

**DATE:**

06/25/2025

**AGENDA ITEM (ACTION ITEM):**

Consider / Approve the design development plans for the Kenton Elementary renovation project (BG 25-352) from Emboss Design.

**APPLICABLE BOARD POLICY:**

01.1 Legal Status of the Board; 04.31 Authority to Encumber and Expend Funds; 702 KAR 4:160

**HISTORY/BACKGROUND:**

The Design Development (DD) plans for the Kenton Elementary renovation project reflects the input of the KCSD team, architects from Emboss Design, civil engineers from Bayer Becker, and mechanical engineers from CMTA Engineering. The project is focused on HVAC upgrade/replacement, roof replacement, and interior and exterior renovations in the 1950 and 2001 sections of the building. The plans are reflective of the evolutionary design process that has continued after the schematic design approved by the Board on May 5, 2025. The initial construction cost estimate for the renovation is \$10,500,000.

**FISCAL/BUDGETARY IMPACT:**

The fiscal impact will be determined upon issuance of final construction documents and the bid process.

**RECOMMENDATION:**

Approve the design development plans for the Kenton Elementary renovation project (BG 25-352) from Emboss Design.

**CONTACT PERSON:**

Matt Rigg, Chief Operations Officer

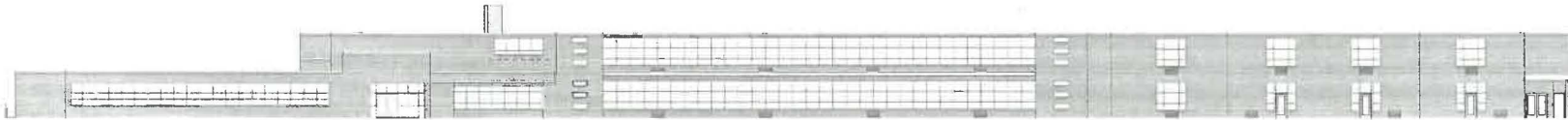
\_\_\_\_\_  
*Principal/Administrator*

  
\_\_\_\_\_  
*District Administrator*

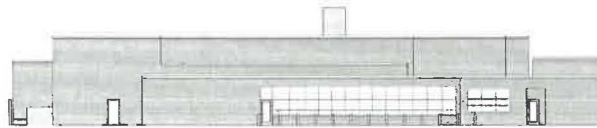
  
\_\_\_\_\_  
*Superintendent*



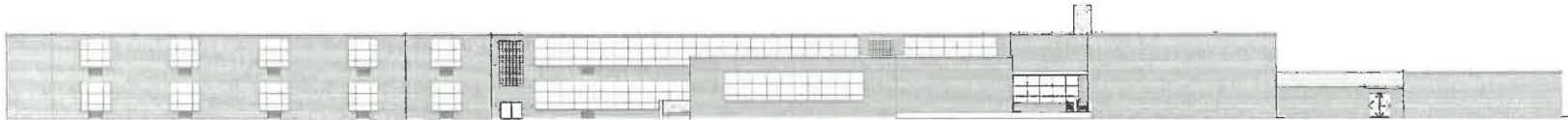
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1 SOUTH ELEVATION  
A200 SCALE: 1/16" = 1'-0"



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



4 NORTH ELEVATION  
A200 SCALE: 1/16" = 1'-0"



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



EmbassyDesign.com 906 Monmouth Street,  
B09V437-6812 Newport, KY 41071

**NOT FOR  
CONSTRUCTION**

**Renovation Project  
Kenton Elementary**  
11246 Madison Pike, Independence, KY 41061  
BG 25-362

NO. DESCRIPTION DATE

ELEVATIONS

25-012

**A200**

PRINT DATE: 5/18/2012 7:29:47 AM



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Plumbing Fixture Schedule									
Tag	Description	Manufacturer	Model	Fixture/Valve Manufacturer	Fixture/Valve Model	CW	HW	San	Vent
F01	RESTROOM FLOOR DRAIN					-	-	3"	1-1/2"
F02	KITCHEN FLOOR DRAIN					-	-	4"	2"
L01	LAVATORY	AMERICAN STANDARD	6256.015	AMERICAN STANDARD	1340.119	1/2"	1/2"	1-1/2"	1-1/2"
L02	LAVATORY	AMERICAN STANDARD	6256.015	AMERICAN STANDARD	1340.119	1/2"	1/2"	1-1/2"	1-1/2"
R01	ROOF DRAIN					-	-	-	-
S01	DROP IN SINK	ELKAY	1040121950	CHICAGO FAUCET	766-22805-1400	1/2"	1/2"	1-1/2"	1-1/2"
U01	WALL HUNG URINAL	AMERICAN STANDARD	6090.001	SLOAN	60455.051	3/4"	-	2"	1-1/2"
WC1	WALL HUNG WATER CLOSET	AMERICAN STANDARD	2257.191	SLOAN	111-255A-1.8	1-1/4"	-	4"	2"
WC2	WALL HUNG WATER CLOSET	AMERICAN STANDARD	2257.191	SLOAN	111-1-1.6	1-1/4"	-	4"	2"

WATER HEATER SCHEDULE					
TAG	DESCRIPTION	MANUFACTURER	MODEL	GAS	RECOVERY
WH1					

### HAZARDOUS MATERIAL NOTE:

- A. THE CONTRACTOR IT IS HEREBY ADVISED THAT IT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDING(S), ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHICHE COMPOSITION THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE PROJECT ENGINEER. THEREAFTER, THE CONTRACTOR SHALL INQUIRE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL, OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NONHAZARDOUS.
- B. CHRY, INC. HAS NO EXPERIENCE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CHRY TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CHRY NOR ANY AFFILIATE HEREOF WILL NOT OFFER, OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
- C. THE WORK WHICH IS REQUIRED TO REPAIR OR REPLACE, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONETS WHICH CONTAIN OR MAY HAVE HAD HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM/HER IMMEDIATELY.
- D. THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCUMPLISHMENT OF ANY WORK THEREBY AGREES TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE, BREACH OF CONTRACT, NEGLIGENCE OR ANY OTHER SUCH ITEM AGAINST CHRY, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CHRY, ITS PRINCIPALS, 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.

### PHASING NOTE:

- A. THE PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL THESE AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MANY GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR PROVIDED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICE AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL END 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 BRONZE AND TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. RELED 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. DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES.
- D. ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL PATTED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MATCH RATING.
- E. ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.
- F. SHARP GAS-HOT LINES INDICATE ITEMS FOR REMOVAL. 3/4" H AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- G. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. INDICATED FOR DEMOLITION WITH THE OWNER.
- H. 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 BRONZE AND TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. RELED VERIFY EXACT REQUIREMENTS.
- I. 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.
- J. DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES.
- K. ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL PATTED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MATCH RATING.
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- Q. DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES.
- R. ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL PATTED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MATCH RATING.
- S. ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.
- T. SHARP GAS-HOT LINES INDICATE ITEMS FOR REMOVAL. 3/4" H AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- U. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. INDICATED FOR DEMOLITION WITH THE OWNER.
- V. 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 BRONZE AND TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. RELED VERIFY EXACT REQUIREMENTS.
- W. 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.
- X. DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES.
- Y. ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL PATTED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MATCH RATING.
- Z. ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.

### PLUMBING GENERAL NOTES:

- A. COORDINATE THE LOCATION OF DRAIN, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.
- B. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THE PRECAUTIONS 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 LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS.
- C. IN ALL CASES, THE MOST EXISTING REQUIREMENT SHALL APPLY.
- D. WHEN WORK IS REQUIRED ABOVE EXISTING A WALL, PLASTER OR GYPSUM BOARD CEILING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION OF THE CEILING, IF DAMAGED, OF ALL CEILING OR TILE AND GYPSUM BOARD CEILING. THE CONTRACTOR SHALL PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNERS' STANDARD) EXISTING WALLS, CEILING, ETC., AND TO REPAIR OR REPLACE DAMAGED CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE ORIGINAL FINISHES AND TO THE OWNER'S SATISFACTION.
- E. OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THE CONTRACT. CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, STATE, ETC.)
- F. THE CONTRACTOR SHALL BE AWARE OF UNDER PLUMBING WORK DURING DEMOLITION. IF FILLS ARE UNCOVERED DURING DEMOLITION THEY FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEER TO REVIEW THE ROUTING.
- G. IF AREA OF CONSTRUCTION HAS A POST-TENSION FLOOR SLAB, CONTRACTOR SHALL USE ULTRA SOUND OR OTHER APPROVED METHODS TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR PENETRATIONS.
- H. WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING CONDUTTS, WATER, HYDROK, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW FLOOR THICKNESS OF FIRE PROOFING OR NO INTERFERENCE.
- I. ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES.
- J. ALL WORK REQUIRING OVERLAP OF ANY AREA IN THE BUILDING SHALL BE DONE IN ADVANCE AND SHALL COMPLY WITH INTERIOR LIFE SAFETY MEASURES.
- K. ALL PIPING IN ROOMS WITH CEILING SHALL BE ABOVE CEILING EXCEPT AS NOTED.
- L. LOCATIONS OF PIPING AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MATCH ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.
- M. ALL OFFSETS IN PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.
- N. 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.).
- O. 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.
- P. DOUBLE WELD TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN AND EXHAUST DUCTWORK ELBOWS. TURNING VANES NOT REQUIRED FOR KITCHEN EXHAUSTS.
- Q. ANY VIBRATING, OSCILLATE OR OTHER NOISE OR VIBRATION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SUBSTRUCTURING SYSTEMS BY AN APPROVED METHOD, NOISE OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.
- R. DEVIATIONS IN SIZE, CAPACITY, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT USED 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.
- S. VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SECURED ACCESS 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 INSTALLATION.
- T. ALL MANHOLES, VALVES AND SIMILAR UNDERGROUND STRUCTURES SHALL HAVE THE TOP ELEVATION SET FLUSH WITH FINISHED GRADE UNLESS SPECIFICALLY NOTED OTHERWISE.
- U. WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE THE PIPING SHALL BE BACKFILLED WITH COMPACTED FILLABLE FILL PER SPECIFICATIONS. WHENEVER POSSIBLE, LOCATE PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL BIDS OF THE FOOTER. ADDITIONALLY, GREASE TRAPS, MANHOLES, VALVES AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.
- V. WORK IN COMPARTED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

