REQUEST FOR QUOTATION - BID No. 07.07 TROY SCHOOL DISTRICT OLD BAKER MIDDLE SCHOOL AHERA Project Design Documentation

School:	Old Baker Middle School 1291 Torpey Drive Troy, Michigan 48083	LEA:	Troy School District 1140 Rankin Street Troy, Michigan 48083
Design Date: Pre-Bid: Bids Due:	Thursday, October 11, 2007 2:00 p.m., Friday, October 12, 2007 12:00 p.m., Monday, October 15, 2007		

Project Information

hA Project #:07763Project Name:Asbestos Abatement at Old Baker Middle School

The Troy School District is requesting a quotation for the removal and disposal of all asbestos flooring materials, including all asbestos floor tile, asbestos floor tile mastic, and all non-asbestos carpet material covering asbestos floor tile from two (2) classrooms, the Counseling Office suite, the Main Office area, and a storage room. The project will also include the removal and disposal of asbestos thermal system insulation, as well as the patch and repair of damaged asbestos thermal system insulation, from various hallway locations and the Media Center.

Scope-of-Work - Abatement Activities

The Contractor will remove and dispose of the following asbestos-containing materials from the identified areas of Old Baker Middle School:

- 1. Remove and dispose of all asbestos floor tile from the Room 33, Room 37, the Counseling Office Suite, the Main Office area, and a storage room, approximately 3,375 square feet.
- 2. Remove and dispose of all asbestos floor tile mastic from a storage room, approximately 720 square feet.
- 3. Remove and dispose of all non-asbestos carpet from the Room 33, Room 37, the Counseling Office Suite, and the Main Office area, approximately 3,199 square feet.
- 4. Remove and dispose of asbestos straight pipe insulation from locations associated with new tie-ins in various hallways, approximately 20 linear feet.
- 5. Remove and dispose of asbestos packed pipe fitting insulation on fiberglass lines from the Media Center, approximately 18 pipe fittings.
- 6. Patch and repair all accessible damaged asbestos pipe insulation materials (including straight pipe insulation and pipe fitting insulation) from throughout the hallways.

Scope-of-Work - Summary of Material Locations and Quantities

The table of the material locations and quantities for all of the asbestos-containing materials listed in the "Abatement Activities" includes:

Locations Materials ->	FT	FTM	Carpet	SPI	PFIFG	P&R
Room 33	960		960			
Room 37	960		960			
Counseling Office - Conference	270		270			

Locations Materials ->	FT	FTM	Carpet	SPI	PFIFG	P&R
Counseling Office - Storage	96					
Counseling Office - Hallway	39		39			
Counseling Office - North Office	165		165			
Counseling Office - South Office	165		165			
Main Office - Reception	320	320	320			
Main Office - Hallway	128	128	128			
Main Office - Copy Room	192	192	192			
Storage south of Gymnasium	80	80				
Hallways				20		x
Media Center					18	x
TOTAL	3375	720	3199	20	18	x

Note: The Contractor is responsible for all measurements.

Key for Table:

Key for rable.	
FT	Asbestos Floor Tile
FTM	Asbestos Floor Tile Mastic
Carpet	Non-Asbestos Carpet
SPI	Asbestos Straight Pipe Insulation
PFIFG	Asbestos Packed Pipe Fitting Insulation on Fiberglass Lines
P&R	Patch & Repair of Asbestos Pipe Insulation

Scope-of-Work - Abatement Requirements:

The Contractor will perform the following activities associated with the removal and disposal of the asbestos-containing materials described in the "Abatement Activities" section:

- 1. The Contractor is responsible for all of the materials listed in the "Abatement Activities" located inside of the project area. The project area includes all portions of the functional spaces listed in the "Summary of Material Locations and Quantities" table. When present in, connected to or adjacent to the classrooms, flooring materials located in bathrooms, closets, storage rooms, below fixtures (such as radiators, cabinets and bookcases), behind furniture and inside sink cabinets are included when exposed by pre-abatement demolition activities. Additional descriptions for certain areas are listed below:
 - <u>Material Below Sink Cabinets/Casework</u>: The Contractor will remove all asbestos flooring materials up to the sink cabinets/casework. Any material which extends below the sink cabinets/casework and cannot be pulled out will remain in place and will be sealed in place.
- 2. The regulated areas will be emptied of all furniture, furnishings and moveable objects prior to the start of the project. This activity will be completed by the Owner.
- 3. The exact routing of projects and configuration of the number of regulated areas/combination of functional spaces will be coordinated on-site. When possible, adjoining functional spaces will be combined into a single regulated area. Each regulated area constructed to address asbestos flooring abatement in this project will be set-up with the following guidelines prior to any interior abatement activities:
 - Critical barriers, constructed of a minimum of one (1) layer six-mil polyethylene sheeting, and asbestos warning signs will be placed over all exterior building entrances falling within the limits of the negative pressure enclosure.

