine

Form: Solid Tablet

Feed Location: Fed from pot feeder to Tower basin

Control Tests: Free Chlorine Residual, Bacteria Monitoring

Program 6:

Description: Solid Chlorine Bromine Tablets

Function: Oxidizing Biocide

Components: Chlorine and Bromine

Form: Solid Tablet

Feed Location: Fed from pot feeder to Tower basin

Control Tests: Free Chlorine Residual, Bacteria Monitoring

Program 7:

Description: Isothiazoline

Function: Non-Oxidizing Biocide

Components: Isothiazoline

Form: Liquid

Feed Location: Slug fed to tower basin

Control Tests: Bacteria Monitoring

Program 8:

Description: Glutaraldehyde

Function: Non-Oxidizing Biocide

Components: Glutaraldehyde

Form: Liquid

Feed Location: Slug fed to tower basin

Control Tests: Bacteria Monitoring

Program 9:

Description: DBNPA

Function: Non-Oxidizing Biocide

Components: Dibromonitropropianamide

Form: Liquid

Feed Location: Slug fed to tower basin

Control Tests: Bacteria Monitoring

Program 10:

Description: Quaternary Amine

Function: Non-Oxidizing Biocide

Components: Quaternary Amine

Form: Liquid

Feed Location: Slug fed to tower basin

Control Tests: Bacteria Monitoring

Program 11:

Description: MBT

Function: Non-Oxidizing Biocide

Components: Methylene-bis-thiocyanate

Form: Liquid

Feed Location: Slug fed to tower basin

Control Tests: Bacteria Monitoring

4.2 CLOSED LOOP COOLING AND HOT WATER SYSTEMS

General guidelines for the control of a closed loop cooling or hot water system include the monitoring of the conductivity, pH, corrosion, and micro bio-levels. Water chemistry limits should be set by a water treatment consultant and routinely monitored by maintenance personnel to ensure that mineral scale and corrosion does not occur. Automated make up water controls along with a makeup water meter should be added to the system to maintain a consistent amount of water. The pH of the water should be routinely monitored, especially if an acidic additive is used to control the pH. Corrosion inhibitor residual tests should also be run to verify that the system is receiving the correct dosage. Monthly monitoring of bacteria concentrations to ensure biological organism levels are under control. If biological organism levels are above recommended levels, there could be a point where oxygen is entering the system, i.e. a leak in the system. Corrosion monitoring should be done with iron or copper corrosion coupons with a six month rotation schedule. Coupon test results should show mild steel corrosion rates less than 0.5 mils per year (MPY) and Copper corrosion rates less than 0.2 MPY at all times.

Recommended Corrosion and Scale Inhibition Programs

Program 1:

Description: Multifunctional Molybdate Based Corrosion Inhibitor and Dispersant

Function: Corrosion Inhibition, Mineral Scale Inhibition

Components: Molybdate for Mild Steel Corrosion Control

Azole for Copper Corrosion Control

Dispersant for Mineral Scale Inhibition

Form: Liquid

Feed Location: Slug feed with Pot Feeder

Control Tests: Molybdate Residual or Test for Tracing Agent if present, Corrosion Monitoring

Program 2:

Description: Multifunctional Nitrite Based Corrosion Inhibitor and Dispersant

Function: Corrosion Inhibition, Mineral Scale Inhibition

Components: Nitrite for Mild Steel Corrosion Control

Azole for Copper Corrosion Control

Dispersant for Mineral Scale Inhibition

Form: Liquid

Feed Location: Slug feed with Pot Feeder

Control Tests: Nitrite Residual or Test for Tracing Agent if present, Corrosion Monitoring

4.3 STEAM AND CONDENSATE RECIRCULATION SYSTEMS

The water treatment program for a steam and condensate recirculation system should include monitoring for conductivity. Proper Conductivity limits will vary slightly depending upon the type, age, and size of the steam boiler system. The absolute maximum conductivity level for any steam system is 5,500 µmhos.

The alkalinity concentration in the steam boiler should routinely be monitored my maintenance personnel. There two main types of alkalinity measured in a steam system total (M)-Alkalinity and hydroxide (OH)-alkalinity. The P-alkalinity test is used to measure the portion of M-alkalinity contributed to by Hydroxide (OH)-alkalinity. Barium chloride is added to water samples containing OH-alkalinity then sulphuric acid is added to neutralize the OH, alkalinity is then measured to show the change in alkalinity due to the elimination of OH molecules. P-Alkalinity is used to monitor the condensate return system; to avoid corrosion within the steam boiler OH-alkalinity is measured. Proper chemical dosage for the steam boiler is ensured by running routine chemical residual tests for the oxygen scavenger and internal scale inhibitor.

In addition, it is very important to monitor the chemistry of the steam boilers feed water. Maintenance personnel should test the conductivity of the feed water on a regular basis. If makeup water pretreatment is exists, Maintenance personnel should also test the total hardness level of the feed water.

The remaining tests to be conducted on condensate return for filming Amine residual, or Iron concentration and the condensate pH should be tested to ensure that the system has received the proper chemical dosage. Further tests can be conducted by a water treatment consultant to determine if dosages should be altered to maintain proper steam, makeup and feed water chemistry.

Recommended Oxygen Scavengers

Program 1:

Description: Sulfite

Function: Chemical Oxygen Scavenger

Components: Catalyzed Sodium Sulfite

Form: Liquid or Powder

Feed Location: Deaerator Drop Leg or Storage Section

Control Tests: Residual Sulfite

Program 2:

Description: Volatile Oxygen Scavenger

Function: Chemical Oxygen Scavenger

Components: Various Types Available

Form: Liquid

Feed Location: Deaerator Drop Leg or Storage Section

Control Tests: DEHA Residual

Recommended Scale Control Programs

Program 1:

Description: Precipitating Phosphate

Function: Sludge Conditioner

Components: Phosphate

Form: Liquid

Feed Location: Boiler Steam Drum or Feedwater line

Control Tests: Conductivity, P Alkalinity, M Alkalinity, OH Alkalinity, Silica, Ortho-Phosphate,

Visual Color Test

Program 2:

Description: Polymer Dispersant

Function: Mineral Dispersant

Components: Polymer

Form: Liquid

Feed Location: Boiler Steam Drum or Feedwater line

Control Tests: Feedwater Hardness, Polymer Residual, Silica, OH-Alkalinity, Tracing Agent if available

Program 3:

Description: Chelant

Function: Sludge Conditioner

Components: EDTA Chelant

Form: Liquid

Feed Location: Boiler Steam Drum or Feedwater line

Control Tests: Feedwater Hardness, Chelate Residual, Silica, O-Alkalinity, Tracing Agent if available

Recommended Condensate Corrosion Control

Program 1:

Description: Neutralizing Amine

Function: Raise pH of Condensate

Components: Various Types

Form: Liquid

Feed Location: Steam Header or Boiler Steam Drum

Control Tests: Condensate pH, Condensate Iron

Program 2:

Description: Filming Amine

Function: Provide Protective Barrier for Condensate Piping

Components: Various Types

Form: Liquid

Feed Location: Steam Header or Boiler Steam Drum

Control Tests: Filming Amine Residual, Condensate Iron

Recommended General Corrosion Control (Steam Drum)

Program 1:

Description: Caustic

Function: Increase Alkalinity

Components: Sodium or Potassium Hydroxide

Form: Liquid or Powder

Feed Location: Deaerator storage or Boiler Steam Drum

Control Tests: O-Alkalinity

5.0 WATER SYSTEM TESTING

Routine water chemistry tests play an important role in maintaining building water systems; they can be used to anticipate and prevent water's capacity to accelerate fouling, scaling and corrosion within a mechanical system. Chemical test kits for each building water system are available through most water treatment chemical suppliers or consultants. Section 5.2 lists the most common water tests used and a water treatment consultant can determine if a system requires more rigorous tests.

5.1 WATER SAMPLING

When water samples are taken, they should be isolated from large amounts of mineral buildup, incoming feed water or makeup water and chemical feed points. Samples should be collected during normal operation before system blow down and chemical dosing. When collecting water, allow the samples container to overfill and to avoid sample contamination use sampled water to rinse cap or container. Label the container appropriately and test sample as soon as possible. A licensed water treatment consultant will be able to give advice on chemical testing. However, building maintenance staff should be familiar with specific test procedures that should be provided by the chemical test equipment supplier(s).

5.2 COMMON WATER CHEMISTRY TESTS

Conductivity:

This test is used to estimate the Total Dissolved Solids (TDS) concentration in a water sample. Conductivity is the measures of electrical conductance in the water. In general 1.0 umhos of conductance is equal to 0.67 ppm of total dissolved solids or minerals. High levels of conductivity increase the scaling potential of the system which depends on water temperature, composition of dissolved solids and interaction with other chemical additives, and the system's metallurgy.

Cycles of concentration for a water system is measured as the ratio of mineral content (TDS) of system water divided by the mineral content (TDS) of make-up water. High cycles of concentration are an indicator of increased scaling potential. Maintaining high cycles can be done with proper chemical water treatment. Cycles of concentration are mainly monitored in open loop cooling systems and general range from 2 to 14 times the mineral content of the makeup water. The cycles of concentration of a system are completely dependent upon the TDS of the makeup water and the optimum point where corrosion and scale build-up are minimized. A water treatment consultant should specify the optimal cycles for the water system.

pH:

In general, low pH water is corrosive and has a high acidity, a meter reading lower than 7.0. High pH water is prone to scaling and is considered to be alkaline and is specified by a meter reading greater than 7.0 and less than 14. Tests for pH, acidity or alkalinity, are used to monitor chemical treatment product dosages and are used for general troubleshooting of a water system.

Nitrite:

The concentration of Nitrite in a closed loop cooling or hot water system's water sample is measured to monitor the corrosion inhibitor program. Nitrite is used to passivate metal surface and remove dissolved oxygen resulting in a non-corrosive water system. A water treatment consultant will set the minimum levels of nitrate that need to be maintained.

Sulfite:

This test is a residual oxygen scavenger test used to determine the concentration of sulfite available in a closed loop hot water system. If used as the oxygen scavenger, Sulphite must be maintained at levels between 30-50 mg/L (ppm). When Sulphite levels are not maintained corrosion will occur. Over charging a system with Sulphite will increase the conductivity of the water, corrosively and may cause the growth of sulphate reducing bacteria.

Silica:

Silica testing measures the concentration of Dissolved Silica in a water sample, typically for steam boiler systems. If silica levels are too high and pH is low scaling will occur. Silica can form extremely hard and dense scale on heat transfer surfaces increasing the risk of mechanical failure. Common water test sample points for silica include the boiler drum and the saturated steam.

Corrosion Coupons:

Corrosion coupons are small, slender circular or rectangular pieces of metal (Iron or copper) used to monitor the actual corrosion level in a water system. Typically corrosion coupons are monitored on a 90-day rotation schedule. The original dimensions, thickness, of the coupon are known. When the coupon is removed from the water loop the change in dimensions are noted as the corrosion rate. If the corrosion inhibitor program is effective the coupon's corrosion rate are below the recommended levels, as specified in Section 5.3.

Bacteria Dip Slide:

This test measures the concentration of bacteria in an open or closed loop cooling water system water sample. A media called "Agar" is wetted with the cooling water then is placed into a tube were Bacteria, yeasts, and fungi are grown. This test is used to confirm that biocide program in an open or closed cooling water system is effective.

Dissolved Iron:

Iron testing is used to monitor corrosion products in a water system. Iron testing is used to either verify that the treatment program is working or to troubleshoot a problem. Dissolved Iron levels should be less than 30 ppm. Increased corrosion problems, leaks, poor heat transfer efficiency, as well as bacteria problems can occur when the dissolved Iron level is high.

Molybdate:

A Molybdate test measures the concentration of Sodium Molybdate in both closed and open loop cooling water systems. A water treatment consultant will state the minimum levels of Molybdate that is needed to maintain the systems' corrosion inhibitor program.

Organic Phosphate:

This test measures the concentration of organic Phosphate in an open loop cooling water system. This test is needed only if an organic phosphate is used as a corrosion inhibitor. A water treatment consultant will set the minimum levels of organic phosphate that need to be maintained to prevent corrosion.

Ortho-Phosphate:

This test measures the concentration of inorganic Phosphate in a water sample. Ortho-Phosphate is a commonly used in closed loop cooling water and hot water systems as an Iron (ferrous) and non-ferrous alloy corrosion inhibitor. If phosphate is used a minimum concentration of 200 – 300

mg/L (ppm) is required.