### SYMBOLS & ABBREVIATIONS

A, AIR	MEDICAL AIR	POINT OF CONNECTION
ABR	ABOVE FINISHED FLOOR	LIMIT OF DEMOLITION
AFR	ABOVE FINISHED ROOF	PIPE ELBOW TURNING UP/TURNING DOWN
CL	CAST IRON	PIPE TEE TURNING UP/TURNING DOWN
CD2	CARBON DIOXIDE	MEDICAL AIR
CW	DOMESTIC COLD WATER	COMPRESSED AIR
DN	DOWN	FORCED MAIN
EV	EVACUATION (WASTE/ANESTHETIC GAS DISPOSAL)	FIRE PROTECTION LINE
FHV	FIRE HOSE VALVE WITH CABINET	GAS LINE
FPWH	FREEZE PROOF WALL HYDRANT	SANITARY WASTE PIPING TO GREASE TRAP
HB	HOSE BIB	OXYGEN PIPING
HN	DOMESTIC HOT WATER	OVERFLOW/STORM PIPING
HW	IN ACCORDANCE WITH	PRIMARY STORM PIPING
ID	INSIDE DIMENSION	SAINTARY WASTE PIPING
IE	INVERT ELEVATION	STORM SEWER PIPING
LPA	LINE PRESSURE ALARM (MEDICAL GAS AREA ALARM)	VACUUM PIPING
MH	MANHOLE	VENT PIPING
MSA	MULTI-SINGLE ALARM (MEDICAL GAS MASTER ALARM)	EXISTING PIPING (THIN LINE)
NB	NOT TO SCALE	ABANDONED EXISTING PIPING (THIN LINE)
NC	NOT IN CONTRACT	CLEANOUT IN CEILING SPACE
NO	NORMALLY OPEN	FLOOR CLEANOUT
NC	NORMALLY CLOSED	EXTERIOR CLEANOUT
O, OX	OXYGEN	BALANCING VALVE
OD	OUTSIDE DIMENSION	BALL VALVE
OFD	OWNER FURNISHED, CONTRACTOR INSTALLED	SAFETY RELIEF VALVE
OFI	OWNER FURNISHED, OWNER INSTALLED	SAFETY RELIEF VALVE
OFD	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	OS&Y (GATE) VALVE
OR	OVER RECEPTACLE	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
ORL	OVERFLOW ROOF LEADER	STRAINER
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, OR GAS)	CHECK VALVE
PSI	POUNDS PER SQUARE INCH	DOUBLE CHECK VALVE ASSEMBLY
RHW	DOMESTIC RECIRCULATING HOT WATER	FLOW METER
RL	ROOF LEADER	FLOW SWITCH
SCW	SOFT DOMESTIC COLD WATER	PRESSURE SWITCH
SRL	SANITARY RISER	TAMPER SWITCH
TB	THRUST BLOCK	THERMOMETER
TE	TOP ELEVATION	VACUUM BREAKER
TP	TRAP PRIMER	LIMITED AREA SPRINKLER HEAD
TYP	TYPICAL	PETE'S PLUG
UN	UNLESS OTHERWISE NOTED	FLOOR DRAIN DESIGNATOR
V, VAC	VACUUM	ROOM DRAIN DESIGNATOR
VTH	VENT THRU ROOF	PLUMBING FIXTURE DESIGNATOR
<b>PIPE LEGEND</b>		EQUIPMENT TAG DESIGNATOR
DOMESTIC COLD WATER		TAGGED NOTE DESIGNATOR
DOMESTIC HOT WATER		REVISION DESIGNATOR
DOMESTIC HOT WATER REGR		TEMPERATURE SENSOR
VENT		HOSE BIB
SANITARY		
STORM		
STORM OVERFLOW		
NATURAL GAS		
GREASE WASTE		



NOT FOR CONSTRUCTION

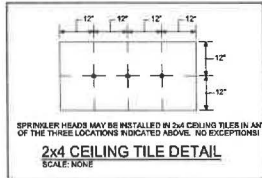
Example Renovation Project  
KCSO - Kenton Elementary  
Project Address, City, State, Zip

NO. DESCRIPTION DATE

PLUMBING LEGEND

2025-012

P000



#### GENERAL NOTES - FIRE PROTECTION

- ALL AREAS SHALL BE PROTECTED BY A 100% WET PIPE FIRE SUPPRESSION SYSTEM INSTALLED IN STRICT ACCORDANCE WITH NFPA-13, THE STATE BUILDING CODES AND THE PROJECT SPECIFICATIONS.
- ALL AREAS ARE PRESENTLY PROTECTED BY A 100% WET PIPE FIRE SUPPRESSION SYSTEM. CONTRACTOR SHALL MODIFY THE SYSTEM AS REQUIRED TO MAINTAIN 100% PROTECTION IN ACCORDANCE WITH NFPA 13, KENTUCKY BUILDING CODE AND SPECIFICATIONS.
- THE EXISTING FIRE PROTECTION CONTRACTOR SHALL OBTAIN AND UTILIZE THE ARCHITECTURAL REVISED CEILING PLAN FOR LAYOUT OF THE SPRINKLER HEADS. THE REVISED CEILING PLANS SHOWN ARE TO COORDINATE CEILING TYPES AND LOCATIONS. REFER TO THE MECHANICAL AND ELECTRICAL DRAWINGS FOR CEILING DEVICE LOCATIONS. REFER TO THE SPECIFICATIONS FOR CEILING DRAWING REQUIREMENTS.
- INSTALL HEADS IN CENTER OF 2'x2' TILES. INSTALL HEADS ON 1/4 POINTS OF THE 4' DIMENSION AND CENTER OF THE 2' DIMENSION IN 2'x4' TILES. DO NOT MOUNT HEADS IN CENTER OF 2'x4' TILES IF IT IS REQUIRED TO LOOK LIKE TWO 2'x2' TILES.
- ALL SPRINKLER HEADS SHALL BE "50% RECESSED" QUICK RESPONSE SPRINKLER HEADS (UNLESS OTHERWISE NOTED ON THE PLANS). HEADS SHALL BE FED FROM A RETURN BEND ARRANGEMENT.
- UTILIZE UPRIGHT AND/OR WALL-MOUNTED TYPE SPRINKLER HEADS IN AREAS WITHOUT CEILINGS.
- THE FIRE PROTECTION CONTRACTOR SHALL PERFORM HIS OWN FLOW TEST PRIOR TO SUBMITTING SHOP DRAWINGS.
- REFER TO A COMPLETE SET OF DOCUMENTS (ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL PLANS AND SPECIFICATIONS) FOR COORDINATION OF TRADES, ROOMS, STRUCTURE AND EQUIPMENT. PIPING DUCTWORK HEADS SHALL BE INSTALLED PRIOR TO FIRE PROTECTION PIPING. PROVIDE DRAIN VALVES IN THE FIRE PROTECTION SYSTEM WHERE REQUIRED TO COMPLETELY DRAIN THE SYSTEM.
- REFER TO THE SPECIFICATIONS FOR SPRINKLER HEAD TYPES.
- PROVIDE ALL REQUIRED DRAIN PIPING TO TEST AND SHUT OFF DISCHARGE DRAIN PIPING TO OUTDOORS OR A FLOOR DRAIN.
- 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 AIR ENGINEER.
- THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO INSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. 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. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS.
- WHERE WORK IS REQUIRED ABOVE EXISTING LATH, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL CEILING OR TILE AND GIRD REPAIRS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.
- ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.
- COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS. PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (1) OWNERS' EXISTING EXPOSED WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
- OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, STATE, ETC.)
- CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING, HVAC AND ELECTRICAL WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING.
- ALL PENETRATIONS OF FIRE AND SMOKE BATTIE ASSEMBLIES SHALL BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.
- 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.
- WHERE CEILINGS ARE INDICATED, ALL SPRINKLER PIPING MUST BE INSTALLED ABOVE CEILINGS. SPRINKLER PIPING MUST BE COORDINATED WITH OTHER TRADES. PIPING MUST BE OFFSET TO AVOID CONFLICTS WITH EXISTING, CONDUIT, ALL ELECTRICAL, ETC.
- LOCATIONS OF PIPING, DUCTS AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO REMOVAL ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.
- ALL OFFSETS IN DUCTS AND PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.
- COORDINATE ALL HVAC WORK WITH ELECTRICAL, PLUMBING AND OTHER TRADES TO AVOID INTERFERENCE WITH PIPING, DUCTS, CONDUIT AND OTHER EQUIPMENT.
- SEAL AIR/TIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION.
- THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPLIANCES, ETC., THAT CONFLICT WITH NEW WORK.
- VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HAND 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 SO THAT THEY DO NOT OBSTRUCT THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.

#### HAZARDOUS MATERIALS NOTES

- THE CONTRACTOR IT IS HEREBY ADVISED THAT IT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDING(S), 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. THEREAFTER, THE CONTRACTOR SHALL INQUIRE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR TIMES THEREAFTER UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.
- DATA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY DATA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, DATA'S LIABILITY FOR THIS WORK WILL NOT BE INCREASED BY THE CONTRACTOR'S FAILURE TO OBTAIN OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
- IF THE WORK WHICH IS TO BE PERFORMED INTERFERES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS WHICH CONTAIN OR REAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE (UPON IMMEDIATELY).
- THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR IN THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST DATA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DATA, ITS PRINCIPALS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.
- THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

#### ABBREVIATIONS

ADJ	ADJUSTABLE
AFV	ABOVE FINISHED FLOOR
AU	AUTHORITY HAVING JURISDICTION
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
CLS	CEILING
CLR	CLEAR
DN	DOWN
ENGR	ENGINEER
EQ	EQUAL
EXT	EXISTING TO REMAIN
EXT	EXTERIOR
FVC	FIRE VALVE CABINET
FL	FLOOR
FLA	FULL LOAD AMPS
FBR	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
FT	FEET OR FOOT
FUT	FUTURE
GA	GAGE/GAUGE
GAL	GALLON (-S)
GC	GENERAL CONTRACTOR
HORIZ	HORIZONTAL
ID	1 (-) IDENTIFICATION, INSIDE DIAMETER, INSIDE DIMENSION
IN	INCH (-S)
INT	INTER (-ION, -IVALS)
JPS	IRON PIPE SIZE
LBS	POUNDS
LF	LINEAR FEET/FOOT
MAX	MAXIMUM
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTY)
MISC	MISCELLANEOUS
MYS	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA OR NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN OR NUMBER
NYS	NOT TO SCALE
OK	ON CENTER
DO	OUTSIDE DI (-AMETER, -ENSION)
CPK1	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
CKC1	OWNER FURNISHED, CONTRACTOR INSTALLED
CKC1	OWNER FURNISHED, OWNER INSTALLED
PC	PLUMBING CONTRACTOR
PLRG	PLUMBING
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
P2	POUNDS PER SQUARE FOOT
P51	POUNDS PER SQUARE INCH
PSIG	PSI GUAGE
SQ FT	SQUARE FEET OR FOOT
TBD	TO BE DETERMINED

