# **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



# **TABLE OF CONTENTS**

SECTION 01 26 13 - REQUEST FOR INFORMATION (RFI)

SECTION 01 26 57 - CHANGE ORDER REQUESTS (COR)

SECTION 01 26 63 - CHANGE ORDER (CO)

SECTION 01 29 76 – PROGRESS PAYMENT PROCEDURES

SECTION 01 33 23 – SUBMITTALS

SECTION 01 41 00 – REGULATORY REQUIREMENTS

SECTION 01 45 16 - FIELD QUALITY CONTROL PROCEDURES

SECTION 01 73 29 - CUTTING AND PATCHING

SECTION 01 74 13 - PROGRESS CLEANING

SECTION 01 74 19 - CONSTRUCTION WASTE MANAGEMENT & DISPOSAL

SECTION 01 76 00 – PROTECTING INSTALLED CONSTRUCTION

SECTION 01 77 00 – CLOSEOUT PROCEDURES

SECTION 01 78 36 – WARRANTIES

		SECTION 01 26 13 REQUEST FOR INFORMATION (RFI)
		REQUEST FOR INFORMATION (RFI)
PART	1 – GE	NERAL
	1.1.	SUMMARY1
:	1.2.	RELATED SPECIFICATIONS
:	1.3.	PERFORMANCE REQUIREMENTS
-	1.4.	QUALITY ASSURANCE
PART	2 – PF	ODUCTS1
	2.1.	REQUEST FOR INFORMATION FORM
	_	ECUTION
	3.1.	CONTRACTOR INITIATED RFI
	3.2.	RFI RESPONSES
3	3.3.	COMMENCEMENT OF WORK RELATED TO AN RFI
PART	1 – G	<u>ENERAL</u>
1.1.	SUL	MMARY
	Α.	Contractors shall use the RFI form/process to request additional information or clarification regarding the
	, · · ·	construction documents.
	В.	Form will be provided by CPM.
1.2.	REL	ATED SPECIFICATIONS
	A.	Section 01 26 46 Construction Bulletin (CB)
	В.	Section 01 26 57 Change Order Request (COR)
	C.	Section 01 26 63 Change Order (CO)
1.3.	PER	FORMANCE REQUIREMENTS
	A.	RFI issues initiated by any contractor shall be done through the General Contractor (GC).
		1. RFIs submitted by any Sub-contractor under the GCs control shall be returned with no response.
	В.	Submit a new RFI for each issue. Only multiple questions that are of a similar nature may be combined into one
		RFI shall be allowed and responded to.
1.4.	QUA	ALITY ASSURANCE
	A.	The GC shall be responsible for all of the following:
		1. Ensure that any request for additional information is valid and the information being requested is not
		addressed in the construction documents.
		2. Ensure that all requests are clearly stated and the RFI form is completely filled out.
		3. Ensure that all Work associated an RFI response is carried out as intended.
	В.	The Project Engineer (PE) shall be responsible for the following:
		1. Ensure that all responses to contractor initiated RFIs are properly responded to in a timely fashion.
		a. The CPM, Owner, consulting staff, and other City staff shall be responsible for the initial review of
		the RFI. The PE shall be responsible for codifying all consultant and Owner/City staff comments
		into a unified RFI response.
DADT	2 DI	OODUCTS
PARI	<u> </u>	RODUCTS
2.1.	REQ	UEST FOR INFORMATION FORM
	A.	Will be provided by CPM.
PART	3 - EX	ECUTION
2 1	CO*	ITDACTOR INITIATED REI
3.1.		ITRACTOR INITIATED RFI  Immediately on discovery of the need for additional information or interpretation of the Contract Documents
	A.	Immediately on discovery of the need for additional information or interpretation of the Contract Documents any contractor may initiate an RFI for additional information or clarification through the GC.

1			
2	3.2.	RFI F	RESPONSES
3		A.	Responses to simple RFI issues shall use the response section of the RFI form and shall be completed within five
4			(5) working days of the RFI form being submitted.
5		В.	Responses to more complex issues may require additional time or may require a Construction Bulletin to be
6			published. The initial RFI shall be responded to within five (5) working days stating that the RFI is being
7			reviewed and provide an estimated date for the response.
8		C.	The following GC generated RFIs will be returned without action:
9			1. Requests for approval of submittals
10			2. Requests for approval of substitutions
11			<ol><li>Requests for approval of Contractor's means and methods.</li></ol>
12			4. Requests for coordination information already indicated in the Contract Documents.
13			<ol><li>Requests for adjustments in the Contract Time or the Contract Sum.</li></ol>
14			6. Requests for interpretation of A/E's actions on submittals.
15			7. Incomplete RFI or inaccurately prepared RFI.
16			
17	3.3.	CON	IMENCEMENT OF WORK RELATED TO AN RFI
18		A.	The GC shall only proceed with the Work of an RFI where, additional information is not required.
19		В.	The GC shall not proceed with any Work associated with an RFI while it is under review.
20		C.	The GC shall not proceed with any Work associated with an RFI that clearly states a CB will be issued in response
21			to the RFI.
22		D.	The GC will be required to immediately remove and replace unauthorized Work and all costs required to
23			conform 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 4	DADT 1 C	SENERAL
5	1.1.	SUMMARY
6	1.1.	RELATED SPECIFICATION SECTIONS
7	1.3.	DEFINITIONS AND STANDARDS
8	1.4.	CONTRACT EXTENSION
9	1.5.	OVERHEAD AND PROFIT MARKUP
10	1.6.	PERFORMANCE REQUIREMENTS
11	1.7.	QUALITY ASSURANCE
12		PRODUCTS
13	2.1.	CHANGE ORDER REQUEST FORM
14		XECUTION
15	3.1.	ESTABLISHING A CHANGE ORDER REQUEST
16	3.2.	CHANGE ORDER REQUEST REVIEW, APPROVAL, AND PROCESSING
17	3.3.	EMERGENCY CHANGE ORDER REQUEST
18	3.3.	EMERGENCY CHANGE ONDER REQUEST
19	PART 1 – 0	SENERAL
20	IANII	<u>JENETINE</u>
21	1.1. SU	MMARY
22	A.	Except in cases of emergency no changes in the Work required by the Contract Documents may be made by
23	Λ.	the General Contractor (GC) without having prior approval of the City Engineer or his representative.
24	В.	The City may at any time, without invalidating the Contract and without Notice to Sureties, order changes in
25	Б.	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	C.	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		<ol> <li>The parties shall attempt in good faith to reach agreement on the adjustments needed to the Contract to</li> </ol>
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		a. Upon written request by the City, the GC shall perform proposed Work
39		b. The cost of such change may be determined in accordance with this specification.
40		c. In the event agreement cannot be accomplished as contemplated herein, the City may authorize
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.	Where changes in the Work are made by the City through use of a force account basis, the GC shall as soon as
45	٠.	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,  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.	In the event Work is required due to an emergency as described in this specification the GC must request an
56	• •	equitable adjustment as soon as practicable, and in no case later than ten (10) working days of the
57		commencement of such emergency.

- MAY 06, 2021 G. 1 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 accompanied by supporting information and documents. 4 Н. No adjustment of any kind shall be made to this Contract, if asserted by the GC for the first time, after the date 5 of final payment. I. This specification shall be used by the GC when preparing documentation for any COR to ensure each has been 6 properly and completely filled out as required by the City of Madison. 7 8 9 1.2. RELATED SPECIFICATION SECTIONS 10 Section 01 26 13 Request for Information (RFI) Α. 11 В. Section 01 26 46 Construction Bulletins (CB) Section 01 26 63 Change Order (CO) 12 C. 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.citvofmadison.com/business/pw/specs.cfm 17 Click on the "Part" chapter identified in the specification text. For example if the specification a. says "Refer to City of Madison Standard Specification 210.2" click the link for Part II, the Part II 18 PDF will open. 19 20 b. Scroll through the index of Part II for specification 210.2 and click the text link which will take you 21 to the referenced text. 22 23 1.3. **DEFINITIONS AND STANDARDS** 24 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 Labor rate is the total hourly rate which includes the base rate of pay, fringe benefits plus each 1. 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 Labor cost is the labor hours multiplied by the hourly labor rates. В. MATERIAL: Actual material cost is the amount paid, or to be paid, by the GC for materials, supplies and 30 31 equipment entering permanently into the Work, including cost of transportation and applicable taxes. The cost 32 shall not exceed the usual and customary cost for such items available in the geographical area of the project. 33 C. LARGE TOOLS AND MAJOR EQUIPMENT: Large tools and major equipment are those with an initial cost greater 34 than \$1,500, whether from the GC or other sources. 35 Tool and equipment use and time allowed is only for extra work associated with change orders. 36 Rental Rate is the machine cost associated with operating a piece of equipment for a defined length of time (hour, day, week, or month) and shall not exceed the usual and customary amount 37 38 for such items available in the geographical area of the project. 39 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,
- 42 43 44
- actual cost to get the item there is also reimbursable.

3.

2.

45 46 47

D. BOND COST: The cost shall be calculated at 1% of the total proposed change order.
 E. SUB-CONTRACTOR COSTS: Sub-contractor costs are for those labor, material, and equipment costs required by

48 49

subcontracted specialties to complete the Change Order work.

F. OVERHEAD AND PROFIT Markup: The allowable markup percentage to a COR by the GC and Sub-contractors for overhead and profit. All of the following are expenses associated with overhead and profit and shall not be

maintenance and other similar expenses but not including profit and overhead.

50 51 52

reimbursable as individual items on any COR:

1. CHANGE ORDER PREPARATION: All costs associated with the preparing and processing of the change order.

DESIGN, ESTIMATING, AND SUPERVISION: All such efforts, unless specifically requested by Owner as

When large tools and equipment needed for Change Order work are not already at the job site, the

53 54 55

additional Work to be documented as a COR or portion thereof.3. INSTALLATION LAYOUT: The layout required for the installation of material and equipment, and the

56 57

INSTALLATION LAYOUT: The layout required for the installation of material and equipment, and the installation design, is the responsibility of the GC. 4.

5.

6.

7.

cutting oil, and similar items.

including but not limited to the following:

1

2

3

4

5

6

7 8

9 a. All association dues, assessments, and similar items. 10 b. All education, training, and similar items. 11 All drafting and/or engineering, unless specifically requested by Owner as additional Work to be c. documented as a Change Order proposal or portion thereof. 12 13 d. All other items including but not limited to review, coordination, estimating and expediting, field 14 and office supervision, administrative work, etc. 15 G. Contract Extension: The necessary amount of time to be added to the contract deadlines for the completion of a 16 change order. 17 **CONTRACT EXTENSION** 18 1.4. The GC shall not assume that every COR will require a Contract Extension. If the GC feels a contract extension is 19 A. 20 warranted he/she shall provide sufficient scheduling information that shows how the COR being requested 21 impacts the critical path of the project. 22 В. The City of Madison strongly encourages the GC to explore alternative methods and practices prior to submitting 23 a COR with a request for contract extension. 24 25 1.5. **OVERHEAD AND PROFIT MARKUP** 26 Pursuant to the City of Madison Standard Specifications for Public Works Construction, Section 104.7, Extra 27 Work, the following maximum allowable markups shall be strictly enforced on all change orders associated with 28 the execution of this contract. 29 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: 30 For work performed and materials provided solely by the General Contractor, fifteen percent 31 32 (15%) of the total costs. 33 b. For work performed and materials provided solely by Sub-contractors and supervised by the 34 General Contractor: 35 i. Supervision of the GC, five percent (5%) of the total Sub-contractor cost. ii. 36 Sub-contractors work and materials ten percent (10%) of the total Sub-contractor cost. 37 38 1.6. PERFORMANCE REQUIREMENTS 39 A. The GC shall become thoroughly familiar with this specification as it will identify procedures and expenses that 40 are or are not allowed under the Change Order and Change Order Request process. 41 В. The GC shall be responsible for all of the following: 42 1. Carefully reviewing the CB that is associated with the COR. 43 2. Collecting required supporting documentation from all contractors that quantify the need for a COR. 44 a. Labor hours and wage rates 45 b. Material costs 46 c. **Equipment costs** 47 C. The following shall apply to establishing prices for labor, materials, and equipment costs: Where Work to be completed has previously been established by individual bid items in the contract bid 48 49 proposal the GC shall use the unit bid prices previously established. 50 2. Where Work to be completed was bid as a Lump Sum without individual bid items the GC shall provide a 51 breakdown of all labor, materials, equipment including unit rates and quantities required. 52 D. The completion date is determined by Owner. The schedule, however, is the responsibility of the GC. Time 53 extensions for extra Work will be considered when a schedule analysis of the critical path shows that the Change 54 Order Request places the Work beyond the completion date stated in the Contract. 55 56 1.7. **QUALITY ASSURANCE** 57 The GC shall be responsible for ensuring that all COR supporting documentation meets the following 58 requirements prior to completing the COR form:

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

OTHER COSTS: Any miscellaneous cost not directly assessable to the execution of the Change Order

with direct labor and material such as job trailers, foreman truck, and similar items.

