EXHIBIT "B"

Project Manual TECHNICAL SPECIFICATIONS

MADISON FIRE STATION 05 WALL REMOVAL & IMPROVEMENTS

4418 Cottage Grove Road Madison, WI 53716

Bid Documents 05/06/2021

Madison Contract No. 9042



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18	1.1.	SUM	MARY
19	1.1.	A.	Contractors shall use the RFI form/process to request additional information or clarification regarding the
20		7	construction documents.
21		В.	Form will be provided by CPM.
22			
23	1.2.	RELA	TED SPECIFICATIONS
24		Α.	Section 01 26 46 Construction Bulletin (CB)
25		в.	Section 01 26 57 Change Order Request (COR)
26		C.	Section 01 26 63 Change Order (CO)
27			
28	1.3.	PERF	ORMANCE REQUIREMENTS
29		Α.	RFI issues initiated by any contractor shall be done through the General Contractor (GC).
30			1. RFIs submitted by any Sub-contractor under the GCs control shall be returned with no response.
31		В.	Submit a new RFI for each issue. Only multiple questions that are of a similar nature may be combined into one
32			RFI shall be allowed and responded to.
33			
34	1.4.		LITY ASSURANCE
35		Α.	The GC shall be responsible for all of the following:
36			 Ensure that any request for additional information is valid and the information being requested is not addressed in the construction documents.
37 38			 Ensure that all requests are clearly stated and the RFI form is completely filled out.
30 39			 Ensure that all Work associated an RFI response is carried out as intended.
40		В.	The Project Engineer (PE) shall be responsible for the following:
40		Б.	1. Ensure that all responses to contractor initiated RFIs are properly responded to in a timely fashion.
42			a. The CPM, Owner, consulting staff, and other City staff shall be responsible for the initial review of
43			the RFI. The PE shall be responsible for codifying all consultant and Owner/City staff comments
44			into a unified RFI response.
45			
46	PART	2 – PRC	<u>ODUCTS</u>
47			
48	2.1.	REQU	JEST FOR INFORMATION FORM
49		A.	Will be provided by CPM.
50			
51	PART	3 - EXE	CUTION
52			
53	3.1.	CONT	FRACTOR INITIATED RFI
54		Α.	Immediately on discovery of the need for additional information or interpretation of the Contract Documents
55			any contractor may initiate an RFI for additional information or clarification through the GC.

1				
2	3.2.	RFI RI	ESPON	SES
3		Α.		onses to simple RFI issues shall use the response section of the RFI form and shall be completed within five
4			(5) w	orking days of the RFI form being submitted.
5		В.	Resp	onses to more complex issues may require additional time or may require a Construction Bulletin to be
6			•	shed. The initial RFI shall be responded to within five (5) working days stating that the RFI is being
7				wed and provide an estimated date for the response.
8		C.	The f	ollowing GC generated RFIs will be returned without action:
9			1.	Requests for approval of submittals
10			2.	Requests for approval of substitutions
11			3.	Requests for approval of Contractor's means and methods.
12			4.	Requests for coordination information already indicated in the Contract Documents.
13			5.	Requests for adjustments in the Contract Time or the Contract Sum.
14			6.	Requests for interpretation of A/E's actions on submittals.
15			7.	Incomplete RFI or inaccurately prepared RFI.
16				
17	3.3.	СОМІ	MENCE	MENT OF WORK RELATED TO AN RFI
18		Α.		GC shall only proceed with the Work of an RFI where, additional information is not required.
19		В.		GC shall not proceed with any Work associated with an RFI while it is under review.
20		C.		GC shall not proceed with any Work associated with an RFI that clearly states a CB will be issued in response
21			to th	e RFI.
22		D.		GC will be required to immediately remove and replace unauthorized Work and all costs required to
23			confo	orm to the Contract Documents shall be borne by the GC.
24				
25				
26				
27				END OF SECTION
28				

1		SECTION 01 26 57
2		CHANGE ORDER REQUESTS (COR)
3		
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14 15		EXECUTION
15 16	3.1. 3.2.	
10	3.2.	
18	5.5.	
19	PART 1 –	GENERAL
20	<u>17401 ±</u>	
21	1.1. S	UMMARY
22	A	Except in cases of emergency no changes in the Work required by the Contract Documents may be made by
23		the General Contractor (GC) without having prior approval of the City Engineer or his representative.
24	В	
25		the Work by written Change Order (CO). Such changes may include additions and/or deletions.
26	C	. Where the City desires to make changes in the Work through use of written Change Order Request (COR), the
27		following procedures apply:
28		1. If requested by the City, the GC shall prepare and submit a detailed proposal, including all cost and time
29		adjustments to which the GC believes it will be entitled if the change proposed is incorporated into the
30		Contract. The City shall be under no legal obligation to issue a Change Order for such proposal.
31		2. The parties shall attempt in good faith to reach agreement on the adjustments needed to the Contract to
32		properly incorporate the proposed change(s) into the Work. In the event that the parties agree on such
33		adjustments, the City may issue a Change Order and incorporate such changes and agreed to
34		adjustments, if any.
35		3. In some instances, it may be necessary for the City to authorize Work or direct changes in Work for which
36		no final and binding agreement has been reached and for which unit prices are not applicable. In such
37		cases the following shall apply.
38 39		 a. Upon written request by the City, the GC shall perform proposed Work b. The cost of such change may be determined in accordance with this specification.
39 40		 b. The cost of such change may be determined in accordance with this specification. c. In the event agreement cannot be accomplished as contemplated herein, the City may authorize
40 41		the Work to be performed by City forces or to hire others to complete the Work. Such action on
42		the part of the City shall not be the basis of a claim by the GC for failure to allow it to perform the
43		changed Work.
44	D	
45	_	practicable, and in no case later than ten (10) working days from the receipt of such order, unless another time
46		period has been agreed to by both parties, give the City written Notice, stating:
47		1. The date, circumstances and source of the extra work; and,
48		2. The cost of performing extra work described by such Order, if any; and,
49		3. Effect of the order on the required completion date of the Project, if any.
50	E	The giving of each Notice by the GC as prescribed by this specification, shall be a requirement to liability of the
51		City for payment of any additional costs incurred by the GC in implementing changes in the Work. Under this
52		specification, no order or statement of the City shall be treated as a Change Order, or shall entitle the GC to an
53		equitable adjustment of the terms of this Contract or damages for costs incurred by the GC on any activity for
54		which the Notice was not given.
55	F	
56		equitable adjustment as soon as practicable, and in no case later than ten (10) working days of the
57		commencement of such emergency.

1		G.	All GC requests for equitable adjustment shall be submitted to the CPM per the specifications below. Such
2			requests shall set forth with specificity the amount of and reason(s) for the proposed adjustment and shall be
3 4		Н.	accompanied by supporting information and documents. No adjustment of any kind shall be made to this Contract, if asserted by the GC for the first time, after the date
5		11.	of final payment.
6		١.	This specification shall be used by the GC when preparing documentation for any COR to ensure each has been
7			properly and completely filled out as required by the City of Madison.
8			
9	1.2.	RELA [.]	TED SPECIFICATION SECTIONS
10		Α.	Section 01 26 13 Request for Information (RFI)
11		в.	Section 01 26 46 Construction Bulletins (CB)
12		C.	Section 01 26 63 Change Order (CO)
13		D.	Parts of this specification will reference articles within "The City of Madison Standard Specifications for Public
14			Works Construction".
15			1. Use the following link to access the Standard Specifications web page:
16			http://www.cityofmadison.com/business/pw/specs.cfm
17			a. Click on the "Part" chapter identified in the specification text. For example if the specification
18			says "Refer to City of Madison Standard Specification <u>2</u> 10.2" click the link for Part II, the Part II
19 20			PDF will open. b. Scroll through the index of Part II for specification 210.2 and click the text link which will take you
20 21			 Scroll through the index of Part II for specification 210.2 and click the text link which will take you to the referenced text.
22			
23	1.3.	DEFIN	NITIONS AND STANDARDS
24		A.	LABOR: The amount of time and cost associated with the performance of human effort for a defined scope of
25			Work. Labor is further defined as follows:
26			1. Labor rate is the total hourly rate which includes the base rate of pay, fringe benefits plus each
27			company's cost of required insurance, also referred to as a reimbursable labor rate.
28			2. Unit labor is the labor hours anticipated to install the corresponding unit of material.
29			3. Labor cost is the labor hours multiplied by the hourly labor rates.
30		В.	MATERIAL: Actual material cost is the amount paid, or to be paid, by the GC for materials, supplies and
31			equipment entering permanently into the Work, including cost of transportation and applicable taxes. The cost
32 33		C.	shall not exceed the usual and customary cost for such items available in the geographical area of the project. LARGE TOOLS AND MAJOR EQUIPMENT: Large tools and major equipment are those with an initial cost greater
33 34		C.	than \$1,500, whether from the GC or other sources.
35			1. Tool and equipment use and time allowed is only for extra work associated with change orders.
36			a. Rental Rate is the machine cost associated with operating a piece of equipment for a defined
37			length of time (hour, day, week, or month) and shall not exceed the usual and customary amount
38			for such items available in the geographical area of the project.
39			b. Rental cost is the rental rate multiplied by the anticipated duration the equipment shall be
40			required.
41			2. The GC shall provide a breakdown of all rental rates to indicate what items and costs are associated with
42			the rate. Examples of items to include in the breakdown would be fuel consumption, lubrication,
43			maintenance and other similar expenses but not including profit and overhead.
44			3. When large tools and equipment needed for Change Order work are not already at the job site, the
45		_	actual cost to get the item there is also reimbursable.
46		D.	BOND COST: The cost shall be calculated at 1% of the total proposed change order.
47 48		Ε.	SUB-CONTRACTOR COSTS: Sub-contractor costs are for those labor, material, and equipment costs required by
40 49		F.	subcontracted specialties to complete the Change Order work. OVERHEAD AND PROFIT Markup: The allowable markup percentage to a COR by the GC and Sub-contractors for
49 50		г.	overhead and profit. All of the following are expenses associated with overhead and profit and shall not be
51			reimbursable as individual items on any COR:
52			1. CHANGE ORDER PREPARATION: All costs associated with the preparing and processing of the change
53			order.
54			2. DESIGN, ESTIMATING, AND SUPERVISION: All such efforts, unless specifically requested by Owner as
55			additional Work to be documented as a COR or portion thereof.
56			3. INSTALLATION LAYOUT: The layout required for the installation of material and equipment, and the
57			installation design, is the responsibility of the GC.

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		4. SMALL TOOLS AND SUPPLIES: The cost of small hand tools with an initial cost of \$1,500 or less, along
		with consumable supplies and expendable items such as drill bits, saw blades, gasoline, lubricating or
		cutting oil, and similar items.
		5. GENERAL EXPENSE: The general expense, which is those items that are a specific job cost not associated
		with direct labor and material such as job trailers, foreman truck, and similar items.
		 RECORD DRAWINGS: The preparation of record or as-built drawings.
		7. OTHER COSTS: Any miscellaneous cost not directly assessable to the execution of the Change Order
		including but not limited to the following:
		a. All association dues, assessments, and similar items.
		b. All education, training, and similar items.
		c. All drafting and/or engineering, unless specifically requested by Owner as additional Work to be
		documented as a Change Order proposal or portion thereof.
		d. All other items including but not limited to review, coordination, estimating and expediting, field
		and office supervision, administrative work, etc.
	G.	Contract Extension: The necessary amount of time to be added to the contract deadlines for the completion of
	0.	change order.
1.4.	CONT	RACT EXTENSION
	Α.	The GC shall not assume that every COR will require a Contract Extension. If the GC feels a contract extension is
		warranted he/she shall provide sufficient scheduling information that shows how the COR being requested
		impacts the critical path of the project.
	В.	The City of Madison strongly encourages the GC to explore alternative methods and practices prior to submittir
		a COR with a request for contract extension.
1.5.	OVERI	HEAD AND PROFIT MARKUP
	A.	Pursuant to the City of Madison Standard Specifications for Public Works Construction, Section 104.7, Extra
		Work, the following maximum allowable markups shall be strictly enforced on all change orders associated with
		the execution of this contract.
		1. The total maximum overhead and profit shall not exceed fifteen percent (15%) of the total costs.
		2. The total maximum overhead and profit shall be distributed as follows:
		a. For work performed and materials provided solely by the General Contractor, fifteen percent
		(15%) of the total costs.
		b. For work performed and materials provided solely by Sub-contractors and supervised by the
		General Contractor:
		i. Supervision of the GC, five percent (5%) of the total Sub-contractor cost.
		ii. Sub-contractors work and materials ten percent (10%) of the total Sub-contractor cost.
1.6.		RMANCE REQUIREMENTS
	A.	The GC shall become thoroughly familiar with this specification as it will identify procedures and expenses that
	_	are or are not allowed under the Change Order and Change Order Request process.
	В.	The GC shall be responsible for all of the following:
		1. Carefully reviewing the CB that is associated with the COR.
		2. Collecting required supporting documentation from all contractors that quantify the need for a COR.
		a. Labor hours and wage rates
		b. Material costs
		c. Equipment costs
	C.	The following shall apply to establishing prices for labor, materials, and equipment costs:
		1. Where Work to be completed has previously been established by individual bid items in the contract bid
		proposal the GC shall use the unit bid prices previously established.
		2. Where Work to be completed was bid as a Lump Sum without individual bid items the GC shall provide a
		breakdown of all labor, materials, equipment including unit rates and quantities required.
	D.	The completion date is determined by Owner. The schedule, however, is the responsibility of the GC. Time
		extensions for extra Work will be considered when a schedule analysis of the critical path shows that the Chang
		Order Request places the Work beyond the completion date stated in the Contract.
_		ITY ASSURANCE
1.7.	-	
1.7.	QUAL A.	The GC shall be responsible for ensuring that all COR supporting documentation meets the following requirements prior to completing the COR form:

1 2 3 4 5 6 7		В.	 Sufficiently indicates labor, material, and other expenses related to completing the intent of the CB. No costs exceed the usual and customary amount for such items available in the geographical area of the project, and no costs exceed those established under the contract. The Project Engineer (PE), City Project Manager (CPM), other members of the consulting staff, and city staff shall review all COR requests to ensure that the intent of the CB will be met under the proposal of the COR or request additional information as necessary.
8 9	PART	<u> 2 – PRC</u>	<u>DDUCTS</u>
9 10	2.1.	CHAN	GE ORDER REQUEST FORM
11		A.	Will be provided by CPM.
12			
13	PART	3 - EXEC	CUTION
14			
15	3.1.	ESTAB	BLISHING A CHANGE ORDER REQUEST
16		Α.	Upon receipt of a Construction Bulletin (CB) where the GC believes a significant change in contract scope
17			warrants the submittal of a COR the GC shall do all of the following within ten (10) working days after receipt of
18			the CB:
19 20			1. Review the CB with all necessary trades and sub-contractors required by the change in scope.
20			a. Additions or deletions to the contract scope shall be as directed within the CB.
21 22			 Additions or deletions of labor and materials shall be determined by the GC based on the directives of the CB.
22			 Assemble all required back-up documentation for additions and deletions of including materials
24			breakdown, labor breakdown and other related contract costs as previously outlined in this specification.
25			3. Submit a COR request form.
26		В.	Submitting a COR does not obligate the GC to complete the work associated with the COR nor does it obligate
27			the Owner to approve the COR as a change to the contract.
28			
29	3.2.	CHAN	GE ORDER REQUEST REVIEW, APPROVAL, AND PROCESSING
30		Α.	The PE and CPM shall review all CORs submitted by the GC.
31			1. Additional consulting staff and city staff having knowledge of the components of the COR shall review
32			and advise the PE and CPM as to the accuracy of the items, quantities, and associated costs of the COR as
33 34			directed by the CB. 2. The CPM shall review the COR with the Owner.
34 35		В.	 The CPM shall review the COR with the Owner. If required the PE and CPM, shall in good faith, further negotiate the COR with the GC as necessary. All
36		Б.	amendments to any COR shall be documented.
37		C.	After final review of the COR the CPM and Owner may accept the COR.
38		D.	The CPM shall prepare the COR in the form of an official Board of Public Works Change Order for final review and
39			approval as outlined in Section 01 26 63 Change Order (CO).
40		Ε.	The GC shall not act upon any accepted COR until it has received final approval through the Public Works process
41			as an official CO to the Work unless instructed to do so by the CPM. Proceeding without the final approval of a
42			fully authorized Change Order is at the GC's own risk.
43		-	
44	3.3.		GENCY CHANGE ORDER REQUEST
45 46		A.	In the event Work is required due to an emergency as described in the Contract Documents, the GC must request an equitable adjustment as soon as practicable, and in no case later than ten (10) working days of the
40 47			commencement of such emergency.
48		В.	The GC shall provide full documentation of all labor, materials and equipment used during the period of
49			emergency as part of the COR submittal.
50			
51			
52			
53			END OF SECTION
54			

