

# ASBESTOS ABATEMENT AND DEMOLITION PROJECT MANUAL

# **PROJECT:** ASBESTOS ABATEMENT AND DEMOLITION FAIR APARTMENTS BUILDING

Owner: Truman State University 100 East Normal Avenue Kirksville, MO 63501

Date: March 20, 2018 Project Number: SP18-23



Signed: 03/20/2018 MDNR # 7118080317MOPR10108 Expires 08/10/2018

#### PROJECT MANUAL FOR

ASBESTOS ABATEMENT AND DEMOLITION OF FAIR APARTMENTS

Owner:

Truman State University 100 East Normal Avenue Kirksville, MO 63501 660-785-4326

Environmental Consultant Farmer Environmental Services, LLC 108 Emerald Hills Drive Edwardsville, IL 62025 Phone: 618-656-6988 Fax: 618-656-8353

DATE: March 20, 2018

DOCUMENT	TITLE	PAGES
00 01 10	Table of Contents	00 01 10-1
00 01 15	Schedule of Drawings	00 01 15-1
00 21 13	Instructions to Bidders	00 21 13-1-5
00 41 13	Bid Form	00 41 13-1-5
00 52 13	Agreement Forms	00 52 13-1
00 72 14	General Conditions	00 72 14-1
00 73 13	Supplementary Conditions	00 73 13-1-6
01 11 00	Summary of Work	01 11 00-1-3
01 41 00	Air Monitoring	01 41 00-1
01 51 00	Temporary Utilities	01 51 00-1-4
01 51 26	Temporary Enclosures	01 51 26-1-2
01 51 30	Negative Pressure Filtration System	01 51 30-1-5
01 51 50	Use of Existing Facilities	01 51 50-1-3
01 51 60	Worker Protection	01 51 60-1-3
01 51 62	Respiratory Protection	01 51 62-1-2
01 51 63	Decontamination Units	01 51 63-1-4
01 70 10	Project Closeout	01 70 10-1
01 71 14	Final Visual Inspection and Clearance Testing	01 71 14-1-2
02 41 16	Structure Demolition	02 41 16-1-7
02 82 13	Asbestos Abatement	02 82 13-1-3
31 05 13	Earthwork	31 05 13-1-9
31 10 00	Site Clearing	31 10 00-1-5
33 05 50	Piped Utilities	33 05 50-1-2
	Missouri Wage Rate Order	

END SECTION 00 01 10.

# DIVISION 0 00 01 15 - SCHEDULE OF DRAWINGS

ASBESTOS ABATEMENT AND DEMOLITION FOR FAIR APARTMENTS

PROJECT NO.: SP18-23 DATE: March 20, 2018

SCHEDULE OF DRAWINGS BOUND SEPARATELY

Sheet No.	Title
C-01	Cover Page
AB-1	Asbestos Flooring Abatement Plan
AB-2	Asbestos Piping and Window Abatement Plan
D-1	Demolition Notes and Universal Waste Notes
D-2	Fencing and Erosion Control Plan
D-3	Demolition Site Plan
D-4	Storm Drain Demolition Plan
D-5	Sidewalk Demolition Plan
D-6	Site Photographs

END OF SECTION 00 01 15

# **Bid Schedule:**

<u>Mandatory</u> Pre-Bid Meeting:	March 20, 2018, 10:00 am Student Union Building, Conference Room 3000 Truman State University 100 East Normal Avenue Kirksville, MO 63501
Bids Due:	March 29, 2017, 2:00pm Attn: Kim Murphy, Purchasing Supervisor Truman State University 100 East Normal Avenue Kirksville, MO 63501

#### 1. BIDDING GUIDELINES

The submission of a Bid shall be deemed the Bidder's tacit acknowledgment and considered conclusive evidence that:

Each Bidder is responsible for reviewing and taking into consideration <u>all</u> Bid Documents, local regulations, and any other reasonably known items that may affect the cost to perform the work.

The Bidder has attended the mandatory Pre-Bid Meeting.

The Bidder has visited the site and is familiar with all conditions, including the nature amount and location of the work, the general and local conditions, labor relations and all other matters which might in any way affect or have a bearing on the work or its costs.

The Bidder has taken into consideration expected weather conditions, and the incorporation of contingencies in its bid to cover the normal delays associated with a project of the type for which the bid is being submitted.

The Bidder assumes ultimate responsibility for ensuring that they have obtained all bid documents and that all documents are complete.

All costs associated with the preparation and submission of a bid are the sole responsibility of the bidder. These costs shall not be chargeable to the Owner by any successful or unsuccessful bidder. All bids become the property of the Owner and shall not be returned except in the case of a late submission.

If a prospective Bidder discovers discrepancies, errors or omissions in the Bid Documents or is in doubt as to the true meaning of any part of the Contract Documents, Specifications or Drawings, the Bidder should immediately contact the Project Designer, Farmer Environmental Services, LLC for an interpretation.

Questions regarding the documents or bidding procedures or requests for interpretations, corrections or changes should be directed to Truman State University, Purchasing Supervisor, Kimberly Murphy; kmurphy@truman.edu.

All requests and questions will be accepted until (3) business days before the opening of bids. After that time no requests for clarifications or questions will be accepted.

Interpretations, corrections or changes to the Bid Documents made in any manner, other than a written Addenda issued by the University, shall not be binding and Bidders shall not rely upon such interpretations, corrections or changes.

If due to unforeseen circumstances, such as natural disasters, etc. the bids cannot be opened on this date and time, the University reserves the right to hold all unopened bids until a later date. The University ensures that the opening of bids would be properly witnessed. In the event that the bids would have to be held, notice would be provided to all plan holders at the earliest possible time.

# 2. BIDDING INSTRUCTIONS

SEE SECTION 00 42 13 FOR BID FORM.

Each bid must show the full legal name and business address of the Bidder, including its street address if it differs from the mailing address.

Each bid must be signed by an individual authorized to bind the Bidder and if submitted by a partnership or joint venture a list showing the full names and addresses of all partners or joint ventures must be provided.

Each bid must be accompanied by a bid security bond, without endorsement, or cashier's check in the amount equivalent to 5% of the total bid. The Bid Security may be retained by Owner until the Contract has been signed and required bonds have been made and delivered to the Owner.

Any bid received after the due date/time stated in the Notice to Bidders will be rejected.

Each bidder shall submit on form provided a list of any subcontractors proposed to use in this project. If no subcontract labor is to be used submit the form with "N/A" for name of  $1^{st}$  contractor.

All bids must be submitted in strict conformity with the documents contained in or referred to in the Bid Documents.

Bids shall be firm for acceptance for ninety (90) days from the due date of this Notice to Bidders. Failure to provide the minimum quotation validity period may result in the Bidder's proposal being considered non-responsive.

#### 3. BIDDING INDEMNIFICATION

By submitting a Bid, each Bidder agrees to waive any claim it has or may have against the Owner, the Architect/Engineer, and Project Designer and their respective employees, arising out of or in connection with the administration, evaluation or recommendation of any Bid.

# 4. BIDDING MODIFICATIONS/WITHDRAWAL OF BIDS

A Bidder may, without prejudice to itself, modify or withdraw its bid from consideration if such a request is made in writing and received by the University prior to the due date and time for submission of bids stated in the Notice to Bidders. Bids already submitted may be modified by fax provided such modification is received by the University prior to the bid due date.

# 5. BID EXPENSE

Any expense or costs incurred by the Bidder in the preparation of and response to the Bid Documents will be at the sole cost and expense of the Bidder.

#### 6. AWARD OF THE CONTRACT OF WORK

In awarding the Contract work, the Owner will evaluate the price; the completeness of Bidder's submittal; the Bidder's skill, ability, responsibility, experience, capacity, financial standing, schedule, efficiency and any other factor deemed appropriate by the Owner and Farmer Environmental Services, LLC.

The Owner shall keep the following rights and considerations:

Owner reserves the right to reject any or all bids or any part thereof, to waive any informalities in bidding and to accept bids deemed most favorable to the Owner.

To waive any informality or irregularity in any Bid received.

To award all or any part of a bid as well as the right to let other contracts in connection with the work, including but not limited to, contracts for furnishing and installation of furniture, equipment, voice and data cabling, machines, appliances and other apparatus.

To award a Contract, based on the bids received, without any further discussion of such bids.

To enter into negotiations with any Bidder.

To award individual contracts for the Contract work on the basis of each separate Base Bid Amount as itemized on the Bid Form; or to award a single contract to one Bidder on the basis of the combined Bid for all the Contract work.

Simultaneously, with delivery of the executed contract, the successful bidder, shall furnish surety in the form of a performance bond and a labor and material payment bond in the amount of one hundred percent (100%) of the contract amount. Surety for such bonds shall be a company duly authorized and licensed in the State of Missouri and acceptable to the Owner. The Attorney-In-Fact who signs bid

bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.

Any work in providing or preparing to provide the services specified herein that is commenced by the successful bidder prior to execution of a written contract agreement shall be at the bidder's expense.

# 7. BID ALTERNATES

To accept alternates in any order or combination and to determine the low Bidder on the basis of the sum of the Base Bid and the Alternates accepted. Acceptance of Alternates is at the sole discretion of the Owner. Each Bid Alternate may be considered separately; the Bidder is not to rely on acceptance of any Alternate Bids. Alternate prices may be used to determine low bidder.

# 8. UNIT PRICES

The Bidding Documents may include Unit Prices in the Bid Form applicable to a specific Bid Category (ies) which must be completed by the Bidder as part of its Bid. If the Unit Prices are not completed, the Bid will not be considered responsive and may be rejected by the University. Unit prices may be used to determine the low bidder.

It is the intent that all Unit Prices shall completely cover all costs, expenses, overhead and profit for such work.

# 9. NON-DISCRIMINATION

All contractors and all subcontractors doing business with the Owner must agree not to discriminate on the basis of race, color, religion, national origin, sex, disability or veteran status. If discrimination by a contractor or subcontractor is found to exist, the Owner must take appropriate action which may include, but not be limited to, cancellation of the contract, removal from all Bidder's lists until corrective action is made and ensured, and referral to the Attorney General's Office.

# 10. MINORITY/WOMAN OWNED BUSINESS ENTERPRISES (MBE/WBE) REQUIREMENTS

- A. For contracts in an amount greater than or equal to One Hundred Thousand and 00/100 Dollars (\$100,000.00), the following provisions shall apply:
  - 1. The selected Contractor is bound to subcontracting not less than the percent indicated in the awarded contract to MBE/WBE(s).
  - 2. If the selected Contractor fails to meet or maintain stated percent, they must satisfactorily explain to the Owner why the requirements cannot be achieved and why meeting the requirements were beyond the selected Contractor's control.
  - 3. If the Owner finds the selected Contractor's explanation unsatisfactory, the Owner may take any appropriate action including, but not limited to:
    - a) Declaring the selected Contractor ineligible to participate in any Owner contracts for a period not to exceed six (6) months.

- b) Directing that the selected Contractor be declared in breach of the contract.
- 4 If a MBE/WBE is replaced during the course of the contract, the selected Contractor shall make a good faith effort to replace them with another MBE/WBE. All substitutions shall be approved by the Owner.
- 5. The selected Contractor shall provide the Owner with regular reports on its progress in meetings its MBE/WBE obligations. As a minimum, the dollar value of work completed by each MBE/WBE subcontractor during the preceding month and as a cumulative total shall be reported as part of each monthly application for payment. Any payment not including such report will be rejected as incomplete. Upon final completion, the final pay request shall include a final report of the total dollar value of work completed by each minority subcontractor during the total contract and the calculations showing the final percentage goal attained.
- Vendors whose pricing will exceed One Hundred Thousand and 00/100 Dollars (\$100,000.00) must contact the Owner's Purchasing Agent to obtain the MBE/WBE forms that will need to be completed and included with their proposal response.

END OF SECTION 00 21 14

TO: Truman State University 100 East Normal Avenue Kirksville, MO 63501

# BID DUE: March 29, 2018, 2:00pm

FROM:	(Contractor)
	(Address)

Operating as (strike out o	conditions that do	not apply) an Individual,	a Corporation,	organized and
existing under the law	of the State of	, a F	Partnership, a	Joint Venture
consisting	of	the		firms
of				

# BASE BID PROPOSAL

In response to your invitation to submit a proposal for the execution of all work described by the drawings and specifications titled:

ASBESTOS ABATEMENT AND DEMOLITION OF FAIR APARTMENTS

JOB NO.: SP18-23 Dated: March 29, 2018

and having examined the site where the Work is to be executed; and having become familiar with local conditions as they might in any way affect the cost and/or execution of the Work; and having carefully examined the aforesaid drawings, specifications, and other related documents and addenda thereto, the undersigned Bidder hereby proposes and agrees to provide all labor, materials, plant, equipment, transportation, and other facilities as necessary and/or required for the complete and satisfactory execution of the Work for which this proposal is submitted, for the lump-sum consideration as stated hereinafter:

Bidders must show bid amount in both words and figures. In case of discrepancy, amount shown in words shall govern.

# BASE PROPOSAL – Asbestos Abatement & Demolition

Bidder agrees to perform all of the Work described in specifications and shown on drawings for the sum of:

	Dollars(\$).
*Bidder has de	ermined the asbestos abatement project will reach substantial completion b
working	3-hour shifts or 10 Hour Shifts. (Insert number of shifts and circle 8 or 10 hour)
BID SECURITY	
Bid Security (5%	) is attached, without endorsement, in the sum of
	Dollars (\$).
The undersigne signed and requ	d agrees that Bid Security may be retained by Owner until the Contract has beer ired bonds have been made and delivered to the Owner.
ADDENDUM	
The following ad	lenda were received by the bidder:
Addendum #	Date of Receipt:

 Addendum #\_\_\_\_\_\_, Date of Receipt: \_\_\_\_\_\_

 Addendum #\_\_\_\_\_\_, Date of Receipt: \_\_\_\_\_\_

 Addendum #\_\_\_\_\_\_, Date of Receipt: \_\_\_\_\_\_

# **GENERAL STATEMENT**

The undersigned has checked all of the figures contained in this proposal and further understands that Owner will not be responsible for any errors or omissions made therein by the undersigned.

The undersigned agrees to assist and cooperate with Owner in preparing the formal Contract, and shall execute same and return it to Owner along with surety bonds and insurance certificates, as may be required by the specifications and other Contract Documents, within 10 days following its receipt.

The undersigned further agrees to begin work on said Contract as soon as practicable after date of "Contract" or "Notice to Proceed," whichever is earlier; or, in any event, not later than 15 days from date of such notification, unless instructed otherwise in Instructions to Bidders. In case the undersigned fails or neglects to appear within the specified time to execute the Contract the undersigned will be considered as having abandoned it, and the Bid Security accompanying this proposal will be forfeited to Owner as liquidated damages for delay and loss caused to Owner by reason of such failure on the part of the undersigned.

It is understood that the right is reserved by Owner to reject any or all proposals, to waive all informalities in connection therewith, and to award a contract for any part of the Work or the Project as a whole. It is agreed that this proposal may not be withdrawn for a period of 60 days after it has been opened, without permission of the Owner.

The undersigned declares that the person(s) signing this proposal is/are fully authorized to sign on behalf of the named firm and to fully bind the named firm to all the conditions and provisions thereof.

It is agreed that no person(s) or company other than the firm listed below or as otherwise indicated hereinafter has any interest whatsoever in this proposal or the Contract that may be entered into as a result thereof, and that in all respects the proposal is legal and fair, submitted in good faith, without collusion or fraud.

It is agreed that the undersigned has complied or will comply with all requirements concerning licensing and with all other local, state, and national laws, and that no legal requirement has been or will be violated in making or accepting this proposal, in awarding the Contract to him, or in the prosecution of the Work required there under.

The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer, recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

The contractor will in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

L.S.

# DRUG FREE WORKPLACE

The Contractor by submitting its bid certifies that it will provide an alcohol and drug free workplace. Possession and/or use of alcohol or illegal drugs are prohibited on the Owner's campus. The Owner's published rules regarding this matter shall apply to **ALL** workers related to the particular project.

# PARKING REGULATIONS

The successful Bidder agrees to comply with the Owner's published rules and regulations regarding vehicles and campus parking. All motor vehicles parked on the Owner's property must be identified with a properly displayed permit. Service vehicles are non-university vehicles which conduct university business or services on a regular basis. Loading and unloading zones are provided for the successful Bidder to use. It shall be further understood that driving on the Owner's sidewalks is not permitted. The successful Bidder will be responsible for their motorized vehicles and all violations identified to their vehicles. Any exigent circumstances are to be directed to the Department of Public Safety, Parking Services, 660.785.7400.

# **CRIMINAL RECORDS CHECKS**

-will not be required for this project -

**BIDDER SIGNATURE** 

			_	
Docpoctfully	v cubmitted thic	david	of	2010
Respectiuit	y submitted this	uavu		, 2010.
	/			

(Name of Firm)

ΒY

(SEAL - IF BIDDER IS A CORPORATION)

# LIST OF SUBCONTRACTORS TO BE USED ON THIS PROJECT

Subcontractor's: Name Address Contact Information	Work to be Performed by Subcontractor	% of Total Project Completed by Subcontractor

# CONTRACTING REQUIREMENTS 00 52 13 – Agreement Forms

# AGREEMENT FORMS

The Agreement forms shall be the standard Contract with Truman State University. For a copy of the standard contract please contact Kim Murphy, Purchasing Supervisor at 660-785-4326 or kmurphy@truman.edu.

END OF SECTION 00 52 13

# CONTRACTING REQUIREMENTS 00 72 14 – General Conditions of the Contract

ASBESTOS ABATEMENT AND DEMOLITION OF FAIR APARTMENTS

PROJECT NO.: SP18-23 Dated: March 20, 2018

#### GENERAL CONDITIONS OF THE CONTRACT

The General Conditions of this Contract is the American Institute of Architects' Document A201, "General Conditions of the Contract for Construction," Fifteenth Edition, 1997, 14 Articles, 41 pages, hereinafter referred to as the "AIA General Conditions," which document is hereby specifically made a part of the Contract Documents with the same force and effect as though set forth in full.

END OF SECTION 00 72 14

#### **GENERAL STATEMENT**

The following supplements modify, change, delete from or add to the "General Conditions of the Contract for Construction," AIA Document A201, Fifteenth Edition, 1997. Where any article of the General Conditions is modified or any paragraph, subparagraph or clause thereof is modified or deleted by these supplements, the unaltered provisions of that article, paragraph, subparagraph or clause shall remain in effect.

#### ARTICLE 2 - OWNER

#### 2.2 INFORMATION AND SERVICES REQUIRED OF THE OWNER

Delete subparagraph 2.2.5 in its entirety and substitute the following:

2.2.5 For construction purposes, drawings and specifications will be posted to Truman's website for printing as needed.

Subcontractors and vendors shall obtain their copies from the applicable Contractor listed above.

#### ARTICLE 3 - CONTRACTOR

# 3.7 PERMITS, FEES AND NOTICES

3.7.1 Add the following sentence to this subparagraph: The Owner or General Contractor shall be responsible for securing and paying for the building permit. The contractor shall be responsible for securing and paying for the asbestos abatement notification fee.

#### 3.10 CONTRACTOR'S CONSTRUCTION SCHEDULES

Add the following to subparagraph 3.10.1:

Refer to Section 01 20 00 - Schedules, Reports, Payments for further provisions on progress schedule.

Delete paragraph 3.10, "Progress Schedule" in its entirety.

3.11 DOCUMENTS AND SAMPLES AT THE SITE

Add the following to subparagraph 3.11.1:

Refer to Section 01 70 10 - Project Closeout for further provisions on this subject.

#### 3.13 USE OF SITE

Add the following to subparagraph 3.13.1:

Refer to Section 01 11 00 – Project Summary for further provisions on this subject.

#### 3.15 CLEANING UP

Add the following to subparagraph 3.15.1 and 3.15.2:

Refer to Section 01 70 10 - Project Closeout for provisions on final cleanup.

#### **ARTICLE 4 - ADMINISTRATION OF THE CONTRACT**

4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT

Delete subparagraph 4.2.10 in its entirety.

Delete subparagraph 4.2.10 in its entirety and substitute the following:

4.2.10 A project representative will be employed at the site by the Owner. The representative will be on site during all abatement activities. During demolition, occasional site visits will be performed.

#### ARTICLE 5 - SUBCONTRACTORS

#### 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

Add the following to subparagraph 5.2.1:

The complete list of subcontractors referred to in this subparagraph shall be submitted prior to the first Application for Payment or this payment will be withheld until list is submitted.

#### ARTICLE 6 - CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

#### 6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

Delete the following words from subparagraph 6.1.3:

"and of each separate Contractor."

Add to 6.1 the following subparagraph 6.1.5:

6.1.5 The Contractor will provide for the coordination of the work of his own forces and of each separate or assigned Contractor who shall cooperate therewith as provided in paragraph 6.2.

#### **ARTICLE 9 - PAYMENTS AND COMPLETION**

9.2 SCHEDULE OF VALUES

Add the following to subparagraph 9.2.1:

Refer to Section 01 20 00 - Schedules, Reports, Payments for additional requirements concerning schedule of values to be submitted by Contractor.

9.3 APPLICATIONS FOR PAYMENT

Add the following to subparagraph 9.3.1:

Refer to Section 01 20 00 - Schedules, Reports, Payments for additional requirements concerning submittal of Application for Payment by Contractor.

Add the following to subparagraph 9.3.1:

Until substantial completion, the Owner will pay 90 percent of the amount due the Contractor on account of progress payments.

