BULLITT CENTRAL HIGH SCHOOL

PHASE III ATHLETICS-PHYSICAL SCIENCE CENTER

GENERAL CONSTRUCTION

BULLITT COUNTY PUBLIC SCHOOLS

BG 25-145

ska#2023-50.1

SCHEMATIC DESIGN & DESIGN DEVELOPMENT
APRIL 22, 2025

PROJECT TEAM:

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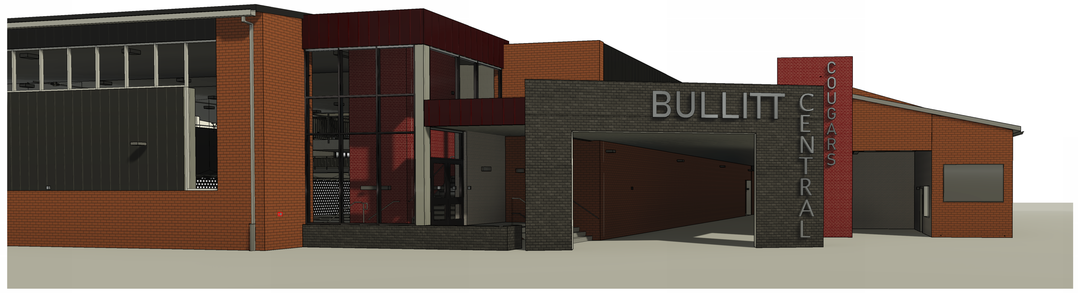


CODE INFORMATION:

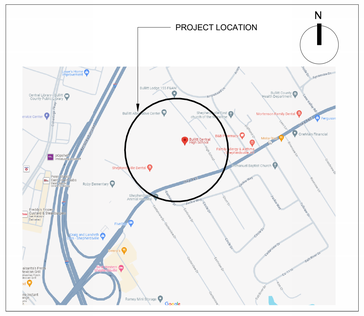
BASED UPON 2018 KENTUCKY BUILDING CODE

USE GROUP: A

CONSTRUCTION TYPE: 2B | FULLY SPRINKLED

*REFER TO G1.01, G1.02, AND G1.03 LIFE SAFETY PLANS FOR ADDITIONAL CODE INFORMATION.

BCHS PROJECT LOCATION



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CD0.40 BCHS - DEMOLITION PLAN BULLITT CENTRAL HIGH SCHOOL
C1.40 BCHS - OVERALL SITE PLAN BULLITT CENTRAL HIGH SCHOOL
C1.41 BCHS - SITE LAYOUT BULLITT CENTRAL HIGH SCHOOL
C1.42 BCHS - SITE GRADING PLAN BULLITT CENTRAL HIGH SCHOOL
C1.43 BCHS - SITE STORM & UTILITY PLAN BULLITT CENTRAL HIGH SCHOOL
C1.45 BCHS - SITE DETAILS BULLITT CENTRAL HIGH SCHOOL
C1.46 BCHS - STORM DETAILS PHASE III | PHYSICAL SCIENCE CENTER
C1.47 BCHS - UTILITY DETAILS BULLITT CENTRAL HIGH SCHOOL
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BCHS S2.12 - SECOND FLOOR FRAMING PLAN -BCHS
BCHS S2.13 - ROOF FRAMING PLAN -BCHS
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S3.3 - FOUNDATION DETAILS
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S4.6 - FRAMING DETAILS
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A4.02 - ENLARGED PLANS AND INTERIOR ELEVATIONS -RESTROOMS
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A6.05 - DOOR DETAILS
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X7.10 - LOCKER KEY PLAN -BCHS
A7.11 - ELEVATIONS -FOOTBALL LOCKER ROOM
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FP2.01 - PHYSICAL SCIENCE CENTER -FIRE PROTECTION -BULLITT CENTRAL -
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P1.00 - PLUMBING SCHEDULES & DETAILS
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M1.00 - MECHANICAL LEGEND AND GENERAL NOTES -BP1
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M7.03 - FIELDHOUSE VENTILATION SCHEDULE
UM1.01 BCHS - MECHANICAL SITE PLAN -BULLITT CENTRAL
UM1.11 BCHS - MECHANICAL SITE DETAILS -BULLITT CENTRAL
E0.01 - ELECTRICAL LEGEND BCHS
ES0.4 ES0.3 - ELECTRICAL NOTES AND DETAILS
ES1.4 BCHS - PARTIAL SITE UTILITY PLAN - FIELD HOUSE DEMO
ES1.5 BCHS - PARTIAL SITE UTILITY PLAN - FIELD HOUSE
ES1.6 BCHS - PARTIAL SITE UTILITY PLAN - FIELD HOUSE
E1.11 BCHS - FIELD HOUSE FLOOR PLAN -BULLITT CENTRAL -LEVEL 1 -LIGHTING
E1.12 BCHS - FIELD HOUSE FLOOR PLAN -BULLITT CENTRAL -LEVEL 2 -LIGHTING
E1.13 BCHS - FIELD HOUSE FLOOR PLAN -BULLITT CENTRAL -LEVEL 1 -POW/SYS
E1.14 BCHS - FIELD HOUSE FLOOR PLAN -BULLITT CENTRAL -LEVEL 2 -POW/SYS
E1.15 BCHS - FIELD HOUSE FLOOR PLAN -BULLITT CENTRAL -LEVEL 1 -EQUIPMENT
E1.16 BCHS - FIELD HOUSE FLOOR PLAN -BULLITT CENTRAL -LEVEL 2 -EQUIPMENT
E2.0 BCHS - BULLITT CENTRAL -DEMOLITION -AREA A
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E3.0 BCHS - BULLITT CENTRAL -EM POWER -AREA A
E3.1 BCHS - BULLITT CENTRAL -EM POWER -AREA B
E3.2 BCHS - BULLITT CENTRAL -ENLARGED EMERGENCY GENERATOR CENTRAL
E6.0 BCHS - LIGHT FIXTURE SCHEDULE
E6.1 BCHS - ELECTRICAL DETAILS
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E6.6 BCHS - ALTERNATE #6 -RGBW FRONT FACADE LIGHTING
E7.0 BCHS - PHASE III | PHYSICAL SCIENCE CENTER BULLITT COUNTY PUBLIC SCHOOLS
E7.1 BCHS - ELECTRICAL SCHEDULE
E7.2 BCHS - ELECTRICAL SCHEDULE
E7.3 BCHS - ELECTRICAL SCHEDULE

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MOVING FORWARD

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

GENERAL CONSTRUCTION – COVER

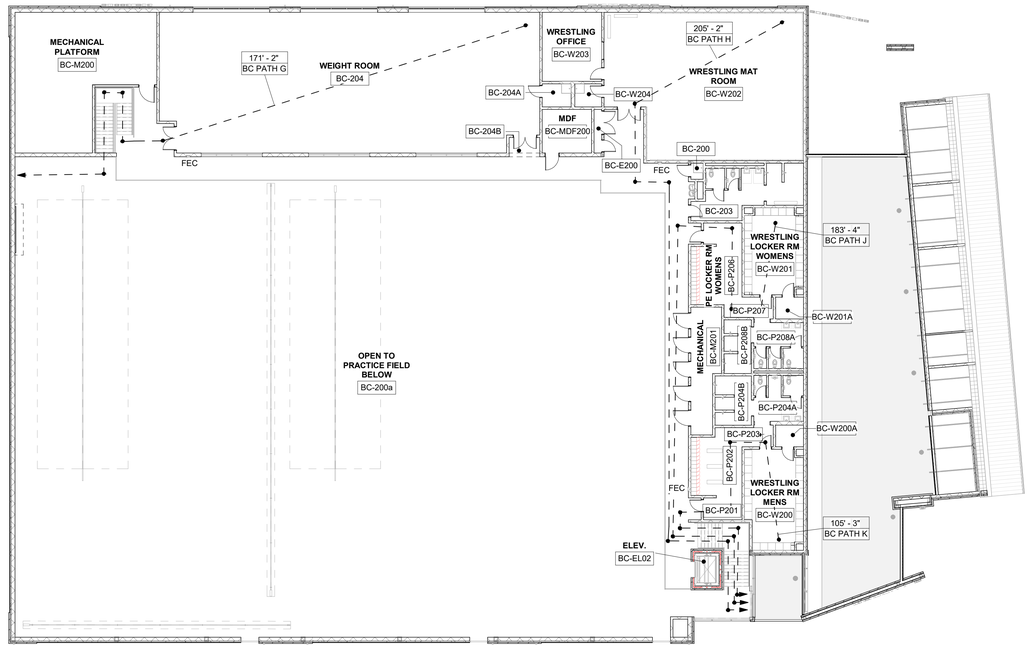
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 25-145

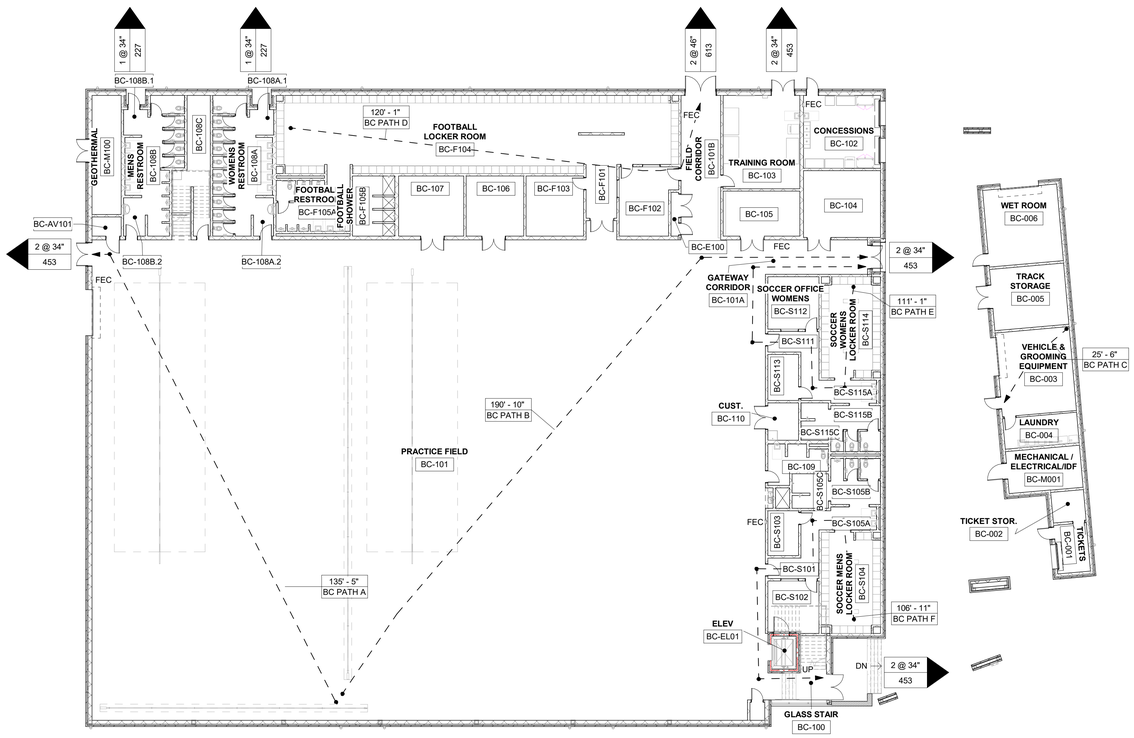
DATE : 06.24.2024
DRAWN BY : CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

G0.00
BCHS



2 BCHS - LIFE SAFETY SECOND FLOOR PLAN
1/16" = 1'-0"



1 BCHS - LIFE SAFETY FIRST FLOOR PLAN
1/16" = 1'-0"

APPLICABLE CODES

ACCESSIBILITY	2009 ICC/ANSI A117.1
ARCHITECTURE	2018 KENTUCKY BUILDING CODE
ELECTRICAL	2017 NFPA 70 - NATIONAL ELECTRICAL CODE
ENERGY	2012 INTERNATIONAL ENERGY CONSERVATION CODE
FIRE	2015 INTERNATIONAL FIRE CODE
LIFE SAFETY	ICC-500 2014
MECHANICAL	2015 INTERNATIONAL MECHANICAL CODE
PLUMBING	815 KAR 20 KENTUCKY STATE PLUMBING LAW, REGULATIONS AND CODE
SPRINKLER SYSTEMS	ICC-500 2014
STRUCTURAL	2018 KENTUCKY BUILDING CODE

CODE SUMMARY

1. OCCUPANCY AND CONSTRUCTION TYPE	
OCCUPANCY	ASSEMBLY GROUP A-3
CONSTRUCTION TYPE	II-B
FULLY SPRINKLED	MULTI-STORY
2. AREA	
ALLOWABLE	28,500 (SM)
LEVEL 1 - PRACTICE FIELD BUILDING	34,322 SF
LEVEL 1 - ANNEX BUILDING	2,052 SF
LEVEL 2 - PRACTICE FIELD BUILDING	12,988 SF
TOTAL CONSTRUCTED AREA (BOTH LEVELS & ANNEX)	49,362 SF
3. HEIGHT	
ALLOWABLE	75 FEET
ACTUAL	35'-8"
4. STORIES	
ALLOWABLE	3 STORIES
ACTUAL	2 STORIES

CODE SUMMARY - EXPANDED

CH. 3: USE AND OCCUPANCY CLASSIFICATION

305.1 USE AND OCCUPANCY CLASSIFICATION	*ASSEMBLY - A-3*

CH. 5: GENERAL BUILDING HEIGHTS AND AREAS

TABLE 504.3 - ALLOWABLE BUILDING HEIGHT	*75 FEET*
TABLE 504.4 - ALLOWABLE NUMBER OF STORIES	*3 STORIES*
505 - EQUIPMENT PLATFORMS	*AGGREGATE AREA OF EQUIPMENT PLATFORMS WITHIN A ROOM SHALL BE NOT GREATER THAN TWO THIRDS OF THE AREA OF THE ROOM IN WHICH THEY ARE LOCATED*
TABLE 506.2 - ALLOWABLE AREA	*28,500 SF ALLOWABLE PER STORY (GROUP A-3, TYPE II-B, MULTI-STORY, SPRINKLED)*
KBC 505.3.1.2 - EQUIPMENT PLATFORMS WITHIN AN ATTIC	*EQUIPMENT PLATFORMS - WITHIN AN ATTIC. THE AGGREGATE AREA OF ALL EQUIPMENT PLATFORMS WITHIN AN ATTIC SHALL NOT BE GREATER THAN 10 PERCENT OF THE AREA OF THE ATTIC IN WHICH THEY ARE LOCATED. A MINIMUM OF TWO REMOTELY LOCATED MEANS OF EGRESS SHALL BE PROVIDED FROM EACH EQUIPMENT PLATFORM LOCATED WITHIN AN ATTIC, AND ACCESS SHALL BE PROVIDED BY MEANS OF STAIRWAYS, ALTERNATING TREAD DEVICES, OR LADDERS IN ACCORDANCE WITH SECTION 1011.*

CH. 6: TYPES OF CONSTRUCTION

TABLE 601 - FIRE RESISTANCE RATING FOR BUILDNG ELEMENTS	*PRIMARY STRUCT. FRAME: 0 HR* *BEARING WALLS: 0 HR* *NONBEARING WALLS AND PARTITIONS: 0 HR* *FLOOR CONSTRUCTION: 0 HR* *ROOF CONSTRUCTION: 0 HR*
TABLE 602 - FIRE RESISTANCE RATING FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE	*TYPE II-B, GROUP A: X<5: 1 HOUR. 5 ≤ X < 10: 1 HOUR. 10 ≤ X < 30: 0 HOUR. X ≥ 30: 0 HOUR.*

CH. 10: MEANS OF EGRESS

1004.1.1.3 ADJACENT STORIES	*OTHER THAN FOR THE EGRESS COMPONENTS DESIGNED FOR CONVERGENCE IN ACCORDANCE WITH SECTION 1005.6, THE OCCUPANT LOAD FROM SEPARATE STORIES SHALL NOT BE ADDED.*
1005.3.1 - MEANS OF EGRESS SIZING: STAIRWAYS	*.2 INCHES PER OCCUPANT WHEN FULLY SPRINKLED*
1005.3.2 - MEANS OF EGRESS SIZING: OTHER COMPONENTS	*.15 INCHES PER OCCUPANT WHEN FULLY SPRINKLED*
1005.5 - DISTRIBUTION OF MINIMUM WIDTH AND REQUIRED CAPACITY	*WHERE MORE THAN ONE EXIT, OR ACCESS TO MORE THAN ONE EXIT IS REQUIRED, THE MEANS OF EGRESS SHALL BE CONFIGURED SUCH THAT THE LOSS OF ANY ONE EXIT, OR ACCESS TO ONE EXIT, SHALL NOT REDUCE THE AVAILABLE CAPACITY OR WIDTH TO LESS THAN 50 ERCENT OF THE REQUIRED CAPACITY OR WIDTH.*
TABLE 1006.2.1 - SPACES WITH ONE EXIT	*ASSEMBLY - MAX OCCUPANT LOAD OF 49, MAX COMMON PATH OF 75 FEET WITH SPRINKLER SYSTEM*
1007.1.1 - TWO EXITS CONFIGURATION	*WHERE A BUILDING IS EQUIPPED THROUGHOUT WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH SECTION 903.3.1.1 OR 903.3.1.2, THE SEPARATION DISTANCE SHALL BE NOT LESS THAN ONE-THIRD OF THE LENGTH OF THE MAXIMUM OVERALL DIAGONAL DIMENSION OF THE AREA SERVED.*
TABLE 1017.2 - EXIT ACCESS TRAVEL DISTANCE	*A OCCUPANCY - 250 FEET WITH SPRINKLER SYSTEM.*
TABLE 1020.1 - CORRIDOR FIRE RESISTANCE RATING	*A OCCUPANCY - 0 HR WITH SPRINKLER SYSTEM.*
TABLE 1020.2 - MINIMUM CORRIDOR WIDTH	*44 INCHES*
1023.2 - INTERIOR EXIT STAIRWAYS AND RAMPS	*CONSTRUCTED AS FIRE BARRIERS. FIRE RESISTANCE RATING OF NOT LESS THAN 1 HOUR WHERE CONNECTING LESS THAN 4 STORIES.*
1029.2 ASSEMBLY MAIN EXIT	*AN ASSEMBLY OCCUPANT LOAD OF GREATER THAN 300 THAT IS PROVIDED WITH A MAIN EXIT SHALL SIZE THE MAIN EXIT FOR SUFFICIENT CAPACITY TO ACCOMMODATE NOT LESS THAN ONE-HALF OF THE TOTAL OCCUPANT LOAD, BUT NOT SIZED LESS THAN THE TOTAL REQUIRED CAPACITY OF ALL MEANS OF EGRESS LEADING TO THE EXIT. THE MAIN EXIT SHALL FRONT ON NOT LESS THAN ONE STREET OR AN UNOCCUPIED SPACE OF NOT LESS THAN 10 FEET IN WIDTH THAT ADJOINS A STREET OR PUBLIC WAY. IN A BUILDING, ROOM, OR SPACE USED FOR ASSEMBLY PURPOSED WHERE THERE IS NOT A WELL-DEFINED MAIN EXIT OR WHERE MUTIPLE MAIN EXITS ARE PROVIDED, EXITS SHALL BE PERMITTED TO BE DISTRIBUTED AROUND THE PERIMETER OF THE BUILDING PROVIDED THAT THE TOTAL CAPACITY OF EGRESS IS NOT LESS THAN 100 PERCENT OF THE REQUIRED CAPACITY.*
1029.3 ASSEMBLY OTHER EXITS	*IN ADDITION TO A MAIN EXIT, EACH LEVEL IN A BUILDING USED FOR ASSEMBLY PURPOSES HAVING AN OCCUPANT LOAD GREATER THAN 300 AND PROVIDED WITH A MAIN EXIT, SHALL BE PROVIDED WITH ADDITIONA MEANS OF EGRESS THAT SHALL PROVIDE AN EGRESS CAPACITY FOR NOT LESS THAN ONE-HALF THE TOTAL OCCUPANT LOAD SERVED BY THAT LEVEL AND SHALL COMPLY WITH 1007.1.*

LIFE SAFETY LEGEND

FEC	FIRE EXTINGUISHER CABINET
X@ XX" / XXX	NUMBER OF DOORS @ DOOR WIDTH EGRESS CAPACITY AT DOORS
	TRAVEL PATH
	EXIT SIGN - SEE REFLECTED CEILING PLANS AND ELECTRICAL DRAWINGS FOR LOCATIONS
	1-HOUR FIRE BARRIER CONSTRUCTION

OCCUPANT LOAD (PER IBC TABLE 1004.1.2) - BULLITT CENTRAL

ROOM NUMBER	ROOM NAME	AREA	OCCUPANCY TYPE	LOAD FACTOR	OCC. LOAD BY AREA
BC-001	TICKETS	108 SF	BUSINESS AREA	100	1
BC-002	TICKET STOR.	68 SF	STORAGE	300	0
BC-003	VEHICLE & GROOMING EQUIPMENT	425 SF	STORAGE	300	1
BC-004	LAUNDRY	155 SF	MECHANICAL EQUIPMENT ROOM	300	1
BC-005	TRACK STORAGE	310 SF	STORAGE	300	1
BC-006	WET ROOM	389 SF	STORAGE	300	1
BC-100	GLASS STAIR	199 SF	CIRCULATION		0
BC-101	PRACTICE FIELD	22004 SF	EXERCISE ROOM	50	440
BC-101A	GATEWAY CORRIDOR	240 SF	CIRCULATION		0
BC-101B	FIELD CORRIDOR	389 SF	CIRCULATION		0
BC-102	CONCESSIONS	382 SF	KITCHEN	200	2
BC-103	TRAINING ROOM	487 SF	EXERCISE ROOM	50	10
BC-104	SPORT STORAGE - GOLF AND SIMULATOR	349 SF	STORAGE	300	1
BC-105	SPORT STORAGE - BASEBALL/ SOFTBALL	235 SF	STORAGE	300	1
BC-106	SPORT STORAGE - ARCHERY	235 SF	STORAGE	300	1
BC-107	SPORT STORAGE - DANCE/CHEER	267 SF	STORAGE	300	1
BC-108A	WOMENS RESTROOM	216 SF	RESTROOM		0
BC-108A.1	WOMENS ALCOVE	42 SF			0
BC-108A.2	WOMENS ALCOVE	55 SF			0
BC-108B	MENS RESTROOM	242 SF	RESTROOM		0
BC-108B.1	MENS ALCOVE	42 SF			0
BC-108B.2	MENS ALCOVE	57 SF			0
BC-108C	RESTROOM CHASE	283 SF	MECHANICAL EQUIPMENT ROOM	300	1
BC-109	COACH RESTROOM	123 SF	RESTROOM		0
BC-110	CUST.	78 SF			0
BC-200	JAN.	13 SF			0
BC-200a	OPEN TO PRACTICE FIELD BELOW	22825 SF			0
BC-203	COACH RESTROOM	152 SF	RESTROOM		0
BC-203A	COACH SHOWER	103 SF	RESTROOM		0
BC-204	WEIGHT ROOM	3564 SF	EXERCISE ROOM	50	71
BC-204A	W.R. MOP	46 SF			0
BC-204B	W.R. ALCOVE	33 SF			0
BC-AV101	A/V	38 SF			0
BC-E100	ELEC. 1	23 SF	MECHANICAL EQUIPMENT ROOM	300	0
BC-E200	ELEC. 2	23 SF	MECHANICAL EQUIPMENT ROOM	300	0
BC-EL01	ELEV	55 SF	CIRCULATION		0
BC-EL02	ELEV.	55 SF	CIRCULATION		0
BC-F101	FOOTBALL HALL	112 SF	CIRCULATION		0
BC-F102	FOOTBALL OFFICE	249 SF	BUSINESS AREA	100	2
BC-F103	FOOTBALL STORAGE	235 SF	STORAGE	300	1
BC-F104	FOOTBALL LOCKER ROOM	2040 SF	LOCKER ROOM	50	41
BC-F105A	FOOTBALL RESTROOM	201 SF	RESTROOM		0
BC-F105B	FOOTBALL SHOWER	165 SF	SHOWER		0
BC-FS01	FIRE SUP.	18 SF	MECHANICAL EQUIPMENT ROOM	300	0
BC-M001	MECHANICAL / ELECTRICAL/IDF	213 SF	MECHANICAL EQUIPMENT ROOM	300	1
BC-M100	GEOTHERMAL	236 SF	MECHANICAL EQUIPMENT ROOM	300	1
BC-M200	MECHANICAL PLATFORM	1059 SF	MECHANICAL EQUIPMENT ROOM	300	4
BC-M201	MECHANICAL	229 SF	MECHANICAL EQUIPMENT ROOM	300	1
BC-MDF200	MDF	147 SF	MECHANICAL EQUIPMENT ROOM	300	0
BC-P201	PE HALL	61 SF			0
BC-P202	PE LOCKER RM MENS	220 SF	LOCKER ROOM	50	4
BC-P203	PE ALCOVE	44 SF			0
BC-P204A	PE RESTROOM MENS	100 SF	RESTROOM		0
BC-P204B	PE SHOWER MENS	116 SF	RESTROOM		0
BC-P205	PE HALL	58 SF			0
BC-P206	PE LOCKER RM WOMENS	221 SF	LOCKER ROOM	50	4
BC-P207	PE ALCOVE	43 SF			0
BC-P208A	PE RESTROOM WOMENS	80 SF	RESTROOM		0
BC-P208B	PE SHOWER WOMENS	96 SF	RESTROOM		0
BC-S101	SOCCER MENS HALL	145 SF			0
BC-S102	SOCCER MENS OFFICE	180 SF	BUSINESS AREA	100	2
BC-S103	SOCCER STORAGE	94 SF	STORAGE	300	0
BC-S104	SOCCER MENS LOCKER ROOM	390 SF	LOCKER ROOM	50	8
BC-S105A	SOCCER MENS LAV	72 SF	RESTROOM		0
BC-S105B	SOCCER MENS RR	100 SF	RESTROOM		0
BC-S105C	SOCCER MENS SHOWER	82 SF	RESTROOM		0
BC-S111	SOCCER WOMENS HALL	147 SF			0
BC-S112	SOCCER OFFICE WOMENS	182 SF	BUSINESS AREA	100	2
BC-S113	SOCCER STORAGE	96 SF	STORAGE	300	0
BC-S114	SOCCER WOMENS LOCKER ROOM	390 SF	LOCKER ROOM	50	8
BC-S115A	SOCCER WOMENS LAV	72 SF	RESTROOM		0
BC-S115B	SOCCER WOMENS RR	80 SF	RESTROOM		0
BC-S115C	SOCCER WOMENS SHOWER	67 SF	RESTROOM		0
BC-W200	WRESTLING LOCKER RM MENS	380 SF	LOCKER ROOM	50	8
BC-W200A	W STORAGE	41 SF	STORAGE	300	0
BC-W201	WRESTLING LOCKER RM WOMENS	335 SF	LOCKER ROOM	50	7
BC-W201A	W STORAGE	41 SF	STORAGE	300	0
BC-W202	WRESTLING MAT ROOM	1859 SF	EXERCISE ROOM	50	37
BC-W203	WRESTLING OFFICE	279 SF	BUSINESS AREA	100	3
BC-W204	W. MOP	42 SF			0
TOTAL # OF OCCUPANTS					667

PATHS OF EGRESS - TRAVEL DISTANCE BCHS

PATH	DISTANCE
BC PATH A	135' - 5 1/2"
BC PATH B	190' - 10"
BC PATH C	25' - 5 3/4"
BC PATH D	120' - 0 3/4"
BC PATH E	111' - 0 3/4"
BC PATH F	106' - 11 1/4"
BC PATH G	171' - 1 3/4"
BC PATH H	205' - 2 1/4"
BC PATH J	183' - 4 1/2"
BC PATH K	105' - 3 1/4"

studio kremer architects
1231 S Shelby St, Louisville, KY 40203
TEL 502.499.1100 FAX 502.499.1101

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

CODE REVIEW AND LIFE SAFTEY PLAN – BCHS

PHASE III | PHYSICAL SCIENCE CENTER

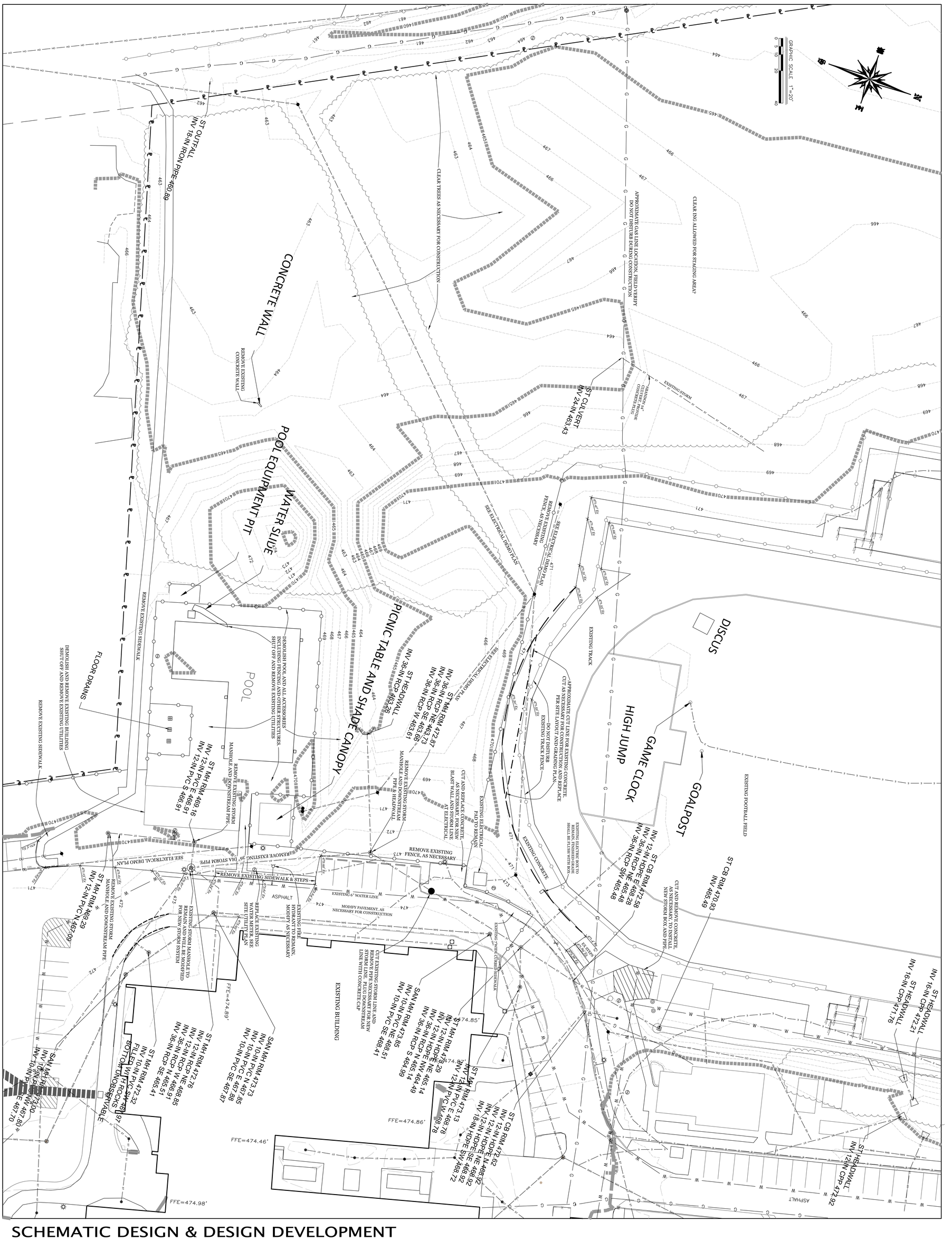
BULLITT COUNTY PUBLIC SCHOOLS
605 Z-145

BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

G1.01
BCHS



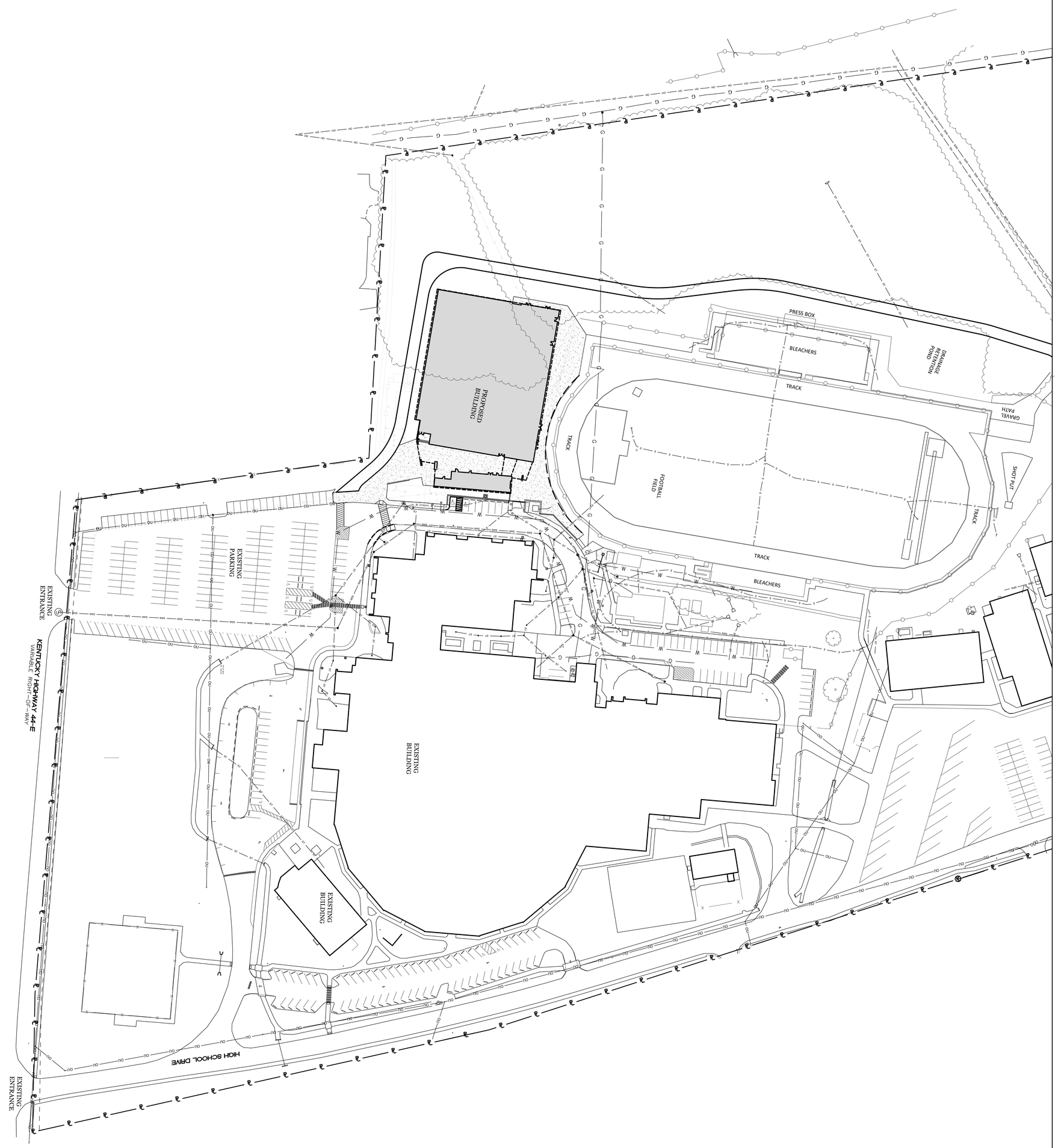
SCHEMATIC DESIGN & DESIGN DEVELOPMENT

CD0.40 BCHS	2023-50.1	DATE : 04/22/2024 DRAWN BY : RPM CHECKED BY : SKA REVISIONS :	BG# 25-145	BULLITT CENTRAL HIGH SCHOOL DEMOLITION PLAN PHASE III | PHYSICAL SCIENCE CENTER BULLITT COUNTY PUBLIC SCHOOLS BULLITT COUNTY, KENTUCKY	BC MOVING FORWARD

BUZICK CONSTRUCTION INC
702 Beechwood Ave
Bardstown, Ky. 40004
Phone: (502) 348-6401

STATE OF KENTUCKY
ROBIN P. MILLS
21248
LICENSED PROFESSIONAL ENGINEER

studio kremer architects
1231 S Shelby St, Louisville, KY 40203
TEL 502.499.1100 FAX 502.499.1101



SCHEMATIC DESIGN & DESIGN DEVELOPMENT

C1.40
BCHS

2023-50.1

DATE : 04/22/2024
DRAWN BY : RPM
CHECKED BY : SKA
REVISIONS :

BC# 25-145

BULLITT CENTRAL HIGH SCHOOL
OVERALL SITE PLAN

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BULLITT COUNTY, KENTUCKY

MOVING FORWARD

GENERAL CONTRACTORS ENGINEERING CONSTRUCTION MANAGERS
SINCE 1937

BUZICK CONSTRUCTION INC
702 Beechwood Ave
Bardstown, Ky. 40004
Phone: (502) 348-6401

STATE OF KENTUCKY
ROBIN P. MILLS
21248
LICENSED PROFESSIONAL ENGINEER

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1231 S Shelby St, Louisville, KY 40203
TEL 502.499.1100 FAX 502.499.1101
studio

GRAPHIC SCALE 1"=20'
0 5 10 20 40

EXISTING WOODED AREA
EXISTING WOODED AREA
EXISTING WOODED AREA
APPROXIMATE GAS LINE LOCATION. FIELD VERIFY DO NOT DISTURB DURING CONSTRUCTION
PROPOSED GEOTHERMAL FIELD. SEE MECHANICAL DRAWINGS
EXISTING FOOTBALL FIELD
EXISTING TRACK
EXISTING STORM TO BE ABANDONED
EXISTING BUILDING
EXISTING ASPHALT PARKING LOT
EXISTING ASPHALT DRIVE
PROPOSED BUILDING FF ELEV = 471.4
PROPOSED CONCRETE
PROPOSED WALL SEAT
15' WIDE ACCESS ROAD
NEW 7' WIDE CURBED SIDEWALK
SIDEWALK JOINTS
ASSUMED EDGE OF EXISTING CONCRETE
ASSUMED EDGE OF SIDEWALK
EXISTING CURBED SIDEWALK
EXISTING FLAT SLAB
EXISTING STEPS
EXISTING ELECTRIC BOX
EXISTING UTILITY POLE
EXISTING FIRE HYDRANT
EXISTING SIGN
EXISTING LIGHT POLE
EXISTING GAS METER
EXISTING GAS VALVE
EXISTING MANHOLE
EXISTING SANITARY MANHOLE
EXISTING STORM MANHOLE
EXISTING SANITARY CLEANOUT
EXISTING STORM INLET
EXISTING SANITARY INLET
EXISTING WATER VALVE
EXISTING WATER METER
EXISTING WATER BOX
EXISTING FIRE DEPARTMENT CONNECTION
EXISTING GAS BOX
EXISTING TELEPHONE BOX
EXISTING TELEPHONE MANHOLE
EXISTING TELEPHONE PEDESTAL
EXISTING TELEPHONE RISER
EXISTING TELEPHONE BOX
EXISTING TELEVISION BOX
EXISTING TELEVISION RISER
EXISTING TELEVISION MANHOLE
EXISTING TELEVISION PEDESTAL

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

C1.42 BCHS	2023-50.1	DATE : 04/22/2024 DRAWN BY : RPM CHECKED BY : SKA REVISIONS :	BC# 25-145	BULLITT CENTRAL HIGH SCHOOL SITE GRADING PLAN PHASE III | PHYSICAL SCIENCE CENTER BULLITT COUNTY PUBLIC SCHOOLS BULLITT COUNTY, KENTUCKY	BC MOVING FORWARD	BUZICK CONSTRUCTION INC 702 Beechwood Ave Bardstown, Ky. 40004 Phone: (502) 348-6401	STATE OF KENTUCKY ROBIN P. MILLS 21248 LICENSED PROFESSIONAL ENGINEER studio kremer architects 1231 S Shelby St, Louisville, KY 40203 TEL 502.499.1100 FAX 502.499.1101

GRAPHIC SCALE 1"=20'
0 5 10 20 40

N
NE
E
SE
S
SW
W
NW

APPROXIMATE GAS LINE LOCATION. FIELD VERIFY
DO NOT DISTURB DURING CONSTRUCTION

EXISTING STORM TO BE ABANDONED

ABANDON EXISTING STORM STRUCTURE. PROVIDE CONCRETE PLUG

PROVIDE 3' DIA OPENING IN WALL

PROVIDE 5' DIA OPENING IN WALL

PROPOSED BUILDING
FF ELEV = 471.4

EXISTING BUILDING

EXISTING TRACK

EXISTING FOOTBALL FIELD

EXISTING ELECTRIC BOX

ASPHALT

50 PARKING

FFE=474.98'
FFE=474.46'
FFE=474.86'
FFE=474.87'
FFE=474.85'
FFE=474.89'

HW3
IE = 466.2'

HW2
IE = 461.5'

HW1
IE = 463.4'

39 LF 36" DIA HDPE STORM PIPE
OUTLET IE = 464.2'

138 LF 36" DIA HDPE STORM PIPE

12" OUTLET IE = 464.5'

183 LF 12" DIA HDPE STORM PIPE

60 LF 36" DIA HDPE STORM PIPE

10 LF 36" DIA HDPE STORM PIPE

17 LF 36" DIA HDPE STORM PIPE

32 LF 36" DIA HDPE STORM PIPE

64 LF 12" DIA HDPE STORM PIPE

81 LF 12" DIA HDPE STORM PIPE

99 LF 12" DIA HDPE STORM PIPE

88 LF 36" DIA HDPE STORM PIPE

88 LF 12" DIA HDPE STORM PIPE

288 LF 36" DIA HDPE STORM PIPE

48" LF 12" DIA HDPE STORM PIPE

9 LF 36" DIA HDPE STORM PIPE

24 LF 36" DIA HDPE STORM PIPE

23 LF 36" DIA HDPE STORM PIPE

PIPE ALL BUILDING DOWNSPOUTS TO PROPOSED STORM PIPE

PIPE ALL BUILDING DOWNSPOUTS TO PROPOSED STORM PIPE WITH 6" DIA PIPE

PIPE ALL BUILDING DOWNSPOUTS TO PROPOSED STORM PIPE

EXISTING 6" WATER LINE

EXISTING 8" WATER LINE

EXISTING 12" WATER LINE

EXISTING 8" DIA STORM PIPE

EXISTING 36" DIA STORM PIPE

EXISTING 24" DIA STORM PIPE

EXISTING 18" DIA STORM PIPE

EXISTING 15" DIA STORM PIPE

EXISTING 12" DIA STORM PIPE

EXISTING 10" DIA STORM PIPE

EXISTING 8" DIA STORM PIPE

EXISTING 6" DIA STORM PIPE

EXISTING 4" DIA STORM PIPE

EXISTING 2" DIA STORM PIPE

EXISTING 1" DIA STORM PIPE

EXISTING 3/4" DIA STORM PIPE

EXISTING 1/2" DIA STORM PIPE

EXISTING 3/8" DIA STORM PIPE

EXISTING 1/4" DIA STORM PIPE

EXISTING 1/8" DIA STORM PIPE

EXISTING 1/16" DIA STORM PIPE

EXISTING 1/32" DIA STORM PIPE

EXISTING 1/64" DIA STORM PIPE

EXISTING 1/128" DIA STORM PIPE

EXISTING 1/256" DIA STORM PIPE

EXISTING 1/512" DIA STORM PIPE

EXISTING 1/1024" DIA STORM PIPE

EXISTING 1/2048" DIA STORM PIPE

EXISTING 1/4096" DIA STORM PIPE

EXISTING 1/8192" DIA STORM PIPE

EXISTING 1/16384" DIA STORM PIPE

EXISTING 1/32768" DIA STORM PIPE

EXISTING 1/65536" DIA STORM PIPE

EXISTING 1/131072" DIA STORM PIPE

EXISTING 1/262144" DIA STORM PIPE

EXISTING 1/524288" DIA STORM PIPE

EXISTING 1/1048576" DIA STORM PIPE

EXISTING 1/2097152" DIA STORM PIPE

EXISTING 1/4194304" DIA STORM PIPE

EXISTING 1/8388608" DIA STORM PIPE

EXISTING 1/16777216" DIA STORM PIPE

EXISTING 1/33554432" DIA STORM PIPE

EXISTING 1/67108864" DIA STORM PIPE

EXISTING 1/134217728" DIA STORM PIPE

EXISTING 1/268435456" DIA STORM PIPE

EXISTING 1/536870912" DIA STORM PIPE

EXISTING 1/1073741824" DIA STORM PIPE

EXISTING 1/2147483648" DIA STORM PIPE

EXISTING 1/4294967296" DIA STORM PIPE

EXISTING 1/8589934592" DIA STORM PIPE

EXISTING 1/17179869184" DIA STORM PIPE

EXISTING 1/34359738368" DIA STORM PIPE

EXISTING 1/68719476736" DIA STORM PIPE

EXISTING 1/137438953472" DIA STORM PIPE

EXISTING 1/274877906944" DIA STORM PIPE

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EXISTING 1/17592186044416" DIA STORM PIPE

EXISTING 1/35184372088832" DIA STORM PIPE

EXISTING 1/70368744177664" DIA STORM PIPE

EXISTING 1/140737488355328" DIA STORM PIPE

EXISTING 1/281474976710656" DIA STORM PIPE

EXISTING 1/562949953421312" DIA STORM PIPE

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EXISTING 1/18788340662190665823115844774314688556527756061822267173923192020711754107221256629698711987078149624255479808" DIA STORM PIPE

EXISTING 1/37576681324381331646231689548629377113055512123644534347846384041423508214442513259397423974156299248510959616" DIA STORM PIPE

EXISTING 1/75153362648762663292463379097258754226111024247289068695692768082847016428885026518794847948312598497021919232" DIA STORM PIPE

EXISTING 1/150306725297525326584926758194517508452222048494578137391385536165694032857770053037589695896625196994043838464" DIA STORM PIPE

EXISTING 1/300613450595050653169853516389035016904444096989156274782771072331388065715540106075179391793250393988087676928" DIA STORM PIPE

EXISTING 1/601226901190101306339707032778070033808888193978312549565542144662776131431080212150358783586500787976175353856" DIA STORM PIPE

EXISTING 1/1202453802380202612679414065556140067617776387956625099131084289325552262862160424300717567173001575952350707712" DIA STORM PIPE

EXISTING 1/2404907604760405225358828131112280135235552775913250198262168578651104525724320848601435134346003151904701415424" DIA STORM PIPE

EXISTING 1/4809815209520810450717656262224560270471105551826500396524337157302209051448641697202870268692006303809402830848" DIA STORM PIPE

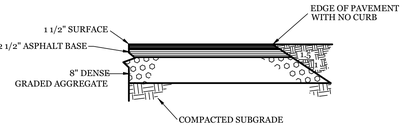
EXISTING 1/9619630419041620901435312524449120540942211103653000793048674314604418102897283394405740537384012607618805661696" DIA STORM PIPE

EXISTING 1/19239260838083241802870625048898241081884422207306001586097348629208836205794566788811481074768025215237611323392" DIA STORM PIPE

EXISTING 1/38478521676166483605741250097796482163768844414612003172194697258417672411589133577622962149536050430475222646784" DIA STORM PIPE

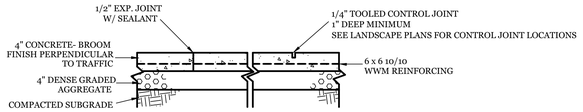
EXISTING 1/76957043352332967211482500195592964327537688829224006344389394516835344823178267155245924299072100860950445293568" DIA STORM PIPE

EX



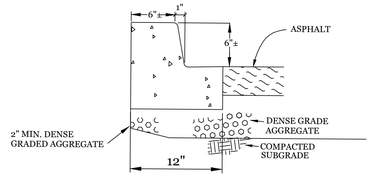
ASPHALT PAVING

NOT TO SCALE



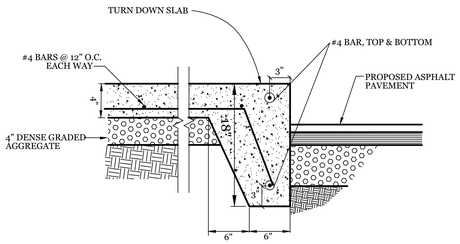
CONCRETE SIDEWALK (TYP)

NOT TO SCALE



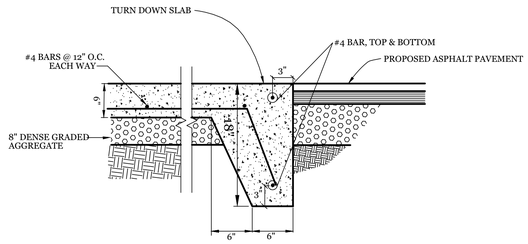
CURB & GUTTER DETAIL

NOT TO SCALE



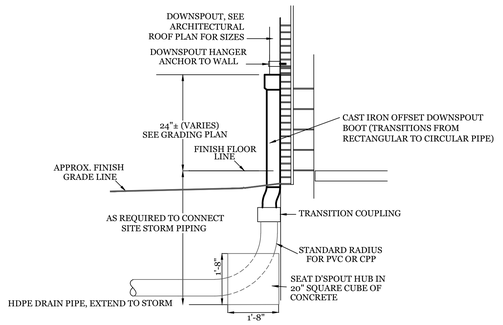
SIDEWALK/ASPHALT TRANSITION

NOT TO SCALE



CONCRETE FOR ENTRANCE APRON (FLUSH CONCRETE) & UTILITY PAD

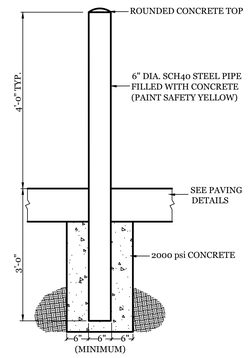
NOT TO SCALE



NOTE: TYPICAL CONNECTION DETAIL
AT ALL BUILDING DOWNSPOUTS.

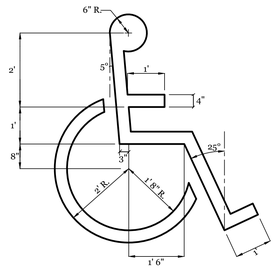
DOWNSPOUT HUB

NOT TO SCALE



BOLLARD DETAIL

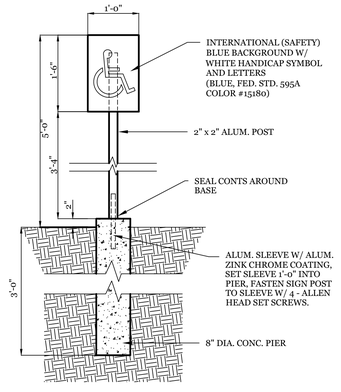
NOT TO SCALE



NOTE:
Paint symbol at disabled parking spaces.

DISABLED LOGO

NOT TO SCALE

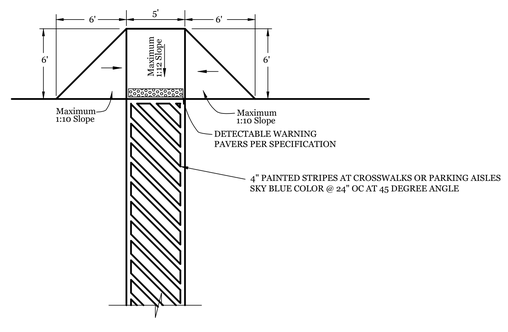


HANDICAP SIGN

NOT TO SCALE

NOTE:
Post sign at each handicap parking stall. Include one van-accessible sign.

NOTE: ALL H/C RAMPS AND ACCESS AISLES SHALL MEET
ALL CODES AND ADAAG REGULATIONS.



HANDICAP ACCESSIBLE CURB RAMP

NOT TO SCALE

studio kremer architects
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COMMONWEALTH OF KENTUCKY
ROBERT PAUL MILLS
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CONSTRUCTION MANAGERS
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SERVICE FIRST
GENERAL CONTRACTORS

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

BULLITT CENTRAL HIGH SCHOOL
SITE DETAILS

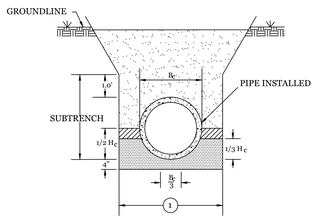
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BULLITT COUNTY, KENTUCKY

BG# 25-145

DATE : 04/22/2024
DRAWN BY : RPM
CHECKED BY : SKA
REVISIONS :

2023-50.1

C1.45
BCHS



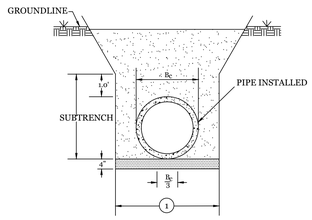
EMBANKMENT MATERIAL (UNLESS SPECIFIED OTHERWISE)

INITIAL BACKFILL

SHAPED BEDDING

TYPE 1 INSTALLATION

FOR ALL RCP INSTALLATIONS (EXCEPT TYPE 4) WHEN THE TOP OF THE PIPE IS NOT WITHIN ONE PIPE DIAMETER OF THE SUBGRADE AS SPECIFIED IN SECTION 701.03.06A OF THE KYTC STANDARD SPECIFICATIONS (LATEST EDITION).

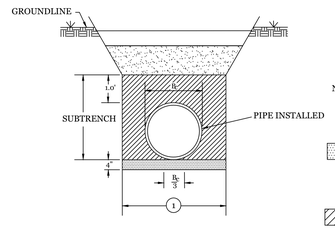


EMBANKMENT MATERIAL (UNLESS SPECIFIED OTHERWISE)

TYPE 4 BEDDING

TYPE 4 INSTALLATION

FOR RCP MEDIAN DRAINS AND INSTALLATIONS LOCATED 35 FEET OR MORE FROM THE EDGE OF SHOULDER, BACK OF CURB, OR ANY OTHER PAVED SURFACE AS SPECIFIED IN SECTION 701.03.06A OF THE KYTC STANDARD SPECIFICATIONS (LATEST EDITION).



EMBANKMENT MATERIAL (UNLESS SPECIFIED OTHERWISE)

INITIAL BACKFILL

SHAPED BEDDING

FLEXIBLE PIPE INSTALLATION

INCLUDES CORRUGATED METAL, THERMOPLASTIC, AND STRUCTURAL PLATE PIPE.

NOTES:

1. Bc + 24" FOR PIPE 36" DIAMETER OR LESS
   Bc + 48" FOR PIPE GREATER THAN 36" DIAMETER

COMPACT BEDDING IN SUBTRENCH IN LAYERS 6" OR LESS TO WIDTH AND ELEVATION SHOWN.

COMPACT REQUIRED BACKFILL MATERIAL IN LAYERS 6" OR LESS TO 1.0' ABOVE THE TOP OF THE PIPE.

PROCEED WITH TRENCH BACKFILL IN A SYMMETRICAL MANNER IN LAYERS 1.0' OR LESS TO THE ORIGINAL GROUND.

WRAP BEDDING MATERIAL IN GEOTEXTILE FABRIC WHEN THE STANDARD SPECIFICATIONS SPECIFIES.

NOTES:

1 Bc + 24" FOR RCP 36" DIAMETER OR LESS
Bc + 48" FOR RCP GREATER THAN 36" DIAMETER

PLACE PIPE ON 4" UNCOMPACTED BEDDING MATERIAL. LEAVE CENTER THIRD OF OUTSIDE PIPE DIAMETER (Bc/3) BEDDING UNCOMPACTED FOR TYPE 1 AND TYPE 4 INSTALLATIONS.

IF ROCK FOUNDATION IS ENCOUNTERED, EXCAVATE SUBTRENCH AN ADDITIONAL DEPTH THAT IS A MINIMUM OF 6" AND SHALL NOT EXCEED 24". BACKFILL WITH COMPACTED BEDDING MATERIAL IN LAYERS 6" OR LESS.

WRAP BEDDING MATERIAL IN GEOTEXTILE FABRIC WHEN THE STANDARD SPECIFICATION SPECIFIES.

THE MAXIMUM COVER HEIGHT FOR HORIZONTAL ELLIPTICAL PIPE IS 10'.

NOTE: PIPE BENEATH PAVEMENT SHALL BE BACKFILLED WITH STONE TO SUBBASE ELEVATION OF PAVEMENT.

BEDDING MATERIAL

NO. 8 OR NO. 9-M AGGREGATE UNLESS OTHERWISE SPECIFIED. DO NOT USE A DGA OR GRAVEL BASE FOR BEDDING.

GRANULAR BACKFILL MATERIAL

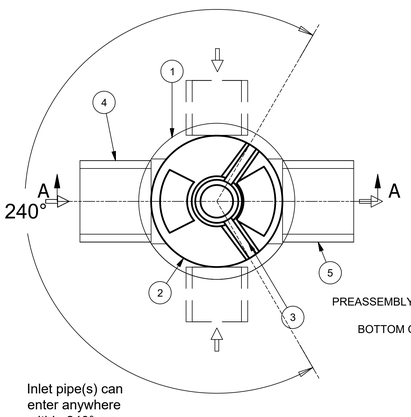
REINFORCED CONCRETE PIPE (RCP) - USE SIZE NO. 2, 23, 3, 37, 4, 467, 5, 67, 68, 78, 8, OR 9-M AGGREGATE. LIMIT ROCK FRAGMENTS TO A 3 INCH MINIMUM SIZE.

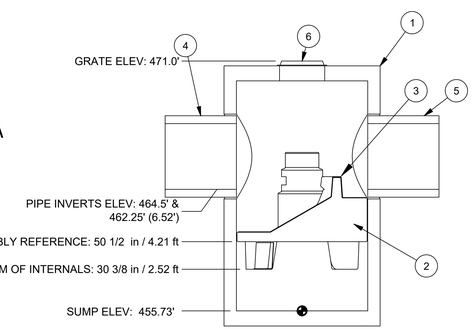
CORRUGATED METAL PIPE (CMP) - USE SAME AGGREGATES AS FOR RCP EXCEPT LIMIT ROCK FRAGMENTS TO A SIZE THAT DOES NOT EXCEED THE CORRUGATION WIDTH.

THERMOPLASTIC PIPE - USE SIZE NO. 5, 57, 67, 68, 78, 8 OR 9-M AGGREGATE. LIMIT ROCK FRAGMENTS TO A MAXIMUM OF 1.5 INCHES. FOR CORRUGATED PIPE, ROCK FRAGMENTS SHALL NOT EXCEED THE CORRUGATION WIDTH OR 1.5 INCHES WHICHEVER IS LEAST.

STORM PIPE TRENCH DETAILS

NOT TO SCALE





SECTION A-A

Parts List		
ITEM	SIZE (in)	DESCRIPTION
1	72	I.D. PRECAST MANHOLE
2		LEDGER SUPPORT
3		SEPARATION MODULE
4	30	INLET PIPE (BY OTHERS)
5	30	OUTLET PIPE (BY OTHERS)
6	30	FRAME AND COVER (OR GRATE) (ROUND)

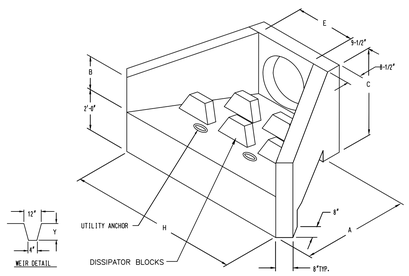
PRODUCT SPECIFICATIONS:

A. The treatment system shall use an induced vortex to separate pollutants from stormwater runoff.
B. The treatment system shall fit within the limits of excavation (area and depth) as shown in the project plans and will not exceed the dimensions for the design flow rates specified herein.
C. The treatment system shall remove greater than or equal to 90% of TSS based on the Target Particle Size (TPS) of 106 microns and/or 80% of TSS based on the TPS of 230 microns at 2.2 cfs and 3.8 cfs, respectively.
D. The treatment system shall convey the Peak On-line Flow Rates of up to 32 cfs without causing upstream surcharge conditions. Full-scale independent laboratory scour testing shall demonstrate effluent control of less than or equal to 5 mg/L for all flows up to 200% of MTFR-106.
E. The treatment system shall be capable of capturing and retaining fine silt and sand size particles. Analysis of captured sediment from full-scale field installations shall demonstrate particle sizes predominately in the 20-micron range

WATER QUALITY UNIT

NOT TO SCALE

ACCEPTABLE MANUFACTURERS: HDYRO INTERNATIONAL FIRST DEFENSE, CASCADE SEPARATOR & BARRACUDA HDYRODYNAMIC SEPARATOR



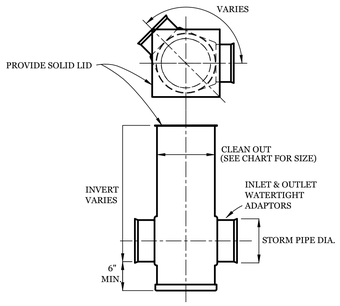
DIMENSIONS							
PIPE DIA.	A	B	C	E	H	Y	WEIGHT
36"	4'-4"	1'-6"	4'-0"	3'-8"	8'-8"	N/A	8,900#

GENERAL NOTES:

1. CONCRETE 4800 P.S.I. 828 DAYS.
2. 2" MIN. CONCRETE COVERAGE.
3. REIF. - #4 REBAR 12" C.C. EA. WAY.
4. HOLE SIZE = PIPE O.D. + 3".
5. 3/4" CHAMFER OR ROUND ON ALL EXPOSED EDGES.

ENERGY DISSIPATOR HEADWALL (HW1, HW2 & HW3)

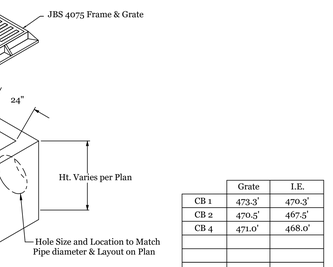
NOT TO SCALE



HDPE DRAIN BASIN

NOT TO SCALE

	Size	No. & Size of Pipes	LID	I.E.
DB 1	12"	(2) 12"	470.9'	466.5'
DB 2	12"	(2) 12"	470.8'	465.5'



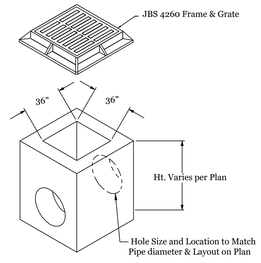
	Grate	I.E.
CB 1	473.3'	470.3'
CB 2	470.5'	467.5'
CB 4	471.0'	468.0'

GENERAL NOTES:

1. STEEL REINFORCEMENT & CONC. STRENGTH PER ASTM C913.

2' x 2' CATCH BASIN (CB)

NOT TO SCALE



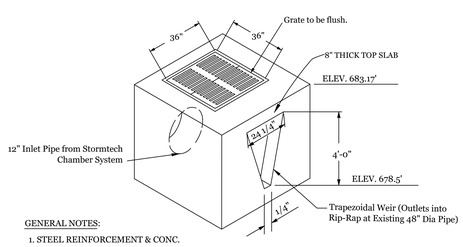
	Grate	I.E.
CB 3	470.5'	467.0'

GENERAL NOTES:

1. STEEL REINFORCEMENT & CONC. STRENGTH PER ASTM C913.

3' x 3' CATCH BASIN (CB)

NOT TO SCALE

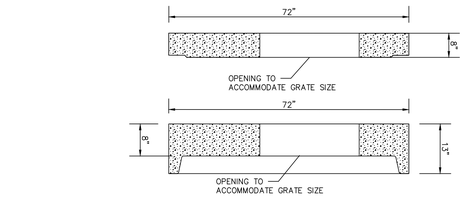


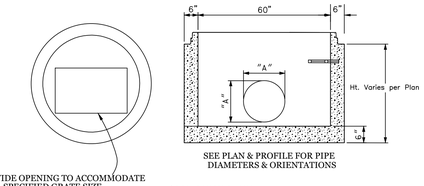
GENERAL NOTES:

1. STEEL REINFORCEMENT & CONC. STRENGTH PER ASTM C913.

3' x 3' OUTLET STRUCTURE (OS1)

NOT TO SCALE





SEE PLAN & PROFILE FOR PIPE DIAMETERS & ORIENTATIONS

5' DIA. CATCH BASIN

NOT TO SCALE

	Grate	I.E.	Grate Size
SM1	470.7'	464.9'	2' x 2'
SM2	474.2'	464.0'	2' x 2'
SM3	473.0'	463.9'	2' x 2'
SM4	470.7'	463.6'	3' x 3'
SM5	471.1'	463.4'	2' x 2'
SM6	471.2'	463.2'	2' x 2'
SM7	471.15'	463.1'	2' x 2'
SM8	470.95'	462.9'	2' x 2'
SM9	470.85'	462.6'	2' x 2'

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BG MOVING FORWARD

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

BULLITT CENTRAL HIGH SCHOOL
STORM DETAILS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BULLITT COUNTY, KENTUCKY

BG# 25-145

DATE : 04/22/2024
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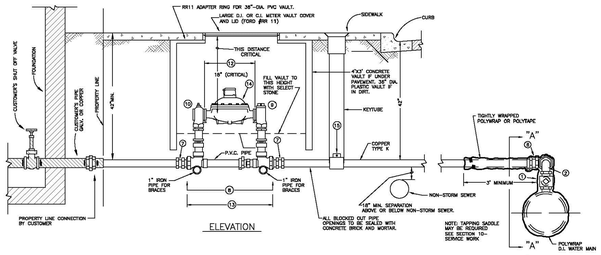
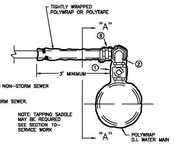
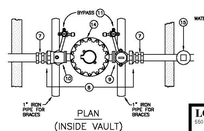
CHECKED BY : SKA
REVISIONS :

2023-50.1

C1.46
BCHS







TYPICAL 1 1/2" or 2" COPPER SERVICE

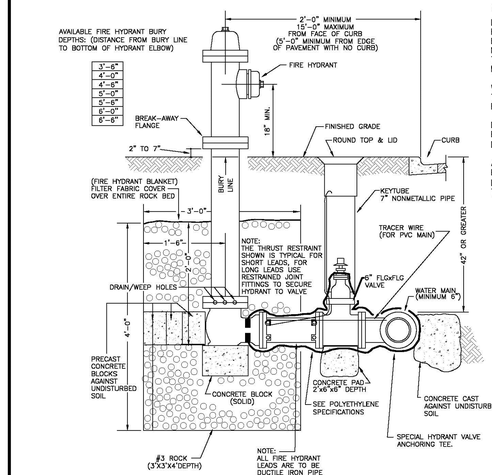
NO.	QTY	FITTING	JOINT	1.5" SERVICE'S FITTING SIZES	2" SERVICE'S FITTING SIZES
1	1	CORPORATION STOP	INLET–MALE THREAD (TAPERED) OUTLET–MALE THREAD	1–1/2" 1–1/2"	2" 2"
2	1	BRASS REDUCING ELL	INLET–FEMALE THREAD OUTLET–FEMALE THREAD	2" 2"	2–1/2" 2–1/2"
3	1	BRASS NIPPLE (CLOSE)	MALE THREAD	1–1/2"	2"
4	1	BRASS UNION	FEMALE THREAD	1–1/2"	2"
5	1	BRASS STREET ELL	MALE THREAD	1–1/2"	2"
6	1	COMPRESSION COUPLING	FEMALE THREAD FEMALE COMPRESSION	1–1/2" 1–1/2"	2" 2"
7	2	ADAPTER	FEMALE COMPRESSION MALE THREAD	1–1/2" 1–1/2"	2" 2"
8	1	METER SETTER	FEMALE THREAD	1–1/2"	2"
9		ANGLE METER STOP	----------	-----	---
10		ANGLE CHECK VALVE	----------	-----	---
11		BY–PASS 1	----------	-----	---
12		---------	----------	13–3/8"	17–3/8"
13		---------	----------	22"	27–1/8"
14	1	METER	MALE THREAD	1–1/2"	2"
15	1	STOP	FEMALE THREAD	1–1/2"	2"

LOUISVILLE WATER COMPANY
550 S. 3RD STREET • LOUISVILLE, KENTUCKY 40202 • (502) 569-3600
SPENCER W. BRUCE, P.E. - PRESIDENT
TIMOTHY ERAIS, P.E. - VICE PRESIDENT / CHIEF ENGINEER

STANDARD DRAWING

TYPICAL 1-1/2" OR 2" COPPER SERVICE

DATE	JULY 2021	SCALE	NONE
DRAWING NO	3200	SHEET	1 OF 1



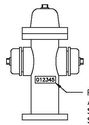
NOTE:

LOUISVILLE WATER COMPANY SUPPLIES HYDRANTS OF VARIOUS BURY DEPTHS. EXTENSION KITS SHALL NOT BE USED FOR NEW INSTALLATIONS. UNLESS APPROVED BY THE LOUISVILLE WATER COMPANY PROJECT MANAGER.

WHEN TURNING FIRE HYDRANT OFF, ALLOW TIME FOR FIRE HYDRANT TO DRAIN BEFORE REPLACING NOZZLE CAPS.

DO NOT INSTALL POLYWRAP ON HYDRANT BARREL. DO NOT COVER HYDRANT DRAIN/WEEP HOLES.

ALL HYDRANTS SHALL BE YELLOW WITH THE EXCEPTION OF WHEN INSTALLED WITHIN THE LOUISVILLE FIRE DEPARTMENT'S DISTRICT. THOSE HYDRANTS SHALL BE ORANGE.



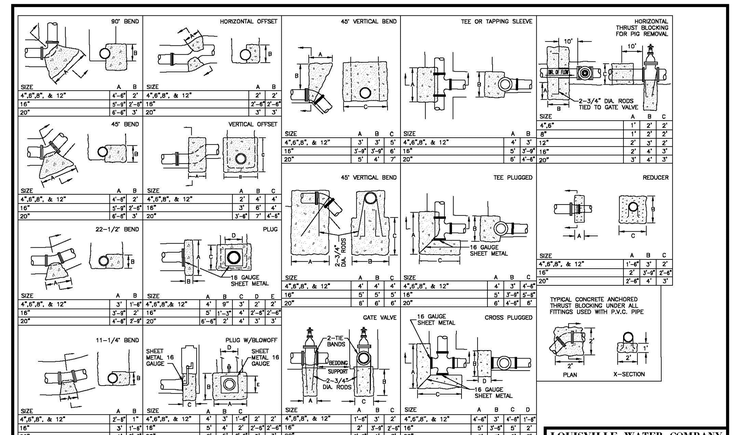
PLACE FIRE HYDRANT ATTACHMENT STICKER ON SMOOTH SURFACE, CENTERED BETWEEN NOZZLES ON BARREL.

LOUISVILLE WATER COMPANY
550 S. 3RD STREET • LOUISVILLE, KENTUCKY 40202 • (502) 569-3600
SPENCER W. BRUCE, P.E. - PRESIDENT
TIMOTHY ERAIS, P.E. - VICE PRESIDENT / CHIEF ENGINEER

STANDARD DRAWING

TYPICAL FIRE HYDRANT INSTALLATION

DATE	MAY 2021	SCALE	NONE
DRAWING NO	2000	SHEET	1 OF 1



SIZE	A	B	C	D	E
4",6",8", & 12"	4'–6"	2'	2'		
16"	5'–8"	2'–6"	2'–6"		
20"	6'–6"	3'	3'		

SIZE	A	B	C
4",6",8", & 12"	3'	3'	2'
16"	3'–9"	3'–9"	2'
20"	5'	4'	2'

SIZE	A	B	C
4",6",8", & 12"	4'	3'	2'
16"	5'	3'–9"	2'
20"	6'	4'	2'

SIZE	A	B	C
4",6",8", & 12"	4'	3'	2'
16"	5'	3'–9"	2'
20"	6'	4'–6"	3'

SIZE	A	B	C
4",6"	1'	2'	2'
8"	1'	3'	3"
12"	2'	3'	2'
16"	2'	4'	3'
20"	3'	4'	3'

SIZE	A	B	C
4",6",8", & 12"	1'–6"	3'	2'
16"	2'	3'–9"	2'–6"
20"	2'–6"	4'	3'

SIZE	A	B
4",6",8", & 12"	4'–6"	2'
16"	5'–8"	2'–6"
20"	6'–6"	3'

SIZE	A	B	C
4",6",8", & 12"	3'	1"	2'
16"	3'	1'–6"	2'
20"	4'	2'–3"	2'

SIZE	A	B	C
4",6",8", & 12"	4'	9"	3'
16"	5'	1'–3"	4'
20"	6'–6"	2'	4'

SIZE	A	B	C	D	E
4",6",8", & 12"	2'	3'	2'	2'	2'
16"	3'	4'	2'	2'–6"	2'–6"
20"	4'	4'	3'	3'	3'

SIZE	A	B	C
4",6",8", & 12"	1'–6"	3'	2'
16"	2'	3'–6"	2'–6"
20"	2'–6"	4'	3'

SIZE	A	B	C	D
4",6",8", & 12"	4'–6"	3'	4'–6"	1'–6"
16"	5'	3'–6"	5'	2'
20"	6'	4'	6'	3'

NOTE:

1. ALL DUCTILE AND GRAY IRON PIPE AND APPURTENANCES SHALL BE DOUBLE POLYWRAPPED.
2. CARE SHALL BE TAKEN TO AVOID DAMAGING THE POLYETHYLENE WRAP. ANY CUTS OR PUNCTURES SHALL BE REPAIRED WITH POLYETHYLENE TAPE AND ADDITIONAL POLYETHYLENE WRAP IF NECESSARY TO PROVIDE TWO (2) LAYERS OF PROTECTION.
3. CONCRETE THRUST BLOCKING MUST BE ALLOWED TO CURE, OR PROTECTED AS APPROVED BY THE PROJECT MANAGER, BEFORE BACKFILLING.
4. ALL CONCRETE SHALL BE 3,500psi FROM A COMMERCIAL PLANT, OR SHALL BE AN ON–SITE MIXTURE PREVIOUSLY APPROVED BY THE PROJECT MANAGER.
5. ALL FITTINGS INVOLVED WITH PVC PIPE SHALL HAVE A CONCRETE SUPPORT BLOCK, IN ADDITION TO THE PERTINENT THRUST BLOCK.
6. SIZING OF THRUST BLOCKING ASSUME AN ALLOWABLE SOIL BEARING CAPACITY OF 3,000 PSF.
7. REINFORCING STEEL ANCHORS USED IN THRUST BLOCKING SHALL BE GRADE 60 AND EPOXY COATED.
8. CONCRETE FOR THRUST BLOCKING MUST EXTEND TO AND BE PLACED AGAINST UNDISTURBED EARTH UNLESS DIRECTED OTHERWISE BY THE COMPANY'S PROJECT MANAGER OR INSPECTOR.
9. RODS USED FOR THRUST RESTRAINT ARE TO BE USED ONLY AS TEMPORARY THRUST RESTRAINT. THRUST ANCHORS MUST BE POURED FOR ALL FITTINGS AS DETAILED IN THIS DRAWING. MECHANICAL RESTRAINT MAY BE USED IN PLACE OF RODS AT THE DISCRETION OF THE COMPANY'S PROJECT MANAGER.

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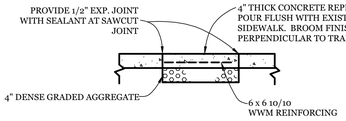
STANDARD DRAWING

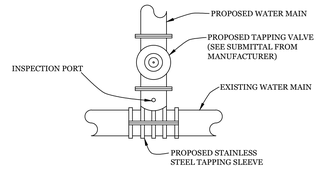
TYPICAL CAST-IN-PLACE CONCRETE THRUST BLOCKING

DATE	JULY 2021	SCALE	NONE
DRAWING NO	1400	SHEET	1 OF 1



CONCRETE SIDEWALK REPLACEMENT

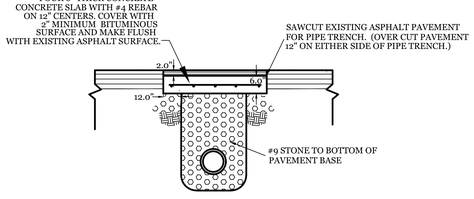
NOT TO SCALE



TAPPING SLEEVE AND VALVE

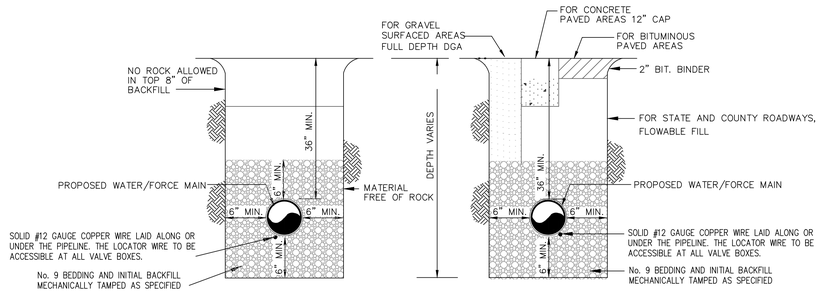
NOT TO SCALE

NOTE: ALL REQUIREMENTS FOR WATER SERVICE INSTALLATION AND HYDRANT MODIFICATION SHALL MEET THE REQUIREMENTS OF THE LOUISVILLE WATER COMPANY.



ASPHALT PAVEMENT CUT AND PIPE TRENCH

NO SCALE



CASE I BACKFILL

WATER/FORCE MAIN IN AREA NOT SUBJECT TO VEHICULAR TRAFFIC OR IN PAVED AND CONCRETE AREAS

CASE II BACKFILL

WATER/FORCE MAIN IN AREAS SUBJECT TO VEHICULAR TRAFFIC

FORCE MAIN & WATER SERVICE BACKFILL DETAILS

NOT TO SCALE

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1231 S Shelby St, Louisville, KY 40203
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ROBIN F. KREMER 21248 LICENSED ARCHITECT STATE OF KENTUCKY

BUZICK CONSTRUCTION INC
702 Beechwood Ave
Bardstown, Ky. 40004
Phone: (502) 348-6401
CONSTRUCTION MANAGERS
ESTABLISHED SINCE 1937

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

BULLITT CENTRAL HIGH SCHOOL
UTILITY DETAILS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BULLITT COUNTY, KENTUCKY

BG# 25-145

DATE : 04/22/2024
DRAWN BY : RPM
CHECKED BY : SKA
REVISIONS :

2023-50.1

C1.47
BCHS

EROSION CONTROL NOTES:

1. The construction entrance shall consist of a 50'x20' filter fabric and covered with 6 inches of #2 stone to minimize the amount of sediment tracked onto public roadways. All construction vehicles shall drive across this pad before leaving the site. See detail on Erosion Control Details. Any sediment washed or tracked onto public street shall be cleaned the same day.
2. Contractor shall install perimeter sediment controls, including silt fence and rip-rap silt checks at the beginning of construction.
3. Disturbed areas shall be kept to a minimum and seeding shall be performed on all exposed earth. For channels and ditches where the slope exceeds 5% additional soil stabilization may be necessary to prevent ruts and erosion. Such measures include the use of erosion control blankets, turf reinforcement mats, as manufactured by Tensar or approved equal, and/or rip-rap. These measures will be required as shown on steep slopes to prevent deterioration of slopes, ruts, and migration of soils. Erosion control blankets turf reinforcement mats shall be constructed during final seeding and strawing unless otherwise noted.
4. Inlet protection shall be provided at new and existing storm inlets until site is stabilized.
5. Borrow or spoils areas shall be temporarily stabilized if construction is suspended for more that 14 days and will not continue for 21 days. Additional silt fence may be necessary around stockpile areas of topsoil to be used in areas designated as green space as well as spoils areas. Once site is to grade, stabilize areas with permanent stabilization per the SWPPP.
6. All erosion control measures shall be performed in accordance with this drainage plan and the Project SWPPP. The contractor will be responsible for performing weekly inspections and maintenance and recording all inspections and repairs in a log book. Inspections may be done every two weeks and after every rain event of $\frac{1}{2}$" or greater in lieu of every week. A copy of the Project SWPPP and weekly log shall be kept on site.

TOTAL DISTURB LIMITS = 4.5 ACRES

GRAPHIC SCALE 1"=20'
0 5 10 20 40

APPROXIMATE GAS LINE LOCATION, FIELD VERIFY
DO NOT DISTURB DURING CONSTRUCTION

EXISTING STORM TO BE ABANDONED

PROVIDE INLET PROTECTION
ON ALL NEW & EXISTING
GRATES AND INLET PIPES

PROVIDE EROSION CONTROL
BLANKETS ON ALL STEEP SLOPES
DURING FINAL SEED & STRAW

PROVIDE RIP-RAP SILT
CHECKS AT EACH END
OF OUTLET PIPE

PROVIDE SILT FENCE ALONG
DOWNHILL DISTURB LIMIT WITH
RIP-RAP SILT CHECK AT END END

EX 18" IRON
PIPE, IE = 460.8

IE = 461.5'

IE = 463.4'

PROPOSED BUILDING
FF ELEV = 471.4'

EXISTING FOOTBALL FIELD

EXISTING TRACK

EXISTING
ELECTRIC BOX

EXISTING BUILDING

50 PARKING S

ASPHALT

FFE=474.85'

FFE=474.87'

FFE=474.86'

FFE=474.46'

FFE=474.89'

FFE=474.98'

CUT CONCRETE AND INSTALL CURB RAMP

5% MAX SLOPE TO
TRANSITION FROM FLUSH
TO CURBED SIDEWALK

UGELEC
COMM

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COMMONWEALTH OF KENTUCKY
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ENGINEERING
SINCE 1937
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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

BG MOVING FORWARD

BULLITT CENTRAL HIGH SCHOOL
EROSION CONTROL PLAN

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BULLITT COUNTY, KENTUCKY

BG# 25-145

DATE : 04/22/2024
DRAWN BY : RPM
CHECKED BY : SKA
REVISIONS :

2023-50.1

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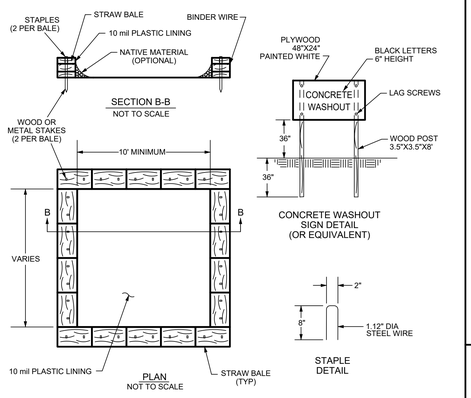
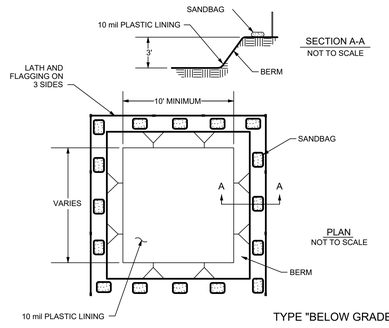


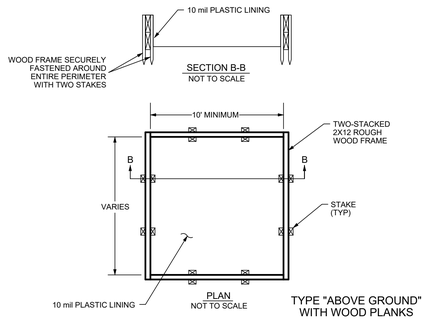
CONCRETE WASHOUT SIGN DETAIL (OR EQUIVALENT)

STAPLE DETAIL

TYPE "ABOVE GRADE" WITH STRAW BALES



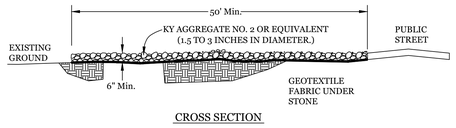
TYPE "BELOW GRADE"



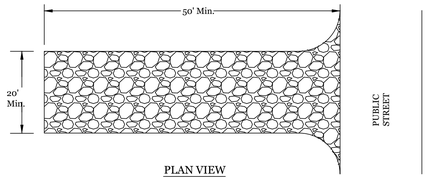
TYPE "ABOVE GROUND" WITH WOOD PLANKS

NOTES

1. ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
2. A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
4. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.

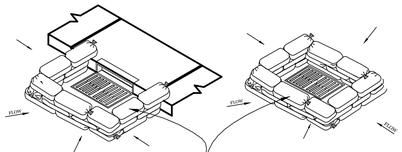


CROSS SECTION



PLAN VIEW

CONSTRUCTION ENTRANCE
NOT TO SCALE



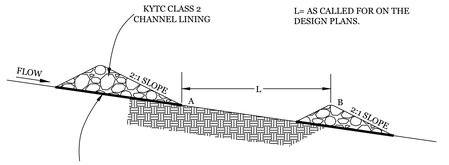
CURB INLET

CATCH BASIN

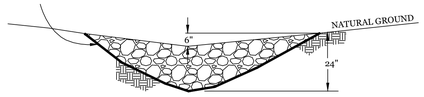
INLET PROTECTION SHALL BE HEIGHT OF 12 INCHES WITH TWO COURSES OF STONE BAGS AS A MINIMUM.

NOTE:
1. INSTALL STONE BAGS AROUND INLET IF PERMANENT STABILIZATION OF DISTURBED AREA IS NOT COMPLETE.
2. STONE BAGS SHALL BE INTERWEAVED SO AS TO FILL ALL GAPS AND PROVIDE A SEAL TO BLOCK SEDIMENT.
3. STONE BAGS SHALL BE INSPECTED WEEKLY. ANY BUILT- UP SEDIMENT SHALL BE REMOVED.
4. STONE BAGS MAY ALSO BE USED FOR SILT PROTECTION IN SMALL SWALES OR SMALL DRAINAGE AREAS.

STONE BAG INLET PROTECTION
SOURCE : KDOH STANDARD DRAWINGS 11-21-07



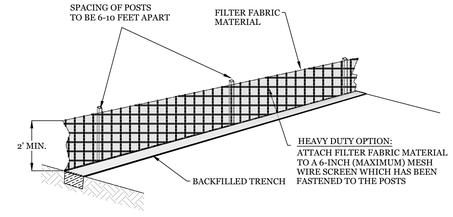
LONGITUDINAL SECTION

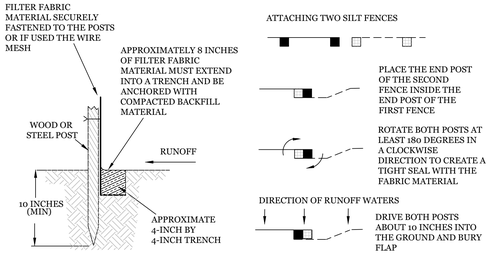


CHANNEL SECTION

CHECK DAM/ SILT CHECK
NOT TO SCALE

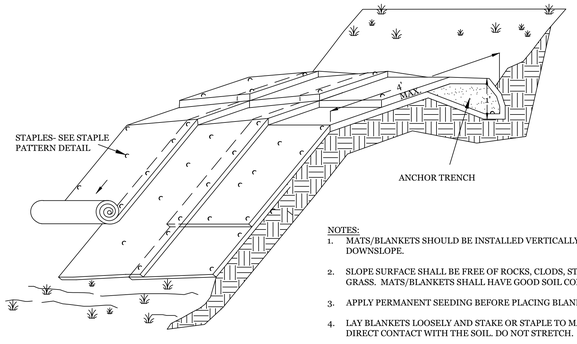
NOTES:
1. GEOTEXTILE FILTER FABRIC SHALL BE PLACED BETWEEN THE STONE SILT CHECK DAM AND SOIL.
2. STONE SHALL BE HAND PLACED TO A MINIMUM THICKNESS OF 12 INCHES.
3. ALL CHECK DAMS SHOULD BE 24" OR LESS IN HEIGHT. THE OVERFLOW POINT SHOULD BE 6" LOWER THAN THE OUTER EDGES.
4. FRONT AND BACK SLOPES SHALL BE 2:1.
5. MORE THAN ONE CHECK DAM SHALL BE USED WHEN CHANNEL DRAINS MORE THAN ONE ACRE.





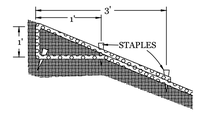
NOTES:
1. SILT FENCE TO BE PLACED ON SLOPE CONTOUR.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.

SILT FENCE INSTALLATION - TRENCH METHOD
SOURCE : CITY OF CLEARWATER, FLORIDA , STANDARD DRAWINGS, JULY 2002

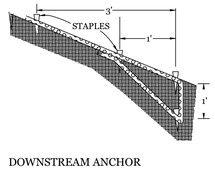


NOTES:
1. MATS/BLANKETS SHOULD BE INSTALLED VERTICALLY DOWNSLOPE.
2. SLOPE SURFACE SHALL BE FREE OF ROCKS, CLODS, STICKS AND GRASS. MATS/BLANKETS SHALL HAVE GOOD SOIL CONTACT.
3. APPLY PERMANENT SEEDING BEFORE PLACING BLANKETS.
4. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
5. FOLLOW DETAIL ON THIS SHEET FOR STAPLE PATTERN OF EROSION CONTROL BLANKETS.

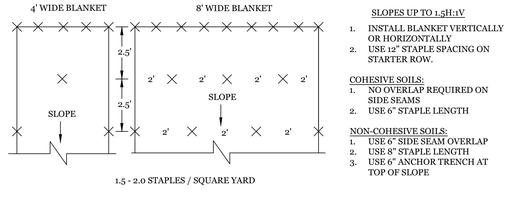
SLOPE INSTALLATION FOR EROSION CONTROL BLANKETS
SOURCE : SALIX APPLIED EARTHCARE - EROSION DRAW 5.0



UPSTREAM ANCHOR SLOT DETAIL
SOURCE : LFUCG STORMWATER MANUAL EFFECTIVE 1-1-09



DOWNSTREAM ANCHOR SLOT DETAIL
SOURCE : LFUCG STORMWATER MANUAL EFFECTIVE 1-1-09



SLOPES UP TO 1.5H:1V
1. INSTALL BLANKET VERTICALLY OR HORIZONTALLY
2. USE 12" STAPLE SPACING ON STARTER ROW.

COHESIVE SOILS:
1. NO OVERLAP REQUIRED ON SIDE SEAMS
2. USE 6" STAPLE LENGTH

NON-COHESIVE SOILS:
1. USE 6" SIDE SEAM OVERLAP
2. USE 8" STAPLE LENGTH
3. USE 6" ANCHOR TRENCH AT TOP OF SLOPE

CHANNELS IN COHESIVE SOILS
1. USE 6" SIDE SEAM OVERLAP
2. USE 6" STAPLE LENGTH
3. USE 6" TRANSVERSE ANCHOR TRENCH AT 100 FT. INTERVALS.
4. USE 12" STAPLE SPACING ON STARTER ROW.
5. UPSTREAM BLANKET SHOULD OVERLAP DOWNSTREAM BLANKET A DISTANCE OF 12" IN A "SHINGLE" FASHION AND BURY THE FINISHED TOE AT LEAST 6"

CHANNELS IN NON-COHESIVE SOILS
1. USE 6" SIDE SEAM OVERLAP
2. USE 8" STAPLE LENGTH
3. USE 6" TRANSVERSE ANCHOR TRENCH AT 50 FT. INTERVALS.
4. USE 12" STAPLE SPACING ON STARTER ROW.
5. UPSTREAM BLANKET SHOULD OVERLAP DOWNSTREAM BLANKET A DISTANCE OF 12" IN A "SHINGLE" FASHION AND BURY THE FINISHED TOE AT LEAST 6"

NOTE:
THE ABOVE STAPLE PATTERN DETAILS INCLUDE STRAW AND EXCELSIOR MATS.

STAPLE PATTERN FOR EROSION CONTROL BLANKETS
SOURCE : LFUCG STORMWATER MANUAL EFFECTIVE 1-1-09

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SINCE 1977

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

BULLITT CENTRAL HIGH SCHOOL
EROSION CONTROL DETAILS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BULLITT COUNTY, KENTUCKY

BG# 25-145

DATE : 04/22/2024
DRAWN BY : RPM
CHECKED BY : SKA
REVISIONS :

2023-50.1

C1.49
BCHS

GENERAL NOTES

DESIGN LOADS

STRUCTURAL RISK CATEGORY ..... CATEGORY III

FLOOR LIVE LOAD

SLABS ON GRADE	150PSF
3rd EDITION (2015 IBC). CORRIDORS ABOVE FIRST FLOOR	80 PSF
LOBBIES AND CORRIDORS	100 PSF
MECHANICAL ROOMS	200 PSF
STAIRS	100 PSF
WEIGHTLIFTING AREAS	250 PSF

ROOF LIVE LOAD ..... 20 PSF MIN

ROOF SNOW LOAD (PER ASCE 7-10)

GROUND SNOW LOAD	P_g = 15 PSF
IMPORTANCE FACTOR	Is = 1.1
SNOW EXPOSURE FACTOR	Ce = 1.0
THERMAL FACTOR	
(BUILDING)	Ct = 1.0
(CANOPIES)	Ct = 1.2
RAIN ON SNOW SURCHARGE (FLAT ROOF ONLY)	P_r = 5 PSF
FLAT-ROOF SNOW LOAD* ($P_f = 0.7Ce$CtIP$_g$)	
(BUILDING)	P_f = 12.8 PSF
(CANOPIES)	P_f = 13.9 PSF
MINIMUM-ROOF SNOW LOAD (IsP$_g$)	P_{rm} = 16.5 PSF
SLOPED-ROOF SNOW LOAD* ($P_s = Cs$ P_f)	
(BUILDING)	P_s = 12.8 PSF
(CANOPIES)	P_s = 13.9 PSF

*(INCREASE FOR DRIFTING PER ASCE 7-10, SECTIONS 7.7 & 7.8)

WIND LOAD (PER ASCE 7-10)

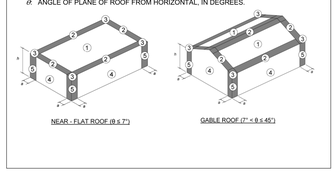
ULTIMATE DESIGN WIND SPEED	V_{ULT}= 120 MPH
NOMINAL DESIGN WIND SPEED	V_{ASD}= 96 MPH
WIND EXPOSURE	EXPOSURE C
ENCLOSURE	FULLY ENCLOSED
INTERNAL PRESSURE COEFFICIENT	GC_{pi} = ± 0.18
END ZONE WIDTH	a = 12 FT

COMPONENTS & CLADDING EXTERNAL PRESSURE ULTIMATE (LRFD) LOADS (PSF)

EFFECTIVE WIND AREA (SQ FT)	LOCATION PER ASCE 7-10: 1	2	3	4	5
10	14.4 -35.3	14.4 -59.3	14.4 -89.3	32.4 -35.0	32.4 -43.1
20	13.9 -34.2	13.9 -51.0	13.9 -69.0	30.7 -33.6	30.7 -40.3
50	12.3 -33.3	12.3 -44.7	12.3 -53.7	29.0 -31.7	29.0 -36.5
100	11.4 -32.4	11.4 -38.3	11.4 -38.3	27.6 -30.3	27.6 -30.3
500				24.3 -27.0	24.3 -27.0

NOTES:

1. WIND LOADING PROVIDED ARE ULTIMATE (LRFD) LOADING. FOR ALLOWABLE STRESS DESIGN MULTIPLY LOADS PROVIDED BY 0.6.
2. LOADING PROVIDED IS FOR SMOOTH ROOF HEIGHT. DELEGATED DESIGNERS MAY RECALCULATE LOADS FOR SPECIFIC COMPONENT HEIGHTS USING PARAMETERS SPECIFIED.
3. PRESSURES SHOWN ARE APPLIED NORMAL TO THE SURFACE.
4. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE SURFACES, RESPECTIVELY.
5. FOR HIP ROOFS WITH $\theta \leq 25°$, ZONE 3 SHALL BE TREATED AS ZONE 2.
6. EACH COMPONENT MUST BE DESIGNED FOR MAXIMUM POSITIVE AND NEGATIVE FORCES.
7. FOR COMPONENTS HAVING EFFECTIVE AREAS IN BETWEEN TABULATED VALUES, DESIGN LOADS MAY BE INTERPOLATED. OTHERWISE DESIGN LOAD MUST BE TAKEN FROM THE NEXT LOWEST EFFECTIVE AREA.
8. INTERNAL PRESSURE FOR ENCLOSED BUILDING IS INCLUDED IN ABOVE VALUES.
9. THE NET C&C PRESSURE (INCLUDING INTERNAL PRESSURE) FOR ANY COMPONENT SHALL NOT BE TAKEN LESS THAN 16 PSF ACTING IN EITHER DIRECTION NORMAL TO THE SURFACE.
10. NOTATION:
   - *a:* 10 PERCENT OF LEAST HORIZONTAL DIMENSION OR 0.4*h*, WHICHEVER IS SMALLER, BUT NOT LESS THAN EITHER 4% OF LEAST HORIZONTAL DIMENSION OR 3 FT.
   - *h:* MEAN ROOF HEIGHT, IN FEET, EXCEPT THAT EAVE HEIGHT SHALL BE USED FOR ROOF ANGLES $\leq$ 10°.
   - θ: ANGLE OF PLANE OF ROOF FROM HORIZONTAL, IN DEGREES.



EARTHQUAKE DESIGN DATA

COUNTY / STATE	BULLITT / KENTUCKY
IMPORTANCE FACTOR	Ie = 1.25
MAPPED SHORT PERIOD RESPONSE ACCELERATION	Ss = 0.226
MAPPED 1 SECOND PERIOD RESPONSE ACCELERATION	S1 = 0.114
SITE CLASS	CLASS C
DESIGN SHORT PERIOD SPECTRAL RESPONSE COEFFICIENT	Sds = 0.181
DESIGN 1 SECOND PERIOD SPECTRAL RESPONSE COEFFICIENT	Sd1 = 0.128
SEISMIC DESIGN CATEGORY	CATEGORY B
BASIC STRUCTURAL SYSTEM	BEARING WALL SYSTEM
SEISMIC RESISTING SYSTEM	INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
RESPONSE MODIFICATION FACTOR	R = 4.0
SEISMIC RESPONSE COEFFICIENT	Cs = 0.113
METHOD OF ANALYSIS	EQUIVALENT LATERAL FORCE PROCEDURE
SEISMIC BASE SHEAR	= 500 KIPS

DESIGN STRESSES

CONCRETE (STRENGTH DESIGN) MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS:	
FOOTINGS	f'c = 3,000 PSI
INTERIOR SLABS ON GRADE, AND CONCRETE ON METAL DECK	f'c = 4,000 PSI
CONCRETE EXPOSED TO FREEZE/THAW	f'c = 4,500 PSI
REINFORCING BARS (ASTM A615 GRADE 60)	f_y = 60,000 PSI
WELDED WIRE FABRIC (ASTM A1064)	f_y = 65,000 PSI
WIDE FLANGE AND TEE SHAPES DESIGNATED AS W AND WT (ASTM A992)	f_y = 50,000 PSI
CHANNELS, ANGLES, PLATES AND BARS (ASTM A572)	f_y = 50,000 PSI
STEEL ROOF DECK (ASTM A653)	f_y = 33,000 PSI
HOLLOW STRUCTURAL SECTIONS - RECTANGULAR STEEL TUBES (ASTM A500 GRADE C)	f_y = 50,000 PSI
STEEL JOISTS (K SERIES) AS PER SJI SPECIFICATIONS	f_y = 50,000 PSI MAX
	f_y = 36,000 PSI MIN
MASONRY ASSEMBLY COMPRESSIVE STRENGTH	f'm = 2,000 PSI
CONCRETE MASONRY UNIT STRENGTH	f'm = 2,000 PSI
TYPE S MORTAR STRENGTH	f'm = 2,000 PSI

MASONRY GROUT (ASTM C476) MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS ..... f'm = 2,000 PSI

SOIL BEARING PRESSURE FOR FOUNDATIONS (SOIL) ..... 2,000 PSF

DESIGN CRITERIA

1. STRUCTURE IS DESIGNED IN ACCORDANCE WITH THE 2018 KENTUCKY BUILDING CODE, 3rd EDITION (2015 IBC).
2. MAXIMUM ESTIMATED DEFLECTIONS (IN INCHES) ARE AS FOLLOWS:

	LIVE LOAD	DEAD + LIVE LOAD
ROOF MEMBERS	L/360	L/240
FLOOR MEMBERS INTERIOR	L/360	L/240
FLOOR MEMBERS SPANDREL	L/480	L/360

WHERE L = SPAN LENGTH BETWEEN CENTERLINE OF SUPPORTS (INCHES) FOR CANTILEVERS L = TWICE THE LENGTH OF THE CANTILEVER.

3. NO PROVISION HAS BEEN MADE FOR FUTURE HORIZONTAL OR VERTICAL EXPANSION.

GENERAL

1. THE REQUIREMENTS OF THESE GENERAL NOTES APPLY UNLESS NOTED OTHERWISE ON PLANS OR IN SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL CONTRACT DOCUMENTS, ADDENDA, AND SUPPLEMENTARY INFORMATION AND DISTRIBUTING SUCH TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE PREPARATION AND SUBMITTAL OF SHOP DRAWINGS, FABRICATION AND INSTALLATION OF ANY STRUCTURAL MEMBERS.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO COMMENCING WORK. THE ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES THAT MAY EXIST.
4. ANY DISCREPANCIES BETWEEN STRUCTURAL AND ARCHITECTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER.
5. DO NOT SCALE DRAWINGS.
6. THE STRUCTURE IS DESIGNED TO FUNCTION AS A UNIT UPON COMPLETION AND IS THEREFORE DEPENDENT UPON DIAPHRAGM ACTION OF THE ROOF DECK AND FLOOR SLAB AND ATTACHMENT TO THE SHEAR WALLS AND FRAMES FOR STABILITY AND FOR RESISTANCE TO WIND AND SEISMIC FORCES. THE CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY BRACING REQUIRED TO PROPERLY CONSTRUCT THE BUILDING UNTIL THESE ELEMENTS ARE COMPLETE AND CAPABLE OF PROVIDING THIS SUPPORT.
7. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR MEANS AND METHODS TO CONSTRUCT THE STRUCTURE, INCLUDING VERIFICATION OF LOAD CAPACITY OF THE STRUCTURE, NEW OR EXISTING, TO SUPPORT CONSTRUCTION ACTIVITIES, EQUIPMENT, ETC. AND FOR LIMITING THE AMOUNT OF CONSTRUCTION LOAD IMPOSED ON THE STRUCTURAL FRAMING. CONSTRUCTION LOADS SHALL NOT EXCEED THE DESIGN CAPACITY OF THE FRAMING AT THE TIME THE LOADS ARE IMPOSED. DAMAGE TO THE STRUCTURE CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE CORRECTED BY THE RESPONSIBLE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
8. SHOP DRAWINGS MUST BE CHECKED AND STAMPED BY THE CONTRACTOR PRIOR TO SUBMISSION.
9. NON-STRUCTURAL ELEMENTS OF THE BUILDING (ARCHITECTURAL FINISHES, MASONRY VENEER AND ASSOCIATED TIES, INSULATION, SHEATHING, DUCTWORK, PIPING, FOUNDATION/FLOOR/ROOF DRAINS, ETC.) ARE TYPICALLY NOT SHOWN ON THE STRUCTURAL DRAWINGS. WHERE NON-STRUCTURAL ELEMENTS ARE SHOWN ON THE STRUCTURAL DRAWINGS, THEY ARE SHOWN FOR REFERENCE AND DESIGN INTENT ONLY. NON-STRUCTURAL ELEMENTS SHALL BE CONSTRUCTED AS SHOWN ON THE ARCHITECTURAL, ELECTRICAL, MECHANICAL AND PLUMBING DRAWINGS.
10. ELEVATIONS SHOWN ON STRUCTURAL DRAWINGS ARE IDEALIZED ELEVATIONS BASED ON DECK THICKNESS AND SLOPES SHOWN ON DRAWINGS AND DO NOT ACCOUNT FOR BEAM OR JOIST CAMBER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE ANY CAMBER OF THEIR WORK WITH OTHER TRADES AND ADJUST ELEVATIONS AS NECESSARY TO ACCOUNT FOR DEAD LOAD DEFLECTION AND THIS CAMBER.
11. WALL OPENINGS AND TERMINATIONS SHOWN ON THE STRUCTURAL DRAWINGS ARE DIAGRAMMATIC ONLY. TERMINATIONS AND OPENINGS AT WALLS AND SILLS SHALL BE CONSTRUCTED AS SHOWN ON THE ARCHITECTURAL DRAWINGS. WHERE VENEERS WRAP JAMBS, DETAIL AND FABRICATE LINTELS TO BEAR ON SOLID STRUCTURE. DO NOT BEAR LINTELS OR BEAMS ON MASONRY (BRICKS, SIDING, ETC.). IF THE ARCHITECTURAL DRAWINGS DO NOT INCLUDE DETAILS FOR ANY OF THESE CONDITIONS, CONSULT WITH ARCHITECT FOR DIRECTION.
12. DETAILS LABELED TYPICAL ON THESE DRAWINGS SHALL APPLY TO ALL SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR AND SHALL APPLY REGARDLESS OF WHETHER THEY ARE KEYED ON THE PLANS. CONSTRUCTION NOT SPECIFICALLY INDICATED BY DETAIL OR SECTION SHALL BE SIMILAR TO DETAILS SHOWN FOR SIMILAR CONDITIONS.

FOUNDATION CONSTRUCTION

1. FOUNDATIONS ON THIS PROJECT ARE DESIGNED IN ACCORDANCE WITH RECOMMENDATIONS MADE BY CONSULTING SERVICES, INC., GEOTECHNICAL ENGINEERS, IN THEIR REPORT DATED FEBRUARY 13, 2023. THE GEOTECHNICAL REPORT IS PROVIDED AS REFERENCE INFORMATION AVAILABLE TO BIDDERS, BUT IS NOT PART OF THE CONTRACT DOCUMENTS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE OR LIABLE FOR THE ACCURACY OF THE INFORMATION PRESENTED IN THE GEOTECHNICAL REPORT.
2. ELEVATIONS GIVEN ARE TO THE TOP OF FOOTINGS.
3. **ALL FOOTINGS MUST BE SUPPORTED ON UNDISTURBED SOIL CAPABLE OF SUPPORTING DESIGN LOADS WITHOUT APPRECIABLE SETTLEMENT. CONTRACTOR SHALL PROBE BEARING STRATA WITH DRIVEN RODS, REMOVE SHALLOW BEDROCK (AND OVERLYING SOIL) WITHIN TWO FEET BELOW BOTTOM OF FOOTING, AND REPLACE WITH ENGINEERED SOIL BACKFILL. FOUNDATIONS SHALL NOT BEAR ON FILL MATERIAL. ALL EXISTING FILL MATERIAL SHALL BE REMOVED (FULL DEPTH) WITHIN THE INFLUENCE ZONE OF THE FOOTING. SEE TYPICAL FOUNDATION DETAILS FOR FOOTING INFLUENCE ZONE.**
4. IN GRANULAR SOILS (SANDS AND GRAVEL) THE SOIL SHALL BE MECHANICALLY TAMPED TO A HARD SURFACE IMMEDIATELY PRIOR TO PLACING FOOTING.
5. LOCATE EXISTING UNDERGROUND UTILITIES IN AREAS OF CONSTRUCTION. COORDINATE WITH UTILITY COMPANIES FOR ANY SHUT-OFF REQUIREMENTS OF STILL-ACTIVE LINES.
6. WHEN EXCAVATIONS APPROACH THE GROUND WATER LEVEL, THE WATER LEVEL SHALL BE LOWERED BY AN ACCEPTABLE DEWATERING SYSTEM SO THAT THE WATER LEVEL IS MAINTAINED CONTINUOUSLY A MINIMUM OF 2'-0" BELOW THE EXCAVATION.
7. PROVIDE MINIMUM (2) #5 CONTINUOUS IN ALL FOOTINGS DIRECTLY UNDER MASONRY WALLS.
8. BEFORE BACKFILL, ALL WALLS MUST BE ADEQUATELY BRACED. FOR BACKFILL REQUIREMENTS, SEE SPECIFICATIONS AND/OR GEOTECHNICAL ENGINEER'S REPORT.
9. RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL COMPRESSIVE STRENGTH TESTS DEMONSTRATE THAT THE CONCRETE HAS DEVELOPED 100% OF THE REQUIRED 28-DAY COMPRESSIVE STRENGTH FOR THE CLASS OF CONCRETE SPECIFIED. THE CONTRACTOR MAY ELECT TO PREPARE ADDITIONAL TEST CYLINDERS IN ORDER TO DEMONSTRATE THAT THE REQUIRED COMPRESSIVE STRENGTH PRIOR TO THE MANDATORY 28-DAY COMPRESSIVE STRENGTH TESTS. IN NO CASE SHALL WALLS BE BACKFILLED PRIOR TO SEVEN (7) DAYS FROM PLACEMENT.
10. FOR PLACEMENT AND COMPACTION OF FILL UNDER SLABS ON GRADE, SEE SPECIFICATIONS. IF NOT NOTED OTHERWISE, COMPACT ALL FILL TO 98% OF OPTIMUM LABORATORY DENSITY IN ACCORDANCE WITH ASTM D698 STANDARD PROCTOR METHOD. PLACE FILL IN 6" TO 8" LAYERS AND COMPACT WITH VIBRATORY TAMPING EQUIPMENT.
11. WHERE ELECTRICAL CONDUIT CONGREGATES BELOW ELECTRICAL ROOMS AND PANELS, CONTRACTOR SHALL HOLD DOWN SUBGRADE APPROPRIATELY FOR CONDUIT TO BE BELOW SLAB. COVER CONDUIT WITH FLOWABLE FILL (LEAN CONCRETE) TO BOTTOM OF SLAB ELEVATION.
12. SEE ARCHITECTURAL AND SITE DRAWINGS FOR CONTOUR AND LAYOUT OF SITE WALKS AND BREEZEWAYS. SLOPE EXTERIOR CONCRETE 1/8" FT AWAY FROM BUILDING, UNLESS NOTED OTHERWISE.
13. FOUNDATION CONCRETE SHALL BE PLACED IMMEDIATELY FOLLOWING EXCAVATION. A LEAN CONCRETE (1,500 PSI) MUD MAT SHALL BE PLACED OVER THE PREPARED BEARING MATERIALS IF EXCAVATION MUST REMAIN OPEN DURING INCLEMENT WEATHER OR FOR MORE THAN 72 HOURS.
14. CONTRACTOR SHALL EXERCISE CAUTION THAT DENSE GRADED AGGREGATE BLANKET BELOW FLOOR SLAB DOES NOT BECOME SATURATED DURING CONSTRUCTION. CONTRACTOR SHALL CAST FLOOR SLAB OR PROVIDE TEMPORARY PROTECTION FOR SUBGRADE UNTIL SLAB IS CAST TO PREVENT WATER INFILTRATION INTO SUBGRADE.
15. SURFACE RUNOFF SHALL BE DIRECTED AWAY FROM FOUNDATION EXCAVATIONS AND NOT BE PERMITTED TO POND WITHIN THE BUILDING FOOTPRINT. PROVIDE DRAINAGE TRENCHES FROM FOUNDATION EXCAVATIONS TO DIRECT RAINWATER OUT OF EXCAVATIONS.

CONCRETE CONSTRUCTION

1. ALL CONCRETE CONSTRUCTION TO BE IN ACCORDANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE ACI 301, ACI 318 AND ACI DETAILING MANUAL, EXCEPT THAT CONSTRUCTION AND REMOVAL OF FORMS AND RESHORING SHALL BE INSPECTED BY THE CONTRACTOR'S ENGINEER.
2. FURNISH BAR SUPPORTS WHERE NECESSARY DURING CONSTRUCTION.
3. PROVIDE PLASTIC, PLASTIC-COATED (NOT PLASTIC-TIPPED) OR STAINLESS STEEL CHAIRS IN ALL CONCRETE EXPOSED TO VIEW IN COMPLETED STRUCTURE.
4. PROVIDE PIPE SLEEVES AND INSERTS IN CONCRETE WORK WHERE REQUIRED. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS.
5. CONSTRUCTION JOINTS SHALL BE POSITIONED SO AS NOT TO CHANGE THE STRUCTURAL DESIGN REQUIREMENTS. RAISED FLOORS SHALL HAVE CONSTRUCTION JOINTS SO THAT NO MORE THAN 10,000 S.F. IS IN ANY SINGLE POUR AND THE MAXIMUM LENGTH OF POUR IS 100'-0". RATIO OF LENGTH TO WIDTH OF POUR SHALL NOT EXCEED 2. LOCATION OF ALL CONSTRUCTION JOINTS SHALL BE APPROVED BY THE ENGINEER.
6. WELDING OF REINFORCING BARS (INCLUDING TACK WELDING) IS NOT PERMITTED.
7. ALL EXPOSED CORNERS OF CONCRETE SHALL BE CHAMFERED 45 DEGREES. MINIMUM CHAMFER TO BE 1/2". CURVE THE LEADING EDGE OF STAIR TREADS TO 1/2" RADIUS.
8. REINFORCING FOR SLABS ON GROUND (IN FLAT SHEETS) SHALL BE IN THE MIDDLE OF THE SLAB, UNLESS NOTED OTHERWISE, AND BE POSITIVELY SUPPORTED AND MAINTAINED IN THIS POSITION DURING PLACEMENT OF CONCRETE.
9. IN SLAB AND/OR JOIST CONSTRUCTION, PROVIDE A MINIMUM OF #4 x 5'-0" AT 12" O.C. TOP OVER BEAMS OR WALLS WHERE SLABS OR JOISTS SPAN PARALLEL TO BEAMS OR WALLS.
10. IN STEEL STAIR TREADS WITH CONCRETE FILL, PROVIDE 4x4-W1.4xW1.4 W.W.F. IN FLAT SHEETS.
11. BEND ALL HORIZONTAL WALL AND FOOTING BARS 1'-0" AROUND CORNERS OR PROVIDE CORNER BARS WITH 2'-0" LAP.
12. PROVIDE FOUNDATION DOWELS FOR ALL WALLS AND PIERS, SAME SIZE AND SPACING AS VERTICAL STEEL.
13. PROVIDE FOUNDATION DOWELS FOR MASONRY WALLS SAME SIZE AND SPACING AS VERTICAL STEEL. ALL DOWELS SHALL BE WITHIN 8" LATERALLY OF WALL REINFORCING ABOVE AND IN LINE WITH THE WALL REINFORCING. PROVIDE DOWELS FOR ALL ADDITIONAL WALL REINFORCING AT CORNERS, INTERSECTIONS AND JAMBS, AND BOTH SIDES OF CONTROL JOINTS. ONLY DOWELS AT THESE ADDITIONAL LOCATIONS MAY BE POST INSTALLED / DRILLED AND ADHESIVE FASTENED WITH EMBEDMENT AS REQUIRED TO DEVELOP FULL YIELD WITHIN THE FOOTING.
14. HORIZONTAL FLOORS THAT HAVE DEFLECTING STRUCTURAL MEMBERS (UNSHORED STEEL BEAMS, PRE-CAST CONCRETE PLANK, ETC.) SHALL BE FINISHED LEVEL. THE SLAB THICKNESS NEED IS MINIMUM. ADDITIONAL CONCRETE MAY BE NECESSARY TO OVERCOME MEMBER DEFLECTIONS. SHORED CONSTRUCTION SHALL BE FINISHED TO A CONSTANT DEPTH.
15. WHERE POCKETS OR VOIDS ARE FORMED INTO CONCRETE WALL FOR STEEL BEAMS OR COLUMNS, FILL POCKET WITH CONCRETE AFTER THE STEEL MEMBER HAS BEEN INSTALLED.
16. SPLICES: ALL REINFORCING SPLICES SHALL BE AS TENSION LAP, U.N.O.
   A. LAP ALL COMPRESSION SPLICES 30 BAR DIAMETERS OF THE LARGER BAR.
   B. LAP ALL TENSION SPLICES (ALL SPLICES EXCEPT COMPRESSION, U.N.O.) IN ACCORDANCE WITH THE FOLLOWING TABLE. MODIFY LENGTHS AS NOTED:

BAR SIZE	CONCRETE COMPRESSIVE STRENGTH 3,000 PSI	4,000 PSI	5,000 PSI
#3	21"	19"	17"
#4	29"	25"	22"
#5	36"	31"	28"
#6	43"	37"	33"
#7	62"	54"	48"
#8	71"	62"	55"
#9	80"	70"	62"
#10	90"	78"	70"
#11	100"	87"	78"

1. INCREASE SPLICE LENGTH BY THE FOLLOWING:
2. NOTE: INCREASED LENGTHS ARE ACCUMULATIVE.
1. HORIZONTAL TOP BARS WITH GREATER THAN 12" OF CONCRETE BELOW +30 %
2. BAR SPACING LESS THAN 2 BAR DIAMETERS +50 %

17. CONCRETE PROTECTION FOR REINFORCEMENT: COVER
   A. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ..... 3"
   B. EACH COMPONENT USED TO EARTH OR WEATHER
      NO. 6 THROUGH NO. 18 BARS ..... 2"
      NO. 5 BAR, W31 OR D31 WIRE AND SMALLER ..... 1 ½"
   C. CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND
      SLABS, FOUNDATION WALLS
      NO. 11 BAR AND SMALLER ..... ¾"

LOOSE LINTEL SCHEDULE

1. THIS SCHEDULE IS FOR LINTELS OVER MASONRY OPENINGS NOT OTHERWISE SHOWN OR NOTED ON DRAWINGS INCLUDING LOAD BEARING PARTITION WALLS AND WYTHES.
   A. ANGLES AND SUPPORT PLATES EXPOSED TO WEATHER SHALL BE HOT-DIP GALVANIZED.
   B. MINIMUM BEARING LENGTH FOR ANGLES AND WT'S SHALL BE 6" EACH END, MINIMUM BEARING LENGTH FOR TUBES SHALL BE 8" EACH END. SEE TYPICAL DETAILS FOR BOND BEAM CONSTRUCTION.
   C. PROVIDE STEEL LINTELS ABOVE ALL PENETRATIONS 16" AND WIDER THROUGH MASONRY WALLS OR MASONRY VENEERS; INCLUDING DUCT PENETRATIONS, LOUVERS, GROUPED CONDUITS, WINDOWS, ET CETERA.
   D. FOR MULTI-WYTHE WALL CONSTRUCTION, PROVIDE LINTEL FOR EACH WYTHE PER SCHEDULE FOR GIVEN WYTHE THICKNESS.
2. FOR 4" MASONRY WALLS PROVIDE:

SPAN LIMITS	ANGLE SIZE
0" TO 4'-0"	L3 1/2x3 1/2x5/16
4'-1" TO 5'-6"	L4x3 1/2x5/16 L.D.V.