#### PHASING NOTES

- THIS PROJECT INTERFERES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL THE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REDUCED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, REPAIR THE WORK, ETC. CONTRACTOR SHALL COORDINATE ALL GAS WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

#### ABBREVIATIONS (CONTINUED)

TE	TOP ELEVATION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WT	WEIGHT
W	WITH
W/O	WITHOUT
%	PERCENT
L	CENTLURIE

#### GENERAL SYMBOLS

⊕	TAGGED NOTE DESIGNATOR
⊕	REVISION TAG
⊕	ROOM TAG
⊕	EQUIPMENT TAG
⊕	POINT OF CONNECTION / CONNECT TO EXISTING
⊕	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
—FP—	FIRE PROTECTION PIPING
—DOOO—	PIPPING TO BE DEMOLISHED - DOOO DENOTES SYSTEM
—DOOO—	EXISTING PIPING - DOOO DENOTES SYSTEM
—ALOOO—	ABANDONED IN PLACE PIPING - DOOO DENOTES SYSTEM
—V—	STRAINER
—V—	MANUAL ISOLATION VALVE
—V—	GLOBE VALVE
—V—	OS&T (VALVE) TYPE
—V—	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
—V—	CHECK VALVE
—V—	DOUBLE CHECK VALVE ASSEMBLY
—V—	FLEXIBLE PIPE CONNECTION
—V—	PIPPING UNION
—V—	FLOW SWITCH
—V—	PRESSURE SWITCH
—V—	TAMPER SWITCH
—V—	PETES PLUS, TEMPERATURE/PRESSURE PORT
—V—	50% RECESSED SPRINKLER HEAD WITH REMOVABLE ESCUTCHION PLATE
—V—	UPRIGHT TYPE SPRINKLER HEAD
—V—	SIOWALL TYPE SPRINKLER HEAD



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NOT FOR  
CONSTRUCTION

Example Renovation Project  
KCSO - Kenton Elementary  
Project Address, City, State, Zip

NO. DESCRIPTION DATE

FIRE PROTECTION  
LEGEND

2025-012

F000



## GENERAL NOTES - MECHANICAL

- THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE GENERAL AND SPECIAL CONDITIONS, GENERAL CONDITIONS, MECHANICAL OF THE PROJECT SPECIFICATIONS AND TO ALL OTHER CONTRACT DOCUMENTS AS THEY APPLY TO THIS BRANCH OF WORK. ATTENTION IS ALSO DIRECTED TO ALL OTHER SECTIONS OF THE CONTRACT DOCUMENTS WHICH AFFECTS THE WORK AND WHICH ARE HEREBY MADE A PART OF THE WORK SPECIFIED.
- ALL MANUFACTURERS, SUPPLIERS, FABRICATORS, CONTRACTORS, ETC. SUBMITTING PROPOSALS FOR ANY PART OF THE WORK, SERVICES, MATERIALS OR EQUIPMENT TO BE USED OR APPLIED TO THIS PROJECT ARE HEREBY DIRECTED TO FAMILIARIZE THEMSELVES WITH THE CONTRACT DOCUMENTS. IN CASE OF CONFLICT, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR CLARIFICATION AND FINAL DETERMINATION PRIOR TO THE BID.
- THE WORK SHALL CONSIST OF FURNISHING ALL LABOR, EQUIPMENT, TRANSPORTATION, SUPPLIES, MATERIALS, APPURTENANCES AND SERVICES NECESSARY FOR THE SATISFACTORY INSTALLATION OF THE COMPLETE AND OPERATING SYSTEMS INDICATED OR SPECIFIED IN THE CONTRACT DOCUMENTS.
- ANY MATERIALS, LABORS, EQUIPMENT OR SERVICES NOT MENTIONED SPECIFICALLY HEREIN WHICH MAY BE NECESSARY TO COMPLETE ANY PART OF THE SYSTEMS IN A SUBSTANTIAL MANNER, IN COMPLIANCE WITH THE REQUIREMENTS STATED, SHOWN OR IMPLIED IN THE PLANS AND SPECIFICATIONS, SHALL BE INCLUDED IN THE BID AS PART OF THE CONTRACT.
- THE ENGINEER DOES NOT DEFINE THE SCOPE OF INDIVIDUAL TRADES, SUBCONTRACTORS, MATERIAL SUPPLIERS AND VENDORS. ANY GUEST NUMBERING OR SPECIFICATION NUMBERING SYSTEM USED WHICH IDENTIFIES DISCIPLINES IS SOLELY FOR THE ENGINEER'S CONVENIENCE AND IS NOT INTENDED TO DEFINE A SUBCONTRACTOR'S SCOPE OF WORK. INFORMATION REGARDING INDIVIDUAL TRADES, SUBCONTRACTORS, MATERIAL SUPPLIERS AND VENDORS MAY BE DETAIL, DESCRIBED AND INDICATED AT DIFFERENT LOCATIONS THROUGHOUT THE CONTRACT DOCUMENTS. NO CONSIDERATION WILL BE GIVEN TO REQUESTS FOR CHANGE ORDERS FOR FAILURE TO OBTAIN AND REVIEW THE COMPLETE SET OF CONTRACT DOCUMENTS WHEN PREPARING BIDS, PRICES AND QUOTATIONS. UNLESS STATED OTHERWISE, THE SUBDIVISION AND ASSIGNMENT OF WORK UNDER THE VARIOUS SECTIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR HOLDING THE PRIME CONTRACT.
- IT IS THE INTENTION OF THE CONTRACT DOCUMENTS TO CALL FOR A COMPLETE AND OPERATIONAL SYSTEM, INCLUDING ALL COMPONENTS, ACCESSORIES, FINISH WORK, ETC. NECESSARY FOR TROUBLE FREE OPERATION, TESTED AND READY FOR OPERATION. ANYTHING THAT MAY BE REQUIRED, IMPLIED, OR IMPLIED BY THE CONTRACT DOCUMENTS SHALL BE PROVIDED AND INCLUDED AS PART OF THE BID.
- ALL CONTRACTORS AND VENDORS PROVIDING A BID FOR THIS PROJECT SHALL REVIEW THE PLANS AND SPECIFICATIONS AND DETERMINE ANY MODIFICATIONS AND/OR ADJUSTMENTS NECESSARY RELATIVE TO THE PROPOSED EQUIPMENT AND MATERIALS WITH SPECIFIC MANUFACTURER'S INSTALLATION REQUIREMENTS. INCLUDE IN THE BID ANY NECESSARY METHODS, MATERIALS, OPTIONS, ACCESSORIES, ETC. NECESSARY TO INSTALL THE PROPOSED EQUIPMENT AND MATERIALS, REGARDLESS OF WHETHER USED AS BASIS OF DESIGN OR BIDDING OFFERS AS A SUBSTITUTION, IN ACCORDANCE WITH THE SPECIFIC MANUFACTURER'S INSTALLATION REQUIREMENTS, WHETHER SPECIFICALLY DETAILED OR NOT, WITHIN THE PLANS AND SPECIFICATIONS.
- THE BIDDER/PROPOSER SHALL COMPLETELY REVIEW THE CONTRACT DOCUMENTS. ANY INTERPRETATION AS TO DESIGN INTENT OR SCOPE SHALL BE PROVIDED BY THE ENGINEER. SHOULD ANY INTERPRETATION BE REQUIRED, THE BIDDER/PROPOSER SHALL REQUEST A CLARIFICATION NOT LESS THAN TEN (10) DAYS PRIOR TO THE SUBMISSION OF THE BID SO THAT THE CONDITION MAY BE CLARIFIED BY ADDENDUM. IN THE EVENT OF ANY CONFLICT, DISCREPANCY, OR INCONSISTENCY DEVELOPS, THE INTERPRETATION OF THE ENGINEER SHALL BE FINAL.
- THE CONTRACTOR SHALL PROVIDE LAYOUT CONFIGURATION OF EQUIPMENT LOCATIONS TO VERIFY THAT ALL COMPONENTS WILL FIT IN THE PROPOSED SPACE AND HAVE ADEQUATE CLEARANCE FOR SERVICES. COORDINATE THE LOCATION OF DRAINS, CONNECTIONS, ETC. PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR(S).
- EQUIPMENT AND MATERIALS SUBSTITUTIONS OR DEVIATIONS SHALL COMPLY WITH "GENERAL PROVISIONS - MECHANICAL PART IV." ANY VENDOR DESIRING TO OBTAIN AN EQUIPMENT SUBSTITUTION SHALL REQUEST A CLARIFICATION NOT LESS THAN TEN (10) DAYS PRIOR TO THE SUBMISSION OF THE PROPOSAL SO THAT IT MAY BE CONSIDERED AND NOTIFICATION INCLUDED BY ADDENDUM. REQUESTS MADE AFTER THIS PERIOD WILL BE REJECTED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE REGARDLESS IF CONTRACTOR IS SIGNATORY OF CODES, RULES, REGULATIONS, LAWS, ETC. THE CONTRACTOR SHALL ALSO BE VERSED IN ALL CODES, RULES, REGULATIONS, LAWS, ETC. PERTINENT TO THEIR PART OF THE WORK PRIOR TO SUBMISSION OF THE PROPOSAL.
- ALL WARRANTIES SHALL BEGIN STARTING AT THE PROJECT'S SUBSTANTIAL COMPLETION DATE. ALL EQUIPMENT, MATERIALS AND LABOR WARRANTIES SHALL BE FURNISHED BY THE EQUIPMENT SUPPLIER/VENDOR.
- WHENEVER WORK PENETRATES ROOFING, IT SHALL BE DONE IN A MANNER THAT WILL NOT DRAIN OR VOID THE ROOFING GUARANTEE OR WARRANTY IN ANY WAY. COORDINATE ALL SUCH WORK WITH THE ROOFING INSTALLER.
- ELECTRICAL, PIPING AND EQUIPMENT SHALL BE KEPT CLEAR AT ALL TIMES. DUCTWORK STORED ON THE JOB SITE SHALL BE PLACED A MINIMUM OF 4" ABOVE THE FLOOR AND BE COMPLETELY COVERED IN PLASTIC. INSTALLED DUCTWORK SHALL BE PROTECTED WITH PLASTIC. DO NOT INSTALL THE DUCTWORK OR INSULATION (PIPE OR DUCT) IF THE BUILDING IS NOT "DRIED-IN." IF THIS IS REQUIRED, THE ENTIRE LENGTH SHALL BE COVERED IN PLASTIC TO PROTECT. THE OWNER/ENGINEER SHALL PERIODICALLY INSPECT THAT THESE PROCEDURES ARE FOLLOWED. IF DEEMED UNACCEPTABLE, THE CONTRACTOR SHALL BE REQUIRED TO CLEAN THE DUCT SYSTEM UTILIZING A MUCKA CERTIFIED CONTRACTOR.
- THE PERMANENT SYSTEM, WHEN INSTALLED, MAY BE USED FOR TEMPORARY SERVICES WITH THE CONSENT OF THE ENGINEER AND IN STRICT ACCORDANCE WITH "GENERAL PROVISIONS - MECHANICAL - TEMPORARY USE OF EQUIPMENT."
- THE CONTRACTOR AND THEIR SUBCONTRACTORS SHALL INCLUDE IN THE BID TO PROVIDE EQUIPMENT AND CONSTRUCTION STARTUP AND VERIFICATION FOR ALL MECHANICAL SYSTEMS SPECIFIED FOR THIS PROJECT AND IN STRICT ACCORDANCE WITH "GENERAL PROVISIONS - MECHANICAL - EQUIPMENT/CONSTRUCTION STARTUP & VERIFICATION."
- THE CONTRACTOR SHALL DETERMINE FROM THE CONTRACT DOCUMENTS, THE DATE OF COMPLETION FOR THE PROJECT AND INSURE THAT EQUIPMENT DELIVERY SCHEDULES CAN BE MET SO AS TO ALLOW THIS COMPLETION TO BE MET.
- THROUGH COORDINATION WITH OTHER CONTRACTORS, VENDORS, AND SUPPLIERS ASSOCIATED WITH THIS PROJECT, THE CONTRACTOR SHALL INSURE, 100% FUNCTIONAL, TESTED, INSPECTED AND APPROVED SYSTEMS. CLAIMS FOR ADDITIONAL COST OR CHANGE ORDERS WILL BE REJECTED.
- PRIOR TO ORDERING ANY MATERIALS OR EQUIPMENT OF ANY KIND, THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL COORDINATION OF ALL ELECTRICAL REQUIREMENTS (I.E. VOLTAGE, PHASE, CIRCUIT BREAKER, WIRE SIZING, ETC.) WITH THE ELECTRICAL CONTRACTOR. THERE WILL BE NO CHANGE IN THE CONTRACT AMOUNT FOR ANY DISCREPANCIES.
- ALL OFFSETS, TURNS, FITTINGS, TEES, ETC., MAY NOT BE INDICATED, BUT SHALL BE PROVIDED AS REQUIRED. ADDITIONAL ALLOWANCES SHALL BE INCLUDED FOR SAME AT EACH PROPOSER'S DISCRETION. DO NOT SCALE FROM DIMENSIONS. PROVIDING DISTANCE SCALE. WORK SHALL BE Laid OUT FROM CONTRACTOR GENERATED DIMENSIONED DRAWINGS.
- THE CONTRACTOR SHALL INSURE PROPER COORDINATION BETWEEN ALL TRADES SUCH AS CONCRETE, PIPING, DUCTWORK, ETC. DOES NOT BLOCK ACCESS TO VALVES, EQUIPMENT, DUCT ACCESS DOORS, ETC. ITEMS THAT HAVE BEEN INSTALLED WHERE ACCESS IS COMPROMISED SHALL BE RELOCATED AT THE CONTRACTOR'S EXPENSE.
- THESE DRAWINGS ARE ACCURATE TO THE BEST OF OUR KNOWLEDGE, HOWEVER LOCATIONS AND SIZES WERE TAKEN FROM DIFFERENT SOURCES AND ARE SUBJECT TO DEVIATION. THE CONTRACTOR SHALL ASSUME SOME DEVIATIONS AND INCLUDE OFFSETS, ADDITIONAL PIPING, ETC. AT THE TIME OF BID.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING REQUIRED FOR THEIR WORK. ALL CUTTING AND PATCHING SHALL MATCH ADJACENT SURFACES AND PERFORMED BY SKILLED WORKERS OF THE TRADE. REFER TO SPECIFICATION SECTION "PAINTING, CUTTING, PATCHING, REPAIRING, ETC." AND ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- ALL SUPPORTS FOR EQUIPMENT, DEVICES OR FITTINGS SHALL BE UNIFORM, FROM THE BUILDING STRUCTURE. DO NOT SUPPORT LOADS ON WALLS, PARTITIONS, EQUIPMENT OR SUPPORTS WITHOUT WRITTEN PERMISSION FROM THE ENGINEER AND CONSENT OF THE OTHER TRADE. IN WRITING.
- PRIOR TO PURCHASE OR FABRICATION OF PIPING, THE CONTRACTOR SHALL COORDINATE INSTALLATION WITH ACTUAL CONSTRUCTING AND INSTALL ACCORDINGLY.
- VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM SHALL NOT BE LOCATED ABOVE A HANG CEILING. IF THIS IS NOT POSSIBLE, THEN AN IMPERMEABLE GASKET ACCESS DOOR SHALL BE PLACED AT NO ADDITIONAL COST UNDER THE ITEM WHETHER SHOWN OR NOT ON THE PLANS TO ALLOW ACCESS AND ADJUSTMENT.
- THE CONTRACTOR SHALL VISIT THE SITE FOR EXACT LOCATIONS OF ALL WALL AND CEILING DEVICES. THIS SHALL INCLUDE PLUMBING FIXTURES, CEILING GRILLES AND DIFFUSERS, ETC.
- CONTRACTOR SHALL CLEAN UP CONSTRUCTION DEBRIS AT ALL TIMES DURING CONSTRUCTION.