RECORD DRAWINGS: The preparation of record or as-built drawings.

GENERAL EXPENSE: The general expense, which is those items that are a specific job cost not associated

1 2 3			<ol> <li>Sufficiently indicates labor, material, and other expenses related to completing the intent of the CB.</li> <li>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.</li> </ol>
4 5		В.	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
6 7			additional information as necessary.
, 8 9	PART	2 – PRC	<u>DDUCTS</u>
10	2.1.	CHAN	GE ORDER REQUEST FORM
11		A.	Will be provided by CPM.
12			
13	PART	3 - EXE	<u>CUTION</u>
14	2.4	FCTAF	DUCUING A CHANGE OPDER REQUEST
15	3.1.		BLISHING A CHANGE ORDER REQUEST  Linear respirit of a Construction Bulletin (CR) where the CC heliaves a significant change in contract scene
16 17		A.	Upon receipt of a Construction Bulletin (CB) where the GC believes a significant change in contract scope 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			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			b. Additions or deletions of labor and materials shall be determined by the GC based on the
22			directives of the CB.
23			2. 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.		IGE ORDER REQUEST REVIEW, APPROVAL, AND PROCESSING
30		A.	The PE and CPM shall review all CORs submitted by the GC.
31 32			1. Additional consulting staff and city staff having knowledge of the components of the COR shall review and advise the PE and CPM as to the accuracy of the items, quantities, and associated costs of the COR as
33			directed by the CB.
34			2. The CPM shall review the COR with the Owner.
35		В.	If required the PE and CPM, shall in good faith, further negotiate the COR with the GC as necessary. All
36		٥.	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		E.	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
46 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		ь.	emergency as part of the COR submittal.
50			emergency as part of the consumittan
51			
52			
53			END OF SECTION
54			

1			SECTION 01 26 63
2			CHANGE ORDER (CO)
3 4	DΔRT	1 – G	ENERAL
5		l.1.	SUMMARY
6		L.2.	RELATED SPECIFICATION SECTIONS
7		l.3.	BOARD OF PUBLIC WORKS PROCEDURE
8	PART	2 – PF	RODUCTS1
9	2	2.1.	CHANGE ORDER FORM
10	PART	3 - EX	ECUTION
11	3	3.1.	PREPARATION OF THE CHANGE ORDER2
12	3	3.2.	EXECUTION OF THE CHANGE ORDER2
13			
14	PART	1 – G	<u>ENERAL</u>
15			
16	1.1.		MMARY
17		A.	Except in cases of emergency, no changes in the Work required by the Contract Documents may be made
18 19		В.	by the General Contractor (GC) without having prior approval of the City Project Manager (CPM).  The City may at any time, without invalidating the Contract and without Notice to Sureties, order changes in
20		ъ.	the Work by written Change Order. Such changes may include additions and/or deletions.
21		C.	The Change Order (CO) is a Board of Public Works (BPW) form that is reviewed and approved by a specific
22			process.
23		D.	The CO form is typically made up of multiple Change Order Requests (CORs) and/or Bid Items as appropriate
24			depending on the type of project and how the contract was bid.
25			
26	1.2.	REL	ATED SPECIFICATION SECTIONS
27		A.	Section 01 26 13 Request for Information (RFI)
28		В.	Section 01 26 46 Construction Bulletin (CB)
29		C.	Section 01 26 63 Change Order Request (COR)
30			
31	1.3.	BO	ARD OF PUBLIC WORKS PROCEDURE
32		A.	The Board of Public Works has a very explicit procedure for the review and approval of all change orders
33			associated with any Public Works Contract as follows:
34			1. The Supervisory Chain of the CPM shall review and approve any CO under \$20,000 provided it does not
35			include either of the following:
36			a. The CO does not request a time extension to the contract.
37			<ul> <li>b. The CO does not cause the contract contingency sum to be exceeded.</li> <li>2. The Board of Public Works shall review and approve any CO that requires any of the following:</li> </ul>
38 39			
40			<ul><li>a. Any CO over \$20,000.</li><li>b. Any CO requesting a time extension to the contract regardless of the monetary value of the CO.</li></ul>
41			c. Any CO that that causes the contract contingency sum to be exceeded.
42		В.	The Board of Public Works generally meets every other week and only once in August and December. The GC is
43		ъ.	cautioned that, under normal scheduling, a CO requiring a BPW review will take a minimum of two (2) weeks to
44			achieve final approval.
45			1. The City shall not be responsible for additional delays to the Work caused by the scheduling constraints
46			of the Board of Public Works.
47		C.	<u>SPECIAL NOTE:</u> The GC is cautioned to never proceed unless told to do so by the CPM. Only in rare instances
48			may the CPM give a written notice to proceed on a COR without an approved CO. Proceeding without the
49			written notice of the CPM or an approved CO is at the GC's own risk.
50			
51	PART	2 – P	RODUCTS CONTROL OF THE PROPERTY OF THE PROPERT
52			
53	2.1.	CHA	ANGE ORDER FORM
54		A.	Provided by CPM.

**PART 3 - EXECUTION** 

55 56

1	3.1.	PREF	PARATIO	ON OF THE CHANGE ORDER
2		A.	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.	EXEC	CUTION	OF THE CHANGE ORDER
14		A.	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.	Upoi	n final approval of the CO the GC may proceed with executing the Work associated with the CO.
32				
33				
34				

**END OF SECTION** 

1			SECTION 01 29 76
2			PROGRESS PAYMENT PROCEDURES
3	DADT	1 (	ENEDAL
4			ENERAL
5 6		.1. .2.	RELATED SPECIFICATIONS
7		2.	RELATED DOCUMENTS
8		.4.	PROGRESS PAYMENT MILESTONES
9		.5.	PROGRESS PAYMENT SUBMITTAL
10		-	ODUCTS - THIS SECTION NOT USED
11			ECUTION
12		.1.	GENERAL CONTRACTOR PROCEDURE4
13	_	.2.	PROJECT ARCHITECT PROCEDURE
14	_	.3.	CITY PROJECT MANAGER PROCEDURE
15			
16	PART	1 – G	<u>ENERAL</u>
17			
18	1.1.	SUN	MMARY
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.		ATED SPECIFICATIONS
28		A.	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 25		G. H.	Section 01 78 23 Operation and Maintenance Data
35		п. I.	Section 01 78 36 Warranties
36 37		ı. J.	Section 01 78 39 As-Built Drawings Section 01 79 00 Demonstration and Training
38		J.	Section 01 79 00 Demonstration and Training
39	1.3.	RFI	ATED DOCUMENTS
40	1.5.	A.	The following documents shall be used when evaluating PP requests.
41		,	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.	PRC	OGRESS PAYMENT MILESTONES
48		A.	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			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.
- 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
<ul> <li>BPW Contract Administration Documentation</li> <li>Workforce profiles</li> <li>Best Value Contracting Documentation</li> <li>Sub-contractors prequalification approval &amp; Affirmative Action plans</li> <li>Other as may be required</li> </ul>	PP-1, or start work as applicable	<ul> <li>For GC and Sub-contractors before PP-1 regardless of scheduling</li> <li>Sub-contractors (if applicable), due 10 days before they may start work</li> <li>Sub-contractors (if applicable), due 10 days before they may start work</li> </ul>
Required Construction Submittals/Administrative Documents	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		See specifications for specific requirements  • Specification 01 32 19, Examples:
<ul> <li>Early submittals, per submittal schedule</li> <li>Detailed Contract Schedules</li> </ul>	PP-1	concrete mix, structural steel, products with long lead times • See Specification 01 32 16
200000000000000000000000000000000000000		000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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	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
<ul><li>Progress Cleaning</li><li>As-Built Drawings</li></ul>		<ul><li>Specification 01 74 13</li><li>Specification 01 78 39</li></ul>
•	bove are update	
	3 3 4 3 3 4	
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	<ul><li>Specification 01 31 19</li><li>Specification 01 33 23</li></ul>

Progress Payr	nent (PP) Miles	stone 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
Operation and Maintenance (O & M) finals, accepted     All major QMO issues resolved     As-Built Drawings, Division Trades ready for GC review	80% CT	<ul> <li>Specification 01 78 23</li> <li>Specification 01 45 16; Items that could prevent occupancy</li> <li>Specification 01 78 39</li> </ul>
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	this 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 verified	Final	See Specification 01 77 00      Contractor must provide any missing BPW Contractual Documentation
* Completion of this classes th	e contract but a	ot the warranty period/bond.
Completion of this closes tr	ie contract but n	or the warranty period/pond.
NOTE: CT = Co	ntract Total less	held retainage

# 1.5. PROGRESS PAYMENT SUBMITTAL

1

2

3

4

5

6 7

8

- A. Each progress payment submittal shall be:
  - 1. Digital in PDF format
  - 2. PDF shall be in color
  - 3. Uploaded to the appropriate Project Management library and properly named per the tutorial instructions provided to the awarded contractor.
- B. 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.
		3.	Only completed installations may be invoiced to 100% based on the Schedule of Values.
	D.	-	OT submit BPW Contract Administration Documentation for review with Progress Payment Requests,
		subm	it them directly to the correct agency and in the correct format as instructed from information in your BPW ract Award Packet instructions.
RT	2 - PR	ODUCTS	S - THIS SECTION NOT USED
PART	3 - EX	ECUTIO	<u>N</u>
3.1.			ONTRACTOR PROCEDURE
	A.		GC shall provide an updated version of his/her schedule of values (AIA documents G702 & G 703) with each
		1.	quest.  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).
			<ul> <li>i. Example: \$5,192.55 of completed work divided by \$10,000 original Contract Total = 0.519255, round this to 0.51926</li> </ul>
			c. Write the percentage in Column 10 on the City Tabular Sheet for the original lump sum bid item in
			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 C	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 previous
		2	progress payments.
		2.	The GC shall sign and date the form where indicated.
		3. 4.	The GC shall provide the dates from and to for the PP being requested.  The GC shall provide the list of all contractors/sub-contractors that were actively working during the
		4.	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.
			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.
	C.		General Contractor (GC) shall scan all of the documents listed below in the order shown, save the scan as a
		_	e PDF file for each PP request.
		1.	City cover sheet – Application and Certificate for Payment
		2.	City tabulation sheet(s)
		3.	AIA G702 - Application and Certificate for Payment

AIA G703 - Continuation Sheet(s)