Add the following clauses 9.3.1.3 and 9.3.1.4 to subparagraph 9.3.1:

9.3.1.3 Until final payment, the Owner will pay 90 percent of the amount due the Contractor on account of progress payments. If the manner of completion of the Work and its progress are and remain satisfactory to the University, and in the absence of other good and sufficient reasons, for each Work category shown to be 50 percent or more complete in the Application for Payment, the University will, without reduction of previous retainage on presentation by the Contractor of Consent of Surety for each Application, certify any remaining progress payments for each Work category to be paid in full.

9.3.1.4 The full Contract retainage may be reinstated if the manner of completion of the Work and its progress do not remain satisfactory to the University or if the Surety withholds its consent, or for other good and sufficient reasons.

Add the following to subparagraph 9.3.3:

Contractor shall submit to Owner with each payment request, waivers of lien from each subcontractor. Lien forms shall be as specified under Section 01 20 00 - Schedules, Reports, Payments.

Add the following to Article 9 - Payments and Completion:

#### ARTICLE 11 - INSURANCE AND BONDS

Replace entire section with:

# ARTICLE 6: Insurance

**6.1 General Terms:** Subcontractor shall maintain all insurance coverages required by the Contract Documents, and in no case less than the limits identified below, including any project specific

endorsements. Subcontractor is solely responsible for ensuring that all of their subcontractors, subsubcontractors, vendors, suppliers, and visitors also comply with project insurance requirements. Failure of Subcontractor to maintain prescribed insurance shall in no way reduce or limit any liability of Subcontractor under any part of this Agreement.

**6.2 Evidence of Insurance:** A Certificate of Insurance acceptable to the University shall be filed with the University prior to commencement of Subcontractor's work and in no case more than 10 days after receipt of this agreement.

**6.3 Notification of Change in Insurance:** Subcontractor shall require its carriers to provide BSI with thirty days notice prior to cancellation or material change to any governing policy.

# 6.4 Commercial General Liability Insurance

Written on an Occurrence Form including:

- (a) Bodily Injury & Property Damage \$1,000,000 per Occurrence
- (b) Personal and Advertising Injury -\$1,000,000 Each Person
- (c) General Aggregate \$3,000,000 Aggregate
- (f) Coverage shall include Owner, Environmental Consultant and all other parties as required as Additional Insureds. The additional insured endorsement shall include coverage for "your work," "ongoing operations," and shall specifically include coverage for completed operations. Additional Insured coverage shall be provided by ISO Additional Insured Endorsements CG 20 33 07 04 & 20 37 07 04 or an endorsement providing equivalent coverage to the additional insureds. A copy of the endorsement shall be provided with the certificate of insurance.
- (g) Products and Completed Operations shall be maintained for a minimum of three years after final payment.
- (h) Property Damage Liability insurance shall provide XCU (explosion, collapse and underground) coverage as applicable, including contracts related to demolition, drilling or any sort of below grade excavation.
- (i) If Subcontractor's work includes Exterior Insulation Finish Systems (EIFS), mold remediation or other pollution work, the Commercial General Liability shall not exclude such work or Subcontractor shall provide separate insurance.
- (j) Residential exclusions are not allowed if a project contains any element of residential construction.
- (k) General aggregate shall apply separately to each project.
- (I) Coverage shall be on a primary and non-contributing basis.

# 6.5 Workers Compensation

- (a) State: Statutory
- (b) Employers Liability
  - Per accident or disease \$1,000,000 Policy limit on disease \$1,000,000
  - Policy limit on disease \$1,000,00
- (c) Applicable Federal Statutory
- (d) Benefits- As required by applicable Labor Contracts

# 6.6 Commercial Automobile Liability Insurance

Provide coverage for all Owned, Leased, Non-Owned, or Hired vehicles.

- (a) Bodily injury and property damage \$1,000,000 Combined Single Limit
- (b) Coverage shall include Owner, Environmental Consultant and all other parties as required as Additional Insureds.
- (c) Coverage shall be on a primary, non-contributing basis.

# 6.7 Excess Liability (Umbrella)

The following minimum limits must be provided:

- (a) For contracts less than \$1,000,000
   \$1,000,000 Each Occurrence
   \$1,000,000 Annual Aggregate
- (b) For contracts greater than \$1,000,000 \$3,000,000 Each Occurrence \$3,000,000 Annual Aggregate
- (c) For contracts greater than \$3,000,000
   \$5,000,000 Each Occurrence
   \$5,000,000 Annual Aggregate
- (d) Coverage shall include as insureds all entities that are additional insureds on the General Liability
- (e) Coverage shall be on a primary and noncontributory basis and provide coverage at least as broad as provided on the General Liability policy.
- (f) General aggregate shall apply separately to each project.

**6.8 Builder's Risk Insurance:** Deductibles and claims not covered under the policy and/or claims not reimbursed by the Owner, shall be borne by each damaged party in proportion to the size of their respective claims. In the event that this Subcontractor's operations are deemed the proximate cause of the claim, then the Subcontractor shall bear the full cost of the deductible.

# 6.9 Contractors Equipment & Property Insurance

- (a) Subcontractor shall insure all construction tools and equipment whether owned, leased, borrowed, or otherwise used on the Work at the Project. No reimbursement will be made to Subcontractor for any loss or damage to their tools and equipment.
- (b) Subcontractor is solely responsible for securing all of their property, including stored materials and equipment, against loss or theft.

**6.10 Professional/Errors & Omissions:** Subcontractors perform-ing design-build or engineering services shall provide errors and omissions (professional liability) insurance.

- (a) Subcontractor shall provide a limit of \$3,000,000 for subcontract amounts up to \$3,000,000.
- (b) For subcontract amounts in excess of \$3,000,000 the Subcontractor shall provide a limit equal to the full value of the subcontract.
- (c) All design build Subcontractors shall maintain the required level of insurance for a minimum of three years beyond the date of substantial completion of the project or as required by law, whichever is more stringent.
- (d) Failure of the Subcontractor's insurance policy to respond to a professional liability claims shall in no way negate the Subcontractor's contractual obligation to respond.

**6.11 Contractors Pollution Liability (CPL):** Subcontractors performing grading, hazardous material abatement (asbestos, lead, mold, etc.), work in the ground, plumbing, HVAC, hauling of dirt/rock and others as required by the master contract shall provide CPL Coverage as follows:

- (a) \$1,000,000 limit for subcontracts up to \$5,000,000
- (b) \$3,000,000 limit for subcontracts over \$5,000,000
- (c) CPL coverage shall cover liability arising from premises, operations, independent contractors, products-completed operations, and contractual liability.
- (d) Owner and all other parties required shall be included as insureds on the CPL. The coverage afforded the additional insureds shall include products/completed operations as well as premises operations.

This insurance shall apply as Primary Insurance and not be Contributory with any other insurance or self-insurance, including any deductible, maintained by, or provided to, the additional insureds.

(e) Coverage shall include mold.

END OF SECTION 00 73 13

# PART 1 - GENERAL

# 1.1 **PROJECT/WORK IDENTIFICATION**

- A. Summary by References: Work of Contract can be summarized by reference to the Contract, General Conditions, Supplementary Conditions, specification sections as listed in the "Index of Specification Sections" bound herewith, drawings as listed in "Schedule of Drawings" bound herewith, addenda and modifications to the contract documents issued subsequent to the initial printing of this project manual, and including but not necessarily limited to printed matter referenced by any of these. It is recognized that work of Contract is also unavoidably affected or influenced by governing regulations, natural phenomenon including weather conditions, and other forces outside the contract documents.
- B. Related Work:
- C. By Owner:
  - 1. Owner shall remove
    - a. All air conditioners.
    - b. All exterior lighting light posts.
    - c. Emergency blue light.
    - d. All copper downspouts and gutters.
    - e. All exterior mailboxes.
    - f. All bike racks.
  - 2. Owner shall assist with coordination of removal of power pole with utility company.
- D. Abbreviated Written Abatement Summary: Abatement Contractor is to provide all labor and materials in order to properly abate asbestos containing materials from the Fair Apartments. The abatement work is to facilitate the future demolition of the building. The Abatement Contractor will also be responsible for select demolition in order to facilitate the abatement. Without force and effect upon contract documents, work of Contract can be summarized as follows:
  - 1. ASBESTOS ABATEMENT
    - a. All work shall follow applicable MDNR, OSHA and NESHAPS rules and regulations.
    - b. Contractor is to field verify all conditions, spaces and quantities prior to bidding project.
    - c. Asbestos abatement contractor is responsible for the removal of all the materials noted on drawings. Quantities provided are approximations only and may not represent all of the material listed.

- d. Asbestos abatement contractor is responsible for the removal and disposal of all asbestos containing materials throughout the building. Specifically all asbestos flooring, pipe insulation, pipe fitting insulation, window and door caulk, and heat shield.
- e. Asbestos Abatement contractor will be responsible for demolishing pipe chase walls as shown on drawings in order to access all pipe insulation and pipe fitting insulation.
- f. Asbestos Abatement contractor shall also remove and recycle fluorescent bulbs and ballasts, mercury containing switches, lead vent pipes, lead drains and lead roof stacks.
- E. Abbreviated Written Demolition Summary: A demolition contractor, subcontractor to the abatement contractor, is to provide all labor and materials in order to properly demolish the Fair Apartment Building. Without force and effect upon contract documents, work of Contract can be summarized as follows:
  - 1. DEMOLITION
    - a. To be coordinated with Asbestos Abatement.
    - b. Contractor is to provide construction fencing around the site.
    - c. Contractor is responsible for demolition of Fair Apartments Building in its entirety.
    - d. Contractor is to provide labor and materials for rock, backfill, borrow soil, and grass seeding.
    - e. Contractor is to provide erosion control during demolition and maintain until grass seed has been established.
    - f. Select landscaping, select sidewalks, curbing and the parking lot are to be protected and remain as shown on drawings.

# 1.2 CONTRACT

A. Construct work under single lump sum Asbestos Abatement Contract.

# 1.3 <u>UNIT PRICES</u>

A. NOT USED.

# 1.4 WORK SEQUENCE

- A. Coordinate construction schedule with Owner and Farmer Environmental Services (Environmental Consultant and Demolition Designer) in scheduling work.
- B. Owner has left power on for abatement.
- C. Owner has turned off the water and steam systems via valves.
- D. Owner will provide a water meter for water hydrant use and abatement contractor will be responsible for the water fee.
- E. Abatement contractor to remove all remaining movable items from the work areas prior to start of Asbestos Abatement and Demolition Work.
- F. Owner will coordinate with Demolition Contractor and Ameren UE for removing power pole prior to demolition.

- G. Demolition contractor is to provide temporary caps in the manholes for steam and domestic water.
- H. Demolition contractor is to remove all underground utilities except for anything located under parking lots and protected sidewalks.
- I. Erosion Control is to be provided and maintained.
- J. Demolition of the building in its entirety to be complete by August 1, 2018.
- K. Schedule of Work:
  - 1. Fair Apartments Commence work on May 14, 2018

# 1.5 <u>PRODUCTS</u>

A. No asbestos containing materials, lead paint, or other hazardous materials shall be furnished for this project.

#### 1.6 APPLICABLE CODES, SAFETY AND HEALTH REGULATIONS

- A. All references to codes, specifications, and standards referred to in specification sections and on drawings shall mean latest edition, amendment or revision of such reference standard in effect as of date of these Contract Documents. In case of a conflict between referenced document and Project Specifications, Project Specifications will govern. If there is a conflict with applicable codes, Contractor shall immediately notify Architect/Engineer before proceeding with work.
- B. All Contractors and subcontractors acknowledge their obligation to comply with all applicable Federal, State and local acts and regulations, and, without limiting this obligation, and in addition to all other indemnities provided for in this Contract, agree to comply with all requirements of the Occupational Safety and Health Act of 1970 (OSHA), Environmental Protection Agency (EPA), and Missouri Department of Natural Resources (MDNR), including latest amendments.
- C. Material and equipment incorporated into Project, which by their nature are governed by OSHA regulations, shall conform to said OSHA regulations, for both manufacturer and installation.
  - 1. Material and/or installation that does not conform to said OSHA, MDNR, and EPA regulations shall be corrected by responsible Contractor to comply with such regulations at no additional cost to Owner or Architect/Engineer.
- D. Labor Statutes, Records, and Rates: Contractor and all subcontractors will be required to conform to all applicable Federal and State statutory requirements, including but not limited to the Missouri Department of Labor, regarding labor and to wage scales required by law. Adair County Prevailing Wage Order No. 24 dated March 10, 2017 (Last updated June 7, 2017) is applicable.

#### END OF SECTION 01 11 00

#### 1. GENERAL

1.1 The Environmental Consultant will provide project oversight, sampling and final clearance visual inspections.

#### 2. AIR MONITORING

- 2.1 Background Sampling:
  - A. Consultant will collect background area air samples from various locations within the building(s) prior to commencement of abatement activities.
  - B. Background air samples will be analyzed by Consultant.
  - C. Background air samples will establish a baseline for airborne air fibers prior to work commencement.
- 2.2 Daily Air Sampling:
  - A. Daily air samples will be collected on each day of work starting with the first day of cleaning. The following is the minimum number/location of samples that will be collected each day:
    - 1. Inside Work Area 2
    - 2. Outside Work Area 1
    - 3. Clean Room 1
    - 4. Equipment Decontamination Unit 1
    - 5. Negative Air Machine 1
  - B. Additional samples can be collected at Consultant's discretion.
- 2.3 OSHA Air Monitoring:
  - A. Must be paid for by Contractor.
  - B. Must follow all OSHA guidelines.
  - C. A copy must be give to the Consultant every 24 hours and posted on site daily.
- 2.4 Final Clearance
  - A. See Section 01 71 40 Final Visual Inspection and Air Clearance Monitoring.
- 3. Sample Analysis
  - 3.1 All Air Samples will be analyzed utilizing Phase Contract Microscopy NIOSH Method 7400.
- 4. Work Stoppage
  - 4.1 Work Stoppages due to high air fiber concentrations will be issued for any results higher than guidelines in 29 CFR 1910.1001.

END 01 41 00.

# DIVISION 1 - GENERAL REQUIREMENTS 01 51 00 - Temporary Utilities

#### 1. GENERAL

- 1.1 REQUIREMENTS INCLUDE. Designated contractor provide and maintain specified temporary facilities and utilities during construction period.
  - A. Contractor Provide:
    - 1. Construction fencing.
    - 2. Erosion Control.
    - 3. Site security.
    - 4. Temporary water service, including initial hookup or connection charges.
    - 5. Temporary lighting (Work, security, safety and lamps).
    - 6. Hoses and fittings from temporary standpipes or water service connection.
    - 7. Drinking water for own forces.
    - 8. Ground fault protection.
    - 9. ABC dry chemical fire extinguishers.
    - 10. Toilets.
  - B. All Contractors Provide:
    - 1. Temporary facilities as required herein or as necessary to carry out the work. All contractors are to provide all equipment, connections and operations of mechanical, electrical and plumbing systems as required.

#### 1.2 RELATED REQUIREMENTS

- A. Specified elsewhere:
  - 1. 01 11 00 Project Summary.

#### 1.1 DEFINITIONS

- A. Temporary Water: Use heavy-duty abrasion-resistant hoses to provide water into each work area and to each decontamination unit. Provide fittings as required to allow for connection to existing hydrants or spouts, as well as temporary heating equipment, showers, nozzles and other equipment.
- B. Temporary Power: It not needed during this project. Abatement contractor is to use GFI connections for all power.

#### 1.2 DESCRIPTION OF TEMPORARY UTILITY SYSTEMS

- A. Electrical system:
  - 1. Abatement Contractor is to use existing electrical service. Abatement Contractor is to extend electrical service as needed for work under this contract.
  - 2. The Demolition Contractor is responsible for terminating the power to the building and removal of the power pole and transformers. The Demolition

Contractor is responsible for all fees associated with termination. The Owner will assist as needed for coordination with the utility company.

- B. Lighting:
  - 1. Provide temporary lighting for:
    - a. Construction needs.
    - b. Safety lighting.
  - 2. Safety lighting:
    - a. Provide sufficient light over barriers and other obstacles which are not apparent as safety hazards.
  - 3. Basic requirements, all lighting:
    - a. Lamps:
      - 1.) Covered with safety guard or deeply recessed in reflector.
      - 2.) Not suspended by their electric cords unless cord and fixture designed for that purpose.
- C. Water service:
  - 1. Provide and maintain temporary water service throughout construction period.
    - a. For construction purposes:
      - 1.) Each contractor and subcontractor shall provide their own water hoses from hose bibbs to point of his operations.
      - 2.) Backflow Protection.
      - 3.) Shower Hot Water Heater.
  - 2. For other purposes:
    - a. Temporary fire protection.
    - b. Cleaning.
    - c. Nonpotable water.
  - 3. Water Source:
    - a. Supplier: Owner will provide the meter to connect to water hydrant.
    - b. Water Usage Fee: to be paid by Contractor.
- D. Toilets:
  - 1. Provide temporary toilet facilities for use of all workmen and authorized parties throughout construction period.
  - 2. Provide a minimum number of enclosed combination toilet and urinal units for construction personnel:
    - a. One for every 20 employees, or fraction thereof.

#### 1.1 USE OF USING AGENCY'S EXISTING SYSTEMS

- A. Modify, supplement and extend system to meet temporary utility requirements for project, subject to approval of Architect/Engineer and Owner.
- B. Limitations:
  - 1. Do not overload systems. When project requirements exceed system capacity, provide separate system to meet needs.
  - 2. Prevent interference with Owner's normal use of system.
- C. Maintain strict supervision of use of temporary facilities.
  - 1. Enforce conformance with Owner's regulations.
  - 2. Use only designated facilities, systems or portions thereof.
- D. Upon completion of need to use existing systems, or when directed by Architect/Engineer, restore existing systems to specified permanent condition.

#### 2. PRODUCTS

2.1 MATERIALS. May be new or used, but shall be adequate for purposes used, shall not create unsafe or unsanitary conditions, nor violate applicable codes.

#### 3. EXECUTION

- 3.1 INSTALLATION To be completed by competent and skilled tradesmen.
  - A. Electrical:
    - 1. Do not run branch circuits on floor or on ground.
    - 2. Verify proper operation of all safety devices.
    - 3. Provide Lockout/Tagout where necessary and in each containment area.
  - B. Water service:
    - 1. Do not run piping on floor or on ground.
    - 2. Provide drip pan under each water service connection located within building.
    - 3. Provide insulation, or other means, to prevent pipes from freezing.
    - 4. When necessary to maintain pressure, provide temporary pumps, tanks and compressors.
  - C. Toilets:
    - 1. Service regularly.
  - D. Lighting:
    - 1. Provide Lockout/Tagout where necessary and in each containment area.
    - 2. Protect each circuit with a ground-fault circuit interrupter.

# 3.2 REMOVAL

A. Upon Architect/Engineer's prior written authorization, completely remove temporary materials and equipment.

END 01 51 00.

# DIVISION 1 - GENERAL REQUIREMENTS 01 51 26 - Temporary Enclosures

#### 1. GENERAL

1.1 REQUIREMENTS INCLUDE. Abatement contractor provide and maintain specified temporary enclosures to facilitate abatement in each work area.

#### 2. PRODUCTS

- 2.1 MATERIALS. Materials shall be adequate for purposes used, shall not create unsafe or unsanitary conditions, nor violate applicable codes.
  - A. Polyethylene Sheeting
    - 1. Use the largest sheet size possible to minimize seams
    - 2. 6-mil thick, clear, frosted or black unless specified.
  - B. Duct Tape
    - 1. 2" or 3" wide
  - C. Spray Cement
  - D. Wood Products
    - 1. Use appropriate size and thickness for each work area.
    - 2. Use sturdy and clean products/pieces.

#### 3. EXECUTION

- 3.1 INSTALLATION Abatement contractor is responsible for building, maintaining and tearing down each containment area.
  - A. Containment Work Area
    - 1. Refer to drawings for location and size.
    - 2. All moveable equipment and furniture shall be removed from the area as specified within Section 01 11 00.
    - 3. All ventilating systems shall be disabled.
    - 4. Containment area power shall be locked out.
      - a. DANGER signs shall be placed over breakers.
      - b. Keys shall be under control of Abatement Contractor Supervisor.
    - 5. Provide Emergency exist at each existing door to work area.
    - 6. Control Work Area
      - a. The Work Area is to be under complete control of the Abatement Contractor and Consultant.
        - 1.) All doors to work area are to be locked (with procession of keys) or chained shut.
        - 2.) Work area partitions are to be constructed with 2"x4" studs (2' centers) with ½" plywood on exterior side of work area.
  - B. Signage
    - a. All exterior entrances to the building shall contain the following sign:

DANGER

#### ASBESTOS CANCER AND LUNG DISEASE HAZARD RESPIRATORS AND PROTECTIVE CLOTHING ARE REQUIRED IN THIS AREA

- C. Critical Barriers
  - 1. Are to separate the containment work area from other areas of the building.
  - 2. Seal of ventilation openings, lighting, clocks, doorways, windows, convertors, speakers and other openings in the Work Area with poly sheeting and duct tape.
  - 3. Provide Pressure Differential System
  - 4. Spray cement shall only be used to bond and seal lapping sheets of polyethylene.
- D. Work:
  - 1. Abatement contractor is to removal all general construction (fixed) items such as cabinets, casework, doors and window trim, moldings, ceilings, trim, etc., that cover the surface of the work.
  - 2. Owner or General Contractor is to remove all moveable equipment and furniture.
  - 3. Clean all surfaces in work area with HEPA filtered vacuum or wet wiping prior to installation of barriers.
  - 4. Take care to protect building and remaining surfaces from water and high humidity or contamination from asbestos containing debris, slurry or fibers.
- E. Work Area Interior Barrier
  - 1. Cover all surfaces in work area with 1 layer of plastic sheeting on floors and walls.
    - a. Cover all walls and ceiling including Critical Barriers with one layer of plastic sheeting supported and sealed with duct tape and spray-glue. Tape all joints including joining at the floor with duct tape.
    - b. Take care not to cover stairs or ramps with unsecured plastic sheeting.
    - c. Remove and replace any damaged sheeting and/or tape immediately.
      - 1.) Immediately stop work if the Critical Barrier is damaged or breached allowing asbestos fibers to infiltrate outside areas.
    - d. Install a second layer of sheet plastic over floors as a drop cloth to protect the flooring from debris generated by abatement work.
- F. Window Barriers
  - 1. Abatement Contractor is to cover all interior window openings with 1 layer of 6 mil poly on windows and remove all windows/frames from the exterior of the building.

