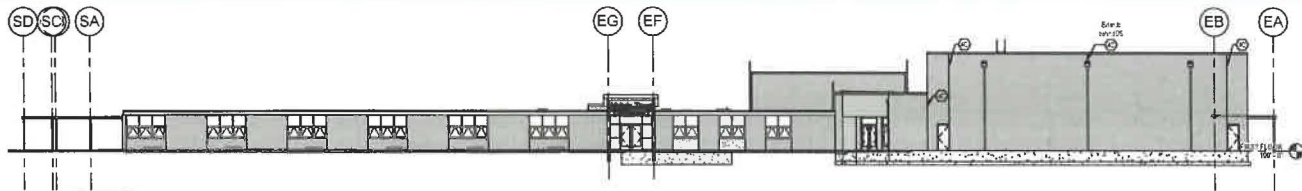


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1 EAST ELEVATION
A200 SCALE 1/16" = 1'-0"

SHEET KEYNOTES

- 42 CUT OPEN LAP Joints, REPLACE BACKER ROD & CALLS WITH NEW.
- 43 SCOPE TO BE DEFINED AT DEMOLISHED UNITS.



Emboss Design/Arch
 659431-6512
 908 Mainwood Drive,
 Newport, KY 41071

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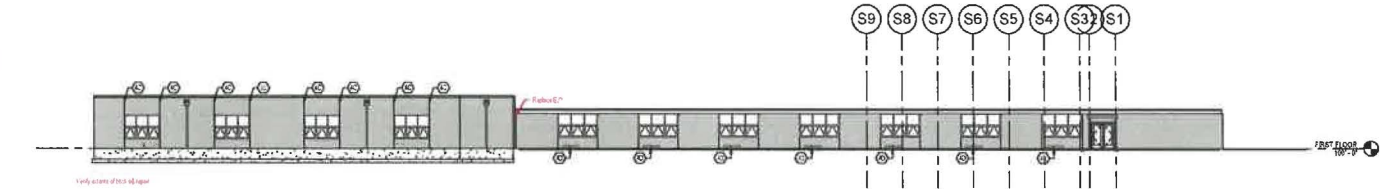
White's Tower Elementary Renovation
Kenton County School District
 2877 Harris Pike
 Independence, KY 41051
 BG# 25-351

NO.	DESCRIPTION	DATE
	DESIGN DEVELOPMENT	5/21/2025

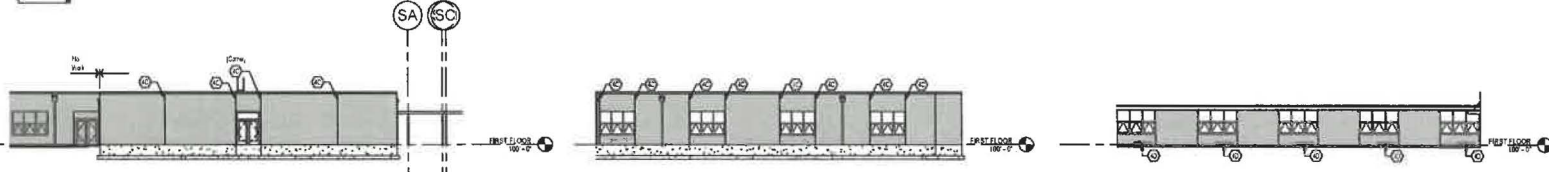
EXTERIOR ELEVATIONS

24-073

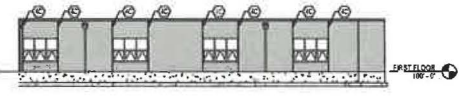
A200



2 SOUTH ELEVATION
A200 SCALE 1/16" = 1'-0"



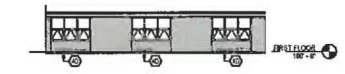
3 WEST ELEVATION - 1994 CLASSROOM WING
A200 SCALE 1/16" = 1'-0"



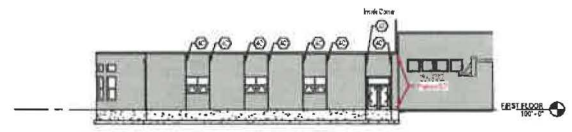
4 NORTH ELEVATION - 1994 CLASSROOM WING
A200 SCALE 1/16" = 1'-0"



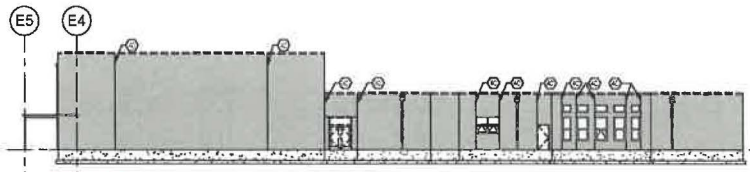
5 NORTH ELEVATION - 1964 CLASSROOMS
A200 SCALE 1/16" = 1'-0"



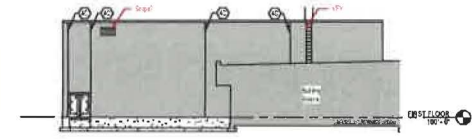
6 WEST ELEVATION - 1964 CLASSROOMS
A200 SCALE 1/16" = 1'-0"



7 WEST ELEVATION - 1994 MEDIA ADDITION
A200 SCALE 1/16" = 1'-0"



8 NORTH ELEVATION - 1994 GYM/MEDIA ADDITION
A200 SCALE 1/16" = 1'-0"



9 WEST ELEVATION - 1994 GYM ADDITION
A200 SCALE 1/16" = 1'-0"



10 SOUTH ELEVATION - 1994 GYM ADDITION
A200 SCALE 1/16" = 1'-0"

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PLUMBING GENERAL NOTES

- A. COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CAREWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC. PRIOR TO COMMENCING INSTALLATION WORK. ALL COORDINATES SHALL BE REVIEWED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.
- B. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR GASFITTING PURPOSES, PART OF THE PRECAUTIONS TO BE TAKEN RELATIVE TO NATURAL GAS AND ELECTRICAL LINES, VERIFY THE LOCATION, SIZE, TYPE, ETC. OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY. WHERE WORK IS REQUIRED ABOVE EXISTING LINES, PLACE THE SYSTEM BOARD CEILING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION OF REPLICATING, IF DAMAGED BY ALL CEILING OR TILE AND GRID MEMBERS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.
- D. ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.
- E. COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS.
- F. PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S STANDARDS) EXISTING WALLS, CEILING, ETC., THAT ARE TO REMAIN UNCHANGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
- G. OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMUNITY OR STATE ETC.)
- H. CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING WORK DURING DEMOLITION. IF ITEMS ARE UNCHANGED DURING DEMOLITION THEN VERIFY THE USE OF THE ITEM AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE OWNER TO REVIEW THE ROUTING.
- I. IF AREA OF CONSTRUCTION HAS A PORT TRENCH FLOOR SLAB, CONTRACTOR SHALL USE A SOUND OR OTHER APPROVED METHODS TO VERIFY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR PENETRATIONS.
- J. WHERE FIRE PROOFING IS SPECIFIED ON EXISTING STRUCTURE, ALL EXISTING CONCRETE, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTIVE LINES, MED GAS, ETC. SHALL BE MAINTAINED TO BE BELOW FULL THICKNESS OF FIRE PROTECTIVE WITH NO INTERFERENCE.
- K. ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE APPROXIMATELY 1/8" FIRE STOPPED PER THE APPLICABLE LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.
- L. ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.
- M. ALL PIPING IN ROOMS WITH CEILING SHALL BE ABOVE CEILING EXCEPT AS NOTED. LOCATIONS OF PIPING AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO ERROR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.
- N. ALL OFFSETS IN PIPING ARE NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.
- O. THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES OR OTHER COSTS THAT ANY UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (GAS, SEWER, WATER, ETC.)
- P. WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL, INTERIOR AND EXTERIOR WALL, ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS.
- R. ANY VIBRATING, OSCILLATING OR OTHER NOISE OR VIBRATION EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER, NOW OR STRUCTURALLY. CHANGING INSTALLATION SHALL BE SATISFACTORY REPLACES OR REPAIRS AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SATISFACTORY OF PARTICULAR INSTALLATION ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.
- S. DEMONSTRATION IN SIZE, LOCATION OF FINISH, ETC. FROM THAT USED AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEMONSTRATION WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
- T. VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY, ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE CEILING. IN GENERAL, ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.
- U. WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

PHASING NOTES

- A. THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAKE-OUT SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICE, STEAM GENERATION, ETC., WILL BE SERVICED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND FULLY OPERATIONAL PRIOR TO INTERRUPTING EXISTING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO INURE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RE-LOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL GRID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

PLUMBING DEMOLITION NOTES

- A. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING CEILING AS REQUIRED AND REINSTALLATION. TEMPORARILY SUPPORT LIGHTS, DIFFUSERS, CEILING ETC. REPLACE BROKEN CEILING TILES WITH NEW AT AN ADDITIONAL COST TO OWNER. FIELD VERIFY EXACT REQUIREMENTS.
- B. ALL OUTAGES SHALL BE SCHEDULED THROUGH THE PROJECT REPRESENTATIVE FOR PROPER COORDINATION. A REQUEST FOR AN OUTAGE SHALL BE SUBMITTED IN WRITING A MINIMUM OF TWO WEEKS IN ADVANCE.
- C. ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL RATED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MAINTAIN RATING.
- D. ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.
- E. HEAVY DASHED LINES INDICATE ITEMS FOR REMOVAL (G.O.N) AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- F. COORDINATE DISPOSAL OF ALL FURNITURE, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH THE OWNER.