- Critical barriers, constructed of a minimum of one (1) layer six-mil polyethylene sheeting, will be placed over all ceiling return vents, bookcases, lockers, and all item which cannot be decontaminated in each of the project areas. Critical barriers constructed of a minimum of two (2) layers six-mil polyethylene sheeting, will be placed over all in ceiling vents.
- One (1) layer six-mil polyethylene sheeting will be placed over all walls, counters and other non-floor surfaces in the project areas. A minimum of one (1) layer six-mil polyethylene sheeting will be placed over all non-asbestos flooring inside of the negative pressure enclosure.
- A minimum of one (1) air filtration devices (AFDs) will be required in each functional space in excess of 400 square feet. This minimum number of machines is desired to create a minimum negative pressure of 0.02 inches of water equivalent, sufficient air chances and appropriate air flow through the enclosure. The Contractor will be responsible for securing the exhaust tubes in any exterior windows and/or doors used for exhaust locations.
- A three stage decontamination chamber will be required for this project. The decontamination chamber will be connected at a location convenient to building access and waste out activities and will be coordinated on-site.
- 4. Each negative pressure regulated area established for the glovebag removal of thermal system insulation will be set-up in accordance with the following *minimum* guidelines prior to the start of any abatement activities:
 - Drop cloths constructed of a minimum of one (1) layer of six-mil polyethylene sheeting will be placed beneath each area where thermal system insulation materials are to be removed.
 - A minimum of one (1) air filtration devices will be placed in each functional space greater than 400 square feet in area within each project area to provide a minimum negative pressure of 0.02 inches of water equivalent, sufficient air changes, and appropriate air flow through the enclosure. All air filtration device exhaust tubes must be routed outside of the building.
 - A three stage decontamination chamber will be required for each project area. The decontamination chamber will be the only access point into the regulated area. The exact placement of the decontamination unit will be determined on-site by healthAIR, inc.'s Project Coordinator and the Contractor's competent person.
 - All exposed vertical and horizontal exposed surfaces inside of the enclosure, including all walls, will be fully washed with a combination of wire brushing, rinsing, wet-wiping, and HEPA-vacuuming during the final cleaning portion of the project.
 - In addition to the *minimum* requirements listed above, all work will be conducted in accordance with all requirements of AHERA and all applicable provisions of the OSHA Asbestos Standard (1926.1101(g) "Methods of Compliance".
- 5. All non-asbestos carpet removal activities will be completed in accordance with the listed "Non-Asbestos Carpet Material Removal Procedures" ("General Procedures for Asbestos Abatement, Item 11.1") and with all applicable provisions of the OSHA Asbestos Standard (1926.1101(g) "Methods of Compliance") regarding disturbances to floor tile materials.
- 6. All asbestos floor tile abatement activities will be completed in accordance with the listed "Class II Non-Friable Floor Tile Abatement Procedures" ("General Procedures for Asbestos Abatement, Item 11.2") and with all applicable provisions of the OSHA Asbestos Standard (1926.1101(g) - "Methods of Compliance").
- 7. All asbestos floor tile mastic abatement activities will be completed in accordance with the listed "Class II Non-Friable Floor Tile Abatement Procedures" ("General Procedures for Asbestos Abatement, Item 11.3") and with all applicable provisions of the OSHA Asbestos Standard (1926.1101(g) - "Methods of Compliance").

- 8. All asbestos thermal system insulation abatement (including asbestos packed fitting insulation) abatement activities will be completed in accordance with the listed "Class I Glovebag Abatement Procedures" ("General Procedures for Asbestos Abatement, Item 11.4") and with all applicable provisions of the OSHA Asbestos Standard (1926.1101(g) "Methods of Compliance").
- 9. All patch and repair work to asbestos pipe insulation will be completed neatly utilizing both lag-cloth and bridging encapsulant.
- 10. All asbestos-containing materials must be removed using wet methods and then bagged and sealed immediately. Bags will be randomly checked as they are transported from the enclosure and double bagged. All bags determined to not be adequately wet will be sent back into the enclosure. No bags may remain open inside of the enclosure. The Contractor will be permitted to leave sealed bags inside the enclosure overnight. All bags must be removed from the enclosure prior to the start of the visual inspection.
- 11. All surfaces inside the enclosure will be fully washed with a combination of wire brushing, rinsing, wet wiping and HEPA vacuuming during the final cleaning portion of the project. During final cleaning activities, the ceiling will be rinsed and then encapsulated during the lock down portion of the project.
- 12. At the conclusion of the final cleaning activities for each individual regulated area, a visual inspection will be completed in accordance with the listed "Visual Inspection Procedures" (Item #4, "General Requirements and Information").

Scope-of-Work - General Requirements and Information

The Contractor will remove and dispose of the asbestos-containing materials in accordance with the following additional general requirements:

- 1. The Contractor will be responsible for providing a manometer to provide a reading of the negative pressure in all negative pressure enclosures and will also be responsible for providing smoke testing of the negative pressure enclosures and glovebags, as required by OSHA. Abatement will not begin inside of a negative pressure enclosure unless a manometer is installed and indicates the proper negative pressure. All air filtration devices must be ducted outside the building. The Contractor will be responsible for properly securing the exhaust tubes in the exterior windows and/or doorways to prevent unauthorized access to the building during after work hours. Some of the exterior window/door frames are scheduled to be remain and the Contractor will not be allowed to screw/nail into the frames. Any and all damage to the windows/doors/frames is the responsibility of the Contractor.
- 2. The Contractor will be allowed to place a dumpster on-site. The exact location will be determined by the Owner and healthAIR, inc.'s Project Coordinator. The dumpster must be removed off-site by Monday, October 29, 2007. If the dumpster is not removed by the end of the day on Monday, October 29, 2007. healthAIR, inc. will coordinate the removal of the dumpster at cost + 14%, which will be deducted directly from the project invoice submitted by the Contractor.
- 3. The Contractor will be allowed to store a limited amount of equipment on-site. The amount of equipment that may be stored will be determined on-site based upon the storage space provided by the Owner.
- 4. The Contractor is strongly encouraged to document all existing conditions prior to the start of the project in order to support pre-project damage. In all situations where damages are listed on work lists or punch lists by the Owner or Construction Manager, the Contractor will be provided two weeks (fourteen 14 calendar days) to complete corrective measures. After the fourteen day period, the Owner, Construction Manager or healthAIR, inc. will complete the corrective measures at the Contractor's expense. The Contractor will be required to dedicate two laborers for general clean-up activities throughout the building (as directed by the Owner or healthAIR, inc.) for two days for each project to address "punch list" type items such as pieces of tape/poly or tape/glue residue. The dates will be coordinated at the completion of all abatement activities.

5. <u>Visual Inspection Procedures:</u>

At the conclusion of final cleaning activities for each individual regulated area, a visual inspection will be completed in accordance with the following procedures:

- Prior to each visual inspection in a negative pressure enclosure, the Contractor will replace the prefilters on all of the air filtration devices with new clean filters. healthAIR, inc.'s Project Manager and the Contractor's competent person will conduct a thorough visual inspection of the project area to ensure that all materials have been completely removed and all surfaces have been properly cleaned. The visual inspection will not be conducted until all areas have been final cleaned and all non-essential equipment and supplies have been removed from the enclosure.
- Prior to each visual inspection in a negative pressure enclosure, the Contractor will remove all excess equipment, including all ladders, scaffolds, hoses, bags, tools, etc. from the enclosure. The Contractor will also clean the exterior of all air filtration devices. Minimal ladders and scaffolds will be left in the enclosure to allow for the visual inspection.
- healthAIR, inc.'s on-site Project Manager and the Contractor's competent person will conduct a thorough visual inspection of each regulated area to ensure that all materials have been completely removed and all surfaces have been properly cleaned.
- The Contractor will not be allowed to conduct the lock down activities until after completion of the visual inspection. All polyethylene sheeting/barriers must be re-checked prior to lock down to minimize the potential of leaks behind the barriers. The Contractor will only be allowed to use a clear drying encapsulant for lock down.
- 6. The Owner reserves the right to re-order projects following award of contract. The initial schedule provided in this specification was developed during a meeting with healthAIR, inc. and the Owner. Should the order of any project change, all durations, including scheduled Saturday work days, will remain the same.
- 7. All procedures specific to the removal of asbestos floor tile, asbestos floor tile mastic, non-asbestos carpet, and pipe insulation utilizing glovebags can be found in the "General Procedures of Asbestos Abatement". [A copy of referenced sections of the "General Procedures for Asbestos Abatement" are included in Attachment #3 of this RFQ.]