END 01 51 26.

#### 1. GENERAL

- 1.1 The Contractor shall provide enough HEPA negative air machines to effect > 0.02" WCG pressure. The Competent Person shall determine the number of units needed for the regulated area by dividing the cubic feet in the regulated area by 15 and then dividing that result by the cubic feet per minute (CFM) for each unit to determine the number of units needed to effect > 0.02" WCG pressure. Provide a standby unit in the event of machine failure and/or emergency in an adjacent area.
- 1.2 NIOSH has done extensive studies and has determined that negative air machines typically operate at ~50% efficiency. The contractor shall consider this in their determination of number of units needed to provide > 0.02" WCG pressure. The contractor shall use double the number of machines, based on their calculations, or submit proof their machines operate at stated capacities, at a 2" pressure drop across the filters.

#### 2. NEGATIVE AIR MACHINES (HEPA UNITS)

- 2.1 Negative Air Machine Cabinet: The cabinet shall be constructed of steel or other durable material capable of withstanding potential damage from rough handling and transportation. The width of the cabinet shall be less than 30" in order to fit in standard doorways. The cabinet must be factory sealed to prevent asbestos fibers from being released during use, transport, or maintenance. Any access to and replacement of filters shall be from the inlet end. The unit must be on casters or wheels.
- 2.2 Negative Air Machine Fan: The rating capacity of the fan must indicate the CFM under actual operating conditions. Manufacturer's typically use "free-air" (no resistance) conditions when rating fans. The fan must be a centrifugal type fan.
- 2.3 Negative Air Machine Final Filter: The final filter shall be a HEPA filter. The filter media must be completely sealed on all edges within a structurally rigid frame. The filter shall align with a continuous flexible gasket material in the negative air machine housing to form an air tight seal. Each HEPA filter shall be certified by the manufacturer to have an efficiency of not less than 99.97%. Each filter shall be marked with the name of the manufacturer, serial number, air flow rating, efficiency and resistance, and the direction of test air flow.
- 2.4 Negative Air Machine Pre-filters: The pre-filters, which protect the final HEPA filter by removing larger particles, are required to prolong the operating life of the HEPA filter. Two stages of pre-filtration are required. A first stage pre-filter shall be a low efficiency type for particles 10 μm or larger. A second stage pre-filter shall have a medium efficiency effective for particles down to 5 μm or larger. Pre-filters shall be installed either on or in the intake opening of the NAM and the second stage filter must be held in place with a special housing or clamps.
- 2.5 Negative Air Machine Instrumentation: Each unit must be equipped with a gauge to measure the pressure drop across the filters and to indicate when filters have become loaded and need to be changed. A table indicating the cfm for various pressure readings on the gauge shall be affixed near the gauge for reference or the reading shall indicate at what point the filters shall be changed, noting cfm delivery. The unit must have an elapsed time meter to show total hours of operation.

- 2.6 Negative Air Machine Safety and Warning Devices: An electrical/ mechanical lockout must be provided to prevent the fan from being operated without a HEPA filter. Units must be equipped with an automatic shutdown device to stop the fan in the event of a rupture in the HEPA filter or blockage in the discharge of the fan. Warning lights are required to indicate normal operation; too high a pressure drop across filters; or too low of a pressure drop across filters.
- 2.7 Negative Air Machine Electrical: All electrical components shall be approved by the National Electrical Manufacturer's Association (NEMA) and Underwriters Laboratories (UL). Each unit must be provided with overload protection and the motor, fan, fan housing, and cabinet must be grounded.
- 2.8 It is essential that replacement HEPA filters be tested using an "in-line" testing method, to ensure the seal around the periphery was not damaged during replacement. Damage to the outer HEPA filter seal could allow contaminated air to bypass the HEPA filter and be discharged to an inappropriate location. Contractor will provide written documentation of test results for negative air machine units with HEPA filters changed by the contractor or documentation when changed and tested by the contractor filters.

# 3. PRESSURE DIFFERENTIAL

3.1 The fully operational negative air system within the regulated area shall continuously maintain a pressure differential of -0.02" water column gauge. Before any disturbance of any asbestos material, this shall be demonstrated to the VA by use of a pressure differential meter/manometer as required by OSHA 29 CFR 1926.1101(e)(5)(i). The Competent Person shall be responsible for providing, maintaining, and documenting the negative pressure and air changes as required by OSHA and this specification.

#### 4. MONITORING

4.1 The pressure differential shall be continuously monitored and recorded between the regulated area and the area outside the regulated area with a monitoring device that incorporates a strip chart recorder. The strip chart recorder shall become part of the project log and shall indicate at least -0.02" water column gauge for the duration of the project.

#### 5. AUXILLIARY GENERATOR

5.1 If the building is occupied during abatement, provide an auxiliary gasoline/diesel generator located outside the building in an area protected from the weather. In the event of a power failure of the general power grid and the VAMC emergency power grid, the generator must automatically start and supply power to a minimum of 50% of the negative air machines in operation.

#### 6. SUPPLEMENTAL MAKE-UP AIR INLETS

6.1 Provide, as needed for proper air flow in the regulated area, in a location approved by the VA, openings in the plastic sheeting to allow outside air to flow into the regulated area. Auxiliary makeup air inlets must be located as far from the negative air machines as possible, off the floor near the ceiling, and away from the barriers that separate the regulated area from the occupied clean areas. Cover the inlets with weighted flaps which will seal in the event of failure of the negative pressure system.

# 7. TESTING THE SYSTEM

7.1 The negative pressure system must be tested before any ACM is disturbed in any way. After the regulated area has been completely prepared, the decontamination units set up, and the negative air machines installed, start the units up one at a time. Demonstrate and document the operation and testing of the negative pressure system to the VA using smoke tubes and a negative pressure gauge. Verification and documentation of adequate negative pressure differential across each barrier must be done at the start of each work shift.

#### 8. DEMONSTRATION OF THE NEGATIVE PRESSURE FILTRATION SYSTEM

- 8.1 Start units before beginning any disturbance of ACM occurs. After work begins, the units shall run continuously, maintaining 4 actual air changes per hour at a negative pressure differential of -0.02" water column gauge, for the duration of the work until a final visual clearance and final air clearance has been successfully completed.
- 8.2 No negative air units shall be shut down at any time.
- 8.3 Pre-cleaning of ACM contaminated items shall be performed after the enclosure has been erected and negative pressure has been established in the work area. After items have been pre-cleaned and decontaminated, they may be removed from the work area for storage until the completion of abatement in the work area.
- 8.4 Abatement work shall begin at a location farthest from the units and proceed towards them. If an electric failure occurs, the Competent Person shall stop all abatement work and immediately begin wetting all exposed asbestos materials for the duration of the power outage. Abatement work shall not resume until power is restored and all units are operating properly again.
- 8.5 The negative air machines shall continue to run after all work is completed and until a final visual clearance and a final air clearance has been successfully completed for that regulated area.

# 9. DIMANTLING THE SYSTEM

9.1 After completion of the final visual and final air clearance has been obtained by the VPIH/CIH, the units may be shut down. The unit exterior surfaces shall have been completely decontaminated; pre-filters are not to be removed and the units inlet/outlet sealed with 2 layers of 6 mil poly immediately after shut down. No filter removal shall occur at the VA site following successful completion of site clearance. OSHA/EPA/DOT asbestos shall be attached to the units.

# 10. CONTAINMENT BARRIERS AND COVERINGS IN THE REGULATED AREA

10.1 Seal off the perimeter to the regulated area to completely isolate the regulated area from adjacent spaces. All surfaces in the regulated area must be covered to prevent contamination and to facilitate clean-up. Should adjacent areas become contaminated as a result of the work, shall immediately stop work and clean up the contamination at no additional cost to the VA. Provide firestopping and identify all fire barrier penetrations due to abatement work.

#### 11. PREPARATION PRIOR TO SEALING THE REGULATED AREA

11.1 Place all tools, scaffolding, materials and equipment needed for working in the regulated area prior to erecting any plastic sheeting. All uncontaminated removable furniture, equipment and/or supplies shall be removed by the VA from the regulated area before commencing work. Any objects remaining in the regulated area shall be completely covered with 2 layers of 6-mil fire retardant poly sheeting and secured with duct tape. Lock out and tag out any HVAC/electrical systems in the regulated area.

# 12. CONTROLLING ACCES TO THE REGULATED AREA

12.1 Access to the regulated area is allowed only through the personnel decontamination facility (PDF). All other means of access shall be eliminated and OSHA DANGER demarcation signs posted as required by OSHA. If the regulated area is adjacent to, or within view of an occupied area, provide a visual barrier of 6 mil opaque fire retardant poly to prevent building occupant observation. If the adjacent area is accessible to the public, the barrier must be solid and capable of withstanding the negative pressure.

#### 13. CRITICAL BARRIERS

13.1 Completely separate any operations in the regulated area from adjacent areas using 2 layers of 6 mil fire retardant poly and duct tape. Individually seal with 2 layers of 6 mil poly and duct tape all HVAC openings into the regulated area. Individually seal all lighting fixtures, clocks, doors, windows, convectors, speakers, or any other objects/openings in the regulated area. Heat must be shut off any objects covered with poly.

# 14. PRIMARY BARRIERS

- 14.1 Cover the regulated area with two layers of 6 mil fire retardant poly on the floors and two layers of 4 mil, fire retardant poly on the walls, unless otherwise directed in writing by the VA representative. Floor layers must form a right angle with the wall and turn up the wall at least 300 mm (12"). Seams must overlap at least 1800 mm (6') and must be spray glued and taped. Install sheeting so that layers can be removed independently from each other. Carpeting shall be covered with three layers of 6 mil poly. Corrugated cardboard sheets must be placed between the bottom and middle layers of poly. Mechanically support and seal with duct tape and glue all wall layers.
- 14.2 If stairs and ramps are covered with 6 mil plastic, two layers must be used. Provide 19 mm (3/4") exterior grade plywood treads held in place with duct tape/glue on the plastic. Do not cover rungs or rails with any isolation materials.

# 15. SECONDARY BARRIERS

15.1 A loose layer of 6 mil shall be used as a drop cloth to protect the primary layers from debris generated during the abatement. This layer shall be replaced as needed during the work and at a minimum once per work day.

#### 16. EXTENSION OF THE REGULATED AREA

16.1 If the enclosure of the regulated area is breached in any way that could allow contamination to occur, the affected area shall be included in the regulated area and constructed as per this section. Decontamination measures must be started immediately and continue until air monitoring indicates background levels are met.

#### 17. FIRESTOPPING

- 17.1 Through penetrations caused by cables, cable trays, pipes, sleeves, conduits, etc. must be firestopped with a fire-rated firestop system providing an air tight seal.
- 17.2 Firestop materials that are not equal to the wall or ceiling penetrated shall be brought to the attention of the VA Representative. The contractor shall list all areas of penetration, the type of sealant used, and whether or not the location is fire rated. Any discovery of penetrations during abatement shall be brought to the attention of the VA representative immediately. All walls, floors and ceilings are considered fire rated unless otherwise determined by the VA Representative or Fire Marshall.
- 17.3 Any visible openings whether or not caused by a penetration shall be reported by the Contractor to the VA Representative for a sealant system determination. Firestops shall meet ASTM E814 and UL 1479 requirements for the opening size, penetrant, and fire rating needed.

END 01 51 30.
### DIVISION 1 - GENERAL REQUIREMENTS 01 51 50 - Use of Existing Facilities

#### 1. GENERAL

- 1.1 The project will be at an abandoned building during regular school session.
- 1.2 The University will occupy surrounding buildings for the use of housing, classrooms, offices, and education.
- 1.3 REQUIREMENTS INCLUDE Contractor provide:
  - A. Scheduling
  - B. Security and site regulations
  - C. Entrances
  - D. Temporary enclosures and barriers
  - E. Temporary utilities
  - F. Access roads & parking areas
  - G. Traffic regulation
  - H. Construction Cleaning
  - I. Field Offices
  - J. Close-out

#### 1.4 RELATED REQUIREMENTS

- A. Specified elsewhere:
  - 1. 00 41 13 Bid Form
  - 2. 01 51 00 Temporary Utilities

#### 2. EXECUTION

- 2.1 SCHEDULING
  - A. Submit separate detailed subschedule showing:
    - 1. Each stage of work; occupancy dates of areas.
    - 2. Date of Substantial Completion for each area of work.
  - B. Schedule noisy or hazardous work to avoid problems with University's operations.
- 2.2 SECURITY AND SITE REGULATIONS
  - A. Confer with the University's representative and obtain full knowledge of all site rules and regulations affecting work.
  - B. Provide control of all persons and vehicles entering and leaving project site.
  - C. Truman State University is a tobacco-free campus. The tobacco-free policy includes cigarettes, smokeless tobacco and electronic nicotine delivery system or e-cigarettes. All parties acknowledge that Missouri state law substantially prohibits the smoking of tobacco products in public buildings. The University has adopted the policy that no

smoking or tobacco use is allowed on any University property. The contractor will follow all university policies and procedures set forth.

- 2.1 TEMPORARY ENCLOSURES AND BARRIERS Contractor:
  - A. Provide temporary enclosures to separate work areas from existing building and from areas occupied by University.
  - B. Provide and maintain suitable barriers to prevent unauthorized entry, and to protect the work.

### 2.2 TEMPORARY UTILITIES

- A. University will authorize use of existing facilities or services:
  - 1. Electrical power service.
  - 2. Work, security, safety lighting.
  - 3. Water service to be paid for by the Contractor.
- B. Prevent interference with University's normal use of system.
- C. Modify, supplement and extend systems to meet temporary utility requirements for project, subject to approval of Architect/Engineer and University. Modifications shall be at contractor's expense.
- D. University will pay all costs of consumables (except toll calls) used for construction purposes for utilities it furnishes.
- E. Contractor requiring facilities or services beyond those available from the User shall provide and pay for extension or modification of services to perform the work, and for restoration of services at completion of work.

#### 2.3 ACCESS ROADS & PARKING AREAS

- A. Maintain roads, walks and parking areas in a sound, clean condition. Restore to original condition upon work completion prior to Final Acceptance.
- B. Control vehicular parking to preclude interference with public traffic or parking, access by emergency vehicles, University's operations or construction operations.
- C. See specific University Requirements Section 00 41 13 Bid Form.
- 2.4 TRAFFIC REGULATION Contractor provide traffic control and directional signs, mounted on barricades or standard posts:
  - A. At each change of direction of a roadway and at parking areas.
  - B. Provide qualified and suitably equipped flaggers when construction operations encroach on traffic lanes, as required for traffic regulation.
- 2.5 CONSTRUCTION CLEANING

- A. Contractor provide cleaning and disposal of waste materials, debris and rubbish during construction.
- B. Contractor provide covered containers for deposit of waste materials, debris and rubbish.
- C. Clean User occupied areas daily.
- D. The selected Contractor shall keep the premises clean and orderly at all times, and upon leaving the job site, shall thoroughly clean the premises. The job site shall be left clear of clutter such as food bags, soda cans, or soda cups at the end of each work day. This includes both the work area and any break areas. Any trash should be left in building centralized trash receptacles.
- E. Prior to the completion of the project, the selected Contractor shall also remove any material considered a hazardous waste material or materials that would incur a fee to analyze and determine the method for disposal. The Owner's Environmental Safety Specialist, or his designate, shall be contacted to inspect the job site to verify no such materials are left present prior to final payment being released to the selected Contractor.

## 2.6 FIELD OFFICES

- A. Make arrangements with User Agency Representative for use of Conference Room for project meetings.
- 2.1 CLOSEOUT
  - A. Upon completion of need to use existing user-provided facilities, or when directed by Architect/Engineer, restore each to original or specified condition.
  - B. At completion of work in each area, provide final cleaning and return space to a condition suitable safety and demolition.

END 01 51 50

### 1. GENERAL

- 1.1 REQUIREMENTS INCLUDE. Abatement contractor is to provide materials and equipment to protect workers from asbestos contamination and other work place hazards.
- 2. TRAINING OF ABATEMENT PERSONNEL
  - 2.1 Prior to beginning any abatement activity, all personnel shall be trained in accordance with OSHA 29 CFR 1926.1101 (k)(9) and any additional State/Local requirements. Training must include, at a minimum, the elements listed at 29 CFR 1926.1101 (k)(9)(viii). Training shall have been conducted by a third party, EPA/State approved trainer meeting the requirements of EPA 40 CFR 763 Appendix C (AHERA MAP). Initial training certificates and current refresher and accreditation proof must be submitted for each person working at the site.

### 3. MEDICAL EXAMINATIONS

- 3.1 Medical examinations meeting the requirements of 29 CFR 1926.1101 (m) shall be provided for all personnel working in the regulated area, regardless of exposure levels. A current physician's written opinion as required by 29 CFR 1926.1101 (m)(4) shall be provided for each person and shall include in the medical opinion the person has been evaluated for working in a heat and cold stress environment while wearing personal protective equipment (PPE) and is able to perform the work without risk of material health impairment.
  - A. Submit to the Consultant:
    - 1. Worker Certification Course Certificate
    - 2. Missouri Worker License
    - 3. Worker Asbestos Physical Evidence with Name/Date/Physician's Signature
    - a. Completed within 12 months of work day
    - 4. Fit Test
      - a. Completed within 12 months of work day

### 4. HEALTH AND SAFETY

- 4.1 Provide Consultant with a Health and Safety Plan for precautions to be taken during this project, including:
  - A. Fire Protection
  - B. Electrical
  - C. Ladders and Scaffolding
  - D. Demolition
  - E. Heat Stress

### 5. PERSONAL PROTECTIVE EQUIPMENT (PPE)

- 5.1 All workers and supervisors are to wear proper PPE for the task at hand. Specifically the use of the following shall be utilized when work tasks apply.
  - A. Personal Clothing/Coveralls
  - B. Boots

- C. Goggles
- D. Gloves
- 5.2 Contractor is to provide specifically for each worker, supervisor, consultant, or authorized person to enter containment:
  - A. Respirators and filters
  - B. Disposable coveralls
  - C. Disposable Gloves
  - D. Disposable Head Covers

# 6. REGULATED AREA ENTRY PROCEDURE

6.1 The Competent Person shall ensure that each time workers enter the regulated area; they remove ALL street clothes in the clean room of the decontamination unit and put on new disposable coveralls, head coverings, a clean respirator, and then proceed through the shower room to the equipment room where they put on non-disposable required personal protective equipment.

## 7. DECONTAMINATION PROCEDURE

The Competent Person shall require all personnel to adhere to following decontamination procedures whenever they leave the regulated area.

- 7.1 When exiting the regulated area, remove disposable coveralls, and ALL other clothes, disposable head coverings, and foot coverings or boots in the equipment room.
- 7.2 Still wearing the respirator and completely naked, proceed to the shower. Showering is MANDATORY. Care must be taken to follow reasonable procedures in removing the respirator to avoid inhaling asbestos fibers while showering. The following procedure is required as a minimum:
  - A. Thoroughly wet body including hair and face. If using a PAPR hold blower above head to keep filters dry.
  - B. With respirator still in place, thoroughly decontaminate body, hair, respirator face piece, and all other parts of the respirator except the blower and battery pack on a PAPR. Pay particular attention to cleaning the seal between the face and respirator facepiece and under the respirator straps.
  - C. Take a deep breath, hold it and/or exhale slowly, completely wetting hair, face, and respirator. While still holding breath, remove the respirator and hold it away from the face before starting to breathe.
- 7.3 Carefully decontaminate the facepiece of the respirator inside and out. If using a PAPR, shut down using the following sequence: a) first cap inlets to filters; b) turn blower off to keep debris collected on the inlet side of the filter from dislodging and contaminating the outside of the unit; c) thoroughly decontaminate blower and hoses; d) carefully decontaminate battery pack with a wet rag being cautious of getting water in the battery pack thus preventing destruction. (THIS PROCEDURE IS NOT A SUBSTITUTE FOR RESPIRATOR CLEANING)
- 7.4 Shower and wash body completely with soap and water. Rinse thoroughly.
- 7.5 Rinse shower room walls and floor to drain prior to exiting.
- 7.6 Proceed from shower to clean room; dry off and change into street clothes or into new disposable work clothing.
- 8. REGULATED AREA REQUIREMENTS

8.1 The Competent Person shall meet all requirements of 29 CFR 1926.1101 (o) and assure that all requirements for regulated areas at 29 CFR 1926.1101 (e) are met. All personnel in the regulated area shall not be allowed to eat, drink, smoke, chew tobacco or gum, apply cosmetics, or in any way interfere with the fit of their respirator.

END 01 51 60.