		SECTION 01 26 63 CHANGE ORDER (CO)
PART	1 – G	ENERAL
	1.1.	SUMMARY
1.2.		RELATED SPECIFICATION SECTIONS
1.3.		BOARD OF PUBLIC WORKS PROCEDURE
	-	RODUCTS
	2.1.	CHANGE ORDER FORM
	3.1.	PREPARATION OF THE CHANGE ORDER
	3.2.	EXECUTION OF THE CHANGE ORDER
PART	1-0	ENERAL
1.1.	SU	MMARY
	A.	Except in cases of emergency, no changes in the Work required by the Contract Documents may be made by the General Contractor (GC) without having prior approval of the City Project Manager (CPM).
	В.	The City may at any time, without invalidating the Contract and without Notice to Sureties, order changes in the Work by written Change Order. Such changes may include additions and/or deletions.
	C.	The Change Order (CO) is a Board of Public Works (BPW) form that is reviewed and approved by a specific process.
	D.	The CO form is typically made up of multiple Change Order Requests (CORs) and/or Bid Items as appropriate
		depending on the type of project and how the contract was bid.
1.2.	REI	ATED SPECIFICATION SECTIONS
	Α.	Section 01 26 13 Request for Information (RFI)
	В.	Section 01 26 46 Construction Bulletin (CB)
	C.	Section 01 26 63 Change Order Request (COR)
1.3.	BO	ARD OF PUBLIC WORKS PROCEDURE
	A.	The Board of Public Works has a very explicit procedure for the review and approval of all change orders associated with any Public Works Contract as follows:
		 The Supervisory Chain of the CPM shall review and approve any CO under \$20,000 provided it does not include either of the following:
		a. The CO does not request a time extension to the contract.
		b. The CO does not cause the contract contingency sum to be exceeded.
		2. The Board of Public Works shall review and approve any CO that requires any of the following:
		a. Any CO over \$20,000.
		 b. Any CO requesting a time extension to the contract regardless of the monetary value of the CO. c. Any CO that that causes the contract contingency sum to be exceeded.
	В.	The Board of Public Works generally meets every other week and only once in August and December. The GC
		cautioned that, under normal scheduling, a CO requiring a BPW review will take a minimum of two (2) weeks to
		achieve final approval.
		 The City shall not be responsible for additional delays to the Work caused by the scheduling constraints of the Board of Public Works.
	C.	SPECIAL NOTE: The GC is cautioned to never proceed unless told to do so by the CPM. Only in rare instances
		may the CPM give a written notice to proceed on a COR without an approved CO. Proceeding without the
		written notice of the CPM or an approved CO is at the GC's own risk.
PART	2 – P	RODUCTS
2.1.	СН	ANGE ORDER FORM
	A.	Provided by CPM.
_	_	
PART	3 - E	KECUTION

1	3.1.	PREP/	ARATION OF THE CHANGE ORDER
2		Α.	The CPM shall prepare the required CO as follows:
3			1. Provide information for all contract information.
4			2. Provide a general description of the items described within the change order.
5			3. Provide detailed information for each Item on the CO form. At the option of the CPM he/she may include
6			multiple Change Order Requests each as their own item.
7			4. Provide required pricing breakdown and accounting information as needed for the item.
8			5. Insert attachments of contractor/architect provided information that clarifies and quantifies the CO.
9			Attachments may include but not be limited to material lists, estimated labor breakdown, revised details
10			or specifications, and other documents that may be related to the requested change.
11			6. Save the final version of the completed CO.
12			
13	3.2.	EXECL	JTION OF THE CHANGE ORDER
14		Α.	The GC shall do the following:
15			1. Review all items on the CO form.
16			2. The GC shall notify the CPM immediately of any errors or discrepancies on the form and shall not sign or
17			save it.
18			a. The CPM shall make any corrections as needed, re-save the form, and notify the GC.
19			3. If/when the GC concurs with the CO form as drafted the GC shall digitally sign the form.
20		В.	The CPM shall do the following:
21			1. Monitor the review process
22			2. Ensure that proper BPW procedures are executed as needed by the CO approval process.
23			a. Schedule the CO on the next available BPW agenda if required.
24			i. Attend the BPW meeting to speak on the CO to board members and answer questions.
25			ii. The GC and/or PE may be required to attend the BPW meeting to address specific
26			information as it relates to the Work and/or materials associated with the CO.
27			3. Monitor final approval and distribution of the CO.
28			4. Notify the GC that the CO has been completed.
29			5. Ensure that the CO is posted to the next Public Works payment schedule.
30			6. Verify that the GC's next Progress Payment-Schedule of Values show the CO as part of the contract sum.
31		C.	Upon final approval of the CO the GC may proceed with executing the Work associated with the CO.
32			
33			
34			
35			END OF SECTION
36			

1 2			SECTION 01 29 76 PROGRESS PAYMENT PROCEDURES
3			
4	PART	1 – GE	NERAL
5		1.	SUMMARY1
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7		3.	RELATED DOCUMENTS1
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9		5.	PROGRESS PAYMENT SUBMITTAL
10			ODUCTS - THIS SECTION NOT USED
11			ECUTION
12		.1.	GENERAL CONTRACTOR PROCEDURE
13		.2.	PROJECT ARCHITECT PROCEDURE
14	3	.3.	CITY PROJECT MANAGER PROCEDURE
15		_	
16 17	PART	1 – GI	ENERAL
17	1.1.	SUN	IMARY
19		A.	The General Contractor (GC) shall review this and all related specifications prior to submitting progress payment
20			requests.
21		В.	Progress payment requests (Partial Payment-PP) for this contract shall be submitted digitally by the GC to the
22			CPM.
23		C.	The Project Engineer (PE) and City Project Manager (CPM) shall review and amend or approve the PP as needed.
24		D.	After approval of the PP by the CPM, he/she shall forward the PP to the appropriate agencies for BPW
25			contractual review and payment processing.
26			
27	1.2.	REL/	ATED SPECIFICATIONS
28		Α.	Section 01 26 63 Change Order (CO)
29		В.	Section 01 29 73 Schedule of Values
30		C.	Section 01 31 19 Progress Meetings
31		D.	Section 01 32 26 Construction Progress Reporting
32		Ε.	Section 01 33 23 Submittals
33		F.	Section 01 77 00 Closeout Procedures
34		G.	Section 01 78 23 Operation and Maintenance Data
35		Η.	Section 01 78 36 Warranties
36		I.	Section 01 78 39 As-Built Drawings
37		J.	Section 01 79 00 Demonstration and Training
38			
39	1.3.		ATED DOCUMENTS
40		Α.	The following documents shall be used when evaluating PP requests.
41			1. Construction progress reports filed since the last payment request.
42			2. Contractors Schedule of Values as updated from the last payment request. See Specification 01 29 73.
43			3. Any document that may be required to be submitted for review and approval, as noted by the
44			specifications listed in Section 1.2 above, or the Progress Payment Milestone Schedule in Section 1.4
45			below, to achieve a required bench mark of contract progression or contract requirement.
46			
47	1.4.		GRESS PAYMENT MILESTONES
48		Α.	City Engineering-Facility Management has developed the Project Payment Milestone Schedule (Section 1.4
49			below) to assist the GC in providing required construction specific documentation and general contractual
50		_	documentation in a timely manner.
51		В.	The Progress Payment Milestone Schedule is not an all inclusive list. Multiple agencies review progress payment
52			requests and contract closeout requests. Missing, incomplete, or incorrect documentation for any agency may
53			be a cause for not processing progress payments. It shall be the sole responsibility of the Contractor for
54		6	providing documentation as required or requested to the appropriate agencies.
55		C.	The milestone schedule is based on the contract total sum and shall be valid for most contracts. Milestone
56			submittals will be required with whatever progress payment hits the percentage of contract total indicated in
57			the schedule.

D. The CPM shall review the milestone schedule with each progress payment request and at his/her option may elect to hold processing the progress payment until such time as the contractor has met the requirements for providing construction specific documentation.

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 E. It shall be the General Contractors responsibility to comply with all BPW Contract Administration requirements and related deadlines as outlined in the Award Letter, Award Checklist, and Start Work Letter.

Progress Payr	nent (PP) Miles	tone Schedule
Milestone Description	Due Before	Remarks
 BPW Contract Administration Documentation Workforce profiles Best Value Contracting Documentation Sub-contractors prequalification approval & Affirmative Action plans Other as may be required 	PP-1, or start work as applicable	 For GC and Sub-contractors before PP-1 regardless of scheduling Sub-contractors (if applicable), due 10 days before they may start work Sub-contractors (if applicable), due 10 days before they may start work
Required Construction Submittals/Administrative Documents Contractors Project Directory Schedule of Values Submittals Schedule Closeout Requirement Checklist Warranty Checklist	PP-1	References Specification 01 31 23 Specification 01 29 73 Specification 01 32 19 Specification 01 77 00 Specification 01 78 36
Construction Progress Milestones Early submittals, per submittal schedule Detailed Contract Schedules 	PP-1	 See specifications for specific requirements Specification 01 32 19, Examples: concrete mix, structural steel, products with long lead times See Specification 01 32 16
General Construction Progress Requirements are all up to date Progress Schedules Submittals/Re-submittals (ongoing) Schedule of Values Progress Reporting QMOs are being addressed and closed Progress Cleaning As-Built Drawings All of these	Each future PP	Verified with each Progress Payment Request Specification 01 32 16 Specification 01 33 23 Specification 01 29 73 Specification 01 32 26 Specification 01 45 16 Specification 01 74 13 Specification 01 78 39
* All of the a	bove are update	a as required
 BPW Contract Administration Documentation Weekly payroll reports Best Value Contracting Reports SBE Reports 	25% CT or PP 2	See 1.4.E above. This progress payment will be with held by BPW for any missing contractual documentation.
Construction Progress Milestones Construction/Contract Closeout Meeting #1 Submittals/Re-submittals complete 	70% CT	 Specification 01 31 19 Specification 01 33 23

		tone Schedule
Milestone Description	Due Before	Remarks
Operation and Maintenance (O & M) drafts	60% CT	Specification 01 78 23
BPW Contract Administration Documentation Request Finalization Review from BPW 	80% CT	This is a recommendation to the GC and is not a requirement of this PP. Specification 01 77 00
 Construction Progress Milestones Operation and Maintenance (O & M) finals, accepted All major QMO issues resolved As-Built Drawings, Division Trades ready for GC review 	80% CT	 Specification 01 78 23 Specification 01 45 16; Items that could prevent occupancy Specification 01 78 39
All of the following shall be completed for this PP: Regulatory Inspections completed All QMO reports closed Demonstration and Training completed Attic Stock completed Final Cleaning 	90% CT	Contractor to determine the proper order of completion: Governing ordinances and statutes Specification 01 45 16 Specification 01 79 00 Specification 01 78 43 Specification 01 74 13
 Construction Closeout Procedures: Letter of Substantial Compliance sent to BI and DHS as needed Certificate of Occupancy issued As-Built Drawings, finals, accepted City Letter of Substantial Completion Warranty letters dated and issued 	100% CT	See Specification 01 77 00 Generated/Signed by the Engineer Building Inspection Specification 01 78 39 Signed by the City Engineer Specification 01 78 36
* Completion of t	his begins the o	ne year warranty.
 BPW Contract Administration Documentation Contract Closeout Procedures Construction Closeout has been completed Contractor requests final payment of retainage upon receiving City Letter of Substantial Completion All BPW contractual requirements are 	Final	 See Specification 01 77 00 Contractor must provide any missing
verified		BPW Contractual Documentation
* Completion of this closes the	e contract but n	ot the warranty period/bond.

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PROGRESS PAYMENT SUBMITTAL 1.5.

Each progress payment submittal shall be: Α. 1. Digital in PDF format 2. PDF shall be in color Uploaded to the appropriate Project Management library and properly named per the tutorial 3. instructions provided to the awarded contractor. В. Submit all required construction progress documentation C. In general the following shall apply to all PP requests:

		1. Materials or products:
		a. On order, being shipped, etc. may not be invoiced.
		b. Received and stored on the project site may be invoiced.
		c. Being manufactured off site at any location may not be invoiced (example: cabinetry, ductwork,
		etc.) d. Completed products stored off site locally waiting for delivery to the project site may be invoiced
		with prior approval by the CPM. All of the following conditions must be met to be allowed:
		 i. Items must be visually inspected by CPM to verify product is complete. ii. Item must be stored inside a compatible structure and the structure and contents must be
		insured.
		iii. Contractor is responsible for condition until installation is completed.
		2. All labor and equipment, including rental time for the current progress period may be invoiced.
	D.	3. Only completed installations may be invoiced to 100% based on the Schedule of Values.
	D.	<u>DO NOT</u> submit BPW Contract Administration Documentation for review with Progress Payment Requests, submit them directly to the correct agency and in the correct format as instructed from information in your BPV
		Contract Award Packet instructions.
PART	2 - PRC	DDUCTS - THIS SECTION NOT USED
PART	<u> 3 - EXE</u>	CUTION
3.1.	GENE	ERAL CONTRACTOR PROCEDURE
J.1.	A.	The GC shall provide an updated version of his/her schedule of values (AIA documents G702 & G 703) with each
		PP request.
		1. The AIA - Application and Certificate for Payment (G702) shall be properly filled out and prepared for the
		Architects review. See specification 01 29 73, Schedule of Values for more information.
		2. The AIA - Continuation sheets (G703) shall be properly filled out and indicate the dollar value of the
		completed work to date for each item on the form. See specification 01 29 73, Schedule of Values for
		more information.
		a. The GC shall subtotal the <u>work completed to date</u> for all of the <u>original</u> Schedule of Value items.
		b. Divide the sub total of work completed by the Original Contract Total to obtain a percentage
		complete of the original Lump Sum Bid. This percentage may be taken out to five (5) decimal
		places (round fifth place up or down as needed).
		 Example: \$5,192.55 of completed work divided by \$10,000 original Contract Total = 0.519255, round this to 0.51926
		c. Write the percentage in Column 10 on the City Tabular Sheet for the original lump sum bid item <u>i</u>
		RED ink.
		3. Ensure that any newly posted change orders from the City of Madison provided tabulation sheet have
		been entered on the G703 continuation sheets. Repeat steps a thru c above for each change order on
		the schedule of values and the City Tabular Sheet.
	В.	The GC shall fill out the City of Madison Application and Certificate of Payment cover sheet as follows:
		1. The GC shall not change any pre-printed information and shall not write in the box that indicates previou
		progress payments.
		2. The GC shall sign and date the form where indicated.
		3. The GC shall provide the dates from and to for the PP being requested.
		4. The GC shall provide the list of all contractors/sub-contractors that were actively working during the
		dates indicated above.
		a. All contractors/sub-contractors named must be in compliance with all City requirements (Pre-
		qualified, Affirmative Action Plan on file, etc). The PP will be held and not processed by the City of Madison until all contractors (sub contractors are in compliance.
		Madison until all contractors/sub-contractors are in compliance.
		b Do not list the names of suppliers or manufacturers doing so will slow down successive and
		b. <u>Do not</u> list the names of suppliers or manufacturers, doing so will slow down processing and require a re-submittal of the paperwork
	ſ	require a re-submittal of the paperwork.
	C.	require a re-submittal of the paperwork. The General Contractor (GC) shall scan all of the documents listed below in the order shown, save the scan as a
	C.	require a re-submittal of the paperwork. The General Contractor (GC) shall scan all of the documents listed below in the order shown, save the scan as a single PDF file for each PP request.
	C.	require a re-submittal of the paperwork. The General Contractor (GC) shall scan all of the documents listed below in the order shown, save the scan as a single PDF file for each PP request. 1. City cover sheet – Application and Certificate for Payment
	C.	require a re-submittal of the paperwork. The General Contractor (GC) shall scan all of the documents listed below in the order shown, save the scan as a single PDF file for each PP request. 1. City cover sheet – Application and Certificate for Payment