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	T ENGINEER PROCEDURE
7 8		A.	The PE shall review the AIA-continuation sheets provided by the GC to determine if the Schedule of Values 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 11		C.	The PE shall work with the GC and the CPM to resolve any issues prior to signing the AIA - Application and 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	OJECT MANAGER PROCEDURE
16 17		A.	The CPM shall review all documents submitted by the GC and work with the PE to ensure the schedule of values 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		C.	appropriate City agencies for further processing of the payment request.
22			appropriate city agencies for farmer processing of the payment request.
23			END OF SECTION
2.0			2.10 0. 322.1011

		SECTION 01 33 23 SUBMITTALS	
DAD	T 1 C	NEDAL	1
PAN	1.1.	NERAL	
	1.2.	RELATED REFERENCES	
	1.3.	SUBMITTAL REQUIREMENTS	
DAD	-	ODUCTS – THIS SECTION NOT USED	
		ECUTION	
FAN	3.1.	GENERAL CONTRACTORS PROCEDURES	
	3.2.	SUBMITTAL REVIEW	
	3.3.	PROJECT ENGINEERS REVIEW	
PAR	RT 1 – G	<u>INERAL</u>	
1.1.	. SUI	IMARY	
	A.	The General Contractor (GC) shall be responsible for providing submittals for review of all contractors and s	sub-
		contractors as designated in the construction documents. Submittals shall include but not be limited to all	
		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 structu	ural,
		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.	
		7. Other submittals as may be required by individual specifications.	
	В.	The submittal process shall not be used to determine alternates to specified products or equipment. All	
		considerations shall be reviewed during the bidding process and acceptable alternates shall be acknowledge	ed by
		addendum prior to the closing of bidding. See bidding instructions for the information on submitting altern	ıates
		for consideration.	
	D.	In the event that a manufacturer has significantly changed a product (discontinued a model, changed dimer	nsion
		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.	
	E.	Contractors and sub-contractors shall be responsible for knowing the submittal requirements of ALL section	
		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, equipmen	
		product installed is determined not to meet the intent of the specification the contractor/sub-contractor sh	าall be
		required to remove and replace the items involved. The GC shall be solely responsible for all costs associate	ed
		with the removal and replacement.	
1.2.	. REL	ATED REFERENCES	
	A.	Section 01 29 76 Progress Payment Procedures	
	В.	Section 01 32 19 Submittals Schedule	
	C.	Section 01 32 26 Construction Progress Reporting	
	D.	All Technical Specifications, contract documents, construction drawings, and any published addendums dur	ing
		the bidding process.	
	E.	All contract documents generated during the execution of the contract including but not limited to Request	s for
		Information (RFI) and Construction Bulletins (CB).	
1.3.	. SUI	MITTAL 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	<u>;</u>
		same.	

2			complete manufacturers data.
3			<ol> <li>Documents within the PDF submittal shall be printable to a sized sheet no less than 8-1/2 by 11 inches</li> </ol>
4			and no larger than 24 by 36 inches.
5			3. At the beginning of each submittal the contractor shall identify the plan reference (WC-1, EF-3, etc.) in
6			RED block letters that the submittal is for.
7			4. Where multiple model numbers appear in a table the contractor shall identify the specific model being
8			submitted by using a RED square, box, or other designation to distinguish the correct model from others
9			on the page.
10		В.	A complete submittal will include all information associated with the product or equipment as presented in
11		ъ.	plans, equipment tables, and specifications. Information shall include but not be limited to the following:
12			Dimensional data
13			2. Performance data
14			3. Resource requirements, power, water, waste, etc
15			4. Clearance and maintenance requirements
16			5. Finish information, colors, textures, etc.
17			6. Warranty information
18		C.	Where a submittal includes material samples (carpet, tile, paint draw downs, etc.) the contractor shall do the
		C.	
19			following:  The Contractor shall submit the sample(s) as indicated in the specification
20			<ol> <li>The Contractor shall submit the sample(s) as indicated in the specification.</li> <li>The Contractor shall include a quality photograph(s) of the product with the digital submittal.</li> </ol>
21			
22			Photographs shall meet the following requirements:  a. Formatted to be between 500Kb and 1.0 Mb in file size
23			
24			b. Have no glare or flash reflection on the sample
25			c. Sample fills the frame of the photo and shows detail as needed. Include multiple photos from
26			other angles as needed.
27		Б	d. Scanned copies of products or photos are not acceptable.
28		D.	Uploaded submittals should be relative and related to a specific written specification.
29			1. <u>Do not upload submittals under a broad category or division (I.E. HVAC 23 00 00)</u> . Always upload by the
30			specific specification that identifies a required product or performance to be met.
31			2. Group related items together if the specification is written that way. (I.E. all of the plumbing fixtures and
32			trim relative to one specific specification should be submitted together).
33			3. Submittals shall be grouped and adhere to the divisions in the submittal schedule. Submittals that do no
34			conform to the submittal schedule and/or specification divisions will be rejected for re-submittal.
35			
	<u>PART</u>	<u> 2 – PRC</u>	DUCTS – THIS SECTION NOT USED
37			
	PART	3 - EXE	<u>CUTION</u>
39			
	3.1.		RAL CONTRACTORS PROCEDURES
41		Α.	All required submittals will be submitted electronically by the GC.
42		В.	Uploading the submittal indicates that the GC has reviewed and approved the submittal against the contract
43			document requirements.
44		C.	The GC shall discuss submittal status at all progress meetings and shall monitor submittal review/approval/re-
45			submittal so as to not incur delays in the project schedule.
46		D.	The GC and sub-contractors shall provide re-submittals as required.
47			
48	3.2.	SUBN	ITTAL REVIEW
49		A.	The submittal shall be reviewed internally by the required Architect/Engineer and Owner Representative in a
50			timely fashion and provide commentary on missing items, incorrect information, or incomplete shop drawings,
51			etc as needed.
52		В.	When the internal review is completed the CPM will notify the Project Engineer the submittal is ready for final
53			review.
54		C.	Information will be transmitted electronically.
55			

01 33 23 - 2

Submittals shall not include sales fliers or other similar documents that typically do not provide

### PROJECT ENGINEERS REVIEW 1 3.3. 2 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

1 2		SECTION 01 41 00 REGULATORY REQUIREMENTS
3		
4		1 – GENERAL
5		L.1. REQUIREMENT INCLUDED
6		1.2. PROCEDURES
7		1.3. NOTICES
8		1.4 PERMITS
9 10		2 – PRODUCTS - THIS SECTION NOT USED
11	FANI	3 - LACCOTION - ITIIS SECTION NOT USED
12	PART	1 – GENERAL
13		<del></del>
14	1.1.	REQUIREMENT INCLUDED
15		Unless otherwise specifically directed by Contractor each Subcontractor and each Sub-subcontractor shall comply with
16		provisions of this Section as required for proper execution and completion of their Work or portions thereof
17		
18	1.2.	PROCEDURES
19		Comply with and give notices required by applicable laws, statutes, ordinances, codes, rules, and regulations, and lawful
20		orders of public authorities having jurisdiction applicable to performance of the Work. Comply with and give notices
21		required by Owner's and Contractor's insurance companies, local utilities and labor regulations relating to the
22		performance of the Work, the protection of adjacent property, and the maintenance of passage ways, guard fences and
23		other protective facilities.
24		
25		The Contractor shall acquire all permits, licenses, and approvals necessary for the execution of this Contract and
26		performance of the Work and provide evidence of such applicable permits, licenses, and approvals at the Pre-
27		Construction Meeting or before commencement of the Work.
28		
29		Where Contract Documents require abatement of asbestos containing materials, prior written Notice to the State of
30		Wisconsin, Department of Natural Resources is required. The Contractor shall provide evidence of such Notice prior to
31		commencement of the Work.
32		Dragues all contificator of increasion, use, and accumancy, and all normits and licenses, nowall charges and face and sive
33		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
34 35		occupancy shall be delivered to the Owner upon completion of the Work in sufficient time for occupation of the Project
36		in accordance with the approved schedule for the Work. The costs of such procurement, payment and delivery shall be
37		included within the Base Bid.
38		included within the base bid.
39		Exercise precaution at all times for the protection of persons (including employees) and property. Observe the safety
40		provisions of applicable laws, building and construction codes. Refer to the Manual of Accident Prevention in
41		Construction, published by the Associated General Contractors of America.
42		
43		It is not Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws,
44		statutes, ordinances, codes, and rules and regulations. However, if Contractor observes that portions of the Contract
45		Documents are at variance therewith, Contractor shall promptly notify A/E and Owner in writing, and necessary changes
46		shall be accomplished by appropriate Modification.
47		
48		If Contractor performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and
49		regulations, or lawful orders of public authorities having jurisdiction, the Contractor shall assume full responsibility for
50		such Work and shall bear the costs attributable to correction.
51		
52		Refer to the Sections of the Work for referenced codes, standards, tests, etc., applicable to the Work.
53		
54	1.3.	NOTICES
55		Concealed or Unknown Conditions:
56		
57		If the Contractor encounters conditions at the site are (1) subsurface or otherwise concealed physical conditions that
58		differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual

nature, that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner and the Engineer before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Engineer will promptly investigate such conditions and, if the Engineer determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any of the Work, will recommend and equitable adjustment in the Contract Sum or Contract Time, or both. If the Engineer determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Engineer shall promptly notify the Owner and Contractor in writing, stating the reasons.

If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites, or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner and Engineer. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume operations. The Contractor shall continue to suspend operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features.

## 1.4 PERMITS

 Permits, Fees, Licenses, and Inspections: Unless otherwise provided in the Contract Documents, Contractor shall secure and pay for the building permit as well as for other permits, fees, licenses, inspections and approvals by government and utility agencies, necessary for proper execution and completion of the Work that are customarily secured after execution of the Contract and legally required at the time bids are received or negotiations concluded.

Owner will obtain plan approvals and pay all fees required by the Wisconsin Department of Safety and Professional Services.

Contractor shall obtain all permits and pay all fees required by local utilities for permanent electric and gas service.

Contractor shall obtain copies of all required permits and certificates of inspection applicable to the work.

Contractor shall furnish A/E and Owner with copy of all required permits and certificates.

# PART 2 - PRODUCTS - THIS SECTION NOT USED

# PART 3 - EXECUTION - THIS SECTION NOT USED

**END OF SECTION** 

1				SECTION 01 45 16
2				FIELD QUALITY CONTROL PROCEDURES
3	DART	4 65	NEDAL	
4		_		
5				N SECTIONS
6 7				REMENTS
8		_	•	ACIVIEIN I S
9			•	IT OBSERVATION REPORT
10		-	•	I NOT USED
11				NINOT OSED
12				IT RESPONSIBILITIES
13				0
14			•	RS FOLLOW-UP
15				EDURE
16			-	OUT
17		J.J.	CONSTRUCTION CLOSE	001
18	DART	1 _ GE	NERAL	
19	FAIL	I - GL	INLINAL	
20	1.1.	SHIM	MARY	
21	1.1.	Α.		has developed a multi-faceted Quality Management Program that begins with contract
22		Λ.		bugh contract closeout to ensure the best quality materials, workmanship, and product are
23			delivered for the cor	
24				Nanagement Observation (QMO) is an ongoing observation of the construction process as it
25				The City of Madison does not use a "Punch List" or "Corrections List" as it is typically known
26				he construction industry. The QMO process acts as an "in progress punch list".
27				ing the QMO process the City of Madison's goal is to have a zero item punch list prior to the
28				progress payment and owner occupancy.
29		В.		be required to review the specifications identified in Section 1.2 below, and other related
30				ried therein to become familiar with the terminology and expectations of this City of
31			Madison Public Wor	
32		C.	It is the intent of this	s specification to outline the requirements, expectations, and responsibilities of the General
33		-		ject Engineer, and other representatives of the Owner for items of Quality Assurance and
34			Quality Control.	,
35				tion is not intended to conflict other specifications requiring testing and inspecting services.
36				tion does not relieve the GC from any requirements associated with regulatory inspections
37				y the City of Madison Building Inspection Unit, or inspectors from other agencies as required
38			by code.	
39				erformed by an Owner's Representative does not relieve the GC from performing any
40				nay required by the construction documents.
41			· ·	
42	1.2.	RELA	TED SPECIFICATION SE	CTIONS
43		A.	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 REQUIREM	ENTS
49		A.	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 a	nd all applicable regulatory codes.
52		В.		onsible for all of the following:
53				quality of all workmanship, supplies, materials, and products being installed by all
54				nd installers to ensure they meet or exceed the minimum requirements set forth by the
55			construction	
56			2. Submit a Rec	uest for Information (RFI) whenever manufacturers' instructions or referenced standards
57				the construction documents before proceeding with the Work.