## GENERAL NOTES - DEMOLITION

- A. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS AND AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING CEILING AS REQUIRED AND REINSTALLATION. TEMPORARILY SUPPORT LIGHTS, OUTLETSES, CEILING ETC. REPLACE BROWN CEILING TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. PRIOR TO VERIFY EXACT REMOVAL REQUIREMENTS.
- ALL OUTGAS SHALL BE DEMOLISHED THROUGH THE PROJECT REPRESENTATIVE FOR PROPER COORDINATION. A REQUEST FOR AN OUTGAS SHALL BE SUBMITTED IN WRITING A MINIMUM OF TWO WEEKS IN ADVANCE.
- URING SPRINKLER SYSTEM OUTGAS THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTGAS.
- ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL BATED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MATCH EXISTING.
- ALL EXISTING BUILDING FIXTURES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.
- HEAVY DASHED LINES INDICATE ITEMS FOR REMOVAL (LUDR) AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH THE OWNER.

## ABBREVIATIONS

ADJ	ADJUSTABLE
AFB	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AIR	AIR PRESSURE DROP
AVE	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BHP	BREAK HORSEPOWER
BTU	BRITISH THERMAL UNIT
CAV	CONSTANT AIR VOLUME
CFM	CUBIC FEET PER MINUTE
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
DB	DRY BULB
DDC	DIRECT DIGITAL CONTROLS
DN	DOWN
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ESP	EXTERNAL STATIC PRESSURE
ETR	ENTERING STATIC PRESSURE
ENTR	ENTERING TO REMAIN
EWTF	ENTERING WATER TEMPERATURE
FA	FIRE AREA
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FM	FIRE PROTECTION CONTRACTOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FSD	FIRE SMOKE DAMPER
GAL	GALLON (S)
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GR	GRAINS
HD	HEAD
HP	H (HORSEPOWER, -HAT PUMP)
ID	(IDENTIFICATION, -INSIDE DIAMETER, -INSIDE DIMENSION)
KW	KILOWATT
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MWH	BTU PER HOUR (THOUSANDS)
MCA	MINIMUM CIRCUIT AMPS
MAF	MANUFACTURER
MOCP	MAXIMUM OVERCURRENT PROTECTION (AMPS)
NC	NOISE OUTLETA OR NORMALLY CLOSED

## ABBREVIATIONS (CONTINUED)

NO	NORMALLY OPEN OR NUMBER
NTS	NOT TO SCALE
OD	OUTSIDE DI (DIAMETER, -DIMENSION)
OPCT	OWNER FURNISHED, CONTRACTOR INSTALLED
OPCI	OWNER FURNISHED, OWNER INSTALLED
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	PHASE (ELECTRICAL)
PM	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	PSI GAUGE
RH	RELATIVE HUMIDITY (%)
RPM	REVOLUTIONS PER MINUTE
SD	SMOKE DAMPER
SP	STATIC PRESSURE
SQ FT	SQUARE FEET OR FOOT
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT (AGE, -S)
VAR	VARI (ABLE, -IES)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VF	VARIABLE FREQUENCY DRIVE
WD	WATT (AGE, -S)
WS	WET BULB
WPD	WATER PRESSURE DROP
WP	DIFFERENTIAL PRESSURE
ΔT	TEMPERATURE DIFFERENCE
C	CENTERLINE
Δ	FLAGGED NOTE DESIGNATOR
△	REVISION TRIANGLE
ROOM TAG	ROOM TAG
EQUIPMENT TAG	EQUIPMENT TAG
POINT OF CONNECTION / CONNECT TO EXISTING	POINT OF CONNECTION / CONNECT TO EXISTING
POINT OF DEMOLITION	POINT OF DEMOLITION

## GENERAL SYMBOLS

△	FLAGGED NOTE DESIGNATOR
△	REVISION TRIANGLE
ROOM TAG	ROOM TAG
EQUIPMENT TAG	EQUIPMENT TAG
POINT OF CONNECTION / CONNECT TO EXISTING	POINT OF CONNECTION / CONNECT TO EXISTING
POINT OF DEMOLITION	POINT OF DEMOLITION