1			5. Any miscellaneous documents that may be requested as backup documentation for the pay request.
2			a. Lien waivers are not required and shall not be submitted.
3			 b. Do not provide contractual administrative documents such as pay reports with pay requests.
4			c. Do not supply progress deliverables with pay requests.
5			
6	3.2.	PROJ	IECT ENGINEER PROCEDURE
7		Α.	The PE shall review the AIA-continuation sheets provided by the GC to determine if the Schedule of Values
8			accurately reflects the work completed for the inclusive dates indicated.
9		В.	The PE shall advise the CPM of any discrepancies in the schedule of values.
10		C.	The PE shall work with the GC and the CPM to resolve any issues prior to signing the AIA - Application and
11			Certificate for Payment.
12		D.	When verified, the PE shall digitally sign the original PDF version of the AIA - Application and Certificate for
13			Payment.
14			
15	3.3.	CITY	PROJECT MANAGER PROCEDURE
16		Α.	The CPM shall review all documents submitted by the GC and work with the PE to ensure the schedule of values
17			accurately reflects the work completed to date.
18		В.	The CPM may elect to hold processing of any progress payment pending submittal of required progress payment
19			milestones.
20		C.	When verified, the CPM shall digitally sign the City Cover Sheet and forward the required documentation to the
21			appropriate City agencies for further processing of the payment request.
22			
23			END OF SECTION
24			
24			

		SECTION 01 33 23 SUBMITTALS
		ENERAL
-	1.1.	SUMMARY
	1.2.	RELATED REFERENCES
	1.3.	SUBMITTAL REQUIREMENTS
		RODUCTS – THIS SECTION NOT USED
		ECUTION
	3.1.	GENERAL CONTRACTORS PROCEDURES
	3.2.	SUBMITTAL REVIEW
	3.3.	PROJECT ENGINEERS REVIEW
PART	<u>1 – G</u>	ENERAL
1.1.	SUN	ΛΜΑRΥ
	Α.	The General Contractor (GC) shall be responsible for providing submittals for review of all contractors and sub-
		contractors as designated in the construction documents. Submittals shall include but not be limited to all of the
		following:
		1. Equipment specified and pre-approved in the specification; to ensure quality, construction, and
		performance specifications have not changed since final design.
		2. Equipment specified by performance in the specification; to ensure that the intended quality,
		construction, and performance specified is met by the selected material or product.
		3. Shop, piece, erection, and other such drawings as indicated in the specifications to ensure all structural,
		dimensional, and assembly requirements are being met.
		4. Submittals indicating installation sequencing
		5. Submittals indicating control sequencing
		6. Contractor licensing, certification, and other such regulatory documentation when required by a
		specification.
	В.	 Other submittals as may be required by individual specifications. The submittal process shall not be used to determine alternates to specified products or equipment. All
	ь.	considerations shall be reviewed during the bidding process and acceptable alternates shall be acknowledged by
		addendum prior to the closing of bidding. See bidding instructions for the information on submitting alternates
		for consideration.
	D.	In the event that a manufacturer has significantly changed a product (discontinued a model, changed dimension
		or performance data changed available colors, etc.) since bid opening the GC shall submit a Request for
		Information (RFI) to the Project Engineer requesting other approved alternates prior to uploading a digital
		submittal.
	Ε.	Contractors and sub-contractors shall be responsible for knowing the submittal requirements of ALL sections
		within their scope of work under the contract. The Owner reserves the right to request documentation on any
		materials, equipment, or product being installed where a submittal is not on file. If the material, equipment, or
		product installed is determined not to meet the intent of the specification the contractor/sub-contractor shall be
		required to remove and replace the items involved. The GC shall be solely responsible for all costs associated
		with the removal and replacement.
1.2.		ATED REFERENCES
	A.	Section 01 29 76 Progress Payment Procedures Section 01 32 19 Submittals Schedule
	В. С.	
	C. D.	Section 01 32 26 Construction Progress Reporting All Technical Specifications, contract documents, construction drawings, and any published addendums during
	U.	the bidding process.
	E.	All contract documents generated during the execution of the contract including but not limited to Requests for
	L.	Information (RFI) and Construction Bulletins (CB).
1.3.	SUE	BMITTAL REQUIREMENTS
	A.	A completed submittal shall meet the following requirements:
		1. Digital submittal shall be original PDF of manufacturer's data sheets or high quality color scan of the
		same.
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		a. Submittals shall not include sales fliers or other similar documents that typically do not provide
		complete manufacturers data.
		2. Documents within the PDF submittal shall be printable to a sized sheet no less than 8-1/2 by 11 inches
		and no larger than 24 by 36 inches.
		3. At the beginning of each submittal the contractor shall identify the plan reference (WC-1, EF-3, etc.) in
		RED block letters that the submittal is for.
		4. Where multiple model numbers appear in a table the contractor shall identify the specific model being
		submitted by using a RED square, box, or other designation to distinguish the correct model from others
		on the page.
	В.	A complete submittal will include all information associated with the product or equipment as presented in plans, equipment tables, and specifications. Information shall include but not be limited to the following:
		1. Dimensional data
		2. Performance data
		3. Resource requirements, power, water, waste, etc
		 Clearance and maintenance requirements
		5. Finish information, colors, textures, etc.
		6. Warranty information
	C.	Where a submittal includes material samples (carpet, tile, paint draw downs, etc.) the contractor shall do the
	•	following:
		1. The Contractor shall submit the sample(s) as indicated in the specification.
		2. The Contractor shall include a quality photograph(s) of the product with the digital submittal.
		Photographs shall meet the following requirements:
		a. Formatted to be between 500Kb and 1.0 Mb in file size
		b. Have no glare or flash reflection on the sample
		c. Sample fills the frame of the photo and shows detail as needed. Include multiple photos from
		other angles as needed.
		d. Scanned copies of products or photos are not acceptable.
	D.	Uploaded submittals should be relative and related to a specific written specification.
		1. <u>Do not</u> upload submittals under a broad category or division (I.E. HVAC 23 00 00). Always upload by the
		specific specification that identifies a required product or performance to be met.
		2. Group related items together if the specification is written that way. (I.E. all of the plumbing fixtures and
		trim relative to one specific specification should be submitted together).
		3. Submittals shall be grouped and adhere to the divisions in the submittal schedule. Submittals that do not
		conform to the submittal schedule and/or specification divisions will be rejected for re-submittal.
PART	2 – PRO	DUCTS – THIS SECTION NOT USED
PART	3 - EXEC	CUTION
3.1.	GENE	RAL CONTRACTORS PROCEDURES
5.1.	A.	All required submittals will be submitted electronically by the GC.
	д. В.	Uploading the submittal indicates that the GC has reviewed and approved the submittal against the contract
	Б.	document requirements.
	C.	The GC shall discuss submittal status at all progress meetings and shall monitor submittal review/approval/re-
	с.	submittal so as to not incur delays in the project schedule.
	D.	The GC and sub-contractors shall provide re-submittals as required.
	2.	
3.2.	SUBM	ITTAL REVIEW
	A.	The submittal shall be reviewed internally by the required Architect/Engineer and Owner Representative in a
		timely fashion and provide commentary on missing items, incorrect information, or incomplete shop drawings,
		etc as needed.
	В.	When the internal review is completed the CPM will notify the Project Engineer the submittal is ready for final
	c	review.
	C.	Information will be transmitted electronically.

PROJECT ENGINEERS REVIEW 1 3.3. 2 Α. Upon completion of the internal review the Project Engineer shall review all internal review comments, confer with the CPM as needed and determine the appropriate disposition status for the submittal (approved or 3 4 resubmit). 5 В. The Project Engineer shall summarize final internal review comments onto the submittal cover sheet, provide a final disposition of the submittal and update the review status of the submittal to "Complete..." (with or w/o 6 7 comments) or "Rejected". A completed Final Review status initiates the CPM to notify the GC and appropriate sub-contractor(s) that the 8 C. review of the submittal has been completed. 9 10 D. Information will be transmitted electronically. 11 12 END OF SECTION 13

L 2	SECTION 01 41 00 REGULATORY REQUIREMENTS
- 3	
	1 – GENERAL
5	1.1. REQUIREMENT INCLUDED
5	1.2. PROCEDURES
7	1.3. NOTICES
3	1.4 PERMITS
) PART	2 – PRODUCTS - THIS SECTION NOT USED
PART	3 – EXECUTION - THIS SECTION NOT USED
L	
	<u>1 – GENERAL</u>
1.1.	
1.1.	REQUIREMENT INCLUDED
	Unless otherwise specifically directed by Contractor each Subcontractor and each Sub-subcontractor shall comply with
	provisions of this Section as required for proper execution and completion of their Work or portions thereof
1.2.	PROCEDURES
	Comply with and give notices required by applicable laws, statutes, ordinances, codes, rules, and regulations, and lawful
	orders of public authorities having jurisdiction applicable to performance of the Work. Comply with and give notices
	required by Owner's and Contractor's insurance companies, local utilities and labor regulations relating to the
	performance of the Work, the protection of adjacent property, and the maintenance of passage ways, guard fences and
	other protective facilities.
	The Contraction half and in all a south linear and an analysis of the south time of this Contraction d
	The Contractor shall acquire all permits, licenses, and approvals necessary for the execution of this Contract and
	performance of the Work and provide evidence of such applicable permits, licenses, and approvals at the Pre-
	Construction Meeting or before commencement of the Work.
	Where Contract Deciments require choteneast of achieve containing materials, with which to the Ctate of
	Where Contract Documents require abatement of asbestos containing materials, prior written Notice to the State of Wisconsin, Department of Natural Resources is required. The Contractor shall provide evidence of such Notice prior to
	commencement of the Work.
	commencement of the work.
	Procure all certificates of inspection, use, and occupancy, and all permits and licenses, pay all charges and fees and give
	all notices necessary and incidental to the due and lawful prosecution of the Work. Certificates of inspection, use and
	occupancy shall be delivered to the Owner upon completion of the Work in sufficient time for occupation of the Project
	in accordance with the approved schedule for the Work. The costs of such procurement, payment and delivery shall be
	included within the Base Bid.
	Exercise precaution at all times for the protection of persons (including employees) and property. Observe the safety
	provisions of applicable laws, building and construction codes. Refer to the Manual of Accident Prevention in
	Construction, published by the Associated General Contractors of America.
	It is not Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws,
	statutes, ordinances, codes, and rules and regulations. However, if Contractor observes that portions of the Contract
	Documents are at variance therewith, Contractor shall promptly notify A/E and Owner in writing, and necessary changes
	shall be accomplished by appropriate Modification.
	If Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and
	regulations, or lawful orders of public authorities having jurisdiction, the Contractor shall assume full responsibility for
	such Work and shall bear the costs attributable to correction.
	Refer to the Sections of the Work for referenced codes, standards, tests, etc., applicable to the Work.
1.3.	NOTICES
	Concealed or Unknown Conditions:
	If the Contractor encounters conditions at the site are (1) subsurface or otherwise concealed physical conditions that
	differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual
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1		nature, that differ materially from those ordinarily found to exist and generally recognized as inherent in construction
2		activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the
3		Owner and the Engineer before conditions are disturbed and in no event later than 21 days after first observance of the
4		conditions. The Engineer will promptly investigate such conditions and, if the Engineer determines that they differ
5		materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any of the
6		Work, will recommend and equitable adjustment in the Contract Sum or Contract Time, or both. If the Engineer
7		determines that the conditions at the site are not materially different from those indicated in the Contract Documents
8		and that no change in the terms of the Contract is justified, the Engineer shall promptly notify the Owner and Contractor
9		in writing, stating the reasons.
10		
11		If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers,
12		archaeological sites, or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend
13		any operations that would affect them and shall notify the Owner and Engineer. Upon receipt of such notice, the Owner
14		shall promptly take any action necessary to obtain governmental authorization required to resume operations. The
15		Contractor shall continue to suspend operations until otherwise instructed by the Owner but shall continue with all
16		other operations that do not affect those remains or features.
17		
18	1.4	PERMITS
19		Permits, Fees, Licenses, and Inspections: Unless otherwise provided in the Contract Documents, Contractor shall secure
20		and pay for the building permit as well as for other permits, fees, licenses, inspections and approvals by government and
21		utility agencies, necessary for proper execution and completion of the Work that are customarily secured after
22		execution of the Contract and legally required at the time bids are received or negotiations concluded.
23		
24		Owner will obtain plan approvals and pay all fees required by the Wisconsin Department of Safety and Professional
25		Services.
26		
27		Contractor shall obtain all permits and pay all fees required by local utilities for permanent electric and gas service.
28		
29		Contractor shall obtain copies of all required permits and certificates of inspection applicable to the work.
30		
31		Contractor shall furnish A/E and Owner with copy of all required permits and certificates.
32		
33	PART	2 – PRODUCTS - THIS SECTION NOT USED
34		
35	PART	3 – EXECUTION - THIS SECTION NOT USED
36		
37		
38		END OF SECTION
39		

1			SECTION 01 45 16
2			FIELD QUALITY CONTROL PROCEDURES
3			
4		-	VERAL
5			5UMMARY
6			RELATED SPECIFICATION SECTIONS
7 8			PERFORMANCE REQUIREMENTS
9			DUALITY MANAGEMENT OBSERVATION REPORT
10			DUCTS - THIS SECTION NOT USED
11			CUTION
12	3	.1. (QUALITY MANAGEMENT RESPONSIBILITIES
13	3	.2.	RESPONDING TO A QMO
14	3	.3. (GENERAL CONTRACTORS FOLLOW-UP
15	3	.4. (QMO CLOSEOUT PROCEDURE
16	3	.5. (CONSTRUCTION CLOSEOUT
17			
18	PART	1 – GEI	NERAL
19 20	1.1.	CLIMA	
20	1.1.	A.	MARY The City of Madison has developed a multi-faceted Quality Management Program that begins with contract
22		л.	signing and runs through contract closeout to ensure the best quality materials, workmanship, and product are
23			delivered for the contracted Work.
24			2. The Quality Management Observation (QMO) is an ongoing observation of the construction process as it
25			progresses. The City of Madison does not use a "Punch List" or "Corrections List" as it is typically known
26			throughout the construction industry. The QMO process acts as an "in progress punch list".
27			a. By using the QMO process the City of Madison's goal is to have a zero item punch list prior to the
28			90% progress payment and owner occupancy.
29		В.	All contractors shall be required to review the specifications identified in Section 1.2 below, and other related
30			specifications identified therein to become familiar with the terminology and expectations of this City of
31			Madison Public Works contract.
32		C.	It is the intent of this specification to outline the requirements, expectations, and responsibilities of the General
33			Contractor (GC), Project Engineer, and other representatives of the Owner for items of Quality Assurance and
34			Quality Control.
35			1. This specification is not intended to conflict other specifications requiring testing and inspecting services.
36 37			2. This specification does not relieve the GC from any requirements associated with regulatory inspections performed by the City of Madison Building Inspection Unit, or inspectors from other agencies as required
38			by code.
39			 Any testing performed by an Owner's Representative does not relieve the GC from performing any
40			testing that may required by the construction documents.
41			
42	1.2.	RELA	TED SPECIFICATION SECTIONS
43		Α.	Section 01 26 13 Request for Information (RFI)
44		В.	Section 01 29 76 Progress Payment Procedures
45		C.	Section 01 31 13 Project Coordination
46		D.	Section 01 77 00 Closeout Procedures
47			
48	1.3.	PERF	ORMANCE REQUIREMENTS
49		Α.	All contractors shall be responsible for a proper quality assurance/quality control (QA/QC) program throughout
50			the execution of the Work defined within the construction documents, including all recognized construction
51		_	industry standards and all applicable regulatory codes.
52		В.	The GC shall be responsible for all of the following:
53			1. Monitor the quality of all workmanship, supplies, materials, and products being installed by all
54 55			contractors and installers to ensure they meet or exceed the minimum requirements set forth by the construction documents.
55 56			 Submit a Request for Information (RFI) whenever manufacturers' instructions or referenced standards
50			conflict with the construction documents before proceeding with the Work.
57			connet with the construction documents before proceeding with the work.