1			3.	Ensure that Work requiring special certifications or licensing is being performed by is being performed
2				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.		City of Madison and its representatives shall perform quality assurance and quality control activities
5				ighout the execution of this project. This in no way relieves the GC of maintaining an acceptable QA/QC
6			progr	ram.
7 8	1.4.	OUA	LITY AS	SURANCE
9		Α.		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				a. Any material, equipment, or product that does not meet the requirements of the construction
13				documents shall be removed and replaced, including any adjacent and related work, at the GCs
14				expense.
15			2.	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			3.	Providing access to updated as-builts, addenda, submittals, bulletins and other related construction
18				documents at the project site.
19		В.	The C	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 28	1.5.	OHA	I ITV M/	ANAGEMENT OBSERVATION REPORT
29	1.5.	A.		Quality Management Observation report or QMO is used as a QA/QC tool by those entities responsible for
30		/۱۰		QC activities, including but not limited to, the GC, CoM, PE, Cx agent, etc.
31		В.		Is are designed to be an early observation of non-conforming construction work before it becomes buried
32				llow on work. As such it is most often used as an "in progress punch list".
33		C.		preports and tracking will be distributed electronically. The distribution list will be established by the GC and
34			CPM.	
35				
36	PART	2 – PR	ODUCTS	S - THIS SECTION NOT USED
37	DADT	2 EV	CUTIO	NI
38 39	PARI	3 - EXI	OITUDE	<u>\</u>
40	3.1.	OUA	LITY MA	ANAGEMENT RESPONSIBILITIES
41		A.		e making routine progress visits to the construction project the GC, CPM, and PE, and applicable others shall
42				rve the details of the construction and installations to ensure that the intent of the construction documents
43				ing followed.
44		В.		ring the progress visit there is a determination of contract non-conformance a QMO report shall be initiated
45				gin 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 f	ollowing 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			5.	Assignment of categories (Sitework, Structure, Enclosure, Interior, etc) from the given list that may apply
55				to the observation being reported.
56			6.	Assignment of responsible contractor(s) that may need to be aware of the observation.
57			7.	Any attachments that may help provide reference to the observation.

1	3.2.	RESP	ONDING TO A QMO
2		A.	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.	GENI	ERAL CONTRACTORS FOLLOW-UP
11		A.	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.	QMC	CLOSEOUT PROCEDURE
16		A.	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		A.	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			

			CUTTING AND DATOURS	
			CUTTING AND PATCHING	
	_			
	_			
		_		
_				
_				
_	_			
J	.4.	CLLAIN	TO AND RESTORATION	
PART	1 – G	ENERAL		
,,,,,	<u></u>			
l.1.	SUN	<b>MARY</b>		
	A.	This !	Section includes general procedural requirements for cutting and patching including, but not limited to	the
		1.	Examination	
		2.	Preparation	
		3.	Performance	
		4.	Cleanup and Restoration	
l.2.	REL	ATED SP	ECIFICATION SECTIONS	
	A.	Divis	ions 02 through 32 Sections for specific requirements and limitations applicable to cutting and patching	5
	В.	Divis	ion 07 Section "Penetration Fire Stopping" for patching fire-rated construction.	
L.3.		_		
	В.			er
	_			
	C.	Leve	Alpha	
	011	A L ITV A C	CUDANICE	
L.4.	•			nina
	A.		·	ıyırıg
	R	•	,	aculto
	υ.			Courto
	C		,	that
	C.			
		-		
		3.	Exterior curtain-wall construction	
		4.		
		5.		
		6.		
	D.	-	·	ng and
				_
		•	· · · · · · · · · · · · · · · · · · ·	
	1 1 1 1 1 2 2 ART: 3 3 3 3 3 3	1.1. 1.2. 1.3. 1.4. 1.5. PART 2 - M. 2.1. SART 3 - EX 3.1. 3.2. 3.3. 3.4. PART 1 - G  A.  B.  C.  C.  C.  C.  C.  C.  C.  C.  C	1.1. SUMM/ 1.2. RELATE 1.3. DEFINIT 1.4. QUALIT 1.5. WARRA PART 2 - MATERIALS 2.1. GENER/ PART 3 - EXECUTION 3.1. EXAMIN 3.2. PREPAR 3.3. PERFOR 3.4. CLEANU  PART 1 - GENERAL  1.1. SUMMARY A. This strong indiv B. Divisi indiv B. Divisi indiv B. Divisi indiv C. Level  1.4. QUALITY AS A. Struct capar C. Misco could may include 1. 2. 3. 4. 5. 6. D. Visua patch woul	1.2. RELATED SPECIFICATION SECTIONS 1.3. DEFINITIONS 1.4. QUALITY ASSURANCE 1.5. WARRANTY 1.5. WARRANTY 1.6. WARRANTON 1.5. LEXAMINATION 1.5. LEXAMINATION 1.5. LEXAMINATION 1.6. WARRANTY 1.6. WARRAN

### WARRANTY 1.5.

- 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.
- В. 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**

1

2

3

4

5

6 7

8 9

10

11

12 13

### 2.1. **GENERAL**

- A. Comply with requirements specified within other sections of the Specifications.
- В. 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.
  - 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.

# **PART 3 - EXECUTION**

# 14 15 16 17

20

21

22

25

26

27

28

29

30 31

32

33 34

36

37

38

39 40

41

42

43 44

45

46

47

48

49

50

51

52

53

54

55

56

57

### **EXAMINATION** 3.1.

# 18 19

- Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed. A.
  - 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.

# 23 24

### **PREPARATION** 3.2.

- A. Temporary Support: Provide temporary support of Work to be cut.
- В. 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**

- General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the A. earliest feasible time, and complete without delay.
  - 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.
- В. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding, and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. If possible, review proposed procedures with original Installer; comply with original Installer's written
  - In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required, and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
  - 2. 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. 3.
  - 4. Excavating and Backfilling: Comply with requirements in applicable Division 3I Sections where required by cutting and patching operations.
  - 5. Mechanical and Electrical Services: Cut off pipe or conduit in walls or partitions to be removed. Cap, valve, or plug and seal remaining portion of pipe or conduit to prevent entrance of moisture or other foreign matter after cutting.
  - Proceed with patching after construction operations requiring cutting are complete. 6.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up, and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and 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.	CLEAR	IUP AND RESTORATION
5		A.	Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a
6			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			2. 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						
PART	1 – G	NERAL	1					
	1.1.	SUMMARY						
	1.2.	RELATED SPECIFICAITONS	1					
	1.3.	QUALITY ASSURANCE	1					
PART	2 - PF	DDUCTS						
	2.1.	CLEANING MATERIALS AND EQUIPMENT						
	-	CUTION						
	3.1.	SAFETY CLEANING						
	3.2. 3.3.	PROJECT SITE CLEANING						
	3.4.	ROGRESS CLEANING						
	3.5.	CALL BACK WORK	_					
PAR1	Г1 – G	NERAL						
1.1.	SUI	IMARY						
	A.	Throughout the execution of this contract all contractors shall be responsible for maintaining the project site in	ıа					
		standard of cleanliness as described in this specification.						
	В.	All contractors shall also comply with the requirements for cleaning as described in other specifications.						
	C.	Work included in this specification shall include but not be limited to:						
		1. Safety Cleaning						
		2. Project Site Cleaning						
		Progress Cleaning     Final Cleaning						
		4. Final Cleaning						
1.2.	REL	ATED SPECIFICAITONS						
	A.	Section 01 60 00 Product Requirements						
	В.	Section 01 74 19 Construction Waste Management and Disposal						
	C.	Section 01 76 00 Protecting Installed Construction						
1.3.	QU	LITY ASSURANCE						
	A.	The General Contractor (GC) shall conduct daily inspections, more often if necessary, of the entire project site t	ю					
		ensure the requirements of cleanliness are being met as described within these specifications.						
	В.	All contractors shall comply with other regulatory requirements as they apply to waste recycling, reuse, hauling	3,					
		and disposal requirements of any governmental authority having jurisdiction.						
	C.	The Owner reserves the right to have work done by others in the event any contractor fails to perform cleaning	5					
		as described within these specifications. The cost of any Owner provided cleaning shall be charged to the						
		contractor through a deduct change order.						
PART	Г <b>2</b> - РІ	<u>ODUCTS</u>						
2.1.	CLE	NING MATERIALS AND EQUIPMENT						
	A.	The Contractor shall provide all required personnel, equipment, and materials necessary to maintain the						
		required level of cleanliness as described in this specification.						
	В.	Use only cleaning materials and equipment that are compatible with the surface being cleaned, as						
		recommended by the manufacturer, or as approved by the A/E.						
	C.	Use only cleaning materials, equipment, and methods as recommended in the manufacturers care and use guid	et					
		of the material, finish or equipment being cleaned.						
PAR1	「3 - E)	<u>ECUTION</u>						
3.1.	SΔF	TY CLEANING						
J.1.	A.	All Contractors shall be responsible for safety cleaning as required by OSHA and other regulatory requirements						
	- **	as applicable.						
	В.	Safety Cleaning shall include but not be limited to the following:						