Project Management and Air Monitoring

healthAIR, inc. will provide project management and air monitoring services for the duration of the project. All PCM air samples, including set-up/baseline samples, personal exposure samples, area samples, and clearance samples will be collected and analyzed on-site by healthAIR, inc.

Final Clearance Sample Requirements:

Each regulated area established for the removal of the materials, as described in the "Abatement Activities", will be cleared using Phase Contrast Microscopy (PCM). Pursuant to the requirements of AHERA, five (5) PCM samples will be collected from the regulated area. All five samples must be analyzed below 0.01 fibers per cubic centimeter allow for tear down of the enclosure. All PCM air samples will be collected in accordance with the AHERA regulation and all EPA recommended guidelines. healthAIR, inc. reserves the right to reduce the number of clearance samples to one (1) for regulated areas involving only the removal of non-friable asbestos flooring materials.

Additional Information

Additional information relating to the completion of this project is provided in this section.

Building Location

Old Baker Middle School is located on Torpey Drive, on the east side of Rochester Road, less than 1/8 mile north of Big Beaver Road.

Project Notification

The Contractor will be responsible for submitting all necessary notifications to the appropriate federal, state and local agencies. The Contractor will be responsible for submitting a Michigan Department of Labor & Economic Growth notification since the project involves the removal of greater than 10 lineal/15 square feet. The Contractor will <u>not</u> be responsible for submitting a NESHAPs notification since the projects involve the removal of less than 160 square feet/260 lineal feet of friable asbestos material.

Project notifications are due for the projects as follows:

Project	MDLEG	NESHAPs
Old Baker Middle School	Monday, October 15, 2007	None

All necessary additional information needed for the Contractor to submit the required project notifications for the building is listed below. If any information has been omitted, please contact healthAIR, inc. at (248)-426-0165.

Old Baker Middle School

Old Dakel Mile	
Building:	Old Baker Middle School
Address:	1291 Torpey Drive, Troy, Michigan 48083
Phone:	(248) 823-4600
Owner:	Troy School District
Address:	1140 Rankin Street, Troy, Michigan 48083
Contact:	Mr. Ken Miller
Contact Phone:	(248) 823-4050
Building Size:	Est 87,000 square feet
# Floors:	1
Project Floors:	1
Building Age:	Original construction in 1952
Building Use:	Educational
Cross Streets:	On Torpey Drive, just east of Rochester Road and just north of Big Beaver Road

All data on the project schedule, materials and material quantities is located in earlier sections of the specification. All data on the abatement contractor, disposal site and waste transporter will be provided by the Owner.

Project Schedule and Additional Information

The Contractor will start the project on Monday, October 22, 2007 and will finished with all abatement activities, including tear down, no later than Friday, October 26, 2007. The Contractor will be allowed a total of five (5) work days to complete the project. Additional schedule considerations are listed below:

- The Contractor will be <u>required</u> to work on an evening work shift (3:00 p.m. 11:30 p.m.) schedule.
- The Contractor will be required to start the flooring abatement projects on Monday, October 22, 2007, and must be complete with all flooring abatement no later than the end of the work shift on Wednesday, October 24, 2007. The Contractor can <u>not</u> conduct any pipe insulation abatement or patch and repair activities until Thursday, October 25, 2007 (the earliest date that the notification will be valid).

Documentation

The Contractor will provide a copy of all company and worker documentation to healthAIR, inc.'s on-site project manager at the beginning of the project. Waste disposal forms will be forwarded to healthAIR, inc. within fourteen (14) days of receipt from the landfill. The Contractor's invoice will not be submitted to the Troy School District until all documentation has been received.

Billing

All work will be invoiced to the Troy School District. All invoices should be submitted directly to healthAIR, inc. with project closeout documentation for approval. A copy of all approval information will be mailed to The Contractor. Terms will be net forty-five (45) days from receipt of all contractor documentation by healthAIR, inc. The Contractor will submit a single invoice upon completion of the all project activities. The invoice shall be made out to and mailed to:

Invoice Addressed To:	Invoice Mailed To:
Troy School District	healthAIR, inc.
Attn: Mr. Ken Miller	Attn: Mr. Steve Roach
1140 Rankin Street	23937 Research Drive
Troy, Michigan 48083	Farmington Hills, Michigan 48335

Prevailing Wages

Prevailing wage rates are in effect for all asbestos abatement activities at Old Baker Middle School. A copy of the prevailing wage rates will be made available to all Contractors upon request.

Insurance

The Contractor will maintain the following levels of insurance throughout the duration of the project (with a copy provided to the Troy School District prior to the start of the project):

- Worker's Compensation and Employer's Liability Insurance with Michigan statutory limits.
- Comprehensive General Liability Insurance with a minimum combined single limit of \$2,000,000 per occurrence in the same amount made for bodily injury and property damage. Policy to include products and completed operations, cross liability, broad form property damage, independent Contractors, and contractual liability coverage. Policy shall be endorsed to provide (60) days written notice to Plymouth-Canton Community Schools of any material change of coverage, cancellation, or non-renewal of coverage.
- Asbestos Specific General Liability Insurance, specific for asbestos abatement, with a minimum combined single limit of \$1,000,000 per occurrence made for bodily injury and property damage in the same amount.
- Automotive Liability Insurance covering all owned, hired, and non-owned vehicles with personal protection insurance and property insurance to comply with the provisions of the Michigan No-Fault Insurance Law, including residual liability insurance with a minimum combined single limit of \$1,000,000 each occurrence of bodily injury and property damage.

