Aria Environmental, Inc.
INDUSTRIAL HYGIENE & SAFETY CONSULTANTS

March 29, 2018

Mr. Jeff Klenk
Howard County Public School System (HCPSS)
10910 Route 108
Ellicott City, MD 21043

RE: Indoor Air Quality Assessments during Renovations at Waverly Elementary School
Project #J17-1037 (February 9 and 16, 2018)

Dear Mr. Klenk,

Aria Environmental, Inc. (AE) is pleased to present this report of findings for indoor air quality assessments conducted at Waverly Elementary School (Waverly). Jeff Klenk of HCPSS requested AE make frequent visits to Waverly to monitor indoor air quality that may be affected by the current major renovation of the school. The visits discussed in this report were performed on February 9 and 16, 2018 and included work site observations, and real-time measurements for particles, indoor air quality parameters (temperature, humidity, carbon monoxide (CO) and carbon dioxide (CO_2)) and volatile organic compounds (VOCs). These assessments were performed by Julie Barth, CIH, CSP, LEED Green Associate or Tony Schwegmann, Industrial Hygienist, of AE. Presented below are observations and recommendations made based upon conditions readily observed on the reported dates.

Particles

Particulate matter or PM is the term for a mixture of solid particles and liquid droplets found in the air. It does not distinguish between the types of particles in the air (e.g., pollen, skin cells, soil, etc.). Particulate matter includes "inhalable coarse particles," with diameters larger than 2.5 micrometers and smaller than 10 micrometers (PM10) and "fine particles," with diameters that are 2.5 micrometers and smaller (PM2.5). A micrometer is also called a micron and is one millionth of a meter. To put these particle diameters in perspective, the average human hair is about 70 micrometers in diameter – making it 30 times larger than the largest fine particle. Particle loads expected to be a part of the school environment include carpet and clothing fiber, soil tracked in from outside, paper dust and dust and fibers from building materials.

ANSI/ASHRAE Standard 62.1–2016 suggests target indoor concentrations for PM2.5 and PM10 of 15 µg/m^3 and 50 µg/m^3, respectively. These concentrations are taken from the EPA's National Ambient Air Quality Standards (NAAQS) based on annual arithmetic means deemed acceptable for outdoor air quality. Occupational standards and guidelines for particles are nearly an order of magnitude higher than concentrations typically found in non-occupational settings and are not appropriate for comparison. Particle measurements were taken with an Aerocet 531 particulate monitor. The particle monitor takes a two minute averaged sample of particle concentrations in 5 size fractions (PM1, PM 2.5, PM 7, PM10 and total suspended particles (TSP)). Results of particulate monitoring are presented in Tables 1, 2, 3 and 4.

Discussion of Particle Results for February 9, 2018

The PM2.5 particle concentrations ranged from 3 to 16 µg/m^3 and PM10 particle concentrations ranged from 29 to 141 µg/m^3 in the hallways outside the construction zones and in non-construction areas. A measurement inside the containment was also taken on the day of the survey for comparison purposes. The school was occupied as usual for a normal school day. PM 2.5 concentrations were below the target concentration in all areas monitored outside of the

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construction area. PM 10 concentrations were above the target concentrations in four areas close to construction barriers but also with student activity nearby. No sticky mat for dust control was in place near the containment door in the back hallway. Results of particulate monitoring are presented in Table 1.

Table 1 – Results of Particulate Monitoring Waverly Elementary School on February 9, 2018

Location	Time	PM1 (µg/m³)	PM2.5 (µg/m³)	PM7 (µg/m³)	PM10 (µg/m³)	TSP (µg/m³)
Lobby	13:46	0	9	75	**113**	176
Hall near Band Room and Containment	13:48	0	12	103	**141**	191
Lobby near Office and Containment	13:51	0	5	28	44	69
Hall at Room A123	13:53	0	4	24	41	79
Hall at Media Center	13:57	0	3	25	30	49
Media Center	13:59	0	6	28	39	51
Hall near Room B136	14:03	0	5	23	29	37
Back Containment Door	14:06	0	7	53	**71**	104
Inside Containment	14:09	7	**58**	339	**519**	794
Health Room	14:19	2	**16**	81	**105**	137
Outside	14:25	0	1	3	4	8

Bold-faced results indicate results above target concentrations.