1 2			3. Ensure that Work requiring special certifications or licensing is being performed by is being performed and supervised by personnel that meet the appropriate requirements.
3			a. Ensure that all certificates and licenses are current throughout the execution of the project.
4		C.	The City of Madison and its representatives shall perform quality assurance and quality control activities
5			throughout the execution of this project. This in no way relieves the GC of maintaining an acceptable QA/QC
6			program.
7			
8	1.4.	QUA	LITY ASSURANCE
9		А.	The GC shall be responsible for the following:
10			1. All materials, equipment, and products shall be new, clean, undamaged, and meet the performance
11			specifications defined within the construction documents including favorably reviewed submittals.
12 13			a. Any material, equipment, or product that does not meet the requirements of the construction documents shall be removed and replaced including any adjacent and related work, at the CCs
15 14			documents shall be removed and replaced, including any adjacent and related work, at the GCs expense.
14 15			 All Work shall be performed by persons properly trained and/or qualified to produce workmanship of the
16			quality specified in the construction documents.
17			 Providing access to updated as-builts, addenda, submittals, bulletins and other related construction
18			documents at the project site.
19		В.	The City of Madison and its representatives may be responsible for any of the following:
20			1. Attend pre-installation meetings
21			2. Attend construction progress meetings
22			3. Review all submittals
23			4. Conduct field visits for QA/QC purposes, provide feedback to the GC and sub-contractors using Quality
24			Management Observation (QMO) reports.
25			5. Review delivered equipment
26			6. Witness equipment installations, startups, testing as specified in other specifications
27	4 -	0.1.4	
28	1.5.	•	LITY MANAGEMENT OBSERVATION REPORT
29 30		Α.	The Quality Management Observation report or QMO is used as a QA/QC tool by those entities responsible for QA/QC activities, including but not limited to, the GC, CoM, PE, Cx agent, etc.
30 31		В.	QMOs are designed to be an early observation of non-conforming construction work before it becomes buried
32		υ.	by follow on work. As such it is most often used as an "in progress punch list".
33		C.	QMO reports and tracking will be distributed electronically. The distribution list will be established by the GC and
34			CPM.
35 36 27	<u>PART</u>	<u>2 – PR</u>	ODUCTS - THIS SECTION NOT USED
37 38	PART	3 - EXE	CUTION
39 40	3.1.		LITY MANAGEMENT RESPONSIBILITIES
41	5.1.	A.	While making routine progress visits to the construction project the GC, CPM, and PE, and applicable others shall
42			observe the details of the construction and installations to ensure that the intent of the construction documents
43			is being followed.
44		В.	If during the progress visit there is a determination of contract non-conformance a QMO report shall be initiated
45			to begin the documentation process.
46			1. The GC field superintendent shall be informed immediately of any issue that may cause harm, damage to
47			finished work, or be buried prior to properly filing a QMO report.
48		C.	The following information will be included in a QMO report:
49			1. The date and time of the field visit
50			2. References to construction documents if any (examples; specification, drawing page, details, approved
51			submittals, RFI, CB, etc)
52			3. Short title for the observation being made
53			4. Detailed description of the observation being made
54 55			5. Assignment of categories (Sitework, Structure, Enclosure, Interior, etc) from the given list that may apply to the observation being reported
55 56			to the observation being reported.Assignment of responsible contractor(s) that may need to be aware of the observation.
50 57			 Assignment of responsible contractor(s) that may need to be aware of the observation. Any attachments that may help provide reference to the observation.
58			······································

1	3.2.	RESP	ONDING TO A QMO
2		Α.	All contractors receiving email notification of a QMO Observation shall review the details of the observation.
3		В.	The GC shall be responsible for determining the course of action required to remedy the non-conforming issue
4			and shall coordinate and direct the contractor(s) responsible for any work related to the observation.
5		C.	All contractors assigned to remedy the observation by the GC shall provide follow-up responses on the QMO
6			report as follows:
7			1. In the "Follow-Up Response" area enter a description of your follow-up response in the box provided.
8			2. Add attachments (pictures) if needed to show the work has been completed.
9			
10	3.3.	GEN	RAL CONTRACTORS FOLLOW-UP
11		Α.	The GC shall inspect the work to ensure that all assigned contractors have remedied the observation to the
12			intent of the construction documents.
13		В.	The GC shall respond with any additional comments in his/her response box.
14			
15	3.4.	QMQ	CLOSEOUT PROCEDURE
16		Α.	The person who initiated the QMO shall review the remedied work and if properly corrected shall close and date
17			the QMO form.
18			
19	3.5.	CON	STRUCTION CLOSEOUT
20		Α.	The GC shall note that successful close out QMOs are required for construction closeout as follows:
21		1.	Certain progress payments as identified in Specification 01 29 76 are contingent QMO reports being properly
22			closed out.
23		2.	Specification 01 77 00 defines all construction closeout requirements.
24			
25			
26			
27			END OF SECTION
28			

1			SECTION 01 73 29
2			CUTTING AND PATCHING
3 4	рлрт	1 _ C	ENERAL
4 5		1.	SUMMARY
6		2.	RELATED SPECIFICATION SECTIONS
,			DEFINITIONS
3		4.	QUALITY ASSURANCE
)		5.	WARRANTY
)	PART	2 - M	ATERIALS
L	2	2.1.	GENERAL
	PART	3 - EX	ECUTION
	З	8.1.	EXAMINATION
	3	3.2.	PREPARATION2
		3.3.	PERFORMANCE
	3	8.4.	CLEANUP AND RESTORATION
	PART	<u>1 – G</u>	ENERAL
	1.1.	SUN	ЛМАРУ
		Α.	This Section includes general procedural requirements for cutting and patching including, but not limited to the
			following:
			1. Examination
			2. Preparation
			3. Performance
			4. Cleanup and Restoration
	1.2.	REL	ATED SPECIFICATION SECTIONS
		Α.	Divisions 02 through 32 Sections for specific requirements and limitations applicable to cutting and patching
			individual parts of the Work.
		В.	Division 07 Section "Penetration Fire Stopping" for patching fire-rated construction.
	1.3.	DEE	INITIONS
	1.5.	A.	Cutting: Removal of in-place construction necessary to permit installation or performance of other Work.
		В.	Patching: Fitting and repair work required to restore surfaces to original conditions after installation of other
		2.	Work.
		C.	Level Alpha
	1.4.	QU	ALITY ASSURANCE
		Α.	Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying
		_	capacity or load-deflection ratio.
		В.	Operational Elements: Do not cut and patch operating elements and related components ina manner that results
			in reducing their capacity to perform as intended or that may result in increased maintenance or decreased
		C.	operational life or safety. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that
		C.	could change their load-carrying capacity that results in reducing their capacity to perform as intended, or that
			may result in increased maintenance or decreased operational life or safety. Some miscellaneous elements
			include the following:
			1. Water, moisture, or vapor barriers
			2. Membranes and flashings
			3. Exterior curtain-wall construction
			4. Equipment supports
			5. Piping, ductwork, vessels, and equipment
			6. Noise and vibration control elements and systems
		D.	Visual Requirements: Do not cut and patch construction in a manner that results in visual evidence of cutting and
			patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that
			would, in Engineer's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has
			been cut and patched in a visually unsatisfactory manner.

1 **1.5. WARRANTY**

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- A. Existing Warranties: Remove, replace, patch, and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.
 - B. All cutting and patching work performed under this contract shall be warranted like new work as defined by the Specification governing the work.

PART 2 - MATERIALS

9 2.1. GENERAL

- A. Comply with requirements specified within other sections of the Specifications.
- B. In-Place Materials: Use materials identical to existing in-place materials. For exposed surfaces use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - 1. If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

16 PART 3 - EXECUTION

- 18 **3.1. EXAMINATION**
 - A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions havebeen corrected.

24 3.2. PREPARATION

- 25 A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection
 from adverse weather conditions for portions of Project that might be exposed during cutting and patching
 operations. If the failure to protect, or the lack of protection, of in-place construction and/or existing conditions
 results in damage, the contractor shall be responsible for repair to previous condition.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
 D. Existing Utility Services and Mechanical/Electrical Systems: Where existing services/systems are required to be
- removed, relocated, or abandoned, bypass such services/systems before cutting to eliminate interruption to
 occupied areas.

35 3.3. PERFORMANCE

36 General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the Α. 37 earliest feasible time, and complete without delay. 38 1. Cut in-place construction to provide for installation of other components or performance of other construction, and subsequently patch as required to restore surfaces to their original condition. 39 40 Β. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, 41 including excavation, using methods least likely to damage elements retained or adjoining construction. If 42 possible, review proposed procedures with original Installer; comply with original Installer's written 43 recommendations. 44 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and 45 chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance 46 of adjacent surfaces. Temporarily cover openings when not in use. 2. 47 Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces. Concrete or Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill. 48 3. 49 4. Excavating and Backfilling: Comply with requirements in applicable Division 3I Sections where required by 50 cutting and patching operations. 51 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, 52 valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other 53 foreign matter after cutting. Proceed with patching after construction operations requiring cutting are complete. 54 6. 55 C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following 56 performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and 57 comply with installation requirements specified in other Sections.

1		D.	Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of
2			installation.
3			
4	3.4.	CLEAI	NUP AND RESTORATION
5 6		Α.	Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
7			1. Clean piping, conduit, and similar features before applying paint or other finishing materials.
8			 Restore damaged pipe covering to its original condition.
9			3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another,
10			patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish,
11			color, texture, and appearance. Remove in-place floor and wall coverings and replace with new
12			materials, if necessary, to achieve uniform color and appearance.
13			4. Where patching occurs in a painted surface, apply primer and intermediate paint coats over the patch
14			and apply final paint coat over entire unbroken surface containing the patch. Provide additional coats
15			until patch blends with adjacent surfaces.
16			5. Ceilings: Patch, repair, or re-hang in-place ceilings as necessary to provide an even-plane surface of
17			uniform appearance.
18			6. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weather tight
19			condition.
20			7. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint,
21			mortar, oils, putty, and similar materials.
22			8. Any smoke and fire caulking that has been disturbed must be replaced by the Contractor as required by
23			code.
24			
25			
26			END OF SECTION
27			

			SECTION 01 74 13 PROGRESS CLEANING
-			
	1.1.		
	1.2.		NS
	1.3.	-	
	2.1.		AND EQUIPMENT
	3.1. 3.2.		3
	3.2. 3.3.		
	3.3. 3.4.		
	3. 4 . 3.5.		
	5.5.	CALL BACK WORK	
PART	1-0	ENERAL	
1.1.	SU	MMARY	
	A.		ution of this contract all contractors shall be responsible for maintaining the project site
		_	ss as described in this specification.
	В.		also comply with the requirements for cleaning as described in other specifications.
	C.	Work included in this	s specification shall include but not be limited to:
		1. Safety Cleanin	ng
		Project Site C	leaning
		Progress Clea	ning
		4. Final Cleaning	
1 2	DE		
1.2.		ATED SPECIFICAITONS	Draduct Doguizamente
	А. В.	Section 01 60 00 Section 01 74 19	Product Requirements Construction Waste Management and Disposal
	Б. С.	Section 01 74 19	Protecting Installed Construction
	С.	50001017000	
1.3.	QU	ALITY ASSURANCE	
	Α.	The General Contract	tor (GC) shall conduct daily inspections, more often if necessary, of the entire project site
		ensure the requirem	ents of cleanliness are being met as described within these specifications.
	В.		comply with other regulatory requirements as they apply to waste recycling, reuse, hauli
			ments of any governmental authority having jurisdiction.
	C.		the right to have work done by others in the event any contractor fails to perform cleani
		as described within t	hese specifications. The cost of any Owner provided cleaning shall be charged to the
		contractor through a	deduct change order.
DADT	г э р	RODUCTS	
<u>r An</u> i	2 - F		
2.1.	CLE	ANING MATERIALS AND	-
	Α.		provide all required personnel, equipment, and materials necessary to maintain the
			nliness as described in this specification.
	В.		iterials and equipment that are compatible with the surface being cleaned, as
	-		e manufacturer, or as approved by the A/E.
	C.	, .	terials, equipment, and methods as recommended in the manufacturers care and use g
		of the material, finish	n or equipment being cleaned.
PART	Г <u>З</u> -Е	<u>KECUTION</u>	
3.1.		ETY CLEANING	
	Α.		be responsible for safety cleaning as required by OSHA and other regulatory requiremen
		as applicable.	
	В.		include but not be limited to the following:

		1. All work areas, passageways, ramps, and stairs shall be kept free of debris, scrap materials, pallets, and other large items that would obstruct exiting routes. Small items such as tools, electrical cords, etc are
		picked up when not in use.
		2. Form and scrap lumber shall have nails/screws removed or bent over. Lumber shall be neatly stacked in
		an area designated by the GC.
		3. Spills of oil, grease, and other such liquids shall be cleaned immediately or sprinkled with sand/oil-dry first, then cleaned.
		 Oily, flammable, or hazardous items shall be stored in appropriate covered containers and storage
		devices unless actively being used.
		5. Oily, or flammable rags, and other such waste shall only be disposed of in authorized covered container
		6. Disposal by burning shall not be allowed at any time.
3.2.	PROJ	ECT SITE CLEANING
	A.	This section applies to the general cleanliness of the project site as a whole for the duration of the execution of
		this contract.
	В.	Exterior Project Site Areas
		1. The GC and other Contractors as appropriate shall ensure the following levels of cleanliness are applied
		to the exterior project site areas.
		a. The overall appearance of the project site is neat and orderly. Defined areas for material storag
		material waste, job trailers, and the project area are clean and well maintained.
		b. The construction fence is maintained, erect with no gaps, and properly posted per all regulatory
		requirements.
		 All erosion control measures are properly maintained, cleaned, and repaired as necessary. All loss materials (construction or waste) are properly tied or weighted down to resist blowing
		 All loose materials (construction or waste) are properly tied or weighted down to resist blowing. All construction materials are properly covered with fully functional target or plastic wrap.
		e. All construction materials are properly covered with fully functional tarps or plastic wrap, protected from the weather, coverings are tied, strapped, or weighted down to resist blowing.
		f. Dust control is applied as necessary or as required by any regulatory requirement.
	C.	Interior Project Site Areas
	с.	1. All Contractors shall ensure the following levels of cleanliness are applied to the interior project site
		areas.
		a. The overall appearance of the project site is neat and orderly. Defined areas for material storag
		material waste, and project area are clean and well maintained.
		b. Stored materials are kept in original shipping containers whenever possible. Stored materials no
		in shipping containers are properly stored and protected according to other applicable
		specifications.
		c. All scraps and debris shall be properly disposed of as often as necessary to keep work areas,
		passageways, stairs, and ramps free of debris and clear for emergency exiting.
		d. Boxes, pallets, and other such shipping containers, are broken down, stored in a consolidated ar
		or, disposed of as often as is necessary.
		e. Hand tools, supplies, materials, electrical cords not being used are picked up and sptored in gang
	D	boxes, not left as walking hazards in work areas, passageways, etc.
	D.	Job Trailer
		 The interior of the job trailer shall be kept clean and available as a work space at all times. The GC shall ensure that the following is provided for within the job trailer:
		a. Meeting space including tables and chairs.
		 b. Sufficient space for all contractors to access the official construction documents, provide update
		etc.
3.3.	DPOC	SRESS CLEANING
5.5.	A.	This sub-section shall apply to all Progress Cleaning prior to the installation of finishes, fixtures, and trim (IE
		rough-in).
		1. For the purposes of this section "clean" shall be defined as a level of cleanliness free of dust and other
		material capable of being removed by use of reasonable effort using a good quality janitor broom and
		shop-vac.
		2. Daily cleanings shall be conducted by all contractors at the end of the work day as follows:
		a. Debris in excavated areas shall be removed prior to backfill and compaction.
		b. Debris in wall cavities, chase spaces, etc shall be removed prior to enclosing the spaces.
		c. Large items shall be properly stored, returned to designated areas, or disposed of as necessary.