The project cannot begin until an insurance certificate has been provided naming the Troy School District as the certificate holder and naming both the Troy School District and healthAIR, inc. as additional insureds in respect to the asbestos abatement activities at the Old Baker Middle School. Upon notification of award, please address two (2) copies of the insurance certificate as follows:

Certificate Holder:	Certificate Mailed To:
Troy School District	healthAIR, inc.
Attn: Mr. Ken Miller	Attn: Mr. Steve Roach
1140 Rankin Street	23937 Research Drive
Troy, Michigan 48083	Farmington Hills, Michigan 48335

Summary of Attachments

Attachments to this project design documentation/RFQ include:

- 1. RFQ 07.07
- 2. Map to Old Baker Middle School
- 3. Excerpt from "General Procedures for Asbestos Abatement" Sections 11.1, 11.2, 11.4

Summary of Project Designer Accreditation

As required by the AHERA, this response action has been designed by an accredited Asbestos Project Designer, as accredited through the State of Michigan's Department of Labor & Economic Growth Asbestos Program. Information on the accredited project designer is listed below.

AHERA Project Designer Information

Name:	Steven L. Roach
Accreditation #:	A23091
State:	Michigan
Expiration Date:	September 25, 2007
Signature:	[ON-FILE / RFQ ISSUED VIA E-MAIL]

ATTACHMENT #1:

RFQ FORM

QUOTATION FORM

The Bidder hereby agrees and certifies to comply with all requirements described within this Request for Quotation and agrees to accept a payment of

Bid No. 07.07 - Old Baker Middle School	
	dollars (\$)
Written Bid Cost	Numerical Bid Cost

for all work regarding this bid as described in the Request for Quotation documentation provided by healthAIR, inc. (dated Thursday, October 11, 2007). Any and all special conditions noted by the Contractor are indicated on the bottom of the bid form.

The Bidder agrees and certifies that the above stated cost includes all charges for all wages, overtime, taxes, materials, supplies, equipment, disposal costs, notification costs, general conditions, supervision, insurance, overhead, profit and incidental expenses and fees.

The Undersigned, a Representative of the Bidder, hereby authorizes and requests any person, firm, or corporation to furnish any additional information requested by the Troy School District in verification of the Bidder's qualifications.

COMPANY NAME	
PRINT NAME	
TITLE	
SIGNATURE	

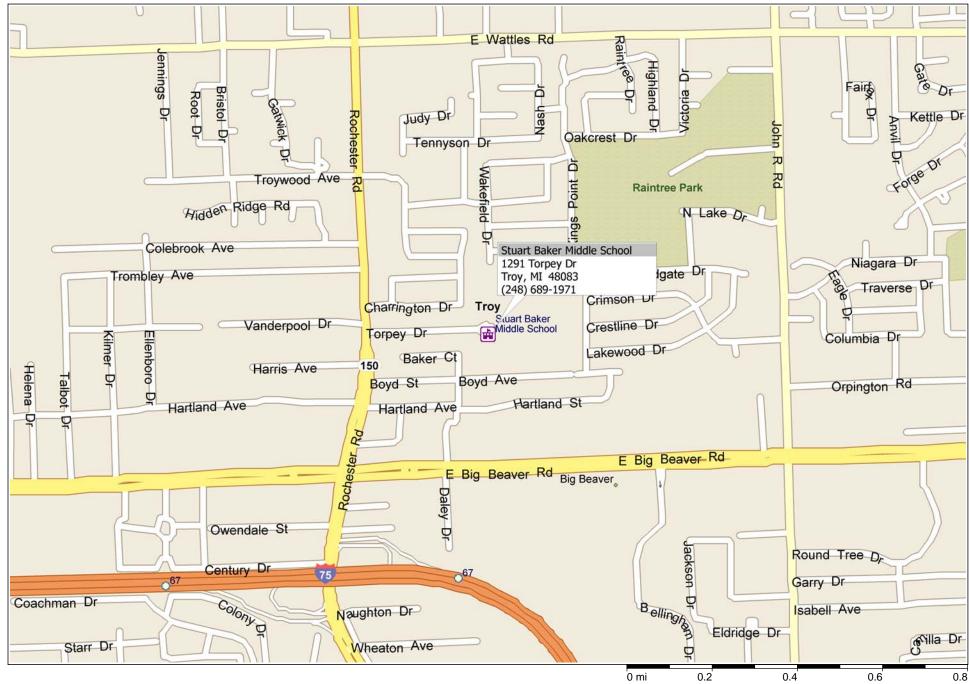
Specific Exclusions/Conditions Made by Bidder:

Please note any specific exclusions or conditions to your bid, including probable deviations or extensions to the proposed time schedule. Attach additional pages if necessary.

BIDS MUST BE FAXED TO healthAIR, inc. BY 12:00 p.m., MONDAY, OCTOBER 15, 2007 Fax to (248) 427-0305 ATTACHMENT #2:

MAP TO OLD BAKER MIDDLE SCHOOL

Bid No. 07.07 - Old Baker Middle School



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ATTACHMENT #3:

EXCERPT FROM "GENERAL PROCEDURES FOR ASBESTOS ABATEMENT"

GENERAL PROCEDURES FOR ASBESTOS ABATEMENT

The following are general procedures which shall be strictly enforced by Troy School District hereafter referred to as the "Owner." The Asbestos Abatement Contractor will hereinafter be referred to as the "Contractor" for the asbestos abatement project and the Project Managers/Air Monitors (healthAIR, inc.) will hereinafter be referred to as the "Owner's Consultant" or "Owners Representative."