Discussion of Particle Results for February 16, 2018

The PM2.5 particle concentrations ranged from 0 to 59 µg/m³ and PM10 particle concentrations ranged from 0 to 341 µg/m³ in the hallways outside the construction zones and in non-construction areas. PM2.5 and PM10 particle concentrations were above the target concentrations in five areas outside of the construction zone. Students were not present in the school on the day of the survey and the building was occupied only by school staff and construction personnel. Drilling and cutting of brick on the front of the building near the main entrance was observed on the day of the survey. Results of particulate monitoring are presented in Table 2.

Table 2 – Results of Particulate Monitoring Waverly Elementary School on February 16, 2018

Location	Time	PM1 (µg/m³)	PM2.5 (µg/m³)	PM7 (µg/m³)	PM10 (µg/m³)	TSP (µg/m³)
Hall near Band Room and Containment	12:32	4	**41**	261	**341**	427
Lobby near Office and Containment	12:34	3	**30**	123	**160**	196
Room 115	12:37	0	5	23	34	43
Health Room	12:41	8	**59**	198	**230**	254
Hall near Room A123	12:44	4	**35**	135	**160**	191
Pod Center B153	12:47	0	0	5	5	11
Hall at Media Center	12:49	0	0	6	8	10
Media Center	12:52	0	0	0	0	1

Table 2 – Results of Particulate Monitoring Waverly Elementary School on February 16, 2018

Location	Time	PM1 (µg/m³)	PM2.5 (µg/m³)	PM7 (µg/m³)	PM10 (µg/m³)	TSP (µg/m³)
Back Hall near Room C107	12:56	0	0	1	1	2
Back Containment	12:59	0	0	10	13	18
Lobby near Cafeteria Entrance	13:03	2	**20**	80	**96**	111
Outside	13:05	0	0	28	28	35

Bold-faced results indicate results above target concentrations

Indoor Air Quality Measurements

Industry guidelines or standards for seasonal temperature and humidity ranges for thermal comfort are established by the American National Standards Institute (ANSI) and the American Society for Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) standard 55-2013. These ranges are presented in Table 3. The U.S. Environmental Protection Agency (EPA) recommends maintaining indoor relative humidity below 60% and ideally between 30 and 50%. Low humidity is expected in buildings that do not add humidity during the heating season. The comfort ranges are only set for the Summer and Winter seasons when temperatures are usually consistent. There are no Fall or Spring ranges because these seasons can include both heating and cooling modes of HVAC operation. Carbon dioxide and carbon monoxide measurements are used to assess ventilation system performance. The exhaled breath of building occupants is the main indoor source of carbon dioxide; therefore, the build-up of carbon dioxide indicates inadequate ventilation. Results of temperature, relative humidity, carbon dioxide and carbon monoxide monitoring are presented in Tables 4 and 5 below.

Table 3- Acceptable Ranges of Temperature and Relative Humidity in Summer and Winter[a]

Relative Humidity	Winter Temperature	Summer Temperature
30%	68.5°F – 76.0°F	74.0°F – 80.0°F
40%	68.5°F - 75.5°F	73.5°F – 79.5°F
50%	68.5°F - 74.5°F	73.0°F – 79.0°F
60%	68.0°F - 74.0°F	72.5°F – 78.0°F