01 74 13 - 1

1 2			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
3				picked up when not in use.
4			2.	Form and scrap lumber shall have nails/screws removed or bent over. Lumber shall be neatly stacked in
5			۷.	an area designated by the GC.
			2	
6 7			3.	Spills of oil, grease, and other such liquids shall be cleaned immediately or sprinkled with sand/oil-dry first, then cleaned.
8			4.	Oily, flammable, or hazardous items shall be stored in appropriate covered containers and storage
9				devices unless actively being used.
10			5.	Oily, or flammable rags, and other such waste shall only be disposed of in authorized covered containers.
11			6.	Disposal by burning shall not be allowed at any time.
12			0.	Disposar by Burning shan not be anowed at any time.
13	3.2.	DDOI	ECT CITE	CLEANING
	3.2.			
14		A.		ection applies to the general cleanliness of the project site as a whole for the duration of the execution of
15		_		ontract.
16		В.		or Project Site Areas
17			1.	The GC and other Contractors as appropriate shall ensure the following levels of cleanliness are applied
18				to the exterior project site areas.
19				a. The overall appearance of the project site is neat and orderly. Defined areas for material storage,
20				material waste, job trailers, and the project area are clean and well maintained.
21				b. The construction fence is maintained, erect with no gaps, and properly posted per all regulatory
22				requirements.
23				c. All erosion control measures are properly maintained, cleaned, and repaired as necessary.
24				d. All loose materials (construction or waste) are properly tied or weighted down to resist blowing.
25				e. All construction materials are properly covered with fully functional tarps or plastic wrap,
25 26				protected from the weather, coverings are tied, strapped, or weighted down to resist blowing.
20 27				
		_	Land and	
28		C.		or Project Site Areas
29			1.	All Contractors shall ensure the following levels of cleanliness are applied to the interior project site
30				areas.
31				a. The overall appearance of the project site is neat and orderly. Defined areas for material storage,
32				material waste, and project area are clean and well maintained.
33				b. Stored materials are kept in original shipping containers whenever possible. Stored materials not
34				in shipping containers are properly stored and protected according to other applicable
35				specifications.
36				c. All scraps and debris shall be properly disposed of as often as necessary to keep work areas,
37				passageways, stairs, and ramps free of debris and clear for emergency exiting.
38				d. Boxes, pallets, and other such shipping containers, are broken down, stored in a consolidated area
39				or, disposed of as often as is necessary.
40				
41		Б.	Laborate	boxes, not left as walking hazards in work areas, passageways, etc.
42		D.	Job Tr	
43			1.	The interior of the job trailer shall be kept clean and available as a work space at all times. The GC shall
44				ensure that the following is provided for within the job trailer:
45				a. Meeting space including tables and chairs.
46				b. Sufficient space for all contractors to access the official construction documents, provide updates,
47				etc.
48				
49	3.3.	PROC	GRESS CI	EANING
50		A.	This s	ub-section shall apply to all Progress Cleaning prior to the installation of finishes, fixtures, and trim (IE
51			rough	
52			1.	For the purposes of this section "clean" shall be defined as a level of cleanliness free of dust and other
53			<b>.</b>	material capable of being removed by use of reasonable effort using a good quality janitor broom and
55 54				
			2	shop-vac.  Daily cleanings shall be conducted by all contractors at the and of the work day as follows:
55			2.	Daily cleanings shall be conducted by all contractors at the end of the work day as follows:
56				a. Debris in excavated areas shall be removed prior to backfill and compaction.
57				b. Debris in wall cavities, chase spaces, etc shall be removed prior to enclosing the spaces.
58				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.		ly cleaning shall be conducted by all contractors as designated by the GC. Weekly cleanings shall
4			5.		le all the above for a daily cleaning and other necessary cleaning as designated by the GC.
		n	This s.		
5		В.	inis st		ion 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.
12					ii. Metal surfaces shall be wiped clean of dirt and oily residues, and be free of surface
13					imperfections prior to painting.
14					iii. Flooring shall be broom swept of large and loose items then vacuumed clean of dust and
15					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.			ion shall apply to Progress Cleaning after the installation of finishes, fixtures, and trim.
19			1.		e purposes of this section "clean" shall be defined as a level of cleanliness free of dust and other
20				mater	rial capable of damaging or visually disfiguring finished work, finishes, fixtures, and trim.
21			2.	Progre	ess 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 C	ontractor(s) at no additional cost to the Owner shall be responsible for replacing any finished work,
26			٥.		es, fixtures, and trim damaged or disfigured because of inadequate or improper cleaning.
27				111113111	,3, fixtures, and trim damaged or disfigured because of inidacquate of improper cleaning.
28	3.4.	EINIAI	. CLEANI	ING	
29	3.4.				nocification 01 20 76 Progress Payment Procedures Progress Payment Milestone Schedule Final
		A.			pecification 01 29 76 Progress Payment Procedures, Progress Payment Milestone Schedule, Final
30					I not be conducted prior to requesting the 90% contract total progress payment and all of the
31				_	Il be complete:
32			1.		al regulatory inspections including but not limited to Building Inspection Department and Madison
33				Fire D	epartment inspections have been successfully completed.
34			2.	All Qu	ality Management Observation (QMO) reports have been closed out.
35			3.	All De	monstration and Training has been completed.
36			4.	All Att	tic Stock has been consolidated and located to its designated area
37			5.		otection for installed construction shall be removed prior to final cleaning by the contractor
38					nsible for providing the protections. This shall include the removal of any adhesive residues left
39					d from tapes. Contractors shall only use manufacturer authorized cleaning materials for removing
40					ives, etc.
41		В.	Ear th		oses of this section "clean" shall be defined as a level of cleanliness generally provided by skilled
		ъ.			
42		•			g commercial quality building maintenance equipment and materials.
43		C.			be responsible for ensuring that all requirements under this section are being met.
44		D.			uirements
45			1.		by experienced personnel or professional cleaners for final cleaning as necessary for the areas or
46				equip	ment being cleaned.
47			2.	Clean	ing equipment used shall be commercial grade equipment commonly used by professional cleaners.
48			3.	Clean	ing equipment and materials shall be cleaned, rinsed, or replaced to ensure a uniform level of
49				cleanl	iness is being maintained during the final cleaning. This shall include but not be limited to the
				follow	
50				a.	Vacuum cleaner bags and/or filters are changed and/or cleaned as often as necessary.
50 51					
51					
51 52				b.	Dust & wipe down rags are washed, rinsed, or replaced before starting each room.
51 52 53					Dust & wipe down rags are washed, rinsed, or replaced before starting each room. Mopping equipment
51 52 53 54				b.	Dust & wipe down rags are washed, rinsed, or replaced before starting each room.  Mopping equipment  i. Mop water for washing shall have cleaning solution added to the amount and temperature
51 52 53 54 55				b.	Dust & wipe down rags are washed, rinsed, or replaced before starting each room.  Mopping equipment  i. Mop water for washing shall have cleaning solution added to the amount and temperature per manufacturer's recommendations. Mop washing water shall be replaced often to
51 52 53 54 55 56				b.	Dust & wipe down rags are washed, rinsed, or replaced before starting each room.  Mopping equipment  i. Mop water for washing shall have cleaning solution added to the amount and temperature per manufacturer's recommendations. Mop washing water shall be replaced often to maintain the levels of the cleaning solution and temperature required.
51 52 53 54 55				b.	Dust & wipe down rags are washed, rinsed, or replaced before starting each room.  Mopping equipment  i. Mop water for washing shall have cleaning solution added to the amount and temperature per manufacturer's recommendations. Mop washing water shall be replaced often to

1			<ol><li>Mop heads and buckets shall be thoroughly rinsed with each change of water.</li></ol>
2			v. Only new mop heads shall be used for rinsing.
3		E.	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			4. Paved areas shall be clean, free of dirt, oily stains and other such blemishes
11			5. 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			4. 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		A.	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			1. The immediate area(s) where work was completed.
33			2. Adjacent areas where dust or debris may have traveled.
34			3. Other areas occupied during the completion of the call back work.
35			4. 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
PART		ENERAL
	1.1.	SUMMARY
	1.2.	RELATED SPECIFICATIONS
DADT	1.3.	CITY ORDINANCES
		ECUTION
FAN	3.1.	GENERAL GUIDELINES FOR ALL WASTES
	3.2.	GUIDELINES FOR RECYCLABLE, RE-USABLE, AND SALVAGEABLE WASTE
	3.3.	GUIDELINES FOR DISPOSAL OF WASTES
PAR	Г1 – <u>G</u>	<u>ENERAL</u>
1.1.	SUN	//MARY
	A.	This specification includes administrative and procedural requirements for the recycling, re-use, salvaging, and
		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.	DEI	ATED SPECIFICAITONS
1.2.	A.	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 as it
		pertains to work being conducted under that particular specification.
1.3.	CITY	/ ORDINANCES
	A.	There are two (2) Madison General Ordinances (MGO) that the City of Madison has regarding construction and
		demolition waste.
		1. MGO 10.185, Recycling and Reuse of Construction and Demolition Debris, describes the requirements
		associated with this ordinance including definitions, documentation requirements, and penalties.
		2. MGO 28.185, Approval of Demolition (Razing, Wrecking) and Removal, describes the requirements
	D	associated with applying for and receiving a demolition permit.  All City of Madison, Board of Public Works, contracts being conducted by City Engineering, Facility Management,
	В.	for construction, remodeling, or demolition shall comply with the above ordinances regardless of project type or
		size.
		SIEG.
PAR	T 2 – PI	RODUCTS – THIS SECTION NOT USED
P	F 2	TOUTION
PAR	13-EX	<u>(ECUTION</u>
3.1.	GEN	IERAL GUIDELINES FOR ALL WASTES
	Α.	Recycle all paper and beverage containers used by workers, sub-contractors, suppliers and visitors to the project
		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 where
		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 trees.
		2. Inspect containers and bins frequently for contamination and inappropriately sorted materials. Remove
		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.	GUIDELINES FOR RECYCLABLE, RE-USABLE, AND SALVAGEABLE WASTE						
7	J.Z.	A.		lowing guidelines is not a complete or all inclusive list and shall be adjusted as needed by the methods				
8		,		ocedures identified in the Waste Management Plan.				
9		В.		t Paving: Break-up into transportable pieces or grind, transport to an authorized recycling facility.				
10		C.		and Pad: Separate carpet and pad scraps, containerize and transport to an authorized recycling facility.				
11		D.		System Components: Suspended ceiling system components shall be sorted by material type as follows:				
12			_	Broken, cut, or damaged tiles shall be containerized, transport to an authorized recycling facility.				
13				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		E.		Fill: When allowed by Division 31 Specifications; concrete, masonry, stone, asphalt pavement, sand and				
16				such materials may be used as clean fill on this project site. The GC shall verify with the Project Engineer,				
17				ral Engineer, or Civil Engineer as necessary prior to using any materials as clean fill. Materials shall be				
18			process	sed, placed, and compacted as specified. If not being re-used on site, transport to an authorized recycling				
19			facility.					
20		F.		Nood Materials: Including but not limited framing cutoffs, wood sheathing or paneling materials,				
21			structu	ral or engineered wood products, and pallets or crates. Clean Wood shall be free of paints, stains, oils,				
22			preserv	vatives and other such contaminates.				
23			1.	Useable pieces shall be sorted by type and dimension, bundled and transported off site by the GC or				
24				returned to the supplier.				
25				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.		te: Break-up into transportable pieces, remove all reinforcing and other metals, transport to an				
29				ized recycling facility.				
30		H.		roducts: Shall be sorted by types, do not include light fixture lamps and bulbs. Products broken in				
31				ent shall be returned to the supplier. Broken or cracked items still in frames shall be taped to prevent				
32				breakage and injury to workers. Transport to an authorized recycling facility.				
33		l.		m Board: Stack large clean pieces on wooden pallets or container, store in a dry location, transport to an				
34				ized recycling facility.				
35		J.		ixture Lamps and Bulbs: Fluorescent tubes shall be containerized, transport to an authorized recycling				
36		V	facility.					
37		K.		ry and CMU: Remove all metal reinforcing, anchors, and ties, clean undamaged pieces and neatly stack on				
38		ı		, transport damaged pieces to an authorized recycling facility.				
39 40		L.		: Sort metals by type as follows, this does not include piping:  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				Structural steel, sort by size and type; palletize and transport to an authorized recycling facility.				
43				Miscellaneous metals such as aluminum, brass, bronze, etc shall be sorted by type, containerized or				
44			5.	palletized as necessary, transport to an authorized recycling facility.				
45		M.	Packagi	ing and shipping materials				
46		141.	Ū	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				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				salvage or re-use.				
52				c. Break down pallets into component wood pieces that comply with the requirements for recycling				
53				clean wood materials. Neatly stack or palletize pieces in preparation for transportation.				
54			3.	Crates: Break down crates into component wood pieces that comply with the requirements for recycling				

4.

55

56

Polystyrene Packaging: Separate and bag materials.

clean wood materials. Neatly stack or palletize pieces in preparation for transportation.