[SECTION 11 ONLY - THE ENTIRE SET OF "GENERAL PROCEDURES FOR ASBESTOS ABATEMENT" CAN BE PROVIDED UPON REQUEST]

11. Methods of Asbestos Abatement - Standard Work Practices for Specific Materials

11.1 Non-Asbestos Carpet Material Removal Procedures: All non-asbestos carpet material will be removed and disposed of in accordance with the following procedures (please note that carpet is not reflected in the scope of work and is the responsibility of the Contractor to review):

- The Contractor may remove all non-asbestos carpet material and any associated non-wood/nonceramic floor molding at the conclusion of set-up activities (after the establishment of the negative pressure enclosure). The carpet materials may be disposed of as non-asbestos waste as long as there are no asbestos floor tile materials removed with the carpet and no asbestos floor tile materials are found broken below the carpeting. If asbestos floor tile materials are attached to the carpeting or are found to be cracked and broken, the carpet will be wrapped in polyethylene sheeting for packaging as non-friable asbestos waste. The floor molding may be disposed of as non-asbestos waste.
- The Contractor will be responsible for removing multiple layers of carpet, when present, in the work area. The locations of second layers of carpet are not detailed within the scope of work. The same removal conditions as described in the previous item exist.
- If the Contractor removes the carpet from any location in the work area and finds that there is no floor tile present (or no tile was expected to be present), the Contractor will be required to remove any and all carpet backing material adhered to the floor. Yellow carpet adhesive is not considered carpet backing and does not need to be removed (unless specifically identified in the abatement activities).
- When removing floor molding from any location in the building, the Contractor will be required to remove all associated adhesives (including, but not limited to, all glues, mastics and caulks) remaining on the wall in the area of the floor molding. The associated adhesive materials will be removed using a sharp scraper to remove the excess materials. All waste generated during this activity will be disposed of with the asbestos floor tile. The floor molding materials may be disposed of as a non-asbestos waste.

11.2 Class II Non-Friable Asbestos Floor Tile Abatement Procedures:

The procedures in this section assume that the material cannot and/or will not be removed in an intact condition following the OSHA Floor Tile Settlement Procedures. All non-friable asbestos floor tile abatement activities will be completed in accordance with the following procedures (regulated area set-up and removal techniques):

Set-up of Regulated Area:

- All Class II work shall be supervised by a competent person (accredited asbestos supervisor).
- Critical barriers shall be placed over all openings to the regulated area, including all doors, windows, vents and HVAC system openings. Critical barriers shall be placed over all doors leading to non-project areas, such as, but not limited to, adjacent rooms, storage areas, closets and bathrooms.
- To assist with final cleaning activities, one (1) layer of six-mil polyethylene sheeting will be placed over all wall surfaces below the ceilings (up to 10') and all counter tops, sink cabinets, etc. in each of the project areas. Prior to the installation of the polyethylene wall, the Contractor will remove all non-

wood/non-ceramic floor molding in the work area and dispose of the material as non-asbestos waste.

- Air filtration devices shall be placed inside of the regulated area and exhausted outside of the building. A minimum of one (1) air filtration device will be placed in each functional space to provide a sufficient air exchange and appropriate air flow through the regulated area.
- A flapped critical barriers will be used to allow for access into the regulated area. Project areas with more than one doorway will have only one access location.
- The set-up of a full, three chamber decontamination unit, complete with an operable shower chamber, will be set-up at the entrance to the regulated area. The Contractor will be responsible for providing water from an access point in the building to the shower via hoses. The Contractor will be allowed to use alternate decontamination procedures, as allowed by the OSHA Asbestos Standard for Class II projects, if the only water sources are in excess of 200' from an access point for the enclosure.
- Asbestos warning signs will be placed on the outside of the critical barriers prior to the commencement of abatement activities.

Removal Procedures:

- All floor tile materials will be removed in a non-friable manner using non-aggressive removal techniques. The set-up requirements listed above provide sufficient containment for the use of non-aggressive non-intact removal methods (i.e., the use of human powered floor scrapers/spuds).
- Mechanical chipping (including use of pneumatic chippers, Terminators[™], Pirhanas[™] and similar devices) and the use of aggressive removal techniques are prohibited. The use of aggressive removal techniques will require additional project considerations, including, but not limited to, TEM clearance sampling and project notifications (all of which will be the responsibility of the Contractor) on AHERA projects. All TEM clearance sampling required due to the use of mechanical and/or aggressive removal methods will be completed by healthAIR, inc. and will be the financial responsibility of the Contractor.
- The Contractor will be responsible for providing water from an access point in the building to the enclosure via hoses. The Contractor will be allowed to use alternate water distribution techniques (such as "piss-pumps" or buckets) if the only water sources are in excess of 200' from an access point for the enclosure.
- All floor tile materials will be placed in lined fiber drums for disposal. The Contractor may dispose of the materials as non-friable asbestos waste, but all materials must be packaged as specified prior to removal from the regulated area. This additional requirement is intended to eliminate the potential for visible emissions (i.e., small pieces of floor tile) outside of the enclosure or near the dumpster/waste transportation vehicle. Fiber drums may be lined, placed in the clean room and filled with sealed bags in lieu of double bagging the waste or using the drums inside of the enclosure.
- At all locations where tile must be cut or broken, such as the edge of cabinets, casework or partition walls, the Contractor will remove all jagged edged tile and all loose tile which remains. At all doorway locations, the Contractor will remove full tiles and will not leave any damaged portions of tile adhered to the floor.
- Flooring and its backing will not be sanded.
- Vacuums equipped with HEPA filters, disposable dust bags and metal floor tools (no brushes) shall be used to clean the floors.
- Dry sweeping is prohibited.

Personal Protection Equipment and Procedures:

- All employees performing Class II work practices inside of the regulated area established by these procedures will wear respiratory protection (minimum = half-face negative pressure respirator).
- The Contractor will not be allowed to cite an initial negative exposure assessment or any other previous monitoring to forgo respiratory protection. An initial negative exposure assessment will be allowed to establish a half-face negative pressure respirator as adequate respiratory protection.
- All employees performing Class II work practices inside of the regulated area established by these procedures will wear disposable coveralls.
- All workers will be required to properly decontaminate when exiting the regulated area.
- Any worker found in violation of these requirements and procedures will be removed from the project site for the duration of the project. healthAIR, inc.'s on-site Project Manager will contact the

Contractor's Main Office to inform the Contractor of the need to relocate the employee.

Final Cleaning Procedures:

- All vertical sections of polyethylene sheeting will be rinsed following completion of gross removal activities.
- All horizontal sections of the polyethylene sheeting will be cleaned using a combination of wet wiping and HEPA vacuuming.
- All flooring surfaces inside of the enclosure will be cleaned using a combination of wet wiping and HEPA vacuuming. All flooring surfaces will be visually inspected to confirm the removal of all asbestos floor tile debris, including all pieces in corners, along cabinets/casework and all grittiness found on the floor.
- All surfaces inside of the enclosure will be sprayed with a clear drying lockdown encapsulant following the visual inspection.
- All rooms at the perimeter of the regulated area will be inspected at the conclusion of final cleaning. Any locations where pieces of floor tile are found will be HEPA vacuumed in accordance with this section of the procedures.