[a]adapted from ASHRAE Standard 55-2013

Real Time Volatile Organic Compounds Measurements

Instantaneous measurements for volatile organic compounds (VOCs) were collected using a ppbRae 3000 monitor calibrated using isobutylene gas. This instrument is used as a screening tool for VOCs in general with a limit of detection of 1 ppb. VOCs include a variety of chemicals, some of which may cause adverse health effects. Concentrations of many VOCs are generally higher indoors than outdoors. VOCs are emitted by many common products including paints, paint strippers, cleaning supplies, building materials, furnishings, fuels, office equipment and supplies, glues, and permanent markers, as well as cosmetics, perfumes and other personal hygiene products. These products can release organic compounds while being used or stored. It is important to note that the measurements taken are instantaneous and are intended to aid the inspector in detecting potential sources of VOC contamination. A VOC source is suspected when the measured concentration is significantly higher than the outdoor concentration or if a spike in concentration is seen in one location compared to others. Results of VOC monitoring are also presented in Tables 4 and 5 below.

Discussion of IAQ and VOC Measurements for February 9, 2018

The indoor temperatures for February 9, 2018 ranged from 64.2°F to 70.1°F. Temperature measurements in classrooms and occupied areas of the school were within the recommended comfort ranges in all areas with a few exceptions. Indoor relative humidity measurements ranged from 22.9% to 32.5%. Seven of the nine indoor locations measured were below the recommended range of 30 to 60%. Lower than normal relative humidity is expected in the winter season in buildings that do not add humidity to conditioned air.

Carbon dioxide concentrations ranged from 442 to 974 ppm within indoor occupied areas. The concentration of concern for carbon dioxide is set by ANSI/ASHRAE standard 62.1 as 700 ppm above outdoor air. On the day of monitoring, the outdoor air concentration of carbon dioxide was 287 ppm; therefore, concentrations were below the target concentration in all areas monitored. Measurements were made during a normal day when the school was fully occupied.

Carbon monoxide is mainly attributed to incomplete combustion. Indoor concentrations of CO ranged from 0.0 to 0.8 ppm in all locations measured. The outdoor concentration was 0.0 ppm. All measurements were below the ASHRAE concentration of concern (9 ppm).

Indoor concentrations of VOCs measured ranged from 16 to 481 ppb, and the outdoor measurement was 0 ppb. The measurements are considered low and do not indicate any obvious source of VOCs above a normal building background level. Results of IAQ and VOC monitoring are presented in Table 4.

Table 4 – Results of Indoor Air Quality (IAQ) Measurements at Waverly Elementary School on February 9, 2018

Location	Time	Temperature (°F)	Relative Humidity (Rh%)	Carbon Monoxide (CO)	Carbon Dioxide (CO_2)	Volatile Organic Compounds (VOCs)
Lobby	13:46	**64.2**	32.5	0.0	974	150
Hall near Band Room and Containment	13:48	**65.2**	30.4	0.6	940	125
Lobby near Office and Containment	13:51	**66.5**	**29.6**	0.8	944	52
Hall at Room A123	13:53	**67.7**	**28.8**	0.8	892	73
Hall at Media Center	13:57	69.1	**27.5**	0.1	798	16
Media Center	13:59	70.0	**26.8**	0.2	785	481
Hall near Room B136	14:03	70.1	**24.8**	0.0	676	270
Back Containment	14:06	69.4	**22.9**	0.0	442	387
Inside Containment	14:09	56.3	24.9	1.0	326	236
Health Room	14:19	69.9	**27.6**	0.0	822	223
Outside	14:25	43.6	40.4	0.0	287	0

Bold-faced indicates results outside of recommended comfort ranges or target concentrations.

Discussion of IAQ and VOC Measurements for February 16, 2018

The indoor temperatures for February 16, 2018 ranged from 69.4°F to 72.6°F. Temperature measurements in classrooms and occupied areas of the school were within the recommended comfort ranges. Indoor relative humidity measurements ranged from 47.9% to 54.9%. All of the locations measured were within the recommended range of 30 to 60%.

Carbon dioxide concentrations ranged from 295 to 381 ppm within indoor occupied areas. The concentration of concern for carbon dioxide is set by ANSI/ASHRAE standard 62.1 as 700 ppm above outdoor air. On the day of monitoring, the outdoor air concentration of carbon dioxide was 265 ppm; therefore, concentrations were below the target concentration in all areas monitored. Measurements were made during a day when only school staff and construction personnel were present at the school.