Free Chlorine:

A free chlorine test measures the concentration of active oxidizing biocide in an open loop cooling water system. Free Chlorine tests are used to monitor both Chlorine and Bromine and are more accurately described as free halogen tests. These tests are commonly used to monitor the dosage of oxidizing biocide in an open re-circulating cooling water system. Since excessive chlorine concentrations are corrosive, a free chlorine residual of 0.2 to 0.8 ppm is maintained.

5.3 MAINTENANCE PARAMETERS

The following charts list the minimum monitoring requirements for each open loop or closed loop water system. The frequency of the water testing can be increased to better maintain the performance in open loop cooling water, steam boiler, or closed loop system. The chemical test ranges and frequencies given are general and should be clearly defined by a certified water treatment consultant. A water treatment program can be controlled to an optimum level if the system is checked on a daily basis and automated monitoring equipment, such as conductivity and pH meters, are installed.

The operating ranges are mandatory performance standards. The maintenance Contractor must maintain water within these tolerances, unless GSA gives a written waiver for specific reasons. GSA may require more rigorous standards where circumstances dictate. The testing frequencies establish minimum mandatory frequencies. Contractors may test more frequently. Sporadic short-term deviations from operating ranges may not, depending on the terms and conditions of specific Contracts, result in a determination of unsatisfactory Contract performance where the Contractor takes prompt action to correct the condition.

OPEN LOOP COOLING WATER SYSTEMS

CHEMISTRY TESTS	FREQUENCY OF TEST	OPERATING RANGES
Tower Water Conductivity	Auto Blow down: Weekly, Monthly Manual Blow down: Daily	160-2400 mmHOS (110-1600 ppm)
Makeup Water Conductivity (Hardness)	Auto Blow down: Weekly, Monthly	40-600 mmHOS (30-400 ppm)
pH Test	Daily, Weekly	7.5 to 9.5
Corrosion Monitoring (Coupon Test)	Quarterly (3 months)	Iron: 2 to 5 mils/ year Copper: 0.2 to 0.5 mils/ yr
Bacteria Testing	Monthly	Max: 103 cfu/ml (colony forming units/ ml)
Chlorides	Weekly, Monthly	Max: 250 ppm as Cl Max: 410 ppm as NaCL
Sulfites	Weekly, Monthly	50-100 ppm SO3 80-160 ppm Na2SO3

Corrosion Inhibitor Residual	Auto Chem. Feed: Weekly, Monthly	Defined by Consultant
Oxidizing Biocide Residual	Auto Chem. Feed: Weekly, Monthly	Defined by Consultant

CLOSED LOOP COOLING WATER SYSTEMS

CHEMISTRY TESTS	FREQUENCY OF TEST	OPTIMUM OPERATING RANGES
pH	Monthly	7.5-9.5
Total Dissolved Solids (TDS) or Conductivity	Quarterly (3 months)	Maximum: 2000 ppm or (2500µS/cm)
Polyphosphates (PO4)	Monthly	10- 20 ppm
Sulfites	Monthly	50-100 ppm SO3 80-160 ppm Na2SO3
Bacteria Testing	Monthly	Max: 103 cfu/ml (colony forming units/ ml)
Corrosion Monitoring (Coupon Test)	Bi-Annually (6 months)	Iron: max. 0.5 mils/ year Copper: max. 0.2 mils/ yr
Corrosion Inhibitor Residual	Monthly	Defined By Consultant

STEAM SYSTEMS WITH RE-CIRCULATING WATER

CHEMISTRY TESTS	FREQUENCY OF TEST	OPTIMUM OPERATING RANGES
Total Hardness Concentration	Daily or 3 times/week	Less Than 2 ppm CaCO3
Feed water pH	Daily or 3 times/week	10.5-11.5
Feed Water Conductivity or TDS	Daily or 3 times/week	1500 - 3000 ppm (2000 – 4000 µS/cm)
Condensate Return pH	Daily or 3 times/week	8.5-9.5 pH
Condensate Return Conductivity or TDS	Daily or 3 times/week	40 ppm (50 µS/cm)
Makeup Water Conductivity	Weekly	40-600 mmHOS (30-400 ppm)

Hydroxide Alkalinity	Daily or 3 times/week	150-300 ppm CaCO3
Total Alkalinity	Auto Chem Feed: Daily, Weekly	<700 ppm CaCO3
Sulphite	Daily or 3 times/week	30-60 ppm SO3 50 ppm Na2SO3
Steam Drum Scale Inhibitor Residual	Auto Chem Feed: Daily, Weekly	Defined By Consultant
Steam Drum Oxygen Scavenger Residual	Auto Chem Feed: Daily, Weekly	Defined By Consultant

6.0 ALTERNATIVES TO CHEMICAL WATER TREATMENT

There are many alternative non-chemical methods to treating closed and open loop cooling and hot water systems. Not all alternatives on the market have been proven to be effective so carefully consider products that promise too much. The products listed below have been used in many systems and have been an effective means of non-chemical water treatment. There are numerous practical studies that can be referenced, when making a decision for or against either of these non-chemical water treatments.

6.1 PULSED ELECTROMAGNETIC FIELDS

This chemical free water treatment system uses a pulsed electromagnetic field to treat water. The common application of this technology is on open loop water processes subject to scale, corrosion, bio-fouling or bacterial contamination. Typical applications include open process water loops, cooling towers and fountains. The technology originated in the food and beverage industry as an FDA approved means for water sterilization.

The principal of operation is to generate a pulsating magnetic field around a Section of pipe in the water process system. Each generated electromagnetic wave varies in amplitude and frequency and as the wave decays harmonics are created that can be measured in the megahertz range. It is this harmonic wave that is used to treat the water.

The harmonic wave alters the minerals; i.e. Calcium Carbonates, electrical charge causing the minerals to clump together into finally divide particles; colloidal nucleation. The minerals concentrate due to evaporation and attract each other thus clumping together into fine particles. The minerals then precipitate out of solution as a non-adhesive powder in the cooling tower basin rather than on the inside of the piping and heat transfer surfaces as scale. The powder is then carried off in the water discharged from the cooling tower during blow-down.

This pulsed electromagnetic field technology also has an effect on biological organisms, such as bacteria. The effect is described by two processes known as electroporation and encapsulation. Electroporation is the electromagnetic pulse causes damage to the cell membrane of biological organisms by repeatedly exposing it to an electromagnetic field. This inhibits the reproductive ability of the bacteria thus exhausting their ability to multiply. Encapsulation is the process of

calcium carbonate precipitates surrounding and encapsulating the biological organisms in the condenser water. This prevents bio-fouling and bacteria from accumulating in open water loops. Eliminating the need for oxidizing biocides; which are corrosive substances such as bleach, chlorine and bromine, directly reduces the predominance for corrosion within cooling towers.

The cycles of concentration of the process loop are increased, therefore the environment becomes more alkaline which reduces the rate of corrosion. Increased cycles of concentration equal a reduction in system blow downs which saves water and water costs. Monitoring of pH and conductivity should still be conducted on a daily or weekly basis. The installation of this system requires the installation of a conductivity sensor to monitor water basin conductivity and automatic blow down controls. Cooling tower systems using this non-chemical water treatment system typically average less than 2 mils per year, which is an industry standard. Below 2 is considered very good with, 2 to 5 being acceptable. Corrosion coupon test should be conducted on a quarterly basis.

6.2 OZONE GENERATORS

Ozone generators have been used for portable drinking water sterilization for over two decades, to kill bacteria and other bio growth in water. This method of water sterilization is used to replace the use chlorination as a water purification method. The applications of Ozone generation for water treatment have expanded to open loop cooling water systems. They are usually installed at the cooling tower of the open loop water. Cooling tower manufacturers and water treatment companies offer Ozone generators as a replacement for chemical treatment. Monitoring of pH, conductivity and bacteria testing should still be conducted on a daily or weekly basis and monthly. The installation of this system requires the installation of a conductivity sensor to monitor water basin conductivity and automatic blow down controls.

The untreated water enters the Ozone generation system and treated water is introduced back into the open loop system at the cooling tower. Ozone generator units produce Ozone by one of three possible methods; sending dried oxygen enriched air through an electrode, ultraviolet irradiator, or cold plasma. The most common method used for cooling water applications is the electrode method. The size of the generation unit is based on the size of the cooling water system and will be specified by the manufacturer. In addition, Ozone generation units require a system to clean and remove the humidity from the air. The air dryer and de-humidifier system require routine maintenance and should be conducted by the manufacturer or qualified maintenance personnel, while the unit is off.

Ozone is a strong oxidizer since it is an unstable three atom (tri-automic) oxygen molecule. Oxygen molecules are naturally diatomic (two atom) molecules at atmospheric pressure and are necessary for life. Ozone will naturally discard its additional oxygen molecule to form a stable diatomic oxygen molecule. Leaving a highly reactive oxygen atom, this atom will destroy bacteria, biological organisms and it eliminates phenols (odor causing organic compound) through oxidation. An Ozone generator should not be installed in any occupied space because it is considered a toxic gas, according to the U.S. Environmental Protection Agency (EPA) and Food & Drug Administration (FDA). It is regulated because the same chemical properties that allow ozone to react with organic compounds outside the body give it the same ability to react similarly with organic compounds that makeup the body.

Attachment 1 – ENERGY AND WATER EFFICIENCY USE PLAN TEMPLATE

CONTRACT INFORMATION – to be completed by Contractor in fields provided

Contract number:

Building number, name and address:

Building annual energy performance targ Btu/GSF

Building annual water performance targe Gal/GSF

Dates covered in this report

Report submitted by (name of Contractor, name of individual responsible for follow-up actions):

Date submitted:

CONTRACTOR REPORTING ELEMENTS – to be completed by Contractor in fields provided

1. Use by resource – For each purchased utility resource, provide the use for the most recent EUAS reporting period for each utility, and the corresponding reporting period from the previous year in the table below.

Resource (please note units)	Billing Period (enter dates for the most recent EUAS billing for the corresponding utility)	Yearly Use Previous Contract Year	Target Use Current Contract Year
Electricity (kWh)			
Water (kgal)			
Steam (mmBtu)			
Natural gas (CCF)			

Total Energy (KBtu)			

1. Significant energy and water efficiency actions/measures completed in the last year that should be considered for the current year.

a. Identify previous overtime utility requests and verify current year

b. request

2. Additional recommendations for improvement in the next Contract year – with consideration to the following

a. Changes to operations practices such as

i. Equipment and/or buildings scheduling

ii. Set points

iii. Trend report assessments

b. Plant or equipment changes for

i. Low-cost/site funded measures

ii. Project funding

c. Contractor/Property Manager coordination and communication

3. Identify support actions needed from GSA to assist in the energy and water efficiency efforts.

GSA REVIEW AND RESPONSE ELEMENTS – to be completed by property manager in the fields provided

GSA1. GSA reviewing official:

GSA2. Date reviewed by GSA:

GSA3. Comments to Contractor:

EXHIBIT 16 ENERGY AND WATER EFFICIENCY MONTHLY REPORT

Background

This energy and water efficiency report is to be completed per the requirements of section C.21.6, Energy & Water Efficiency, of the O&M services contract. The Contractor shall use this report template and submit completed reports as part of the monthly report to the Property Manager.

The primary objectives of this report are twofold. First, to encourage the Contractor to regularly review and manage their efficiency efforts towards achieving the performance targets established in Energy & Water Operational Performance Targets, and to optimize building performance. Second, to provide information that generates regular discussion with the Property Manager on the energy and water efficiency efforts. Together these objectives will help the Contractor and Property Manager work in a collaborative manner to improve the operational efficiency of the building by addressing current and emerging issues, and developing mid- and long-term plans that will optimize building and Contractor performance. Examples of potential collaborative outcomes include identification of roles and actions for GSA to engage tenants in, such as reducing overtime utility requests, reduction of off-hour plug loads, or even purchase and installation of equipment sized to efficiently meet the off-hour loads; identification of operational changes that can reduce energy and water use while still meeting tenant requirements such as temperature set points and equipment on/off schedules; and identification of potential prospectus-level projects. These types of actions will ultimately benefit the Contractor performance by meeting or exceeding energy and water use targets. GSA will benefit by reducing utility costs, achieving agency energy and water efficiency goals, and overall improvement in building performance including system reliability and occupant comfort. Building tenants will benefit from improved building comfort, systems reliability, and reduction in the overall cost to lease space.

Note that information provided in the report will be used to support the annual building energy and water efficiency report.