1			d. Loose materials shall be properly secured.
2			e. Flammable or hazardous materials are properly stored or disposed of.
3			3. Weekly cleaning shall be conducted by all contractors as designated by the GC. Weekly cleanings shall
4		_	include all the above for a daily cleaning and other necessary cleaning as designated by the GC.
5		В.	This sub-section shall apply to Progress Cleaning in preparation for the installation of finishes, fixtures, and trim.
6			a. Surfaces receiving finishes shall be thoroughly cleaned prior to contractors applying finish
7			materials. The GC shall be responsible for inspecting the area and surfaces being cleaned for
8			finish prior to the sub-contractor applying the finish. This shall include but not be limited to the
9			following:
10			i. Wall surfaces shall be wiped clean of dirt and oily residues, vacuumed free of dust, and
11			shall be free of surface imperfections prior to painting or installing wall coverings. ii. Metal surfaces shall be wiped clean of dirt and oily residues, and be free of surface
12 13			 Metal surfaces shall be wiped clean of dirt and oily residues, and be free of surface imperfections prior to painting.
15 14			iii. Flooring shall be broom swept of large and loose items then vacuumed clean of dust and
14			small particles, and damp mopped clean and dried prior to installing any flooring finish.
16			Additional cleaning may be required depending on the preparation requirements
17			recommended by the flooring material manufacturer.
18		C.	This sub-section shall apply to Progress Cleaning after the installation of finishes, fixtures, and trim.
19		с.	1. For the purposes of this section "clean" shall be defined as a level of cleanliness free of dust and other
20			material capable of damaging or visually disfiguring finished work, finishes, fixtures, and trim.
21			 Progress Cleaning at this point in the contract shall be conducted immediately as follows:
22			a. Dust, dirt, etc shall be swept and vacuumed off of finish flooring and trim.
23			b. Liquid spills shall be cleaned up according to the spill type. This shall include drips and spills
24			caused by paint, stain, sealants, and other such items.
25			3. The Contractor(s) at no additional cost to the Owner shall be responsible for replacing any finished work,
26			finishes, fixtures, and trim damaged or disfigured because of inadequate or improper cleaning.
27			
28	3.4.	FINA	. CLEANING
29		Α.	As noted in Specification 01 29 76 Progress Payment Procedures, Progress Payment Milestone Schedule, Final
30			Cleaning shall not be conducted prior to requesting the 90% contract total progress payment and all of the
31			following shall be complete:
32			1. All final regulatory inspections including but not limited to Building Inspection Department and Madison
33 34			Fire Department inspections have been successfully completed. 2. All Quality Management Observation (QMO) reports have been closed out.
34 35			 All Quality Management Observation (QMO) reports have been closed out. All Demonstration and Training has been completed.
36			 All Attic Stock has been consolidated and located to its designated area
37			 All protection for installed construction shall be removed prior to final cleaning by the contractor
38			responsible for providing the protections. This shall include the removal of any adhesive residues left
39			behind from tapes. Contractors shall only use manufacturer authorized cleaning materials for removing
40			adhesives, etc.
41		В.	For the purposes of this section "clean" shall be defined as a level of cleanliness generally provided by skilled
42			cleaners using commercial quality building maintenance equipment and materials.
43		C.	The GC shall be responsible for ensuring that all requirements under this section are being met.
44		D.	General Requirements
45			1. Employ experienced personnel or professional cleaners for final cleaning as necessary for the areas or
46			equipment being cleaned.
47			2. Cleaning equipment used shall be commercial grade equipment commonly used by professional cleaners.
48			3. Cleaning equipment and materials shall be cleaned, rinsed, or replaced to ensure a uniform level of
49			cleanliness is being maintained during the final cleaning. This shall include but not be limited to the
50			following:
51			a. Vacuum cleaner bags and/or filters are changed and/or cleaned as often as necessary.
52			b. Dust & wipe down rags are washed, rinsed, or replaced before starting each room.
53			c. Mopping equipment
54 E E			i. Mop water for washing shall have cleaning solution added to the amount and temperature
55 56			per manufacturer's recommendations. Mop washing water shall be replaced often to
56 57			maintain the levels of the cleaning solution and temperature required.
57 58			ii. Mop water for rinsing shall remain clean, clear, and be replaced as often as necessary.iii. Mop heads shall be rinsed often and replaced as necessary.
0			
	MADI	SON FIR	E STATION 05 WALL REMOVAL &

1			iv. Mop heads and buckets shall be thoroughly rinsed with each change of water.
2			v. Only new mop heads shall be used for rinsing.
3		Ε.	Refer to all other specifications in this contract for specific requirements regarding final cleaning of finishes,
4			fixtures, equipment, etc.
5		F.	Exterior Cleaning shall include but not be limited to the following:
6			1. All exterior glazing surfaces have been professionally cleaned and are free of dust and streaking.
7			2. Metal roofs, siding, and other surfaces shall be clean of dirt and free of splashed or excess materials such
8			as sealants, mortar, paint, etc.
9			3. All exterior furnishings shall be clean, waste receptacles shall be empty.
10			Paved areas shall be clean, free of dirt, oily stains and other such blemishes
11			Exterior lights and diffusers are clean and free of dust.
12		G.	Interior Cleaning shall include but not be limited to the following:
13			1. Remove all labels, stickers, tags, and other such items which are not required by code as permanent
14			labels.
15			2. All interior glazing surfaces, including mirrors, have been professionally cleaned and are free of dust and
16			streaking.
17			3. All interior surfaces have been cleaned of excess materials such as paint, sealants, etc and have been
18			wiped free of dust.
19			Interior metals, fixtures, and trim have been cleaned free of dust and oily residues
20			5. Carpet flooring has been thoroughly cleaned; vacuumed free of dust, excess glues and other stains
21			removed per manufacturers use and care instructions.
22			6. Resilient flooring has been thoroughly cleaned; vacuumed free of dust, excess glues and other stains
23			removed, mopped and buffed per manufacturers use and care instructions.
24			7. Interior non-occupied concrete floors shall be broom cleaned, vacuumed free of dust, excess glues and
25			other stains removed per manufacturers use and care instructions.
26			8. Light fixtures, lamps, diffusers and other such items have been dusted and cleaned as necessary.
27			
28	3.5.	CALL	BACK WORK
29		Α.	The GC shall be responsible for ensuring that any contractor returning to the project site for completion or
30			correction work has re-cleaned and restored the area to the levels described in section 3.4 above upon
31			completion of the work. This shall include but not be limited to the following:
32			 The immediate area(s) where work was completed.
33			Adjacent areas where dust or debris may have traveled.
34			3. Other areas occupied during the completion of the call back work.
35			Path of entrance/exit, to/from the area(s) of work.
36			
37			
38			
39			END OF SECTION
40			

		SECTION 01 74 19 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
ρδδτ	1 – 6	ENERAL
	1 – Gi L.1.	SUMMARY
	L.2.	RELATED SPECIFICAITONS
	L.3.	CITY ORDINANCES
	-	RODUCTS – THIS SECTION NOT USED
		ECUTION
	3.1.	GENERAL GUIDELINES FOR ALL WASTES
3	3.2.	GUIDELINES FOR RECYCLABLE, RE-USABLE, AND SALVAGEABLE WASTE
3	3.3.	GUIDELINES FOR DISPOSAL OF WASTES
PART	<u>1 – G</u>	ENERAL
1.1.	SUN	ЛМАRY
	A.	This specification includes administrative and procedural requirements for the recycling, re-use, salvaging, a
		disposal of non-hazardous construction and demolition waste.
	В.	The General Contractor (GC) shall be fully responsible for complying with all applicable ordinances and other
		such regulatory requirements during the execution of this contract.
1.2.	REL	ATED SPECIFICAITONS
	Α.	01 29 76 Progress Payment Procedures
	В.	01 33 23 Submittals
	C.	01 77 00 Closeout Procedures
	D.	Other Divisions and Specifications that may address the proper disposal of construction or demolition waste
		pertains to work being conducted under that particular specification.
1.3.	CITY	/ ORDINANCES
	Α.	There are two (2) Madison General Ordinances (MGO) that the City of Madison has regarding construction a
		demolition waste.
		1. MGO 10.185, Recycling and Reuse of Construction and Demolition Debris, describes the requirement
		associated with this ordinance including definitions, documentation requirements, and penalties.
		2. MGO 28.185, Approval of Demolition (Razing, Wrecking) and Removal, describes the requirements
	~	associated with applying for and receiving a demolition permit.
	В.	All City of Madison, Board of Public Works, contracts being conducted by City Engineering, Facility Manager
		for construction, remodeling, or demolition shall comply with the above ordinances regardless of project types
		size.
PART	2 – P	RODUCTS – THIS SECTION NOT USED
<u>raki</u>	3 - EX	<u>(ECUTION</u>
3.1.	GEN	IERAL GUIDELINES FOR ALL WASTES
	A.	Recycle all paper and beverage containers used by workers, sub-contractors, suppliers and visitors to the pro-
		site.
	В.	All revenues, savings, rebates, tax credits, and other such incentives received from recycling, reusing, or
		salvaging waste materials shall accrue to the GC unless specified otherwise in the contract documents.
	C.	Separate recyclable, reusable, and salvageable waste from other waste materials, trash, and debris except w
		Waste Management Disposal Company allows comingled waste materials, see section 1.8.D above.
		1. Separate by type in appropriate containers or designated areas according to the approved waste
		management plan away from the construction area. Do not store within the drip lines of existing tre
		2. Inspect containers and bins frequently for contamination and inappropriately sorted materials. Rem
		contaminated materials and resort as necessary.

1			3. Stockpile bulk materials such as sand, topsoil, stone, etc., on site away from the construction area and						
2			without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water, and						
3			cover to prevent windblown dust. Do not store within the drip lines of existing trees.						
4			4. Whenever possible store items off the ground and/or protect them from the weather.						
5 6	3.2.	.2. GUIDELINES FOR RECYCLABLE, RE-USABLE, AND SALVAGEABLE WASTE							
7	5.2.	A.	The following guidelines is not a complete or all inclusive list and shall be adjusted as needed by the methods						
8		7	and procedures identified in the Waste Management Plan.						
9		В.	Asphalt Paving: Break-up into transportable pieces or grind, transport to an authorized recycling facility.						
10		C.	Carpet and Pad: Separate carpet and pad scraps, containerize and transport to an authorized recycling facility.						
11		D.	Ceiling System Components: Suspended ceiling system components shall be sorted by material type as follows:						
12			1. Broken, cut, or damaged tiles shall be containerized, transport to an authorized recycling facility.						
13			2. Damaged, or cut tracks, trim and other metal grid system components shall be sorted with other metals						
14			of similar types, palletize, transport to an authorized recycling facility.						
15		Ε.	Clean Fill: When allowed by Division 31 Specifications; concrete, masonry, stone, asphalt pavement, sand and						
16			other such materials may be used as clean fill on this project site. The GC shall verify with the Project Engineer,						
17			Structural Engineer, or Civil Engineer as necessary prior to using any materials as clean fill. Materials shall be						
18			processed, placed, and compacted as specified. If not being re-used on site, transport to an authorized recycling						
19		_	facility.						
20		F.	Clean Wood Materials: Including but not limited framing cutoffs, wood sheathing or paneling materials,						
21			structural or engineered wood products, and pallets or crates. Clean Wood shall be free of paints, stains, oils,						
22 23			preservatives and other such contaminates.						
25 24			 Useable pieces shall be sorted by type and dimension, bundled and transported off site by the GC or returned to the supplier. 						
24			 Non-useable pieces shall be palletized or containerized, transport to an authorized recycling facility. 						
26			 Clean, uncontaminated sawdust and wood shavings shall be bagged, transport to an authorized recycling 						
27			facility.						
28		G.	Concrete: Break-up into transportable pieces, remove all reinforcing and other metals, transport to an						
29			authorized recycling facility.						
30		Н.	Glass Products: Shall be sorted by types, do not include light fixture lamps and bulbs. Products broken in						
31			shipment shall be returned to the supplier. Broken or cracked items still in frames shall be taped to prevent						
32			further breakage and injury to workers. Transport to an authorized recycling facility.						
33		I.	Gypsum Board: Stack large clean pieces on wooden pallets or container, store in a dry location, transport to an						
34			authorized recycling facility.						
35		J.	Light Fixture Lamps and Bulbs: Fluorescent tubes shall be containerized, transport to an authorized recycling						
36		V	facility.						
37 38		К.	Masonry and CMU: Remove all metal reinforcing, anchors, and ties, clean undamaged pieces and neatly stack on pallets, transport damaged pieces to an authorized recycling facility.						
39		L.	Metals: Sort metals by type as follows, this does not include piping:						
40		L.	1. Architectural metals including but not limited to siding, soffit, and roofing panels shall be sorted by						
41			material, palletize or bundle as needed and transport to an authorized recycling facility.						
42			2. Structural steel, sort by size and type; palletize and transport to an authorized recycling facility.						
43			3. Miscellaneous metals such as aluminum, brass, bronze, etc shall be sorted by type, containerized or						
44			palletized as necessary, transport to an authorized recycling facility.						
45		М.	Packaging and shipping materials						
46			1. Cardboard boxes and containers: Breakdown all cardboard boxes and containers into flat sheets. Bundle						
47			and store in a dry location until transported for recycling.						
48			2. Pallets:						
49			a. Whenever possible require deliveries using pallets to remove them from the project site.						
50			b. Neatly stack pallets in preparation for reusing them or providing them to other companies for						
51 52			salvage or re-use.						
52 53			c. Break down pallets into component wood pieces that comply with the requirements for recycling clean wood materials. Neatly stack or palletize pieces in preparation for transportation.						
55 54			3. Crates: Break down crates into component wood pieces that comply with the requirements for recycling						
55			clean wood materials. Neatly stack or palletize pieces in preparation for transportation.						
56			 Polystyrene Packaging: Separate and bag materials. 						
			, , - · · · · · · · · · · · · · · · · ·						

1		N.	Piping and conduit: Reduce all piping and conduit to straight lengths, sort and store by size, material and type.
2			Remove supports, hangers, valves, boxes, sprinkler heads, and other such components, sort and store by size,
3			material and type. Transport to authorized recycling facilities according to material types.
4		О.	Roofing: Roofing materials shall be sorted and containerized by type, transport to authorized recycling facilities
5			according to material types.
6		Ρ.	Site-Clearing Waste: Sort all site waste by type.
7			1. Only stockpile soils types and quantities required for re-use on the project site. All remaining quantities
8			shall be transported off site to an authorized facility that receives such materials.
9			2. Brush, branches, and trees with no marketable re-use shall be transported to facilities for chipping into
10			mulch.
11			3. Trees with a marketable re-use shall be salvaged and transported to facilities that specialize in processing
12			trees for future use as wood products.
13			
14	3.3.	GUID	DELINES FOR DISPOSAL OF WASTES
15		Α.	The following guidelines shall be adjusted as needed by the methods and procedures identified in the Waste
16			Management Plan.
17		В.	Any waste that is contaminated, organic, or cannot be recycled, re-used, or salvaged shall be legally disposed of
18			in an authorized landfill or incinerator. Disposal methods shall follow all applicable regulatory requirements.
19		C.	No waste material of any kind, except those types designated as clean fill in section 3.4 above, shall be allowed
20			to be buried on the project site at any time.
21		D.	No burning of any kind of waste material shall be permitted on this project site at any time.
22		Ε.	Paint and Stain: Paints, stains, and their containers shall be disposed of as follows:
23			1. Whenever possible containers should be thoroughly cleaned immediately after emptying and sorted with
24			as appropriate (metal or plastic) for recycling
25			2. Empty containers, regardless of type or base material, may be disposed of with lids off with general
26			garbage.
27			3. Latex paint may be placed with general garbage if properly solidified as follows:
28			a. Small amounts (an inch or less in can): Remove lids and allow paint to dry out in the can and
29			harden. Protect cans from rain and freezing.
30			b. Large amounts (more than one inch): Mix paint with equal amounts of cat litter, stir and allow to
31			completely dry. Alternate method: mix with commercial paint hardener.
32			4. Oil-based or combustible paints and stains, regardless of liquid or solid, shall be transported to an
33			approved facility that takes such items such as Dane County Clean Sweep Sites.
34		F.	Treated Wood Materials: Treated wood materials including but not limited to wood that has been painted,
35			stained, or chemically treated shall not be recycled or incinerated.
36			
37			
38			
39			END OF SECTION
40			

1				SECTION 01 76 00				
2			PROTECTING INSTALLED CONSTRUCTION					
3								
4	PART	1 – G	ENERAL .					
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21								
22	PART	1 – G	ENERAL					
23								
24	1.1.		MMARY					
25		Α.	•	purpose of this specification is to provide clear responsibilities, guide lines, and requirements related to				
26				iding protection to already installed construction.				
27		В.		ady installed construction shall include but not be limited to the following:				
28			1.	Any existing site feature such as pavement, curbs, drainage features, utilities, landscaping features (trees,				
29				shrubbery, plantings, flagpoles, etc) and other such exterior items not associated with the building				
30				whether on or adjacent to the project site.				
31			2.	Any existing structure on or adjacent to the project site.				
32			3.	Any existing interior work that may be adjacent to the new work including all paths of ingress/egress to				
33			_	areas associated with accessing the Work.				
34			4.	Any existing feature of any kind within the public right-of-way that may be on the project site property,				
35		_		adjacent to the project site or across the street from the project site.				
36		C.		ontractors shall be familiar with the specifications of their Division of Work for specific requirements on				
37		_	•	ection of the Work.				
38		D.		requirements noted within this specification do not relieve any contractor of the responsibility for				
39				pliance with any code, statute, ordinance, or other such regulatory requirement having jurisdictional				
40			autho	ority over these contract documents.				
41		~						
42	1.2.			SURANCE				
43		Α.		all be the responsibility of every contractor and worker assigned to the project to be diligent in protecting all				
44				ing work, and newly installed construction.				
45		В.		all be the General Contractors' (GC) responsibility under the contract to provide all reasonable protection				
46				nods, materials, or precautionary measures required to protect new or existing construction as described in				
47				in this specification to the project as a whole.				
48 40			1.	The GC shall be responsible to ensure any damaged new or existing construction is repaired or replaced				
49 50			n	at no additional cost to the Contract.				
50 51			2.	The GC at his/her discretion may direct other contractors to provide and maintain protection of				
51 52				completed work associated with their Division of Work. I.E.: The carpet installer may be required by the				
52 52		c	lt ab -	GC to provide carpet protection along traveled paths, ingress/egress, etc after installation.				
53 54		C.		all be the responsibility of the GC to ensure that all materials being used to protect installed construction are				
54 55				patible with, and/or adjacent to, the materials being protected. This shall include but not be limited to the erial used as covering, tapes used to fasten protective materials, etc.				
			mate	אמי משכע מש כטיבווווק, נמףכש משכע נט ומשנכוו ףוטנכנוויב וומנכוומש, כננ.				