Carbon monoxide is mainly attributed to incomplete combustion. Indoor concentrations of CO were consistently 0.0 ppm in all locations measured and the outdoor concentration was 0.0 ppm. All measurements were below the ASHRAE concentration of concern (9 ppm).

Indoor concentrations of VOCs measured on February 16, 2018 were 0 ppb in all locations measured, and the outdoor measurement was 0 ppb. The measurements are considered low and do not indicate any obvious source of VOCs. Results of IAQ and VOC monitoring are presented in Table 5.

Table 5 – Results of Indoor Air Quality (IAQ) Measurements at Waverly Elementary School on February 16, 2018

Location	Time	Temperature (°F)	Relative Humidity (Rh%)	Carbon Monoxide (CO)	Carbon Dioxide (CO_2)	Volatile Organic Compounds (VOCs)
Hall near Band Room and Containment	12:32	72.6	48.4	0.0	366	0
Lobby near Office and Containment	12:34	71.4	51.6	0.0	312	0
Room 115	12:37	71.6	49.8	0.0	381	0
Health Room	12:41	71.4	51.0	0.0	348	0
Hall near Room A123	12:44	71.3	50.8	0.0	363	0
Pod Center B153	12:47	71.1	50.3	0.0	307	0
Hall at Media Center	12:49	71.4	49.4	0.0	295	0
Media Center	12:52	71.7	47.9	0.0	303	0
Back Hall near Room C107	12:56	70.7	49.3	0.0	300	0
Back Containment	12:59	69.4	50.4	0.0	329	0
Lobby near Cafeteria Entrance	13:03	70.0	54.9	0.0	341	0
Outside	13:05	66.4	53.6	0.0	265	0

Bold-faced indicates results outside of recommended comfort ranges or target concentrations.