This document includes the following three attachments:

1. Attachment 1 – Energy and Water Efficiency Reporting Template. The Contractor shall use this template to complete the energy and water efficiency report sections for “Contract Information” and

"Contractor Reporting Elements." The GSA Property Manager shall complete the section "GSA Review and Response Elements."

2. Attachment 2 – Clarification for Completing Energy and Water Efficiency Report. This attachment provides additional detail on the types of information to be included in the individual reporting elements found in the template.

3. Attachment 3 – Example Energy and Water Efficiency Report. This attachment is included to show users' what a completed report can look like.

Instruction

The Contractor shall complete the required fields in this report (see Attachment 1, Energy and Water Efficiency Reporting Template) and forward the completed report to the Property Manager by the 5th working day of the subsequent month. The Property Manager shall review the submitted report; meet with the Contractor to discuss identified issues, findings, and recommendations; complete the report fields in the section "GSA Response;" and provide a copy of the GSA response to the Contractor. Attachment 2, Clarification for Completing Energy and Water Efficiency Report, provides the additional detail and clarifications to assist in completing the report template.

Contract Information – to be completed by Contractor in the fields provided

Contract number: Field for Contractor provided in template

Building number, name and address: Field for Contractor provided in template

Building annual energy performance target: Field for Contractor provided in template

Building annual water performance target: Field for Contractor provided in template

Dates covered in this report: Field for Contractor provided in template

Report submitted by (name of contractor, name of individual responsible for follow-up actions): Field for Contractor provided in template

Date submitted: Field for Contractor provided in template

Contractor Reporting Elements – to be completed by Contractor in the fields provided.

1. Monthly resource use – For each purchased utility resource, provide the use for the most recent EUAS reporting period for each utility, and the corresponding reporting period from the previous year in the table below. Field for Contractor below.

Resource (please note units)[a]	Billing Period (enter dates for the most recent EUAS billing for the corresponding utility)	Monthly Use - Current Year	Monthly Use - Previous Year
Electricity (kWh)[b]			
Electric demand (kW)			
Water (gal)[c]			
Steam (mmBtu)[d]			
Natural gas (CCF)[e]			

Notes:
Units listed in this table are standard units. Should different units be reported, the Contractor shall clearly label the units being used. The same units shall be used for both the current and previous year values reported.
Electricity shall be reported in kWh, the standard units of electric energy. The standard conversion for kWh to Btu is 3,413 Btu per 1 kWh.
[c] Water is typically billed in thousands of gallons (kgal). However, water should be reported in gallons (gal) on this form.
[d] Steam usage is typically reported in millions of Btus (mmBtu). Other units must be approved by the Property Manager.
[e] Natural gas can be metered/reported in hundreds of cubic feet (CCF). The standard conversion for CCF to Btu is 1,028 Btu per CCF.

2. Verification of building operations practices per the building operating plan – for each element below, verify if the operations practices are being followed, and list the date(s) these practices were verified.

a. Operating schedule for HVAC systems – address all systems that apply: Field for Contractor provided in template
b. Operating schedule for interior lighting systems – address all systems that apply: Field for Contractor provided in template
c. Operating schedule for exterior lighting systems: Field for Contractor provided in template
d. Summarize overtime utility requests and verify control settings were returned to original/desired setting: Field for Contractor provided in template
e. Summarize building space temperatures at locations and times established by the Building Manager: Field for Contractor provided in template

3. Analysis or completion of physical changes to plant and/or equipment resulting in reduced energy and/or water use. Field for Contractor provided in template

4. Operations changes resulting in reduced or increased energy and/or water use. Field for Contractor provided in template

5. Identify issues and their potential impact on the building's energy and/or water performance. Field for Contractor provided in template

6. Overall energy and water use performance trend assessment. Field for Contractor provided in template

7. Planned energy and water efficiency actions for the next reporting period. Field for Contractor provided in template

8. Identify support actions needed from GSA to assist in the energy and water efficiency efforts. Field for Contractor provided in template

GSA Review And Response Elements – to be completed by Property Manager in the fields provided

GSA1. GSA reviewing official: Field for Property Manager provided in template

GSA2. Date reviewed by GSA: Field for Property Manager provided in template

GSA3. Comments to Contractor: Field for GSA provided in template

Attachment 1 – ENERGY AND WATER EFFICIENCY REPORTING TEMPLATE

Contract Information – to be completed by Contractor in fields provided

Contract number:

Building number, name and address:

Building annual energy performance target: Btu/GSF

Building annual water performance target: Gal/GSF

Dates covered in this report:

Report submitted by (name of contractor, name of individual responsible for follow-up actions):

Date submitted:

Contractor Reporting Elements – to be completed by Contractor in fields provided.

1. Monthly resource use – For each purchased utility resource, provide the use for the most recent EUAS reporting period for each utility, and the corresponding reporting period from the previous year in the table below.

Resource (please note units)[a]	Billing Period (enter dates for the most recent EUAS billing for the corresponding utility)	Monthly Use - Current Year	Monthly Use - Previous Year
Electricity (kWh)[b]			
Electric demand (kW)			
Water (gal)[c]			
Steam (mmBtu)[d]			
Natural gas (CCF)[e]			

Notes:
Units listed in this table are standard units. Should different units be reported, the Contractor shall clearly label the units being used. The same units shall be used for both the current and previous year values reported.
Electricity shall be reported in kWh, the standard units of electric energy. The standard conversion for kWh to Btu is 3,413 Btu per 1 kWh.
[c] Water is typically billed in thousands of gallons (kgal). However, water should be reported in gallons (gal)

on this form.
[d] Steam usage is typically reported in millions of Btus (mmBtu). Other units must be approved by the Property Manager.
[e] Natural gas can be metered/reported in hundreds of cubic feet (CCF). The standard conversion for CCF to Btu is 1,028 Btu per CCF.

2. Verification of building operations practices per the building operating plan – for each element below, verify if the operations practices are being followed, and list the date(s) these practices were verified.

a. Operating schedule for HVAC systems

Completed: Yes ☐ No ☐ Date

b. Operating schedule for interior lighting systems

Completed: Yes ☐ No ☐ Date

c. Operating schedule for exterior lighting systems

Completed: Yes ☐ No ☐ Date

d. Summarize overtime utility requests and verify control settings were returned to original/desired setting.

Summary:

Timely controls settings return completed: Yes ☐ No ☐

e. Summarize building space temperatures at locations and times established by the Property Manager.

Summary:

3. Analysis or completion of physical changes to plant and/or equipment resulting in reduced energy and/or water use.

Summary:

4. Operations changes resulting in reduced or increased energy and/or water use. .

   Summary:

5. Identify issues and their potential impact on the building's energy and/or water performance.

   Summary:

6. Overall energy and water use performance trend assessment.

   Summary:

7. Planned energy and water efficiency actions for the next reporting period.

   Summary:

8. Identify support actions needed from GSA to assist in the energy and water efficiency efforts.

   Summary:

GSA Review And Response Elements – to be completed by Property Manager in the fields provided

GSA1. GSA Reviewing Official:

GSA2. Date reviewed by GSA:

GSA3. Comments to Contractor:

Summary:

Attachment 2 – CLARIFICATION FOR COMPLETING MONTHLY ENERGY AND WATER EFFICIENCY REPORT

This attachment provides clarification on the types of information requested in the Monthly Energy and Water Efficiency Report. Entries in this clarification correspond to the numbered elements in the report template.

CONTRACTOR REPORTING ELEMENTS

1. Monthly resource use (i.e., electricity, natural gas, etc.) – complete the table in the reporting template by providing the most recent monthly usage information available from the EUAS. Note that in cases where the building is connected to the GSA ION EES, the Property Manager and Contractor may agree to use this data instead. (The advantage of the EES data is that the data is available in real-time while the EUAS data are at least 1 month old before they are available.) Contractors must make sure that the use data is entered in the correct units and that these units are either the default units used in the template or they are clearly called out in the table.
2. Verification of building operations practices per the building operating plan – for each element below, verify if the operations practices are followed, and list the date(s) these practices were verified.
   a. Operating schedule for HVAC systems – address all systems that apply. This reporting element intends to address the major HVAC systems. Consult with the Property Manager if clarification is needed to identify the major HVAC systems. Provide verification that each of the identified major HVAC systems is operated in accordance with the building operating plan. Identify exceptions and their causes.
   b. Operating schedule for interior lighting systems – address all systems that apply. This reporting element intends to address the major interior lighting systems. Consult with the Property Manager if clarification is needed to identify the major indoor lighting systems. Provide verification that each of the identified major lighting systems are operated in accordance with the building operating plan. Identify exceptions and their causes.
   c. Operating schedule for exterior lighting systems. Provide verification that each of the exterior lighting systems is operated in accordance with the building operating plan. Identify exceptions and their causes.
   d. Summarize overtime utility requests and verify control settings were returned to original/desired settings. This reporting element intends to verify that the building energy using systems used to accommodate overtime requests are returned to their original settings at the expiration of the overtime utility request. All requests for overtime utilities should be included in this summary; each summary entry should include the date the control settings were returned to their original/desired settings. “Long-term” overtime requests should be identified in the reporting under element 5 below.
   e. Summarize average building/space temperatures in the following locations – the Property Manager shall provide to the Contractor a list of locations for temperature monitoring along

with instructions for frequency of monitoring. Because temperature monitoring can be helpful in identifying HVAC systems that are not shutting-down or starting-up as appropriate for the building operating schedule, temperature monitoring is encouraged during occupied and unoccupied hours. Note also that space temperatures are also used to evaluate overall HVAC system operations and correct temperature set points.

3. Analysis or completion of physical changes to plant or equipment resulting in reduced energy and/or water use. Examples for inclusion are listed below.
   a. Assess/verify need for equipment replacement – section C.13 (Equipment Condition Assessment) of the O&M services contract states "the Contractor shall complete and submit to the CO or designee an itemized equipment condition assessment with their recommendation for equipment or system upgrades or replacements (that have reached the end of their life-cycle) …" Energy and water efficiency opportunities identified in the condition system assessment should also be listed in this report.
   b. Use of Energy Star® and FEMP covered products
   c. Size replacement products and/or identification of different technology approaches to accomplish the same objective
4. Operational change resulting in reduced or increased energy and/or water use. Examples are listed below. Note cases where changes were made at the request of the building occupants/tenants (please identify if possible).
   a. Revise equipment control procedures
   b. Reduce equipment runtime
   c. Optimize chilled water supply temperature and differential temperature reset
   d. Optimize static pressure set point
   e. Delamp overlit areas such as corridors and offices
5. Identify issues and their potential impact on the building's energy and/or water performance. Examples include
   a. Increase/decrease in overtime utility requests – because overtime utility use represents a significant additional operational cost, GSA would like to better understand what the building and tenant needs are, and identify potential options to reduce these cost impacts. For example, in some cases the installation of a local/small packaged air conditioning unit to satisfy overtime tenant needs can be considered as an alternative to operating the central plant chiller at a very low load. The Contractor is encouraged to look at and propose potential solutions to the Property Manager. Also, monitoring overtime utility requests can serve as a reminder to operating staff to verify that system overrides put in place to accommodate the overtime request need to be returned to their correct normal setting immediately after the request has been fulfilled.
   b. Extreme weather – very hot, very cold, weather closures, or unseasonably mild
   c. Major equipment/systems failures
   d. Tenant move-out (decreased occupancy) or move-in (increased occupancy)
   e. New building loads from tenants – data centers added/increased, high intensity equipment, etc.
6. Overall performance trend assessment. Review the events/actions throughout the reporting period and provide an assessment of the overall energy and water performance. This assessment should make use of the EUAS and ION EEM data as available and appropriate.
7. Planned and/or proposed energy and water efficiency actions for the next reporting period.

Identify planned actions, such as those listed as examples above that are anticipated to take place during the next reporting period and, as available, provide supporting information on the potential impacts. Note that agreement/approval from the Property Manager should be obtained prior to proceeding with changes.

8. Identify actions required from GSA to assist in the energy and water efficiency efforts. Examples of such actions may include reviewing and/or responding to Contractor submitted requests for action or information such as equipment information, occupant needs, or energy or water use information for previous reporting periods.