- 1. GENERAL
  - 1.1 Provide each regulated area with separate personnel decontamination facilities (PDF) and waste/equipment decontamination facilities (W/EDF). Ensure that the PDF are the only means of ingress and egress to the regulated area and that all equipment, bagged waste, and other material exit the regulated area only through the W/EDF.
  - 1.2 All personnel entering or exiting a regulated area must go through the PDF and shall follow the requirements at 29 CFR 1926.1101 (j)(1) and these specifications. All waste, equipment and contaminated materials must exit the regulated area through the W/EDF and be decontaminated in accordance with these specifications. Walls and ceilings of the PDF and W/EDF must be constructed of a minimum of 3 layers of 6 mil opaque fire retardant polyethylene sheeting and be securely attached to existing building components and/or an adequate temporary framework. A minimum of 3 layers of 6 mil poly shall also be used to cover the floor under the PDF and W/EDF units. Construct doors so that they overlap and secure to adjacent surfaces. Weight inner doorway sheets with layers of duct tape so that they close quickly after release. Put arrows on sheets so they show direction of travel and overlap. If the building adjacent area is occupied, construct a solid barrier on the occupied side(s) to protect the sheeting and reduce potential for non-authorized personnel entering the regulated area.

#### 2. SELECTION AND USE OF RESPIRATORS

- 2.1 The procedure for the selection and use of respirators must be included in the RRP. The procedure must written clearly enough for workers to understand. A copy of the Respiratory Protection Program must be available in the clean room of the decontamination unit for reference by employees or authorized visitors.
  - A. Respirator Options:
    - 1. Half-Face
    - 2. Full-Face

### 3. MINIMUM RESPIRATORY PROTECTION

- 3.1 Minimum respiratory protection shall be a full face powered air purifying respirator when fiber levels are maintained consistently at or below 0.5 f/cc. A higher level of respiratory protection may be provided or required, depending on fiber levels. Respirator selection shall meet the requirements of 29 CFR 1926.1101 (h); Table 1, except as indicated in this paragraph. Abatement personnel must have a respirator for their exclusive use.
- 4. MEDICAL WRITTEN OPINION
  - 4.1 No employee shall be allowed to wear a respirator unless a physician or other licensed health care professional has provided a written determination they are medically qualified to wear the class of respirator to be used on the project while wearing whole body impermeable garments and subjected to heat or cold stress.
- 5. RESPIRATOR FIT TEST

5.1 All personnel wearing respirators shall have a current qualitative/quantitative fit test which was conducted in accordance with 29 CFR 1910.134 (f) and Appendix A. Quantitative fit tests shall be done for PAPRs which have been put into a motor/blower failure mode.

## 6. RESPIRATOR FIT CHECK

6.1 The Competent Person shall assure that the positive/negative pressure user seal check is done each time the respirator is donned by an employee. Head coverings must cover respirator head straps. Any situation that prevents an effective facepiece to face seal as evidenced by failure of a user seal check shall preclude that person from wearing a respirator inside the regulated area until resolution of the problem.

# 7. MAINTENANCE AND CARE OF RESPIRATORS

7.1 The Abatement Contractor is responsible for the repair, maintenance and replacement of respirators and filters as needed in a timely manner.

### 8. SUPPLIED AIR SYSTEMS

8.1 If a supplied air system is used, the system shall meet all requirements of 29 CFR 1910.134 and the ANSI/Compressed Gas Association (CGA) Commodity Specification for Air current requirements for Type 1 - Grade D breathing air. Low pressure systems are not allowed to be used on asbestos abatement projects. Supplied Air respirator use shall be in accordance with EPA/NIOSH publication EPA-560-OPTS-86-001 "A Guide to Respiratory Protection for the Asbestos Abatement Industry". The competent person on site will be responsible for the supplied air system to ensure the safety of the worker.

END 01 51 62.

# DIVISION 1 – GENERAL REQUIREMENTS 01 51 63 – DECONTAMINATION UNITS

#### 1. GENERAL

- 1.1 Provide each regulated area with separate personnel decontamination facilities (PDF) and waste/equipment decontamination facilities (W/EDF). Ensure that the PDF are the only means of ingress and egress to the regulated area and that all equipment, bagged waste, and other material exit the regulated area only through the W/EDF.
- 1.2 All personnel entering or exiting a regulated area must go through the PDF and shall follow the requirements at 29 CFR 1926.1101 (j)(1) and these specifications. All waste, equipment and contaminated materials must exit the regulated area through the W/EDF and be decontaminated in accordance with these specifications. Walls and ceilings of the PDF and W/EDF must be constructed of a minimum of 3 layers of 6 mil opaque fire retardant polyethylene sheeting and be securely attached to existing building components and/or an adequate temporary framework. A minimum of 3 layers of 6 mil poly shall also be used to cover the floor under the PDF and W/EDF units. Construct doors so that they overlap and secure to adjacent surfaces. Weight inner doorway sheets with layers of duct tape so that they close quickly after release. Put arrows on sheets so they show direction of travel and overlap. If the building adjacent area is occupied, construct a solid barrier on the occupied side(s) to protect the sheeting and reduce potential for non-authorized personnel entering the regulated area.

#### 2. TEMPORARY FACILITIES TO THE PDF AND W/EDF

2.1 The Competent Person shall provide temporary water service connections to the PDF and W/EDF. Backflow prevention must be provided at the point of connection to the VA system. Water supply must be of adequate pressure and meet requirements of 29 CFR 1910.141(d)(3). Provide adequate temporary overhead electric power with ground fault circuit interruption (GFCI) protection. Provide a sub-panel equipped with GFCI protection for all temporary power in the clean room. Provide adequate lighting to provide a minimum of 50 foot candles in the PDF and W/EDF. Provide temporary heat, if needed, to maintain 70°F throughout the PDF and W/EDF.

### 3. PERSONNEL DECONTAMINATION FACILITY (PDF)

- 3.1 The Competent Person shall provide a PDF consisting of shower room which is contiguous to a clean room and equipment room which is connected to the regulated area. The PDF must be sized to accommodate the number of personnel scheduled for the project. The shower room, located in the center of the PDF, shall be fitted with as many portable showers as necessary to insure all employees can complete the entire decontamination procedure within 15 minutes. The PDF shall be constructed of opaque poly for privacy. The PDF shall be constructed to eliminate any parallel routes of egress without showering.
  - A. Clean Room: The clean room must be physically and visually separated from the rest of the building to protect the privacy of personnel changing clothes. The clean room shall be constructed of at least 3 layers of 6 mil opaque fire retardant poly to provide an air tight room. Provide a minimum of 2 900 mm (3 foot) wide 6 mil poly opaque fire retardant doorways. One doorway shall be the entry from outside the

PDF and the second doorway shall be to the shower room of the PDF. The floor of the clean room shall be maintained in a clean, dry condition. Shower overflow shall not be allowed into the clean room. Provide 1 storage locker per person. A portable fire extinguisher, minimum 10 pounds capacity, Type ABC, shall be provided in accordance with OSHA and NFPA Standard 10. All persons entering the regulated area shall remove all street clothing in the clean room and dress in disposable protective clothing and respiratory protection. Any person entering the clean room does so either from the outside with street clothing on or is coming from the shower room completely naked and thoroughly washed. Females required to enter the regulated area shall be ensured of their privacy throughout the entry/exit process by posting guards at both entry points to the PDF so no male can enter or exit the PDF during her stay in the PDF.

- B. Shower Room: The Competent Person shall assure that the shower room is a completely water tight compartment to be used for the movement of all personnel from the clean room to the equipment room and for the showering of all personnel going from the equipment room to the clean room. Each shower shall be constructed so water runs down the walls of the shower and into a drip pan. Install a freely draining smooth floor on top of the shower pan. The shower room shall be separated from the rest of the building and from the clean room and equipment room using air tight walls made from at least 3 layers of 6 mil opaque fire retardant poly. The shower shall be equipped with a shower head and controls, hot and cold water, drainage, soap dish and continuous supply of soap, and shall be maintained in a sanitary condition throughout its use. The controls shall be arranged so an individual can shower without assistance. Provide a flexible hose shower head, hose bibs and all other items shown on Shower Schematic. Waste water will be pumped to a drain after being filtered through a minimum of a 100 micron sock in the shower drain; a 20 micron filter; and a final 5 micron filter. Filters will be changed a minimum of daily or more often as needed. Filter changes must be done in the shower to prevent loss of contaminated water. Hose down all shower surfaces after each shift and clean any debris from the shower pan. Residue is to be disposed of as asbestos waste.
- C. Equipment Room: The Competent Person shall provide an equipment room which shall be an air tight compartment for the storage of work equipment/tools, reusable personal protective equipment, except for a respirator and for use as a gross decontamination area for personnel exiting the regulated area. The equipment room shall be separated from the regulated area by a minimum 3 foot wide door made with 2 layers of 6 mil opaque fire retardant poly. The equipment room shall be separated from the regulated area, the shower room and the rest of the building by air tight walls and ceiling constructed of a minimum of 3 layers of 6 mil opaque fire retardant poly. Damp wipe all surfaces of the equipment room after each shift change. Provide an additional loose layer of 6 mil fire retardant poly per shift change and remove this layer after each shift. If needed, provide a temporary electrical sub-panel equipped with GFCI in the equipment room to accommodate any equipment required in the regulated area.
- D. The PDF shall be as follows: Clean room at the entrance followed by a shower room followed by an equipment room leading to the regulated area. Each doorway in the PDF shall be a minimum of 2 layers of 6 mil opaque fire retardant poly.



# 4. WASTE/EQUIPMENT DECONTAMINATION FACILITY (W/EDF)

The Competent Person shall provide an W/EDF consisting of a wash room, holding room, and clean room for removal of waste, equipment and contaminated material from the regulated area. Personnel shall not enter or exit the W/EDF except in the event of an emergency. Clean debris and residue in the W/EDF daily. All surfaces in the W/EDF shall be wiped/hosed down after each shift and all debris shall be cleaned from the shower pan. The W/EDF shall consist of the following:

- 4.1 Wash Down Station: Provide an enclosed shower unit in the regulated area just outside the Wash Room as an equipment bag and container cleaning station.
- 4.2 Wash Room: Provide a wash room for cleaning of bagged or containerized asbestos containing waste materials passed from the regulated area. Construct the wash room using 50 x 100 mm (2" x 4") wood framing and 3 layers of 6 mil fire retardant poly. Locate the wash room so that packaged materials, after being wiped clean, can be passed to the Holding Room. Doorways in the wash room shall be constructed of 2 layers of 6 mil fire retardant poly.
- 4.3 Holding Room: Provide a holding room as a drop location for bagged materials passed from the wash room. Construct the holding room using 50 x 100 mm (2" x 4") wood framing and 3 layers of 6 mil fire retardant poly. The holding room shall be located so that bagged material cannot be passed from the wash room to the clean room unless it goes through the holding room. Doorways in the holding room shall be constructed of 2 layers of 6 mil fire retardant poly.
- 4.4 Clean Room: Provide a clean room to isolate the holding room from the exterior of the regulated area. Construct the clean room using 2 x 4 wood framing and 2 layers of 6 mil fire retardant poly. The clean room shall be located so as to provide access to the holding room from the building exterior. Doorways to the clean room shall be constructed of 2 layers of 6 mil fire retardant poly. When a negative pressure differential system is used, a rigid enclosure separation between the W/EDF clean room and the adjacent areas shall be provided.
- 4.5 The W/EDF shall be as follows: Wash Room leading to a Holding Room followed by a Clean Room leading to outside the regulated area. See diagram.



# 5. WASTE/EQUIPMENT DECONTAMINATION PROCEDURES

5.1 At the washdown station in the regulated area, thoroughly wet clean contaminated equipment and/or sealed polyethylene bags and pass into Wash Room after visual inspection. When passing anything into the Wash Room, close all doorways of the W/EDF, other than the doorway between the washdown station and the Wash Room. Keep all outside personnel clear of the W/EDF. Once inside the Wash Room, wet clean the equipment and/or bags. After cleaning and inspection, pass items into the Holding Room. Close all doorways except the doorway between the Holding Room and the Clean Room. Workers from the Clean Room/Exterior shall enter the Holding Room and remove the decontaminated/cleaned equipment/bags for removal and disposal. These personnel will not be required to wear PPE. At no time shall personnel from the clean side be allowed to enter the Wash Room.

END 01 51 63.

### 1. GENERAL

- 1.1 Contractor shall follow the following steps in order to accomplish Substantial Completion, Final Acceptance, and Project Closeout.
- 2. PAYMENT AND BILLING PROCEDURES
  - 2.1 See Section 01 20 00 Schedules, Reports and Payments

### 3. SUBSTANTIAL COMPLETION

- A. Upon notification from the Contractor that the project is ready for inspection for Substantial Completion, the Consultant will perform a visual inspection.
  - 1. Upon completion of visual inspection the Consultant will then notify the Owner and Contractor that Substantial Completion is acceptable and the project can move to Final Acceptance.

### 4. FINAL ACCEPTANCE:

- A. Once Substantial Completion inspection has been approved by the Consultant the Contractor can begin Final Acceptance Procedures.
- B. See Section 01 20 00 Schedules, Reports and Payments.
- C. See Section 02 82 00 Asbestos Abatement.

END 01 41 00.

# DIVISION 1 – GENERAL REQUIREMENTS 01 71 14 – FINAL VISUAL INSPECTION AND CLEARANCE TESTING

### 1. GENERAL

1.1 The Consultant will conduct final visual inspection and clearance testing upon determination by the Contractor and Consultant that all work has been completed in accordance with rules and regulations and these specifications.

#### 2. FINAL VISUAL INSPECTION

2.1 Final visual inspection will include the entire regulated area, the PDF, all poly sheeting, seals over HVAC openings, doorways, windows, and any other openings. If any debris, residue, dust or any other suspect material is detected, the final cleaning shall be repeated at no cost to the Owner. When the regulated area is visually clean the final testing can be done.

#### 3. FINAL AIR CLEARANCE TESTING

- 3.1 After an acceptable final visual inspection by the Consultant, the Consultant will perform the final clearance testing. Air samples will be collected and analyzed in accordance with procedures for NESPHAPS in this specification. 5 PCM samples shall be collected for clearance and a minimum of one field blank. If the release criteria are not met, the Contractor shall repeat the final cleaning and continue decontamination procedures until clearance is achieved. All Additional inspection and testing costs will be at the Contractor's expense.
- 3.2 If release criteria are met, proceed to perform the abatement closeout or next phase of the project.

### 4. FINAL AIR CLEARANCE PROCEDURES

- 4.1 Contractor's Release Criteria: Work in a regulated area is complete when the regulated area is visually clean and airborne fiber levels have been reduced to or below 0.01 f/cc as measured by the AHERA PCM protocol.
- 4.2 Air Monitoring and Final Clearance Sampling: To determine if the elevated airborne fiber counts encountered during abatement operations have been reduced to the specified level, the Consultant will secure samples and analyze them according to the following procedures:
  - A. Fibers Counted: "Fibers" referred to in this section shall be either all fibers regardless of composition as counted in the NIOSH 7400 PCM method.
  - B. Aggressive Sampling: All final air testing samples shall be collected using aggressive sampling techniques except where soil is not encapsulated or enclosed. Samples will be collected on 0.8µ MCE filters for PCM analysis and 0.45µ Polycarbonate filters for TEM. A minimum of 1200 Liters of using calibrated pumps shall be collected for clearance samples. Before pumps are started, initiate aggressive air mixing sampling as detailed in 40 CFR 763 Subpart E (AHERA) Appendix A (III)(B)(7)(d). Air samples will be collected in areas subject to normal air circulation away from corners, obstructed locations, and locations near windows, doors, or vents. After air sampling pumps have been shut off, circulating fans shall be shut off. The negative

pressure system shall continue to operate.

- 5. CLEARANCE SAMPLING USING PCM:
  - 5.1 The Consultant will perform clearance samples as indicated by the specification.
  - 5.2 The NIOSH 7400 PCM method will be used for clearance sampling with a minimum collection volume of 1200 Liters of air. A minimum of 5 PCM clearance samples shall be collected. All samples must be equal to or less than 0.01 f/cc to clear the regulated area.
- 6. LABORATORY TESTING OF CLEARANCE SAMPLES
  - 6.1 PCM CLEARANCE Samples will be analyzed by accredited laboratory of Consultant's choosing.

END 01 71 14.

PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Demolition and removal of buildings.
  - 2. Removing below-grade construction.
  - 3. Disconnecting, capping or sealing, and removing site utilities.
  - 4. Rubblization of existing buildings as an aggregate base for backfill.
- B. Related Sections:
  - 1. Division 2 Section "Site Clearing" for site clearing and removal of above- and belowgrade site improvements not part of building demolition.
  - 2. Division 2 Section "Piped Utilities Basic Materials and Methods" for shutting off, disconnecting, removing, and sealing or capping utilities.
  - 3. Division 2 Section "Earthwork" for soil properties.

### 1.3 DEFINITIONS

A. Remove: Detach items from existing construction and legally dispose of them off-site unless indicated to be removed and salvaged.

### 1.4 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.
- B. Historic items, relics, antiques, and similar objects including, but not limited to, cornerstones and their contents, commemorative plaques and tablets, and other items of interest or value to Owner that may be uncovered during demolition remain the property of Owner.
  - 1. Carefully salvage in a manner to prevent damage and promptly return to Owner.

### 1.5 SUBMITTALS

A. Proposed Protection Measures: Submit informational report, including Drawings, that indicates the measures proposed for protecting individuals and property for dust control and for noise control. Indicate proposed locations and construction of barriers.

- 1. Adjacent Buildings: Detail special measures proposed to protect adjacent buildings to remain including means of egress from those buildings.
- B. Landfill Records: Indicate receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.

### 1.6 QUALITY ASSURANCE

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ANSI/ASSE A10.6 and NFPA 241.
- C. Predemolition Conference: Conduct conference at Project Site.
  - 1. Inspect and discuss condition of construction to be demolished.
  - 2. Review structural load limitations of existing structures.
  - 3. Review and finalize building demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
  - 4. Review and finalize protection requirements.
  - 5. Review procedures for noise control and dust control.
  - 6. Review procedures for protection of adjacent buildings.

### 1.7 PROJECT CONDITIONS

- A. Buildings to be demolished will be vacated and their use discontinued before start of the Work.
- B. Buildings, streets, and parking lots immediately adjacent to demolition area will be occupied. Conduct building demolition so operations of occupied buildings will not be disrupted.
  - 1. Provide not less than 72 hours notice of activities that will affect operations of adjacent occupied buildings.
  - 2. Maintain access to existing walkways, exits, and other facilities used by occupants of adjacent buildings, streets, and parking lots.
    - a. Do not close or obstruct walkways, exits, or other facilities used by occupants of adjacent buildings without written permission from authorities having jurisdiction.
    - b. Do not close lanes or portions of parking lots without permissions from authorities having jurisdiction.
- C. Owner assumes no responsibility for buildings and structures to be demolished.

- 1. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
- D. Hazardous Materials: Hazardous materials are present in buildings and structures to be demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.
  - 1. Hazardous material remediation is specified elsewhere in the Contract Documents.
  - 2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.
- E. On-site storage or sale of removed items or materials is not permitted.

### PART 2 - PRODUCTS

### 2.1 SOIL MATERIALS

A. Satisfactory Soils: Comply with requirements in Division 2 Section "Earthwork."

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Review Project Record Documents of existing construction provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- B. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operations.
- C. Verify that hazardous materials have been remediated before proceeding with building demolition operations.

# 3.2 PREPARATION

- A. Existing Utilities: Locate, identify, disconnect, and seal or cap off all utilities serving buildings and structures to be demolished.
  - 1. Arrange to shut off indicated utilities with utility companies.
  - 2. If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.
  - 3. Cut off pipe or conduit at construction limits. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.

- 4. The Contractor is responsible for all fees and permits relating to the demolition and disconnection of all utilities.
- B. Existing Utilities: Power
  - 1. Contractor is to coordinate with Truman State University and Ameren UE for the electric disconnect and removal of power pole and transformers.
- C. Existing Utilities: Large Water Connection Destroys
  - 1. The Contractor is responsible for obtaining all proper permits, (ie plumbing, excavation, etc.) and present them to the Truman State University and the City of Kirksville, Missouri.
  - 2. The Contractor will excavate and expose the valve and the pipe leaving the valve fully exposed.
  - 3. The Contractor will cut the pipe on the outlet side of the valve approximately one (1) foot away from the face of the valve and remove approximately one (1) foot of pipe.
  - 4. The Contractor will schedule all required inspections with the City of Kirksville, Missouri.
  - 5. If the inspection detects that any problems existing with the method of the destroy the Contractor will have to make the required corrections at no additional cost to the Owner before being released.
  - 6. If supplemental inspections will be required they will be performed at no additional cost to the Owner.
- D. Existing Utilities: Sewer and/or Storm Destroys
  - 1. The Contractor is responsible for capping sewer and/or storm drains that are owned by Truman State University.
    - a. The storm drains are to be destroyed in their entirety as shown in drawings. The drains are to be capped at construction limits.
    - b. The sewer is to be destroyed and capped at the construction limits. The sewer will be abandoned outside construction limits and then capped or plugged at manholes as shown on drawings.
  - 2. The Contractor will complete the backfill to the requirements as specified in Section 2 "Earthwork".
- E. Existing Utilities: Steam and Condensate Destroys
  - 1. The Contractor is responsible for destroying all steam and condensate lines within construction limits.
    - a. The contractor shall first cap steam lines and condensate lines in manholes as shown on drawings.
- F. Existing Utilities: Phone and Fiber Lines
  - 1. The Contractor is responsible for terminating phone line downstream of switch within the construction limits.
    - a. The Contractor shall shrink wrap cable ends to ensure no water intrusion on the line.
  - 2. The Contactor is responsible for cut and cap fiberoptic conduit within the construction limits.