Conclusions and Recommendations

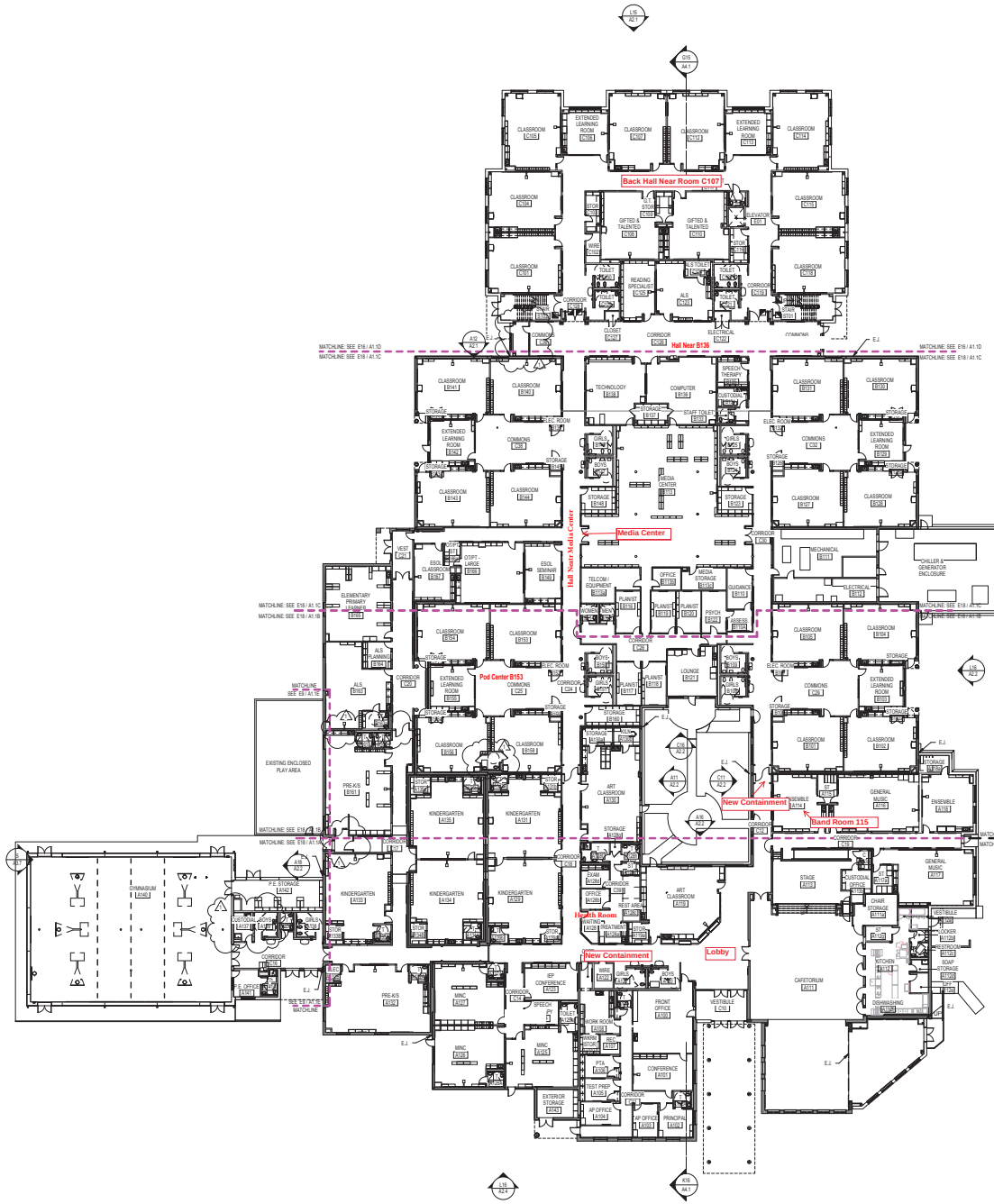
Based upon our observations and sampling results on February 9 and 16, 2018 at Waverly Elementary School, measures are being taken to prevent construction dust and odors from entering the occupied areas of the school. Only a few measurements were above the recommended concentrations in a few areas during these two school visits. The school is fully occupied. Elevated concentrations are expected and are not entirely due to construction activities. The tiled floors were being kept clean of visible dust, however dust was observed near a door in the Media Center that leads to the construction area. The door is labeled as not for construction use although it has been reported that construction personnel were observed using

the door. To reduce the transfer of dust from the construction area to non-construction areas, this door should not be used by construction personnel. Fluctuations of dust and VOC concentrations are influenced by the types of construction activities occurring and also by student and staff activities and are expected to vary over time. A floor plan with measurement locations for the school is attached. Also, to reduce dust and soil being tracked inside the school, a sticky mat should be kept in place and refreshed regularly at containment doors that are used by construction workers.

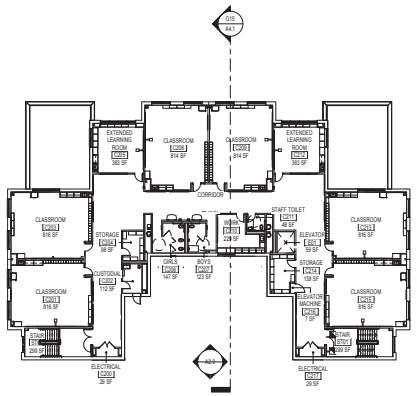
AE will continue to make weekly visits to Waverly Elementary School as requested. Thank you for choosing Aria Environmental, Inc. for your industrial hygiene consulting needs. Should you have any questions about the information contained herein, please do not hesitate to contact us at 410-549-5774.

Sincerely,
Aria Environmental, Inc.