1.3.		ATED SPECIFICATIONS
	A.	Parts of this specification will reference articles within "The City of Madison Standard Specifications for Publi Works Construction".
		1. Use the following link to access the Standard Specifications web page:
		http://www.cityofmadison.com/business/pw/specs.cfm
		 Click on the "Part" chapter identified in the specification text. For example if the specification says "Refer to City of Madison Standard Specification <u>2</u>10.2" click the link for Part II, the Part I
		PDF will open.
		b. Scroll through the index of Part II for specification 210.2 and click the text link which will take to the referenced text.
		c. City Standard Detail Drawings (SDD) may be located from the index in Part VIII.
	В.	Section 01 60 00 Product Requirements
	C.	Section 01 74 13 Progress Cleaning
PART	2 - PR	<u>ODUCTS</u>
2.1.	FFNC	CING MATERIALS AND BARRICADES
	A.	Except where noted in other areas of the construction documents the responsible contractor may provide ar
		the following that sufficiently provide a sturdy physical barrier and/or visual barrier as necessary for the intended application.
		1. Standard orange construction barrels each with a standard rubber base ring and reflective tape
		a. Provide flashing amber lights as needed to increase night time visibility
		2. Steel "T" style fence posts
		 4'0" high standard orange construction fence
		4. Traffic barricades
		5. Jersey barriers
		6. Other types of fencing or barricades typically used in the construction industry
	В.	The contractor responsible for providing the fencing materials and barricades shall also be responsible for
		maintaining them. This shall include but not limited to fixing damaged fencing, standing up barrels that have
		been knocked over, realigning barrels, and ensuring flashing lights are fully operational at all times.
	C.	The following fencing and barricade designations, and their use descriptions shall be used throughout this specification to provide uniformity in describing protection requirements.
		 Type A, Jersey Barriers, to be used as permanent blocking devices to deny access to alternate project
		entrances or exits.
		2. Type B, Traffic Barricades, to be used as temporary blocking devices to deny access to alternate proje
		site entrances or exits.
		3. Type C, Construction Barrels without construction fencing shall be used for lane closures, temporary
		blocking devices to deny access and the protection of single locations (I.E. identify the location of an
		access structure) that do not require fencing.
		4. Type D, Construction Barrels with construction fencing where it becomes necessary to surround an ol
		with a complete visual barricade and it is impractical or unacceptable to install fence posts. The surrous shall be constructed in such a manner as to provide a buffer zone around and access to the item bein
		protected.
		5. Type E, Steel "T" Fence Posts with construction fencing to surround an object with a complete visual
		barricade and it is practical to install fence posts. The surround shall be constructed in such a manne
		to provide a buffer zone around and access to the item being protected.
		 Type X, Other fencing or barricade types that may be designated and detailed within the constructior documents shall use additional alpha numeric designations.
2.2.	EROS	SION CONTROL PROTECTION
	A.	Refer to City of Madison Standard Specification 210.2 for authorized materials associated with erosion contr materials.
2.3.	INTF	RIOR FINISH PROTECTION MATERIALS
	A.	Except where noted in other areas of the construction documents or this specification the responsible
		contractor:
		1. Shall not provide the cheapest or least effective method as an effort to meet any protection requirem

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1			2. Shall provide materials of sufficient quality, and durability to provide adequate protection based on the
2			seasonal conditions and the anticipated duration at the time the protection will be needed.
3			3. Shall provide sufficient quantity of protection material to protect the construction as needed.
4		В.	Prior to installing protective measures the responsible contractor shall propose to the GC, Project Engineer (PE)
5			and City Project Manager (CPM) the proposed plan for protection, materials to be used and samples as
6			necessary.
7			1. The PE and CPM reserve the right to disapprove any proposed method and/or material and/or make
8			alternate proposals.
9			
10	PARI	3 - EXE	CUTION
11	2.4	CENIE	
12 13	3.1.		RAL EXECUTION REQUIREMENTS
13 14		Α.	The GC shall be responsible for ensuring all of the following procedures and requirements are implemented as needed for the duration of the Work performed under this contract.
14 15		В.	The GC shall also be responsible for the following:
15		Б.	 Reporting any incident of damage to existing property, right-of-way, or utility to the CPM immediately
10			upon rendering the incident safe, and notifying emergency response teams, and emergency utility crews
18			as needed.
19			 Conduct a site walk through prior to leaving at the end of each day to assess:
20			a. Protection measures are properly in place, provide correction actions as necessary.
20			 b. Note damage to existing completed work and schedule repair/replacement as needed.
22			 Ensure all contractors and workers are being diligent in protecting existing work, and newly installed
23			construction.
24			
25	3.2.	PROT	ECT ADJACENT PROPERTIES
26		Α.	Whenever possible through the design process the City of Madison shall have previously provided notice to
27			adjacent property owners that work will be occurring on or near their property. The City of Madison shall also
28			have obtained any permanent or temporary easements that may be necessary to complete any Work on
29			adjacent properties.
30		В.	It shall be the responsibility of the GC to do the following for all Work under this contract being performed on or
31			adjacent to the property line:
32			1. Contact the adjacent property owner and provide him/her with information on the work to be done,
33			equipment to be used, and estimated duration of the work. Information to be updated and
34			communicated to property owner(s) as construction progresses and site conditions change.
35			a. If any adjacent property is a rented or leased space the GC shall also make contact and provide
36			the same information to the tenants.
37			b. Determine from the owner and/or tenants if there are any concerns for children, pets, special
38			plantings, or other concerns.
39			2. Discuss the following with all contractors performing work on or near the property line.
40			a. Work to be completed and timeline.
41			b. Concerns of adjacent property owners/tenants from item 1 above.
42			c. Which protective measures will be necessary to protect adjacent properties and address the
43			concerns of adjacent property owners/tenants.
44			3. Ensure all protective measures are placed and maintained during the execution of Work on or adjacent to
45			the property line. Interact with the adjacent property owners/tenants as needed.
46		C.	Any contractor doing work on or adjacent to the property line shall install and maintain any protective measure
47			identified in the contract documents, this specification, or as directed by the GC.
48		D.	The GC shall be responsible for restoring any damage to structure and property located on or adjacent to the
49			property line.
50			1. Restoration shall include but not be limited to repair or replacement using like materials and finishes to
51			its original condition or better.
52			2. Restoration of landscaping materials shall include watering of any seed, sod, or other planting of any kind
53		_	for a reasonable period of time to encourage germination and root development.
54		Ε.	The GC shall keep the CPM informed directly to any issues pertaining to adjacent property owners and tenants.
55			
56	3.3.		ECT LANDSCAPING FEATURES
57		Α.	Except where specifically stated in other areas of the construction documents the following minimal protection
58			requirements shall apply under this section.
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		OVEMEN	
	CONIT		
		 Whenever possible do not install new landscape features until exterior building construction has been completed, equipment such as scaffolding and lifts are no longer needed and have been removed, and 	
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		heavy equipment operation is no longer required.	
		 Whenever possible remove and temporarily store all existing landscape features such as benches, waster 	
		receptacles, signage, and other such features that will be within the area of Work that can be removed.	
		 Landscape features that cannot be removed such as flag poles, light poles, light bollards, etc. shall be 	
		protected with Type D fencing for areas on pavement or Type E fencing for areas on soil.	
		4. Planting beds shall be protected using Type E fencing around the exposed perimeter of the planting bed	
		as needed.	
		5. The City of Madison Standard Specification 107.13 shall apply to all tree protection in and around the	
		project site at all times.	
3.4.	PROT	ECT UTILITIES	
	Α.	The contractor shall be responsible for notifying all utilities to determine emergency response procedures and	
		protection requirements prior to installing any construction protection.	
		1. This includes requesting utility marking through Diggers Hotline.	
		a. Call 811 or 1-800-242-8511 to request a public utility locate	
		b. For emergency locate call (262) 432-7910 or (877) 500-9592	
		2. Contact the Owner and CPM for any available private utility information on the property that may be	
		available prior to calling a private utility locating company.	
	В.	Except where specifically stated in other areas of the construction documents the following minimal protection	
		requirements shall apply under this section.	
		1. Hydrants, lamp posts, electrical transformers, and other utility pedestals shall be protected with Type D	
		fencing for areas on pavement or Type E fencing for areas on soil. Fence posts shall be located so as to	
		not be directly over the utility main.	
		2. Storm sewer structures in pavement shall have proper inlet protection according to City of Madison	
		 Standard Specification 210.1(g) and Type C Construction Barrels when necessary. Storm sewer structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and other landscaped areas shall have proper inlet protection according in the seven structures in turf and seven structures in turf areas shall have proper inlet protection according in the seven structures in turf areas shall have proper structures in turf areas structures in turf	
		City of Madison Standard Specification 210.1(g) and Type E fencing for areas on soil.	
		 Stormwater management features such as greenways, retention/detention ponds, bio-filtration ponds 	
		and other such features shall be properly protected according to the appropriate erosion control	
		measure specified on the Erosion Control Plan. See multiple sections of City of Madison Standard	
		Specification 210.1	
		a. For the protection of hard to see items such as structures, castings, inlets, etc. in grassy areas	
		provide Type E fencing for areas on soil.	
		c. For the protection of storm water management features having special soils and plants such as	
		bio-filtration ponds provide Type E fencing for areas on soil.	
		5. Other structures and covers including but not limited to cleanouts, wiring hand holes, valve boxes, acce	
		structures, grease trap structures, etc shall be protected as follows:	
		a. Provide Type E fencing for areas on soil.	
		b. When paving operations are complete provide a construction barrel or cone near structures as	
		necessary depending on required heavy construction traffic.	
3.5.		ECT PUBLIC RIGHT OF WAY	
	Α.	Except where specifically stated in other areas of the construction documents the following minimal protection	
		requirements shall apply under this section.	
		1. All public right-of-way (area from behind the sidewalk to the centerline of the street) shall remain open	
		and accessible except during periods of active work. At such times the public right of way shall be	
		properly closed and signed as referenced in City of Madison Standard Specification 107.9.	
		 Bus stops and bus stop structures shall remain accessible at all times. Tofficial standard the file standard the file standard the stan	
		3. Traffic signage and traffic signals, traffic control boxes shall be protected with Type D fencing for areas or average on soil	
		pavement or Type E fencing for areas on soil.	
		a. Protection at traffic signage/signals shall not obstruct the viewing of the sign/signal for its intended numbers at any time.	
	В.	intended purpose at any time. When additional protection for traffic control is required, the use of barricades, guardrails, lane closures and	
	D.	other such procedures will be detailed within the construction documents.	
	C.	When additional protection for overhead sidewalk cover is required the contract documents shall indicate the	
	N	when additional protection for overhead suewark cover is required the contract documents shall multicle the	

1				
2	3.6.	PROTI	ЕСТ STO	DRED MATERIALS
3		Α.	All con	ntractors shall refer to Specification 01 60 00 Product Requirements for all storage and protection
4			require	ements of building materials and products delivered to the site.
5				
6	3.7.	PROTI	ECT WO	NRK - EXTERIOR
7		Α.	Provid	le all temporary services that may be required to protect the installed material from heat, cold, humidity,
8				hile materials such as concrete, mortar, sealants, paints, etc, are drying and/or curing.
9		В.		trenches, pits, and other such excavations shall be properly covered, lined, or shored as needed during
10		2.		Is of inclement weather to prevent the caving of soils onto existing work in progress. Refer to the
11			•	priate specifications and/or regulatory requirements governing this type of work as necessary.
12		C.		le adequate protection at all openings with heavy duty tarps, plastic sheathing, or wood framing and
12		С.		ning as needed to protect interior work in progress from inclement weather as needed.
13		D.		
		D.		t exterior finishes of all kinds with heavy duty tarps or plastic sheathing as needed while landscaping is
15			-	installed through full germination of seeded areas or installation of filter fabric and mulches to keep dust,
16		-		nd mud off of finished exterior surfaces.
17 18		E.	-	nate specific curb mounting points and provide wood blocking where small vehicles, skid loaders and other equipment may need access to areas being landscaped.
19		F.		le plywood turning pads for skid loaders to turn on to prevent tire marking on new pavement.
20		G.		t permit the parking of vehicles with any kind of fluid leaks to park on new pavement.
21		H.		ontractor shall be responsible for cleaning, repairing, or replacing any completed work or work in progress
22				this specification as deemed necessary by the CPM without additional cost to the contract.
23			under	this specification as deemed necessary by the or in without dualitonal cost to the contract.
24	3.8.		CT WO	NRK - INTERIOR
25	5.0.	A.		C shall do all of the following:
26		Λ.	1.	Provide all temporary services that may be required to protect the installed material from heat, cold,
27			1.	humidity, etc, while materials such as concrete, mortar, sealants, paints, etc, are drying and/or curing.
28			r	
			2.	Provide adequate visual and/or physical protection as needed to protect newly completed interior work
29			2	such as paint, flooring material, sealants, grouts, etc that may be drying and/or curing.
30			3.	Provide adequate space and materials for cleaning boots, tool boxes, supplies, and other items coming
31				into the project site once finish work has begun.
32		_	4.	Clean dirtied areas and repair/replace damaged areas immediately.
33		В.		ontractors responsible for interior work shall be responsible for protecting their work and finishes from dirt,
34			mud, s	snow, spills, splatters, and physical damage after installation as follows:
35			1.	Protect vinyl composite, rubber composite, painted/stained concrete, and tiled flooring as follows:
36				a. Define foot traffic areas and protect with Ramboard Temporary Floor Protection products as a
37				minimum basis of design or other protection product(s) compatible with installed flooring product
38				if Ramboard is not compatible. Products to be used shall be new.
39				i. Tape all edges, seams, etc with a good quality tape that does not leave sticky residue. Do
40				not allow any debris or other material between the installed flooring and the protection
41				material.
42				ii. Repair tears immediately, replace worn areas with like material as necessary.
43			2.	Protect carpeted areas as follows:
44				a. Define foot traffic areas and protect with a minimum of 6mil, clear, polyethylene sheeting 3 feet
45				wide. Products to be used shall be new.
46				i. Tape all edges, seams, etc with a good quality tape that does not leave sticky residue. Do
47				not allow any debris or other material between the installed flooring and the protection
48				material.
49				ii. Repair tears immediately, replace worn areas with like materials as necessary.
50			3.	Protect all finished walls in high traffic areas with Ramboard Temporary Wall protection products or
51			0.	approved equal.
52				i. Tape all edges, seams, etc with a good quality tape that does not leave sticky residue. Do
53				not allow any debris or other material between the installed flooring and the protection
54				material.
55				ii. Repair tears immediately, replace worn areas with like materials as necessary.
			2	
56			3.	Protect counter tops, cabinets, and other finished surfaces with large sheets of thick cardboard or Bamboard products. Do not allow toolboard, finish materials, parts and other such items to be placed on
57 E 0				Ramboard products. Do not allow toolboxes, finish materials, parts and other such items to be placed on finished materials.
58				finished materials.
-	MADIS	ON FIRE	STATIO	N 05 WALL REMOVAL &