HAZARDOUS MATERIAL NOTES

- A. THE CONTRACTOR IS HEREBY ADVISED OF THE POSSIBILITY THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDINGS. ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.
- B. CMTA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CMTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CMTA HAS NO LIABILITY FOR ANY RECOMMENDATIONS OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
- C. IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONTACTS OR RELATES IN ANY PHYSICAL MANNER TO EXISTING COMPARTMENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM IMMEDIATELY.
- D. THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK HEREBY AGREES TO BEING IN COMPLIANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, AGENCIES OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CMTA, ITS OFFICERS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.
- E. THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

ABBREVIATIONS LIST

AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
ATF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE (AMP, AMPS)
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APD	AIR PRESSURE DROP
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR-CONDITIONING ENGINEERS
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BHP	BREAK HORSEPOWER
BTU	BRITISH THERMAL UNIT
CBP	CAPACITY
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CL	CAST IRON
CLG	CEILING
CLR	CLEAR
CO	CLEANOUT
COND	CONDENS (HEAT, INSULATION, RATE)
CONT	CONTINU (ED, OUS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
DB	DEGREE
DB	DRY BULB
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE (S)
DIA	DIAMETER (S)
DN	DOWN
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION (TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
EXR	EXISTING TO REMAIN
EWAP	EVAPORAT (E, -ING, -ED, -OR, -ION)
EWV	ENTERING WATER TEMPERATURE
EXP	EXPANSION
EXT	EXTERIOR
FA	FREE AREA
FCO	FLOOR CLEANOUT
FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FFC	FIRE PROTECTION CONTRACTOR
FFM	FEET PER MINUTE
FFS	FEET PER SECOND
FT	FEET OR FOOT
FUT	FUTURE
FV	FACE VELOCITY
GA	GAGGEGUAGE
GAL	GALLON (S)

ABBREVIATIONS LIST (CONTINUED)

GC	GENERAL CONTRACTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRANIS
H	HUMIDITY
HD	HEAD
HG	MERCURY
HORIZ	HORIZONTAL
HP	H (OR)SPEEDER, -EAT PUMP)
HR	HOUR (S)
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING
HZ	HERTZ
ID	IDENTIFICATION, -INSIDE DIAMETER, -INSIDE DIMENSION)
IN	INCH (ES)
INSUL	INSULAT (ED, -ION)
INT	INTER (LOR, -ERVAL)
IPS	IRON PIPE SIZE
KWH	KILOWATT HOUR
LBS	POUNDS
LF	LINEAR FEET/FOOT
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MHM	BTU PER HOUR (THOUSANDS)
MCA	MINIMUM CIRCUIT AMPS
MFG	MANUFACTURER
MIN	MIN (IMUM, -UTIE)
MISC	MISCELLANEOUS
MSCP	MAXIMUM OVERCURRENT PROTECTION (AMPS)
MTO	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA OR NORMALLY CLOSED
NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN OR NUMBER
NYS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (AMETER, -ENSION)
OCF	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OCF	OWNER FURNISHED, CONTRACTOR INSTALL ED
OCF	OWNER FURNISHED, OWNER INSTALLED
OR	OPEN RECEPTACLE
OZ	OUNCE (S)
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	PHASE (ELECTRICAL)
PLBG	PLUMBING
PPM	PARTS PER MILLION
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	PSIG GAUGE
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SO	SQUARE
SG FT	SQUARE FEET OR FOOT

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED ON THIS PROJECT.

VALVE SYMBOL LEGEND

	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	AUTOMATIC AIR VENT (AAV)
	MANUAL AIR VENT (MAV)
	MANUAL BALANCING VALVE (BV)
	BALL VALVE
	BUTTERFLY VALVE
	TRIPLE DUTY VALVE (TDV)
	STRAINER
	MANUAL ISOLATION VALVE
	GLOBE VALVE
	OS&Y (OS&Y) VALVE
	PRESSURE REDUCING VALVE
	AUTO-FLOW CONTROL VALVE
	CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY

PLUMBING SYMBOL LEGEND

	FLEXIBLE PIPE CONNECTION
	FLOW METER (VENTURI)
	PIPING UNION
	FLOW SWITCH
	PRESSURE SWITCH
	TAMPER SWITCH
	THERMOMETER
	PET'S PLUG, TEMPERATURE/PRESSURE PORT

GENERAL SYMBOLS

	TAGGED NOTE DESIGNATOR
	REVISION TRIANGLE
	ROOM TAG
	EQUIPMENT TAG
	POINT OF CONNECTION / CONNECT TO EXISTING
	POINT OF DEMOLITION
	DOMESTIC WATER RISER TAG
	SANITARY WASTE & VENT RISER TAG
	FIRE SUPPRESSION RISER TAG
	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
	EXISTING PIPING - (XXX) DENOTES SYSTEM
	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM

PLUMBING PIPING LEGEND

	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
	PIPE TEE CONNECTION ON TOP
	PIPE TEE CONNECTION ON BOTTOM
	PIPE CAP
	COMPRESSED AIR
	CONDENSATE DRAIN
	CARBON DIOXIDE
	STEAM PIPING
	DOMESTIC COLD WATER (CW)
	DOMESTIC HOT WATER (HW)
	RECIRCULATED DOMESTIC HOT WATER (RH)
	HEATING WATER SUPPLY/RETURN
	SANITARY
	SANITARY VENT
	RAIN LEADER
	OVERFLOW RAIN LEADER

ABBREVIATIONS LIST (CONTINUED)

SQ IN	SQUARE INCH OR INCHES
TAB	TESTING AND BALANCING
TBD	TO BE DETERMINED
TE	TOP ELEVATION
TEMP	TEMPERATURE
TRAP	TRAP PRIMER ADAPTER
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UND	UNLESS NOTED OTHERWISE
V	VOLT (AGE, -S)
VAR	VARI (ABLE, -ES)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VD	VARIABLE FREQUENCY DRIVE
W	WATT (AGE, -S)
WB	WET BULB
WTB	WET BULB TEMPERATURE
WCO	WALL CLEANOUT
WPD	WATER PRESSURE DROP
WT	WEIGHT
WV	WETH
W/O	WITHOUT
%	PERCENT
ΔP	DIFFERENTIAL PRESSURE
ΔT	TEMPERATURE DIFFERENCE
±	CENTERLINE

SHEET LIST - PLUMBING

SHEET #	SHEET NAME
P100	PLUMBING LEGEND
PS01B	UNDERFLOOR PLUMBING DEMO - AREA B
PS02B	UNDERFLOOR PLUMBING NEW WORK - AREA B
PS01	LEVEL 1 - PLUMBING DEMO - OVERALL
PS01A	LEVEL 1 - PLUMBING DEMO - AREA A
PS01B	LEVEL 1 - PLUMBING DEMO - AREA B
PS02	LEVEL 1 - PLUMBING NEW WORK - OVERALL
PS02A	LEVEL 1 - PLUMBING NEW WORK - AREA A
PS02B	LEVEL 1 - PLUMBING NEW WORK - AREA B
P100	PLUMBING SCHEDULES



EnricoDesign.com 906 Main Street
8594931-9572 Newport, KY 41001

NOT FOR CONSTRUCTION

White's Tower Elementary Renovation
Kenton County School District
 2977 Harris Pike
 Independence, KY 41051
 BG#-25-351