Julie Barth, CIH, CSP, LEED Green Associate

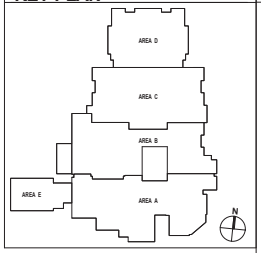


A15 OVERALL FIRST FLOOR PLAN
1" = 20'-0"
FIRST FLOOR 104,414 SF



A6 OVERALL SECOND FLOOR PLAN
1" = 20'-0"
SECOND FLOOR 11,328 SF

KEY PLAN



GENERAL NOTES

GENERAL NOTE APPLICABLE TO ALL DRAWINGS - ITEMS AND CONDITIONS DETAILED, NOTED OR OTHERWISE IDENTIFIED ON ONE OF THE SECTIONS OR DETAILS ARE APPLICABLE AND BINDING TO ALL OTHER SECTIONS AND DETAILS FOR IDENTICAL OR SIMILAR CONDITIONS.

1. ALL CONSTRUCTION AND WORK SHOWN ON THE COMPLETE SET OF DRAWINGS IS ASSUMED TO BE NEW AND FURNISHED AND INSTALLED BY THE CONTRACTOR.
2. IF A CONFLICT EXISTS BETWEEN DRAWINGS (AND/OR SPECIFICATIONS), THE MORE STRINGENT AND MORE COSTLY REQUIREMENT SHALL APPLY. ITEMS SHOWN ON THE DRAWINGS, BUT NOT SPECIFIED, SHALL APPLY AND BE FURNISHED AND INSTALLED BY THE CONTRACTOR. IF AN ITEM IS SHOWN ON THE DRAWINGS, BUT IS NOT INCLUDED IN THE SPECIFICATIONS, PROVIDE ITEM OF A QUALITY LEVEL CONSISTENT WITH THE GENERAL QUALITY LEVEL OF THE CONTRACT REQUIREMENTS. BRING CONFLICTS BETWEEN THE DRAWINGS AND SPECIFICATIONS TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.
3. WRITTEN INFORMATION TAKES PRECEDENT OVER DRAWING LINES. BRING CONFLICTS BETWEEN WRITTEN INFORMATION AND DRAWN LINES TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.
4. IF A CONFLICT EXISTS BETWEEN DRAWINGS OF DIFFERENT SCALES, CONSULT THE ARCHITECT FOR CLARIFICATION.
5. IN THE ABSENCE OF A WRITTEN DIMENSION, OR IN CASE OF DOUBT AS TO THE PROPER MEASUREMENT, CONSULT THE ARCHITECT FOR CLARIFICATION.
6. IF AN AREA OR SPACE IS SHOWN, BUT IS NOT CLEARLY DEFINED OR INDICATED BY NOTES, PROVIDE THE SAME MATERIALS AND FINISHES AS SCHEDULED OR DETAILED FOR AREAS OF SIMILAR USE ELSEWHERE IN THE BUILDING.
7. SECTIONS INDICATED ARE INTENDED TO SHOW THE SPECIFIC CONSTRUCTION WHERE REFERENCED AS WELL AS ESTABLISH THE GENERAL CONSTRUCTION DETAILS FOR SECTIONS THROUGHOUT THE PROJECT WHICH DO NOT HAVE SPECIFIC SECTIONS DRAWN. THE MOST SIMILAR SECTIONS SHALL BE ADAPTED TO ANY SECTIONS NOT DETAILED. ANY SPECIFIC QUESTIONS CONCERNING CONSTRUCTION NOT ADEQUATELY COVERED BY THE ABOVE SHOULD BE DIRECTED TO THE ARCHITECT DURING BIDDING.
8. TYPICAL DETAILS THROUGHOUT THE DRAWING SET SHALL APPLY FOR ALL APPLICABLE CONDITIONS EVEN IF NOT SPECIFICALLY SHOWN OR REFERENCED.
9. SEE STRUCTURAL DRAWINGS FOR ACTUAL STRUCTURAL STEEL AND BEARING ELEVATIONS.