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		Ο.	Roofing: Roofing materials shall be sorted and containerized by type, transport to authorized recycling facilities			
5			according to material types.			
6		P.	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		A.	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		E.	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			

1	SECTION 01 76 00								
2				PROTECTING INSTALLED CONSTRUCTION					
4	PART	1 – G	ENERAL.		1				
5		 1.1.		ARY					
6	-	1.2.	QUALIT	TY ASSURANCE	1				
7	2	1.3.	RELATE	D SPECIFICATIONS	2				
8	PART	2 - PF	RODUCTS	, )	2				
9	2	2.1.	FENCIN	IG MATERIALS AND BARRICADES	2				
10	2	2.2.	EROSIO	ON CONTROL PROTECTION	2				
11	2	2.3.	INTERIO	OR FINISH PROTECTION MATERIALS	2				
12	PART	3 - EX	(ECUTION	V	3				
13	3.1.			AL EXECUTION REQUIREMENTS					
14	3.2.			PROTECT ADJACENT PROPERTIES					
15		3.3.		PROTECT LANDSCAPING FEATURES					
16		3.4.		CT UTILITIES					
17		3.5.		CT PUBLIC RIGHT OF WAY					
18		3.6.		CT STORED MATERIALS					
19		3.7.	_	CT WORK - EXTERIOR	_				
20	3	3.8.	PROTE	CT WORK - INTERIOR	5				
21	DADT		CALEDAL						
22 23	PAKI	1-6	ENERAL						
25 24	1.1.	SHIP	MMARY						
25	1.1.	A.		purpose of this specification is to provide clear responsibilities, guide lines, and requirements related to					
26		л.		iding protection to already installed construction.					
27		В.		ady installed construction shall include but not be limited to the following:					
28		٥.	1.	Any existing site feature such as pavement, curbs, drainage features, utilities, landscaping features (tre	es.				
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.	All co	ontractors shall be familiar with the specifications of their Division of Work for specific requirements on					
37			prote	ection of the Work.					
38		D.	The i	requirements noted within this specification do not relieve any contractor of the responsibility for					
39			com	pliance with any code, statute, ordinance, or other such regulatory requirement having jurisdictional					
40			auth	ority over these contract documents.					
41									
42	1.2.	-		SURANCE					
43		A.		all be the responsibility of every contractor and worker assigned to the project to be diligent in protecting	all				
14 1-		-		ing work, and newly installed construction.					
45 46		В.		all be the General Contractors' (GC) responsibility under the contract to provide all reasonable protection					
46 47				nods, materials, or precautionary measures required to protect new or existing construction as described in this provides to the provides as a sub-level of the provides to th	n				
47 40				in this specification to the project as a whole.	ا۔				
48 40			1.	The GC shall be responsible to ensure any damaged new or existing construction is repaired or replaced	J				
49 -0			2	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	20				
51 52				completed work associated with their Division of Work. I.E.: The carpet installer may be required by the GC to provide carpet protection along traveled paths, ingress/egress, etc after installation.	iC				
52 53		C.	It ch	all be the responsibility of the GC to ensure that all materials being used to protect installed construction a	aro				
54		С.		patible with, and/or adjacent to, the materials being protected. This shall include but not be limited to the					
55				erial used as covering, tapes used to fasten protective materials, etc.	-				

1.3.	RELA		CIFICATIONS
	A.	Parts o	of this specification will reference articles within "The City of Madison Standard Specifications for Public
		Works	Construction".
		1.	Use the following link to access the Standard Specifications web page:
			http://www.cityofmadison.com/business/pw/specs.cfm
			a. Click on the "Part" chapter identified in the specification text. For example if the specification
			says "Refer to City of Madison Standard Specification <b>2</b> 10.2" click the link for Part II, the Part II
			PDF will open.
			b. Scroll through the index of Part II for specification 210.2 and click the text link which will take you to the referenced text.
			c. City Standard Detail Drawings (SDD) may be located from the index in Part VIII.
	В.	Section	n 01 60 00 Product Requirements
	C.	Section	n 01 74 13 Progress Cleaning
<u>PART</u>	2 - PR	<u>ODUCTS</u>	
2.1.	EENI	ING MAT	TERIALS AND BARRICADES
2.1.	A.	-	t where noted in other areas of the construction documents the responsible contractor may provide any of
	,	the fol	llowing that sufficiently provide a sturdy physical barrier and/or visual barrier as necessary for the led application.
		1.	Standard orange construction barrels each with a standard rubber base ring and reflective tape
		1.	a. Provide flashing amber lights as needed to increase night time visibility
		2.	Steel "T" style fence posts
		3.	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.		ontractor responsible for providing the fencing materials and barricades shall also be responsible for
	ъ.		aining them. This shall include but not limited to fixing damaged fencing, standing up barrels that have
			knocked over, realigning barrels, and ensuring flashing lights are fully operational at all times.
	C.		llowing fencing and barricade designations, and their use descriptions shall be used throughout this
	C.		cation to provide uniformity in describing protection requirements.
		1.	Type A, Jersey Barriers, to be used as permanent blocking devices to deny access to alternate project site
		1.	entrances or exits.
		2.	Type B, Traffic Barricades, to be used as temporary blocking devices to deny access to alternate project
		۷.	site entrances or exits.
		3.	Type C, Construction Barrels without construction fencing shall be used for lane closures, temporary
		5.	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 object
		4.	with a complete visual barricade and it is impractical or unacceptable to install fence posts. The surround
			shall be constructed in such a manner as to provide a buffer zone around and access to the item being
			protected.
		5.	Type E, Steel "T" Fence Posts with construction fencing to surround an object with a complete visual
		٥.	barricade and it is practical to install fence posts. The surround shall be constructed in such a manner as
			to provide a buffer zone around and access to the item being protected.
		6.	Type X, Other fencing or barricade types that may be designated and detailed within the construction
		0.	documents shall use additional alpha numeric designations.
			accuments shan use additional alpha numene designations.
2.2.	FRO	SION CON	NTROL PROTECTION
	A.		to City of Madison Standard Specification 210.2 for authorized materials associated with erosion control
	, · ·	materi	
		materi	with

contractor:

2.3. INTERIOR FINISH PROTECTION MATERIALS

55

56

57

58

Except where noted in other areas of the construction documents or this specification the responsible

Shall not provide the cheapest or least effective method as an effort to meet any protection requirement.

30

31 32

33

34

35

36

37

38

39

40

41

42

43

44

45

46

47

48

49

50

51

52

53

54

55

56

57

58

- have obtained any permanent or temporary easements that may be necessary to complete any Work on adjacent properties.
- В. It shall be the responsibility of the GC to do the following for all Work under this contract being performed on or adjacent to the property line:
  - Contact the adjacent property owner and provide him/her with information on the work to be done, equipment to be used, and estimated duration of the work. Information to be updated and communicated to property owner(s) as construction progresses and site conditions change.
    - If any adjacent property is a rented or leased space the GC shall also make contact and provide the same information to the tenants.
    - b. Determine from the owner and/or tenants if there are any concerns for children, pets, special plantings, or other concerns.
  - Discuss the following with all contractors performing work on or near the property line. 2.
    - a. Work to be completed and timeline.
    - b. Concerns of adjacent property owners/tenants from item 1 above.
    - c. Which protective measures will be necessary to protect adjacent properties and address the concerns of adjacent property owners/tenants.
  - 3. Ensure all protective measures are placed and maintained during the execution of Work on or adjacent to the property line. Interact with the adjacent property owners/tenants as needed.
- C. Any contractor doing work on or adjacent to the property line shall install and maintain any protective measure identified in the contract documents, this specification, or as directed by the GC.
- D. The GC shall be responsible for restoring any damage to structure and property located on or adjacent to the property line.
  - 1. Restoration shall include but not be limited to repair or replacement using like materials and finishes to its original condition or better.
  - 2. Restoration of landscaping materials shall include watering of any seed, sod, or other planting of any kind for a reasonable period of time to encourage germination and root development.
- E. The GC shall keep the CPM informed directly to any issues pertaining to adjacent property owners and tenants.

### PROTECT LANDSCAPING FEATURES 3.3.

Except where specifically stated in other areas of the construction documents the following minimal protection requirements shall apply under this section.

1 1. Whenever possible do not install new landscape features until exterior building construction has been 2 completed, equipment such as scaffolding and lifts are no longer needed and have been removed, and 3 heavy equipment operation is no longer required. 4 2. Whenever possible remove and temporarily store all existing landscape features such as benches, waste receptacles, signage, and other such features that will be within the area of Work that can be removed. 5 3. Landscape features that cannot be removed such as flag poles, light poles, light bollards, etc. shall be 6 7 protected with Type D fencing for areas on pavement or Type E fencing for areas on soil. 8 4. Planting beds shall be protected using Type E fencing around the exposed perimeter of the planting bed 9 as needed. 10 5. The City of Madison Standard Specification 107.13 shall apply to all tree protection in and around the 11 project site at all times. 12 13 3.4. **PROTECT UTILITIES** 14 Α. The contractor shall be responsible for notifying all utilities to determine emergency response procedures and 15 protection requirements prior to installing any construction protection. 16 This includes requesting utility marking through Diggers Hotline. 17 a. Call 811 or 1-800-242-8511 to request a public utility locate 18 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 19 20 available prior to calling a private utility locating company. 21 В. Except where specifically stated in other areas of the construction documents the following minimal protection 22 requirements shall apply under this section. 23 Hydrants, lamp posts, electrical transformers, and other utility pedestals shall be protected with Type D 24 fencing for areas on pavement or Type E fencing for areas on soil. Fence posts shall be located so as to 25 not be directly over the utility main. 26 2. Storm sewer structures in pavement shall have proper inlet protection according to City of Madison 27 Standard Specification 210.1(g) and Type C Construction Barrels when necessary. 28 3. Storm sewer structures in turf and other landscaped areas shall have proper inlet protection according to 29 City of Madison Standard Specification 210.1(g) and Type E fencing for areas on soil. 30 4. 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 31 32 measure specified on the Erosion Control Plan. See multiple sections of City of Madison Standard Specification 210.1 33 For the protection of hard to see items such as structures, castings, inlets, etc. in grassy areas 34 35 provide Type E fencing for areas on soil. 36 For the protection of storm water management features having special soils and plants such as c. 37 bio-filtration ponds provide Type E fencing for areas on soil. Other structures and covers including but not limited to cleanouts, wiring hand holes, valve boxes, access 38 5. structures, grease trap structures, etc shall be protected as follows: 39 40 a. Provide Type E fencing for areas on soil. 41 b. When paving operations are complete provide a construction barrel or cone near structures as 42 necessary depending on required heavy construction traffic. 43 PROTECT PUBLIC RIGHT OF WAY 44 3.5. 45 Except where specifically stated in other areas of the construction documents the following minimal protection 46 requirements shall apply under this section. 47 All public right-of-way (area from behind the sidewalk to the centerline of the street) shall remain open 48 and accessible except during periods of active work. At such times the public right of way shall be 49 properly closed and signed as referenced in City of Madison Standard Specification 107.9. 50 2. Bus stops and bus stop structures shall remain accessible at all times. 51 3. Traffic signage and traffic signals, traffic control boxes shall be protected with Type D fencing for areas on 52 pavement or Type E fencing for areas on soil. Protection at traffic signage/signals shall not obstruct the viewing of the sign/signal for its 53 54 intended purpose at any time. 55 В. When additional protection for traffic control is required, the use of barricades, guardrails, lane closures and

C.

56

57

58

When additional protection for overhead sidewalk cover is required the contract documents shall indicate the

other such procedures will be detailed within the construction documents.

specific location and structural requirements of the protective structure.

53

54 55

56

57

58

### 3.6. PROTECT STORED MATERIALS

A. All contractors shall refer to Specification 01 60 00 Product Requirements for all storage and protection requirements of building materials and products delivered to the site.