- G. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.
  - 1. Strengthen or add new supports when required during progress of demolition.

### 3.3 PROTECTION

- A. Existing Facilities: Protect adjacent walkways, building entries, and other building facilities during demolition operations. Maintain exits from existing buildings.
- B. Temporary Protection: Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction and as indicated in Project Manual.
  - 1. Protect adjacent buildings and facilities from damage due to demolition activities.
  - 2. Protect existing site improvements, appurtenances, and landscaping to remain.
  - 3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
  - 4. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent properties, buildings, parking lots, and roads to remain.
- C. Remove temporary barriers and protections where hazards no longer exist. Where open excavations or other hazardous conditions remain, leave temporary barriers and protections in place.

### 3.4 DEMOLITION, GENERAL

- A. General: Demolish indicated building and site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
  - 1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
  - 2. Maintain fire watch during and for at least two hours after flame cutting operations.
  - 3. Maintain adequate ventilation when using cutting torches.
  - 4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
- B. Engineering Surveys: During demolition, perform surveys to detect hazards that may result from building demolition activities.
- C. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
  - 1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide

alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.

- 2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations. Do not use water when it may damage adjacent construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.
- D. Explosives: Use of explosives is not permitted.

## 3.5 DEMOLITION BY MECHANICAL MEANS

- A. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.
- B. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
  - 1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.
- C. Below-Grade Construction: Demolish foundation walls and other below-grade construction.
  - 1. Remove below-grade construction, including basements, foundation walls, footings, and all slab/wall subgrade rock backfil in their entirety.
- D. Existing Utilities: Demolish and remove existing utilities and below-grade utility structures except as noted otherwise.

### 3.6 SITE RESTORATION

- A. Below-Grade Areas: Completely fill below-grade areas and voids resulting from building demolition operations to backfill requirements in Division 2 Section "Earthwork."
- B. Site Grading: Uniformly rough grade area of demolished construction according to the plans to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.

### 3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and legally dispose of them in an EPA approved landfill. See Division 1 Sections.
  - 1. Do not allow demolished materials to accumulate on-site.
  - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.

- B. Do not burn demolished materials.
- 3.8 CLEANING
  - A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.
    - 1. Clean roadways of debris caused by debris transport.

END OF SECTION 02 41 16

## TECHNICAL REQUIREMENTS – ASBESTOS ABATEMENT 02 82 13 - Asbestos Abatement

# **1.** GENERAL

- 1.1 WORK INCLUDES: Asbestos Abatement
  - A. Contractor provide:

Asbestos Abatement of all asbestos containing materials from the Fair Apartments Building in order to facilitate demolition of the building. All abatement shall be completed as per MDNR, OSHA, and EPA/NESHAPS rules and regulations as shown in the asbestos abatement drawings dated March 20, 2018.

## 1.2 SCHEDULE

- A. Asbestos abatement work is to commence on or around May 14, 2018 and the schedule to be determined by the owner.
- B. By Others
  - 1. Architect/Engineer:
    - a. Perform duties of APM/ASP per EPA Rules and Regulations.
    - b. Sign Waste Shipment Record for User.
  - 2. By Using agency:
    - a. Will provide meter for water hydrant.
    - b. Power will remain active to the building for abatement.

### 1.3 FIELD QUALITY CONTROL

- A. Architect/Engineer:
  - 1. Employ the Air Sampling Professional (ASP) in accord with the MDNR, EPA and OSHA Rules and Regulations.
- B. Contractor:
  - 1. Provide air monitoring of own personnel. Provide a copy of all results to the APM within 24 hours.
  - 2. Pay any additional costs which arise from failure of clearance testing and may include costs for services of APM, ASP, laboratory, or A/E.
- C. Regulatory Agencies, the Owner or the APM may issue emergency stop work orders to the Contractor. Regulatory agencies may additionally assess fines and penalties in accord with applicable Rules and Regulations.
- 1.4 SUBMITTALS
  - A. Make all submittals in accord with MDNR Rules and Regulations, to the onsite Project Manager.
    - 1. Submit documented evidence that each person, including contractor's supervisor,

Project No: SP18-23

ASBESTOS ABATEMENT

02 82 13 - 1

performing asbestos work holds a valid MDNR License and accreditation certificate in accord with MDNR Rules and Regulations/

- 2. Submit documented evidence of current medical surveillance records.
- 3. Submit documented evidence of respirator training, most recent fit testing and written respiratory protection program.
- B. Complete and submit the asbestos abatement notification to MDNR and provide a copy to the onsite Project Manager.
- **1.5** PROTECTION Provide protection for personnel and building in accord with EPA Rules and Regulations.
- **2.** PRODUCTS / EQUIPMENT
- 2.1 ASBESTOS ABATEMENT EQUIPMENT Use only materials and equipment complying with the EPA Rules and Regulations.
- **3.** EXECUTION
- 3.1 PREPARATION
  - A. Perform all preparation work in accord with the EPA Rules and Regulations.
- 3.2 PERFORMANCE
  - A. Perform all asbestos work in accord with the EPA and applicable MDNR Rules and Regulations:
    - 1. Commencement of Work
    - 2. Removal Procedures
    - 3. Encapsulation Procedures
    - 4. Enclosure Procedures
  - B. Full Containment Gross Removal

Abatement Contractor is to remove and dispose of all asbestos containing materials from the Fair Apartment Building utilizing full containment gross removal methods and wrap and cut methods.

- C. Disposal :
  - 1. Label all bags or containers containing asbestos debris as follows-

FAIR APARTMENTS – TRUMAN STATE UNIVERSITY KIRKSVILLE, MISSOURI

- 2. Whenever trucks or dumpsters are being loaded or unloaded with asbestos waste, post signs in accord with the NESHAP STANDARD- DANGER, ASBESTOS DUST HAZARD, CANCER AND LUNG DISEASE HAZARD, AUTHORIZED PERSONNEL ONLY.
- 3. Transport all waste to an approved landfill. Complete a waste shipment record for each load of waste in accord with the NESHAP STANDARD. Return the record, signed by waste disposal site owner/operator to APM within 10 days after completion of project.

### 3.3 CLEANUP

A. Perform all cleanup operations daily in accord with the EPA Rules and Regulations.

Project No: SP18-23

ASBESTOS ABATEMENT

Clearance Air Monitoring and Analysis:

 Aggressive Sampling and PCM Analysis

END 02 82 13.

PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Excavating and backfilling trenches for utilities and pits for buried utility structures.
- B. Related Sections:
  - 1. Division 2 Section "Site Clearing" for site clearing and removal of above- and belowgrade site improvements not part of building demolition.
  - 2. Division 2 Section "Piped Utilities Basic Materials and Methods" for shutting off, disconnecting, removing, and sealing or capping utilities.
  - 3. Division 2 Section "Building Demolition" for demolition of buildings, structures, and site improvements.
- 1.3 DEFINITIONS
  - A. Backfill: Soil material or controlled low-strength material used to fill an excavation.
    - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
    - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
  - B. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.
  - C. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.
    - 1. Class A Excavation: This excavation consists of the removal of soil and soil-like materials that do not normally require the use of a jack-hammer or blasting to break up into pieces small enough to be removed. This includes clayey, silty, or sandy soil, trash and rubble, cinders, shale, chert, crushed rock, brick or cobblestone paving or surfacing, asphaltic concrete paving, and other plain, bituminous-bound bases or surface course or macadam, gravel, or broken stone.
    - 2. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work

- 3. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.
- D. Fill: Soil materials used to raise existing grades.
- E. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- F. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- G. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

# 1.4 SUBMITTALS

- A. Material Test Reports: From a qualified testing agency indicating and interpreting test results for compliance of the following with requirements indicated:
  - 1. Classification according to ASTM D 2487 of each on-site and borrow soil material proposed for fill and backfill.
  - 2. Laboratory compaction cuve according to ASTM D 698 (Standard Proctor) for each onsite and borrow soil material proposed for fill and backfill.
- B. Preexcavation Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by earth moving operations. Submit before earth moving begins.

# 1.5 QUALITY ASSURANCE

- A. Geotechnical Testing Agency Qualifications: An independent testing agency qualified according to ASTM E 329 to conduct soil materials and rock-definition, as documented according to ASTM D 3740 and ASTM E 548.
- B. Pre-excavation Conference: Conduct conference at Project Site.

# 1.6 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth moving operations.
  - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
  - 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.

B. Do not commence earth moving operations until temporary erosion- and sedimentationcontrol measures, specified in Division 2 Section "Site Clearing, are in place.

#### PART 2 - PRODUCTS

### 2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Sand or gravel Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D 2487 or a combination of these groups.
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, OL, CH, MH, OH, and PT according to ASTM D 2487or a combination of these groups.
  - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

#### 2.2 ACCESSORIES

- A. Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide by 4 mils thick, continuously inscribed with a description of the utility; colored as follows:
- B. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide by 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored as follows:

### PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.
- B. Preparation of subgrade for earthwork including removal of vegetation, topsoil, debris, obstruction, and deleterious materials from ground surface is specified in Division 2 Section "Site Clearing."
- C. Protect and maintain erosion and sedimentation controls, which are specified in Division 2 Section "Site Clearing", during earthwork operations.

D. Provide protective insulating materials to protect sub grades and foundation soils against freezing temperatures or frost.

### 3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared sub grades, and from flooding Project site and surrounding area.
- B. Protect sub grades from softening, undermining, washout, and damage by rain or water accumulation.
  - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.

#### 3.3 EXPLOSIVES

A. Explosives: Do not use explosives.

#### 3.4 EXCAVATION, GENERAL

- A. Class A Excavation: Excavate to subgrade elevations. Removed all non-rigid pavements, including brick, cobblestone, or asphaltic concrete, or macadam, including alley aprons, driveways, or any other brick pavement or a stone base. Removal shall include the pavement and all the material below the pavement required to reach the depth needed for proper placement of the proposed new work at the grades specified, or as shown in the plans. Materials to be excavated will be classified as earth and rock.
  - 1. Earth excavation includes excavating pavements and obstructions visible on surface; underground structures, utilities, and other items indicated to be removed; together with soil, boulders, and other materials not classified as rock or unauthorized excavation.

### 3.5 EXCAVATION FOR STRUCTURES

A. Excavate structures in their entirety.

### 3.6 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

### 3.7 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations, and to the payline widths.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
  - 1. Clearance: 6 inches each side of pipe, or as indicated on the drawings.
- C. Trench Bottoms: Excavate trenches 4 inches deeper than bottom of pipe and conduit elevations to allow for bedding course. Hand-excavate deeper for bells of pipe.
  - 1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.
- D. Length of Open Trench: The length of trench which may be opened in advance of the completed sewer (or utility) shall be limited to 200 feet in earth, except with permission of the Engineer.
- E. Bracing and Shoring: Furnish, place, and maintain such sheeting, bracing, shoring, etc. as necessary or that may be required by OSHA to support the sides of the excavation to protect workmen in the trench and to prevent any earth movement which might in any way injure or delay the work; change the required width of excavation, or endanger adjacent pavement, utilities, sewers, buildings, or other structures above or below the ground surface.

### 3.8 SUBGRADE INSPECTION

- A. Notify Engineer when excavations have reached required subgrade.
- B. The subgrade shall be substantially uniform in density throughout the entire width of the subgrade. Where hauling or other construction operations result in ruts or other objectionable irregularities, the Contractor shall reshape and re-roll the subgrade before the base or surfacing is placed.
- C. All subgrade shall be rolled. The subgrade shall be checked and rolled and, if not at the proper elevation at all points, sufficient material shall be removed or added and compacted to bring all portions of the subgrade to the required elevation and density. A maximum deviation of ½ inch, plus or minus, from the required elevation will be permitted on the surface of the finished subgrade.
- D. If Engineer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
- E. Authorized additional excavation and replacement material will be paid for according to Contract provisions for Changes in Work.

F. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

### 3.9 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
  - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

## 3.10 BACKFILL

- A. Place and compact backfill in excavations promptly, but not before completing the following:
  - 1. Construction below finish grade including, where applicable, subdrainage, dampproofing, waterproofing, and perimeter insulation.
  - 2. Surveying locations of underground utilities for Record Documents.
  - 3. Testing and inspecting underground utilities.
  - 4. Removing concrete formwork.
  - 5. Removing trash and debris.
  - 6. Removing temporary shoring and bracing, and sheeting.
  - 7. Installing permanent or temporary horizontal bracing on horizontally supported walls.
- B. Place backfill on subgrades free of mud, frost, snow, or ice.

### 3.11 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Backfill trenches excavated under footings and within 18 inches of bottom of footings with satisfactory soil; fill with concrete to elevations of bottom of footings.
- D. Backfill voids with satisfactory soil while removing shoring and bracing.

# 3.12 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:

- 1. Under grass and planted areas, use satisfactory soil material.
- 2. Under walks and pavements, use satisfactory soil material.
- C. Place soil fill on subgrades free of mud, frost, snow, or ice.

### 3.13 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content. Contractor shall be responsible for obtaining Proctor values for soils encountered in the fill operations to determine the optimum moisture and compaction parameters.
  - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
  - 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

## 3.14 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 698 (Standard Proctor):
  - 1. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 85 percent.

### 3.15 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
  - 1. Provide a smooth transition between adjacent existing grades and new grades.
  - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
  - 1. Turf or Unpaved Areas: Plus or minus 1 inch.

### 3.16 HYDROSEEDING

- A. General: Hydroseed with a mixture of wood mulch, seed, fertilizer and tackifier. Apply 25 hours before rainfall occurs before drying. Hydroseeding shall take place during growing season only.
- B. Minimum Application Rates:
  - 1. Gaur Tackifier: Application rate of 1 ½ pounds per 1,000 square feet (60 pounds per acre).
  - 2. Wood Mulch: Application rate of 45 pounds per 1,000 square feet (2,000 pounds per acre).
  - 3. Seed (Baron variety of Kentucky Bluegrass): Application rate of 5 pounds per 1,000 square feet
  - 4. Fertilizer: Balanced Fertilizer 10-20-10. Do not exceed 300 pounds per acre.

## 3.17 FIELD QUALITY CONTROL

- A. Testing Agency: Demo Contractor will engage a qualified geotechnical engineering testing agency to perform tests and inspections.
- B. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- C. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable. Tests will be performed at the following locations and frequencies:
  - 1. Paved and Building Slab Areas: At subgrade and at each compacted fill and backfill layer, at least one test for every 200 square feet or less of paved area or building slab, but in no case fewer than three tests.
  - 2. Trench Backfill: At each compacted initial and final backfill layer, at least one test for every 150 feet less of trench length, but no fewer than two tests.
- D. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

## 3.18 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

- 1. Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
  - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.
- 3.19 DISPOSAL OF SURPLUS AND WASTE MATERIALS
  - A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 31 05 13.

PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Protecting existing vegetation to remain.
  - 2. Removing existing vegetation.
  - 3. Clearing and grubbing.
  - 4. Removing above- and below-grade site improvements.
  - 5. Temporary erosion- and sedimentation-control measures.
- B. Related Sections:
  - 1. Division 2 Section "Building Demolition" for demolition of buildings, structures, and site improvements.
  - 2. Division 2 Section "Piped Utilities Basic Materials and Methods" for shutting off, disconnecting, removing, and sealing or capping utilities.
  - 3. Division 2 Section "Earthwork" for soil properties.

### 1.3 DEFINITIONS

- A. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing inplace surface soil and is the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of subsoil and weeds, roots, toxic materials, or other nonsoil materials.
- D. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

#### 1.4 MATERIAL OWNERSHIP

A. Except for stripped topsoil to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

#### 1.5 SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
  - 1. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.

#### 1.6 QUALITY ASSURANCE

A. Preinstallation Conference: Conduct conference at Project Site.

#### 1.7 PROJECT CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
  - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
  - 2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
- B. Utility Locator Service: Notify utility locator service (private) and Missouri One Call (public) or sufficient coordinate with affected utility companies.
- C. Salvable Improvements: Carefully remove items indicated to be salvaged and stored on Owner's premises at a location determined by the Owner.
- D. Do not commence site clearing operations until temporary erosion- and sedimentation-control protection measures are in place.
- E. Soil Stripping, Handling, and Stockpiling: Perform only when the topsoil is dry or slightly moist.

### PART 2 - PRODUCTS

### 2.1 MATERIALS

A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Division 2 Section "Earthwork."
1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

### PART 3 - EXECUTION

### 3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Locate and clearly identify trees, shrubs, and other vegetation to remain and flag each tree trunk at 54 inches above the ground.
- C. Protect existing site improvements to remain from damage during construction.
  - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

### 3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not bypass erosion protection measures.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

### 3.3 TREE AND PLANT PROTECTION

A. Protect all trees and landscaping outside the construction limits. All trees and landscaping inside construction limits shall be removed.

### 3.4 EXISTING UTILITIES

- A. Verify that utilities have been disconnected and capped before proceeding with site clearing.
- B. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.

- 1. Arrange with utility companies to shut off indicated utilities.
- C. Locate, identify, and disconnect utilities indicated to be abandoned in place.
- D. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
  - 1. Notify Engineer not less than two days in advance of proposed utility interruptions.
  - 2. Do not proceed with utility interruptions without Engineer's written permission.
- E. Excavate for and remove underground utilities indicated to be removed.

### 3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation inside construction limits.
  - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
  - 2. Grind down stumps and remove roots, obstructions, and debris to a depth of 18 inches below exposed subgrade.
- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
  - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches and compact each layer to a density equal to adjacent original ground.

### 3.6 SITE IMPROVEMENTS

- A. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
  - 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.
  - 2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.

### 3.7 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.

### TECHNICAL SPECIFICATIONS - DEMOLITION 31 10 00 - SITE CLEARING

END OF SECTION 31 10 00.

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

### 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Piped utility demolition.

### PART 2 - PRODUCTS

### 2.1 GROUT

- A. Description: ASTM C 1107, Grade B, nonshrink and nonmetallic, dry hydraulic-cement grout.
  - 1. Characteristics: Post hardening, volume adjusting, nonstaining, noncorrosive, nongaseous, and recommended for interior and exterior applications.
  - 2. Design Mix: 5000-psi 28-day compressive strength.
  - 3. Packaging: Premixed and factory packaged.

### 2.2 FLOWABLE FILL

- A. Description: Low-strength-concrete, flowable-slurry mix.
  - 1. Cement: ASTM C 150, Type I, portland.
  - 2. Density: [115- to 145-lb/cu. ft.
  - 3. Aggregates: ASTM C 33, natural sand, fine and crushed gravel or stone, coarse.
  - 4. Aggregates: ASTM C 33, natural sand, fine.
  - 5. Admixture: ASTM C 618, fly-ash mineral.
  - 6. Water: Comply with ASTM C 94/C 94M.
  - 7. Strength: 100 to 200 psig at 28 days.

### PART 3 - EXECUTION

### 3.1 PIPED UTILITY DEMOLITION

- A. Disconnect, demolish, and remove piped utility systems, equipment, and components indicated to be removed.
  - 1. Piping to Be Removed: Remove portion of piping indicated to be removed and cap or plug remaining piping with same or compatible piping material.

- 2. Piping to Be Abandoned in Place: Drain piping. Fill abandoned piping with flowable fill, and cap or plug piping with same or compatible piping material.
- 3. Equipment to Be Removed: Disconnect and cap services and remove equipment.
- 4. Equipment to Be Removed and Salvaged: Disconnect and cap services and remove equipment and deliver to Owner.
- B. If pipe, insulation, or equipment to remain is damaged in appearance or is unserviceable, remove damaged or unserviceable portions and replace with new products of equal capacity and quality.

END OF SECTION 02080

# Missouri Division of Labor Standards

WAGE AND HOUR SECTION



ERIC R. GREITENS, Governor

# Annual Wage Order No. 24

### Section 001 ADAIR COUNTY

In accordance with Section 290.262 RSMo 2000, within thirty (30) days after a certified copy of this Annual Wage Order has been filed with the Secretary of State as indicated below, any person who may be affected by this Annual Wage Order may object by filing an objection in triplicate with the Labor and Industrial Relations Commission, P.O. Box 599, Jefferson City, MO 65102-0599. Such objections must set forth in writing the specific grounds of objection. Each objection shall certify that a copy has been furnished to the Division of Labor Standards, P.O. Box 449, Jefferson City, MO 65102-0449 pursuant to 8 CSR 20-5.010(1). A certified copy of the Annual Wage Order has been filed with the Secretary of State of Missouri.