3. FOR 6" MASONRY WALLS PROVIDE:

SPAN LIMITS	LINTEL SIZE
0" TO 4'-0"	WT5x6.0
4'-1" TO 5'-6"	WT5x8.5

4. FOR 8" MASONRY WALLS PROVIDE:

SPAN LIMITS	LINTEL SIZE
0" TO 6'-0"	8" BOND BEAM TYPE ML8 SEE DET E/S401 OR (2) L4x3 1/2x5/16 L.D.V.
6'-1" TO 9'-6"	16" BOND BEAM TYPE ML16 SEE DET E/S401 OR HSS8x4x1/4 + PL 1/4x7 (TYPE 3, SEE DET E/S401

5. FOR 12" MASONRY WALLS PROVIDE:

SPAN LIMITS	LINTEL SIZE
0" TO 6'-0"	8" BOND BEAM TYPE ML8 SEE DET E/S401 OR (3) L4x3 1/2x5/16 L.D.V.
6'-1" TO 9'-6"	16" BOND BEAM TYPE ML16 SEE DET E/S401 OR HSS8x8x5/16 + PL 1/4x11 (TYPE 3, SEE DET E/S401)

MASONRY WALL CONSTRUCTION

1. MASONRY WALLS SHOWN ON STRUCTURAL DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (ACI 530/ASCE 5/TMS 402).
2. MASONRY WALLS SHOWN ON STRUCTURAL DRAWINGS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530.1/ASCE 6/TMS 602) AND THE PROJECT SPECIFICATIONS. IF THERE ARE ANY CONFLICTS BETWEEN THE TWO, THE MORE RESTRICTIVE REQUIREMENT SHALL BE APPLICABLE.
3. DETERMINE COMPRESSIVE STRENGTH OF MASONRY (f'm) BY THE UNIT STRENGTH METHOD (SECTION 1.4B.2 OF ACI 530.1/ASCE 6/TMS 602). THE STRENGTH OF GROUT SHALL BE DETERMINED BY TESTS IN ACCORDANCE WITH ASTM C1019.
4. MATERIALS:
   - C.M.U. ..... ASTM C55 OR C90
   - GROUT ..... ASTM C476
   - MORTAR ..... TYPE S
5. USE TYPE S MORTAR FOR C.M.U. IN ALL STRUCTURAL BEARING, SHEAR, AND CURTAIN WALLS.
6. INTERSECTING BEARING WALLS SHALL BE ANCHORED BY ONE OF THE FOLLOWING METHODS:
   A. FIFTY PERCENT OF THE UNITS AT THE INTERSECTION SHALL BE LAID IN AN OVERLAPPING MASONRY BONDING PATTERN, WITH ALTERNATE UNITS HAVING A BEARING OF NOT LESS THAN 3" ON THE UNIT BELOW.
   B. WALLS SHALL BE TIED BY GALVANIZED STEEL STRAPS 1 1/2" x 1/4" x 24" WITH 2" BEND AT 90° EACH END. GROUT STRAPS SOLID INTO CORES OF BLOCK AT 24" MAXIMUM VERTICAL SPACING.
   C. THE ABOVE DO NOT APPLY AT CONTROL JOINTS OR WHERE NON-LOAD-BEARING PARTITIONS ABUT BEARING WALLS.
7. UNLESS NOTED OTHERWISE, PROVIDE GALVANIZED STEEL SLEEVE / 8 GA WIRE STABILIZING ANCHORS AT 24" O.C. VERTICAL AT ALL JOINTS BETWEEN MASONRY PARTITIONS AND IN-PLACE MASONRY CONSTRUCTION (BEARING OR EXISTING WALL CONSTRUCTION). FASTEN ANCHOR TO IN-PLACE WALL W/ (2) 3/16"Ø x 1 1/4" MASONRY SCREWS.
8. CORNERS OF BEARING AND EXTERIOR WALLS SHALL BE BUILT IN RUNNING BOND.
9. ALL STRUCTURAL WALLS SHALL BE LAID IN RUNNING BOND. STACK BOND IS NOT ALLOWED.
10. PROVIDE A MINIMUM OF 16" DEPTH OF SOLID MASONRY UNDER THE BEARING ENDS OF ALL BEAMS AND LH AND DLH SERIES JOISTS, AND 8" DEPTH OF SOLID MASONRY UNDER THE BEARING ENDS OF ALL K SERIES JOISTS AND SLABS. GROUT CELLS (2 MINIMUM) BELOW LINTEL BEARING AT JAMBS DOWN TO FOUNDATION OR BOND BEAM, WHICHEVER OCCURS FIRST.
11. PROVIDE SOLID MASONRY MORTARED INTO PLACE AROUND BEARING ENDS OF ALL BEAMS AND JOISTS. COMPLETELY FILL BEARING POCKETS. CUT MASONRY NEATLY AT EXPOSED CONDITIONS.
12. NO CHASES, RECESSES, CONDUITS, OR TOOTHING OF MASONRY SHALL OCCUR IN MASONRY WALLS WITHIN 18 INCHES OF BEAM BEARING CENTERLINE.
13. PROVIDE SHOP DRAWINGS THAT INDICATE SIZE, SPACING, BENDING DETAILS, AND TYPE OF ALL REINFORCING BARS PLACED IN MASONRY WALLS. COMPLY WITH ACI SP-066(04) "ACI DETAILING MANUAL." PROVIDE WALL ELEVATION VIEWS OF ALL REINFORCED WALLS SHOWING LOCATIONS OF ALL HORIZONTAL AND VERTICAL DEFORMED BAR REINFORCING, DEPTH/WIDTH OF GROUTING, OPENINGS, TOP OF BOND BEAM ELEVATIONS, AND DIMENSIONED LOCATIONS OF CONTROL JOINTS. COORDINATE SIZE AND LOCATION OF ALL WALL PENETRATIONS WITH MEP CONTRACTORS, AND DIMENSION ON WALL ELEVATIONS, PRIOR TO SUBMITTAL OF SHOP DRAWINGS. INCOMPLETE SUBMITTALS WILL BE REJECTED WITHOUT REVIEW.
14. PROVIDE HORIZONTAL JOINT REINFORCEMENT PER ASTM A951, GALVANIZED, AT 16" CENTERS VERTICALLY. SEE SPECIFICATIONS. UNLESS NOTED OTHERWISE, PROVIDE A GALVANIZED LADDER TYPE JOINT REINFORCEMENT.
15. WELDING OF DEFORMED BARS (INCLUDING TACK WELDING) IS NOT PERMITTED.
16. LAP SPLICES FOR REINFORCING CENTERED IN CORES TO BE IN ACCORDANCE WITH THE FOLLOWING TABLE.

BAR SIZE	WALL THICKNESS 8" CMU	12" CMU
#3	18"	18"
#4	25"	25"
#5	31"	31"
#6	57"	52"
#7	79"	61"
#8	112"	75"

17. SEE DETAILS AND SCHEDULES FOR LOCATIONS AND SIZES OF HORIZONTAL AND VERTICAL REINFORCEMENT.
18. REINFORCE BOND BEAMS WITH (2) #5 CONTINUOUS, UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS FOR ALL BOND BEAM REINFORCEMENT.
19. IN ADDITION TO SPANNING INDICATED IN SCHEDULE, PROVIDE VERTICAL BARS AT ALL CORNERS, ENDS, JAMBS, INTERSECTIONS AND BOTH SIDES OF CONTROL JOINTS.
20. EXTEND ALL VERTICAL REINFORCEMENT THRU MID-HEIGHT BOND BEAMS. EXTEND VERTICAL REINFORCING INTO BOND BEAMS AT TOP OF WALL AND TERMINATE AT 2" DOWN FROM TOP OF WALL.
21. PROVIDE DOWELS FROM CONTINUOUS FOOTING (FOOTING, BEAM OR SLAB) FOR ALL REINFORCED WALLS. SAME SIZE, LOCATION, AND SPACING AS WALL REINFORCING.
22. VERTICAL REINFORCEMENT SHALL BE CENTERED IN CELLS OF MASONRY UNIT, UNLESS NOTED OTHERWISE.
23. WHERE REQUIRED BY CONSTRUCTION GEOMETRY/DETAILING, BAR POSITIONERS SHALL BE USED TO HOLD BOND BEAM REINFORCEMENT IN PROPER ALIGNMENT.
24. BAR POSITIONERS SHALL BE USED TO HOLD VERTICAL REINFORCEMENT IN PROPER ALIGNMENT WHERE C.M.U. BLOCK IS CONSTRUCTED SUCH THAT THE GROUT POUR HEIGH

9. ALL STUD AND JOIST MATERIAL SHALL BE PRE-PUNCHED WITH 1 1/2" x 4" WEB OPENINGS SPACED AT 24" O.C. UNLESS NOTED OTHERWISE. ALL OPENINGS SHALL BE LOCATED A MINIMUM OF 10" (TO EDGE OF OPENING) FROM THE END OF THE MEMBER.
10. ALL SCREWS SHALL BE SELF-DRILLING, SELF-THREADING, ZINC-COATED STEEL DRILL SCREWS, WITH LOW PROFILE HEADS WHEN USED BENEATH SHEATHING. MAINTAIN MINIMUM CLEARANCES AS SPECIFIED BELOW:

SCREW NUMBER DESIGNATION	NOMINAL SCREW DIAMETER (IN)	MINIMUM CENTER-TO-CENTER SPACING	MINIMUM EDGE DISTANCE	TOTAL PANEL THICKNESS STEEL TO STEEL
10	0.190	9/16"	9/16"	0.11 MAXIMUM #2 POINT 0.175 MAXIMUM #3 POINT
12	0.216	5/8"	5/8"	0.14 MAXIMUM #2 POINT 0.21 MAXIMUM #3 POINT
1/4"	0.250	3/4"	3/4"	0.175 MAXIMUM #2 POINT 0.21 MAXIMUM #3 POINT

11. POWDER ACTUATED FASTENERS USED FOR FASTENING COLD-FORMED METAL FRAMING (RUNNER TRACKS, CLIP ANGLES, ETC.) TO CONCRETE SHALL BE 1 1/4" LONG, 0.157" SHANK DIAMETER, WITH PRE-MOUNTED PLASTIC WASHER. OTHER FASTENERS OF EQUIVALENT OR LARGER DIMENSION AND WITH EQUIVALENT OR GREATER LOAD CAPACITY MAY BE SUBSTITUTED UPON REVIEW AND APPROVAL FROM THE STRUCTURAL ENGINEER. FASTENERS SHALL BE ZINC PLATED WITH A MINIMUM ZINC THICKNESS OF 5 MICRONS.
12. POWDER ACTUATED FASTENERS USED FOR FASTENING COLD-FORMED METAL FRAMING (RUNNER TRACKS, CLIP ANGLES, ETC.) TO STEEL SHALL BE 3/4" LONG, 0.157" SHANK DIAMETER, WITH PRE-MOUNTED PLASTIC WASHER. OTHER FASTENERS OF EQUIVALENT OR LARGER DIMENSION AND WITH EQUIVALENT OR GREATER LOAD CAPACITY MAY BE SUBSTITUTED UPON REVIEW AND APPROVAL FROM THE STRUCTURAL ENGINEER. FASTENERS SHALL BE ZINC PLATED WITH A MINIMUM ZINC THICKNESS OF 5 MICRONS.
13. ALL WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH THE ANSI/AWS D1.3 "STRUCTURAL WELDING CODE," LATEST EDITION.
14. BRIDGING AND SHEAR WALL STRAPS SHALL BE IN PLACE PRIOR TO PLACEMENT OF SUPERIMPOSED LOADS ON STUD OR JOIST ASSEMBLIES. ALL SHALL BE TAUT BY PRE-TENSIONING. PRE-TENSIONING LOAD SHALL NOT EXCEED VALUES LISTED IN TABLE BELOW. INTERPOLATION MAY BE UTILIZED.

ONE-INCH WIDE STRAP BASE STEEL THICKNESS (MILS)	MAXIMUM ALLOWABLE PRETENSION LOAD PER INCH WIDTH (LBS)
33	75
43	100
54	180
68	230

15. STUDS ENDS SHALL BE SAWN TO FIT SQUARELY AND EVENLY AGAINST THE CONNECTING MEMBER. STUDS SHALL NOT BE THERMALLY CUT.
16. ALIGN BEARING WALL STUDS DIRECTLY BELOW FLOOR JOISTS AND ROOF TRUSSES. SEE PLAN FOR LAYOUT.
17. CONSTRUCT ALL CORNERS AND INTERSECTIONS WITH NOT LESS THAN THREE STUDS.
18. PROVIDE AND INSTALL A MINIMUM OF TWO FULL-HEIGHT STUDS (IN ADDITION TO JACK STUD OR STUDS) AT THE JAMBS OF ALL OPENINGS (WINDOWS, DOORS, LOUVERS, ETC.) EXCEEDING 2'-0" IN WIDTH.
19. SPLICES OR CUTOUTS IN THE FLANGES OF EXTERIOR WALL STUDS ARE PROHIBITED. EXTERIOR WALL STUDS SHALL RUN FULL HEIGHT FROM FLOOR TO FLOOR OR FLOOR TO ROOF WITHOUT SPLICE.
20. SEE HEADER SCHEDULE FOR HEADER SIZE AND NUMBER OF JACK STUDS.
21. SEE COLD-FORMED METAL FRAMING SCHEDULE FOR MATERIAL SIZES AND SPACINGS.
22. WHERE A DEFLECTION CLIP OR STATIC/RIGID CLIP IS NOTED TO COLD-FORMED FRAMING, CLIP SHALL OCCUR AT EACH MEMBER IN THE FRAMING SYSTEM UNLESS NOTED OTHERWISE (e.g. CLIP NOTED TO STUD WALL FRAMING SHALL OCCUR AT EACH STUD IN THE WALL SYSTEM).
23. THE OWNER MAY EMPLOY AN INDEPENDENT TESTING AGENCY TO PERFORM FIELD TESTS AND INSPECTION OF COLD-FORMED CONSTRUCTION FOR CONFORMANCE WITH CONTRACT DOCUMENTS. THE CONTRACTOR SHALL FACILITATE AND ALLOW ACCESS TO THE WORK FOR TESTS AND INSPECTIONS TO BE PERFORMED.
24. SUBMIT REPORTS DETAILING RESULTS OF ALL INSPECTIONS AND TESTING TO THE ARCHITECT/ENGINEER FOR APPROVAL WITHIN FIVE DAYS OF COMPLETION OF THE TESTS.
25. FIELD MODIFICATIONS OF COLD-FORMED STEEL SYSTEMS SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL BY ENGINEER OF RECORD.

SITE OBSERVATION BY THE STRUCTURAL ENGINEER

1. THE ENGINEER HAS NO CONTROL OR CHARGE OF, AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, OR PROCEDURES; FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK; FOR THE ACTS OR OMISSION OF THE CONTRACTOR, SUBCONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
2. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR ANY ACTS OR OMISSIONS OF THE CONTRACTOR, ANY SUBCONTRACTOR, MATERIAL SUPPLIER, OR AGENTS THEREOF. THE ENGINEER DOES NOT GUARANTEE THE PERFORMANCE OF THE CONTRACTOR AND SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO PERFORM ITS WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR APPLICABLE LAWS, CODES, RULES, OR REGULATIONS. THE CONTRACTOR SHALL MAINTAIN SOLE RESPONSIBILITY FOR DEFECTS AND DEFICIENCIES, INCLUDING PROVIDING TESTING AND INSPECTION ONCE SUCH ARE DISCOVERED, AND FOR PROVIDING ENGINEERED CORRECTIVE ACTION FOR DESIGN TEAM REVIEW.
3. PERIODIC SITE OBSERVATION BY FIELD REPRESENTATIVES OF BROWN+KUBICAN, PSC IS SOLELY FOR THE PURPOSE OF DETERMINING IF THE WORK OF THE CONTRACTOR IS PROCEEDING IN GENERAL ACCORDANCE WITH THE STRUCTURAL CONTRACT DOCUMENTS. THIS LIMITED SITE OBSERVATION SHALL NOT BE CONSTRUED AS EXHAUSTIVE OR CONTINUOUS TO CHECK THE QUALITY, QUANTITY, OR ACCURACY OF THE CONSTRUCTION WORK, BUT RATHER PERIODIC IN EFFORT TO INFORM THE CLIENT ABOUT GENERAL PROGRESS AND TO ADVISE THE CLIENT ABOUT OBSERVED DEFECTS AND DEFICIENCIES IN THE WORK OF THE CONTRACTOR.

ROOF, FLOOR, OR WALL OPENINGS

1. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE NUMBER, SIZE, AND LOCATION OF ALL SLEEVES AND OPENINGS REQUIRED FOR MECHANICAL OR ELECTRICAL ITEMS.
2. SLEEVES AND OPENINGS SHALL BE LOCATED IN A MANNER THAT WILL MAINTAIN THE STRUCTURAL INTEGRITY OF THE ROOF, FLOOR, OR WALL SYSTEM.
3. NO STRUCTURAL ELEMENTS ARE TO BE CUT UNLESS SPECIFICALLY APPROVED BY THE ENGINEER.

OPENINGS / PENETRATIONS / ATTACHMENTS TO STRUCTURE BY OTHER TRADES

1. THE CONTRACTOR SHALL COORDINATE AND VERIFY THE NUMBER, SIZE, AND LOCATION OF ALL SLEEVES AND OPENINGS REQUIRED FOR OTHER TRADES IN STRUCTURAL ELEMENTS.

TO STRUCTURAL STEEL:

1. FIELD CUTTING/DRILLING OF HOLES LARGER THAN 3/8" INTO BEAM FLANGES OR COLUMNS IS PROHIBITED EXCEPT WHERE REQUIRED FOR STRUCTURAL STEEL CONNECTIONS.
2. PENETRATIONS / HOLES THROUGH BEAM WEBS MAY BE POSSIBLE. TRADE CONTRACTOR SHALL BE RESPONSIBLE FOR ENGINEERING COST TO VERIFY ADEQUACY AND DESIGN AND FOR INSTALLATION COST OF OPENING AND ANY REINFORCEMENT.

TO OPEN WEB STEEL JOIST:

1. DO NOT FIELD CUT ANY PORTION OF A STEEL JOIST.
2. FIELD DRILLING OF HOLES OF ANY SIZE INTO THE CHORDS OF A STEEL JOIST IS PROHIBITED EXCEPT WHERE REQUIRED FOR STRUCTURAL STEEL CONNECTIONS.
3. SUSPENDED LOADS OF LESS THAN 100 LBS MAY BE FASTENED THROUGH THE NEUTRAL AXIS OF A SINGLE ANGLE OF THE BOTTOM CHORD (ECCENTRIC TO THE JOIST) USING APPROPRIATELY-SIZED CLAMPING ANCHORS WITHOUT REINFORCEMENT OF THE JOIST. SUSPENDED LOADS OF LESS THAN 250 LBS MAY BE FASTENED CONCENTRICALLY TO THE TOP OR BOTTOM CHORD (BETWEEN THE ANGLES) USING APPROPRIATELY-SIZED HANGERS WITHOUT REINFORCEMENT OF THE JOIST. ONLY ONE CONCENTRATED LOAD IS ALLOWED PER JOIST WEB PANEL. ALL OTHER CONCENTRATED LOADS IN EXCESS OF THESE FORCES SHALL HAVE THE JOIST LOCALLY REINFORCED WITH FIELD-WELDED ANGLE TO THE OPPOSING CHORD'S NEAREST PANEL POINT. SEE STRUCTURAL DRAWINGS.

TO STRUCTURAL PRECAST CONCRETE:

1. DO NOT USE DRILLED OR POWDER-ACTUATED FASTENERS FOR ATTACHING ACCESSORY ITEMS TO PRECAST, PRESTRESSED UNITS. ATTACHMENT TO THE PRECAST PLANK SHALL BE LOCATED AROUND TENDON LAYOUT AND SHALL INCORPORATE FASTENERS DESIGNED FOR USE IN HOLLOW CONCRETE AND THAT DO NOT PENETRATE THE CONCRETE MORE THAN ¾" (SUCH AS DROP-IN ANCHORS).
2. CONTRACTORS SHALL COORDINATE PENETRATION REQUIREMENTS WITH STRUCTURAL ENGINEER AND STRUCTURAL MANUFACTURERS. TRADE CONTRACTORS SHALL COORDINATE AND MARK ALL PENETRATIONS LARGER THAN 12 INCHES IN DIAMETER/SQUARE THROUGH PRECAST CONCRETE PLANK DURING THE STRUCTURAL SUBMITTAL PROCESS. REINFORCEMENT OF SUBSEQUENT FIELD CUT OPENING OF 12" OR LARGER SHALL BE THE RESPONSIBILITY OF THE TRADE CONTRACTOR REQUIRING SUCH OPENING.

TO FLOOR DECK,PLANK, ELEVATED SLABS, ROOF DECK:

1. NO PENETRATIONS LARGER THAN 12" IN DIAMETER / SQUARE SHALL BE FIELD CUT IN THE STRUCTURAL MEMBER WITHOUT APPROVAL OF THE ENGINEER OF RECORD FOR THAT ELEMENT.
2. CUTTING / CORING OF ADJACENT PENETRATIONS, PERPENDICULAR TO THE STRUCTURAL SPAN, SHALL BE AVOIDED. ADJACENT PENETRATIONS THAT REMOVE MORE THAN 20% OF SUCH STRUCTURAL ELEMENT, IN ANY GIVEN 3-FOOT LENGTH, ARE PROHIBITED.

MAINTENANCE STATEMENT AND STRUCTURE LIFESPAN

1. THE ENGINEER MAKES NO CLAIM OR AGREEMENT AS TO THE LIFESPAN OF THE BUILDING STRUCTURE. THE CLIENT AND OWNER SHALL UNDERSTAND THAT STRUCTURAL TYPES DO HAVE LIFESPAN RELATIVE TO INITIAL COST AND MAINTENANCE AND THAT BY REQUESTING OR ACCEPTING A STRUCTURAL SYSTEM OF LOWER INITIAL COST THAT THE USEABLE LIFESPAN WILL DECREASE AND MAINTENANCE INCREASE.
2. ALL STRUCTURES REQUIRE PERIODIC MAINTENANCE TO EXTEND LIFESPAN AND TO ENSURE STRUCTURAL INTEGRITY FROM EXPOSURE TO THE ENVIRONMENT. THE ENGINEER SHALL NOT BE HELD LIABLE FOR MAINTENANCE REQUIREMENTS OR DETERIORATION RESULTING FROM LACK OF BUILDING MAINTENANCE.
3. A PLANNED PROGRAM OF MAINTENANCE SHALL INCLUDE ITEMS SUCH AS, BUT NOT LIMITED TO: PAINTING OF STRUCTURAL STEEL AND LINTELS, PROTECTIVE COATING FOR CONCRETE AND TIMBER, SEALANTS, CAULKED JOINTS, EXPANSION JOINTS, CONTROL JOINTS, TIMELY REPAIR OF SPALLS AND CRACKS IN CONCRETE, AND PRESSURE WASHING OF STRUCTURAL ELEMENTS EXPOSED TO A SALT ENVIRONMENT OR OTHER HARSH CHEMICALS.

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NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

GENERAL NOTES

BCPS HIGH SCHOOL PHYSICAL SCIENCE CENTERS
BULLITT COUNTY PUBLIC SCHOOLS
SHEPHERDSVILLE, MT WASHINGTON & HEBRON, KENTUCKY

BG# 25-145

DATE : 04.22.2025
DRAWN BY : JLL/AH
CHECKED BY : AJB
REVISIONS :

2023-50

S1.2

STRUCTURAL SPECIAL INSPECTIONS CHART

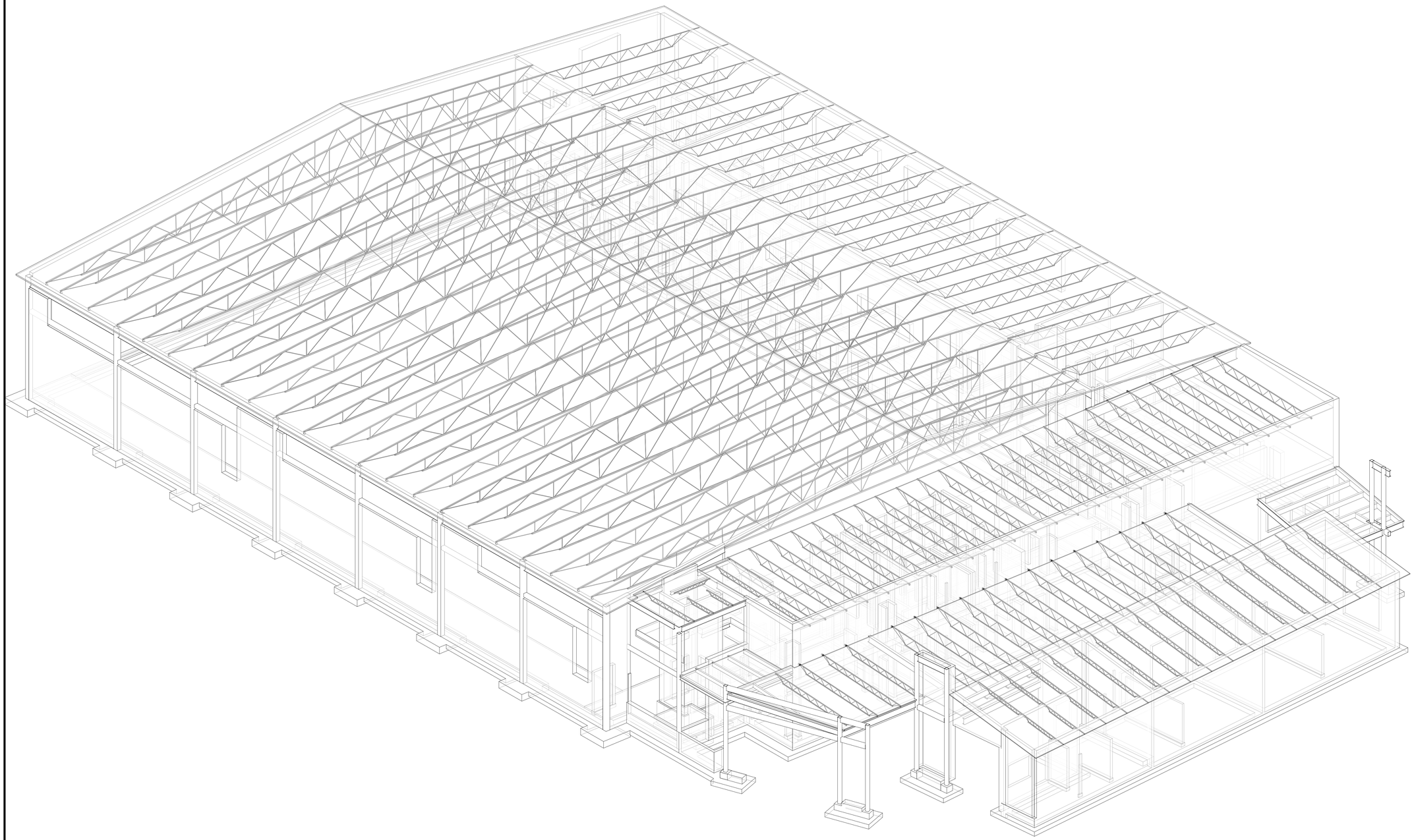
COMPONENT	TEST OR SPECIAL INSPECTION	PERIODIC OR CONTINUOUS	ACCEPTABLE QUALIFICATIONS
FABRICATORS (IBC 1704.2.5)	INSPECT THE FABRICATION OF STRUCTURAL LOAD-BEARING MEMBERS WHERE SUCH WORK IS BEING PERFORMED ON THE PREMISES OF THE FABRICATOR'S SHOP. 1. FABRICATORS SHALL BE EXEMPT FROM SPECIAL INSPECTION WHEN A QUALIFIED CERTIFICATION AUTHORITY HAS PERIODICALLY REVIEWED AND APPROVED FABRICATOR'S WRITTEN PROCEDURAL AND QUALITY CONTROL MANUALS AND FABRICATION PRACTICES. SUBJECT TO COMPLIANCE WITH KENTUCKY BUILDING CODE REQUIREMENTS, QUALIFIED CERTIFICATION AUTHORITIES PROVIDING CERTIFICATION WHICH MAY BE APPLICABLE TO PROJECT INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING: a. STRUCTURAL STEEL FABRICATORS – AISC CERTIFIED. b. STEEL JOIST FABRICATORS – SJI CERTIFIED. c. PRECAST CONCRETE FABRICATORS – PCI CERTIFIED.	PERIODIC	COMPLY WITH SECTIONS BELOW WHEN REQUIRED
	VERIFY THAT THE FABRICATOR MAINTAINS AND REVIEW FOR COMPLETENESS FABRICATOR'S DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES, WHICH PROVIDE A BASIS FOR CONTROL OF THE WORKMANSHIP AND ABILITY TO CONFORM TO THE APPROVED CONSTRUCTION DOCUMENTS AND REFERENCE STANDARDS. REVIEW THE PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.	PERIODIC	QUALIFIED CERTIFICATION AUTHORITY
	PERFORM SPECIAL INSPECTIONS AT FABRICATOR'S SHOP AS OUTLINED IN THIS CHART FOR EACH TYPE OF CONSTRUCTION.	----	
STEEL (AND OTHER METAL) CONSTRUCTION (IBC 1705.2)	PROVIDE SPECIAL INSPECTION OF THE FABRICATION OF STEEL STRUCTURAL ELEMENTS AND ASSEMBLIES IN ACCORDANCE WITH THE FABRICATORS SECTION IN THIS CHART.	----	
	VERIFY THAT CERTIFICATION NUMBERS ON BOLT, NUT, AND WASHER CONTAINERS CORRESPOND TO THE IDENTIFICATION NUMBERS ON MILL TEST REPORTS AND THAT MANUFACTURER'S SYMBOL AND GRADE MARKINGS APPEAR ON ALL BOLTS AND NUTS. ALSO VERIFY THAT BOLTS, NUTS, AND WASHERS ARE BEING PROPERLY CARED FOR AT THE SITE.	PERIODIC	CWI, SSSI, SWSI
	VERIFY THAT IDENTIFICATION MARKINGS ON STRUCTURAL STEEL MEMBERS CONFORM TO ASTM STANDARDS SPECIFIED ON THE APPROVED CONSTRUCTION DOCUMENTS.	PERIODIC	CWI, SSSI, SWSI
	VERIFY THAT IDENTIFICATION MARKINGS ON WELD FILLER MATERIALS CONFORM TO ASTM STANDARDS SPECIFIED ON THE APPROVED CONSTRUCTION DOCUMENTS. ALSO VERIFY THAT WELD FILLER MATERIAL IS BEING PROPERLY CARED FOR.	PERIODIC	CWI, SSSI, SWSI
	VERIFY THAT ANCHOR RODS AND OTHER EMBEDMENTS THAT ARE TO SUPPORT STRUCTURAL STEEL ARE OF PROPER DIAMETER, GRADE, TYPE, LENGTH, AND EXTENT OF EMBEDMENT PRIOR TO PLACEMENT OF CONCRETE.	PERIODIC	CWI, SSSI, SWSI
	TEST AND INSPECT HIGH-STRENGTH BOLTED CONNECTIONS ACCORDING TO RCSC'S "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS." 1. VERIFY THAT FASTENERS ARE OF CORRECT GRADE, TYPE, DIAMETER, LENGTH, AND SHEAR PLANE LOCATIONS FOR THE JOINT DETAIL. 2. VERIFY THAT CONNECTING ELEMENTS MEET REQUIREMENTS FOR FAYING SURFACE AND HOLE PREPARATION. 3. PROVIDE PRE-INSTALLATION VERIFICATION TESTING OF FASTENER ASSEMBLIES AND METHODS. TESTING/INSPECTION METHODS FOR BOLTS SHALL BE DETERMINED, APPROVED, AND CALIBRATED AS NECESSARY PRIOR TO THE START OF STEEL ERECTION. a. UTILIZE A TENSION CALIBRATOR TO CONFIRM THE SUITABILITY OF THE COMPLETE FASTENER ASSEMBLY FOR PRETENSIONED INSTALLATION AND CONFIRM THE PROCEDURE AND PROPER USE BY THE BOLTING CREW OF THE PRETENSIONING METHOD TO BE USED. b. ENSURE THAT JOINT PLIES ARE BROUGHT TO SNUG-TIGHT CONDITION PRIOR TO PRETENSIONING OPERATION. c. CONFIRM FASTENER COMPONENT IS NOT TURNED BY THE WRENCH PREVENTING ROTATION. d. CONFIRM THAT FASTENERS ARE PRETENSIONED PROGRESSING SYSTEMATICALLY FROM THE MOST RIGID PART TOWARDS THE FREE EDGES. 4. VERIFY THAT FASTENER ASSEMBLIES WITH REQUIRED WASHERS ARE PLACED IN ALL HOLES AND ARE POSITIONED AS REQUIRED. a. VERIFY THAT DIRECT-TENSION INDICATOR GAPS COMPLY WITH ASTM F 959, TABLE 2. b. VERIFY THAT TWIST-OFF-TYPE TENSION-CONTROL ASSEMBLIES HAVE BEEN PROPERLY TIGHTENED. 5. PERFORM PERIODIC INSPECTION OF BEARING TYPE CONNECTIONS. 6. PERFORM CONTINUOUS INSPECTION OF SLIP-CRITICAL TYPE CONNECTIONS.	PERIODIC, U.N.O.	CWI, SSSI, SWSI
	INSPECT AND TEST WELDS DURING FABRICATION (WHERE APPLICABLE) AND ERECTION OF STRUCTURAL STEEL, STEEL DECK, AND STUDS/ANCHORS AS FOLLOWS:		
	1. CERTIFY WELDERS AND CONDUCT INSPECTIONS AND TESTS AS REQUIRED. RECORD TYPES AND LOCATIONS OF DEFECTS FOUND IN WORK. RECORD WORK REQUIRED AND PERFORMED TO CORRECT DEFICIENCIES. a. CONFIRM THAT WELDING PROCEDURE SPECIFICATIONS ARE AVAILABLE. b. CONFIRM THAT CONTRACTOR HAS INSTITUTED A *WELDER IDENTIFICATION SYSTEM*.	PERIODIC	CWI, SWSI
	2. INSPECT WELD PROCEDURES AND WELDERS ACCORDING TO THE REQUIREMENTS OF AWS D1.1 AND AISC 360. a. CONFIRM THAT THERE IS NO WELDING OVER CRACKED TACK WELDS. b. CONFIRM THAT ENVIRONMENTAL CONDITIONS ARE BEING PROPERLY CONSIDERED (WIND SPEED, PRECIPITATION, AND TEMPERATURE). c. CONFIRM THAT WELDING PROCEDURE SPECIFICATIONS ARE BEING FOLLOWED (EQUIPMENT SETTINGS, TRAVEL SPEED, MATERIAL USAGE, SHIELDING TYPE AND FLOW RATE, PREHEATING REQUIREMENTS, MAINTENANCE OF INTERPASS TEMPERATURE, AND PROPER WELDER POSITIONING). d. CONFIRM WELDING TECHNIQUES (INTERPASS AND FINAL CLEANING, EACH PASS WITHIN PROFILE LIMITATIONS, AND THAT EACH PASS MEETS QUALITY REQUIREMENTS).	PERIODIC	CWI, SWSI
	3. USE NON-DESTRUCTIVE TESTING ACCORDING TO AWS D1.1 ON ALL WELDS THAT APPEAR TO HAVE EXCESSIVE INCLUSIONS, POROSITIES, CRACKS, AND INCOMPLETE PENETRATIONS AS DESCRIBED BY AWS D1.1 OR HAVE THE QUESTIONABLE WELD REMOVED AND REWELDED.	PERIODIC	AWS-UT-2
	4. PERFORM OBSERVATION ON THE FIRST TWO WELDS INSTALLED BY EACH WELDER AND SUBSEQUENT NON-DESTRUCTIVE TESTING ACCORDING TO AWS D1.1 ON ALL (100%) COMPLETE PENETRATION AND/OR PARTIAL PENETRATION GROOVE WELDS AND ON ALL SPLICES OF MAIN MEMBERS WHERE THOSE SPLICES ARE REQUIRED. a. CONFIRM JOINT PREPARATION. b. CONFIRM DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, AND BEVEL). c. CONFIRM CLEANLINESS OF WELDS AND BASE MATERIAL (CONDITION OF STEEL SURFACES). d. CONFIRM TACKING (TACK WELD QUALITY AND LOCATION). e. CONFIRM BACKING TYPE AND FIT (AS APPLICABLE) AND REMOVAL SUBSEQUENT TO WELD PLACEMENT. f. PERFORM ULTRASONIC TESTING IN ACCORDANCE WITH AWS D.1.1 FOR STEEL MATERIAL 5/16" THICK AND GREATER. FOR THINNER MATERIAL, PERFORM VISUAL OBSERVATIONS IN ACCORDANCE WITH AWS D1.1.	CONTINUOUS	CWI, SWSI
	5. PERFORM INSPECTION ACCORDING TO AWS D1.1 (VISUAL INSPECTION) ON ALL MULTI-PASS FILLET WELDS AND ON ALL SINGLE-PASS FILLET WELDS LARGER THAN 5/16". a. CONFIRM DIMENSIONS (ALIGNMENT, GAPS AT ROOT, ROOT SIZE, LENGTH), SPACING, ORIENTATION, AND LOCATIONS. b. CONFIRM CLEANLINESS OF WELDS AND BASE MATERIAL (CONDITION OF STEEL SURFACES). c. CONFIRM TACKING (TACK WELD QUALITY AND LOCATION). d. CONFIRM VISUAL ACCEPTANCE CRITERIA (CRACK PROHIBITION, WELD/BASE FUSION, CRATER CROSS SECTION, WELD PROFILES, WELD SIZE, UNDERCUT, AND POROSITY).	CONTINUOUS	CWI, SWSI
	6. PERFORM INSPECTION ACCORDING TO AWS D1.1 (VISUAL INSPECTION) ON ALL SINGLE-PASS FILLET WELDS 5/16" AND SMALLER AND ON ALL FLOOR, FORM, AND ROOF DECK WELDS. a. CONFIRM DIMENSIONS (ALIGNMENT, GAPS AT ROOT, ROOT SIZE, LENGTH), SPACING, ORIENTATION, AND LOCATIONS. b. CONFIRM CLEANLINESS OF WELDS AND BASE MATERIAL (CONDITION OF STEEL SURFACES). c. CONFIRM TACKING (TACK WELD QUALITY AND LOCATION). d. CONFIRM VISUAL ACCEPTANCE CRITERIA (CRACK PROHIBITION, WELD/BASE FUSION, CRATER CROSS SECTION, WELD PROFILES, WELD SIZE, UNDERCUT, AND POROSITY).	PERIODIC	CWI, SWSI
	7. OBSERVE AND DOCUMENT REPAIR ACTIVITIES.	PERIODIC	CWI, SWSI
	INSPECT ALL MECHANICAL FASTENING OF FLOOR, FORM, AND ROOF DECK. VERIFY FASTENER TYPE, LENGTH, AND DIAMETER. CONFIRM PERIMETER AND INTERMEDIATE FASTENER SPACING.	PERIODIC	CWI, SWSI
	IN ADDITION TO VISUAL INSPECTION, INSPECT AND TEST FIELD WELDED SHEAR CONNECTORS ACCORDING TO REQUIREMENTS OF AWS D1.1 AND AS FOLLOWS: 1. VERIFY NUMBER, LOCATION, AND APPLICATION OF ALL WELD SHEAR CONNECTORS. 2. PERFORM BEND TESTS ON A MINIMUM OF 10 PERCENT OF ALL SHEAR CONNECTORS AND WHEN VISUAL INSPECTIONS REVEAL EITHER LESS THAN A CONTINUOUS 360-DEGREE FLASH OR WELDING REPAIRS TO ANY SHEAR CONNECTOR. 3. CONDUCT TESTS ON ADDITIONAL SHEAR CONNECTORS WHEN WELD FRACTURE OCCURS ON SHEAR CONNECTORS ALREADY TESTED, ACCORDING TO REQUIREMENTS OF AWS D1.1.	PERIODIC	CWI, SWSI
	INSPECT ALL STEEL FRAME CONNECTION DETAILS, INCLUDING OPEN-WEB STEEL JOIST AND JOIST GIRDER CONNECTION DETAILS, FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS AND APPROVED STEEL ERECTION AND STEEL JOIST SHOP DRAWINGS. 1. VERIFY COMPLETENESS AND CONSTRUCTION OF ALL BRACING, BRIDGING, STIFFENING, AND CONNECTIONS. 2. VERIFY LOCATION, COMPLETENESS, ACCURACY, AND JOINT DETAILS OF ALL MEMBERS.	PERIODIC	PE

COMPONENT	TEST OR SPECIAL INSPECTION	PERIODIC OR CONTINUOUS	ACCEPTABLE QUALIFICATIONS
STRUCTURAL ANCHORS	WHERE PERIODIC ANCHOR INSPECTION IS PERMITTED, THE SPECIAL INSPECTOR SHALL VERIFY THE INITIAL INSTALLATIONS OF EACH TYPE AND SIZE OF ANCHOR BY CONSTRUCTION PERSONNEL ON SITE. SUBSEQUENT INSTALLATIONS OF THE SAME ANCHOR TYPE AND SIZE BY THE SAME CONSTRUCTION PERSONNEL ARE PERMITTED TO BE PERFORMED IN THE ABSENCE OF THE SPECIAL INSPECTOR. FOR ONGOING INSTALLATIONS OVER AN EXTENDED PERIOD, GREATER THAN THREE MONTHS, THE SPECIAL INSPECTOR MUST MAKE REGULAR INSPECTIONS TO CONFIRM CORRECT HANDLING AND INSTALLATION OF THE ANCHORS.	---- ----	
	ADDITIONAL TO REQUIREMENTS LISTED BELOW, INSPECT ALL POST-INSTALLED ANCHORS AS FOLLOWS: VERIFY ANCHOR TYPE, ANCHOR DIMENSIONS, HOLE CLEANING PROCEDURE, EMBEDMENT DEPTH, SUBSTRATE TYPE (MATERIAL), SUBSTRATE THICKNESS, DRILL BIT TYPE AND SIZE, HOLE DIMENSIONS, ANCHOR SPACING, MINIMUM EDGE DISTANCE, ANCHOR PLUMBNESS (RELATIVE TO HORIZONTAL OR VERTICAL AS APPLICABLE), AND ADHERENCE TO THE ANCHOR MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS.	PERIODIC	RCSI, SMSI
	INSPECT DRILLED-IN ADHESIVE TYPE ANCHORS AS FOLLOWS: VERIFY ADHESIVE PRODUCT AND EXPIRATION DATE, PROOF LOAD 25% OF EACH TYPE AND SIZE OF ANCHOR IN ACCORDANCE WITH RECOMMENDATIONS OF THE ANCHOR MANUFACTURER. ADHESIVE ANCHORS AND CAPSULE ANCHORS SHALL NOT BE TORQUE TESTED UNLESS OTHERWISE DIRECTED BY THE ENGINEER. IF MORE THAN 10% OF THE TESTED ANCHORS FAIL TO ACHIEVE THE SPECIFIED TORQUE OR PROOF LOAD WITHIN THE LIMITS AS DEFINED IN THE SPECIFICATIONS, ALL ANCHORS OF THE SAME DIAMETER AND TYPE AS THE FAILED ANCHOR SHALL BE TESTED, UNLESS OTHERWISE INSTRUCTED BY THE ENGINEER. 1. PROOF LOADS SHALL BE APPLIED WITH A CALIBRATED HYDRAULIC RAM. DISPLACEMENT OF ADHESIVE AND CAPSULE ANCHORS AT PROOF LOAD SHALL NOT EXCEED D/10, WHERE D IS THE NOMINAL ANCHOR DIAMETER. 2. UNLESS NOTED OTHERWISE BY THE MANUFACTURER, PROOF LOAD LEVEL SHALL BE **XXXX** POUNDS. 3. MAINTAIN THE PROOF LOAD AT THE REQUIRED LOAD LEVEL FOR A MINIMUM OF TEN SECONDS.	PERIODIC	RCSI, SMSI
	INSPECT 100% OF EXPANSION TYPE MECHANICAL ANCHORS AS FOLLOWS: VERIFY INSTALLED TORQUE OF ANCHORS WITH A CALIBRATED TORQUE WRENCH, COORDINATE MINIMUM INSTALLED TORQUE WITH MANUFACTURER OF ANCHORS INSTALLED.	PERIODIC	RCSI, SMSI
CONCRETE CONSTRUCTION (IBC 1705.3)	INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC	RCSI, ACI-2, NICET-2C
	VERIFY THE USE OF THE PROPER DESIGN MIX.	PERIODIC	RCSI, ACI-2, NICET-2C
	VERIFY USE OF PROPER GRADE AND ASTM DESIGNATION OF REINFORCING STEEL.	PERIODIC	RCSI, ACI-2, NICET-2C
	PERFORM INSPECTION ON PLACEMENT, SPACING, CLEAR COVER, NUMBER, AND SPLICE LAP LENGTHS OF REINFORCING STEEL.	PERIODIC	RCSI, NICET-2C
	MONITOR CONCRETE QUALITY BY MEANS OF SITE AND LABORATORY TESTS. THE INSPECTION AGENCY IS AUTHORIZED TO REJECT PLASTIC CONCRETE NOT CONFORMING TO SPECIFICATIONS, IMMEDIATELY INFORM THE CONTRACTOR, THE ARCHITECT AND THE STRUCTURAL ENGINEER OF INADEQUACIES IN CONCRETE QUALITY. SAMPLING AND TESTING FOR QUALITY CONTROL DURING CONCRETE PLACEMENT SHALL INCLUDE THE FOLLOWING: 1. TESTING OF COMPOSITE SAMPLES OF FRESH CONCRETE OBTAINED ACCORDING TO ASTM C 172 SHALL BE PERFORMED ACCORDING TO THE FOLLOWING REQUIREMENTS: a. TESTING FREQUENCY: OBTAIN ONE COMPOSITE SAMPLE FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE EXCEEDING 5 CU. YD., BUT LESS THAN 25 CU. YD., PLUS ONE SET FOR EACH ADDITIONAL 50 CU. YD. OR FRACTION THEREOF. b. SLUMP: ASTM C 143; ONE TEST AT POINT OF PLACEMENT FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE. PERFORM ADDITIONAL TESTS WHEN CONCRETE CONSISTENCY APPEARS TO CHANGE. c. AIR CONTENT: ASTM C 231, PRESSURE METHOD, FOR NORMAL-WEIGHT CONCRETE; ONE TEST FOR EACH COMPOSITE SAMPLE, BUT NOT LESS THAN ONE TEST FOR EACH DAY'S POUR OF EACH CONCRETE MIXTURE. **d.** CONCRETE TEMPERATURE: ASTM C 1064; ONE TEST HOURLY WHEN AIR TEMPERATURE IS 40 DEG F AND BELOW OR 80 DEG F AND ABOVE, AND ONE TEST FOR EACH SET OF COMPOSITE SAMPLE. e. COMPRESSION TEST SPECIMEN: ASTM C 31; ONE SET OF FOUR STANDARD 6" DIAMETER BY 12" OR FIVE STANDARD 4" DIAMETER BY 8" CYLINDERS FOR EACH COMPRESSIVE-STRENGTH TEST, UNLESS OTHERWISE DIRECTED. MOLD AND STORE CYLINDERS FOR LABORATORY-CURED TEST SPECIMENS EXCEPT WHEN FIELD-CURED TEST SPECIMENS ARE REQUIRED. f. COMPRESSIVE-STRENGTH TESTS: ASTM C 39; TEST ONE SPECIMEN AT 7 DAYS, TWO 6"x12" OR THREE 4"x8" SPECIMENS TESTED AT 28 DAYS, AND ONE SPECIMEN RETAINED IN RESERVE FOR LATER TESTING IF REQUIRED. ADDITIONAL CYLINDER TESTS (SUCH AS AT 14 DAYS) FOR CONTRACTOR CONVENIENCE AND SCHEDULING SHALL BE PAID FOR BY THE CONTRACTOR. A COMPRESSIVE-STRENGTH TEST SHALL BE THE AVERAGE COMPRESSIVE STRENGTH FROM A SET OF SPECIFIED NUMBER SPECIMENS OBTAINED FROM SAME COMPOSITE SAMPLE AND TESTED AT AGE INDICATED. g. WHEN FREQUENCY OF TESTING WILL PROVIDE FEWER THAN FIVE STRENGTH TESTS FOR A GIVEN CLASS OF CONCRETE, CONDUCT TESTING FROM AT LEAST FIVE RANDOMLY SELECTED BATCHES OR FROM EACH BATCH IF FEWER THAN FIVE ARE USED. h. WHEN STRENGTH OF FIELD-CURED CYLINDERS IS LESS THAN 85 PERCENT OF COMPANION LABORATORY-CURED CYLINDERS, CONTRACTOR SHALL EVALUATE OPERATIONS AND PROVIDE CORRECTIVE PROCEDURES FOR PROTECTING AND CURING THE IN-PLACE CONCRETE. i. STRENGTH OF EACH CONCRETE MIXTURE WILL BE SATISFACTORY IF EVERY AVERAGE OF ANY THREE CONSECUTIVE COMPRESSIVE-STRENGTH TESTS EQUALS OR EXCEEDS SPECIFIED COMPRESSIVE STRENGTH AND NO COMPRESSIVE-STRENGTH TEST VALUE FALLS BELOW SPECIFIED COMPRESSIVE STRENGTH BY MORE THAN 500 PSI. 2. TEST RESULTS SHALL BE REPORTED IN WRITING TO ARCHITECT, STRUCTURAL ENGINEER, READY-MIX PRODUCER, AND CONTRACTOR WITHIN 48 HOURS OF TESTING. REPORTS OF COMPRESSIVE-STRENGTH TESTS SHALL CONTAIN THE PROJECT IDENTIFICATION NAME AND NUMBER, DATE OF CONCRETE PLACEMENT, NAME OF CONCRETE TESTING AND INSPECTING AGENCY, CONCRETE TYPE AND CLASS, LOCATION OF CONCRETE BATCH IN STRUCTURE, DESIGN COMPRESSIVE STRENGTH AT 28 DAYS, CONCRETE MIXTURE PROPORTIONS AND MATERIALS, COMPRESSIVE BREAKING STRENGTH, AND TYPE OF BREAK FOR BOTH 7- AND 28-DAY TESTS.	CONTINUOUS	RCSI, ACI-2, NICET-1
	PERFORM INSPECTION OF CONCRETE PLACEMENT TO VERIFY PROPER APPLICATION TECHNIQUES, INCLUDING BUT NOT LIMITED TO SLABS ON DECK, SLABS ON GRADE, WALLS, COLUMNS, FOOTINGS, FRAMED CONCRETE SLABS.	CONTINUOUS	RCSI, ACI-2, NICET-1
	PERFORM INSPECTION OF CONCRETE CURING PROCEDURES TO VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE, PROTECTION, AND TECHNIQUES.	PERIODIC	RCSI, ACI-2, NICET-1
	PROVIDE INSPECTION OF THE ERECTION OF STRUCTURAL PRECAST CONCRETE MEMBERS.	PERIODIC	RCSI, ACI-2, NICET-1
	TEST THE F-NUMBER TOLERANCES OF CONCRETE SLABS IN ACCORDANCE WITH THE PROVISIONS SET FORTH BY ASTM COMMITTEE E6.21.10. ALL TESTS SHALL BE PERFORMED WITHIN THREE WORKING DAYS AFTER CONCRETE PLACEMENT AND PRIOR TO ANY FORM REMOVAL. A. SLAB AREAS SHALL BE TESTED FOR F-NUMBER TOLERANCES FOR THE FIRST 10,000 SQUARE FEET PLACED AT EACH LEVEL. THEREAFTER, TEST AN ADDITIONAL 1,000 SQUARE FEET PER 10,000 SQUARE FEET OF SLAB AREA AT EACH LEVEL. QUANTITY OF TEST READINGS FOR EACH AREA SHALL BE PER ASTM E1155.	PERIODIC	RCSI, ACI-2, NICET-1
	NONDESTRUCTIVE TESTING: IMPACT HAMMER, SONOSCOPE, OR OTHER NONDESTRUCTIVE DEVICE MAY BE PERMITTED BUT SHALL NOT BE USED AS THE SOLE BASIS FOR ACCEPTANCE OR REJECTION.	----	
	ADDITIONAL TESTS: TESTING AND INSPECTING AGENCY SHALL MAKE ADDITIONAL TESTS OF CONCRETE WHEN TEST RESULTS INDICATE THAT SLUMP, AIR ENTRAINMENT, COMPRESSIVE STRENGTHS, OR OTHER REQUIREMENTS HAVE NOT BEEN MET, AS DIRECTED BY ARCHITECT. TESTING AND INSPECTING AGENCY MAY CONDUCT TESTS TO DETERMINE ADEQUACY OF CONCRETE BY CORED CYLINDERS COMPLYING WITH ASTM C 42 OR BY OTHER METHODS AS DIRECTED BY ARCHITECT. 1. ADDITIONAL TESTING AND INSPECTING, AT CONTRACTOR'S EXPENSE, WILL BE PERFORMED TO DETERMINE COMPLIANCE OF REPLACED OR ADDITIONAL WORK WITH SPECIFIED REQUIREMENTS.	----	

COMPONENT	TEST OR SPECIAL INSPECTION	PERIODIC OR CONTINUOUS	ACCEPTABLE QUALIFICATIONS
MASONRY CONSTRUCTION (IBC 1705.4)	AT ONSET OF MASONRY CONSTRUCTION AND PERIODICALLY THEREAFTER, VERIFY PROPORTIONS OF SITE-PREPARED MORTAR, CONSTRUCTION OF MORTAR JOINTS, AND LOCATION OF REINFORCEMENT AND CONNECTORS.	PERIODIC	SMSI
	PERFORM INSPECTION TO VERIFY SIZE AND LOCATION OF STRUCTURAL ELEMENTS, TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING ANCHORAGE TO OTHER STRUCTURAL ELEMENTS, FRAMES, AND CONSTRUCTION; AND SPECIFIED SIZE, GRADE, AND TYPE OF REINFORCEMENT.	PERIODIC	SMSI
	PRIOR TO EACH GROUTING OPERATION, VERIFY CLEANLINESS OF GROUT SPACE, PLACEMENT OF ALL REINFORCEMENT AND CONNECTORS, INCLUDING LAP SPLICE LENGTHS, AND PROPORTIONS OF SITE-PREPARED GROUT.	PERIODIC	SMSI
	PERFORM INSPECTION OF GROUT PLACEMENT TO VERIFY COMPLIANCE WITH CONTRACT DOCUMENT PROVISIONS.	CONTINUOUS	SMSI
	PERFORM INSPECTION OF MASONRY CURING PROCEDURES TO VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE, PROTECTION, AND TECHNIQUES.	PERIODIC	SMSI
	FOR CONCRETE MASONRY DESIGNED IN ACCORDANCE WITH THE UNIT STRENGTH METHOD (AS SPECIFIED ON THE GENERAL NOTES), SAMPLE AND TEST GROUT COMPRESSIVE STRENGTH ACCORDING TO ASTM C 1019, MORTAR COMPRESSIVE STRENGTH ACCORDING TO ASTM C780, AND THE FOLLOWING: 1. COMPRESSION TEST SAMPLE: ONE SET OF THREE STANDARD CUBE SPECIMENS FOR EACH COMPRESSIVE-STRENGTH TEST, UNLESS OTHERWISE DIRECTED. MOLD AND STORE CUBES FOR LABORATORY-CURED TEST SPECIMENS EXCEPT WHEN FIELD-CURED TEST SPECIMENS ARE REQUIRED. 2. COMPRESSIVE-STRENGTH TESTS: AT THE COMMENCEMENT OF CONSTRUCTION TAKE SAMPLES PRIOR TO CONSTRUCTION, THE NEXT 4 SAMPLES FOR EACH 2,500 SQ FEET OF WALL CONSTRUCTION, AND THEN FOLLOWING THEREAFTER FOR EACH 5,000 SQ FEET OF WALL CONSTRUCTION. TEST ONE SPECIMEN AT 7 DAYS, ONE SPECIMEN TESTED AT 28 DAYS, AND ONE SPECIMEN RETAINED IN RESERVE FOR LATER TESTING IF REQUIRED.	PERIODIC	SMSI
SOILS (IBC 1705.6)	INSPECT THE EXISTING SITE SOIL CONDITIONS, FILL PLACEMENT, AND LOAD-BEARING REQUIREMENTS FOR COMPLIANCE WITH THE RECOMMENDATIONS OF THE APPROVED GEOTECHNICAL INVESTIGATION REPORT.	PERIODIC	SSI, NICET-2S
	WHERE THE SITE IS SPECIFIED TO BE UNDERCUT BY THE GEOTECHNICAL INVESTIGATION REPORT, VERIFY ALL UNSUITABLE SOILS, DEBRIS, ROCK AND OTHER MATERIALS HAVE BEEN REMOVED FROM BELOW BUILDING FOOTPRINT. 1. VERIFY THAT TOPSOIL HAS BEEN STRIPPED AND REMOVED FROM BUILDING FOOTPRINT. 2. VERIFY ALL EXISTING UNCONTROLLED FILLS, SOFT AND UNSUITABLE SOILS HAVE BEEN REMOVED FROM BELOW APPLICABLE FOUNDATION ELEMENTS. TEST NATIVE MATERIAL AT BASE OF CUT TO ENSURE THAT UNSUITABLE MATERIAL HAS BEEN COMPLETELY REMOVED; NOTIFY ARCHITECT IF UNACCEPTABLE MATERIAL REMAINS AFTER COMPLETION OF SPECIFIED UNDERCUT. 3. FOR SOIL BEARING FOUNDATIONS, VERIFY THAT EXPANSIVE CLAYS AND BEDROCK HAVE BEEN COMPLETELY REMOVED TO ALLOW SUFFICIENT SOIL CUSHION DEPTH AS SPECIFIED. 4. AT FOUNDATIONS BEARING ON EXISTING FILL OR SHALE SOILS, PERFORM DYNAMIC CONE PENETROMETER TESTING AT EACH SPREAD FOOTING WHEN FOUNDATION EXCAVATION IS COMPLETE TO ENSURE BEARING CAPACITY IS WITHIN THE RECOMMENDED NET ALLOWABLE.	PERIODIC	SSI, NICET-2S
	OBSERVE PROOFROLLING OF THE BUILDING PAD AREAS PRIOR TO COMMENCEMENT OF FILL/SUBBASE PLACEMENT, AND DURING FILL PLACEMENT (IF REQUIRED).	PERIODIC	SSI, NICET-2S
	PRIOR TO PLACEMENT OF ANY ENGINEERED FILL, DETERMINE THAT THE SITE HAS BEEN PREPARED IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE APPROVED GEOTECHNICAL INVESTIGATION REPORT. 1. TEST SAMPLES FROM PROPOSED BORROW ON- AND OFF- SITE SOURCES OF FILL FOR COMPLIANCE WITH THE APPROVED MATERIALS LISTING AND OTHER REQUIREMENTS OF THE GEOTECHNICAL REPORT AND THE SPECIFICATIONS. CLAY SOILS SHALL BE CHECKED FOR ACCEPTABLE PLASTICITY INDEX PRIOR TO MOVING ON SITE. MAXIMUM ORGANIC CONTENT SHALL BE VERIFIED BY INSPECTION OR TEST TO BE BELOW ACCEPTABLE LIMITS.	PERIODIC	SSI, NICET-2S
	DURING PLACEMENT AND COMPACTION OF THE ENGINEERED FILL MATERIAL, VERIFY THAT THE MATERIAL BEING USED, MAXIMUM LIFT THICKNESS, AND IN-PLACE DRY DENSITY COMPLY WITH THE RECOMMENDATIONS OF THE APPROVED GEOTECHNICAL REPORT. 1. SOIL FILLS SHALL BE EXEMPT FROM SPECIAL INSPECTION WHEN TOTAL FILL PLACEMENT IS LESS THAN 12 INCHES DEEP. 2. TESTING AGENCY TO INSPECT AND TEST SUBGRADES AND EACH FILL OR BACKFILL LAYER.	CONTINUOUS	SSI, NICET-2S
	FOOTING SUBGRADE: AT FOOTING SUBGRADES, AT LEAST ONE TEST OF EACH SOIL STRATUM SHALL BE PERFORMED TO VERIFY DESIGN BEARING CAPACITIES. SUBSEQUENT VERIFICATION AND APPROVAL OF OTHER FOOTING SUBGRADES MAY BE BASED ON A VISUAL COMPARISON OF SUBGRADE WITH TESTED SUBGRADE WHEN APPROVED BY ARCHITECT.	PERIODIC	SSI, NICET-2S
	TESTING AGENCY WILL TEST COMPACTION OF SOILS IN PLACE ACCORDING TO ASTM D 1556, ASTM D 2167, ASTM D 6938, AND ASTM D 2937, AS APPLICABLE. TESTS SHALL BE PERFORMED AT THE FOLLOWING LOCATIONS AND FREQUENCIES: 1. BUILDING SLAB AREAS: AT SUBGRADE AND AT EACH COMPACTED FILL AND BACKFILL LAYER, AT LEAST 1 TEST FOR EVERY 2000 SQ. FT. OR LESS OF BUILDING SLAB, BUT IN NO CASE FEWER THAN 3 TESTS. 2. FOUNDATION WALL BACKFILL: AT EACH COMPACTED BACKFILL LAYER, AT LEAST 1 TEST FOR EACH 100 FEET OR LESS OF WALL LENGTH, BUT NO FEWER THAN 2 TESTS.	PERIODIC	SSI, NICET-2S

NOTES ON SPECIAL INSPECTIONS CHART:

1. REFER TO 014110 SPECIFICATION FOR ADDITIONAL REQUIREMENTS AND RESPONSIBILITIES.
2. SPECIAL INSPECTIONS AS DEFINED IN SECTIONS 1704 AND 1705 OF THE KENTUCKY BUILDING CODE ARE REQUIRED. ALL REFERENCES SHOWN ARE TO THE KBC 2018 / IBC 2015.
3. SPECIAL INSPECTIONS SHALL BE PERFORMED BY A QUALIFIED TESTING AGENCY APPROVED BY THE ARCHITECT AND THE STRUCTURAL ENGINEER AND PAID FOR BY THE OWNER.
4. THE INSPECTOR SHALL OBSERVE WORK FOR CONFORMANCE WITH THE APPROVED STRUCTURAL DRAWINGS AND SPECIFICATIONS AND PREPARE INSPECTION REPORTS STATING THEIR OBSERVATIONS. COPIES OF THE INSPECTION REPORTS SHALL BE SUBMITTED TO THE CONTRACTOR, THE ARCHITECT AND THE STRUCTURAL ENGINEER.
5. ALL DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND THE WORK BEING PERFORMED SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF ARCHITECT AND THE STRUCTURAL ENGINEER PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.
6. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL REPORT OF INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCI



A
S1.4
ISOMETRIC BCHS

NOTE:
3D VIEWS SHOWN ON THIS SHEET ARE FOR REFERENCE ONLY.
3D STRUCTURAL MODEL IS NOT GUARANTEED TO BE COMPLETE OR EXACT.
SEE ALL OTHER SHEETS FOR ACCURATE STRUCTURAL PLANS AND DETAILS.

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ISOMETRIC VIEW - BCHS

BCPS HIGH SCHOOL PHYSICAL SCIENCE CENTERS
BULLITT COUNTY PUBLIC SCHOOLS
SHEPHERDSVILLE, MT WASHINGTON & HEBRON, KENTUCKY

BG# 25-145

DATE : 04.22.2025
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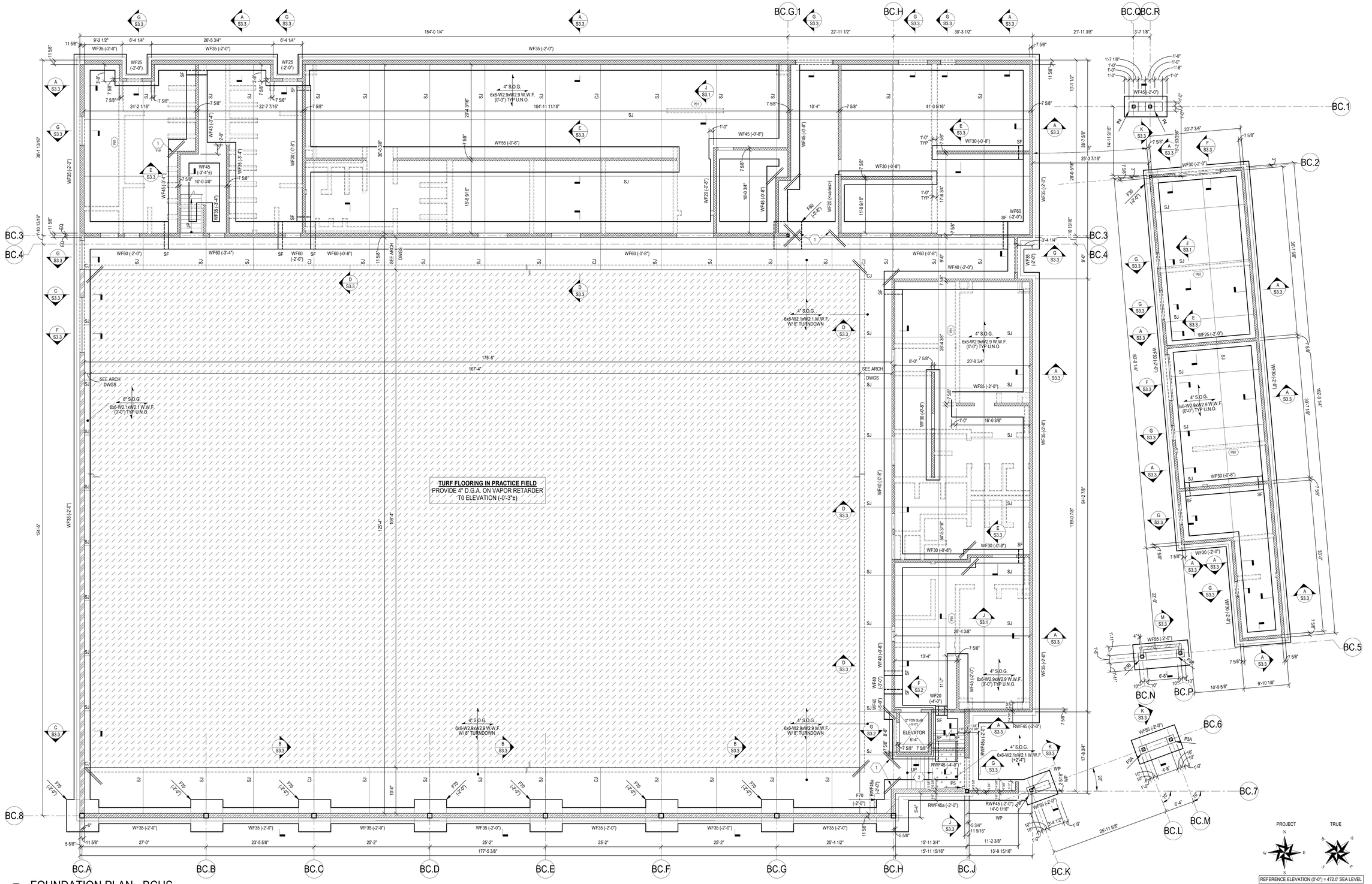
CHECKED BY : AJB
REVISIONS :

2023-50

BCHS
S1.4



A S2.11 FOUNDATION PLAN - BCHS
1/8" = 1'-0"

FOUNDATION PLAN NOTES

1. ELEVATIONS SHOWN ARE TO THE TOP OF THE FOUNDATION AND ARE REFERENCED FROM FINISHED FIRST FLOOR REFERENCE ELEVATION (0'-0").
2. CENTER ALL WALL FOOTINGS ON C.M.U. WALL CENTERLINE U.N.O.
3. CENTER ALL SPREAD FOOTINGS ON COLUMN GRID INTERSECTION U.N.O.
4. SEE DWGS S1.1 & S1.2 FOR GENERAL NOTES.
5. SEE DWG S1.2 FOR SPECIAL INSPECTION NOTES.
6. SEE DWGS S3.1 & S3.2 FOR TYPICAL FOUNDATION DETAILS.
7. SEE DWG S5.1 FOR COLUMN SCHEDULE.
8. SLAB ON GRADE SHALL BE PLACED ON VAPOR RETARDER (SEE SPECIFICATIONS) OVER 4" MINIMUM DENSE GRADED AGGREGATE.
9. REINFORCE SLABS ON GRADE AT RE-ENTRANT CORNERS PER DETAIL M/S3.1. REINFORCING BARS MAY NOT BE SHOWN GRAPHICALLY ON PLAN IN ALL LOCATIONS.
10. PROVIDE CONSTRUCTION JOINTS IN SLAB ON GRADE ALIGNING WITH BOTH FACES OF C.M.U. WALLS AT OPENINGS IN INTERIOR LOAD-BEARING WALLS.
11. ALL FOOTINGS MUST BE SUPPORTED ON UNDISTURBED SOIL CAPABLE OF SUPPORTING DESIGN LOADS WITHOUT APPRECIABLE SETTLEMENT. CONTRACTOR SHALL PROBE BEARING STRATA WITH DRIVEN RODS. REMOVE SHALLOW BEDROCK/OBSTRUCTIONS (AND OVERLYING SOIL) WITHIN TWO FEET OF FOOTING BELOW BOTTOM OF FOOTING, AND REPLACE WITH ENGINEERED SOIL BACKFILL. FOUNDATIONS SHALL NOT BEAR ON EXISTING FILL MATERIAL. ALL EXISTING FILL MATERIAL SHALL BE REMOVED (FULL DEPTH) WITHIN THE INFLUENCE ZONE OF THE FOOTING. SEE DET A/S3.1.
12. ALL SLABS ON GRADE MUST BE SUPPORTED ON UNDISTURBED SOIL CAPABLE OF SUPPORTING DESIGN LOADS WITHOUT APPRECIABLE SETTLEMENT. CONTRACTOR SHALL PROBE BEARING STRATA & REMOVE BEDROCK/OBSTRUCTIONS WITHIN **ONE FOOT BELOW BOTTOM OF SLAB** AND REPLACE W/ ENGINEERED SOIL OR D.G.A. BACKFILL UP TO SLAB SUB-BASE. SLABS ON GRADE SHALL NOT BEAR ON EXISTING FILL MATERIAL OR EXISTING FAT CLAY. CONTRACTOR SHALL REMOVE SHALLOW FILL AND FAT CLAY WITHIN **TWO FEET BELOW BOTTOM OF SLAB** AND REPLACE W/ ENGINEERED SOIL OR D.G.A. BACKFILL UP TO SLAB BASE.
13. COORDINATE SIZE AND LOCATION OF ALL SLAB ON GRADE PENETRATIONS (INCLUDING FLOOR BOXES, FLOOR DRAINS AND RELATED SLOPED SLABS) WITH ARCH AND MEP DRAWINGS.
14. WHERE THICKENED SLAB OCCURS OVER FOOTINGS POUR THICKENED SLAB DOWN ON TOP OF FOOTING.
15. MAX SPACING OF HORIZ BOND BEAMS IN C.M.U. WALL IS 12'-0" O.C.
16. SEE ARCH DWGS FOR LOCATIONS OF EXPOSED AND/OR POLISHED CONCRETE SLABS ON GRADE.

FOUNDATION LEGEND

- F40 = SPREAD FOOTING. SEE SCHEDULE.
- WF40 = WALL FOOTING. SEE SCHEDULE.
- RWF40 = RETAINING WALL FOOTING. SEE SCHEDULE.
- P1 = COLUMN PIER. SEE DETAIL B/S3.2 .
- SF = STEP FOOTING. SEE DETAIL C/S3.1.
- (-0'-8") = TOP OF FOOTING ELEVATION.
- = EXTENT OF ELEVATION CHANGE AT TURF PLAY FIELD. VERIFY DIFFERENCE IN ELEVATION WITH TURF MANUFACTURER.
- SJ = SAWN CONTRACTION JOINT. SEE DETAIL L/S3.1.
- CJ = CONSTRUCTION JOINT. SEE DETAIL L/S3.1.
- PB1 = MASONRY PARTITION BRACE. SEE DETAIL L/S4.1.
- S1 = STAIR STRINGER, HSS12x2x1/4.
- = CONCRETE WALL.
- = MASONRY NON-BEARING PARTITION WALL. SEE ARCH DWGS FOR WALL THICKNESS, TYPE AND LAYOUT. PARTITION WALLS ARE SHOWN FOR CLARITY ONLY ON STRUCTURAL DRAWINGS.
- = C.M.U. WALL REINFORCED W/ #5@48" O.C. VERT CENTERED IN CORE.
- = C.M.U. WALL REINFORCED W/ #5@32" O.C. VERT CENTERED IN CORE.
- = C.M.U. WALL REINFORCED W/ #5@24" O.C. VERT CENTERED IN CORE.
- = C.M.U. WALL REINFORCED W/ #6@24" O.C. VERT CENTERED IN CORE.

FOUNDATION TAG NOTES

1. RE-ENTRANT CORNER BARS SEE DET M/S3.1 .
2. CONCRETE STAIRS. SEE DET C/S3.2.

2000 PSF

WALL FOOTING SCHEDULE

MARK	WIDTH	THICKNESS	REINFORCING CONT BOTTOM	TRANSVERSE REINFORCING BOTTOM
RWF45	4'-6"	1'-0"	SEE SECTIONS	SEE SECTIONS
RWF45a	4'-6"	1'-0"	SEE SECTIONS	SEE SECTIONS
RWF60	6'-0"	1'-2"	SEE SECTIONS	SEE SECTIONS
RWF60a	6'-0"	1'-2"	SEE SECTIONS	SEE SECTIONS
RWF80	8'-0"	1'-4"	SEE SECTIONS	SEE SECTIONS
WF20	2'-0"	1'-0"	(2) #5	#5@12" O.C.
WF25	2'-6"	1'-0"	(3) #5	#5@12" O.C.
WF30	3'-0"	1'-0"	(3) #5	#5@12" O.C.
WF35	3'-6"	1'-0"	(3) #5	#5@12" O.C.
WF40	4'-0"	1'-0"	(4) #5	#5@12" O.C.
WF45	4'-6"	1'-0"	(4) #5	#5@12" O.C.
WF55	5'-6"	1'-0"	(5) #5	#6@12" O.C.
WF60	6'-0"	1'-0"	(6) #5	#6@12" O.C.

2000 PSF

SPREAD FOOTING SCHEDULE

MARK	LENGTH	WIDTH	THICKNESS	REINFORCING E.W. BOTTOM
F30	3'-0"	3'-0"	1'-6"	(3) #5
F60	6'-0"	6'-0"	1'-6"	(6) #6
F70	7'-0"	7'-0"	1'-6"	(7) #6

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FOUNDATION PLAN - BCHS

BCPS HIGH SCHOOL PHYSICAL SCIENCE CENTERS
BULLITT COUNTY PUBLIC SCHOOLS
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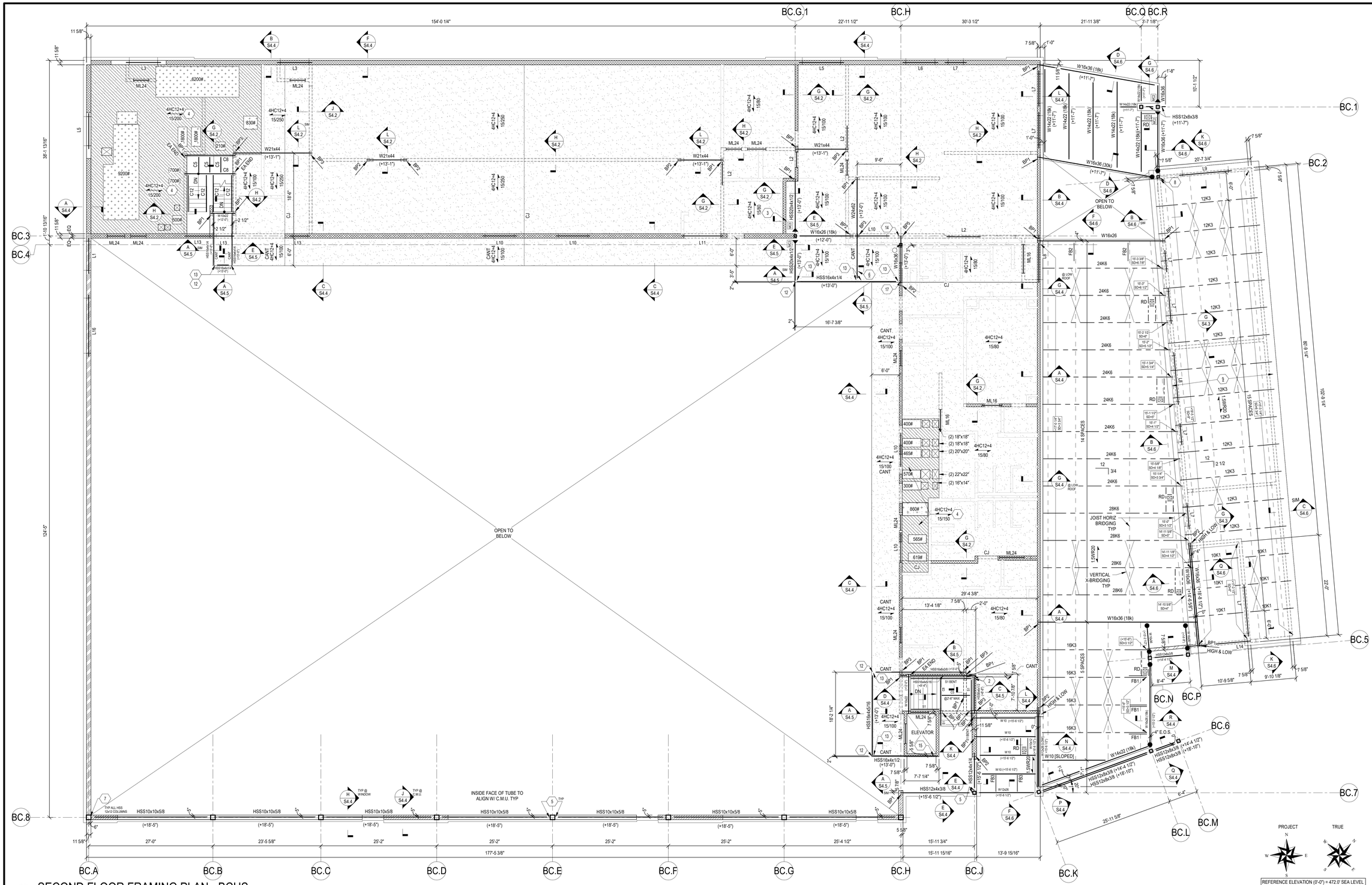
BCHS
S2.11



A S2.12 SECOND FLOOR FRAMING PLAN - BCHS

1/8" = 1'-0"

FRAMING PLAN NOTES

1. ELEVATIONS SHOWN ARE TO THE TOP OF STEEL AND ARE REFERENCED FROM FINISHED FIRST FLOOR REFERENCE ELEVATION (0'-0").
2. FINISHED SECOND FLOOR ELEVATION (+13'-4").
3. SEE PLAN FOR ELEVATION OF TOP OF SECOND FLOOR STEEL BEAMS.
4. SEE DWG S1.1 & S1.2 FOR GENERAL NOTES.
5. SEE DWG S1.3 FOR SPECIAL INSPECTION NOTES.
6. SEE DWGS S4.1 THRU S4.3 FOR TYPICAL FRAMING DETAILS.
7. SEE DWG S5.1 FOR COLUMN SCHEDULE.
8. SPACE BEAMS / JOISTS EVENLY THROUGHOUT BAY U.N.O.
9. SIZE AND LOCATION OF ROOF TOP MECHANICAL UNITS & ROOF DRAINS SHALL BE COORDINATED WITH THE MECHANICAL CONTRACTOR. OPERATING WEIGHT OF UNIT (INCLUDING CURBS) SHALL NOT EXCEED WEIGHT SHOWN ON PLAN. SEE K/S4.3 FOR ADDITIONAL FRAMING REQUIREMENTS AT UNITS.

FRAMING LEGEND

- 1.5WR20 / 3.0NA20 = 1 1/2" 20 GA GALVANIZED WIDE RIB STEEL ROOF DECK. = 3" 20 GA GALVANIZED DEEP RIB ACOUSTICAL STEEL ROOF DECK.
- PANEL WIDTH (FEET).
- PRECAST HOLLOW-CORE PLANK. PLANK DEPTH (INCHES).
- 4HC12+4 / 15/50 PSF = CONCRETE TOPPING SLAB THICKNESS (INCHES) REINF W/ 4x4-W2.9xW2.9 W.W.F. SUPERIMPOSED SERVICE LOAD (DL/LL) (SEE PLANS MASONRY PARTITION LOADS.
- W16x26 (15k) = STEEL BEAM SIZE. SERVICE LOAD REACTION (KIPS) EACH END.
- (+13'-1") = TOP OF STEEL BEAM ELEVATION REFERENCED FROM FINISHED FIRST FLOOR REFERENCE ELEVATION (0'-0").
- = COLLECTOR/TENSION CONNECTION W/ MAXIMUM ROWS OF 3/4"ø A325-SC BOLTS. USE FULL-DEPTH SINGLE PLATE CONNECTION TO BEAMS AND WT CONNECTION TO COLUMNS.
- MC1 = MOMENT CONNECTION. SEE DETAIL M/S4.2 .
- +X'-X" / SD=X" = TOP OF STEEL (BOTTOM OF DECK) SPOT ELEVATION. SLOPE STEEL EVENLY BETWEEN POINTS. DROP STEEL JOIST SUPPORT BEAMS/ BEARING PLATES BY DEPTH OF JOIST SEAT (SIGNIFIED AS SD - SEAT DEPTH). WHERE NO SEAT DEPTH IS SPECIFIED, DEPTH SHALL BE SJI STANDARD FOR TYPE OF JOIST. SEAT DEPTH GIVEN AT CENTERLINE OF GIRDER OR END OF BEARING PLATE NEAREST CENTER OF BEARING WALL.
- L1 = STEEL LINTEL. SEE DET K/S4.1FOR SCHEDULE.
- = COLUMN STARTING AT AND EXTENDING UPWARD FROM THIS LEVEL.
- = HSS6x6x1/4 STEEL POST ABOVE W/ BASE PL 1/2x7x12. SEE DET C/S5.1.
- = HSS4x4x1/4 STEEL POST ABOVE W/ BASE PL 3/8x5x5 BOT & 3/16" FILLET WELD ALL AROUND TO BEAM (+) 1.4x3x1/4 L.D.V. x 5" LONG EA SIDE TOP. PROVIDE 1/2" CLEAR BETWEN POST AND BEAM @ TOP.
- = HSS4x4x1/4 W/ PL 1/2x7x10 & (4) 3/4"ø BOLTS.
- PB1 = C.M.U. WALL REINFORCED W/ #5@48" O.C. VERT CENTERED IN CORE.
- = C.M.U. WALL REINFORCED W/ #5@32" O.C. VERT CENTERED IN CORE.
- = C.M.U. WALL REINFORCED W/ #5@24" O.C. VERT CENTERED IN CORE.
- = C.M.U. WALL REINFORCED W/ #6@24" O.C. VERT CENTERED IN CORE.
- = CONCRETE WALL.
- = MASONRY NON-BEARING PARTITION WALL. SEE ARCH DWGS FOR WALL THICKNESS, TYPE AND LAYOUT. COMPOSITE PRECAST CONCRETE FLOOR STRUCTURE TO BE DESIGNED TO SUPPORT PARTITION WEIGHT WITH A MAXIMUM DEFLECTION OF L/600 DUE TO LIVE LOAD, PARTITION WEIGHT AND 15 PSF COLLATERAL DEAD LOAD. WEIGHT OF PARTITION IS AS FOLLOWS:
  - 4" C.M.U. PARTITION 500 PLF
  - 6" C.M.U. PARTITION 600 PLF
  - 8" C.M.U. PARTITION 920 PLF
- BP1 = STEEL BEARING PLATE. SEE DETAIL G/S4.1.
- PB1 = MASONRY PARTITION BRACE. SEE DETAIL A/S1.4.
- ML8 = MASONRY LINTEL. SEE DET D/S4.1 FOR SCHEDULE.
- FB1 = BEAM BOTTOM FLANGE BRACE. SEE DETAIL F/S4.2.
- CANT = CANTILEVER BEAM OR PLANK END. SEE DET B/S5.1.
- 12 / 1 1/4 = ROOF SLOPE.
- DLHSP-1 = SPECIAL DLH JOIST. SEE DET N/S4.3
- W8 = W8x10 (9k).
- W10 = W10x12 (9k).
- C5 = C5x6.7.
- C8 = C8x11.5.
- C12 = C12x20.7.
- S1 = STAIR STRINGER, HSS12x2x1/4
- RD = ROOF DRAIN. SEE DET K/S4.3FOR FRAMING REQUIREMENTS. SEE ARCH DWGS FOR LOCATIONS.
- = FLOOR OPENING. SEE MECH DWGS FOR SIZE AND LOCATION. COORDINATE EXACT OPENING SIZES W/ PRE-CAST SUPPLIER.
- = MECHANICAL AREA. SEE PLAN FOR LOADING INFORMATION.
- = 4" MECHANICAL HOUSEKEEPING PAD.
- BC = BEAM COPE. SEE DET M/S4.1 .

SECOND FLOOR & LOW ROOF FRAMING TAG NOTES

1. SEE U/S4.6FOR FAN MOUNTING DETAIL.
2. SEE DET K/S4.1 FOR TYPE 2 BEAM PER PLAN + CONT PL3/8x7 .
3. (4) 4" DIAMETER CORES IN HC PLANK AT MECHANICAL SHAFT. SEE M.E.P. DRAWINGS FOR LOCATIONS. SEE DET L/S4.3 AND COORDINATE EXACT LOCATION WITH PRECAST SUPPLIER.
4. MECHANICAL EQUIPMENT LOADS AND HOUSEKEEPING PAD WEIGHTS ARE INCLUDED IN LOADING.
5. SEE DETAIL A/S4.2 FOR BEAM TO COLUMN CONNECTION, TYP. GRIND WELDS SMOOTH WHERE EXPOSED TO VIEW.
6. COPE END OF WF BEAM OVER LAST 24" SO BOTTOM TAPERS TO 16" DEPTH. ADD SLOPING BOTTOM FLANGE PL3/8x6 W/ 5/16 FILLET WELD BOTH SIDES.
7. SEE DET D/S4.3 FOR TYPE A STEEL COLUMN TO C.M.U. WALL CONNECTION.
8. SEE DET D/S4.3 FOR TYPE B STEEL COLUMN TO C.M.U. WALL CONNECTION.
9. ROOF DECK AT THIS LOCATION SHALL BE DESIGNATED AS "ZONE 1" AND SHALL BE INSTALLED IN ACCORDANCE WITH DET H/S4.3 .
10. L3x3x1/4 MITER AS REQUIRED & WELD ALL AROUND TO COLUMN. COPE & WELD ALL AVAILABLE SIDES TO JOIST. ATTACH DECK TO ANGLE W/ #10 SELF DRILLING SCREWS @ 12" O.C. MAX.
11. ELEVATOR HOIST BEAM W/ BP1 EA END. COORDINATE LOCATION & ELEVATION W/ ELEVATOR MANUFACTURER.
12. 1/4" END CAP AT EXPOSED ENDS OF HSS MEMBERS.
13. VERTICAL L4x4x3/8 x 0'-10" LONG W/ 1/4" FILLET WELD SIDE, BOT. & TOP 1/2" @ EA BEAM FOR SHEAR CXN. PLUS HORIZ PL1/4x4x4 CONNECTING TOPS OF TUBES W/ 1/4" FILLET WELD ALL AROUND.
14. 5/16" STIFFENER PLATE ON EACH SIDE OF STEEL BEAM. WELD TO BEAM WITH 1/4" FILLET WELD ON 3 SIDES.
15. ALIGN EXT FACE OF HSS W/ EXT FACE OF 8" CMU. PROVIDE 1/2"ø x 5" HEADED SHEAR STUDS @ 16" O.C. TOP & BOT.
16. SEE DET K/S4.2 FOR HOLLOW-CORE PLANK TO BEAM DETAIL.
17. BEARING PLATE LOCATED BEYOND OPENING BELOW PER DETAIL G/S4.1 , "PARALLEL TO WALL".
18. OFFSET JOIST FOR MIN SJI BEARING LENGTH ON BEAM. PROVIDE 1/2" MIN CLR BTWEEN JOIST SEATS.
19. CAMBER JOIST RELATIVE TO TRIBUTARY AREA AS COMPARED TO STANDARD DLHSP.1 TRIBUTARY AREA & CAMBER.
20. COPE W14 TO FRAME INTO W24.
21. EXTEND W16 BEAM THROUGH C.M.U. WALL AND CONNECT TO HSS COLUMN. SEE FRAMING LEGEND FOR NOTE ON COLLECTOR/TENSION CONNECTION.
22. VERTICAL L4x4x3/8 x 0'-10" LONG W/ 1/4" FILLET WELD SIDE, BOT, & TOP 1/2" @ EA BEAM FOR SHEAR CXN.

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

SECOND FLOOR FRAMING PLAN - BCHS

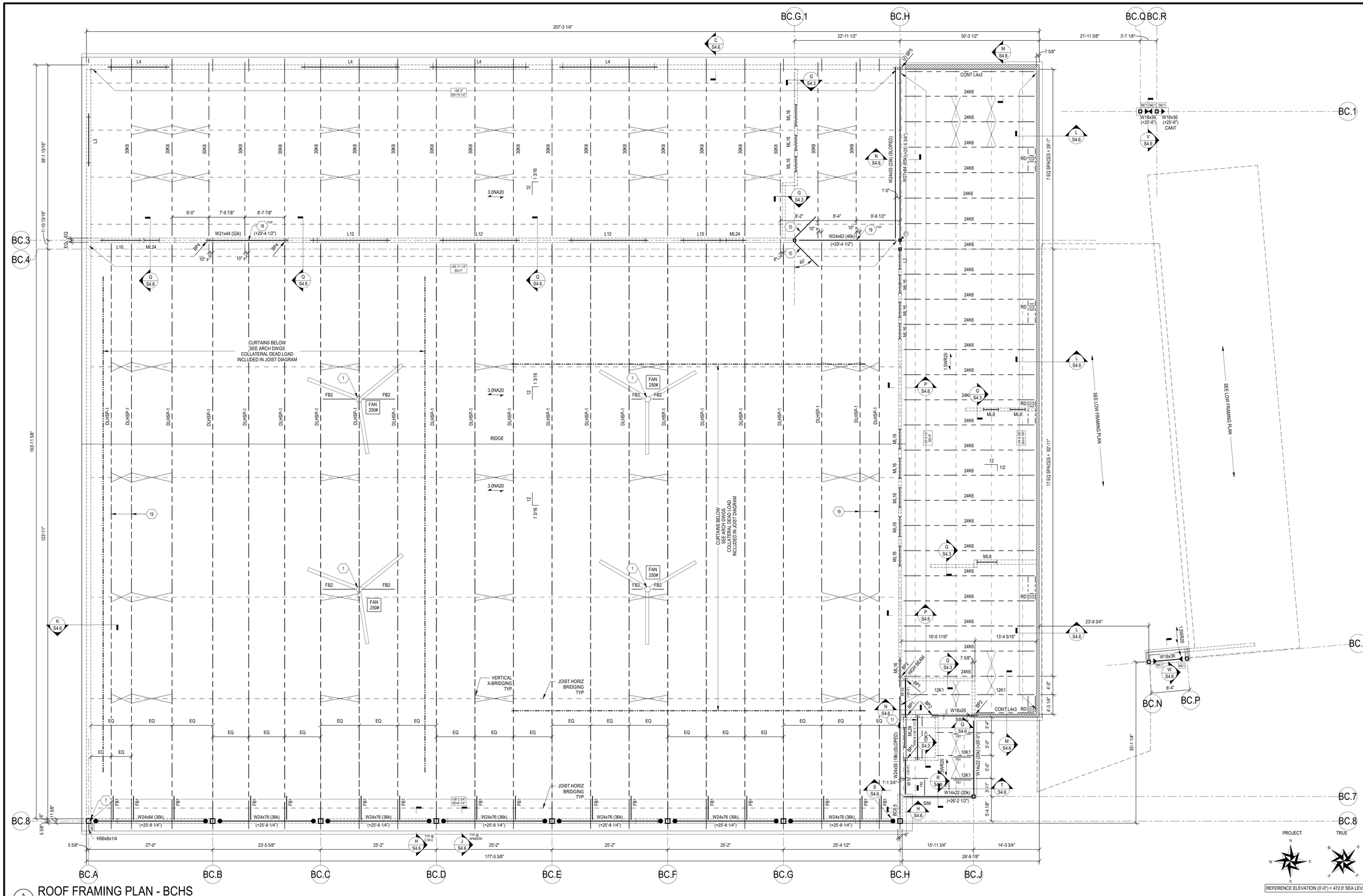
BCPS HIGH SCHOOL PHYSICAL SCIENCE CENTERS
BULLITT COUNTY PUBLIC SCHOOLS
SHEPHERDSVILLE, MT WASHINGTON & HEBRON, KENTUCKY

BG# 25-145

DATE : 04.22.2025
DRAWN BY : JLL/AH
CHECKED BY : AJB
REVISIONS :

2023-50

BCHS
S2.12



A S2.13 ROOF FRAMING PLAN - BCHS

1/8" = 1'-0"

FRAMING PLAN NOTES

1. ELEVATIONS SHOWN ARE TO THE TOP OF STEEL AND ARE REFERENCED FROM FINISHED FIRST FLOOR REFERENCE ELEVATION (0'-0").
2. FINISHED SECOND FLOOR ELEVATION (+13'-4").
3. SEE PLAN FOR ELEVATION OF TOP OF SECOND FLOOR STEEL BEAMS.
4. SEE DWG S1.1 & S1.2 FOR GENERAL NOTES.
5. SEE DWG S1.3 FOR SPECIAL INSPECTION NOTES.
6. SEE DWGS S4.1 THRU S4.3 FOR TYPICAL FRAMING DETAILS.
7. SEE DWG S5.1 FOR COLUMN SCHEDULE.
8. SPACE BEAMS / JOISTS EVENLY THROUGHOUT BAY U.N.O.
9. SIZE AND LOCATION OF ROOF TOP MECHANICAL UNITS & ROOF DRAINS SHALL BE COORDINATED WITH THE MECHANICAL CONTRACTOR. OPERATING WEIGHT OF UNIT (INCLUDING CURBS) SHALL NOT EXCEED WEIGHT SHOWN ON PLAN. SEE K/S4.3 FOR ADDITIONAL FRAMING REQUIREMENTS AT UNITS.

FRAMING LEGEND

- 1.5WR20 — = 1 1/2" 20 GA GALVANIZED WIDE RIB STEEL ROOF DECK.
- 3.0NA20 — = 3" 20 GA GALVANIZED DEEP RIB ACOUSTICAL STEEL ROOF DECK.
- PANEL WIDTH (FEET).
- PRECAST HOLLOW-CORE PLANK.
- PLANK DEPTH (INCHES).
- 4HC12+4 — CONCRETE TOPPING SLAB THICKNESS (INCHES)
- 15/50 PSF — REINF W/ 4x4-W2.9xW2.9 W.W.F.
- SUPERIMPOSED SERVICE LOAD (DL/LL) (SEE PLANS MASONRY PARTITION LOADS.
- STEEL BEAM SIZE.
- W16x26 (15k) — SERVICE LOAD REACTION (KIPS) EACH END.
- (+13'-1") = TOP OF STEEL BEAM ELEVATION REFERENCED FROM FINISHED FIRST FLOOR REFERENCE ELEVATION (0'-0").
- = COLLECTOR/TENSION CONNECTION W/ MAXIMUM ROWS OF 3/4"ø A325-SC BOLTS. USE FULL-DEPTH SINGLE PLATE CONNECTION TO BEAMS AND WT CONNECTION TO COLUMNS.
- MC1 — = MOMENT CONNECTION. SEE DETAIL M/S4.2 .
- HS"x"x"/SO=T" — = TOP OF STEEL (BOTTOM OF DECK) SPOT ELEVATION. SLOPE STEEL EVENLY BETWEEN POINTS. DROP STEEL JOIST SUPPORT BEAMS/ BEARING PLATES BY DEPTH OF JOIST SEAT (SIGNIFIED AS SD - SEAT DEPTH). WHERE NO SEAT DEPTH IS SPECIFIED, DEPTH SHALL BE SJI STANDARD FOR TYPE OF JOIST. SEAT DEPTH GIVEN AT CENTERLINE OF GIRDER OR END OF BEARING PLATE NEAREST CENTER OF BEARING WALL.
- L1 — = STEEL LINTEL. SEE DET K/S4.1 FOR SCHEDULE.
- = COLUMN STARTING AT AND EXTENDING UPWARD FROM THIS LEVEL.
- = HSS6x6x1/4 STEEL POST ABOVE W/ BASE PL 12x7x12. SEE DET C/S5.1.
- = HSS4x4x1/4 STEEL POST ABOVE W/ BASE PL 3/8x5x5 BOT & 3/16" FILLET WELD ALL AROUND TO BEAM (+) 1/4x3x1/4 L.D.V. x 5" LONG EA SIDE TOP. PROVIDE 1/2" CLEAR BETWEEN POST AND BEAM @ TOP.
- = HSS4x4x1/4 W/ PL 1/2x7x10 & (4) 3/4"ø BOLTS.
- = C.M.U. WALL REINFORCED W/ #5@48" O.C. VERT CENTERED IN CORE.
- = C.M.U. WALL REINFORCED W/ #5@32" O.C. VERT CENTERED IN CORE.
- = C.M.U. WALL REINFORCED W/ #5@24" O.C. VERT CENTERED IN CORE.
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- CANT — = CANTILEVER BEAM OR PLANK END. SEE DET B/S5.1.
- 12 / 1/4 — = ROOF SLOPE.
- DLHSP-1 — = SPECIAL DLH JOIST. SEE DET N/S4.3
- W8 — = W8x10 (9k).
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- C5 — = C5x6.7.
- C8 — = C8x11.5.
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- S1 — = STAIR STRINGER, HSS12x2x1/4
- RD — = ROOF DRAIN. SEE DET K/S4.3 FOR FRAMING REQUIREMENTS. SEE ARCH DWGS FOR LOCATIONS.
- = FLOOR OPENING. SEE MECH DWGS FOR SIZE AND LOCATION. COORDINATE EXACT OPENING SIZES W/ PRE-CAST SUPPLIER.
- = MECHANICAL AREA. SEE PLAN FOR LOADING INFORMATION.
- = 4" MECHANICAL HOUSEKEEPING PAD.
- BC — = BEAM COPE. SEE DET M/S4.1 .

SECOND FLOOR & LOW ROOF FRAMING TAG NOTES

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9. ROOF DECK AT THIS LOCATION SHALL BE DESIGNATED AS "ZONE 1" AND SHALL BE INSTALLED IN ACCORDANCE WITH DET H/S4.3 .
10. L3x3x1/4 MITER AS REQUIRED & WELD ALL AROUND TO COLUMN. COPE & WELD ALL AVAILABLE SIDES TO JOIST. ATTACH DECK TO ANGLE W/ #10 SELF DRILLING SCREWS @ 12" O.C. MAX.
11. ELEVATOR HOIST BEAM W/ BP1 EA END. COORDINATE LOCATION & ELEVATION W/ ELEVATOR MANUFACTURER.
12. 1/4" END CAP AT EXPOSED ENDS OF HSS MEMBERS.
13. VERTICAL L4x4x3/8 x 0'-10" LONG W/ 1/4" FILLET WELD SIDE, BOT, & TOP 1/2" @ EA BEAM FOR SHEAR CXN. PLUS HORIZ PL1/4x4x4 CONNECTING TOPS OF TUBES W/ 1/4" FILLET WELD ALL AROUND.
14. 5/16" STIFFENER PLATE ON EACH SIDE OF STEEL BEAM. WELD TO BEAM WITH 1/4" FILLET WELD ON 3 SIDES.
15. ALIGN EXT FACE OF HSS W/ EXT FACE OF 8" CMU. PROVIDE 1/2"ø x 5" HEADED SHEAR STUDS @ 16" O.C. TOP & BOT.
16. SEE DET K/S4.2 FOR HOLLOW-CORE PLANK TO BEAM DETAIL.
17. BEARING PLATE LOCATED BEYOND OPENING BELOW PER DETAIL G/S4.1, "PARALLEL TO WALL".
18. OFFSET JOIST FOR MIN SJI BEARING LENGTH ON BEAM. PROVIDE 1/2" MIN CLR BTWEEN JOIST SEATS.
19. CAMBER JOIST RELATIVE TO TRIBUTARY AREA AS COMPARED TO STANDARD DLHSP.1 TRIBUTARY AREA & CAMBER.
20. COPE W14 TO FRAME INTO W24.
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22. VERTICAL L4x4x3/8 x 0'-10" LONG W/ 1/4" FILLET WELD SIDE, BOT, & TOP 1/2" @ EA BEAM FOR SHEAR CXN.

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ROOF FRAMING PLAN - BCHS

BCPS HIGH SCHOOL PHYSICAL SCIENCE CENTERS

BULLITT COUNTY PUBLIC SCHOOLS
SHEPHERDSVILLE, MT WASHINGTON & HEBRON, KENTUCKY

BG# 25-145

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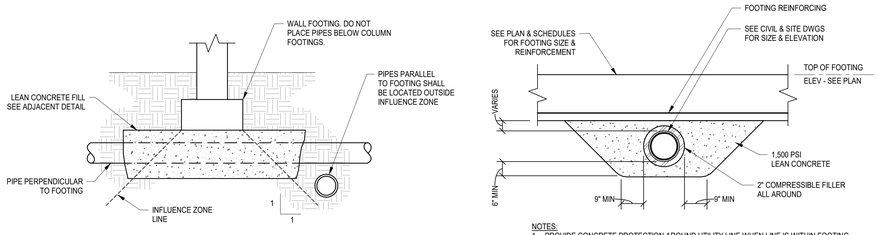
CHECKED BY : AJB
REVISIONS :

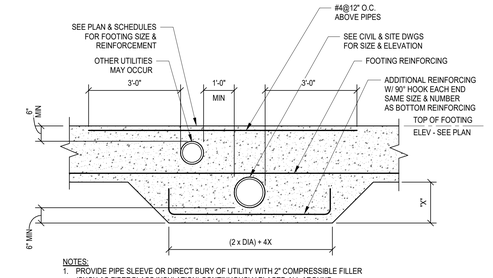
2023-50

BCHS
S2.13



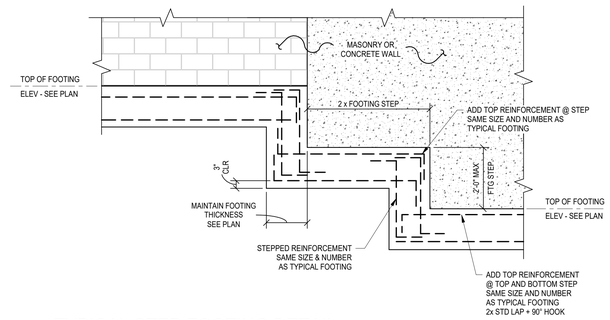
NOTES:
1. PROVIDE CONCRETE PROTECTION AROUND UTILITY LINE WHEN LINE IS WITHIN FOOTING INFLUENCE ZONE. SEE ADJACENT DETAIL FOR INFLUENCE ZONE DEFINITION.
2. DETAIL APPLIES WHEREVER TOP OF PIPE IS WITHIN 4 PIPE DIAMETERS TO BOTTOM OF FOOTING OR IF UTILITY IS INSTALLED AFTER FOOTING PLACEMENT (REGARDLESS OF DEPTH).
3. PROVIDE PIPE SLEEVE OR DIRECT BURY OF UTILITY WITH 2" COMPRESSIBLE FILLER (SUCH AS FIBERGLASS INSULATION) CONTINUOUSLY PLACED ALL AROUND.

A S3.1 TYPICAL UTILITY LINE BELOW FOOTING DETAIL
NOT TO SCALE

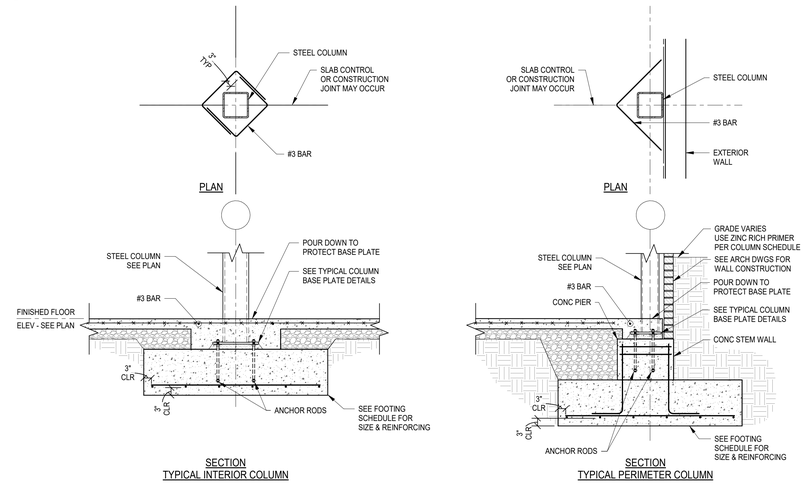


NOTES:
1. PROVIDE PIPE SLEEVE OR DIRECT BURY OF UTILITY WITH 2" COMPRESSIBLE FILLER (SUCH AS FIBERGLASS INSULATION) CONTINUOUSLY PLACED ALL AROUND.
2. DETAIL APPLIES AT TRENCH FOOTINGS ONLY. DO NOT USE THIS DETAIL FOR GRADE BEAMS.

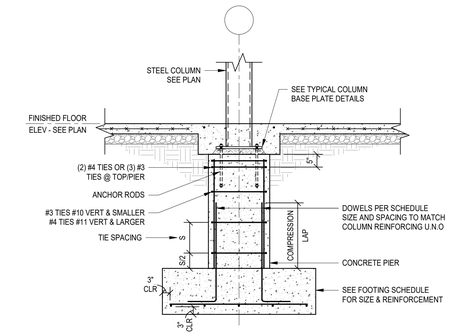
B S3.1 TYPICAL FOOTING PENETRATION/SLEEVE DETAIL
NOT TO SCALE



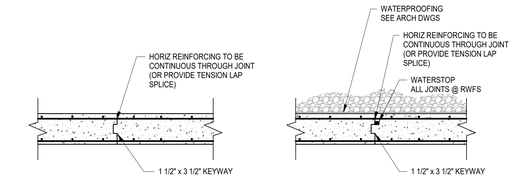
C S3.1 TYPICAL STEP FOOTING DETAIL
NOT TO SCALE



D S3.1 TYPICAL STEEL COLUMN BASE PLATE SETTING DETAIL
1/2" = 1'-0"

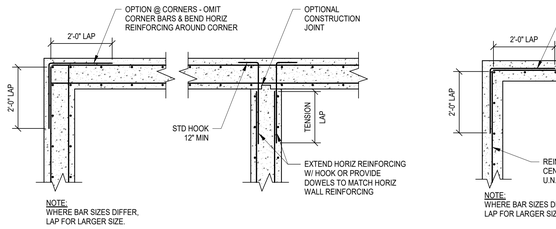


E S3.1 TYPICAL STEEL COLUMN, PIER, AND FOOTING DETAIL
NOT TO SCALE



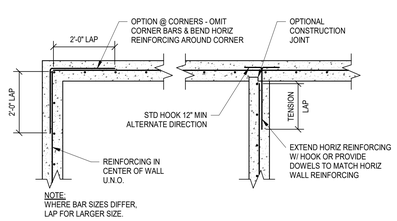
NOTES:
1. MAXIMUM LENGTH OF WALL POUR = 40'-0".
2. PERMIT 48 HOURS BETWEEN ADJACENT POURS.
3. SEE PLANS FOR ADDITIONAL JOINT LOCATIONS.
4. FOR STEM WALLS THAT ARE BELOW GRADE (BOTH SIDES), MAXIMUM POUR LENGTH MAY BE INCREASED TO 60'-0".

F S3.1 TYPICAL CONCRETE WALL CONSTRUCTION JOINT DETAIL
NOT TO SCALE



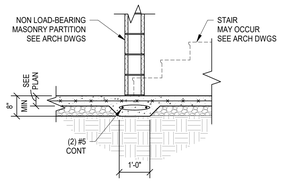
NOTE:
WHERE BAR SIZES DIFFER, LAP FOR LARGER SIZE.

G S3.1 TYPICAL CONCRETE WALL REINFORCING DETAIL
NOT TO SCALE

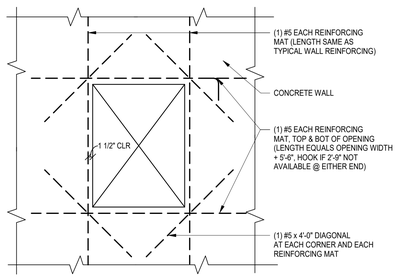


NOTE:
WHERE BAR SIZES DIFFER, LAP FOR LARGER SIZE.

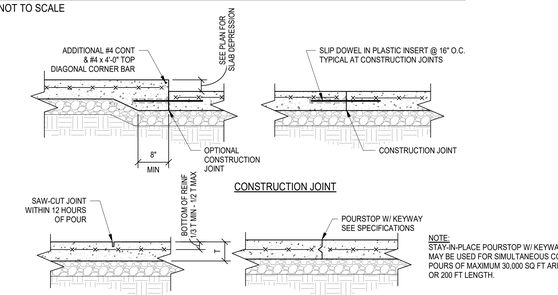
H S3.1 TYPICAL CONCRETE WALL REINFORCING DETAIL
NOT TO SCALE



J S3.1 TYPICAL THICKENED SLAB BELOW MASONRY PARTITIONS
NOT TO SCALE



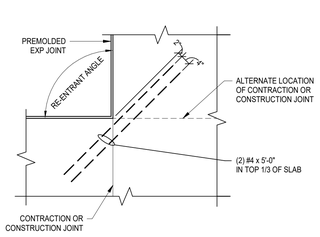
K S3.1 TYPICAL REINFORCING AT CONCRETE WALL OPENING DETAIL
NOT TO SCALE



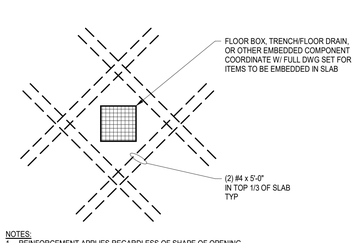
NOTE:
STAY-IN-PLACE POURSTOP W/ KEYWAY MAY BE USED FOR SIMULTANEOUS CONCRETE POURS OF MAXIMUM 30,000 SQ FT AREA OR 200 FT LENGTH.

NOTES:
1. JOINTS SHALL BE INSTALLED IN SLABS ON GROUND AT A MAXIMUM SPACING IN FEET OF 3 TIMES THE SLAB THICKNESS IN INCHES IN EACH DIRECTION BY EITHER OF THE ABOVE METHODS. MAXIMUM LENGTH OF ANY SLAB ON GROUND POUR TO BE 100'-0" BETWEEN CONSTRUCTION JOINTS. RATIO OF LENGTH TO WIDTH SHALL NOT EXCEED 2. THIS SPACING OF JOINTS SHALL APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE.
2. WELDED WIRE FABRIC SHALL BE DISCONTINUOUS THROUGH CONSTRUCTION JOINTS.

L S3.1 TYPICAL SLAB ON GROUND JOINT DETAIL
NOT TO SCALE



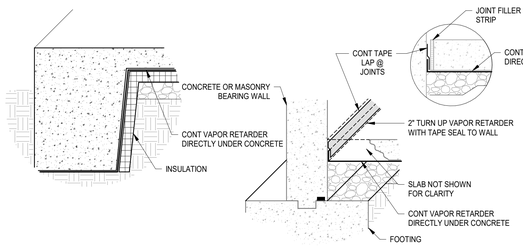
M S3.1 TYPICAL SLAB ON GRADE JOINT AT RE-ENTRANT CORNER
NOT TO SCALE



NOTES:
1. REINFORCEMENT APPLIES REGARDLESS OF SHAPE OF OPENING (ROUND OR RECTANGULAR MAY OCCUR).
2. DETAIL DOES NOT APPLY TO OPENINGS SMALLER THAN 3", U.N.O.

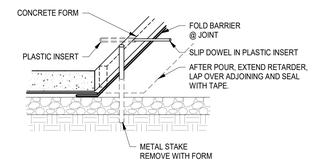
N S3.1 TYPICAL SLAB REINFORCEMENT AT FLOOR BOXES, TRENCH/FLOOR DRAINS, ETC DETAIL
NOT TO SCALE

NOTES:
1. PROVIDE VAPOR RETARDER THAT IS RESISTANT TO DETERIORATION WHEN TESTED ACCORDING TO ASTM E 154. SEE SPECIFICATION SECTION 033000.
2. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION.
3. SEAL ALL PENETRATIONS AND REPAIR ALL DAMAGED SURFACES WITH APPROVED JOINT TAPE OR MASTIC.
4. PREPARE ALL SURFACES FOR PROPER ADHESION WITH APPROVED TAPE. ALL SURFACES SHALL BE CLEAN, DRY, AND FROST FREE.
5. TURN UP BARRIER AT ALL EXTERIOR OR INTERIOR WALL SURFACES AND SEAL WITH APPROVED TAPE.