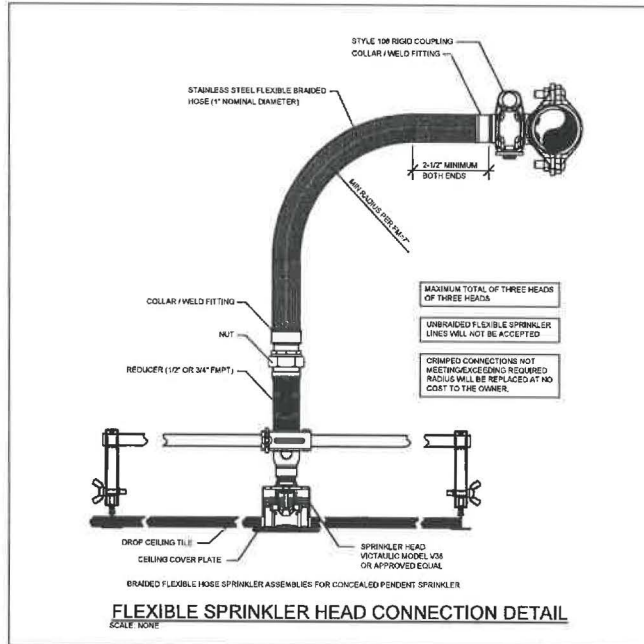
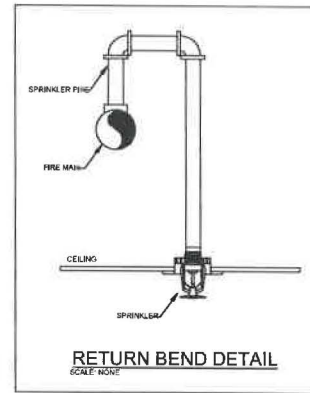
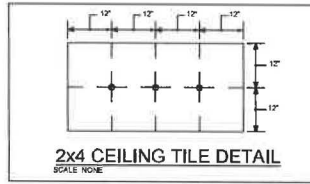
NO.	DESCRIPTION	DATE
	DESIGN DEVELOPMENT	5/18/2025

PLUMBING LEGEND

24-073

P100

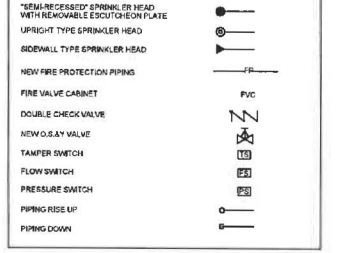
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FIRE PROTECTION DESIGN NOTES:

- THE ENTIRE BUILDING IS TO BE 100% COVERED WITH A WET FIRE PROTECTION SYSTEM DESIGNED IN ACCORDANCE WITH NFPA 13. THE SYSTEM SHOULD BE DESIGNED AS UNIFORMITY HAZARD UNLESS NOTED.
- THE SUCCESSFUL FIRE PROTECTION CONTRACTOR SHALL OBTAIN AND UTILIZE THE ARCHITECTURAL REFLECTED CEILING PLAN FOR LAYING OUT THE SPRINKLER HEADS. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS SHOWN TO COORDINATE CEILING TYPES AND LOCATIONS. REFER TO THE MECHANICAL AND ELECTRICAL DRAWINGS FOR CEILING DEVICE LOCATIONS. REFER TO SPECIFICATIONS FOR COORDINATION DRAWING REQUIREMENTS.
- ALL AREAS SHALL BE SPRINKLED WITH A WET FIRE PROTECTION SYSTEM FED FROM A RETURN BEND ARRANGEMENT. UTILIZE QUICK RESPONSE HEADS, BUT DO NOT USE THE DESIGN REDUCTION FOR THE QUICK HEADS WHEN DOING THE CALCULATIONS. USE THE FOLLOWING HEADS IN SPECIFIC AREAS AS INDICATED BELOW. REFER TO SPECIFICATIONS FOR DIFFERENT TYPES OF SPRINKLER HEADS.
 - IN AREAS WITH LAY-IN CEILING USE SEMI-RECESSED SPRINKLER HEADS. ALL SPRINKLER HEADS SHALL BE CENTERED IN BOTH DIRECTIONS OF A LAY-IN CEILING TILE.
 - IN AREAS WITH HARD CEILING USE FULLY RECESSED SPRINKLED HEADS. PROVIDE COVER-PLATED TO MATCH THE CEILING COLOR.
 - IN AREAS WITHOUT CEILING USE UPRIGHT AND/OR WALL MOUNTED SPRINKLER HEADS.
- HVAC DUCTWORK MAINS SHALL BE INSTALLED PRIOR TO FIRE PROTECTION PIPING. PROVIDE DRAIN VALVES IN THE FIRE PROTECTION SYSTEM WHERE NECESSARY TO COMPLETELY DRAIN THE SYSTEM. ALL EXISTING PIPING IS TO BE REMOVED AS REQUIRED TO INSTALL NEW MAINS.
- INSTALL ALL PIPING AT LEAST 12" ABOVE FINISHED CEILING ELEVATION TO ALLOW FOR SUITABLE ACCESS TO ABOVE CEILING.
- RUN NO SPRINKLER MAINS BRANCH PIPES OVER LIGHT FIXTURES.
- ALL PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE. LOW PIPING WILL HAVE TO BE RELOCATED BY THE CONTRACTOR IF IT COULD HAVE BEEN INSTALLED HIGHER. THIS WILL BE UP TO THE DISCRETION OF THE ENGINEER.
- PROVIDE ALL REQUIRED DRAIN PIPING TO TEST FLOW SWITCHES. DISCHARGE DRAIN PIPING TO OUTDOORS OR A FLOOR DRAIN.
- NO PIPING IS TO BE ROUTED ABOVE ELECTRICAL PANELS, TRANSFORMERS, COMPUTER RACKS, ETC. AS REQUIRED BY THE ELECTRICAL CODE. FIELD VERIFY ALL EXISTING ELECTRICAL LOCATIONS PRIOR TO DESIGNING THE FIRE PROTECTION PLANS.
- THE SUCCESSFUL FIRE PROTECTION CONTRACTOR WILL BE REQUIRED TO OBTAIN A MINIFLOW TEST PRIOR TO STARTING CALCULATIONS. SIZE ALL FIRE PROTECTION PIPING IN ACCORDANCE WITH NFPA 13. PIPE SIZING SHALL BE ACCOMPLISHED USING HYDRAULIC CALCULATIONS. SUBMIT HYDRAULIC CALCULATIONS AND SYSTEMS DESIGN FOR REVIEW TO THE ME ENGINEER. USE 250 GPM FOR THE HOSE STREAM CALCULATION.
- INSTALL SPRINKLER HEADS WITHIN JANITORS CLOSETS DIRECTLY ABOVE THE DOOR.

FIRE PROTECTION LEGEND



FLOW TEST RESULTS:

PERFORMED BY NORTHERN KENTUCKY WATER DISTRICT AND SAFETY 1ST FIRE PROTECTION ON MAY, 25 2021 AT APPROXIMATELY 9:00 AM.

STATIC: 64 PSI
RESIDUAL: 58 PSI
FLOW: 1137 GPM

SHEET LIST - FIRE SUPPRESSION

SHEET #	SHEET NAME
FP100	FIRE PROTECTION LEGEND
FP200	FIRE PROTECTION NEW WORK



NOT FOR CONSTRUCTION

White's Tower Elementary Renovation
Kenton County School District
2977 Harris Pike
Independence, KY 41051
BC# 25-351