Original Signed by Tammy Cavender Acting Department Director Division of Labor Standards

This Is A True And Accurate Copy Which Was Filed With The Secretary of State: March 10, 2017

Last Date Objections May Be Filed: April 10, 2017

Prepared by Missouri Department of Labor and Industrial Relations

OCCUPATIONAL TITLE	** Date of	.	Basic	Over-		T. ( ) E ( ) =
	Increase		* Dotoo	l ime	Holiday	Total Fringe Benefits
Asbestos Worker (H & F) Insulator	Increase	+			Schedule	
Boilermaker	6/17	+	\$32,42	2 55	60	\$22.40
Bricklayer and Stone Mason	0/17	+	\$30.50	5/		\$29.13
Carpenter	6/17		\$29.70	59	7	\$17.44
Cement Mason	0/17	+	\$25.34	60	15	\$16.85
Communication Technician			\$27.82	9	3	\$12.92
Electrician (Inside Wireman)			\$18.50	FED		\$8.62
Electrician (Outside-Line Construction) ineman)			\$30.57	69	75	\$5.93 + 35%
Lineman Operator		+	\$43.50	43	45	\$5.50 + 36%
Groundman			\$37.48	43	45	\$5.50 + 36%
Elevator Constructor	6/17		\$28.86	43	45	\$5.50 + 36%
Glazier	0/17		\$47.07	26	54	\$33.275
ronworker	0147	+	\$23.35	36	52	\$6.71
Laborer (Building)	0/17		\$29.65	50	4	\$29.05
General						
First Semi-Skilled			\$23.01	42	44	\$13.54
Second Semi-Skilled			\$25.01	42	44	\$13.54
ather			\$24.01	42	44	\$13.54
incleum Laver and Cuttor		<u> </u>	USE CAR	PENTER RA	ATE	
Marble Mason	6/17	<u> </u>	\$25.22	60	15	\$16.85
Marble Finisher	6/17		\$22.24	124	74	\$13.05
Aillwright	6/17		\$14.35	124	74	\$9.52
Derating Engineer	6/17		\$26.34	60	15	\$16.85
Group I						
Group II	6/17		\$29.06	86	66	\$26.00
Group III	6/17		\$29.06	86	66	\$26.00
Group III-A	6/17		\$27.81	86	66	\$26.00
Group IV	6/17		\$29.06	86	66	\$26.00
Group V	6/17		\$26.83	86	66	\$26.00
Cloup V	6/17		\$29.76	86	66	\$26.00
ile Driver	6/17		\$23.69	18	7	\$12,08
ine Eitter	6/17		\$26.34	60	15	\$16.85
lasteror		b	\$38.00	91	69	\$26.93
lumbor			\$17.00	FED		
oofor \ Waterprester		b	\$38.00	91	69	\$26.93
boot Metal Warker			\$29.30	12	4	\$15.19
orinklor Fitter File Put ti			\$31.34	40	23	\$17.04
Difficient Filler - Fire Protection			\$34.79	33	19	\$20.17
Briazzo Worker	6/17		\$29.55	124	74	\$14.76
la Setter	6/17		\$19.22	124	74	\$14.76
	6/17		\$22.24	124	74	\$13.05
affia Control Control D	6/17		\$14.35	124	74	\$9.52
unc Control Service Driver			\$25.685	22	55	\$9.045
uck Driver-Teamster						
		с	\$25.535	35	36	\$8.65
		c	\$25.695	35	36	\$8.65
broup III		c	\$25.685	35	36	\$8.65
roup IV		c	\$25,805	35	36	\$9.6F

# Building Construction Rates for REPLACEMENT PAGE

Section 001

Fringe Benefit Percentage is of the Basic Hourly Rate

\*\*Incremental Increase

### Building Construction Rates for ADAIR County Footnotes

# OCCUPATIONAL TITLE \*\* Date of Increase Basic Hourly Rates Over-Time Schedule Holiday Schedule Total Fringe Benefits Increase Rates Schedule Schedule Increase Increase

\* Welders receive rate prescribed for the occupational title performing operation to which welding is incidental.

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

a - Vacation: Employees under 5 years - 6%, over 5 years - 8% b - All work over \$7 Mil. Total Mech. Contract - \$38.00, Fringes - \$26.93 All work under \$7 Mil. Total Mech. Contract - \$36.66, Fringes - \$21.49 c - Group I: Projects over \$3 3/4 Million - \$25.535 Projects under \$3 3/4 Million - \$22.035 Group II: Projects over \$3 3/4 Million - \$25.695 Projects under \$3 3/4 Million - \$22.195 Group III: Projects over \$3 3/4 Million - \$25.685 Projects under \$3 3/4 Million - \$22.185 Group IV: Projects over \$3 3/4 Million - \$25.805

Projects under \$3 3/4 Million - \$22.305

### Section 001

FED: Minimum requirement per Fair Labor Standards Act means time and one-half (1 1/2) shall be paid for all work in excess of forty (40) hours per work week.

**NO. 9:** Means the regular workday starting time of 8:00 a.m. (and resulting quitting time of 4:30 p.m.) may be moved forward to 6:00 a.m. or delayed one hour to 9:00 a.m. All work performed in excess of the regular work day and on Saturday shall be compensated at one and one-half (1½) times the regular pay. In the event time is lost during the work week due to weather conditions, the Employer may schedule work on the following Saturday at straight time. All work accomplished on Sunday and holidays shall be compensated for at double the regular rate of wages. The work week shall be Monday through Friday, except for midweek holidays.

**NO. 12:** Means the work week shall commence on Monday at 12:01 a.m. and shall continue through the following Friday, inclusive of each week. All work performed by employees anywhere in excess of forty (40) hours in one (1) work week, shall be paid for at the rate of one and one-half  $(1\frac{1}{2})$  times the regular hourly wage scale. All work performed within the regular working hours which shall consist of a ten (10) hour work day except in emergency situations. Overtime work and Saturday work shall be paid at one and one-half  $(1\frac{1}{2})$  times the regular hourly rate. Work on recognized holidays and Sundays shall be paid at two (2) times the regular hourly rate.

**NO. 18:** Means the regular work day shall be eight (8) hours. Working hours are from six (6) hours before Noon (12:00) to six (6) hours after Noon (12:00). The regular work week shall be forty (40) hours, beginning between 6:00 a.m. and 12:00 Noon on Monday and ending between 1:00 p.m. and 6:00 p.m. on Friday. Saturday will be paid at time and one-half (1½). Sunday and Holidays shall be paid at double (2) time. Saturday can be a make-up day if the weather has forced a day off, but only in the week of the day being lost. Any time before six (6) hours before Noon or six (6) hours after Noon will be paid at time and one-half (1½).

**NO. 22:** Means a regular work week of forty (40) hours will start on Monday and end on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof may be worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A workday is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time may be advanced or delayed if mutually agreed to by the interest parties. For all time worked on recognized holidays, or days observed as such, double (2) time shall be paid.

**NO. 26:** Means that the regular working day shall consist of eight (8) hours worked between 6:00 a.m., and 5:00 p.m., five (5) days per week, Monday to Friday, inclusive. Hours of work at each jobsite shall be those established by the general contractor and worked by the majority of trades. (The above working hours may be changed by mutual agreement). Work performed on Construction Work on Saturdays, Sundays and before and after the regular working day on Monday to Friday, inclusive, shall be classified as overtime, and paid for at double (2) the rate of single time. The employer may establish hours worked on a jobsite for a four (4) ten (10) hour day work week at straight time pay for construction work; the regular working day shall consist of ten (10) hours worked consecutively, between 6:00 a.m. and 6:00 p.m., four (4) days per week, Monday to Thursday, inclusive. Any work performed on Friday, Saturday, Sunday and holidays, and before and after the regular working day on Monday to Thursday where a four (4) ten (10) hour day work week has been established, will be paid at two times (2) the single time rate of pay. The rate of pay for all work performed on holidays shall be at two times (2) the single time rate of pay.

**NO. 33:** Means the standard work day and week shall be eight (8) consecutive hours of work between the hours of 6:00 a.m. and 6:00 p.m., excluding the lunch period Monday through Friday, or shall conform to the practice on the job site. Four (4) days at ten (10) hours a day may be worked at straight time, Monday through Friday and need not be consecutive. All overtime, except for Sundays and holidays shall be at the rate of time and one-half (1½). Overtime worked on Sundays and holidays shall be at double (2) time.

**NO. 35:** Means a regular work week of forty (40) hours, will start on Monday and end on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof maybe worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A work day is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time maybe advanced or delayed if mutually agreed to by the interested parties. For all time worked on recognized holidays, or days observed as such, double (2) time shall be paid.

**NO. 36:** Means eight (8) hours shall constitute a work day, Monday through Friday between the hours of 6:00 a.m. and 6:00 p.m. Saturday can be used as a makeup day if time is lost due to weather. All hours in excess of the regular forty (40) hour work week or eight (8) hours per day shall be considered overtime and shall be paid for at the rate of one and one-half (1½) times the regular rate. Employees will be paid at the rate of one and one-half (1½) times their regular rate for work performed on Saturdays. Sundays and holidays worked are to be paid at double (2) the regular hourly rate. Four (4) ten-hour days, at the option of the Employer, shall be the standard work week, consisting of a consecutive tenhour period, Monday through Thursday or Tuesday through Friday, between the hours of 6:00 a.m. and 6:00 p.m. Forty (40) hours per week shall constitute a week's work.

**NO. 40:** Means the regular working week shall consist of five (5) consecutive (8) hour days' labor on the job beginning with Monday and ending with Friday of each week. Four (4) 10-hour days may constitute the regular work week. The regular working day shall consist of eight (8) hours labor on the job beginning as early as 6:00 a.m. and ending as late as 5:30 p.m. All full or part time labor performed during such hours shall be recognized as regular working hours and paid for at the regular hourly rate. All hours worked on Saturday and all hours worked in excess of eight (8) hours but not more than twelve (12) hours during the regular working week shall be paid for at time and one-half (1½) the regular hourly rate. All hours worked on Sundays and holidays and all hours worked in excess of twelve (12) hours during the regular working week shall be paid for at time and one-half (1½) the regular hourly rate. All hours worked on Sundays and holidays and all hours worked in excess of twelve (12) hours during the regular working week shall be paid for at time and one-half (1½) the regular working day shall be paid at two (2) times the regular hourly rate. In the event of rain, snow, cold or excessively windy weather on a regular working day, Saturday may be designated as a "make-up" day. Saturday may also be designated as a "make-up" day, for an employee who has missed a day of work for personal or other reasons. Pay for "make-up" days shall be at regular rates.

NO. 42: Means eight (8) hours between the hours of 8:00 a.m. and 4:30 p.m. shall constitute a work day. The starting time may be advanced one (1) or two (2) hours. Employees shall have a lunch period of thirty (30) minutes. The Employer may provide a lunch period of one (1) hour, and in that event, the workday shall commence at 8:00 a.m. and end at 5:00 p.m. The workweek shall commence at 8:00 a.m. on Monday and shall end at 4:30 p.m. on Friday (or 5:00 p.m. on Friday if the Employer grants a lunch period of one (1) hour), or as adjusted by starting time change as stated above. All work performed before 8:00 a.m. and after 4:30 p.m. (or 5:00 p.m. where one (1) hour lunch is granted for lunch) or as adjusted by starting time change as stated above or on Saturday, except as herein provided, shall be compensated at one and one-half (11/2) times the regular hourly rate of pay for the work performed. All work performed on Sunday and on recognized holidays shall be compensated at double (2) the regular hourly rate of pay for the work performed. When working a five 8-hour day schedule and an Employer is prevented from working forty (40) hours, Monday through Friday, or any part thereof by reason of inclement weather (rain or mud), Saturday or any part thereof may be worked as a make-up day at the straight time rate. The Employer shall have the option of working five eight (8) hour days or four ten (10) hour days Monday through Friday. If an Employer elects to work five (5) eight (8) hour days during any work week, hours worked more than eight (8) per day or forty (40) hours per week shall be paid at time and one-half (11/2) the hourly rate Monday through Friday. If an Employer elects to work four (4) ten (10) hour days in any week, work performed more than ten (10) hours per day or forty (40) hours per week shall be paid at time and one-half (11/2) the hourly rate Monday through Friday. If an Employer is working ten (10) hour days and loses a day due to inclement weather, they may work ten (10) hours Friday at straight time. All hours worked over the forty (40) hours Monday through Friday will be paid at time and one-half (11/2) overtime rate. Overtime shall be computed at half-hour intervals. Shift Work: Two (2) or three (3) shifts shall be permitted, provided such shifts are scheduled for a minimum of three (3) consecutive days. The second shift shall begin at 4:30 p.m. and end at 12:30 a.m. with one-half (1/2) hour for lunch between 7:30 p.m. and 9:00 p.m. and shall received eighty (8) hours' pay. The third shift shall begin at 12:30 a.m. and end at 8:00 a.m. with one-half (1/2) hour for lunch between 3:30 a.m. and 5:00 a.m. and shall received (8) hour's; pay. There shall be at least one (1) foreman on each shift on jobs where more than one shift is employed, provided that there are two (2) or more employees on second and on the third shifts. All shifts shall arrange to interchange working hours at the end of each week. When three shifts are used, the applicable rate must be paid from Saturday at 8:00 a.m. until the following Monday at 8:00 a.m. When three shifts are employed, the second and third shifts shall contain at least one-half (1/2) as many employees as the first shift.

**NO. 43:** Eight (8) hours shall constitute a work day between the hours of 7:00 a.m. and 4:30 p.m. Forty (40) hours within five (5) days, Monday through Friday inclusive, shall constitute the work week. Work performed in the 9th and 10th hour, Monday through Friday, shall be paid at time and one-half (1½) the regular straight time rate of pay. Contractor has the option to pay two (2) hours per day at the time and one-half (1½) the regular straight time rate of pay between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. Work performed outside the regularly scheduled working hours and on Saturdays, Sundays and recognized legal holidays, or days celebrated as such, shall be paid for at the rate of double (2) time.

**NO. 50:** Means eight (8) hours constitute a normal day's work Monday through Friday. Any time worked over eight (8) hours will normally be paid at time and one-half  $(1\frac{1}{2})$  except for exclusions stated in some following additional sentences. The Employer, at his discretion, may start the work day between 6:00 a.m. and 9:00 a.m. Any schedule chosen shall be started at the beginning of the work week (Monday) and used for at least five days. Work may be scheduled on a four (4) days a week (Monday through Thursday) at ten (10) hours a day schedule. If such a schedule is employed, then Friday may be used as a make-up day when time is lost due to inclement weather. Time and one-half (1 $\frac{1}{2}$ ) shall be paid for any work in excess of eight (8) hours in any regular work day Monday through Friday unless working 4-10's, then time and one-half (1 $\frac{1}{2}$ ) after ten (10) hours. All work performed on Saturday will be time and one-half (1 $\frac{1}{2}$ ). Double (2) time shall be paid for all work on Sundays and recognized holidays.

**NO. 55:** Means the regular work day shall be eight (8) hours between 6:00 a.m. and 4:30 p.m. The first two (2) hours of work performed in excess of the eight (8) hour work day, Monday through Friday, and the first ten (10) hours of work on Saturday, shall be paid at one & one-half (1½) times the straight time rate. All work performed on Sunday, observed holidays and in excess of ten (10) hours a day, Monday through Saturday, shall be paid at double (2) the straight time rate.

**NO. 57:** Means eight (8) hours per day shall constitute a day's work and forty (40) hours per week, Monday through Friday, shall constitute a week's work. The regular starting time shall be 8:00 a.m. If a second or third shift is used, the regular starting time of the second shift shall be 4:30 p.m. and the regular starting period for the third shift shall be 12:30 a.m. These times may be adjusted by the employer. The day shift shall work a regular eight (8) hours shift as outlined above. Employees working a second shift shall receive an additional \$0.25 above the regular hourly rate and perform seven and one-half (7½) hours work for eight (8) hours pay. Third shift employees shall be paid an additional \$0.50 above the regular hourly rate and work seven (7) hours for eight (8) hours pay. When circumstances warrant, the Employer may change the regular workweek to four (4) ten-hour days at the regular time rate of pay. All time worked before and after the established workday of eight (8) hours, Monday through Friday, and all time worked on Saturday shift. All time worked on Sunday and recognized holidays shall be paid at the double (2) time rate of pay except in cases where work is part of an employee's previous day's shift. For all overtime hours worked \$27.76 of the fringe benefits portion of the prevailing wage shall be paid at the same overtime rate at which the cash portion of the same straight time.

**NO. 59:** Means that except as herein provided, eight (8) hours a day shall constitute a standard work day, and forty (40) hours per week shall constitute a week's work. All time worked outside of the standard eight (8) hour work day and on Saturday shall be classified as overtime and paid the rate of time and one-half (1½). All time worked on Sunday and holidays shall be classified as overtime and paid at the rate of double (2) time. The Employer has the option of working either five (5) eight hour days or four (4) ten hour days to constitute a normal forty (40) hour work week. When the four (4) ten-hour work week is in effect, the standard work day shall be consecutive ten (10) hour periods between the hours of 6:30 a.m. and 6:30 p.m. Forty (40) hours per week shall constitute a week's work, Monday through Thursday, inclusive. In the event the job is down for any reason beyond the Employer's control, then Friday and/or Saturday may, at the option of the Employer, be worked as a make-up day; straight time not to exceed ten (10) hours or forty (40) hours per week. When the five day eight (8) hour work week is in effect, forty (40) hours per week shall constitute a week's work, Monday through Friday, inclusive. In the event the job is down for any reason beyond for any reason beyond the Employer's control, then Employer's control, then Saturday may, at the option of the Employer, be worked as a make-up day; straight time not to exceed ten (10) hours or forty (40) hours or forty (40) hours per week. The regular starting time (and resulting quitting time) may be moved to 6:00 a.m. or delayed to 9:00 a.m. Make-up days shall not be utilized for days lost due to holidays.

NO. 60: Means the Employer shall have the option of working five 8-hour days or four 10-hour days Monday through Friday. If an Employer elects to work five 8-hour days during any work week, hours worked more than eight (8) per day or forty (40) per week shall be paid at time and one-half (1<sup>1</sup>/<sub>2</sub>) the hourly wage rate plus fringe benefits Monday through Friday. SATURDAY MAKE-UP DAY: If an Employer is prevented from working forty (40) hours, Monday through Friday, or any part thereof by reason of inclement weather (rain or mud), Saturday or any part thereof may be worked as a makeup day at the straight time rate. It is agreed by the parties that the make-up day is not to be used to make up time lost due to recognized holidays. If an Employer elects to work four 10-hour days, between the hours of 6:30 a.m. and 6:30 p.m. in any week, work performed more than ten (10) hours per day or forty (40) hours per week shall be paid at time and one half (11/2) the hourly wage rate plus fringe benefits Monday through Friday. If an Employer is working 10-hour days and loses a day due to inclement weather, the Employer may work ten (10) hours on Friday at straight time. All hours worked over the forty (40) hours Monday through Friday will be paid at time and one-half (11/2) the hourly wage rate plus fringe benefits. All Millwright work performed in excess of the regular work day and on Saturday shall be compensated for at time and one-half (11/2) the regular Millwright hourly wage rate plus fringe benefits. The regular work day starting at 8:00 a.m. (and resulting quitting time of 4:30 p.m.) may be moved forward to 6:00 a.m. or delayed one (1) hour to 9:00 a.m. All work accomplished on Sundays and recognized holidays, or days observed as recognized holidays, shall be compensated for at double (2) the regular hourly rate of wages plus fringe benefits. NOTE: All overtime is computed on the hourly wage rate plus an amount equal to the fringe benefits.

**NO. 69:** Means eight (8) hours of work between the hours of 8:00 a.m. and 4:30 p.m., except for a thirty (30) minute lunch period shall constitute a regular work day. Forty (40) hours, within five (5) such work days-Mondays through Friday, inclusive, shall constitute a regular work week. The starting and quitting time for each job shall be subject to variance by mutual Agreement and where not agreed otherwise the regular starting time shall be 8:00 a.m. and the quitting time shall be 4:30 p.m. In order to meet job site or owner conditions, the above section may be modified to allow for a workday/workweek of four (4), ten-hour days (4-10's) provided that the following condition is met:

The project must be for a minimum of four (4) consecutive days, beginning on either a Monday or Tuesday, holidays, inclusive.

All work performed outside of the regularly scheduled working hours, Monday through Friday, and on Saturday shall be paid at one and one-half  $(1\frac{1}{2})$  times the hourly rate. On all work performed on Sundays and recognized legal holidays or days that may be celebrated as such, shall be paid at double (2) the hourly rate. Shift work performed between the hours of 4:30 p.m. and 12:30 a.m. (second shift) shall be paid at eight (8) hours pay at the regular hourly rate plus ten (10%) percent for seven and one-half (7 $\frac{1}{2}$ ) hours work. Shift work performed between the hours of 12:30 a.m. and 8:00 a.m. (third shift) shall be paid at eight (8) hours pay at the regular hourly rate plus fifteen (15%) percent for seven (7) hours work. A lunch period of thirty (30) minutes shall be allowed on each shift. All overtime work required after the completion of a regular shift shall be paid at one and one-half (1 $\frac{1}{2}$ ) times the shift hourly rate.

NO. 86: The regular workday shall consist of eight (8) consecutive hours, exclusive of a thirty (30) minute lunch period, with pay at the straight time rate with all hours in excess of eight (8) hours in any one day to be paid at the applicable overtime rate at time and one-half (11/2). The regular workday shall begin between the hours of 6:00 a.m. and 8:00 a.m. The Employer may have the option to schedule the work week from Monday through Thursday at ten (10) hours per day at the straight time rate of pay with all hours in excess of ten (10) hours in any one day to be paid at the applicable overtime rate at time and one-half (11/2). If the Employer elects to work from Monday through Thursday and is stopped due to inclement weather, holiday or other conditions beyond the control of the Employer, they shall have the option to work Friday at the straight time rate of pay to complete the forty (40) hours for the workweek. All overtime work performed on Monday through Saturday shall be paid at time and one-half (11/2) the hourly rate. Fringe benefits shall be paid at the one and one half the hourly rate. All work performed on Sundays and recognized holidays shall be paid at double (2) the hourly rate. Fringe benefits shall be paid at double the hourly rate. Shifts may be established when considered necessary by the Employer. Shift hours and rates will be as follows. If shifts are established, work on the First Shift will begin between 6:00 a.m. and 9:00 a.m. and consist of eight (8) hours of work plus one-half hour unpaid lunch. Hours worked during the first shift will be paid at the straight time rate of pay. The second shift shall start eight hours after the start of the first shift and consist of eight (8) hours of work plus one-half hour unpaid lunch. Work on the second shift will begin between 2:00 p.m. and 5:00 p.m. and be paid the straight time rate plus \$2.50 per hour. The third shift shall start eight hours after the start of the second shift and consist of eight (8) hours plus one-half hour unpaid lunch. Work on the third shift will begin between 10:00 p.m. and 1:00 a.m. and be paid the straight time rate plus \$3.50 per hour. The additional amounts that are to be paid are only applicable when working shifts. Shifts that begin on Saturday morning through those shifts which end on Sunday morning will be paid at time and one-half these rates. Shifts that begin on Sunday morning through those shifts which end on Monday morning will be paid at double time these rates.