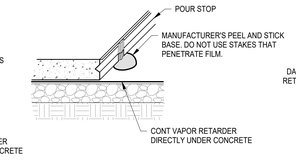


TYPICAL @ TURNED DOWN SLAB | TYPICAL @ WALL | TYPICAL @ SEAM

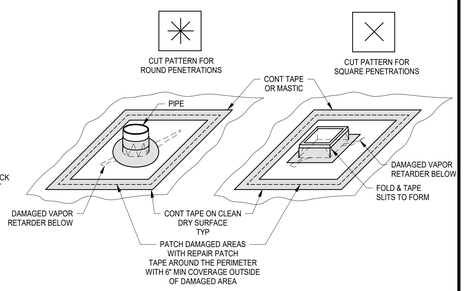
P S3.1 TYPICAL VAPOR RETARDER DETAILS
NOT TO SCALE



TYPICAL DIVIDED POUR @ CONSTRUCTION JOINT



OPTIONAL SIMULTANEOUS POUR @ CONSTRUCTION JOINT



TYPICAL PIPE REPAIR | TYPICAL RECTANGULAR REPAIR

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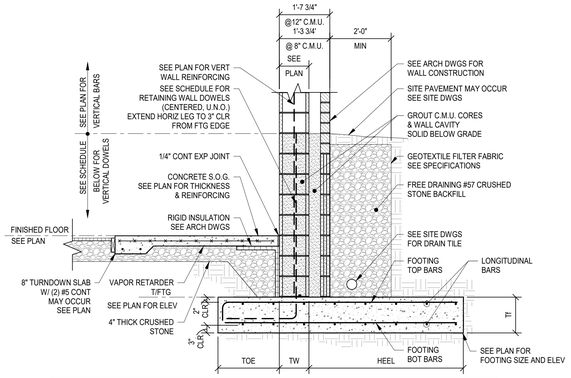


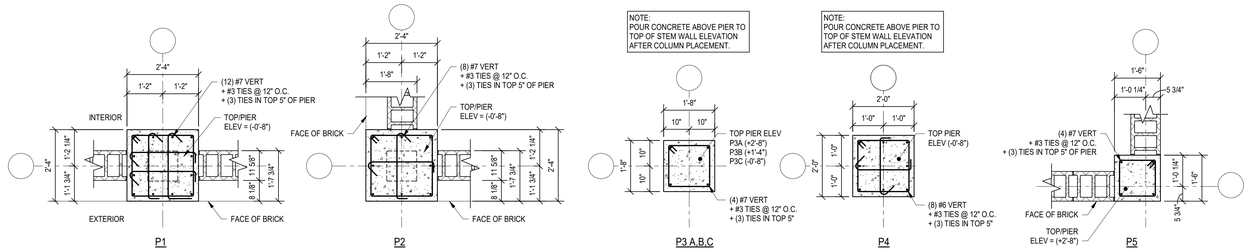
RETAINING WALL SCHEDULE

MARK (SEE PLANS)	DIMENSIONS FOOTING Tw	Tf	TOE	HEEL	REINFORCEMENT FOOTING TOP BARS	BOT BARS	RETAINING WALL VERT DOWELS
RWF45	7 5/8"	1'-0"	1'-6"	2'-4 3/8"	#5@12" O.C. TRANS + (5) #5 CONT LONGITUDINAL	#5@12" O.C. TRANS + (5) #5 LONGITUDINAL	#5@24" O.C. VERT
RWF45a	11 5/8"	1'-0"	1'-6"	2'-0 3/8"	#5@12" O.C. TRANS + (5) #5 CONT LONGITUDINAL	#5@12" O.C. TRANS + (5) #5 LONGITUDINAL	#5@24" O.C. VERT
RWF60	11 5/8"	1'-2"	2'-0"	3'-0 3/8"	#5@12" O.C. TRANS + (6) #5 CONT LONGITUDINAL	#5@12" O.C. TRANS + (6) #5 CONT LONGITUDINAL	#5@16" O.C. VERT
RWF60a	7 5/8"	1'-2"	2'-0"	3'-4 3/8"	#5@12" O.C. TRANS + (6) #5 CONT LONGITUDINAL	#5@12" O.C. TRANS + (6) #5 CONT LONGITUDINAL	#5@16" O.C. VERT
RWF80	11 5/8"	1'-4"	2'-0"	5'-0 3/8"	#6@12" O.C. TRANS + (8) #6 CONT LONGITUDINAL	#6@12" O.C. TRANS + (8) #6 CONT LONGITUDINAL	#6@8" O.C. VERT

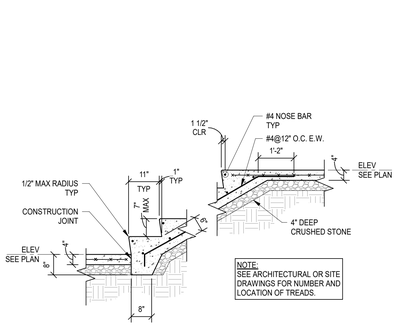
* CONTACT ENGINEER IF MAXIMUM RETAINED HEIGHT NOTED WILL BE EXCEEDED BASED ON FINISHED GRADING.

NOTES:
1. GRADE AT HIGH SIDE AND/OR LOW SIDE MAY BE GRASS, PLANTINGS, SITE PAVEMENT, BUILDING FLOOR SLAB, OR OTHER. COORDINATE WITH ADDITIONAL ARCHITECTURAL, STRUCTURAL, AND SITE/CIVIL DRAWINGS FOR PERTINENT INFORMATION.
2. WALL IS DESIGNED FOR DRAINED CONDITION OF THE RETAINED MATERIALS. PROVIDE CONTINUOUS FOUNDATION DRAIN AT BASE OF WALL ON THE RETAINED GRADE SIDE OF WALL. SEE SITE, CIVIL, AND PLUMBING DRAWINGS FOR DRAIN TERMINATION INFORMATION. IF NOT OTHERWISE NOTED, PIPE SHALL DAYLIGHT IN MANNER TO PERMIT DRAINAGE.
3. WHERE FLOOR SLAB ON GRADE TERMINATES INTO VERTICAL WALL FACE, PROVIDE CONTINUOUS 1/4" EXPANSION JOINT BETWEEN EDGE OF SLAB AND FACE OF WALL.
4. WHERE HOOKED BARS ARE SHOWN, HOOK LENGTH SHALL BE ACI 318 STANDARD 90° HOOK UNLESS NOTED OTHERWISE.

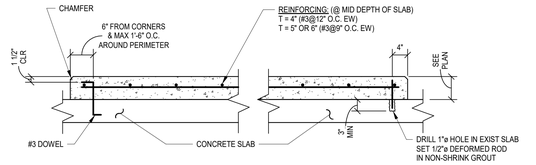
A S3.2 TYPICAL RETAINING WALL FOOTING DETAIL
NOT TO SCALE



B S3.2 PIER DETAILS
1/2" = 1'-0"



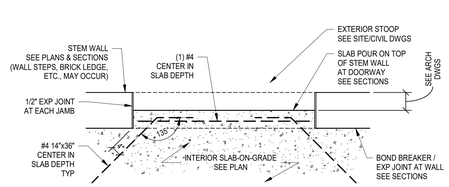
C S3.2 TYPICAL CONCRETE STAIR
NOT TO SCALE



FOR NEW CONSTRUCTION FOR EXISTING CONSTRUCTION

NOTES:
1. BASE SLAB PREPARATION NEW CONSTRUCTION: CLEAN SLAB & WET DOWN PRIOR TO POURING PAD.
2. EXISTING CONSTRUCTION: SWEEP CONCRETE CLEAN, ROUGHEN SLAB, & APPLY BONDING AGENT ACCORDING TO SUPPLIER'S DIRECTIONS.
3. CONCRETE MIX: USE SAME CONCRETE AS USED ELSEWHERE ON JOB, BUT NOT LESS THAN 3000 PSI (MAX 4" SLUMP).
4. CURING: CURE FOR 7 DAYS BY EITHER OF THE FOLLOWING METHODS:
   A. COVER W/ BURLAP & KEEP CONTINUOUSLY WET.
   B. COVER W/ 6 MIL VISQUEEN. TAPE ALL JOINTS & TAPE VISQUEEN TO BASE SLAB.

D S3.2 TYPICAL MECHANICAL HOUSEKEEPING PAD DETAIL
NOT TO SCALE



E S3.2 TYPICAL SLAB-ON-GRADE REINFORCING AT EXTERIOR DOOR DETAIL
NOT TO SCALE

F S3.2 TYPICAL ELEVATOR PIT SECTION
NOT TO SCALE

G S3.2 ELEVATOR PIT SECTION @ DOOR
1/2" = 1'-0"

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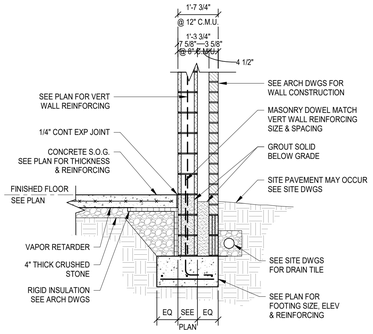
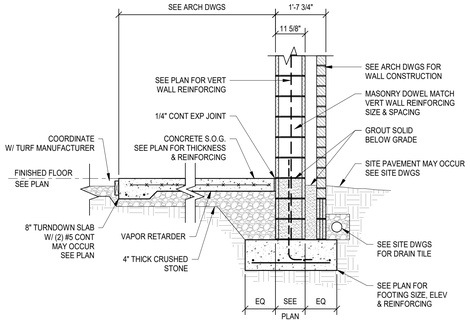
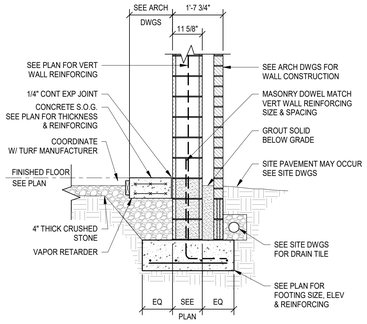


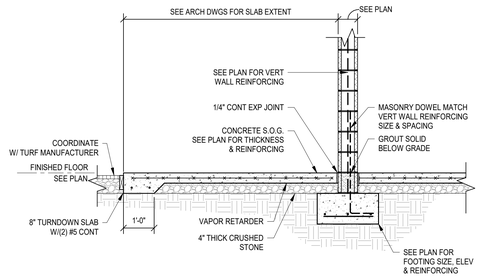
A S3.3 SECTION
1/2" = 1'-0"



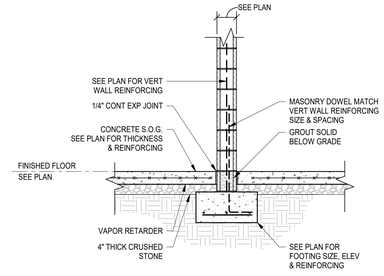
B S3.3 SECTION
1/2" = 1'-0"



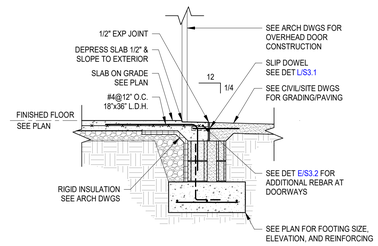
C S3.3 SECTION
1/2" = 1'-0"



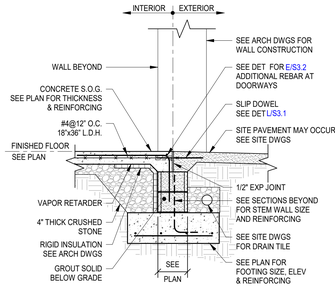
D S3.3 SECTION
1/2" = 1'-0"



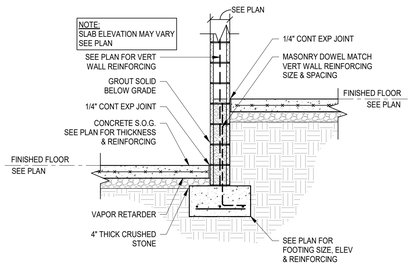
E S3.3 SECTION
1/2" = 1'-0"



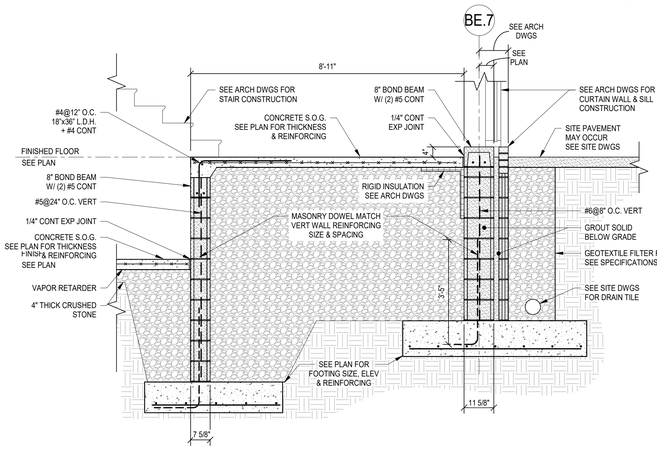
F S3.3 SECTION
1/2" = 1'-0"



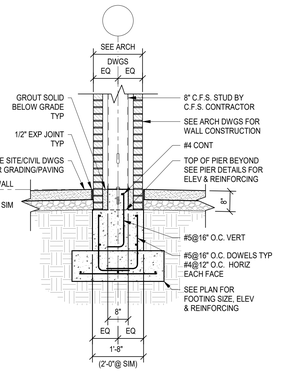
G S3.3 SECTION
1/2" = 1'-0"



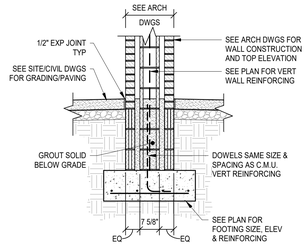
H S3.3 SECTION
1/2" = 1'-0"



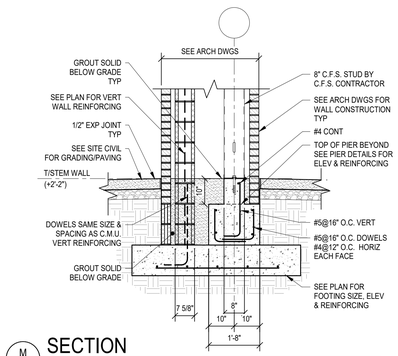
J S3.3 SECTION
1/2" = 1'-0"



K S3.3 SECTION
1/2" = 1'-0"



L S3.3 SECTION
1/2" = 1'-0"



M S3.3 SECTION
1/2" = 1'-0"

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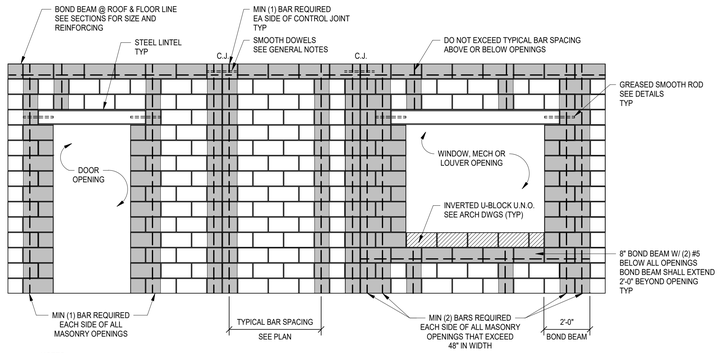
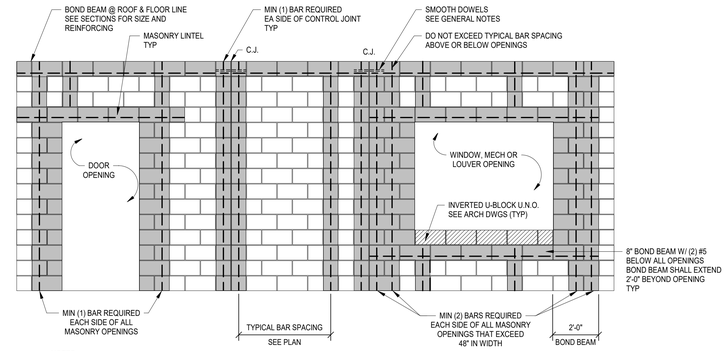


NOTES:
1. SEE MASONRY GENERAL NOTES FOR REINFORCING NOT SHOWN AND GROUTING PROCEDURES.
2. CONTROL JOINTS SHALL EXTEND FULL HEIGHT OF WALL AND ALIGN FROM FLOOR TO FLOOR.
3. CONTROL JOINTS SHALL BE LOCATED OUTSIDE MASONRY OPENING JAMB REINFORCING.

A S4.1 TYPICAL MASONRY WALL REINFORCING DETAIL

NOT TO SCALE



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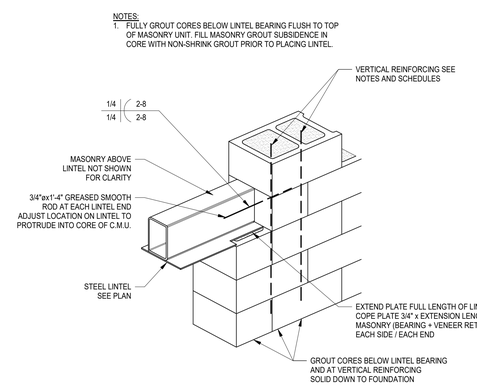
NOT TO SCALE

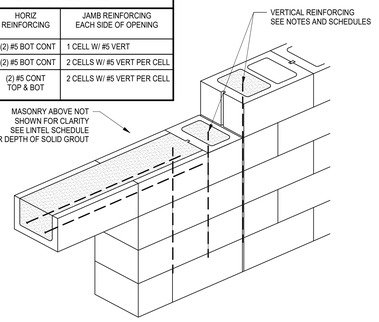


C S4.1 TYPICAL STEEL LINTEL BEARING DETAIL

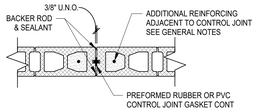
NOT TO SCALE

LINTEL SCHEDULE

MARK	DEPTH	HORIZ REINFORCING	JAMB REINFORCING EACH SIDE OF OPENING
ML8	8"	(2) #5 BOT CONT	1 CELL W/ #5 VERT
ML16	16"	(2) #5 BOT CONT	2 CELLS W/ #5 VERT PER CELL
ML24	24"	(2) #5 CONT TOP & BOT	2 CELLS W/ #5 VERT PER CELL



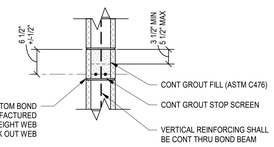
NOTES:
1. REINFORCING SHALL HAVE 1/2" MINIMUM GROUT COVER TO SURFACE OF BOND BEAM.
2. REINFORCING SHALL BE LOCATED 3" MAXIMUM FROM BOTTOM OF LINTEL BLOCK.
3. WHERE JAMB IS LESS THAN 2'-0" WIDE, HOOK HORIZONTAL LINTEL BARS AT ENDS.



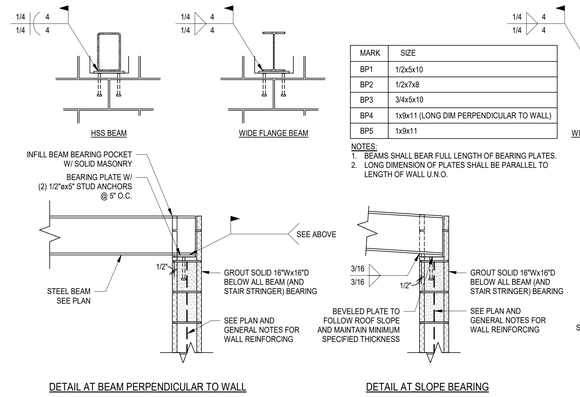
NOTES:
1. HORIZONTAL JOINT REINFORCING IN BLOCK AND BRICK SHALL BE DISCONTINUOUS AT CONTROL JOINTS.
2. SEE ARCHITECTURAL DRAWINGS FOR CONTROL JOINT LOCATIONS.
3. UNLESS OTHERWISE SHOWN OR NOTED, SPACING OF CONTROL JOINTS SHALL NOT EXCEED 25 FEET AT EXTERIOR WALLS AND 32 FEET AT INTERIOR WALLS.

E S4.1 TYPICAL C.M.U. CONTROL JOINT DETAIL (C.J.)

NOT TO SCALE



NOTES:
1. MORTAR WEBS OF BLOCK AT VERTICAL REINFORCING TO PREVENT GROUT FROM FLOWING INTO THE ADJACENT CELL.
2. UNLESS OTHERWISE SHOWN OR NOTED, REINFORCING SHALL BE PLACED IN THE BOTTOM OF THE BOND BEAM AS SHOWN IN THIS DETAIL. WHERE REINFORCING IS SHOWN OR NOTED TO BE IN THE TOP OF THE BOND BEAM, BAR LOCATION SHALL BE 6 1/2"± 1/2" FROM THE BOTTOM OF THE BOND BEAM AND THE BOND BEAM UNIT SHALL BE INVERTED SUCH THAT THE REMAINING WEB IS IN THE BOTTOM.
3. REINFORCING SHALL HAVE 1/2" MINIMUM GROUT COVER TO ALL C.M.U. SURFACES.
4. GROUT STOP SCREEN SHALL BE DUR-O-STOP AS MANUFACTURED BY DUR-O-WAL OR OTHER APPROVED EQUIVALENT.
5. USE LINTEL BLOCK WHERE BOND BEAM OCCURS DIRECTLY ABOVE WINDOW, DOOR, OR LOUVER OPENING.

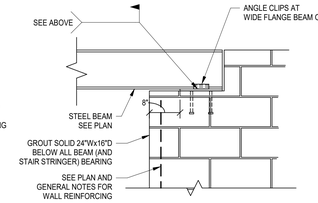


MARK	SIZE
BP1	1/2x5x10
BP2	1/2x7x8
BP3	3/4x5x10
BP4	1x9x11 (LONG DIM PERPENDICULAR TO WALL)
BP5	1x9x11

NOTES:
1. BEAMS SHALL BEAR FULL LENGTH OF BEARING PLATES.
2. LONG DIMENSION OF PLATES SHALL BE PARALLEL TO LENGTH OF WALL U.N.O.

DETAIL AT BEAM PERPENDICULAR TO WALL

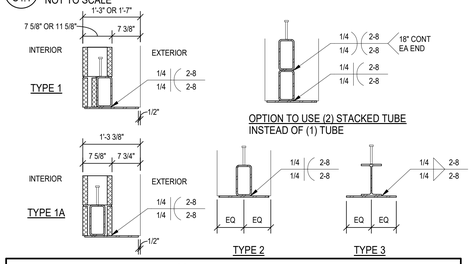
DETAIL AT SLOPE BEARING



DETAIL AT BEAM PARALLEL TO WALL

D S4.1 TYPICAL MASONRY LINTEL BEARING DETAIL

NOT TO SCALE



LINTEL SCHEDULE

MARK	TYPE	SIZE	JAMB REINFORCING EACH SIDE OF OPENING	REMARKS
L1	1	HSS8x4x1/4 + CONT GALV PL 3/8x18	(4) #6	
L2	2	HSS8x4x1/4 + CONT PL 3/8x7	(2) #5	
L3	1	HSS8x6x1/4 + CONT GALV PL 3/8x18	(2) #5	
L4	2	HSS16x8x5/16 OR (2) HSS 8x8x5/16 + CONT GALV PL 3/8x11	(3) #5	
L5	1	HSS16x4x5/16 OR (2) HSS 8x4x5/16 + CONT GALV PL 3/8x18	(2) #5	
L6	1	HSS8x6x3/8 + CONT GALV PL 3/8x18	(2) #5	
L7	1	HSS8x4x1/4 + CONT GALV PL 3/8x14	(2) #5	
L8	1	HSS8x4x5/8 + CONT GALV PL 3/8x14	(2) #5	
L9	1	HSS8x4x1/4 + CONT GALV PL 3/8x14	(3) #5	
L10	2	HSS16x4x1/4 OR (2) HSS8x4x1/4 + CONT PL 3/8x11	(2) #5	
L11	3	W16x26 + CONT PL 3/8x11	(2) #5	
L12	3	W24x55 + CONT PL 3/8x11	(2) #5	
L13	2	HSS8x4x1/4 + CONT PL 3/8x11	(2) #5	
L14	2	HSS8x4x5/8 + CONT GALV PL 3/8x15	(2) #5	
L15	1A	HSS16x4x1/4 + CONT GALV PL 3/8x15	(2) #5	
L16	1	HSS16x8x5/16 + CONT GALV PL 3/8x18	(2) #5	

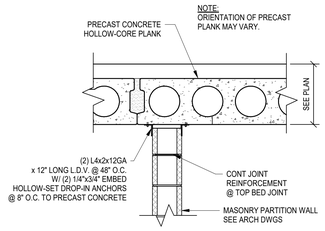
NOTES:
1. LINTELS SHALL BEAR DIRECTLY ON SOLID MASONRY, WITHOUT BEARING PL, U.N.O. BEAR LINTELS 8" ON PARALLEL WALLS AND 5" ON PERPENDICULAR WALLS, U.N.O.
2. WHERE COLUMN FACE OCCURS IN PLANE OF WALL WITHIN 16" OF OPENING, CONNECT LINTEL DIRECTLY TO COLUMN PER DETAIL A/S4.2.
3. EXTEND PLATES FULL LENGTH OF LINTELS. COPE PLATE 3/4"x EXTENSION OVER MASONRY (BEARING LENGTH + VENEER RETURN IF APPLICABLE) FOR MORTAR IN BED JOINT EXCEPT OVER BEARING ON WALL PERPENDICULAR TO LINTEL.
4. PROVIDE 1/2"ø x5" STUD ANCHORS @ 48" O.C. TO TOP FLANGE OF ALL LINTELS IN EXTERIOR WALLS REGARDLESS OF LENGTH AND LINTELS IN INTERIOR WALLS WHERE OPENING IS WIDER THAN 8'-0".
5. PROVIDE 3/4"ø x1'-4" GREASED ROD WELDED AT EACH END OF LINTEL.
6. GALVANIZE ALL LINTEL PLATES LOCATED IN EXTERIOR WALLS.

K S4.1 STEEL LINTEL SCHEDULE

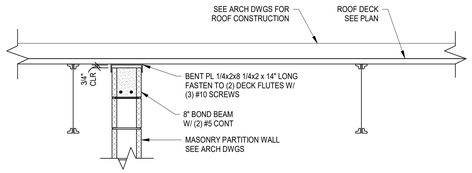
NOT TO SCALE

F S4.1 TYPICAL C.M.U. BOND BEAM DETAIL

NOT TO SCALE

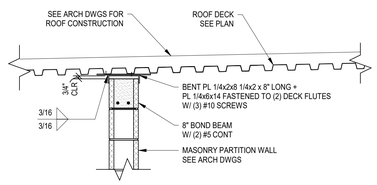


PARTITION BRACE PB1



PARTITION BRACE PB2

DETAIL WHERE ROOF JOIST SPAN IS PARALLEL TO WALL



PARTITION BRACE PB3

DETAIL WHERE ROOF JOIST SPAN IS PERPENDICULAR TO WALL

G S4.1 TYPICAL BEAM BEARING ON MASONRY DETAIL

NOT TO SCALE

NOTES:
1. DETAIL APPLIES AT ALL NON-LOAD BEARING MASONRY PARTITIONS.
2. LEAVE 1" MIN GAP BETWEEN MASONRY WALLS AND ALL SIDES OF STEEL JOISTS/DECK.
3. CONTRACTOR SHALL ADJUST DETAILS AS REQUIRED WHEN PARTITIONS OCCUR DIRECTLY BELOW JOISTS, OR OTHER CONFLICTS. 1" MIN GAP BETWEEN PARTITION AND STRUCTURE SHALL BE MAINTAINED.
4. UNLESS OTHER SPECIFIC ARRANGEMENTS ARE MADE, BRACING OF MASONRY PARTITIONS SHALL BE THE RESPONSIBILITY OF THE MASONRY SUBCONTRACTOR.
5. ADJUST WIDTH OF BENT PL WHICH RECEIVES TOP OF WALL TO MATCH WALL THICKNESS.
6. SPACING BETWEEN PARTITION BRACES IS 12'-0" MAX U.N.O. IF LENGTH OF WALL IS LESS THAN 24'-0", USE ONLY ONE BRACE AT MID-POINT.

L S4.1 TYPICAL MASONRY PARTITION BRACING AT FLOOR OR ROOF DETAIL

NOT TO SCALE

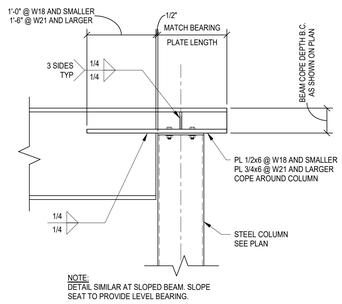
H S4.1 TYPICAL C.M.U. BOND BEAM STEP DETAIL

NOT TO SCALE

ELEVATION

J S4.1 TYPICAL STAIR STRINGER BEND DETAIL

3/4" = 1'-0"



NOTE:
DETAIL SIMILAR AT SLOPED BEAM. SLOPE SEAT TO PROVIDE LEVEL BEARING.

M S4.1 BEAM COPE DETAIL

3/4" = 1'-0"

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TYPICAL FRAMING DETAILS

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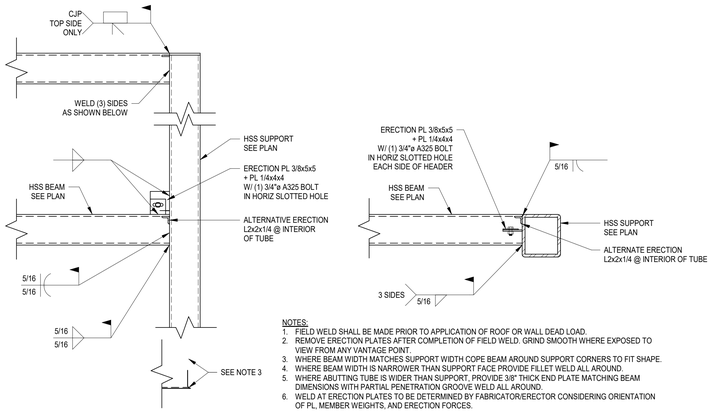
REVISIONS :

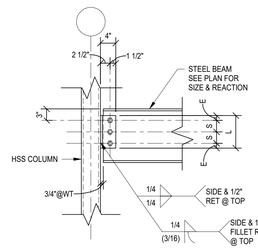
2023-50

S4.1



NOTES:
1. FIELD WELD SHALL BE MADE PRIOR TO APPLICATION OF ROOF OR WALL DEAD LOAD.
2. REMOVE ERECTION PLATES AFTER COMPLETION OF FIELD WELD. GRIND SMOOTH WHERE EXPOSED TO VIEW FROM ANY VANTAGE POINT.
3. WHERE BEAM WIDTH MATCHES SUPPORT WIDTH COPE BEAM AROUND SUPPORT CORNERS TO FIT SHAPE.
4. WHERE BEAM WIDTH IS NARROWER THAN SUPPORT FACE PROVIDE FILLET WELD ALL AROUND.
5. WHERE ABUTTING TUBE IS WIDER THAN SUPPORT, PROVIDE 3/8" THICK END PLATE MATCHING BEAM DIMENSIONS WITH PARTIAL PENETRATION GROOVE WELD ALL AROUND.
6. WELD AT ERECTION PLATES TO BE DETERMINED BY FABRICATOR/ERECTOR CONSIDERING ORIENTATION OF PL, MEMBER WEIGHTS, AND ERECTION FORCES.

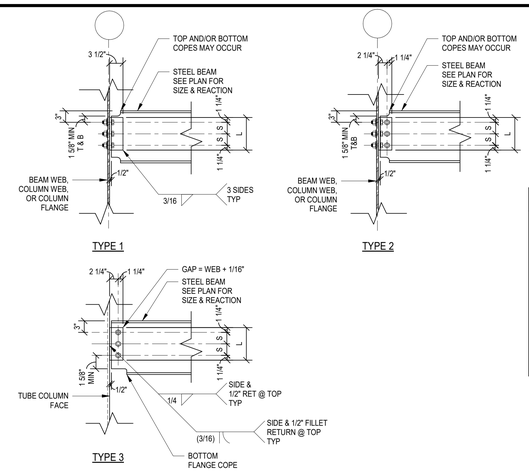
A S4.2 TYPICAL TUBE TO TUBE CONNECTION DETAIL
NOT TO SCALE



CONNECTION CAPACITY TABLE

NO. OF BOLTS ASTM A325-N	3/4"ø BOLTS	
	LENGTH OF WT L (INCHES)	CONNECTION CAPACITY (KIPS)
2	5 1/2	12
3	8 1/2	18
4	11 1/2	26
5	14 1/2	36
6	17 1/2	46
7	20 1/2	56
8	23 1/2	66

NOTES:
1. USE WT4x7.5 CONNECTIONS WITH 3/4"ø BOLTS.
2. ALL BOLTS ASTM A325-N.
3. ALL WELDS E70XX.
4. BOLT SPACING (S) = 3".
5. EDGE DISTANCE (E) = 1 1/4" @ 3/4"ø BOLTS.
6. SHORT HORIZONTAL SLOTTED HOLES MAY BE USED.

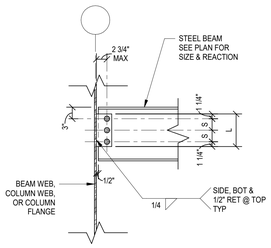


CONNECTION CAPACITY TABLE

NO. OF BOLT ROWS ASTM A325-N	LENGTH OF ANGLE L (INCHES)	ASD CONNECTION CAPACITY (KIPS)		
		TYPE 1	TYPE 2	TYPE 3
2	5 1/2	19	14	14
3	8 1/2	35	24	24
4	11 1/2	58	42	42
5	14 1/2	87	63	63
6	17 1/2	122	88	88
7	20 1/2	151	116	116
8	23 1/2	169	154	149
9	26 1/2	185	177	173
10	29 1/2	202	230	197

NOTES:
1. ALL CONNECTION ANGLES L4x3 1/2x5/16, ASTM A572 GR 50, N.S. & F.S.
2. ALL BOLTS ASTM A325-N, 3/4"ø.
3. ALL WELDS E70XX.
4. BOLT SPACING (S) = 3".
5. SHORT HORIZONTAL SLOTTED HOLES MAY BE USED.
6. WELD AT ERECTION ANGLE TO BE DETERMINED BY FABRICATOR/ERECTOR CONSIDERING MEMBER WEIGHTS AND ERECTION FORCES.

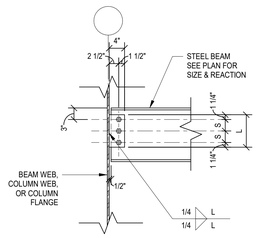
B S4.2 TYPICAL WT SHEAR CONNECTION DETAIL
NOT TO SCALE



CONNECTION CAPACITY TABLE

NO. OF BOLTS ASTM A325-N	LENGTH OF ANGLE L (INCHES)	CONNECTION CAPACITY (KIPS)
2	5 1/2	9
3	8 1/2	18
4	11 1/2	28
5	14 1/2	38
6	17 1/2	48
7	20 1/2	58
8	23 1/2	68
9	26 1/2	77
10	29 1/2	87

NOTES:
1. ALL CONNECTION ANGLES, L4x3x3/8 SLO.
2. ALL BOLTS ASTM A325-N, 3/4"ø.
3. ALL WELDS E70XX.
4. BOLT SPACING (S) = 3".
5. SHORT HORIZONTAL SLOTTED HOLES MAY BE USED AT SUPPORTED BEAM CONNECTION. STANDARD-SIZED HOLES SHALL BE USED IN CONNECTION AT SUPPORT WHERE BOTH LEGS ARE BOLTED.
6. BOTH LEGS MAY BE BOLTED WITH NO REDUCTION IN CONNECTION CAPACITY AS LONG AS THE BOLTS THROUGH THE SUPPORTING MEMBER ARE NOT SHARED WITH A CONNECTION ON THE OPPOSITE SIDE OF THE SUPPORT.

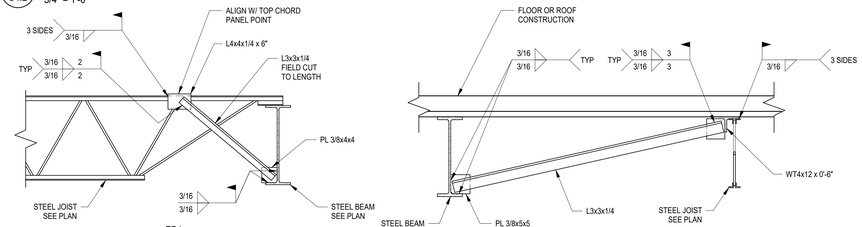


CONNECTION CAPACITY TABLE

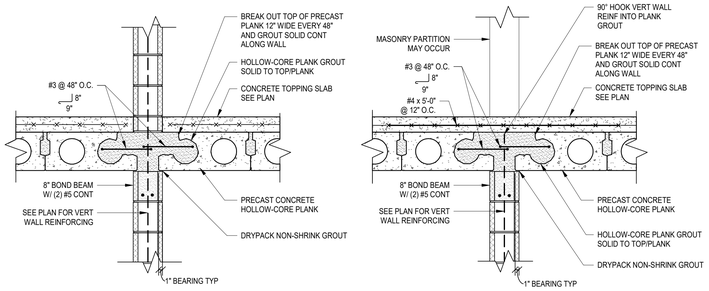
NO. OF BOLTS ASTM A325-N	LENGTH OF PLATE L (INCHES)	CONNECTION CAPACITY (KIPS)
2	5 1/2	12
3	8 1/2	23
4	11 1/2	30
5	14 1/2	40
6	17 1/2	50

NOTES:
1. ALL CONNECTION PLATES, 3/8" THICK.
2. ALL BOLTS ASTM A325-N, 3/4"ø.
3. ALL WELDS E70XX.
4. BOLT SPACING (S) = 3".
5. SHORT HORIZONTAL SLOTTED HOLES MAY BE USED.
6. SINGLE PLATE SHEAR CONNECTIONS ARE NOT PERMITTED WHERE THE REACTION EXCEEDS 50 KIPS. AT FIELD APPLIED CONNECTIONS, OR CONNECTIONS TO COLUMNS (OTHER THAN AT MOMENT CONNECTIONS, SKEWED CONNECTIONS, PIPE COLUMNS, TUBE COLUMNS WITH FACE DIMENSION 4" OR LESS, OR CONNECTIONS WITH REACTIONS LESS THAN 15 KIPS).
7. WHERE CONNECTION PLATE IS SKEWED UP TO 10° RELATIVE TO THE PERPENDICULAR CONDITION, PROVIDE FILLET WELDS AS SHOWN. WHERE PLATE IS SKEWED BETWEEN 10° AND 45°, ADJUST WELDS PER AISC STEEL MANUAL GUIDELINES. WHERE PLATE IS SKEWED BETWEEN 45° AND 60°, PROVIDE CJP WELD WITH BACKER BAR FOR PLATE-TO-SUPPORT CONNECTION.

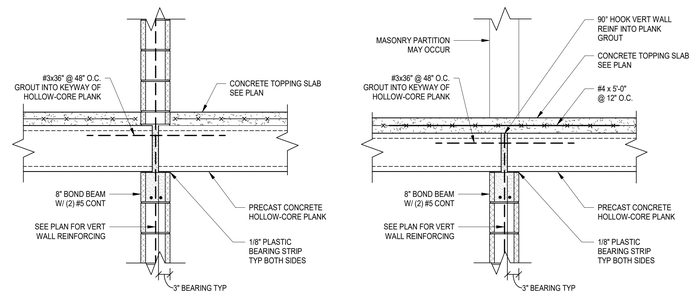
C S4.2 TYPICAL DOUBLE ANGLE SHEAR CONNECTION DETAIL
3/4" = 1'-0"



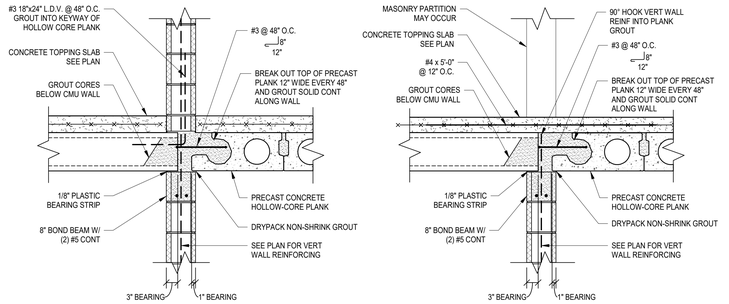
D S4.2 TYPICAL SINGLE ANGLE SHEAR CONNECTION DETAIL
NOT TO SCALE



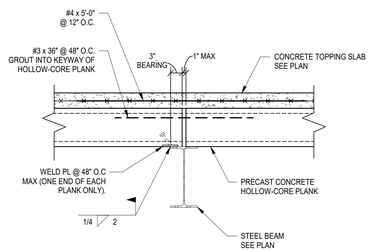
E S4.2 TYPICAL SINGLE PLATE SHEAR CONNECTION DETAIL
NOT TO SCALE



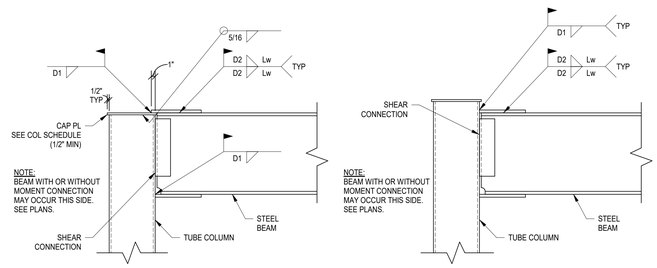
F S4.2 TYPICAL FLANGE BRACE DETAIL
NOT TO SCALE



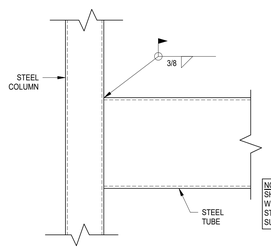
G S4.2 TYPICAL PRECAST SLAB SIDE BEARING ON INTERIOR WALL
NOT TO SCALE



H S4.2 TYPICAL PRECAST SLAB END BEARING ON INTERIOR WALL DETAIL
NOT TO SCALE



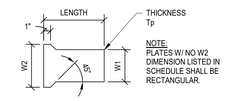
J S4.2 TYPICAL PRECAST SLAB SIDE/END BEARING ON INTERIOR WALL DETAIL
NOT TO SCALE



MOMENT CONNECTION SCHEDULE

MARK	CONNECTION TYPE	FLANGE PLATE							WELDS		
		TOP				BOTTOM					
		Tp	W1	W2	LENGTH	Tp	WIDTH	LENGTH	D1	D2	Lw
MC1	I	1/2	6"	--	8"	1/2	8"	7"	--	3/16	6 1/2
MC2	II	1/2	8"	--	8"	1/2	8"	8"	5/16	3/16	6 1/2
MC3	III	--	--	--	--	--	--	--	--	--	--

NOTE:
SHEAR CONNECTIONS IN CONJUNCTION WITH WELDED FLANGE CONNECTIONS MAY BE SELECTED USING STANDARD AISC CONFIGURATIONS WITH EXCEPTION THAT FAYING SURFACE SHALL BE PREPARED AS A SLIP CRITICAL JOINT.



NOTE:
PLATES W/ NO W2
DIMENSION LISTED IN
SCHEDULE SHALL BE
RECTANGULAR.

TYPICAL FLANGE PLATE

K S4.2 TYPICAL PRECAST SLAB END BEARING ON STEEL BEAM DETAIL
NOT TO SCALE

L S4.2 TYPICAL PRECAST SLAB END BEARING ON EMBEDDED STEEL BEAM
NOT TO SCALE

M S4.2 TYPICAL MOMENT CONNECTION DETAILS
NOT TO SCALE

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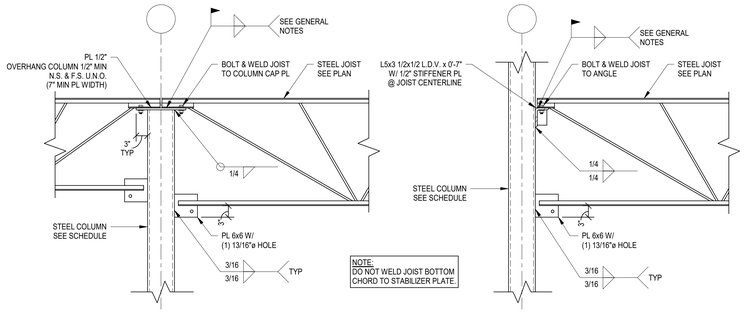
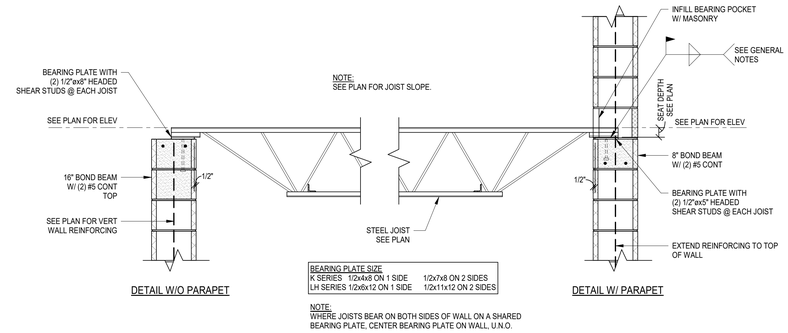
S4.2



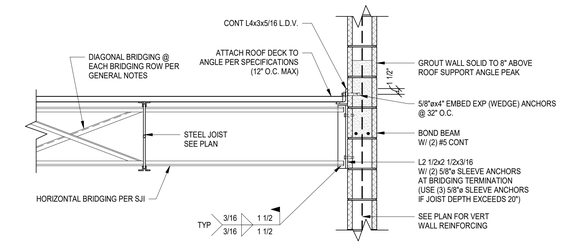
A S4.3 TYPICAL JOIST SEAT ON COLUMN CAP / FACE DETAIL

NOT TO SCALE



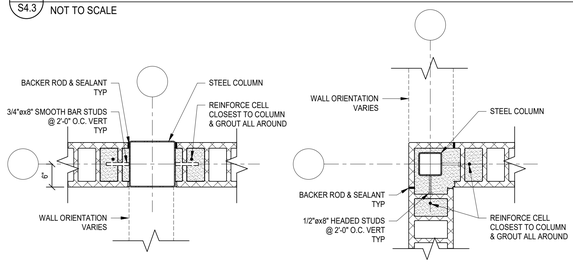
B S4.3 TYPICAL ROOF JOIST BEARING DETAIL

NOT TO SCALE



C S4.3 TYPICAL ROOF JOIST BRIDGING ANCHOR AND ROOF DECK SUPPORT DETAIL

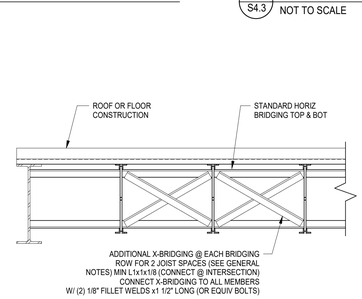
NOT TO SCALE



NOTE: DETAIL APPLIES EVERYWHERE UNLESS TAGGED OTHERWISE.

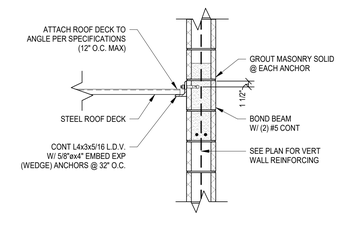
D S4.3 TYPICAL STEEL COLUMN TO C.M.U. WALL CONSTRUCTION

NOT TO SCALE



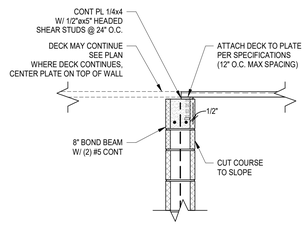
E S4.3 TYPICAL JOIST BRIDGING AT EDGE BEAM DETAIL

NOT TO SCALE



F S4.3 TYPICAL ROOF DECK SUPPORT ANGLE DETAIL

NOT TO SCALE

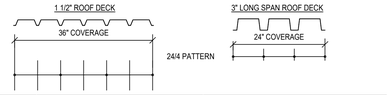


G S4.3 TYPICAL ROOF DECK SUPPORT DETAIL

NOT TO SCALE

FASTEN STEEL FLOOR AND ROOF DECK AS INDICATED BELOW FOR EACH DIAPHRAGM ZONE AS MARKED ON PLAN.

A. FASTEN DECK UNITS AT ENDS AND AT INTERMEDIATE SUPPORTS WITH FASTENERS AS NOTED IN SCHEDULE ACCORDING TO THE FOLLOWING PATTERNS.



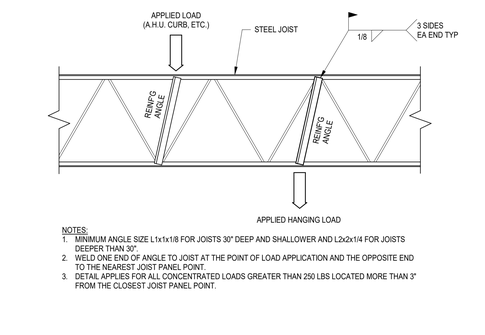
DIAPHRAGM ZONE	DECK TYPE	PANEL ENDS AND INTERMEDIATE SUPPORTS	DECK SIDE LAPS
ALL U.N.O.	3.0NA20	#12 TEK SCREW OR P.A.F. PIN @ 24/4 PATTERN	#10 TEK SCREW @ 18" O.C. MAX
ZONE 1	1.5WR20	#12 TEK SCREW OR P.A.F. PIN @ 36/4 PATTERN	#10 TEK SCREW @ 12" O.C. MAX
ALL, U.N.O.	1.5WR20	#12 TEK SCREW OR P.A.F. PIN @ 36/4 PATTERN	#10 TEK SCREW @ 36" O.C. MAX

B. FASTEN DECK SIDE LAPS, INCLUDING DECK TO CLOSURE PLATES, WITH #10 SELF DRILLING SCREWS AS NOTED IN SCHEDULE.

C. FASTEN DECK PERIMETER SIDE EDGES (PARALLEL TO DECK SPAN), INCLUDING CLOSURE PLATES, TO STEEL SUPPORTS WITH #12 TEK SCREWS OR P.A.F. PIN SPACED AT 12" ON CENTER.

H S4.3 STEEL ROOF DECK FASTENING SCHEDULE

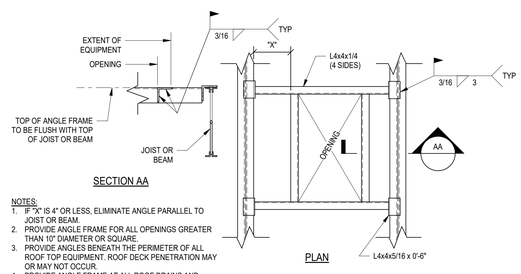
NOT TO SCALE



NOTES:
1. MINIMUM ANGLE SIZE L1x1x1/8 FOR JOISTS 30" DEEP AND SHALLOWER AND L2x2x1/4 FOR JOISTS DEEPER THAN 30".
2. WELD ONE END OF ANGLE TO JOIST AT THE POINT OF LOAD APPLICATION AND THE OPPOSITE END TO THE NEAREST JOIST PANEL POINT.
3. DETAIL APPLIES FOR ALL CONCENTRATED LOADS GREATER THAN 250 LBS LOCATED MORE THAN 3" FROM THE CLOSEST JOIST PANEL POINT.

J S4.3 TYPICAL STEEL JOIST REINFORCING DETAIL

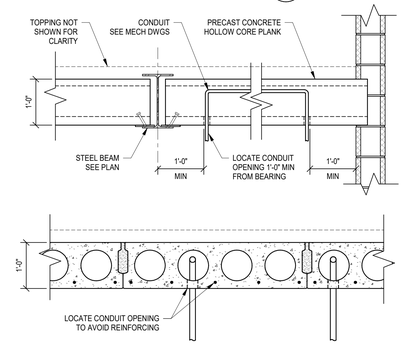
NOT TO SCALE



NOTES:
1. IF "X" IS 4" OR LESS, ELIMINATE ANGLE PARALLEL TO JOIST OR BEAM.
2. PROVIDE ANGLE FRAME FOR ALL OPENINGS GREATER THAN 10" DIAMETER OR SQUARE.
3. PROVIDE ANGLES BENEATH THE PERIMETER OF ALL ROOF TOP EQUIPMENT. ROOF DECK PENETRATION MAY OR MAY NOT OCCUR.
4. PROVIDE ANGLE FRAME AT ALL ROOF DRAINS AND EXHAUST FANS REGARDLESS OF PENETRATION SIZE. SEE MECHANICAL DWGS AND ROOF PLAN FOR LOCATIONS.
5. CONTRACTOR TO VERIFY SIZE AND LOCATION OF ALL OPENINGS. COORDINATE WITH ARCHITECTURAL AND MECHANICAL DWGS.

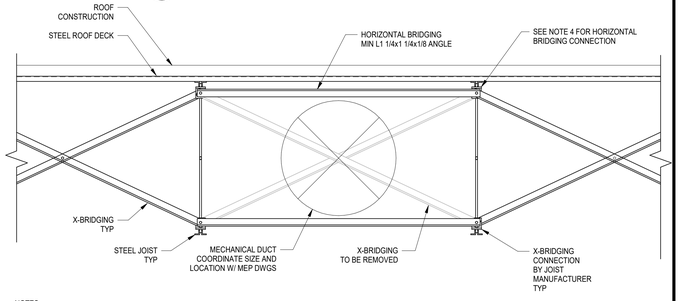
K S4.3 TYPICAL ROOF FRAME OPENING DETAIL

NOT TO SCALE



L S4.3 TYPICAL SECTION OF CONDUIT OPENING LOCATIONS IN PRECAST CONCRETE SLAB

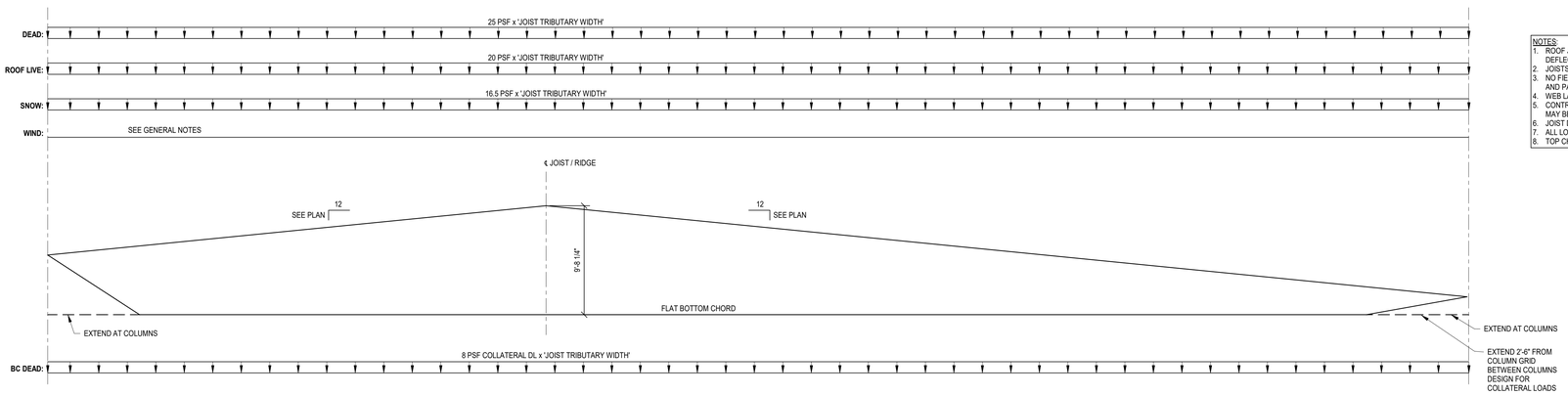
NOT TO SCALE



NOTES:
1. X-BRIDGING SHALL NOT BE REMOVED UNTIL ALL X-BRIDGING, STEEL ROOF DECK, AND HORIZONTAL BRIDGING HAS BEEN INSTALLED.
2. HORIZONTAL BRIDGING SHALL MATCH X-BRIDGING SIZE W/ MINIMUM SIZE OF L1 1/4x1 1/4x1/8.
3. DUCTS SHALL NOT BE INSTALLED IN ADJACENT BAYS OR EVERY OTHER BAY. DUCTS SHALL HAVE A MIN 2 BAYS OF X-BRIDGING BETWEEN THEM.
4. HORIZONTAL BRIDGING SHALL BE CONNECTED TO STEEL JOISTS BY ONE OF THE FOLLOWING METHODS.
   A. (2) #10 TEK SCREWS EACH END.
   B. 3/16" FILLET WELD EACH END.
   C. (1) A307 BOLT EACH END. MATCH X-BRIDGING LENGTH AND DIAMETER.

M S4.3 BRIDGING AT DUCTWORK DETAIL

NOT TO SCALE



N S4.3 STEEL JOIST LOADING DIAGRAM - DLH SP1

NOT TO SCALE

NOTES:
1. ROOF JOISTS SHALL BE DESIGNED FOR MAXIMUM DEFLECTIONS OF L/480 DUE TO LIVE / SNOW LOAD AND L/360 DUE TO TOTAL LOAD UNLESS MORE STRINGENT DEFLECTION CRITERIA ARE LISTED IN DETAILS.
2. JOISTS SHALL BE DESIGNED FOR IBC 2015 / ASCE 2010 LOAD COMBINATIONS.
3. NO FIELD MODIFICATION OF JOISTS IS TO BE DONE TO TRANSFER LOAD TO PANEL POINTS. JOIST DESIGNER SHALL DESIGN AND PROVIDE ADDITIONAL DIAGONALS AND PANEL POINTS AT CONCENTRATED LOADS OR DESIGN BOTTOM CHORDS FOR FLEXURE DUE TO CONCENTRATED LOADS BETWEEN PANEL POINTS.
4. WEB LAYOUT AND FIELD SPLICES SHALL BE IDENTICAL ON ALL JOISTS. PANEL POINTS SHALL ALIGN BETWEEN JOISTS.
5. CONTRACTOR SHALL ACCOUNT FOR ANY ELEVATION DIFFERENCES BETWEEN TOP CHORD OF JOISTS AND CAMBER AND DEFLECTION, SO THAT METAL ROOF DECK MAY BE PROPERLY ATTACHED TO TOP CHORDS OF ALL JOISTS.
6. JOIST DEAD LOAD LISTED IN THESE DIAGRAMS DOES NOT INCLUDE JOIST SELF-WEIGHT. JOIST MANUFACTURER SHALL INCLUDE JOIST SELF-WEIGHT IN JOIST DESIGN.
7. ALL LOADS SHOWN ARE ACTING AT JOIST TOP CHORD, U.N.O. (BC = LOAD ACTING AT BOTTOM CHORD)
8. TOP CHORD EXTENSIONS SHALL BE DESIGNED FOR THE SAME LOADING AS TOP CHORD.

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BG# 25-145

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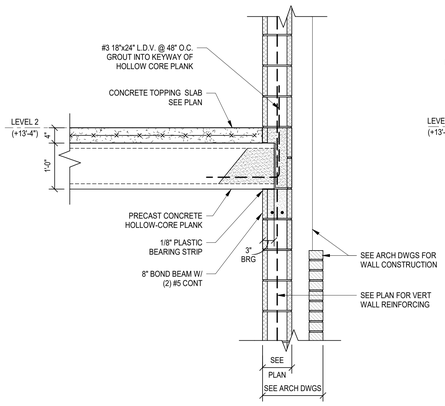
REVISIONS :

2023-50

S4.3

NOTE:
SEE SHEET S4.2 FOR TYPICAL PRECAST DETAILS NOT SHOWN.



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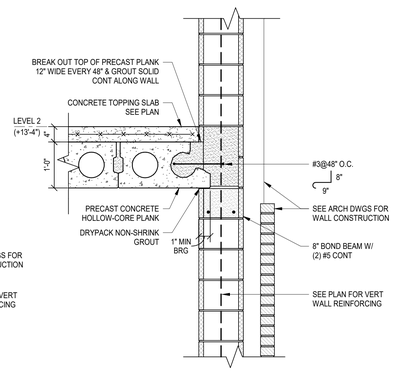

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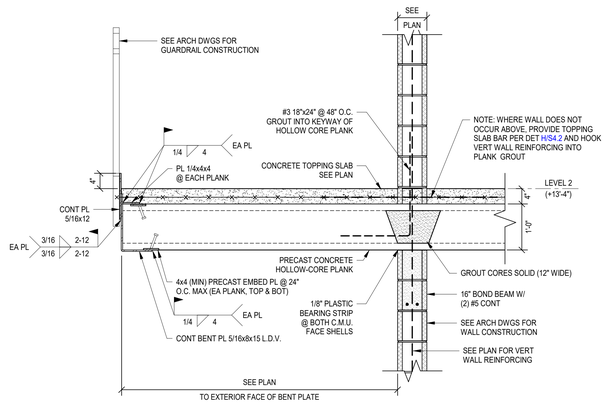

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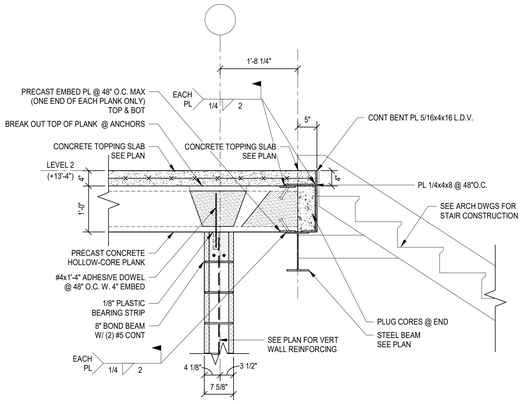

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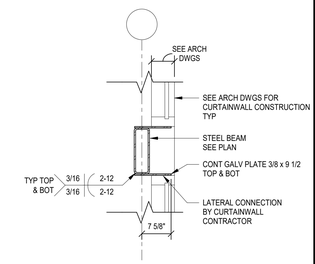

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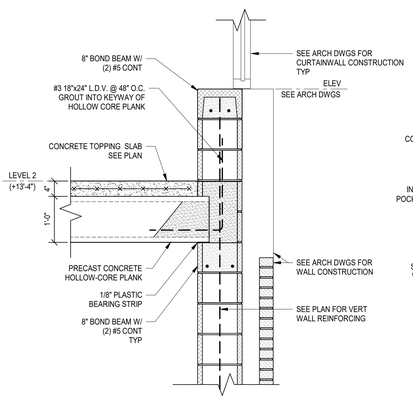

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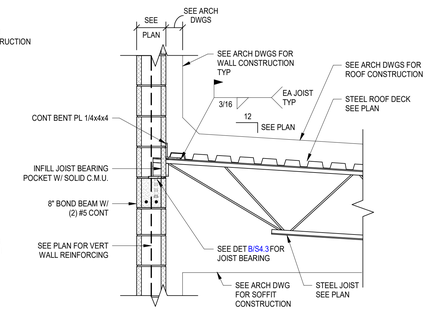

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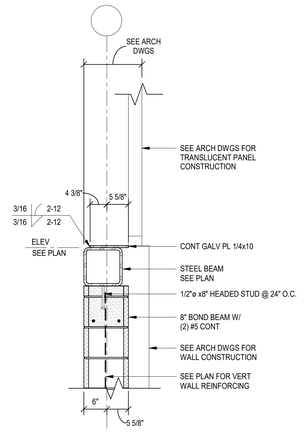

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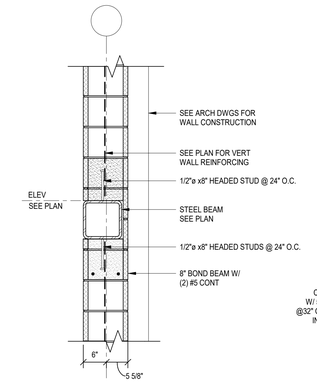

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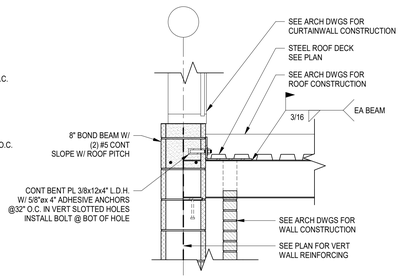

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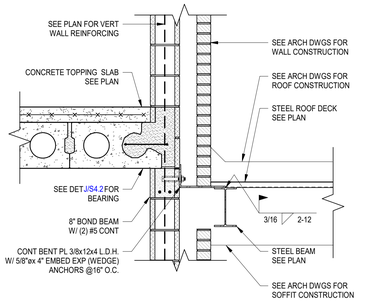

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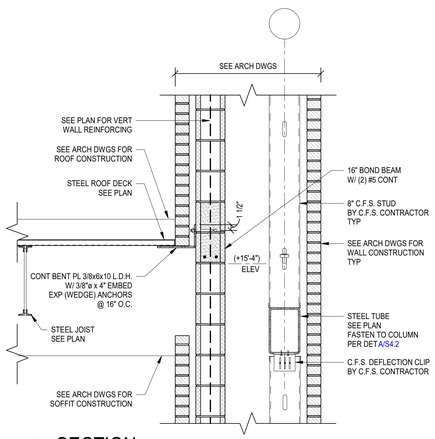

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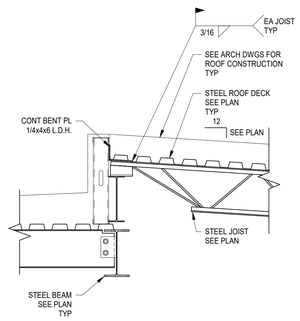

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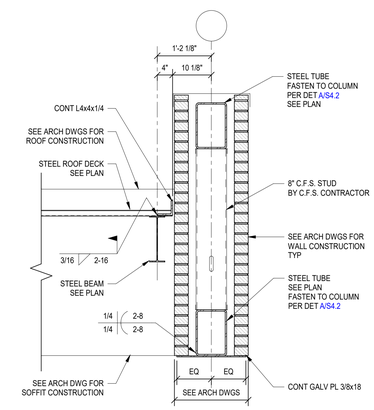

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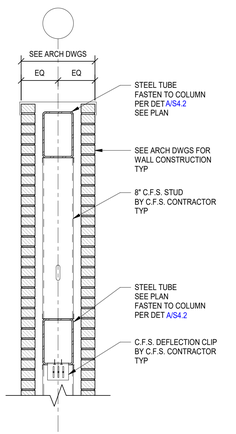

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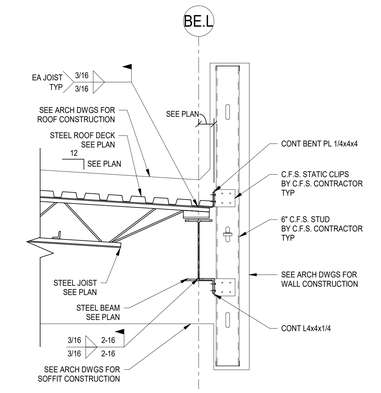

R S4.4 SECTION
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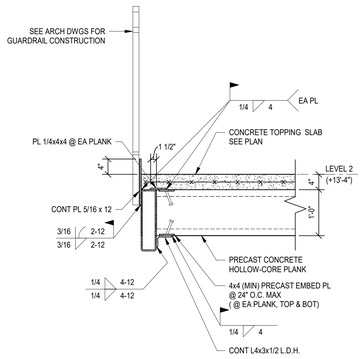

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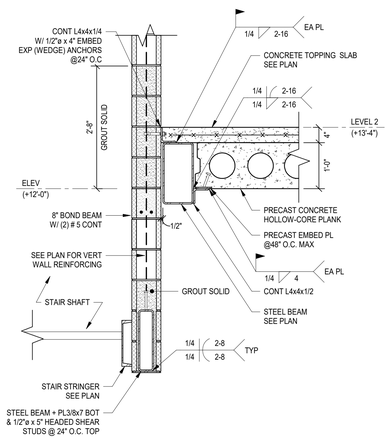

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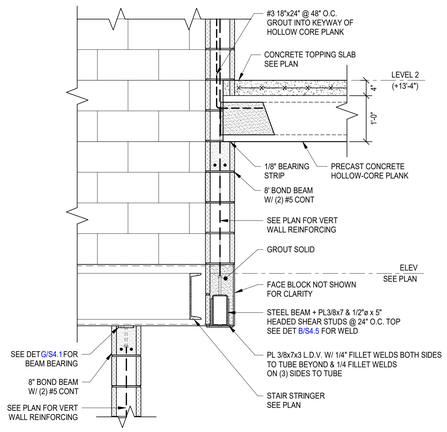

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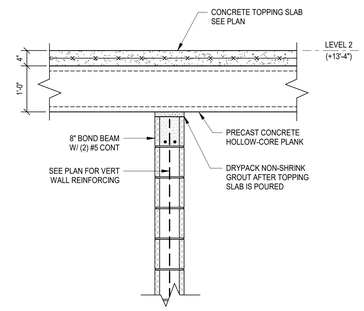

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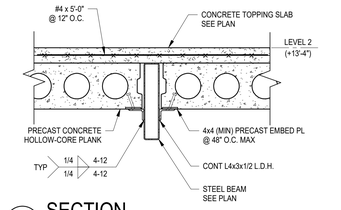

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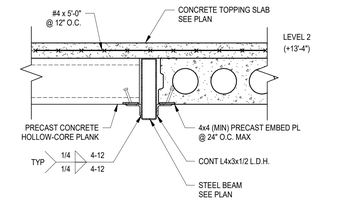

F S4.5 SECTION
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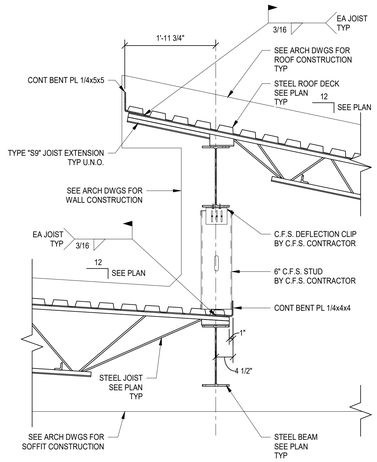

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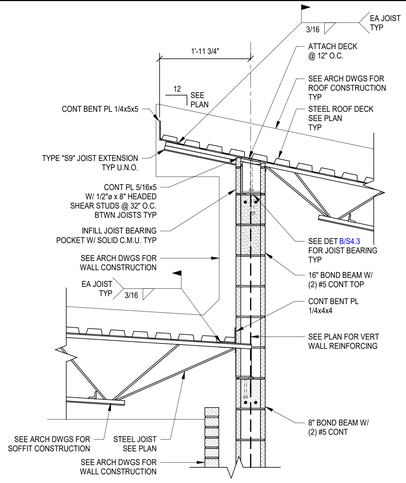

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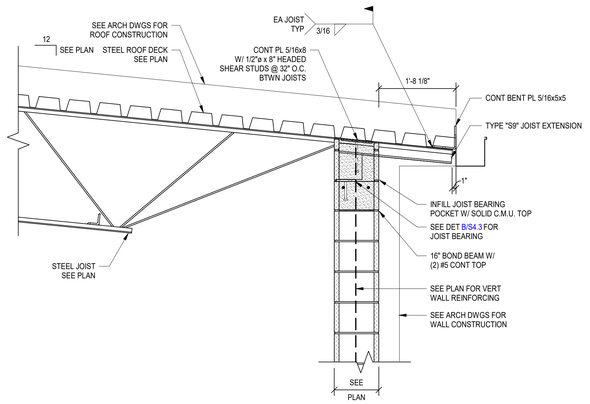

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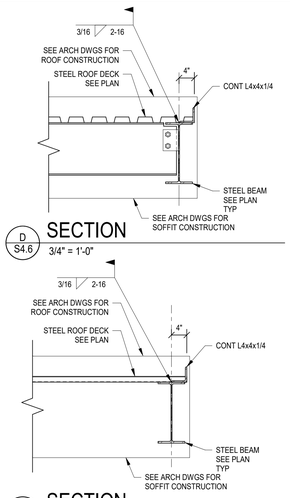

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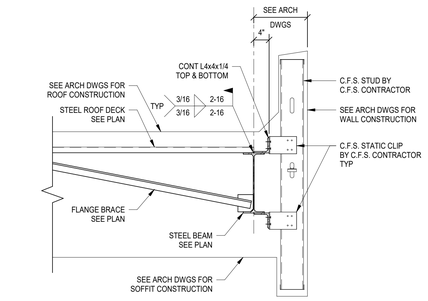

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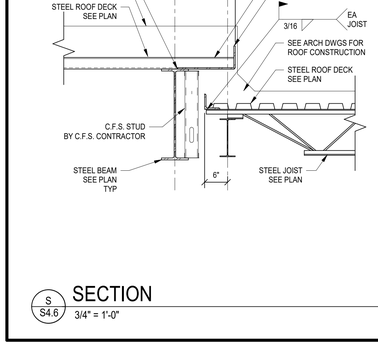

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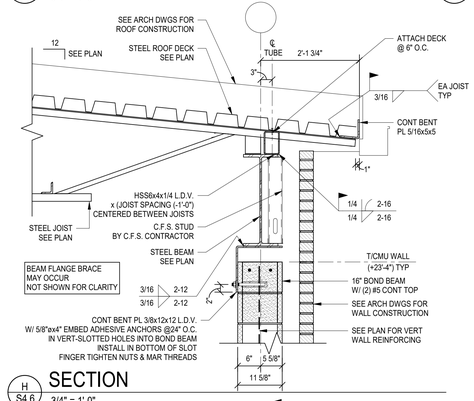

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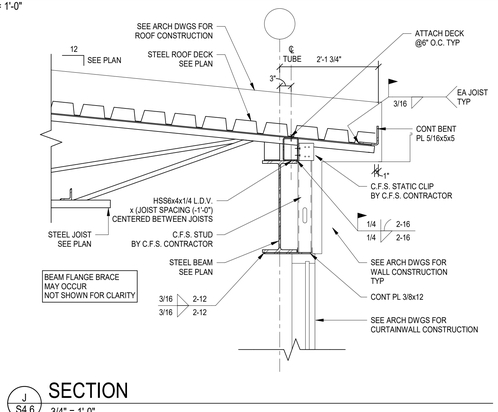

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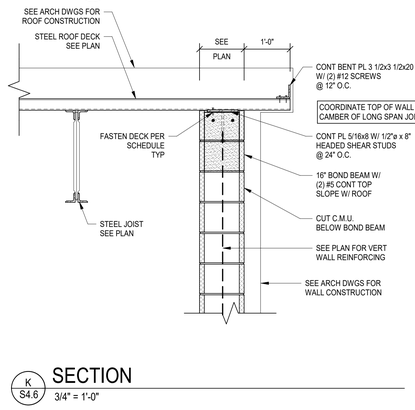

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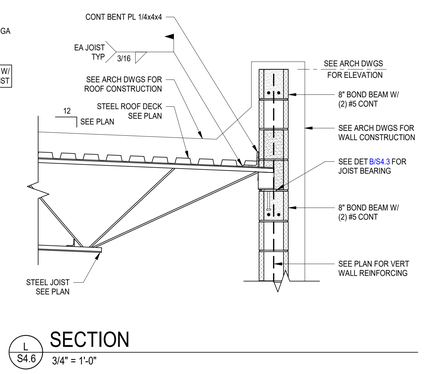

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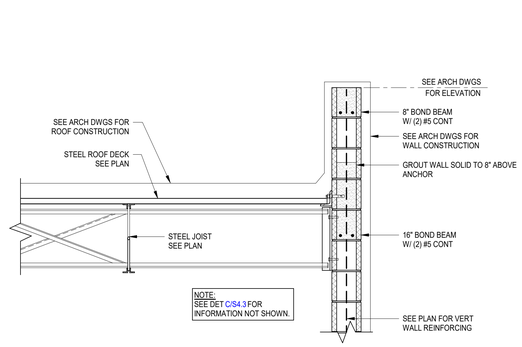

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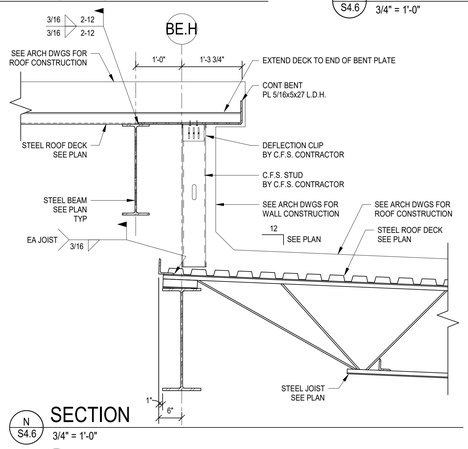

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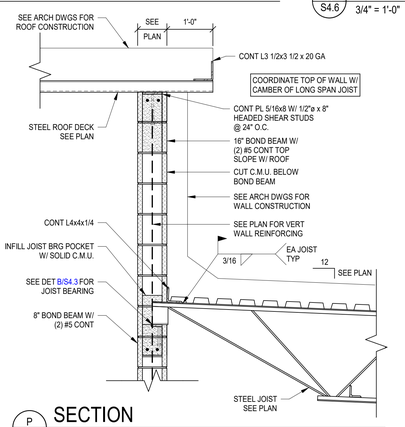
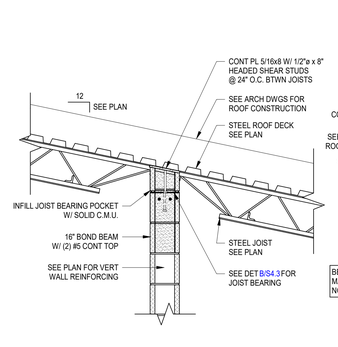
3/4" = 1'-0"



P S4.6 SECTION
3/4" = 1'-0"



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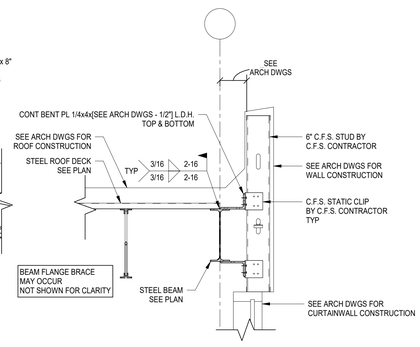
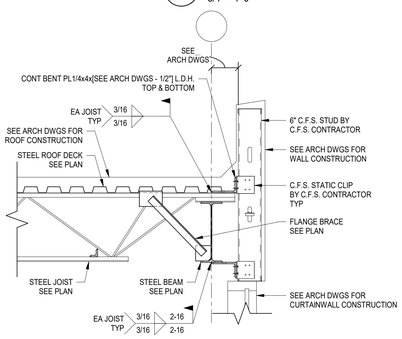
3/4" = 1'-0"

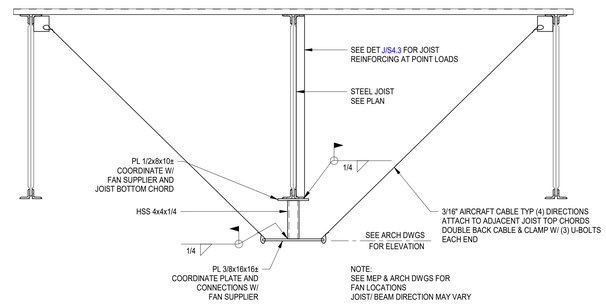


R S4.6 SECTION
3/4" = 1'-0"

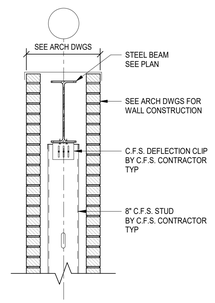
S S4.6 SECTION
3/4" = 1'-0"



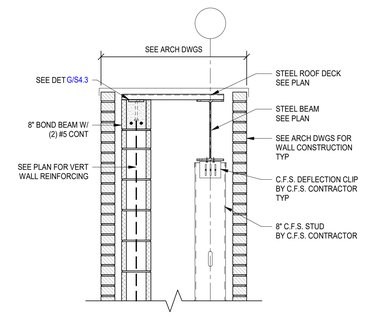
T S4.6 SECTION
3/4" = 1'-0"



U S4.6 FAN HANGER
3/4" = 1'-0"



V S4.6 SECTION
3/4" = 1'-0"



W S4.6 SECTION
3/4" = 1'-0"

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

FRAMING DETAILS

BCPS HIGH SCHOOL PHYSICAL SCIENCE CENTERS

BULLITT COUNTY PUBLIC SCHOOLS
SHEPHERDSVILLE, MT WASHINGTON & HEBRON, KENTUCKY

BG# 25-145

DATE : 04.22.2025
DRAWN BY : JLL/AH
CHECKED BY : AJB
REVISIONS :

2023-50

S4.6

studio kremer architects
1231 S Shelby St, Louisville, KY 40203
TEL 502.499.1100 FAX 502.499.1101

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STRUCTURAL ENGINEERS
8900 Greenway Commons Pl #201 Louisville, KY 40220
502-749-2061 www.brownkubican.com

BG MOVING FORWARD

NOT FOR CONSTRUCTION

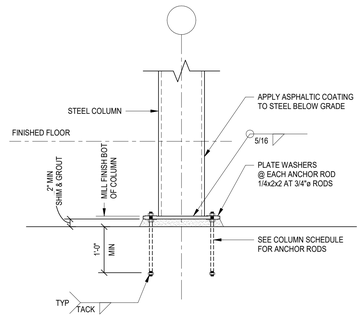
NOT FOR CONSTRUCTION

STEEL COLUMN SCHEDULE

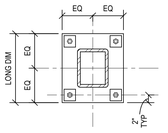
LEVEL 4																														LEVEL 4
35'-0"																														35'-0"
LEVEL 3																														LEVEL 3
25'-0"																														25'-0"
TOP OF HC																														TOP OF HC
13'-0"	HSS8x8x.38	HSS8x8x.38	HSS6x6x.14	HSS6x6x.38	HSS6x6x.14	HSS8x8x.38	HSS8x8x.38	HSS8x8x.38	HSS8x8x.38	HSS8x8x.38	HSS8x8x.38	HSS8x8x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS8x8x.38	HSS8x8x.38	HSS6x6x.14	HSS6x6x.38	HSS6x6x.14	HSS8x8x.38	HSS8x8x.38	HSS8x8x.38	HSS8x8x.38	HSS12x12x.38 (+7'-0") ZRP	HSS12x12x.38 ZRP	13'-0"
LEVEL 1																														LEVEL 1
0"																														0"
BASE PLATE	3/4x16x16	3/4x16x16	3/4x10 1/2x10 1/2	3/4x14x14	1/2x7x12	3/4x16x16	3/4x16x16	3/4x16x16	3/4x16x16	3/4x16x16	3/4x16x16	3/4x12 1/2x12 1/2	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x16x16	3/4x16x16	3/4x10 1/2x10 1/2	3/4x14x14	1/2x7x12	3/4x16x16	3/4x16x16	3/4x16x16	3/4x16x16	3/4x14x14	3/4x20x20	3/4x20x20	
ANCHOR RODS	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø BOLTS	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	C	E	B	B	B	B	B	E	(4) 3/4"ø	(4) 3/4"ø	C	A	D	A	A	(4) 3/4"ø A 1/4	(4) 3/4"ø	(4) 3/4"ø	C	E	B	
BASE PL TYPE	A	A	C	A	D	A	A	A	A	A	A	1/4	1/4	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	A	A	C	A	D	A	A		A	A	C	E	B	
CAP PLATE	1/2	1/2	1/4	1/4	1/2x7x9 1/2	1/2	1/4	1/4	1/4	1/4	1/4	1/4	1/4							1/2	1/2	1/4	1/4	1/2x7x9 1/2	1/2	1/2		1/4	1/4	1/4	1/4	1/2x13x15 1/2	
NOTES	SEE MC1	SEE MC1			SEE DET C/SS.1	SEE MC1	SEE MC1																	SEE DET C/SS.1	SEE MC1	SEE MC1							
Column Locations	BC.1-BC.Q	BC.1-BC.R	BC.2-BC.R	BC.3-BC.G.1	BC.4-BC.H	BC.5-BC.N	BC.5-BC.P	BC.6-BC.K	BC.6-BC.L	BC.6-BC.M	BC.7-BC.J	BC.8-BC.A	BC.8-BC.B	BC.8-BC.C	BC.8-BC.D	BC.8-BC.E	BC.8-BC.F	BC.8-BC.G	BC.8-BC.H	BE.1-BE.M	BE.1-BE.Q	BE.2-BE.Q	BE.3-BE.G.1	BE.4-BE.H	BE.5-BE.L	BE.5-BE.P	BE.6-BE.K	BE.6-BE.L	BE.6-BE.N	BE.7-BE.J	BE.8-BE.A	BE.8-BE.B	

LEVEL 4																														LEVEL 4
35'-0"																														35'-0"
LEVEL 3																														LEVEL 3
25'-0"																														25'-0"
TOP OF HC																														TOP OF HC
13'-0"	HSS12x12x.38 (+7'-0") ZRP	HSS12x12x.38 ZRP	HSS12x12x.38 ZRP	HSS12x12x.38 ZRP	HSS12x12x.38 ZRP	HSS12x12x.38 ZRP	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS12x12x.38	HSS8x8x.38	HSS6x6x.38	HSS8x8x.38	HSS6x6x.18	HSS8x8x.38	HSS6x6x.14	HSS8x8x.38	HSS6x6x.14	HSS8x8x.38	HSS8x8x.38	HSS8x8x.38						13'-0"
LEVEL 1																														LEVEL 1
0"																														0"
BASE PLATE	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x20x20	3/4x16x16	3/4x12 1/2x12 1/2	3/4x16x16	3/4x16x16	3/4x16x16	1/2x7x12	3/4x14x14	3/4x10 1/2x10 1/2	3/4x16x16	3/4x16x16							
ANCHOR RODS	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	C	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø	(4) 3/4"ø A 1/2x9 1/2	(4) 3/4"ø	C	(4) 3/4"ø	(4) 3/4"ø						
BASE PL TYPE	B	B	B	B	B	E	E	B	B	B	B	B	B	B	B	E	A	A	A	A	D	A	C	A	A						
CAP PLATE	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/4	1/4	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/2x13x15 1/2	1/4	1/2	1/4	1/2	1/2 SEE MC1	1/2 SEE MC1	1/2x7x9 1/2 SEE DET C/SS.1	1/4	1/4	1/2 SEE MC1	1/2 SEE MC1						
NOTES																														
Column Locations	BE.8-BE.C	BE.8-BE.D	BE.8-BE.E	BE.8-BE.F	BE.8-BE.G	BE.8-BE.H	BN.1-BN.A	BN.1-BN.B	BN.1-BN.C	BN.1-BN.D	BN.1-BN.E	BN.1-BN.F	BN.1-BN.G	BN.1-BN.H	BN.2-BN.L	BN.3-BN.J	BN.3-BN.L	BN.4-BN.L.4	BN.5-BN.L.4	BN.6-BN.H	BN.7-BN.G.1	BN.8-BN.M	BN.9-BN.L.1	BN.9-BN.M							

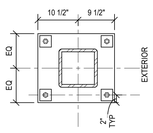
COLUMN SCHEDULE NOTES:
1. SEE PLAN FOR TOP OF FOUNDATION OR PIER ELEVATION.
2. SEE DETAIL A/SS.1 FOR BASE PLATE INFORMATION.
3. CAP PLATES SHALL BE WELDED TO COLUMN WITH ALL-AROUND SEAL WELD U.N.O.
4. WHERE COLUMN EXTENDS TO UNDERSIDE OF ROOF DECK, SLOPE TOP OF COLUMN TO MATCH ROOF DECK SLOPE.
5. COORDINATE BOTTOM OF BASE PLATE ELEVATION WITH SUPPORTING FOUNDATION ELEMENT ELEVATION GIVEN ON PLAN (FOOTING OR PIER) & DETAIL A/SS.1.
6. WHERE TOP OF COLUMN ENDS AT FLOOR LEVEL, TOP OF COLUMN SHALL MATCH TOP OF ADJACENT STEEL BEAM FRAMING ELEVATION. WHERE TOP OF COLUMN ENDS AT ROOF LEVEL (DECK ON STEEL FRAMING) COORDINATE TOP OF COLUMN ELEVATION WITH ELEVATIONS NOTED ON PLAN & FRAMING SECTIONS.
7. COORDINATE WITH PLANS AND MOMENT CONNECTION SCHEDULE FOR CAP PLATE DIM & PLATE ELEVATION WHERE MOMENT CONNECTION OCCURS AT TOP OF COLUMN.
8. COORDINATE WITH DETAIL A/S4.3 FOR CAP PLATE CONDITION WHERE STEEL JOIST BEARS ON TOP OF COLUMN.
9. ZRP= ZINC RICH PRIMER BELOW GRADE.



NOTES:
1. GROUT SHALL BE 8,000 P.S.I. NON-SHRINK, NON-METALLIC GROUT.
2. LEVELING PLATES ARE OPTIONAL.
3. ANCHOR RODS SHALL BE ASTM F1554 ROD WITH NUTS AND WASHERS AS SHOWN. WELD BOTTOM NUT (BELOW) TO ANCHOR ROD PRIOR TO INSTALLING ROD.
4. HOLES IN BASE PLATES SHALL BE OVERSIZED, PER AISC STANDARDS, UNLESS NOTED OTHERWISE.
5. ANCHOR ROD BELOW COLUMN INTENDED FOR VERTICAL SUPPORT DURING ERECTION ONLY. NO TOP NUT/WASHER NEED BE PROVIDED (BASE PL TYPE C).
6. LONG DIMENSION OF BASE PLATE SHALL BE PARALLEL TO LONG DIMENSION OF HSS COLUMN, UNLESS NOTED OTHERWISE.



TYPE A



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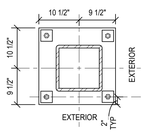
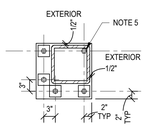
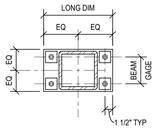


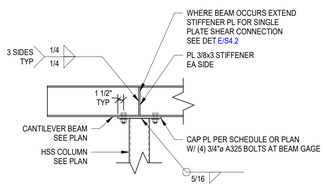
TYPE E

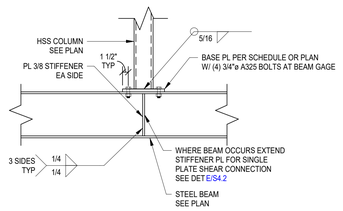


TYPE C



TYPE D





A S5.1 TYPICAL STEEL COLUMN BASE PLATE SETTING DETAIL
NOT TO SCALE

B S5.1 TYPICAL CANTILEVER BEAM DETAILS
NOT TO SCALE

C S5.1 TYPICAL TUBE COLUMN ABOVE BEAM DETAIL
NOT TO SCALE

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8900 Greenway Commons Pl #201
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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

STEEL COLUMN SCHEDULE

BCPS HIGH SCHOOL PHYSICAL SCIENCE CENTERS
BULLITT COUNTY PUBLIC SCHOOLS
SHEPHERDSVILLE, MT WASHINGTON & HEBRON, KENTUCKY

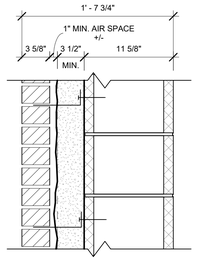
BG# 25-145

DATE : 04.22.2025
DRAWN BY : JLL/AH
CHECKED BY : AJB
REVISIONS :

2023-50

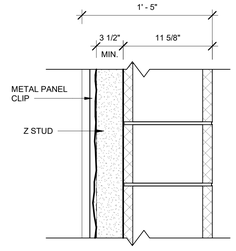
S5.1

EXTERIOR WALL TYPES:



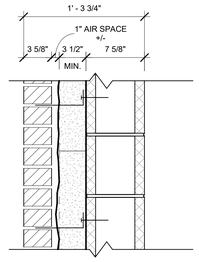
E1.1

- 4" NOMINAL FACE BRICK VENEER
  - W/ MASONRY TIES AT 16" O.C. VERTICALLY, AND 24" O.C. HORIZONTALLY
- 1" AIR SPACE
- 3 1/2" MIN. THICKNESS CLOSED CELL SPRAY FOAM INSULATION
- 12" REINFORCED CONCRETE MASONRY UNIT
  - 11-5/8" ACTUAL AND 12" NOMINAL
  - TRUSS TYPE HORIZONTAL REINFORCING
  - REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS



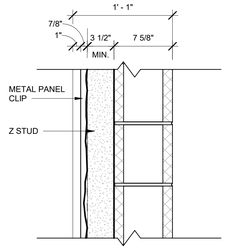
E1.1A

- 1" CONCEALED FASTENER METAL SIDING
- 7/8" HAT CHANNELS @ 16" O.C. / OR PANEL CLIPS
- 3 1/2" METAL ZEE STUDS @ 16" O.C
- 3 1/2" MIN. THICKNESS CLOSED CELL SPRAY FOAM INSULATION
- 12" REINFORCED CONCRETE MASONRY UNIT
  - 11-5/8" ACTUAL AND 12" NOMINAL
  - TRUSS TYPE HORIZONTAL REINFORCING
  - REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS



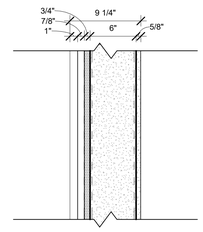
E1.2

- 4" NOMINAL FACE BRICK VENEER
  - W/ MASONRY TIES AT 16" O.C. VERTICALLY, AND 24" O.C. HORIZONTALLY
- 1" AIR SPACE
- 3 1/2" MIN. THICKNESS CLOSED CELL SPRAY FOAM INSULATION
- 8" REINFORCED CONCRETE MASONRY UNIT
  - 8" ACTUAL AND 12" NOMINAL
  - TRUSS TYPE HORIZONTAL REINFORCING
  - REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS



E1.2A

- 1" CONCEALED FASTENER METAL SIDING WITH METAL PANEL CLIPS
- 3 1/2" METAL ZEE STUDS @ 16" O.C
- 3 1/2" MIN. THICKNESS CLOSED CELL SPRAY FOAM INSULATION
- 12" REINFORCED CONCRETE MASONRY UNIT
  - 11-5/8" ACTUAL AND 12" NOMINAL
  - TRUSS TYPE HORIZONTAL REINFORCING
  - REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS



E2.1

6" METAL STUD CORE WITH METAL SIDING

- 1" METAL SIDING
- 7/8" METAL HAT CHANNELS
- 3/4" PRESSURE TREATED PLYWOOD SHEATHING
- 6" METAL STUD @ 16" O.C. WITH CLOSED CELL SPRAY FOAM INSULATION
- 5/8" HIGH-IMPACT GYPSUM WALLBOARD

WALL TYPE GENERAL NOTES:

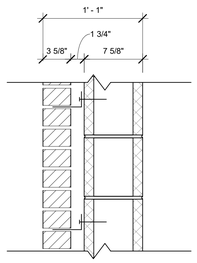
1. ALL PARTITION WALLS TO EXTEND TO UNDERSIDE OF FLOOR DECK OR ROOF DECK - UNLESS NOTED OTHERWISE.
2. ALL PARTITION WALLS AT ROOF TRUSS LOCATIONS TO EXTEND TO BOTTOM OF ROOF TRUSS - UNLESS NOTED OTHERWISE.
3. PROVIDE FIRESTOPPING AT THE PERIMETER OF ALL RATED WALL OPENINGS.
4. WHERE NON-BEARING METAL STUD WALLS DO NOT EXTEND TO DECK, PROVIDE HORIZONTAL BRACING AT TOP OF WALL, AT WALL CORNERS.
5. WHERE NON-BEARING CMU WALLS EXTEND TO DECK, HOLD CMU 1" FROM BOTTOM OF DECK AND FILL VOIDS AT DECK AND VOIDS AT TOP OF WALL WITH SOUND ATTENUATION BATTS UNLESS ENLARGED DETAIL NOTES OTHERWISE.
6. REFER TO STRUCTURAL DRAWINGS FOR CMU WALL BRACING REQUIREMENTS.
7. PROVIDE CORNER BEADS AT ALL OUTSIDE CORNERS OF GWB WALLS, BULKHEADS, SOFFITS, ETC.
8. PROVIDE CORNER GUARDS (PER SECTION 10 26 00) AT ALL OUTSIDE CORNERS OF GWB BOARD, INCLUDING DOOR OPENINGS. CORNER GUARD NOT REQUIRED AT OUTSIDE CORNERS OF WINDOW OPENINGS.
9. PROVIDE BULLNOSE UNITS AT ALL EXPOSED CONCRETE BLOCK CORNERS AND SILLS UNLESS NOTED OTHERWISE.
10. CONTRACTOR SHALL ENSURE THAT ALL RATED WALL CONSTRUCTION IS CONSTRUCTED TIGHT TO UNDERSIDE OF FLOOR AND OR ROOF STRUCTURE ABOVE, AND THAT ALL PENETRATIONS ARE FIRESTOPPED. COORDINATE WITH MEP DRAWINGS FOR RATED PENETRATION REQUIREMENTS.
11. ALL GYPSUM WALL BOARD TO BE TYPE X, HIGH-IMPACT WALL BOARD, TYPICAL. THIS INCLUDES ALL BULKHEADS, SOFFITS AND CEILINGS.

WALL TYPES LEGEND:

CORE MATERIAL DESIGNATION:

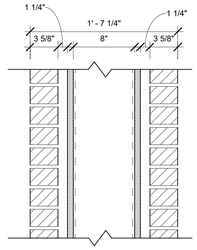
1 - CMU
2 - METAL STUD
5 - CONCRETE

EXTERIOR MONUMENT WALL TYPES:



M1.2

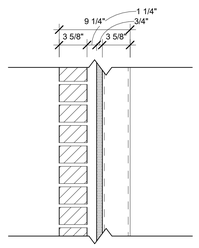
- 4" NOMINAL FACE BRICK VENEER
  - W/ MASONRY TIES AT 16" O.C. VERTICALLY, AND 24" O.C. HORIZONTALLY
- 1 3/4" AIR SPACE
- 8" REINFORCED CONCRETE MASONRY UNIT
  - 8" ACTUAL AND 12" NOMINAL
  - TRUSS TYPE HORIZONTAL REINFORCING
  - REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS



M2.1

8" METAL STUD CORE WITH BRICK VENEER

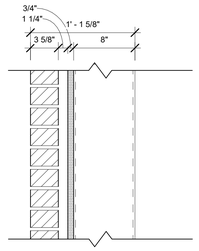
- 4" NOMINAL FACE BRICK VENEER *(EACH SIDE)*
  - W/ MASONRY TIES AT 16" O.C. VERTICALLY, AND 24" O.C. HORIZONTALLY
- 1 1/4" AIR SPACE *(EACH SIDE)*
- 3/4" PRESSURE TREATED PLYWOOD SHEATHING *(EACH SIDE)*
- 8" METAL STUD @ 16" O.C.
  - STUD FRAMING TO COORDINATE WITH TUBE STEEL STRUCTURE AND ROOF LEADERS. SEE STRUCTURAL AND PLUMBING DRAWINGS.



M2.2

3 5/8" METAL STUD CORE WITH BRICK VENEER

- 4" NOMINAL FACE BRICK VENEER
  - W/ MASONRY TIES AT 16" O.C. VERTICALLY, AND 24" O.C. HORIZONTALLY
- 1 1/4" AIR SPACE
- 3/4" PRESSURE TREATED PLYWOOD SHEATHING
- 3 5/8" METAL STUD @ 16" O.C.
  - STUD FRAMING TO COORDINATE WITH TUBE STEEL STRUCTURE AND ROOF LEADERS. SEE STRUCTURAL AND PLUMBING DRAWINGS.

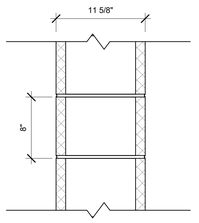


M2.3

8" METAL STUD CORE WITH BRICK VENEER

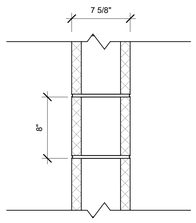
- 4" NOMINAL FACE BRICK VENEER
  - W/ MASONRY TIES AT 16" O.C. VERTICALLY, AND 24" O.C. HORIZONTALLY
- 1 1/4" AIR SPACE
- 3/4" PRESSURE TREATED PLYWOOD SHEATHING
- 8" METAL STUD @ 16" O.C.
  - STUD FRAMING TO COORDINATE WITH TUBE STEEL STRUCTURE AND ROOF LEADERS. SEE STRUCTURAL AND PLUMBING DRAWINGS.

PARTITION TYPES:



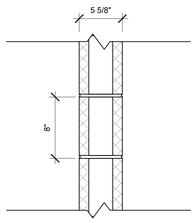
1.1

- 12" REINFORCED CONCRETE MASONRY UNIT
  - 11-5/8" ACTUAL AND 12" NOMINAL
  - TRUSS TYPE HORIZONTAL REINFORCING
  - REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS



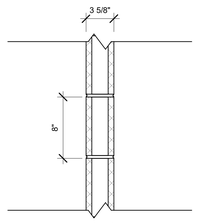
1.2

- 8" REINFORCED CONCRETE MASONRY UNIT
  - 7-5/8" ACTUAL AND 8" NOMINAL
  - TRUSS TYPE HORIZONTAL REINFORCING
  - REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS



1.3

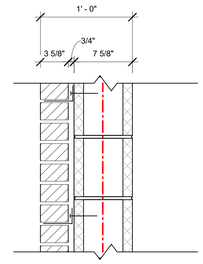
- 6" REINFORCED CONCRETE MASONRY UNIT
  - 5-5/8" ACTUAL AND 6" NOMINAL
  - TRUSS TYPE HORIZONTAL REINFORCING
  - REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS



1.4

- 4" REINFORCED CONCRETE MASONRY UNIT
  - 3-5/8" ACTUAL AND 4" NOMINAL
  - TRUSS TYPE HORIZONTAL REINFORCING
  - REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS

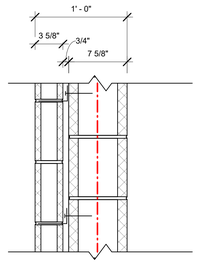
RATED WALL AND PARTITION TYPES:



F1.1

8" REINFORCED CONCRETE MASONRY UNIT W/ BRICK VENEER - ELEVATOR SHAFT WALL (1-HOUR FIRE BARRIER)

- 4" NOMINAL GLAZED FACE BRICK VENEER - SEE FIELD HOUSE MASONRY TYPES FOR GLAZED BRICK COLOR.
  3-5/8" X 2-1/4" X 7-5/8" W/ ADJUSTABLE MASONRY TIES - SEE WALL TYPE GENERAL NOTES FOR ADDITIONAL DETAILS
- 3/4" AIR SPACE
- 7-5/8" ACTUAL AND 8" NOMINAL (UL U905)
- TRUSS TYPE HORIZONTAL REINFORCING
- REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS



F1.2

8" REINFORCED CONCRETE MASONRY UNIT W/ 4-INCH CMU VENEER - ELEVATOR SHAFT WALL (1-HOUR FIRE BARRIER)

- 4" REINFORCED CONCRETE MASONRY UNIT (3-5/8" ACTUAL) WITH TRUSS TYPE HORIZONTAL REINFORCING
- 3/4" AIR SPACE
- 7-5/8" ACTUAL AND 8" NOMINAL (UL U905)
- TRUSS TYPE HORIZONTAL REINFORCING
- REFER TO STRUCT. FOR ADDITIONAL REINFORCING AND GROUT REQUIREMENTS

1 WALL AND PARTITION TYPES - FIELD HOUSES
1 1/2" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

WALL TYPES – FIELD HOUSES

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
650 Z5-145

BG# 25-145

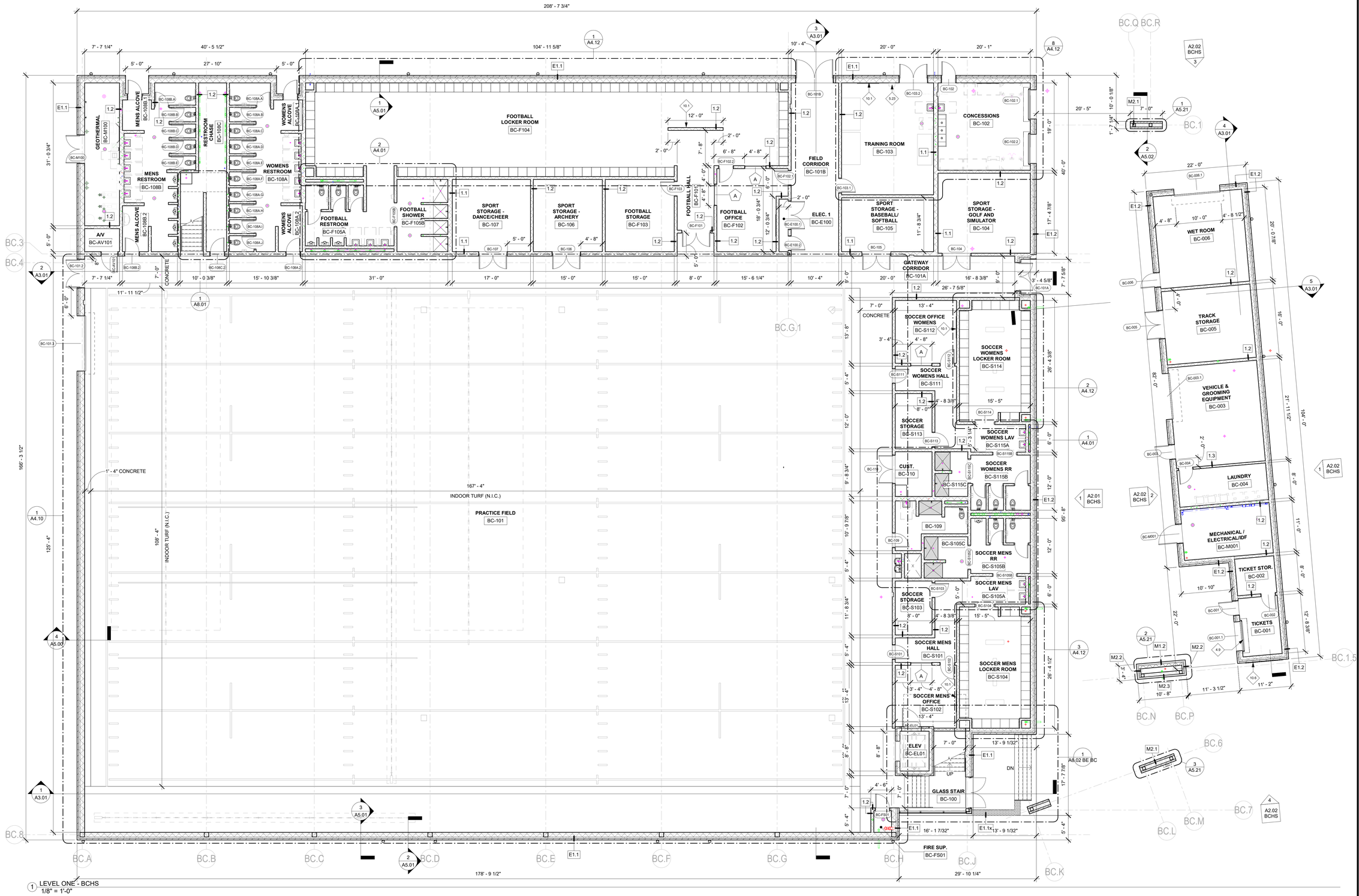
DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :
2 Addendum No. 2 SEP 06 2024

2023-50.1

A0.01

KEYNOTE LEGEND

4.9	COILING COUNTER DOOR - REFER TO DOOR SCHEDULE FOR DESCRIPTION.
5.23	DEFIBRILLATION CABINET, WALL MOUNTED
10.1	WALL MOUNTED TV O.F.O.I. G.C. TO PROVIDE DATA AND POWER - COORDINATE DATA AND ELECTRICAL REQUIREMENTS WITH ELECTRICAL (BP1) AND COMMUNICATION DRAWINGS (BP3).
10.6	LED DISPLAY VIDEO BOARD - SEE ELECTRICAL AND TECHNOLOGY DRAWINGS (BP4) FOR CONNECTIONS.



1 LEVEL ONE - BCHS
1/8" = 1'-0"

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

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BULLITT CENTRAL – FLOOR PLAN – LEVEL 1

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BS'25-145

BG# 25-145

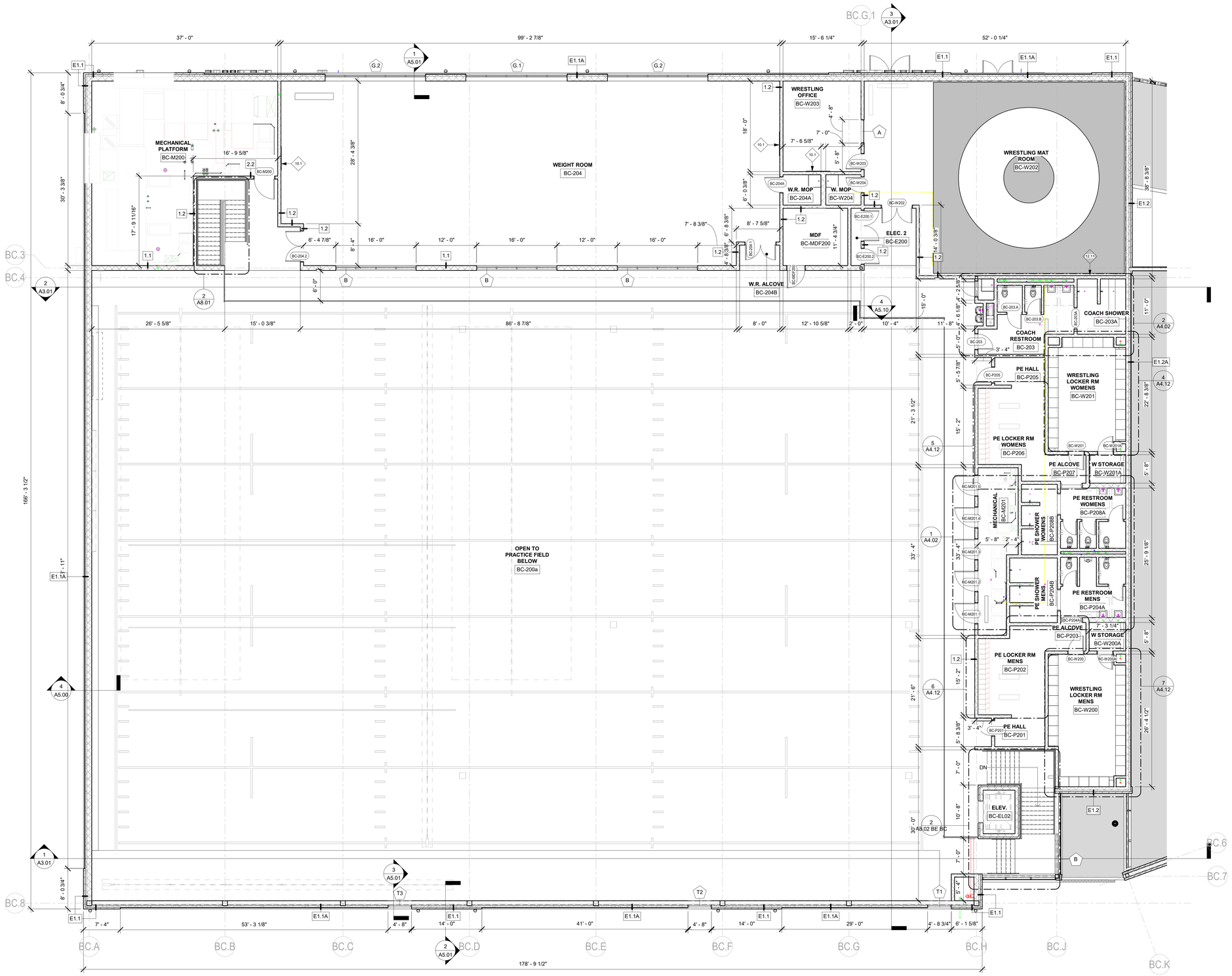
DATE : 04.XX.2025
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

A1.11
BCHS

KEYNOTE LEGEND

10.1	WALL MOUNTED TV O.F.O.I. G.C. TO PROVIDE DATA AND POWER - COORDINATE DATA AND ELECTRICAL REQUIREMENTS WITH ELECTRICAL (BP1) AND COMMUNICATION DRAWINGS (BP3) .
12.11	WALL PADDING



1 LEVEL TWO - BCHS
1/8" = 1'-0"

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

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FIELD HOUSE FLOOR PLAN – BULLITT CENTRAL LEVEL 2

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

A1.12
BCHS

KEYNOTE LEGEND

CEILING FINISH LEGEND

NUMBER	CEILING	CEILING USE/ FINISH TREATMENT	SIZE
ACT	A.C.T.	RESTROOMS/LOCKER ROOMS/TOILETS, WHITE	2X2 GRID
G.W.B.	GYPSUM WALL BOARD	ALL GYPSUM WALL BOARD SOFFITS/CEILINGS/BULKHEADS TO BE PAINTED, COMPLETE.	-
O.T.S.	OPEN TO STRUCTURE	ALL VISIBLE AREAS OPEN TO STRUCTURE ARE TO BE PAINTED, COLOR TBD ARCHITECT. VISIBLE WALLS IN O.T.S. AREAS ARE TO BE PAINTED, COLOR TBD BY ARCHITECT.	-

GENERAL CEILING NOTES:

A. CEILING ITEMS ARE SHOWN FOR CONFIGURATION. CONTRACTOR SHALL REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

B. CEILING GRIDS SHALL BE CONFIGURED AS SHOWN AND AT EQUAL DIMENSIONS IN BOTH DIRECTIONS WITHIN THE BOUNDARIES OF THE WALLS AND/OR SOFFITS OF THE SPACE - UNLESS NOTED OTHERWISE.

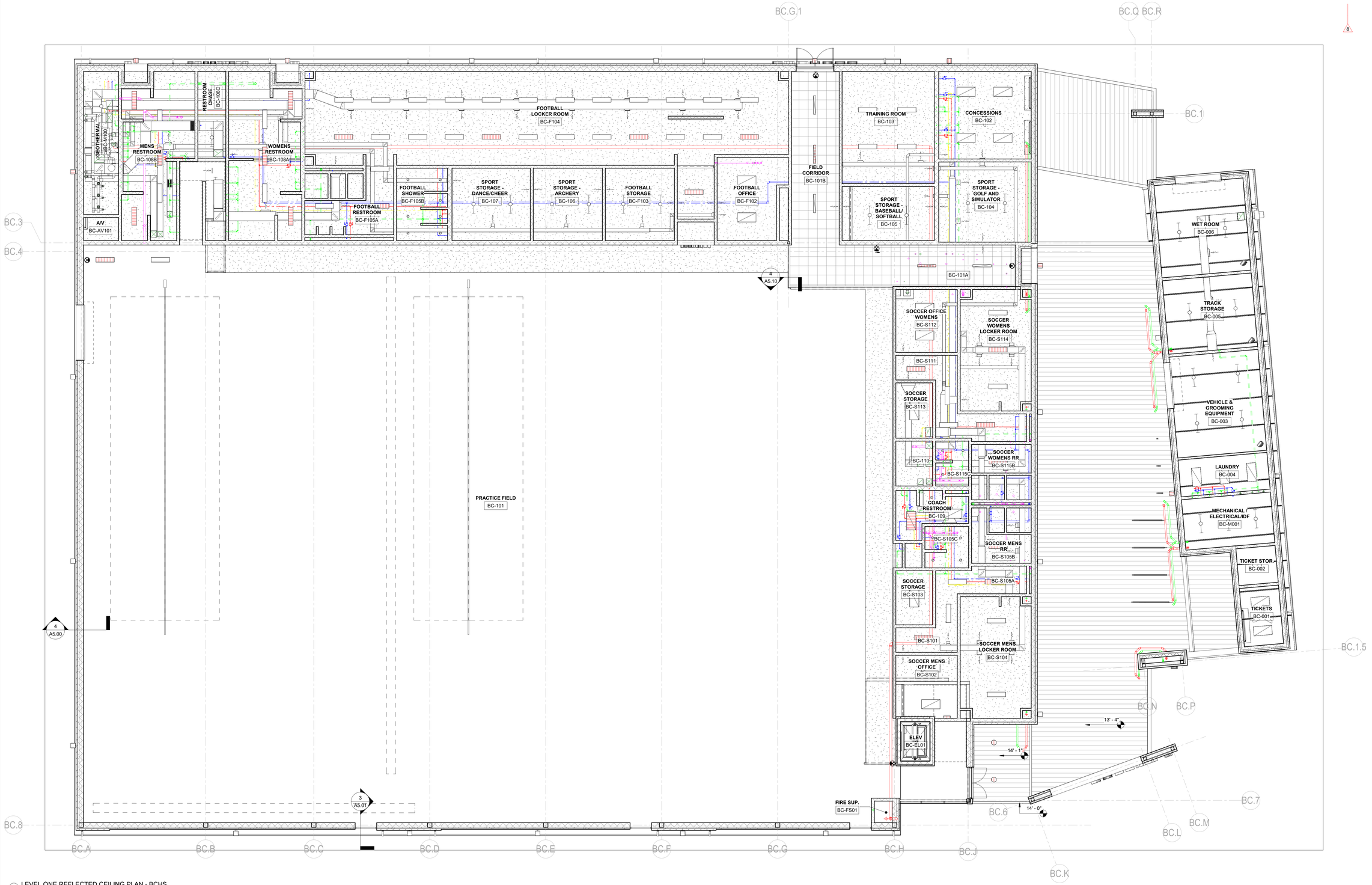
C. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE PERFORMING PERTINENT WORK.