GSA REVIEW AND RESPONSE ELEMENTS

GSA1. GSA Reviewing Official

GSA2. Date reviewed by GSA

GSA3. Comments to Contractor. The Property Manager is to review each monthly report to identify areas of progress, concerns, and need (e.g. specific information or support requests from the Contractor). This review should also address the planned and/or proposed actions submitted by the Contractor, as well as the listed actions required from GSA (see Contractor Reporting Elements 7 and 8 above). The Property Manager should meet with the Contractor each month to discuss these areas of progress, concern, and need. Before meeting with the Contractor, the Property Manager may seek additional technical support within GSA regarding issues of concern, and include these experts in the dialogue with the Contractor if thought to be beneficial. Please remember the objective of these monthly report reviews and meetings is to promote an ongoing dialogue between the Contractor and GSA to enable proactive problem solving and avoid end-of-the-year problems in assessing the Contractor's performance.

It is recommended that the Property Manager share this information with the Regional Energy Coordinator in a joint effort to collaborate on strategic planning. It is also recommended that the GSA reviewing official include in the monthly report review a summary of the rolling 12-month building performance data as generated by the EUAS (see sample below). Trends of concern against this rolling performance should be called to the attention of the Contractor.

Sample Rolling 12 month report below

Sample Data Report - Energy

Building Summary for building categories : ALL

Optional Building Designation(s) :

Energy Usage is shown in Actual units - Show All Report Details

Conversion Detail = Site Use

Date : 12/11/2012 Report for the period of Floating 12 Months, Fiscal Year : 2012 Month : June

Time : 7:50:21 AM

Region :	06	Building Category : A	Building : MO0050ZZ
Building Name:	WHITTAKER COURTHOUSE	City :	KANSAS CITY
Field Office :	5101-KANSAS CITY NORTH PMC	State :	Missouri

Service Center : 1 GSF : 753,511

		Electricity (KWH)		Demand (KW)		Steam (Thou. lbs)	
Jul	Usage	1,004,654	A	2,212	A	553	A
	Cost	$78,335	N	$21,850	A	$15,523	N
Aug	Usage	899,797	A	2,145	A	1,354	A
	Cost	$81,254	N	$22,087	A	$20,963	N
Sep	Usage	670,256	A	1,745	A	762	A
	Cost	$56,879	N	$13,472	A	$16,943	N
Oct	Usage	569,927	A	1,658	A	1,183	A
	Cost	$49,789	N	$11,604	A	$19,802	N
Nov	Usage	644,465	N	1,669	A	1,219	A
	Cost	$52,526	N	$11,681	A	$22,497	N
Dec	Usage	588,543	A	1,370	A	1,893	A
	Cost	$46,000	N	$9,589	A	$28,430	N
Jan	Usage	578,578	A	1,404	A	2,020	A
	Cost	$46,280	N	$9,827	A	$29,548	N
Feb	Usage	636,912	N	1,955	A	1,981	A
	Cost	$55,926	N	$13,683	A	$29,204	N
Mar	Usage	675,916	A	1,935	A	1,063	A
	Cost	$57,115	N	$13,543	A	$21,124	N
Apr	Usage	640,644	N	1,975	A	862	A
	Cost	$55,977	N	$13,823	A	$19,355	N
May	Usage	720,322	A	2,013	A	606	A
	Cost	$70,375	N	$19,483	A	$17,101	N
Jun	Usage	967,002	N	2,010	A	918	A
	Cost	$79,609	N	$20,697	A	$19,848	N
Total	Usage	8,597,016		22,091		14,414	
	Cost	$730,065		$181,339		$260,338	

* Demand KW and cost are information items only; demand cost is also included in KWH cost.

* RenElec, RenGas are information items only; RenElec, RenGas usage and cost are also included in electricity and gas usage and cost respectively.

Sensitive But Unclassified, Intended for GSA Internal Use Only.

Building Summary for building categories : ALL
Optional Building Designation(s) :
Energy Usage is shown in Actual units - Show All Report Details
Conversion Detail = Site Use

Date : 12/11/2012 Report for the period of Floating 12 Months, Fiscal Year : 2012 Month : June
Time : 7:50:21 AM

Region :	06	Building Category : A	Building : MO0050ZZ
Building Name:	WHITTAKER COURTHOUSE	City :	KANSAS CITY
Field Office :	5101-KANSAS CITY NORTH PMC	State :	Missouri
Service Center :	1	GSF :	753,511

Month	Remarks
Jul	
Aug	
Sep	
Oct	enter demand
Nov	
Dec	
Jan	
Feb	
Mar	
Apr	
May	
Jun	

Attachment 3 – EXAMPLE
ENERGY AND WATER EFFICIENCY REPORT – CONTRACTOR INPUT

Note to users: This sample report is based on the Energy and Water Efficiency Reporting Template. There are minor variances between this example and the temple. These minor variances are acceptable provided all the information requested in the template is provided.

Energy and Water Efficiency Monthly Reporting Sample

CONTRACT INFORMATION: _____
Contract number: _____

Building number, name and address: _Denney Federal Bldg
_100 Centennial Mall North
_Lincoln, NE 68508

FY12 Building energy performance target: 60,923 Btu/GSF,
Actual rolling 12 months EUI as of August 2012, 56,434 Btu/GSF,

FY12 Building annual water performance target: 14.61 Gal/GSF,
Actual rolling 12 months water use as of August 2012, 12.41 Gal/GSF

Dates covered in this report: August 2012

Report submitted by: Joe Jones, O&M Contract Supervisor

Date submitted: September 7, 2012

CONTRACTOR REPORTING ELEMENTS:

2. Use by resource – For each purchased utility resource, provide the use for the most recent EUAS reporting period for each utility, and the corresponding reporting period from the previous year in the table below.

Resource (please note units)	**Billing Period** (enter dates for the most recent EUAS billing for the corresponding utility)	**Monthly Use Current Year**	**Monthly Use Previous Year**
Electricity (kWh)	August 2012	435,000	503,000
Electricity Demand (kW)	August 2012	1,326	1,674
Water (gal)	August 2012	698,632	996,336
Steam (mmBtu)	August 2012	NA	NA
Natural gas (CF)	August 2012	0	0

3. Verification of building operations practices per the building operating plan – for each element below, verify if the operations practices are being followed, and list the date(s) these practices were verified.

The following were all reviewed in our meeting of October 24.

a. Operating schedule for HVAC systems

Completed: Yes ☐ No ☐ Date 10/24/12

b. Operating schedule for interior lighting systems

Completed: Yes ☐ No ☐ Date 10/24/12

c. Operating schedule for exterior lighting systems

Completed: Yes ☐ No ☐ Date 10//24/12

Will re-verify operating schedules of all exterior lighting when daylight savings time goes into effect on Nov 4

d. Summarize overtime utility requests and verify control settings were returned to original/desired setting:

Standing overtime utilities scheduled for the USDA Lab – 24/7 – AHU-6. No other overtime utilities were requested this month. SSA will have overtime utilities starting in the second quarter for their annual busy season. Typical OT utility hours are extended 2 hours per day Monday through Friday and 6 hours on Saturday until April 30, 2013.

Timely controls settings return completed: Yes ☐ No ☐ Not applicable ☐

e. Summarize building space temperatures at locations and times established by the Building Manager:

As discussed, the winter set point will be 72 +/- 2F. All areas will be set to this temperature per GSA Building Manager.

4. Analysis or completion of physical changes to plant and/or equipment resulting in reduced energy and/or water use. Use attachment if additional space is needed.

The VFDs on the chilled water and condenser water pumps are showing erratic operation. The control PID loop for these pumps is being investigated as the cause of this condition. The BAS vendor controls tech. is assisting in the analysis and reprogramming to correct this issue.

5. Operations changes resulting in reduced or increased energy and/or water use. Use attachment if additional space is needed.

During the dry weather and drought conditions this month, the landscaping on mall side of the building required increased watering to as much as 3 times per week. As rainfall increases, this practice will be monitored closely to avoid over using water for irrigation purposes.

6. Identify issues and their potential impact on the building's energy and/or water performance. Use attachment of additional space is needed.

During the dry weather and drought conditions this month, the cooling tower make-up water has increased. Even though water use is down substantially for the rolling 12 month period, we estimate the tower is requiring more water for the month due to increased evaporation and additional runtime during the extreme high temperatures this past month.

7. Overall energy and water use performance trend assessment.

Overall, the rolling 12 month energy use has decreased by -10.15% as of August 2012, compared to same 12 month period last year. Completion of ARRA projects along with adjustments of runtime schedules for air-handling units and some vacant space in the building has helped to reduce electrical energy consumption. Water usage is also down by 16.77% due to new cooling towers and new control sequences for the chilled water system. We will continue to adjust the AHU runtimes to match occupancy changes to reduce the operation of the chiller plant and to reduce electrical demand.

Planned energy and water efficiency actions for the next reporting period.

We will continue to closely monitor increased irrigation required due to drought conditions, and closely monitor that chilled water reset controls are working to take advantage of meeting cooling needs with lowered chilled water supply temperatures going into the shoulder season.

8. Identify support actions needed from GSA to assist in the energy and water efficiency efforts.

As discussed, GSA Building Manager is planning to meet with tenants to discuss the approved temperature ranges for office spaces to get a better understanding of the temperature range that is acceptable for all area. This should help to reduce hot/cold calls and repeat calls in many areas.

AHU-4 continues to have operational challenges. The unit is required to run for longer hours each day to ensure that cool down is achieved when the tenants return in the morning. VAV box air flows and temperatures in the area have been overridden to make the area as comfortable as possible. We believe this unit is not sized correctly for the area it serves and needs to be studied for refurbishment or replacement in a future capital project.

GSA REVIEW AND RESPONSE ELEMENTS – to be completed by property manager in the fields provided

GSA1. GSA Reviewing Official: _____

GSA2. Date reviewed by GSA: _____

GSA3. Comments to Contractor: _____

EXHIBIT 17 ANNUAL ENERGY & WATER EFFICIENCYREPORT

Background The annual report on energy and water efficiency will be completed and submitted per the requirements of section C.21.6, Energy & Water Efficiency, of the O&M services contract. The Contractor will meet with the GSA Property Manager prior to the last week of the contract expiration when the contract is not being extended, or by the 5th working day of the subsequent year startup when the contract is being extended, to review and discuss the submitted report. This discussion will address past building performance and initiate the planning of energy and water efficiency efforts for the next contract year. This information will assist the property manager and regional energy coordinator in establishing energy targets in the Operational Performance Targets (see Exhibit 10) for energy and water for the next fiscal year.

GSA is adopting this annual reporting procedure as a way to promote a collaborative relationship between GSA and the Contractor. This collaborative relationship will work to better identify and address issues and opportunities for improved energy and water efficiency, as well as overall building operations. This annual report will:

1. summarize actions completed during the last contract year aimed at
2. energy and water efficiency, and assess relative degree of success and lessons learned;
3. set operational goals for the next contract year; and
4. Identify and prioritize projects for the next contract year.

This document includes the following attachments:

1. Attachment 1 – Annual Report on Energy and Water Efficiency Template. The Contractor shall use the template to complete the report template sections for “Contract Information” and “Contractor Reporting Elements.” The GSA Property Manager shall complete the section “GSA Review and Response Elements.”
2. Attachment 2 – Clarification for Completing the Annual Report on Energy and Water Efficiency. This attachment provides additional detail on the types of information to be included in the individual reporting elements found in the template.

Data Sources Contractor shall make use of the energy and water efficiency reports that were submitted each month throughout the contract period. Contractor shall also use the most recent 12 month EUAS` data available for each individual resource and for total building resource use.

Instructions The incumbent Contractor shall complete the required fields in this report (see Attachment 1, Annual Report on Energy and Water Efficiency Reporting Template) and forward the completed report to the Property Manager prior to the last week of the contract expiration. (Note that in cases where a new Contractor is starting-up, they are not required to complete this report as part of their start-up.) The Property Manager shall review the submitted report; meet with the Contractor to discuss the summary of actions and outcomes reported; develop building performance targets for the new contract period; and prioritize projects, actions, and activities that will lead to energy and water efficiency improvements for the new contract period. Attachment 2, Clarification for Completing the Annual Report on Energy and Water Efficiency, provides additional

detail and clarifications to assist in completing the report template.

A new Contractor starting-up work is not required to complete and submit this annual report until the last week of the contract period. However, the new Contractor shall review the last annual report submitted by the previous Contractor and complete the reporting element 7and consider results/recommendations for development of the Energy and Water Use Plan for the next contract year and submit to the CO or their designee within the first 2 weeks of the new contract. The Contractor will then meet with the Property Manager to agree upon the first year energy and water efficiency use plan.