NO. 91: Means eight (8) hours shall constitute a day's work commencing at 7:00 a.m. and ending at 3:30 p.m., allowing one-half (1/2) hour for lunch. The option exists for the Employer to use a flexible starting time between the hours of 6:00 a.m. and 9:00 a.m. The regular workweek shall consist of forty (40) hours of five (5) workdays, Monday through Friday. The workweek may consist of four (4) ten (10) hour days from Monday through Thursday, with Friday as a make-up day. If the make-up day is a holiday, the employee shall be paid at the double (2) time rate. The employees shall be paid time and one-half (11/2) for work performed on Saturdays, before the regular starting time or after the regular quitting time or over eight (8) hours per work day (unless working a 10-hour work day, then time and one-half (11/2) is paid for work performed over ten (10) hours a day) or over forty (40) hours per work week. Work performed on Sundays and recognized holidays shall be paid at the double (2) time rate of pay. SHIFT WORK: When it is necessary for the project to operate in shifts, there will be three (3) eight (8) hour shifts commencing at 8:00 a.m. Shift work must continue for a period of not less than three (3) consecutive work days, two (2) days which must be regular work days (Monday through Friday). In the event the second or third shift of any regular work day shall fall into a Saturday or a holiday, such extension into a Saturday or holiday shall be considered as part of the previous workday and employees shall be paid at the regular shift rate. The first day shift shall work a regular eight (8) hour day at regular rates. The second shift shall be eight (8) hours regular time pay plus \$2.50 per hour premium for eight (8) hours work. Third shift will be for eight (8) hours regular time pay plus \$3.00 per hour premium for eight (8) hours work.

**NO. 124:** Means eight (8) hours shall constitute a day's work on all classes of work between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. The pay for time worked during these hours shall be at the regular wage rate. The regular workweek shall be Monday through Friday. Employment from 4:30 p.m. to 12:00 midnight, Monday through Friday, shall be paid for at one and one-half (1½) times the regular hourly rate. From 12:00 midnight until 8:00 a.m. on any day shall be paid for at twice the regular hourly rate. All time worked on Sundays and the recognized holidays shall be paid at the rate of double (2) time. It is understood that forty (40) hours shall constitute a regular workweek, (5-8's) Sunday Midnight through Friday Midnight, understanding anything over eight (8) hours is one and one-half (1½) times the hourly wage rate.

### ADAIR COUNTY HOLIDAY SCHEDULE – BUILDING CONSTRUCTION

**NO. 3:** All work done on New Year's Day, Decoration Day, July 4th, Labor Day, Veteran's Day, Thanksgiving and Christmas shall be compensated at the double (2) time rate of pay. When any of these holidays fall on a Sunday, the following Monday shall be observed.

**NO. 4:** All work done on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas Day shall be paid at the double time rate of pay. If any of the above holidays fall on Sunday, Monday will be observed as the recognized holiday. If any of the above holidays fall on Saturday, Friday will be observed as the recognized holidays falling on Sunday will be observed on the following Monday.

**NO. 7:** The following days are assigned days and are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. If a holiday falls on a Saturday, it shall be observed on the following Monday. If a holiday falls on a Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This is applied to protect Labor Day. When a holiday falls during the normal workweek, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week. However, no reimbursement for these eight (8) hours is to be paid to the workman unless worked. If workman are required to work the above enumerated holidays or days observed as such, or on Sunday, they shall receive double (2) the regular rate of pay for such work.

**NO. 15:** All work accomplished on the recognized holidays of New Year's Day, Decoration Day (Memorial Day), Independence Day (Fourth of July), Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day, or days observed as these named holidays, shall be compensated for at double (2) the regular hourly rate of wages plus fringe benefits. If a holiday falls on Saturday, it shall be observed on the preceding Friday. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day, Christmas Day, Decoration Day or Independence Day except to preserve life or property.

**NO. 19:** All work done on New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day shall be paid at the double time rate of pay. The employee may take off Friday following Thanksgiving Day. However, the employee shall notify his or her Foreman, General Foreman or Superintendent on the Wednesday preceding Thanksgiving Day. When one of the above holidays falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double (2) time rate. When one of the holidays falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double (2) time rate.

**NO. 23**: All work done on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day and Sundays shall be recognized holidays and shall be paid at the double time rate of pay. When a holiday falls on Sunday, the following Monday shall be considered a holiday. When a holiday falls on Saturday, Friday is recognized as a holiday.

**NO. 36:** The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workman unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make-up day when an observed holiday occurs during the work week. Employees have the option to work that make-up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

**NO. 44:** All work done on New Year's Day, Decoration Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day shall be paid at the double time rate of pay. If a holiday falls on a Sunday, it shall be observed on the Monday following. If a holiday falls on a Saturday, it shall be observed on the proceeding Friday. No work shall be performed on these days except in emergency to protect life or property. All work performed on these holidays shall be compensated at double the regular hourly rate for the work performed. Overtime shall be computed at half-hour intervals.

### ADAIR COUNTY HOLIDAY SCHEDULE – BUILDING CONSTRUCTION

**NO. 45:** All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the day after Thanksgiving, the day before Christmas, and Christmas Day, shall be paid at the double time rate of pay.

**NO. 52:** All work performed on Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day shall receive the double (2) time rate of pay.

**NO. 54:** All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, the Friday after Thanksgiving Day, and Christmas Day shall be paid at the double (2) time rate of pay. When a holiday falls on Saturday, it shall be observed on Friday. When a holiday falls on Sunday, it shall be observed on Friday.

**NO. 55:** The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workmen unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make up day when an observed holiday occurs during the work week. Employees have the option to work that make up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

**NO. 60:** All work performed on New Year's Day, Armistice Day (Veteran's Day), Decoration Day (Memorial Day), Independence Day (Fourth of July), Thanksgiving Day and Christmas Day shall be paid at the double time rate of pay. No work shall be performed on Labor Day except when triple (3) time is paid. When a holiday falls on Saturday, Friday will be observed as the holiday. When a holiday falls on Sunday, the following Monday shall be observed as the holiday.

**NO. 66:** All work performed on Sundays and the following recognized holidays, or the days observed as such, of New Year's Day, Decoration Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day, shall be paid at double (2) the hourly rate plus an amount equal to the hourly Total Indicated Fringe Benefits. Whenever any such holidays fall on a Sunday, the following Monday shall be observed as a holiday.

**NO. 69:** All work performed on New Year's Day, Memorial Day, July Fourth, Labor Day, Veteran's Day, Thanksgiving Day or Christmas Day shall be compensated at double (2) their straight-time hourly rate of pay. Friday after Thanksgiving and the day before Christmas are also holidays, however, if the employer chooses to work the normal work hours on these days, the employee will be paid at straight -time rate of pay. If a holiday falls on a Saturday, the holiday will be observed on Saturday; if a holiday falls on a Sunday, the holiday will be observed on the following Monday.

**NO. 74:** All work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day, shall be paid at double (2) time of the hourly rate of pay. In the event one of the above holiday's falls on Saturday, the holiday shall be celebrated on Saturday. If the holiday falls on Sunday, the holiday will be celebrated on Monday.

**NO. 75:** Means that on all work performed on Sundays and the following legal holiday or days that may be celebrated as such, shall be paid at double (2) the hourly rate: New Year's Day, Memorial Day, and Independence Day, Labor Day, Veteran's Day, Thanksgiving Day and Christmas Day. Saturday holidays will be celebrated on Saturday. Sunday holidays will be celebrated on Monday following the holiday. Work performed on any of these Mondays will be paid at double (2) the rate of pay. The Friday following Thanksgiving will be worked at the Employer's option. If worked, it will be at the regular hourly rate of pay.

## Heavy Construction Rates for ADAIR County

### REPLACEMENT PAGE

Section 001

		Basic	Over-		
OCCUPATIONAL TITLE	* Date of	Hourly	Time	Holiday	Total Fringe Benefits
	Increase	Rates	Schedule	Schedule	
Carpenter	6/17	\$31.02	23	16	\$16.85
Electrician (Outside-Line Construction\Lineman)		\$43.50	9	12	\$5.50 + 36%
Lineman Operator		\$37.48	9	12	\$5.50 + 36%
Lineman - Tree Trimmer		\$24.53	32	31	\$9.98 + 3%
Groundman		\$28.86	9	12	\$5.50 + 36%
Groundman - Tree Trimmer		\$18.14	32	31	\$7.19 + 3%
Laborer					
General Laborer	6/17	\$28.56	2	4	\$13.52
Skilled Laborer	6/17	\$28.56	2	4	\$13.52
Millwright	6/17	\$31.02	23	16	\$16.85
Operating Engineer					
Group I	6/17	\$28.14	21	5	\$25,89
Group II	6/17	\$27.79	21	5	\$25.89
Group III	6/17	\$27.59	21	5	\$25.89
Group IV	6/17	\$23.94	21	5	\$25.89
Oiler-Driver	6/17	\$23.94	21	5	\$25.89
Pile Driver	6/17	\$31.02	23	16	\$16.85
Traffic Control Service Driver		\$25.685	26	25	\$9.045
Truck Driver-Teamster					
Group I	6/17	\$29.14	25	21	\$12.85
Group II	6/17	\$29.30	25	21	\$12.85
Group III	6/17	\$29.29	25	21	\$12.85
Group IV	6/17	\$29.41	25	21	\$12.85

Use Heavy Construction Rates on Highway and Heavy construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(3).

Use Building Construction Rates on Building construction in accordance with the classifications of construction work established in 8 CSR 30-3.040(2).

If a worker is performing work on a heavy construction project within an occupational title that is not listed on the Heavy Construction Rate Sheet, use the rate for that occupational title as shown on the Building Construction Rate sheet.

### REPLACEMENT PAGE ADAIR COUNTY OVERTIME SCHEDULE - HEAVY CONSTRUCTION

FED: Minimum requirement per Fair Labor Standards Act means time and one-half (1 ½) shall be paid for all work in excess of forty (40) hours per work week.

NO. 2: Means a regular workweek shall be forty (40) hours and will start on Monday and end on Friday. The Employer shall have the option of working five 8-hour days or four 10-hour days Monday through Friday. If an Employer elects to work five 8-hour days during any workweek, hours worked more than eight (8) per day or 40 per week shall be paid at time and one-half the hourly rate Monday through Friday. If an Employer elects to work four 10-hour days in a week, work performed more than ten (10) hours per day or 40 hours per week shall be paid at time and one-half the hourly rate Monday through Friday. When working a five 8-hour day schedule and an Employer is prevented from working forty (40) hours Monday through Friday, or any part thereof, by reason of inclement weather. Saturday or any part thereof may be worked as a make-up day at the straight time rate. If an Employer is working a four 10-hour day schedule and loses a day due to inclement weather, he may work 10 hours Friday at straight time. All hours worked over the 40 hours Monday through Friday will be paid at 1 ½ overtime rate. A workday shift is to begin at the option of the Employer, between 6:00 a.m. and not later than 9:00 a.m. However, the project starting time may be advanced or delayed if required. If workmen are required to work the enumerated holidays or days observed as such or Sundays, they shall receive double (2) the regular rate of pay for such work. Overtime shall be computed at one-half (1/2) hour intervals. Shift: The Contractor may elect to work one, two or three shifts on any work. When operating on more than one shift, the shifts shall be known as the day shift, swing shift, and graveyard shift as such terms are recognized in the industry. When two shifts are worked on any operation, the shifts will consist of eight (8) or ten (10) hours exclusive of lunchtime. When three shifts are worked the first day or day shift will consist of eight (8) hours exclusive of lunchtime. The second or swing shift shall consist of seven and one-half (7 1/2) hours work for eight hours pay, exclusive of lunchtime, and the third or the graveyard shift shall consist of seven (7) hours work for eight (8) hours pay, exclusive of the lunchtime. All time in excess of normal shifts shall be considered overtime. Multiple shift (the two or three shift) operation will not be construed on the entire project if at anvtime it is deemed advisable and necessary for the Employer to multiple shift a specific operation. However, no shift shall be started between midnight and six a.m. except the graveyard shift on a three-shift operation, or except in an unusual or emergency situation. If an Employer starts a shift between midnight and 6 a.m. except the graveyard shift on a three-shift operation, he shall reimburse all employees for the entire shift at the double time rate. Completion of the second shift on a two-shift operation or completion of the graveyard shift on a three-shift operation that carries over into Saturday morning, shall be at the straight time rate. Overtime shall be computed at 1/2 hour intervals.

**NO. 9:** Eight (8) hours shall constitute a work day between the hours of 7:00 a.m. and 4:30 p.m. Forty (40) hours within five (5) days, Monday through Friday inclusive, shall constitute the work week. Work performed in the 9th and 10th hour, Monday through Friday, shall be paid at time and one-half (1½) the regular straight time rate of pay. Contractor has the option to pay two (2) hours per day at the time and one-half (1½) the regular straight time rate of pay between the hours of 6:00 a.m. and 5:30 p.m., Monday through Friday. Worked performed in the first eight (8) hours on Saturday shall be paid at the rate of one and eight tenths (1.8) the regular straight time rate. Work performed outside these hours and on Sundays and recognized legal holidays, or days celebrated as such, shall be paid for at the rate of double (2) time.

**NO. 21:** Means the regular workday for which employees shall be compensated at straight time hourly rate of pay shall, unless otherwise provided for, begin at 8:00 a.m. and end at 4:30 p.m. However, the project starting time may be advanced or delayed at the discretion of the Employer. At the discretion of the Employer, when working a five (5) day eight (8) hour schedule, Saturday may be used for a make-up day. If an Employer is prohibited from working on a holiday, that employer may work the following Saturday at the straight time rate. However, the Employer may have the option to schedule his work from Monday through Thursday at ten (10) hours per day at the straight time rate of pay with all hours in excess of ten (10) hours in any one day to be paid at the applicable overtime rate. If the Employer elects to work from Monday through Thursday and is stopped due to circumstances beyond his control, he shall have the option to work Friday or Saturday at the straight time rate of pay to complete his forty (40) hours. If an Employer is prohibited from working on a holiday, that Employer may work the following Friday or Saturday at the straight time rate. Overtime will be at one and one-half (1½) times the regular rate. If workmen are required to work the enumerated holidays or days observed as such, or Sundays, they shall receive double (2) the regular rate of pay for such work.

### REPLACEMENT PAGE ADAIR COUNTY OVERTIME SCHEDULE - HEAVY CONSTRUCTION

NO. 23: Means the regular workweek shall start on Monday and end on Friday, except where the Employer elects to work Monday through Thursday, (10) hours per day. All work over ten (10) hours in a day or forty (40) hours in a week shall be at the overtime rate of one and one-half (1½) times the regular hourly rate. The regular workday shall be either eight (8) or ten (10) hours. If a job can't work forty (40) hours Monday through Friday because of inclement weather or other conditions beyond the control of the Employer, Friday or Saturday may be worked as a make-up day at straight time (if working 4-10's). Saturday may be worked as a make-up day at straight time (if working 5-8's). An Employer, who is working a four (4) ten (10) hour day work schedule may use Friday as a make-up day when a workday is lost due to a holiday. A workday is to begin at the option of the Employer but not later than 11:00 a.m. except when inclement weather. requirements of the owner or other conditions beyond the reasonable control of the Employer prevent work. Except as worked as a make-up day, time on Saturday shall be worked at one and one-half (11/2) times the regular rate. Work performed on Sunday shall be paid at two (2) times the regular rate. Work performed on recognized holidays or days observed as such, shall also be paid at the double (2) time rate of pay. For all overtime hours worked during the week or on Saturday \$16.25 of the fringe benefits portion of the prevailing wage shall be paid at time and one-half (11/2). For all overtime hours worked on Sundays or recognized holidays \$16.25 of the fringe benefits portion of the prevailing wage shall be paid double time. The remaining \$.60 of the fringe benefit portion of the prevailing wage shall be paid at straight time.

**NO. 25:** Means a regular work week of forty (40) hours, starting on Monday and ending on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof maybe worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A work day is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time maybe advanced or delayed if mutually agreed to by the interest parties. All hours worked on recognized holidays, or days observed as such, double (2) time shall be paid.

**NO. 26:** Means a regular work week of forty (40) hours will start on Monday and end on Friday. The regular work day shall be either eight (8) or ten (10) hours. If a crew is prevented from working forty (40) hours Monday through Friday, or any part thereof by reason of inclement weather, Saturday or any part thereof may be worked as a make-up day at the straight time rate. Employees who are part of a regular crew on a make-up day, notwithstanding the fact that they may not have been employed the entire week, shall work Saturday at the straight time rate. A workday is to begin between 6:00 a.m. and 9:00 a.m. However, the project starting time may be advanced or delayed if mutually agreed to by the interest parties. For all time worked on recognized holidays, or days observed as such, double (2) time shall be paid.

**NO. 32:** Means the overtime rate shall be time and one-half the regular rate for work over forty (40) hours per week. Sundays and Holidays shall be paid at double the straight time rate.

### ADAIR COUNTY HOLIDAY SCHEDULE – HEAVY CONSTRUCTION

**NO. 4:** All work performed on New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, or observed as such, shall be paid at the double time rate of pay. When a Holiday falls on a Sunday, Monday shall be observed. No work shall be performed on Labor Day, except in case of jeopardy to life or property. This is applied to protect Labor Day.

**NO. 5:** The following days are recognized as holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. If a holiday falls on a Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward a forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workman unless worked. If workmen are required to work the above recognized holidays or days observed as such, or Sundays, they shall receive double (2) the regular rate of pay for such work. The above shall apply to the four 10's Monday through Friday work week. The ten (10) hours shall be applied to the forty (40) hour work week.

**NO. 12:** All work performed on New Year's Day, Memorial Day, Fourth of July, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day, or days celebrated as such, shall be paid at the double time rate of pay. When one of the foregoing holidays falls on Sunday, it shall be celebrated on the following Monday. When one of the foregoing holidays falls on Saturday, it shall be celebrated on the Friday before the holiday.

**NO. 16:** The following days are recognized as holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on Sunday, it shall be observed on the following Monday. If a holiday falls on Saturday, it shall be observed on the preceding Friday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid to the worker unless worked. If workers are required to work the above recognized holidays or days observed as such, they shall receive double (2) the regular rate of pay for such work.

**NO. 21:** The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workman unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make-up day when an observed holiday occurs during the work week. Employees have the option to work that make-up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

**NO. 25:** The following days are recognized as holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day. If a holiday falls on a Sunday, it shall be observed on the following Monday. No work shall be performed on Labor Day except in case of jeopardy to work under construction. This rule is applied to protect Labor Day. When a holiday falls during the normal work week, Monday through Friday, it shall be counted as eight (8) hours toward the forty (40) hour week; however, no reimbursement for this eight (8) hours is to be paid the workmen unless worked. An Employer working a four (4) day, ten (10) hour schedule may use Friday as a make up day when an observed holiday occurs during the work week. Employees have the option to work that make up day. If workmen are required to work the above enumerated holidays, or days observed as such, they shall receive double (2) the regular rate of pay for such work.

**NO. 31:** All work performed on New Year's Day, Presidents' Day, Veterans' Day, Good Friday, Decoration Day, Fourth of July, Labor Day, Christmas Eve Day, Christmas Day, Thanksgiving Day and Day after Thanksgiving or days celebrated for the same.

**DATE: MARCH 20, 2018 ASBESTOS ABATEMENT AND DEMOLITION FOR** FAIR APARTMENTS **TRUMAN STATE UNIVERSITY EAST PATTERSON STREET KIRKSVILLE, MO 63501** 

**USING AGENCY: TRUMAN STATE UNIVERSITY 100 EAST NORMAL AVENUE KIRKSVILLE, MO 63501** 

PROJECT DESIGNER: FARMER ENVIRONMENTAL SERVICES, L.L.C.

ENVIRONMENTAL CONSULTANTS 108 Emerald Hills

Edwardsville, Illinois 62025

	REVISIONS	DRAWN PREPARED	NUMBER OF WESS		FARMER	COVER SHEET	PROJECT NO. 1711-557
NO. DATE	REMARKS		BRETT		ENVIRONMENTAL	TRUMAN STATE UNIVERSITY	DATE 03/20/18
		TRACED APPROVED	1 A A hural [		SERVICES, LLC	FAIR APARTMENTS	SHEET NO.
		BEF	E-27711			EAST PATTERSON ST.	$\sim$ 1
			PROFFSSIONAL INTE	108 EMERALD HILLS DRIVE	PHONE: 618.656.6988	KIRKSVILLE, MO 63501	
		APK BAS	Manual and	EDWARDSVILLE, IL 62025	FAX: 618.656.8353		01 OF 09 SHEETS

### DRAWING LIST:

C-1

D-1

D-2

D-3

D-4

D-5 D-6

AB-1

COVER SHEET ASBESTOS FLOORING ABATEMENT PLAN AB-2 ASBESTOS PIPING AND WINDOW/DOOR ABATEMENT PLAN DEMOLITION AND UNIVERSAL WASTE NOTES FENCING AND EROSION CONTROL PLAN DEMOLITION SITE PLAN STORM DRAIN DEMOLITION PLAN SIDEWALK DEMPLITION PLAN SITE PHOTOGRAPHS



1. ALL ASBESTOS ABATEMENT WORK SHALL CONFORM TO ALL APPLICABLE EPA,

2. ABATEMENT CONTRACTOR SHALL VERIFY JOB/FIELD CONDITIONS AND MEASUREMENTS. VERIFY ALL QUANTITIES, DIMENSIONS AND LOCATIONS AS INDICATED ON THESE DRAWINGS AND SPECIFICATIONS AND MAKE ANY FURTHER MEASUREMENTS AND COUNTS FOR THE ACCURATE PROSECUTION OF WORK.