D. ALL DIMENSIONS ARE SHOWN FROM FACE OF GYPSUM BOARD UNLESS NOTED OTHERWISE.

E. ALL EXACT COLORS AND FINISHES SHALL BE AS SPECIFIED OR SELECTED BY ARCHITECT.

CEILING LEGEND

SYMBOL	DESCRIPTION
	ACT: 2' x 2' SUSPENDED ACOUSTIC PANEL CEILING SYSTEM, REFER TO FINISH SCHEDULE FOR ACT TYPES
	EXPOSED CONCRETE PLANK FLOOR SLAB
	EXPOSED METAL ROOF DECK
	METAL SOFFIT PANEL
O.T.S.	OPEN TO STRUCTURE



1 LEVEL ONE REFLECTED CEILING PLAN - BCHS
1/8" = 1'-0"

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TEL 502.499.1100 FAX 502.499.1101

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

FIELD HOUSE REF. CEILING PLAN – BULLITT CENTRAL – LEVEL 1

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG-25-145

BG# 25-145

DATE : 06.10.2024
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REVISIONS :

2023-50.1

A1.13
BCHS

KEYNOTE LEGEND

CEILING FINISH LEGEND

NUMBER	CEILING	CEILING USE/ FINISH TREATMENT	SIZE
ACT	A.C.T.	RESTROOMS/LOCKER ROOMS/TOILETS, WHITE	2X2 GRID
G.W.B.	GYPSUM WALL BOARD	ALL GYPSUM WALL BOARD SOFFITS/CEILINGS/BULKHEADS TO BE PAINTED, COMPLETE.	-
O.T.S.	OPEN TO STRUCTURE	ALL VISIBLE AREAS OPEN TO STRUCTURE ARE TO BE PAINTED, COLOR TBD ARCHITECT. VISIBLE WALLS IN O.T.S. AREAS ARE TO BE PAINTED, COLOR TBD BY ARCHITECT.	-

GENERAL CEILING NOTES:

A. CEILING ITEMS ARE SHOWN FOR CONFIGURATION. CONTRACTOR SHALL REFERENCE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

B. CEILING GRIDS SHALL BE CONFIGURED AS SHOWN AND AT EQUAL DIMENSIONS IN BOTH DIRECTIONS WITHIN THE BOUNDARIES OF THE WALLS AND/OR SOFFITS OF THE SPACE - UNLESS NOTED OTHERWISE.

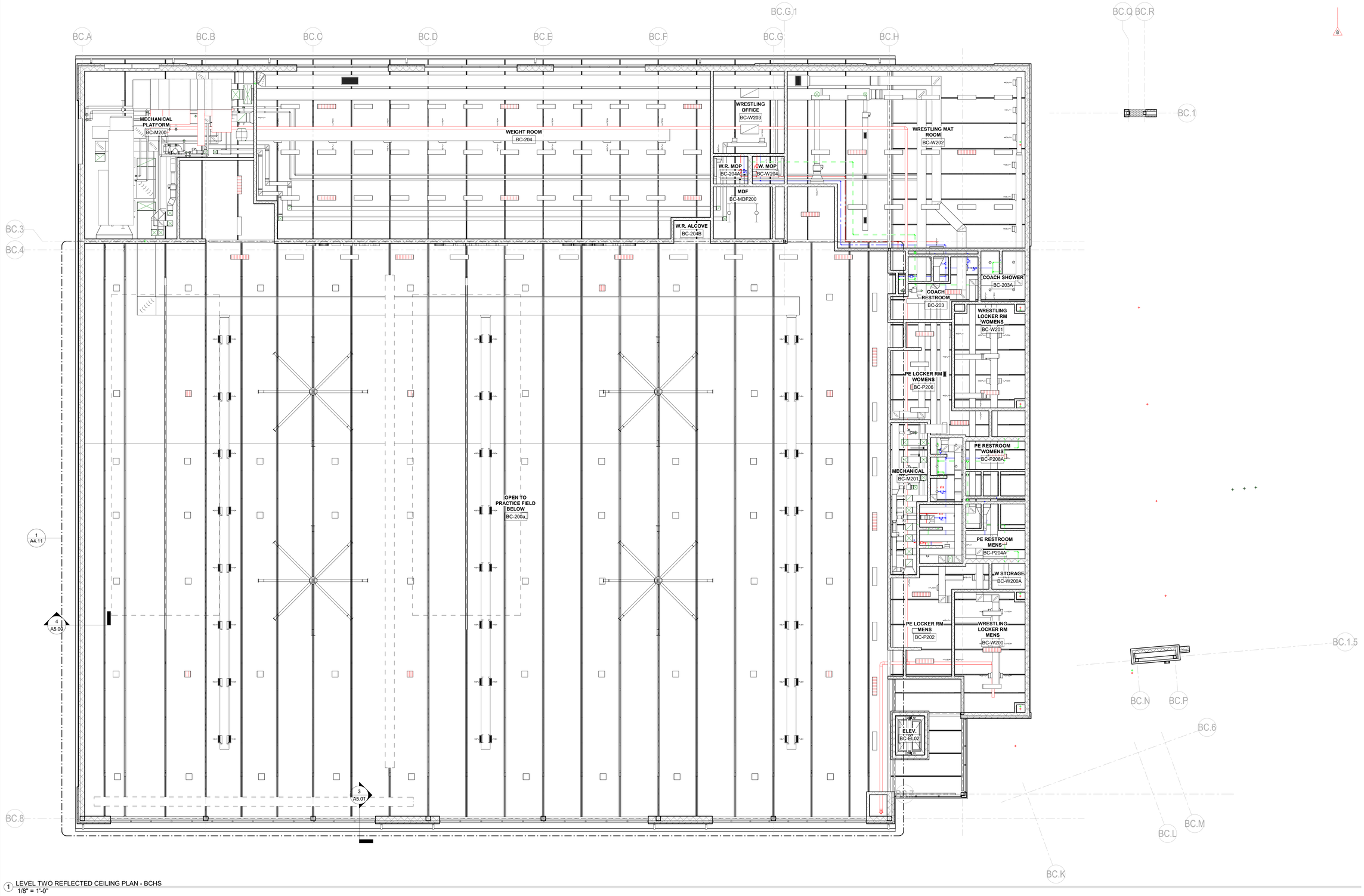
C. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE PERFORMING PERTINENT WORK.

D. ALL DIMENSIONS ARE SHOWN FROM FACE OF GYPSUM BOARD UNLESS NOTED OTHERWISE.

E. ALL EXACT COLORS AND FINISHES SHALL BE AS SPECIFIED OR SELECTED BY ARCHITECT.

CEILING LEGEND

SYMBOL	DESCRIPTION
	ACT: 2' x 2' SUSPENDED ACOUSTIC PANEL CEILING SYSTEM, REFER TO FINISH SCHEDULE FOR ACT TYPES
	EXPOSED CONCRETE PLANK FLOOR SLAB
	EXPOSED METAL ROOF DECK
	METAL SOFFIT PANEL
O.T.S.	OPEN TO STRUCTURE



1 LEVEL TWO REFLECTED CEILING PLAN - BCHS
1/8" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

FIELD HOUSE REF. CEILING PLAN – BULLITT CENTRAL – LEVEL 2

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
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REVISIONS :

2023-50.1

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BCHS

ROOF TYPE LEGEND

ROOF TYPE 1:
NEW MODIFIED BITUMEN ROOFING SYSTEM:
- 2 PLY MODIFIED BITUMINOUS ROOF SYSTEM
- 1/2" COVER BOARD
- RIGID INSULATION (4.4" - R-25 MIN.)

OVER NEW METAL ROOF DECK. SEE STRUCTURAL DRAWINGS FOR METAL ROOF DECK TYPE.

WHERE ACOUSTIC METAL ROOF DECK OCCURS
PROVIDE SELF ADHERING VAPOR BARRIER MEMBRANE DIRECT TO DECK.

ROOF TYPE 2:
PRE-FINISHED STANDING SEAM METAL ROOFING SYSTEM (SSMR)
- STANDING SEAM METAL ROOF ROOF SYSTEM
- SELF ADHERING HIGH TEMP METAL ROOFING UNDERLAYMENT
- RIGID INSULATION (4.4" - R-25 MIN.)

OVER NEW METAL ROOF DECK. SEE STRUCTURAL DRAWINGS FOR METAL ROOF DECK TYPE

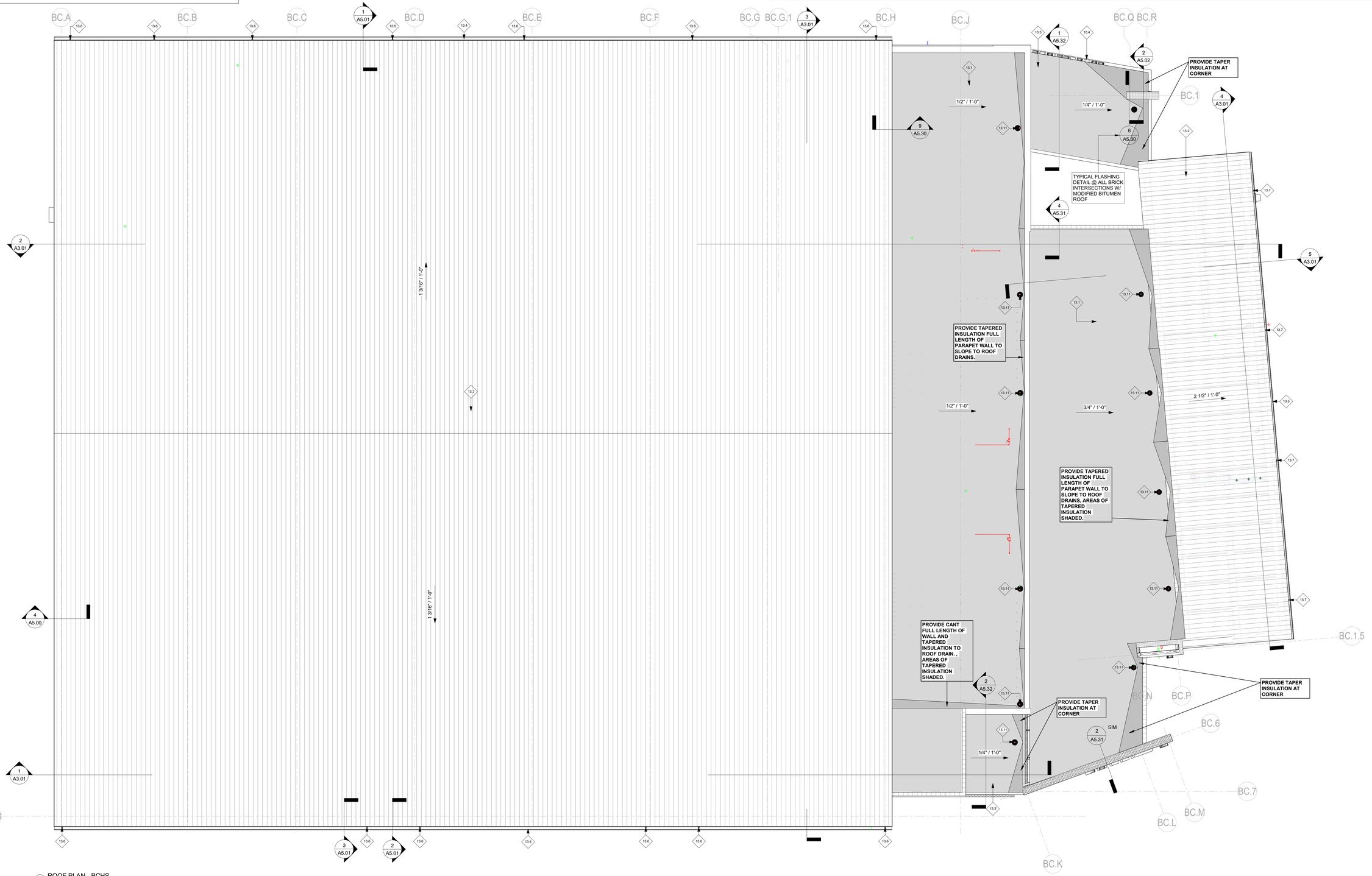
WHERE ACOUSTIC METAL ROOF DECK OCCURS
PROVIDE SELF ADHERING VAPOR BARRIER MEMBRANE DIRECT TO DECK.

KEYNOTE LEGEND

10.4	METAL DIMENSIONAL LETTERING.
13.1	ROOF TYPE 01, REFER TO ROOF LEGEND.
13.2	ROOF TYPE 02, REFER TO ROOF LEGEND.
13.3	CANOPY ROOF. REFER TO SECTIONS AND DETAILS FOR ROOF COMPOSITION. TAPER INSULATION TO PROVIDE POSITIVE SLOPE TO ROOF DRAINS.
13.4	PRE-FINISHED 8" X 8" METAL GUTTER.
13.5	PRE-FINISHED 6" X 6" METAL GUTTER.
13.6	PRE-FINISHED 8" X 8" DOWNSPOUT WITH PAINTED CAST IRON HUB. SEE CIVIL DRAWINGS FOR STORM CONTINUATION AND HUB DETAILS.
13.7	PRE-FINISHED 6" X 6" DOWNSPOUT WITH PAINTED CAST IRON HUB. SEE CIVIL DRAWINGS FOR STORM CONTINUATION AND HUB DETAILS.
13.11	ROOF DRAIN AND LEADER SYSTEM AND ROOF OVERFLOW DRAIN. SEE PLUMBING DRAWINGS FOR CONTINUATION.

GENERAL ROOF NOTES:

A. SUBMIT ROOFING FLASHING DETAILS FOR ALL CONDITIONS SHOWN FOR ARCHITECT'S APPROVAL PRIOR TO INSTALLATION.
B. COORDINATE ROOF PENETRATIONS WITH PLUMBING AND MECHANICAL DRAWINGS.
C. ALL DIMENSIONS SHOWN ARE APPROXIMATE.
D. REFER TO STANDING SEAM MANUFACTURER TECHNICAL INFORMATION FOR FASTENER COMPATIBILITY WITH METAL ROOFING.
E. REFER TO STANDING SEAM MANUFACTURER TECHNICAL INFORMATION FOR HEM LENGTH AND REQUIRED DISTANCE BETWEEN PANEL AND CLEAT.
F. PROVIDE MANUFACTURER APPROVED ICE/SNOW-DAM PROTECTION FOLLOWING ROOF WARRANTY REQUIREMENTS.
G.
H. PROVIDE SNOW AND ICE GUARDS AT ALL STANDING SEAM METAL ROOFS 3'-0" UP FROM EAVE EDGE.
I. INSTALL ROOF SYSTEM UNDERLAYMENT, FULL COVERAGE OF ROOF DECK AT STANDING SEAM ROOF SYSTEM.
J. ALL EXTERIOR WOOD BLOCKING TO BE PRESSURE TREATED.
K. ALL METAL ROOF FLASHING, COPINGS AND FABRICATIONS DESIGNED TO PROTECT THE BUILDING FROM WATER INTRUSION SHALL BE INSTALLED PER STANDARDS DETAILED IN THE SMACNA ARCHITECTURAL SHEET METAL MANUAL.
L. PRE-FINISHED METAL GUTTERS AT METAL ROOFS SHALL BE BEVELED TYPE. REFER TO PLANS FOR SIZE.
M. ALL PRE-FINISHED METAL DOWNSPOUTS (D.S.) TO TERMINATE AT CAST IRON HUB AT BASE. REFER TO CIVIL DRAWINGS FOR DETAILS AND CONTINUATION.PAINT ALL CAST IRON DOWNSPOUT BOOTS EXPOSED ABOVE GRADE, TYP.
N. PROVIDE POSITIVE SLOPE TO ALL ROOF DRAINS. TAPERED INSULATION TO BE PROVIDED AT MODIFIED BITUMEN ROOFING WHERE REQUIRED ABOVE THE MINIMUM INSULATION THICKNESS FOR SLOPES TO ROOF DRAINS.
O. PROVIDE CRICKETS AT ALL VALLEY-TO-PARAPET LOCATIONS AND PARAPET CORNERS.
P. PROVIDE RIDGE TRIM AT STANDING SEAM METAL ROOFS.



1 ROOF PLAN - BCHS
1/8" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

ROOF PLAN – BULLITT CENTRAL

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
650 Z5-A16

BG# 25-145

DATE : 03.15.2025
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

A1.15
BCHS

BULLITT CENTRAL FIELD HOUSE
METAL PANEL / SIDING TYPES

METAL PANEL 1:
BASIS OF DESIGN: METAL SALES
SIZE: BOX RIB PROFILE WITH 1" RIB HEIGHT
PANEL COVERAGE: 16"
STYLE: EM1-1653
COLOR: ZINC GREY

METAL PANEL 2:
BASIS OF DESIGN: METAL SALES
SIZE: BOX RIB PROFILE WITH 1" RIB HEIGHT
PANEL COVERAGE: 16"
STYLE: EM1-1653
COLOR: BRANDYWINE

BULLITT CENTRAL FIELD HOUSE
MASONRY VENEER LEGEND

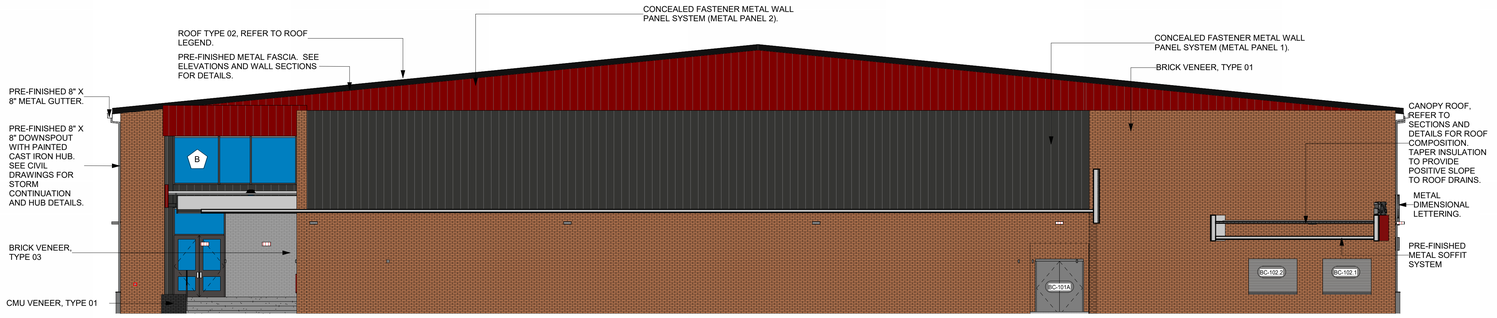
BULLITT CENTRAL BRICK VENEER TYPE 1:
BASIS OF DESIGN:
BELDEN
SIZE: MODULAR
COLOR: CHERRY VELOUR

BULLITT CENTRAL GLAZED BRICK VENEER TYPE 2:
BASIS OF DESIGN:
BELDEN GLAZED (*SHOWN SHADED*)
SIZE: STANDARD
COLOR: CRANBERRY

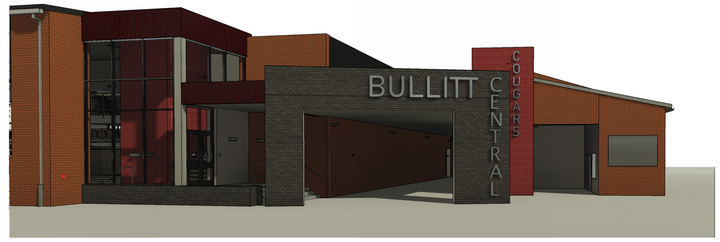
BULLITT CENTRAL GLAZED BRICK VENEER TYPE 3:
BASIS OF DESIGN:
BELDEN GLAZED (*SHOWN SHADED*)
SIZE: STANDARD
COLOR: VINTAGE GRAY

BULLITT CENTRAL CMU VENEER, TYPE 1:
BASIS OF DESIGN:
TRENWYTH ARCHITECTURAL MASONRY
SIZE: 4F - 3 9/16" x 15 5/8" x 7 5/8"
STYLE: TRENDSTONE PLUS 44F
COLOR: ASH CHARCOAL

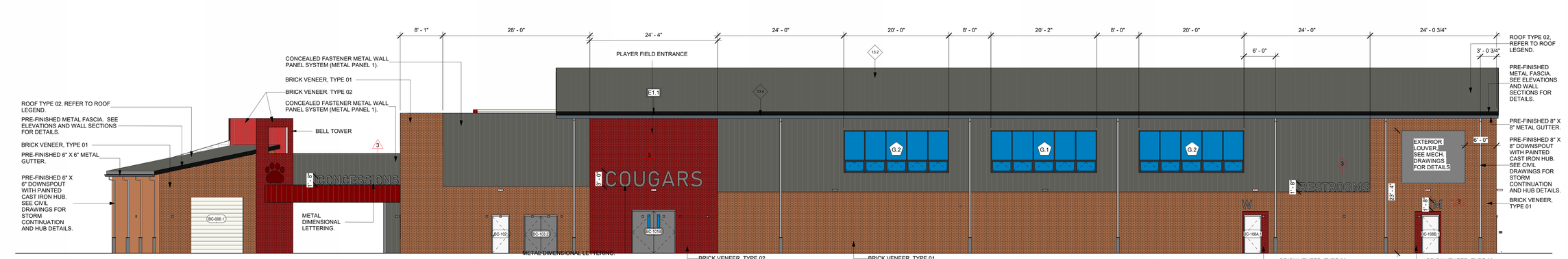
4 BULLITT CENTRAL - WEST ELEVATION
1/8" = 1'-0"



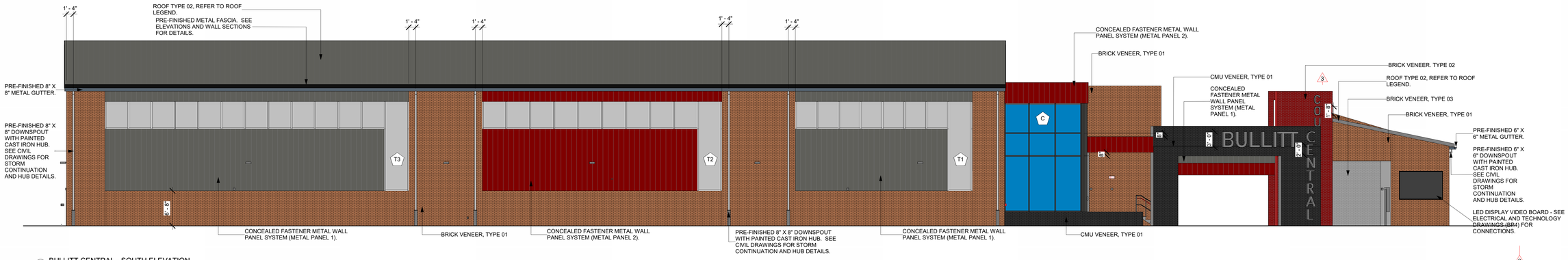
1 BULLITT CENTRAL - EAST ELEVATION
1/8" = 1'-0"



5 BCHS - Perspective - Main Gateway Entrance



2 BULLITT CENTRAL - NORTH ELEVATION
1/8" = 1'-0"



3 BULLITT CENTRAL - SOUTH ELEVATION
1/8" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

EXTERIOR ELEVATION

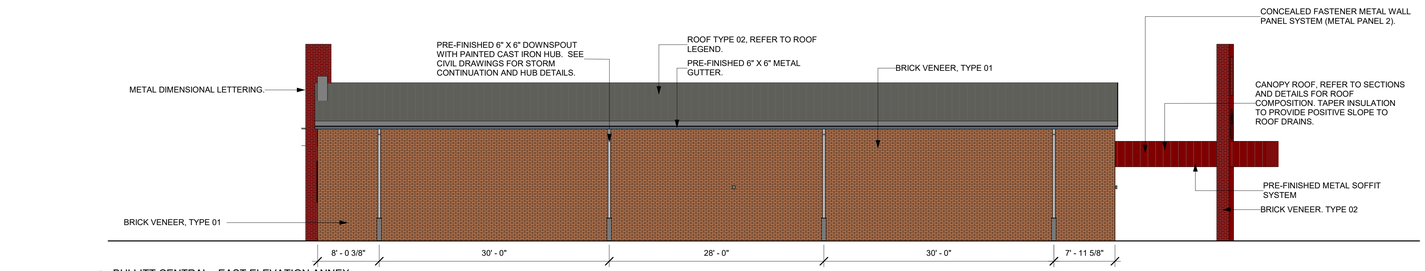
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
630 ZoneAG

BG# 25-145

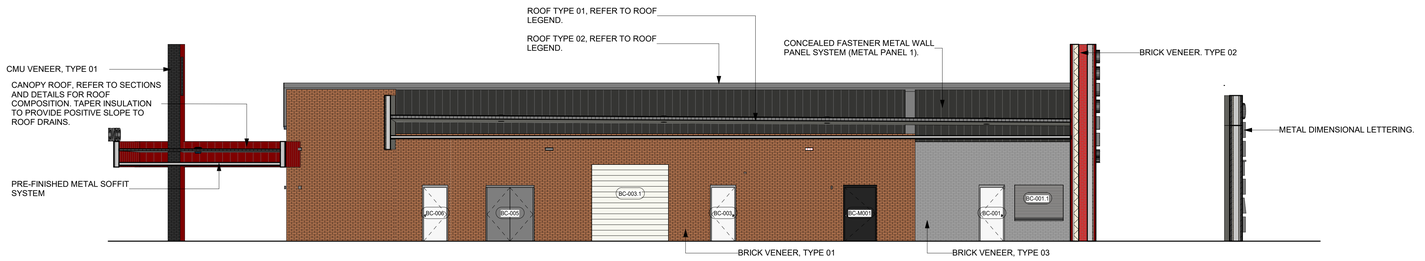
DATE : 03.15.2025
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :
1 Addendum No. 3 SEP 18 2025

2023-50.1

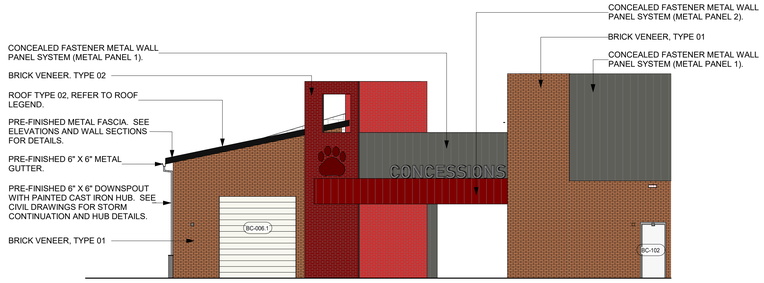
A2.01
BCHS



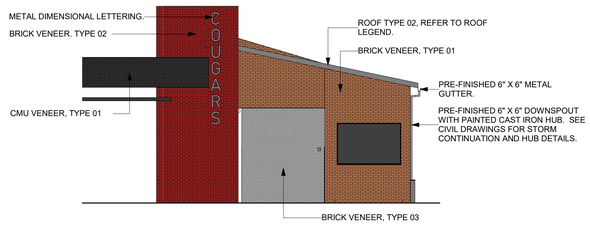
1 BULLITT CENTRAL - EAST ELEVATION ANNEX
1/8" = 1'-0"



2 BULLITT CENTRAL - WEST ELEVATION ANNEX
1/8" = 1'-0"



3 BULLITT CENTRAL - NORTH ELEVATION ANNEX
1/8" = 1'-0"



4 BULLITT CENTRAL - SOUTH ELEVATION ANNEX
1/8" = 1'-0"

BULLITT CENTRAL FIELD HOUSE
METAL PANEL / SIDING TYPES

METAL PANEL 1:
BASIS OF DESIGN: METAL SALES
SIZE: BOX RIB PROFILE WITH 1" RIB HEIGHT
PANEL COVERAGE: 16"
STYLE: EM1-1653
COLOR: ZINC GREY

METAL PANEL 2:
BASIS OF DESIGN: METAL SALES
SIZE: BOX RIB PROFILE WITH 1" RIB HEIGHT
PANEL COVERAGE: 16"
STYLE: EM1-1653
COLOR: BRANDYWINE

BULLITT CENTRAL FIELD HOUSE
MASONRY VENEER LEGEND

BULLITT CENTRAL BRICK VENEER TYPE 1:
BASIS OF DESIGN:
BELDEN
SIZE: MODULAR
COLOR: CHERRY VELOUR

BULLITT CENTRAL GLAZED BRICK VENEER TYPE 2:
BASIS OF DESIGN:
BELDEN GLAZED (*SHOWN SHADED*)
SIZE: STANDARD
COLOR: CRANBERRY

BULLITT CENTRAL GLAZED BRICK VENEER TYPE 3:
BASIS OF DESIGN:
BELDEN GLAZED (*SHOWN SHADED*)
SIZE: STANDARD
COLOR: VINTAGE GRAY

BULLITT CENTRAL CMU VENEER, TYPE 1:
BASIS OF DESIGN:
TRENWYTH ARCHITECTURAL MASONRY
SIZE: 4F - 3 9/16" x 15 5/8" x 7 5/8"
STYLE: TRENDSTONE PLUS 44F
COLOR: ASH CHARCOAL

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EXTERIOR ELEVATIONS – BULLITT CENTRAL ANNEX

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
ESY 25-145

BG# 25-145

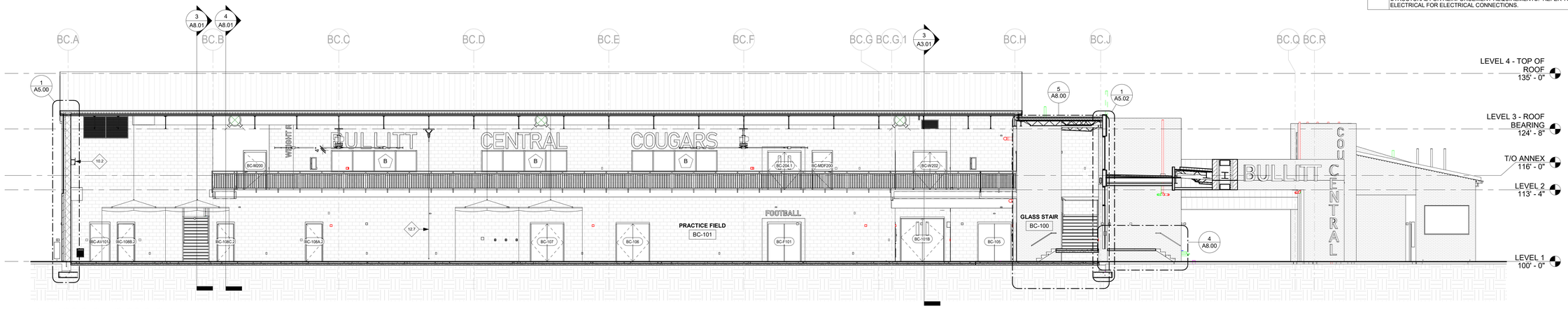
DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

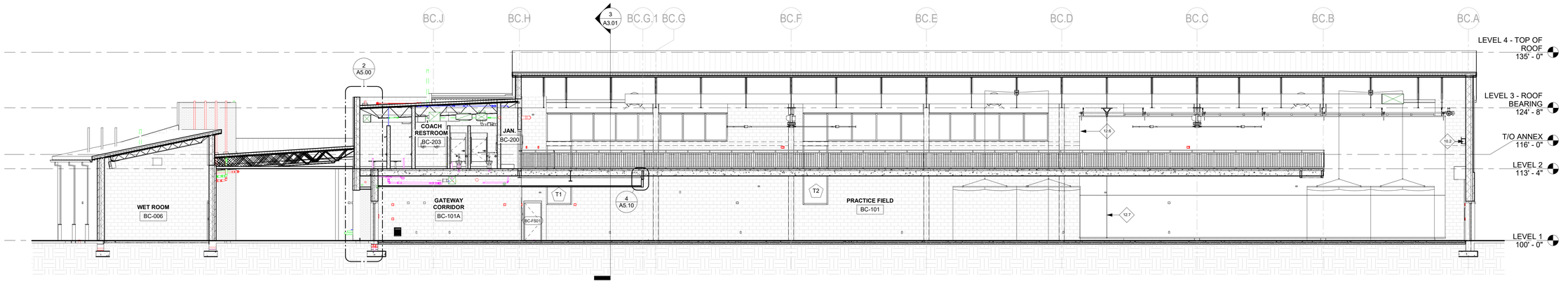
A2.02
BCHS

KEYNOTE LEGEND

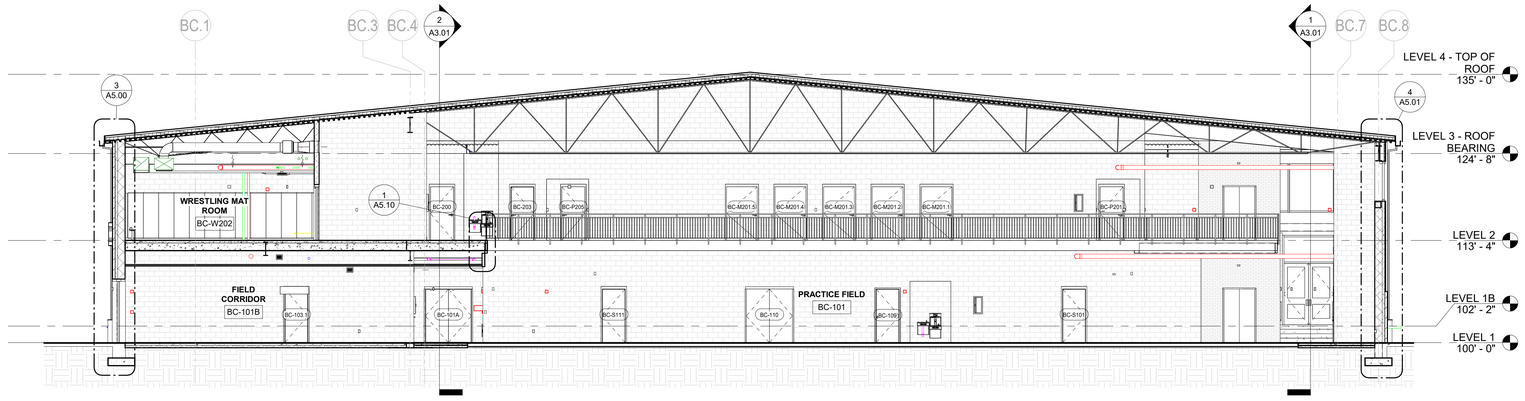
10.2	MOTORIZED PROJECTION SCREEN - VIEWING AREA 24'-0" WIDE X 12'-0" HIGH. COORDINATE WITH ELECTRICAL DRAWINGS.
12.6	MOTORIZED CEILING SUSPENDED ARCHERY CURTAIN. REFER TO STRUCTURAL FOR REINFORCEMENT REQUIREMENTS. REFER TO ELECTRICAL FOR ELECTRICAL CONNECTIONS.
12.7	MOTORIZED CEILING SUSPENDED DIVIDER CURTAIN. REFER TO STRUCTURAL FOR REINFORCEMENT REQUIREMENTS. REFER TO ELECTRICAL FOR ELECTRICAL CONNECTIONS.



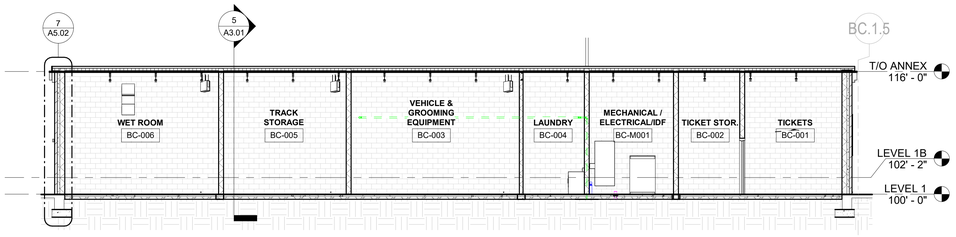
1 BUILDING SECTION - BCHS SECTION 1
1/8" = 1'-0"



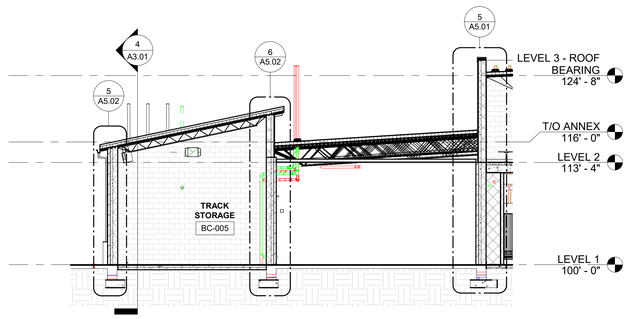
2 BUILDING SECTION - BCHS SECTION 2
1/8" = 1'-0"



3 BUILDING SECTION - BCHS SECTION 3
1/8" = 1'-0"



4 BUILDING SECTION - BCHS SECTION 4
1/8" = 1'-0"



5 BUILDING SECTION - BCHS ANNEX SECTION
1/8" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

BUILDING SECTIONS – BULLITT CENTRAL

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BCPS-142

BG# 25-145

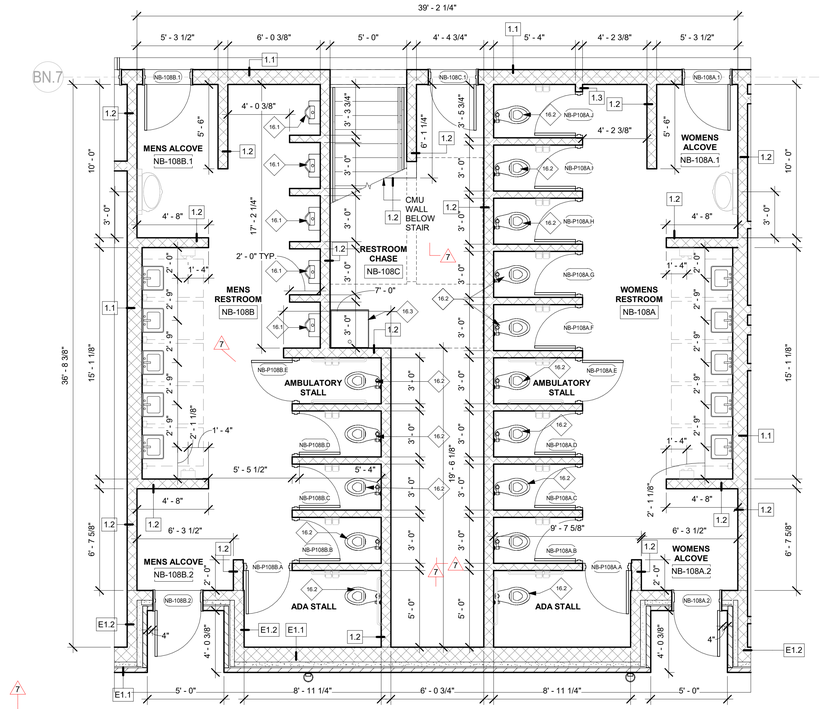
DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

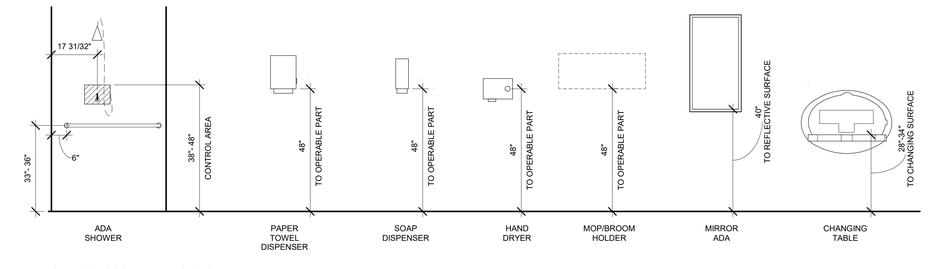
A3.01

KEYNOTE LEGEND

16.1	URINAL, REF. PLUMBING DRAWINGS.
16.2	FLOOR SET WATER CLOSET, REF. PLUMBING DRAWINGS.
16.3	MOP SINK, REF. PLUMBING DRAWINGS.
16.5	WALL HUNG LAVATORY, REF. TO PLUMBING DRAWINGS.



10 ENLARGED RESTROOM PLAN - NORTH BULLITT
1/4" = 1'-0"



TYPICAL ACCESSORY DIMENSIONS
1/2" = 1'-0"

TOILET ACCESSORIES SCHEDULE

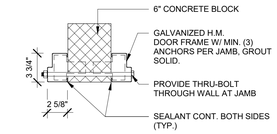
KEY TAG	DESCRIPTION	BASIS OF DESIGN: MANUFACTURER / MODEL / COLOR
TA-1	PAPER TOWEL (FOLDED) DISPENSER	BOBRICK / B-2860 / STAINLESS STEEL - SATIN
TA-2	DOUBLE ROLL TOILET TISSUE DISPENSER WITH CONTROLLED DELIVERY	BOBRICK / B274 / STAINLESS STEEL - SATIN
TA-3	FOAM SOAP DISPENSER	IMPACT / FOAM-EEZE 9326 / BLACK/GRAY
TA-4	42" GRAB BAR	BOBRICK / B-6806X42 / STAINLESS STEEL - SATIN
TA-5	36" GRAB BAR	BOBRICK / B-6806X36 / STAINLESS STEEL - SATIN
TA-6	18" VERTICAL GRAB BAR	BOBRICK / B-6806X18 / STAINLESS STEEL - SATIN
TA-7	24" GRAB BAR	BOBRICK / B-6806X24 / STAINLESS STEEL - SATIN
TA-8	MOP AND BROOM HOLDER WITH SHELF AND HOOKS	BOBRICK / B-B-239X34 / STAINLESS STEEL - SATIN
TA-9	18" X 36" FRAMED MIRROR	BOBRICK / B-290 / STAINLESS STEEL - SATIN
TA-10	ELECTRIC HAND DRYER	BRADLEY / 2904-28 / WHITE PORCELAIN ENAMELED
TA-11	BABY CHANGING STATION	KOALA KARE / KB310-SSWM

TOILET ACCESSORY NOTES:

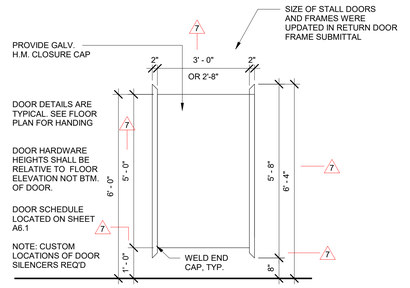
A. SEE DIVISION 10 SECTION "RESTROOM ACCESSORIES."

B. MOUNT ALL ACCESSORIES PER MANUFACTURER INSTRUCTIONS FOR ADA COMPLIANCE.

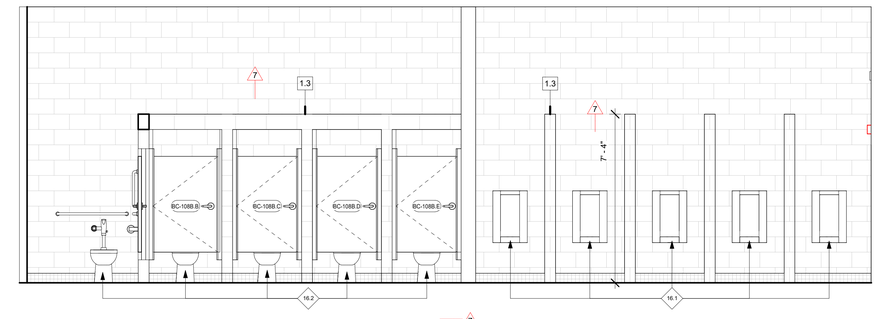
C. REFER TO SHEET A4.00 FOR CMU TOILET PARTITION DETAILS.



5 DETAIL - RESTROOM DOUBLE STALL JAMB
1 1/2" = 1'-0"

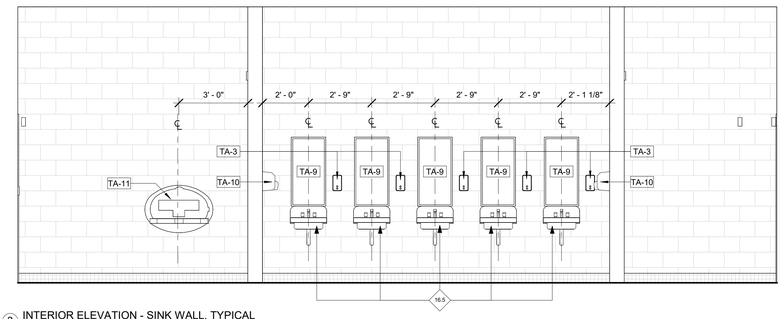


6 DETAIL - RESTROOM STALL DOOR
1/2" = 1'-0"



2 INTERIOR ELEVATION - URINAL WALL
3/8" = 1'-0"

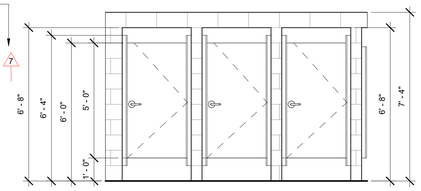
INTERIOR ELEVATIONS ARE OPPOSITE HAND FOR NORTH BULLITT FIELD HOUSE



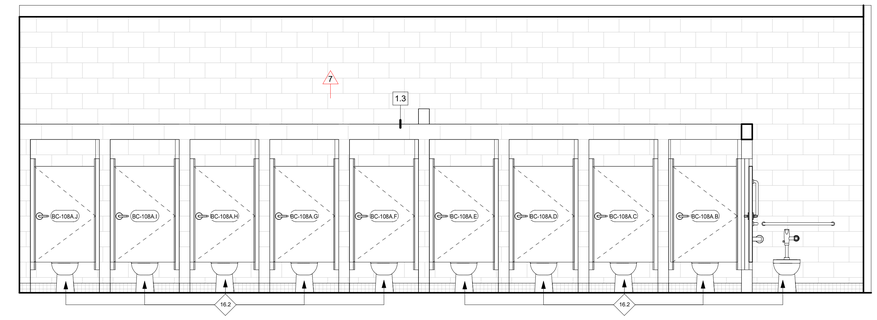
3 INTERIOR ELEVATION - SINK WALL, TYPICAL
3/8" = 1'-0"

INTERIOR ELEVATIONS ARE OPPOSITE HAND FOR NORTH BULLITT FIELD HOUSE

SIZE OF STALL DOORS AND FRAMES WERE UPDATED IN RETURN DOOR FRAME SUBMITTAL

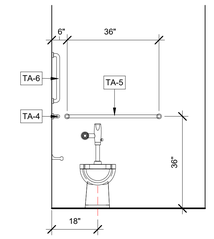


7 PARTIAL ELEVATION - CMU STALL, TYPICAL1
3/8" = 1'-0"

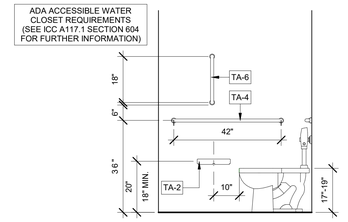


4 INTERIOR ELEVATION - TOILET STALL WALL
3/8" = 1'-0"

INTERIOR ELEVATIONS ARE OPPOSITE HAND FOR NORTH BULLITT FIELD HOUSE



8 TYPICAL ADA WATER CLOSET - FRONT
1/2" = 1'-0"



9 TYPICAL ADA WATER CLOSET - SIDE
1/2" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

ENLARGED PLANS AND INTERIOR ELEVATIONS – RESTROOMS

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BCPS-25-145

BG# 25-145

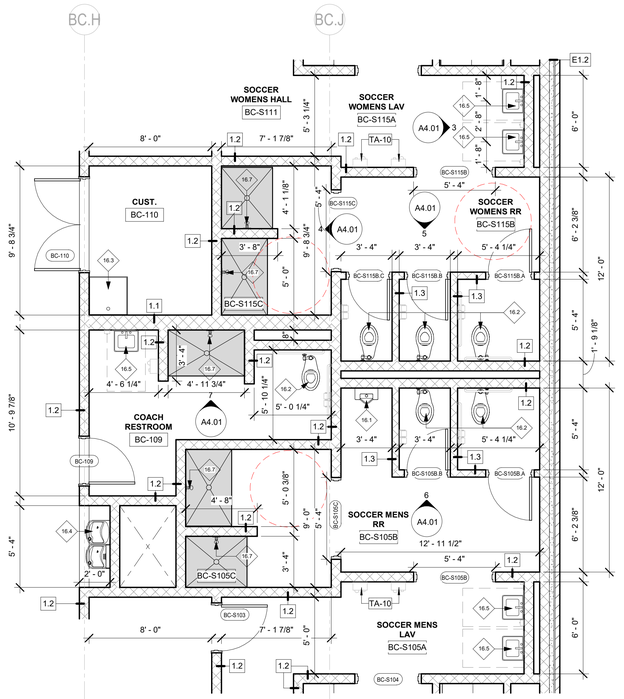
DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :
1 SDP1 ADD'M - RESTROOM 108 | 12.09.2024
CLARIFICATIONS

2023-50.1

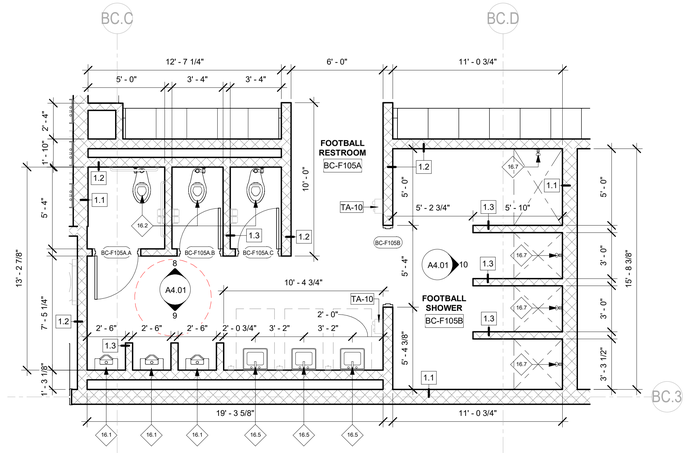
A4.00

KEYNOTE LEGEND

16.1	URINAL, REF. PLUMBING DRAWINGS.
16.2	FLOOR SET WATER CLOSET, REF. PLUMBING DRAWINGS.
16.3	MOP SINK, REF. PLUMBING DRAWINGS.
16.4	BI-LEVEL DRINKING FOUNTAIN WITH BOTTLE FILLER, REF. PLUMBING DRAWINGS.
16.5	WALL HUNG LAVATORY, REF. TO PLUMBING DRAWINGS.
16.7	SHOWER HEAD AND CONTROLS, REF. PLUMBING DRAWINGS. PROVIDE ADA COMPLIANT FIXTURE AT 5'-0" WIDE SHOWER COMPARTMENTS.



1 SOCCER RESTROOM - BULLITT CENTRAL (SIM. NORTH AND EAST)
1/4" = 1'-0"



2 FOOTBALL RESTROOM - BULLITT CENTRAL (SIM. NORTH AND EAST)
1/4" = 1'-0"

TOILET ACCESSORIES SCHEDULE

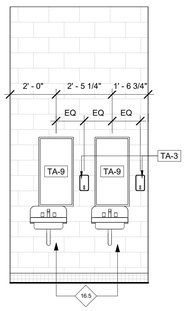
KEY TAG	DESCRIPTION	BASIS OF DESIGN: MANUFACTURER / MODEL / COLOR
TA-1	PAPER TOWEL (FOLDED) DISPENSER	BOBRICK / B-2860 / STAINLESS STEEL - SATIN
TA-2	DOUBLE ROLL TOILET TISSUE DISPENSER WITH CONTROLLED DELIVERY	BOBRICK / B274 / STAINLESS STEEL - SATIN
TA-3	FOAM SOAP DISPENSER	IMPACT / FOAM-EEZE 9326 / BLACK/GRAY
TA-4	42" GRAB BAR	BOBRICK / B-6806X42 / STAINLESS STEEL - SATIN
TA-5	36" GRAB BAR	BOBRICK / B-6806X36 / STAINLESS STEEL - SATIN
TA-6	18" VERTICAL GRAB BAR	BOBRICK / B-6806X18 / STAINLESS STEEL - SATIN
TA-7	24" GRAB BAR	BOBRICK / B-6806X24 / STAINLESS STEEL - SATIN
TA-8	MOP AND BROOM HOLDER WITH SHELF AND HOOKS	BOBRICK / B-B-239X34 / STAINLESS STEEL - SATIN
TA-9	18" X 36" FRAMED MIRROR	BOBRICK / B-290 / STAINLESS STEEL - SATIN
TA-10	ELECTRIC HAND DRYER	BRADLEY / 2904-28 / WHITE PORCELAIN ENAMELED
TA-11	BABY CHANGING STATION	KOALA KARE / KB310-SSWM

TOILET ACCESSORY NOTES:

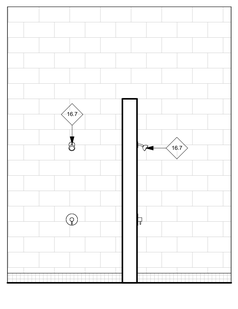
A. SEE DIVISION 10 SECTION "RESTROOM ACCESSORIES."

B. MOUNT ALL ACCESSORIES PER MANUFACTURER INSTRUCTIONS FOR ADA COMPLIANCE.

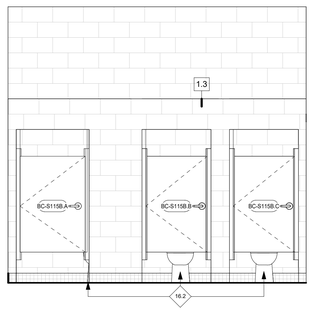
C. REFER TO SHEET A4.00 FOR CMU TOILET PARTITION DETAILS.



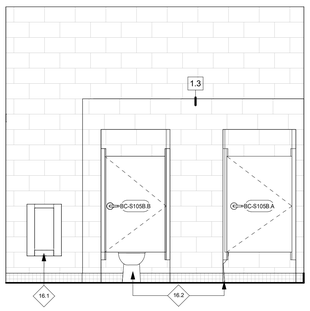
3 INT. ELEV. - SOCCER LAV.
3/8" = 1'-0"



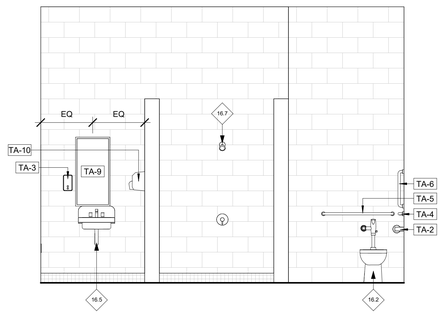
4 INT. ELEV. - SOCCER SHOWER
3/8" = 1'-0"



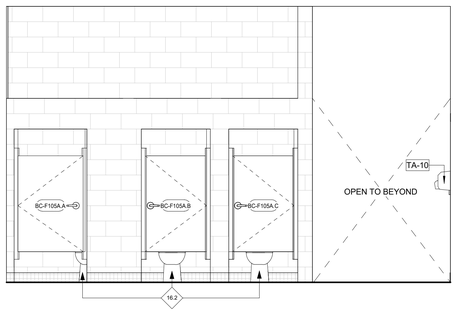
5 INT. ELEV. - SOCCER WOMEN'S RR SOUTH
3/8" = 1'-0"



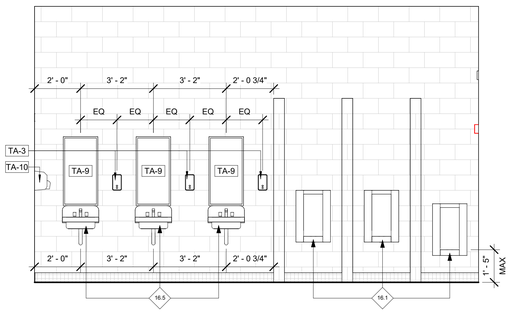
6 INT. ELEV. - SOCCER MENS RR NORTH
3/8" = 1'-0"



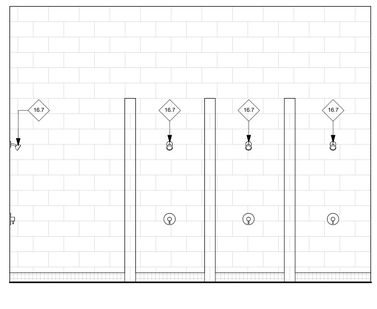
7 INT. ELEV. - COACH RR 1 NORTH
3/8" = 1'-0"



8 INT. ELEV. - FOOTBALL RR NORTH
3/8" = 1'-0"



9 INT. ELEV. - FOOTBALL RR SOUTH
3/8" = 1'-0"



10 INT. ELEV. - FOOTBALL RR EAST
3/8" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

BC MOVING FORWARD

ENLARGED PLANS AND INTERIOR ELEVATIONS – RESTROOMS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BCPS-145

BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

A4.01

KEYNOTE LEGEND

16.1	URINAL. REF. PLUMBING DRAWINGS.
16.2	FLOOR SET WATER CLOSET, REF. PLUMBING DRAWINGS.
16.4	BI-LEVEL DRINKING FOUNTAIN WITH BOTTLE FILLER, REF. PLUMBING DRAWINGS.
16.5	WALL HUNG LAVATORY, REF. TO PLUMBING DRAWINGS.
16.7	SHOWER HEAD AND CONTROLS, REF. PLUMBING DRAWINGS. PROVIDE ADA COMPLIANT FIXTURE AT 5'-0" WIDE SHOWER COMPARTMENTS.

TOILET ACCESSORIES SCHEDULE

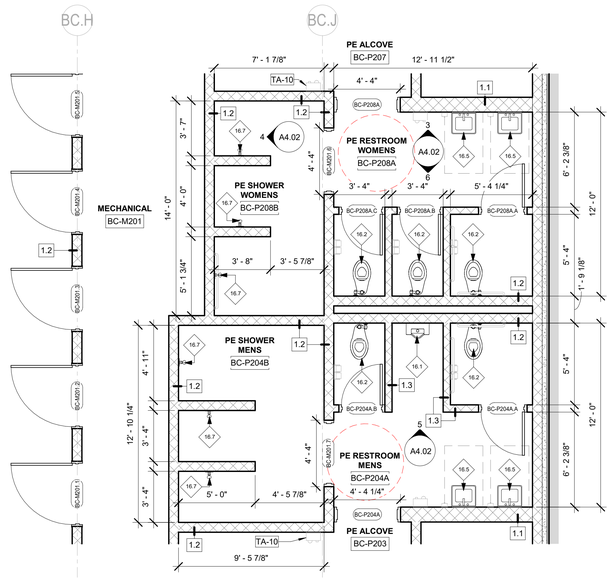
KEY TAG	DESCRIPTION	BASIS OF DESIGN: MANUFACTURER / MODEL / COLOR
TA-1	PAPER TOWEL (FOLDED) DISPENSER	BOBRICK / B-2860 / STAINLESS STEEL - SATIN
TA-2	DOUBLE ROLL TOILET TISSUE DISPENSER WITH CONTROLLED DELIVERY	BOBRICK / B274 / STAINLESS STEEL - SATIN
TA-3	FOAM SOAP DISPENSER	IMPACT / FOAM-EEZE 9326 / BLACK/GRAY
TA-4	42" GRAB BAR	BOBRICK / B-6806X42 / STAINLESS STEEL - SATIN
TA-5	36" GRAB BAR	BOBRICK / B-6806X36 / STAINLESS STEEL - SATIN
TA-6	18" VERTICAL GRAB BAR	BOBRICK / B-6806X18 / STAINLESS STEEL - SATIN
TA-7	24" GRAB BAR	BOBRICK / B-6806X24 / STAINLESS STEEL - SATIN
TA-8	MOP AND BROOM HOLDER WITH SHELF AND HOOKS	BOBRICK / B-B-239X34 / STAINLESS STEEL - SATIN
TA-9	18" X 36" FRAMED MIRROR	BOBRICK / B-290 / STAINLESS STEEL - SATIN
TA-10	ELECTRIC HAND DRYER	BRADLEY / 2904-28 / WHITE PORCELAIN ENAMELED
TA-11	BABY CHANGING STATION	KOALA KARE / KB310-SSWM

TOILET ACCESSORY NOTES:

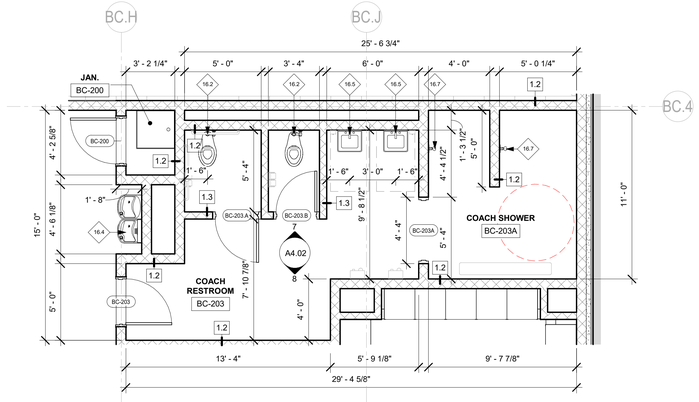
A. SEE DIVISION 10 SECTION "RESTROOM ACCESSORIES."

B. MOUNT ALL ACCESSORIES PER MANUFACTURER INSTRUCTIONS FOR ADA COMPLIANCE.

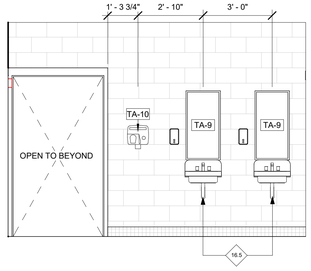
C. REFER TO SHEET A4.00 FOR CMU TOILET PARTITION DETAILS.



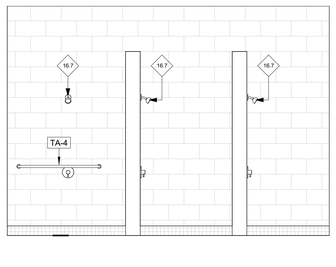
1 PE RESTROOM - BULLITT CENTRAL (SIM. NORTH AND EAST)
1/4" = 1'-0"



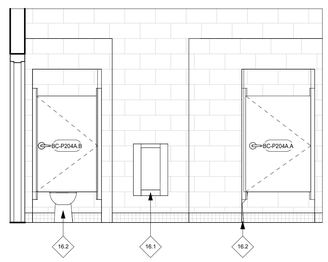
2 COACH RESTROOM - BULLITT CENTRAL (SIM. NORTH AND EAST)
1/4" = 1'-0"



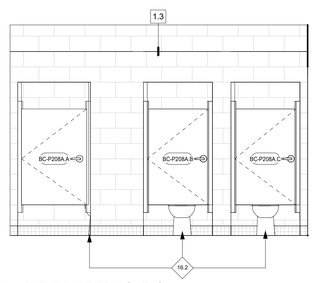
3 INT. ELEV. - PE RR NORTH
3/8" = 1'-0"



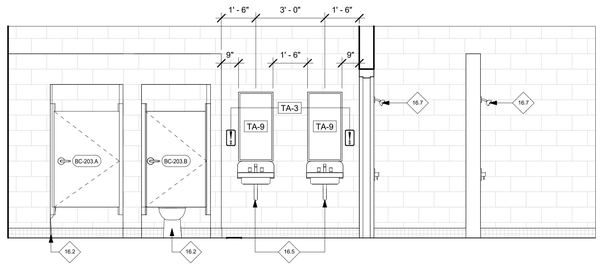
4 INT. ELEV. - PE RR SHOWER
3/8" = 1'-0"



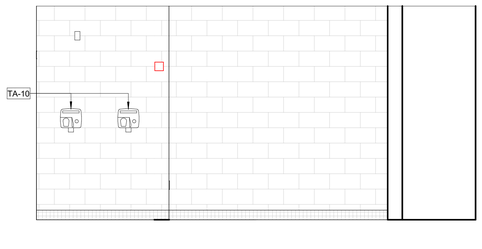
5 INT. ELEV. - PE RR MENS
3/8" = 1'-0"



6 INT. ELEV. - PE RR WOMENS
3/8" = 1'-0"



7 INT. ELEV. - COACH RR LEVEL 2 NORTH
3/8" = 1'-0"



8 INT. ELEV. - COACH RR LEVEL 2 SOUTH
3/8" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

ENLARGED PLANS AND INTERIOR ELEVATIONS – RESTROOMS

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BCPS-25-145

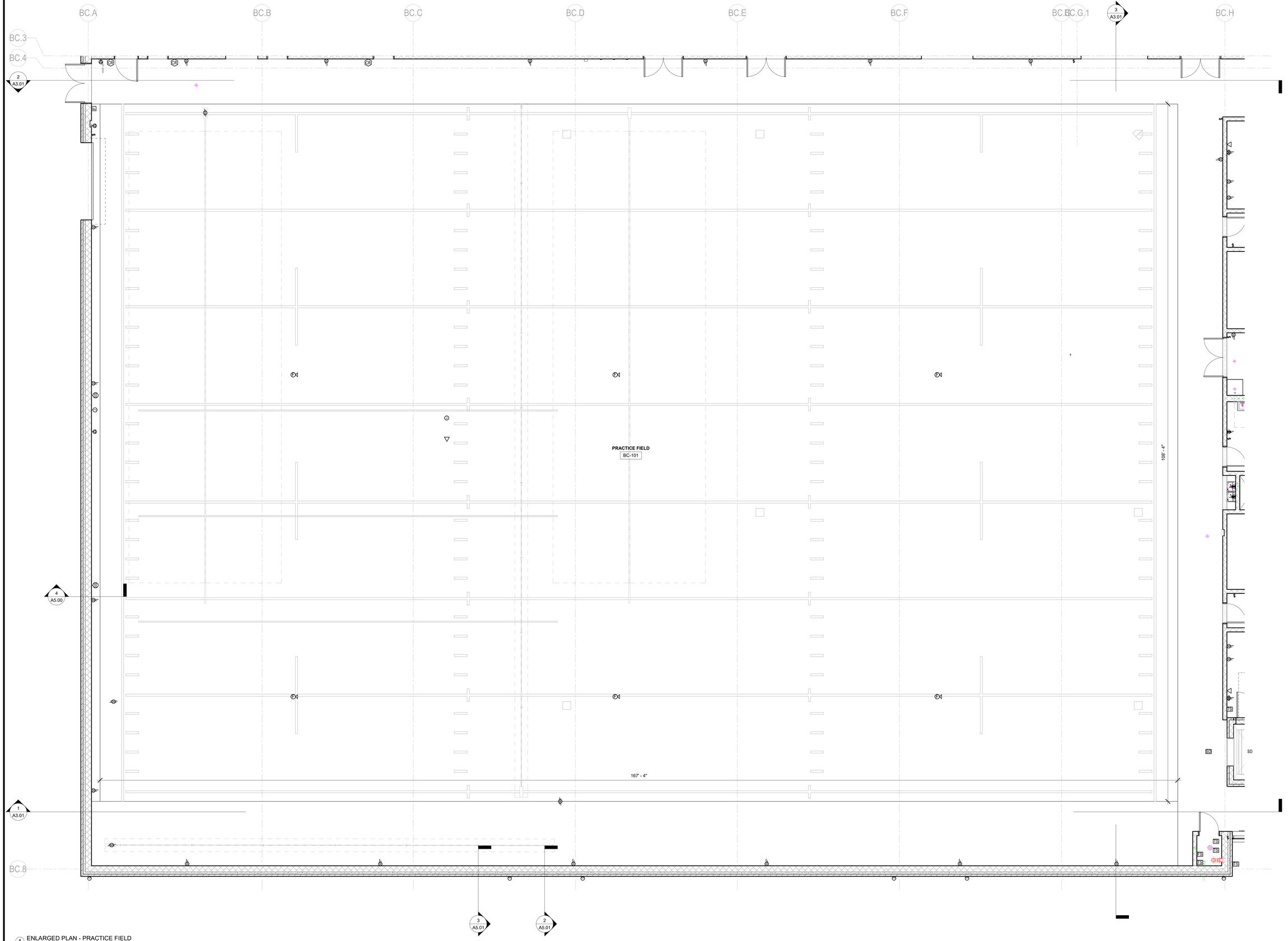
BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

A4.02

KEYNOTE LEGEND



1 ENLARGED PLAN - PRACTICE FIELD
3/16" = 1'-0"

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ENLARGED PLANS – PRACTICE FIELD

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BS-25-145

BG# 25-145

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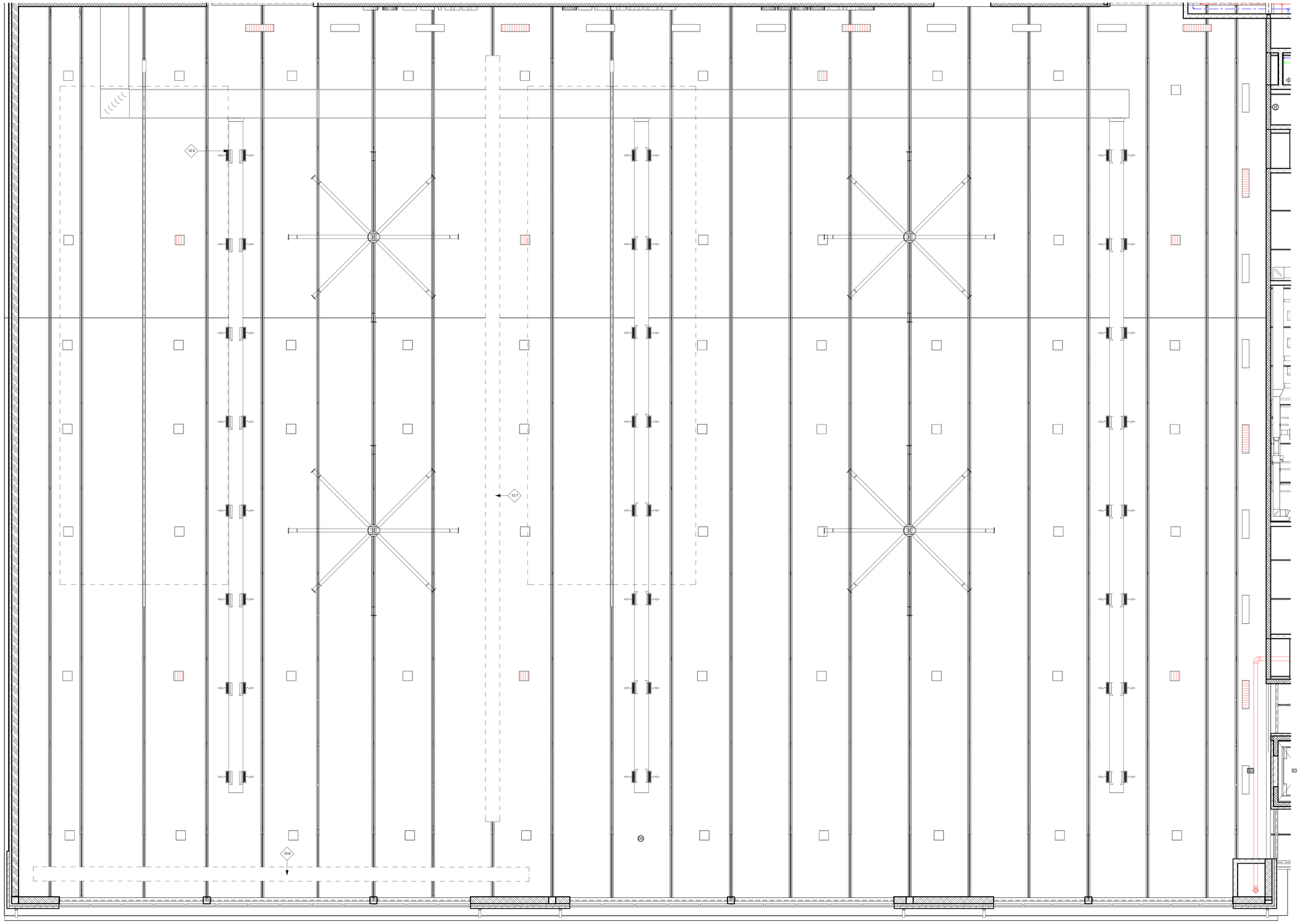
A4.10

KEYNOTE LEGEND

12.5	MOTORIZED CEILING SUSPENDED BATTING/GOLF CAGE. REFER TO STRUCTURAL FOR REINFORCEMENT REQUIREMENTS. REFER TO ELECTRICAL FOR ELECTRICAL REQUIREMENTS.
12.6	MOTORIZED CEILING SUSPENDED ARCHERY CURTAIN. REFER TO STRUCTURAL FOR REINFORCEMENT REQUIREMENTS. REFER TO ELECTRICAL FOR ELECTRICAL CONNECTIONS.
12.7	MOTORIZED CEILING SUSPENDED DIVIDER CURTAIN. REFER TO STRUCTURAL FOR REINFORCEMENT REQUIREMENTS. REFER TO ELECTRICAL FOR ELECTRICAL CONNECTIONS.



1 ENLARGED REF. CEILING PLAN - PRACTICE FIELD
3/16" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

ENLARGED PLANS - PRACTICE FIELD
REFLECTED CEILING

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
SCHOOLS

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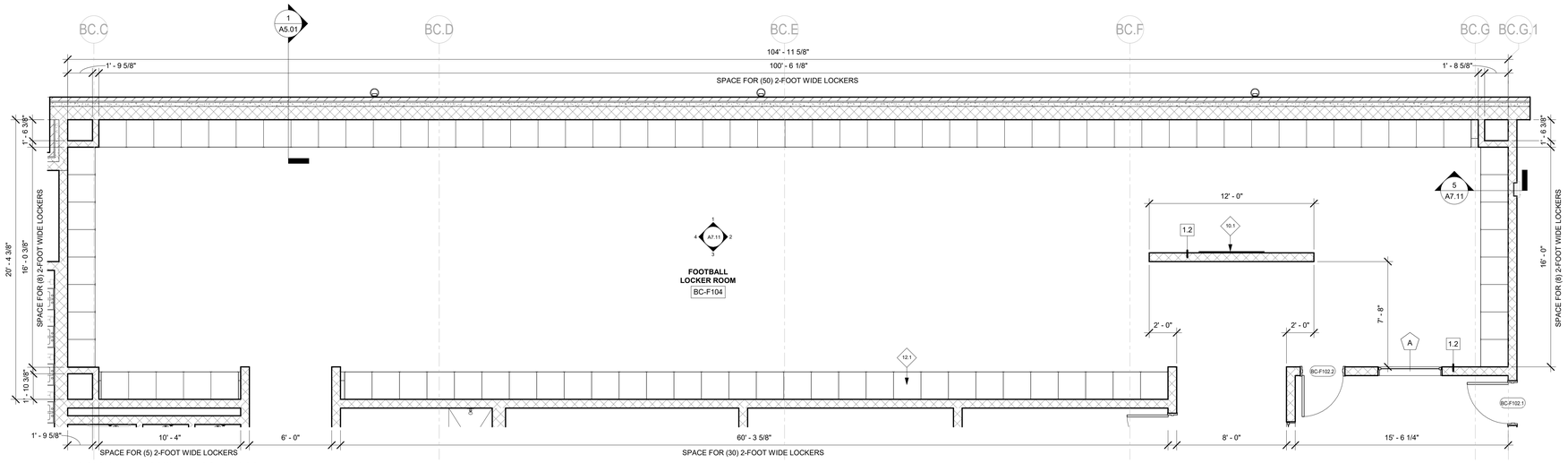
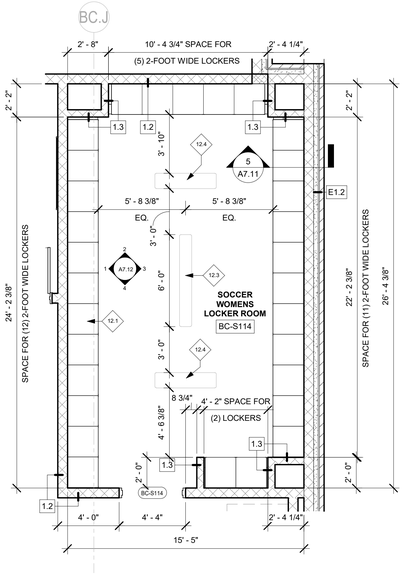
A4.11

KEYNOTE LEGEND

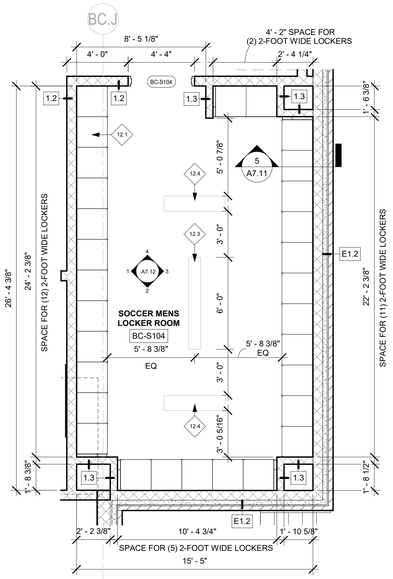
4.9	COILING COUNTER DOOR - REFER TO DOOR SCHEDULE FOR DESCRIPTION.
5.23	DEFIBRILLATION CABINET, WALL MOUNTED
10.1	WALL MOUNTED TV O.F.O.I. G.C. TO PROVIDE DATA AND POWER - COORDINATE DATA AND ELECTRICAL REQUIREMENTS WITH ELECTRICAL (BP1) AND COMMUNICATION DRAWINGS (BP3).
12.1	2'-0" WIDE LOCKERS ON CMU CURB. PROVIDE FILLER AT ENDS AS REQUIRED.
12.2	1'-0" WIDE DOUBLE STACK LOCKERS ON CMU CURB. PROVIDE FILLER AT ENDS AS REQUIRED.
12.3	6'-0" LONG LOCKER ROOM BENCH, FLOOR MOUNTED.
12.4	4'-0" LONG LOCKER ROOM BENCH, FLOOR MOUNTED.
12.8	TAPING STATION (2) SEATS AND CENTER DRAWER 84.5" WIDE X 48" DEEP
12.9	DOUBLE WHIRLPOOL TABLE, 80.5" WIDE X 38.25" DEEP SEE PLUMBING DRAWINGS FOR CONNECTIONS
12.10	ICE MACHINE
16.5	WALL HUNG LAVATORY, REF. TO PLUMBING DRAWINGS.



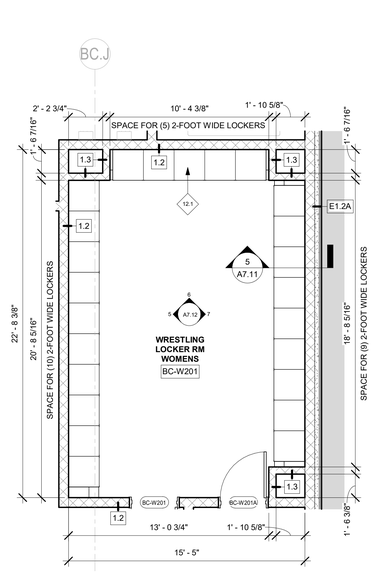
1 ENLARGED PLAN - FOOTBALL LOCKER ROOM
1/4" = 1'-0"



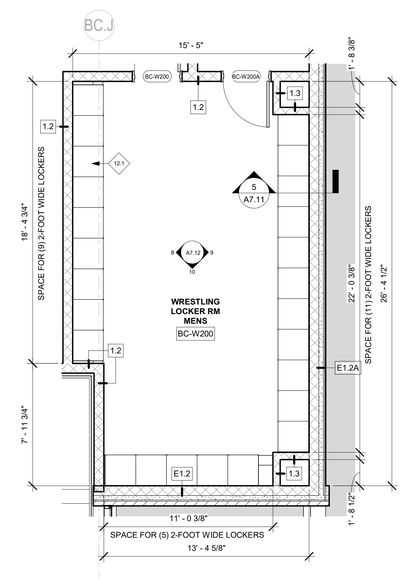
2 ENLARGED PLAN - WOMENS SOCCER LOCKER RM.
1/4" = 1'-0"



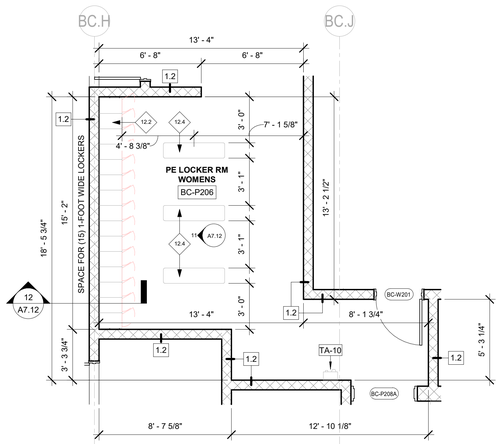
3 ENLARGED PLAN - MENS SOCCER LOCKER RM.
1/4" = 1'-0"



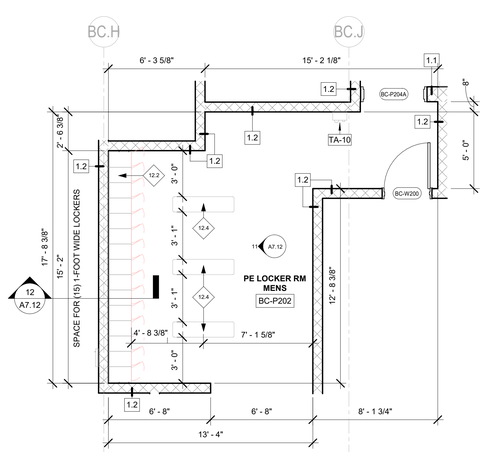
4 ENLARGED PLAN - WOMENS WRESTLING LOCKER RM.
1/4" = 1'-0"



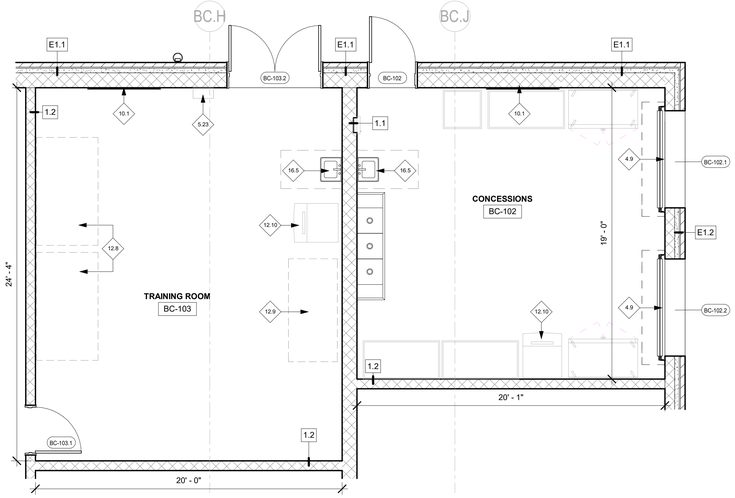
7 ENLARGED PLAN - MENS WRESTLING LOCKER RM.
1/4" = 1'-0"



5 ENLARGED PLAN - WOMENS PE LOCKER RM.
1/4" = 1'-0"



6 ENLARGED PLAN - MENS PE LOCKER RM.
1/4" = 1'-0"



8 ENLARGED PLAN - TRAINING ROOM AND CONCESSIONS
1/4" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

ENLG. PLANS – LOCKER ROOMS – BULLITT CENTRAL (BEHS & NBHS SIM.)

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BG-25-145

BG# 25-145

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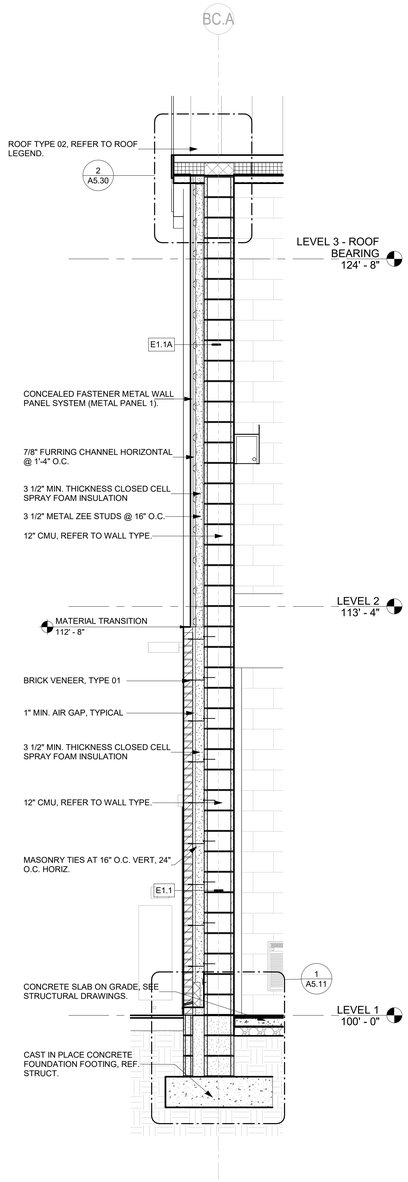
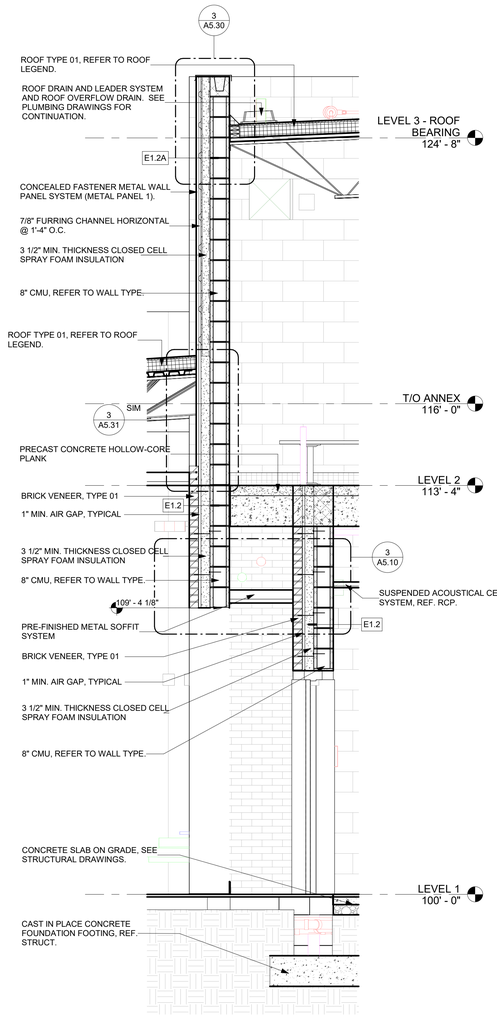
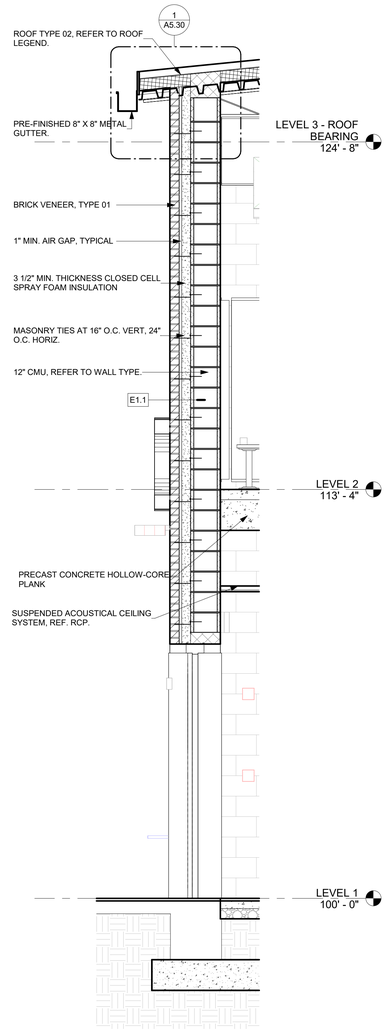
A4.12



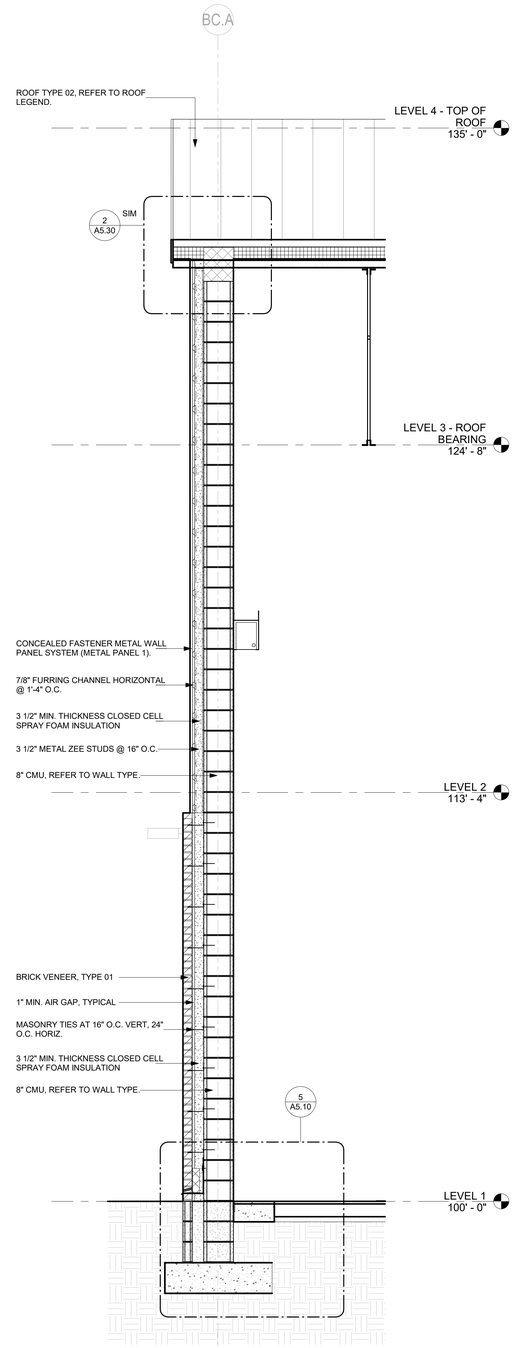
1 WALL SECTION - TYP. BRICK W/ METAL
1/2" = 1'-0"



2 WALL SECTION - TYP. VESTIBULE
1/2" = 1'-0"



3 WALL SECTION - TYP. FULL HEIGHT GLAZED BRICK
1/2" = 1'-0"



4 WALL SECTION - TYP. BACK WALL @ TURF
1/2" = 1'-0"

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BG MOVING FORWARD

WALL SECTIONS – TYPICAL

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BULLITT COUNTY PUBLIC SCHOOLS
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BG# 25-145

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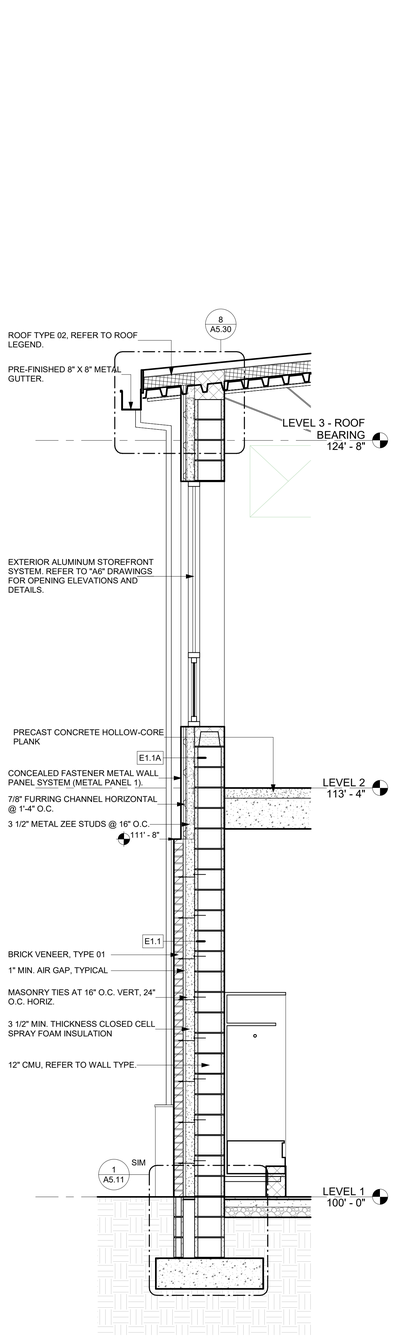
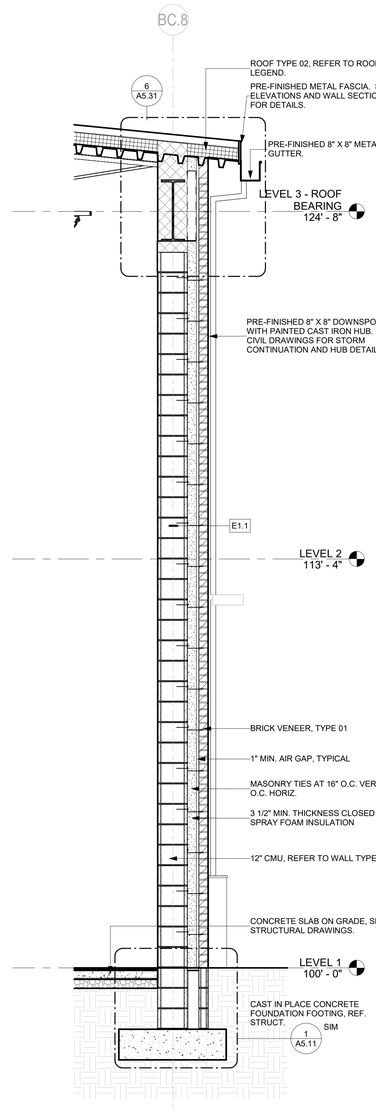
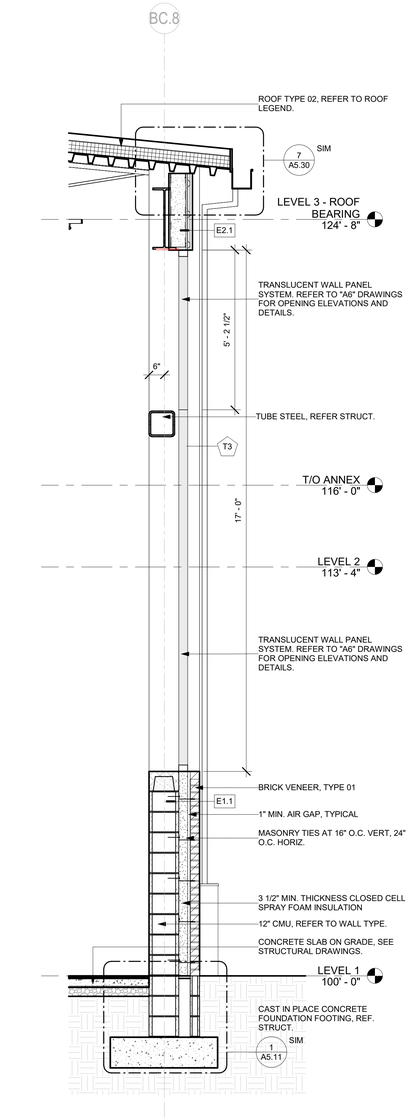
A5.00



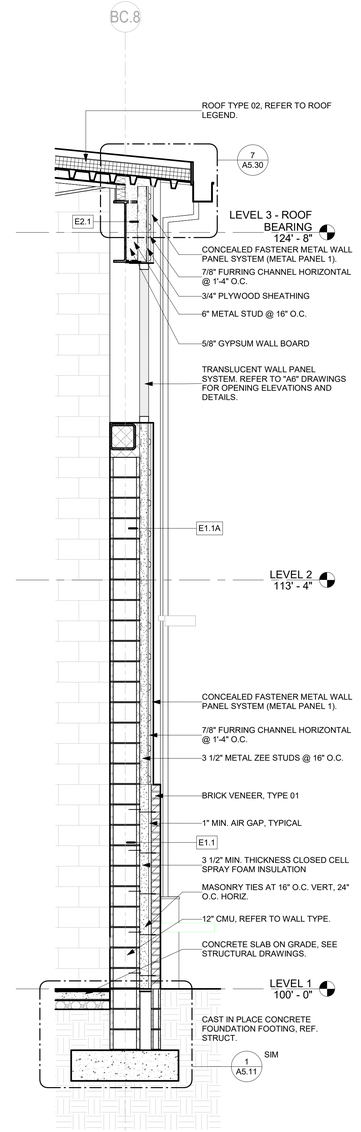
1 WALL SECTION - BRICK W/ METAL W/ GLAZING
1/2" = 1'-0"



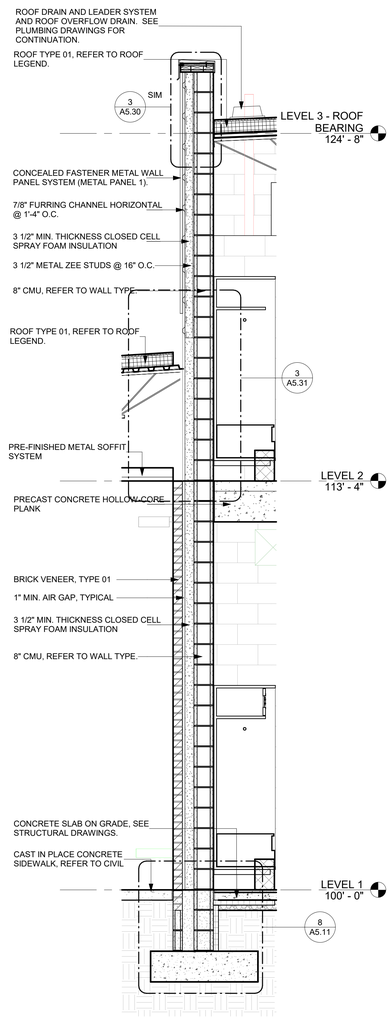
2 WALL SECTION - FULL HEIGHT BRICK
1/2" = 1'-0"



3 WALL SECTION - AT TRANSLUCENT PANEL
1/2" = 1'-0"



4 WALL SECTION - TYP. BRICK W/ METAL AND HIGH WINDOW
1/2" = 1'-0"



5 WALL SECTION - TYP. WALKWAY WALL
1/2" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

WALL SECTIONS – TYPICAL

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG-25-145

BG# 25-145

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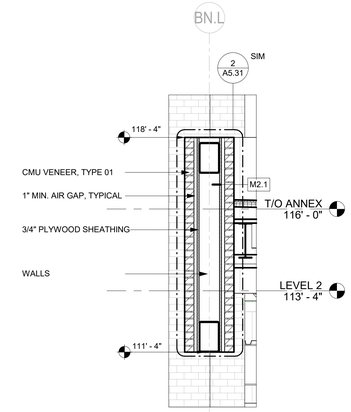
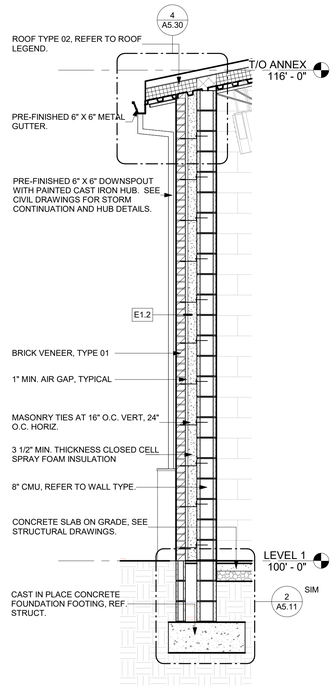
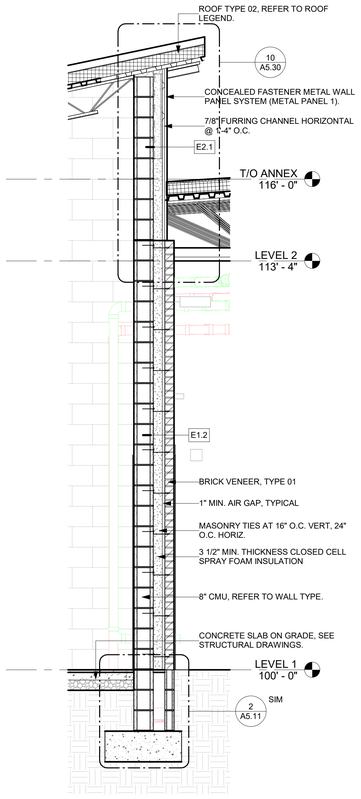
A5.01



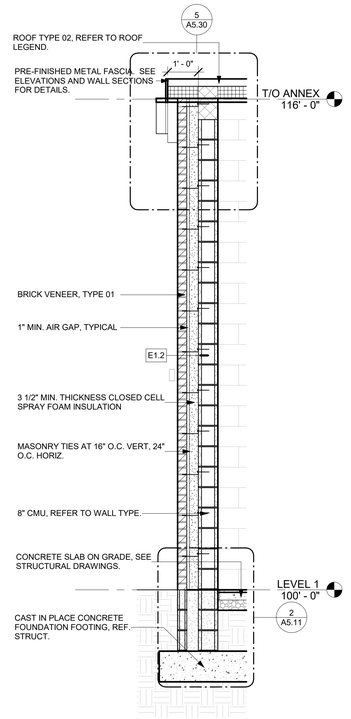
4 WALL SECTION - TYP. MONUMENTAL WALL HORIZONTAL PORTION
1/2" = 1'-0"



5 WALL SECTION - TYP. ANNEX SHORT
1/2" = 1'-0"



6 WALL SECTION - TYP. ANNEX TALL
1/2" = 1'-0"



7 WALL SECTION - TYP. ANNEX WALL
1/2" = 1'-0"

1 WALL SECTION - TYP. GLASS STAIR WALL
1/2" = 1'-0"

2 WALL SECTION - TYP. STAND ALONE MONUENTAL WALL
1/2" = 1'-0"

3 WALL SECTION - TYP. ANNEX TICKETS
1/2" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

WALL SECTIONS – TYPICAL

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
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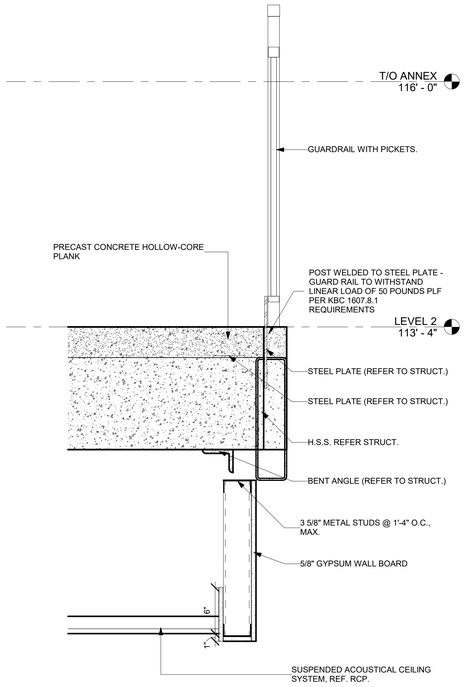
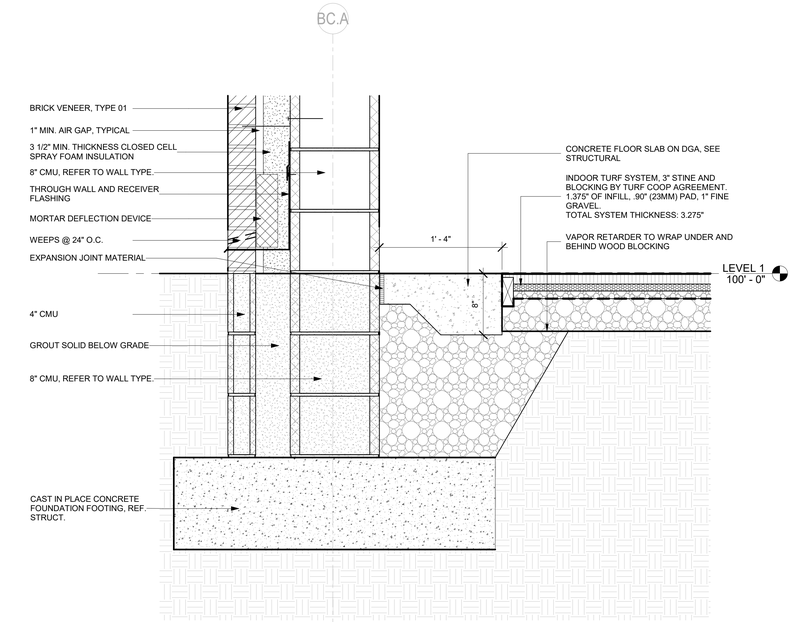
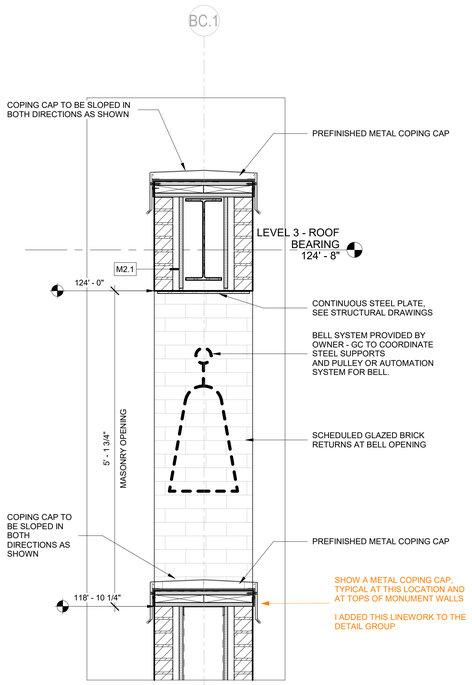


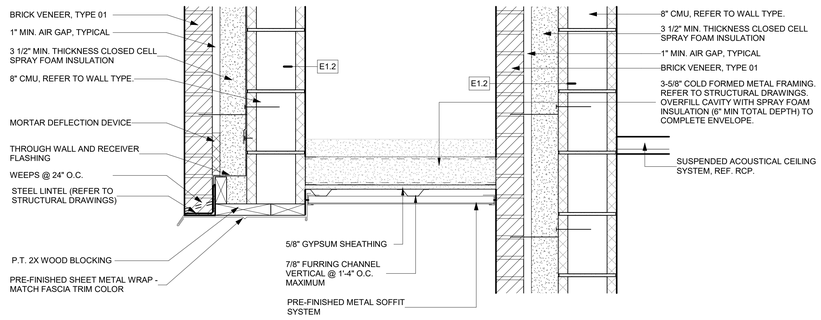
1 DETAIL - WALKWAY
1 1/2" = 1'-0"



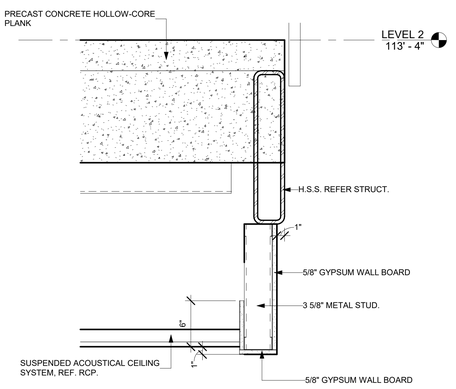
5 FOUNDATION DETAIL - EDGE OF TURF
1 1/2" = 1'-0"



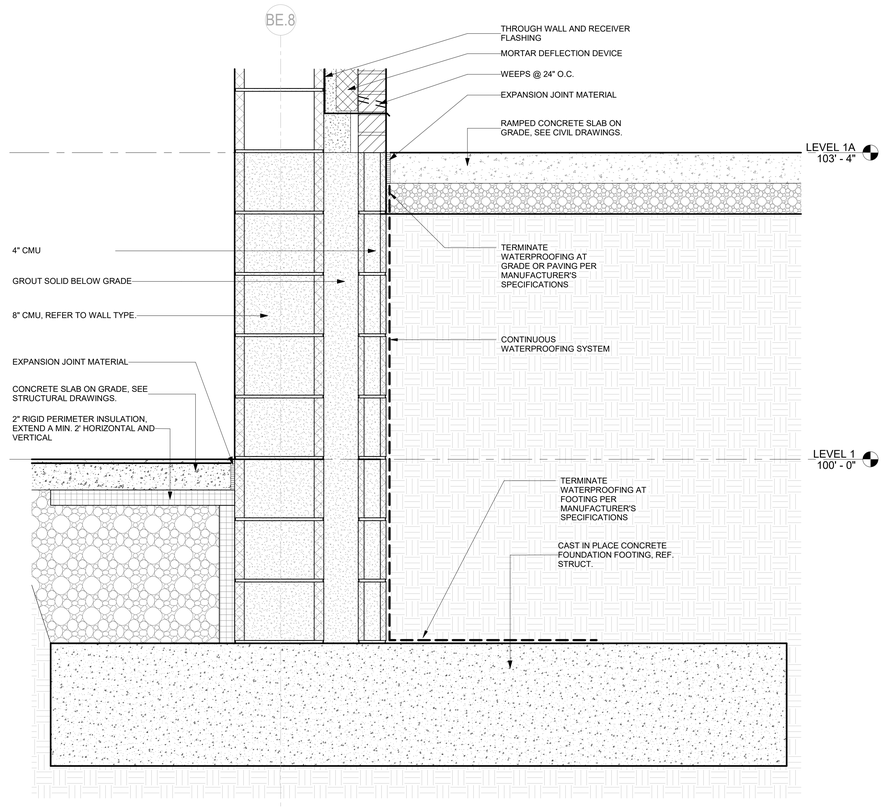
2 DETAIL - MONUMENTAL WALL OPENING
1" = 1'-0"



3 DETAIL - RECESSED DOOR SOFFIT
1 1/2" = 1'-0"



4 CEILING DETAIL - SOFFIT
1 1/2" = 1'-0"



6 FOUNDATION DETAIL - BEHS PLAN SOUTH RETAINING
1 1/2" = 1'-0"

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ENLARGED WALL DETAILS

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BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 25-145

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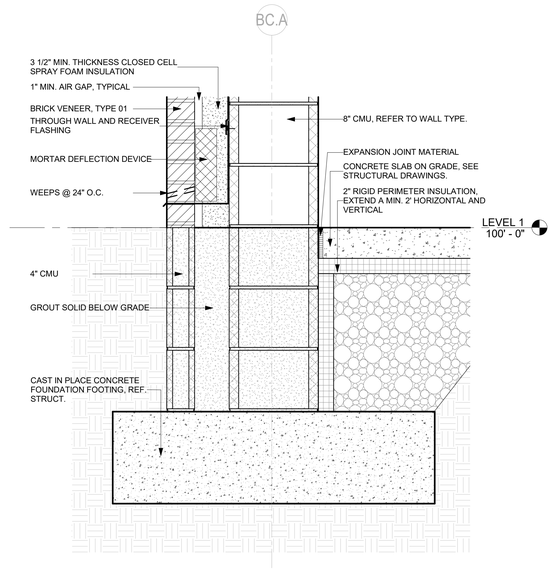
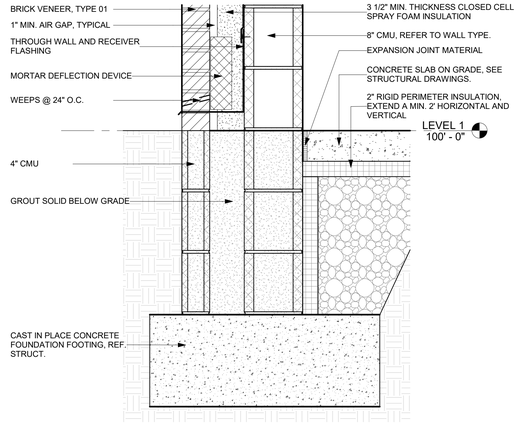
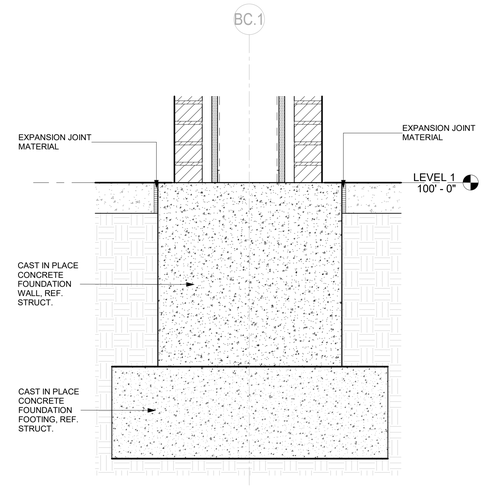


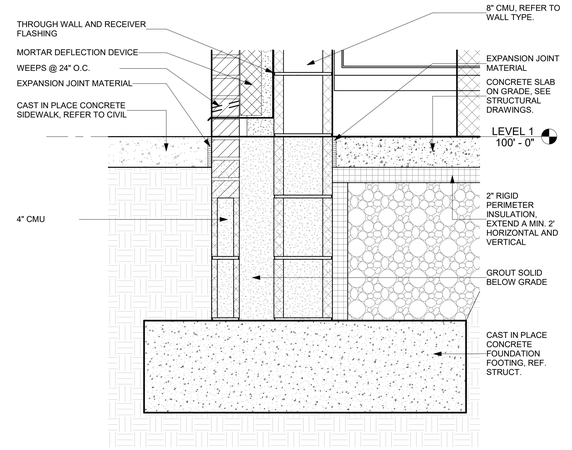
1 FOUNDATION DETAIL - TYP. 12" CMU W/ BRICK
1 1/2" = 1'-0"



2 FOUNDATION DETAIL - TYP. 8" CMU W/ BRICK
1 1/2" = 1'-0"



3 FOUNDATION DETAIL - TYP. MONUMENTAL WALL
1 1/2" = 1'-0"

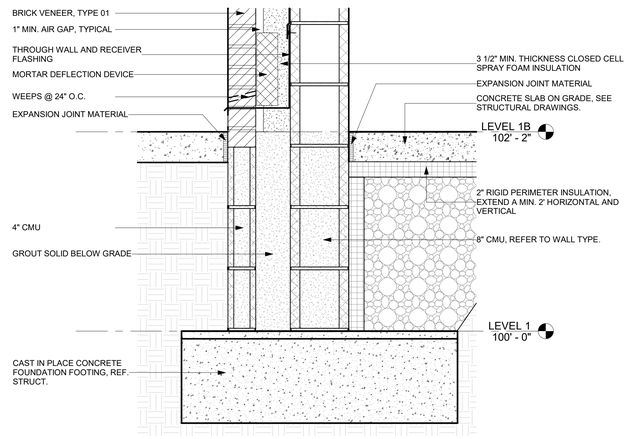


8 FOUNDATION DETAIL - WALKWAY WALL
1 1/2" = 1'-0"

4 FOUNDATION DETAIL - BEHS FIELDHOUSE WALKWAY SIDE
1 1/2" = 1'-0"

5 FOUNDATOIN DETAIL - BEHS ANNEX LEVEL 1B
1 1/2" = 1'-0"

6 FOUNDATION DETAIL - BEHS ANNEX SHORT WALL
1 1/2" = 1'-0"



7 FOUNDATION DETAIL - BEHS ANNEX CONCESSIONS
1 1/2" = 1'-0"

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ENLARGED WALL DETAILS

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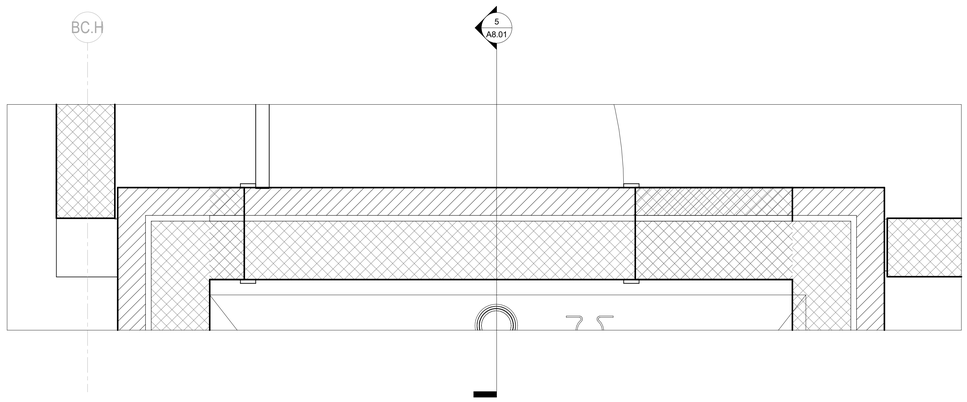

1 PLAN DETAIL - ELEVATOR CORNER
1 1/2" = 1'-0"

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PLAN DETAILS – PRACTICE BUILDING

PHASE III | PHYSICAL SCIENCE CENTER
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BG-25-145