CONTRACT INFORMATION – to be completed by Contractor in fields provided

Contract number: Field for Contractor provided in template

Building number, name and address: Field for Contractor provided in template

Building annual energy performance target: Field for Contractor provided in template

Building annual water performance target: Field for Contractor provided in template

Dates covered in this report: Field for Contractor provided in template

Report submitted by (name of contractor, name of individual responsible for follow-up actions): Field for Contractor provided in template

Date submitted: Field for Contractor provided in template

ANNUAL REPORTING ELEMENTS – to be completed by the Contractor in fields provided. Additional guidance on completing these reporting elements is provided in Attachment 2 (Clarification for Completing the Annual Report on Energy and Water Efficiency)

1. Summary of annual use by resource – For each purchased utility resource, provide the total annual use for the last 12 months available from the EUAS. Field for Contractor, as shown below is provided in template.

Resource (please note units)[a]	Billing Period (enter dates for the most recent 12 month EUAS billing for the corresponding utility)	Yearly Use Current Year	Yearly Use Previous Year
Electricity (kWh)[b]			
Electric demand (kW)			
Water (gal)[c]			
Steam (mmBtu)[d]			
Natural gas (CCF)[e]			

Notes:
Units listed in this table are standard units. Should different units be reported, the Contractor shall clearly label the units being used. The same units shall be used for both the current and previous year values reported.
Electricity shall be reported in kWh, the standard units of electric energy. The standard conversion for kWh to Btu is 3,413 Btu per 1 kWh.
[c] Water is typically billed in thousands of gallons (kgal). However, water should be reported in gallons (gal) on this form.
[d] Steam usage is typically reported in millions of Btus (mmBtu). Other units must be approved by the Property Manager.
[e] Natural gas can be metered/reported in hundreds of cubic feet (CCF). The standard conversion for CCF to Btu is 1,028 Btu per CCF.

2. Total energy and water use for the 12-month (contract) period – Using the most recent 12 months of EUAS data from reporting element 1 above, provide the following comparisons of performance against the targets established in Exhibit 10, Operational Performance Targets):
   a. Total 12-month building energy used (Btu/GSF) versus the annual energy performance target: Field for Contractor provided for contractor in template.
   b. Total 12-month building water used (gallons/GSF) versus the annual water performance target: Field for Contractor provided in template.

3. Provide a summary of changes/actions completed over the contract period affecting energy and water efficiency. Include, where possible, an estimate of the resulting impact in terms of energy and/or water savings for the previous 12 months. Estimates may be engineering or measured (meter or BAS supported) estimates.
   a. Operational changes – to address building/equipment schedule changes, set point changes, equipment/system tune-ups, and similar energy and water intensive system controls and operations settings completed during the contract period. Narrative field provided for Contractor to complete.
   b. Building/equipment changes – to address equipment, systems, or building materials installed and/or replaced during the contract period that would impact energy use such as window replacements, new rooftop units, and building renovation start-up or completion. Narrative field provided for Contractor to complete.
   c. Occupant behavior changes – to address outcomes from occupant changes such as reductions in frequent or routine overtime utility requests and energy awareness programs. Contractor actions supporting these behavior changes should be highlighted. Narrative field provided for Contractor to complete.

4. Recommendations for the next contract period – provide a list of recommended actions that will improve energy and water efficiency that should be considered for the next contract year. Include estimates of outcomes for each recommendation, making use of supporting data and calculations when practical. Recommendations should address each operational efficiency, retrofit projects, and occupant behavior initiatives. Narrative field provided for Contractor to complete.

5. Contractor identified projects proposed – provide a summary of the Contractor identified projects that were proposed to GSA during the contract period. Summary for each project identified should include a short description of the project, estimated cost, and estimated impact on building energy and/or water use.

6. Overall Contractor assessment of performance – the Contractor will provide an assessment of their overall performance in terms of energy and water efficiency performance. At a minimum, this assessment should address each of the following:

   a. Energy and water use against the performance targets as measured and reported, as well as against the overall building operating conditions and requirements;
   b. Actions taken by the Contractor that (significantly) affected energy and water use, and the lessons learned;
   c. How the Contractor would assess their energy and water efficiency performance and why, and strengths and areas for improvement.

   Narrative fields will be provided for the Contractor to complete for each sub-element above.

7. Propose and prioritize efficiency measures – develop a list of the top priority actions that should be completed in the next contract year. Each proposed action should include the estimated cost and time to complete, and estimated impact on building energy and/or water use. Narrative field provided for Contractor to complete.

   GSA REVIEW AND RESPONSE ELEMENTS – to be completed by the Property Manager in the fields provided

   GSA1. GSA Reviewing Official: Field for Property Manager provided in template.

   GSA2. Review Contractor annual report: Field for Property Manager provided in template.

   GSA3. Confirmation of meeting between Property Manager and Contractor – date, participants, and summary of outcomes. Topics and desired outcomes – agreement on planned actions and energy and water performance targets for the next contract year – are summarized in Attachment 2 (Clarification for Completing the Annual Report on Energy and Water Efficiency): Fields for Property Manager provided in template.

Attachment 1 – ANNUAL REPORT ON ENERGY AND WATER EFFICIENCY TEMPLATE

CONTRACT INFORMATION – to be completed by Contractor in fields provided

Contract number:

Building number, name and address:

Building 12-month energy performance target: Btu/GSF

Building 12-month water performance target: Gal/GSF

Dates covered in this report:

Report submitted by (name of contractor, and name, email, and phone number of individual responsible for follow-up actions):

Date submitted:

ANNUAL REPORTING ELEMENTS – to be completed by the Contractor in fields provided. Additional guidance on completing these reporting elements is provided in Attachment 2 (Clarification for Completing the Annual Report on Energy and Water Efficiency)

1. Summary of annual use by resource – For each purchased utility resource, provide the total annual use for the last 12 months available from the EUAS. Field for Contractor as shown below is provided in template.

Resource (please note units)[a]	Billing Period (enter dates for the most recent 12 month EUAS billing for the corresponding utility) (format mm/dd/yy – mm/dd/yy)	Yearly Use Current Year	Yearly Use Previous Year
Electricity (kWh)[b]			
Electric demand (kW)			
Water (kgal)[c]			
Steam (mmBtu)[d]			
Natural gas (CCF)[e]			

Notes:
Units listed in this table are standard units. Should different units be reported, the Contractor shall clearly label the units being used. The same units shall be used for both the current and previous year values reported.
Electricity shall be reported in kWh, the standard units of electric energy. The standard conversion for kWh to Btu is 3,413 Btu per 1 kWh.
[c] Water is typically reported in thousands of gallons (kgal). Water may also be reported in gallons (gal).
[d] Steam usage is typically reported in millions of Btus (mmBtu). Other units must be approved by the Property Manager.
[e] Natural gas can be metered/reported in hundreds of cubic feet (CCF). The standard conversion for CCF to Btu is 1,028 Btu per CCF.

2. Total energy and water use for the 12-month (contract) period – Using the most recent 12 months of EUAS data from reporting element 1 above, provide the following comparisons of performance against the targets established in Exhibit 10 (Operational Performance Targets):

a. Total 12-month building energy used (Btu/GSF) versus the annual energy performance target:

12-month energy performance target: Btu/GSF

12-month energy use: Btu/GSF

Difference between target and actual use: Btu/GSF

b. Total 12-month building water used (gallons/GSF) versus the annual water performance target:

12-month water performance target: gal/GSF

12-month water use: gal/GSF

Difference between target and actual use: gal/GSF

3. Provide a summary of changes/actions completed over the contract period affecting energy and water efficiency. Include, where possible, an estimate of the resulting impact in terms of energy and/or water savings. Estimates may be engineering or measured (meter or BAS supported) estimates.

a. Operational changes – to address building/equipment schedule changes, set point changes, equipment/system tune-ups, and similar energy and water intensive system controls and operations settings completed during the contract period.

Summary:

b. Building/equipment changes – to address equipment, systems, or building materials installed and/or replaced during the contract period that would impact energy use such as window replacements, new rooftop units, and building renovation start-up or completion.

Summary:

c. Occupant behavior changes – to address outcomes from occupant changes such as reductions in frequent or routine overtime utility requests and energy awareness programs. Contractor actions supporting these behavior changes should be highlighted.

Summary:

4. Recommendations for the next contract period – provide a list of recommended actions that will improve energy and water efficiency that should be considered for the next contract year. Include estimates of outcomes for each recommendation, making use of supporting data and calculations when practical. Recommendations should address each operational efficiency, retrofit projects, and occupant behavior initiatives

Summary:

5. Contractor identified projects proposed – provide a summary of the Contractor identified projects that were proposed to GSA during the contract period. Summary for each project identified should include a short description of the project, estimated cost, and estimated impact on building energy and/or water use.

Summary:

6. Overall Contractor assessment of performance – the Contractor will provide an assessment of their

overall performance in terms of energy and water efficiency performance. At a minimum, this assessment should address each of the following:

a. Energy and water use against the performance targets as measured and reported, as well as against the overall building operating conditions and requirements.

Summary:

b. Actions taken by the Contractor that (significantly) affected energy and water use, and the lessons learned.

Summary:

c. How the Contractor would assess their energy and water efficiency performance and why, and strengths and areas for improvement.

Summary:

7. Propose and prioritize efficiency measures – develop a list of the top priority actions that should be completed in the next contract year. Each proposed action should include the estimated cost and time to complete, and estimated impact on building energy and/or water use.

Summary:

GSA REVIEW AND RESPONSE ELEMENTS – to be completed by the Property Manager in the fields provided

GSA1. GSA Reviewing Official:

GSA2. Date review completed by GSA:

GSA3. Confirmation of meeting between Property Manager and Contractor – date, participants, and summary of outcomes. Topics and desired outcomes – agreement on planned actions and energy and water performance targets for the next contract year – are summarized in Attachment 2 (Clarification for Completing the Annual Report on Energy and Water Efficiency).

Summary:

Attachment 2 – CLARIFICATION FOR COMPLETING THE ANNUAL REPORT ON ENERGY AND WATER EFFICIENCY

This attachment provides clarification on the types of information requested in the Annual Report on Energy and Water Efficiency. Entries in this clarification correspond to the numbered elements in the report template.

CONTRACTOR REPORTING ELEMENTS

1. Summary of annual use by resource (i.e., electricity, natural gas, etc.) – complete the table in the reporting template by providing the total resource usage using the most recent 12 months of information available from the EUAS. Note that in cases where the building is connected to the GSA ION EES, the Property Manager and Contractor may agree to use this data instead. (The advantage of the EES data is that the data is available in real-time, while the EUAS data are at least 1 month old before they are available.) Contractors must make sure that the use data is entered in the correct units and that these units are either the default units used in the template or they are clearly called out in the table.
2. The total energy use versus the reported 12-month energy use is an important measure of the Contractor's performance in addressing energy and water efficiency. GSA recognizes that throughout the year, there are events that may impact resource use both adversely and positively. For this reason, the outcome of the comparison of actual use to target use is not a pass/fail proposition. GSA will review and take into account the overall efforts of the Contractor and the range of factors that may have impacted the reported 12-month energy and water usage. Attention should be given to the following when completing these comparisons.

a. The Contractor and GSA are in agreement on data that go into the 12- month usage totals for all resources
b. Units of the individual energy resources used must all be converted to Btu before entering the total energy use. The conversions should make use of the conversion factors used by GSA.

3. Provide a summary of changes/actions completed over the contract period affecting energy and water efficiency, and provide estimates of their impacts. Changes/actions should be presented for each of the following categories: Operational changes, building/equipment changes, and occupant behavior changes.

Operational changes Numerous research efforts have reported that building-wide energy savings on the order of 5 to 15% are usually available through better building operations practices. Better yet, many of these changes can also result in improved occupant comfort, increased equipment reliability, and safer operating conditions. For these reasons, GSA encourages its contractors to identify and implement (after approval) these types of measures (e.g. set points).

Measures may address overall operations and maintenance management approaches such as:

- Metered data analysis – periodic, even daily, reviews of whole building and individual major equipment (where available) energy and water use and performance including building load profiles and performance trending.
- Developing approaches for staff to identify and recommend for action, energy and water efficiency measures.
- Providing staff training in building re-tuning, energy auditing and management, water auditing and management, existing building commissioning, BAS operations, and boiler efficiency and operations.