General Requirements:

All work conducted by the Contractor will use the following engineering controls and work practices regardless of the levels of exposure:

- 1. Vacuum cleaners equipped with HEPA filters to collect all debris and dust.
- 2. Wet methods to control employee exposures during all handling of asbestos.
- 3. Prompt clean-up and disposal of wastes and debris in leak tight containers.
- 4. Local exhaust ventilation equipped with HEPA filters.
- 5. Enclosure or isolation of processes producing asbestos dust.
- 6. Ventilation of the regulated area to move contaminated air away from the breathing zone of employees and toward a filtration or collection device equipped with a HEPA filter.

Prohibited Work Practices:

The following work practices and engineering controls shall not be used for these projects regardless of the level of exposure:

- 1. High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filters.
- 2. Compressed air used to remove asbestos unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.
- 3. Dry sweeping, dry shoveling or other dry clean-up of asbestos waste and debris.
- 4. Employee rotation as a means of reducing employee exposure to asbestos.

11.3 Class II Non-Friable Asbestos Floor Tile Mastic Abatement Procedures:

All non-friable asbestos floor tile mastic abatement activities will be completed in accordance with the following procedures (regulated area set-up and removal procedures):

Set-up of Regulated Area:

• The Contractor will complete the removal of the asbestos floor tile mastic materials inside of the same regulated area set-up for the removal of Class II non-friable asbestos floor tile materials. The same set-up will be used for non-asbestos floor tile when asbestos floor tile mastic is present.

Removal Procedures:

- The Contractor will be allowed to use chemical mastic remover for the removal of the asbestos floor tile mastic. The Contractor will note in the bid any specific conditions to the use of chemical mastic remover.
- The Contractor will be allowed to use grinding methods for the removal of asbestos floor tile mastic

if the removal is inside of a negative pressure enclosure with TEM clearance sampling.

- The Contractor will not be allowed to use a "shot blaster" type device for the removal of the asbestos floor tile mastic.
- All removal of asbestos floor tile mastic will be completed using wet methods.
- All floor tile mastic materials will be placed in lined fiber drums or six-mil polyethylene bags for disposal.
- Flooring and its backing will not be sanded.
- Vacuums equipped with HEPA filters, disposable dust bags and metal floor tools (no brushes) shall be used to clean the floors.
- Dry sweeping is prohibited.

Personal Protection Equipment and Procedures:

• The Contractor will complete the removal of the asbestos floor tile mastic with the same personal protection equipment requirements and procedures in place for the removal of Class II non-friable asbestos floor tile materials.

Final Cleaning Procedures:

- The Contractor will complete the removal of the asbestos floor tile mastic with the same final cleaning procedures in place for the removal of Class II non-friable asbestos floor tile materials.
- In addition, if the Contractor uses a chemical floor tile mastic remover during the project, the Contractor will be required to complete floor cleaning per the manufacturers recommendation. The Contractor will submit a signed attestation indicating that "all manufacturers recommendations were followed during the removal of asbestos floor tile mastic using chemical mastic remover". This attestation must be received prior to release of final payment.

General Requirements:

• The Contractor will complete the removal of the asbestos floor tile mastic with the same general conditions as the removal of Class II non-friable asbestos floor tile materials.

Prohibited Work Practices:

• The Contractor will complete the removal of the asbestos floor tile mastic with the same general conditions as the removal of Class II non-friable asbestos floor tile materials.

11.4 Class I Glovebag Abatement Procedures:

All glovebag abatement activities for asbestos thermal system insulation will be completed in accordance with the following procedures (regulated area set-up and removal techniques):

Set-up of Regulated Area:

- All Class I work, including set-up of the glovebags and other control systems, shall be supervised by a competent person (accredited asbestos supervisor).
- Critical barriers shall be placed over all openings to the regulated area, including all doors, operable windows and vents. Openings will include openings between rooms once ceilings have been removed. Critical barriers shall be placed over all doors leading to non-project areas, such as, but not limited to, adjacent rooms, storage areas, closets and bathrooms. These requirement may be eliminated if less than 10 square/25 lineal feet of material will be removed and no other workers are in the areas adjacent to the regulated area.
- Two critical barriers shall be placed over all HVAC system openings inside of the regulated area.
- Impermeable dropcloths shall be placed on all surfaces below the removal activity.
- All objects within the regulated area shall be covered with impermeable dropcloths or plastic sheeting which is secured by duct tape.
- Air filtration devices shall be placed inside of the regulated area and exhausted outside of the building. A minimum of one (1) air filtration device will be placed in each functional space to provide a sufficient air exchange and appropriate air flow through the regulated area.
- For all projects involving the removal of more than 25 lineal feet of friable material using glovebags, a full, three chamber decontamination unit, complete with an operable shower chamber, will be set-up

at the adjacent to the regulated area. The Contractor will be responsible for providing water from an access point in the building to the shower via hoses. The Contractor will be allowed to use alternate decontamination procedures, as allowed by the OSHA Asbestos Standard for Class I projects, if the only water sources are in excess of 200' from an access point for the enclosure.

Asbestos warning signs will be placed on placed on the outside of the critical barriers prior to the commencement of abatement activities.

Set-up and Use of Glovebags:

- All glovebags shall be made of six mil polyethylene sheeting and shall be seamless at the bottom.
- Each glovebag shall be installed so that it completely covers the circumference of the pipe.
- Glovebags shall be smoke-tested for leaks and any leaks sealed prior to use.

Removal Procedures

- Glovebags shall be used only once and may not be moved.
- Glovebags shall not be used on surfaces whose temperatures exceed 150° F.
- Prior to disposal, glovebags shall be collapsed by removing air within them using a HEPA vacuum.
- Before beginning the operation, loose and friable material adjacent to the glovebag operation shall be wrapped and sealed in two layers of six mil polyethylene sheeting or otherwise rendered intact.
- At least two persons shall perform Class I glovebag removal procedures.

Personal Protection Equipment and Procedures:

- All employees performing Class I work practices inside of the regulated area established by these procedures will wear respiratory protection (minimum = half-face negative pressure respirator).
- All employees performing Class I work practices inside of the regulated area established by these procedures will wear disposable coveralls.
- All workers will be required to properly decontaminate when exiting the regulated area.
- Any worker found in violation of these requirements and procedures will be removed from the project site for the duration of the project. healthAIR, inc.'s on-site Project Manager will contact the Contractor's Main Office to inform the Contractor of the need to relocate the employee.