1	С.	All protection shall stay in place until the CPM, PE, and GC mutually deem the project is ready for Final Cleaning.
2		The contractors responsible for protecting the work shall be responsible for removing the protection and
3		removing any adhesive residue at that time. Contractors shall only use manufacturer authorized cleaning
4		materials for removing adhesives, etc.
5	D.	Contractors doing work in un-protected areas of finished work shall be required to provide drop cloths and other
6		protection as noted within this specification for the duration of their work.
7		1. Finished areas shall be sufficiently covered to accommodate all equipment, and materials being used to
8		complete the work being done.
9		2. Finished areas shall be sufficiently covered to prevent splatters, over spray, etc when doing touch-up
10		work.
11		3. Contractors who do not provide sufficient protection under this sub-section shall be responsible for any
12		costs associated with cleaning, repairing or replacing already finished construction at no additional cost
13		to the contract.
14		
15		
16		
17		END OF SECTION
18		

		JO, 202							
1	SECTION 01 77 00								
2		CLOSEOUT PROCEDURES							
3 4	PART	1 – G	GENERAL						
5		1.1.							
6	-	1.2.	RELATE	D SPECIFICATION	JS1				
7		1.3.	DEFINIT	IONS					
8	:	1.4.	QUALIT	Y ASSURANCE –	CONSTUCTION CLOSEOUT				
9	:	1.5.	QUALIT	Y ASSURANCE –	CONTRACT CLOSEOUT				
10	PART	2 – P	RODUCTS	6 – THIS SECTION	NOT USED				
11	PART	3 - EX							
12		3.1.			OUT CHECKLIST				
13		3.2.			OUT REQUIREMENTS				
14		3.3.			OUT PROCEDURE				
15		3.4.			EQUIREMENTS				
16	3	3.5.	CONTRA	ACT CLOSEOUT P	ROCEDURE				
17									
18	PARI	1-G	ENERAL						
19 20	1.1.	C 111							
20 21	1.1.	A.	MMARY	ourpose of this s	pecification is to clearly define and quantify the requirements associated with closing a City				
22		А.	•		brks Contract for facility related work.				
22		В.			b distinct but related paths. Each path needs to be properly closed independently in order				
24		υ.		ose the contract					
25			1.		closeout is related to closing out all of the Work associated with the construction				
26				documents.					
27					be the responsibility of all contractors to be fully aware of the required Work and closeout				
28					ements involved in their individual trades.				
29			2.	Contract close	out is related to closing out all of the administrative aspects of the contract in general.				
30					be the responsibility of all contractors to be fully aware of the administrative requirements				
31				require	ed by the contract and to provide the supporting documentation required.				
32			3.	Construction	Closeout must be completed before Contract Closeout can begin.				
33		C.	This s	specification will	provide general knowledge associated with the following areas:				
34			1.		Closeout Requirements				
35			2.		Closeout Procedure				
36			3.		eout Requirements				
37			4.		eout Procedure				
38			5.	Final Payment	and Certificate of Completion				
39									
40	1.2.			ECIFICATIONS					
41		Α.			ew all references to other specifications including specifications relating to the execution of				
42 42		D		on 01 29 76	with their Division or Trade.				
43 44		В. С.		on 01 32 16	Progress Payment Procedures Construction Progress Schedules				
44 45		D.		on 01 74 13	Progress Cleaning				
46		Б. Е.		on 01 45 16	Construction Waste Management and Disposal				
40 47		с. F.		on 01 76 00	Protecting Installed Construction				
48		G.		on 01 78 23	Operation and Maintenance Data				
49		О. Н.		on 01 78 36	Warranties				
50		I.		on 01 78 39	As-Built Drawings				
51		J.		on 01 79 00	Demonstration and Training				
52		K.			is noted in the contract documents signed by the General Contractor				
53					Ŭ ,				
54	1.3.	DE		S					
55		Α.			ce: A letter provided to the City of Madison Building Inspection and signed by the Project				
56					at all Work has been completed to a level that would allow Owner Occupancy and that all				
57			const	ruction is in com	pliance with the construction documents. A copy of this letter is also provided to the				

1			State of Wisconsin Department of Health and Safety as necessary to clear plan review requirements. This letter				
2		п	does not represent construction closeout.				
3		В.	<i>Certificate of Occupancy</i> : The Regulatory letter from the City of Madison Building Inspection Department indicating that all regulatory requirements and inspections have been completed and the building may now be				
4			occupied for its intended use. This letter does not represent construction closeout.				
5 6		C.	<i>Certificate of Substantial Completion</i> : A letter provided by the Department of Public Works, signed by the City				
7		C.	Engineer indicating that Construction activities are substantially complete. This letter does represent				
8			construction closeout and the date of this letter begins the date of the Warranty Period.				
9		D.	Construction Closeout : The point in the contract where all contractual requirements associated the execution of				
10		D.	the Work as described in the plans, specifications, and other documents have been successfully met and the				
11			items described in 1.3.A, .B, and .C above have been completed.				
12		E.	<i>Final Progress Payment</i> : The progress payment associated with achieving Construction closeout as described in				
13		с.	1.3.D above. At this point the contractor may request all monies associated with achieving constitucion closedul as described in				
14			exception of held retainage.				
15		F.	Contract Closeout: The point in the contract where all contractual requirements associated with the City of				
16		••	Madison, Board of Public Works contract has been successfully met.				
17		G.	<i>Final Payment</i> : The final contract payment submittal that may be approved by the City of Madison after all				
18		-	contractual requirements of the Public Works Contract have been met and any remaining monies (retainage)				
19			due to the contractor may be released for the Final Payment.				
20							
21	1.4.	QUA	LITY ASSURANCE – CONSTRUCTION CLOSEOUT				
22		Α.	All contractors shall be responsible for properly executing the construction closeout requirements associated				
23			with their Work as described in the specifications governing their Work.				
24		в.	The GC shall be responsible for all of the following:				
25			1. Ensuring that all contractors have met the construction closeout requirements associated with their				
26			Work.				
27			2. Coordinate the collection of all construction closeout deliverables from all contractors, provide the				
28			deliverables to the Project Engineer and City Project Manager for review as necessary, and ensure all				
29			contractors correct deficiencies of deliverables and resubmit as needed for final acceptance.				
30			3. Ensure all closeout requirements identified in the Construction Closeout Checklist below have been				
31			completed as intended by the construction documents.				
32		~~~~					
33	1.5.	•	LITY ASSURANCE – CONTRACT CLOSEOUT				
34 35		Α.	The City of Madison, Department of Civil Rights (DCR) monitors contract compliance for construction and procurement contracts to ensure that local, state and federal regulations are followed by contractors working on				
36			City of Madison Public Works (PW) projects. DCR will monitor all PW projects from contract award through the				
37			final payment at the close of the project. Contractors will be required to submit reporting paperwork				
38			throughout the PW project process.				
39			1. Contractors are encouraged to visit the web site identified below for additional information, checklists,				
40			forms, and other information provided by DCR as it relates to Contract Compliance.				
41			http://www.cityofmadison.com/Business/PW/contractCompliance.cfm				
42			2. Questions regarding the process should be directed to parties and offices as identified on the various				
43			forms, documents, and instructions or contact:				
44			City of Madison, Department of Civil Rights				
45			210 Martin Luther King Jr. Blvd., Room 523				
46			Madison, WI 53703				
47			(608) 266-4910				
48		В.	All Sub-Contractors have submitted the applicable required documents described in item 1.5.D below to the				
49			General Contractor (GC) for Contract Closeout.				
50		C.	The GC has submitted the required applicable documents described in item 1.5.D below for all contractors to the				
51			appropriate City of Madison Agency per instructions associated with each submittal.				
52		D.	The documents required for submittal to the City of Madison for Contract Closeout may include any/all of the				
53			items listed below depending on contract type. It is the sole responsibility of all contractors to know and submit				
54			the required and complete documentation in a timely fashion.				
55			1. Weekly Payroll Reports				
56			2. Employee Utilization Reports				
57			3. Agent or Subcontractor Affidavit of Compliance with Prevailing Wage Rate Determination				
58			4. Prime Contractor Affidavit of Compliance with Prevailing Wage Rate Determination				
	MADISON FIRE STATION 05 WALL REMOVAL &						

1			5. Documentation required for Small Business Enterprise (SBE) goals
2			6. Other documents as maybe required or requested through the Finalization Review Process
3			
4	PART	2 – PRC	ODUCTS – THIS SECTION NOT USED
5			
6	PART	3 - EXE	CUTION
7			
8	3.1.	CONS	STRUCTION CLOSEOUT CHECKLIST
9		Α.	All contractors shall be responsible for reviewing the drawings and specifications within their Divisions of Work
10			to provide a complete and comprehensive list of all Construction Closeout Requirements to the GC.
11			1. The checklist shall include all items identified within the construction documents that require any of the
12			following (and examples) prior to moving into Contract Closeout Procedures:
13			a. Documents indicating a specified level of performance has been achieved, such as:
14			i. Test reports of all types
15			ii. Startup reports
16			b. Required documentation, such as:
17			i. As-builts and record drawings
18			ii. Operation and maintenance data
19			c. Physical items to be turned over to the owner, such as:
20			i. Attic stock
21			ii. Keys
22			d. Required maintenance completed, such as:
23			i. Ducts cleaned
24			ii. Filters replaced
25			e. Owner and Maintenance Training
26		В.	Each list shall indicate the title of the closeout requirement, the associated specification of the requirement, the
27			required result or deliverable, the responsible contractor(s), and a column to verify the item has been turned in
28			and completed.
29		C.	The GC shall be responsible for all of the following:
30			 Consolidating all the closeout lists into one master Construction Closeout Checklist.
31			a. The checklist shall be in a tabular data format similar to the sample below
32			2. Resubmit the checklist as needed after initial reviews have been completed.
33		D.	The GC shall work with all contractors to amend the Construction Closeout Checklist throughout the execution of
34			the project based on changes and modifications as necessary.
~ -			

34 35

<u>Title</u>	Specification	Description	Responsibility	Completed
Quality Management	01 45 16	All QMO reports have been properly	All, GC	
Observation Reports		responded to, reviewed and closed by		
		the CPM.		
As-Built Drawings	01 78 39	As-Built drawings have been reviewed	All, GC	
		and accepted per the specification		
Testing and Balancing	23 09 23	Provide final TAB reports indicating	HVAC	
		design performance has been achieved		

36

3.2. CONSTRUCTION CLOSEOUT REQUIREMENTS

37	3.2.	CONS	TRUCTI	ON CLOSEOUT REQUIREMENTS
38		Α.	The ti	nely submittal or completion of closeout requirements shall go hand in hand with the Progress Payment
39			Milest	one Schedule that can be found in Specification 01 29 76 Progress Payments. No payments shall be made
40			until a	Il requirements for that payment have been met.
41			1.	The GC and all major Subcontractors, PE, and CPM, shall review all requirements for
42				Construction/Contract Closeout during two (2) special meetings.
43				a. The first meeting shall be held at the 50% Contract Total Payment milestone. This meeting shall
44				discuss the requirements associated with various construction/contract closeout documentation
45				and events when they are due with respect to progress payments.
46				b. The second meeting shall be held at the 70% Contract Total Payment milestone. This meeting
47				shall review the contractors progress regarding the closeout checklist, begin making plans for
48				upcoming deadlines such as scheduling training, where to put attic stock, and when they are due
49				with respect to progress payments.

1			2. The GC, PE, and CPM, shall utilize the Construction Closeout checklist to ensure that all construction
2			closeout requirements have been met.
3			
4	3.3.		TRUCTION CLOSEOUT PROCEDURE
5		Α.	Upon successful completion and final acceptance of all Construction Closeout Requirements the GC may submit
6		_	to the CPM and PE the request for Final Progress Payment (100% contract total, less retainage).
7		В.	The PE will confirm with the design consultants, CPM, and other City of Madison staff that all requirements of
8			the Work have been completed and will do the following:
9			1. Approve the final progress payment application
10			2. Provide the required signed payment documents to the CPM
11			Provide the required Letter of Substantial Compliance to the following as required:
12			a. State Safety and Building Division
13			b. Local Building Inspection office
14			c. GC
15			d. CPM
16		C.	The CPM shall draft the City Letter of Substantial Completion for signature by the City Engineer. This letter shall
17			state any of the following that may still be tied to the contract and/or warranty:
18			1. Indicate that the date of the letter shall also be the beginning of the Warranty period.
19			2. Indicate any allowed due outs, reasons for them, and anticipated dates of finalization.
20		D.	The GC and all subcontractors shall finalize all warranty letters associated with their Work using the date noted
21			on the City Letter of Substantial Completion, and provide the CPM with all warranties as described in
22			Specification 01 78 36 Warranties. Upon receipt and final approval of the Warranties the CPM may initiate final
23			processing of the Final Progress Payment (100% contract total, less retainage).
24			
25	3.4.	CONT	RACT CLOSEOUT REQUIREMENTS
26	-	Α.	The GC and all sub-contractors shall follow all requirements associated with documenting contract compliance
27			and provide documentation as required or requested by DCR or PW staff. All contractors are encouraged to stay
28			current with submissions of the following documentation:
29			1. Weekly Payroll Reports no later than the Progress Payment equal to 50% of the contract total.
30			 Employee Utilization Reports
31			 Agent or Subcontractor Affidavit of Compliance with Prevailing Wage Rate Determination
32			 Prime Contractor Affidavit of Compliance with Prevailing Wage Rate Determination
33			 Documentation required for Small Business Enterprise (SBE) goals
34			6. Other documents as maybe required or requested through the Finalization Review Process
35		В.	Near the Progress Payment equal to 80% of the contract total the GC shall request in writing a Finalization
36		Б.	Review. At that time DCR or PW staff shall prepare a report of all contract documentation submitted to date. A
37 38			list of missing items or outstanding issues will be emailed to the GC. <u>No additional follow-up will be generated</u>
			by DCR or PW Staff.
39 40	25	CONIT	
40	3.5.		RACT CLOSEOUT PROCEDURE
41		A.	The Contract Closeout Procedure will not begin until the Construction Closeout Procedure has been completed.
42		В.	When the GC feels he/she has successfully met all of the Contract Closeout Requirements associated with
43		~	Section 3.3 above the GC may submit to the request for Final Payment to the CPM.
44		C.	The CPM shall sign and submit the Final Payment request for processing.
45		D.	DCR and PW staff shall do a complete review of all documentation associated with item 3.3.A above.
46		Ε.	The GC shall be notified directly by DCR or PW Staff of any documentation that may still be missing, have
47			incomplete information, or other outstanding issues. It shall be the responsibility of the GC to continue follow-
48		_	up with DCR and PW staff until all documentation has been successfully submitted and accepted.
49		F.	When all required documentation associated with Contract Closeout has been successfully submitted and
50			accepted by DCR and PW Staff the City of Madison shall process the Final Payment of any remaining monies
51			including retainage.
52			
53			
54			END OF SECTION
55			