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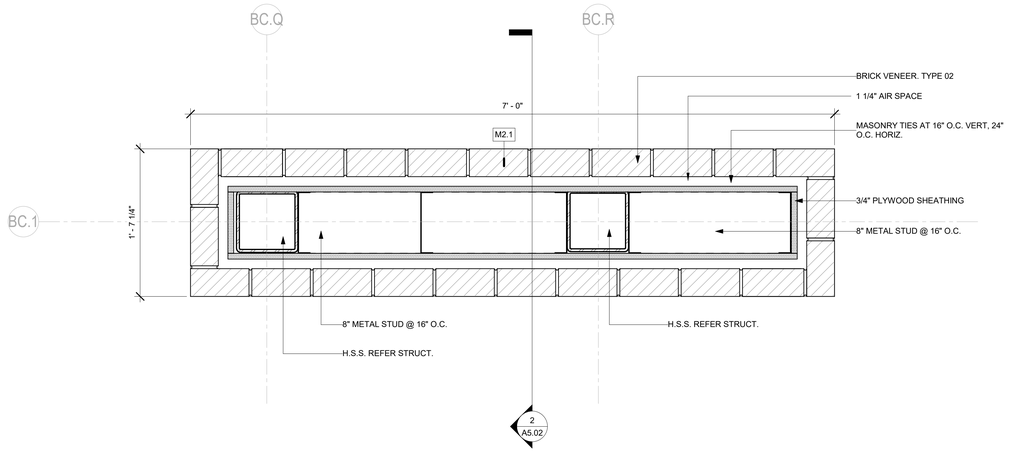
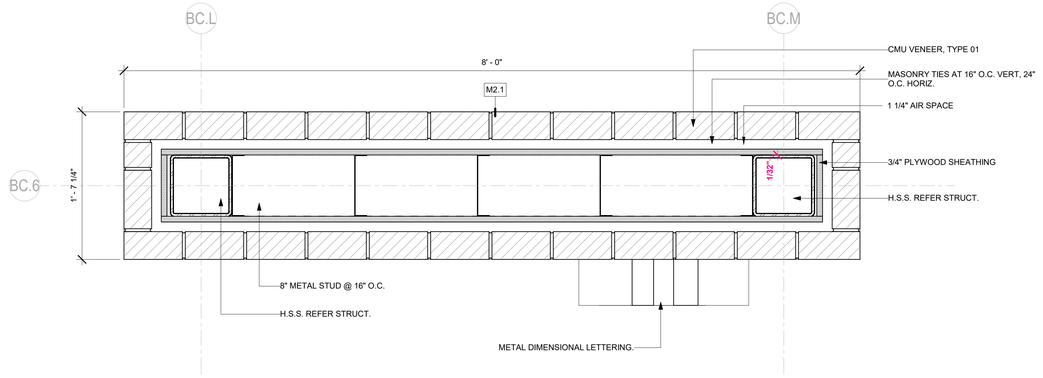
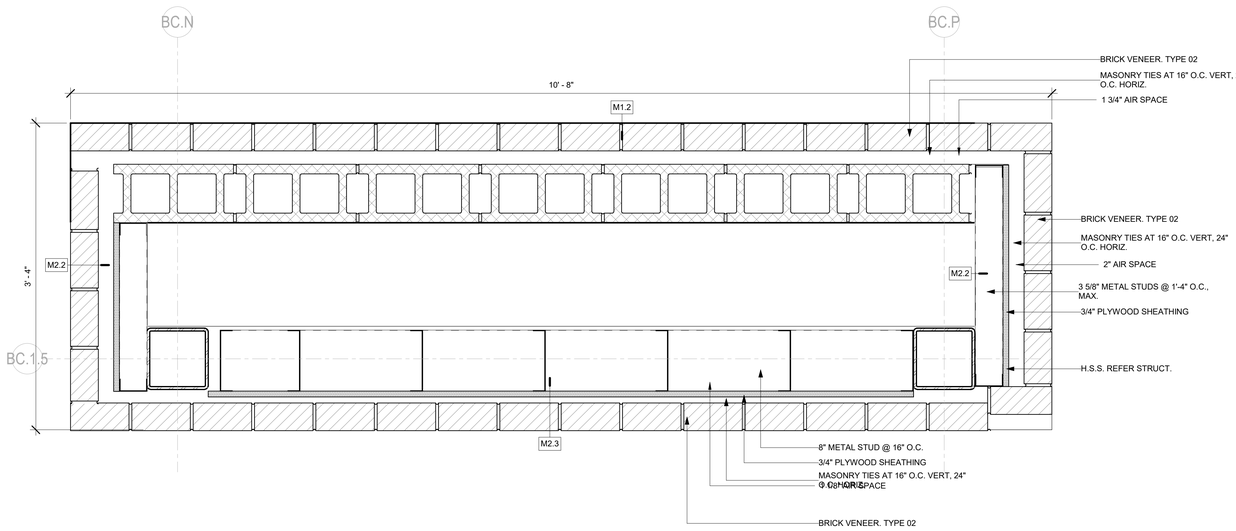


1 PLAN DETAIL - MONUMENTAL WALL BCHS 1
1 1/2" = 1'-0"



3 PLAN DETAIL - MONUMENTAL WALL BCHS 3
1 1/2" = 1'-0"



2 PLAN DETAIL - MONUMENTAL WALL BCHS 2
1 1/2" = 1'-0"

4 PLAN DETAIL - MONUMENTAL WALL BCHS 4
1 1/2" = 1'-0"

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PLAN DETAILS – GATEWAY – BCHS

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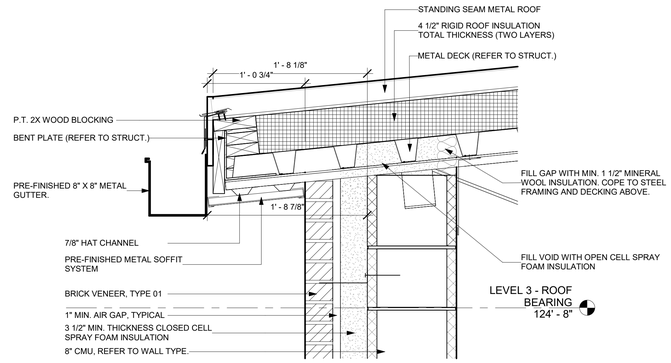
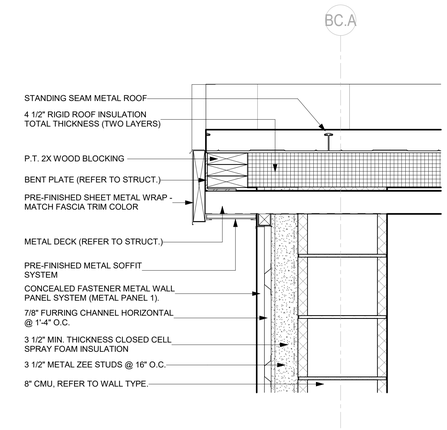
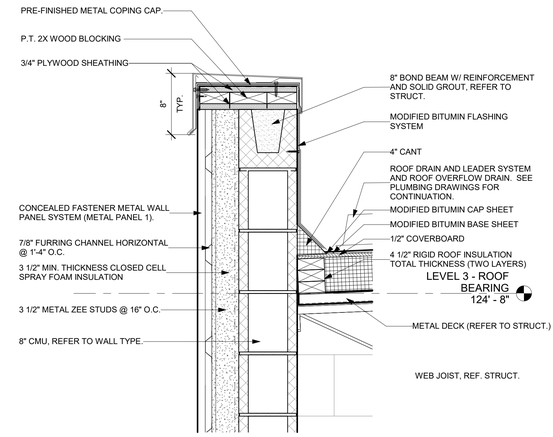


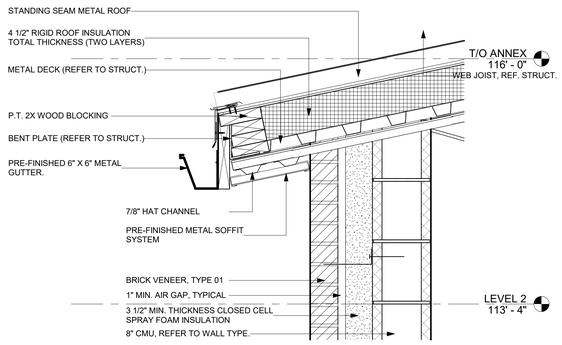
1 ROOF DETAIL - GLAZED BRICK
1 1/2" = 1'-0"



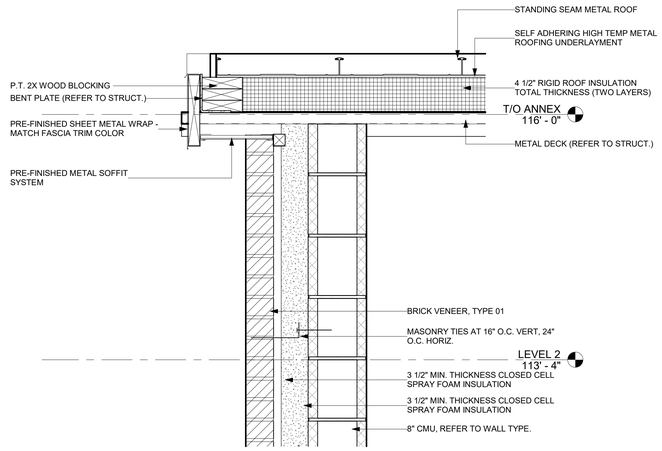
2 ROOF DETAIL - FRONT EDGE
1 1/2" = 1'-0"



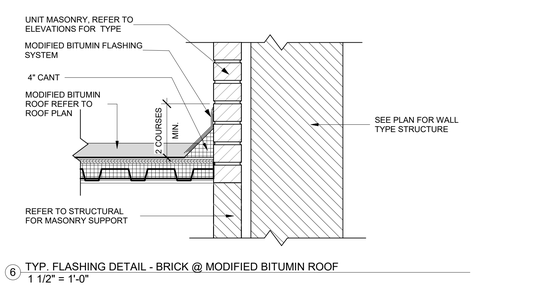
3 ROOF DETAIL - METAL PARAPET WALL
1 1/2" = 1'-0"



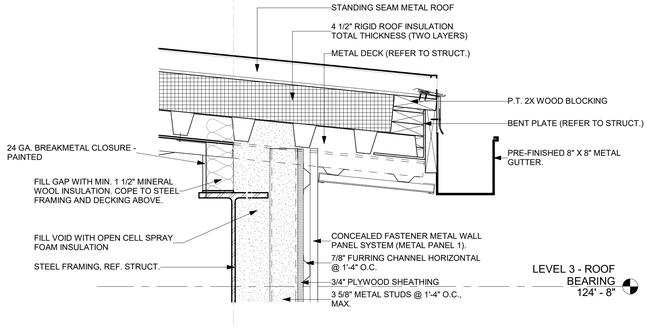
4 ROOF DETAIL - TYP. ANNEX LOW EDGE
1 1/2" = 1'-0"



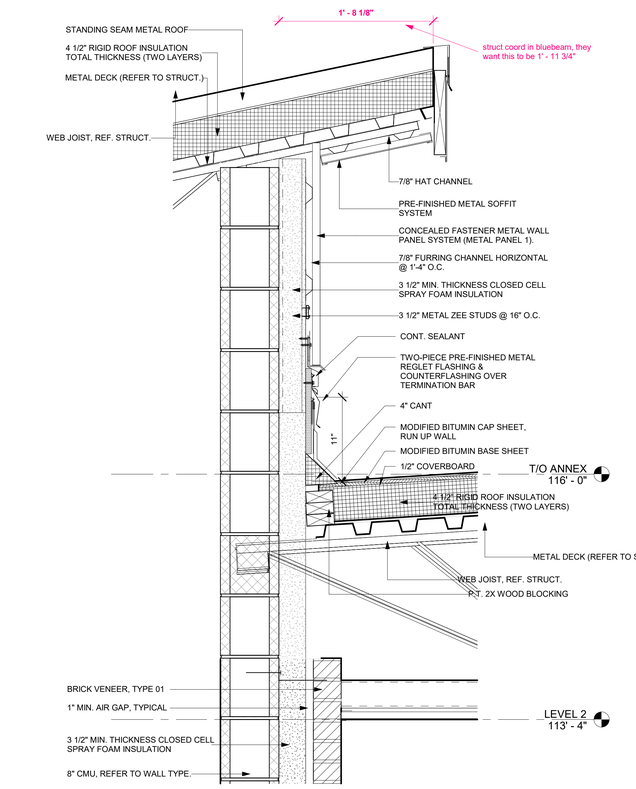
5 ROOF DETAIL - TYP. ANNEX END
1 1/2" = 1'-0"



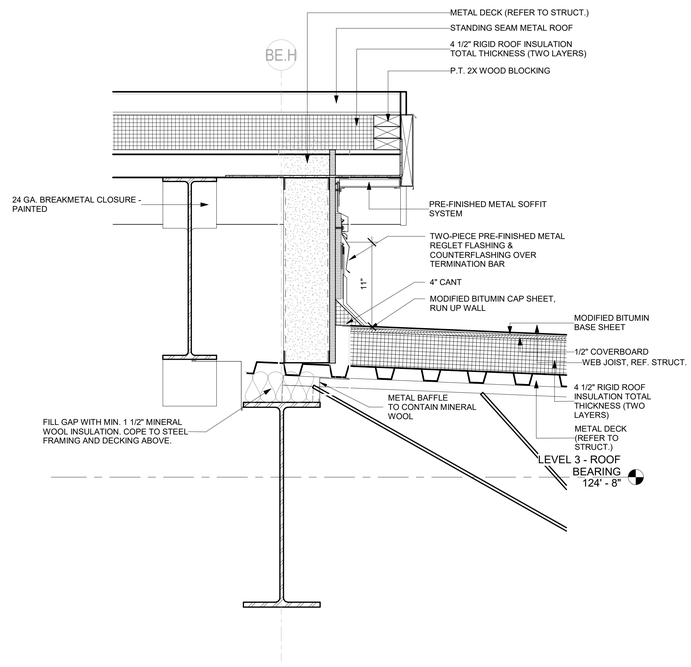
6 TYP. FLASHING DETAIL - BRICK @ MODIFIED BITUMIN ROOF
1 1/2" = 1'-0"



7 ROOF DETAIL - SIDE WALL @ METAL PANEL
1 1/2" = 1'-0"



10 ROOF DETAIL - ANNEX @ CONNECTION
1 1/2" = 1'-0"



9 ROOF DETAIL- STUD WALL ABOVE FLAT ROOF
1 1/2" = 1'-0"

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ROOF DETAILS

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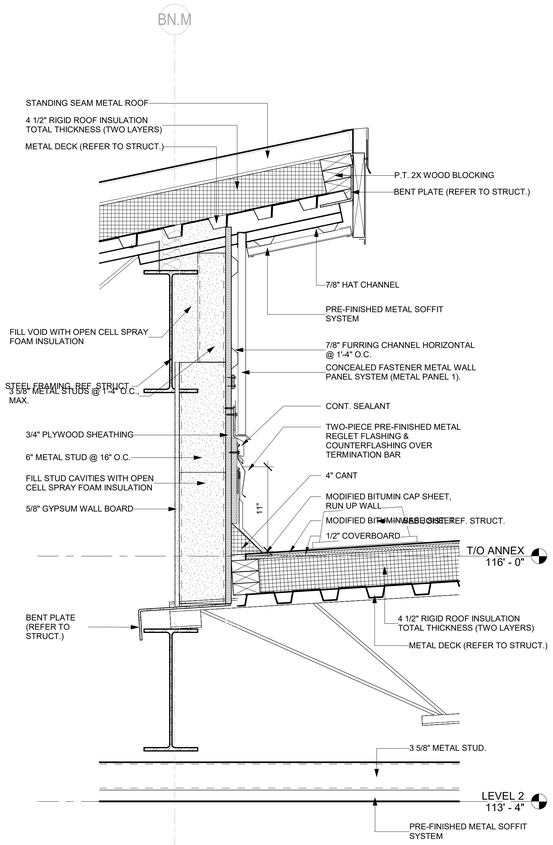
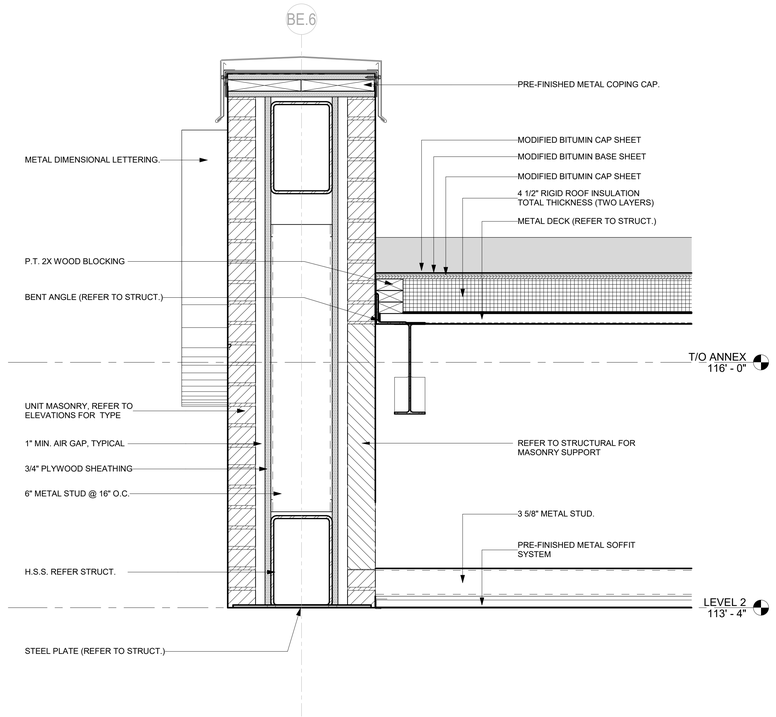
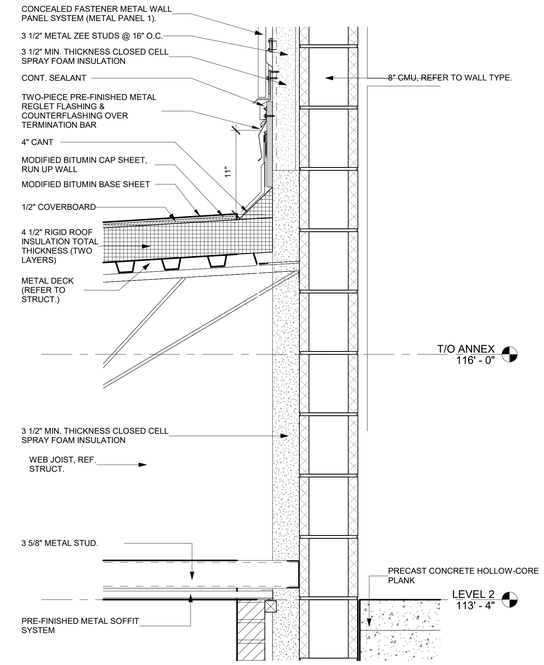


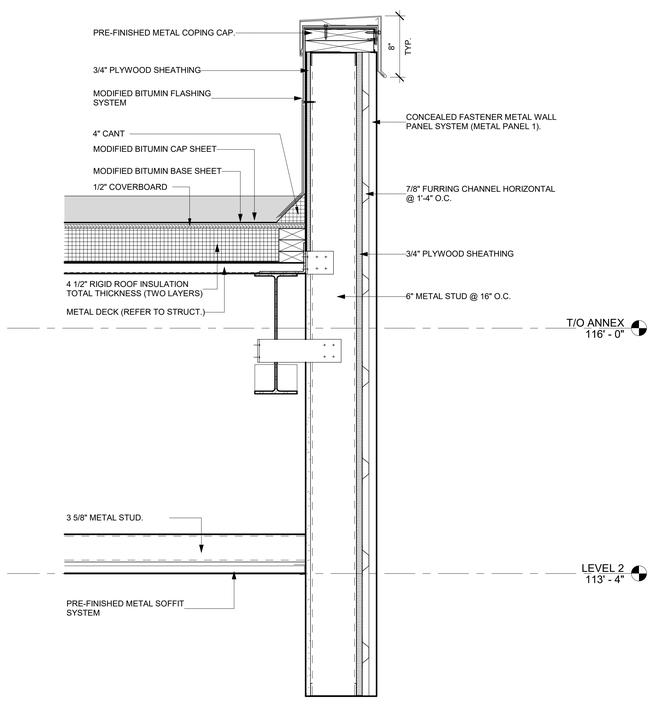
1 ROOF DETAIL - ANNEX CONNECTION STUD WALL
1 1/2" = 1'-0"



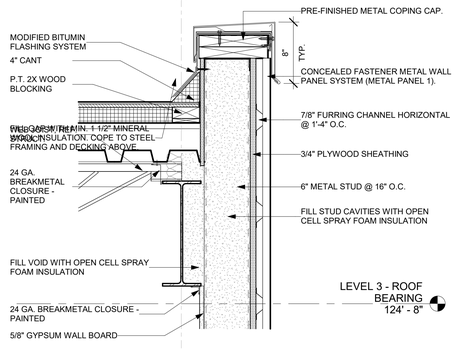
2 ROOF DETAIL - MONUMENTAL WALL ENTRY
1 1/2" = 1'-0"



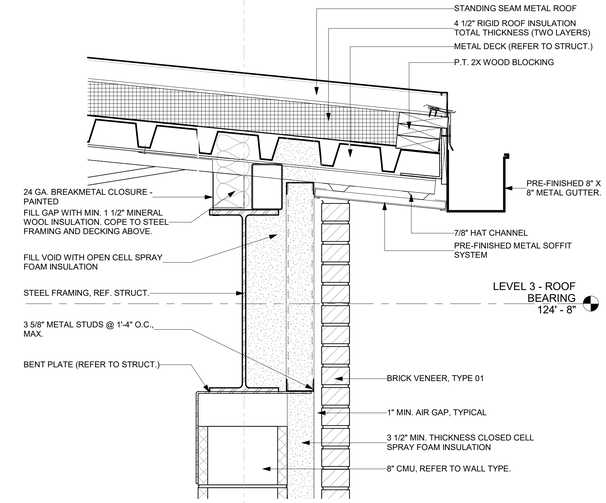
3 ROOF DETAIL - FIELDHOUSE WALL @ WALKWAY ROOF
1 1/2" = 1'-0"



4 ROOF DETAIL - END OF CONNECTING ROOF
1 1/2" = 1'-0"



5 ROOF DETAIL - PARAPET AT GLASS STAIR
1 1/2" = 1'-0"



6 ROOF DETAIL - TYP. BRICK AT TRANSLUCENT PANEL WALL
1 1/2" = 1'-0"

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BG MOVING FORWARD

ROOF DETAILS

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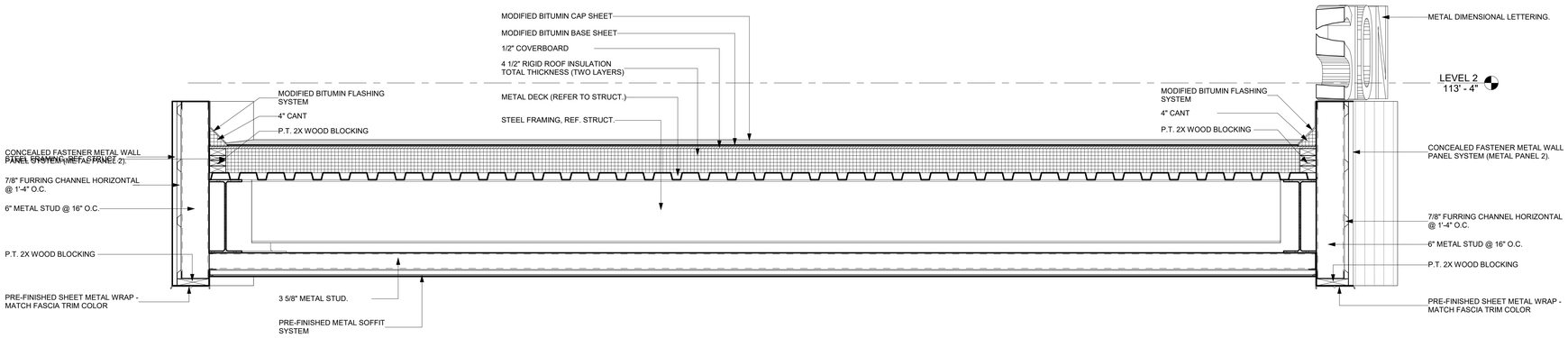
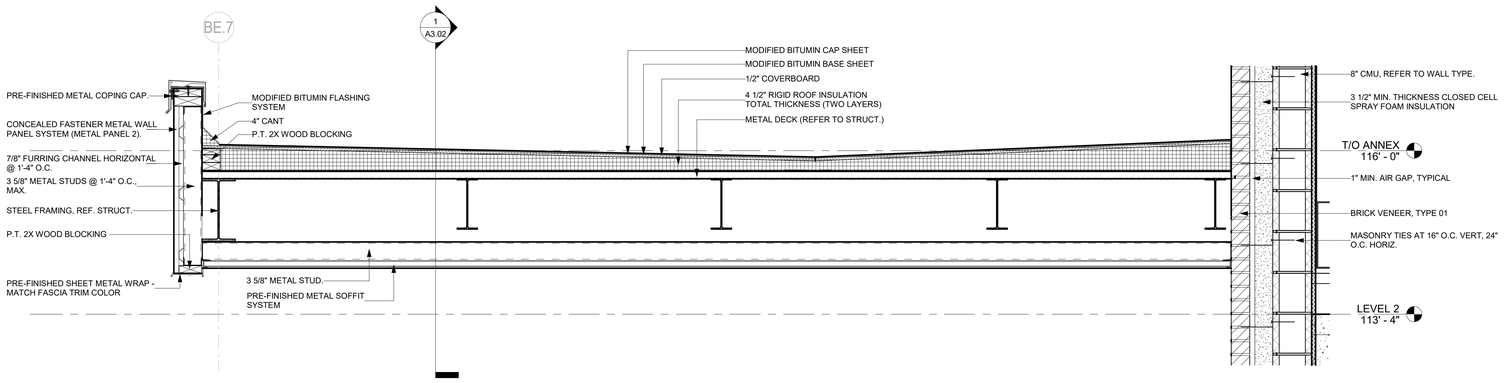


1 ROOF DETAIL - SMALL CONNECTING ROOF
1" = 1'-0"



2 ROOF DETAIL - LOW ROOF @ GLASS STAIR
1" = 1'-0"

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ROOF DETAILS

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1

ACCESS CONTROL LEGEND

SYMBOL	DESCRIPTION
C.R.	CARD READER, O.F.O.I. PATHWAYS BY G.C.
ADA	ADA OPERATOR BUTTON, C.F.C.I.
P.S.	POWER SUPPLY, O.F.O.I. SEE ELECTRICAL DRAWINGS FOR POWER REQUIREMENTS AND ALL LOCATIONS. **POWER SUPPLIES TO BE LOCATED IN MDF. (10 AMP, 8 DOOR OPERATION)**
JB	12x12 JUNCTION BOX ABOVE EACH DOOR WHERE ACCESS CONTROLS ARE SCHEDULED. SEE PLAN FOR LOCATION IF CEILINGS ARE NOT SCHEDULED DIRECTLY ABOVE DOOR OPENING.
DFIB	DEFIBRILLATOR CABINET
TV	WALL MOUNTED TV POWER AND DATA
PH	IN-WALL PHONE
AV	IN-WALL AV CONTROL
IR	INTERCOM STATION

HATCH INDICATES DOOR W/ ELECTRIFIED HARDWARE

CROSS HATCH INDICATES DOOR W/ ELECTRIFIED HARDWARE & ADA OPERATOR

NOTE:
DOOR & FRAME SUPPLIER TO COORDINATED ACCESS CONTROL PATHWAYS WITH ELECTRICAL CONTRACTOR. FLEX CONDUIT IS NOT PERMITTED FOR PATHWAYS. 1/2" RIGID RACEWAY CONDUIT REQUIRED ALL DOORS SCHEDULED WITH ACCESS CONTROLS

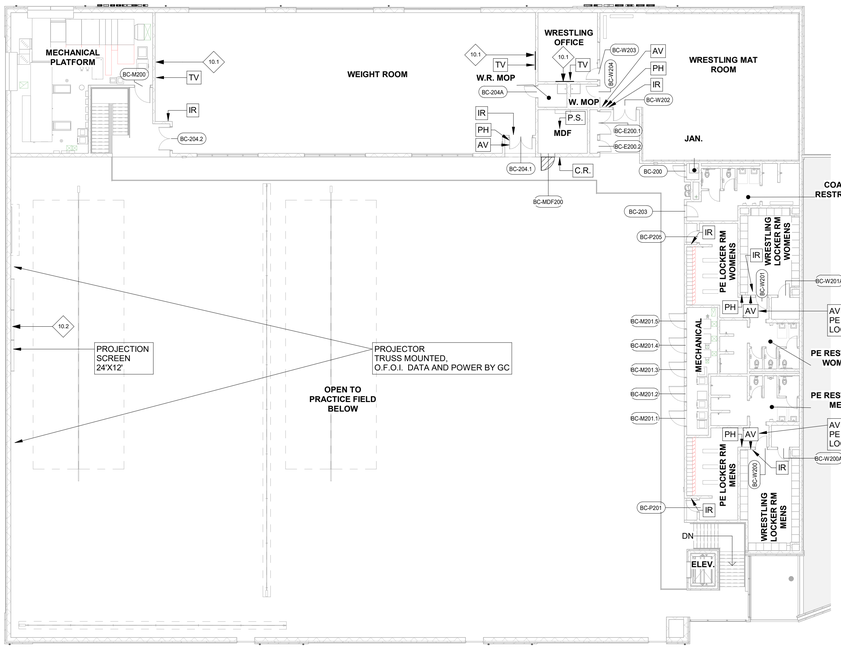
DOOR POSITION SWITCH AT ALL DOORS SCHEDULED WITH ACCESS CONTROLS. SEPARATE PATHWAY FOR DOOR POSITION REQUIRED - SEE ELECTRICAL DETAIL.

KEYNOTE LEGEND

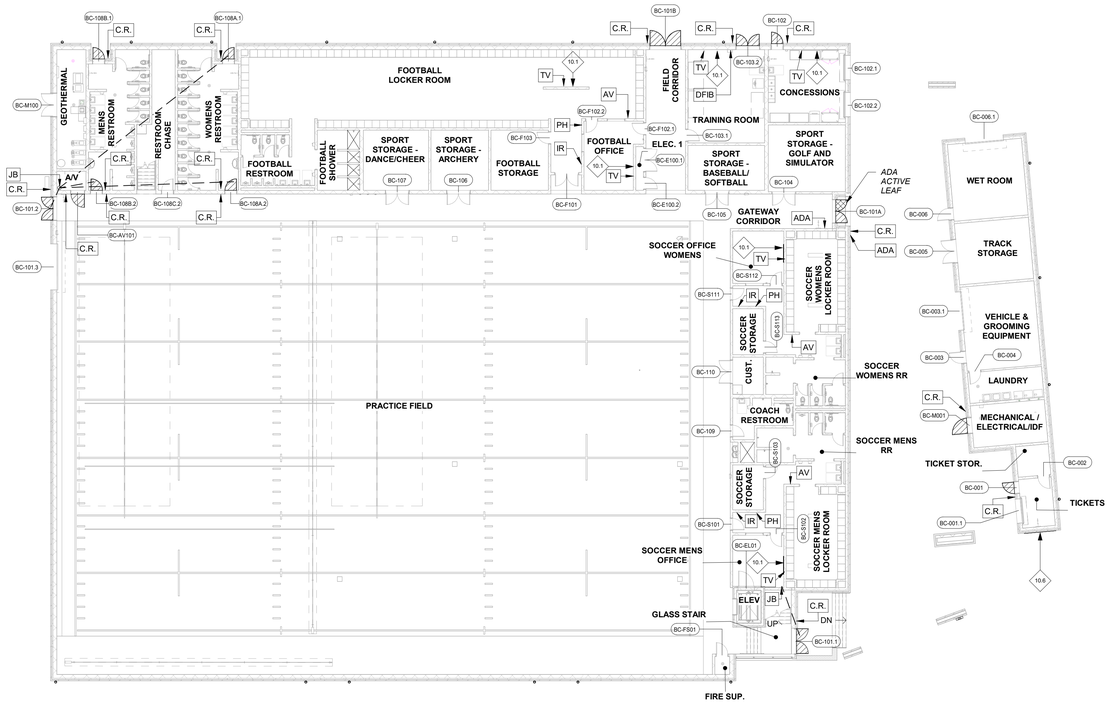
10.1	WALL MOUNTED TV O.F.O.I. G.C. TO PROVIDE DATA AND POWER - COORDINATE DATA AND ELECTRICAL REQUIREMENTS WITH ELECTRICAL (BP1) AND COMMUNICATION DRAWINGS (BP3) .
10.2	MOTORIZED PROJECTION SCREEN - VIEWING AREA 24'-0" WIDE X 12'-0" HIGH. COORDINATE WITH ELECTRICAL DRAWINGS.
10.6	LED DISPLAY VIDEO BOARD - SEE ELECTRICAL AND TECHNOLOGY DRAWINGS (BP4) FOR CONNECTIONS.

GENERAL DOOR ACCESS CONTROL COORDINATION:

CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF PATHWAYS FOR LOW VOLTAGE CABLING ASSOCIATED WITH ACCESS CONTROL DEVICES AT DOORS SCHEDULED TO RECEIVE ACCESS CONTROLS/ELECTRIFIED HARDWARE. COORDINATE WITH BCPS TECHNOLOGY STAFF FOR FINAL REQUIREMENTS. ALL PATHWAY ROUTING TO BE HARD PIPE CONDUIT - SEE ELECTRICAL DRAWINGS FOR CONDUIT SIZE. **NO FLEX CONDUIT WILL BE ALLOWED.** 1/2" RIGID RACEWAY CONDUIT REQUIRED ALL DOORS SCHEDULED WITH ACCESS CONTROLS



2 ACCESS CONTROL PLAN - LEVEL TWO - BCHS
1/16" = 1'-0"



1 ACCESS CONTROL PLAN - LEVEL ONE - BCHS
1/16" = 1'-0"

DOOR SCHEDULE - BULLITT CENTRAL FIELD HOUSE

DOOR NO.	LOCATION: ROOM NUMBER	LOCATION: ROOM NAME	DOOR: WIDTH	DOOR: HEIGHT	DOOR: TYPE	DOOR: MATERIAL	DOOR: FINISH	FRAME: TYPE	FRAME: MATERIAL	FRAME: FINISH	DETAILS: HEAD DETAIL	DETAILS: JAMB DETAIL	FIRE RATING	HARDWARE LOCKSET	COMMENTS
BC-001	BC-001	TICKETS	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	12/A6.05	11/A6.05	1	E01	ELECTRIFIED HARDWARE.
BC-001.1	BC-001	TICKETS	6' - 4"	4' - 8"	E	ALUM.	POWDER COAT	-	-	-	8/A6.04	7/A6.04		01	COUNTER HEIGHT COILING DOOR, MANUALLY OPERATED
BC-002	BC-002	TICKET STOR.	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02	
BC-003	BC-003	VEHICLE & GROOMING EQUIPMENT	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	12/A6.05	11/A6.05		03	KEYPAD LOCKSET
BC-003.1	BC-003	VEHICLE & GROOMING EQUIPMENT	10' - 0"	10' - 0"	D	STEEL	POWDER COAT	-	-	-	16/A6.05	15/A6.05		01	
BC-004	BC-004	LAUNDRY	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	6/A6.05	5/A6.05		03A	KEYPAD LOCKSET
BC-005	BC-005	TRACK STORAGE	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	12/A6.05	11/A6.05		03C	KEYPAD LOCKSET
BC-006	BC-006	WET ROOM	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	12/A6.05	11/A6.05		03B	KEYPAD LOCKSET
BC-006.1	BC-006	WET ROOM	10' - 0"	10' - 8"	D	STEEL	POWDER COAT	-	-	-	16/A6.05	15/A6.05		01	
BC-101.1	BC-100	GLASS STAIR	6' - 6 1/8"	8' - 0 1/2"	CC	ALUM.	CLEAR ANOD.	3*	ALUM	CLEAR ANOD				E02	ELECTRIFIED HARDWARE.
BC-101.2	BC-101	PRACTICE FIELD	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	14/A6.05	13/A6.05		E02A	ELECTRIFIED HARDWARE.
BC-101.3	BC-101	PRACTICE FIELD	12' - 0"	11' - 4"	D	STEEL	POWDER COAT	-	-	-	16/A6.05	15/A6.05		- -	
BC-101A	BC-101A	GATEWAY CORRIDOR	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	12/A6.05	11/A6.05		AE01	ELECTRIFIED HARDWARE.
BC-101B	BC-101B	FIELD CORRIDOR	8' - 0"	8' - 0"	AA	HM	PAINT	1	HM	PAINT	14/A6.05	13/A6.05		E02A	ELECTRIFIED HARDWARE.
BC-102	BC-102	CONCESSIONS	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	14/A6.05	13/A6.05		E01	ELECTRIFIED HARDWARE.
BC-102.1	BC-102	CONCESSIONS	6' - 4"	4' - 8"	E	ALUM.	POWDER COAT	-	-	-	8/A6.04	7/A6.04		01	COUNTER HEIGHT COILING DOOR, MANUALLY OPERATED
BC-102.2	BC-102	CONCESSIONS	6' - 4"	4' - 8"	E	ALUM.	POWDER COAT	-	-	-	8/A6.04	7/A6.04		01	COUNTER HEIGHT COILING DOOR, MANUALLY OPERATED
BC-103.1	BC-103	TRAINING ROOM	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		04	
BC-103.2	BC-103	TRAINING ROOM	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	14/A6.05	13/A6.05		02A	ELECTRIFIED HARDWARE.
BC-104	BC-104	SPORT STORAGE - GOLF AND SIMULATOR	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02B	
BC-105	BC-105	SPORT STORAGE - BASEBALL/ SOFTBALL	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	4/A6.05	3/A6.05		02B	
BC-106	BC-106	SPORT STORAGE - ARCHERY	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	4/A6.05	3/A6.05		02B	
BC-107	BC-107	SPORT STORAGE - DANCE/CHEER	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	4/A6.05	3/A6.05		02B	
BC-108A.1	BC-108A.1	WOMENS ALCOVE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	14/A6.05	13/A6.05		E02B	ELECTRIFIED HARDWARE.
BC-108A.2	BC-108A.2	WOMENS ALCOVE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	4/A6.05	3/A6.05		E01A	ELECTRIFIED HARDWARE.
BC-108A.A	BC-108A	WOMENS RESTROOM	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108A.B	BC-108A	WOMENS RESTROOM	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108A.C	BC-108A	WOMENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108A.D	BC-108A	WOMENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108A.E	BC-108A	WOMENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108A.F	BC-108A	WOMENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108A.G	BC-108A	WOMENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108A.H	BC-108A	WOMENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108A.I	BC-108A	WOMENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108A.J	BC-108A	WOMENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108B.1	BC-108B.1	MENS ALCOVE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	14/A6.05	13/A6.05		E02B	ELECTRIFIED HARDWARE.
BC-108B.2	BC-108B.2	MENS ALCOVE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	4/A6.05	3/A6.05		E01A	ELECTRIFIED HARDWARE.
BC-108B.A	BC-108B	MENS RESTROOM	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108B.B	BC-108B	MENS RESTROOM	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108B.C	BC-108B	MENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108B.D	BC-108B	MENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108B.E	BC-108B	MENS RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-108C.2	BC-108C	RESTROOM CHASE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	4/A6.05	3/A6.05		02	
BC-109	BC-109	COACH RESTROOM	3' - 0"	7' - 0"	B	HM	PAINT	2	HM	PAINT	2/A6.05	1/A6.05		06	
BC-110	BC-110	CUST.	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02C	
BC-200	BC-200	JAN.	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02D	
BC-203	BC-203	COACH RESTROOM	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02M	
BC-203.A	BC-203	COACH RESTROOM	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05B	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-203.B	BC-203	COACH RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-203A	BC-203A	COACH SHOWER	4' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	
BC-204.1	BC-204	WEIGHT ROOM	6' - 0"	7' - 0"	AA	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		04A	
BC-204.2	BC-204	WEIGHT ROOM	6' - 0"	7' - 0"	AA	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		04A	
BC-204A	BC-204A	W.R. MOP	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02F	
BC-AV101	BC-AV101	A/V	3' - 6"	7' - 0"	B	HM	PAINT	1	HM	PAINT	4/A6.05	3/A6.05		E01B	ELECTRIFIED HARDWARE.
BC-E100.1	BC-E100	ELEC. 1	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02J	
BC-E100.2	BC-E100	ELEC. 1	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02G	
BC-E200.1	BC-E200	ELEC. 2	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02J	
BC-E200.2	BC-E200	ELEC. 2	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02G	
BC-EL01	BC-EL01	ELEV	4' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	10/A6.05	9/A6.05	60 MIN	02H	
BC-F101	BC-F101	FOOTBALL HALL	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		07B	
BC-F102.1	BC-F102	FOOTBALL OFFICE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		08	
BC-F102.2	BC-F102	FOOTBALL OFFICE	3' - 0"	7' - 0"	A	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		08	
BC-F103	BC-F103	FOOTBALL STORAGE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02	
BC-F105A.A	BC-F105A	FOOTBALL RESTROOM	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05A	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-F105A.B	BC-F105A	FOOTBALL RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-F105A.C	BC-F105A	FOOTBALL RESTROOM	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-F105B	BC-F105B	FOOTBALL SHOWER	5' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	
BC-FS01	BC-FS01	FIRE SUP.	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02G	
BC-M001	BC-M001	MECHANICAL / ELECTRICAL/IDF	4' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	12/A6.05	11/A6.05		E02B	
BC-M100	BC-M100	GEOTHERMAL	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	14/A6.05	13/A6.05		02A	
BC-M200	BC-M200	MECHANICAL PLATFORM	4' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	8/A6.05	7/A6.05		02K	
BC-M201.1	BC-M201	MECHANICAL	4' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02L	
BC-M201.2	BC-M201	MECHANICAL	4' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02L	
BC-M201.3	BC-M201	MECHANICAL	4' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02L	
BC-M201.4	BC-M201	MECHANICAL	4' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02L	
BC-M201.5	BC-M201	MECHANICAL	4' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02L	
BC-M201.6	BC-P208B	PE SHOWER WOMENS	4' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	
BC-M201.7	BC-P204B	PE SHOWER MENS	4' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	
BC-MDF200	BC-MDF200	MDF	3' - 6"	7' - 0"	B	HM	PAINT	1	HM	PAINT	4/A6.05	3/A6.05		E01B	ELECTRIFIED HARDWARE.
BC-P201	BC-P201	PE HALL	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		07	
BC-P204A	BC-P204A	PE RESTROOM MENS	4' - 0"	7' - 0"	-	-	-	1	HM	PAINT	4/A6.05	3/A6.05		09	
BC-P204.A.A	BC-P204A	PE RESTROOM MENS	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05A	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-P204.A.B	BC-P204A	PE RESTROOM MENS	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-P205	BC-P205	PE HALL	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		07	
BC-P208A	BC-P208A	PE RESTROOM WOMENS	4' - 0"	7' - 0"	-	-	-	1	HM	PAINT	4/A6.05	3/A6.05		09	
BC-P208A.A	BC-P208A	PE RESTROOM WOMENS	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05A	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-P208A.B	BC-P208A	PE RESTROOM WOMENS	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-P208A.C	BC-P208A	PE RESTROOM WOMENS	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-S101	BC-S101	SOCCER MENS HALL	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		07	
BC-S102	BC-S102	SOCCER MENS OFFICE	3' - 0"	7' - 0"	A	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		08	
BC-S103	BC-S103	SOCCER STORAGE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02	
BC-S104	BC-S104	SOCCER MENS LOCKER ROOM	4' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	
BC-S105B	BC-S105B	SOCCER MENS RR	5' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	
BC-S105B.A	BC-S105B	SOCCER MENS RR	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-S105B.B	BC-S105B	SOCCER MENS RR	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05A	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-S105C	BC-S105C	SOCCER MENS SHOWER	5' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	
BC-S111	BC-S111	SOCCER WOMENS HALL	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		07	
BC-S112	BC-S112	SOCCER OFFICE WOMENS	3' - 0"	7' - 0"	A	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		08	
BC-S113	BC-S113	SOCCER STORAGE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02	
BC-S114	BC-S114	SOCCER WOMENS LOCKER ROOM	4' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	HOLLOW METAL FRAMED OPENING.
BC-S115B	BC-S115B	SOCCER WOMENS RR	5' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	
BC-S115B.A	BC-S115B	SOCCER WOMENS RR	2' - 10"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-S115B.B	BC-S115B	SOCCER WOMENS RR	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-S115B.C	BC-S115B	SOCCER WOMENS RR	2' - 8"	4' - 2"	SEE SHEET A4.00	HM	PAINT	SEE SHEET A4.00	HM	PAINT	*	*		05A	* REFER TO SHEET A4.00 FOR DOOR AND STALL DETAILS
BC-S115C	BC-S115C	SOCCER WOMENS SHOWER	5' - 0"	7' - 0"	-	-	-	1	HM	PAINT	2/A6.05	1/A6.05		09	HOLLOW METAL FRAMED OPENING.
BC-W200	BC-W200	WRESTLING LOCKER RM MENS	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		07A	
BC-W200A	BC-W200A	W STORAGE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02	
BC-W201	BC-W201	WRESTLING LOCKER RM WOMENS	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		07A	
BC-W201A	BC-W201A	W STORAGE	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02	
BC-W202	BC-W202	WRESTLING MAT ROOM	6' - 0"	7' - 0"	BB	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02E	
BC-W203	BC-W203	WRESTLING OFFICE	3' - 0"	7' - 0"	A	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		08	
BC-W204	BC-W204	W. MOP	3' - 0"	7' - 0"	B	HM	PAINT	1	HM	PAINT	2/A6.05	1/A6.05		02D	

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BG MOVING FORWARD

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

DOOR SCHEDULE & A.C. & TECHNOLOGY PLANS – BCHS F.H.
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
321 ZAG

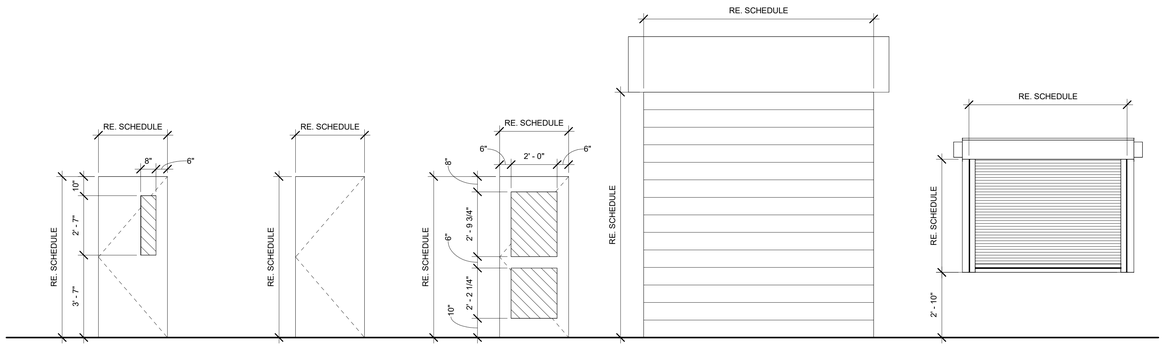
BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

1	Addendum No. 1	08.28.2024
2	Addendum No. 3	SEP 19 2024

2023-50.1

A6.01
BCHS



A: SINGLE
AA: DOUBLE

NARROW LITE

PANIC DEVICES
WHERE SCHEDULED

B: SINGLE
BB: DOUBLE

FLUSH

SEE SCHEDULE FOR
DOOR MATERIAL
PANIC DEVICES WHERE
SCHEDULED

C: SINGLE
CC: DOUBLE

DOUBLE GLASS VIEW LITE
WIDE STILE

SEE SCHEDULE FOR
DOOR MATERIAL
PANIC DEVICES WHERE
SCHEDULED

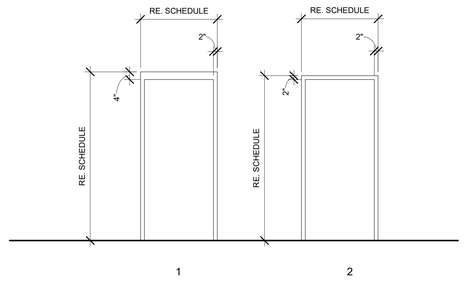
D

OVERHEAD COILING DOOR
THERMALLY INSULATED

E

OVERHEAD ROLLING DOOR
COUNTER HEIGHT

DOOR TYPES
3/8" = 1'-0"



FRAME TYPES
3/8" = 1'-0"

GLAZING LEGEND

CLEAR, TEMPERED GLAZING

TEMPERED GLAZING W/ SAFETY FILM & GRAPHIC

TRANSLUCENT GLAZING PANEL

HM FRAME ELECTRICAL DEVICE COORDINATION:

CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF PATHWAYS FOR MULLION MOUNTED ELECTRICAL DEVICES WHERE SCHEDULED - SEE ELECTRICAL DRAWINGS. COORDINATE IN-SLAB ROUTING OF CONDUIT WHERE LINTEL REQUIREMENTS PROHIBIT IN-WALL ROUTING, ABOVE. **SURFACE MOUNT, EXPOSED CONDUIT WILL NOT BE ALLOWED AT DOOR FRAMES.**

KEYNOTE LEGEND

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

DOOR AND FRAME TYPES

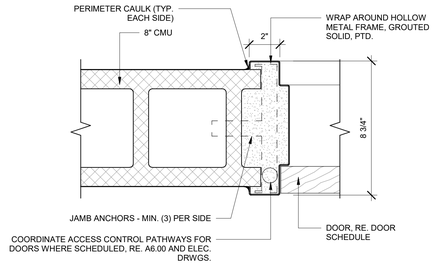
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG-25-145

BG# 25-145

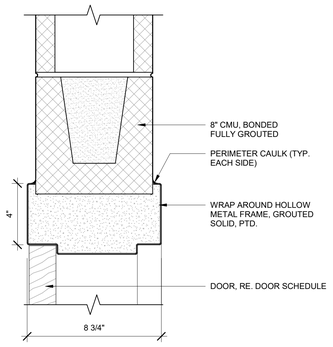
DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

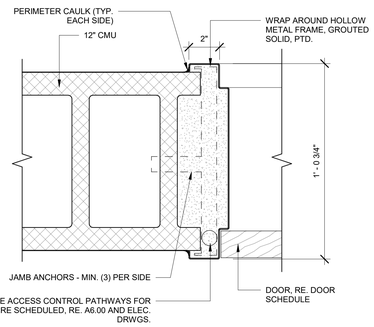
A6.04



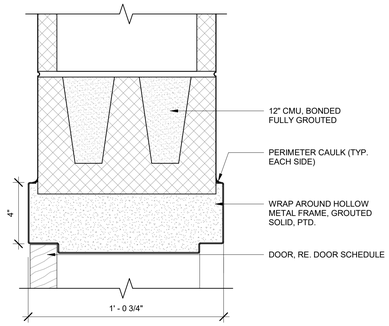
1 HM DOOR FRAME- JAMB @ 8" CMU
3" = 1'-0"



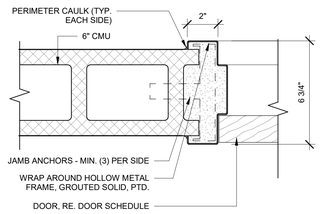
2 HM DOOR FRAME- HEAD @ 8" CMU- 4" HEAD
3" = 1'-0"



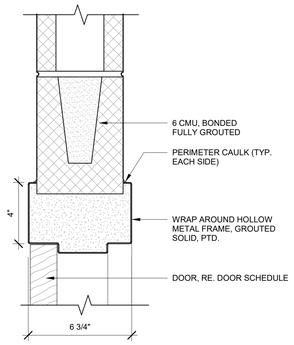
3 HM DOOR FRAME- JAMB @ 12" CMU
3" = 1'-0"



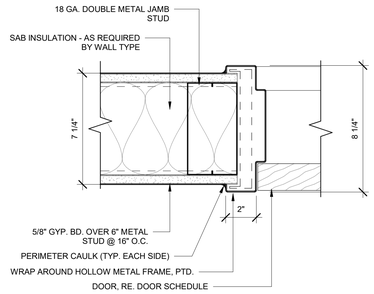
4 HM DOOR FRAME- HEAD @ 12" CMU - 4" HEAD
3" = 1'-0"



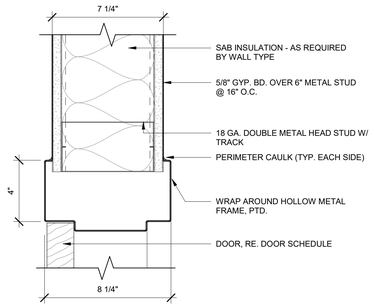
5 HM DOOR FRAME- JAMB @ 6" CMU
3" = 1'-0"



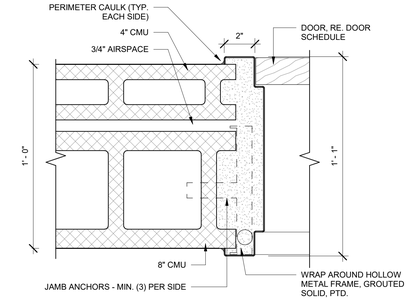
6 HM DOOR FRAME- HEAD @ 6" CMU- 4" HEAD
3" = 1'-0"



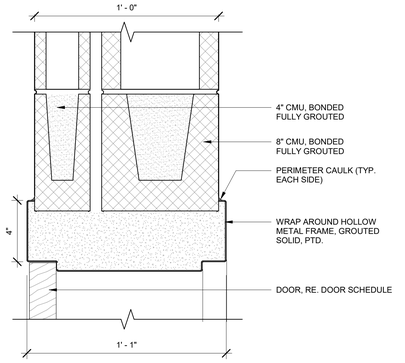
7 HM DOOR FRAME- JAMB @ 6" STUD
3" = 1'-0"



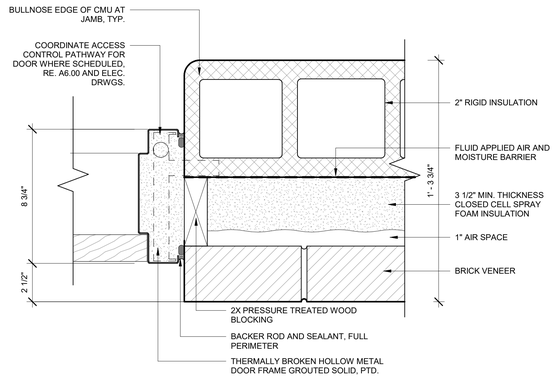
8 HM DOOR FRAME- HEAD @ 6" STUD - 4" HEAD
3" = 1'-0"



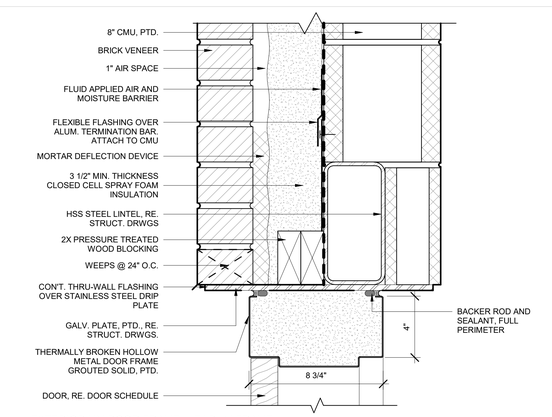
9 HM DOOR FRAME- JAMB @ 8" CMU W/ 4" CMU
3" = 1'-0"



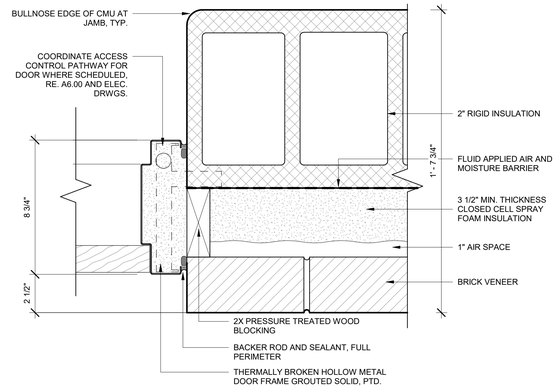
10 HM DOOR FRAME- HEAD @ 8" CMU/ 4" CMU - 4" HEAD
3" = 1'-0"



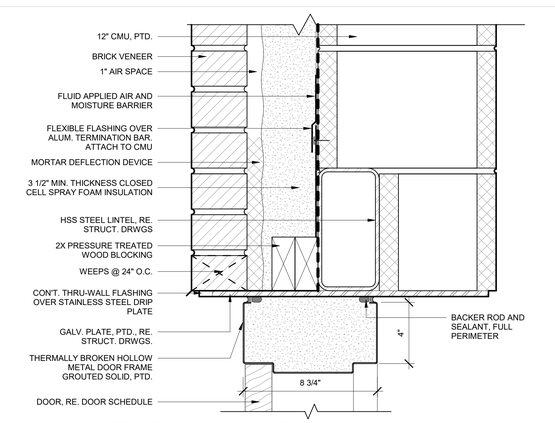
11 EXTERIOR HM DOOR FRAME- JAMB
3" = 1'-0"



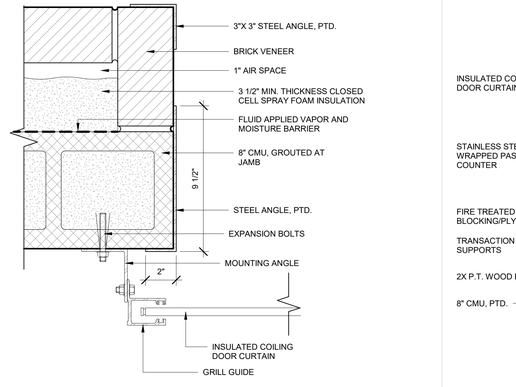
12 EXTERIOR HM DOOR FRAME- HEAD- 4" FRAME
3" = 1'-0"



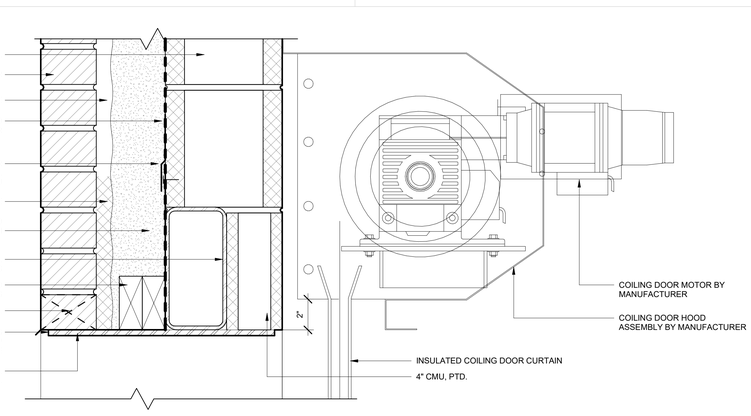
13 EXTERIOR HM DOOR FRAME- JAMB 12" CMU
3" = 1'-0"



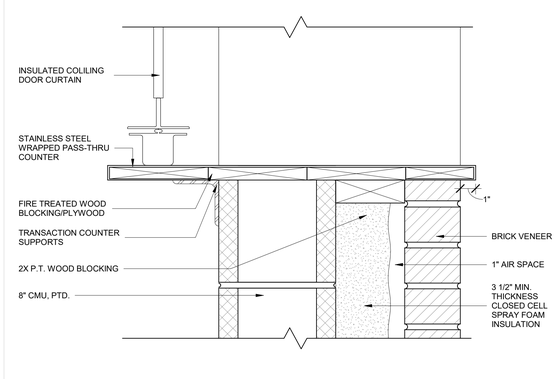
14 EXTERIOR HM DOOR FRAME- HEAD- 4" FRAME 12" CMU
3" = 1'-0"



15 EXTERIOR COILING DOOR- JAMB
3" = 1'-0"



16 EXTERIOR COILING DOOR - HEAD
3" = 1'-0"



17 DETAIL - SILL PASS-THRU COUNTER
3" = 1'-0"

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

DOOR DETAILS

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BCPS-245

BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :
1 Addendum No. 2 SEP 06 2024

2023-50.1

A6.05

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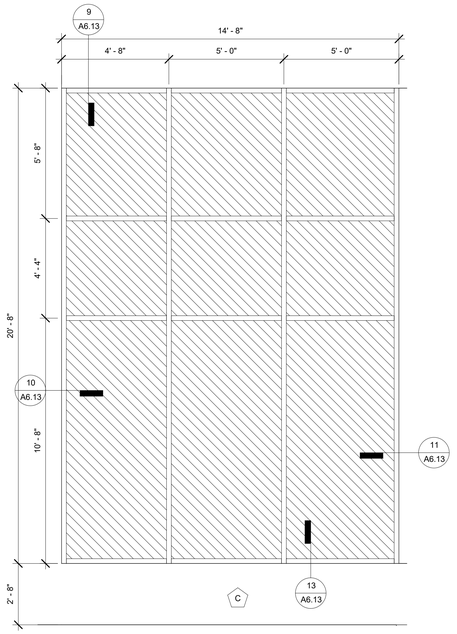
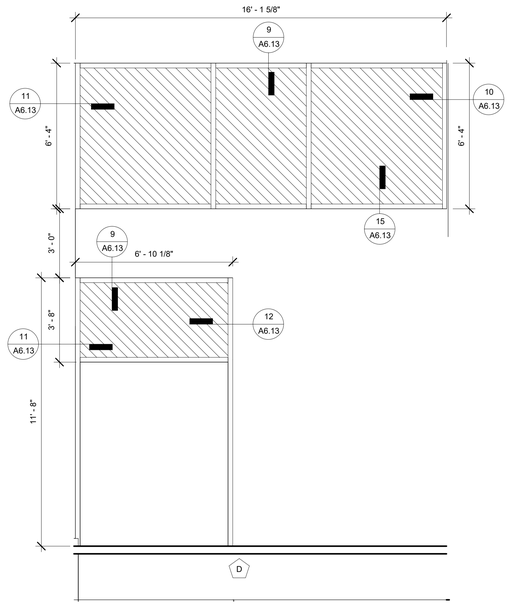
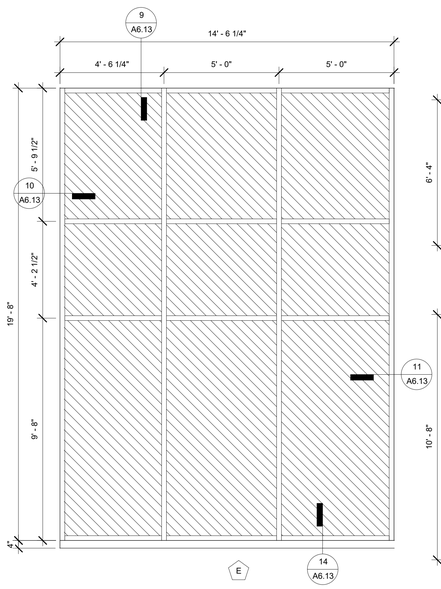
1231 S Shelby St, Louisville, KY 40203
TEL 502.499.1100 FAX 502.499.1101



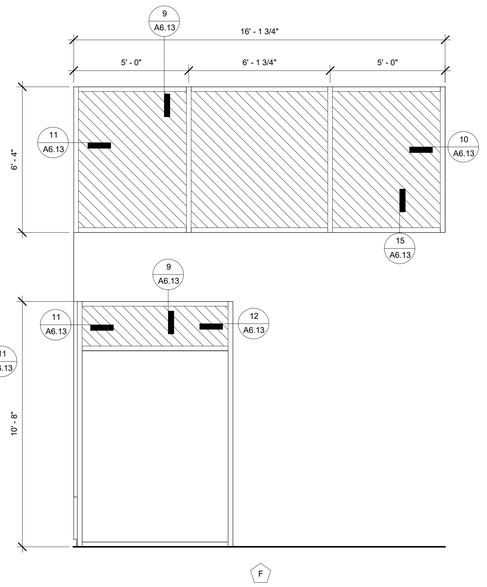
1 CURTAINWALL ELEVATION - BCHS GLASS STAIR FULL
3/8" = 1'-0"



2 WINDOW ELEVATION - BCHS GLASS STAIR W/ DOOR
3/8" = 1'-0"



4 WINDOW ELEVATION - BEHS GLASS STAIR FULL
3/8" = 1'-0"



3 WINDOW ELEVATION - BEHS GLASS STAIR W/ DOOR
3/8" = 1'-0"

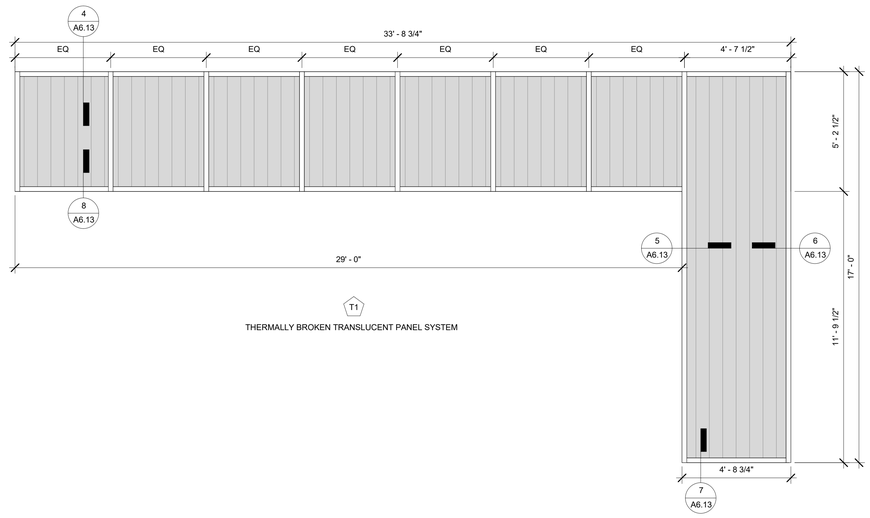
2

GLAZING LEGEND

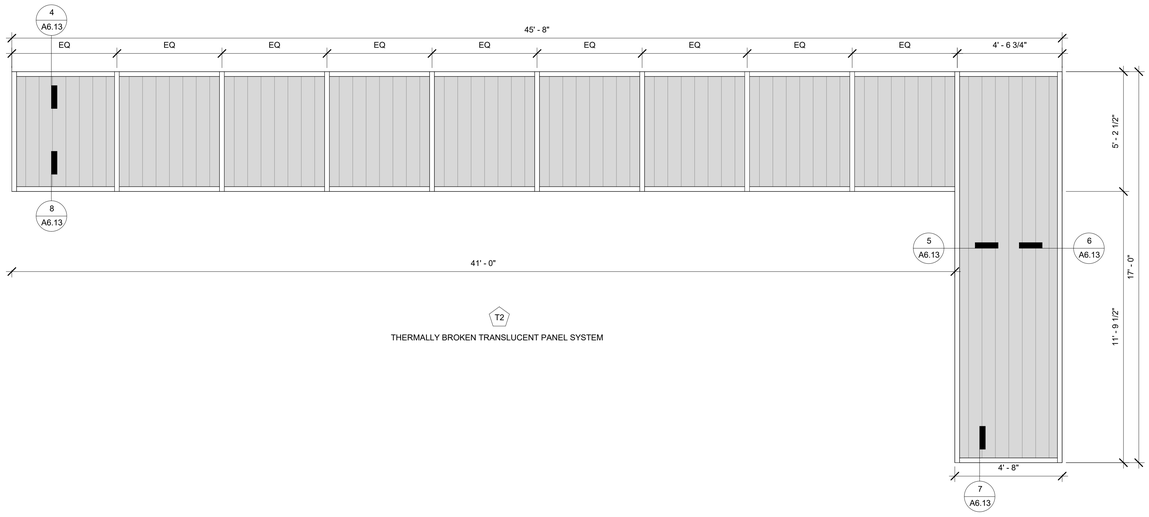
- CLEAR, TEMPERED GLAZING
- TEMPERED GLAZING W/ SAFETY FILM & GRAPHIC
- TRANSLUCENT GLAZING PANEL

HM FRAME ELECTRICAL DEVICE COORDINATION:

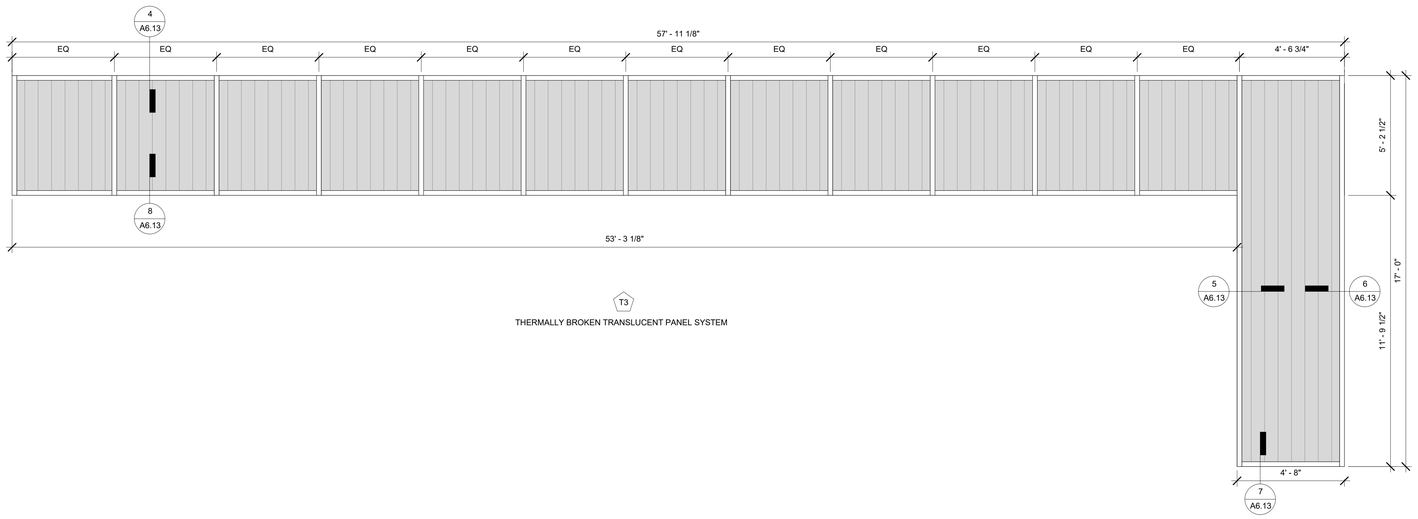
CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF PATHWAYS FOR MULLION MOUNTED ELECTRICAL DEVICES WHERE SCHEDULED - SEE ELECTRICAL DRAWINGS. COORDINATE IN-SLAB ROUTING OF CONDUIT WHERE LINTEL REQUIREMENTS PROHIBIT IN-WALL ROUTING, ABOVE. **SURFACE MOUNT, EXPOSED CONDUIT WILL NOT BE ALLOWED AT DOOR FRAMES.**



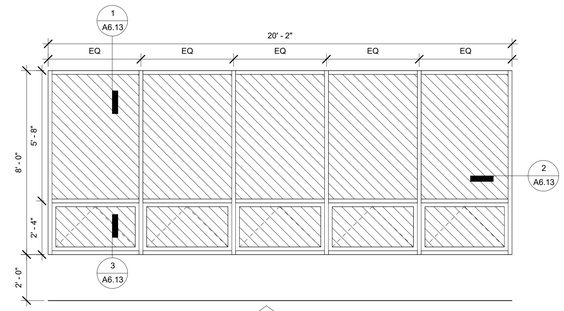
T1
THERMALLY BROKEN TRANSLUCENT PANEL SYSTEM



T2
THERMALLY BROKEN TRANSLUCENT PANEL SYSTEM



T3
THERMALLY BROKEN TRANSLUCENT PANEL SYSTEM



G.1 20' - 2" WIDE
G.2 20' - 0" WIDE

THERMALLY BROKEN 4 1/2" DEEP ALUMINUM
WINDOW W/ OPERABLE VENT - 1" GLAZING

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

BG MOVING FORWARD

EXTERIOR OPENING ELEVATIONS

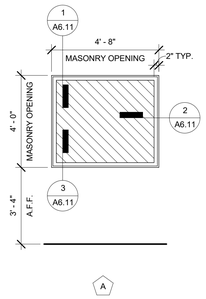
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BCPS-ALC

BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :
1 Addendum No. 2 07.09.2024

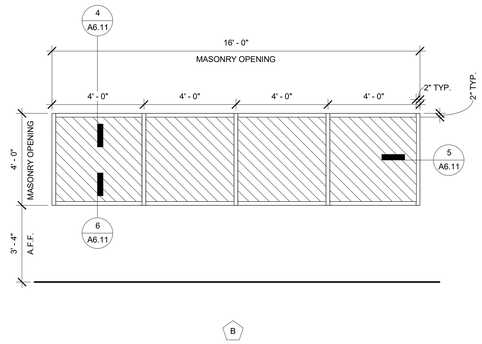
2023-50.1

A6.10



A

HOLLOW METAL INTERIOR VIEW WINDOW
WITH TEMPERED GLAZING



B

HOLLOW METAL INTERIOR VIEW WINDOW
WITH TEMPERED GLAZING

GLAZING LEGEND

CLEAR, TEMPERED GLAZING

TEMPERED GLAZING W/ SAFETY FILM & GRAPHIC

TRANSLUCENT GLAZING PANEL

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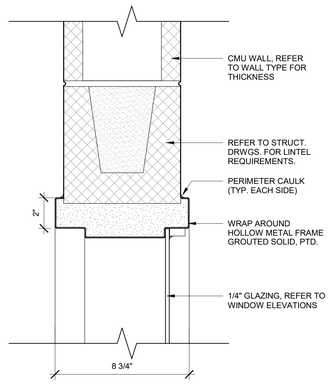
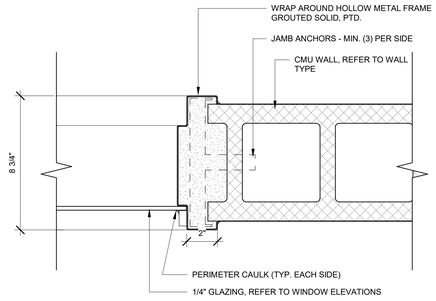
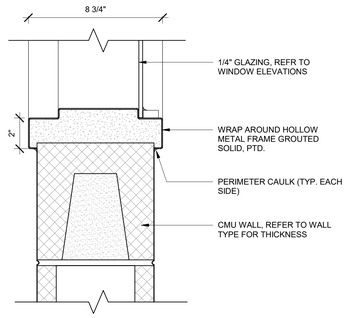


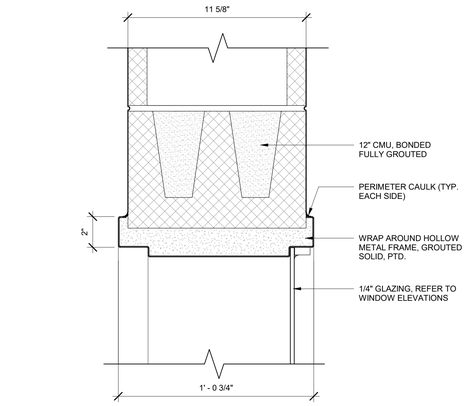
1 INT. HM STOREFRONT- 8" CMU- HEAD
3" = 1'-0"



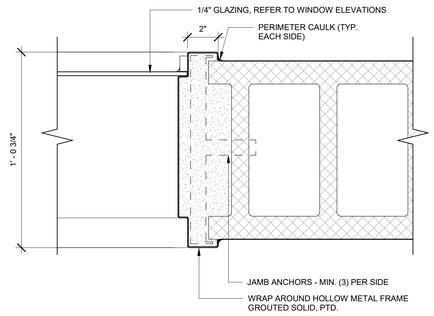
2 INT. HM STOREFRONT- 8" CMU- JAMB
3" = 1'-0"



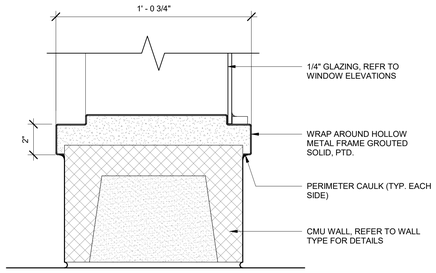
3 INT. HM STOREFRONT- 8" CMU- SILL
3" = 1'-0"



4 INT. HM STOREFRONT- 12" CMU- HEAD
3" = 1'-0"



5 INT. HM STOREFRONT- 12" CMU- JAMB
3" = 1'-0"



6 INT. HM STOREFRONT- 12" CMU- SILL
3" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

INTERIOR OPENING ELEVATIONS

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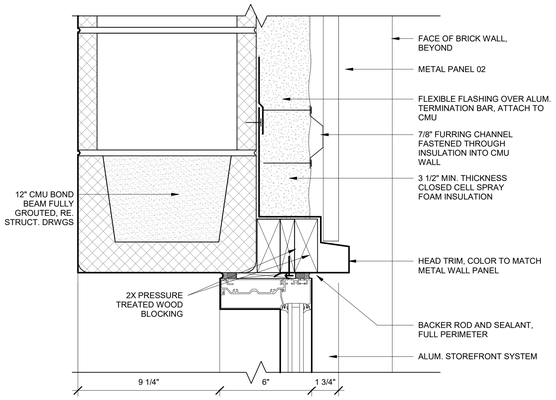
BULLITT COUNTY PUBLIC SCHOOLS
BG-25-145

BG# 25-145

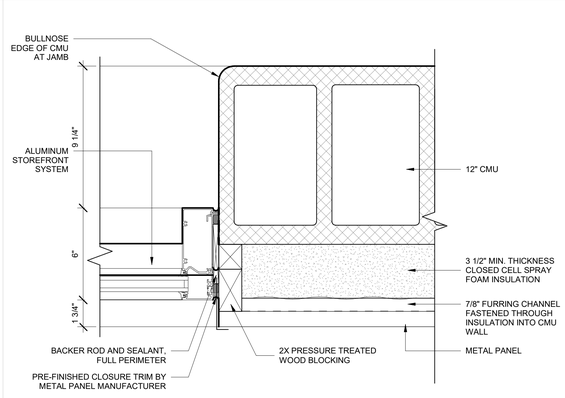
DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

2023-50.1

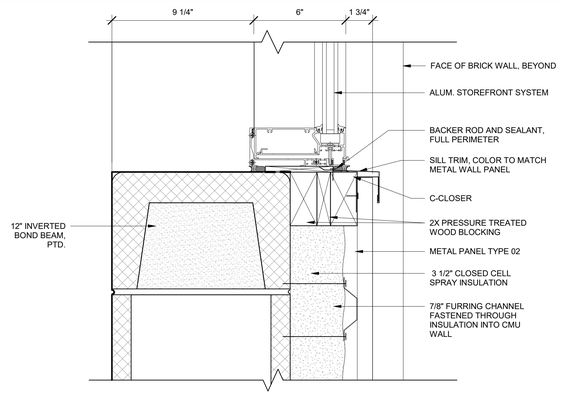
A6.11



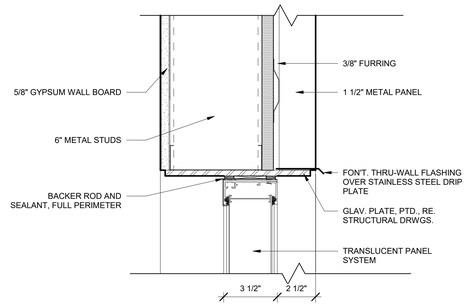
1 ALUM. SF - HEAD @ METAL PANEL
3" = 1'-0"



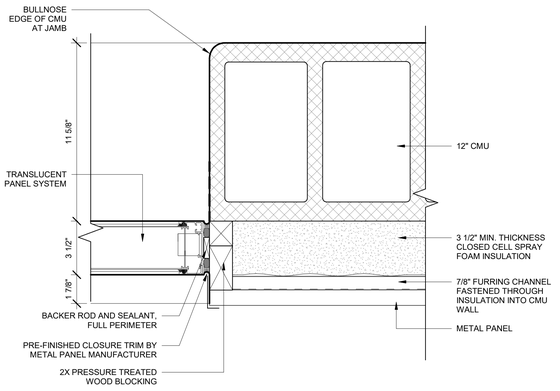
2 ALUM. SF - JAMB @ METAL PANEL
3" = 1'-0"



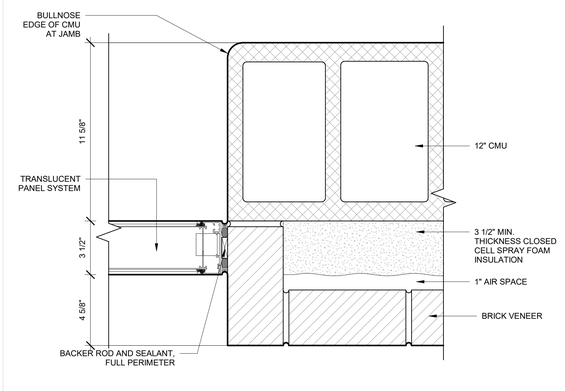
3 ALUM. SF - SILL @ METAL PANEL
3" = 1'-0"



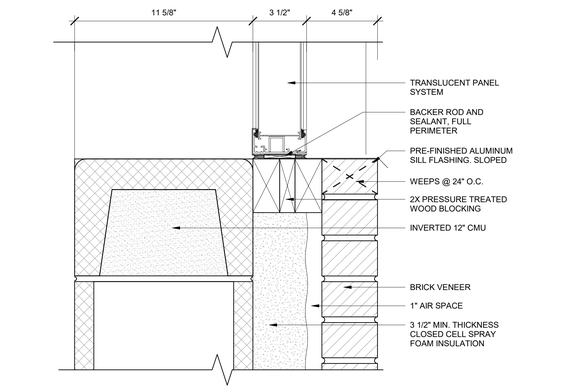
4 TRANSLUCENT PANEL - HEAD @ METAL PANEL
3" = 1'-0"



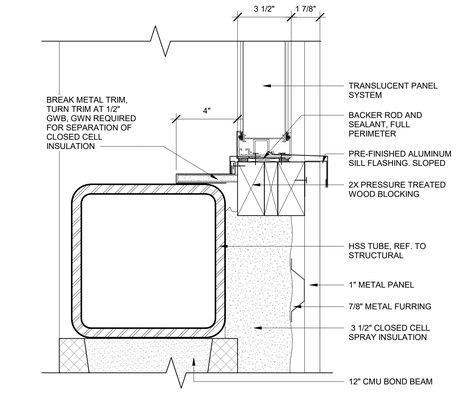
5 TRANSLUCENT PANEL - JAMB @ METAL PANEL
3" = 1'-0"



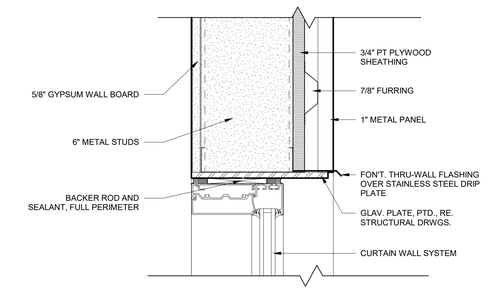
6 TRANSLUCENT PANEL - JAMB @ BRICK VENEER
3" = 1'-0"



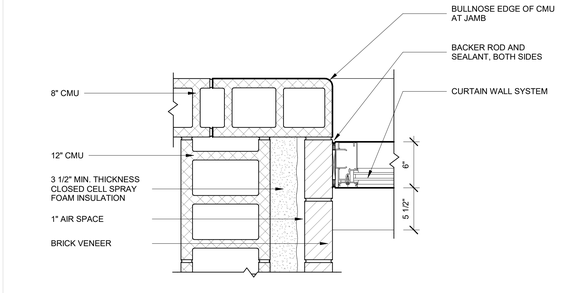
7 TRANSLUCENT PANEL - SILL @ BRICK
3" = 1'-0"



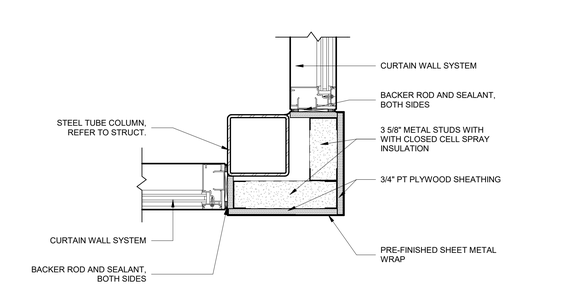
8 TRANSLUCENT PANEL - SILL @ METAL PANEL
3" = 1'-0"



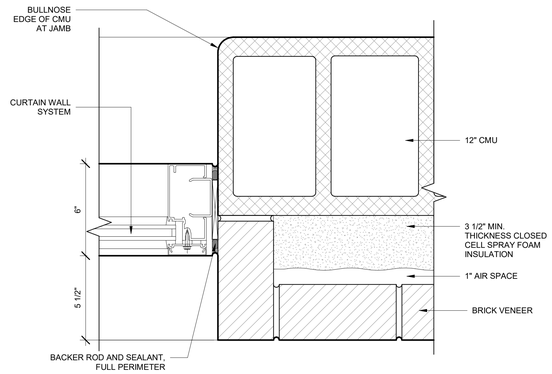
9 CURTAIN WALL - HEAD @ METAL PANEL
3" = 1'-0"



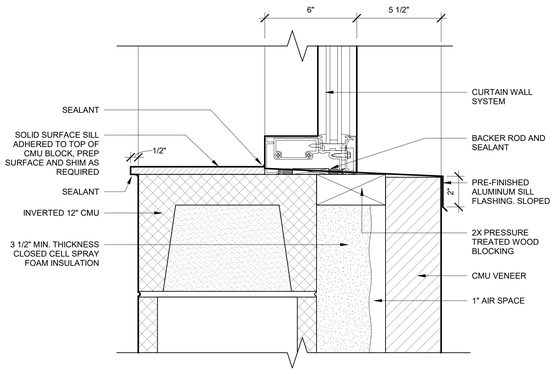
10 CURTAIN WALL - JAMB @ BRICK
1 1/2" = 1'-0"



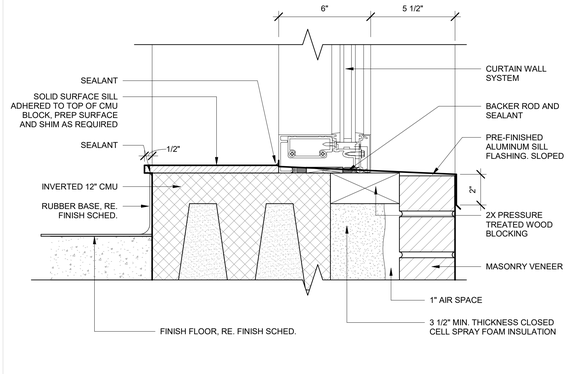
11 CURTAIN WALL - CORNER JAMB
1 1/2" = 1'-0"



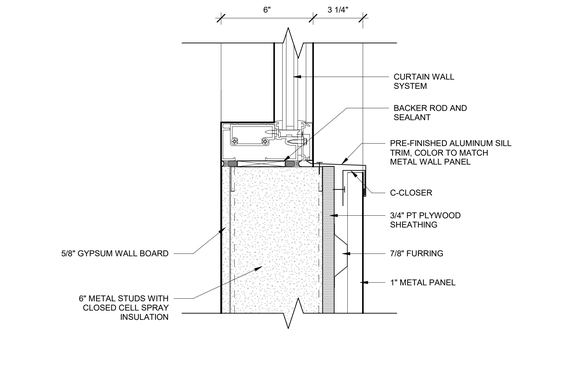
12 CURTAIN WALL - JAMB @ BRICK VENEER
3" = 1'-0"



13 CURTAIN WALL - SILL @ BRICK
3" = 1'-0"



14 CURTAIN WALL - SILL LOW
3" = 1'-0"



15 CURTAIN WALL - SILL @ METAL PANEL
3" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

OPENING DETAILS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG PS-145

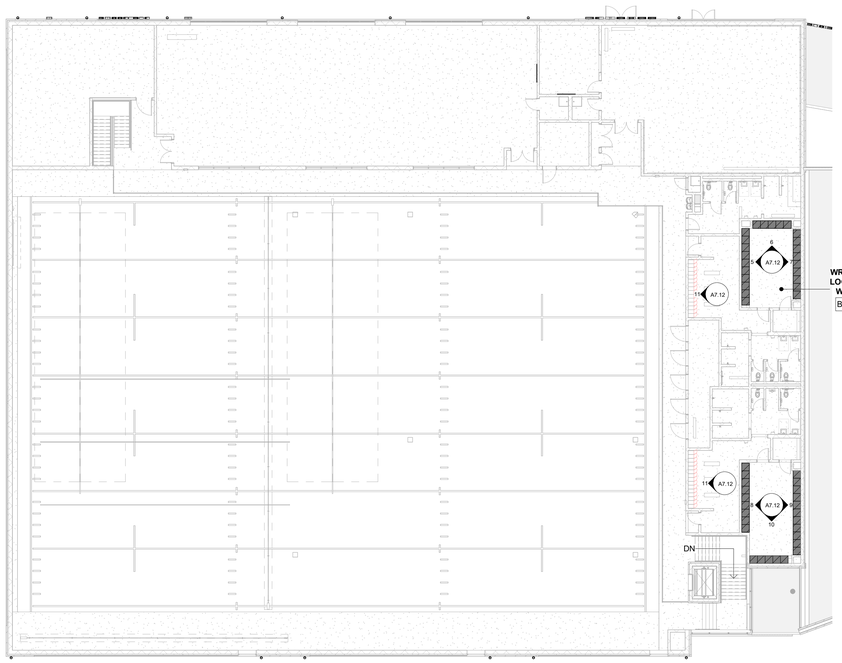
BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :
2 Addendum No. 2 SEP 06 2024

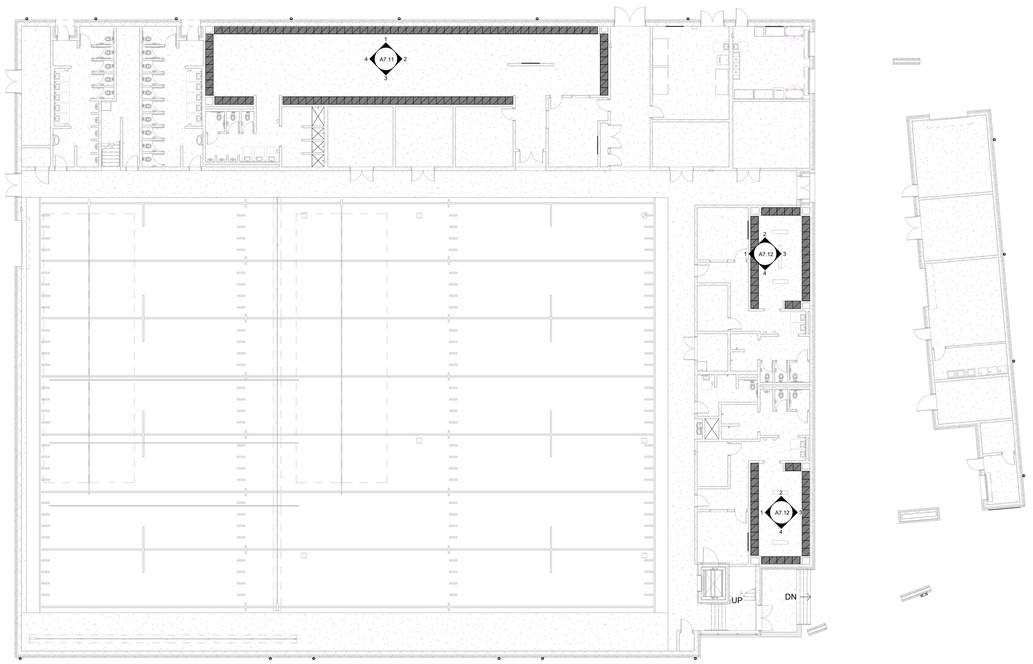
2023-50.1

A6.13
2

KEYNOTE LEGEND



2 LEVEL TWO - BCHS CASEWORK
1/16" = 1'-0"



1 LEVEL ONE - BCHS CASEWORK
1/16" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

LOCKER KEY PLAN – BCHS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
650 ZZA-AAS

BG# 25-145

DATE : 06.10.2024
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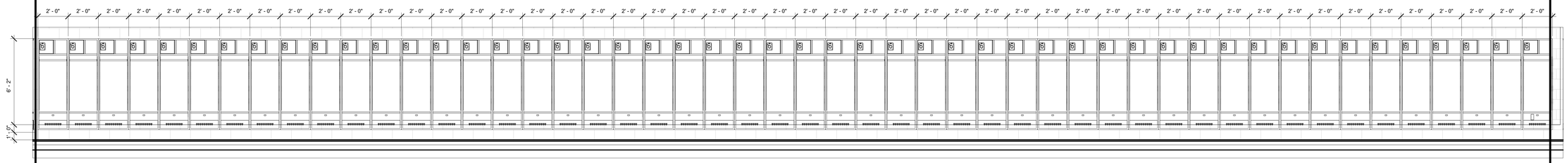
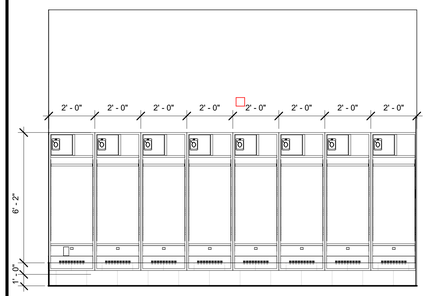
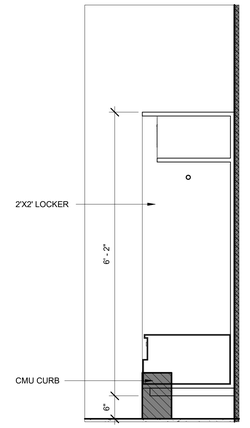
X7.10



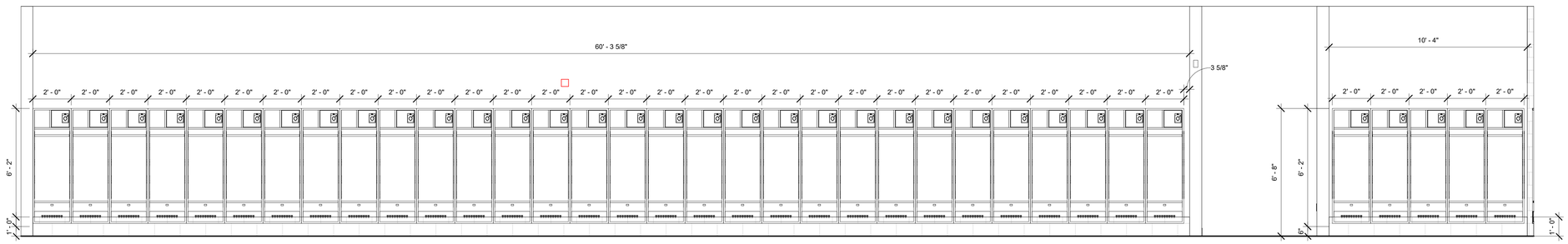
1 CASEWORK ELEV. FOOTBALL LOCKER ROOM 01
3/8" = 1'-0"



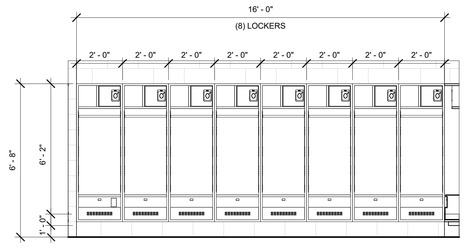
2 CASEWORK ELEV. FOOTBALL LOCKER ROOM 02
3/8" = 1'-0"



5 TYPICAL 2' LOCKER SECTION
3/4" = 1'-0"



3 CASEWORK ELEV. FOOTBALL LOCKER ROOM 03
3/8" = 1'-0"



4 CASEWORK ELEV. FOOTBALL LOCKER ROOM 04
3/8" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

ELEVATIONS – FOOTBALL LOCKER ROOM

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG-25-145

BG# 25-145

DATE : 06.10.2024
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REVISIONS :

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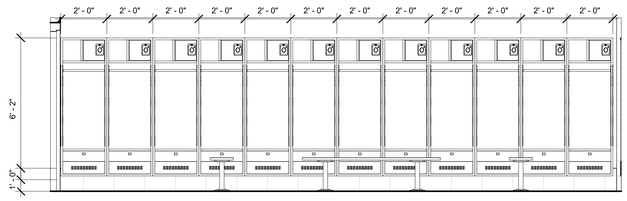
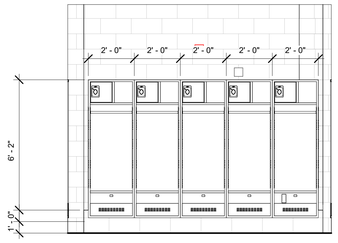
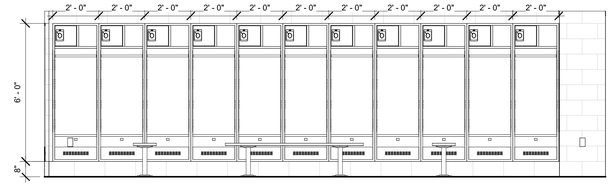
A7.11



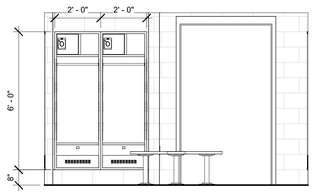
1 CASEWORK ELEV. SOCCER LOCKER ROOM 01
3/8" = 1'-0"



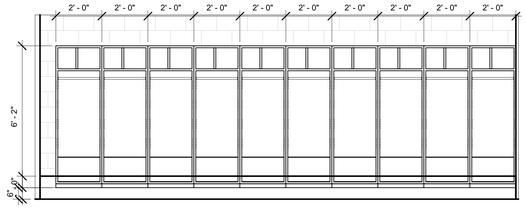
2 CASEWORK ELEV. SOCCER LOCKER ROOM 02
3/8" = 1'-0"



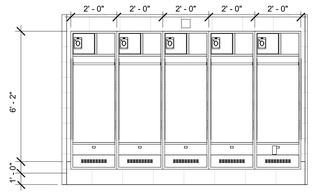
3 CASEWORK ELEV. SOCCER LOCKER ROOM 03
3/8" = 1'-0"



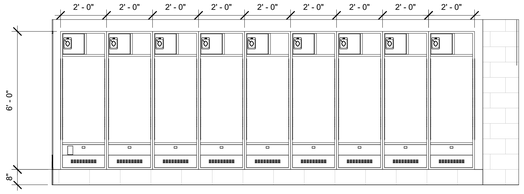
4 CASEWORK ELEV. SOCCER LOCKER ROOM 04
3/8" = 1'-0"



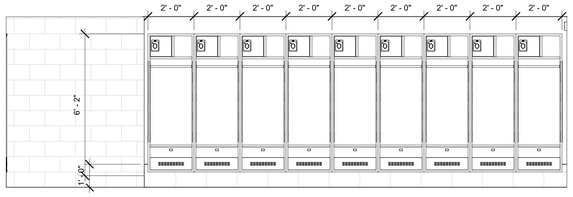
5 CASEWORK ELEV. WRESTLING LOCKER RM. WOMENS 01
3/8" = 1'-0"



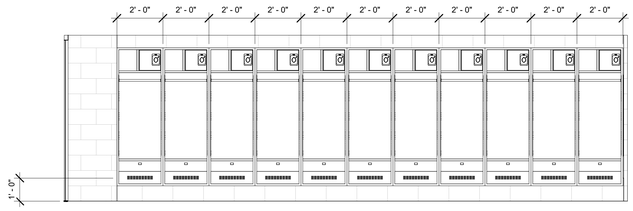
6 CASEWORK ELEV. WRESTLING LOCKER RM. WOMENS 02
3/8" = 1'-0"



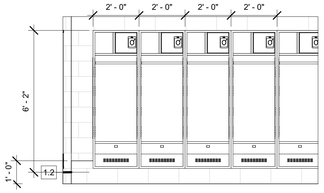
7 CASEWORK ELEV. WRESTLING LOCKER RM. WOMENS 03
3/8" = 1'-0"



8 CASEWORK ELEV. WRESTLING LOCKER RM. MENS 01
3/8" = 1'-0"

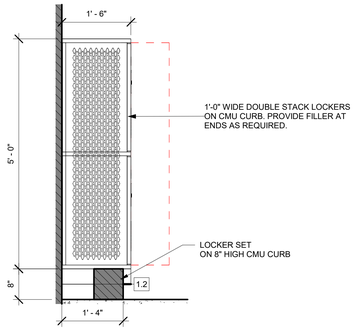


9 CASEWORK ELEV. WRESTLING LOCKER RM. MENS 02
3/8" = 1'-0"



10 CASEWORK ELEV. WRESTLING LOCKER RM. MENS 03
3/8" = 1'-0"

11 CASEWORK ELEV. P.E. LOCKER RM.
3/8" = 1'-0"



12 TYPICAL PE LOCKER SECTION
3/4" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

ELEVATIONS – LOCKER ROOMS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
650 ZZA AVE

BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
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REVISIONS :

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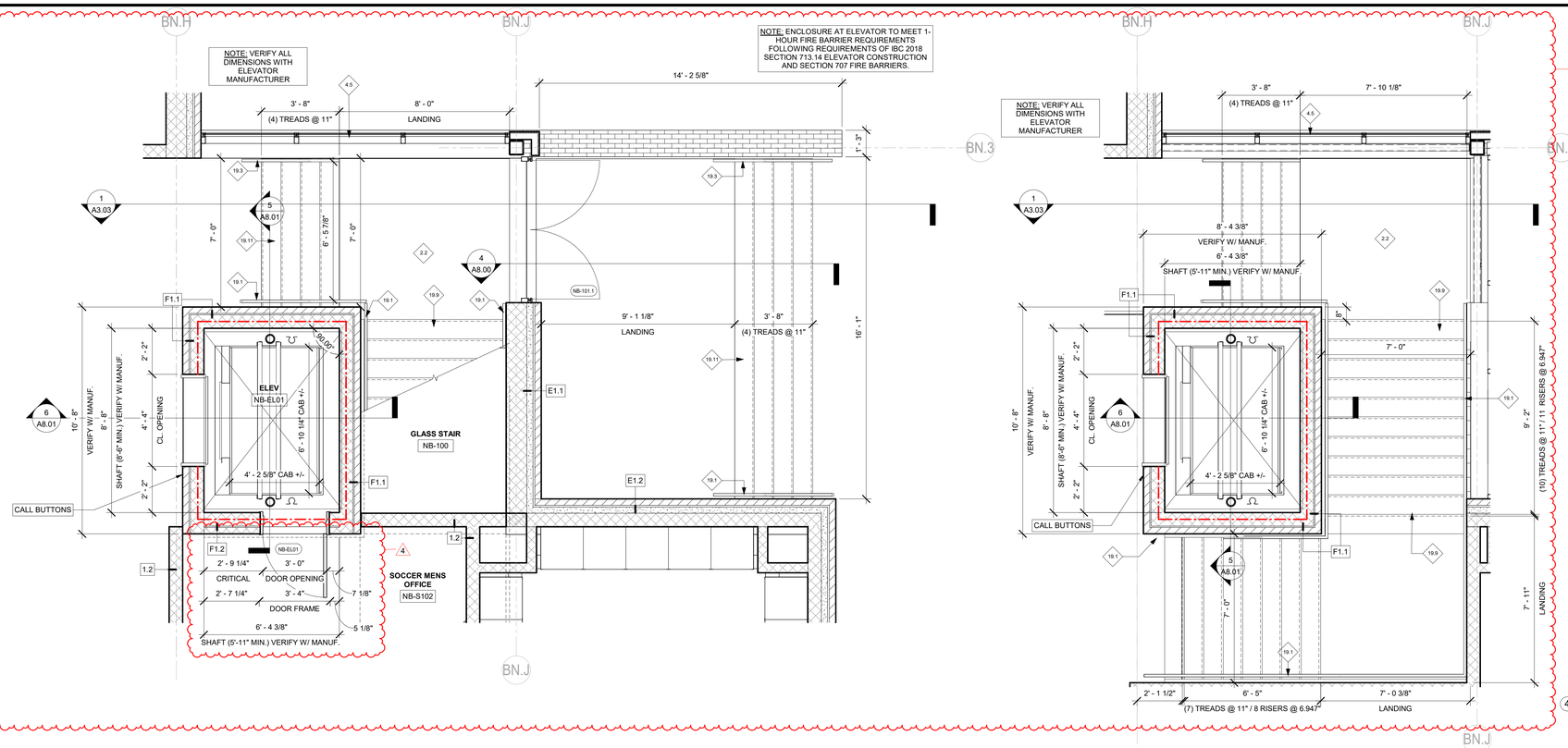
A7.12



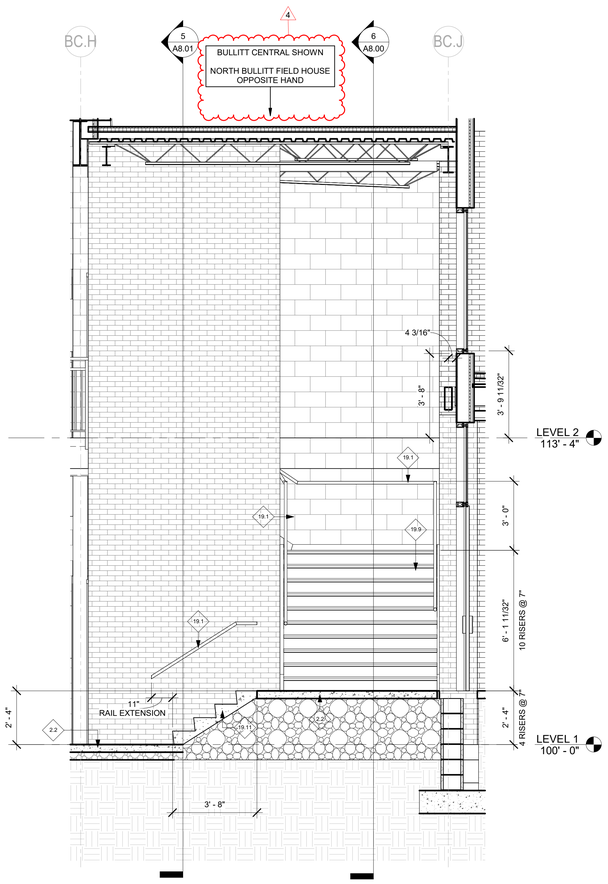
4 STAIR SECTION - STAIR DOWN FROM GLASS
3/8" = 1'-0"

KEYNOTE LEGEND

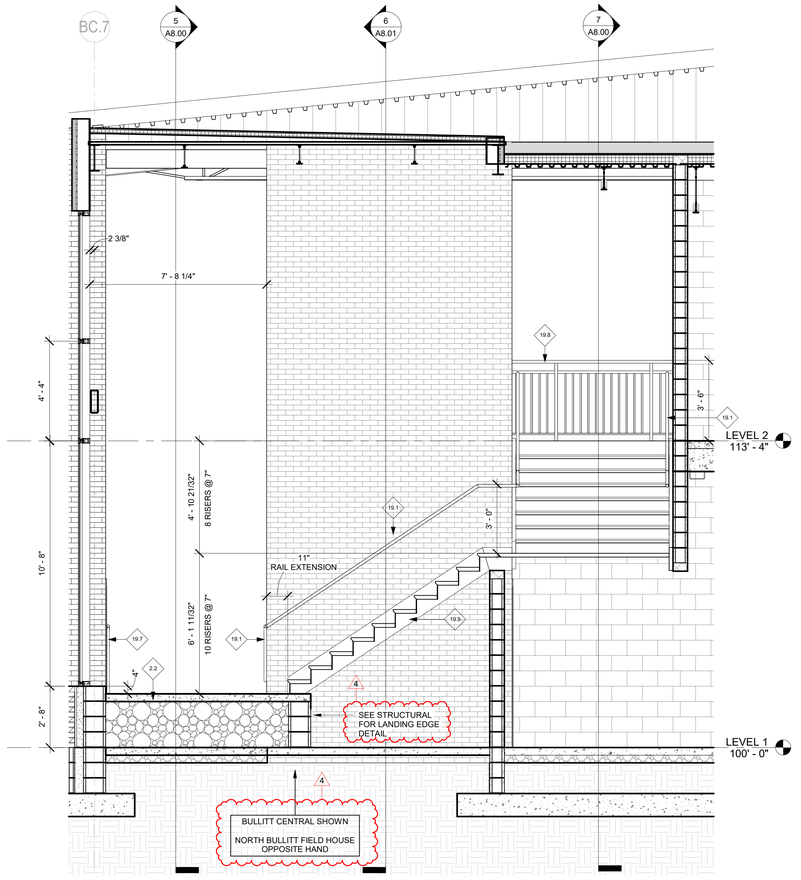
2.2	CONCRETE SLAB ON GRADE, SEE STRUCTURAL DRAWINGS.
2.7	PRECAST CONCRETE HOLLOW-CORE PLANK
4.5	EXTERIOR ALUMINUM CURTAIN WALL SYSTEM. REFER TO "A6" DRAWINGS FOR OPENING ELEVATIONS AND DETAILS.
19.1	1 1/2" DIA. WALL MOUNTED PIPE HAND RAIL. RETURN ENDS TO WALL. PAINT.
19.3	1 1/2" DIA. STRINGER MOUNTED PIPE GUARDRAIL WITH INTERMEDIATE HORIZONTAL GUARD. PAINT.
19.7	SINGLE LINE AUDITORIUM HANDRAIL.
19.8	GUARDRAIL WITH PICKETS.
19.9	CONCRETE PAN-FILLED STAIR TREAD WITH CLOSED STEEL DIAMOND PLATE RISER.
19.11	CONCRETE STAIR

1 ENLARGED STAIR AND ELEVATOR PLAN - LEVEL 1
3/8" = 1'-0"

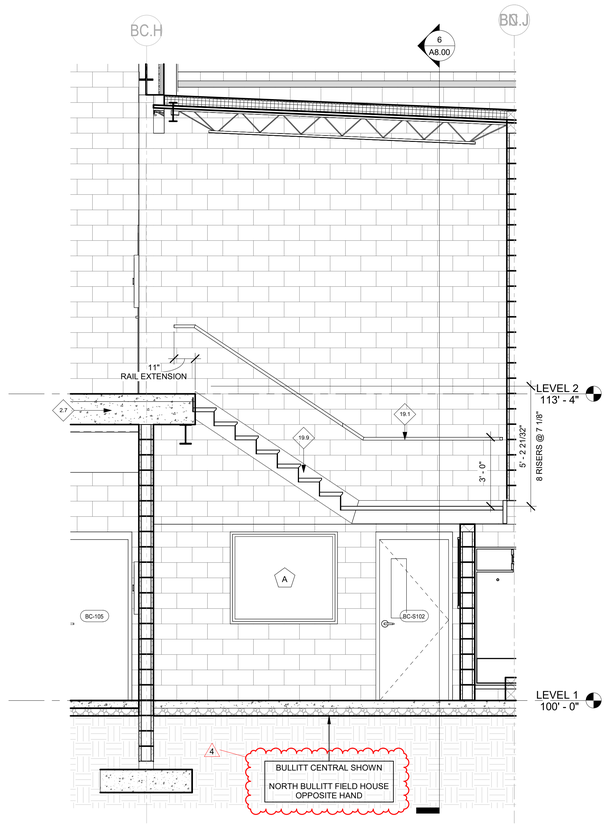
2 ENLARGED STAIR AND ELEVATOR PLAN - LEVEL 2
3/8" = 1'-0"



5 STAIR SECTION - GLASS STAIR BASE BCHS
3/8" = 1'-0"



6 STAIR SECTION - GLASS STAIR 1
3/8" = 1'-0"



7 STAIR SECTION - GLASS STAIR 2
3/8" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

VERTICAL CIRCULATION – ELEVATOR AND GLASS STAIR

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
525 Cedar Hill

BG# 25-145

DATE : 06.10.2024
DRAWN BY JSS/CNW
CHECKED BY : SKA
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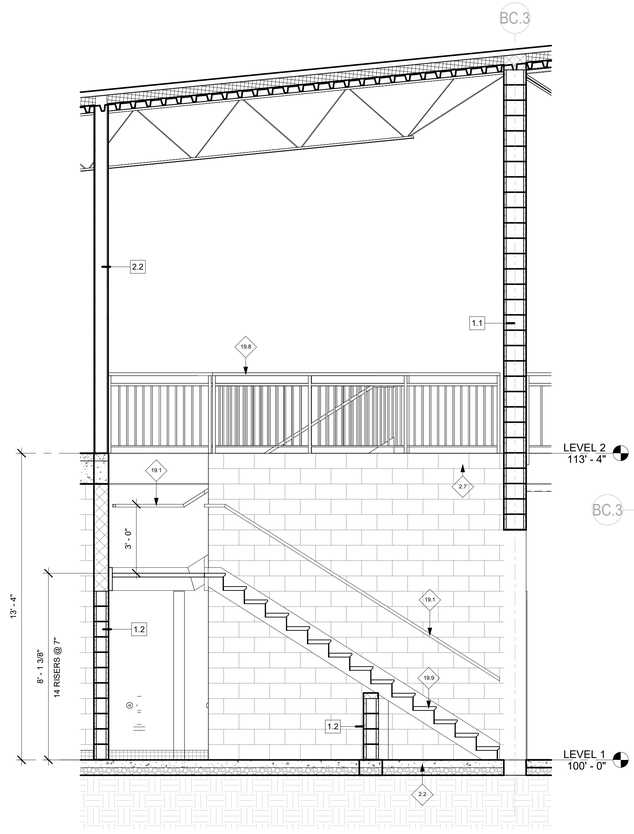
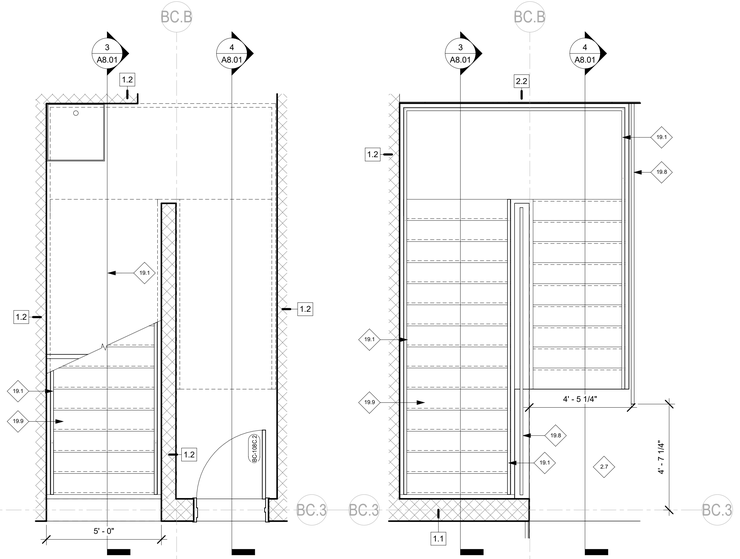
1	06.28.2024
A	RFI3 AD 21 - NB Elevator and Other Plans (RFI - 3.18.2025)

2023-50.1

A8.00
1

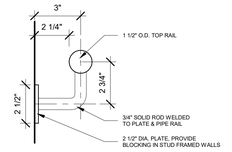


3 STAIR SECTION - BCHS 1
3/8" = 1'-0"



1 STAIR ENLARGED PLAN - LEVEL 1
3/8" = 1'-0"

2 STAIR ENLARGED PLAN - LEVEL 2
3/8" = 1'-0"



11 RAILING SECTION - 19.2
3" = 1'-0"

1015 GUARDS

1015.4 OPENING LIMITATIONS
REQUIRED GUARDS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A SPHERE 4 INCHES IN DIAMETER FROM THE WALKING SURFACE TO THE REQUIRED GUARD HEIGHT.

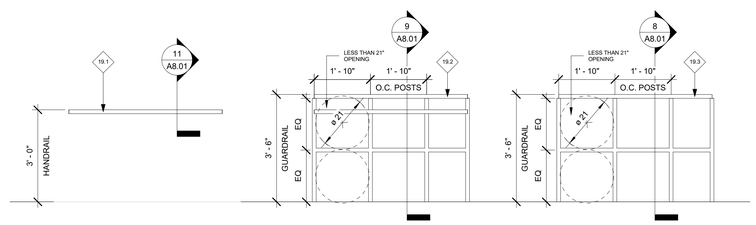
EXCEPTIONS:
3. AT ELEVATED WALKING SURFACES FOR ACCESS TO AND USE OF ELECTRICAL, MECHANICAL OR PLUMBING SYSTEMS OR EQUIPMENT, GUARDS SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A SPHERE 21 INCHES IN DIAMETER.

RAILING GENERAL NOTES

1. ALL RAILINGS, HANDRAILS AND GUARDS TO BE PAINTED IN THE FIELD. CLEAN AND PRIME RAILS FOR PAINT.
2. ALL RAILINGS, HANDRAILS AND GUARDS TO BE STEEL. IF LOCATED IN AN EXTERIOR LOCATION, GALVANIZED STEEL TO BE PROVIDED.
3. AT ANY WALL SUPPORTED HANDRAIL, PROVIDE APPROPRIATE BLOCKING TO SUPPORT HANDRAILS.