Building/equipment operations typically offer many opportunities to improve savings usually attributed to large energy and water using systems, such as HVAC and lighting. Building/equipment operations strategies and approaches for energy and water efficiency include, but are not limited to, actions focused on scheduling, procedures, and work/systems control and optimization. Examples include ongoing commissioning/building tune-up activities and operations and maintenance best practices procedures identifying and addressing opportunities such as those listed below:

- Revising equipment control sequences
- Reducing equipment runtime
- Improving economizer operations
- Optimizing chilled water supply temperature and differential pressure reset
- De-lamping overlit areas such as corridors and offices

Equipment maintenance – how well the Contractor will perform preventive, predictive, scheduled and unscheduled actions to prevent equipment failures or decline in performance with the goal of increasing efficiency, reliability, and safety. Examples might include

- Use of predictive maintenance technologies such as infrared thermography to (help) inspect electrical systems, mechanical systems, roofs, and insulation
- Use of actual equipment runtimes as recorded by the BAS to perform maintenance as needed instead of as scheduled
- Calibration of sensors and actuators

Numerous resources that address the topics above are available at no cost:

- Building re-tuning approach focuses on improving the operations and maintenance of (large) building controls systems. The re-tuning methodology is highly structured to identify and implement no-cost/low-cost energy savings. For more information visit http://www.pnnl.gov/buildingretuning/training.stm

Impact of E4 Training and Field Auditing of GSA Heartland Facilities provides a summary

EXHIBIT 18 QUALIFICATIONS OF ELECTRICAL TESTINGTECHNICIANS (ETT)

(ANSI/NETA ETT-2010 Standard for Certification of Electrical Testing Technicians)

TITLE:	Trainee Technician	Assistant Technician	Certified Technician	Certified Senior Technician
LEVEL:	Level I	Level II	Level III	Level IV
EDUCATION AND TRAINING:	High School / GED	Safety 40 hours Electrical 160 hours	Safety 24 hours add'l Electrical 240 hours add'l	Safety 40 hours add'l Electrical 200 hours add'l
RELATED EXPERIENCE:	None	Two Years*	Five Years*	Ten Years*
TYPICAL DUTIES:	None	Generally requires direct supervision. Responsible for safety of self. Understands hazardous electrical energy control procedures.	Capable of supervising Levels I and II. Routine and moderately complex projects. Record keeping. Safety of others. Switching. Evaluations.	Supervises large projects, multiple crews. Works independently. More complex investigations, tests, and evaluations.
TYPICAL ACTIVITIES:	Simple assistance. Simple measurements. Test equipment set up and removal. Cleaning.	Assists. Inspects. Tests. Data collection. Test for de-energized locked out/tagged out equipment.	Lockout/Tagout, safety grounding. Test for de-energized medium-voltage equipment. Performs moderately complex tasks. Interacts with other skills and operations.	Corrects system failures. Performs very complex tests. Interacts with engineers and managers. Writes reports.
EXAMINATION:	By employer	By certifying organization 70% minimum score	By certifying organization 70% minimum score	By certifying organization 70 % minimum score

NOTE: Candidates for Levels II, III, IV must have met the qualifications for all previous levels.
* Completion of two or more years of technical education in an electrical field shall be equivalent to a maximum of one year of experience.

EXHIBIT 19 MISCELLANEOUS BEST PRACTICES

BP3 No Threshold
Mechanical Estimating Tool
Commissioning
Shave Energy
Federal High Performance Guiding Principles

BP3 NO THRESHOLD

C.40 REPAIRS

C.40.1 General

There is no repair threshold in this Contract. However, a repair fund will be established which will work as follows:

The Government will determine an annual amount for a Repair Fund based on historical repair costs in the facility(s) covered under this Contract. This dollar value is indicated as an Allowance Line item in Section B of this Contract. The annual Repair Fund pre-approval limit is $_____. (Government inputs "ALL" or specific dollar amount tailored to this procurement.)

The Contractor will be paid for actual costs incurred to accomplish repairs each month with the amount being deducted from the repair fund. Each time a repair is needed, the Contractor will ensure that pre-approval is received from the CO or designee. The actual labor and material costs of that repair will be deducted from the repair fund. The Government may establish a per repair limit permitting the Contractor to proceed below the amount without prior approval of the CO or designee. For example, the CO or their designee may wish to let the Contractor proceed with repairs under $250.00 without CO designee approval. The Contractor will not be paid for any work not first approved by the CO or their designee or if a minimum has been established, the Contractor shall not be paid for a repair that exceeds the established threshold without prior CO or their designee approval.

Each month the Contractor will furnish the CO designee with a list of all completed repairs including the total amount requested to be deducted from the repair fund. The government will review the list and either accept it or dispute one or more items. If an agreement cannot be reached, then the CO will make the final determination.

If at the end of the Contract year, there is money remaining in the repair fund, it will be de-obligated. If it is determined that the repair fund is not adequate to cover all of the repair costs during the year, the Government can increase the amount of the repair fund through a Contract

modification or it may simply choose to issue individual repair orders as necessary.

Each year the amount of the repair fund will be analyzed and either increased or decreased as deemed necessary.

The intent of this Contract is to ensure that most repairs will be accomplished by in-house Contractor personnel. However, the Government recognizes that occasionally there are certain specialized repairs that require specialized skills outside the skill sets of the in house O&M personnel. If the Contractor identifies a repair that they believe is of such a specialized nature that a specialized subcontractor is required to properly complete the repair, the Contractor must provide written justification in advance, to the CO or designee, for approval of the need to use a subcontractor. If approved, the cost of the subcontractor will be treated as a repair part and material cost for the purposes of calculating the repair threshold. The subcontractor's cost must be appropriate and approved in advance by the CO or designee.

All repairs must use supplies, materials, and parts of the highest quality available that are appropriate for the repair of the given equipment or system. Any replacement parts used during the course of this Contract must be of comparable or higher quality. Energy-consuming items must be the most efficient in their class. The Contractor must stock commonly used items and have a network of suppliers that will deliver ordered items without any delay. Any replacement motors must be of premium efficiency. Whenever motors are replaced, motor size must be recalculated and replacement motor selection must reflect the appropriate size.

MECHANICAL ESTIMATING TOOL

This automated craft package contains a list of every possible type of equipment that may be in the federal building. The user simply has to enter the quantity of each type of equipment and the program will figure out the man-hours required for tours, watches, service calls and repairs. The tool includes a government estimate. The user just selects their locality from a drop-down list and the program automatically fills in the government estimate based on the man-hours calculated from the other sections of the tool. The user has the ability to enter subcontract information on the estimate if necessary as well as override some specific calculations if applicable. A detailed instruction sheet is included with the tool.

We have found that as long as the user enters an accurate inventory the tool creates an estimate that is within 5% of actual costs. We have been able to significantly reduce some of our contracts based on the resulting estimated created by this tool.

COMMISSIONING

Commissioning for PBS takes several forms, Total Building Commissioning for New and Modernized facilities, Re-Commissioning for facilities that have been commissioned before, Retro-Commissioning for facilities that have not been commissioned before and Ongoing-Commissioning for all facilities through the use of technology and partnering with Operations and Maintenance (O&M) service providers.

Total Building Commissioning (TBC): GSA is responsible for meeting the space requirements of Federal agencies. To ensure a high standard of excellence for the American public, PBS utilizes a Total Building Commissioning Process. Total Building Commissioning is PBS's process for quality delivery in new construction and facility modernization. It is the process for achieving, validating and documenting that the performance of the total building and its systems meet the design intent and requirements of the owner.

Re/Retro-Commissioning : GSA's Re/Retro-Commissioning efforts will focus on GSA's "Covered Facilities" (facilities that constitute at least 75% of GSA's energy use) as defined in the Energy Independence and Security Act of 2007 (EISA 2007), as well as a data repository for our Commissioning and Continuous-Commissioning efforts In GSA's Strategic Sustainability Performance Plan, GSA has committed to re/retro-commission 25% of covered facilities (over 33 million sq ft) each year. The result of these re/retro-commissioning activities will improve the operations, maintenance and energy efficiency of the facilities.

Ongoing Commissioning : GSA's Ongoing Commissioning efforts will focus on maintaining the facility in the optimized state resulting from TBC and Re/Retro Commissioning efforts. GSA will achieve this through its relationship with its service providers (Operations and Maintenance/Custodial/Repair and Alterations/IT/Utilities) and the use of technology (networked systems/Advanced Meters/Smart Buildings).

Benefits of Commissioning for GSA Buildings: Because all building systems are integrated, a deficiency in one or more components can result in suboptimal operation and performance among other components. Remedying these deficiencies can result in a variety of benefits including:

- Improved building occupant productivity
- Lower utility bills through energy savings
- Increased occupant and owner satisfaction
- Enhanced environmental/health conditions and occupant comfort
- Improved system and equipment function
- Improved building operation and maintenance
- Increased occupant safety
- Better building documentation
- Shortened occupancy transition period
- Significant extension of equipment/systems life cycle

Industry sources indicate that on average the operating costs of a commissioned building range

from 8% to 20% below that of a non-commissioned building. Certain available commissioning implementation tools, such as cost shared USDOE Energy Contractors, may even result in a negative capital investment cost. GSA's goal in adopting building commissioning is:

- To safeguard PBS interest, by implementing solutions that best represent and meet the long term efficiency and functionality of all PBS buildings and meet the expectations of GSA's customers
- To improve facility operations
- To optimize the value received for each construction dollar spent
- To improve Indoor Environmental Quality (IEQ) and decrease liability due to IEQ problems

(A) COMMISSIONING.—The term 'commissioning', with respect to a facility, means a systematic process—
''(i) of ensuring, using appropriate verification and documentation, during the period beginning on the initial day of the design phase of the facility and ending not earlier than 1 year after the date of completion of construction of the facility, that all facility systems perform interactively in accordance with—
''(I) the design documentation and intent of the facility; and
''(II) the operational needs of the owner of the facility, including preparation of operation personnel; and
''(ii) the primary goal of which is to ensure fully functional systems that can be properly operated and maintained during the useful life of the facility.

''(F) *RECOMMISSIONING*.—The term 'recommissioning' means a process—
''(i) of commissioning a facility or system beyond the project development and warranty phases of the facility or system; and
''(ii) the primary goal of which is to ensure optimum performance of a facility, in accordance with design or current operating needs, over the useful life of the facility, while meeting building occupancy requirements.

''(G) *RETROCOMMISSIONING*.—The term 'retro-commissioning' means a process of commissioning a facility or system that was not commissioned at the time of construction of the facility or system.

SHAVE ENERGY

The Shave Energy Program is designed to assist field offices to systematically identify and implement simple no cost energy efficiency measures. The primary goal of the program is to identify no cost inefficiencies in operations, make appropriate adjustments, and reduce total energy consumption at participating facilities, on average, by 10% per year. FMSP expects that the program can reduce energy cost by $45 million per year once fully implemented nationally.

Program participants will use various audit procedures, tools, templates, strategies, educational tools and reference materials to implement a variety of best practices. These include optimizing HVAC & lighting schedules, controls, and equipment, implementing energy- and comfort-optimized

thermal set points and lighting levels, demand shedding, and tenant engagement.

Field office personnel will be essential to the success of the program and will be pivotal to reducing cost significantly through no cost means. They will be supported by regional super users and a regional program manager.

The Miami Service Centers participated in the *unintentional* Shave Energy pilot program last year and the results are very promising. The Service Center, under the leadership of Don Rollins, implemented numerous no cost items into its portfolio and the benefits were profound as they maintained reductions over a one year period.

Over the past year, the Service Center reduced energy consumption by 4,916 BTU/GSF and a 15% reduction in total KWH usage (equivalent to almost 6 million KWH). This reduction is very significant and equivalent to "not using" 161,294 gallons of gas. The cost benefit associated with these reductions is also significant as it reduced total energy cost by $541,419 in FY11 KWH dollars.

The Wilkie Ferguson facility has also seen phenomenal success on its own as it reduced its usage by 15,369 BTU/GSF over the last year. The property manager reduced total consumption by 3.5 million KWH or 29% over the last year. This reduction is equivalent to "not using" 95,093 gallons of gas or removing 1,521 cars from the road. The cost savings associated with these reductions is $314,861 in FY11 KWH dollars.

The Pilot Shave Energy Program was expanded to include an additional service center in the fall. After initial walk through and audits of two of its' facilities, possible annual consumption reductions between 2.8 million and 3.8 million KWH were identified. Again, these reductions would result from "no cost" methods. The potential cost savings is approximately $250K to $340K.

The pilot participants are currently vetting the various audit procedures, tools, templates, and strategies with much success.

The Shave Energy Program presents a unique methodology to bridge the gap between the identification of energy-saving opportunities and implementation of energy retrofits by outlining specific actionable items based on simple operational best practices. Integration of Shave Energy with advanced metering programs will significantly expedite the detection of opportunities for energy reduction through the analysis of building energy consumption.