## HVAC LEGEND

☒	SUPPLY AIR DIFFUSER
☒	RETURN AIR GRILLE
☒	EXHAUST AIR DIFFUSER
☒	TRANSFER AIR GRILLE W/ SOUND ATTENUATING BOOT
☒	SIDEWALL DIFFUSER/GRILLE
☒	AIR DEVICE TAG (REGISTER, GRILLE, DIFFUSER, LOUVER)
☒	RECTANGULAR DUCT
☒	ROUND/SPIRAL DUCT
☒	FLAT CHAL DUCT
☒	SUPPLY AIR DUCT
☒	RETURN AIR DUCT
☒	EXHAUST AIR DUCT
☒	OUTSIDE AIR DUCT
☒	TRANSFER AIR DUCT
☒	COMBUSTION AIR EXHAUST DUCT
☒	COMBUSTION AIR INTAKE DUCT
☒	SA AIR DUCT TURNING UP
☒	SA AIR DUCT TURNING DOWN
☒	RA AIR DUCT TURNING UP
☒	RA AIR DUCT TURNING DOWN
☒	EA AIR DUCT TURNING UP
☒	EA AIR DUCT TURNING DOWN
☒	EXISTING DUCT - (XXX) DENOTES SYSTEM
☒	DUCT TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
☒	DUCT TO BE DEMOLISHED IN PLACE - (XXX) DENOTES SYSTEM
☒	MIXERED BLOW WITH TURNING VANES
☒	FLEXIBLE DUCT
☒	THERMOSTAT
☒	TEMPERATURE SENSOR
☒	HUMIDITY SENSOR
☒	CARBON DIOXIDE SENSOR
☒	TEMPERATURE & CARBON DIOXIDE SENSOR
☒	MANUAL BALANCING/VOLUME DAMPER
☒	HORIZONTAL DAMPER

## MECHANICAL PIPING LEGEND

☒	PIPE ELBOW TURNING UP
☒	PIPE ELBOW TURNING DOWN
☒	PIPE TEE CONNECTION ON TOP
☒	PIPE TEE CONNECTION ON BOTTOM
☒	PIPE CAP
☒	CONDENSATE DRAIN
☒	CHILLED WATER SUPPLY/RETURN
☒	CONDENSER WATER SUPPLY/RETURN
☒	DUAL TEMP. WATER SUPPLY/RETURN
☒	GEO-THERMAL WATER SUPPLY/RETURN
☒	HIGH PRESSURE STEAM CONDENSATE
☒	HIGH PRESSURE STEAM (H) DENOTES PRESSURE
☒	HEAT PUMP WATER SUPPLY/RETURN
☒	HEAT RECOVERY SUPPLY/RETURN PIPING
☒	HEATING WATER SUPPLY/RETURN
☒	LOW PRESSURE STEAM CONDENSATE
☒	LOW PRESSURE STEAM (L) DENOTES PRESSURE
☒	MEDIUM PRESSURE STEAM RETURN
☒	MEDIUM PRESSURE STEAM (M) DENOTES PRESSURE
☒	STEAM VENT PIPING
☒	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
☒	EXISTING PIPING - (XXX) DENOTES SYSTEM



EmbosseDesign.com 806 Monmouth Street  
Newport, KY 41071

NOT FOR  
CONSTRUCTION

Example Renovation Project  
KCSO - Kenton Elementary  
Project Address, City, State, Zip

NO. DESCRIPTION DATE

MECHANICAL LEGEND

2025-012

M000

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



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**BEFORE YOU DIG**

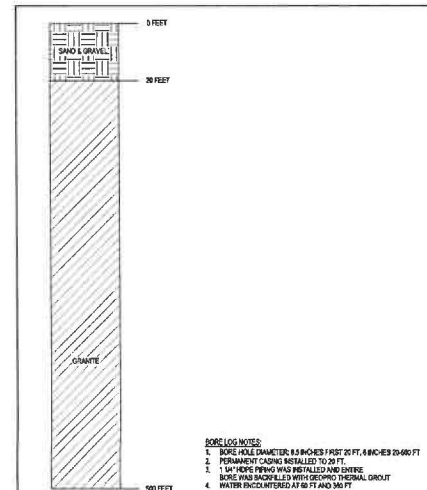
THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONTACT "800 BEFORE YOU DIG" AT 1-800-753-6687 TO OBTAIN UNDERGROUND UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY CONTRACTOR OR SUBCONTRACTOR PERFORMING ANY TYPE OF EXCAVATION ON THIS PROJECT SHALL CALL "800" TO OBTAIN AN AUTHORIZED PERSON NUMBER.

**SITE UTILITIES LEGEND**

— GS — GEOTHERMAL SUPPLY PIPING  
— GR — GEOTHERMAL RETURN PIPING



- MECHANICAL SITE UTILITY NOTES**
- DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS.
  - CONTRACTOR SHALL CUT ALL PAVEMENT, CURBS, ETC. AS REQUIRED FOR WORK. CONTRACTOR SHALL REFER TO CH SCOPING DOCUMENTS FOR PATCH AND REPAIR OF CONCRETE/PAVEMENT. ANY SUCH WORK NOT EXPLICITLY MENTIONED UNDER A SEPARATE CONTRACT IS TO BE INCLUDED IN THE CONTRACTOR'S BID.
  - FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEPTED BY THIS DESIGN.
  - WHEN INTERRUPTION OF AN EXISTING UTILITY OR SERVICES IS PLANNED OR OCCURS ACCEPTABLY, THE CONTRACTOR SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED AT NO INCREASE IN THE CONTRACT PRICE.
  - PLANNED INTERRUPTION OF ANY SERVICE SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPALITY OR UTILITY COMPANY, THE ARCHITECT AND THE BUILDING OPERATORS AT LEAST TWO WEEKS IN ADVANCE OF THE ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN THE PARTIES MENTIONED TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED FROM THEM AT LEAST TWO WEEKS IN ADVANCE IN WRITING AND INSURE THAT THEY DO NOT DELAY WORK.
  - LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPURTENANCES, LINES, BUILDINGS, ETC. INDICATED ON THESE DRAWINGS WERE TAPE FROM VARIOUS SOURCES, ARE DIAGNOSTIC ONLY AND ARE SUBJECT TO SUBSTANTIAL VARIATION FROM EXISTING CONDITIONS. EXISTING UTILITY LOCATIONS MAY VARY (CONSEQUENTLY ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO INSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE). FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE, AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITIES SHALL ALSO BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY. IF ANY VARIATION OCCURS, CONSULT THE BUILDING ENGINEER AND THE MECHANICAL ENGINEER'S REPRESENTATIVE. CONTRACTOR SHALL VISIT SITE AND FIELD VERIFY THE ROUTING OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID PERSONAL INDICATES THAT THE CONTRACTOR IS FULLY AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.
  - CONTRACTOR SHALL REFER TO CH SCOPING DOCUMENT FOR PATCH AND REPAIR OF LANDSCAPING THAT IS DISTURBED BY WORK OCCURRING IN THIS PROJECT. ANY SKID PATCH AND REPAIR NOT EXPLICITLY COVERED UNDER A SEPARATE CONTRACT SHALL BE INCLUDED IN THE CONTRACTOR'S BID.
  - THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE DRAWINGS ARE APPROXIMATE ONLY.
  - THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY EXCAVATION WORK REQUIRED TO LOCATE UNDERGROUND UTILITIES. THE CONTRACTOR IS ALSO REQUIRED TO NOTIFY ANY OTHER AFFECTED UTILITY OWNERS PRIOR TO DIGGING. IN THE EVENT OF ACCIDENTAL INTERRUPTION OF SERVICE, CONTRACTOR WILL IMMEDIATELY NOTIFY THE OTHER UTILITY OWNERS.
  - THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD OTHER EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE OTHER UTILITIES, THE UTILITY WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT.
  - CONTRACTOR SHALL PAY ALL TAP FEES, UTILITY COST, UTILITY CONNECTION COSTS, METER FEES, EXTENSION AND DEVELOPMENT CHARGES, REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
  - CONTRACTOR SHALL COORDINATE LOCATION OF ALL UNDERGROUND WATER LINES, GAS LINES, SANITARY LINES, SEWER LINES, VALVES, ETC. WITH ELECTRICAL, RAIL, BOILER, CONCRETE, POLE BASES ETC. SPECIFICALLY COORDINATE PLACEMENT OF CHILLED WATER PIPING IN PARKING LOTS WITH POLE BASE LOCATIONS AND NOTIFY A/E BY COMPLETION DATE.
  - ALL PIPING TO BE ABANDONED SHALL BE CAPPED WATERTIGHT. NO PIPING SHALL BE LEFT OPEN-ENDED.
  - REFER TO SITE DEMOLITION PLAN FOR TREES TO BE REMOVED. IF TREES ARE TO REMAIN, CONTRACTOR SHALL TAKE CARE TO INSTALL PIPING AND LIMIT DEMOLITION ACTIVITIES TO OUTSIDE THE ENVELOPE OF EXISTING TREES TO REMAIN.



- BORE LOG NOTES**
- BORE HOLE DIAMETER: 8.5 INCHES / 21.59 CM / 8.5 INCHES / 21.59 CM
  - PERMANENT CASING INSTALLED TO 21 FT.
  - 1" WIDE PIPING WAS INSTALLED AND EXTENDED TO 21 FT.
  - BORE HOLE DIAMETER: 8.5 INCHES / 21.59 CM / 8.5 INCHES / 21.59 CM

**2 WELLFIELD BORE LOG**

MS100 SCALE: NOT TO SCALE

**TAGGED NOTES**

**MS**



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1000 Main Street  
Newport, KY 41071

**NOT FOR  
CONSTRUCTION**

**Example Renovation Project**  
**KCSD - Kenton Elementary**  
Project Address, City, State, Zip

NO. DESCRIPTION DATE

**MECHANICAL SITE PLAN**

2025-012

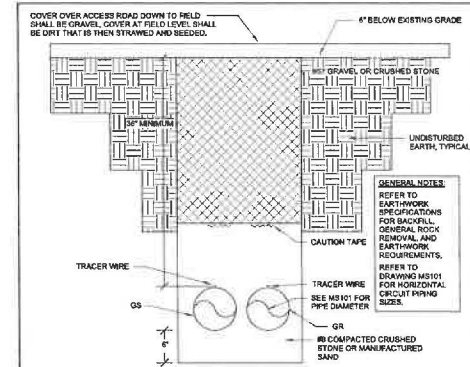
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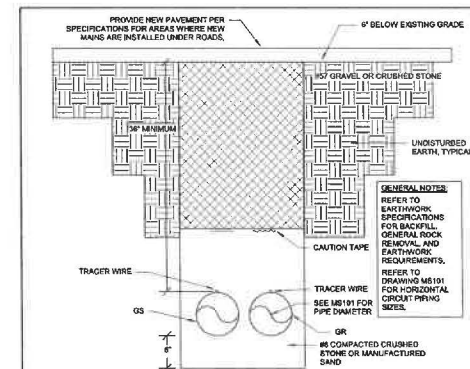
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2 GEOTHERMAL TRENCHING DETAIL FOR NONPAVED AREAS  
MS101 SCALE: NOT TO SCALE



3 GEOTHERMAL TRENCHING DETAIL FOR PAVED AREAS  
MS101 SCALE: NOT TO SCALE

GEOTHERMAL WELLFIELD INFORMATION	
WELL BORE DEPTH	300'
WELL FIELD SPACING	20' ON CENTER
WELL QUANTITY	128
# OF CIRCUITS	8 @ 16 WELLS EACH
GPM PER WELL	XX GPM
PIPING TYPE	HEAT FUSION WELDED HOPE PIPING IN WELLS SHALL BE 1" 1/2" U BEND ASSEMBLY
WELL FIELD GROUT	THE ENTIRE BORE SHALL BE GROUTED WITH A GROUT MIXTURE THERMAL CONDUCTIVITY OF 1.0 BTU/HR-FT-°F
COVER OF WELLFIELD AND ASSOCIATED PIPING	THE WELL FIELD WHICH IS BEING LOCATED UNDER THE EXISTING TRACK SHALL BE STAMPED AND RESEAL ONCE THE WELL FIELD IS COMPLETE. IT IS THE EXPECTATION THAT THE ENTIRE FIELD HAS A CONTINUOUS AND UNIFORM APPEARANCE.