KEYNOTE LEGEND

2.2	CONCRETE SLAB ON GRADE, SEE STRUCTURAL DRAWINGS.
2.7	PRECAST CONCRETE HOLLOW-CORE PLANK
19.1	1 1/2" DIA. WALL MOUNTED PIPE HAND RAIL. RETURN ENDS TO WALL. PAINT.
19.2	1 1/2" DIA. STRINGER MOUNTED PIPE GUARDRAIL WITH INTERMEDIATE HORIZONTAL GUARD AND PIPE HAND RAIL. RETURN ENDS TO WALL. PAINT.
19.3	1 1/2" DIA. STRINGER MOUNTED PIPE GUARDRAIL WITH INTERMEDIATE HORIZONTAL GUARD. PAINT.
19.7	SINGLE LINE AUDITORIUM HANDRAIL.
19.8	GUARDRAIL WITH PICKETS.
19.9	CONCRETE PAN-FILLED STAIR TREAD WITH CLOSED STEEL DIAMOND PLATE RISER.

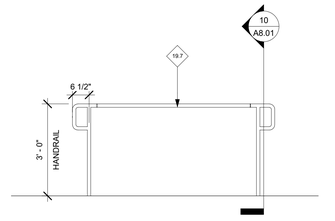


WALL MOUNTED HANDRAIL

GUARDRAIL AT STAIR

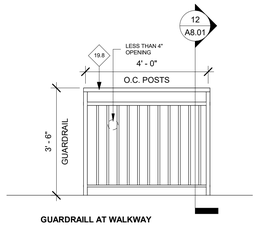
GUARDRAIL AT EXT. STAIR

7 RAILING TYPES - ELEVATION
1/2" = 1'-0"



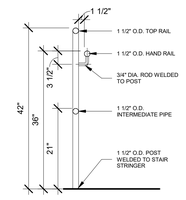
HANDRAIL AT SHORT STAIR

13 RAILING TYPES - ELEVATION (CONTINUED)
1/2" = 1'-0"

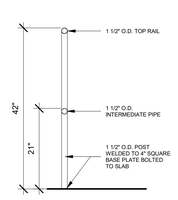


GUARDRAILL AT WALKWAY

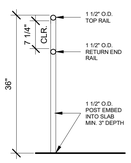
14 RAILING TYPES - ELEVATION (CONTINUED 2)
1/2" = 1'-0"



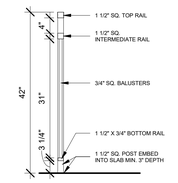
9 RAILING SECTION - 19.3
3/4" = 1'-0"



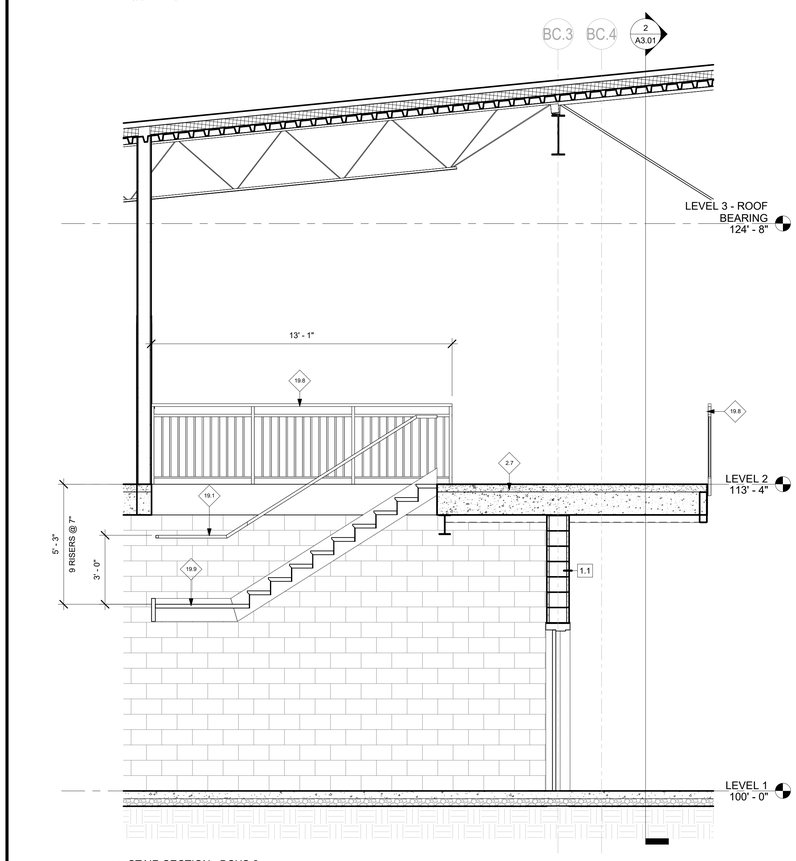
8 RAILING SECTION - 19.4
3/4" = 1'-0"



10 RAILING SECTION - 19.7
3/4" = 1'-0"

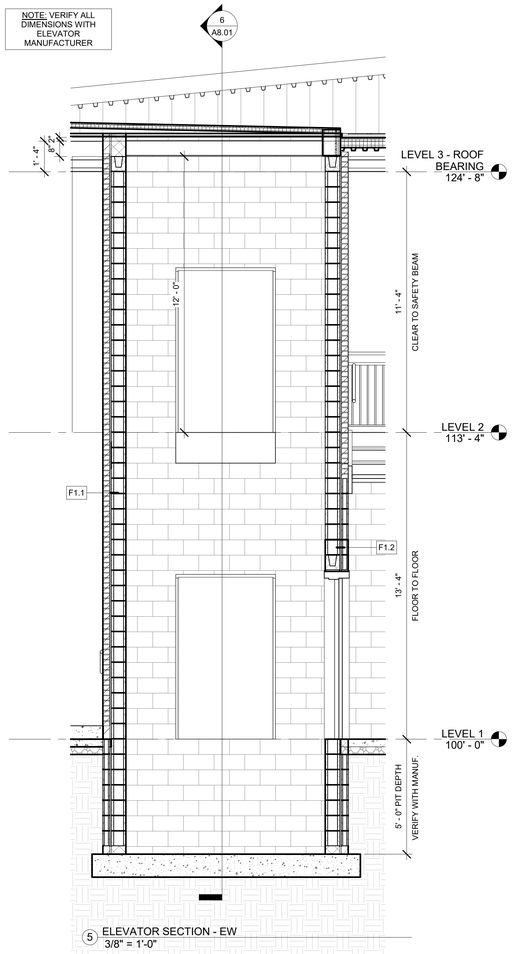


12 RAILING SECTION - 19.8
3/4" = 1'-0"

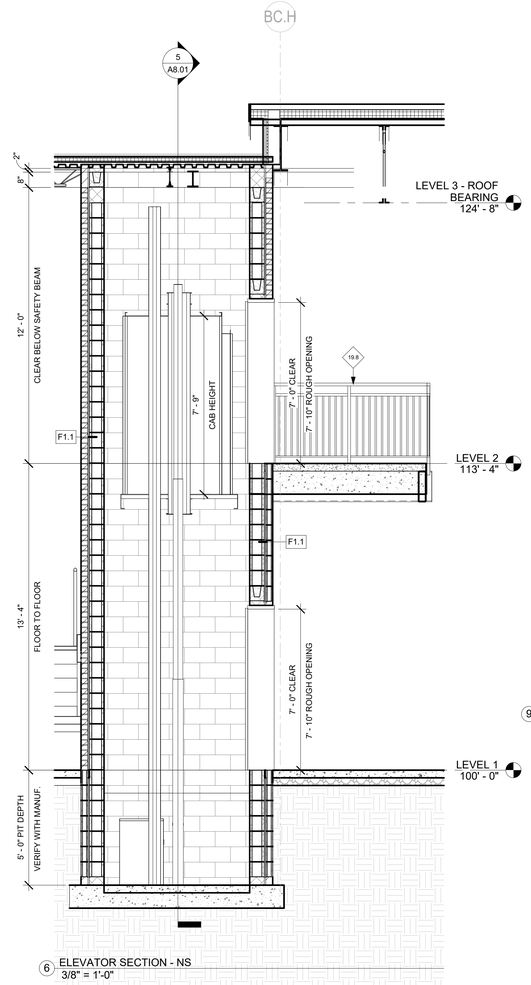


4 STAIR SECTION - BCHS 2
3/8" = 1'-0"

NOTE: VERIFY ALL DIMENSIONS WITH ELEVATOR MANUFACTURER



5 ELEVATOR SECTION - EW
3/8" = 1'-0"



6 ELEVATOR SECTION - NS
3/8" = 1'-0"

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BG MOVING FORWARD

VERTICAL CIRCULATION – ELEVATOR AND STAIR

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :
1 Addendum No. 1 06.18.2024

2023-50.1

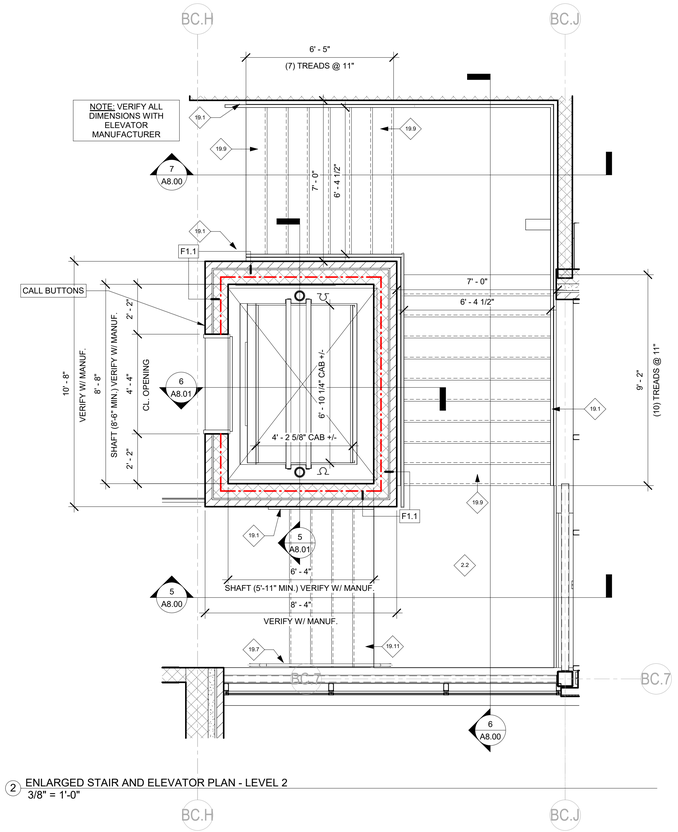
A8.01

1

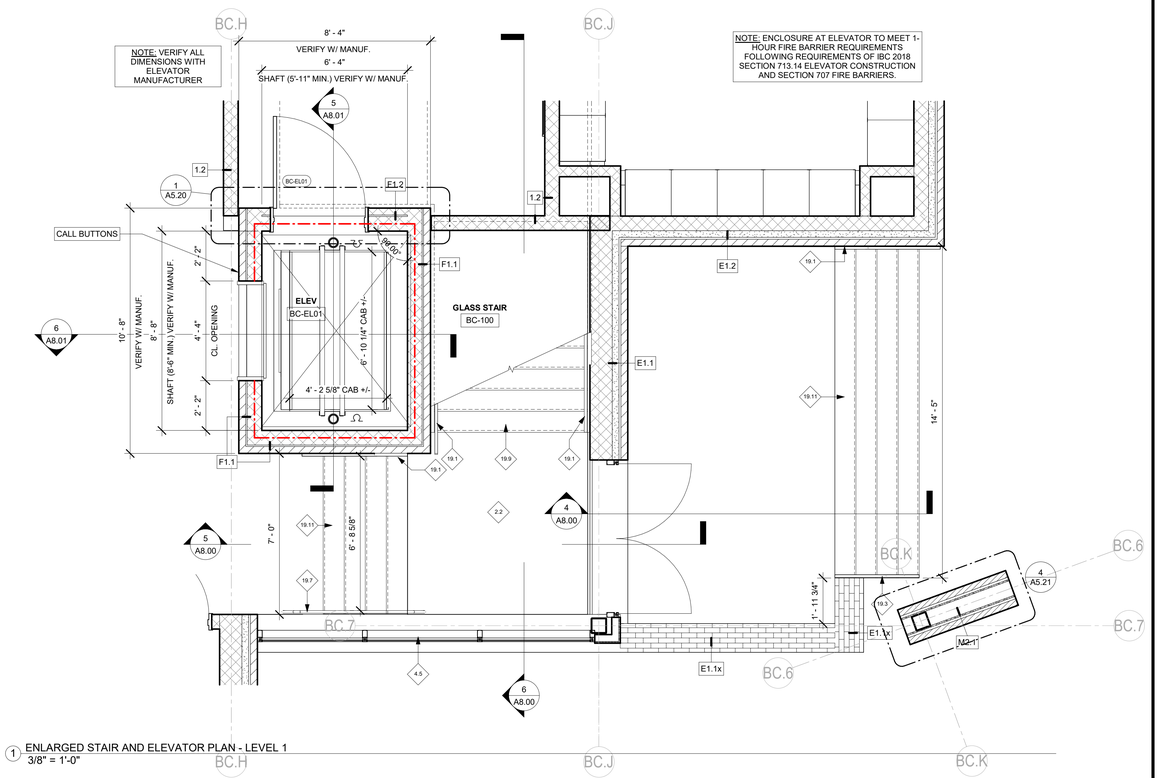
SCHEMATIC DESIGN & DESIGN DEVELOPMENT

KEYNOTE LEGEND

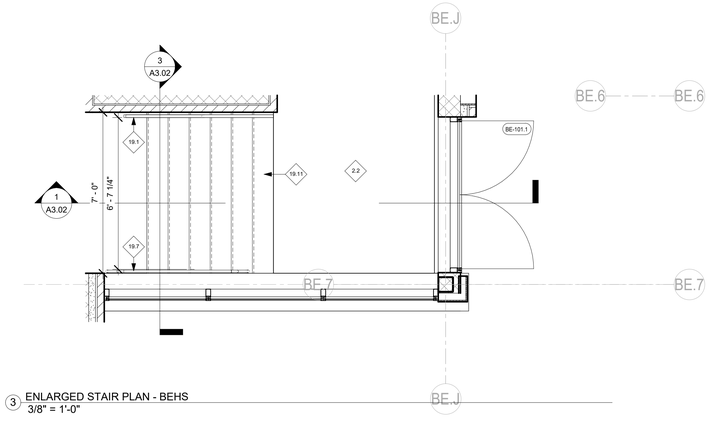
2.2	CONCRETE SLAB ON GRADE, SEE STRUCTURAL DRAWINGS.
4.5	EXTERIOR ALUMINUM CURTAIN WALL SYSTEM. REFER TO "A6" DRAWINGS FOR OPENING ELEVATIONS AND DETAILS.
19.1	1 1/2" DIA. WALL MOUNTED PIPE HAND RAIL. RETURN ENDS TO WALL. PAINT.
19.3	1 1/2" DIA. STRINGER MOUNTED PIPE GUARDRAIL WITH INTERMEDIATE HORIZONTAL GUARD. PAINT.
19.7	SINGLE LINE AUDITORIUM HANDRAIL.
19.9	CONCRETE PAN-FILLED STAIR TREAD WITH CLOSED STEEL DIAMOND PLATE RISER.
19.11	CONCRETE STAIR



② ENLARGED STAIR AND ELEVATOR PLAN - LEVEL 2
3/8" = 1'-0"



① ENLARGED STAIR AND ELEVATOR PLAN - LEVEL 1
3/8" = 1'-0"



③ ENLARGED STAIR PLAN - BEHS
3/8" = 1'-0"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

VERTICAL CIRCULATION – ELEVATOR AND STAIR

PHASE III | PHYSICAL SCIENCE CENTER

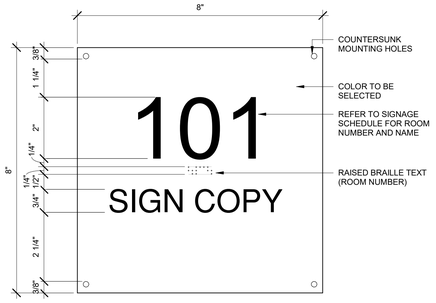
BULLITT COUNTY PUBLIC SCHOOLS
650 Z-AS

BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :
1 ISPC Add 01 - Add Elevator and Steel Plate Infills - 10.17.2024

2023-50.1

A8.02
BE BC



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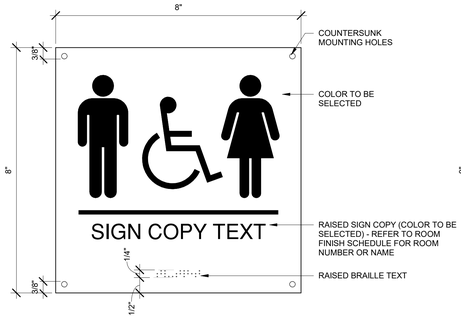

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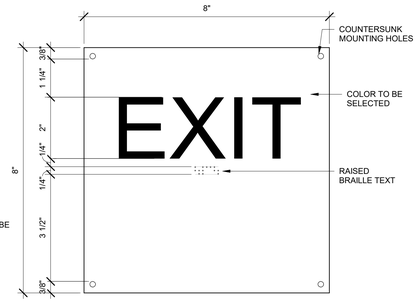
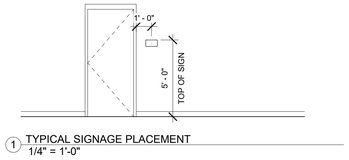


SIGN TYPE "C"



1 TYPICAL SIGNAGE PLACEMENT
1/4" = 1'-0"

INTERIOR SIGNAGE NOTES:

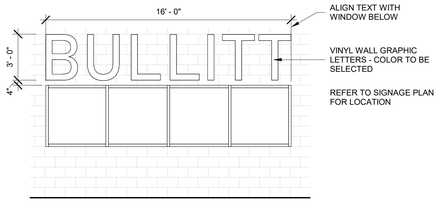
A. COORDINATE EXACT SIGN LOCATION WITH ARCHITECT / OWNER PRIOR TO INSTALLATION.

B. PROVIDE (12) ADDITIONAL SIGNS (TYPE A.1) - SIGNS. COPY AND LOCATION TO BE DETERMINED DURING THE SHOP DRAWINGS PHASE.

C. PROVIDE (12) ADDITIONAL SIGNS (TYPE A.2) - SIGNS. COPY AND LOCATION TO BE DETERMINED DURING THE SHOP DRAWINGS PHASE.

D. SEE SIGNAGE PLAN FOR LOCATIONS OF SIGNS.

E. PROVIDE (10) ADDITIONAL SIGNS (TYPE C) - SIGNS. LOCATION TO BE DETERMINED DURING THE SHOP DRAWING PHASE.



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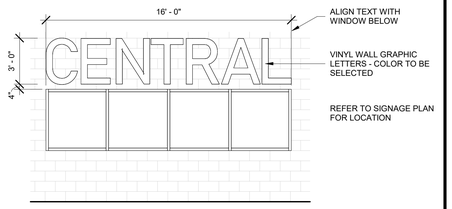

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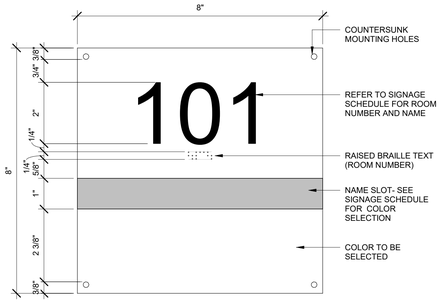

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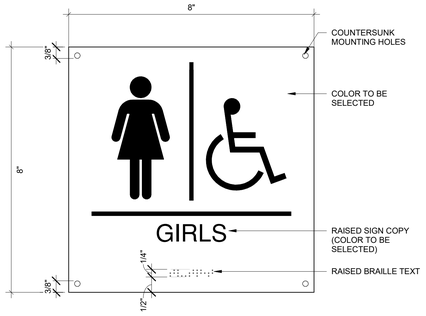

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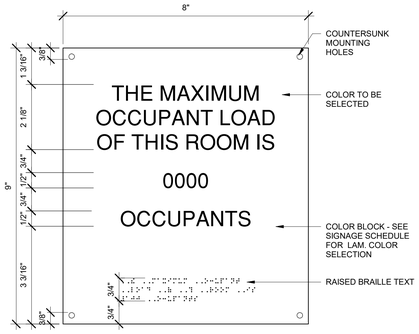
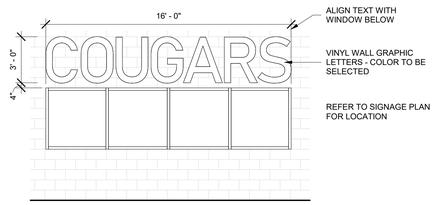


SIGN TYPE "D"



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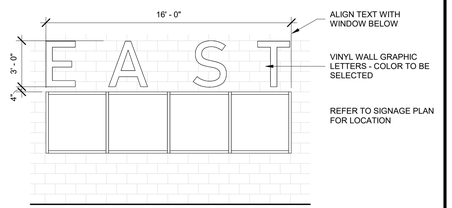
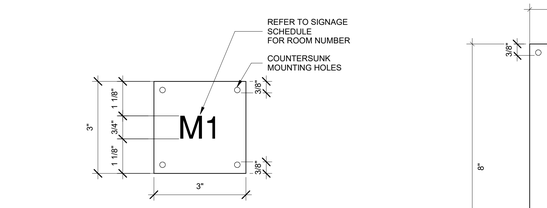
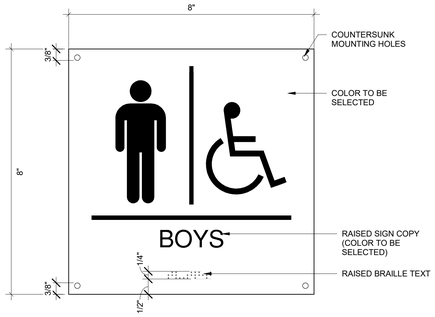


SIGN TYPE "G.4"



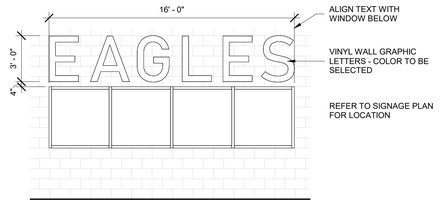
SIGN TYPE "A.3"

REFER TO SPECIFICATIONS FOR SIGN TYPE "A.3" DESCRIPTION



SIGN TYPE "B.3"

SIGN TYPE "E"



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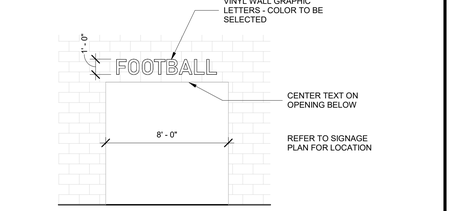
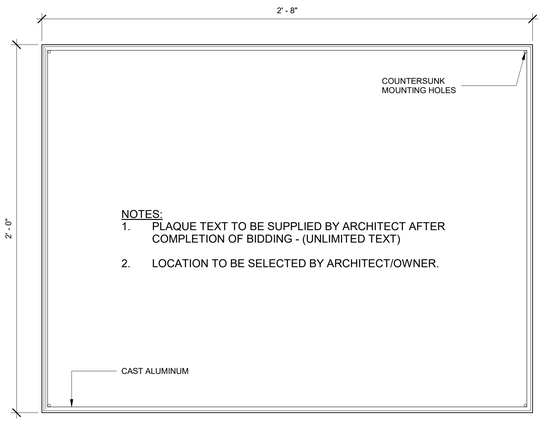
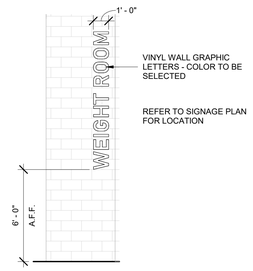


SIGN TYPE "G.8"



DEDICATION PLAQUE TYPE "F"
FINAL LOCATION TO BE CONFIRMED BY OWNER



SIGN TYPE "G.9"

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SCHEMATIC DESIGN & DESIGN DEVELOPMENT

SIGNAGE TYPES

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BCPS-AE

BG# 25-145

DATE : 06.10.2024
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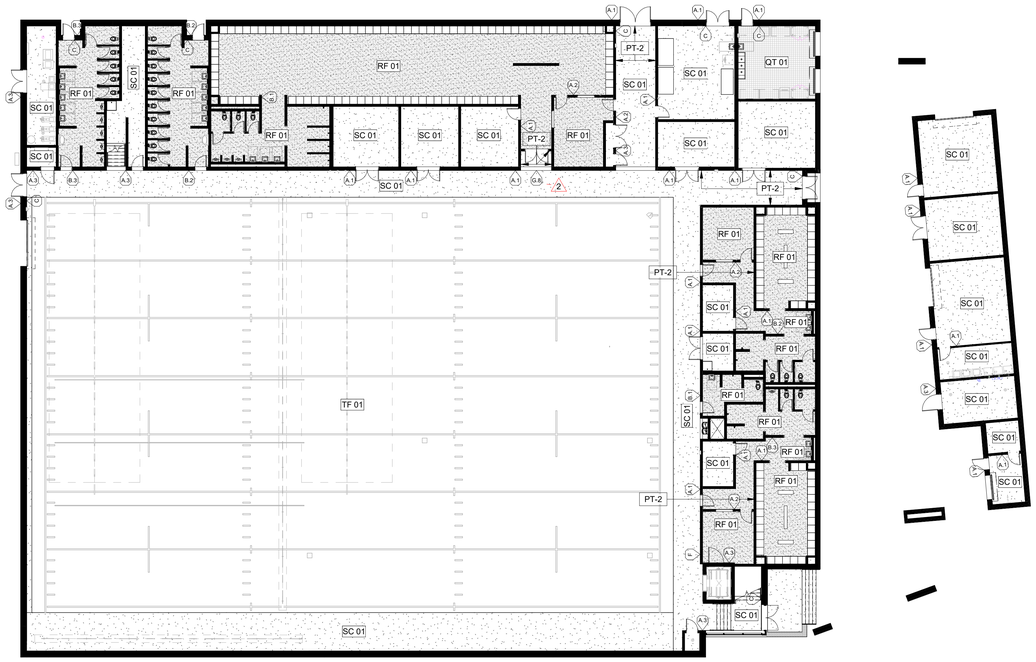
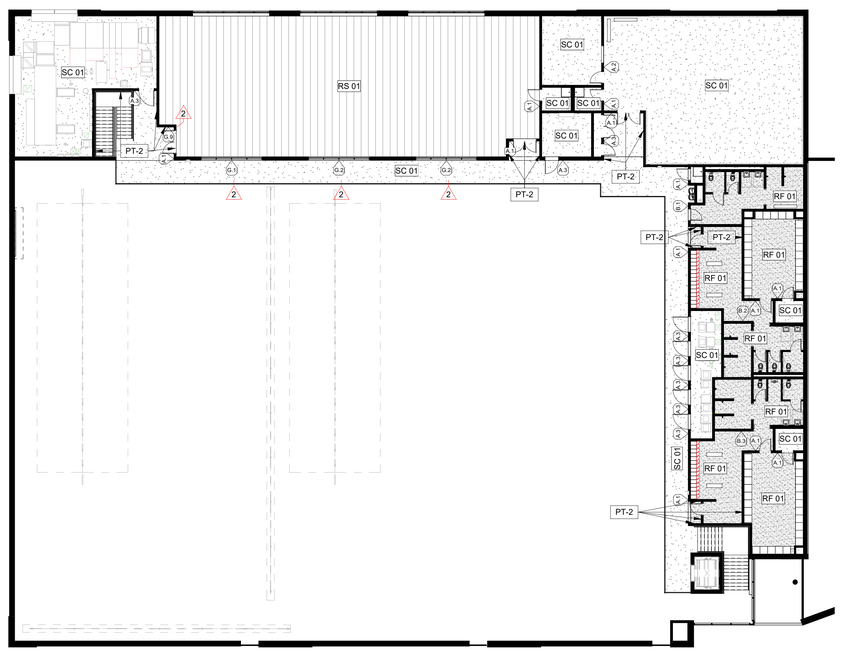
1 Addendum No. 2 07.09.2024

2023-50.1

A9.10



1 FINISH & SIGNAGE PLAN - LEVEL ONE - BCHS
1/16" = 1'-0"



2 FINISH & SIGNAGE PLAN - LEVEL TWO - BCHS
1/16" = 1'-0"

FLOOR FINISH LEGEND

- RF 01
- RF 02
- RF 03
- QT 01
- TF 01
- RS 01
- SC 01

ROOM FINISH SCHEDULE - BCHS

ROOM NO.	ROOM NAME	FLOOR	BASE	CEILING	FINISH COMMENTS
BC-001	TICKETS	SC 01	RB-1	O.T.S.	
BC-002	TICKET STOR.	SC 01	RB-1	O.T.S.	
BC-003	VEHICLE & GROOMING EQUIPMENT	SC 01	RB-1	O.T.S.	
BC-004	LAUNDRY	SC 01	RB-1	O.T.S.	
BC-005	TRACK STORAGE	SC 01	RB-1	O.T.S.	
BC-006	WET ROOM	SC 01	RB-1	O.T.S.	
BC-100	GLASS STAIR	SC 01		O.T.S.	
BC-101	PRACTICE FIELD	TF 01		O.T.S.	TURF BY COOP AGREEMENT, N.I.C.
BC-101A	GATEWAY CORRIDOR	SC 01	RB-1	ACT	
BC-101B	FIELD CORRIDOR	SC 01	RB-1	ACT	
BC-102	CONCESSIONS	QT 01	QT-1	O.T.S.	
BC-103	TRAINING ROOM	SC 01	RB-1	O.T.S.	
BC-104	SPORT STORAGE - GOLF AND SIMULATOR	SC 01	RB-1	O.T.S.	
BC-105	SPORT STORAGE - BASEBALL/ SOFTBALL	SC 01	RB-1	O.T.S.	
BC-106	SPORT STORAGE - ARCHERY	SC 01	RB-1	O.T.S.	
BC-107	SPORT STORAGE - DANCE/CHEER	SC 01	RB-1	O.T.S.	
BC-108A	WOMENS RESTROOM	RF 01	RF-1		
BC-108A.1	WOMENS ALCOVE	RF 01	RF-1		
BC-108A.2	WOMENS ALCOVE	RF 01	RF-1		
BC-108B	MENS RESTROOM	RF 01	RF-1		
BC-108B.1	MENS ALCOVE	RF 01	RF-1		
BC-108B.2	MENS ALCOVE	RF 01	RF-1		
BC-108C	RESTROOM CHASE	SC 01	RB-1	O.T.S.	
BC-109	COACH RESTROOM	RF 01	RF-1	O.T.S.	
BC-110	CUST.	SC 01	RB-1	O.T.S.	
BC-200	JAN.	SC 01	RB-1	O.T.S.	
BC-200a	OPEN TO PRACTICE FIELD BELOW				
BC-203	COACH RESTROOM	RF 01	RF-1	O.T.S.	
BC-203A	COACH SHOWER	RF 01	RF-1	O.T.S.	
BC-204	WEIGHT ROOM	RS 01		O.T.S.	
BC-204A	W.R. MOP	SC 01	RB-1	O.T.S.	
BC-204B	W.R. ALCOVE	SC 01	RB-1	O.T.S.	
BC-AV101	A/V	SC 01	RB-1	O.T.S.	
BC-E100	ELEC. 1	SC 01	RB-1	O.T.S.	
BC-E200	ELEC. 2	SC 01	RB-1	O.T.S.	
BC-EL01	ELEV				
BC-EL02	ELEV.				
BC-F101	FOOTBALL HALL	RF 01	RF-1	O.T.S.	
BC-F102	FOOTBALL OFFICE	SC 01	RB-1		
BC-F103	FOOTBALL STORAGE	SC 01	RB-1	O.T.S.	
BC-F104	FOOTBALL LOCKER ROOM	RF 01	RF-1	O.T.S.	
BC-F105A	FOOTBALL RESTROOM	RF 01	RF-1	O.T.S.	
BC-F105B	FOOTBALL SHOWER	RF 01	RF-1	O.T.S.	
BC-FS01	FIRE SUP.	SC 01	RB-1	O.T.S.	
BC-M001	MECHANICAL / ELECTRICAL/IDF	SC 01	RB-1	O.T.S.	
BC-M100	GEOTHERMAL	SC 01	RB-1	O.T.S.	
BC-M200	MECHANICAL PLATFORM	SC 01	RB-1	O.T.S.	
BC-M201	MECHANICAL	SC 01	RB-1	O.T.S.	
BC-MDF200	MDF	SC 01	RB-1	O.T.S.	
BC-P201	PE HALL	RF 01	RB-1	O.T.S.	
BC-P202	PE LOCKER RM MENS	RF 01	RF-1	O.T.S.	
BC-P203	PE ALCOVE	RF 01	RF-1	O.T.S.	
BC-P204A	PE RESTROOM MENS	RF 01	RF-1	O.T.S.	
BC-P204B	PE SHOWER MENS	RF 01	RF-1	O.T.S.	
BC-P205	PE HALL	RF 01	RF-1	O.T.S.	
BC-P206	PE LOCKER RM WOMENS	RF 01	RF-1	O.T.S.	
BC-P207	PE ALCOVE	RF 01	RF-1	O.T.S.	
BC-P208A	PE RESTROOM WOMENS	RF 01	RF-1	O.T.S.	
BC-P208B	PE SHOWER WOMENS	RF 01	RF-1	O.T.S.	
BC-S101	SOCCER MENS HALL	RF 01	RF-1	O.T.S.	
BC-S102	SOCCER MENS OFFICE	RF 01	RF-1		
BC-S103	SOCCER STORAGE	SC 01	RB-1	O.T.S.	
BC-S104	SOCCER MENS LOCKER ROOM	RF 01	RF-1	O.T.S.	
BC-S105A	SOCCER MENS LAV	RF 01	RF-1	O.T.S.	
BC-S105B	SOCCER MENS RR	RF 01	RF-1	O.T.S.	
BC-S105C	SOCCER MENS SHOWER	RF 01	RF-1	O.T.S.	
BC-S111	SOCCER WOMENS HALL	RF 01	RF-1	O.T.S.	
BC-S112	SOCCER OFFICE WOMENS	RF 01	RF-1		
BC-S113	SOCCER STORAGE	SC 01	RB-1	O.T.S.	
BC-S114	SOCCER WOMENS LOCKER ROOM	RF 01	RF-1	O.T.S.	
BC-S115A	SOCCER WOMENS LAV	RF 01	RF-1	O.T.S.	
BC-S115B	SOCCER WOMENS RR	RF 01	RF-1	O.T.S.	
BC-S115C	SOCCER WOMENS SHOWER	RF 01	RF-1	O.T.S.	
BC-W200	WRESTLING LOCKER RM MENS	RF 01	RF-1	O.T.S.	
BC-W200A	W STORAGE	SC 01	RB-1	O.T.S.	
BC-W201	WRESTLING LOCKER RM WOMENS	RF 01	RF-1	O.T.S.	
BC-W201A	W STORAGE	SC 01	RB-1	O.T.S.	
BC-W202	WRESTLING MAT ROOM	SC 01	RB-1	O.T.S.	
BC-W203	WRESTLING OFFICE	SC 01	RB-1		
BC-W204	W. MOP	SC 01	RB-1	O.T.S.	

GENERAL FINISH NOTES

A	FIELD VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH WORK OR FABRICATION OF FINISH MATERIALS/CASEWORK.
B	ALL PAINTED DOORS AND FRAMES SHALL BE A SEMI GLOSS FINISH.
C	ALL INTERIOR CMU SHALL BE PAINTED WITH EGGSHELL FINISH, UNLESS OTHERWISE NOTED.
D	INTERIOR CMU AT RESTROOMS, TOILET ROOMS, CAFETERIA AND KITCHEN TO BE PAINTED WITH SEMI GLOSS FINISH.
E	ALL GWB CEILINGS SHALL BE PAINTED WITH FLAT FINISH.
F	ALL GWB WALLS SHALL BE PAINTED AN EGGSHELL FINISH.
G	PROCEEDING WITH THE INSTALLATION OF FINISHES WILL BE CONSTRUED THAT THE INSTALLER AND/OR FINISHER HAS INSPECTED AND ACCEPTED THE SUBSTRATE TO RECEIVE THE WORK. NO CHANGE ORDER WILL BE ISSUED TO RECTIFY UNSATISFACTORY SUBSTRATE ONCE FINISH WORK HAS BEGUN.
H	ALL FLOOR MATERIAL TRANSITIONS TO HAPPEN UNDER DOOR UNLESS NOTED OTHERWISE.
I	FLOORING SUPPLIER TO PROVIDE TRANSITIONS AT ALL FLOORING MATERIAL CHANGES. COORDINATE WITH FLOOR HEIGHT, MATERIAL AND LOCATION. SEE TYPICAL TRANSITION DETAILS.
J	CASEWORK - ALL PLASTIC LAMINATE BASE CABINETS SHALL RECEIVE RUBBER WALL BASE AT TOE KICK.
K	CASEWORK - ALL PLASTIC LAMINATE COUNTERTOPS SHALL RECEIVE A MATCHING PVC EDGE - SEE SPECIFICATIONS.
L	CASEWORK - LAMINATE FILLER STRIPS SHALL BE USED TO FILL VOID BETWEEN CASEWORK AND ADJACENT WALLS. LAMINATE TO MATCH ADJACENT CABINET.
M	ALL EXPOSED COLUMNS TO BE PAINTED. COLOR TBD BY ARCHITECT.
N	FURNITURE SHOWN GRAY FOR REFERENCE ONLY. FURNITURE O.F.O.I.
O	CASEWORK - ALL PLASTIC CABINET COUNTERTOPS TO EXTEND 1" PAST FACE OF CABINET, BELOW, UNLESS OTHERWISE NOTED.
P	CASEWORK - ALL PLASTIC LAMINATE COUNTERTOPS THAT ABUT A WALL ARE TO RECEIVE A 4" HIGH PLASTIC LAMINATE BACKSPLASH AND SIDE RETURNS, UNLESS OTHERWISE NOTED.
Q	CASEWORK - ALL UPPER CABINETS SHALL BE PROVIDED WITH (2) ADJUSTABLE SHELVES.
R	CASEWORK - ALL LOWER/BASE CABINETS SHALL BE PROVIDED WITH (1) ADJUSTABLE SHELF.
S	CASEWORK - INTERIOR OF CABINET BODIES ARE TO BE WHITE MELAMINE UNLESS EXPOSED TO VIEW. FOR OPEN CASEWORK, SEE ELEVATION FOR LAMINATE SELECTION.
T	ALL WINDOW SILLS TO BE SOLID SURFACE TYPE SS-1.
U	ALL EXPOSED STRUCTURE INCLUDING EXPOSED CEILING STRUCTURE SHALL BE PAINTED, COLOR TBD BY ARCHITECT.
V	ALL EXTERIOR STEEL LINTELS SHALL BE PAINTED, COLOR TBD BY ARCHITECT
W	ALL EXTERIOR GWB SOFFITS AT ALCOVE TO BE PAINTED. COLOR TBD BY ARCHITECT.
X	LOCKERS - METAL FILLER STRIPS SHALL BE USED TO FILL VOID BETWEEN LOCKERS AND ADJACENT WALLS. METAL TO MATCH ADJACENT LOCKER.
Y	REFER TO FINISH PLANS FOR PAINT COLOR LOCATIONS

WALL FINISH LEGEND

NUMBER	FINISH	BASIS OF DESIGN: MANUFACTURER / PATTERN / COLOR / NUMBER
PT-1	PAINT	SHERWIN WILLIAMS / ALABASTER / SW 7008
PT-6	PAINT	SHERWIN WILLIAMS / HUNT CLUB / SW 6468 (ACCENT COLOR 1)
PT-7	PAINT	SHERWIN WILLIAMS / BLACK MAGIC / SW 6991 (NB ACCENT, HM DOORS, HM FRAMES AND EXPOSED STEEL)
PT-8	PAINT	SHERWIN WILLIAMS/GUSTO GOLD / SW 6904 (ACCENT COLOR 2)
PT-9	PAINT	SHERWIN WILLIAMS /MINDFUL GRAY / SW 7016

FLOOR FINISH SCHEDULE

Key Name	FLOOR TYPE	PRODUCT BASIS OF DESIGN
QT 01	QUARRY TILE	DALTILE / QUARRY TILE RED BLAZE / 6"X6"
RF 01	RESINOUS FLOORING	BCHS
RF 02	RESINOUS FLOORING	BEHS
RF 03	RESINOUS FLOORING	NBHS
RS 01	RESILIENT SPORT FLOOR	SEE SPECIFICATION
SC 01	SEALED CONCRETE	SEE SPECIFICATION
TF 01	INDOOR TURF	TURF MATERIALS INSTALLATION BY COOP (N.I.C.)

BASE FINISH LEGEND

NUMBER	BASE	BASIS OF DESIGN: MANUFACTURER / PATTERN / COLOR / NUMBER
QT-1	QUARRY TILE	DALTILE - QUARRY TILE - COVE BASE 5"X6"
RB-1	RUBBER BASE	JOHNSONITE
RF-1	RESINOUS FLOOR BASE	BCHS
RF-2	RESINOUS FLOOR BASE	BEHS
RF-3	RESINOUS FLOOR BASE	NBHS

CEILING FINISH LEGEND

NUMBER	CEILING	CEILING USE/ FINISH TREATMENT	SIZE
ACT	A.C.T.	RESTROOMS/LOCKER ROOMS/TOILETS, WHITE	2X2 GRID
G.W.B.	GYPSUM WALL BOARD	ALL GYPSUM WALL BOARD SOFFITS/CEILINGS/BULKHEADS TO BE PAINTED, COMPLETE.	-
O.T.S.	OPEN TO STRUCTURE	ALL VISIBLE AREAS OPEN TO STRUCTURE ARE TO BE PAINTED. COLOR TBD ARCHITECT. VISIBLE WALLS IN O.T.S. AREAS ARE TO BE PAINTED, COLOR TBD BY ARCHITECT.	-

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BC MOVING FORWARD

SCHEMATIC DESIGN & DESIGN DEVELOPMENT

ROOM FINISH SCHED., FINISH/ SIGNAGE PLANS & LEGENDS – BCHS

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BCPS 25-145

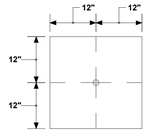
BG# 25-145

DATE : 06.10.2024
DRAWN BY :SS/CNW
CHECKED BY : SKA
REVISIONS :

No.	Description	Date
1	Addendum No. 3	07.08.2024

2023-50.1

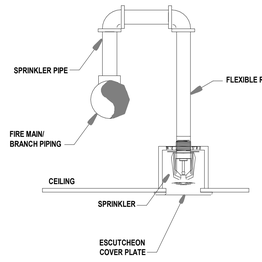
A9.11
BCHS



SPRINKLERS TO BE INSTALLED IN CENTER OF 2x2 CEILING TILES.

2x2 CEILING TILE DETAIL

SCALE: NONE



RETURN BEND DETAIL

SCALE: NONE CONCEALED

EXISTING FLOW TEST

BULLITT EAST HIGH SCHOOL

STATIC:	56 psi
RESIDUAL:	30 psi
FLOW:	1200 gpm
DATE:	07/18/2023
LOCATION:	11450 KY-44, MT WASHINGTON, KY 40047
BY:	MT. WASHINGTON FIRE DEPARTMENT

EXISTING FLOW TEST

BULLITT CENTRAL HIGH SCHOOL

STATIC:	91 psi
RESIDUAL:	25 psi
FLOW:	1,100 gpm
DATE:	05/29/2024
LOCATION:	1330 KY-44, SHEPHERDSVILLE, KY 40165
BY:	LOUISVILLE WATER COMPANY

GENERAL FIRE PROTECTION NOTES:

A. THE ENTIRE BUILDING SHALL BE 100% PROTECTED WITH A FULLY AUTOMATIC FIRE PROTECTION SYSTEM DESIGNED IN ACCORDANCE WITH NFPA (13-2013), STATE AND LOCAL CODES.

B. THE SUCCESSFUL FIRE PROTECTION CONTRACTOR SHALL OBTAIN AND UTILIZE ALL APPLICABLE ARCHITECTURAL FLOOR PLANS, SECTIONS, AND REFLECTED CEILING PLANS FOR LAYING OUT SPRINKLERS. REFER TO A COMPLETE SET OF DOCUMENTS (ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL PLANS AND SPECIFICATIONS FOR COORDINATION OF TRADES, ROOMS, STRUCTURE, AND EQUIPMENT).

C. ALL AREAS ARE TO BE PROVIDED WITH QUICK RESPONSE SPRINKLERS (EXCEPTIONS PER NFPA MAY BE APPLIED, IE MECHANICAL SPACES, ETC.). REFER TO FLOOR PLANS FOR LOCATIONS AND SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS AND MODELS.

D. ALL SPRINKLERS LOCATIONS SHALL BE COORDINATED WITH ALL OTHER CEILING RELATED DEVICES. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION RELATED TO CEILING CONSTRUCTION.

E. ALL SPRINKLER PIPING MUST BE INSTALLED ABOVE CEILINGS. SPRINKLER PIPING MUST BE COORDINATED WITH OTHER TRADES. PIPING MUST OFFSET AS REQUIRED TO AVOID CONFLICTS WITH DUCTWORK, PIPING, CONDUIT, ALL EQUIPMENT, LIGHTS, CABLE TRAYS, ETC.

F. 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.

G. PROVIDE ALL REQUIRED DRAIN PIPING TO TEST FLOW SWITCHES. DISCHARGE DRAIN PIPING TO OUTDOORS.

H. SIZE ALL FIRE PROTECTION PIPING IN ACCORDANCE WITH NFPA 13. PIPE SIZING SHALL BE ACCOMPLISHED USING HYDRAULIC CALCULATIONS.

I. CONTRACTOR TO PROVIDE UPDATED FLOW TEST. SUBMIT HYDRAULIC CALCULATIONS AND SYSTEMS DESIGN FOR REVIEW TO THE M/E ENGINEER. REFER TO CHART ON THIS SHEET FOR PREVIOUS FLOW INFORMATION. PROVIDE FIRE PUMP SIZING BASED ON FLOW TEST AND HYDRAULIC CALCULATIONS.

J. THE SPARE SPRINKLERS, WRENCH AND CABINET SHALL BE LOCATED IN THE FIRE PUMP ROOM.

K. ONLY CERTIFIED TECHNICIANS APPROVED BY THE LOCAL WATER COMPANY SHALL INSTALL OR TEST BACKFLOW PREVENTERS.

L. CERTIFIED CONTRACTOR SHALL TEST BACKFLOW PREVENTER AFTER INSTALLATION. PROVIDE TEST RESULTS (INCLUDE IN OPERATION AND MAINTENANCE MANUALS).

M. BUILDING SHALL BE CLASSIFIED AS LIGHT/ORDINARY HAZARD. LIGHT HAZARD AREAS (IE. GENERAL POPULATION, GYM, RESTROOMS, ETC.) SHALL BE PROVIDED WITH A SPRINKLER DENSITY OF 0.10GPM/150SQFT. ORDINARY HAZARD GROUP I AREAS (IE GYM STORAGE ROOMS, MECHANICAL ROOMS, ETC.) SHALL BE PROVIDED WITH A SPRINKLER DENSITY OF 0.15GPM/1500SQFT. COORDINATE ALL REQUIRED SPRINKLER DENSITIES WITH THE OWNERS INSURANCE UNDERWRITER AND USE THE GREATER. PROVIDE PLACARD AT INCOMING FIRE SERVICE.

N. COORDINATE ALL SPRINKLER PIPE ROUTINGS WITH ALL ELECTRICAL EQUIPMENT.

O. THE CONTRACTOR SHALL INSURE THAT ALL PENETRATIONS OF THE AIR BARRIER BE SEALED TO MAINTAIN AN AIR TIGHT BUILDING.

P. FLOOR CONTROL VALVE ASSEMBLIES FOR EACH FIRE ZONE SHALL CONSIST OF, BUT ARE NOT LIMITED TO THE FOLLOWING: CONTROL VALVE WITH FLOW & TAMPER SWITCH, PRESSURE GAUGES, DRAIN VALVE WITH BYPASS, ETC.

Q. ALL AREAS HAVING CEILING SHALL BE PROVIDED WITH CONCEALED STYLE SPRINKLERS UNLESS NOTED OTHERWISE.

R. COLOR FINISHES OF ALL SPRINKLERS/ESCUTCHEONS/COVER PLATES SHALL BE COORDINATED WITH ARCHITECT/CEILING.

S. ALL AREAS HAVING NO CEILINGS SHALL BE PROVIDED WITH UPRIGHT TYPE SPRINKLERS.

T. ARCHITECTURAL REFLECTED CEILING PLANS SHALL BE UTILIZED AS AN AID IN LOCATING SPRINKLERS BUT DOES NOT RELIEVE THE SPRINKLER CONTRACTOR FROM PROVIDING A FULLY PROTECTED BUILDING SPRINKLER LAYOUT. CONTRACTOR SHALL ALSO COORDINATE ALL SPRINKLER LOCATION WITH ALL TRADE DRAWINGS (LIGHTING, FIRE ALARM, SECURITY, HVAC, ETC.)

U. COORDINATE LOCATIONS OF THE FOLLOWING FIRE PROTECTION APARATUS' WITH THE LOCAL FIRE DEPARTMENT PRIOR TO INSTALLATION: FIRE DEPARTMENT CONNECTION (F.D.C.), POST INDICATOR VALVE (P.I.V.), FIRE ALARM BELLS, ETC. COORDINATION SHALL ALSO INCLUDE VERIFICATION OF ALL HOSE CONNECTION SIZES, THREAD TYPES.

V. ALL SPRINKLER DRAIN PIPING SHALL BE DISCHARGED TO THE BUILDING EXTERIOR AT AN APPROVED LOCATION OR TO A BUILDING DRAIN CAPABLE OF HANDLING FULL FLOW.

W. ALL SPRINKLERS LOCATED IN IDF/MDF AND ELECTRICAL ROOMS SHALL BE HIGH TEMPERATURE SPRINKLERS WITH PROTECTIVE WIRE CAGES. DO NOT ROUTE SPRINKLER PIPING THROUGH THE IDF/MDF ROOMS AND DO NOT LOCATE SPRIKLERS PIPING ABOVE EQUIPMENT. PROVIDE SIDEWALL SPRINKLERS.

X. PROVIDE SPRINKLER COVERAGE BENEATH THE LOWEST LEVEL OF STAIR TREADS WHERE THE AREAS COULD BE UTILIZED FOR POTENTIAL STORAGE. SPRINKLER PIPING SHALL BE CONCEALED INSIDE WALLS AND UTILIZE SIDEWALL STYLE SPRINKLERS.

Y. ALL SPRINKLERS LOCATED IN SHOWER RELATED AREA SHALL BE CORROSION RESISTANT STYLE SPRINKLERS.

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

FIRE PROTECTION LEGEND & DETAILS

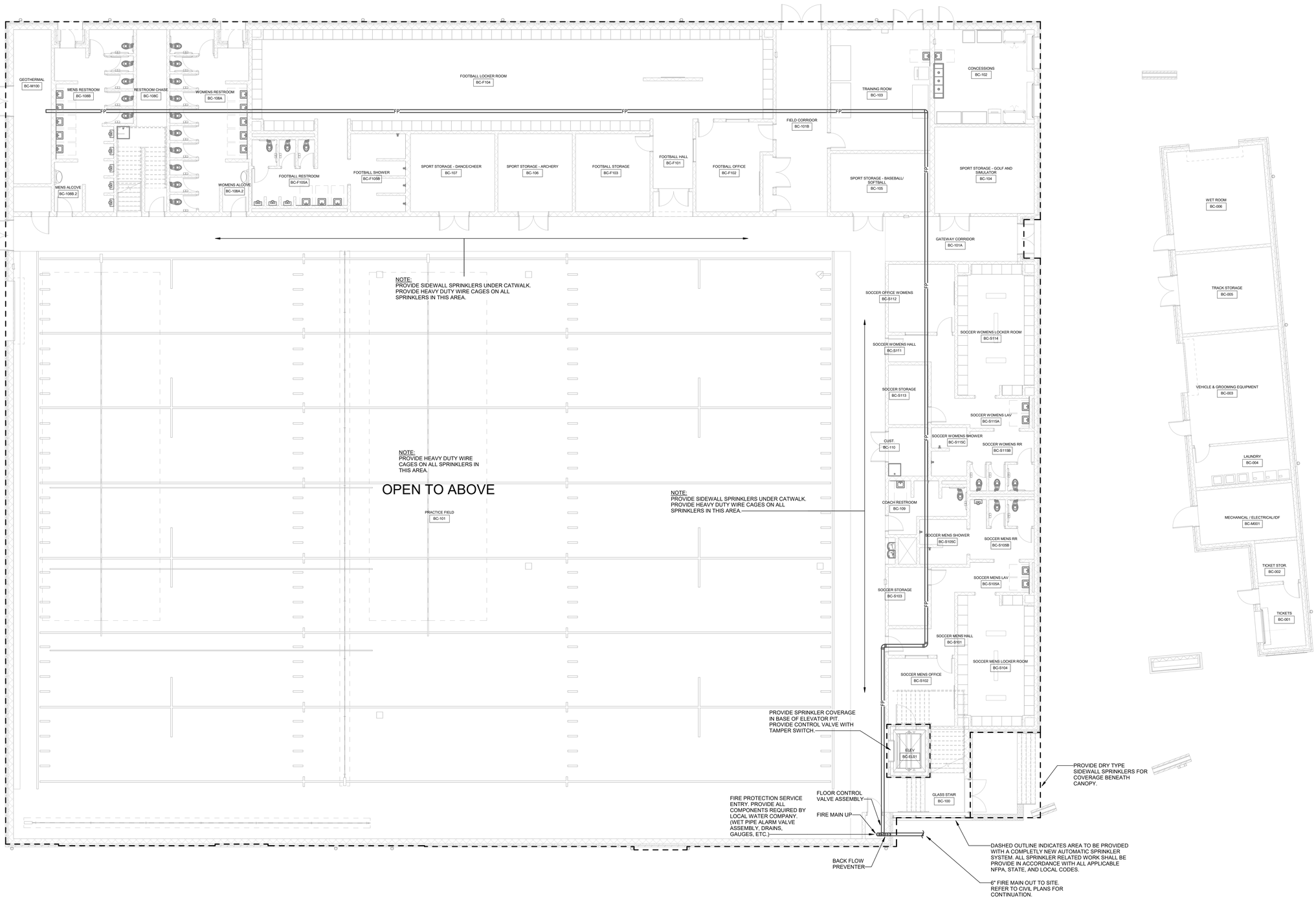
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG-22-145

BG# 24-192

DATE : 04/22/25
DRAWN BY : AME
CHECKED BY : JRE
REVISIONS :

2023-50

FP1.00



1 Physical Science Center - Fire Protection - Bullitt Central - Level 1

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

PHYSICAL SCIENCE CENTER – FIRE PROTECTION – BULLITT CENTRAL – [illegible]

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BG-25-145

BG MOVING FORWARD

BG# 224-192

DATE : 06/24/24
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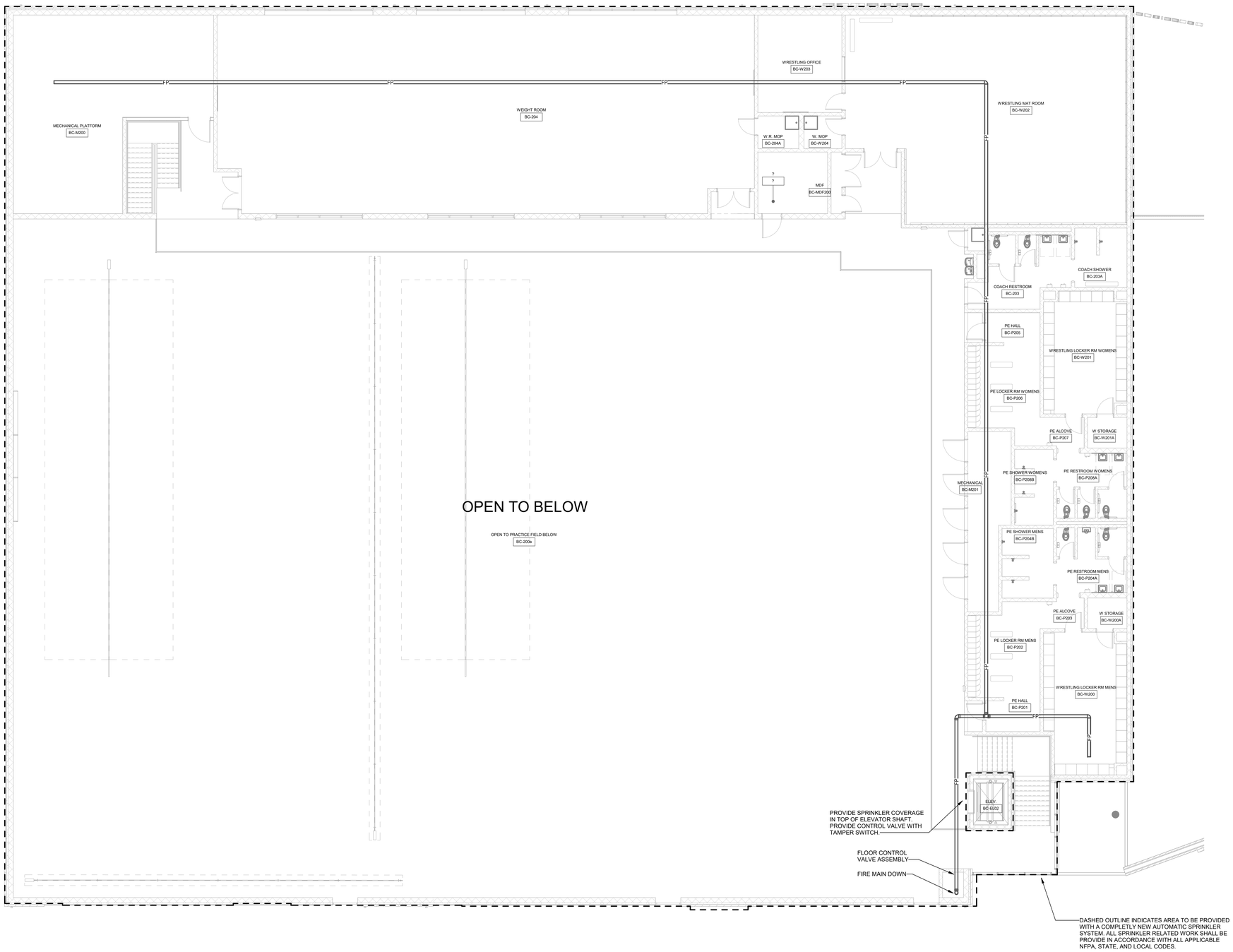
FP2.01
BCHS



1 Physical Science Center - Fire Protection - Bullitt Central - Level 2

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

BG MOVING FORWARD

PHYSICAL SCIENCE CENTER – FIRE PROTECTION – BULLITT CENTRAL – [illegible]

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BS-25-145

BG# 224-192

DATE : 06/24/24
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REVISIONS :

2023-50

FP2.02
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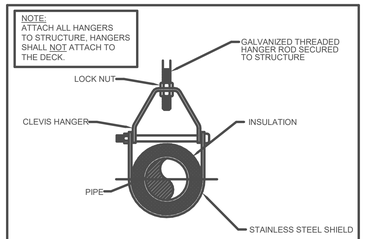
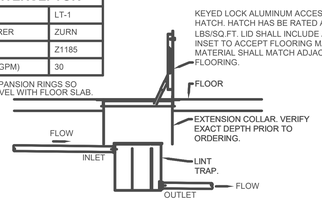


PIPE HANGER DETAIL

NOT TO SCALE

LINT INTERCEPTOR	
TAG	LT-1
MANUFACTURER	ZURN
MODEL	Z1185
FLOW RATE (GPM)	30

* PROVIDE EXPANSION RINGS SO COVER IS LEVEL WITH FLOOR SLAB.



INSTALLATION DETAIL - LINT TRAP (BELOW GROUND)

NOT TO SCALE

PLUMBING FIXTURE SCHEDULE

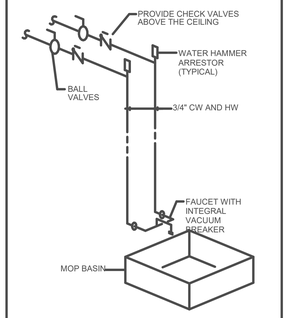
DESIGNATOR	FIXTURE	CW	HW	SAN	VENT
P-1	WATER CLOSET - FLOOR SET	1-1/4"	--	4"	2"
P-1A	WATER CLOSET - FLOOR SET - ADA	1-1/4"	--	4"	2"
P-2	LAVATORY, WALL HUNG	1/2"	1/2"	2"	1-1/2"
P-2A	LAVATORY, WALL HUNG - ADA	1/2"	1/2"	2"	1-1/2"
P-3	URINAL	3/4"	--	2"	1-1/2"
P-3A	URINAL - ADA	3/4"	--	2"	1-1/2"
P-5	ELEC. WATER COOLER - 2 STATION - BOTTLE FILLER	1/2"	--	2"	1-1/2"
P-6	JANITOR SINK	3/4"	3/4"	3"	1-1/2"
P-7	WASHER BOX	1/2"	1/2"	2"	1-1/2"
P-8	ICE MAKER / COFFEE MAKER WATER CONNECTION BOX	1/2"	--	--	--
P-9	SHOWER	1/2"	1/2"	2"	1-1/2"
P-9A	SHOWER - ADA	1/2"	1/2"	2"	1-1/2"
P-10	3 COMPARTMENT SINK/W POINT OF USE GREASE TRAP	1/2"	1/2"	2"	1-1/2"
LT-1	LINT INTERCEPTOR	--	--	--	--
HB	HOSE BIBB	1/2"	--	--	--
FPWH	FREEZE-PROOF WALL HYDRANT	3/4"	--	--	--
FD-1	TOILET ROOM FLOOR DRAIN	--	--	3"	1-1/2"
FD-2	FIRE SPRINKLER FLOOR DRAIN - TRAP PRIMER	--	--	3"	1-1/2"
FD-3	KITCHEN FLOOR DRAIN	--	--	4"	2"
FD-4	HEAT PUMP CLOSET FLOOR DRAIN - TRAP PRIMER	--	--	4"	2"
FS-1	FLOOR SINK	--	--	4"	2"
RD-1	BI-FUNCTIONAL ROOF DRAIN WITH 45° PRIMARY OUTLET CONNECTION	--	--	--	--

NOTES:

- PIPE SIZES ARE AS INDICATED UNLESS OTHERWISE NOTED ON FLOOR PLANS AND RISER DIAGRAMS
- MINIMUM 2" SANITARY PIPING UNDERGROUND. PROVIDE ALL REQUIRED PIPING TO FIXTURES INDICATED ON THE FLOOR PLANS, INDICATED WITH A "P" DESIGNATION. PROVIDE PIPING OF SIZE INDICATED IN THIS SCHEDULE.

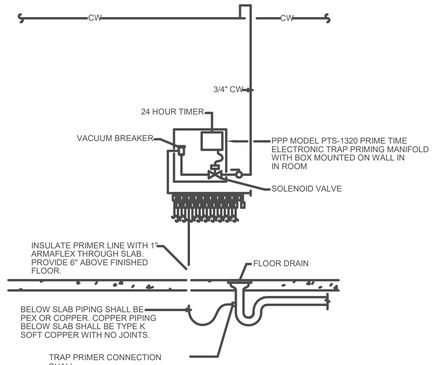
PLUMBING LEGEND

ABOVE FINISHED FLOOR	AFF
CLEANOUT	CO
COLD WATER	CW
DOMESTIC WATER CIRCULATING PUMP	DP
EXPANSION TANK	ET
EXTERIOR CLEANOUT	ECO
FLOOR DRAIN	FD
FREEZE PROOF WALL HYDRANT	FPWH
GENERAL CONTRACTOR	GC
HOSE BIBB	HB
HOT WATER	HW
MANHOLE	MH
NOT TO SCALE	NTS
OPEN RECEPTACLE	OR
POLYVINYL CHLORIDE	PVC
PUMP DISCHARGE	PD
SUMP PUMP	SP
TYPICAL	TYP
VENT THROUGH ROOF	VTR
WATER HEATER	WH
SANITARY PIPING	SAN
SANITARY VENT PIPING	V
DOMESTIC COLD WATER PIPING	
DOMESTIC HOT WATER PIPING (120° F)	
DOMESTIC HOT WATER RETURN PIPING (120° F)	
NATURAL GAS PIPING	G
NATURAL GAS PIPING (2.5 PSIG)	2.5# G
RELIEF VALVE DISCHARGE	RVD
PRESSURE RELIEF VALVE	
UNION	
DIGITAL THERMOMETER	
PRESSURE GAUGE	
GATE VALVE	
BALANCING VALVE	
SOLENOID VALVE	
GAS SHUT-OFF VALVE	
CHECK VALVE	
DOUBLE CHECK VALVE ASSEMBLY	
BALL VALVE	
BALL VALVE IN RISER	
PIPING ELBOW (TURNED UP/DOWN)	
PIPING TEE (TURNED UP/DOWN)	
REDUCED PRESSURE BACKFLOW PREVENTER	



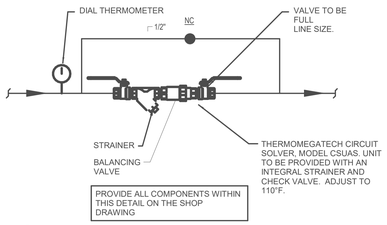
MOP BASIN DETAIL (P-6)

NOT TO SCALE



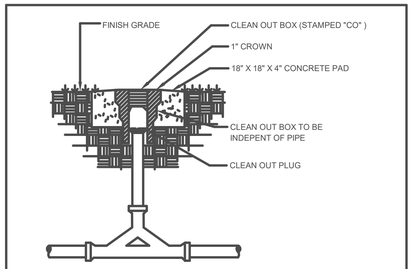
FLOOR DRAIN (FD-2) ELECTRONIC TRAP PRIMER PIPING SCHEMATIC

NOT TO SCALE MECHANICAL ROOM



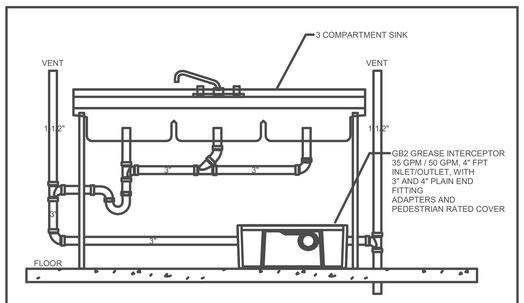
HOT WATER RETURN BALANCING VALVE DETAIL.

NOT TO SCALE



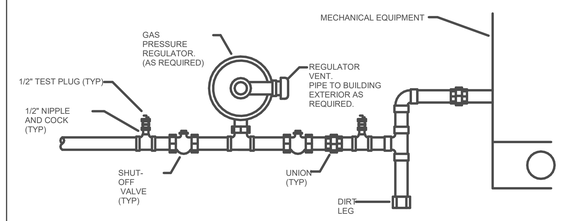
EXTERIOR 2-WAY CLEANOUT DETAIL

NOT TO SCALE



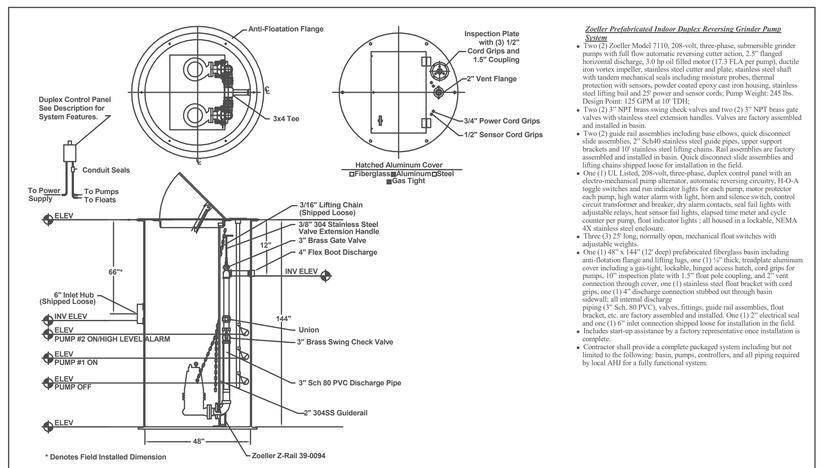
GREASE TRAP ON FLOOR INSTALLATION

NOT TO SCALE



NATURAL GAS CONNECTION DETAIL

NOT TO SCALE



NOTE: Basin shall be vented in accordance with all local codes and regulations.

Zoeller Prefabricated Indoor Duplex Reversing Grinder Pump System

- Two (2) Zoeller Model 7110, 208-volt, three-phase, submersible grinder pumps with full flow automatic reversing cutter action, 2.5" flanged horizontal discharge, 3.0 hp oil filled motor (17.3 FLA per pump), ductile iron vortex impeller, stainless steel cutter and plate, stainless steel shaft with tandem mechanical seals including moisture probes, thermal protection with sensors, powder coated epoxy cast iron housing, stainless steel lifting bail and 25' power and sensor cords; Pump Weight: 245 lbs. Design Point: 125 GPM at 10' TDH.
- Two (2) 3" NPT brass swing check valves and two (2) 3" NPT brass gate valves with stainless steel extension handles. Valves are factory assembled and installed in basin.
- Two (2) guide rail assemblies including base elbows, quick disconnect slide assemblies, 2" Sch40 stainless steel guide pipes, upper support brackets and 10' stainless steel lifting chains. Rail assemblies are factory assembled and installed in basin. Quick disconnect slide assemblies and lifting chains shipped loose for installation in the field.
- One (1) UL Listed, 208-volt, three-phase, duplex control panel with an electro-mechanical pump alternator, automatic reversing circuitry, H-O-A toggle switches and run indicator lights for each pump, motor protector each pump, high water alarm with light, horn and silence switch, control circuit transformer and breaker, dry alarm contacts, seal fail lights with adjustable relays, heat sensor fail lights, elapsed time meter and cycle counter per pump, float indicator lights ; all housed in a lockable, NEMA 4X stainless steel enclosure.
- Three (3) 25' long, normally open, mechanical float switches with adjustable weights.
- One (1) 48" x 144" (12' deep) prefabricated fiberglass basin including anti-flotation flange and lifting lugs, one (1) ¼" thick, treadplate aluminum cover including a gas-tight, lockable, hinged access hatch, cord grips for pumps, 10" inspection plate with 1.5" float pole coupling, and 2" vent connection through cover, one (1) stainless steel float bracket with cord grips, one (1) 4" discharge connection stubbed out through basin sidewall; all internal discharge piping (3" Sch. 80 PVC), valves, fittings, guide rail assemblies, float bracket, etc. are factory assembled and installed. One (1) 2" electrical seal and one (1) 6" inlet connection shipped loose for installation in the field.
- Includes start-up assistance by a factory representative once installation is complete.
- Contractor shall provide a complete packaged system including but not limited to the following: basin, pumps, controllers, and all piping required by local AHJ for a fully functional system.

SEWAGE EJECTOR PUMP DETAIL (SEP-1NB)

NOT TO SCALE

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

PLUMBING SCHEDULES & DETAILS

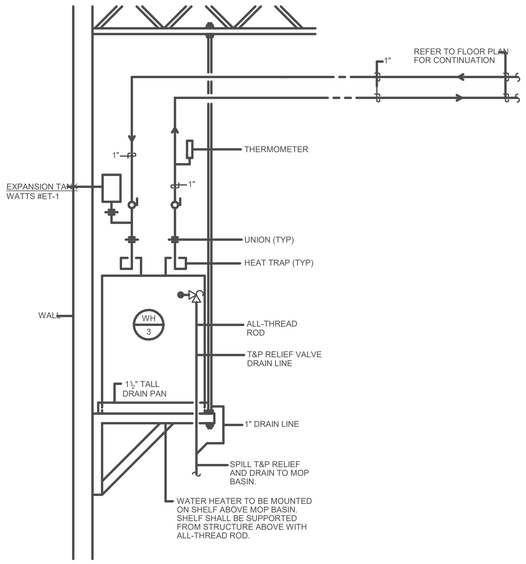
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG #25-145

BG# 24-192

DATE : 06/24/24
DRAWN BY : AME
CHECKED BY : JRE
REVISIONS :

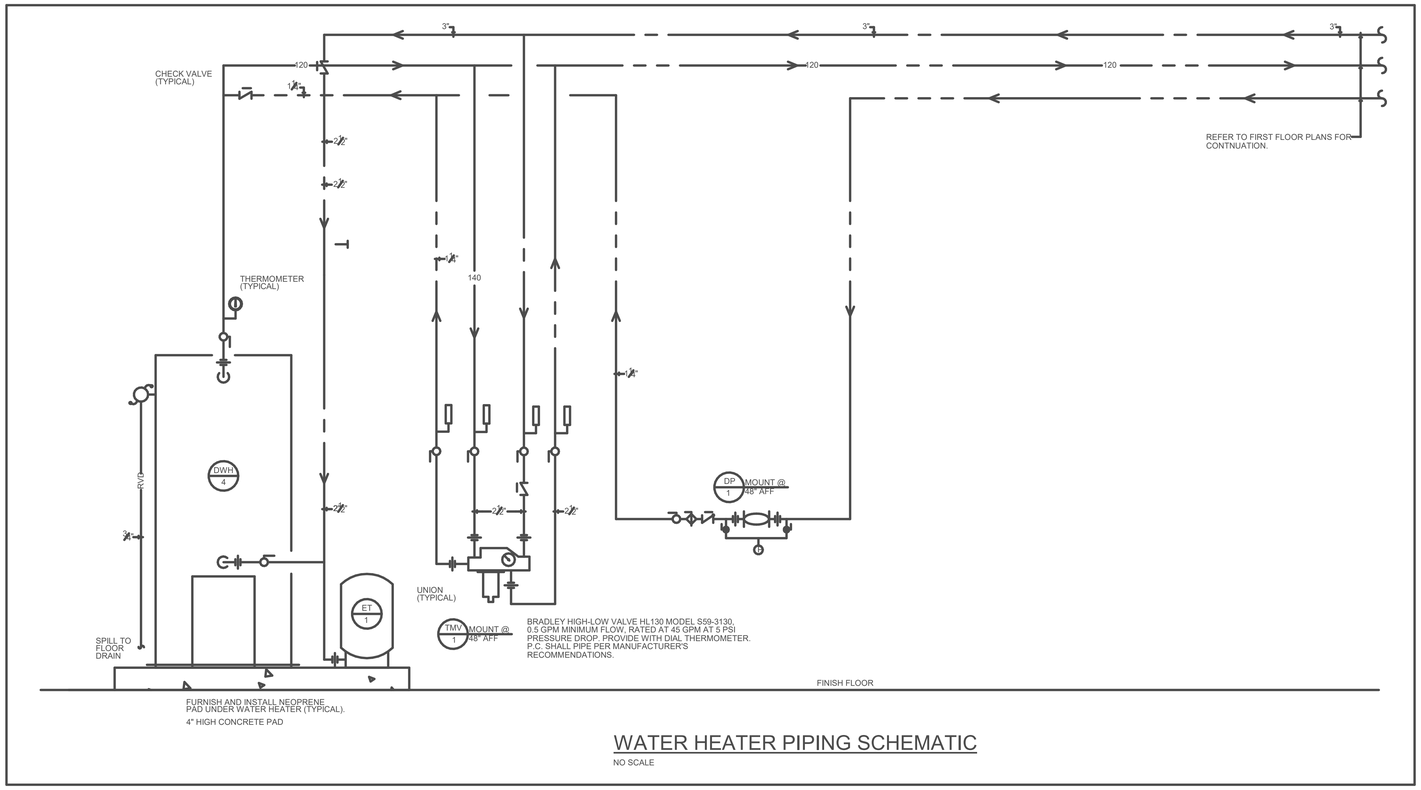
2023-50

P1.00



WATER HEATER ON SHELF PIPING SCHEMATIC

NOT TO SCALE



WATER HEATER PIPING SCHEMATIC

NO SCALE

WATER HEATER

TAG	DWH-1/2	DWH-3	DWH-4	DWH-5
MANUFACTURER	AO SMITH	AO SMITH	AO SMITH	AO SMITH
MODEL	DVE-120	DVE-120	DVE-120	DVE-50
GALLONS STORAGE	100	100	100	50
GPH RECOVERY @ 80° F	164	56	109	56
VOLTAGE / MAX FUSE	480/ 45 KW	480/12 KW	480/36 KW	480/ 12 KW
ASME RATED	YES	YES	YES	YES
UL LISTED	YES	YES	YES	YES

EXPANSION TANK

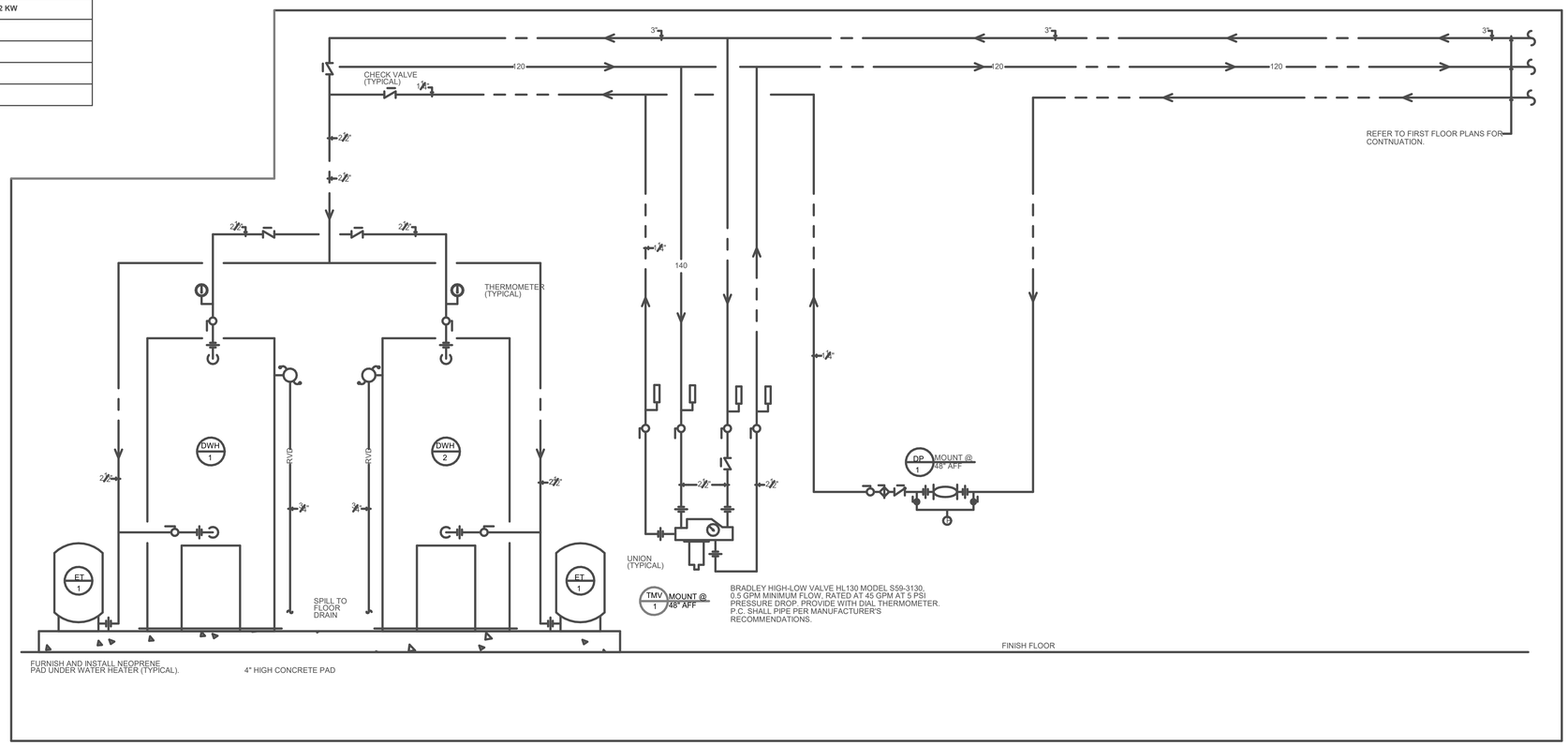
TAG	ET-1	ET-2
MANUFACTURER	WATTS	WATTS
MODEL	DET-A-42	DET-A-42
MAX PRESSURE (PSI)	150	150
MAX TEMPERATURE	240° F	240° F
TANK VOLUME-GAL.	22	22
TANK ACCEPTANCE-GAL.	15.5	15.5

* EQUAL EXPANSION TANKS BY AMTROL AND WILKINS TANKS TO BE ASME RATED.

RECIRCULATING PUMP

TAG	DP-1
MANUFACTURER	BELL & GOSSETT
MODEL	PL-45
VOLTAGE / PHASE	115 / 1Ø
HP	1/6
FLOW (GPM)	9.0
HEAD (FT.)	30.0
ALL BRONZE BODY	YES
100% LEAD FREE	YES

* EQUAL PUMPS BY GRUNDFOS AND ARMSTRONG



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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

PLUMBING SCHEDULES & DETAILS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
605 252-7445

MOVING FORWARD

BG# 224-192

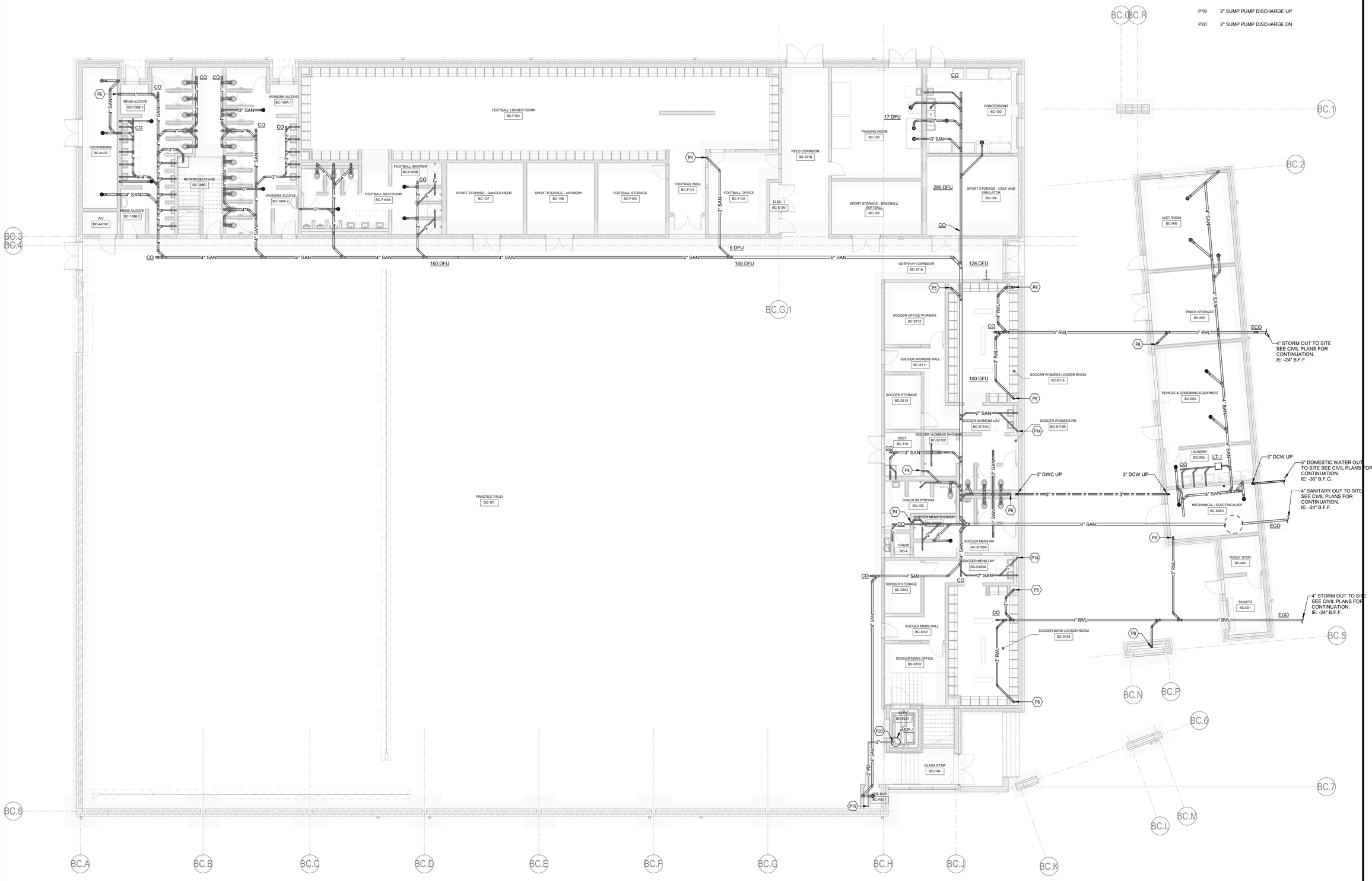
DATE : 06/24/24
DRAWN BY : AME
CHECKED BY : JRE
REVISIONS :

2023-50

P1.01

KEYNOTES

P4	3" SANITARY UP
P6	4" SANITARY UP
P8	3" STORM UP
P14	2" SANITARY UP
P19	2" SUMP PUMP DISCHARGE UP
P20	2" SUMP PUMP DISCHARGE DN



1 Physical Science Center - Plumbing Below Slab - Bullitt Central - Level 1

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

PHYSICAL SCIENCE CENTER – PLUMBING BELOW SLAB – BULLITT CENTRAL – LEVEL 1

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BCPS-1645

MOVING FORWARD

BG# 224-192

DATE : 05/24/24
DRAWN BY : AME
CHECKED BY : JRE
REVISIONS :

2023-50

P2.00
BCHS

TAGGED NOTES

P1	EXTEND 2" CW LINE DOWN IN CHASE. ROUTE 2" CW HEADER HORIZONTALLY IN CHASE TO FIXTURES AND CONNECT. FURNISH AND INSTALL WATER HAMMER ARRESTORS AS REQUIRED.
P2	EXTEND 1-1/2" CW AND 1/2" HW DOWN IN CHASE. ROUTE CW/HW HEADER HORIZONTALLY IN CHASE TO FIXTURES AND CONNECT. FURNISH AND INSTALL WATER HAMMER ARRESTORS AS REQUIRED.
P5	3" SANITARY DN
P6	4" SANITARY UP
P7	4" SANITARY DN
P8	3" STORM UP
P9	3" STORM DN
P10	3" STORM UP/DN
P11	4" VENT UP THRU ROOF
P12	2" DOMESTIC WATER DN BELOW-SLAB
P13	2" CW, 1-1/2" HW, 3/4" HWR UP TO SECOND FLOOR CEILING CAVITY.
P14	2" SANITARY UP
P15	2" SANITARY DN
P16	3" OVERFLOW DN
P17	3" OVERFLOW UP

GREASE TRAP (GT-1)
SCHIER MODEL GB-2
35 GPM / 50 GPM, 4" FPT
INLET/OUTLET, WITH
3" AND 4" PLAIN END FITTING
ADAPTERS AND PEDESTRIAN
RATED COVER.

TRAP PRIMER MANIFORD AND CONNECTION BOX. REFER TO DETAIL SHEET P1.00

2" SUMP PUMP DISCHARGE TO SPILL TO GRADE 2'-0" A.F.F. PROVIDE SPLASH BLOCK AT GRADE.

1 Physical Science Center - Plumbing - Bullitt Central - Level 1
SCALE: 1/8" = 1'-0"

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BC MOVING FORWARD

PHYSICAL SCIENCE CENTER – PLUMBING – BULLITT CENTRAL – PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BID 25-145

BC# 224-192

DATE : 06/24/24
DRAWN BY : AME
CHECKED BY : JRE
REVISIONS :

2023-50

SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

P2.01
BCHS

KEYNOTES

P1 EXTEND 2" CW LINE DOWN IN CHASE. ROUTE 2" CW HEADER HORIZONTALLY IN CHASE TO FIXTURES AND CONNECT. FURNISH AND INSTALL WATER HAMMER ARRESTORS AS REQUIRED.

P2 EXTEND 1-1/2" CW AND 1/2" HW DOWN IN CHASE. ROUTE CW/HW HEADER HORIZONTALLY IN CHASE TO FIXTURES AND CONNECT. FURNISH AND INSTALL WATER HAMMER ARRESTORS AS REQUIRED.

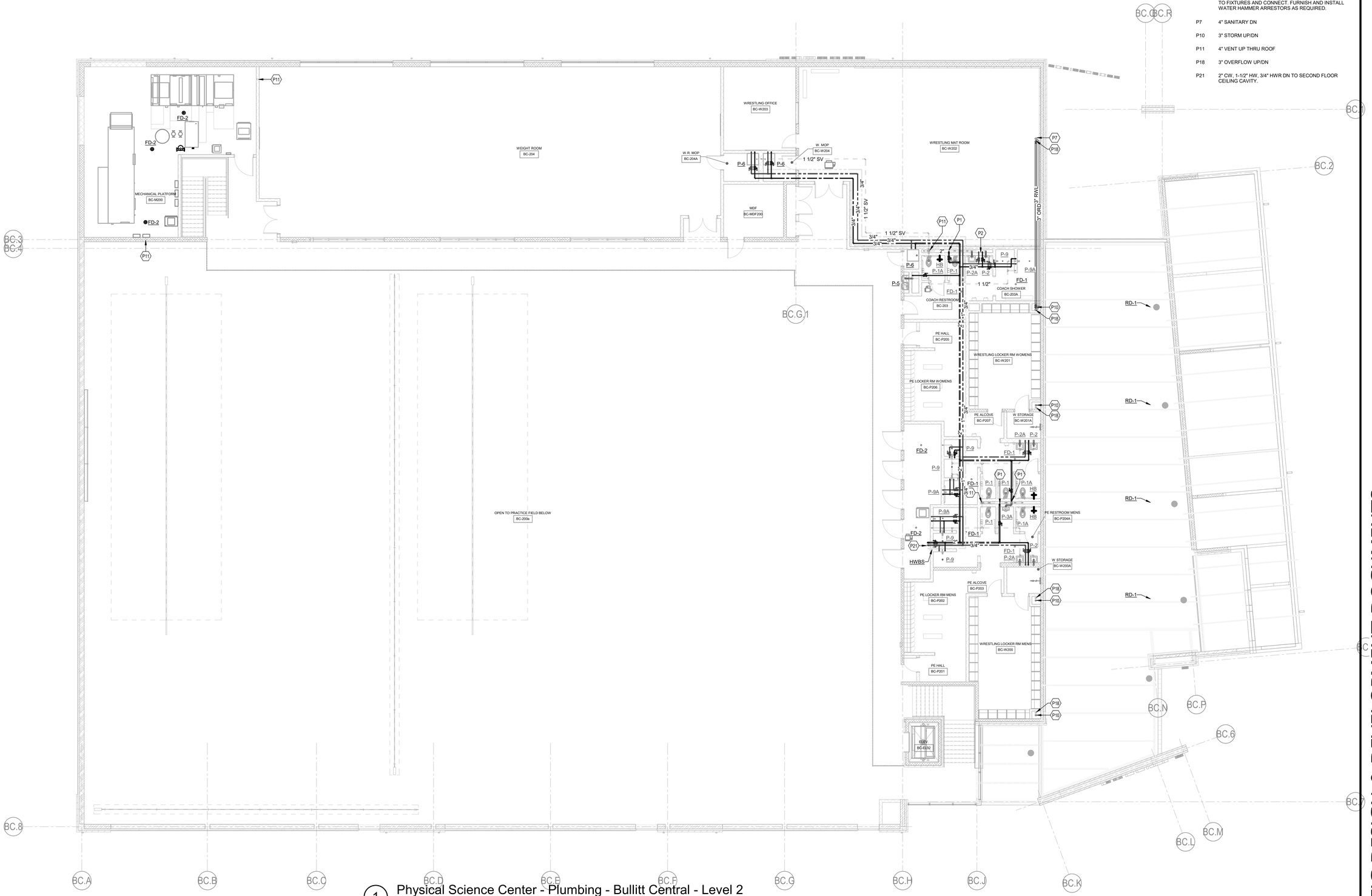
P7 4" SANITARY DN

P10 3" STORM UP/DN

P11 4" VENT UP THRU ROOF

P18 3" OVERFLOW UP/DN

P21 2" CW, 1-1/2" HW, 3/4" HWR DN TO SECOND FLOOR CEILING CAVITY.



1 Physical Science Center - Plumbing - Bullitt Central - Level 2

SCALE: 1/8" = 1'-0"

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BG MOVING FORWARD

PHYSICAL SCIENCE CENTER –
PLUMBING – BULLITT CENTRAL –
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BCS 25-145

BG# 224-192

DATE : 06/24/24
DRAWN BY : AME
CHECKED BY : JRE
REVISIONS :

2023-50

P2.02
BCHS

SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

1 Physical Science Center - Plumbing - Bullitt Central - Roof

SCALE:

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studio

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

PHYSICAL SCIENCE CENTER – PLUMBING – BULLITT CENTRAL – ROOF PLAN

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
605 252-1440

MOVING FORWARD

BG# 24-192

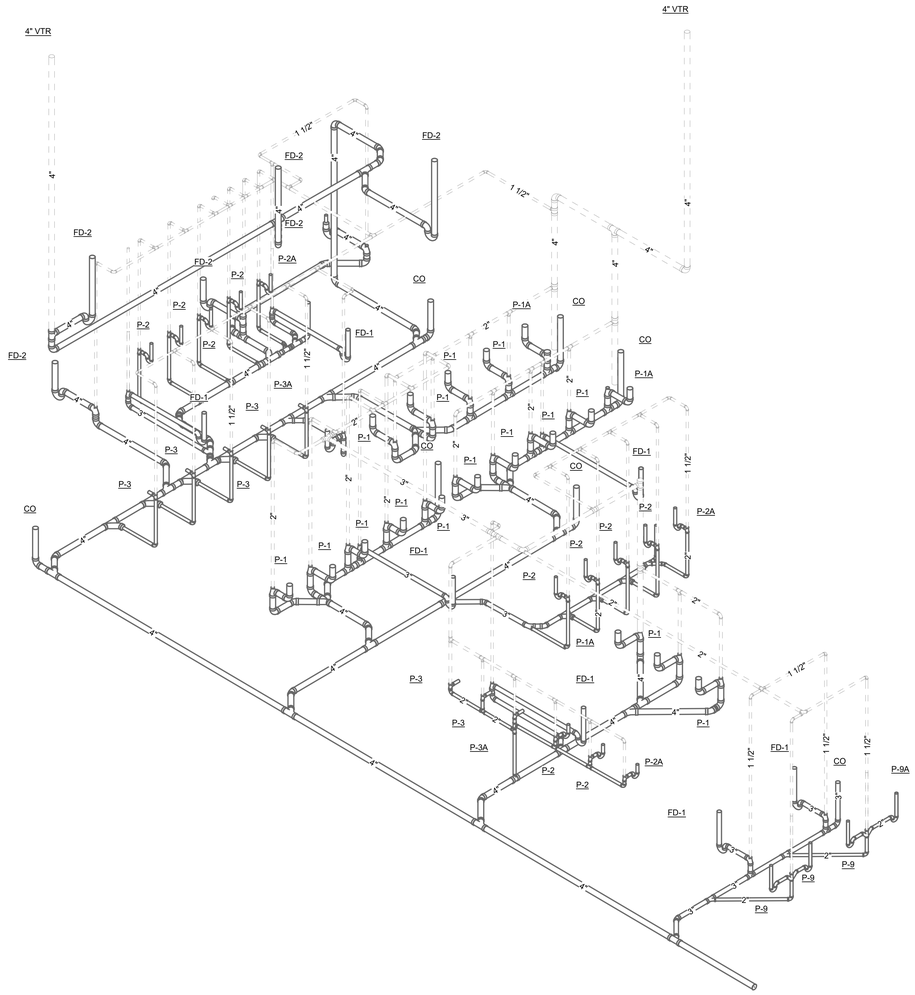
DATE : 06/24/24
DRAWN BY : AME
CHECKED BY : JRE
REVISIONS :

2023-50

P2.03
BCHS

SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

P4.01	2023-50	DATE: 05/22/24 DRAWN BY: AME CHECKED BY: JRE REVISIONS:	BG# 24-192	WASTE & VENT RISER DIAGRAM PHASE III | PHYSICAL SCIENCE CENTER BULLITT COUNTY PUBLIC SCHOOLS BG 25-145	BC MOVING FORWARD		CMTA A LEGENCE Company 10411 Meeting Street | Louisville, KY 40059 | 502.326.3085 | cmta.com	studio kremer architects 1231 S Shelby St, Louisville, KY 40203 TEL 502.499.1100 FAX 502.499.1101


4" VTR
4" VTR
FD-2
FD-2
FD-2
FD-2
FD-2
FD-2
P-2A
P-2
CO
P-2
P-2
P-2
FD-1
FD-2
P-3A
P-3
FD-1
P-3
P-3
P-3
CO
P-1
P-1
P-1

MECHANICAL GENERAL NOTES

A COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, 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 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, STANDARD 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.

C WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF 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, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED 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, COMMONWEALTH OF KENTUCKY, ETC.)

H 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.

I 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.

J WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING CONDUITS, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW FULL THICKNESS OF FIRE PROOFING WITH NO INTERFERENCE.

K 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 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 DUCTWORK, PIPING, CONDUITS, ETC. IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING EXCEPT AS NOTED.

N INSTALL AIR VENTS AT HIGH POINTS IN PIPING AND DRAINS IN LOW POINTS. USE CARE TO AVOID FREEZING OF EXTERIOR VENTS.

O LOCATIONS OF PIPING, DUCTS AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.

P ALL OFFSETS IN DUCTS AND PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.

Q COORDINATE ALL HVAC WORK WITH ELECTRICAL, PLUMBING AND OTHER TRADES TO AVOID INTERFERENCE WITH PIPING, DUCTS, CONDUIT AND OTHER EQUIPMENT.

R INSTALL ALL PIPING, DUCTWORK AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTION. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT.

S SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION.

T SEAL ALL NEW DUCTWORK JOINTS WITH UNITED MCGILL, IRONGRIP 601 OR EQUAL WATER BASED SEALANT.

U ALL MOTOR DRIVEN EQUIPMENT SHALL BE INSTALLED WITH FLEXIBLE CONNECTIONS TO DUCTWORK, PIPING, ETC., UNLESS OTHERWISE NOTED.

V THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.

W 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.

X DOUBLE WIDTH TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ELBOWS. TURNING VANES NOT REQUIRED FOR KITCHEN EXHAUSTS.

Y ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY 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.

Z DEVIATIONS IN SIZE, CAPACITIES, 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.

AA 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 CEILINGS. 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.

AB ALL MANHOLES, VAULTS AND SIMILAR UNDERGROUND STRUCTURES SHALL HAVE THE TOP ELEVATION SET FLUSH WITH FINISHED GRADE UNLESS SPECIFICALLY NOTED OTHERWISE.

AC PIPING SHALL NOT BE LOCATED UNDER A FOOTER OR IN 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 SIDES OF THE FOOTER. ADDITIONALLY, GREASE TRAPS, MANHOLES, VAULTS AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.

AD THE DOCUMENTS COMPLY WITH 2006 IMC, 2007 KBC, AND 2009 IECC.

AE THE DOCUMENTS COMPLY WITH 2006 IMC, 2007 KBC, AND ASHRAE 90.1-2007.

AF WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

ABBREVIATIONS

AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
AFF	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	BREAK HORSEPOWER
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
C.I.	CAST IRON
CLG	CEILING
CLR	CLEAR
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COND	CONDENS (-ER, -ING, -ATION, -ATE)
CONT	CONTINU (-ED, -OUS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
dB	DECIBEL
DB	DRY BULB
DBT	DRY BULB TEMPERATURE
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE (-S)
DIA	DIAMETER (-S)
DN	DOWN
DWG	DRAWING
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVA (-TION, -TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EVAP	EVAPORAT (-E, -ING, -ED, -OR, -ION)
EWT	ENTERING WATER TEMPERATURE
EXP	EXPANSION
EXT	EXTERIOR
FA	FREE AREA

ABBREVIATIONS (CONTINUED)

FD	FIRE DAMPER
FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET **OR** FOOT
FUT	FUTURE
FV	FACE VELOCITY
GA	GAGE/GAUGE
GAL	GALLON (-S)
GC	GENERAL CONTRACTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAINS
H	HUMIDITY
HD	HEAD
HG	MERCURY
HORIZ	HORIZONTAL
HP	H (-ORSEPOWER, -EAT PUMP)
HR	HOUR (-S)
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING
Hz	HERTZ
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)
IN	INCH (-ES)
INSUL	INSULAT (-ED, -ION)
INT	INTER (-IOR, -ERVAL)
IPS	IRON PIPE SIZE
kW	KILOWATT
kWh	KILOWATT HOUR
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LF	LINEAR FEET/FOOT
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	BTU PER HOUR [THOUSANDS]
MCA	MINIMUM CIRCUIT AMPS
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTE)
MISC	MISCELLANEOUS
MOCP	MAXIMUM OVERCURRENT PROTECTION [AMPS]
MTG	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA **OR** NORMALLY CLOSED
NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU
NIC	NOT IN CONTRACT

ABBREVIATIONS (CONTINUED)

NO	NORMALLY OPEN **OR** NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (-AMETER, -MENSION)
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	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	PPSI GAUGE
RH	RELATIVE HUMIDITY [%]
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SD	SMOKE DAMPER
SP	STATIC PRESSURE
SQ	SQUARE
SQ FT	SQUARE FEET **OR** FOOT
SQ IN	SQUARE INCH **OR** INCHES
TAB	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	VARI (-ABLE, -IES)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FEQUENCY DRIVE
W	WATT (-AGE, -S)
WB	WET BULB
WBT	WET BULB TEMPERATURE
WPD	WATER PRESSURE DROP
WT	WEIGHT
W/	WITH
W/O	WITHOUT
%	PERCENT
ΔP	DIFFERENTIAL PRESSURE
ΔT	TEMPERATURE DIFFERENCE
℄	CENTERLINE

GENERAL SYMBOLS

#	TAGGED NOTE DESIGNATOR
1	REVISION TRIANGLE
ROOM NAME [SEE #]	ROOM TAG
TAG XXX-# INSTANCE XXXX	EQUIPMENT TAG
	POINT OF CONNECTION / CONNECT TO EXISTING
	POINT OF DEMOLITION

HVAC LEGEND

	SUPPLY AIR DIFFUSER
	RETURN AIR DIFFUSER
	EXHAUST AIR DIFFUSER
	TRANSFER AIR DIFFUSER W/ SOUND ATTENUATING BOOT
	SIDEWALL DIFFUSER/GRILLE
	SIDEWALL DIFFUSER/GRILLE
TAG XXX AIRFLOW #,###	AIR DEVICE TAG (REGISTER, GRILLE, DIFFUSER,LOUVER)
##x##	RECTANGULAR DUCT
#ø	ROUND/SPIRAL DUCT
##/##	FLAT OVAL DUCT
SA	SUPPLY AIR DUCT
RA	RETURN AIR DUCT
EA	EXHAUST AIR DUCT
OA	OUTSIDE AIR DUCT
TA	TRANSFER AIR DUCT
CAE	COMBUSTION AIR EXHAUST DUCT
CAI	COMBUSTION AIR INTAKE DUCT
SA	SA AIR DUCT TURNING UP
SA	SA AIR DUCT TURNING DOWN
RA	RA AIR DUCT TURNING UP
RA	RA AIR DUCT TURNING DOWN
EA	EA AIR DUCT TURNING UP
EA	EA AIR DUCT TURNING DOWN
E(XXX)	EXISTING DUCT - (XXX) DENOTES SYSTEM
D(XXX)	DUCT TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
A(XXX)	DUCT TO BE ABANDONED IN PLACE - (XXX) DENOTES SYSTEM
	MITERED ELBOW WITH TURNING VANES
	FLEXIBLE DUCT
T	THERMOSTAT
T AVG	AVERAGING THERMOSTAT
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
C	CARBON DIOXIDE SENSOR
T/C	TEMPERATURE & CARBON DIOXIDE SENSOR
VERT. HORIZ.	MANUAL BALANCING/VOLUME DAMPER
VERT. HORIZ.	MOTORIZED DAMPER
VERT. HORIZ.	FIRE DAMPER
VERT. HORIZ.	SMOKE DAMPER
VERT. HORIZ.	COMBINATION FIRE & SMOKE DAMPER

MECHANICAL PIPING LEGEND

	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
	PIPE CAP
BFW	BOILER FEEDWATER
CAI/E	COMBUSTION AIR INTAKE/EXHAUST
CBS/R	CHILLED BEAM SUPPLY/RETURN
CD	CONDENSATE DRAIN
CHWS/R	CHILLED WATER SUPPLY/RETURN
CST	CLEAN STEAM PIPING
CWS/R	CONDENSER WATER SUPPLY/RETURN
DTS/R	DUAL TEMP. WATER SUPPLY/RETURN
GS/R	GEOTHERMAL WATER SUPPLY/RETURN
HPC	HIGH PRESSURE STEAM CONDENSATE
HPS(#)	HIGH PRESSURE STEAM: (#) DENOTES PRESSURE
HPS/R	HEAT PUMP WATER SUPPLY/RETURN
HRS/R	HEAT RECOVERY SUPPLY/RETURN PIPING
HWS/R	HEATING WATER SUPPLY/RETURN
LPC	LOW PRESSURE STEAM CONDENSATE
LPS(#)	LOW PRESSURE STEAM; (#) DENOTES PRESSURE
MPC	MEDIUM PRESSURE STEAM RETURN
MPS(#)	MEDIUM PRESSURE STEAM: (#) DENOTES PRESSURE
SPD	STEAM CONDENSATE PUMPED DISCHARGE
SVT	STEAM VENT PIPING
D(XXX)	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
E(XXX)	EXISTING PIPING - (XXX) DENOTES SYSTEM
A(XXX)	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM
	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 (GATE) VALVE
	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
	AUTO-FLOW CONTROL VALVE
	CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	FLEXIBLE PIPE CONNECTION
	FLOW METER (VENTURI)
	PIPING UNION
	FLOW SWITCH
	PRESSURE SWTICH
	TAMPER SWITCH
	THERMOMETER
	PETE'S PLUG; TEMPERATURE/PRESSURE PORT

Sheet List - Mechanical

SHEET #	SHEET NAME
M1.00	MECHANICAL LEGEND AND GENERAL NOTES - BP1
M1.01 BCHS	BASEBALL/SOFTBALL FIELD BUILDINGS - MECHANICAL - BCHS
M1.02 BEHS	BASEBALL/SOFTBALL FIELD BUILDINGS- MECHANICAL - BULLITT EAST
M1.03 NBHS	BASEBALL/SOFTBALL FIELD BUILDINGS - MECHANICAL - NORTH BULLITT
M2.01	MECHANICAL DETAILS
M3.01	MECHANICAL SCHEDULES

MECHANICAL HAZARDOUS MATERIALS NOTES

A THE CONTRACTOR IT IS HEREBY ADVISED THAT 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. 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 NOR ANY AFFILIATE HEREOF WILL NOT OFFER OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.

C IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS 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 THEREBY AGREE TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CMTA, 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.

MECHANICAL 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, MAIN GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES 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 SAID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

APPLICABLE BUILDING CODES

APPLICABLE BUILDING CODES	DOCUMENT	YEAR
ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES	ANSI A117.1	2009
FIRE SPRINKLER CODE	NFPA 13	2013
INTERNATIONAL BUILDING CODE (IBC)	STATE EDITION	2015
INTERNATIONAL ENERGY CONSERVATION CODE (IECC) OR ASHRAE 90.1	STATE EDITION	2012 OR 2010
INTERNATIONAL FIRE CODE (IFC)	STATE EDITION	2015
INTERNATIONAL FUEL GAS CODE (IFGC)	STATE EDITION	2015
INTERNATIONAL MECHANICAL CODE (IMC)	STATE EDITION	2015
INTERNATIONAL PLUMBING CODE (IPC)	STATE EDITION	2015
INTERNATIONAL EXISTING BUILDING CODE (IEBC)	STATE EDITION	2009
NATIONAL ELECTRIC CODE (NEC)	NFPA 70	2017
NATIONAL FIRE ALARM & SIGNALING CODE	NFPA 72	2013
UNIFORM STATEWIDE BUILDING CODE		2018

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

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

BG MOVING FORWARD

MECHANICAL LEGEND AND GENERAL NOTES – BP1

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 24-192

DATE : 06.24.2024
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REVISIONS :

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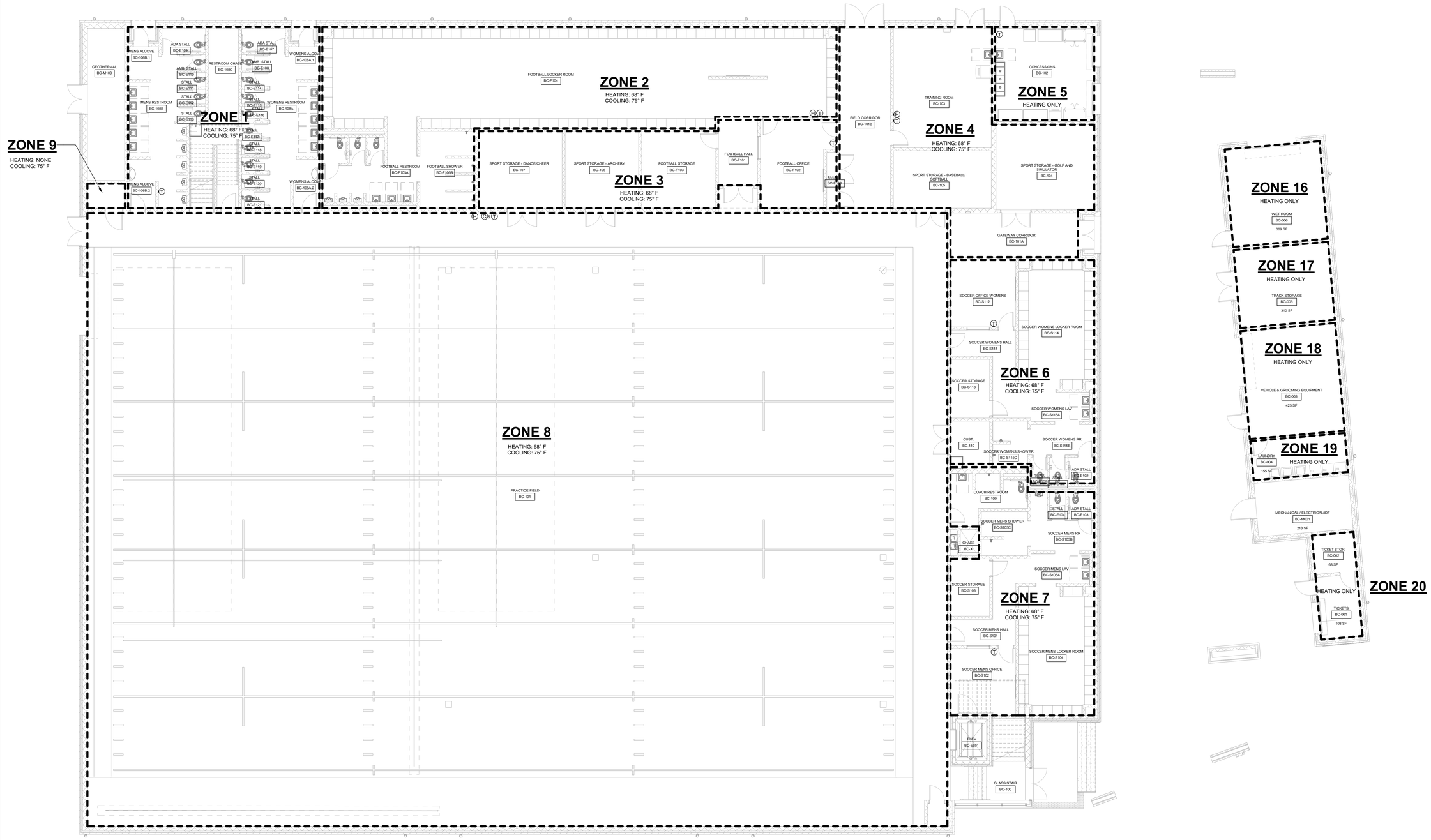
M1.00



1 Bullitt Central - HVAC Zoning Plan - First Floor

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

HVAC ZONING PLAN – BULLITT CENTRAL – LEVEL 1

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BG# 24-192

DATE : 06.24.2024
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1 Addendum 1 10.28.24

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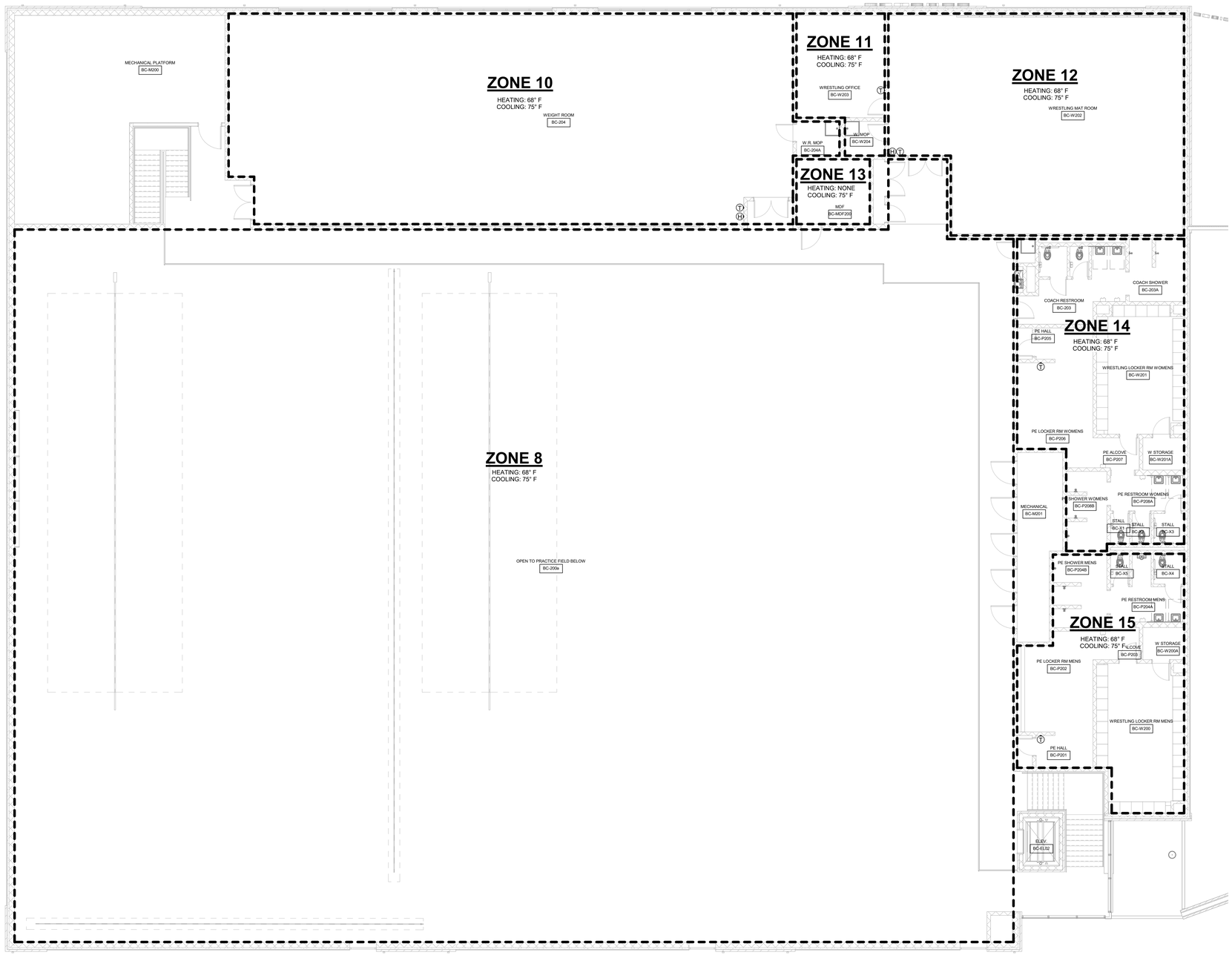
M1.11
BCHS



1 Bullitt Central - HVAC Zoning Plan - Second Floor

SCALE: 1/8" = 1'-0"

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HVAC ZONING PLAN – BULLITT CENTRAL – LEVEL 2

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M1.12
BCHS

VAV RUNOUT SCHEDULE

MARK	INLET ROUND SIZE	OUTLET DUCT SIZE
VAV-08	8"	12"X10"
VAV-10	10"	14"X12"
VAV-14	14"	18"X14"

KEYNOTES

M3 FASTEN GRILLE TO BOTTOM OF DUCT. REFER TO MANUFACTURER'S INSTALLATION MANUAL FOR DUCT MOUNTING INSTRUCTIONS.