The success of Shave Energy is dependent on managerial commitment to existing GSA operational standards. In order to maximize the impact of the Shave Energy Program, GSA management must be proactively engaged at the national, regional, field office, and building levels.

The first step is to identify core team members. These core team members will assist in fully developing the program and providing guidance to the national program team. A call for team members will be sent out shortly.

The second step is to make people and buildings available for training and implementation of best practices. This program's training is expected to be 10 hours for regional and field office super users and participating property managers. The audit process is expected to take approximately 24 to 30 hours per facility depending on size. And a strong commitment to implement cost saving measures uncovered during the audits.

In conclusion, it is still feasible to reduce consumption and cost with little or no investment. In these current uncertain fiscal times your commitment and support is fundamental.

C.35.5 OPTIMAL SYSTEM PERFORMANCE STANDARDS

Schedule Alignment

One of the easiest ways to reduce energy usage in a building is to ensure that operations such as heating, cooling, and lighting satisfy occupant requirements only during occupied times. The GSA definition of occupancy in the workplace is defined as the times during which at least 75% of all people typically working in the office are present. The Contractor should align all operational schedules to reflect GSA's occupancy definition. Providing heating and cooling services beyond the occupied operational schedule without prior approval of GSA is prohibited unless those services will be required to maintain the facility in accordance to ASHRAE thermal comfort and efficiency standards. All operating schedules must be adjusted seasonally and be approved by GSA every 90 days.

Unoccupied Heating and Cooling Operations

During unoccupied times, heating and cooling operations should be shut off, or in climates that require the circulation of mildly conditioned air, their set points set back by (at minimum) 8-10°F (e.g. if the cooling set point is 74°F then an appropriate unoccupied set point would be 84°F). As required by the Federal Management Regulations, heating temperature set points must be no higher than 55°F during non-working hours. When the building is unoccupied, only emergency lighting should remain on inside the building. During times when occupants are filtering in or out of the building at the beginning and end of the day, the air conditioning system can be in the process of ramping up or down because a lower internal load (i.e. body heat and appliance use) exists under these conditions. For more information, see SEP Reference Manual Sections.

Morning Start-Up and Afternoon Drift

Depending on the system type and building size and air conditioning load, some systems may take a number of hours to stabilize at the desired heating or cooling set points. The O&M Contractor should be aware of these start-up times and should operate the equipment schedules based on the observed response and the space occupancy. However, the system start-up response time will also vary by season. For example, GSA would expect a system that takes 2 hours to meet occupied cooling set points in August to take significantly less time to meet these set points in March. The Contractor should adjust the heating and cooling system start-up times seasonally to align the observed stabilized response of the system with the periods of 75% occupancy or greater, keeping in mind that full air conditioning need not be applied during times of lower occupancy.

Many building automation systems have algorithms for optimal start procedures based on the outside air temperature and the load required to reach set points in morning start-up. Where such systems exist, these algorithms should be utilized to minimize start-up energy consumption.

GSA recommends that Contractors shut down or set back equipment in a similar manner. In many buildings, while exact temperature set points may not be upheld, favorable temperatures will be maintained long after equipment have been shut off or set back to unoccupied levels. As occupants leave at the end of the day, cooling loads decrease. For example, if occupants leave the building between 3:30 p.m. and 5:00 p.m., the unoccupied temperature set back can actually be applied at 4:00 or 4:15 and the temperature allowed to slowly drift upwards as people leave the building. In order to determine the appropriate time for shutting down or setting back equipment operations, the Contractor should evaluate the current system capabilities and adjust the systems schedule daily if

needed to optimize energy usage while maintaining acceptable levels of comfort.

Heating, Ventilation, and Air Conditioning (HVAC)

This Section summarizes the best practices for operating heating, ventilation, and air conditioning systems. As the Contractor surveys the building spaces and the associated systems, each of the following practices should be verified and the need for adjustment noted.

Timing of HVAC Adjustments

Changes to centralized building temperature set points for more efficient operation should be gradual but substantial enough to reduce system inefficiencies. If centralized building temperature set points are required the Contractor should adjust no more than by 2°F per week.

Set Point Control

ASHRAE Standard 55 for Thermal Comfort identifies acceptable comfort ranges based on humidity and mean outdoor air temperature using a metric of Predicted Percentage Dissatisfied (PPD) to optimize thermal comfort. For most summer climates for which air conditioning is utilized in the United States, acceptable cooling set points range between 74°F and 78°F. Acceptable heating set points range between 68°F and 72°F for most US climates. The Contractor shall operate all GSA conditioned space in accordance to ASHRAE Standard 55 for appropriate space types and all building thermostat dead bands shall be limited to no more than ± 2°F. For example, an appropriate set point and dead band would be 74°F ± 2°F for a cooling environment if the ASHRAE standard acceptable cooling set points range between 74°F and 78°F. An inappropriate set point and dead band would be 72°F ± 2°F or 74°F ± 3°F for a cooling environment if the ASHRAE standard acceptable cooling set points range between 74°F and 78°F.

Supply Air Temperature Resets

When outside air temperatures are lower, the building can meet space cooling temperature set points using higher supply air temperature set points. This lowers the energy costs associated with running the cooling system and, in buildings with zonal reheat, this can also prevent the waste of energy through simultaneous heating and cooling. For applicable systems, the Contractor should implement a supply air temperature reset. Where such automation is not possible, Contractors should manually implement this strategy on a seasonal basis. In most climates, discharge air temperature can be reset by about 10°F while maintaining favorable indoor temperatures and reducing energy consumption. Typical discharge air temperature resets range between 50°F and 60°F for cooling.

Chilled Water and Hot Water Resets

The prescribed recommendations for the reset of chilled water and heating hot water set points apply only to hydronic systems, in which the heating and cooling sources to the air handler are chilled water and hot water served by chiller(s) and boiler(s) respectively.

Many HVAC system configurations can be programmed to automatically reset the CHW temperature set point in response to building load, similar to supply air temperature reset control, if the system is programmable the Contractor shall automate all configurations. The Contractor should adopt a chilled water reset strategy and implement a temperature control range of 5-10°F. In general the lower limit of the control range should be no less than 42°F and that the upper limit should be no more than 2°F less than the minimum supply air temperature. Where such automation is not possible, Contractors should implement this strategy on a seasonal basis.

Most buildings can be programmed to automatically modulate hot water temperatures in response to building load. The Contractor should implement a hot water reset strategy which decreases the range to which the hot water temperature can be reset; if the system is programmable the Contractor shall automate all configurations. As a rule of thumb, the hot water temperature set point should be no lower than 140°F and no greater than 180°F. For example, if the building is controlling heating hot water temperatures to 170°F, an appropriate reset control strategy would control heating hot water between 140°F and 170°F.

Static Pressure Resets

Variable air volume systems typically modulate supply fan speed to maintain a constant duct static pressure. This static pressure set point is designed to overcome all system pressure loss at peak fan airflows. Under partial load conditions, the required airflow is less than the design airflow and a lower duct static pressure is required to meet the load. In order to meet ventilation requirements, the degree to which duct static pressure can be reduced depends on the number of zones, the zone size and maximum occupancy, and the system's air balance. Poorly balanced systems require greater static pressure to ventilate the worst-served zones. The Contractor shall rebalance any poorly balanced zones.

Most air handling units use constant duct static pressure set points around 2" WC. Depending on the building, static pressure may even be reset to below 0.5" WC while maintaining sufficient airflow for heating, cooling, and ventilation. The Contractor should determine the minimum required static pressure to meet ventilation requirements. If adjustment is possible the Contractor shall lower the static pressure until airflow to the worst stops providing adequate ventilation, as required by ASHRAE 62.1 (see next Section). Wherever systems can support it, the Contractor shall implement a duct static pressure reset control strategy that ranges from the design static pressure to the minimum static pressure required for ventilation.

Outside Air Intake

When buildings are occupied, they are required by law to intake a certain amount of outside air to maintain appropriate indoor air quality. The Contractor must verify that all HVAC systems provide ventilation as required by ASHRAE Standard 62.1 – 2010 every three years through system testing. These reports must be submitted to GSA for approval. The use of TAB reports to verify performance is strictly prohibited. The value to note in verifying the intake of outside air is the combined outdoor air rate, shown in Table 6-1 of ASHRAE 62.1. This may be calculated based on the maximum number of occupants and floor area, as shown in the equation below, or using the default values based on default occupant densities.

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Table 1 Selection of ASHRAE Standard 62.1 Table 6-1

Occupancy Category	People Outdoor Air Rate R_p		Area Outdoor Air Rate R_a		Notes	Default Values			Air Class
						Occupant Density (see Note 4)	Combined Outdoor Air Rate (see Note 5)		
	cfm/person	L/s·person	cfm/ft^2	L/s·m^2		#/1000 ft^2 or #/100 m^2	cfm/person	L/s·person	
Office space	5	2.5	0.06	0.3		5	17	8.5	1
Reception areas	5	2.5	0.06	0.3		30	7	3.5	1
Break rooms	5	2.5	0.06	0.3		25	10	5.1	1
Conference/meeting	5	2.5	0.06	0.3		50	6	3.1	1
Corridors	–	–	0.06	0.3		–			1
Courtrooms	5	2.5	0.06	0.3		70	6	2.9	1
Legislative chambers	5	2.5	0.06	0.3		50	6	3.1	1
Libraries	5	2.5	0.12	0.6		10	17	8.5	1
Lobbies	5	2.5	0.06	0.3		150	5	2.7	1

One Section of the ASHRAE 62.1 Table 6-1 is shown above. The Contractor can access the full document and a comprehensive list on the GSA Shave Energy Google Site. A conservative estimate for the required outside air flow is 20 CFM per occupant. The intake of outside air above minimum requirements can reduce or increase the total cooling energy use, depending on the outside air temperature. If possible, the Contractor shall implement airside economizer control to optimize the intake of outside air for cooling operations. If the minimum outside air intake is greater than required by ASHRAE 62.1, however, then additional energy is required to condition that air to space requirements. As best practice, minimum ventilation rates should be within 100-110% of that required by ASHRAE 62.1.

Exhaust Fan Control

GSA prohibits running exhaust fans constantly. The Contractor shall adopt an exhaust fan strategy and where possible use sensors to control all exhaust fan systems.

Placement of Supply and Return Air Diffusers

In order for building spaces to be effectively cooled and heated, the air supplied to each zone must be allowed to distribute and mix with the warmer (for cooling) or cooler (for heating) air in these spaces. If supply and return diffusers are placed too close to each other, then air flow will be short-circuited and conditioned air will be returned without effectively conditioning the space. The Contractor shall verify that all supply and return air diffusers are placed no less than 5 feet apart. The O&M Contractors shall re-distribute the supply and return air connections when necessary and feasible.

C.35.6 Demand Response Strategies

If GSA has a Demand Response Strategy in place the Contractor shall operate the facility in accordance to that strategy. In addition, any strategies that can be adopted on a normal routine should be adopted as standard daily practice. Any strategy that can temporarily decrease energy consumption (e.g. lighting reduction, where applicable) should be applied during high-rate demand response events and were feasible daily. The Contractor shall maximize demand reduction strategies during high-rate periods.

Lighting and Lighting Controls
The Contractor shall remove or replace lighting fixtures and bulbs with more efficient equivalent alternatives when available when those alternatives can be procured at the same market cost. It is important to note that these investments in time pay off on their end as well because in the future they'll need to replace fewer bulbs less often. If such an alternative more efficient product is available at the request of the government the Contractor is required to use them if the payback is less than three-fourths of the Contract period or less than eighteen months whichever is less. In addition, if an appropriate lighting efficiency strategy is identified at the facility the Contractor, shall support the effort if there is no undue burden placed upon the Contractor (e.g. a de-lamping 2 hours per week over a specified amount of time).

Acceptable Levels of Luminance
Section 6.3 in the P100 specifies interior lighting requirements, which must be realized at work surfaces or a height of 30 inches by the combination of ambient lighting fixtures, task lighting, and ambient daylight. These standards should be interpreted as guidelines for appropriate lighting levels - as in actual application, these levels will vary throughout the space. The below guidelines recommended minimum and maximum values for luminance for most GSA space types. These are to be realized at working surfaces by a combination of installed lighting fixtures, task lighting, and daylight.