TEST WELL INFORMATION	
THERMAL CONDUCTIVITY	1.49 BTU/HR-FT-°F
UNDISTURBED FORMATION TEMPERATURE	52.7 TO 53.8°F
THERMAL DIFFUSIVITY	1.28 FT²/DAY
TEST WELL DEPTH	300', 1" HOPE 60R-11 (2) END



F.H. BOSS DESIGN, INC.  
800/431-0512 208 Monmouth Street,  
Newport, KY 41071

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Example Renovation Project  
KCSD - Kenton Elementary  
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NO. DESCRIPTION DATE

MECHANICAL SITE PLAN -  
ENLARGED

2025-012

MS101

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**Example Renovation Project**  
**KCSD - Kenton Elementary**  
Project Address, City, State, Zip

*(continued)*

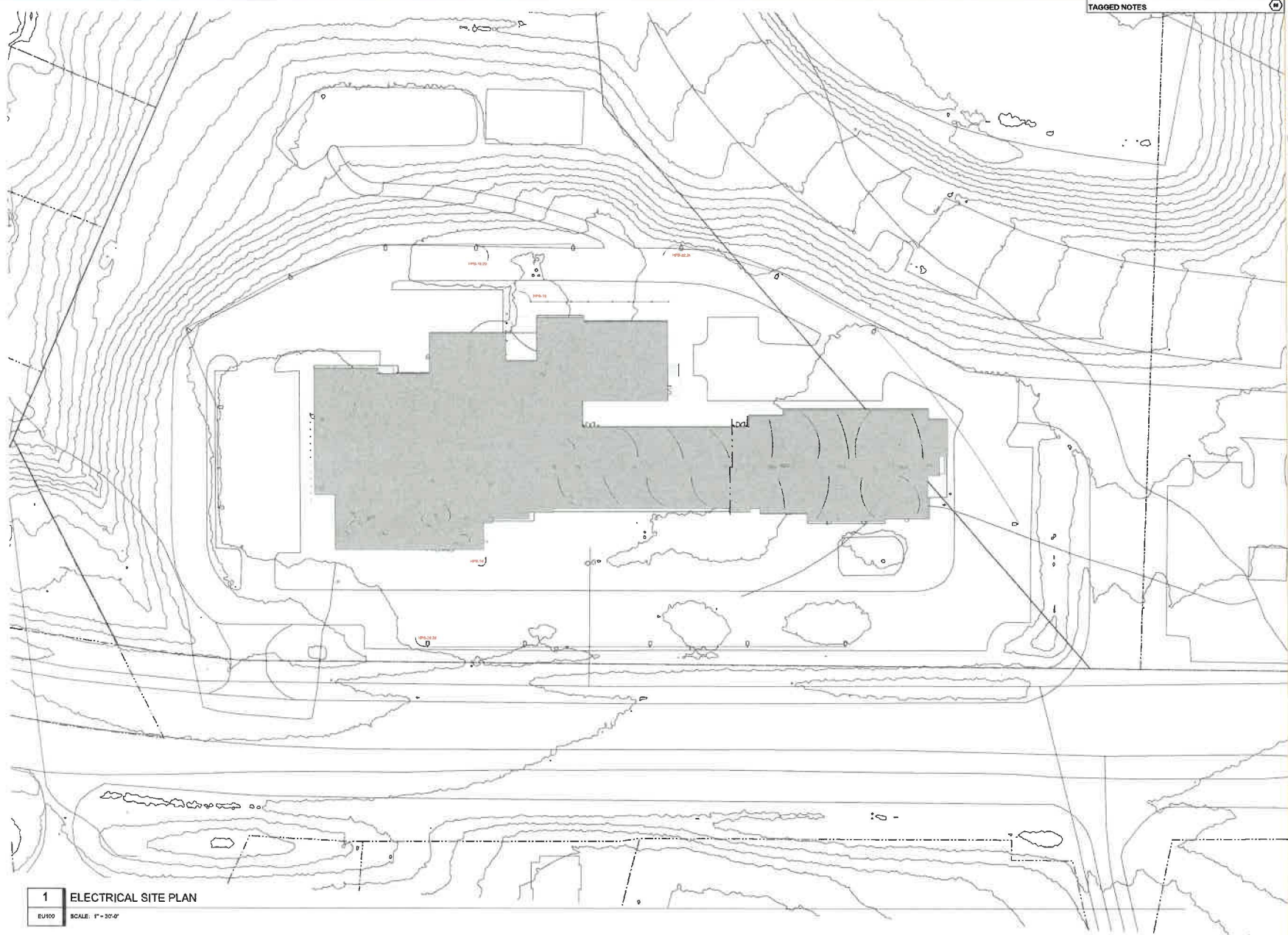
### ELECTRICAL LEGEND

0005 010

E000



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TAGGED NOTES



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ELECTRICAL SITE UTILITY  
PLAN

2025-012

EU100

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## GENERAL REQUIREMENTS:

- IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE APPROPRIATE QUANTITIES, FIELD MEASUREMENTS, DIMENSIONAL STABILITY, INSTALLATION, ANCHORAGE, AND COORDINATION WITH OTHER TRADES. THEY SHALL ALSO OBTAIN AND REVIEW ALL DIMENSIONS OF THE CONTRACT DOCUMENTS AND ALL DIMENSIONS TO BE PROVIDED TO THE OWNER OR ARCHITECT.
- CONTRACTOR SHALL UTILIZE THESE DRAWINGS ALONG WITH THE SPECIFICATIONS TO DETERMINE THE FULL SCOPE, INTENT AND REQUIREMENTS OF THE PROJECT. WORK DETAILED ON THE DRAWINGS BUT NOT DESCRIBED IN THE SPECIFICATIONS IN THE SPECIFICATIONS SHALL BE INTERPRETED AS SUCH WORK WILL BE FULLY DESCRIBED IN BOTH DOCUMENTS. THE HIGHER QUALITY, HIGHER QUANTITY, MORE LABOR INTENSIVE AND OVERALL MORE STRINGENT AND MORE COMPLEX REQUIREMENT SHALL APPLY. UNLESS OTHERWISE NOTED PRIOR TO ME.
- THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE SPECIFICATIONS. ANY DISCREPANCY DISCOVERED SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGNER PRIOR TO THE COMMENCEMENT OF ANY WORK AFFECTED BY ANY SUCH DISCREPANCY. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH OR CAUSED BY THEIR FAILURE TO COMPLY WITH THE REQUIREMENT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR JOB CLEANLINESS. PROJECT AREAS SHALL BE THOROUGHLY CLEANED AND ANY WASTE REMOVED AT THE END OF EACH WORK DAY. OWNER'S FACILITIES OR TRASH COLLECTION SHALL NOT BE USED FOR WASTE DISPOSAL.
- EACH CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL SURFACES AND FINISHES IN THE INTERIOR OR EXTERIOR OF THE FACILITY. DAMAGED SURFACES OR FINISHES RESULTING FROM THE PERFORMANCE OF THE WORK OR NEGLIGENCE SHALL BE REPAIRED AT NO COST TO THE OWNER AND BE MADE TO MATCH THE EXISTING FINISHES OR SURFACES TO THE SATISFACTION OF THE OWNER.
- FOR MULTIPHASED PROJECTS, THE CONTRACTOR SHALL MAINTAIN ALL EXISTING UTILITY SERVICES AND BUILDING SYSTEMS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNERS IT REPRESENTATIVE AS NECESSARY TO ALLOW FOR OPERATION ACCESSIBLE TO THE OWNER DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE TEMPORARY MEANS AS NECESSARY.
- PROVIDE DUST PROTECTION FOR ANY EXISTING EQUIPMENT AFFECTED BY THE CONTRACTORS WORK AND FOR ANY NEW WORK INSTALLED WHICH MAY BE AFFECTED BY CONSTRUCTION DUST.