10. REFER TO ARCHITECTURAL SITE PLAN FOR THE LAYOUT OF CONCRETE WALKS, MOW STRIPS, PAVING PATTERNS, ETC. IN THE BUILDING VICINITY. REFER TO CIVIL DRAWINGS FOR THE CONTINUATION OF THIS WORK.
11. UNLESS NOTED OTHERWISE, WALLS SHALL EXTEND TO THE ROOF OR FLOOR DECK ABOVE AND BE SEALED IN ACCORDANCE WITH GENERAL PLAN NOTE #2 ON SHEET A1.1 AND WALL TERMINATION DETAILS ON WALL TYPE SHEET.
12. AT ALL OUTSIDE CORNERS OF INTERIOR CMU WALLS, COLUMN ENCLOSURES, PIPE CHASES OR OTHER WALL PROJECTIONS, PROVIDE MASONRY UNITS AND/OR GLAZED MASONRY UNITS WITH BULLNOSED (ROUNDED) EDGES WITH 1" RADIUS, UNLESS OTHERWISE NOTED OR WHERE SCHEDULED TO RECEIVE CERAMIC TILE. WHERE MASONRY CORNERS ALIGN WITH BULLNOSED, TRANSITION FROM BULLNOSE CORNER UNITS TO SQUARE CORNER UNITS.
13. UNLESS SPECIFICALLY NOTED OTHERWISE, ENCLOSE ALL VERTICAL MECHANICAL PIPES, RAIN LEADERS, ETC. WITH 4" CMU OR GYPSUM BOARD TO MATCH SURROUNDING FINISHES.
14. REFER TO PLANS AND ELEVATIONS FOR LOCATIONS OF CONTROL JOINTS (C.J.) AND EXPANSION JOINTS (E.J.) IN EXTERIOR MASONRY WALLS. IF A CONFLICT EXISTS BETWEEN JOINT LOCATIONS SHOWN ON THE ELEVATIONS AND PLANS, CONSULT THE ARCHITECT FOR CLARIFICATION PRIOR TO CONSTRUCTION. REFER TO FLOOR PLANS FOR LOCATIONS OF CONTROL JOINTS (C.J.) IN INTERIOR MASONRY WALLS.
15. ALL EXTERIOR CAVITY WALLS TO HAVE THRU-WALL FLASHING AT THE BOTTOM OF THE CAVITY WITH WEEP HOLES TO THE OUTSIDE. ALL FLASHING BUTT INTO WALLS SHALL BE LAPPED AND SEALED. REFER TO FLASHING DETAILS.
16. REFER TO BUILDING ELEVATIONS AND ELEVATION DETAILS FOR MASONRY PATTERNS.
17. INCLUDE PROJECTIONS, BEAM ENCLOSURES, RECESSES, BULKHEADS, PILASTERS AND SIMILAR ENCLOSURES AS PART OF WALL AND CEILING FINISHES AS SCHEDULED.
18. ALL APPURTENANCES BUILT INTO OR THROUGH WALLS, INCLUDING DOORS, DUCTS, WINDOWS, LOUVERS, GRILLES, MECHANICAL WORK, ETC. SHALL FIT TIGHT AND BE THOROUGHLY SEALED AROUND PERIMETERS. WORK AT EXTERIOR WALLS SHALL BE FLASHED OR OTHERWISE WATERPROOF SEALED.
19. SEE FURNISHING PLANS (A-9 SERIES) FOR CASEWORK, CABINETS, LOCKERS, DISPLAY BOARDS AND CASES AND SIMILAR ITEMS.
20. FIELD CHECK ROUGH AND/OR FINISHED DIMENSIONS FOR ACCURATE FITTING OF CABINETS, COUNTERS, LOCKERS, DOORS, WINDOWS, FIXTURES, SHELVING, GATES AND OTHER INSTALLATIONS PRIOR TO SHOP OR FACTORY FABRICATION. PROVIDE FILLER STRIPS, SCRIBE STRIPS, BASES, CLOSURE FINISHES AND TRIM FOR A COMPLETE INSTALLATION.
21. PROVIDE APPROPRIATE TRANSITION STRIPS AT CHANGES IN FLOOR ELEVATIONS. ALL TO BE ADA COMPLIANT.