TABLE 2 ACCEPTABLE LEVELS OF LUMINANCE

Area/Activity	Guideline Average Illuminance (foot candles)	Recommended Minimum Illuminance (foot candles)	Recommended Maximum Illuminance (foot candles)
Parking lot	N/A	.1	5
Elevator	N/A	5	10
Inactive storage	5	5	10
Active storage	10	5	15
Stairs	10	10	15
Restroom	10	10	20
Corridor	10	10	30
Dining area	10	10	30
Lounge	10	10	30
Atrium	10	10	30
Lobby	10	10	30
Elec./Mech/Tech. room	30	20	40
Enclosed office	30	20	50
Open office	30	30	50
Conference	30	30	50
Classroom	30	30	50

The U.S. Courts Design Guide derives required levels of illumination from IESNA standards, as shown below. These have also been coupled with recommended minimum and maximum values for space luminance.

TABLE 3 U.S. COURT FACILITIES – ACCEPTABLE LEVELS OF LUMINANCE

Area/Activity	Guideline Average Illuminance (foot candles)	Recommended Minimum Illuminance (foot candles)	Recommended Maximum Illuminance (foot candles)
Public seating	10	10	20
Supplies and storage	20	10	30
Attorney witness table	30	30	50
Witness box	30	30	50
News media room	30	30	50
Attorney work room	30	30	50
Attorney witness room	30	30	50
Jury assembly suite	30	30	50
Trial jury suite	30	30	50
Grand jury suite	30	30	50
Central court libraries	30-50	30	50
Judges chamber suites	30-50	30	50
Judge's bench	50	40	60
Bailiff	50	40	60
Interpreter	50	40	60
Court reporter	50	40	60
Jury box	50	40	60

The recommended levels of luminance should be provided for each space and over lit spaces should be reduced in electrical lighting by one of the following lighting reduction measures.

Removal and Relocation of Fixtures

Where excessive lighting exists, the simplest measure to reduce lighting energy consumption is to remove some of the fixtures that serve that area. Where over lit spaces can output favorable lighting levels using fewer of the existing installed fixtures, determine the minimum number of fixtures required to meet the desired level of luminance. Remove the unnecessary lighting fixtures and rearrange them to effectively distribute luminance throughout the space. A multiple period plan should be developed and submitted to GSA if removal or relocation of fixtures is warranted.

Removal of Lamps (De-lamping)

Where the distribution of lighting fixtures is appropriate, yet lighting levels are higher than needed, one option for reducing lighting energy is to remove lamps from the existing fixtures. For example, if a room with excessive lighting has six fixtures with three lamps per fixture, an acceptable solution could be to remove the center lamp from each fixture in order to maintain fixture symmetry yet reduce the lighting energy by 33%.

Replacement of Lamps/Fixtures

Many buildings were installed with fixtures and lamps that are grossly inefficient compared to modern lighting technology. Furthermore, newer induction, CFL and LED technologies last longer

and require replacement less often than older, inefficient lamps. As these lamps burn out, they should be replaced with more efficient lamps, and where necessary, fixtures should be replaced. To maintain aesthetic consistency, a plan to replace the lamps or fixtures for an entire zone over time should be submitted to GSA for approval. For more information regarding appropriate efficient lighting technologies, see GSA Standards Related to Shave Energy and the P100 Facilities Standards for the Public Buildings Service.

Re-ballasting fixtures

Re-ballasting fixtures can be an effective method for reducing the energy consumption of lighting fixtures or increasing their total lifetime. Ballasts regulate the amount of electrical current available to a lighting fixture. When older, more inefficient, ballasts are in place and expire the Contractor shall replace them with more efficient technology. When lighting fixtures are replaced and/or existing ballasts are incompatible with the installed lighting, the Contractor must ensure that the ballast is installed to the light bulb specifications. Improper ballasting severely reduces lamp life and incurs additional maintenance and repair costs. For spaces in which dimming capabilities are desired, such as for photocell control, install dimmable ballasts to regulate the electrical current to the light bulbs.

Occupancy Control

Occupancy controls have become significantly more economical in recent years, and are proven to significantly reduce energy by allowing lighting to turn on only when spaces are occupied. They can be applied to any building interior space or parking structure. Depending on the layout and use for each space, the Contractor should choose (a combination of) specific sensor types found below when current lighting controls fail or require replacement:

- Wall-Mounted Sensors
- Ceiling-Mounted Sensors
- Bi-Level Sensors
- Passive Infrared (PIR)
- Ultrasonic
- Dual Technology

Daylight Control

Many office spaces maintain high levels of luminance during the day through windows and skylights and require no electrical lighting during most occupied hours. In some places, lighting fixtures can simply be removed where they are not unnecessary. In places where electrical lighting is only required during some hours, however, one of two strategies should be employed by the Contractor if appropriate systems are in place to allow the lights to come on only when needed:

Photocell Sensors: Measures luminance and interacts with the fixtures or BAS to control area lighting by switching lights on and off or by electronic dimming. The sensor sensitivity is adjustable.

Timer Switches: Timers interact with the fixtures directly or through the BAS to control area lighting based on the time of day.

Lighting Demand Response
Lighting reductions may also be utilized as a measure for demand response. For buildings that incur demand charges and where systems are in place, implement a continuous dimming or stepped lighting reduction demand response strategy during the peak demand period. From standard lighting levels, dim lighting by 20%, 40%, and 60% for zones with no daylight, low daylight, and high daylight respectively without occupant impact – assuming that the dimming takes place over the matter of minutes – GSA recommends at 1% per minute. With prior GSA approval lighting can be reduced up to 60% across the board during the worst demand response.

Stepped lighting reductions require stepped dimming lighting control or a wiring configuration that supports turning only some lights off. During peak demand periods, reduce the stepped lighting output or the number of lights served.

FEDERAL HIGH PERFORMANCE GUIDING PRINCIPLES

C.35.7 - PERFORMANCE MEASUREMENT - BUILDING AUTOMATION SYSTEM (GP4.3A)

A BAS supports ongoing accountability and optimization of the building energy performance, and helps building engineers to efficiently operate GSA assets.

The BAS must monitor and control the major building systems, including at minimum, heating, cooling, ventilation exterior and interior lighting, if a preexisting BAS is in place. Operating in manual or non-automated modes is strictly prohibited. Altering any building system that is, was, or previously has been automated or controlled by the BAS or similar control system is prohibited and is grounds for Contract termination or penalty. Lighting may be controlled by the BAS or by time clocks, occupancy sensors, or photocells. Critical spaces include all spaces within the building except for storage closets and mechanical closets. All regularly occupied spaces, stairwells, lobbies, and corridors are considered to be critical spaces and therefore must have automatic controls in place if applicable.

All critical sensors should be calibrated annually to ensure accurate readings and control points. When used effectively, a BAS allows building engineers and management to make informed decisions regarding changes in building operations and energy saving investments.

The Contractor shall record the Base Building Systems Control and BAS Operating Capabilities in the GSA Sustainable Operations and Maintenance Tool. The Contractor shall develop a maintenance plan for all zone level sensors and actuators using GSA's "Zone Level Sensor Maintenance Plan Template and Sample." The maintenance plan must demonstrate that zone level sensors and actuators will be calibrated according to the manufacturer recommended intervals to ensure sensor and actuator accuracy and precision and proper operation of the overall systems. The plan must also demonstrate that any malfunctioning zone level sensors and actuators will be repaired or replaced. At a minimum, the maintenance plan must include the following zone level sensors and actuators:

- Terminal unit damper
- Terminal unit flow sensor
- Space temperature sensors
- Space humidity sensors (if applicable at the facility)
- Zone CO2 sensors (if applicable at the facility)
- Calibrate all system level sensors and actuators annually

The Contractor shall maintain zone level sensors and actuators according to the Zone Level Sensors Maintenance Plan. Ensure the standard operating procedure for responding to comfort calls includes calibration/verification of zone level sensors and actuators as applicable to the facility. The Contractor shall check temperature set points and resets annually, record changes to set points, programming, and schedules, set up trends so that unusual equipment operation can be identified and corrected, annually provide GSA a Calibration and Testing Report. The Contractor shall operate the facility in accordance to the Federal High Performance Guiding Principles 3.1 Performance Measurement - Building Automation System as outlined in the GSA Sustainable Operations and Maintenance Tool and Reference Guide. The Contractor shall provide GSA documentation to support compliance to the Federal High Performance Guiding Principles 3.1 Performance Measurement - Building Automation System as outlined in the GSA Sustainable Operations and Maintenance Tool and Reference Guide. The Contractor shall provide GSA a schematic of the floor layout showing automated lighting controls.

If no BAS system is in place or limited control the Contractor shall operate the GSA asset in accordance to the GSA GP3.3b - (EQc2.2) - Controllability of Systems – Lighting requirements. The contractor will confirm that the facility provides automated lighting controls (occupancy/vacancy sensors with manual-off capacity) for appropriate spaces including restrooms, conference and meeting rooms, employee lunch and break rooms, training classrooms and offices. Provide GSA a schematic of the floor layout showing automated lighting controls

Benchmarking, Energy and GHG Performance (GP 2.1a, 2.3, 2.4, 2.5)
GSA utilizes EPA's Energy Star Portfolio Manager (ESPM) as a tool to allow buildings to directly compare their observed energy consumption to a database of national energy data, and to establish a building energy performance rating accordingly. The facility's ESPM will be shared with the Contractor in a read only view.

GSA's Energy Star Rating goal is an Energy Star Rating of at least 75 or be 19th percentile points above the national average energy usage intensity. GSA centrally maintains all energy use for its buildings centrally and that data is uploaded to Energy Star on or about the 20th of each month.

The Contractor shall annually review the space information and building profile in the facility's ESPM account for accuracy and report to GSA an inaccuracy. The Contractor shall not update, alter, or change any utility data or entries. Support GSA in efforts of documenting compliance for an Energy Star Label. Operate the facility in accordance to the Energy Star PE Guide standards. Calibrate meters in accordance to the GSA Sustainable Operations and Maintenance Tool and

Reference Guide. Operate the facility in accordance to the Federal High Performance Guiding Principles 2.1a, 2.3, 2.4, & 2.5 Energy and GHG Performance as outlined in the GSA Sustainable Operations and Maintenance Tool and Reference Guide. Provide GSA documentation to support compliance to the Federal High Performance Guiding Principles 2.1a, 2.3, 2.4, & 2.5 Energy and GHG Performance as outlined in the GSA Sustainable Operations and Maintenance Tool and Reference Guide.

BP 1 - ASHRAE 62.1-2007

To ensure that the facility is adequately ventilated with outside air (OA) the GSA has adopted the ASHRAE 62.1-2007 standards. Facilities with naturally ventilated systems (i.e. no mechanical ventilation) are not required to document compliance to the ASHRAE 62.1-2007 standard. An alternative standard can be used at GSA's discretion.

The Contractor shall annually document that all mechanical ventilation systems are meeting ventilation requirements of ASHRAE 62.1-2007. Any air handlers (AHU) that are physically not able to meet these standards must provide at least 10 CFM/person of outside air. The Contractor shall annually document proper function of all dedicated exhaust systems and operate the facility in accordance to the Federal High Performance Guiding Principles 4.1 Outside Air Ventilation & Indoor Air Quality Best Management Practices as outlined in the GSA Sustainable Operations and Maintenance Tool and Reference Guide. The Contract shall operate all heating and cooling systems and equipment in accordance the Shave Energy program standards, best practices, training, and reference guides. The Contractor shall provide GSA documentation to support the Federal High Performance Guiding Principles 4.1 Outside Air Ventilation & Indoor Air Quality Best Management Practices as outlined in the GSA Sustainable Operations and Maintenance Tool and Reference Guide.

Besides the aforementioned lighting and HVAC efficiency measures, there are a great number of other no cost efficiency measures that can easily be implemented into building operation. The following list demonstrates a number of additional strategies the Contractor should adopt if appropriate and feasible at the GSA facility:

- Timer control for, or removal of, water fountain cooling systems
- Keypad access to freight elevators
- Smart programming for elevator operation (automated, timer, BAS, sleep mode)
- Extended elevator door close operation
- LED lighting for elevators, stairs, exterior, flood lighting
- Weather stripping of doors and windows
- Plug standby load controllers (timer, occupancy)
- Dynamic modification of BAS equipment schedules
- Additional strategies can be found in the National Energy Efficiency Best Practices Study.

Exhibit 15 N-CMMS
Equip Temp

EXHIBIT 21 PREVENTIVE MAINTENANCE SCHEDULE

GSA PM Guide Final
Rev 3

Per Section C.35.2 Maintenance Standard refer to Public Buildings Service Operations and Maintenance Standards 2012 (PM Guide). The GSA Preventative Maintenance Guide is provided for informational purposes, the contractor is to perform maintenance in accordance with the requirements in C.6.31.2.