M4 24"X18" EA DUCT TO RUN BELOW STAIR. RUN DUCT FLUSH WITH CONTOUR OF STAIR. COORDINATE LOCATION OF DUCT WITH PLUMBING IN THE AREA. AVOID ALL VENT AND WATER PIPING ALONG WALL. DUCT TO PENETRATE WALL OF WOMENS BATHROOM AT 9'9" AFF.

M5 DUCT MOUNTED SMOKE DETECTOR. MOUNT IN RETURN DUCT.

M6 NEW OUTSIDE AIR VAV BOX. REFER TO INSTALLATION DETAIL FOR MORE INFORMATION.

M7 PROVIDE A 4" DRYER BOX FOR EACH DRYER. (EQUAL TO DRYERBOX MODEL 350) IN THE WALL BEHIND THE DRYER IN LAUNDRY. EXTEND 4" ROUND DRYER VENT FROM DYER BOX THROUGH ROOF AND TERMINATE WITH DRYERJACK MODEL DJK466 LOW PROFILE VENT. PAINT VENT TERMINATION TO MATCH COLOR OF ROOF.

M11 ROUTE DUCTS UP THROUGH FLOOR TO MECHANICAL PLATFORM ABOVE.

KEYNOTES

M12 ALL DUCTWORK WITHIN PRACTICE FIELD TO REMAIN AS DOUBLE WALL INSULATION AND PAINTED PER SPEC FOR BASE BID AND ALTERNATE 7.

M13 MOUNT TRANSER GRILLES 9'6" AFF. TYPICAL.

M14 WALL MOUNTED FAN CONTROLLER. ALL FANS WITHIN PRACTICE FIELD TO BE TIED TO SINGLE CONTROLLER.

M15 WALL MOUNTED EXHAUST FAN. MOUNT FAN 11'0 AFF. PROVIDE FAN WITH ALL EQUIPMENT REQUIRED TO MOUNT FAN ON WALL.

M16 ELECTRIC UNIT HEATER. HANG UNIT HEATER FROM CEILING.

M17 INSTALL FAN PER MANUFACTURER'S INSTRUCTIONS. PROVIDE WITH HANGING KIT, EXTENSION TUBE AND ACCESSORIES AS REQUIRED TO MOUNT FAN AS INDICATED.

KEYNOTES

M18 ROUTE DUCTS UP THROUGH FLOOR TO MECHANICAL ROOM ABOVE.

M19 WALL MOUNTED AC UNIT. MOUNT UNIT 7'0" AFF. REFER TO HYDRONIC PLANS FOR MORE INFORMATION.

M20 CU-1 TO BE PLACED ON 4" CONCRETE PADM OUTSIDE OF BUILDING. CONCRETE PAD TO EXTEND 8" PAST ALL EXTENTS OF CONDENSING UNIT.

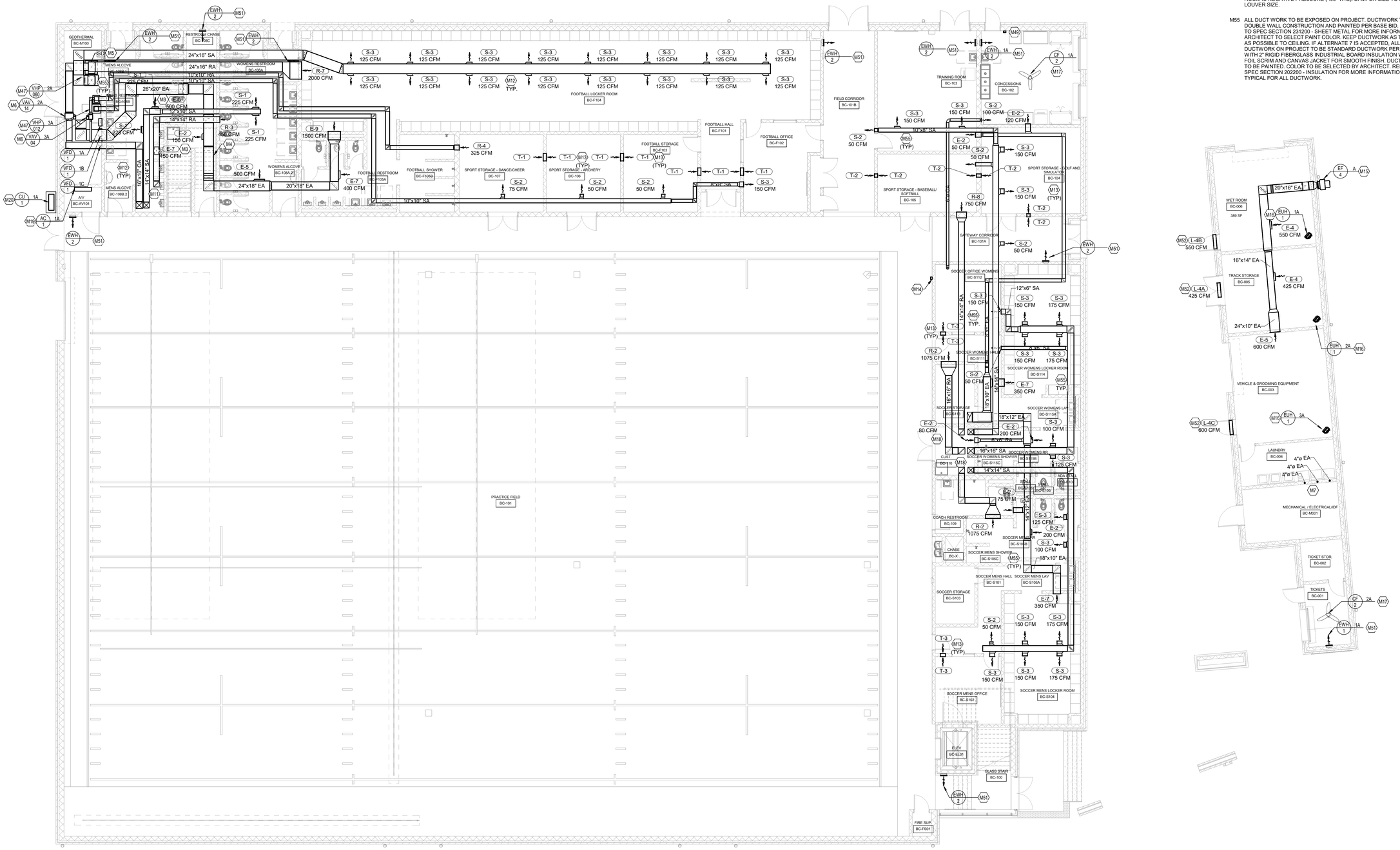
M47 VERTICAL HEAT PUMP. ALL VHP-60'S AND SMALLER TO BE PLACED ON 2'X2' METAL STAND. ALL HP'S LARGER VHP-72'S TO BE PLACED ON 4" HOUSEKEEPING PAD AS SHOWN. REFER TO HEAT PUMP DETAIL FOR MORE INFORMATION.

M49 WALL MOUNTED FAN CONTROLLER.

M51 ELECTRIC WALL HEATER. MOUNT HEATER RECESSED WITHIN WALL. PROVIDE HEATER WITH ALL ACCESSORIES TO RECESS HEATER IN WALL.

M52 WALL MOUNTED LOUVER. MOUNT LOUVER CENTERED 6" ABOVE DOOR FRAME. CONNECT SHEET METAL TO LOUVER THROUGH WALL. PROVIDE BAROMETRIC DAMPER CONNECTED TO SHEET METAL ON INTERIOR OF SPACE. BALANCE DAMPER TO OPEN WHEN ROOM IS NEGATIVE PRESSURE (-.05" W.G). DAMPER SIZE TO MATCH LOUVER SIZE.

M55 ALL DUCT WORK TO BE EXPOSED ON PROJECT. DUCTWORK TO BE DOUBLE WALL CONSTRUCTION AND PAINTED PER BASE BID. REFER TO SPEC SECTION 231200 - SHEET METAL FOR MORE INFORMATION. ARCHITECT TO SELECT PAINT COLOR. KEEP DUCTWORK AS TIGHT AS POSSIBLE TO CEILING. IF ALTERNATE 7 IS ACCEPTED, ALL DUCTWORK ON PROJECT TO BE STANDARD DUCTWORK PER SPEC WITH 2" RIGID FIBERGLASS INDUSTRIAL BOARD INSULATION WITH FOIL SCRIM AND CANVAS JACKET FOR SMOOTH FINISH. DUCTWORK TO BE PAINTED. COLOR TO BE SELECTED BY ARCHITECT. REFER TO SPEC SECTION 202200 - INSULATION FOR MORE INFORMATION. TYPICAL FOR ALL DUCTWORK.



1 Bullitt Central - Air Distribution - First Floor

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

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FIELD HOUSE FLOOR PLAN – AIR DISTRIBUTION – BCHS– LEVEL 1

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
850 Cecil Ave

BG# 24-192

DATE : 06/07/24
DRAWN BY : SJB
CHECKED BY : JRE
REVISIONS :

1	Addendum 1	9.09.24
2	Addendum 2	10.7.24
3	Addendum 3	10.16.24

2023-50

M2.01 BCHS

VAV RUNOUT SCHEDULE

MARK	INLET ROUND SIZE	OUTLET DUCT SIZE
VAV-08	8"	12"X10"
VAV-10	10"	14"X12"
VAV-14	14"	18"X14"

KEYNOTES

M3 FASTEN GRILLE TO BOTTOM OF DUCT. REFER TO MANUFACTURER'S INSTALLATION MANUAL FOR DUCT MOUNTING INSTRUCTIONS.

M5 DUCT MOUNTED SMOKE DETECTOR. MOUNT IN RETURN DUCT.

M6 NEW OUTSIDE AIR VAV BOX. REFER TO INSTALLATION DETAIL FOR MORE INFORMATION.

M10 INSTALL FAN PER MANUFACTURER'S INSTRUCTIONS. MOUNT FAN FROM BOTTOM OF STRUCTURAL PURLINS. PROVIDE WITH HANGING KIT, EXTENSION TUBE AND ACCESSORIES AS REQUIRED TO MOUNT FAN AS INDICATED IN SECTION VIEW ON SHEET M4.02. FANS TO BE TIED TO SINGLE FAN CONTROLLER. FAN TO BE TIED TO BUILDING BAS. CONTRACTOR TO COORDINATE FAN LOCATIONS WITH NETTING FOR BATTING CAGES, LIGHTING, STRUCTURAL, AND ALL OTHER TRADES WORKING WITHIN PRACTICE FIELD PRIOR TO INSTALLATION. MAINTAIN MANUFACTURER RECOMMENDED CLEARANCES.

M12 ALL DUCTWORK WITHIN PRACTICE FIELD TO REMAIN AS DOUBLE WALL INSULATION AND PAINTED PER SPEC FOR BASE BID AND ALTERNATE 7.

M13 MOUNT TRANSER GRILLES 9'6" AFF. TYPICAL.

M22 ALL DIFFUSERS SHOWN IN PRACTICE FIELD TO BE ANGLED 45 DEGREES DOWNWARD. REFER SIDEWALL DETAIL FOR MORE INFORMATION. TYPICAL.

M23 MOUNT VFD 5'0" AFF. VFD TO SERVE DOAS-1 SUPPLY FAN, RETURN FAN AND ENERGY RECOVERY WHEEL.

M24 FLOOR MOUNTED CONSOLE HEAT PUMP.

M30 DDC CONTROL PANEL.

M47 VERTICAL HEAT PUMP. ALL VHP-60'S AND SMALLER TO BE PLACED ON 2'X2' METAL STAND. ALL HP'S LARGER VHP-72'S TO BE PLACED ON 4" HOUSEKEEPING PAD AS SHOWN. REFER TO HEAT PUMP DETAIL FOR MORE INFORMATION.

M48 DOAS UNIT TO BE MOUNTED ON 4" HOUSEKEEPING PAD TO BE SIZED FOR FOOTPRINT +6" ON ALL SIDES. REFER TO DOAS SECTION DETAIL FOR MORE INFORMATION

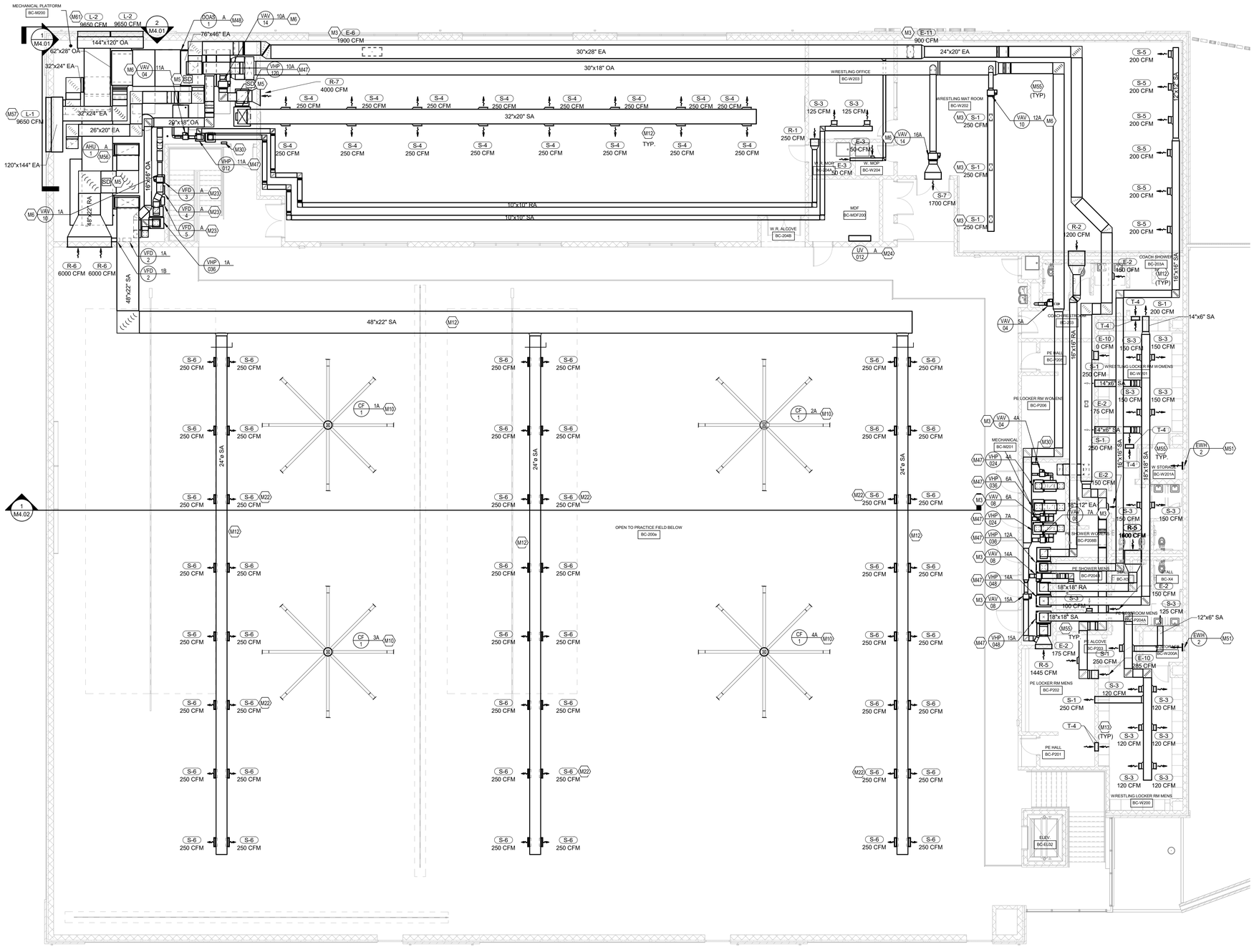
M51 ELECTRIC WALL HEATER. MOUNT HEATER RECESSED WITHIN WALL. PROVIDE HEATER WITH ALL ACCESSORIES TO RECESS HEATER IN WALL.

M55 ALL DUCT WORK TO BE EXPOSED ON PROJECT. DUCTWORK TO BE DOUBLE WALL CONSTRUCTION AND PAINTED PER BASE BID. REFER TO SPEC SECTION 231200 - SHEET METAL FOR MORE INFORMATION. ARCHITECT TO SELECT PAINT COLOR. KEEP DUCTWORK AS TIGHT AS POSSIBLE TO CEILING. IF ALTERNATE 7 IS ACCEPTED, ALL DUCTWORK ON PROJECT TO BE STANDARD DUCTWORK PER SPEC WITH 2" RIGID FIBERGLASS INDUSTRIAL BOARD INSULATION WITH FOIL SCRIM AND CANVAS JACKET FOR SMOOTH FINISH. DUCTWORK TO BE PAINTED. COLOR TO BE SELECTED BY ARCHITECT. REFER TO SPEC SECTION 202200 - INSULATION FOR MORE INFORMATION. TYPICAL FOR ALL DUCTWORK.

M56 AHU TO BE MOUNTED ON 4" HOUSEKEEPING PAD. PAD TO BE SIZED FOR FOOTPRINT OF UNIT +6" ON ALL SIDES. REFER TO AHU SECTION DETAIL FOR MORE INFORMATION.

M57 (2) 120"X72" WALL MOUNTED LOUVERS. LOUVERS TO BE VERTICALLY STACKED. LOUVER HOLE TO BE UTILIZED TO BRING IN LARGE MECHANICAL EQUIPMENT. REFER TO SECTION VIEWS ON M4.01 FOR MORE INFORMATION.

M61 (2) 60"X120" WALL MOUNTED LOUVERS. LOUVERS TO BE MOUNTED HORIZONTALLY. REFER TO SECTION VIEWS ON M4.01 FOR MORE INFORMATION.



1 Bullitt Central - Air Distribution - Second Floor

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

FIELD HOUSE FLOOR PLAN – AIR DISTRIBUTION – BCHS – LEVEL 2

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BCPS-145

BG# 24-192

DATE : 06/07/24
DRAWN BY : SJB
CHECKED BY : JRE
REVISIONS :

1	Addendum 1	08.28.24
2	Addendum 2	07.08.24

2023-50

M2.02
BCHS

HEAT PUMP RUNOUT SCHEDULE

MARK	GPM	PIPE RUNOUT SIZE	HOSE KIT SIZE	CONDENSATE PIPE SIZE
HPC-1	95	3"	3"	-
VHP-012	3	1"	1"	3/4"
VHP-024	6	1.25"	1.25"	3/4"
VHP-036	9	1.5"	1.5"	1"
VHP-048	12	2"	2"	1"
VHP-060	15	2"	2"	1"
VHP-120	30	2"	2"	1/1/2"

KEYNOTES

H5 ROUTE CONDENSATE FROM SPLIT SYSTEM DOWN THROUGH WALL. CONDENSATE TO SPILL TO DRYWELL. REFER TO DRYWELL DETAIL FOR MORE INFORMATION.

H6 CU-1 TO BE PLACED ON 4" CONCRETE PADM OUTSIDE OF BUILDING. CONCRETE PAD TO EXTEND 8" PAST ALL EXTENTS OF CONDENSING UNIT.

H7 NEW EXPANSION TANK TO BE FLOOR MOUNTED. INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND GEOTHERMAL SCHEMATIC.

H8 1-1/2" REDUCED PRESSURE BACKFLOW PREVENTER FURNISHED BY PLUMBING CONTRACTOR. EXTEND 1-1/2" FILL TO HVAC SYSTEMS AND 1-1/2" COLD WATER TO DOMESTIC WATER SYSTEM AND CONNECT. REFER TO HYDRONIC SYSTEM FILL DETAIL FOR ADDITIONAL INFORMATION.

H9 ROUTE REFRIGERANT SUCTION AND LIQUID PIPES TO EQUIPMENT AS SHOWN. INSTALL PIPES AND ACCESSORIES, SIZE AND INSULATE PIPING, AND CHARGE SYSTEM PER MANUFACTURER'S RECOMMENDATIONS. ROUTE PIPING UP EXTERIOR WALL AND CONCEAL WITHIN PVC ENCLOSURE PAINTED TO MATCH BUILDING COLOR.

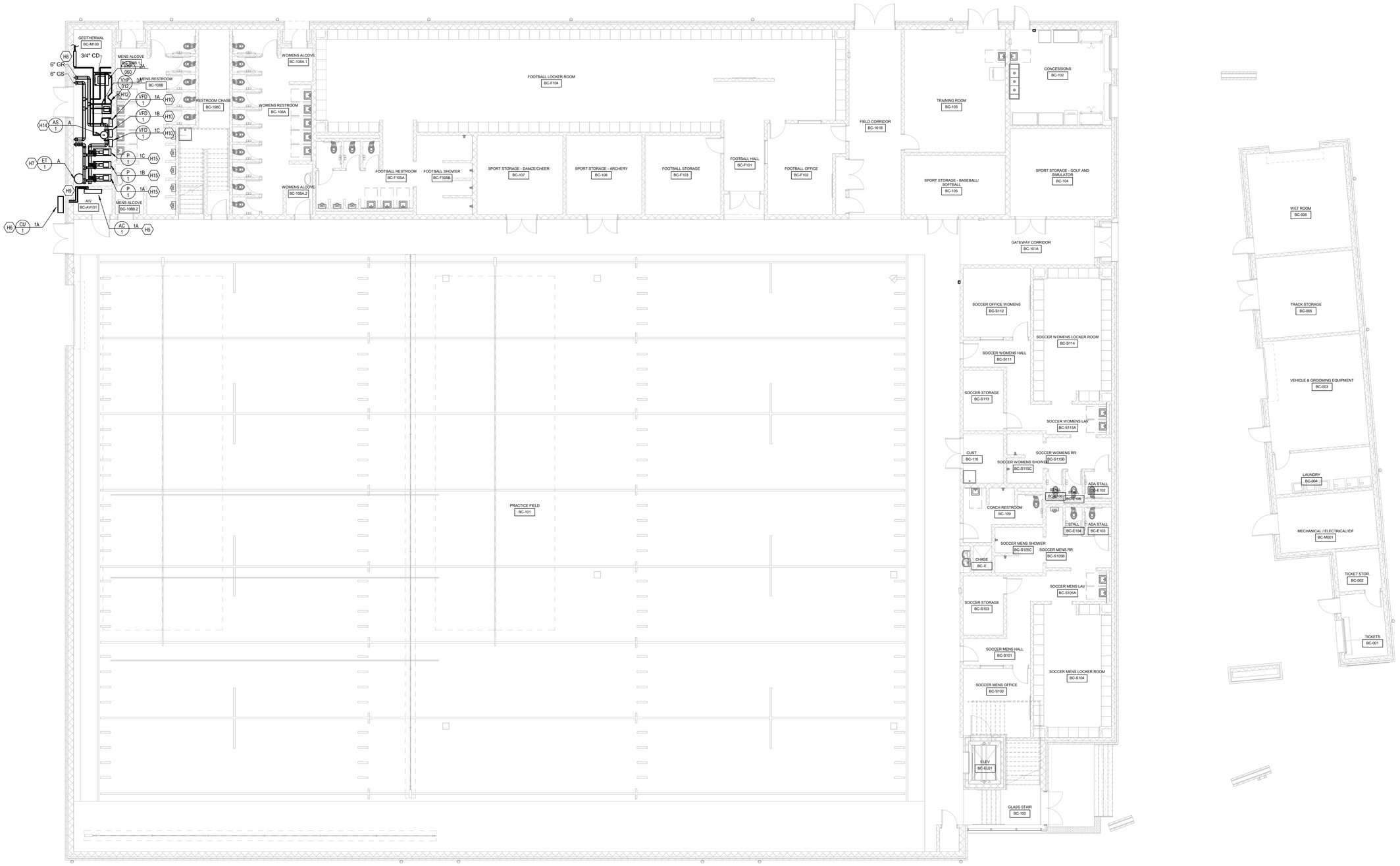
KEYNOTES

H10 MOUNT NEW VFD ON WALL 5'0" AFF. VFD TO SERVE GEOTHERMAL PUMPS.

H12 EXTEND CONDENSATE PIPE TO FLOOR DRAIN. COORDINATE EXACT LOCATION OF FLOOR DRAIN WITH EQUIPMENT. DO NOT LOCATE DRAIN AND ASSOCIATED CONDENSATE PIPE IN SERVICE ACCESS SPACE TO CREATE A TRIP HAZARD. WHERE PIPING CROSSES WALK PATH, PROVIDE PLASTIC TRIP PROTECTION. PAINTED YELLOW. REFER TO HEAT PUMP RUNOUT SCHEDULE FOR PIPE SIZING.

H14 AIR AND DIRT SEPERATOR. MOUNT FROM CEILING. REFER TO DETAIL FOR MORE INFORMATION.

H15 GEOTHERMAL PUMPS. ALL PUMPS TO BE MOUNTED ON SAME 4" HOUSEKEEPING PAD. PAD TO EXTEND 6" PAST ALL SIDES OF PUMPS. REFER TO GEOTHERMAL PIPING SCHEMATIC FOR MORE INFORMATION.



1 Bullitt Central - Hydronics - First Floor

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

FIELD HOUSE FLOOR PLAN – HYDRONICS – BCHS– LEVEL 1

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2023-50

M3.01
BCHS

HEAT PUMP RUNOUT SCHEDULE

MARK	GPM	PIPE RUNOUT SIZE	HOSE KIT SIZE	CONDENSATE PIPE SIZE
HPC-1	95	3"	3"	-
VHP-012	3	1"	1"	3/4"
VHP-024	6	1.25"	1.25"	3/4"
VHP-036	9	1.5"	1.5"	1"
VHP-048	12	2"	2"	1"
VHP-060	15	2"	2"	1"
VHP-120	30	2"	2"	1/1/2"

KEYNOTES

H2 HEAT PUMP CHILLER UNIT TO BE PLACED ON CONCRETE PAD. PAD TO EXTEND 6" PAST FOOTPRINT OF UNIT.REFER TO HEAT PUMP CHILLER PIPING SCHEMATIC FOR MORE INFORMATION.

H3 NEW INLINE PUMPS SERVING DOAS HW/CHW COIL. REFER TO HEAT PUMP CHILLER PIPING SCHEMATIC FOR MORE INFORMATION.

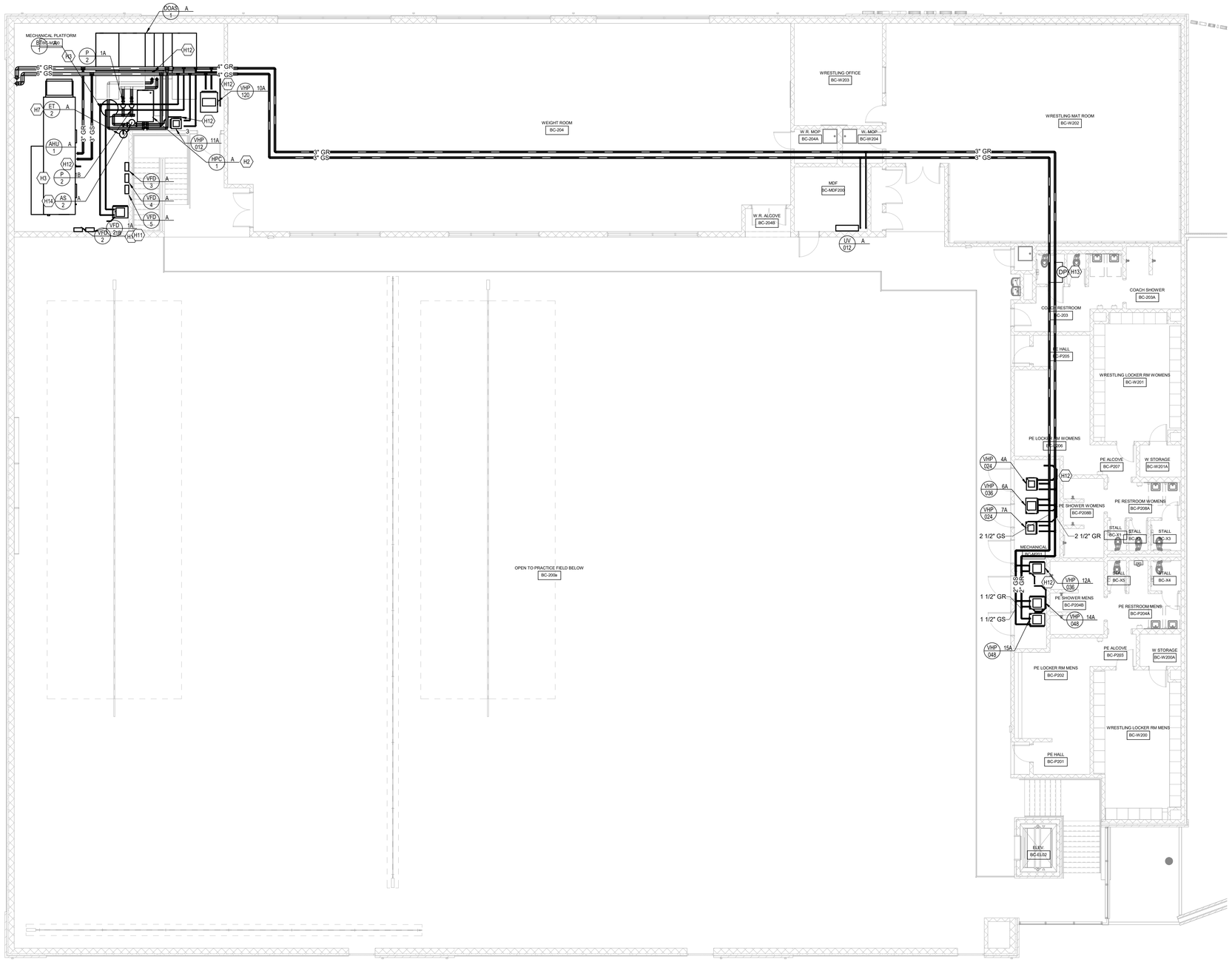
H7 NEW EXPANSION TANK TO BE FLOOR MOUNTED. INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND GEOTHERMAL SCHEMATIC.

H11 MOUNT NEW VFD ON WALL 5'0" AFF. VFD TO SERVE HEAT PUMP CHILLER PUMPS.

H12 EXTEND CONDENSATE PIPE TO FLOOR DRAIN. COORDINATE EXACT LOCATION OF FLOOR DRAIN WITH EQUIPMENT. DO NOT LOCATE DRAIN AND ASSOCIATED CONDENSATE PIPE IN SERVICE ACCESS SPACE TO CREATE A TRIP HAZARD. WHERE PIPING CROSSES WALK PATH, PROVIDE PLASTIC TRIP PROTECTION, PAINTED YELLOW. REFER TO HEAT PUMP RUNOUT SCHEDULE FOR PIPE SIZING.

H13 DIFFERENTIAL PRESSURE SENSOR. REFER TO DETAIL FOR MORE INFORMATION.

H14 AIR AND DIRT SEPERATOR. MOUNT FROM CEILING. REFER TO DETAIL FOR MORE INFORMATION.



1 Bullitt Central - Hydronics - Second Floor

SCALE: 1/8" = 1'-0"

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FIELD HOUSE FLOOR PLAN – HYDRONICS – BCHS– LEVEL 2

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BG# 24-192

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BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
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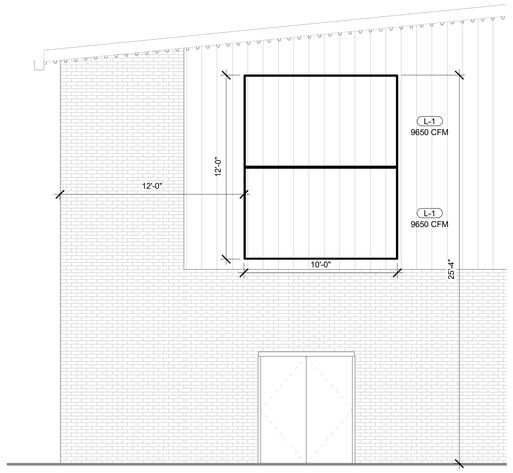
REVISIONS :
1 Addendum 1 07.08.24

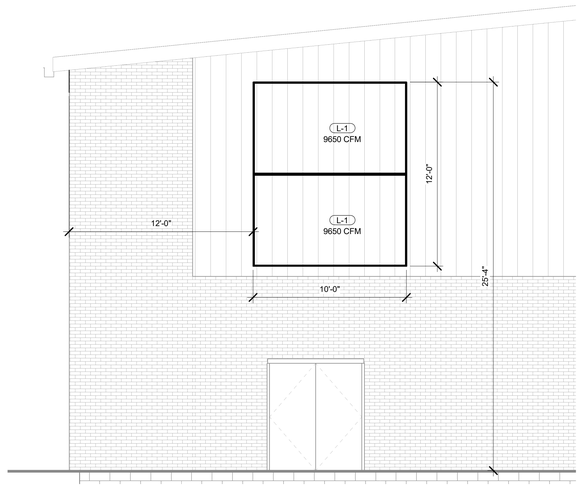
2023-50

M3.02
BCHS



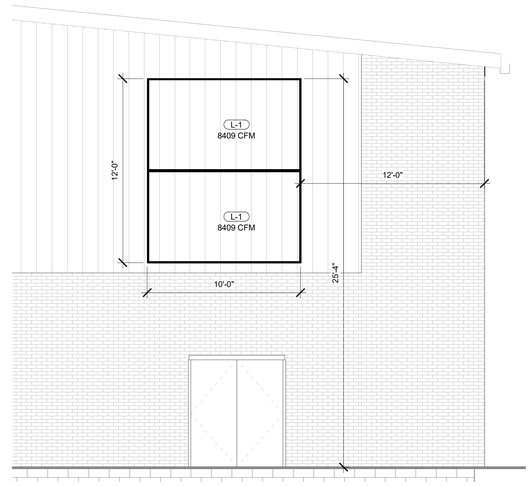
1 Bullitt Central - Exhaust Air Louver Section

SCALE: 1/4" = 1'-0"



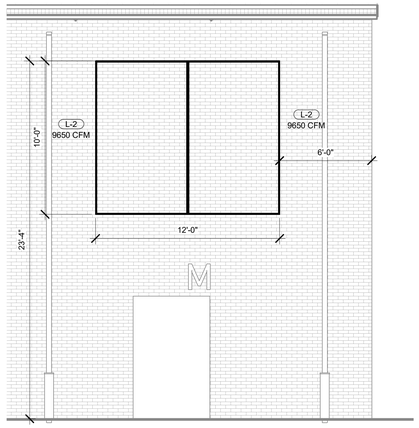
3 Bullitt East Exhaust - Air Louver Section

SCALE: 1/4" = 1'-0"



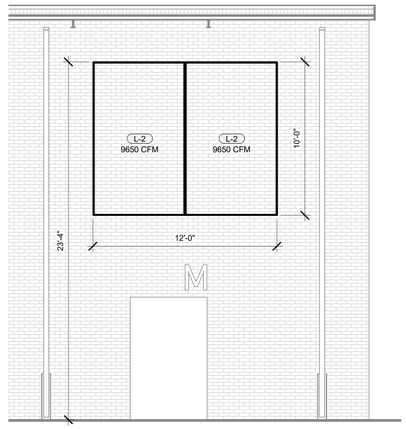
6 North Bullit - Exhaust Air Louver Section

SCALE: 1/4" = 1'-0"



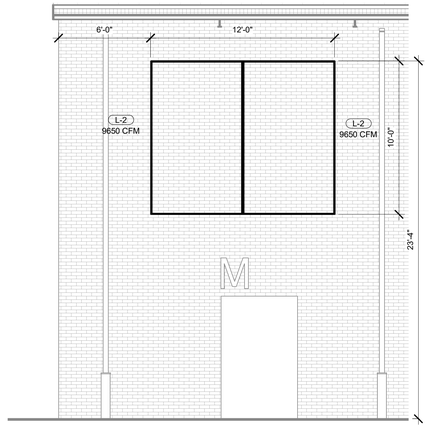
2 Bullitt Central - Intake Air Louver Section

SCALE: 1/4" = 1'-0"



4 Bullitt East - Intake Air Louver Section

SCALE: 1/4" = 1'-0"



5 North Bullit - Intake Air Louver Section

SCALE: 1/4" = 1'-0"

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studio

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BG MOVING FORWARD

MECHANICAL SECTION VIEWS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG-24-142

BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
CHECKED BY : JRE
REVISIONS :

2023-50

M4.01

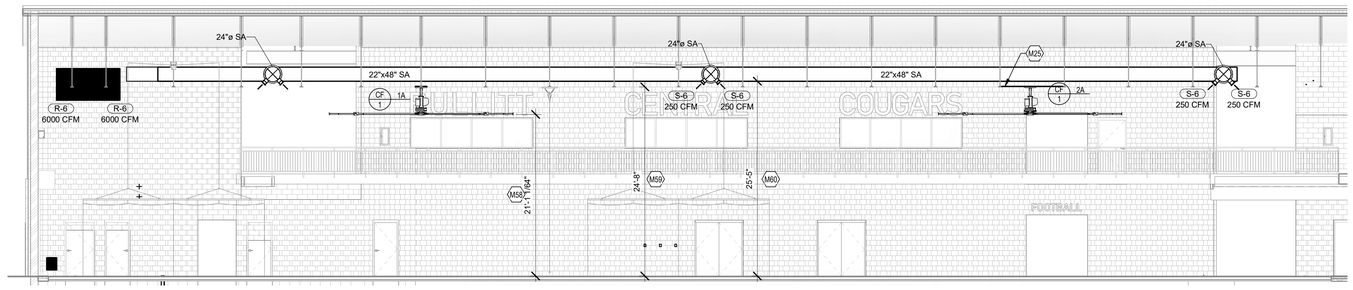
KEYNOTES

M25 MOUNT FAN BETWEEN BAR JOISTS. PROVIDE (2) ANGLE IRON SUPPORTS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. REFER TO STRUCTURAL DRAWINGS FOR MORE INFORMATION.

M58 FLOOR TO FAN AIRFOIL HEIGHT.

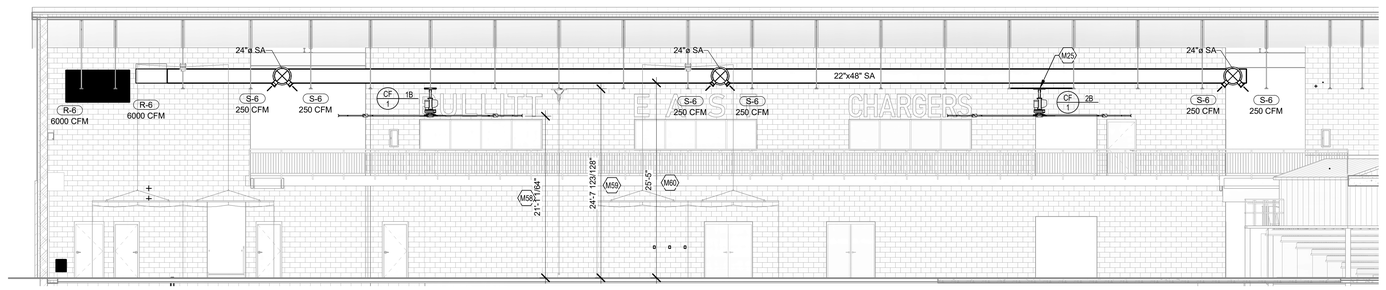
M59 FLOOR TO BOTTOM OF STRUCTURE.

M60 FLOOR TO BOTTOM OF DUCT.



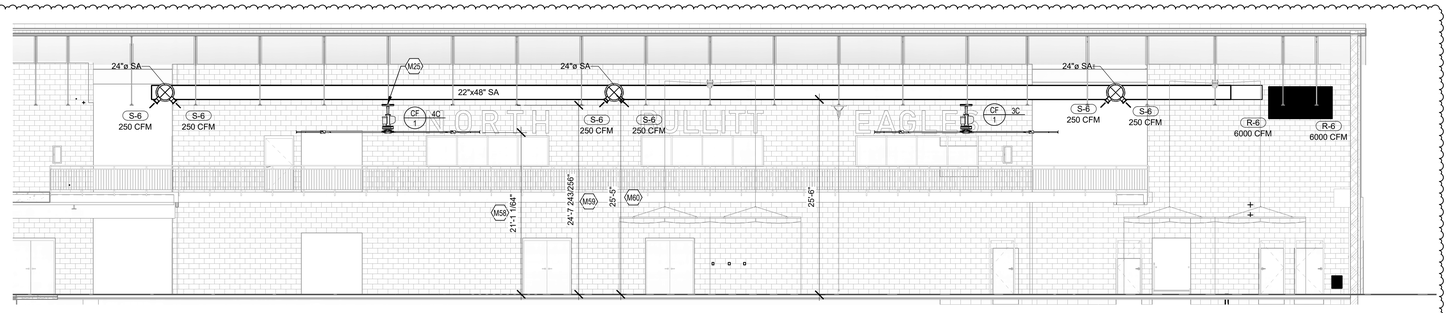
1 Bullitt Central - Practice Field Section

SCALE: 1/8" = 1'-0"



2 Bullitt East - Practice Field Section

SCALE: 1/8" = 1'-0"



3 North Bullitt - Practice Field Section

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

MECHANICAL SECTION VIEWS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
321 Cecil Ave

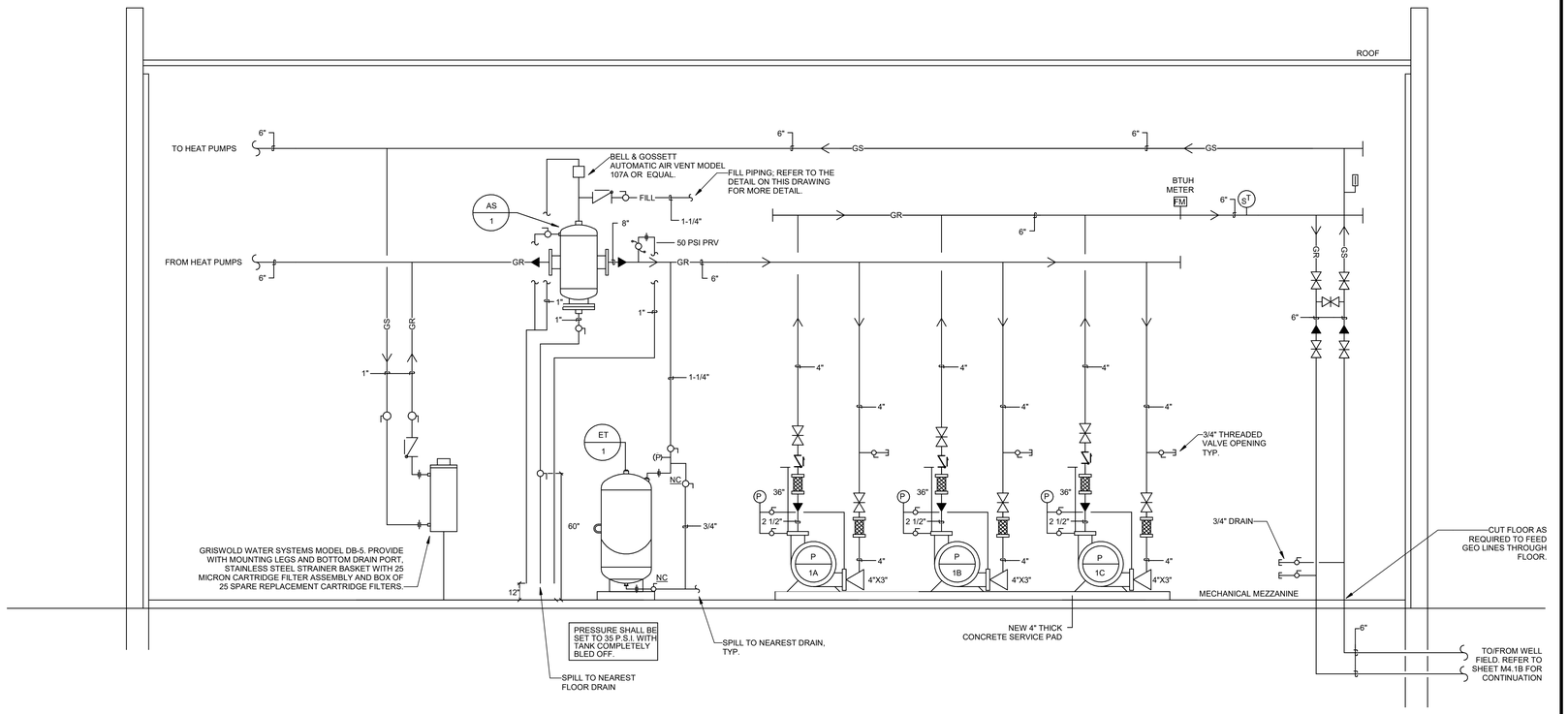
BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
CHECKED BY : JRE
REVISIONS :

1	Addendum 1	07.08.24
2	ASI-08	09.06.24

2023-50

M4.02

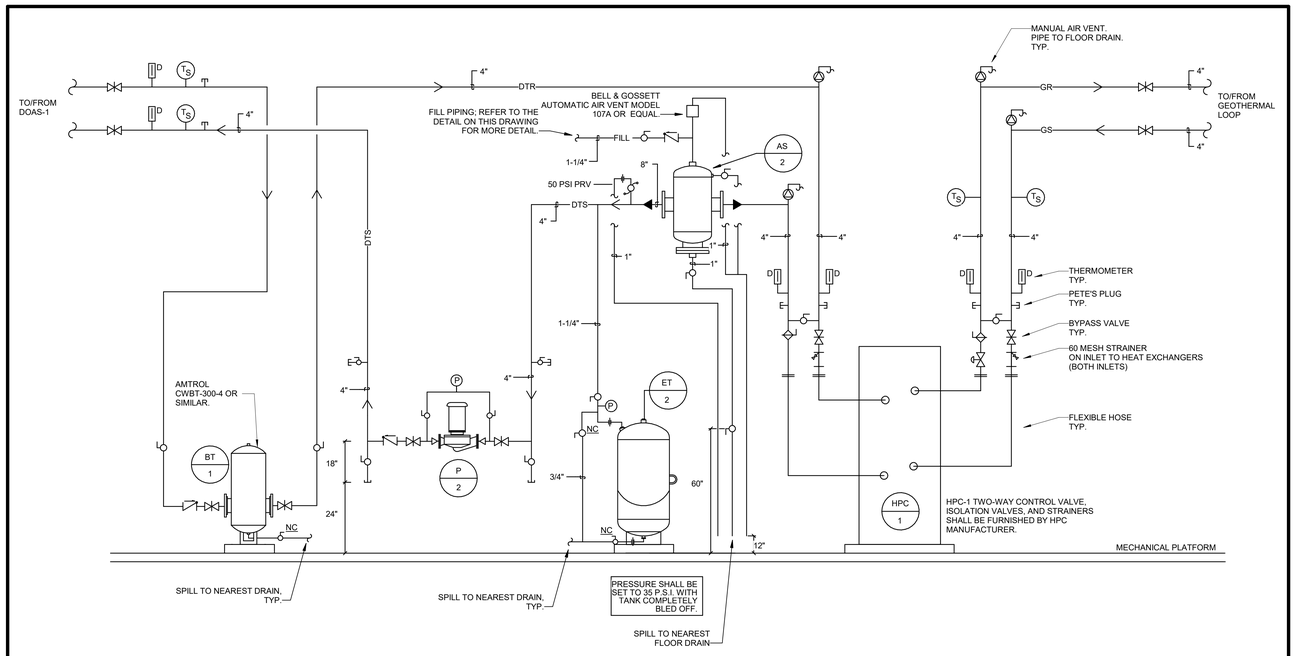


GEOTHERMAL PIPING SCHEMATIC

NOT TO SCALE

2 GEOTHERMAL PIPING SCHEMATIC MECH ROOM HEADER

NO SCALE



2-PIPE HYDRONIC HEAT PUMP CHILLER PIPING SCHEMATIC

NOT TO SCALE

1 HPC PIPING SCHEMATIC

NO SCALE

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

MECHANICAL PIPING SCHEMATICS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BCPS-145

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BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
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REVISIONS :

2023-50

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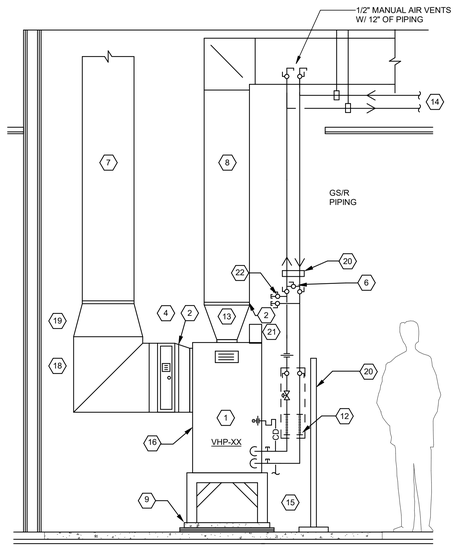
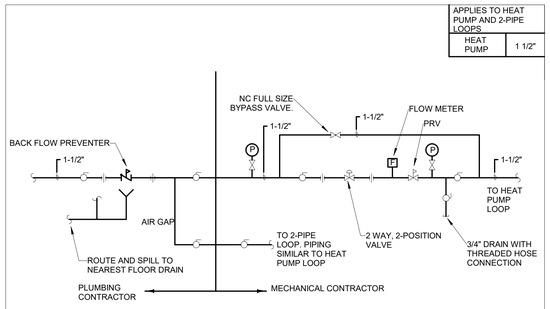


VERTICAL HEAT PUMP INSTALLATION DETAIL

NTS

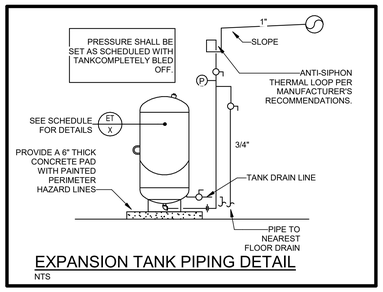
HEAT PUMP DETAIL TAG NOTES: (X)

1. VERTICAL HEAT PUMP UNIT. DO NOT BLOCK ACCESS PANEL FOR HEAT PUMP UNIT WITH ANY OBJECT.
2. PROVIDE FLEXIBLE CANVAS CONNECTIONS AT UNIT CONNECTION. TRANSITION DUCTWORK TO UNIT OPENING AS NEEDED.
4. SIDE ACCESS FILTER SECTION. REFER TO SPECIFICATION
6. PROVIDE FULLSIZE BYPASS CONNECTION FROM SUPPLY TO RETURN PIPING FOR FLUSHING AND AIR REMOVAL. CLOSE BYPASS VALVE UPON COMPLETION OF FLUSHING AND PURGING. FLUSH PRIOR TO OPERATION. DO NOT CONNECT ANY UNITS UNTIL FLUSHING IS COMPLETE.
7. RETURN DUCTWORK. REFER TO DRAWINGS FOR DUCT SIZE.
8. SUPPLY DUCTWORK. REFER TO DRAWINGS FOR DUCT SIZE.
9. MOUNT UNIT ON 36" TALL 2X2 PAINTED ANGLE IRON STAND. PROVIDE MOUNTING BRACKETS WITH VIBRATION ISOLATING GROMMETS TO SECURE UNIT TO STAND. BOLT STAND TO FLOOR SLAB (OR CONCRETE PAD WHERE INDICATED ON FLOOR PLANS.) PROVIDE VIBRATION ISOLATION NEOPRENE PAD BETWEEN BOTTOM OF UNIT AND STAND. STAND ONLY APPLICABLE TO VHP-72'S AND SMALLER. UNITS LARGER THAN VHP-72 TO BE PLACED DIRECTLY ON CANCRETE PAD WITH VIBRATION ISOLATION NEOPRENE PAD IN-BETWEEN THE HEAT PUMP AND THE PAD.
12. FLEXIBLE HOSE KITS, HOSE KITS SIZE SHALL MATCH PIPE RUN OUT SIZE SCHEDULED. TRANSITION DOWN AT UNIT AS REQUIRED. REFER TO SPECIFICATION FOR FURTHER REQUIREMENTS.
13. TRANSITION FROM FULL SIZE OF UNIT OUTLET TO DUCT SIZE INDICATED ON THE DRAWINGS.
14. REFER TO DRAWINGS FOR CONTINUATION OF PIPING. REFER TO THE PIPING RUNOUT SCHEDULE FOR SIZING.
15. DESIGNER EDIT: (STORM/SAN) ROUTE CONDENSATE DRAIN TO NEAREST FLOOR DRAIN. REFER TO PIPING RUNOUT SCHEDULE FOR SIZING. ENSURE ALL CONDENSATE PIPING IS INSTALLED SO AS NOT TO CREATE A TRIP HAZARD. STRAP/SECURE PIPING TO FLOOR/WALL AS REQUIRED. REFER TO THE PIPING RUNOUT SCHEDULE FOR SIZING.
16. MAINTAIN MANUFACTURER'S REQUIRED CLEARANCE ON SIDE OF HEAT PUMP TO ALLOW FOR MAINTENENCE ACCESS.
18. PROVIDE TRANSITION ELBOW WITH VANES FROM SIDE ACCESS FILTER TO RETURN DUCT DEPTH.
19. TRANSITION DUCT FROM ELBOW TO DUCT SIZE INDICATED ON PLANS.
20. SECURELY SUPPORT PIPING FROM 2X2 UNISTRUT PIPE SUPPORT FRAME. UTILIZE VIBRATION ISOLATION SUPPORTS AT PIPING SUPPORT. DO NOT LOCATE FRAME IN HEAT PUMP SERVICE AREA.
21. FACTORY MOUNTED DISCONNECT.
22. LINE SIZE VALVED AND CAPPED HEAT PUMP FLUSH VALVES AND PURGE.



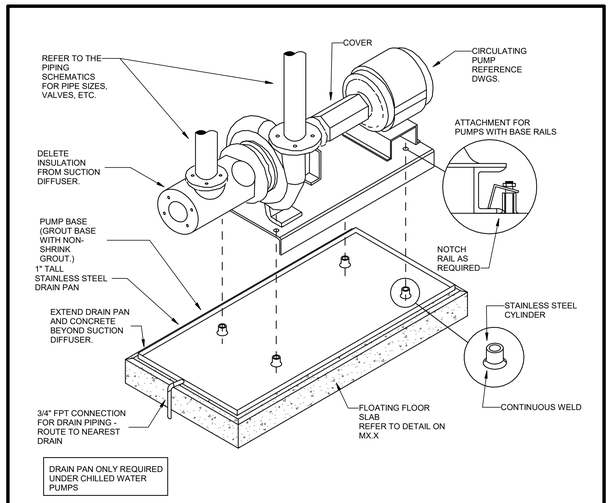
HYDRONIC FILL SYSTEM - PIPING DETAIL

NTS



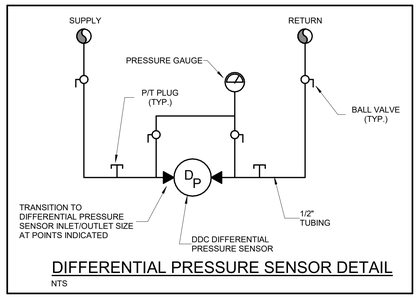
EXPANSION TANK PIPING DETAIL

NTS



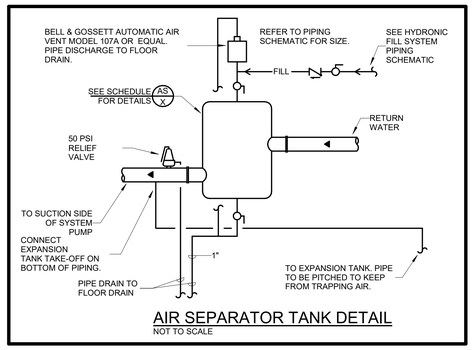
BASE MOUNTED PUMP AND DRAIN PAN DETAIL

NOT TO SCALE



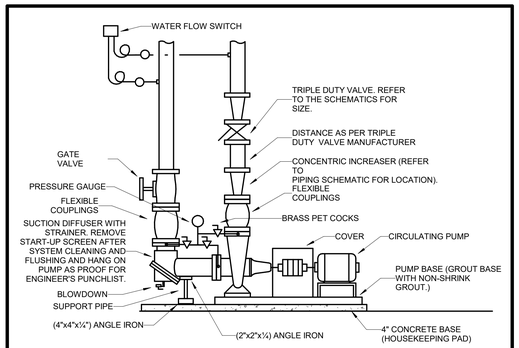
DIFFERENTIAL PRESSURE SENSOR DETAIL

NTS



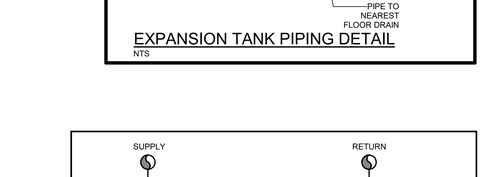
AIR SEPARATOR TANK DETAIL

NOT TO SCALE



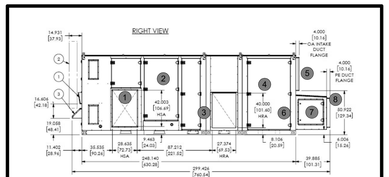
BASE MOUNTED PUMP PIPING DETAIL

NOT TO SCALE



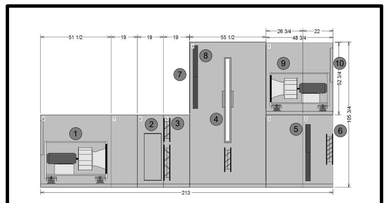
GEOTHERMAL PIPING TAP DETAL

NTS



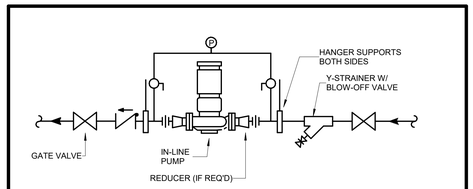
AHU-1 SECTION DETAIL (TYPICAL FOR AHU-1A/B/C)

1. SUPPLY AIR DISCHARGE AND SUPPLY FAN
2. DUAL TEMPERATURE COIL AND HOT GAS REHEAT SECTION
3. FACE AND BYPASS DAMPER
4. ENERGY RECOVERY WHEEL
5. OUTSIDE AIR INTAKE
6. FILTER SECTION
7. EXHAUST FAN SECTION
8. EXHAUST AIR DISCHARGE



DOAS-1 SECTION DETAIL (TYPICAL FOR DOAS-1A/B/C)

1. OUTSIDE AIR DISCHARGE AND SUPPLY FAN
2. DUAL TEMPERATURE COIL SECTION
3. FACE AND BYPASS DAMPER
4. ENERGY RECOVERY WHEEL
5. FILTER SECTION
6. OUTSIDE AIR INTAKE
7. EXHAUST AIR INTAKE
8. FILTER SECTION
9. EXHAUST FAN SECTION
10. EXHAUST AIR DISCHARGE



VERTICAL IN-LINE PUMP DETAIL

NTS

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MECHANICAL DETAILS

PHASE III | PHYSICAL SCIENCE CENTER
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BG 22-145

BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
CHECKED BY : JRE
REVISIONS :

1	Addendum 1	7.8.24
2	Addendum 2	07.08.24

2023-50

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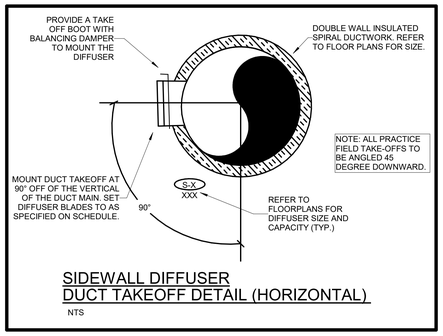
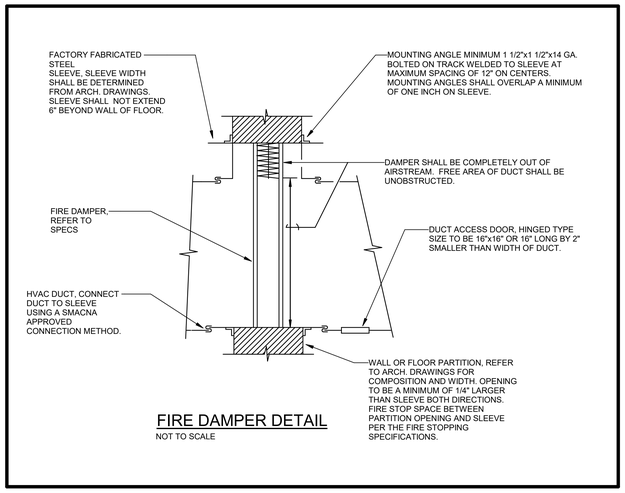


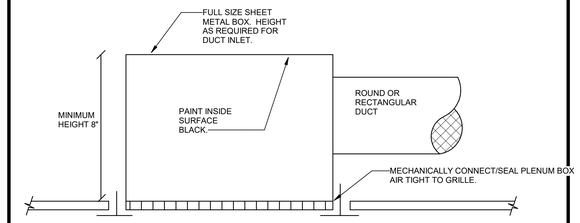
SIDEWALL DIFFUSER DUCT TAKEOFF DETAIL (HORIZONTAL)

NTS



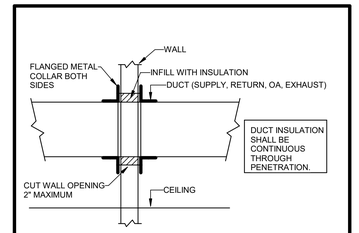
FIRE DAMPER DETAIL

NOT TO SCALE



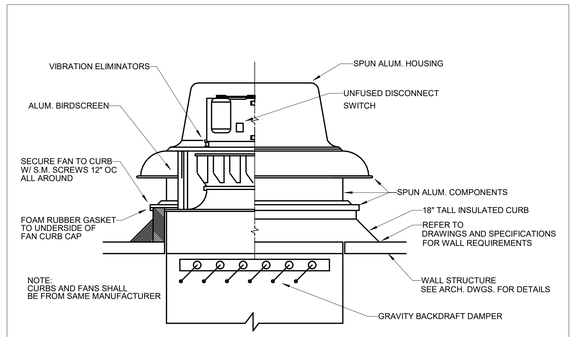
NOTE:

1. PROVIDE MANUAL VOLUME DAMPER IN ALL BRANCH RETURN AND EXHAUST DUCTS SERVING RETURN/EXHAUST GRILLES.
2. WHERE NOTED, RETURN GRILLES SHALL INCLUDE A HINGED FACE AND FILTER. TYPICAL FOR ALL HEAT PUMP RETURNS.



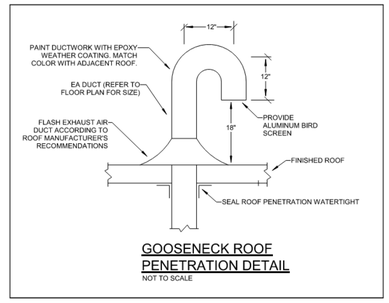
DUCT PENETRATION THROUGH NON-RATED WALL DETAIL

NTS



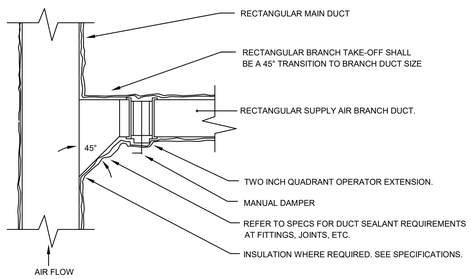
WALL MOUNTED CENTRIFUGAL EXHAUST FAN DETAIL

NOT TO SCALE



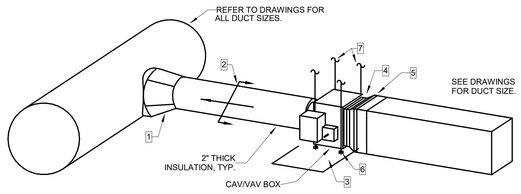
GOOSENECK ROOF PENETRATION DETAIL

NOT TO SCALE



TYPICAL RECTANGULAR SUPPLY, RETURN, & EXHAUST BRANCH DUCT TAKE OFF

NTS

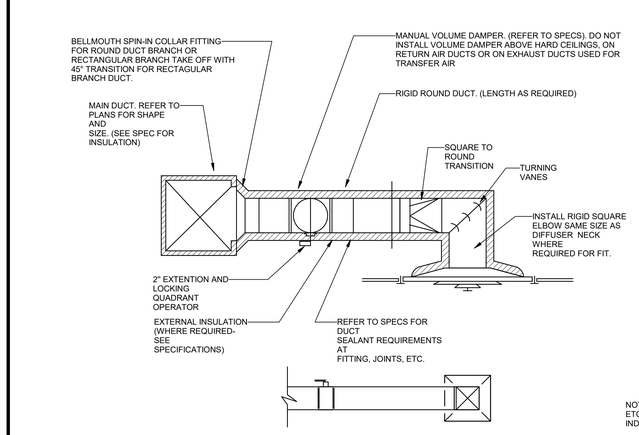


TAG NOTES: X

1. HIGH EFFICIENCY DUCT TAKE-OFF - REFER TO DRAWINGS FOR SIZE.
2. MAINTAIN A MINIMUM OF THREE DUCT DIAMETERS BETWEEN TAKE-OFF AND CAV/VAV UNIT. NO FLEXIBLE DUCTWORK ALLOWED ON THE INLET SIDE OF THE UNIT.
3. ACCESS PANEL
4. PROVIDE TRANSITION BETWEEN CAV/VAV UNIT AND DUCT.
5. PROVIDE FLEXIBLE CONNECTION BETWEEN CAV/VAV UNIT AND DUCT.
6. UNI-STRUT WITH ISOLATION PAD.
7. SUPPORT UNIT FROM STRUCTURE.

VAV BRANCH DUCT CONNECTION DETAIL

NTS



TYPICAL SUPPLY / RETURN / EXHAUST / OA BRANCH DUCT DETAIL

NOT TO SCALE

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MECHANICAL DETAILS

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624 Cedar Ave

BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
CHECKED BY : JRE
REVISIONS :

2023-50

M6.02

OUTSIDE AIR UNIT AIRSIDE SCHEDULE - BP2

MARK	INSTANCE MARK	MANUF.	MODEL	SERVICE	TYPE	LOCATION	SIZE LXWXH (IN.)	WEIGHT (LBS)	SUPPLY AIR FAN							RELIEF AIR FAN						ENERGY RECOVERY WHEEL										
																						OUTSIDE AIR SIDE							EXHAUST AIR SIDE			
									CFM	# OF FANS - RPM	FAN TYPE	T.S.P/E.S.P (IN WG)	MOTOR HP/BHP (PER FAN)	VOLT.	PH.	VFD	CFM	FAN TYPE	# OF FANS - RPM	T.S.P./E.S.P. (IN WG)	FAN HP	VFD	VOLT.	HP	PH.	CFM	APD	EAT-SUMMER (DB/WB)	LAT-SUMMER (DB/WB)	EAT-WINTER (DB/WB)	LAT-WINTER (DB/WB)	CFM	APD	EAT-SUMMER (DB/WB)	EAT-WINTER (DB/WB)
DOAS-1	A	TRANE	CSAA021	BULLITT CENTRAL	100% OUTSIDE AIR	MECHANICAL PLATFORM BC-M200	213 X 80 X 105	5704	10736	1-1918	CENTRIFUGAL-PLENUM	5.22 / 2.00	15	480 V	3	Yes	10400	CENTRIFUGAL-PLENUM	1-2165	3.90 / 2.00	15		480	-	3	10500	0.94	95 / 77	82.29 / 69.44	0 / -2	42.08 / 35.22	12300	1.06	75 / 64	70 / 53
DOAS-1	B	TRANE	CSAA021	BULLITT EAST	100% OUTSIDE AIR	MECHANICAL PLATFORM BE-M200	213 X 80 X 105	5704	10736	1-1918	CENTRIFUGAL-PLENUM	5.22 / 2.00	15	480 V	3	Yes	10400	CENTRIFUGAL-PLENUM	1-2165	3.90 / 2.00	15		480	-	3	10500	0.94	95 / 77	82.76 / 69.76	0 / -2	40.49 / 34.03	12300	1.06	75 / 64	70 / 53
DOAS-1	C	TRANE	CSAA021	NORTH BULLITT	100% OUTSIDE AIR	MECHANICAL PLATFORM NB-M200	213 X 80 X 105	5704	10736	1-1918	CENTRIFUGAL-PLENUM	5.22 / 2.00	15	480 V	3	Yes	10400	CENTRIFUGAL-PLENUM	1-2165	3.90 / 2.00	15		480	-	3	10500	0.94	95 / 77	82.76 / 69.76	0 / -2	40.49 / 34.03	12300	1.06	75 / 64	70 / 53

OUTSIDE AIR UNIT COIL AND FILTER SCHEDULE - BP2

MARK	INSTANCE MARK	CHILLED WATER COIL							HOT WATER COIL			PRIMARY FILTER SECTION		
		TOTAL COOLING CAP. (MBH)	SENSIBLE COOLING CAP. (MBH)	EAT (DB/WB) (F)	LAT (DB/WB) (F)	MAX FACE VELOCITY (FPM)	MAX. AIR PRESSURE DROP (IN. WG.)	COIL ROWS/NO. OF COILS	FIN SPACING (FINS/IN)	TOTAL HEATING CAP. (MBH)	EAT (F)	LAT (F)	TYPE	MAX. VELOCITY (FPM)	MINIMUM FILTER AREA (SQ. FT)	RESISTANCE (MID-LIFE)
DOAS-1	A	298.76	189.97	82.29 / 69.44	55.00 / 54.56	404	0.467	6	8.67	375.21	48.12	95.00	PLEATED MEDIA - MERV 8	506	21.53	0.652
DOAS-1	B	298.76	189.97	82.29 / 69.44	55.00 / 54.56	404	0.467	6	8.67	375.21	48.12	95.00	PLEATED MEDIA - MERV 8	506	21.53	0.652
DOAS-1	C	298.76	189.97	82.29 / 69.44	55.00 / 54.56	404	0.467	6	8.67	375.21	48.12	95.00	PLEATED MEDIA - MERV 8	506	21.53	0.652

REMARKS:

1. ACCEPTABLE MANUFACTURERS: DAIKIN, AAON, TRANE, VALENT.
2. PROVIDE WITH FACTORY START-UP UTILIZING MANUFACTURER'S STANDARD FORMS. NO EXCEPTIONS.
3. ENTIRE UNIT SHALL BE DOUBLE WALL CONSTRUCTION WITH FOAM INJECTED PANELS.
4. PROVIDE WITH STAINLESS STEEL CONDENSATE DRAIN PAN. ENTIRE PAN SHALL BE PITCHED TO OUTLET.
5. PROVIDE WITH STAINLESS STEEL COIL CASING.
6. PROVIDE WITH HIGH EFFICIENCY SUPPLY AIR & RETURN AIR FAN MOTORS AND INTEGRAL VFD'S WITH DISCONNECT. PROVIDE GATEWAY FOR INTERFACE WITH BAS.
7. UNIT DESIGN DIMENSIONS AND WEIGHTS AND WEIGHTS ARE LISTED IN THE SCHEDULE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE FIT, CLEARANCES, ELECTRICAL REQUIREMENTS, ETC. ARE APPROPRIATE RELATIVE TO THE DESIGN INTENT.
8. UNIT TO SIT ON 4" HOUSKEEPING PAD. PAD TO EXCEED THE UNIT 6" ON ALL SIDES.

AIR HANDLING UNIT AIRSIDE SCHEDULE - BP2

MARK	INSTANCE MARK	MANUF.	MODEL	SERVICE	TYPE	LOCATION	NOM. SIZE LXWXH (IN.)	WEIGHT (LBS)	SUPPLY AIR FAN							RETURN AIR FAN						ENERGY RECOVERY WHEEL									
																						OUTSIDE AIR SIDE									
									CFM	# OF FANS - RPM	FAN TYPE	T.S.P/E.S.P (IN WG)	MOTOR HP/BHP (PER FAN)	VOLT.	PH.	VFD	CFM	FAN TYPE	# OF FANS - RPM	T.S.P./E.S.P. (IN WG)	FAN HP	VFD	VOLT.	HP	PH.	CFM	APD	EAT-SUMMER (DB/WB)	LAT-SUMMER (DB/WB)	EAT-WINTER (DB/WB)	LAT-WINTER (DB/WB)
AHU-1	A	TRANE	HORIZON WSHP (OAK/N REV5)	BC PRACTICE FIELD	INDOOR AIR HANDLING UNIT	MECHANICAL PLATFORM BC-M200	264x93x93	9170	12000	2 - 2439	CENTRIFUGAL-PLENUM	4.1/2.0	15/11.81	480 V	3	Yes	12000	CENTRIFUGAL-PLENUM	1 - 1885	2.46 / 1	5		480	-	3	7000	1.19	95/78	80.7/68.2	0 / -2	50.2 / 44.9
AHU-1	B	TRANE	HORIZON WSHP (OAK/N REV5)	BE PRACTICE FIELD	INDOOR AIR HANDLING UNIT	MECHANICAL PLATFORM BE-M200	264x93x93	9170	12000	2 - 2439	CENTRIFUGAL-PLENUM	4.1/2.0	15/11.81	480 V	3	Yes	12000	CENTRIFUGAL-PLENUM	1 - 1885	2.46 / 1	5		480	-	3	7000	1.19	95/78	80.7/68.2	0 / -2	50.2 / 44.9
AHU-1	C	TRANE	HORIZON WSHP (OAK/N REV5)	NB PRACTICE FIELD	INDOOR AIR HANDLING UNIT	MECHANICAL PLATFORM NB-M200	264x93x93	9170	12000	2 - 2439	CENTRIFUGAL-PLENUM	4.1/2.0	15/11.81	480 V	3	Yes	12000	CENTRIFUGAL-PLENUM	1 - 1885	2.46 / 1	5		480	-	3	7000	1.19	95/78	80.7/68.2	0 / -2	50.2 / 44.9

AIR HANDLING UNIT COIL AND FILTER SCHEDULE - BP2

MARK	INSTANCE MARK	COOLING								HEATING			PRIMARY FILTER SECTION	
		TOTAL COOLING CAP. (MBH)	SENSIBLE COOLING CAP. (MBH)	EAT (DB/WB) (F)	LAT (DB/WB) (F)	MAX FACE VELOCITY (FPM)	MAX. AIR PRESSURE DROP (IN. WG.)	COIL ROWS/NO. OF COILS	FIN SPACING (FINS/IN)	TOTAL HEATING CAP. (MBH)	EAT (F)	LAT (F)	TYPE	RESISTANCE (CLEAN)
AHU-1	A	416.1	306.2	78.3 / 66.1	54.8 / 54.6	434	0.3	4 / 1	12	360	58.4	83.4	MERV-8	0.35
AHU-1	B	416.1	306.2	78.3 / 66.1	54.8 / 54.6	434	0.3	4 / 1	12	360	58.4	83.4	MERV-8	0.35
AHU-1	C	416.1	306.2	78.3 / 66.1	54.8 / 54.6	434	0.3	4 / 1	12	360	58.4	83.4	MERV-8	0.35

REMARKS:

1. ACCEPTABLE MANUFACTURERS: TRANE, DAIKIN, VALENT, INNOVENT AND VENMAR.
2. SYSTEMS REQUIRE COMMISSIONING.
3. ENTIRE UNIT SHALL BE DOUBLE WALL CONSTRUCTION WITH FOAM INJECTED PANELS.
4. PROVIDE WITH STAINLESS STEEL CONDENSATE DRAIN PAN. ENTIRE PAN SHALL BE PITCHED TO OUTLET.
5. PROVIDE STAINLESS STEEL COIL CASING. PROVIDE WITH HIGH EFFICIENCT SUPPLY AIR AND RETURN AIR FAN MOTORS AND INTEGRAL VFD'S WITH DISCONNECT. PROVIDE GATEWAY FOR INTERFACE WITH BAS.
6. UNIT DESIGN DIMENSIONS AND WEIGHTS ARE LISTED IN THE SCHEDULE IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE FIT, CLEARANCES, ELECTRICAL REQUIREMENTS, ETC. ARE APPROPRIATE RELATIVE TO THE DESIGN INTENT.
7. UNIIT TO SIT ON 4" HOUSEKEEPING PAD. PAD TO EXCEED THE UNIT 6" ON ALL SIDES.
8. PROVIDE UNIT WITH NON-FUSED DISCONNECT SWITCH "CIRCUIT BREAKER" WITH 115V OUTLET. UNIT TO BE SINGLE POINT CONNECTION.

HEAT PUMP CHILLER SCHEDULE -BP2

MARK	INSTANCE MARK	SERVICE	MANUFACTURER	MODEL	SIZE (LxWxH)	WEIGHT (LB)	ELECTRICAL				COOLING MODE					HEATING MODE					
							VOLTAGE	PHASE	MCA	MOCP	CHWS/CHWR LWT	CHWS/CHWR GPM/WPD	GS/GR EWT	GS/GR GPM/WPD	COOLING CAP. (TONS)	EER	HWS/HWR LWT	HWS/HWR GPM/WPD	GS/GR EWT	GS/GR GPM/WPD	HEATING CAP. (MBH)	COP
HPC-1	A	BULLITT CENTRAL	TRANE	TPWCCMV0300D4-MM-HP	24 X 66 X 77	1600	480 V	3	54 A	80 A	45	73.72 / 8.92	85	91.5 / 11.1	30.87	15.2	45	83.02 / 6.86	85.24	34.16 / 1.64	416.4	4.18
HPC-1	B	BULLITT EAST	TRANE	TPWCCMV0300D4-MM-HP	24 X 66 X 77	1600	480 V	3	54 A	80 A	45	73.72 / 8.92	85	91.5 / 11.1	30.87	15.2	45	83.02 / 6.86	85.24	34.16 / 1.64	416.4	4.18
HPC-1	C	NORTH BULLITT	TRANE	TPWCCMV0300D4-MM-HP	24 X 66 X 77	1600	480 V	3	54 A	80 A	45	73.72 / 8.92	85	91.5 / 11.1	30.87	15.2	45	83.02 / 6.86	85.24	34.16 / 1.64	416.4	4.18

REMARKS:

1. ACCEPTABLE MANUFACTURERS: WATERFURNACE, CLIMATEMASTER, FLORIDA HEAT PUMP.
2. PROVIDE WITH INTEGRAL DISCONNECT.
3. PROVIDE WITH UNIT ENCLOSURE/CABINET WITH SOUD REDUCTION PACKAGE.
4. UNIT COOLING CAPACITY SHALL MEET OR EXCEED RESPECTIVE OA UNIT COOLING COIL REQUIREMENTS.

WATER SOURCE HEAT PUMP SCHEDULE - BP2

MARK	INSTANCE	MANUFACTURER	MODEL	NOM. CFM	ESP (IN. WG.)	GPM	WATER PD (FT. H20)	COMPRESSORS	STAGES	SIZE (WxLxH)	ELECTRICAL				HEATING					COOLING					REMARKS
											VOLTAGE	PHASE	MCA	MOCP	HEATING CAPACITY (MBTU/HR)	EAT (DB)	EWT (DEG. F)	HEAT OF ABSORBTION (MBTU/HR)	COP	SENSIBLE CAPACITY (MBTU/HR)	TOTAL CAPACITY (MBTU/HR)	EAT (DB/WB)	EWT (DEG. F)	HEAT OF REJECTION	EER (DESIGN/AHRI)	
VHP-012	3A	TRANE	EXVK012	400	0.5	3	8.2	1	1	21.5 X 21.5 X 34.0	208 V	1	9.00 A	15.00 A	12.1	68	55	9.9	3.8	10.2	11.9	76.1 / 63.4	85	14.0	19.8	ALL
VHP-012	3B	TRANE	EXVK012	400	0.5	3	8.2	1	1	21.5 X 21.5 X 34.0	208 V	1	9.00 A	15.00 A	12.1	68	55	9.9	3.8	10.2	11.9	76.1 / 63.4	85	14.0	19.8	ALL
VHP-012	3C	TRANE	EXVK012	400	0.5	3	8.2	1	1	21.5 X 21.5 X 34.0	208 V	1	9.00 A	15.00 A	12.1	68	55	9.9	3.8	10.2	11.9	76.1 / 63.4	85	14.0	19.8	ALL
VHP-012	11A	TRANE	EXVK012	400	0.5	3	8.2	1	1	21.5 X 21.5 X 34.0	208 V	1	9.00 A	15.00 A	12.1	68	55	9.9	3.8	10.2	11.9	76.1 / 63.4	85	14.0	19.8	ALL
VHP-012	11B	TRANE	EXVK012	400	0.5	3	8.2	1	1	21.5 X 21.5 X 34.0	208 V	1	9.00 A	15.00 A	12.1	68	55	9.9	3.8	10.2	11.9	76.1 / 63.4	85	14.0	19.8	ALL
VHP-012	11C	TRANE	EXVK012	400	0.5	3	8.2	1	1	21.5 X 21.5 X 34.0	208 V	1	9.00 A	15.00 A	12.1	68	55	9.9	3.8	10.2	11.9	76.1 / 63.4	85	14.0	19.8	ALL
VHP-024	4A	TRANE	DXVK024	800	0.5	6	4.5	1	2	21.5 X 26.0 X 38.0	208 V	3	10.00 A	15.00 A	26.0	68	55	21.2	4.1	21.1	25.9	76.1 / 63.4	85	30.4	21.3	ALL
VHP-024	4B	TRANE	DXVK024	800	0.5	6	4.5	1	2	21.5 X 26.0 X 38.0	208 V	3	10.00 A	15.00 A	26.0	68	55	21.2	4.1	21.1	25.9	76.1 / 63.4	85	30.4	21.3	ALL
VHP-024	4C	TRANE	DXVK024	800	0.5	6	4.5	1	2	21.5 X 26.0 X 38.0	208 V	3	10.00 A	15.00 A	26.0	68	55	21.2	4.1	21.1	25.9	76.1 / 63.4	85	30.4	21.3	ALL
VHP-024	7A	TRANE	DXVK024	800	0.5	6	4.5	1	2	21.5 X 26.0 X 38.0	208 V	3	10.00 A	15.00 A	26.0	68	55	21.2	4.1	21.1	25.9	76.1 / 63.4	85	30.4	21.3	ALL
VHP-024	7B	TRANE	DXVK024	800	0.5	6	4.5	1	2	21.5 X 26.0 X 38.0	208 V	3	10.00 A	15.00 A	26.0	68	55	21.2	4.1	21.1	25.9	76.1 / 63.4	85	30.4	21.3	ALL
VHP-024	7C	TRANE	DXVK024	800	0.5	6	4.5	1	2	21.5 X 26.0 X 38.0	208 V	3	10.00 A	15.00 A	26.0	68	55	21.2	4.1	21.1	25.9	76.1 / 63.4	85	30.4	21.3	ALL
VHP-036	1A	TRANE	DXVK036	1200	0.5	9	9.5	1	2	24.0 X 32.5 X 42.0	208 V	3	13.00 A	20.00 A	34.4	68	55	28.3	4.2	29.5	34.0	76.1 / 63.4	85	39.9	20.5	ALL
VHP-036	1B	TRANE	DXVK036	1200	0.5	9	9.5	1	2	24.0 X 32.5 X 42.0	208 V	3	13.00 A	20.00 A	34.4	68	55	28.3	4.2	29.5	34.0	76.1 / 63.4	85	39.9	20.5	ALL
VHP-036	1C	TRANE	DXVK036	1200	0.5	9	9.5	1	2	24.0 X 32.5 X 42.0	208 V	3	13.00 A	20.00 A	34.4	68	55	28.3	4.2	29.5	34.0	76.1 / 63.4	85	39.9	20.5	ALL
VHP-036	6A	TRANE	DXVK036	1200	0.5	9	9.5	1	2	24.0 X 32.5 X 42.0	208 V	3	13.00 A	20.00 A	34.4	68	55	28.3	4.2	29.5	34.0	76.1 / 63.4	85	39.9	20.5	ALL
VHP-036	6B	TRANE	DXVK036	1200	0.5	9	9.5	1	2	24.0 X 32.5 X 42.0	208 V	3	13.00 A	20.00 A	34.4	68	55	28.3	4.2	29.5	34.0	76.1 / 63.4	85	39.9	20.5	ALL
VHP-036	6C	TRANE	DXVK036	1200	0.5	9	9.5	1	2	24.0 X 32.5 X 42.0	208 V	3	13.00 A	20.00 A	34.4	68	55	28.3	4.2	29.5	34.0	76.1 / 63.4	85	39.9	20.5	ALL
VHP-036	12A	TRANE	DXVK036	1200	0.5	9	9.5	1	2	24.0 X 32.5 X 42.0	208 V	3	13.00 A	20.00 A	34.4	68	55	28.3	4.2	29.5	34.0	76.1 / 63.4	85	39.9	20.5	ALL
VHP-036	12B	TRANE	DXVK036	1200	0.5	9	9.5	1	2	24.0 X 32.5 X 42.0	208 V	3	13.00 A	20.00 A	34.4	68	55	28.3	4.2	29.5	34.0	76.1 / 63.4	85	39.9	20.5	ALL
VHP-036	12C	TRANE	DXVK036	1200	0.5	9	9.5	1	2	24.0 X 32.5 X 42.0	208 V	3	13.00 A	20.00 A	34.4	68	55	28.3	4.2	29.5	34.0	76.1 / 63.4	85	39.9	20.5	ALL
VHP-048	14A	TRANE	DXVK048	1600	0.5	12	8	1	2	25.4 X 32.5 X 55.0	208 V	3	18.00 A	25.00 A	44.8	68	55	36.9	4.2	39.9	46	76.1 / 63.4	85	54.4	19.8	ALL
VHP-048	14B	TRANE	DXVK048	1600	0.5	12	8	1	2	25.4 X 32.5 X 55.0	208 V	3	18.00 A	25.00 A	44.8	68	55	36.9	4.2	39.9	46	76.1 / 63.4	85	54.4	19.8	ALL
VHP-048	14C	TRANE	DXVK048	1600	0.5	12	8	1	2	25.4 X 32.5 X 55.0	208 V	3	18.00 A	25.00 A	44.8	68	55	36.9	4.2	39.9	46	76.1 / 63.4	85	54.4	19.8	ALL
VHP-048	15A	TRANE	DXVK048	1600	0.5	12	8	1	2	25.4 X 32.5 X 49.0	208 V	3	18.00 A	25.00 A	44.8	68	55	36.9	4.2	39.9	46.0	76.1 / 63.4	85	54.4	19.8	ALL
VHP-048	15B	TRANE	DXVK048	1600	0.5	12	8	1	2	25.4 X 32.5 X 49.0	208 V	3	18.00 A	25.00 A	44.8	68	55	36.9	4.2	39.9	46.0	76.1 / 63.4	85	54.4	19.8	ALL
VHP-048	15C	TRANE	DXVK048	1600	0.5	12	8	1	2	25.4 X 32.5 X 49.0	208 V	3	18.00 A	25.00 A	44.8	68	55	36.9	4.2	39.9	46.0	76.1 / 63.4	85	54.4	19.8	ALL
VHP-060	2A	TRANE	DXVK060	2000	0.5	15	14.1	1	2	25.4 X 32.5 X 55.0	480 V	3	13.00 A	20.00 A	55.1	68	55	46.0	4.2	48.9	55.5	76.1 / 63.4	85	64.9	20.7	ALL
VHP-060	2B	TRANE	DXVK060	2000	0.5	15	14.1	1	2	25.4 X 32.5 X 55.0	480 V	3	13.00 A	20.00 A	55.1	68	55	46.0	4.2	48.9	55.5	76.1 / 63.4	85	64.9	20.7	ALL
VHP-060	2C	TRANE	DXVK060	2000	0.5	15	14.1	1	2	25.4 X 32.5 X 55.0	480 V	3	13.00 A	20.00 A	55.1	68	55	46.0	4.2	48.9	55.5	76.1 / 63.4	85	64.9	20.7	ALL
VHP-120	10A	TRANE	GEVK120	4000	0.5	30	16	2	2	42.0 X 36.0 X 63.0	480 V	3	22.50 A	25.00 A	115.4	68	55	92.2	3.7	102.0	128.6	76.1 / 63.4	85	151.0	19.1	ALL
VHP-120	10B	TRANE	GEVK120	4000	0.5	30	16	2	2	42.0 X 36.0 X 63.0	480 V	3	22.50 A	25.00 A	115.4	68	55	92.2	3.7	102.0	128.6	76.1 / 63.4	85	151.0	19.1	ALL
VHP-120	10C	TRANE	GEVK120	4000	0.5	30	16	2	2	42.0 X 36.0 X 63.0	480 V	3	22.50 A	25.00 A	115.4	68	55	92.2	3.7	102.0	128.6	76.1 / 63.4	85	151.0	19.1	ALL

REMARKS:

1. ACCEPTABLE MANUFACTURERS: TRANE, DAIKIN, WATERFURNACE, FLORIDA HEAT PUMP.
2. ALL HEAT PUMPS TO BE PROVIDED WITH INTEGRAL DISCONNECT. IF MANUFACTURER CANNOT ACCOMMODATE, A DISCONNECT SHALL BE PROVIDED AS REQUIRED.
3. PROVIDE HEAT PUMP WITH CONDENSATE OVERFLOW SWITCH.
4. REFER TO SPECIFICATION SECTIONS 200100 AND 230200 FOR HP ACCESSORIES AND FILTER RACKS. PROVIDE WITH THE REQUIRED FILTER SETS FOR THE CONSTRUCTION PHASE AND FOR OWNER STOCK.
5. PROVIDE COMPRESSOR ACOUSTIC BLANKET.
6. PROVIDE WATER TEMPERATURE SENSOR FOR FREEZE PROTECTION.
7. EQUIPMENT VENDOR IS RESPONSIBLE FOR PURCHASE AND INSTALLATION OF BI-POLAR IONIZATION DEVICE ON UNITS. THIS DEVICE SHALL BE GLOBAL PLASMA SOLUTIONS MODEL GPS-FC-24-AC (OR EQUAL).
8. ALL VHP'S LARGER THAN 072 TO BE SET ON A 6" THICK CONCRETE PAD. CONCRETE PAD TO BE SIZED 6" LARGER ON EACH SIDE OF THE FOOTPRINT OF THE HEAT PUMP.
9. ALL VHP'S 072 AND SMALLER TO BE PLACED ON A 2' TALL METAL STAND. REFER TO VERTICAL HEAT PUMP DETAIL FOR MORE INFORMATION.
10. HEAT PUMPS SERVING ZONES 2, 4, 10 AND 12 TO BE PROVIDED WITH HOT GAS REHEAT FOR HUMIDITY CONTROL.

ELECTRIC WALL HEATER SCHEDULE - BP2

MARK	MANUF.	MODEL #	TYPE	ELECTRICAL DATA			
				KW	VOLTAGE	PHASE	REMARKS
EWH-1	REZNOR	EHA-3	WALL MOUNTED UNIT HEATER	3	208	1	ALL
EWH-2	REZNOR	EHA-5	WALL MOUNTED UNIT HEATER	5	480	1	ALL

ELECTRIC UNIT HEATER SCHEDULE - BP2

MARK	MANUF.	MODEL #	TYPE	ELECTRICAL DATA			
				KW	VOLTAGE	PHASE	REMARKS
EUH-1	REZNOR	EGHB-5	SUSPENDED UNIT HEATER	5	208	1	ALL

REMARKS:

1. ACCEPTABLE MANUFACTURERS: REZNOR, MARKEL, DAYTON, AND TRANE.
2. PROVIDE WITH INTEGRAL DISCONNECT AND SINLE POINT CONNECTION.
3. PROVIDE WITH APPROPRIATE MOUNTING HARDWARE FOR TYPE INDICATED.
4. THERMAL OVERHEAT PROTECTION.
5. PROVIDE WITH MANUFACTURER'S FIELD INSTALLED IN-UNIT THERMOSTAT, SET TEMPERATURE AT 65 DEG F.
6. PROVIDE RELAY FOR BAS CONTROL SYSTEM. REFER TO CONTROLS SPECIFICATIONS FOR MORE INFORMATION.
7. PROVIDE WITH RECESSING TRIM FRAME FOR FULLY RECESSED INSTALLATION FOR RECESSED HEATERS.

VAV BOX SCHEDULE - BP2

MARK	MANUFACTURER	MODEL #	BOX TYPE	DUCT CONNECTIONS		MAX. CFM	PRESSURE INDEPENDENT CONTROLS	REMARKS
				INLET SIZE	OUTLET SIZE			
VAV-08	TITUS	DESV	SINGLE INLET VAV	8	11"X10"	675 CFM	Yes	ALL
VAV-10	TITUS	DESV	SINGLE INLET VAV	10	14"X12"	1050 CFM	Yes	ALL
VAV-14	TITUS	DESV	SINGLE INLET VAV	14	19"X18"	2400 CFM	Yes	ALL

REMARKS:

1. ACCEPTABLE MANUFACTURERS: TRANE, ETI, PRICE, AND TITUS.
2. ALL BOXES SHALL BE DOUVLE WALL WITH A MINIMUM OF 1/2" THICK INSULATION.
3. PROVIDE EACH BOX WITH AN INDEPENDENT CONTROLLER. NO BOX SHALL BE OPERATED BY ANOTHER CONTROLLER LOCATED ON ANOTHER BOX.
4. PROVIDE WITH BOTTOM ACCESS PANEL.
5. BOXES UTILIZED FOR VENTILATION CONTROL. VAV BOXES LISTED HERE ARE ACTUATOR AND ENCLOSURE ONLY. THESE UNITS DO NOT HAVE REHEAT COIL. SEE MECH EQUIPMENT SPECS FOR MORE INFORMATION.

LOUVER SCHEDULE - BP2

MARK	MANUFACTURER	MODEL #	SERVICE	CONSTRUCTION	CFM	WIDTH (IN)	HEIGHT (IN)	DEPTH (IN)	FREE AREA (SQ FT)	VELOCITY (FPM)	APD (IN. WG.)	BIRD SCREEN	DRAINABLE BLADE	REMARKS
L-1	RUSKIN	ELF375DX	FIELDHOUSE EXHAUST	EXTRUDED ALUMINUM	9650 CFM	120	72	8	34 SF	599 FPM	0.05 in-wg	Yes	Yes	ALL
L-2	RUSKIN	ELF375DX	FIELDHOUSE OUTSIDE AIR INTAKE	EXTRUDED ALUMINUM	9650 CFM	60	120	8	29 SF	408 FPM	0.05 in-wg	Yes	Yes	ALL
L-4A	RUSKIN	ELM6375DX	TRACK STORAGE	EXTRUDED ALUMINUM	425 CFM	36	12	8	1 SF	352 FPM	0.05 in-wg	Yes	Yes	ALL
L-4B	RUSKIN	ELM6375DX	WET ROOM	EXTRUDED ALUMINUM	550 CFM	36	12	8	1 SF	456 FPM	0.05 in-wg	Yes	Yes	ALL
L-4C	RUSKIN	ELM6375DX	VEHICLE GROOMING AND EQUIPMENT	EXTRUDED ALUMINUM	600 CFM	36	12	8	1 SF	496 FPM	0.05 in-wg	Yes	Yes	ALL

REMARKS:

1. ACCEPTABLE MANUFACTURERS: RUSKIN, GREENHECK AND RELIABLE LOUVERS.
2. FREE AREA LISTED IS THE MINIMUM ACCEPTABLE FREE AREA. ALTERNATE LOUVER MANUFACTURERS SHALL MEET OR EXCEED FREE AREA LISTED. NO EXCEPTIONS.
3. ALL LOUVERS SHALL BE FACTORY BAKED ENAMEL WITH CUSTOM PAINT COLOR AS SELECTED BY THE ARCHITECT.
4. ALL LOUVERS SHALL BE EXTRUDED ALUMINUM WITH CHANNEL FRAME.
5. ALL LOUVERS SHALL BE MIAMI DADE COUNTY RATED. CONSULT MANUFACTURER FOR INSTALLATION DETAILS.

EXHAUST FAN SCHEDULE - BP2

MARK	INSTANCE MARK	MANUFACTURER	MODEL #	SERVICE	TYPE	AIRFLOW (CFM)	E.S.P.	DRIVE	RPM	FAN HP	ELECTRICAL DATA			SONES	REMARKS
											VOLTAGE	PHASE	HZ		
EF-4	A	GREENHECK	CUBE-130	BCHS ANNEX BUILDING	SIDEWALL MOUNTED UPBLAST EXHAUST FAN	1750 CFM	0.50 in-wg	DIRECT	1488	0.75	208	1	60	15	ALL
EF-4	B	GREENHECK	CUBE-130	BEHS ANNEX BUILDING	SIDEWALL MOUNTED UPBLAST EXHAUST FAN	1750 CFM	0.50 in-wg	DIRECT	1488	0.75	208	1	60	15	ALL
EF-4	C	GREENHECK	CUBE-130	NBHS ANNEX BUILDING	SIDEWALL MOUNTED UPBLAST EXHAUST FAN	1750 CFM	0.50 in-wg	DIRECT	1488	0.75	208	1	60	15	ALL

REMARKS:

1. ACCEPTABLE MANUFACTURERS: GREENHECK, LOREN COOK, TWIN CITY AND CAPTIVE-AIRE.
2. PROVIDE WITH BACKDRAFT DAMPER.
3. PROVIDE WITH CURB.
4. PROVIDE WITH INTEGRAL D

SPLIT SYSTEM INDOOR UNIT SCHEDULE - BP2

MARK	MANUF.	MODEL	DIMENSIONS (IN.)			WEIGHT (LBS)	AIRFLOW (CFM)	ELECTRICAL DATA			REMARKS
			LENGTH	WIDTH	HEIGHT			VOLTAGE	PHASE		
AC-1	DAKIN	FAQ24TAVJU	9	42	12	31.00 lbf	635 CFM	208	1		ALL
PTAC-01	AMANA	PTH073J	9	42	12	31.00 lbf	635 CFM		1		ALL

SPLIT SYSTEM OUTDOOR UNIT SCHEDULE - BP2

MARK	MANUF.	MODEL #	DIMENSIONS (IN.)			WEIGHT (LBS)	TOTAL COOLING (MBH)	HEATING CAPACITY (MBH)	MINIMUM SEER	ELECTRICAL DATA					REMARKS
			LENGTH	WIDTH	HEIGHT					MCA	MOCP	VOLTAGE	PHASE		
CU-1	DAKIN	RZQ24TAVJU	13	39	27	172	24.0	22.0	18.5	16.5 A	25	208	1		ALL

REMARKS:

1. ACCEPTABLE MANUFACTURERS: DAIKIN, MISTUBISHI, AND TRANE.
2. INSTALL UNITS PER MANUFACTURERS' INSTRUCTIONS AND WITH MANUFACTURER'S RECOMMENDED CLEARANCES.
3. INDOOR UNIT SHALL BE POWERED THROUGH OUTDOOR UNIT.
4. PROVIDE UNIT WITH FILTER.
5. PROVIDE UNIT WITH LOW AMBIENT CONTROL DOWN TO 0 DEGF AND HAIL GUARD FOR OUTDOOR UNIT.
6. PROVIDE UNIT WITH WALL MOUNTED THERMOSTAT.

CIRCULATION FAN SCHEDULE - BP2

MARK	MANUFACTURER	MODEL #	TYPE	WEIGHT	ELECTRICAL DATA		REMARKS
					VOLTAGE	PHASE	
CF-1	BIG ASS FANS	POWERFOIL X4	24' HVLS FAN	357.00	208	3	ALL
CF-2	BIG ASS FANS	HAIKU	60" CEILING FAN	18.50	120	1	ALL

REMARKS:

1. ACCEPTABLE MANUFACTURERS: BIG ASS FANS, GREENHECK, AND AERATRON.
2. INSTALL UNITS PER MANUFACTURERS' INSTRUCTIONS AND WITH MANUFACTURER'S RECOMMENDED CLEARANCES.
3. PROVIDE LOCAKBLE ENCLOSURE FOR MULTIPLE FAN SPEED CONTROLLER.
4. MOUNT FANS FROM STRUCTURE PER MANUFACTURER'S RECOMMENDATIONS.
5. CUSTOM FINISH TO BE SELECTED BY ARCHITECT.
6. PROVIDE WITH FACTORY STARTUP. FACTORY TECHNICIAN SHALL MEASURE AND SET AIRFLOW VELOCITY FOR COOLING AND HEATING. REFER TO EQUIPMENT SPECIFICATIONS.
7. PROVIDE ALL NECESSARY CONTROL WIRING.
8. PROVIDE WITH FIRE ALARM SHUTDOWN RELAY. COORDINATE WITH FIRE ALARM CONTRACTOR.
9. PROVIDE WALL MOUNTED SWITCH FOR FANS. REFER TO PLANS FOR LOCATION.

REGISTERS, GRILLES, AND DIFFUSERS - BP2

MARK	MANUFACTURER	MODEL	TYPE	CFM RANGE	FACE SIZE	INLET DUCT SIZE	NECK SIZE	REMARKS
E-2	TITUS	350FL	EXTRUDED ALUMINUM 3/4" BLADE SPACING 45 DEGREE DEFLECTION	50-225	14"X8"	12"X6"	12"X6"	4,5,6,8
E-3	TITUS	350FL	EXTRUDED ALUMINUM 3/4" BLADE SPACING 45 DEGREE DEFLECTION	25-125	8"X8"	6"X6"	6"X6"	4,5,6,8
E-4	TITUS	350FL	EXTRUDED ALUMINUM 3/4" BLADE SPACING 45 DEGREE DEFLECTION	135-675	20"X14"	18"X12"	18"X12"	4,5,6,8
E-5	TITUS	350FL	EXTRUDED ALUMINUM 3/4" BLADE SPACING 45 DEGREE DEFLECTION	150-750	26"X12"	24"X10"	24"X10"	4,5,6,8
E-6	TITUS	350FL	EXTRUDED ALUMINUM 3/4" BLADE SPACING 45 DEGREE DEFLECTION	500-2600	44"X20"	42"x18"	42"X18"	4,5,6,8
E-7	TITUS	350FL	EXTRUDED ALUMINUM 3/4" BLADE SPACING 45 DEGREE DEFLECTION	110-560	24"X24"	18"X10"	18"X10"	4,5,6,8
E-9	TITUS	350FL	EXTRUDED ALUMINUM 3/4" BLADE SPACING 45 DEGREE DEFLECTION	350-1750	32"X20"	30"X18"	30"X18"	4,5,6,8
E-10	TITUS	350FL	EXTRUDED ALUMINUM 3/4" BLADE SPACING 45 DEGREE DEFLECTION	75-375	20"X8"	18"X6"	18"X6"	4,5,6,8
E-11	TITUS	350FL	EXTRUDED ALUMINUM 3/4" BLADE SPACING 45 DEGREE DEFLECTION	215-1075	26"X16"	24"X14"	24"X14"	4,5,6,8
R-1	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	75-375	20"X8"	18"X6"	18"X6"	4,5,6,8
R-2	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	275-1375	38"X14"	36"X12"	36"X12"	4,5,6,8
R-3	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	175-800	16"X16"	14"X14"	14"X14"	4,5,6,8
R-4	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	100-500	14"X14"	12X"12"	12"X12"	4,5,6,8
R-5	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	450-2100	38"X20"	36"X18"	36"X18"	4,5,6,8
R-6	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	1600-6200	50"X50	48"X48"	48"X48"	4,5,6,8
R-7	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	2000-2730	44"X26"	42"x24"	42"X42"	4,5,6,8
R-8	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	200-925	26"X14"	24"X12"	24"X12"	4,5,6,8
S-1	TITUS	300 FS	EXTRUDED ALUMINUM 3/4" SPACING 45 DEGREE DEFLECTION	150-340	16"X8"	14"X6"	14"X6"	1,4,5,6,7,8
S-2	TITUS	300 FS	EXTRUDED ALUMINUM 3/4" SPACING 45 DEGREE DEFLECTION	75-200	10"X8"	8"X6"	8"X6"	1,4,5,6,7,8
S-3	TITUS	300 FS	EXTRUDED ALUMINUM 3/4" SPACING 45 DEGREE DEFLECTION	125-325	14"X8"	12"X6"	12"X6"	1,4,5,6,7,8
S-4	TITUS	300 FS	EXTRUDED ALUMINUM 3/4" SPACING 45 DEGREE DEFLECTION	175-400	20"X8"	18"X6"	18"X6"	1,4,5,6,7,8
S-5	TITUS	300 FS	EXTRUDED ALUMINUM 3/4" SPACING 0 DEGREE DEFLECTION	150-340	14"X8"	14"X6"	14"X6"	3,4,5,6,7,8
S-6	TITUS	300 FS	EXTRUDED ALUMINUM 3/4" SPACING 0 DEGREE DEFLECTION	175-400	20"X8"	18"X6"	18"X6"	3,4,5,6,7,8
S-7	TITUS	300 FS	EXTRUDED ALUMINUM 3/4" SPACING 45 DEGREE DEFLECTION	150-340	16"X8"	14"X6"	14"X6"	1,4,5,6,7,8
T-1	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	75-375	20"X8"	18"X6"	18"X6"	4,5,6,8
T-2	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	25-175	10"X8"	8"X6"	8"X6"	4,5,6,8
T-3	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	50-225	14"X8"	12"X6"	12"X6"	4,5,6,8
T-4	TITUS	350FL	EXTRUDED ALUMINUM 3/4" SPACING 35 DEGREE DEFLECTION	200-1035	20"X20"	18"X18"	18"X18"	4,5,6,8

REMARKS:

1. DIFFUSER BLADES WILL HAVE DOWNWARD DEFLECTION OF 45 DEGREES.
2. DIFFUSER BLADES WILL HAVE DOWNWARD DEFLECTION OF 22.5 DEGREES.
3. DIFFUSER BLADES WILL HAVE DOWNWARD DEFLECTION OF 0 DEGREES.
4. ACCEPTABLE MANUFACTURERS: TITUS, PRICE, METALAIRE, KRUGER.
5. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR AIR DEVICE MOUNTING TYPE. FOR DRYWALL, WALL OR DUCT MOUNTED AIR DEVICES PROVIDE APPROPRIATE SURFACE MOUNTING FRAME.
6. COORDINATE COLOR OF AIR DEVICES WITH ARCHITECT'S CEILING AND WALL FINISH SCHEDULE - MATCH FINISH COLOR. CONFIRM COLORS WITH ARCHITECT.
7. PROVIDE ALL SUPPLY GRILLES WITH A MOLDED INSULATION BLANKET.
8. MOUNTING HEIGHTS FOR ALL SIDEWALL GRILLES TO BE COORDINATED WITH OTHER TRADES PRIOR TO INSTALLATION.

UNIT VENTILATOR SCHEDULE - BP2

MARK	INSTANCE	MANUFACTURER	MODEL	TYPE	WATER FLOW				SIZE (WxLxH)	ELECTRICAL				HEATING					COOLING					
					GPM	MAX WPD (FT)	COMPRESSORS	STAGES		VOLTAGE	PHASE	MCA	MOCP	HEATING CAPACITY (MBH)	EDB (°F)	EWT (°F)	HEAT OF ABSORPTION (MBH)	COP @ AHRI CONDITIONS	SENSIBLE CAPACITY (MBH)	TOTAL CAPACITY (MBH)	EWT (°F)	HEAT OF REJECTION (MBH)	EER @ AHRI CONDITIONS
UV-012	A	TRANE	GEC012	CONSOLE HEAT PUMP	2.8	9.3	1	1	12 X 48 X 25	208 V	1	19 A	20 A	12.6	68.0 °F	55 °F	9.8	3.26	9.6	11.5	86 °F	14.3	14.65
UV-012	B	TRANE	GEC012	CONSOLE HEAT PUMP	2.8	9.3	1	1	12 X 48 X 25	208 V	1	19 A	20 A	12.6	68.0 °F	55 °F	9.8	3.26	9.6	11.5	86 °F	14.3	14.65
UV-012	C	TRANE	GEC012	CONSOLE HEAT PUMP	2.8	9.3	1	1	12 X 48 X 25	208 V	1	19 A	20 A	12.6	68.0 °F	55 °F	9.8	3.26	9.6	11.5	86 °F	14.3	14.65

EXPANSION TANK SCHEDULE - BP2

MARK	MANUFACTURER	MODEL	TYPE	SERVICE	CAPACITY				REMARKS
					TANK VOLUME (GAL.)	ACCEPTANCE VOLUME (GAL.)	PHYSICAL SIZE	AIR PRESSURE CHARGE	
ET-1	BELL AND GOSSETT	B165	BLADDER	BULLITT CENTRAL GEOTHERMAL LOOP	44	5.33	24"X34"	25	ALL
ET-1	BELL AND GOSSETT	B165	BLADDER	BULLITT EAST GEOTHERMAL LOOP	44	5.33	24"X34"	25	ALL
ET-1	BELL AND GOSSETT	B165	BLADDER	NORTH BULLITT GEOTHERMAL LOOP	44	5.33	24"X34"	25	ALL
ET-2	BELL AND GOSSETT	B85	BLADDER	BULLITT CENTRAL HEAT PUMP CHILLER LOOP	23	1.54	16"X37"	25	ALL
ET-2	BELL AND GOSSETT	B85	BLADDER	BULLITT EAST HEAT PUMP CHILLER LOOP	23	1.54	16"X37"	25	ALL
ET-2	BELL AND GOSSETT	B85	BLADDER	NORTH BULLITT HEAT PUMP CHILLER LOOP	23	1.54	16"X37"	25	ALL

REMARKS:

1. ACCEPTABLE MANUFACTURERS: BELL AND GOSSETT, TACO AND ARMSTRONG

AIR SEPARATOR SCHEDULE - BP2

MARK	INSTANCE MARK	MANUFACTURER	MODEL	GENERAL	CAPACITY		ACCESSORIES	
				INLET/OUTLET SIZE	GPM (ACTUAL)	MAX WPD (FT)	INTEGRAL STRAINER	ASME RATED
AS-1	A	BELL AND GOSSETT	RL-6F	6"	330	2.3	Yes	Yes
AS-1	B	BELL AND GOSSETT	RL-6F	6"	330	2.3	Yes	Yes
AS-1	C	BELL AND GOSSETT	RL-6F	6"	330	2.3	Yes	Yes
AS-2	A	BELL AND GOSSETT	RL-4F	4"	95	2.3	Yes	Yes
AS-2	B	BELL AND GOSSETT	RL-4F	4"	95	2.3	Yes	Yes
AS-2	C	BELL AND GOSSETT	RL-4F	4"	95	2.3	Yes	Yes

REMARKS:

1. ACCEPTABLE MANUFACTURERS: BELL AND GOSSETT, TACO AND ARMSTRONG

HYDRONIC PUMP SCHEDULE - BP2

MARK	INSTANCE MARK	MANUFACTURER	TYPE	MODEL	SERVICE	GPM	HEAD (FT)	VFD	HP	BRAKE HP	MIN. EFFICIENCY(%)	RPM	VOLTAGE	PHASE	FREQUENCY	REMARKS
P-1	1A	BELL AND GOSSETT	BASE MOUNTED END SUCTION PUMP	e-1510 2EB	BULLITT CENTRAL GEOTHERMAL LOOP	180	100	Yes	10	6.33	64.6	1800	480 V	3	60	ALL
P-1	1B	BELL AND GOSSETT	BASE MOUNTED END SUCTION PUMP	e-1510 2EB	BULLITT CENTRAL GEOTHERMAL LOOP	180	100	Yes	10	6.33	64.6	1800	480 V	3	60	ALL
P-1	1C	BELL AND GOSSETT	BASE MOUNTED END SUCTION PUMP	e-1510 2EB	BULLITT CENTRAL GEOTHERMAL LOOP	180	100	Yes	10	6.33	64.6	1800	480 V	3	60	ALL
P-1	2A	BELL AND GOSSETT	BASE MOUNTED END SUCTION PUMP	e-1510 2EB	BULLITT CENTRAL GEOTHERMAL LOOP	180	100	Yes	10	6.33	64.6	1800	480 V	3	60	ALL
P-1	2B	BELL AND GOSSETT	BASE MOUNTED END SUCTION PUMP	e-1510 2EB	BULLITT CENTRAL GEOTHERMAL LOOP	180	100	Yes	10	6.33	64.6	1800	480 V	3	60	ALL
P-1	2C	BELL AND GOSSETT	BASE MOUNTED END SUCTION PUMP	e-1510 2EB	BULLITT CENTRAL GEOTHERMAL LOOP	180	100	Yes	10	6.33	64.6	1800	480 V	3	60	ALL
P-1	3A	BELL AND GOSSETT	BASE MOUNTED END SUCTION PUMP	e-1510 2EB	NORTH BULLITT GEOTHERMAL LOOP	180	100	Yes	10	6.33	64.6	1800	480 V	3	60	ALL
P-1	3B	BELL AND GOSSETT	BASE MOUNTED END SUCTION PUMP	e-1510 2EB	NORTH BULLITT GEOTHERMAL LOOP	180	100	Yes	10	6.33	64.6	1800	480 V	3	60	ALL
P-1	3C	BELL AND GOSSETT	BASE MOUNTED END SUCTION PUMP	e-1510 2EB	NORTH BULLITT GEOTHERMAL LOOP	180	100	Yes	10	6.33	64.6	1800	480 V	3	60	ALL
P-2	1A	BELL AND GOSSETT	CLOSE COUPLED IN-LINE CENTRIFUGAL PUMP	e-80 2x2x7B	BULLITT CENTRAL HEAT PUMP CHILLER LOOP	95	35	Yes	2	1.29	60.8	1800	208 V	3	60	ALL
P-2	1B	BELL AND GOSSETT	CLOSE COUPLED IN-LINE CENTRIFUGAL PUMP	e-80 2x2x7B	BULLITT CENTRAL HEAT PUMP CHILLER LOOP	95	35	Yes	2	1.29	60.8	1800	208 V	3	60	ALL
P-2	2A	BELL AND GOSSETT	CLOSE COUPLED IN-LINE CENTRIFUGAL PUMP	e-80 2x2x7B	BULLITT EAST HEAT PUMP CHILLER LOOP	95	35	Yes	2	1.29	60.8	1800	208 V	3	60	ALL
P-2	2B	BELL AND GOSSETT	CLOSE COUPLED IN-LINE CENTRIFUGAL PUMP	e-80 2x2x7B	BULLITT EAST HEAT PUMP CHILLER LOOP	95	35	Yes	2	1.29	60.8	1800	208 V	3	60	ALL
P-2	3A	BELL AND GOSSETT	CLOSE COUPLED IN-LINE CENTRIFUGAL PUMP	e-80 2x2x7B	NORTH BULLITT HEAT PUMP CHILLER LOOP	95	35	Yes	2	1.29	60.8	1800	208 V	3	60	ALL
P-2	3B	BELL AND GOSSETT	CLOSE COUPLED IN-LINE CENTRIFUGAL PUMP	e-80 2x2x7B	NORTH BULLITT HEAT PUMP CHILLER LOOP	95	35	Yes	2	1.29	60.8	1800	208 V	3	60	ALL

REMARKS:

1. PUMPS EFFICIENCIES LISTED ARE MINIMUM EFFICIENCES ACCEPTABLE. DO NOT SUBMIT LESS EFFICIENT PUMPS.
2. PROVIDE ALL PUMPS WITH BRONZE FITTINGS.
3. PUMP TO OPERATE ON VFD. REFER TO VFD SCHEDULE ON THIS SHEET.
4. ACCEPTABLE MANUFACTURERS: BELL AND GOSSETT, PATTERSON, TACO AND ARMSTRONG.