## GENERAL ROUGH-IN AND CABLING PATHWAY REQUIREMENTS:

- PROVIDE PATHWAYS FOR ALL TELECOMMUNICATIONS, AUDIO/VIDEO, SAFETY AND SECURITY SYSTEMS CABLING. REFER TO SPECIFICATIONS FOR ADDITIONAL INSTRUCTIONS.
- ROUGH-IN PATHWAYS SHALL BE REVIEWED AND COORDINATED PRIOR TO INSTALLATION.
- WHERE CONDUITS ARE SPECIFIED "TAC" (TO ABOVE ACCESSIBLE CEILING), CONDUITS SHALL BE STUBBED INTO AN ACCESSIBLE CEILING CAVITY.
- WHERE CONDUITS ARE SPECIFIED "TAC" (TO ABOVE ACCESSIBLE HALLWAY/CORRIDOR CEILING), CONDUITS SHALL BE RUN CONTINUOUS AND STUBBED OUT INTO AN ACCESSIBLE CEILING CAVITY WITHIN THE NEAREST CORRIDOR FURNISHING AN ACCESSIBLE CEILING CAVITY.
- CONDUIT INSTALLER SHALL INSTALL PULL STRINGER IN ALL CONDUITS IMMEDIATELY AFTER INSTALLATION.
- CONDUIT INSTALLER SHALL LABEL CONDUITS PER THE DEVICES WHICH THEY ARE INTENDED TO SERVICE WITH PERMANENT MARKER AT CONDUIT TERMINATION.
- WHERE CONDUIT IS SHOWN AND/OR SPECIFIED, PROVIDE PULL BOXES SHOWN ON THE DRAWINGS PLUS ADDITIONAL PULL BOXES FOR EVERY 100 FEET OF CONDUIT RUN AND 100 FEET OF CONDUIT.
- PROVIDE COVER PLATES FOR JUNCTION AND PULL BOXES. COORDINATE MATERIAL AND FINISH OF BLANK PLATES TO MATCH SURROUNDING PLATES.
- WHERE A MOUNTING HEIGHT MEASUREMENT IS APPLIED TO A ROUGH-IN, THE MEASUREMENT SHALL BE REFERENCED TO THE CENTER OF THE ROUGH-IN DEVICE.
- PATHWAYS SHALL BE INSTALLED IN A CONCEALED MANNER. EXPOSED CONDUIT SHALL NOT BE PERMITTED IN FINISHED AREAS.
- PROVIDE CODE-COMPLIANT PRESUPPORTING FOR PATHWAYS THROUGH FIRE-RATED WALLS, FLOORS AND CEILINGS.
- PROVIDE CONDUITS WITH NYLON END-BUSHINGS, INSTALL BUSHINGS AT THE END OF EACH CONDUIT AND EACH ADDITIONAL LOCATION WHERE CABLES COULD BE DAMAGED WHEN PULLING THEM THROUGH THE CONDUIT.
- DEVICES TO BE INSTALLED AT COUNTER HEIGHT, CASEWORK OR FURNITURE SHALL BE CLOSELY COORDINATED IN THE FIELD WITH ARCHITECT, CASEWORK AND FURNITURE VENDORS PRIOR TO ROUGH-IN.
- WHERE FLOORBOARDS, POWER POLES AND OTHER DUAL SERVICE PATHWAYS ARE INDICATED ON THE DRAWINGS, PATHWAYS DEVICES SHALL BE PROVIDED BY THE DESIGNER IN CONTRACTOR. SEE ELECTRICAL DRAWINGS FOR REQUIREMENTS AND ADDITIONAL INFORMATION.
- MANY COMMUNICATIONS DEVICES ARE INTENDED TO HAVE ADJACENT POWER OR INTEGRAL RECEPTACLES (MULTI-POW) TO SERVICE THE SAME EQUIPMENT. COORDINATE THE LOCATION OF SEPARATE DEVICES SO THAT THEY ARE LOCATED ADJACENT AND AT THE SAME ELEVATION. FACEPLATES SHALL BE COORDINATED TO THE SAME TYPE AND COLOR.
- LAISER RACKS AND OTHER COMMUNICATION TECHNOLOGY EQUIPMENT SHALL BE COORDINATED TO THE SAME TYPE AND COLOR.
- PROVIDE PERSONAL FIRE MANAGEMENT WITHIN THE MAIN EQUIPMENT ROOM <MR> AND ALL TELECOMMUNICATION ROOMS <TR> <DR> SHALL BE ALSO BE PROVIDED AS NECESSARY.
- WHERE CABLE TRAY IS DEPICTED ON THE FLOOR PLAN IT SHALL BE PROVIDED AS INDICATED AND SIZED APPROPRIATELY FOR THE CABLE QUANTITY AND SIZE TO BE CONVEYED. PROVIDE ALL PROTECTIVE HARDWARE AND TRANSITIONS REQUIRED TO SECURE TO THE WALLS AND/OR CEILING. COORDINATE WITH ALL TRADES TO ENSURE APPROPRIATE SPACE HAS BEEN ALLOCATED FOR THE CABLE TRAY DIMENSIONS.
- PROVIDE A MINIMUM OF ONE (1) 2-INCH DIAMETER THROUGH-THE-WALL CONDUIT SLEEVES FOR USE AS LOW-VOLTAGE CABLE PATHWAYS INTO EACH SPACE CONTAINING LOW-VOLTAGE DEVICES. ROUTE CONDUITS FROM ABOVE ACCESSIBLE CEILING TO THE NEAREST HALLWAY/CORRIDOR RELAYING AN ACCESSIBLE CEILING CAVITY.
- IN ALL CASES WHERE CABLING IS NOT INSTALLED IN CONDUIT, IT SHALL BE SUPPORTED BY CABLE TRAY, LADDER OR OTHER APPROVED PATHWAY SUPPORTS. IT SHALL NEVER BE SUPPORTED BY BUILDING STRUCTURE OR SUSPENDED CEILING INFRASTRUCTURE.
- WHERE CABLING IS NOT INSTALLED IN CONDUIT, IT SHALL BE SUPPORTED BY CABLE TRAY, LADDER OR OTHER APPROVED PATHWAY SUPPORTS. IT SHALL NEVER BE SUPPORTED BY BUILDING STRUCTURE OR SUSPENDED CEILING INFRASTRUCTURE.
- MAJOR CONDUIT PATHWAYS 2" DIAMETER AND GREATER HAVE BEEN DEPICTED ON THE FLOOR PLANS AND SECTION DETAILS. HOWEVER, ADDITIONAL CONDUIT PATHWAYS AND SLEEVES SHALL BE REQUIRED FOR CABLING TO PASS THROUGH WALLS, FLOORS, EXPOSED OPEN CEILING TYPE SPACES, AND TO COMPLETE PROPER INSTALLATION. FIELD COORDINATE AND PROVIDE AS REQUIRED.

## GENERAL CABLING REQUIREMENTS:

- CABLE RATING REQUIREMENTS:
  - A. ALL CABLE SHALL BE RATED FOR THE ENVIRONMENT IN WHICH IT IS INSTALLED PER NEC REQUIREMENTS.
  - B. ANY CABLE INSTALLED WITHIN A RETURN AIR PLenum SHALL BE PLenum RATED (CMP). ANY CABLE DISCOVERED WITHIN A RETURN AIR PLenum THAT IS NOT RATED FOR SUCH SHALL BE REMOVED AND REINSTALLED WITH THE PROPER RATING AT THE CONTRACTOR'S EXPENSE.
- CABLE INSTALLED WITHIN UNDERGROUND CONDUITS AND/OR DIRECTLY BURIED IN GROUND SHALL BE RATED FOR SUCH.
- CABLING CABLES SHALL BE SIZED APPROPRIATELY TO OPERATE WITHIN THE VOLTAGE AND CURRENT RANGES PER NEC AND MANUFACTURER'S REQUIREMENTS.
- ALL INSTALLED CABLING SHALL BE CONTINUOUS AND WITHOUT SPLICES, UNLESS OTHERWISE NOTED.
- COLORS OF CABLING AND TERMINATIONS USED FOR ALL TECHNOLOGY WORK SHALL CONFORM TO THE DESIGNER'S AND OWNER'S REQUIREMENTS PRIOR TO PROCUREMENT AND INSTALLATION.

REMARKS/NOTES	DATE
UNLESS OTHERWISE NOTED	
OWNER FURNISHED CONTRACTOR INSTALLED	OFC
CONTRACTOR FURNISHED, OWNER INSTALLED	OFO
CONTRACTOR FURNISHED, CONTRACTOR INSTALLED	OCF
CONTRACTOR FURNISHED, OWNER INSTALLED	OCU
ABOVE FINISHED FLOOR	AF
ABOVE FINISHED GRADE	AG
CEILING MOUNTED DEVICE	CLD
FLOOR MOUNTED DEVICE	FLR
COUNTER HEIGHT	CH
TO ABOVE ACCESSIBLE CEILING	TAC
TO ABOVE ACCESSIBLE HALLWAY / CORRIDOR CEILING	TAC
WIRE GUARD	WG
WEATHER PROOF EQUIPMENT / FURNITURE / DEVICE	WP
CABLE WITH BRACKET AND/OR POLE SHELDED	BP
WALL MOUNTED CEILING	WPC
FURNISHED AND INSTALLED BY OTHERS	FRO

## CABLE AND CONDUIT COLOR SCHEDULE

SYSTEM	CABLE COLOR	CABLE INSPIRY
DATA	BLUE	BLUE
WAP	GREEN	GREEN
SECURITY	PURPLE	PURPLE
SECURITY CAMS	YELLOW	YELLOW

## LEGEND GENERAL NOTES:

- BASE SYMBOLS ARE USED TO REFERENCE THE FLOOR PLAN LOCATION AND PROPER ROUGH-IN AND CABLING REQUIREMENTS.
- BASE SYMBOLS SHOWN IN THE LEGEND ARE TYPICAL, AND SHALL BE CONSIDERED "UNLESS OTHERWISE NOTED" (UON), SPECIFIC DIMENSIONS INDICATED ON THE FLOOR PLAN SHALL SUPERSEDE THE TYPICAL.
- DIMENSIONS SHALL BE TO CENTER OF BOX / DEVICE UNLESS NOTED.