Final Cleaning Procedures:

- All dropcloths will be removed and disposed of as asbestos waste. This will be completed as the final activity of final cleaning.
- All exposed ends on piping systems will be neatly sealed with bridging encapsulant.

General Requirements:

All work conducted by the Contractor will use the following engineering controls and work practices regardless of the levels of exposure:

- 1. Vacuum cleaners equipped with HEPA filters to collect all debris and dust.
- 2. Wet methods to control employee exposures during all handling of asbestos.
- 3. Prompt clean-up and disposal of wastes and debris in leak tight containers.
- 4. Local exhaust ventilation equipped with HEPA filters.
- 5. Enclosure or isolation of processes producing asbestos dust.
- 6. Ventilation of the regulated area to move contaminated air away from the breathing zone of employees and toward a filtration or collection device equipped with a HEPA filter.

Prohibited Work Practices:

The following work practices and engineering controls shall not be used for these projects regardless of the level of exposure:

- 1. High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filters.
- 2. Compressed air used to remove asbestos unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the

compressed air.

- 3. Dry sweeping, dry shoveling or other dry clean-up of asbestos waste and debris.
- 4. Employee rotation as a means of reducing employee exposure to asbestos.

11.5 **Class II Intact/Non-Friable Transite Panel Abatement Procedures:**

All non-friable asbestos transite panels, which includes siding, shingles, soffits and panels in window frames, abatement activities will be completed in accordance with the following Class II intact removal procedures (regulated area set-up and removal techniques):

Set-up of Regulated Area:

- All Class II work shall be supervised by a competent person (accredited asbestos supervisor). The competent person will be required to ensure that all panels are removed intact and that all procedures relating to the removal are strictly followed.
- The Contractor will set-up asbestos warning signs and asbestos banner tape to mark the regulated area.
- The need for additional set-up/engineering controls, such as critical barriers or AFDs, will be on a site specific basis and will be added when necessary. In most cases, these will be added when abatement is completed inside of the building.

Removal Procedures:

- Cutting, abrading or breaking the transite panels shall be prohibited unless the Contractor can demonstrate that methods less likely to result in asbestos fiber release cannot be used.
- Each panel shall be sprayed with amended water prior to removal.
- All nails shall be cut with flat, sharp instruments.
- The panels will be carefully removed intact and immediately lowered to the ground using a dust-tight chute, crane or hoist, or placed in an impervious waste bag or wrapped in plastic sheeting and lowered to the ground no later than the end of the work shift. The panels will not be dropped, thrown, slide or otherwise moved in manner with may damage or disturb the asbestos material.
- Cracked or broken panels will not be left inside of a regulated area. The Contractor will remove all portions of cracked, broken or otherwise damaged panels.
- All of the materials will be wrapped in a minimum of one layer of six-mil polyethylene sheeting and disposed of as a Category II non-friable material at a Type II construction landfill.

Personal Protection Equipment and Procedures:

- All employees performing Class II work practices inside of the regulated area established by these procedures will wear respiratory protection (minimum = half-face negative pressure respirator) unless an initial negative exposure assessment has been produced for this operation and is present at the project site.
- All employees performing Class II work practices inside of the regulated area established by these procedures will wear disposable coveralls unless an initial negative exposure assessment has been produced for this operation and is present at the project site.
- A polyethylene drop cloth will be set-up to all a location for workers to decontaminate their clothing, tools and equipment at the conclusion of removal activities unless an initial negative exposure assessment has been produced for this operation and is present at the project site.
- Any worker found in violation of these requirements and procedures will be removed from the project site for the duration of the project. healthAIR, inc.'s on-site Project Manager will contact the Contractor's Main Office to inform the Contractor of the need to relocate the employee.

Final Cleaning Procedures:

- All dropcloths will be removed and disposed of as asbestos waste. This will be completed as the final activity of final cleaning.
- All exposed ends on adjacent panels will be neatly sealed with bridging encapsulant.
- Any remaining tracking, such as those present with windows, will be final cleaned using a combination of HEPA vacuuming and wet-wiping.

General Requirements:

All work conducted by the Contractor will use the following engineering controls and work practices regardless of the levels of exposure:

- 1. Vacuum cleaners equipped with HEPA filters to collect all debris and dust.
- 2. Wet methods to control employee exposures during all handling of asbestos.
- 3. Prompt clean-up and disposal of wastes and debris in leak tight containers.

Prohibited Work Practices:

The following work practices and engineering controls shall not be used for these projects regardless of the level of exposure:

- 1. High-speed abrasive disc saws that are not equipped with point of cut ventilator or enclosures with HEPA filters.
- 2. Compressed air used to remove asbestos unless the compressed air is used in conjunction with an enclosed ventilation system designed to capture the dust cloud created by the compressed air.
- 3. Dry sweeping, dry shoveling or other dry clean-up of asbestos waste and debris.
- 4. Employee rotation as a means of reducing employee exposure to asbestos.
- Note: These procedure described in this section do not apply to transite ceilings, circumstances where the material cannot be removed substantially intact or any circumstances were friable removal techniques are employed.



Environmental Consulting/Health & Safety Services/Hazardous Waste Management

October 15, 2007

Mr. Ken Miller Director of Operations Troy School District 1140 Rankin Street Troy, Michigan 48083

RE: Purchase Order Request for Bid No. 07.07 Asbestos Abatement Old Baker Middle School

Dear Mr. Miller:

Pursuant to the request of Troy School District, healthAIR, inc. prepared an RFQ for abatement of asbestos floor tile, asbestos floor tile mastic, and asbestos pie insulation at Old Baker Middle School. The project is being completed to support upcoming renovation activities. healthAIR, inc. requested and received a quotations from four (4) state of Michigan licensed and accredited asbestos abatement contractors. healthAIR, inc. has reviewed the submitted bid from the lowest bidder, evaluated the bid, and determined that bid was inclusive and correct. healthAIR, inc. requests your approval to award a contract or Purchase Order in the amount shown:

<u>Contractor</u> Qualified Abatement Services, Inc. 1935 McGraw Detroit, Michigan 48206 [Phone: (313) 361-6003] [Fax: (313) 361-6143]

<u>Amount</u> \$7,500.00

healthAIR, inc. has attached a copy of all submitted bids for Bid No. 07.07, as well as a complete bid tabulation for the bid. The low bid has been highlighted.