22. EACH CONTRACTOR SHALL REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS AND BE RESPONSIBLE FOR WORK PERTAINING TO THEIR PARTICULAR TRADE. ALL CONTRACTORS SHALL COORDINATE THE WORK OF ALL TRADES AND FIELD CHECK AGAINST ANY CONFLICTS BETWEEN DRAWINGS. REPORT CONFLICTS TO THE ARCHITECT FOR CLARIFICATION.
23. REFER TO PLUMBING, HVAC AND ELECTRICAL DRAWINGS FOR LOCATIONS AND DESCRIPTIONS OF ACCESS PANELS, LOUVER OPENINGS, VENTILATORS, GRILLES, VALVE CABINETS, FIRE DAMPERS OR OTHER APPURTENANCES AFFECTING WALLS, CEILINGS OR FLOORS. PROVIDE NECESSARY LINTELS, SUPPORT AND ANCHORAGE. SEE STRUCTURAL NOTES FOR LINTEL REQUIREMENTS.
24. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATIONS OF CONCRETE PADS TO BE PROVIDED BELOW OR AROUND EQUIPMENT.
25. INSTALL ELECTRIC SWITCHES, OUTLETS, THERMOSTATS, CONTROLS, CLOCKS, SPEAKERS, FLAGPOLE HOLDERS AND OTHER WALL-MOUNTED ACCESSORIES IN LOCATIONS WHICH ARE UNOBSTRUCTED BY CABINETS, COUNTERS, RACKS, DISPLAY BOARDS, FIXTURES, SHELVING OR OTHER FURNISHINGS OR EQUIPMENT DESIGNATED FOR SPACES SHOWN ON DRAWINGS. THESE DEVICES ARE SHOWN ON THE ARCHITECTURAL DRAWINGS TO ALERT OTHER SUB-CONTRACTORS OF THEIR PRESENCE. COORDINATE INSTALLATION WITH THE ELECTRICAL DRAWINGS. ADVISE THE ARCHITECT OF CONFLICTS IN LOCATION OR TYPES OF DEVICES SHOWN PRIOR TO INSTALLATION. DO NOT INSTALL WALL-MOUNTED ITEMS ON, THROUGH OR INTO ANY EQUIPMENT UNLESS INDICATED.
26. MOUNT ELECTRIC SWITCHES, THERMOSTATS AND OTHER ELECTRONIC CONTROLS LOCATED IN THE SAME VICINITY AT THE SAME HEIGHT ABOVE FINISHED FLOOR IN A UNIFORM, ORDERLY FASHION UNLESS NOTED OTHERWISE. ALL MOUNTING HEIGHTS TO BE ADA COMPLIANT.

DRAWING KEY

GRID LINE
DRAWING NUMBER
SHEET NUMBER
SECTION
DETAIL NUMBER
SHEET NUMBER
ENLARGED PLAN/SECTION OR DETAIL
TYPICAL CMU PARTITION - SEE WALL TYPE SHEET FOR SPECIFIC WALL TYPES
GYPSUM & MTL. STUD PARTITION - SEE WALL TYPE SHEET FOR SPECIFIC WALL TYPES
EXISTING WALLS - VIF.
DETAIL NUMBER
SHEET NUMBER
INTERIOR ELEVATION
ROOM NAME
ROOM NUMBER
DOOR NO. ON PLAN
H.M. FRAME NO. ON PLAN
REVISION TYPE = A,B,(I/P,R,/C,C,D,)ADD.
CASEWORK (FURNISHING PLANS ONLY)
ALUM. FRAME/WINDOW TYPE
WALL TYPE

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GP #21480

WAVERLY ELEMENTARY SCHOOL RENOVATION & ADDITION
10220 WETHERBURN ROAD ELLICOTT CITY, MARYLAND 21042

OVERALL PLANS

ΔP	DATE	DESCRIPTION
1	06/21/16	Addendum #1

A0.9
06/07/2016
BID SET