NO.	DESCRIPTION	DATE
	DESIGN DEVELOPMENT	5/19/2025

FIRE PROTECTION LEGEND

24-073

FP100

MECHANICAL GENERAL NOTES

- A. COMPLY WITH ALL RELEVANT CODES, RULES AND REGULATIONS PERTAINING TO THIS CONTRACT. ALL WORK MUST ADHERE TO FEDERAL, STATE/COMMONWEALTH, MUNICIPAL, AND/OR LOCAL JURISDICTIONAL CODES, INCLUDING ANY CODE AMENDMENTS, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITIES SHALL BE REINSTALLED IN ACCORDANCE WITH THE STANDARDS SET BY THE RELEVANT MUNICIPALITY OR UTILITY COMPANY, IN EVERY INSTANCE. THE MOST STRINGENT REQUIREMENT SHALL TAKE PRECEDENCE.
- B. COORDINATE THE LOCATION OF DRAINING, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT AND MECHANICAL ROOM EQUIPMENT PRIOR TO COMMENCING INSTALLATION.
- C. ENSURE THAT ALL HVAC EQUIPMENT AND DUCTS ARE INSTALLED WITH ADEQUATE ACCESS FOR BALANCING AND FUTURE MAINTENANCE/REPAIRS. WHERE POSSIBLE, CONTRACTOR SHALL NOT INSTALL ITEMS REQUIRING ACCESS ABOVE CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY, ALL SUCH ITEMS SHALL NOT BE INSTALLED UNLESS AN UNBREAKABLE STRIKE-A-SHOCK CEILING IN GENERAL. ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO 12 INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLATION.
- D. HANG ALL NEW WORK FROM THE STRUCTURE, NOT FROM OTHER TRADES' WORK.
- E. PIPING, DUCTS AND EQUIPMENT LOCATIONS ARE APPROXIMATE AND SUBJECT TO MINOR RED ADJUSTMENTS, DO NOT SCALE DRAWINGS.
- F. COORDINATE ALL WORK WITH ELECTRICAL, PLUMBING, AND OTHER TRADES TO AVOID INTERFERENCE, PROVIDING ADDITIONAL OFFSETS WHERE NECESSARY.
- G. INSTALL ALL PIPING, DUCTWORK AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS. IF IN CONFLICT WITH THE DESIGN INDICATED ON CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT.
- H. SEAL ALL DUCT AND PIPING PENETRATIONS AIRTIGHT THROUGH WALLS, FLOORS, AND ROOFS.
- I. APPROPRIATELY FIRE-STOP ALL PENETRATIONS OF FIRE AND SMOKE-RATED ASSEMBLIES PER ALL LISTED STANDARDS. CONTRACTOR TO PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.
- J. IDENTIFY ALL REAR CARCASSES, TRIM, ETC., FOR REMOVAL FROM THIS PROJECT AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
- K. WHERE LOCATING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL, INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAILS OF THESE DOCUMENTS.
- L. LOCATE ANY HOSE-PROOFING EQUIPMENT FROM SURROUNDING SYSTEM AND REPLACE OR REPAIR INSTALLED EQUIPMENT AT THE CONTRACTOR'S EXPENSE, IF DESIGN UNACCEPTABLE BY THE ENGINEER.
- M. INSTALL AIR VENTS AT HIGH POINTS IN PIPING AND DRAINS AT LOW POINTS, TAKING CARE TO AVOID FREEZING OF EXTERIOR VENTS.
- N. SEAL ALL NEW DUCTWORK JOINTS WITH UNFLO MCOLL, IRONPOW 801 OR EQUAL WATER BASED SEALANT.
- O. INSTALL ALL UNDERDRAINAGE WITH FLEXIBLE GASKETS, PIPING, ETC., UNLESS OTHERWISE INDICATED.
- P. INSTALL ALL UNDERDRAINAGE STRUCTURES (MATHES, VALVES, ETC.) HAVE TOP ELEVATIONS FLUSH WITH FINISHED GRADE UNLESS OTHERWISE NOTED.
- Q. PERFORM ALL UNDERDRAINAGE AREA DOWNTIME AT LEAST TWO WEEKS IN ADVANCE AND COMPLY WITH INTERM LIFE SAFETY MEASURES.
- R. COORDINATE ALL WORK WITH THE OWNER AND UTILITIES AS SPECIFIED IN THE CONTRACT DOCUMENTS, BEARING ALL COSTS AND RISKS. TEMPORARY SERVICES, RELOCATION AND PREMIUM TIME WORK.
- S. WHENEVER POSSIBLE, LOCATE UNDERDRAIN PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A HOORSE-AN EQUAL PROCEEDING DOWN FROM THE BOTTOM EDGE OF THE FOOTER ON ALL SIDES OF THE FOOTER. WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE, THE PIPING SHALL BE BACKFILLED WITH CONSISTENTLY FLOWABLE FILL PER SPECIFICATIONS. ADDITIONALLY, GREATEST TRAPS, MANHOLES, VALVES AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD ABOVE THE FOOTER TO ALLOW EASY ACCESS TO THE OUTSIDE OF THE FOUNDATION.
- T. INSTALL DOUBLE-WIDTH TURNING VANES IN ALL DUCTWORK ELBOWS, EXCEPT FOR OTHER EXHAUSTS.
- U. IMPROVE QUALITY THROUGHOUT CONSTRUCTION. INSURE ALL WORK IS DONE IN ACCORDANCE WITH ALL INSTALLATIONS, ENSURING COMPLIANCE WITH CONSTRUCTION DOCUMENTS, INDUSTRY STANDARDS AND OTHER REQUIREMENTS, CONTACTING THE ENGINEER TO VERIFY ALL WORK IS DONE AS ADDRESS AND AS SPECIFIED.
- V. MAINTAIN DETAILED RECORDS OF ALL AS-BUILT CONDITIONS AND PROVIDE THIS DOCUMENTATION AND AS-BUILT DRAWINGS MARKUP TO THE OWNER OR FACILITY MANAGER UPON PROJECT COMPLETION.
- W. PROVIDE TRAINING FOR FACILITY STAFF ON THE OPERATION, MAINTENANCE, AND TROUBLESHOOTING OF ALL HVAC SYSTEMS AND CONTROLS. ENSURE THAT ALL OPERATIONAL MANUALS AND DOCUMENTATION ARE HANDED OVER TO THE OWNER OR FACILITY MANAGER, REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- X. PROVIDE WARRANTY INFORMATION FOR ALL INSTALLED HVAC EQUIPMENT AND COMPONENTS, INCLUDING TERMS, CONDITIONS AND CONTACT DETAILS FOR SUPPORT AND SERVICE. OBTAIN SERVICE AVAILABILITY, SERVICE PARTS AND ONGOING TECHNICAL SUPPORT. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
- Y. THIS PROJECT MAY REQUIRE CONSIDERING AND TESTING OF ALL HVAC SYSTEMS TO ENSURE PROPER OPERATION, EFFICIENCY, AND COMPLIANCE WITH DESIGN SPECIFICATIONS. REFER TO SPECIFICATIONS FOR MORE INFORMATION.

APPLICABLE BUILDING CODES

- I. INTERNATIONAL PLUMBING CODE (IPC) - STATE EDITION (2011)
- II. INTERNATIONAL MECHANICAL CODE (IMC) - STATE EDITION (2011)
- III. INTERNATIONAL FIRE CODE (IFC) - STATE EDITION (2011)
- IV. INTERNATIONAL GREEN CONSTRUCTION CODES - STATE EDITION (2011)
- V. INTERNATIONAL BUILDING CODE (IBC) - STATE EDITION (2011)
- VI. NATIONAL ELECTRICAL CODE (NEC) - STATE EDITION (2011)
- VII. ADA STANDARDS FOR ACCESSIBLE DESIGN - 2010
- VIII. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) - STATE EDITION (2011)
- IX. LIFE SAFETY CODE (NFPA 101) - STATE EDITION (2011)
- X. FIRE CODE (NFPA 101) - STATE EDITION (2011)
- XI. FIRE SPRINKLER CODE (NFPA 13) - STATE EDITION (2011)
- XII. FIRE ALARM CODE (NFPA 72) - STATE EDITION (2011)

EXISTING SYSTEMS AND UTILITIES NOTES

- A. EXERCISE EXTREME CARE DURING WORK TO AVOID INTERRUPTING ANY EXISTING SERVICES, ESPECIALLY NATURAL GAS AND ELECTRICAL LINES. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. CONDUCT AND MODIFICATIONS TO EXISTING UTILITIES SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND THE STANDARDS SET BY THE RELEVANT MUNICIPALITY OR UTILITY COMPANY. IN EVERY INSTANCE, THE MOST STRINGENT REQUIREMENT SHALL TAKE PRECEDENCE.
- B. COORDINATE ALL TESTS AND INSPECTIONS OF EXISTING SERVICES TO MINIMIZE DOWNTIME. INSTALL ALL NEW SERVICES AND EQUIPMENT AND TESTING THEM BEFORE INTERRUPTING EXISTING SERVICES.
- C. BE AWARE OF EXISTING CONCEALED PLUMBING, HVAC, AND ELECTRICAL WORK. FIELD VERIFY UNCOVERED ITEMS AND PLAN ALTERNATE ROUTES IF NEEDED. CONSULT WITH ENGINEERS FOR REVIEW.
- D. THE CONTRACTOR SHALL BE RESPONSIBLE TO AVOID ANY EXISTING EQUIPMENT, APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.
- E. WHERE WORK IS REQUIRED ABOVE AN EXISTING CEILING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL, REINSTALLATION, OR REPLACEMENT OF CEILING TILES AND GRID MEMBERS AS NECESSARY TO PERFORM THE SCOPE OF WORK.
- F. PATCH, REPAIR, PAINT EXISTING WALLS & CEILING ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. PATCHING WORK SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
- G. USE ULTRASOUND OR OTHER APPROVED METHODS TO SURVEY EXISTING POSITIVE-DENSION FLOOR SLABS BEFORE MAKING ANY FLOOR PENETRATIONS.
- H. WHERE FINE PROOFING IS TO BE SPRAYED ONTO EXISTING STRUCTURE, LOWER ALL EXISTING CONDUITS, PIPING, AND OTHER UTILITIES BELOW THE FULL THICKNESS OF SPRAYED PROOFING.