# 3.7. PROTECT WORK - EXTERIOR

- A. Provide all temporary services that may be required to protect the installed material from heat, cold, humidity, etc, while materials such as concrete, mortar, sealants, paints, etc, are drying and/or curing.
- B. Open trenches, pits, and other such excavations shall be properly covered, lined, or shored as needed during periods of inclement weather to prevent the caving of soils onto existing work in progress. Refer to the appropriate specifications and/or regulatory requirements governing this type of work as necessary.
- C. Provide adequate protection at all openings with heavy duty tarps, plastic sheathing, or wood framing and sheathing as needed to protect interior work in progress from inclement weather as needed.
- D. Protect exterior finishes of all kinds with heavy duty tarps or plastic sheathing as needed while landscaping is being installed through full germination of seeded areas or installation of filter fabric and mulches to keep dust, dirt, and mud off of finished exterior surfaces.
- E. Designate specific curb mounting points and provide wood blocking where small vehicles, skid loaders and other such equipment may need access to areas being landscaped.
- F. Provide plywood turning pads for skid loaders to turn on to prevent tire marking on new pavement.
- G. Do not permit the parking of vehicles with any kind of fluid leaks to park on new pavement.
- H. The contractor shall be responsible for cleaning, repairing, or replacing any completed work or work in progress under this specification as deemed necessary by the CPM without additional cost to the contract.

### 3.8. PROTECT WORK - INTERIOR

- A. The GC shall do all of the following:
  - Provide all temporary services that may be required to protect the installed material from heat, cold, humidity, etc, while materials such as concrete, mortar, sealants, paints, etc, are drying and/or curing.
  - 2. Provide adequate visual and/or physical protection as needed to protect newly completed interior work such as paint, flooring material, sealants, grouts, etc that may be drying and/or curing.
  - 3. Provide adequate space and materials for cleaning boots, tool boxes, supplies, and other items coming into the project site once finish work has begun.
  - 4. Clean dirtied areas and repair/replace damaged areas immediately.
- B. The contractors responsible for interior work shall be responsible for protecting their work and finishes from dirt, mud, snow, spills, splatters, and physical damage after installation as follows:
  - 1. Protect vinyl composite, rubber composite, painted/stained concrete, and tiled flooring as follows:
    - a. Define foot traffic areas and protect with Ramboard Temporary Floor Protection products as a minimum basis of design or other protection product(s) compatible with installed flooring product if Ramboard is not compatible. Products to be used shall be new.
      - Tape all edges, seams, etc with a good quality tape that does not leave sticky residue. Do
        not allow any debris or other material between the installed flooring and the protection
        material.
      - ii. Repair tears immediately, replace worn areas with like material as necessary.
  - 2. Protect carpeted areas as follows:
    - a. Define foot traffic areas and protect with a minimum of 6mil, clear, polyethylene sheeting 3 feet wide. Products to be used shall be new.
      - Tape all edges, seams, etc with a good quality tape that does not leave sticky residue. Do
        not allow any debris or other material between the installed flooring and the protection
        material.
      - ii. Repair tears immediately, replace worn areas with like materials as necessary.
  - 3. Protect all finished walls in high traffic areas with Ramboard Temporary Wall protection products or approved equal.
    - Tape all edges, seams, etc with a good quality tape that does not leave sticky residue. Do
      not allow any debris or other material between the installed flooring and the protection
      material
    - ii. Repair tears immediately, replace worn areas with like materials as necessary.
  - Protect counter tops, cabinets, and other finished surfaces with large sheets of thick cardboard or Ramboard products. Do not allow toolboxes, finish materials, parts and other such items to be placed on finished materials.

1	C.	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		

				SECTION 01 77 00					
				CLOSEOUT PROCEDURES					
DΔRT 1	– GI	INFRΔI							
			SUMMARY						
				INS					
	1.3. DEFINITIONS								
1.4	-			- CONSTUCTION CLOSEOUT					
1.5				- CONTRACT CLOSEOUT					
				N NOT USED					
				3					
3.3	1.	CONST	RUCTION CLOSE	OUT CHECKLIST3					
3.2	2.	CONST	RUCTION CLOSE	OUT REQUIREMENTS3					
3.3	3.	CONST	RUCTION CLOSE	OUT PROCEDURE4					
3.4	4.	CONTRA	ACT CLOSEOUT	REQUIREMENTS					
3.5	5.	CONTRA	ACT CLOSEOUT	PROCEDURE					
ART 1	. – G	<u>ENERAL</u>							
.1.	SUN	/IMARY							
	A.			specification is to clearly define and quantify the requirements associated with closing a City of the Contract for facility related work.					
	В.			vo distinct but related paths. Each path needs to be properly closed independently in order					
		to clo	ose the contract						
		1.		closeout is related to closing out all of the Work associated with the construction					
			documents.						
				Il be the responsibility of all contractors to be fully aware of the required Work and closeout rements involved in their individual trades.					
		2.	Contract clos	seout is related to closing out all of the administrative aspects of the contract in general.					
			a. It shal	Il be the responsibility of all contractors to be fully aware of the administrative requirements					
			requir	red by the contract and to provide the supporting documentation required.					
		3.	Construction	Closeout must be completed before Contract Closeout can begin.					
	C.	This	specification wil	ll provide general knowledge associated with the following areas:					
		1.		Closeout Requirements					
		2.	Construction	Closeout Procedure					
		3.		seout Requirements					
		4.		seout Procedure					
		5.	Final Paymen	nt and Certificate of Completion					
2.	REL	ATED SP	ECIFICATIONS						
	A.	Cont	ractors shall rev	view all references to other specifications including specifications relating to the execution of					
		the V	<b>Vork</b> associated	with their Division or Trade.					
	В.	Secti	on 01 29 76	Progress Payment Procedures					
	C.	Secti	on 01 32 16	Construction Progress Schedules					
	D.	Secti	on 01 74 13	Progress Cleaning					
	E.	Secti	on 01 45 16	Construction Waste Management and Disposal					
	F.	Secti	on 01 76 00	Protecting Installed Construction					
	G.	Secti	on 01 78 23	Operation and Maintenance Data					
	Н.		on 01 78 36	Warranties					
	I.		on 01 78 39	As-Built Drawings					
	J.		on 01 79 00	Demonstration and Training					
	K.	Othe	r requirements	as noted in the contract documents signed by the General Contractor					
.3.	DEF	INITION	S						
	A.			<b>Ince</b> : A letter provided to the City of Madison Building Inspection and signed by the Project					
		_	_	that all Work has been completed to a level that would allow Owner Occupancy and that all					
		const	truction is in cor	mpliance 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 does not represent construction closeout. Certificate of Occupancy: The Regulatory letter from the City of Madison Building Inspection Department 3 В. 4 indicating that all regulatory requirements and inspections have been completed and the building may now be 5 occupied for its intended use. This letter does not represent construction closeout. C. Certificate of Substantial Completion: A letter provided by the Department of Public Works, signed by the City 6 7 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 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. E. Final Progress Payment: The progress payment associated with achieving Construction closeout as described in 12 13 1.3.D above. At this point the contractor may request all monies associated with the contract be paid with the 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. Final Payment: 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) due to the contractor may be released for the Final Payment. 19 20 21 1.4. QUALITY 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. В. 24 The GC shall be responsible for all of the following: 25 Ensuring that all contractors have met the construction closeout requirements associated with their 1. 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. QUALITY ASSURANCE - CONTRACT CLOSEOUT 34 A. The City of Madison, Department of Civil Rights (DCR) monitors contract compliance for construction and 35 procurement contracts to ensure that local, state and federal regulations are followed by contractors working on City of Madison Public Works (PW) projects. DCR will monitor all PW projects from contract award through the 36 37 final payment at the close of the project. Contractors will be required to submit reporting paperwork 38 throughout the PW project process. Contractors are encouraged to visit the web site identified below for additional information, checklists, 39 40 forms, and other information provided by DCR as it relates to Contract Compliance. http://www.cityofmadison.com/Business/PW/contractCompliance.cfm 41 Questions regarding the process should be directed to parties and offices as identified on the various 42 2. 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 the required and complete documentation in a timely fashion. 54 55 1. Weekly Payroll Reports

**Employee Utilization Reports** 

2.

3.

56

57

58

Prime Contractor Affidavit of Compliance with Prevailing Wage Rate Determination

Agent or Subcontractor Affidavit of Compliance with Prevailing Wage Rate Determination

2 3 4 5 6 7	
8 9 10 11	
12 13 14 15 16 17	
18 19 20 21 22	
23 24 25 26 27	
28 29 30 31 32	
33 34 35	
36 37 38 39 40 41	

42 43

44

45

46

47

48 49

1

- 5. Documentation required for Small Business Enterprise (SBE) goals
- 6. Other documents as maybe required or requested through the Finalization Review Process

# PART 2 - PRODUCTS - THIS SECTION NOT USED

# **PART 3 - EXECUTION**

## 3.1. CONSTRUCTION CLOSEOUT CHECKLIST

- 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 Construction Closeout Requirements to the GC.
  - 1. The checklist shall include all items identified within the construction documents that require any of the following (and examples) prior to moving into Contract Closeout Procedures:
    - a. Documents indicating a specified level of performance has been achieved, such as:
      - i. Test reports of all types
      - ii. Startup reports
    - b. Required documentation, such as:
      - i. As-builts and record drawings
      - ii. Operation and maintenance data
    - c. Physical items to be turned over to the owner, such as:
      - i. Attic stock
      - ii. Keys
    - d. Required maintenance completed, such as:
      - i. Ducts cleaned
      - ii. Filters replaced
    - e. Owner and Maintenance Training
- B. Each list shall indicate the title of the closeout requirement, the associated specification of the requirement, the required result or deliverable, the responsible contractor(s), 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 closeout lists into one master Construction Closeout Checklist.
    - a. The checklist shall be in a tabular data format similar to the sample below
  - 2. Resubmit the checklist as needed after initial reviews have been completed.
- D. The GC shall work with all contractors to amend the Construction Closeout Checklist throughout the execution of the project based on changes and modifications as necessary.

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

## 3.2. CONSTRUCTION CLOSEOUT REQUIREMENTS

- A. The timely submittal or completion of closeout requirements shall go hand in hand with the Progress Payment Milestone Schedule that can be found in Specification 01 29 76 Progress Payments. No payments shall be made until all requirements for that payment have been met.
  - The GC and all major Subcontractors, PE, and CPM, shall review all requirements for Construction/Contract Closeout during two (2) special meetings.
    - a. The first meeting shall be held at the 50% Contract Total Payment milestone. This meeting shall discuss the requirements associated with various construction/contract closeout documentation and events when they are due with respect to progress payments.
    - b. The second meeting shall be held at the 70% Contract Total Payment milestone. This meeting shall review the contractors progress regarding the closeout checklist, begin making plans for upcoming deadlines such as scheduling training, where to put attic stock, and when they are due with respect to progress payments.