	MATO	0, 202	1
1			SECTION 01 78 36
2			WARRANTIES
3	DADT	4 6	
4			ENERAL
5 6		1. 2.	SUMMARY
7		2.	DEFINITIONS
8			GENERAL CONTRACTORS RESPONSIBILITIES
9			RODUCTS - THIS SECTION NOT USED
10			ECUTION
11		3.1.	WARRANTY CHECKLIST
12	3	8.2.	LETTERS OF WARRANTY
13	Э	3.3.	STANDARD PRODUCT WARRANTY
14	3	8.4.	FINAL WARRANTY SUBMITTAL
15	3	8.5.	WARRANTY NOTIFICATION, RESPONSE, EXECUTION AND FOLLOW-UP
16	3.5. WARRANTY NOTIFICATION, RESPONSE, EXECUTION AND FOLLOW-UP		
17	PART	1 – G	ENERAL
18			
19	1.1.	SUN	ЛMARY
20		Α.	The purpose of this specification is to provide clear responsibilities and guide lines related to providing all
21			Warranties and Guarantees related to the Work, workmanship, materials, equipment, and other such items
22		_	required by the Construction Documents.
23		В.	Manufacturers' disclaimers and limitations on product warranties do not relieve any contractor of the warranty
24 25		C.	on the Work that includes the product. Manufacturers' disclaimers and limitations on product warranties do not relieve suppliers, manufacturers and
25 26		C.	any contractor required to provide special warranties under the contract documents.
20			any contractor required to provide special warranties under the contract documents.
28	1.2.	RFL	ATED SPECIFICATIONS
29		A.	Section 01 29 76 Progress Payment Procedures
30		В.	Section 01 77 00 Closeout Procedures
31		C.	Section 01 78 23 Operation and Maintenance Data
32		D.	Other Divisions and Specifications that may address more specifically the requirements for Warranties related to
33			the installation of all items and equipment installed under the execution of the Work.
34			
35	1.3.	DEF	INITIONS
36		Α.	See specification 01 77 00 for the definitions of the following terms that may also be used in this specification:
37			1. Substantial Compliance
38			2. Certificate of Occupancy
39			3. Certificate of Substantial Completion
40			4. Construction Closeout
41			5. Contract Closeout
42		В.	Emergency Repair: The Owner or Owner Representative reserves the right to make emergency repairs as
43 44			required to keep equipment or materials in operation or to prevent damage to property and injury to persons without voiding the contractors warranty or bond or relieving the contractor of his/her responsibilities during
44 45			the warranty period.
46		C.	Installer: The company or contractor hired to install a finished product that was manufactured and supplied
47		С.	specifically for the Work within this contract. The Installer may or may not be the same company that supplied
48			the product. See the definition for supplier.
49		D.	Supplier: Any company that makes a specific finished product for the Work from information within the Contract
50			Documents. Examples of suppliers would include custom cabinets, steel stairs and railings, etc. A supplier would
51			not be a company that distributes items manufactured by others such as an electrical or plumbing supplier.
52		Ε.	Warranty: A written guarantee from the manufacturer to the owner on the integrity of a product and its
53			installation, and the manufacturers' responsibility to repair or replace the defective product or components
54			within a specified time from the date of ownership. Warranty may also be used interchangeably with
55			Guarantee. The following warranty types may be part of any specification within the Work associated with the
56			Construction Documents:
57			1. Expressed Warranty: A warranty that provides specific repair or replacement for covered components of
58			a product over a specified length of time.

1			2. Implied Warranty: A warranty that is not stated explicitly by a seller or manufacturer that the product is
2			merchantable and fit for the intended purpose.
3			3. Standard Product Warranty: Preprinted written warranties published by individual manufacturers for
4			particular products and are specifically endorsed by the manufacturer to the Owner. Standard warranties
5			may be for any amount of time but shall not be for anything less than one (1) year from the warranty
6			date.
7			4. Special Warranty: A written warranty required by the Contract Documents either to extend the time
8			limit provided under a standard warranty or to provide greater rights to the Owner.
9		F.	Warranty Date: The effective date that begins all warranty periods required for products, installations, and
10			work-manship associated with the execution of the Work for this contract. The Warranty Date shall be set by
11		~	the CPM.
12		G.	Related Damages and Losses: When correcting failed or damaged Warranted Work, remove and reinstall (or
13			replace if necessary) the construction that has been damaged as a result of the failure or the construction that
14			must be removed and replaced to obtain access for the correction of Warranted Work.
15 16		Н.	Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected reinstate the
16 17			warranty by a new written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation unless specifically noted otherwise in a specification.
17		I.	Replacement Cost: All costs that may be associated with Work being replaced under warranty including but not
19		1.	limited to the following:
20			1. Related damages and losses
20			 Labor, material and equipment
22			 Permits and inspection fees
23			4. This shall be regardless of any benefit the Owner may have had from the Work through any portion of its
24			anticipated useful service life.
25		J.	Replacement Work: All materials, products, required labor, and equipment necessary to replace failed or
26			damaged warranted to an acceptable condition that complies with the requirements of the original Construction
27			Documents.
28		К.	Owners Recourse: Expressed warranties made to the Owner are in addition to implied warranties and shall not
29			limit the duties, obligations, rights, and remedies otherwise available under the law. Expressed warranty periods
30			shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations,
31			rights, and remedies.
32			1. Rejection of Warranties: The Owner reserves the right to reject any warranty and to limit the selection of
33			products with warranties not in conflict with the requirements of the contract documents.
34			2. Where the Contract Documents require a Special Warranty or similar commitment on the Work or
35			product, the Owner reserves the right to refuse acceptance of the Work until the Contractor presents
36			evidence the entities required to countersign such required commitments have done so.
37			
38	1.4.	GENE	RAL CONTRACTORS RESPONSIBILITIES
39		A.	The General Contractor (GC) shall be responsible to remedy, at his/her expense, any defect in the Work and any
40			damage to City owned or controlled real or personal property when the damage is a result of:
41			1. The GC's failure to conform to Contract Document requirements.
42			a. Any substitutions not properly approved and authorized may be considered defective.
43		_	2. Any defect in workmanship, materials, equipment, or design furnished by the GC or Sub-contractors.
44		В.	All warranties as described in this specification and these Contract Documents shall take effect on the date
45			established by the CPM, as noted in Section 1.3F above.
46			1. All warranties shall remain in effect for one (1) year thereafter unless specifically stated otherwise in the Contract Documents or where standard manufacturer warranties are greater.
47 49		C.	-
48 49		C.	The GC's warranty with respect to Work repaired or replaced, including restored or replaced Work due to damage, will run for one (1) year from the date of Owner Acceptance of said repair or replacement.
49 50			1. This shall be regardless of any benefit the Owner may have had from the Work through any portion of its
50 51			anticipated useful service life.
52		D.	Warranty Response
53		0.	1. See Section 3.5 of this specification.
55 54	PART	2 – PR(ODUCTS - THIS SECTION NOT USED
55	<u> </u>		
56	PART	3 - EXE	CUTION
57			

1 3.1. WARRANTY CHECKLIST

2.

- A. All contractors shall be responsible for reviewing the drawings and specifications within their Divisions of Work to provide a complete and comprehensive list of all Warranty Requirements to the GC.
- B. Each list shall indicate the title (and plan identifier when applicable) of the warranted item, the associated specification of the warranted item, the terms of the warranty (years), and a column to verify the item has been turned in and completed.
- C. The GC shall be responsible for all of the following:
 - 1. Consolidating all the warranty lists into one master Warranty Checklist and submitting electronically.
 - a. The checklist shall be in a tabular data format similar to the sample below.
 - Resubmit the schedule as needed after initial reviews have been completed.
- D. The GC shall work with all contractors to amend the Warranty Checklist throughout the execution of the project based on changes and modifications as necessary.
- 12 13

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Title	Specification	Terms	Completed
Overhead Door Operator	08 36 00	MFR 2yr	
Exterior Bench and Trash	12 93 00	MFR 3 year warranty on finish	
Receptacles			
Kitchen Sink (SK-1)	22 42 00	MFR 5 year	
Disposal (D-1)	22 42 00	MFR 7 year parts and in-home service	
Toilet (WC-1)	22 42 00	MFR 1 year limited	

15	3.2.	LETTERS OF	WARRANTY

16	Α.	All letters of warranty shall be in a typed letter format and provide the following information:
17		1. The letter shall be on official company stationary including company name, address, and phone number.
18		2. Indicate MADISON FIRE STATION 05 WALL REMOVAL & IMPROVEMENTS, contract number, and contract
19		address the warranty is for on the reference line.
20		3. Provide a description of the warranty(ies) being provided.
21		a. Include Division, Trade, or Specification information as necessary.
22		b. Only combine warranties of related Divisional Work together. Create new letters for additional
23		Divisions as necessary.
24		4. Indicate the effective Warranty Date. As noted in Section1.3.F above, the Warranty Date shall be the
25		date the Certificate of Substantial Completion was signed by the City Engineer.
26		5. Contractor Letters of Warranty shall only be signed by a principal officer of the company.
27		6. After signing the letter provide the GC with a high quality color scanned image in PDF format and the
28		original signed letter.
29	В.	The GC shall be responsible for the Final Warranty submittal as identified in Section 3.4 below.
30	С.	The GC shall obtain letters of warranty from all of the following:
31		1. The General Contractor shall provide warranty letters for all Work that was self performed under the
32		contract documents, identify all trades or Divisions of Work.
33		2. All Sub-contractors shall provide warranty letters for Work performed under the contract documents;
34		identify all trades or Divisions of Work.
35		3. Suppliers, as required by other specifications within the Construction Documents where the manufacture
36		of a specific product unique to the Work of this contract was required.
37		a. The terms and conditions of the Supplier Letter of Warranty shall be as defined by the
38		specifications associated with the Work but shall not be less than the industry standard of repair,
39		or replace defective materials and workmanship within one (1) year of the warranty date.
40		b. When the supplier is also the installer a single written letter may be submitted identifying both
41		the warranty for the manufacture of the product and the warranty for the installation of the
42		product.
43		4. Installers as required by other specifications within the Construction Documents where the installation of
44		a specific product unique to the Work of this contract was required.
45		1. The terms and conditions of the Installer Letter of Warranty shall be as defined by the
46		specifications associated with the Work but shall not be less than the industry standard of repair,
47		or replace defective materials and workmanship associated with the installation of the product
48		within one (1) year of the warranty date.
49		5. Special Letters of Warranty shall be required from any contractor, supplier, installer or manufacturer who
50		agrees to provide warranty services required by any Division Specification in excess of their Standard
51		Product Warranty.
		E STATION 05 WALL REMOVAL &
	IMPROVEMEN	TS

1			
2	3.3.	STANE	DARD PRODUCT WARRANTY
3		Α.	All contractors shall be responsible for collecting and providing copies of all standard product warranties for
4			commercially available products purchased and installed under this contract.
5		В.	Only one copy of the manufacturers' standard warranty needs to be submitted as representative for all
6			quantities of the same model number used throughout the Work.
7		C.	Provide the manufacturers certificate, letter, or other standard documentation for each Standard Product
8			Warranty submitted as follows:
9			 Whenever possible a PDF version of the document shall be used.
10			a. If a PDF version is used all additional information shall be completed using simple PDF editing
11			tools such as text boxes, highlight, etc.
12			b. If a PDF version is not available and an original document is furnished the additional information
13			shall be neatly hand written and highlighted on the document in such a fashion so that it does not
14			obscure any part of the written warranty.
15			2. Provide the following additional information on each warranty document:
16			a. Contract warranty date.
17			b. Provide the manufacturer name and model number of the product if not specified within the
18			warranty.
19			i. Where the manufacturer name and model number is specified within the warranty it shall
20			be highlighted for visibility.
21			c. Provide the plan identifier (LAV-1, WC-2, etc) when applicable.
22		D.	Each completed warranty shall be saved as a digital PDF. The file shall be named using the specification number
23			and item description. I.E. 22 42 00 Toilet (WC-1).pdf
24			a. Where an original certificate was furnished provide a high quality colored scan of the completed
25			document with the additional information. Save the scanned image in PDF format and use the
26			same naming convention as indicated above.
27		Ε.	Provide all PDF files and any original documents to the GC for final consolidation to be provided to the Owner.
28			
29	3.4.		WARRANTY SUBMITTAL
30		A.	The GC shall receive all required warranties (digital PDF and any original documents) from all contractors,
31			suppliers, installers and manufacturers.
32		В.	The GC shall inventory all received warranties with the Warranty Submittal List to ensure all required warranties
33			have been received and all warranty periods are correct according to the specifications.
34		C.	Provide with each Operation and Maintenance Manual a complete copy of any associated warranty.
35		D.	Scan all warranties into a single organized electronic PDF file as follows:
36			1. Organize the PDF file into an orderly sequence based on the table of contents of the Specifications.
37			2. Provide a typed Table of Contents for the entire file at the front of the document.
38			Provide bookmarks and links to each individual PDF to enable quick navigation through the PDF
39			document.
40		Ε.	Submit electronically, the warranty submittal for review by the PE and CPM.
41		F.	Correct any deficiencies or omissions and resubmit as necessary.
42			
43	3.5.	WARR	ANTY NOTIFICATION, RESPONSE, EXECUTION AND FOLLOW-UP
44		Α.	Warranty Notification:
45			1. The City of Madison uses an email notification system for all warranty related issues. The GC will be
46			required to provide, and keep current during the warranty period, a minimum of two (2) email addresses
47			and phone numbers of current employees to receive email notifications and provide response regarding
48			Work associated with these construction documents.
49			a. In the event a Warranty Issue is deemed by the City of Madison to be an emergency, the GC shall
50			first receive a phone call with a follow-up email from the CPM.
51		В.	Warranty Response:
52			1. The GC shall upon notification by the City of Madison provide warranty response as follows:
53			a. Critical Systems or equipment: Where damage to equipment and other building components, or
54			injury to personnel is probable provide immediate emergency shut-down information and an on-
55			site response team as soon as possible but in no case shall on-site response exceed 24 hours.
56			b. For non-critical responses where damage or injury is unlikely provide on-site response no later
57			than the next business day.

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1		c. Where Technical Assistance support is part of the written warranty provide all assistance
2		necessary via phone, text, or internet systems as indicated by the warranty. If issues cannot be
3		resolved provide on-site response no later than the next business day.
4		d. If the request cannot be supported in sufficient time as outlined above the Owner (or Owner
5		Representative) reserves the right to contact other contractors or service companies having
6		similar capability to expedite the repair or replacement and shall invoice all associated costs to
7		the Owner back to the GC.
8	C.	Warranty Execution:
9	С.	1. The GC shall provide all repairs or replacements as necessary to restore broken or damaged Work to the
10		original level of acceptance as intended by the Contract Documents.
11		a. Provide all materials, equipment, products, and labor necessary to complete the repair or
12		replacement associated with the Warranty Issue.
13		 b. Provide all cleaning services as may be required before, during, and after the repair or
13 14		replacement as per Specification 01 74 13 Progress Cleaning.
14 15		
15		 Provide any protection necessary for existing construction as per Specification 01 76 00 Protecting Installed Construction
10		d. Provide new letters of warranty when required.
17	D.	Warranty Follow-up:
	D.	
19 20		1. Logged Warranty Issues:
20 21		a. The GC shall provide complete documented responses of all logged Warranty Issues. Responses
		shall provide a description of work completed, by who, inclusive dates, and photos of completed
22		or repaired work.
23		i. Provide call back response if work is not acceptable.
24		b. The City Project Manager shall review the submitted response documentation and do a field
25		inspection if necessary.
26		i. If work is not acceptable, contact GC to review details and expectations of the repair as
27		needed.
28		ii. If work is acceptable close the Warranty Issue.
29		2. Warranty Reviews:
30		a. The GC shall be responsible for scheduling on-site review with all of the following:
31		i. City Project Manager, and other City staff as needed
32		ii. Owner and Owner Tenant Representative
33		iii. Plumbing, Heating, Electrical Sub-contractors
34		iv. Other Sub-contractors that may be responsible for open Warranty issues
35		b. Reviews shall be scheduled at 6 months, and 11 months after the effective date of the warranty.
36		The review meetings shall:
37		i. Review the status of all open Warranty Issues, determine course of action and estimated
38		date of completion.
39		ii. As appropriate, provide shut-down, start-up, testing, and training of off-season equipment
40		as required by the contract documents.
41		iii. The 11th month review shall review all open Warranty Issues, final plan for resolution, and
42		all Warranty Issues where a new letter of warranty may have been issued.
43		
44		
45		
46 47		END OF SECTION