MECHANICAL DEMOLITION NOTES

- A. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING CEILING AS REQUIRED AND REINSTALLING THE REMAINING SUPPORT LIGHTS, DIFFUSERS, CEILING ETC. REPLACE BROKEN CEILING TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. FIELD VERIFY EXACT LOCATION OF ALL EXISTING CEILING TILES.
- B. DURING SPRINKLER SYSTEMS THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTLETSES.
- C. ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH NEW CONSTRUCTION. ALL RATED WALLS AND FLOOR SLABS SHALL BE REPAIRED AND REQUITED TO MAINTAIN RATING.
- D. ALL EXISTING BUILDING FINISHES SHALL BE REMOVED DURING THE DEMOLITION PHASE.
- E. HEAVY DASHED LINES INDICATE ITEMS FOR REMOVAL. (U) AND (L) INDICATE EXISTING ITEMS TO REMAIN.
- F. COORDINATE DISPOSAL OF ALL REFRIGERANTS, REFRIGERANTS ETC. (INDICATED FOR DEMOLITION) WITH THE OWNER.
- G. ADDRESS TOXIC MATERIALS AND GASOLINE CONTAINING REFRIGERANTS, EMISSIONS AND WASTE DISPOSAL, UTILIZE ENVIRONMENTALLY FRIENDLY PRACTICES AND MATERIALS WHENEVER POSSIBLE.
- H. ALL CONTRACTORS SHALL BE REQUIRED TO OBTAIN NECESSARY PERMITS FOR PROPER COORDINATION. A REQUEST FOR AN OUTAGE SHALL BE SUBMITTED IN WRITING A MINIMUM OF TWO WEEKS IN ADVANCE.

PHASING NOTES

- A. THIS PROJECT INTERFERES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH ALL EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, THE MAIN GAS LINE SHALL BE SHUT DOWN TO ALLOW FOR THE INSTALLATION OF NEW GAS MAINS AND FRESH AIR GENERATION, ETC., WILL BE AFFECTED AND REPAIRS OR MINOR DOWNTIME DURING THE PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW WORK AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, REDUCING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC., CONTRACTOR SHALL COORDINATE ALL NEW WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

ABBREVIATIONS

AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
AF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE (AMP, AMPS)
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APD	AIR PRESSURE DROP
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR-CONDITIONING ENGINEERS
ATU	AIR TERMINAL UNIT
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BHP	BRAKE HORSEPOWER
BTU	BTU THERMAL UNIT
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
CL	CAST IRON
CLG	CEILING
CLR	CLEAR
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COND	CONDENSE (ER, -ING, -ATION, -ATE)
CONT	CONTINUOUS (DOWNS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
DB	DEGREE (S)
DB	DRY BULB
DBT	DRY BULB TEMPERATURE
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DD	DIRECT DIGITAL CONTROLS
DEG	DEGREE (S)
DIA	DIAMETER (S)
DW	DRAIN
DWG	DRAWING
ENT	ENTERING AIR TEMPERATURE
ELC	ELECTRICAL CONTRACTOR
ELEV	ELEVATION (TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EVAP	EVAPORATE (E, -ING, -ED, -OR, -ING)
EW	ENTERING WATER TEMPERATURE
EXP	EXPANSION
EXT	EXTERIOR
FA	FREE AREA

ABBREVIATIONS (CONTINUED)

FD	FIRE DAMPER
FL	FLOOR
FLA	FLOOR LOAD AMPS
FOT	FLOOR TO BOTTOM
FOU	FLOOR TO TOP
CFU	FLOOR UTILIZATION EFFICIENCY
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET OR FOOT
FUT	FUTURE
FA	FACE VELOCITY
GA	GAS GAUGE
GAL	GALLON (S)
GC	GENERAL CONTRACTOR
GPD	GALLONS PER DAY
GPM	GALLONS PER MINUTE
GR	GRAINS
H	HUMIDITY
HD	HAD
HG	MERCURY
HORIZ	HORIZONTAL
HP	HORSEPOWER (-EAT PUMP)
HR	HOUR (S)
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING
Hz	HERTZ
ID	IDENTIFICATION, -ASIDE DIAMETER, -ASIDE DIMENSION
IN	INCH (S)
INSUL	INSUL (E, -ATION, -ING)
INT	INTERIOR (-ERVAL)
IPS	IRON PIPE SIZE
KW	KILOWATT
KWH	KILOWATT HOUR
L	LEAVIN AIR TEMPERATURE
LBS	POUNDS
LFA	LINKED FOOTPRINT
LFR	LOCAL ROOM FLOORS
LMT	LEAVING WATER TEMPERATURE
M	MEDIUM
MFB	MBTU PER HOUR (THOUSANDS)
MFC	MERKURY CIRCUIT AMPS
MFG	MANUFACTURER
MIN	MIN (IMUM, -UTE)
MISC	MISCELLANEOUS
MOP	MAXIMUM OVERCURRENT PROTECTION (AMPS)
MTR	MOVING TO REMAIN
NA	NOT APPLICABLE
NOISE	NOISE CRITERIA OR NORMALLY C. O. SED
NBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU
NB	NOT IN CONTRACT

ABBREVIATIONS (CONTINUED)

NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER, (MENSION)
OCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OCFI	OWNER FURNISHED, CONTRACTOR INSTALLED
OCI	OWNER FURNISHED, OWNER INSTALLED
OR	OPEN RECEPTACLE
OR	OPEN (-S)
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	PHASE (ELECTRICAL)
PLBG	PLUMBING
PPM	PARTS PER MILLION
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VALVE (STREAM, WATER, GAS)
P&F	POUNDS PER SQUARE FOOT
P&I	POUNDS PER SQUARE INCH
PSIG	PSI GAUGE
PH	RELATIVE HUMIDITY (%)
RLM	RUNNING LOAD AMPS
RLP	REVOLUTIONS PER MINUTE
SD	SMOKE DAMPER
SP	STATIC PRESSURE
SQ	SQUARE
SO FT	SQUARE FEET OR FOOT
SQ INCH	SQUARE INCH OR INCHES
TA	TESTING AND BALANCING
TBD	TO BE DETERMINED
TE	TOP ELEVATION
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT (-AGE, -S)
VAR	VARIABLE (-ABLE, -S)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
W	WATT (-AGE, -S)
WB	WET BULB
WB	WET BULB TEMPERATURE
WFD	WET BULB TEMPERATURE DROP
WT	WEIGHT
WTH	WITH
WO	WITHOUT
%	PERCENT
ΔP	DIFFERENTIAL PRESSURE
ΔT	TEMPERATURE DIFFERENCE
°	CENTIGRADE

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED ON THIS PROJECT

GENERAL SYMBOLS

#	TAGGED NOTE DESIGNATOR
△	REVISION TRIANGLE
□	ROOM TAG
□	EQUIPMENT TAG
→	POINT OF CONNECTION / CONNECT TO EASTING
⊗	POINT OF DEMOLITION