1 2			2.	The GC, PE, and CPM, shall utilize the Construction Closeout checklist to ensure that all construction closeout requirements have been met.					
3									
4	3.3.		NSTRUCTION CLOSEOUT PROCEDURE						
5		A.		successful completion and final acceptance of all Construction Closeout Requirements the GC may submit					
6		В		CPM and PE the request for Final Progress Payment (100% contract total, less retainage).					
7 8		В.		E will confirm with the design consultants, CPM, and other City of Madison staff that all requirements of ork 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			3.	Provide the required Letter of Substantial Compliance to the following as required:					
12			J.	a. State Safety and Building Division					
13				b. Local Building Inspection office					
14				c. GC					
15				d. CPM					
16		C.	The CI	PM shall draft the City Letter of Substantial Completion for signature by the City Engineer. This letter shall					
17				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 G	C and all subcontractors shall finalize all warranty letters associated with their Work using the date noted					
21			on the	e City Letter of Substantial Completion, and provide the CPM with all warranties as described in					
22			Specif	ication 01 78 36 Warranties. Upon receipt and final approval of the Warranties the CPM may initiate final					
23			proces	ssing of the Final Progress Payment (100% contract total, less retainage).					
24									
25	3.4.	CONT		LOSEOUT REQUIREMENTS					
26		A.		C and all sub-contractors shall follow all requirements associated with documenting contract compliance					
27				rovide documentation as required or requested by DCR or PW staff. All contractors are encouraged to stay					
28				nt 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			2.	Employee Utilization Reports					
31			3.	Agent or Subcontractor Affidavit of Compliance with Prevailing Wage Rate Determination					
32			4.	Prime Contractor Affidavit of Compliance with Prevailing Wage Rate Determination					
33			5.	Documentation required for Small Business Enterprise (SBE) goals  Other decuments as marks required as requested through the Finalization Region Process					
34		В	6.	Other documents as maybe required or requested through the Finalization Review Process					
35		В.		the Progress Payment equal to 80% of the contract total the GC shall request in writing a Finalization w. At that time DCR or PW staff shall prepare a report of all contract documentation submitted to date. A					
36 37				missing items or outstanding issues will be emailed to the GC. No additional follow-up will be generated					
38				R or PW Staff.					
39			by DC	KOTT W Stan.					
40	3.5.	CONT	RACT C	LOSEOUT PROCEDURE					
41	0.0.	Α.		ontract Closeout Procedure will not begin until the Construction Closeout Procedure has been completed.					
42		B.		the GC feels he/she has successfully met all of the Contract Closeout Requirements associated with					
43				n 3.3 above the GC may submit to the request for Final Payment to the CPM.					
44		C.		PM shall sign and submit the Final Payment request for processing.					
45		D.		nd PW staff shall do a complete review of all documentation associated with item 3.3.A above.					
46		E.		C shall be notified directly by DCR or PW Staff of any documentation that may still be missing, have					
47			incom	plete information, or other outstanding issues. It shall be the responsibility of the GC to continue follow-					
48				th DCR and PW staff until all documentation has been successfully submitted and accepted.					
49		F.		all required documentation associated with Contract Closeout has been successfully submitted and					
50			accept	ted by DCR and PW Staff the City of Madison shall process the Final Payment of any remaining monies					
51			includ	ing retainage.					
52									
53									

54

55

**END OF SECTION** 

1			SECTION 01 78 36	
2			WARRANTIES	
3				
4			NERAL	
5		1.	SUMMARY	
6		2.	RELATED SPECIFICATIONS	
7		3.	DEFINITIONS	
8	_	4.	GENERAL CONTRACTORS RESPONSIBILITIES	
9			ODUCTS - THIS SECTION NOT USED	
10			ECUTION	
11		3.1.	WARRANTY CHECKLIST	_
12		3.2.	LETTERS OF WARRANTY	_
13		3.3.	STANDARD PRODUCT WARRANTY	
14 15		3.4.	WARRANTY NOTIFICATION, RESPONSE, EXECUTION AND FOLLOW-UP	
15	3	3.5.	WARRANTY NOTIFICATION, RESPONSE, EXECUTION AND FOLLOW-UP	4
16 17	DADT	1 _ 6	ENED A I	
17 18	PARI	1-0	<u>ENERAL</u>	
19	1.1.	CIIN	1MARY	
20	1.1.	30N A.	The purpose of this specification is to provide clear responsibilities and guide lines related to providing all	
21		Λ.	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 warrant	.,
24		ъ.	on the Work that includes the product.	y
25		C.	Manufacturers' disclaimers and limitations on product warranties do not relieve suppliers, manufacturers and	
26		C.	any contractor required to provide special warranties under the contract documents.	
27			any contractor required to provide special warranties under the contract documents.	
28	1.2.	REL	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		A.	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			required to keep equipment or materials in operation or to prevent damage to property and injury to persons	
44			without voiding the contractors warranty or bond or relieving the contractor of his/her responsibilities during	
45			the warranty period.	
46		C.	Installer: The company or contractor hired to install a finished product that was manufactured and supplied	
47			specifically for the Work within this contract. The Installer may or may not be the same company that supplied	t
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 Contr	
50			Documents. Examples of suppliers would include custom cabinets, steel stairs and railings, etc. A supplier wo	uld
51			not be a company that distributes items manufactured by others such as an electrical or plumbing supplier.	
52		E.	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	ة
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.	

2. 1 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. 4. Special Warranty: A written warranty required by the Contract Documents either to extend the time 7 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 Related Damages and Losses: When correcting failed or damaged Warranted Work, remove and reinstall (or 12 G. 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. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected reinstate the 15 Η. 16 warranty by a new written endorsement. The reinstated warranty shall be equal to the original warranty with an 17 equitable adjustment for depreciation unless specifically noted otherwise in a specification. I. 18 Replacement Cost: All costs that may be associated with Work being replaced under warranty including but not limited to the following: 19 20 1. Related damages and losses 21 2. Labor, material and equipment 22 3. 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 K. 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 shall not be interpreted as limitations on the time in which the Owner can enforce such other duties, obligations, 30 rights, and remedies. 31 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 evidence the entities required to countersign such required commitments have done so. 36 37 38 1.4. **GENERAL CONTRACTORS RESPONSIBILITIES** 39 Α. 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 Any substitutions not properly approved and authorized may be considered defective. 43 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 All warranties shall remain in effect for one (1) year thereafter unless specifically stated otherwise in the 47 Contract Documents or where standard manufacturer warranties are greater. 48 C. The GC's warranty with respect to Work repaired or replaced, including restored or replaced Work due to 49 damage, will run for one (1) year from the date of Owner Acceptance of said repair or replacement. 50 This shall be regardless of any benefit the Owner may have had from the Work through any portion of its 51 anticipated useful service life.

Warranty Response

PART 2 - PRODUCTS - THIS SECTION NOT USED

See Section 3.5 of this specification.

**PART 3 - EXECUTION** 

D.

52

53

54

55 56

57

#### WARRANTY CHECKLIST 3.1.

- 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.
- В. 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:
  - Consolidating all the warranty lists into one master Warranty Checklist and submitting electronically.
    - The checklist shall be in a tabular data format similar to the sample below.
  - 2. 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.

<u>Title</u>	Specification	<u>Terms</u>	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	

#### 3.2. **LETTERS OF WARRANTY**

- All letters of warranty shall be in a typed letter format and provide the following information:
  - The letter shall be on official company stationary including company name, address, and phone number.
  - 2. Indicate MADISON FIRE STATION 05 WALL REMOVAL & IMPROVEMENTS, contract number, and contract address the warranty is for on the reference line.
  - 3. Provide a description of the warranty(ies) being provided.
    - Include Division, Trade, or Specification information as necessary. a.
    - b. Only combine warranties of related Divisional Work together. Create new letters for additional Divisions as necessary.
  - 4. Indicate the effective Warranty Date. As noted in Section 1.3.F above, the Warranty Date shall be the date the Certificate of Substantial Completion was signed by the City Engineer.
  - 5. Contractor Letters of Warranty shall only be signed by a principal officer of the company.
  - 6. After signing the letter provide the GC with a high quality color scanned image in PDF format and the original signed letter.
- The GC shall be responsible for the Final Warranty submittal as identified in Section 3.4 below. В.
- C. The GC shall obtain letters of warranty from all of the following:
  - The General Contractor shall provide warranty letters for all Work that was self performed under the contract documents, identify all trades or Divisions of Work.
  - 2. All Sub-contractors shall provide warranty letters for Work performed under the contract documents; identify all trades or Divisions of Work.
  - 3. Suppliers, as required by other specifications within the Construction Documents where the manufacture of a specific product unique to the Work of this contract was required.
    - The terms and conditions of the Supplier Letter of Warranty shall be as defined by the specifications associated with the Work but shall not be less than the industry standard of repair, or replace defective materials and workmanship within one (1) year of the warranty date.
    - b. When the supplier is also the installer a single written letter may be submitted identifying both the warranty for the manufacture of the product and the warranty for the installation of the product.
  - 4. Installers as required by other specifications within the Construction Documents where the installation of a specific product unique to the Work of this contract was required.
    - The terms and conditions of the Installer Letter of Warranty shall be as defined by the specifications associated with the Work but shall not be less than the industry standard of repair, or replace defective materials and workmanship associated with the installation of the product within one (1) year of the warranty date.
  - 5. Special Letters of Warranty shall be required from any contractor, supplier, installer or manufacturer who agrees to provide warranty services required by any Division Specification in excess of their Standard Product Warranty.

14

1

2

3

4

5

6

7 8

9

10

11

12 13

15

16 17

18 19 20

21 22

23 24 25

26 27 28

33 34 35

36 37 38

39 40 41

42

47 48 49

50 51

1							
2	3.3.	STANI	DARD PRODUCT WARRANTY				
3		A.	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		B.	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			1. 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			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			<ul> <li>i. Where the manufacturer name and model number is specified within the warranty it shall</li> </ul>				
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				
		υ.					
23 24			and item description. I.E. 22 42 00 Toilet (WC-1).pdf				
			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		E.	Provide all PDF files and any original documents to the GC for final consolidation to be provided to the Owner.				
28			WARD AND CURACITAL				
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			3. Provide bookmarks and links to each individual PDF to enable quick navigation through the PDF				
39			document.				
40		E.	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		A.	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		B.	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.				
			· · · · · · · · · · · · · · · · · · ·				

1				Where Technical Assistance support is part of the written warranty provide all assistance
2			r	necessary via phone, text, or internet systems as indicated by the warranty. If issues cannot be
3			r	esolved provide on-site response no later than the next business day.
4			d. I	f the request cannot be supported in sufficient time as outlined above the Owner (or Owner
5			F	Representative) reserves the right to contact other contractors or service companies having
6			S	similar capability to expedite the repair or replacement and shall invoice all associated costs to
7			t	he Owner back to the GC.
8	C.	Warran	ity Execu	rtion:
9		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. F	Provide all materials, equipment, products, and labor necessary to complete the repair or
12			r	replacement associated with the Warranty Issue.
13			b. F	Provide all cleaning services as may be required before, during, and after the repair or
14				replacement as per Specification 01 74 13 Progress Cleaning.
15			c. F	Provide any protection necessary for existing construction as per Specification 01 76 00 Protecting
16				nstalled Construction
17			d. F	Provide new letters of warranty when required.
18	D.	Warran	ty Follov	
19				Warranty Issues:
20				The GC shall provide complete documented responses of all logged Warranty Issues. Responses
21				shall provide a description of work completed, by who, inclusive dates, and photos of completed
22			c	or repaired work.
23				Provide call back response if work is not acceptable.
24			b. T	The City Project Manager shall review the submitted response documentation and do a field
25				nspection if necessary.
26			i.	
27				needed.
28			ii	i. If work is acceptable close the Warranty Issue.
29		2.	Warrant	ty Reviews:
30				The GC shall be responsible for scheduling on-site review with all of the following:
31			i.	
32				i. Owner and Owner Tenant Representative
33				ii. Plumbing, Heating, Electrical Sub-contractors
34				v. Other Sub-contractors that may be responsible for open Warranty issues
35				Reviews shall be scheduled at 6 months, and 11 months after the effective date of the warranty.
36				The review meetings shall:
37			i.	· · · · · · · · · · · · · · · · · · ·
38			•	date of completion.
39			ii	<ol> <li>As appropriate, provide shut-down, start-up, testing, and training of off-season equipment</li> </ol>
40				as required by the contract documents.
41			ii	ii. 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				an transfer issues where a new letter of warrancy may have been issued.
44				
45				
-				

**END OF SECTION** 

46

47