SYMBOL	DESCRIPTION	ELEVATION	BOX TYPE/SIZE	PATHWAY TYPE/SIZE	TYPE	QUANTITY	NOTES	MISCELLANEOUS NOTES
1	DATA OUTLET, NUMBER INDICATES QUANTITY OF DATA JACKS AND CABLES, BAS = BUILDING AUTOMATION SYSTEMS OUTLET, SEC = SECURITY SYSTEMS OUTLET	4"X4" BOX WITH 1 GANG DEVICE	1" CONDUIT TAAAC	CAT 6	(1)	"MINIMUM (1) DATA	PROVIDE (1) DEVICE GAND AND CONDUIT PATHWAY FOR EACH SET OF 4 CABLES.	
2	DATA OUTLET WITH LOCAL INPUT, NUMBER INDICATES QUANTITY OF DATA JACKS AND CABLES, ROUTE (1) CONDUIT TAAAC, ROUTE (2) THE OTHER CONDUIT TO THE LOCAL INPUT OUTLET IN THE SAME SPACE.	4"X4" BOX WITH 2 GANG DEVICE	(2) 1 1/4" CONDUIT TAAAC	CAT 6	(1)	"MINIMUM (1) DATA		
3	DATA OUTLET WITH LOCAL OUTPUT, NUMBER INDICATES QUANTITY OF DATA JACKS AND CABLES, ROUTE (1) CONDUIT TAAAC, ROUTE (2) THE OTHER CONDUIT TO THE LOCAL INPUT OUTLET IN THE SAME SPACE.	4"X4" BOX WITH 2 GANG DEVICE	(2) 1 1/4" CONDUIT TAAAC	CAT 6	(1)	"MINIMUM (1) DATA		
4	VOICE OUTLET, NUMBER INDICATES QUANTITY OF VOICE JACKS AND CABLES, V = WALL PHONE OUTLET AT 4"X4" JACP = FIRE ALARM CONTROL PANEL OUTLET, ELEV = ELEVATOR PHONE OUTLET.	1"X1" AFF UON	1" CONDUIT TAAAC	CAT 6	(1)	"MINIMUM (1) VOICE	PROVIDE (1) DEVICE GAND AND CONDUIT PATHWAY FOR EACH SET OF 4 CABLES.	
5	WIRELESS ACCESS POINT, PROVIDE DATA OUTLET AT OR ABOVE CEILING, MOUNTED AT AN ACCESSIBLE HEIGHT NO MORE THAN 24" ABOVE CEILING. R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	4"X4" BOX WITH 1 GANG DEVICE	1" CONDUIT TAAAC WHERE NOT INSTALLED AT ACCESSIBLE CEILING	CAT 6A	(1)		PROVIDE A 2" SERVICE LOOP FOR ADJUSTMENT OF PULL PLACEMENT, COORDINATE LOCATIONS WITH OWNER.	
6	FLOOR DATA OUTLET, NUMBER INDICATES QUANTITY OF DATA JACKS AND CABLES, COORDINATE WITH DESIGNER IN CONTRACTOR.	FLOOR	1 GANG	1" CONDUIT TAAAC OF INSTALLED FLOOR	CAT 6	(1)	"MINIMUM (1) DATA	PROVIDE (1) DEVICE GAND AND CONDUIT PATHWAY FOR EACH SET OF 4 CABLES.
7	EQUIPMENT ROOM / MAIN DISTRIBUTION FRAME - REFERENCE DATA SYSTEM SCHEMATICS AND DETAILS FOR ADDITIONAL REQUIREMENTS	N/A	N/A	N/A	-	-	"BACKSHEET (1) DATA	PROVIDE FIRE RATED / PAINTED 3/4" X 4" PLYWOOD BACKSHEET ON WALLS ENCLOSING THESE SPACES.
8	TELECOMMUNICATIONS ROOM / INTERMEDIATE DISTRIBUTION FRAME - REFERENCE DATA SYSTEM SCHEMATICS AND DETAILS FOR ADDITIONAL REQUIREMENTS	N/A	N/A	N/A	-	-	"BACKSHEET (1) DATA	PROVIDE FIRE RATED / PAINTED 3/4" X 4" PLYWOOD BACKSHEET ON WALLS ENCLOSING THESE SPACES.
9	COMMUNICATIONS UTILITY ENTRANCE FACILITY - REFERENCE DATA SYSTEM SCHEMATICS AND DETAILS FOR ADDITIONAL REQUIREMENTS	N/A	N/A	N/A	-	-	"BACKSHEET (1) DATA	PROVIDE FIRE RATED / PAINTED 3/4" X 4" PLYWOOD BACKSHEET ON WALLS ENCLOSING THESE SPACES.
10	TELECOM ROOM LADDER RACK, SIZE AS NOTED, PROVIDE AT LOCATION SHOWN, PROVIDE CABLE WATER FALLS WHERE CABLES EXT LADDER RACK TO ENTER EQUIPMENT RACKS.	10"	N/A	N/A	-	-	"BACKSHEET (1) DATA	PROVIDE FIRE RATED / PAINTED 3/4" X 4" PLYWOOD BACKSHEET ON WALLS ENCLOSING THESE SPACES.
11	CEILING MOUNTED SPEAKER, SEE DETAILS AND DIAGRAMS FOR ADDITIONAL INFORMATION. SUBSCRIPT "L" = INTEGRAL VOLUME CONTROL.	CEILING	N/A	3/4" CONDUIT ABOVE NON-ACCESSIBLE CEILING	-	(1)	"SEE DETAILS	
12	LOCAL SOUND SYSTEM CEILING MOUNTED SPEAKER, SEE DETAILS AND DIAGRAMS FOR ADDITIONAL INFORMATION. SUBSCRIPT "L" = INTEGRAL VOLUME CONTROL.	CEILING	N/A	3/4" CONDUIT ABOVE NON-ACCESSIBLE CEILING	-	(1)	"SEE DETAILS	
13	SURFACE MOUNTED SPEAKER, SEE DETAILS AND DIAGRAMS FOR ADDITIONAL INFORMATION. R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	90" AFF	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	-	(1)	"SEE DETAILS	
14	WALL VOLUME CONTROL, SEE DETAILS AND DIAGRAMS FOR ADDITIONAL INFORMATION. R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	90" AFF	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	-	(1)	"SEE DETAILS	
15	INTERCOMMUNICATION SYSTEM CALL INITIATION STATION, SEE DETAILS AND DIAGRAMS FOR ADDITIONAL INFORMATION	48" AFF	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	-	(1)	"SEE DETAILS	
16	WALL MICROPHONE OUTLET, SEE DETAILS AND DIAGRAMS FOR ADDITIONAL INFORMATION	18" AFF	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	-	-	"SEE DETAILS	
17	AUDIO CONNECTION OUTLET, SEE DETAILS AND DIAGRAMS FOR ADDITIONAL INFORMATION	18" AFF	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	-	-	"SEE DETAILS	
18	FLAT PANEL DISPLAY OUTLET AT PANEL (DFO), SEE DETAILS AND DIAGRAMS FOR ADDITIONAL INFORMATION. R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	60" AFF	4"X4" BOX WITH 3 GANG DEVICE	(2) 1" CONDUIT TAAAC	CAT 6A	-	"SEE DETAILS FOR CITY	
19	WIRELESS SYNCHRONOUS ANALOG WALL CLOCK, D = DIAL FACE CLOCKS WITH MOUNTING ADAPTERS, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	LOWER OF 12" IF C/F OR 18" AFF	4"X4" BOX WITH 1 GANG DEVICE	(2) 1 1/4" CONDUIT TAAAC	CAT 6	(1)		
20	SYNCHRONOUS CLOCK HEADEND CONTROLLER	EQUIPMENT RACK	N/A	N/A	CAT 6	(1)		
21	CARD / PROXIMITY AUTHENTICATION READER, R = MULLION MOUNT VERSION, COORDINATE WITH DOOR HARDWARE SCHEDULE, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	48" AFF	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	SH 6 COND	(1)		IF INTEGRAL TO DOOR HARDWARE, PROVIDE INTERCONNECTION TO DEVICE.
22	DOOR POSITION SWITCH/DOUBLE LEAF DOORS, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	TOP OF DOOR FRAME	N/A	3/4" CONDUIT TAAAC	2 COND	(1)		IF INTEGRAL TO DOOR HARDWARE, PROVIDE INTERCONNECTION TO DEVICE.
23	ELECTRIFIED HARDWARE, MORTISE LOCK, CYLINDRICAL LOCK, PANIC HARDWARE, MAGNETIC LOCK, PANIC DEVICE, ETC. TYPE, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	HINGE SIDE OF DOOR FRAME	N/A	3/4" CONDUIT TAAAC	2 COND	(1)		
24	ELECTRIC STRIKE TYPE DEVICE, COORDINATE WITH DOOR HARDWARE SCHEDULE, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	STRIKE SIDE OF DOOR FRAME	N/A	3/4" CONDUIT TAAAC	2 COND	(1)		
25	REQUEST TO EXIT DEVICE, MOTION SENSING PIR TYPE OR INTEGRATED WITH EXIT DEVICE HARDWARE, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	CENTERED ABOVE DOOR	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	8 COND	(1)		IF INTEGRAL TO DOOR HARDWARE, PROVIDE INTERCONNECTION TO DEVICE.
26	REQUIRE DOOR LOCATION, SHALL INCLUDE THE DEVICE, ROUGH-IN, AND CABLING REQUIREMENTS OF DOOR POSITION SWITCH, ELECTRIC STRIKE / ELECTRIFIED HARDWARE, & REQUEST TO EXIT DEVICE DETAILED ABOVE.	3/8" ABOVE	3/8" ABOVE	3/8" ABOVE				IF INTEGRAL TO DOOR HARDWARE, PROVIDE INTERCONNECTION TO DEVICE.
27	DOOR RELEASE PUSH BUTTON, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	UNDER DOOR	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	2 COND	(1)		
28	LOCAL ANNUNCIATOR ALARM / SOUNDER	CEILING / WALL	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	2 COND	(1)		
29	DURESS ALARM BUTTON / SWITCH	UNDER DEBK	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	4 COND	(1)		PROVIDE BLANK PLATE WITH GROMMETTED HOLE.
30	DOOR INTERCOM MASTER STATION, W = WALL MOUNTED, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	DESK MOUNTED	4"X4" BOX WITH 1 GANG DEVICE	3/4" CONDUIT TAAAC	CAT 6	(1)		
31	AUDIO/VIDEO INTERCOM DOOR STATION, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	4"	4"X4" BOX	3/4" CONDUIT TAAAC	CAT 6	(1)		"COORDINATE BOX REQUIREMENTS WITH SPECIFIC DEVICES TO BE PROVIDED.
32	VIDEO SURVEILLANCE SECURITY CAMERA: CEILING MOUNTED, MV = MULTIVIEW FUNCTIONALITY, DV = DUAL-VIEW FUNCTIONALITY, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	CEILING	4"X4" BOX WITH 2 GANG DEVICE	3/4" CONDUIT TAAAC	CAT 6	(1)		
33	VIDEO SURVEILLANCE SECURITY CAMERA: WALL OR POLE MOUNTED, MV = MULTIVIEW FUNCTIONALITY, DV = DUAL-VIEW FUNCTIONALITY, R = EXISTING DEVICE TO BE REMOVED, RE-CABLED, AND REINSTALLED.	120" AFF OR AFF	4"X4" BOX WITH 2 GANG DEVICE	3/4" CONDUIT TAAAC	CAT 6	(1)		
34	ACCESS CONTROL PANEL LOCATION	SURFACE MOUNT	N/A	N/A	CAT 6	(1)		PROVIDE HARD WIRED POWER TO POWER SUPPLY
35	VIDEO SURVEILLANCE SERVER LOCATION	EQUIPMENT RACK	N/A	N/A	CAT 6	(1)		



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(859)431-8812 Newport, KY 41071

NOT FOR CONSTRUCTION

Example Renovation Project  
KCSD - Kenton Elementary  
Project Address, City, State, Zip

NO.	DESCRIPTION	DATE
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1 Revision 1 Date 1

## TECHNOLOGY LEGEND SCHEDULE & NOTES

2025-012

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