MECHANICAL PIPING LEGEND

○	PIPE ELBOW TURNING UP
○	PIPE ELBOW TURNING DOWN
○	PIPE TEE, CONNECTION ON TOP
○	PIPE TEE, CONNECTION ON BOTTOM
○	PIPE CAP
○	BOILER FEEDWATER
○	COLLECTOR AIR INTAKE/EXHAUST
○	CHILLED BEAM WATER SUPPLY/RETURN
○	CONDENSATE DRAIN
○	CHILLED WATER SUPPLY/RETURN
○	CLEAN WATER PIPING
○	CONDENSATE WATER SUPPLY/RETURN
○	DUAL TEMP. WATER SUPPLY/RETURN
○	GEOTHERMAL WATER SUPPLY/RETURN
○	HIGH PRESSURE STEAM CONDENSATE
○	HIGH PRESSURE STEAM (B) DENOTES PRESSURE
○	HEAT PUMP WATER SUPPLY/RETURN
○	HEATING WATER SUPPLY/RETURN PIPING
○	HEATING WATER SUPPLY/RETURN
○	LOW PRESSURE STEAM CONDENSATE
○	LOW PRESSURE STEAM (B) DENOTES PRESSURE
○	MEDIUM PRESSURE STEAM RETURN
○	MEDIUM PRESSURE STEAM (B) DENOTES PRESSURE
○	STEAM CONDENSATE PUMPED DISCHARGE
○	STEAM VENT PIPING
○	EXHAUST PIPING TO BE DEMOLISHED
○	EXISTING PIPING
○	ABANDONED IN PLACE PIPING
○	TWO-WAY CONTROL VALVE
○	THREE-WAY CONTROL VALVE
○	AUTOMATIC AIR VENT (AAV)
○	MANUAL AIR VENT (MAN)
○	MANUAL BALANCING VALVE (BV)
○	BALL VALVE
○	BUTTERFLY VALVE
○	TRIPLE DUTY VALVE (TDV)
○	STRAINER
○	DUCT TO BE ABANDONED IN PLACE
○	GLOBE VALVE
○	GATE VALVE
○	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
○	AUTO-FLOW CONTROL VALVE
○	CHECK VALVE
○	DOUBLE CHECK VALVE ASSEMBLY
○	FLEXIBLE PIPE CONNECTION
○	FLOW METER (VENTURE)
○	PIPING UNDO
○	FLOW SWITCH
○	PRESSURE SWITCH
○	TAMPER SWITCH
○	THERMOMETER
○	PETE'S P.U.G., TEMPERATURE/PRESSURE PORT

HAZARDOUS MATERIAL NOTES

- A. THE CONTRACTOR IS HEREBY ADVISED OF THE POSSIBILITY THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THE BUILDING. ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.
- B. CH2A, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CH2A TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CH2A DOES NOT AFFILIATE HERSELF WITH, NOT OFFER OR MAKE ANY RECOMMENDATIONS AS TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
- C. THE WORK WHICH IS TO BE PERFORMED INTERFERES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL. ASBESTOS REMOVAL CONTRACTORS SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM IMMEDIATELY.
- D. THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCEPTANCE OF ANY WORK THEREBY AGREES TO BRING TO LIGHT ALL THE ASPECTS RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENT BREACH OF CONTRACT. NEITHER CH2A NOR ANY OTHER TEAM MEMBER, CH2A, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS, ALSO, THE CONTRACTOR, FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CH2A, ITS PRINCIPALS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR BY ANY OTHER THIRD PARTIES.
- E. THE CONTRACTOR IS OBLIGATED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

SHEET LIST - MECHANICAL

M100	MECHANICAL LEGEND
M101	MECHANICAL ZONE
M201	AIR DISTRIBUTION DEMO - OVERALL
M202	AIR DISTRIBUTION DEMO - AREA A
M203	AIR DISTRIBUTION DEMO - OVERALL
M204	AIR DISTRIBUTION NEW WORK - AREA A
M205	AIR DISTRIBUTION NEW WORK - AREA B
M301	HYDRONICS DEMO - OVERALL
M302	HYDRONICS DEMO - AREA A
M303	HYDRONICS DEMO - AREA B
M304	HYDRONICS NEW WORK - OVERALL
M305	HYDRONICS NEW WORK - AREA A
M306	HYDRONICS NEW WORK - AREA B
M401	MECHANICAL DEMO - ROOF
M402	MECHANICAL NEW WORK - ROOF
M501	MECHANICAL DETAILS



NOT FOR CONSTRUCTION

White's Tower Elementary Renovation
Kenton County School District
 2977 Harris Pike
 Independence, KY 41051
 BG# 25-351

NO. DESCRIPTION DATE
 DESIGN DEVELOPMENT 5/19/2015

MECHANICAL LEGEND

M100

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REGISTERS, GRILLES, AND DIFFUSERS								
Q MARK	MANUFACTURER	MODEL	MATERIAL & TYPE	CFM RANGE	PHYSICAL SIZE		INLET GROUT SIZE	REMARKS
					OVERALL FACE SIZE	NECK SIZE		
E-1	TITUS	OMNI AA	EXTRUDED ALUMINUM	0-100	24"x24"	8"Ø		
E-2	TITUS	OMNI AA	EXTRUDED ALUMINUM	0-125	24"x24"	8"Ø		
E-3	TITUS	OMNI AA	EXTRUDED ALUMINUM	225-360	24"x24"	10"Ø		
E-4	TITUS	OMNI AA	EXTRUDED ALUMINUM	381-525	24"x24"	12"Ø		
E-5	TITUS	OMNI AA	EXTRUDED ALUMINUM	525-800	24"x24"	14"Ø		
R-1	TITUS	OMNI AA	EXTRUDED ALUMINUM	0-100	24"x24"	6"Ø		
R-2	TITUS	OMNI AA	EXTRUDED ALUMINUM	101-225	24"x24"	8"Ø		
R-3	TITUS	OMNI AA	EXTRUDED ALUMINUM	225-360	24"x24"	10"Ø		
R-4	TITUS	OMNI AA	EXTRUDED ALUMINUM	351-525	24"x24"	12"Ø		
R-5	TITUS	OMNI AA	EXTRUDED ALUMINUM	526-800	24"x24"	14"Ø		
R-6	TITUS	OMNI AA	EXTRUDED ALUMINUM	0-100	24"x24"	6"Ø		
R-7	TITUS	OMNI AA	EXTRUDED ALUMINUM	101-225	24"x24"	8"Ø		
R-8	TITUS	OMNI AA	EXTRUDED ALUMINUM	226-360	24"x24"	10"Ø		
R-9	TITUS	OMNI AA	EXTRUDED ALUMINUM	381-525	24"x24"	12"Ø		
R-9	TITUS	OMNI AA	EXTRUDED ALUMINUM	526-800	24"x24"	14"Ø		

BLOWER COIL UNIT SCHEDULE															
SYMBOL	MFG	MODEL	TYPE	SERVICE	MAX. Q (CFM)	AIRFLOW (CFM)	ESP (IN. W.G.)	HEATING PERFORMANCE							
								HEATING CAP (MBH)	MAX. COIL ROWS	MAX. FIN SPACING (FINS/IN)	FLOW RATE (GPM)	MAX. WPD (FT)	EAT (°F)	LAT (°F)	EWT (°F)
BC-30	TRANE	BCND633	HORIZONTAL BLOWER COIL			1600	0.1"		4.2	10					
BC-30															

VENTILATION HOOD SCHEDULE										
MARK	MANUFACTURER	MODEL	SERVICE	THROAT LENGTH	THROAT WIDTH	TOTAL DOWNFLOW (CFM)	MAX. CFM	AIR VELOCITY (FPM)	MAX. AIR PD (IN. WC)	GRID SCREEN

UNIT VENTILATOR SCHEDULE																		
SYMBOL	INSTANCE	MANUFACTURER	MODEL #	TYPE	CONFIGURATION	ECONOMIZER/REFRIGERANT	WEIGHT (LB)	DESIGN CFM (SQAD)	TYPE	ESP (IN. WC)	FAN SPEED	MOTOR HP / TYPE	DRIVE	ELECTRICAL				REMARKS
														V	HZ	PHASE	MCA	
VUW-125		TRANE	VUW-125	VERTICAL CLASSROOM UNIT VENTILATOR														

UNIT VENTILATOR SCHEDULE (CONT.)																				
SYMBOL	INSTANCE	REVERSE CYCLE HEATING CAPACITY					COOLING CAPACITY					DISPOSABLE PRIMARY FILTERS					REMARKS			
		TOTAL MBH	BAT/LAT (°F)	EWT/LWT	QPM / WPD (FT)	HEAT OF EXTRACTION (MBH) (FULL)	COOP @ AIR (FULL)	TOTAL MBH (FULL)	SENSIBLE MBH	EAT (DBWB) (°F)	LAT (DBWB) (°F)	EXTRANT (°F)	QPM / WPD (FT)	HEAT OF REJECTION (MBH)	EER @ AIR	MANUFACTURER		MODEL / TYPE	EFFICIENCY	MAX. FACE VELOCITY (FPM) / MAX. AWD
VUW-125																				