3. ABATEMENT CONTRACTOR SHALL REMOVE CARPET, 12"x12" CERAMIC FLOOR TILE, GROUT, MORTAR, BASEBOARD, ASBESTOS CONTAINING 9"x9" FLOOR TILE, ASBESTOS CONTAINING FLOOR TILE MASTIC AND LIGHTS WITH ASBESTOS CONTAINING HEAT SHIELDS IN A NEGATIVE PRESSURE ENCLOSURE AND

4. ABATEMENT CONTRACTOR SHALL REMOVE ASBESTOS CONTAINING PIPE INSULATION AND PIPE FITTING INSULATION BY GLOVE BAG METHOD OR BY WRAP AND CUT METHODS AND DISPOSE OF ALL AS ASBESTOS CONTAINING

5. ABATEMENT CONTRACTOR SHALL REMOVE ALL FIXED CASEWORK, UNIT VENTS, AND ALL WALLS BUILT ON ORIGINAL TILE AND DISPOSE OF AS NON ASBESTOS WASTE. IT IS THE ABATEMENT CONTRACTORS RESPONSIBILITY TO LOCATE AND REMOVE ALL FLOOR TILE AND MASTIC UNDER WALLS WETHER SHOWN OR NOT. 6. ABATEMENT CONTRACTOR SHALL REMOVE ALL PLUMBING FIXTURES TO GAIN ACCESS TO ASBESTOS CONTAINING FLOOR TILE AND FLOOR TILE MASTIC.

LOCATION OF CARPET ON ASBESTOS CONTAINING 9"x9" FLOOR TILE AND ASBESTOS CONTAINING FLOOR TILE MASTIC. (APPROX. 10,670 SQ. FT.) LOCATION OF 1"x1" CERAMIC FLOOR TILE ON ASBESTOS CONTAINING MASTIC.

LOCATION OF 12"x12" CERAMIC FLOOR TILE ON ASBESTOS CONTAINING 9"x9" FLOOR TILE AND ASBESTOS CONTAINING FLOOR TILE MASTIC. (APPROX. 360

LOCATION OF WALL TO BE DEMOLISHED TO ACCESS ASBESTOS CONTAINING

LOCATION OF WARDROBE OR KITCHENETTE/CABINETRY TO BE REMOVED TO

LOCATION OF CEILING LIGHT WITH ASBESTOS CONTAINING HEAT SHEILD.

ORING ABATEMENT PLAN	PROJECT NO.
UNIVERSITY	DATE 03/20/18
	SHEET NO.
0 63501	AB-1
	02 OF 09 SHEETS



PHONE: 618.656.6988

FAX: 618.656.8353

108 EMERALD HILLS DRIVE

EDWARDSVILLE, IL 62025

- ASBESTOS CONTAINING MATERIAL.



-82′-10″-

APT. 21

APT- 11

N

-82′-10″-

AP7, 10

APT. 17

 $\bigcirc$ 

N

 $\mathcal{O}$ 

APT. 14

146-11

CHECKED APPROVED

APK

BAS

APG 13

APT. 20

1. ALL ASBESTOS ABATEMENT WORK SHALL CONFORM TO ALL APPLICABLE EPA,

2. ABATEMENT CONTRACTOR SHALL VERIFY JOB/FIELD CONDITIONS AND MEASUREMENTS. VERIFY ALL QUANTITIES, DIMENSIONS AND LOCATIONS AS INDICATED ON THESE DRAWINGS AND SPECIFICATIONS AND MAKE ANY FURTHER MEASUREMENTS AND COUNTS FOR THE ACCURATE PROSECUTION OF WORK.

3. ABATEMENT CONTRACTOR SHALL REMOVE OLD RESIDUAL ASBESTOS CONTAINING CAULK FROM ALL WINDOWS AND DOORS OPENINGS AND DISPOSE OF AS

4. ABATEMENT CONTRACTOR SHALL DEMOLISH WALLS AS NEEDED TO LOCATE AND REMOVE ALL PIPE INSULATION THROUGHOUT BUILDING. ABATEMENT CONTRACTOR SHALL REMOVE ALL ASBESTOS CONTAINING PIPE INSULATION THROUGHOUT BUILDING WHETHER SHOWN ON PRINT OR NOT.

1. ABATEMENT CONTRACTOR SHALL REMOVE AND RECYCLE ALL FLUORESCENT

2. ABATEMENT CONTRACTOR SHALL REMOVE AND RECYCLE ALL MERCURY

3. ABATEMENT CONTRACTOR SHALL REMOVE AND RECYCLE ALL LEAD VENT PIPES,

### LOCATION OF ASBESTOS CONTAINING WINDOW/DOOR CAULK

LOCATION OF PLUMBING WALL WITH ASBESTOS CONTAINING PIPE INSULATION

• LOCATION OF TWO FITTINGS WITH ASBESTOS CONTAINING PIPE FITTING INSULATION. ONE ON THE UNIT VENT AT THE FLOOR AND ONE IN THE CEILING BETWEEN THE ATTIC AND THE FIRST FLOOR.

ASBESTOS PIPING AND WINDOW/DOOR ABATEMENT PLAN	PROJECT NO. 1711-557
TRUMAN STATE UNIVERSITY	DATE 03/20/18
FAIR APARTMENTS FAST PATTERSON ST	SHEET NO.
KIRKSVILLE, MO 63501	AB-2
	03 OF 09 SHEETS

### **DEMOLITION NOTES:**

- 1. ALL WORK PERFORMED ON THIS PROJECT SHALL CONFORM TO ALL APPLICABLE SECTIONS, ORDINANCES. AND REQUIREMENTS OF CITY OF KIRKSVILLE PUBLIC WORKS AND ALL APPLICABLE REQUIREMENTS OF THE ORDINANCES OF ALL AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.
- 2. PRIOR TO COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, AND CONDITIONS AFFECTING THEIR WORK WITH THE ACTUAL CONDITIONS AT THE JOBSITE. IN ADDITION. THE CONTRACTOR MUST VERIFY THE ENGINEER'S LINE AND GRADES. IF THERE ARE ANY DISCREPANCIES FROM WHAT IS SHOWN ON THE CONSTRUCTION PLANS, STANDARD SPECIFICATION AND/OR SPECIAL DETAILS, THE CONTRACTOR SHALL SECURE WRITTEN INSTRUCTION FROM THE ENGINEER PRIOR TO PROCEEDING WITH ANY PART OF THE WORK AFFECTED BY OMISSION OR DISCREPANCIES. FAILING TO SECURE SUCH INSTRUCTION, THE CONTRACTOR WILL BE CONSIDERED TO HAVE PROCEEDED AT HIS OWN RISK AND EXPENSE. IN THE EVENT OF ANY DOUBT OR QUESTION ARISING WITH RESPECT TO THE TRUE MEANING OF THE CONSTRUCTION PLANS OR SPECIFICATIONS, THE DECISION OF THE ENGINEER SHALL BE FINAL AND CONCLUSIVE.
- 3. WHEN A CONFLICT BETWEEN PLANS AND SPECIFICATIONS OR NOTES OCCURS, THE ENGINEER SHALL DECIDE WHICH GOVERNS GENERALLY. THE MORE RESTRICTIVE, MORE SPECIFIC, OR STRICTER PROVISION SHALL GOVERN. IF ANY DISCREPANCIES ARE DISCOVERED ON THE PLANS OR BETWEEN THE PLANS AND THE SPECIFICATIONS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OBTAIN CLARIFICATION OF THE INTENT FROM THE ENGINEER PRIOR TO CONSTRUCTION OR INSTALLATION OF IMPROVEMENTS.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND FEES REQUIRED FOR ALL UTILITY DESTROYS, ROAD, AND SIDEWALK CLOSURES.
- 5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ADEQUATE SIGNS, TRAFFIC CONTROL DEVICES, AND WARNING DEVICES TO INFORM AND PROTECT THE PUBLIC DURING ALL PHASES OF DEMOLITION.
- 6. WHERE SECTION OR SUBSECTION SURVEY MONUMENTS ARE ENCOUNTERED, THE CONTRACTOR 22. DEMOLITION CONTRACTOR SHALL REMOVE PARKING LOT SIGNAGE AND SAVE FOR OWNER. SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER AND AN AUTHORIZED SURVEYOR OR AGENT, HAVE WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
- 7. DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DISCONNECTS AND UTILITY DESTROYS. COORDINATE WITH USING AGENCY AND UTILITY COMPANIES.
- 8. DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR PROCTECTING SIDEWALKS, CURBS, AND PARKING LOTS THAT ARE TO REMAIN. IF DAMAGE OCCURS THE DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR REPACEMENT OF ALL DAMAGED MATERIALS AND ALL FEES/PERMITS FOR REPLACEMENT.
- 9. DEMOLITION CONTRACTOR SHALL DEMOLISH THE BUILDING IN ITS ENTIRETY, ALL BUILDING SYSTEMS, BUILDING SYSTEM COMPONENTS IN THEIR ENTIRETY, INCLUDING BUT NOT LIMITED TO ALL WALLS, ROOFS, ROOFING, PORCHES, OVERHANGS, MECHANICAL SYSTEMS, STRUCTURAL SYSTEMS, ALL ABOVE GROUND UTILITIES, BELOW GROUND UTILITIES, PIPING, AND SEWERS.
- 10. DEMOLITION CONTRACTOR SHALL DEMOLISH IN THEIR ENTIRETY ALL FOOTINGS, FOUNDATIONS, CONCRETE RETAINING WALLS, SLABS, AND ALL SLAB/WALL ROCK SUB-GRADE BACKFILL AND DISPOSE OF OFFSITE. NO RUBBLIZING OF CONCRETE FOR BACKFILL WILL BE ALLOWED.

- 11. DEMOLITION CONTRACTOR SHALL SHORE OR BACKFILL ANY HOLES OR UNDERMINING OF ANY SIDEWALK AREAS IMMEDIATELY AFTER DEMOLITION OF ANY BUILDING COMPONENTS THAT ADJOIN THE SIDEWALKS OR PARKING LOTS.
- 12. DEMOLITION CONTRACTOR SHALL TAKE CARE TO NOT DAMAGE ANY UTILITY POLES, LIGHTING POLES, TRANSMISSION LINES OR UNDERGROUND ELECTRIC FEEDS.
- 13. DEMOLITION CONTRACTOR SHALL NOT USE OR BLOCK ENTRANCES ADJACENT TO CONSTRUCTION AREA.
- 14. THE CONTRACTOR SHALL INSTALL SILT FENCING TO PROTECT SIDEWALKS, ROADS, AND NEARBY PROPERTIES FROM SOIL EROSION.
- 15. DEMOLITION CONTRACTOR SHALL DISPOSE OF ALL BUILDING MATERIALS AND BRING BACK TO GRADE WITH COMPACTED BORROW SOIL, TOP DRESS ALL DISTURBED AREAS WITH A MINIMUM OF 6" OF TOPSOIL, HYDRO SEED ALL DISTURBED AREAS. FERTILIZE WITH 10-20-10 AT A RATE OF 200LBS PER ACRE. DEMOLITION CONTRACTOR SHALL USE "BARON" VARIETY KENTUCKY BLUEGRASS FOR SEEDING.
- 16. PROVIDE TEMPORARY 6' CONSTRUCTION FENCING. FENCE SHALL BE CHAIN LINK WITH BARRIER OR PRIVACY SLATS. FENCE CAN BE FREESTANDING. PROVIDE LOCKABLE GATES WITH EXTRA KEYS FOR USING AGENCY AND FES PERSONNEL. REMOVE NEW CONSTRUCTION FENCE AT COMPLETION OF PROJECT.
- 17. LEAVE CONCRETE CURBS AROUND ENTIRE BUILDING.
- 18. DEMOLITION CONTRACTOR SHALL SAW CUT AND PERFORM SELECTIVE DEMOLITION FOR ALL SIDEWALKS AND APPROACHES TO REMAIN.
- 19. DEMOLITION CONTRACTOR MAY USE FIRE HYDRANTS FOR WATER SUPPLY. USING AGENCY WILL PROVIDE A METER AND DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR FEES FOR ALL WATER USAGE. DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR METER INSTALLATION.
- 20. USING AGENCY SHALL REMOVE LIGHT POSTS, COPPER GUTTERS, DOWNSPOUTS, MAILBOXES, AND BIKE RACKS.
- 21. DEMOLITION CONTRACTOR SHALL REMOVE AND DISPOSE OF LIGHT POST FOOTINGS, ASSOCIATED LIGHT POST CONDUITS, AND HANDICAP HAND RAILS.
- - 23. DEMOLITION CONTRACTOR SHALL COORDINATE WITH THE CITY OF KIRKSVILLE AND PAY ALL FEES AND PERMITS FOR CAPPING OF DOMESTIC WATER.
  - 24. DEMOLITION CONTRACTOR SHALL COORDINATE WITH AMEREN, PAY ALL FEES, AND PERMITS FOR ELECTRICAL DISCONNECTS AND REMOVAL OF POWERPOLE AND TRANSFORMERS.
  - 25. DEMOLITION CONTRACTOR SHALL HIRE TELECOMMUNICATIONS SUBCONTRACTOR FOR DISCONNECTS OF PHONE LINE AND FIBER OPTICS LINE CAPPING.
  - 26. DEMOLITION CONTRACTOR SHALL HIRE MECHANICAL CONTRACTOR FOR CAPPING STEAM, CONDENSATE, STORM, AND SEWER IN MANHOLES AND AT CONSTRUCTION LIMITS.
  - 27. DEMOLITION CONTRACTOR SHALL TAKE CARE TO NOT DAMAGE TREES AROUND PERIMETER. LANDSCAPING BUSHES ARE TO BE REMOVED AND DISPOSED OF.

### UNIVERSAL WASTE NOTES:

- 1. ABATEMENT CONTRACTOR SHALL REMOVE AND RECYCLE ALL FLUORESCENT BULBS AND BALLASTS.
- 2. ABATEMENT CONTRACTOR SHALL REMOVE AND RECYCLE ALL MERCURY CONTAINING SWITCHES.
- 3. ABATEMENT CONTRACTOR SHALL REMOVE AND RECYCLE ALL LEAD VENT PIPES, LEAD DRAINS, AND LEAD ROOF STACKS.
- 4. USING AGENCY SHALL REMOVE ALL AIR CONDITIONERS.

	REVISIONS			ANNIN OF MICHAE	F F	ARMER	DEMOLITION AND UNIVERSAL WASTE NOTES	PROJECT NO. 1711-557
NO.	DATE REMARKS			BRETT		NVIRONMENTAL	TRUMAN STATE UNIVERSITY	DATE 03/20/18
		IRACED	BFF	Bathwall		SERVICES, LLC	FAIR APARTMENTS	SHEET NO.
		CHECKED	APPROVED	E-27711			KIRKSVILLE, MO 63501	D-1
		APK	BAS	ROFESSION WITHIN	108 EMERALD HILLS DRIVE EDWARDSVILLE, IL 62025	PHONE: 618.656.6988 FAX: 618.656.8353		04 OF 09 SHEETS



### EROSION CONTROL NOTES:

- 1. ALL EROSION CONTROL MEASURES, EXCEPT FOR THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE LEFT IN PLACE UNTIL GRASS IS ESTABLISHED.
- 2. CONTRACTOR SHALL MAINTAIN EROSION CONTROL MEASURES THROUGHOUT DEMO WORK AND INSPECT AND REPAIR MEASURES AT FINAL COMPLETION FOR TURNOVER. THIS REPAIR WORK SHALL BE TO THE SATISFACTION OF THE ENGINEER.
- 3. INLET PROTECTS FOR DRAINAGE STRUCTURES TO BE REMOVED OR BURIED SHALL REMAIN OPERATIONAL UNTIL ALL STORM SEWER ITEMS ARE DISCONNECTED OR BURIED.
- 4. STORM SEWER INLET GRATES SHALL BE COMPLETELY COVERED WITH HI-FLOW FABRIC.
- 5. PERIMETER SILT FENCE SHALL BE CONSTRUCTED AT THE COMMENCEMENT OF THE SEQUENCE OF GRADING OPERATIONS AS PRACTICAL. AREAS WHERE CONSTRUCTION ACTIVITY WILL TEMPORARILY CEASE FOR MORE THAN 21 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING AND MULCH WITHIN 14 DAYS OF THE LAST DISTURBANCE.
- 6. INSTALL A TRACKING PAD TO PREVENT SEDIMENT FROM BEING TRACKED ON TO PUBLIC ROADWAYS AND UNIVERSITY PARKING LOTS. ANY SEDIMENT REACHING A PUBLIC ROAD OR UNIVERSITY PARKING LOT SHALL BE REMOVED BEFORE THE END OF EACH WORKDAY. FLUSHING MAY NOT BE USED.
- 7. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF LAND DISTURBING ACTIVITIES SHALL BE CLEANED UP BY THE END OF THE WORKDAY.

KEYED NOTES:

LOCATION OF CONSTRUCTION FENCINGLOCATION OF EROSION CONTROL

EROSION CONTROL PLAN	PROJECT NO. 1711-557
UNIVERSITY	DATE 03/20/18
	SHEET NO.
	D-2
0 83501	
	05 OF 09 SHEETS



### DEMOLITION NOTES:

1. USING AGENCY SHALL REMOVE POST LIGHTS. DEMOLITION CONTRACTOR SHALL REMOVE POST LIGHT FOOTINGS AND ANY/ALL CONDUIT BELOW GROUND.

KEYED NOTES:
LOCATION OF POST LIGHTS
LOCATION OF MANHOLE
LOCATION OF POWER POLE
LOCATION OF BLUE LIGHT
LOCATION OF FIBER OPTIC LINE AND CONDUIT
LOCATION OF PHONE LINE (50 PAIR DIRECT BURIED)
LOCATION OF SANITARY LINE
LOCATION OF STEAM AND CONDENSATE LINES.
LOCATION OF DOMESTIC WATER LINE.
LOCATION OF FIBER OPTIC LINE AND CONDUIT TO
LOCATION OF PHONE LINE TO BE DISCONNECTED
LOCATION OF PHONE LINE TO BE TERMINATED WITH
WATER PROOF SHRINK WRAP.
LOCATION OF SANITARY LINE TO BE CAPPED.
ABANDON IN PLACE
LOCATION OF STEAM AND CONDINSATE LINES TO BE
CAPPED IN MANHOLE.
LOCATION OF DOMESTIC WATER LINE TO BE
CAPPED IN MANHOLE. (COORDINATE WITH CITY OF
KIKKSVILLE)
F PLAN PROJECT NO.
1711-557

TE PLAN	1711-557
UNIVERSITY	DATE 03/20/18
NTS	SHEET NO.
DN ST. D 63501	D-3
	06 OF 09 SHEETS



1. DEMOLITION CONTRACTOR SHALL REMOVE STORM DRAIN SYSTEM IN ITS ENTIRETY. CAP DRAIN LINES AS CLOSE TO CONCRETE CURBS AS

**KEYED NOTES:** 

- LOCATION STORM DRAINS (1) LOCATION WHERE STORM DRAIN SHALL BE CAPPED. (2) ABANDON IN PLACE

DEMOLITION PLAN	PROJECT_NO. 1711-557
UNIVERSITY	DATE 03/20/18
NTS	SHEET NO.
ON ST. D 63501	D-4
	07 OF 09 SHEFTS



### KEYED NOTES:

0

LOCATION OF SIDEWALK TO BE REMOVED. NOTE; NOT ALL SIDEWALKS SHOWN. ALL SIDEWALKS UNDER BUILDING ROOF ARE TO BE REMOVED AS WELL.

LOCATION OF CONCRETE CURBS TO REMAIN.

LOCATION OF TREE TO REMAIN.

LOCATION OF LANDSCAPING BUSHES TO BE REMOVED.

OLITION PLAN	PROJECT NO. 1711-557
UNIVERSITY	DATE 03/20/18
NIS ST	SHEET NO.
63501	D-5
	08 OF 09 SHEETS











		REVISIONS				•	FARMER	SITE PHOTOGRA
NO.	DATE	REMARKS	AFR		III SALE SSOUGH			TDUMAN STATE
			TRACED	APPROVED			SERVICES LLC	FAIR APARTMEN
				BEF	E-27711			EAST PATTERSO
			CHECKED	APPROVED	All All			KIRKSVILLE, MO
			APK	BAS	WOFESSION WITH	108 EMERALD HILLS DRIVE EDWARDSVILLE, IL 62025	PHONE: 618.656.6988 FAX: 618.656.8353	





APHS	PROJECT NO. 1711-557
UNIVERSITY	DATE 03/20/18
NTS	SHEET NO.
DN 31. D 63501	D-6
	09 OF 09 SHEETS