Please show your approval to issue a contract to Qualified Abatement Services, Inc. by signing the "Approved By" section below and returning a copy of this letter to our office. healthAIR, inc. will coordinate the issuance of Troy School District's Purchase Order after receiving your approval of this Purchase Order Request.

If you have any questions regarding this recommendation, or require any additional documentation in support of Qualified Abatement Services, Inc., please feel free to contact me at (248) 426-0165.

Sincerely,

healthAIR, inc.

Steven L. Roach Project Administrator, TSD

Approved By:

Troy School District

Date:

23937 Research Dr. • Farmington Hills, MI 48335 Phone: (248) 426-0165 • Fax: (248) 427-0305

336 Inverness Drive • Cary, IL 60013 Phone: (847) 462-9687 • Fax: (847) 462-9724 Mr. Ken Miller October 15, 2007 Page Two

cc: Mr. Forrest Goyette, Qualified Abatement Services, Inc.

- Attach: Bid No. 07.07 Bid Tabulation Bid Forms for "Bid No. 07.07 - Old Baker Middle School"
- File: 07763 recommendation.qasi.07.07.oldbaker.07763.tsd.wpd

TROY SCHOOL DISTRICT Bid No. 07.07 Asbestos Abatement Old Baker Middle School



BID RESULTS	Bid No. 07.07
Contractor / Planholder	Old Baker MS
Qualified Abatement Services, Inc.	\$7,500.00
Trust Thermal Abatement	\$9,300.00
American Abatement Systems, Inc.	\$9,493.00
Environmental Maintenance Engineers, Inc.	\$9,728.00
Low Bid Amount	\$7,500.00
Low Bidder	QASI

Notes

1 - All bids faxed to healthAIR, inc.'s Farmington Hills office.

QUOTATION FORM

The Bidder hereby agrees and certifies to comply with all requirements described within this Request for Quotation and agrees to accept a payment of

Bid No. 07.07 - Old Baker Middle School	
Seven Thousand Five Hundred	dollars (\$ 7,500.00)
Written Bid Cost	Numerical Bid Cost

for all work regarding this bid as described in the Request for Quotation documentation provided by healthAIR, inc. (dated Thursday, October 11, 2007). Any and all special conditions noted by the Contractor are indicated on the bottom of the bid form.

The Bidder agrees and certifies that the above stated cost includes all charges for all wages, overtime, taxes, materials, supplies, equipment, disposal costs, notification costs, general conditions, aupervision, insurance, overhead, profit and incidental expenses and fees.

The Undersigned, a Representative of the Bidder, hereby authorizes and requests any person, firm, or corporation to furnish any additional information requested by the Troy School District in verification of the Bidder's qualifications.

COMPANY NAME	Qualified Abatement Services, Inc.
PRINT NAME	Forrespecture
TITLE	President of Matter
SIGNATURE	Jam offer
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Specific Exclusions/Conditions Made by Bidder: Please note any specific exclusions or conditions to your bid, including probable deviations or extensions to the proposed time schedule. Attach additional pages if necessary.

> BIDS MUST BE FAXED TO healtbAIR, inc. BY 12:00 p.m., MONDAY, OCTOBER 15, 2007 Fax to (248) 427-0305

QUOTATION FORM

The Bidder hereby agrees and certifies to comply with all requirements described within this Request for Quotation and agrees to accept a payment of

Bid No. 07.07 - Old Baker Middle School	
Time thousand three hundres	
	Numerical Bid Court

for all work regarding this bid as described in the Request for Quotation documentation provided by healthAIR, inc. (dated Thursday, October 11, 2007). Any and all special conditions noted by the Contractor are indicated on the bottom of the bid form.

The Bidder agrees and certifies that the above stated cost includes all charges for all wages, overtime, taxes, materials, supplies, equipment, disposal costs, notification costs, general conditions, supervision, insurance, overhead, profit and incidental expenses and fees.

The Undersigned, a Representative of the Bidder, hereby authorizes and requests any person, firm, or corporation to furnish any additional information requested by the Troy School District in verification of the Bidder's qualifications.

COMPANY NAME 1	rust Th	srmg	Abatement
PRINT NAME			
TITLE	ingerin	tenden	}
SIGNATURE	Jam	-D.K	

Specific Exclusions/Conditions Made by Bidder:

Please note any specific exclusions or conditions to your bid, including probable deviations or extensions to the proposed time schedule. Attach additional pages if necessary.

BIDS MUST BE FAXED TO healthAIR, Inc. BY 12:00 p.m., MONDAY, OCTOBER 15, 2007 Fax to (248) 427-0305

QUOTATION FORM

The Bidder hereby agrees and certifies to comply with all requirements described within this Request for Quotation and agrees to accept a payment of

Bid No. 07.07 - Old Baker Middle School Nine Thousand Four Hundred Ninety Three and no/100--- dollars (5 9,493.00) Written Bid Cost

for all work regarding this bid as described in the Request for Quotation documentation provided by healthAIR, inc. (dated Thursday, October 11, 2007). Any and all special conditions noted by the Contractor are indicated on the bottom of the bid form.

The Bidder agrees and certifies that the above stated cost includes all charges for all wages, overtime, taxes, materials, supplies, equipment, disposal costs, notification costs, general conditions, supervision, insurance, overheud, profit and incidental expenses and fees.

The Undersigned, a Representative of the Bidder, hereby authorizes and requests any person, firm, or corporation to furnish any additional information requested by the Troy School District in verification of the Bidder's qualifications.

COMPANY NAME	American Abatement Systems, Inc.
PRINT NAME	Thomas B. Ross
TITLE	President
SIGNATURE	How Blon

Specific Exclusions/Conditions Made by Bidder:

Please note any specific exclusions or conditions to your bid, including prohable deviations or extensions to the proposed time schedule. Attach additional pages if necessary,

	BIDS MUST BE FAXED TO	
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QUOTATION FORM

The Bidder hereby agrees and certifies to comply with all requirements described within this Request for Quotation and agrees to accept a payment of

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	nmerical Bid Cost

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COMPANY NAME	En Uivos mental	Mais trane	E-silven,	I-C
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TITLE	Protect managen /	Estamator		
SIGNATURE	-	4 C	\sum	
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