AIR SOURCE HEAT PUMP SCHEDULE																						
SYMBOL	MANUFACTURER	MODEL #	TYPE	NOM. CFM	ESP (IN. W.G.)	COMPRESSOR	REFRIGERANT	WEIGHT (LB)	VOLTAGE	HZ	PHASE	MCA	MCOFP	REVERSE CYCLE HEATING CAPACITY - 85° EAT, 32° EWT			COOLING CAPACITY - 72° F / 60° EAT, 85° EWT			EER @ AIR	REMARKS	
														HEATING CAPACITY (MBH)	HEAT OF EXTRACTION (MBH) (FULL)	COP @ AIR (FULL)	SENSIBLE CAPACITY (MBH)	TOTAL CAPACITY (MBH) (FULL)	HEAT OF REJECTION (MBH)			
ASHP	DAIKIN	REBEL	ROOFTOP PACKAGE	4300		VARIABLE	R-32		208 V	60	3											

EXHAUST FAN SCHEDULE										
MARK	SERVICE	TYPE	CFM / ESP (IN)	DRIVE / FAN RPM	FAN HP	VOLTS	PHASE	HZ	ELECTRICAL	REMARKS
EF-1	TOILET EXHAUST	ROOFTOP DOWNBLAST	300	DIRECT		208 V	1	60		
EF-2	TOILET EXHAUST	ROOFTOP DOWNBLAST	1100	DIRECT		208 V	1	60		
EF-3	TOILET EXHAUST	ROOFTOP DOWNBLAST	950	DIRECT		208 V	1	60		
EF-4	IDF EXHAUST	ROOFTOP DOWNBLAST	150	DIRECT		208 V	1	60		



NOT FOR CONSTRUCTION

White's Tower Elementary Renovation
 Kenton County School District
 2877 Harris Pike
 Independence, KY 41051
 BGH 23-351

NO.	DESCRIPTION	DATE
	DESIGN DEVELOPMENT	5/19/2025

MECHANICAL SCHEDULES

24-073

M501

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GENERAL NOTES (LEGEND):

- A. EACH CONTRACTOR, PROPOSER, SUPPLIER AND/OR MANUFACTURER SHALL REFER TO ALL DOCUMENTS PERTAINING TO THE PROJECT AND COORDINATE ACCORDINGLY SO AS TO RESOLVE ANY OF THE CONFLICTS WITH SPECIFICATIONS, PROPER VOLTAGE AND CURRENT CHARACTERISTICS TO AVOID CONFLICT WITH ANY OTHER BUILDING SYSTEMS, VERIFY SAME WITH SHOP DRAWINGS.
- B. ADDITIONAL ELECTRICAL REQUIREMENTS MAY BE SHOWN ON PLANS FROM OTHER DISCIPLINES IN THIS SET, IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL PLANS AND SPECIFICATIONS FOR A COMPLETE UNDERSTANDING OF THE PROJECT REQUIREMENTS.
- C. WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ALL LOCAL, STATE, AND NATIONAL CODES, INCLUDING BUT NOT LIMITED TO NFPA 70 (NEC), NFPA 72, INTERNATIONAL BUILDING CODES, ETC. IN ADDITION, OBSERVE ALL APPLICABLE RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT FROM CITY, COUNTY, LOCAL, STATE, FEDERAL, MUNICIPALITY, UTILITY COMPANY, OSHA, ETC.
- D. CONTRACTOR SHALL FOLLOW SEISMIC RESTRAINT AND DESIGN REQUIREMENTS CONTAINED IN LATEST ADOPTED STATE AND INTERNATIONAL BUILDING CODES, WITH ALL AMENDMENTS AS ADOPTED BY THE CURRENT LEGISLATION. REFER TO ELECTRICAL AND STRUCTURAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- E. ADVISE THE ENGINEER OF ANY CONFLICTS, ERRORS, OMISSIONS, ETC. AT LEAST TEN DAYS PRIOR TO BID DATE TO ALLOW CLARIFICATION BY WRITTEN ARCHDUEM.
- F. WHERE CONFLICTS ARE FOUND IN DRAWINGS, DETAILS, OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY. NOTIFY ARCHITECT OF DISCREPANCY IN WRITING.
- G. DEVIATION FROM SPECIFICATIONS OR PLANS REQUIRES PRIOR WRITTEN APPROVAL FROM THE ENGINEERS AND MUST BE SUBMITTED IN WRITING NO LATER THAN TEN DAYS PRIOR TO THE BID DATE.
- H. ALL ELECTRICAL COMPONENTS OR EQUIPMENT SHALL BE LISTED AND LABELED BY UNDERWRITERS LABORATORIES OR OTHER APPROVED LISTING AGENCIES. APPROVAL AND LABELING OF INDIVIDUAL COMPONENTS ON AN ASSEMBLY IS NOT ACCEPTABLE AS MEETING THIS REQUIREMENT, UNLESS WAIVED BY THE ENGINEER IN WRITING.
- I. ALL MATERIALS FINISHED AND ALL WORK INSTALLED SHALL COMPLY WITH THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODES, NATIONAL FIRE CODES OF THE NATIONAL FIRE PROTECTION ASSOCIATION, THE REQUIREMENTS OF LOCAL UTILITY COMPANIES, AND WITH THE REQUIREMENTS OF ALL GOVERNMENTAL AGENCIES OR DEPARTMENTS HAVING JURISDICTION. IF ANY CONFLICTS OR DISCREPANCIES OCCUR THE MOST STRINGENT SHALL APPLY.
- J. MOUNTING HEIGHTS FOR WALL MOUNTED DEVICES INDICATED ABOVE FINISHED FLOOR ARE TO CENTER OF DEVICE UNO. MOUNTING HEIGHTS TO CEILING SUSPENDED DEVICES ARE TO BOTTOM OF DEVICE UNO. WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEER BEFORE AFFECTING INSTALLATION. REFER ALSO TO ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS, CEILING HEIGHTS AND OTHER DETAILS OF THESE DOCUMENTS AS APPLICABLE.
- K. DO NOT SCALE FROM DRAWINGS, AS PRINTING DISTORTS SCALE. WORK SHALL BE LAID OUT FROM DIMENSIONED DRAWINGS, OR DIMENSIONS SUPPLIED TO THE CONTRACTOR.
- L. REFER TO ARCHITECTURAL WALL ELEVATIONS (WHERE GIVEN) FOR HEIGHTS AND MOUNTING RELATIONSHIP OF OUTLETS AND FURNITURE, CABINETS, AND/OR EQUIPMENT. ADDITIONAL OUTLETS MAY BE SHOWN ON ARCHITECTURAL DRAWINGS AND SHALL BE INCLUDED IN THE CONTRACT.
- M. FLOOR OR PENDANT TYPE FLOOR OUTLETS/BOXES, AS INDICATED ON PLAN, SHALL BE LOCATED BY DIMENSIONS PROVIDED BY THE ARCHITECT, UNLESS OTHERWISE SHOWN ON PLANS. IF IN DOUBT, CONTACT THE ENGINEER PRIOR TO INSTALLATION OR CLARIFICATION.
- N. INSTALL EQUIPMENT, MATERIALS, ETC. IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND DIRECTIONS. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEER PRIOR TO INSTALLATION OR CLARIFICATION.
- O. THE CONSTRUCTION MANAGER, GENERAL CONTRACTOR, OR WHOEVER HOLDS THE PRIME CONTRACT FOR THIS CONSTRUCTION IS RESPONSIBLE FOR THE COORDINATION, APPEARANCE, SCHEDULING AND TIMELINESS OF THE WORK OF ALL TRADES CONTRACTORS, SUPPLIERS, INSTALLERS, ETC. POOR OR UNTIMELY WORK ON THE PART OF ANY SUBCONTRACTOR SHALL BE RESPONSIBLE TO THE PARTY WHO EMPLOYED THEM ON THE PROJECT.
- P. THE PURPOSE AND INTENT OF ALL OF THE DOCUMENTS PERTAINING TO THE PROJECT IS TO PROVIDE A COMPLETE, FUNCTIONAL, SAFE, LIKE-NEW FACILITY. ANYTHING LESS SHALL BE UNACCEPTABLE.
- Q. ALL SYSTEMS, EQUIPMENT AND MATERIALS ARE TO BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. WORK NOT MEETING THIS CRITERION SHALL BE REMOVED AND REINSTALLED SATISFACTORILY. FINAL CLEANUP SHALL BE THE RESPONSIBILITY OF THE QUALITY OF WORK PROVIDED BY THE TRADES.
- R. ALL WORK, MATERIALS, EQUIPMENT, ETC. SHALL BE FULLY GUARANTEED FOR ONE FULL CALENDAR YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AS DOCUMENTED BY THE ENGINEER, UNLESS LONGER WARRANTY PERIODS FOR EQUIPMENT ARE SPECIFIED.
- S. ALL WORK SHALL BE CONCEALED UNLESS SPECIFICALLY INDICATED TO BE EXPOSED, OR REQUIRED TO BE EXPOSED. IF IN DOUBT, CONTACT THE ENGINEER FOR CLARIFICATIONS PRIOR TO INSTALLING ANY SUCH WORK.
- T. UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL EQUIPMENT AND/OR MATERIALS WITHIN OCCUPIED SPACES OR EXPOSED TO VIEW ON THE BUILDING EXTERIOR SHALL BE PRIME AND FINISHED SO AS TO COMPLEMENT ADJACENT SURFACE, UNLESS OTHERWISE NOTED. COORDINATE WORK AND COLORS WITH ARCHITECT.
- U. WHERE PENETRATING ROOFING MEMBRANE OR OTHER MATERIALS USED FOR WEATHER-PROOFING THE BUILDING, MAKE SURE SUCH PENETRATION IN A WAY THAT WILL NOT LEAK OR DAMEN THE ROOFING MEMBRANE OR INTEGRITY IN ANYWAY. COORDINATE ALL SUCH PENETRATIONS WITH THE ROOFING MANUFACTURER AND ARCHITECT.
- V. CEILING-MOUNTED ELECTRICAL DEVICES SHALL BE CENTERED IN 2'X2' CEILING TILE AND INSTALLED CENTERED ON 2" DIMENSION OF 2'X2' TILE AND ON CENTERLINE OR A QUARTER POINT ON 4" DIMENSION.
- W. PROVIDE DETAILED SHOP DRAWINGS TO ENGINEER PRIOR TO PURCHASING OR INSTALLING ANY EQUIPMENT OR MATERIALS IN SEES, CAPACITORS, RESISTORS, ETC. FOR EQUIPMENT FROM THAT TRADE SPECIFIED SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVICE, WHETHER APPROVED BY THE ENGINEER OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
- X. WHERE PANELS OR CABINETS ASSEMBLIES ARE MOUNTED, PROVIDE UNFINISHED PRE-FABRATED GYPSUM BOARD OR PRE-MANUFACTURED ENCLOSURES ABOVE LUMINAIRE CEILING DEVICES, ETC. IN OR ON CEILING, AS REQUIRED TO MAINTAIN CEILING RATINGS.
- Y. DO NOT RECESS PANELBOARD, TUBS OR OTHER FLUSH-MOUNTED EQUIPMENT IN WALLS THAT HAVE A FIRE RATING. NO INSTALLATION SHALL OBTAIN OR VOID FIRE RESISTIVE RATINGS IN ANYWAY.
- Z. COORDINATE THE LOCATION OF DRAINS, ELECTRICAL OUTLETS, GAS OUTLETS, ETC. WITH ALL GAS SERVICE, FIREARM EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC. PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR.
- AA. ALL OFFSETS, TURNING, FITTINGS, TRIM, ETC., ETC. MAY NOT BE INDICATED, BUT SHALL BE PROVIDED AS REQUIRED. ADDITIONAL ALLOWANCES SHALL BE PROVIDED FOR SAME AT EACH PROPOSER'S DISCRETION.
- BB. INSTALL NO PIPING, CONDUIT, DUCTWORK, ETC. IN A LOCATION OR IN A MANNER WHICH WOULD ALLOW FREEZING OR THE COLLECTION OF CONDENSATION THEREON. IF IN DOUBT, CONTACT THE ENGINEER.
- CC. ALL WIRING SYSTEMS SHALL BE INSTALLED WITH A MINIMUM OF SPACES, CONDUCTORS, WHETHER SHIELD OR MULTIPAIR, SHALL BE INSTALLED CONTINUOUSLY INSOFAR AS POSSIBLE FROM TERMINAL POINT TO TERMINAL POINT.
- DD. NO CONDUIT, SUPPORTS, ETC. SHALL BE RUN THROUGH ACCESS CLEARANCES OF EQUIPMENT BY OTHER TRADES (E.G. WAX BOXES). COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.
- EE. ALL SUPPORTS FOR EQUIPMENT, DEVICES OR FIXTURES SHALL BE UNIQUE DIRECTLY FROM THE BUILDING STRUCTURE. DO NOT SUPPORT WORK FROM OTHER TRADES EQUIPMENT OR SUPPORTS WITHOUT WRITTEN PERMISSION FROM THE ENGINEER AND CONSENT OF THE OTHER TRADE, IN WRITING.
- FF. WHERE BACKBOXES ARE LOCATED IN THE SAME VERTICAL CHANNEL/STUD SPACE ON OPPOSITE SIDES OF THE SAME WALL, PROVIDE SOUND-INSULATING PUTTY AROUND BOXES AS REQUIRED TO ELIMINATE SOUND TRANSMISSION FROM ROOM TO ROOM.
- GG. JUNCTION BOXES LOCATED ABOVE ACCESSIBLE CEILING SHALL BE LOCATED NO MORE THAN 2" ABOVE CEILING LEVEL. LABEL EACH BOX IN AREA OF WORK WITH A PERMANENT MARKER OR IN ACCORDANCE WITH SPECIFICATIONS, WHOEVER IS MORE STRINGENT.
- HH. ANY VERTICAL, OBLIQUE, LATERAL OR OTHER HOLES OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM BUILDING'S SYSTEMS IN AN APPROVED MANNER. HOLES OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE EXTRACTED, REPLACED OR REPAIRED AT THE INSTALLERS CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.
- I. CHECK ALL THREE PHASE MOTORS WITH A PHASE ROTATION METER, PRIOR TO PLACING IN SERVICE.
- J. ALL ITEMS HAVING KEYS OR LOCKS OPERATORS SHALL HAVE CORRED LOCKS/OPERATORS. ALL KEYS SHALL MATCH THE OWNER'S EXISTING KEYWAYS. COORDINATE EXACT REQUIREMENTS WITH OWNER PRIOR TO CONSTRUCTION.
- KK. NOisy WORK, WORK OUTSIDE CONSTRUCTION BARRIERS, WORK IN OCCUPIED AREAS, ETC. SHALL BE PERFORMED AFTER HOURS OR ON WEEKENDS. COORDINATE EXACT SCHEDULING WITH FACILITY PRIOR TO CONSTRUCTION.
- LL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR HIS WORK. ALL CUTTING AND PATCHING SHALL BE IN ACCORDANCE WITH THE ARCHITECT'S STANDARDS FOR SUCH WORK.
- MM. THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES, CASH CONTRIBUTIONS OR OTHER COSTS THAT THE UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK (ELECTRIC, TELEPHONE, TELEVISION, DATA, ETC.).
- NN. ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE OR SUBSERVANCE FOR PUBLIC UTILITIES. PAY PARTICULAR ATTENTION TO THE PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC. OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL ALL SHALL BE INFORMED AND COORDINATED WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
- OO. INTERRUPTION OF ANY EXISTING SERVICE SHALL BE COORDINATED WITH THE OWNER, GENERAL CONTRACTOR, UTILITY COMPANY AS NECESSARY, AND THE ARCHITECT. AT LEAST TWO WEEKS IN ADVANCE OF ANTICIPATED INTERRUPTION, A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN THE PARTIES INVOLVED TO AVOID UNNECESSARY DISRUPTIONS TO THE BUILDING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE COMPANY OF ANTICIPATED SERVICES REQUIRED TWO WEEKS IN ADVANCE IN WRITING, IF UTILITY COMPANY REQUIRES A LONGER NOTIFICATION PERIOD, SO PROVIDE.
- PP. WHERE INTERRUPTING AN EXISTING UTILITY OR SERVICE DELIBERATELY OR ACCIDENTALLY, THE RESPONSIBLE CONTRACTOR SHALL WORK CONTINUOUSLY NEEDED TO RESTORE SAME, PROVIDING PREEMPTIVE AS NEEDED.
- QQ. AS APPLICABLE, REFER TO ARCHITECTURAL FINISHING PLANS AND FINISHING SCHEDULES FOR REQUIREMENTS OF WORK. FULL EXTENT OF AREAS INVOLVED, EXTENT OF CEILING WORK, ETC. PROVIDE TEMPORARY COVERINGS FOR CIRCUITS AND WORK AS REQUIRED TO MAINTAIN A SEQUENCE OF THE WORK FROM THE PHASING PLAN.

PRINT DATE: 5/16/2023 10:25 AM



NOT FOR CONSTRUCTION

White's Tower Elementary Renovation
Kenton County School District
 2977 Harris Pike
 Independence, KY 41051
 BG# T.B.C.

NO.	DESCRIPTION	DATE
	ELECTRICAL LEGEND AND GENERAL NOTES	
		24-073
	E101	