VARIABLE FREQUENCY DRIVE SCHEDULE - BP2

MARK	INSTANCE MARK	MANUFACTURER	MODEL	SERVICE	MOTOR HP	ELECTRICAL			FUSED DISCONNECT & NEMA 12 ENCLOSURE	BYPASS STARTER
						VOLTS	PH	HZ		
VFD-1	1A	ABB	ACH550	GEOTHERMAL PUMPS	10	480 V	3	60	YES	YES
VFD-1	1B	ABB	ACH550	GEOTHERMAL PUMPS	10	480 V	3	60	YES	YES
VFD-1	1C	ABB	ACH550	GEOTHERMAL PUMPS	10	480 V	3	60	YES	YES
VFD-1	2A	ABB	ACH550	GEOTHERMAL PUMPS	10	480 V	3	60	YES	YES
VFD-1	2B	ABB	ACH550	GEOTHERMAL PUMPS	10	480 V	3	60	YES	YES
VFD-1	2C	ABB	ACH550	GEOTHERMAL PUMPS	10	480 V	3	60	YES	YES
VFD-1	3A	ABB	ACH550	GEOTHERMAL PUMPS	10	480 V	3	60	YES	YES
VFD-1	3B	ABB	ACH550	GEOTHERMAL PUMPS	10	480 V	3	60	YES	YES
VFD-1	3C	ABB	ACH550	GEOTHERMAL PUMPS	10	480 V	3	60	YES	YES
VFD-2	1A	ABB	ACH550	HEAT PUMP CHILLER PUMPS	2	208 V	3	60	YES	YES
VFD-2	1B	ABB	ACH550	HEAT PUMP CHILLER PUMPS	2	208 V	3	60	YES	YES
VFD-2	2A	ABB	ACH550	HEAT PUMP CHILLER PUMPS	2	208 V	3	60	YES	YES
VFD-2	2B	ABB	ACH550	HEAT PUMP CHILLER PUMPS	2	208 V	3	60	YES	YES
VFD-2	3A	ABB	ACH550	HEAT PUMP CHILLER PUMPS	2	208 V	3	60	YES	YES
VFD-2	3B	ABB	ACH550	HEAT PUMP CHILLER PUMPS	2	208 V	3	60	YES	YES
VFD-3	A	ABB	ACH550	DOAS-1 SUPPLY FAN	15	480 V	3	60	YES	YES
VFD-3	B	ABB	ACH550	DOAS-1 SUPPLY FAN	15	480 V	3	60	YES	YES
VFD-3	C	ABB	ACH550	DOAS-1 SUPPLY FAN	15	480 V	3	60	YES	YES
VFD-4	A	ABB	ACH550	DOAS-1 EXHAUST FAN	15	480 V	3	60	YES	YES
VFD-4	B	ABB	ACH550	DOAS-1 EXHAUST FAN	15	480 V	3	60	YES	YES
VFD-4	C	ABB	ACH550	DOAS-1 EXHAUST FAN	15	480 V	3	60	YES	YES
VFD-5	A	ABB	ACH550	DOAS-1 ENERGY RECOVERY WHEEL	1	480 V	3	60	YES	YES
VFD-5	B	ABB	ACH550	DOAS-1 ENERGY RECOVERY WHEEL	1	480 V	3	60	YES	YES
VFD-5	C	ABB	ACH550	DOAS-1 ENERGY RECOVERY WHEEL	1	480 V	3	60	YES	YES

REMARKS:

1. THE VFD SHALL INCLUDE A COMMUNICATIONS PORT FOR BACNET COMPATIBLE PROTOCOL. COORDINATE WITH THE TCC. PROVIDE INPUT POINTS FOR TWO PRESET SPEEDS. PROVIDE TWO PROGRAMMABLE FORM C RELAYS RATED FOR 2 AMPS TO ACTIVATE AT SPEED.
2. PROVIDE VFD EQUIPPED MOTORS WITH SHAFT GROUNDING RINGS.
3. PROVIDE ALL VFDS WITHA LAMICOID PLATE INDICATING ID#, HP AND EQUIPMENT SERVED. INCLUDE VFD SPEED FOR REQUIRED AIRFLOW ON AHU VFDS.
4. PROVIDE NEMA 12 ENCLOSURE AND BACNET MS/TP PROTOCOL.
5. ACCEPTABLE MANUFACTURERS: ABB, SQUARE D, DANFOSS.

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BG MOVING FORWARD

SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

MECHANICAL SCHEDULES

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
CHECKED BY : JRE
REVISIONS :
1 Addendum 1 - 30.09.24

2023-50

M7.02

Bullitt County Athletic Fieldhouses (Typical for 3) - ASHRAE 62.1-2010 - VENTILATION CALCULATIONS

Zone	Room Number	Room Name	Room Type	Az Floor Area (SF)	#/1000 Sqft	ASHRAE Occupancy (Pz)	ASHRAE OA per person (Rp)	(Pz *Rp)	ASHRAE Required CFM/SF (Ra)	(Ra)*(Az)	Ez for sqft only	Ez Zone Air Distribution Effectiveness	ASHRAE OA Airflow (cfm)	Fixture Count	Area Exhaust, CFM/SF	Fixture Exhaust, CFM/Fixture	Minimum Exhaust CFM	Actual OA Airflow (cfm)	Actual EA Airflow (cfm)	MIN OA (CFM)	MIN EA (CFM)	ZONE OA TOTALS (MAX)	ZONE EA TOTALS (MAX)	ZONE OA TOTALS (MIN)	ZONE EA TOTALS (MIN)
1	3	MENS RESTROOM	Restroom	485	0	0	0	0	0	0	0	1.0	0	10	0	50	500	500	500	500	500	1075	1150	1075	1150
	4	JANITOR	Janitor	138	0	0	0	0	0	0	0	1.0	0		1	0	140	75	150	75	150				
	5	WOMENS RESTROOM	Restroom	557	0	0	0	0	0	0	0	1.0	0	10	0	50	500	500	500	500	500				
2	6	FOOTBALL RESTROOM/SHOWER	Restroom	445	0	0	0	0	0	0	0	1.0	0	8	0	50	400	0	400	0	400	1750	1900	1750	1900
	7	FOOTBALL LOCKER ROOM	Locker Room (Sports)	2,074	0	0	0	0	0	0	0	1.0	0		0.5	0	1040	1750	1500	1750	1500				
3	8	SPORT STORAGE - DANCE/CHEER	Storage room, Unoccupied	267	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0	70	70	50	0
	9	SPORT STORAGE - ARCHERY	Storage room, Unoccupied	235	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
	10	FOOTBALL STORAGE	Storage room, Unoccupied	235	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
	11	FOOTBALL HALL	Corridors	112	0	0	0	0	0.06	7	7	1.0	7		0	0	0	0	0	0	0				
	12	FOOTBALL OFFICE	Office space	249	5	1	5	5	0.06	15	15	1.0	20		0	0	0	70	0	50	0				
4	13	FIELD CORRIDOR	Corridors	389	0	0	0	0	0.06	24	24	1.0	24		0	0	0	25	25	25	25	200	185	185	185
	14	TRAINING ROOM	Office space	482	5	3	5	15	0.06	29	29	1.0	44		0	0	0	50	50	35	35				
	17	SPORT STORAGE - GOLF AND SIMULATOR	Gym, stadium (play area)	351	0	0	0	0	0.3	106	106	1.0	106		0	0	0	110	110	110	110				
	18	GATEWAY CORRIDOR	Corridors	239	0	0	0	0	0.06	15	15	1.0	15		0	0	0	15	0	15	15				
	15	SPORT STORAGE - BASEBALL/SOFTBALL	Storage room, Unoccupied	232	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
5	16	CONCESSIONS	Kitchen (cooking)	384	20	5	7.5	38	0.12	47	47	1.0	85		0.3	0	120	100	120	85	85	100	120	85	85
6	19	SOCCER OFFICE WOMENS	Office space	182	5	1	5	5	0.06	11	11	1.0	16		0	0	0	75	0	55	15	555	640	370	440
	20	SOCCER WOMENS HALL	Corridors	147	0	0	0	0	0.06	9	9	1.0	9		0	0	0	10	10	0	0				
	21	SOCCER WOMENS LOCKER ROOM	Locker Room (Sports)	469	0	0	0	0	0	0	0	1.0	0		0.5	0	235	470	350	315	235				
	22	SOCCER STORAGE	Storage room, Unoccupied	96	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
	23	CUSTODIAN	Janitor	78	0	0	0	0	0	0	0	1.0	0		1	0	80	0	80	0	55				
	24	SOCCER WOMENS RESTROOM	Restroom	230	0	0	0	0	0	0	0	1.0	0	4	0	50	200	0	200	0	135				
7	25	COACH RESTROOM	Restroom	129	0	0	0	0	0	0	0	1.0	0	1.5	0	50	75	0	75	0	55	495	625	345	450
	26	SOCCER MENS RESTROOM	Restroom	246	0	0	0	0	0	0	0	1.0	0	4	0	50	200	0	200	0	135				
	27	SOCCER MENS LOCKER ROOM	Locker Room (Sports)	469	0	0	0	0	0	0	0	1.0	0		0.5	0	235	470	350	315	235				
	28	SOCCER STORAGE	Storage room, Unoccupied	94	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
	29	SOCCER MENS HALL	Corridors	145	0	0	0	0	0.06	9	9	1.0	9		0	0	0	0	0	10	10				
	30	SOCCER MENS OFFICE	Office space	180	5	1	5	5	0.06	11	11	1.0	16		0	0	0	25	0	20	15				
8	31	PRACTICE FIELD**	Gym, stadium (play area)	22,028	0	0	0	0	0.3	6609	6609	1.0	6609		0	0	0	6625	6295	4430	4210	6625	6295	4430	4210
9	1	GEOTHERMAL**	Mechanical Room	238	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0	0	0	0	0
	2	A/V**	Electrical Equipment Room	38	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
10	3	WEIGHT ROOM	Health club / weight rooms	3,564	10	36	20	713	0.06	214	214	1.0	927		0	0	0	1650	1900	1110	1275	1650	1950	1110	1310
	4	W.R MOP	Janitor	46	0	0	0	0	0	0	0	1.0	0		1	0	50	0	50	0	35				
11	5	WRESTLING OFFICE	Office space	279	5	1	5	7	0.06	17	17	1.0	24		0	0	0	25	0	20	0	25	50	20	50
	6	W. MOP	Janitor	42	0	0	0	0	0	0	0	1.0	0		1	0	45	0	50	0	50				
12	7	WRESTLING MAT ROOM	Health club / weight rooms	1,856	10	19	20	371	0.06	112	112	1.0	483		0	0	0	750	900	505	605	750	900	505	605
13	8	MDF**	Electrical Equipment Room	147	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0	0	0	0	0
14	9	COACH RESTROOM	Restroom	318	0	0	0	0	0	0	0	1.0	0	3	0	50	150	75	150	55	150	650	800	445	665
	10	PE LOCKER ROOM WOMENS	Locker Room (Sports)	344	0	0	0	0	0	0	0	1.0	0		0.5	0	175	400	175	270	120				
	11	WRESTLING LOCKER ROOM WOMENS	Locker Room (Sports)	335	0	0	0	0	0	0	0	1.0	0		0.5	0	170	175	250	120	170				
	12	W STORAGE	Storage room, Unoccupied	41	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
	13	PE RESTROOM WOMENS	Restroom	263	0	0	0	0	0	0	0	1.0	0	4.5	0	50	225	0	225	0	225				
	14	MECHANICAL	Mechanical Room	229	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
15	53	PE RESTROOM MENS	Restroom	285	0	0	0	0	0	0	0	1.0	0	4.5	0	50	225	0	225	0	155	610	685	415	470
	54	W STORAGE	Storage room, Unoccupied	41	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
	55	PE LOCKER ROOM MENS	Locker Room (Sports)	349	0	0	0	0	0	0	0	1.0	0		0.5	0	175	400	175	270	120				
	56	WRESTLING LOCKER ROOM MENS	Locker Room (Sports)	380	0	0	0	0	0	0	0	1.0	0		0.5	0	190	210	285	145	195				
16	57	WET ROOM**	Storage room, Unoccupied	388	0	0	0	0	0	0	0	1.0	0		0	0	0	0	550	0	550	0	550	0	550
17	58	TRACK STORAGE**	Storage room, Unoccupied	310	0	0	0	0	0	0	0	1.0	0		0	0	0	0	425	0	425	0	425	0	425
18	59	VEHICLE AND GROOMING EQUIPMENT**	Storage room, Unoccupied	428	0	0	0	0	0	0	0	1.0	0		0	0	0	0	600	0	600	0	600	0	600
19	60	LAUNDRY**	Storage room, Unoccupied	155	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0	0	0	0	0
20	61	TICKET STORAGE**	Storage room, Unoccupied	68	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0	0	0	0	0
	62	TICKETS**	Storage room, Unoccupied	109	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0				
	63	MECHANICAL / ELECTRICAL / IDF	Mechanical Room	231	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0	0	0	0	0
	64	MECHANICAL PLATFORM	Mechanical Room	1,059	0	0	0	0	0	0	0	1.0	0		0	0	0	0	0	0	0	0	0	0	0
	31A	Make-up air VAV (16)*		-	-	-	-	-	-	-	-	1.0	-	-	-	-	0	1700	0	1140	0	1700	0	1140	0

NOTES:
*: MAKE-UP AIR VAV NOT TIED TO SPECIFIC ZONE. MAKE-UP AIR VAV TO OPERATE AT MAX CFM UNLESS ALL OTHER ZONES ARE UNOCCUPIED. WHEN ALL OTHER ZONES ARE IN UN-OCCUPIED SETBACK, UNIT TO SET BACK TO MINIMUM FLOW.

**: ROOM/ZONE NOT TIED TO DOAS OR ANY VAV.

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

FIELDHOUSE VENTILATION SCHEDULE

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 22-145

BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
CHECKED BY : JRE

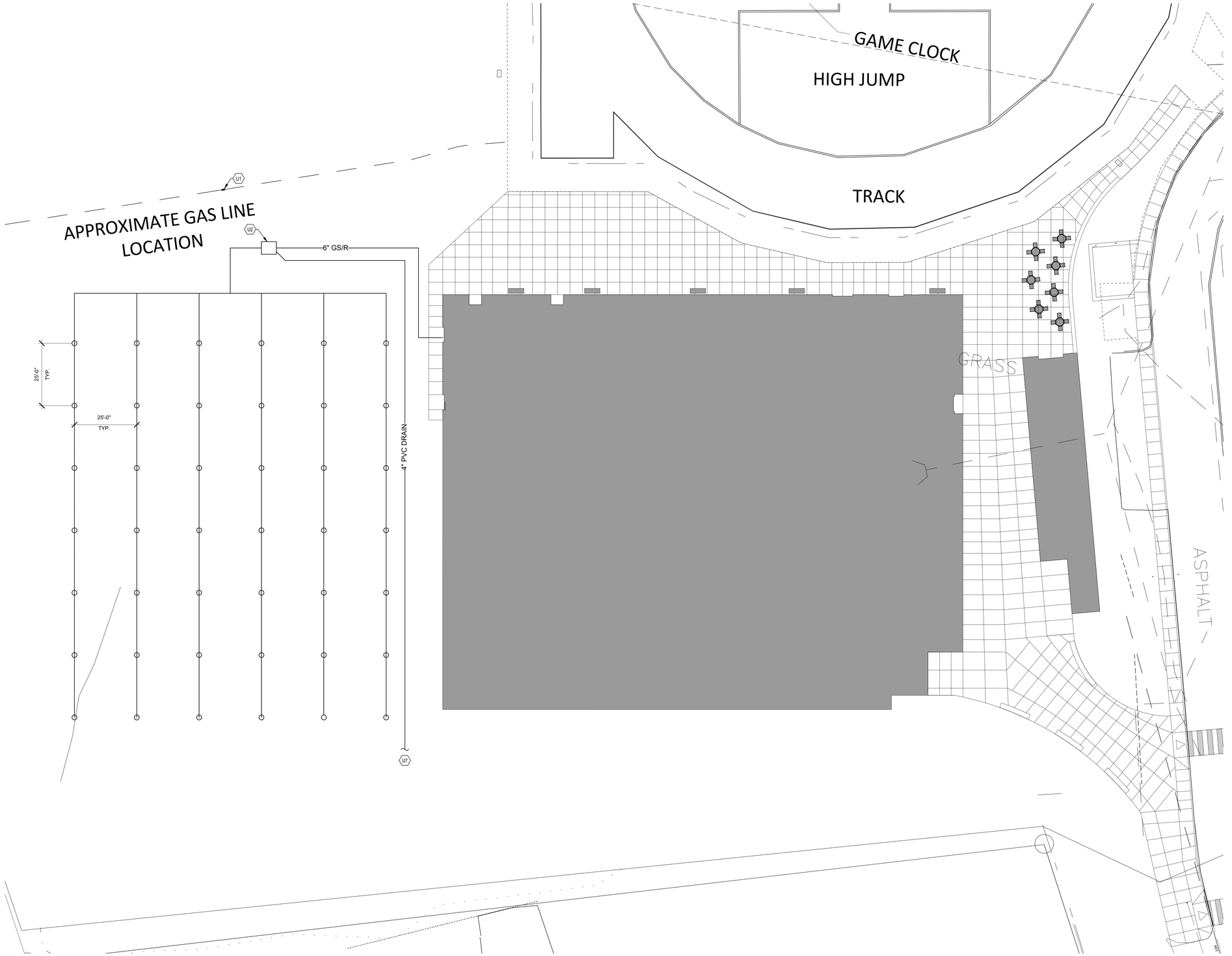
REVISIONS :

1	Addendum 1	08.28.24
2	Addendum 2	07.19.24

2023-50

M7.03

BG MOVING FORWARD



1 Bullitt Central - Mechanical Site Plan

SCALE: 1/16" = 1'-0"

TAGGED NOTES

(#)

- U1 APPROXIMATE GAS LINE LOCATION. GAS LINE TO BE LOCATED AND MARKED PRIOR TO DRILLING. AVOID LINE AS NECESSARY.
- U2 UNDERGROUND GEOTHERMAL VAULT. REFER TO GEOTHERMAL SITE DETAIL SHEET FOR MORE INFORMATION.
- U7 4" PVC DRAIN FROM GEOTHERMAL VAULT. REFER TO VAULT DETAIL FOR MORE INFORMATION. SLOPE DRAIN AT 1/8" PER FT. SPILL TO STORM SEWER. (APPROXIMATE LOCATION. REFER TO CIVIL FOR DETAILED LOCATION).

BEFORE YOU DIG:

THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONTACT "BUD (BEFORE YOU DIG)" AT 811 TO OBTAIN UNDERGROUND UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY CONTRACTOR OR SUBCONTRACTOR PERFORMING ANY TYPE OF EXCAVATION ON THIS PROJECT SHALL CALL "BUD" TO OBTAIN AN AUTHORIZATION NUMBER.

GENERAL NOTES:

A. ALL GEOTHERMAL PIPING INSTALLED AS PART OF THIS PROJECT SHALL BE SURVEYED BY A LAND SURVEYOR LICENSED IN THE STATE OF KENTUCKY. THE SURVEY SHALL BE FURNISHED ON A COMPACT DISC IN AUTOCAD ".DWG" FORMAT AND PDF FORMAT. ALSO FURNISH ONE MYLAR COPY. ALL VERTICAL BORES SHALL BE LOCATED WITH A GPS LOCATOR, AND THE GPS COORDINATE INCLUDED ON THE RECORD DRAWINGS.
B. REFER TO DRAWING UM1.1 AND SPECIFICATIONS FOR BURY DEPTH AND BACKFILL INFORMATION.

WELLFIELD INFORMATION:

NUMBER OF WELLS - 42
NUMBER OF INDEPENDENT CIRCUITS - 6
NUMBER OF WELLS PER CIRCUIT - 7
DEPTH OF WELL - 600'
WELL PIPE SIZE - 1 1/4"
WELL SPACING - 25' O-C
WELL FIELD FLOW - 360 GPM

UNDISTURBED FORMATION TEMPERATURE = 57.9° F
THERMAL CONDUCTIVITY = 1.51 BTU/HR-FT-°F
THERMAL DIFFUSIVITY = 1.01 FT²/DAY

WELL FIELD FLUSHING & PURGING REQUIREMENTS:

1. THE ENTIRE WELL FIELD SHALL BE FLUSHED WITH WATER TO REMOVE ANY DEBRIS (DIRT, PIPING SHAVINGS AND OTHER FOREIGN MATERIALS) TRAPPED WITHIN THE PIPING. REFER TO SPECIFICATIONS AND DRAWINGS FOR MORE INFORMATION.
2. FILL THE WELL FIELD WITH CLEAN WATER AND PURGE. PURGING FLOW RATE FOR A BORE SHALL BE A MINIMUM FLOW OF 15 GPM PER BORE. MAINTAIN 200 GPM MINIMUM PER CIRCUIT FOR 6 BORE CIRCUITS. THIS TOTAL FLOW RATE SHALL BE MAINTAINED FOR A MINIMUM OF (4 HOURS PER CIRCUIT) TO REMOVE AIR DEBRIS FROM THE HEAT EXCHANGER LOOP.
3. THE WELL FIELD PURGE SHALL BE WITNESSED AND VERIFIED BY A TEST & BALANCE (T&B) CONTRACTOR AND OWNER. THE T&B CONTRACTOR SHALL VERIFY THAT THE MINIMUM FLOW RATE AND VELOCITY IS ACHIEVED. ADDITIONALLY, THE T&B CONTRACTOR SHALL MEASURE THE TOTAL HEAD REQUIRED TO FLOW THE MINIMUM PURGE RATE REQUIREMENTS.
4. AFTER FLUSHING AND PURGING IS COMPLETE, BUT PRIOR TO BACKFILL THE CONTRACTOR SHALL TEST THE SYSTEM TO CONFIRM THERE HAVE NOT BEEN ANY FABRICATION OR INSTALLATION ERRORS. THIS SHALL BE ACCOMPLISHED BY MEASURING AND RECORDING CIRCUIT PRESSURE DIFFERENTIALS (WITH PURGING FLOW RATES) AT THE SUPPLY AND RETURN PIPING WITHIN THE VAULT. THE PRESSURE DROP THROUGH THE CIRCUITS (UTILIZING ACTUAL INSTALLATION CONFIGURATION) SHALL BE ESTIMATED BY THE CONTRACTOR AND REVIEWED BY THE ENGINEER. IF INCONSISTENCIES ARISE FROM THE PROCESS, THIS CONTRACTOR SHALL INVESTIGATE AND REMEDY THE PROBLEMS AND RE-TEST THE CIRCUIT(S) AT NO ADDITIONAL COST.

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

BG MOVING FORWARD

MECHANICAL SITE PLAN – BULLITT CENTRAL

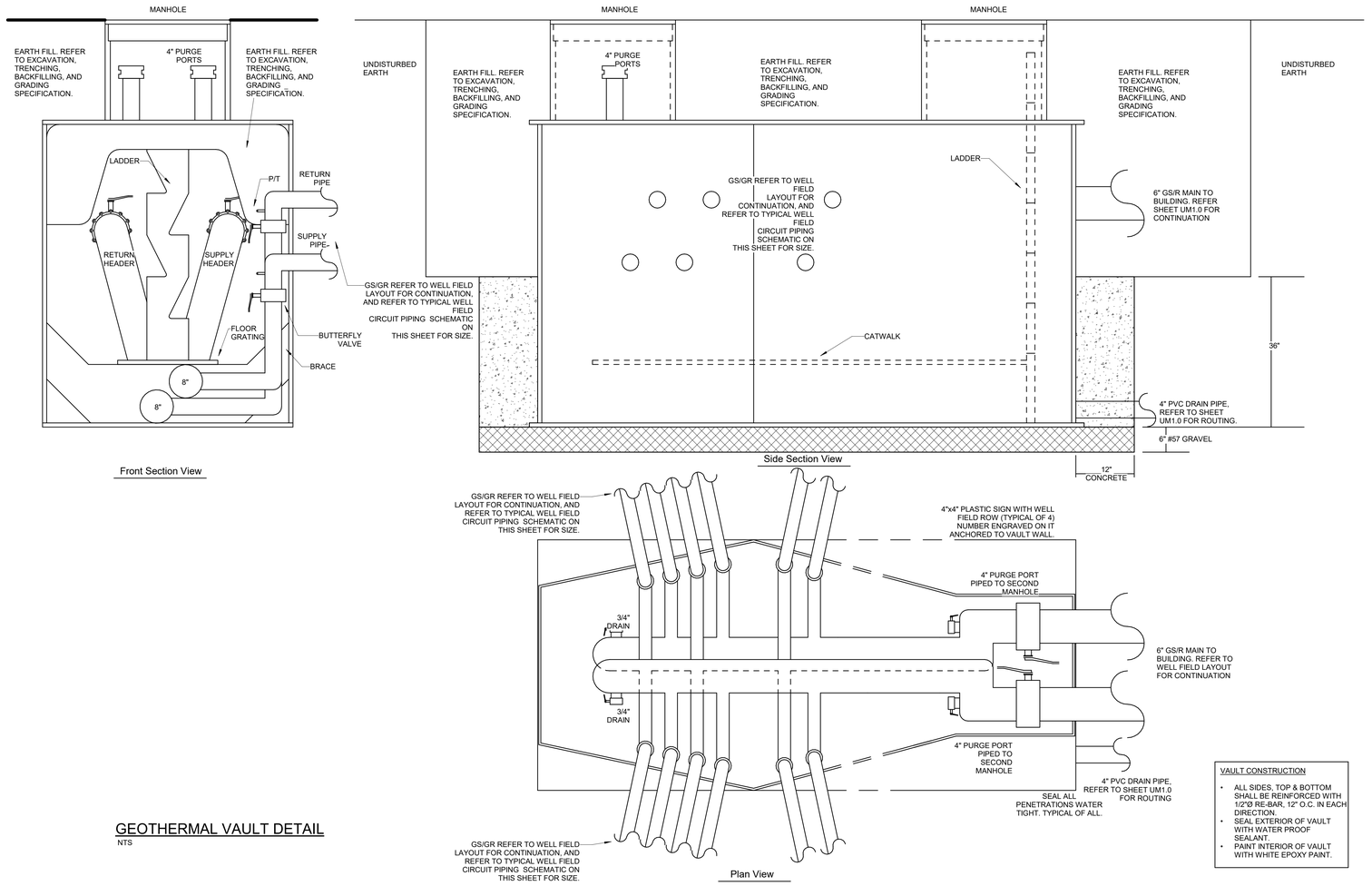
PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
CHECKED BY : JRE
REVISIONS :
2 Addendum 2 07.08.24

2023-50

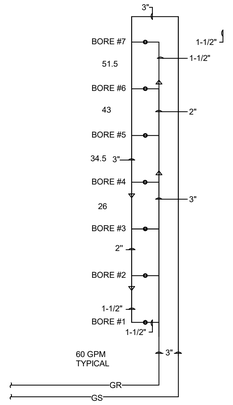
UM1.01
BCHS



GEOTHERMAL VAULT DETAIL
NTS

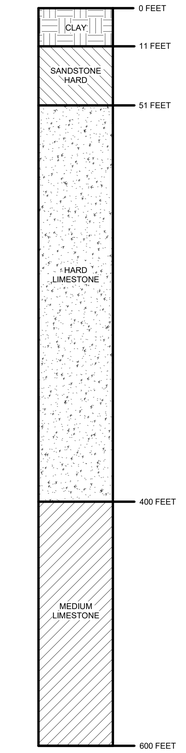
VAULT CONSTRUCTION

- ALL SIDES, TOP & BOTTOM SHALL BE REINFORCED WITH 1/2"Ø RE-BAR, 12" O.C. IN EACH DIRECTION.
- SEAL EXTERIOR OF VAULT WITH WATER PROOF SEALANT.
- PAINT INTERIOR OF VAULT WITH WHITE EPOXY PAINT.



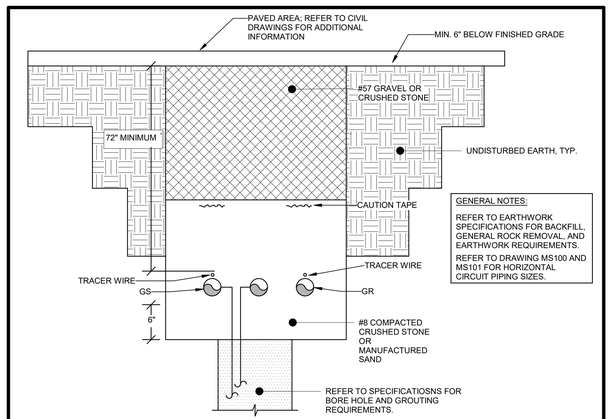
NOTES:
1) PIPE SIZES TYPICAL
2) WELLS SHALL BE LOCATED ON 25 FOOT CENTERS.

TYPICAL WELLFIELD CIRCUIT PIPING SCHEMATIC
NTS

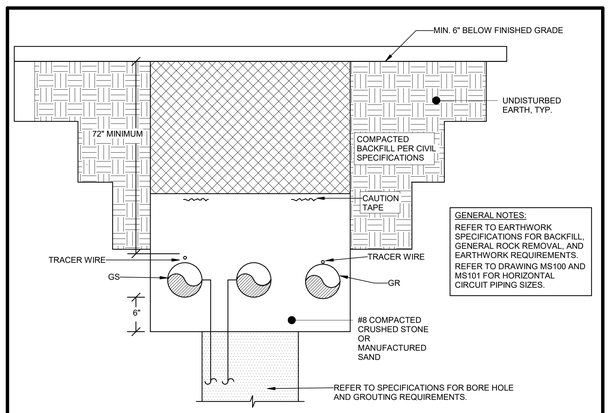


BORE LOG - (FROM TEST BORE)
NOT TO SCALE

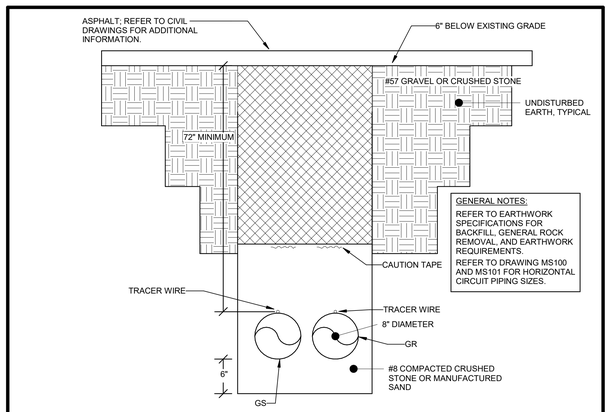
BORE LOG NOTES:
1. BORE HOLE DIAMETER: 6.25" FROM 0-600 FT.
2. 1 1/4" HDPE PIPING WAS INSTALLED AND ENTIRE BORE WAS BACKFILLED WITH GEOPRO TG LITE GROUT AND SAND/WATER MIXTURE.
3. PVC CASING INSTALLED TO 12 FT DEPTH.



TYPICAL GEOTHERMAL TRENCH DETAIL FOR PAVED AREAS
NTS



TYPICAL GEOTHERMAL TRENCH DETAIL FOR GRASSY AREAS
NTS



GEOTHERMAL MAINS TRENCHING DETAIL
NOT TO SCALE

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

MECHANICAL SITE DETAILS – BULLITT CENTRAL

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BS-25-145

BG# 24-192

DATE : 06.24.2024
DRAWN BY : SJB
CHECKED BY : JRE
REVISIONS :
2 Addendum 2 07.08.24

2023-50

UM1.11
BCHS

ELECTRICAL GENERAL NOTES:

A. EACH CONTRACTOR, PROPOSER, SUPPLIER AND/OR MANUFACTURER SHALL REFER TO ALL DOCUMENTS PERTAINING TO THIS PROJECT AND COORDINATE ACCORDINGLY SO AS TO ENSURE ADEQUACY OF FIT, COMPLIANCE WITH SPECIFICATIONS, PROPER VOLTAGE AND CURRENT CHARACTERISTICS TO AVOID CONFLICT WITH ANY OTHER BUILDINGS 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.
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. ALL OFFSETS, TURNS, FITTINGS, TRIM, DETAIL, ETC. MAY NOT BE INDICATED, BUT SHALL BE PROVIDED AS REQUIRED. ADDITIONAL ALLOWANCES SHALL BE INCLUDED FOR SAME AT EACH PROPOSER'S DISCRETION.
F. INSTALL NO PIPING, CONDUIT, DUCTWORK, ETC. IN A LOCATION OR IN A MANNER WHICH WILL ALLOW FREEZING OR THE COLLECTION OF CONDENSATION THEREON. IF IN DOUBT, CONTACT THE ENGINEER.
G. ADVISE THE ENGINEER OF ANY CONFLICTS, ERRORS, OMISSIONS, ETC. AT LEAST TEN DAYS PRIOR TO BID DATE, TO ALLOW CLARIFICATION BY WRITTEN ADDENDUM.
H. WHERE CONFLICTS ARE FOUND BETWEEN DRAWINGS, DETAILS, OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY. NOTIFY ARCHITECT OF DISCREPANCY IN WRITING.
I. 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.
J. OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, STATE, FEDERAL, MUNICIPALITY, UTILITY COMPANY, OSHA, ETC.).
K. 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.
L. 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 FOR CLARIFICATION.
M. DO NOT RECESS PANELBOARD TUBS OR OTHER FLUSH-MOUNTED EQUIPMENT IN WALLS THAT HAVE A FIRE RATING. NO INSTALLATION SHALL DIMINISH OR VOID FIRE RESISTIVE RATINGS IN ANYWAY.
N. THE PURPOSE AND INTENT OF ALL OF THE DOCUMENTS PERTAINING TO THIS PROJECT IS TO PROVIDE A COMPLETE, FUNCTIONAL, SAFE, LIKE-NEW FACILITY. ANYTHING LESS SHALL BE UNACCEPTABLE.
O. 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 DETERMINATION OF THE ACCEPTABILITY OF THE QUALITY OF WORK RESIDES WITH THE ENGINEER.
P. 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.
Q. UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL EQUIPMENT AND/OR MATERIALS WITHIN OCCUPIED SPACES OR EXPOSED TO VIEW ON THE BUILDING EXTERIOR SHALL BE PRIMED AND FINISHED SO AS TO COMPLEMENT ADJACENT SURFACE, UNLESS OTHERWISE NOTED. COORDINATE WORK AND COLORS WITH ARCHITECT.
R. WHERE PENETRATING ROOFING MEMBRANE OR OTHER MATERIALS USED FOR WEATHERPROOFING THE BUILDING, MAKE SUCH PENETRATION IN A WAY THAT WILL NOT VOID OR DIMINISH THE ROOFING WARRANTY OR INTEGRITY IN ANYWAY. COORDINATE ALL SUCH PENETRATIONS WITH THE ROOFING MANUFACTURER AND ARCHITECT.
S. 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.).
T. COORDINATE WITH ARCHITECTURAL FLOOR PLANS, ELEVATIONS AND CASEWORK DETAILS FOR LOCATION OF ADDITIONAL RECEPTACLES, UTILITY OUTLETS, ELECTRICAL DEVICES, ETC.
U. CEILING-MOUNTED ELECTRICAL DEVICES SHALL BE CENTERED IN 2'X2' CEILING TILE AND INSTALLED CENTERED ON 2' DIMENSION OF 2'X4' TILE AND ON CENTERLINE OR A QUARTER POINT ON 4' DIMENSION.
V. ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTORS' EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.
W. CHECK ALL THREE PHASE MOTORS WITH A PHASE ROTATION METER, PRIOR TO PLACING IN SERVICE.
X. PROVIDE DETAILED SHOP DRAWINGS TO ENGINEER PRIOR TO PURCHASING OR INSTALLING ANY EQUIPMENT
Y. DEVIATIONS IN SIZES, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT PRIME SPECIFIED SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEER OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
Z. THE CONSTRUCTION MANAGER, GENERAL CONTRACTOR, OR WHOMEVER HOLDS THE PRIME CONTRACT(S) 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 RESOLVED BY THE PARTY WHO ENGAGED THEM ON THIS PROJECT.
AA. 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.
BB. WHERE FIRE-RATED CEILING ASSEMBLIES ARE NOTED, PROVIDE UL-LISTED FIRE-RATED GYPSUM BOARD OR PRE-MANUFACTURED ENCLOSURES ABOVE LUMINAIRES, CEILING DEVICES, ETC. IN OR ON CEILING, AS REQUIRED TO MAINTAIN CEILING RATINGS.
CC. COORDINATE THE LOCATION OF DRAINS, ELECTRICAL OUTLETS, GAS OUTLETS, ETC. WITH ALL CASEWORK, KITCHEN 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(S).
DD. ALL ELECTRICAL COMPONENTS OR EQUIPMENT SHALL BE LISTED AND LABELED BY UNDERWRITER'S LABORATORIES OR OTHER APPROVED LISTING AGENCY. APPROVAL AND LABELING OF INDIVIDUAL COMPONENTS ON AN ASSEMBLY IS NOT ACCEPTABLE AS MEETING THIS REQUIREMENT, UNLESS WAIVED BY THE ENGINEER IN WRITING.
EE. ALL WIRING SYSTEMS SHALL BE INSTALLED WITH A MINIMUM OF SPLICES. CONDUCTORS, WHETHER SINGLE OR MULTI-PAIR, SHALL BE INSTALLED CONTINUOUS INSOFAR AS POSSIBLE FROM TERMINAL POINT TO TERMINAL POINT.
FF. NO CONDUIT, SUPPORTS, ETC. SHALL BE RUN THROUGH ACCESS CLEARANCES OF EQUIPMENT BY OTHER TRADES (I.E. VAV BOXES). COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.
GG. 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 SUB-SERVICE FOR SAFETY PURPOSES. PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, TYPE, ETC. OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
HH. 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.
II. WHERE INTERRUPTING AN EXISTING UTILITY OR SERVICE DELIBERATELY OR ACCIDENTALLY, THE RESPONSIBLE CONTRACTOR SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME, PROVIDING PREMIUM TIME AS NEEDED.
JJ. REFER TO ARCHITECTURAL WALL ELEVATIONS (WHERE GIVEN) FOR HEIGHTS AND MOUNTING RELATIONSHIP OF OUTLETS AND EQUIPMENT. IF IN DOUBT, CONTACT ENGINEER FOR DIRECTION PRIOR TO ROUGH IN.
KK. FLUSH OR PEDESTAL 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 ROUGHING-IN ANY WORK.
LL. AS APPLICABLE, REFER TO ARCHITECTURAL PHASING PLANS AND PHASING BOUNDARIES ON THESE DRAWINGS FOR SEQUENCING OF WORK, FULL EXTENT OF AREAS INVOLVED, EXTENT OF CEILING WORK, ETC. PROVIDE TEMPORARY CONNECTIONS FOR CIRCUITS AND WORK AS REQUIRED TO MAINTAIN SEQUENCE OF THE WORK FROM PHASE TO PHASE.
MM. THIS 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.
NN. 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.
OO. INTERRUPTION OF ANY EXISTING SERVICES 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 MENTIONED TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED TWO WEEKS IN ADVANCE, IN WRITING. IF UTILITY COMPANY REQUIRES A LONGER NOTIFICATION PERIOD, SO PROVIDE.
PP. 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.
QQ. JUNCTION BOXES LOCATED ABOVE ACCESSIBLE CEILINGS SHALL BE LOCATED NO MORE THAN 36" ABOVE CEILING LEVEL. LABEL EACH BOX IN AREA OF WORK WITH A PERMANENT MARKER OR IN ACCORDANCE WITH SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
RR. ALL MATERIALS FURNISHED 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.
SS. DO NOT SCALE FROM DRAWINGS, AS PRINTING DISTORTS SCALE. WORK SHALL BE LAID OUT FROM DIMENSIONED DRAWINGS, OR DIMENSIONS SUPPLIED TO THE CONTRACTOR.
TT. 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.
UU. ALL ITEMS HAVING KEYED LOCKS/OPERATORS SHALL HAVE CORED LOCKS/OPERATORS. ALL KEYING SHALL MATCH THE OWNER'S EXISTING KEY-WAYS. COORDINATE EXACT REQUIREMENTS WITH OWNER PRIOR TO CONSTRUCTION.
VV. REFER TO ARCHITECTURAL PLANS FOR PHASING REQUIREMENTS. WORK SHALL BE COMPLETED IN PHASES PER THE PHASING PLAN AND AS COORDINATED WITH OWNER AND GENERAL CONTRACTOR. PROVIDE ALL REQUIRED INCREMENTAL INSPECTIONS, CERTIFICATIONS, ETC. AND ALL TEMPORARY SERVICES AS REQUIRED BY OWNER TO ACCOMPLISH THE PHASING PLAN.
WW. AT ALL OUTBUILDING, PROVIDE A SEPARATE GROUND ROD FOR STRUCTURE.
XX. MANY EXISTING UNDERGROUND PRIVATE UTILITIES EXISTING IN AREAS OF RENOVATION. CONTRACTOR SHALL TAKE CARE TO WORKK AROUND/OFFSET FROM EXISTING UTILITIES. HYDRO EXCAVATE AS REQUIRED.

DESCRIPTION	MOUNTING HEIGHT (TO CENTER OF BOX)	DRAWING SYMBOL
SWITCHES		
LIGHT SWITCH:GENERAL PURPOSE	46"	$
THREE-WAY SWITCH	46"	$3
FOUR-WAY SWITCH	46"	$4
KEYED SWITCH	46"	$K
DIMMER SWITCH	46"	$D
LIGHT SWITCH FOR UNDER-CABINET LIGHTS	46"	$U
ILLUMINATED HANDLE LIGHT SWITCH (ILLUMINATED WHEN LOAD IS OFF)	46"	$IL
PILOT LIGHT SWITCH (ILLUMINATED WHEN LOAD IS ON)	46"	$PL
NON-REVERSING MOTOR STARTER SNAP SWITCH	AS NOTED	$M
MOMENTARY CONTACT SWITCH	46"	$MC
TIMER SWITCH - SHALL BE A 6 HOUR ROTARY WOUND LINE VOLTAGE TIMER CONTROL WITH STAINLESS STEEL FRONT PLATE - TORK OR INTERMATIC.	46"	$T
OCCUPANCY OR VACANCY SENSOR SWITCH	46"	$OS,$VS,$SD
OCCUPANCY OR VACANCY SENSOR SWITCH W/ DIMMING	46"	$OSD,$
DIGITAL WALL SWITCH (REFER TO DETAIL)	46"	$LV[X]
OCCUPANCY OR VACANCY SENSOR, CEILING MOUNT	CLG	(VS) (VS)
OCCUPANCY OR VACANCY SENSOR, WALL MOUNT	WALL	(OS) (VS)
DAYLIGHT SENSOR AS NOTED	AS NOTED	(DS)
EMERGENCY AUTOMATIC RELAY (UL924) FOR LIGHTING CONTROLS (REFER TO DETAIL)		ER
EMERGENCY AUTOMATIC TRANSFER DEVICE UL1008) FOR LIGHTING CONTROLS (REFER TO DETAIL)		ET
INDICATES CONTROL ZONE, DAYLIGHT ZONE OR BOTH - REFER TO DETAIL		
POWER OUTLETS		
ALL RECEPTACLES ARE REQUIRED TO BE TAMPER RESISTANT		
SIMPLEX RECEPTACLE	1'-6"	
DUPLEX RECEPTACLE	1'-6"	
SLASH THROUGH ANY DEVICE INDICATES MOUNTING ABOVE COUNTERTOP 4" ABOVE BACKSPLASH, OR AT 46" WHERE NO COUNTER IS PRESENT		
FILLED CENTER BAR INDICATES INTEGRAL GROUND FAULT PROTECTION (GFCI)	1'-6"	
DEAD FRONT GFCI DEVICE, LABEL AND INSTALL IN READILY ACCESSIBLE LOCATION		(G) G
FILLED OUTER BARS INDICATES INTEGRAL INTEGRAL USB OUTLETS IN ADDITION TO POWER RECEPTACLES	1'-6"	
GANG RECEPTACLE IN COMBINATION WITH SWITCH (PROVIDE DIVIDER IF LIGHTING CIRCUIT IS 277V)	46"	C/S
DUPLEX RECEPTACLE, CEILING MOUNTED - MOUNTED AT STRUCTURE OR FLUSH IN HARD CEILING.	CLG	
QUADRUPLEX RECEPTACLE	1'-6"	
JUNCTION BOX, CEILING OR WALL		(J) KJ
VOLTAGE/1PH RECEPTACLE, AS NOTED	AS NOTED	
VOLTAGE/3PH RECEPTACLE, AS NOTED	1'-6"	
"DOG-HOUSE" TYPE TWIN DUPLEX RECEPTACLE WITH ONE DUPLEX RECEPTACLE ON BOTH SIDES	ON CNTR.	DP
SS INDICATES SURGE SUPPRESION TYPE OUTLET(S)		SS
GROUND FAULT BREAKER PROTECTED DUPLEX WITH WEATHER-PROOF "WHILE IN USE" TYPE DIE-CAST METAL COVERPLATE WITH LOCKABLE ENCLOSURE AT OUTLET - SEE SPECIFICATIONS	2'-2"	WP
DUPLEX FOR ELECTRIC WATER COOLER: COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR TO CONCEAL OUTLET BEHIND COOLER, PROVIDE BREAKER TYPE GFCI PROTECTION WITH OUTLET LABEL.		EWC
KITCHEN PEDESTAL DUPLEX - SEE DETAIL		K
BASE MOUNTED BOOKSHELF OUTLET - SEE DETAIL		BS
FIRE ALARM		
MAIN CONTROL PANEL CENTRAL PROCESSING UNIT (CPU)	6'-6" TO TOP	FACP
PULL STATION : DOUBLE ACTION W/ STOPPER COVER AND BATTERY BUZZER STI #11XX	46" TO LEVER	F
KEYED, LOCKED PULL STATION : DOUBLE ACTION. STATION SHALL ONLY BE OPERABLE VIA KEY IN POSSESSION OF STAFF.	46" TO LEVER	F K
AUDIO/VISUAL NOTIFICATION APPLIANCE	WALL, CLG	F (F)
AUDIO-ONLY NOTIFICATION APPLIANCE	WALL, CLG	A (A)
VISUAL-ONLY NOTIFICATION APPLIANCE	WALL, CLG	V (V)
BELL / LIGHT	80"	BL
BELL ONLY	80"	B
PHOTO-ELECTRIC SMOKE DETECTOR	CLG	SD
HEAT DETECTOR	CLG	HD
CARBON MONOXIDE ALARM: SINGLE STATION W/SOUNDER BASE	CLG	CM
DOOR HOLDER : WALL TYPE	WALL	DH
DOOR HOLDER : CLOSURE TYPE	ABV DOOR	DH C
DUCT SMOKE DETECTOR	ABV CLG	DD
CONNECTION TO SPRINKLER FLOW SWITCH WITH ADDRESSABLE MODULE		FS
CONNECTION TO SPRINKLER TAMPER SWITCH WITH ADDRESSABLE MODULE		TS
CONNECTION TO SPRINKER PRESSURE SWITCH WITH ADDRESSABLE MODULE		PS
REMOTE L.C.D. FIRE ALARM ANNUNCIATOR	54"	FAA
REMOTE FIRE ALARM ANNUNCIATOR W/ MICROPHONE	54"	FAAM
POST INDICATOR VALVE		PIV
POWER SUPPLY/CONTROL FOR AUDIO/VISUAL DEVICES	46"	NAC
FIRE ALARM SURGE PROTECTIVE DEVICE		SPD
ISOLATION MODULE	WALL	I
ZONE ADDRESSABLE MODULE		Z
H.V.A.C. SMOKE DAMPER CONNECTION		SM
FLUSH MOUNTED REMOTE ALARM INDICATING STATION/TEST SWITCH	7'-6"	RI
FIREMAN'S PHONE JACK	4'-6"	FP
FIREMAN'S KNOX BOX CONNECTION		KB
ADDRESSABLE RELAY MODULE		R
INDICATES VANDAL-PROOF POLYCARBONATE COVER. VANDAL PROOF COVERS SHALL BE UL LISTED FOR USE WITH THE SPECIFIC DEVICE THEY ARE PROTECTING		PC
INDICATES CHIME AUDIBLE NOTIFACTION		CH
DEVICE USED FOR ELEVATOR CONTROL		EL
DEVICE PROVIDED WITH WIREGUARD PROTECTION		WG

DESCRIPTION	MOUNTING HEIGHT (TO CENTER OF BOX)	DRAWING SYMBOL
LIGHTING		
REFER TO LUMINAIRE SCHEDULE FOR EXACT FIXTURE SPECIFICATIONS, MOUNTING HEIGHTS, ETC.		
SURFACE OR SUSPENDED CEILING FIXTURE (SLASH INDICATES RECESSED)		
POLE MOUNTED AREA LIGHT		
EMERGENCY BATTERY WALL-PACK		
WALL MOUNT FIXTURE		
FLOODLIGHT		
SURGICAL/EXAM LIGHT		SL,XL
EXIT LIGHT (CEILING, END, WALL MOUNT)		
STRIP FIXTURE		
CROSS-HATCHING INDICATES LIGHT IS POWERED FROM THE EMERGENCY-CRITICAL BRANCH		
PARALLEL-HATCHING INDICATES LIGHT IS POWERED FROM THE EMERGENCY-LIFE SAFETY BRANCH		
MISCELLANEOUS		
CONDUIT CONCEALED IN WALLS OR IN CEILING SPACE: ARROW(S) INDICATE(S) HOME RUN & # OF CIRCUITS: HASHMARKS INDICATE # OF CONDUCTORS. DASHED LINE INDICATES CONDUIT BELOW FLOOR.		GROUND NEUTRAL PHASE
DISCONNECT SWITCH	5'-0"	
MAGNETIC STARTER	5'-0"	
MAGNETIC COMBINATION STARTER	5'-0"	
VARIABLE FREQUENCY DRIVE	5'-0"	
ENCLOSED FLUSH MTD. CIRCUIT BREAKER	5'-0"	
CIRCLE ON ANY DEVICE INDICATES DEVICE FED FROM STUB UP CONDUIT.		
WIREWAY WITH REMOVABLE COVER (SIZE AS NOTED)	AS SHOWN	
TRENCH DUCT (SIZE AS NOTED)	AS SHOWN	
EM POWER OFF STATION WITH BUZZER COVER STI STI #STI-13020CY WITH "EMERGENCY POWER OFF" LABEL	46"	EPO
FLEXIBLE CONDUIT		
PANELBOARD, SURFACE OR FLUSH MOUNTED, HATCHING INDICATES EMERGENCY	6'-6" TO TOP	
TRANSFORMER	AS NOTED	
EQUIPMENT TAG, REFER TO EQUIPMENT SCHEDULE		EQUIP-1
TAGGED NOTE		
REVISION TAG		
MECHANICAL EQUIPMENT DESIGNATOR (SEE MECH SCHEDULES)		
WIRE BASKET CABLE TRAY, SIZE AS NOTED	AS SHOWN	
LADDER CABLE TRAY, SIZE AS NOTED	AS SHOWN	
SOLID BOTTOM CABLE TRAY, SIZE AS NOTED	AS SHOWN	
LOW VOLTAGE CABLE PATH		
DOORBELL PUSHBUTTON STATION, PROVIDE COMPLETE WITH TRANSFORMER (MOUNT ABOVE CEILING IN CORRIDOR NEAR PUSH-BUTTON) AND ALL ACCESSORIES, POWER FROM NEAREST AVAILABLE 120V NORMAL POWER GENERAL RECEPTACLE CIRCUIT, EDWARDS 691-W AND 147 GANG PLATE.	46"	DB
DOORBELL AUDIO STATION, PROVIDE PROVIDE CONNECTION TO PUSHBUTTON STATION IN AREA. EDWARDS 340 4" BELL, SURFACE BELL, RECESSED BACKBOX.	7'-6"	DA
EQUIPMENT HARDWIRE CONNECTION (SEE DETAIL)		
KITCHEN EQUIPMENT OUTLET COUPLING CONNECTION (SEE DETAIL)		K
MOTOR CONNECTION, REFER TO EQUIPMENT CONNECTION SCHEDULE		C
INDICATES MOUNTING ABOVE COUNTER-TOP, 2" ABOVE BACKSPLASH, NO HIGHER THAN 48"		
WIREGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR APPLICATION NOTED		WG
WEATHERPROOF - NEMA-3R, WET LOCATION LISTED. PROVIDE COVERS, RATINGS, ETC, AS SUITABLE FOR OUTDOORS.		WP
EXPLOSION PROOF - PROVIDE WIRING METHODS, ENCLOSURES, RATINGS, ETC. AS SUITABLE FOR HAZARDOUS LOCATION.		XP
INDICATES EMERGENCY POWER		E,EM
INDICATES MULLION MTD - PROVIDE CUT-IN BOX AND FLEXIBLE METAL CONDUUIT TO ABOVE CEILING IN MULLION. COORDINATE WITH SHOP DRAWINGS.		M
PLUMBING FIXTURE SOLENOID VALVE/ELECTRIC EYE SENSOR CONNECTION. COORDINATE EXACT CONNECTION REQUIREMENTS WITH MANUFACTURER.		
PLUMBING FIXTURE ELECTRIC EYE TRANSFORMER CONNECTION. TRANSFORMER SHALL BE 120V-24V, MOUNT ABOVE SUSPENDED ACCESSIBLE CEILING IN J-BOX. PROVIDE ADDITIONAL TRANSFORMERS OF SAME TYPE AS/IF NEEDED		
PROVIDE CONNECTION TO HAND DRYER (SEE ARCHITECTURAL SPECIFICATIONS)	VERIFY WITH ARCHITECT	
SURGE PROTECTION DEVICE		SPD
GENERATOR ANNUNCIATOR PANEL - SEE SPECIFICATIONS	46"	GEN-A
THERMOSTAT PROVIDED BY MECHANICAL CONTRACTOR, ELECTRICAL CONTRACTOR SHALL PROVIDE BACK-BOX CONDUIT STUB-UP, REFER TO MECHANICAL DRAWINGS FOR LOCATIONS		T
CLASSROOM WIRING TROUGH, DATA, TOKEN RING, COAX AND BREAKERS TO BE REMOVED		CT
GROUND BUS BAR ON INSULATED STANDOFFS	2'-0"	
PROJECTOR		P
ELEVATOR LANDING TWO WAY COMMUNICATION STATION		(TW)
ELEVATOR LANDING TWO WAY COMMUNICATION MASTER STATION		(TW) M
		TW-P

DESCRIPTION	MOUNTING HEIGHT (TO CENTER OF BOX)	DRAWING SYMBOL
ABBREVIATIONS		
UNLESS OTHERWISE NOTED		UON
OWNER FURNISHED CONTRACTOR INSTALLED		OFCI
OWNER FURNISHED OWNER INSTALLED		OFOI
CONTRACTOR FURNISHED CONTRACTOR INSTALLED		CFCI
CONTRACTOR FURNISHED OWNER INSTALLED		CFOI
INDICATES EMERGENCY POWER		EM
FLOOR OUTLETS AND DEVICES		
FLOORBOX, 2 GANG PROVISION FOR (2) DUPLEX OUTLETS AND (2) GANG PROVISION FOR (2) DATA, (2) GANG PROVISION FOR FOR FUTURE AV LEGEND INFRARE-OG WITH SURFACE OR FLUSH 8" ROUND CPVER AND FINISH AS SELECTED BY ARCHITECT, HUBBELL EQUAL. PROVIDE 1" CONDUIT TO ABOVE CEILING FFOR DATA AND 1" FOR AV.	FLOOR	FB-A
CONNECT-TRAC SURFACE RACEWAY AND FLOOR BOX SYSTEM	FLOOR	FB-CT
CONNECT TRACK FLOOR RACEWAY WALL FEED IN POINT	7'-0" OR AS INDICATED	CT
OVERHEAD PAGING		
PAGING SPEAKER: CEILING	CLG	S
PAGING SPEAKER W/ VOLUME CONTROL	CLG	SV
AIRCRAFT CABLE PENDANT SUSPENDED SPEAKER	CABLE	SW
SURFACE/JOIST MOUNTED SPEAKER	SURFACE	SS
PAGING SPEAKER: WALL	8'-0"	S
CLASSROOM PAGING IP MODULE	8" ABOVE CEILING	B
EXTERIOR VANDAL PROOF / WEATHERPROOF WALL MOUNTED PAGING SPEAKER, SHALL BE PAINTED COLOR SELECTED BY ARCHITECT/OWNER. QUAM 6VPS	SEE FLOOR PLANS	SE
CLOCKS		
ANALOG CLOCK		C
WIRELESS INTERCOM ANALOG CLOCK		IC
ABANDONDED DIGITAL CLOCK		DC
DIGITAL CLOCK: SINGLE FACE		DC
DIGITAL CLOCK: DUAL FACE		2DC
PANEL FURNITURE		
PANEL FURNITURE DUPLEX RECEPTACLE. PROVIDE ALL WIRING AS REQUIRED, COORDINATE EXACT INSTALLATION REQUIREMENTS AND LOCATIONS WITH OWNER'S PANEL FURNITURE VENDOR		
PANEL FURNITURE DATA/VOICE OUTLET. PROVIDE ALL WIRING AS REQUIRED, COORDINATE EXACT INSTALLATION REQUIREMENTS AND LOCATIONS WITH OWNER'S PANEL FURNITURE VENDOR		
POWER CONNECTION TO PANEL FURNITURE. PROVIDE SEAL-TIGHT CONDUIT CONNECTION FROM RECESSED WALL BOX TO PANEL FURNITURE. PROVIDE FINAL CONNECTIONS TO PANEL FURNITURE AS REQUIRED BY PANEL FURNITURE VENDOR	1'-6"	FP
COMBINATION POWER AND LOW VOLTAGE CONNECTION TO PANEL FURNITURE. PROVIDE SEAL-TIGHT CONDUIT CONNECTION FROM RECESSED WALL BOX TO PANEL FURNITURE. PROVIDE FINAL CONNECTIONS TO PANEL FURNITURE AS REQUIRED BY PANEL FURNITURE VENDOR	1'-6"	FF
DATA / VOICE		
DATA OUTLET : NUMBER BESIDE OUTLET INDICATES NUMBER OF DATA JACKS (NO # INDICATES (1) DATA DROP	1'-6"	#D
DATA OUTLET: WALL MOUNTED VOICE DEVICE. DEVICE SHALL BE PHONE MOUNT WITH VERTICAL DOG EARS FOR WALL PHONE MOUNTING.	46"	W
WIRELESS ACCESS POINT WITH PROVISIONS FOR (2) DATA OUTLETS FOR ANTENNA. PROVIDE A COMPLETE DATA OUTLET WITH PANDUIT MINICOM SURFACE BOX TERMINATED ON CABLE ABOVE CEILING HUNG FROM J-HOOK NO MORE THAN 24" ABOVE CEILING. AT EACH OUTLET, PROVIDE A 15' COIL OF CABLE AHEAD OF THE OUTLET FOR ADJUSTMENT OF FINAL OUTLET LOCATION. THE CONTRACTOR SHALL

GENERAL SITE WORK NOTES (APPLY TO ALL SITE DRAWINGS)

A. DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS.

B. REFER ALSO TO ALL OTHER PLANS AND THE SPECIFICATION, BUT ESPECIALLY TO:

- THE SITE SURVEY
- THE ARCHITECTURAL SITE PLAN
- THE SITE GRADING PLAN
- THE PLANTING PLAN (WHERE AVAILABLE)
- FOUNDATION PLAN(S)
- APPROPRIATE MECHANICAL & ELECTRICAL FLOOR PLANS FOR SERVICE CONTINUATIONS
- THE SITE UTILITY PLAN – MECHANICAL & ELECTRICAL

WHERE THERE ARE CONFLICTS AMONG THESE PLANS AND/OR RELATED SPECIFICATIONS, ADVISE THESE ENGINEERS AT LEAST TWELVE DAYS PRIOR TO SUBMISSION OF BIDS.

C. ALL FEES AND ANY OTHER COSTS TO UTILITY COMPANIES, MUNICIPALITIES, INSPECTORS, REVIEWING AGENCIES, ETC. ARE TO BE INCLUDED AS A PART OF THIS CONTRACT.

D. FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEEDED BY THIS DESIGN.

E. WHEN INTERRUPTION OF AN EXISTING UTILITY OR SERVICES IS PLANNED OR OCCURS ACCIDENTALLY, THE CONTRACTOR(S) SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED AT NO INCREASE IN THE CONTRACT PRICE.

F. PLANNED INTERRUPTION OF ANY SERVICE SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPALITY OR UTILITY COMPANY, THE ARCHITECT AND THE BUILDING OPERATORS AT LEAST ONE WEEK IN ADVANCE OF 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.

G. LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPURTENANCES, LINES, BUILDINGS, ETC. INDICATED ON THESE DRAWINGS WERE TAKE FROM VARIOUS SOURCES, ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO SUBSTANTIAL VARIATION FROM EXISTING CONDITIONS. EXISTING UTILITIES 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 PROPOSAL INDICATES THAT THE CONTRACTOR IS FULLY AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.

H. CONTRACTOR SHALL CUT AND PATCH ALL PAVEMENT, CURBING, etc. AS REQUIRED FOR WORK. CONTRACTOR SHALL REPAIR ALL LANDSCAPING THAT IS DAMAGED FOR WORK. FINISH GRADE, SEED AND STRAW ALL DISTURBED GREEN SPACES.

I. EXISTING SIGNAGE AND OTHER EXTERIOR LIGHTING CIRCUITS TO REMAIN ARE TO BE PROTECTED. WHERE A PANEL THEY ARE SERVED FROM IS REPLACED, INTERCEPT AND EXTEND TO REPLACEMENT PANEL.

J. NEW PULL BOX SIZES ARE MINIMUM OR AS REQUIRED FOR CONDUCTORS/PULL REQUIREMENTS.

K. SURFACES NOT REPAIRED BY OTHER SCOPES OF WORK SHOULD BE PATCHED AND REPAIRED BY THE ELECTRICAL CONTRACTOR AS COORDINATED WITH GENERAL CONTRACTOR.

L. AT ALL NEW FIELDS REFER TO GRAY HATCHED AREA ACROSS FIELD. CONTRACTOR SHALL COORDINATE BURIAL DEPTHS WITH TURF INSTALLATION TO ENSURE NO CONFLICT EXISTS.

M. ALL CONDUITS ROUTED BELOW FIELD/TURF TO BE SCHEDULE 80 PVC.

N. WHERE FIBER IS ROUTED THRU SCHOOL ABOVE CEILING, PROVIDE IN ORANGE INNERDUCT SUPPORTED BY EXISTING CABLING PATH OR J-HOOKS. WHERE FIBER IS EXPOSED IN MECHANICAL OR ELECTRICAL SPACE INDOOR, OUTSIDE OF IDF/MDF CLOSET, PROVIDE IN CONDUIT.

O. ALL ROUTINGS ARE DIAGRAMMATIC. NEW ROUTINGS WILL REQUIRE OFFSETS AND SHIFTS AS REQUIRED TO COORDINATE WITH EXISTING/NEW UTILITIES AND CONSTRUCTION. FIELD VERIFY EXACT REQUIREMENTS.

P. WHERE EXISTING UNDERGROUND FEED IS DEMOLISHED, REMOVE WIRE AND FILL WITH FLOWABLE FILL. UNDERGROUND RACEWAYS SHALL BE COORDINATED WITH FOUNDATIONS TO NOT ROUTE UNDER OR CONFLICT WITH INSTALLATION.

ELECTRICAL SITE UTILITIES LINE LEGEND

	EXISTING	DEMOLITION	NEW
OVERHEAD	——(E)OH——	— —(E)OH— —	——OH——
UNDERGROUND	– – –(E)UG– – –	– – –(E)UG– – –	——UG——
POWER POLE	(E)PP Ø	(E)PP Ø	PP Ø
SITE LIGHTS	□	□	□
ELECTRIC	—— ELEC ——		
TELEPHONE	—— TEL ——	COMMUNICATIONS ——	COMM ——
CABLE TV	—— CATV ——	FIBER ——	FIBER ——

SITE LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MODEL	LAMPS	REMARKS	VOLTAGE
OL2	30'-0" AREA LIGHT	MCGRAW EDISON #GALN-SA4B-740-U-T3-HSS LIGHTOLIER EQUAL	22322 LUMENS @164W	PROVIDE POLE BASE PER DETAIL. OAH HEIGHT OF FIXTURE TO BE 30'-0" WITH BASE	MVOLT

GENERAL INSTALLATION NOTE:

COORDINATE INSTALLATION AND PIPE CROSSINGS WITH ALL UTILITIES AND ALL TRADES TO AVOID INTERFERENCE AND TO ENSURE ALL CLEARANCES ARE MET PRIOR TO INSTALLATION.

BEFORE YOU DIG

THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONTACT "BUD (BEFORE YOU DIG)" AT 811 OR 1-800-752-6007 TO OBTAIN UNDERGROUND UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY CONTRACTOR OR SUBCONTRACTOR PERFORMING ANY TYPE OF EXCAVATION ON THIS PROJECT SHALL CALL "BUD" TO OBTAIN AN AUTHORIZATION NUMBER.

NEW LIGHT FIXTURE SCHEDULE GENERAL NOTES:

- ALL LUMINARIES AND LIGHTING CONTROL DEVICES SHALL BE UL LISTED.
- REFERENCE SPECIFICATION SECTION 265113 FOR ADDITIONAL REQUIREMENTS.
- "EQUAL" FIXTURES SHALL BE OF EQUAL OR BETTER QUALITY AND PERFORMANCE TO THE SPECIFIED FIXTURE. BURDEN OF PROOF SHALL BE ON THE MANUFACTURER AND SHALL BE PROVED UTILIZING POINT BY POINT CALCULATIONS 10 DAYS PRIOR TO BID.
- FIXTURES SHALL HAVE A CRI GREATER THAN 80.
- CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTORS TO ALL EMERGENCY LIGHTS, NIGHT LIGHTS, ETC. AS REQUIRED.
- LIGHT FIXTURES SHALL BE PROVIDED WITH MULTIPLE ELECTRONIC DRIVERS OR BI-LEVEL DRIVERS (STEP DIMMING) FOR MULTIPLE POWER CIRCUITS AS INDICATED ON FLOOR PLANS WHERE BI-LEVEL (STEP DIMMING) SWITCING AND CONTROL IS INDICATED.
- CONTRACTOR SHALL FOCUS, AIM AND ADJUST LIGHT FIXTURES UNDER THE SUPERVISION AND DIRECTION OF THE ENGINEER AND ARCHITECT. ALLOW LABOR FOR FINAL FOCUS AND ADJUSTMENTS AFTER DARK. LIFTS AND SCAFFOLDING SHALL BE AVAILABLE.
- CONFIRM ALL FINISHES AND MOUNTING HEIGHTS WITH ARCHITECT DURING SHOP DRAWING REVIEW. PROVIDE CUSTOM, FACTORY CUT STEM LENGTHS AS REQUIRED. NO ELEVATIONS SHALL BE ASSUMED AND WHERE REQUIRED SHALL BE REQUESTED FROM ARCHITECT ENGINEER AND LOCATED AS DIRECTED.
- REFER TO DRAWINGS FOR MOUNTING REQUIREMENTS, NUMBER OF FACES AND ARROWS (CHEVRONS) FOR ALL EXIT SIGNS.
- CONTRACTOR SHALL VERIFY CEILING TYPES PRIOR TO ORDERING FIXTURES AND PROVIDE FIXTURES APPROPRIATE TO THE ACTUAL CONDITIONS. THIS IS TO INCLUDE SPECIFIC TYPE OF LAY-IN CEILING GRID.
- CONTRACTOR SHALL VERIFY CEILING TYPES PRIOR TO ORDERING FIXTURE AND PROVIDE FIXTURES APPROPRIATE TO THE ACTUAL CONDITION. THIS IS TO INCLUDE SPECIFIC TYPE OF LAY-IN CEILING GRID.
- ALL LUMINARIES SHALL HAVE INTERNAL FAST-BLOW FUSING.
- ALL LIGHT LUMINAIRES, INCLUDING PENDANTS AND DOWNLIGHTS, SHALL HAVE A "MAXIMUM WATTAGE LABEL" AFFIXED TO EACH FIXTURE BY THE MANUFACTURERS FACTORY. MAXIMUM WATTAGE TO BE BASED ON THE SPECIFIED LIGHT ENGINE AND/ORE DRIVER FROM THE LIGHT FIXTURE SCHEDULE.
- ALL LAY-IN FIXTURES SHALL BE PROVIDED WITH SCREW ON HOLD DOWN CLIPS.
- FIXTURE WHIPS SHALL BE 1/2" FLEXIBLE METAL CONDUIT, WITH CLAMP-ON STEEL FITTINGS AT EACH END, SIX FOOT MAXIMUM LENGTH, WITH INSULATED THROAT BUSHINGS AT EACH END AND BONDING LOCKNUTS. WIRING THRU WHIP SHALL BE #12, WITH #12 GROUND BONDED TO OUTLET AT SOURCE END.
- ACCESS SCREWS FOR ALL FIXTURES SHALL HAVE PHILLIPS HEADS. NO TAMPER RESISTANT SCREWS SHALL BE ALLOWED FOR ANY FIXTURES.
- ALL RECESSED TROFFERS SHALL BE SUPPORTED FROM STRUCTURE FROM ALL FOUR CORNERS. HURRICANE CLIPS SHALL BE INSTALLED FOR ALL FIXTURES IN LAY-IN CEILING. SUPPORT WIRES SHALL BE ATTACHED TO CORNER OF FIXTURES AND SHALL NOT BE ATTACHED TO HURRICANE CLIPS.
- ALL LUMINAIRES SHALL BE 0-10V DIMMABLE, U.O.N.
- FIXTURES AND ASSOCIATED ON-BOARD CIRCUITY MUST MEET CLASS A EMISION LIMITS REFERRED TO IN FEDERAL COMMUNICATIONS COMMISSION (FCC) TITLE 47, SUBPART B, SECTION 15 NON-CONSUMER REQUIREMENTS FOR EMI/RFI EMISSIONS. ANY ADDITIONAL MATERIALS AND LABOR REQUIRED TO ADDRESS EMI/RFI ISSUES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
- CONTRACTOR SHALL PROVIDE SHOP DRAWINGS OF LIGHT FIXTURES FOR REVIEW AND APPROVAL NO LATER THAN 48 HOURS AFTER NOTICE TO PROCEED.
- ALL DOWNLIGHTS ABOVE SHOWER OR TUB AREAS SHALL HAVE HEAD FRONT DROP LENS TRIM.

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SCHEMATIC DESIGN & DEVELOPMENT

ELECTRICAL NOTES AND DETAILS

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

MOVING FORWARD

BG# 25-145
DATE : 04.22.2025
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2023-50.1

ES0.3

1 PARTIAL SITE UTILITY PLAN - FIELD HOUSE DEMO
1" = 30'-0"

SCHEMATIC DESIGN & DEVELOPMENT

ES1.4 BCHS	2023-50.1		DATE: 04.22.2025 DRAWN BY: CMTA CHECKED BY: CMTA REVISIONS:	BC# 25-145	PARTIAL SITE UTILITY PLAN - FIELD HOUSE DEMO PHASE III | PHYSICAL SCIENCE CENTER BULLITT COUNTY PUBLIC SCHOOLS BG 25-145	BC MOVING FORWARD	CMTA A LEGENCE Company 10411 Meeting Street | Louisville, KY 40059 | 502.326.3085 | cmta.com

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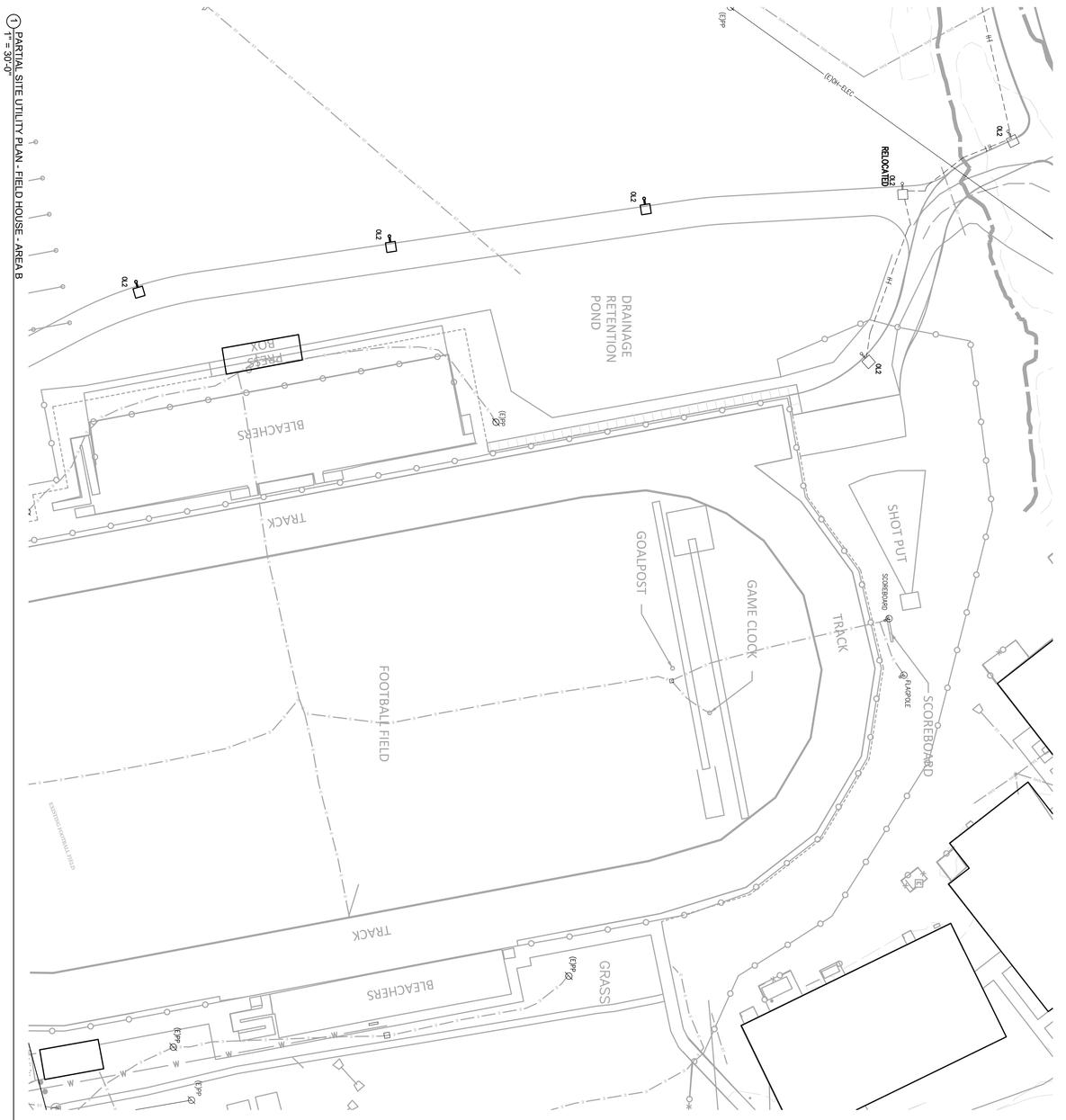
NEW GEOTHERMAL FIELD - COORDINATE LOOP FIELD WITH ALL TRADES TO AVOID CONFLICTS WITH UTILITIES, VERTICAL AND HORIZONTAL PIPING
PROVIDE (3) 3" FOR PRIMARY EXTENSION, MIN BURY 42"
EXISTING PULL BOX
REFER TO FIELD HOUSE FLOOR PLANS FOR WORK IN THIS BUILDING
PROPOSED BUILDING FF ELEV = 471-4
MIN BURY 48" FOR ALL UTILITIES AT DRIVE FIELD HOUSE AND ANNEX. PROVIDE 6" MINIMUM CONCRETE ENCASED WITH COMPRESSIBLE FILLER. ELECTRICAL ROUTING AND DEPTH TO BE VERIFIED BY ELECTRICAL ENGINEER. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
NEW FIBER SERVICE
APPROXIMATE LOCATION OF MAIN COMMUNICATIONS ROOM
PROVIDE GROUND RODS AND UFER GROUND.
NEW FIBER INTERCONNECT 4" RACEWAY
APPROXIMATE LOCATION OF MAIN ELECTRIC ROOM
REFER TO FIELD HOUSE FLOOR PLANS FOR WORK IN ANNEX BUILDING
UG-ELEC
UG-COMM
TO GROUND FLOOR ELECTRICAL PANELS
EXISTING FIBER PULL BOX
PROVIDE NEW PRIMARY DUCT CONDUITS FOR RECONNECTION
PROVIDE (3) 3" FOR PRIMARY ELECTRICAL FOR NEW SERVICE RETURN PRIMARY AROUND NEW MILLFIELD LOCATION
(E)UG-ELEC
(E)OH-ELEC
3ØT3-#6
3ØT3-#4
EXISTING FIBER PULL BOX
NEW UTILITY PULL BOX - PROVIDE (3) 3" FOR PRIMARY EXTENSION
EXISTING CCC TRANSFORMER TO BE REMOVED AS REQUIRED FOR SALT RIVER ELECTRIC
NEW SECONDARY ELECTRIC SERVICE TRANSFORMER - COORDINATE OUTAGE WITH EKPC HOLIDAY SCHEDULE
5/8" 10'-0" GROUND RODS 20'-0" APART, PROVIDE GROUND PIG AND UFER GROUND FOR FIELDHOUSE
NEW PRIMARY PULL BOX - REROUTE PRIMARY UNDERGROUND AND RECONNECT OVERHEAD FROM NEW JUNCTION POLE (TYPICAL)
EXISTING UTILITY TRANSFORMER
EXISTING UTILITY PAD MOUNT TRANSFORMER
NEW GENERATOR - REFER TO ENLARGED PLANS
EXISTING PULL BOX
EXISTING PULL BOX
EXISTING PULL BOX



1 PARTIAL SITE UTILITY PLAN - FIELD HOUSE - AREA B
1" = 30'-0"

SCHEMATIC DESIGN & DEVELOPMENT

ES1.6 BCHS	2023-50.1		DATE : 04.22.2025 DRAWN BY : CMTA CHECKED BY : CMTA REVISIONS :	BG# 25-145	PARTIAL SITE UTILITY PLAN – FIELD HOUSE PHASE III | PHYSICAL SCIENCE CENTER BULLITT COUNTY PUBLIC SCHOOLS BG 25-145	BC MOVING FORWARD	CMTA A LEGENCE Company 10411 Meeting Street | Louisville, KY 40059 | 502.326.3085 | cmta.com	studio kremer architects 1231 S Shelby St, Louisville, KY 40203 TEL 502.499.1100 FAX 502.499.1101

GENERAL NOTES (LIGHTING):

A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER N.E.C. #300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C #100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

C. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. ALSO, MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

D. LOCATE CHAIN-HUNG INDUSTRIAL FIXTURES IN MECHANICAL ROOMS TO AVOID DUCTWORK AND PIPING, TO MAXIMIZE AVAILABLE LIGHT. SPACE AROUND EQUIPMENT, AIR HANDLERS, ETC. TO PROVIDE ADEQUATE LIGHTING TO ALL AREAS OF ROOM. PROVIDE ADDITIONAL FIXTURES OF SAME TYPE AS NEEDED TO FULFILL THIS REQUIREMENT.

E. LOCATE EXIT SIGNS FOR MAXIMUM VIEWING AREA TO IDENTIFY EGRESS PATHS AS INDICATED ON PLANS. COORDINATE LOCATIONS SUCH THAT ARCHITECTURAL FEATURES OR EQUIPMENT FROM OTHER TRADES DO NOT OBSTRUCT VIEW.

F. ALL LIGHTING FIXTURE LENSES, PARABOLIC LOUVERS, DOWNLIGHTING ALZAK CONES AND "PARACUBE" LOUVERS SHALL BE HANDLED WITH COTTON GLOVES DURING INSTALLATION AND LAMPING TO AVOID FINGERPRINTS OR DIRT DEPOSITS. IT IS PREFERRED THAT FIXTURES BE SHIPPED AND INSTALLED WITH CLEAR PLASTIC BAGS TO PROTECT LOUVERS. AT CLOSE OF PROJECT, AND AFTER CONSTRUCTION AIR FILTERS ARE CHANGED, REMOVE BAGS. ANY LOUVER OR CONE SHOWING DIRT OR FINGER PRINTS SHALL BE CLEANED WITH SOLVENT RECOMMENDED BY THE MANUFACTURER, OR REPLACED AS NECESSARY IN ORDER TO TURN OVER TO THE OWNER NEW FIXTURES AT OCCUPANCY.

G. CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO ALL EXIT SIGNS, EMERGENCY INVERTER BATTERY PACKS, AND NIGHT LIGHTS AS REQUIRED.

H. LIGHTING CONTROL POWER PACKS AND EMERGENCY TRANSFER RELAYS, ETC ARE TO BE LOCATED CONCEALED ABOVE ACCESSIBLE CEILINGS. IN EXPOSED AREAS, LOCATE AT THE NEAREST CONCEALED ACCESSIBLE CEILING AREA.

I. PROVIDE NORMAL POWER (CONTROLLED AND UNCONTROLLED) FROM ASOCATED NORMAL POWER FIXTURE TO EMERGENCY RELAY WHERE EMERGENCY FIXTURE IS IN SAME ZONE. INSTALL COMPLETE WHETHER CIRCUITING OR EMERGENCY RELAY IS INDICATED OR NOT.

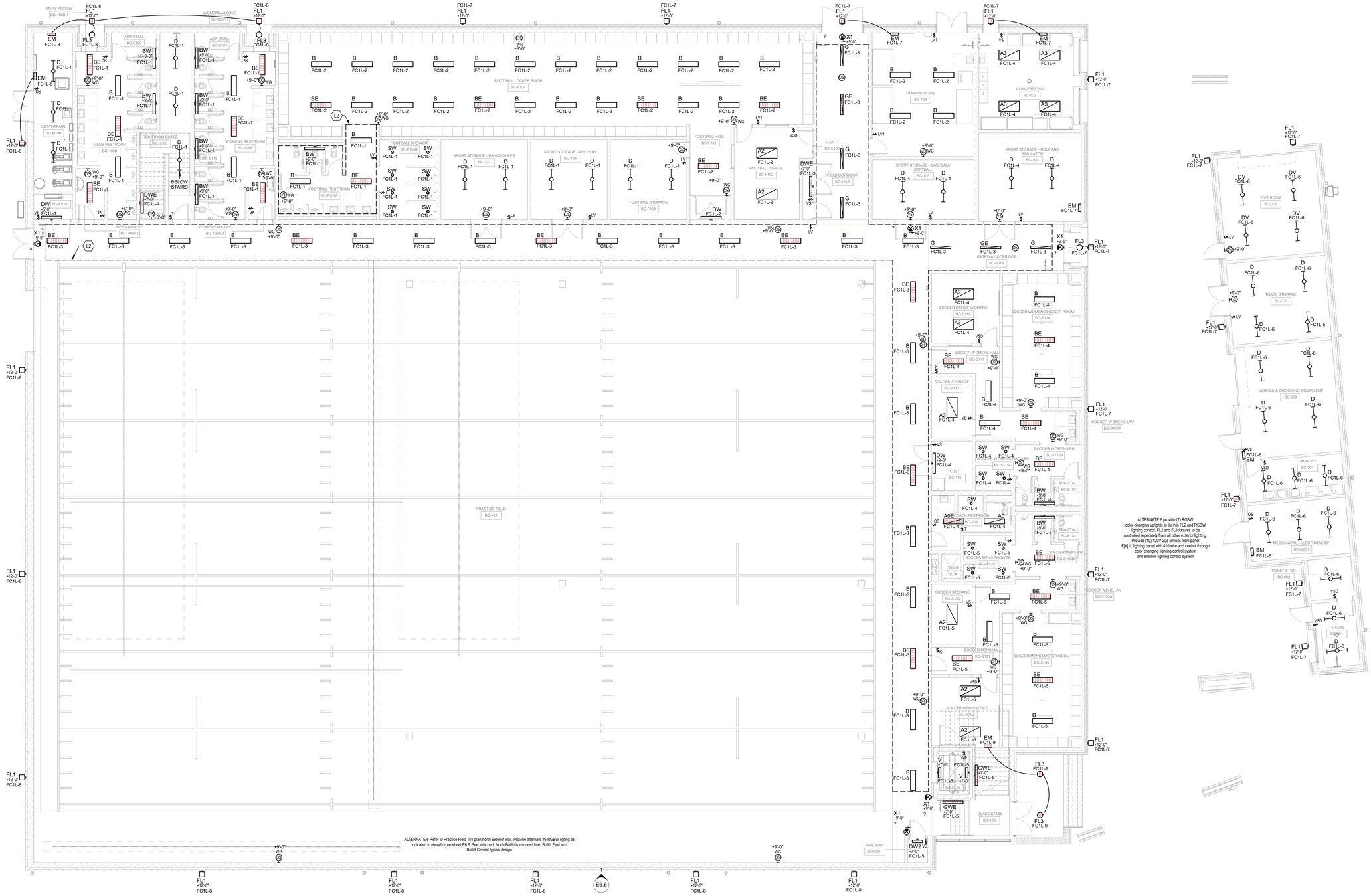
J. REFER TO STRUCTURAL DRAWINGS DETAIL - TYPICAL SECTION OF CONDUIT OPENING LOCATIONS IN PRECAST CONCRETE SLAB FOR ATTACHMENT AND PENETRATION OF ALL ELECTRICAL EQUIPMENT.

K. REFER TO ARCHITECTS FLOOR PLANS FOR HARD CEILING AREAS. PROVIDE ACCESS PANELS AS REQUIRED FOR JUNCTION BOX ACCESS. COORDINATE LOCATIONS ON-SITE WITH ARCHITEXT AND ALL TRADES TO CONSOLIDATE ACCESS PANELS THAT ARE OUT OF SIGHT AS MUCH AS POSSIBLE.

L. AT ALL EXTERIOR LIGHTS PART OF THIS PROJECT, LOOP CIRCUITS THROUGH CONTACTOR AND HOA SWITCHES FOR CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DETAIL ON E6.0. PROVIDE (1) AT IN MDF OF EACH FIELD HOUSE.

KEYNOTES:

L2 LIGHTING IN THIS AREA TO BE ON A SINGLE, SEPARATE ZONE.



1 BULLITT CENTRAL FIRST FLOOR PLAN - LIGHTING

SCALE: 1/8" = 1'-0"

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BG MOVING FORWARD

FIELD HOUSE FLOOR PLAN – BULLITT CENTRAL – LEVEL 1 – LIGHTING

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E1.11
BCHS

GENERAL NOTES (LIGHTING):

A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER N.E.C. #300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C #100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

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F. ALL LIGHTING FIXTURE LENSES, PARABOLIC LOUVERS, DOWNLIGHTING ALZAK CONES AND "PARACUBE" LOUVERS SHALL BE HANDLED WITH COTTON GLOVES DURING INSTALLATION AND LAMPING TO AVOID FINGERPRINTS OR DIRT DEPOSITS. IT IS PREFERRED THAT FIXTURES BE SHIPPED AND INSTALLED WITH CLEAR PLASTIC BAGS TO PROTECT LOUVERS. AT CLOSE OF PROJECT, AND AFTER CONSTRUCTION AIR FILTERS ARE CHANGED, REMOVE BAGS. ANY LOUVER OR CONE SHOWING DIRT OR FINGER PRINTS SHALL BE CLEANED WITH SOLVENT RECOMMENDED BY THE MANUFACTURER, OR REPLACED AS NECESSARY IN ORDER TO TURN OVER TO THE OWNER NEW FIXTURES AT OCCUPANCY.

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J. REFER TO STRUCTURAL DRAWINGS DETAIL - TYPICAL SECTION OF CONDUIT OPENING LOCATIONS IN PRECAST CONCRETE SLAB FOR ATTACHMENT AND PENETRATION OF ALL ELECTRICAL EQUIPMENT.

K. REFER TO ARCHITECTS FLOOR PLANS FOR HARD CEILING AREAS. PROVIDE ACCESS PANELS AS REQUIRED FOR JUNCTION BOX ACCESS. COORDINATE LOCATIONS ON-SITE WITH ARCHITEXT AND ALL TRADES TO CONSOLIDATE ACCESS PANELS THAT ARE OUT OF SIGHT AS MUCH AS POSSIBLE.

L. AT ALL EXTERIOR LIGHTS PART OF THIS PROJECT, LOOP CIRCUITS THROUGH CONTACTOR AND HOA SWITCHES FOR CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DETAIL ON E6.0. PROVIDE (1) AT IN MDF OF EACH FIELD HOUSE.

KEYNOTES:

L1 NEW DAYLIGHT DIMMING ZONE (0-10V). LIGHTING SHALL BE CONTROLLED FROM ROOM ZONE SWITCHING AS WELL AS 0-10V DAYLIGHT DIMMING DEVICE. EMERGENCY RELAY/ TRANSFER DEVICE SHALL BE COMPATIBLE WITH DIMMING 0-10V CONTROLS TO PROVIDE FULL OUTPUT UPON LOSS OF NORMAL POWER. REFER TO DETAIL FOR REQUIREMENTS.

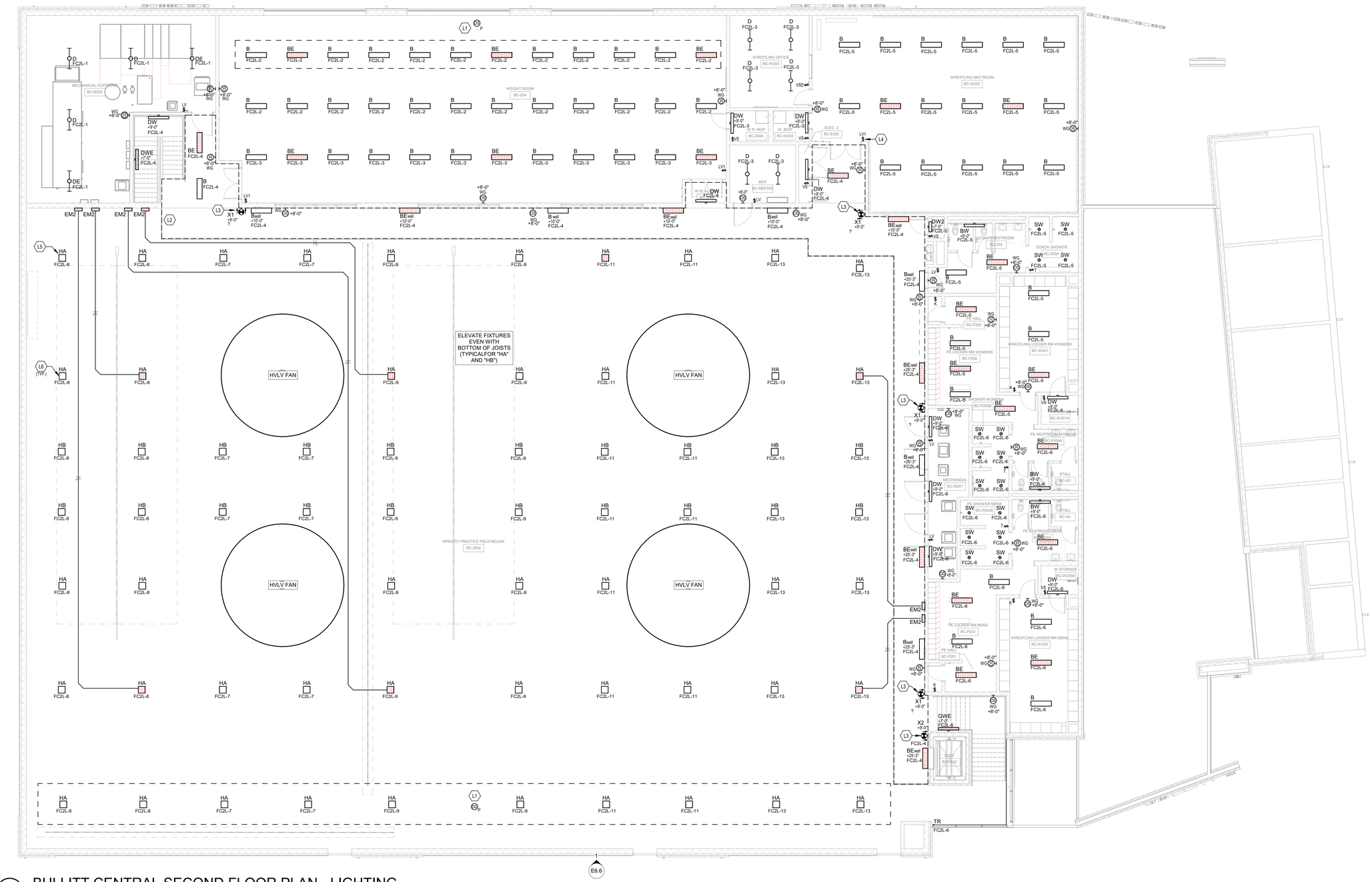
L2 LIGHTING IN THIS AREA TO BE ON A SINGLE, SEPARATE ZONE.

L3 RIGIDLY SUPPORT FROM STRUCTURE IN ADDITION TO STANDARD JBOX SUPPORT.

L4 COORDINATE CUTOUTS WITH WALL PROTECTION FOR WALL DEVICES.

L5 EVERY 2 COLLUMNS OF FIXTURES SHALL BE PROVIDED WITH A SEPARATE POWER PACK. CONTROL SHHALL BE GROUPED AND COORDINATED WITH OWNER. PROVIDE SCENE PRESET STATION AT FIRST FLOOR.

L6 PROVIDE REMOTE 250W INVERTER FOR EACH HA FIXTURE. LOCATE NEAR 2ND FLOOR STAIR NEAR MECHANICAL ROOM.



1 BULLITT CENTRAL SECOND FLOOR PLAN - LIGHTING

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

FIELD HOUSE FLOOR PLAN – BULLITT CENTRAL – LEVEL 2 – LIGHTING

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BG# 25-145

DATE : 04.22.2025
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2023-50.1

E1.12
BCHS

GENERAL NOTES (POWER/SYSTEMS):

A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

C. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

D. LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.

E. REFER TO "SYSTEM INSTALLATION MATRIX" (ON SYSTEMS LEGEND SHEET) AND SPECIFICATIONS FOR CONTRACTOR REQUIREMENTS OF EACH SYSTEM.

F. PROVIDE 2 TIER 4" J-HOOK CABLING PATH OUTSIDE OF MAIN EXPOSED PRACTICE FIELD FOR CABLE ROUTING. PROVIDE ON BOTH FLOORS. PROVIDE (2) 3" HILTI SPEED SLEEVES WHERE PASSING THROUGH VERTICAL PARTITIONS. PROVIDE (2) 4" SLEEVES BETWEEN 1ST AND 2ND FLOOR CABLING PATHS.

G. 20A BRANCH CIRCUITS OUTSIDE OF 100' RADIUS OF POWER PANELS SHALL BE #10 WIRE AND GROUND.

H. THE CONTRACTOR SHALL ROUTE ALL "SYSTEM CONDUIT STUB-UPS" TO THE NEAREST CORRIDOR CABLING PATH (SEE "STUB-UP" DETAILS). REFER TO CABLING PATH INSTALLATION DETAIL FOR ADDITIONAL REQUIREMENTS.

I. CONTRACTOR SHALL PAINT ALL SYSTEMS CONDUIT STUB-UPS LIGHT BLUE FOR SYSTEMS CABLING INTO THE CORRIDOR CABLING PATH. PROVIDE PULL STRINGS IN ALL NEW CONDUIT RUNS FOR SYSTEM CABLING INSTALLATION.

J. CCTV DEVICE ROUGH-INS AT EXTERIOR WALL ARE TO BE NIPPLES WITH LENGTH OF RACEWAY AS REQUIRED CUT FLUSH WITH EXTERIOR WALL TO ALLOW FOR OWNER TO MOUNT CCTV CAMERA OVER CONDUIT. CONDUIT TO BE SUPPORT BY INTERIOR JUNCTION BOX FASTENED TO BUILDING. PENETRATION AND CONDUIT SHALL BE WEATHER SEALED.

K. DEVICE ELEVATIONS ARE TO BE CONFIRMED PRIOR TO ROUGH-IN.

L. ALL ELECTRIC WATER COOLERS (EWC'S) TO BE PROVIDED WITH A GFCI TYPE CIRCUIT BREAKER.

M. REFER TO STRUCTURAL DRAWINGS DETAIL - TYPICAL SECTION OF CONDUIT OPENING LOCATIONS IN PRECAST CONCRETE SLAB FOR ATTACHMENT AND PENETRATION OF ALL ELECTRICAL EQUIPMENT. DETAIL IS VIEW "L" S4..3.

N. INTERCEPT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR RELOCATION.

O. ROUGH-INS ARE PROVIDED FOR LOW VOLTAGE BUT CONDUITS MUST BE RUN UNDER PRESSBOX FOR INTERCONNECTION OF SOUND AND DATA CABLES. PROVIDE INTERCONNECTION AS REQUIRED.

P. REFER TO ARCHITECTS FLOOR PLANS FOR HARD CEILING AREAS. PROVIDE ACCESS PANELS AS REQUIRED FOR JUNCTION BOX ACCESS. COORDINATE LOCATIONS ON-SITE WITH ARCHITEXT AND ALL TRADES TO CONSOLIDATE ACCESS PANELS THAT ARE OUT OF SIGHT AS MUCH AS POSSIBLE.

Q. MANY UNDERGROUND PRIVATE UTILITIES EXISTING IN AREA OF RENOVATION. CONTRACTOR SHALL TAKE OF TO WORK AROUND / OFFSET FROM EXISTING UTILITIES. HYDRO EXCAVATE AS REQUIRED.

KEYNOTES:

E1 PROVIDE A 100A/240V/3P HEAVY DUTY DISCONNECT SWITCH IN NEMA-1 ENCLOSURE FUSED @ 90A WITH AUXILIRY CONTACT FOR BATTERY LOWERING WHERE EQUIPED. LOCATE DISCONECT IN MACHINEROOMLESS SHAFT ENCLOSURE. DISCONNECT SHALL BE NO DEEPER THAN 11" TO HANDLE.

E2 PROVIDE A 30A/240V/2P HEAVY DUTY DISCONNECT SWITCH WITH NEUTRAL IN NEMA-1 ENCLOSURE FUSED @ 20A . LOCATE DISCONECT IN MACHINEROOMLESS SHAFT ENCLOSURE. DISCONNECT SHALL BE NO DEEPER THAN 7" TO HANDLE.

E5 PROVIDE DATA ROUGH-IN FOR TEMPERATURE CONTROL PANEL. RECEPTACLE SHALL BE GFCI TYPE.

E6 PROVIDE FIRE ALARM RELAY TIE INTO SOUND SYSTEM POWER SEQUENCER FOR SHUTDOWN.

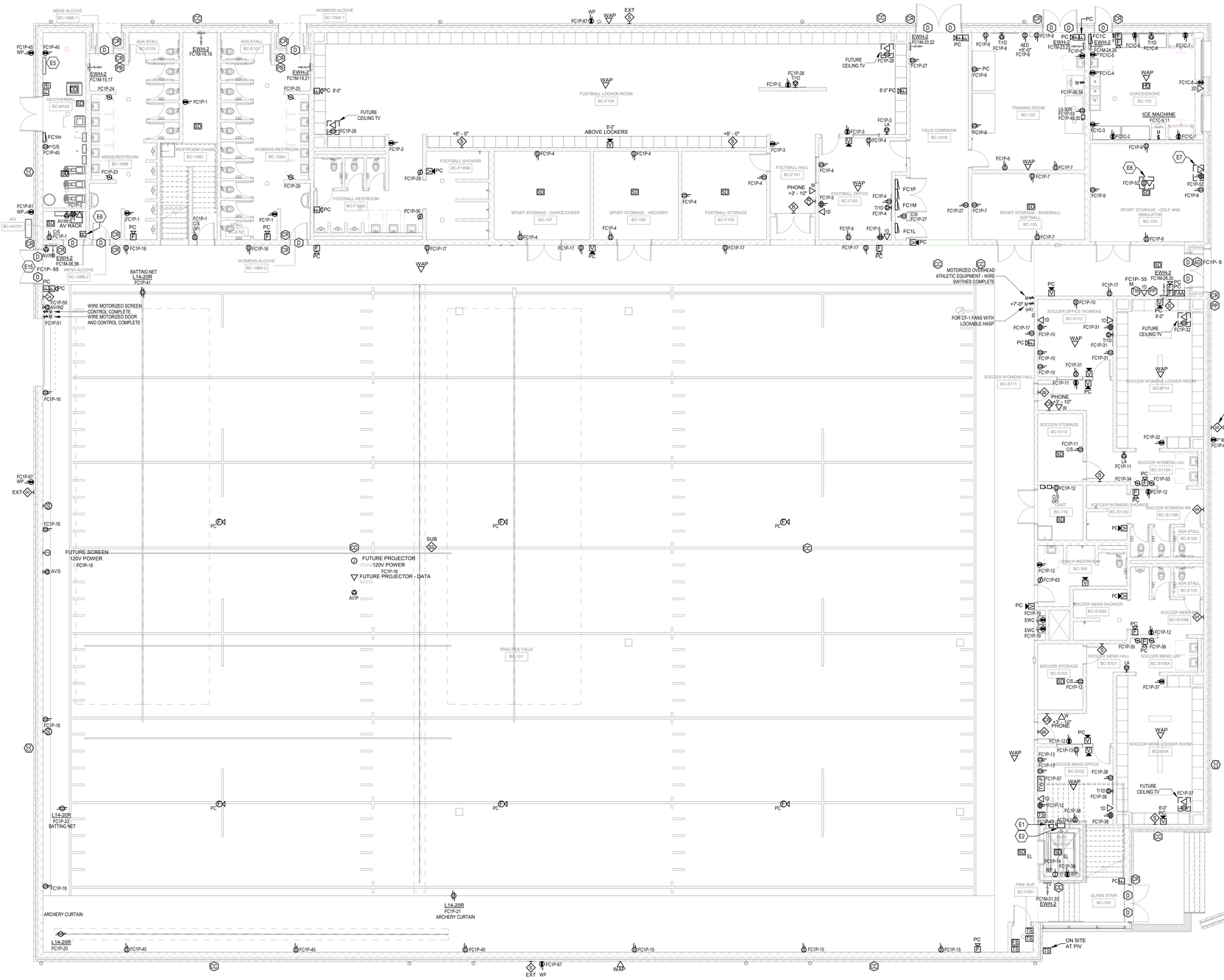
E7 PROVIDE DATA AND 2G BOX WITH CONDUIT TO CEILING.

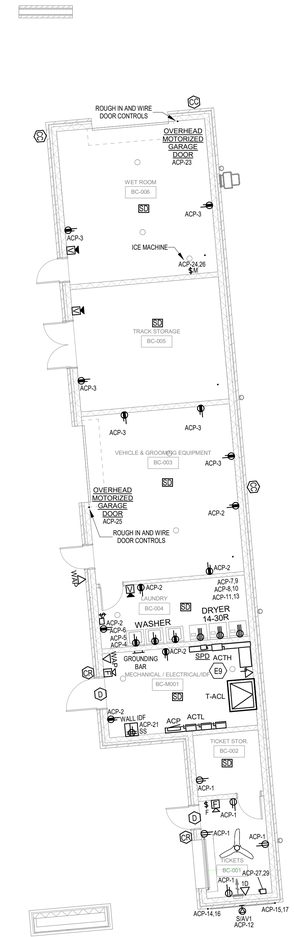
E8 PROVIDE DATA AND 2G BOX WITH CONDUIT BELOW FOR FUTURE PROJECTOR.

E9 PROVIDE GROUNDING BUS BAR PER E6.1 GROUNDING ELECTRODE INTERCONNECTION DETAIL.

E15 ROUGH-IN AND WIRE DOOR CONTROLS.

E16 EXTERIOR MOUNTED SPEAKERS TO BE ON THEIR OWN SEPARATE ZONE.





1 BULLITT CENTRAL FIRST FLOOR PLAN - POWER / SYSTEMS

SCALE: 1/8" = 1'-0"

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FIELD HOUSE FLOOR PLAN – BULLITT CENTRAL – LEVEL 1 – POW/SYS

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BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 25-145

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GENERAL NOTES (POWER/SYSTEMS):

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B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

C. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

D. LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.

E. REFER TO "SYSTEM INSTALLATION MATRIX" (ON SYSTEMS LEGEND SHEET) AND SPECIFICATIONS FOR CONTRACTOR REQUIREMENTS OF EACH SYSTEM.

F. PROVIDE 2 TIER 4" J-HOOK CABLING PATH OUTSIDE OF MAIN EXPOSED PRACTICE FIELD FOR CABLE ROUTING. PROVIDE ON BOTH FLOORS. PROVIDE (2) 3" HILTI SPEED SLEEVES WHERE PASSING THROUGH VERTICAL PARTITIONS. PROVIDE (2) 4" SLEEVES BETWEEN 1ST AND 2ND FLOOR CABLING PATHS.

G. 20A BRANCH CIRCUITS OUTSIDE OF 100' RADIUS OF POWER PANELS SHALL BE #10 WIRE AND GROUND.

H. THE CONTRACTOR SHALL ROUTE ALL "SYSTEM CONDUIT STUB-UPS" TO THE NEAREST CORRIDOR CABLING PATH (SEE "STUB-UP" DETAILS). REFER TO CABLING PATH INSTALLATION DETAIL FOR ADDITIONAL REQUIREMENTS.

I. CONTRACTOR SHALL PAINT ALL SYSTEMS CONDUIT STUB-UPS LIGHT BLUE FOR SYSTEMS CABLING INTO THE CORRIDOR CABLING PATH. PROVIDE PULL STRINGS IN ALL NEW CONDUIT RUNS FOR SYSTEM CABLING INSTALLATION.

J. CCTV DEVICE ROUGH-INS AT EXTERIOR WALL ARE TO BE NIPPLES WITH LENGTH OF RACEWAY AS REQUIRED CUT FLUSH WITH EXTERIOR WALL TO ALLOW FOR OWNER TO MOUNT CCTV CAMERA OVER CONDUIT. CONDUIT TO BE SUPPORT BY INTERIOR JUNCTION BOX FASTENED TO BUILDING. PENETRATION AND CONDUIT SHALL BE WEATHER SEALED.

K. DEVICE ELEVATIONS ARE TO BE CONFIRMED PRIOR TO ROUGH-IN.

L. ALL ELECTRIC WATER COOLERS (EWC'S) TO BE PROVIDED WITH A GFCI TYPE CIRCUIT BREAKER.

M. REFER TO STRUCTURAL DRAWINGS DETAIL - TYPICAL SECTION OF CONDUIT OPENING LOCATIONS IN PRECAST CONCRETE SLAB FOR ATTACHMENT AND PENETRATION OF ALL ELECTRICAL EQUIPMENT. DETAIL IS VIEW "L" S4..3.

N. INTERCEPT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR RELOCATION.

O. ROUGH-INS ARE PROVIDED FOR LOW VOLTAGE BUT CONDUITS MUST BE RUN UNDER PRESSBOX FOR INTERCONNECTION OF SOUND AND DATA CABLES. PROVIDE INTERCONNECTION AS REQUIRED.

P. REFER TO ARCHITECTS FLOOR PLANS FOR HARD CEILING AREAS. PROVIDE ACCESS PANELS AS REQUIRED FOR JUNCTION BOX ACCESS. COORDINATE LOCATIONS ON-SITE WITH ARCHITEXT AND ALL TRADES TO CONSOLIDATE ACCESS PANELS THAT ARE OUT OF SIGHT AS MUCH AS POSSIBLE.

Q. MANY UNDERGROUND PRIVATE UTILITIES EXISTING IN AREA OF RENOOVATION. CONTRACTOR SHALL TAKE OF TO WORK AROUND / OFFSET FROM EXISTING UTILITIES. HYDRO EXCAVATE AS REQUIRED.

KEYNOTES:

E10 PROVIDE DATA ROUGH-IN FOR TEMPERATURE CONTROL PANEL.

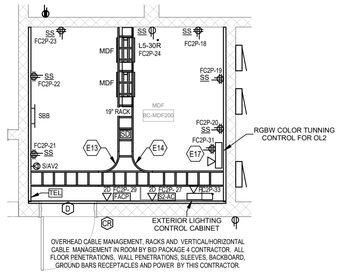
E11 PROVIDE STUT MOUNTED FIRE ALARM PULL STATION AND HORN STROBE.

E12 COORDINATE CUTOUTS WITH WALL PROTECTION FOR WALL DEVICES.

E13 OVERHEAD CABLE MANAGEMENT, RACKS, AND VERTICAL/HORIZONTAL MANAGEMENT IN ROOM BY BID PACKAGE 4 CONTRACTOR. ALL FLOOR PENETRATIONS, WALL PENETRATIONS, SLEEVES, BACKBOARD, GROUND BARS REECEPTACLES AND POWER BY THIS CONTRACTOR.

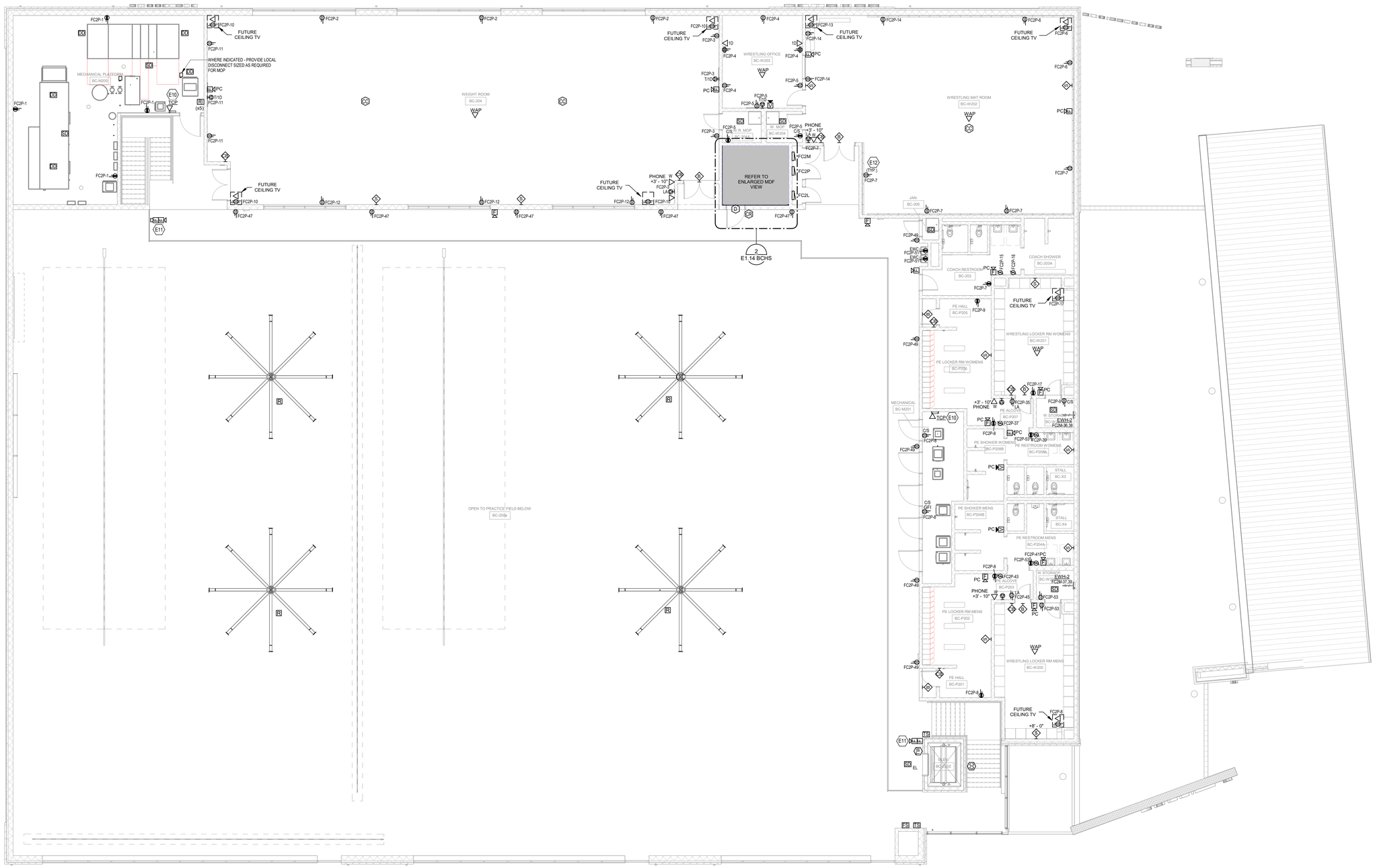
E14 PROVIDE SBB AND CABLING SLEEVE TO CABLING PATH.

E17 COLOR TUNING CONTROL IS DETIAL 3 ON E6.4 UNDER ALTERNATE #6.



2 Enlarged Telecom Room - Bullitt Central

SCALE: 1/4" = 1'-0"



1 BULLITT CENTRAL SECOND FLOOR PLAN - POWER / SYSTEMS

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FIELD HOUSE FLOOR PLAN – BULLITT CENTRAL – LEVEL 2 – POW/SYS

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E1.14 BCHS

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KEYNOTES:

1 BULLITT CENTRAL FIRST FLOOR - EQUIPMENT CONECTIONS

SCALE: 1/8" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

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FIELD HOUSE FLOOR PLAN – BULLITT CENTRAL – LEVEL 1 – EQUIPMENT CONNECTIONS

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BG# 25-145

BG# 25-145

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1	Addendum 1	08.28.24
2	Addendum 2	07.15.24

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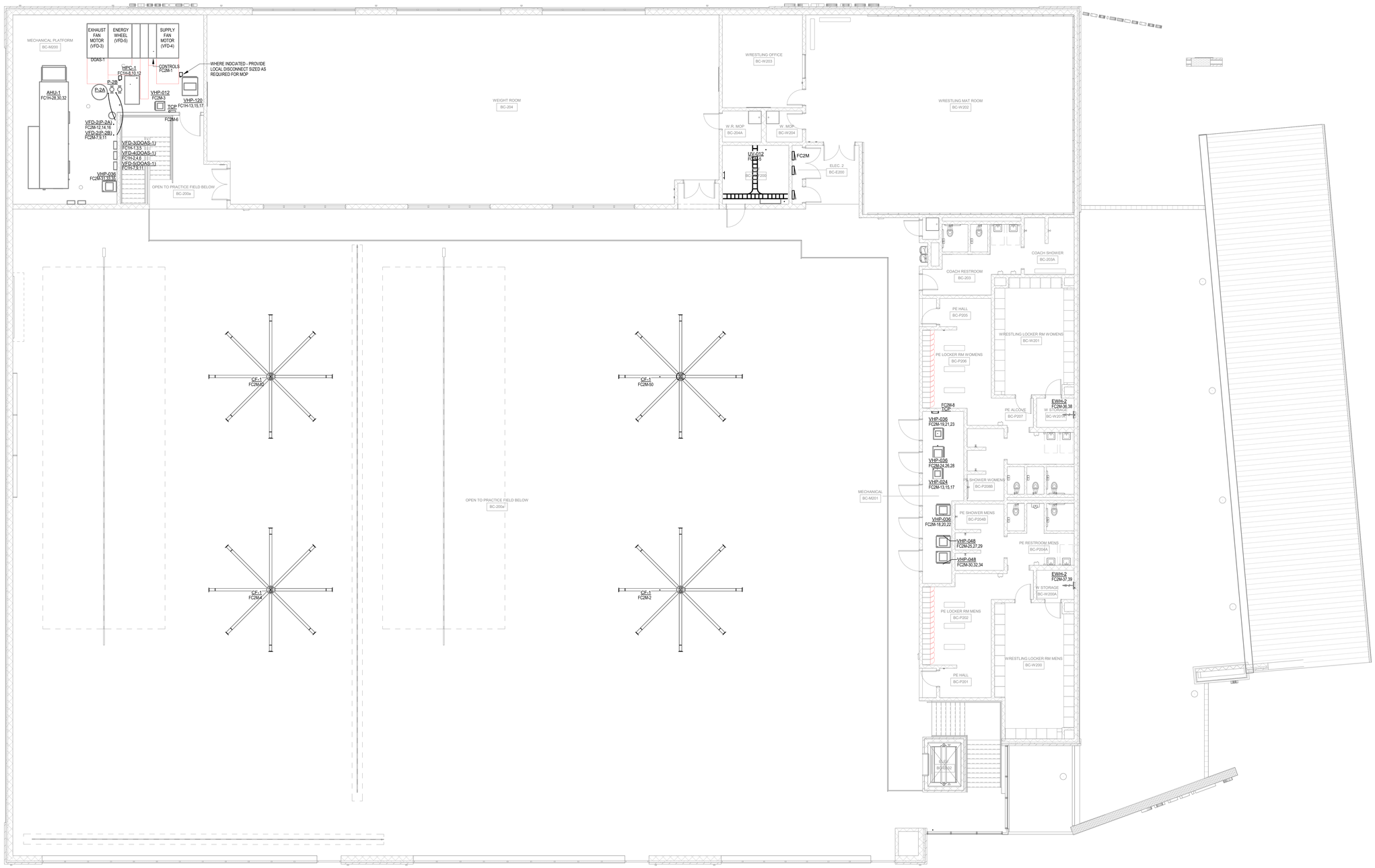

1 BULLITT CENTRAL SECOND FLOOR - EQUIPMENT CONECTIONS

SCALE: 1/8" = 1'-0"

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FIELD HOUSE FLOOR PLAN – BULLITT CENTRAL – LEVEL 2 – EQUIPMENT CONNECTIONS
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DATE : 04.22.2025
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1 Addendum 1 04.28.24

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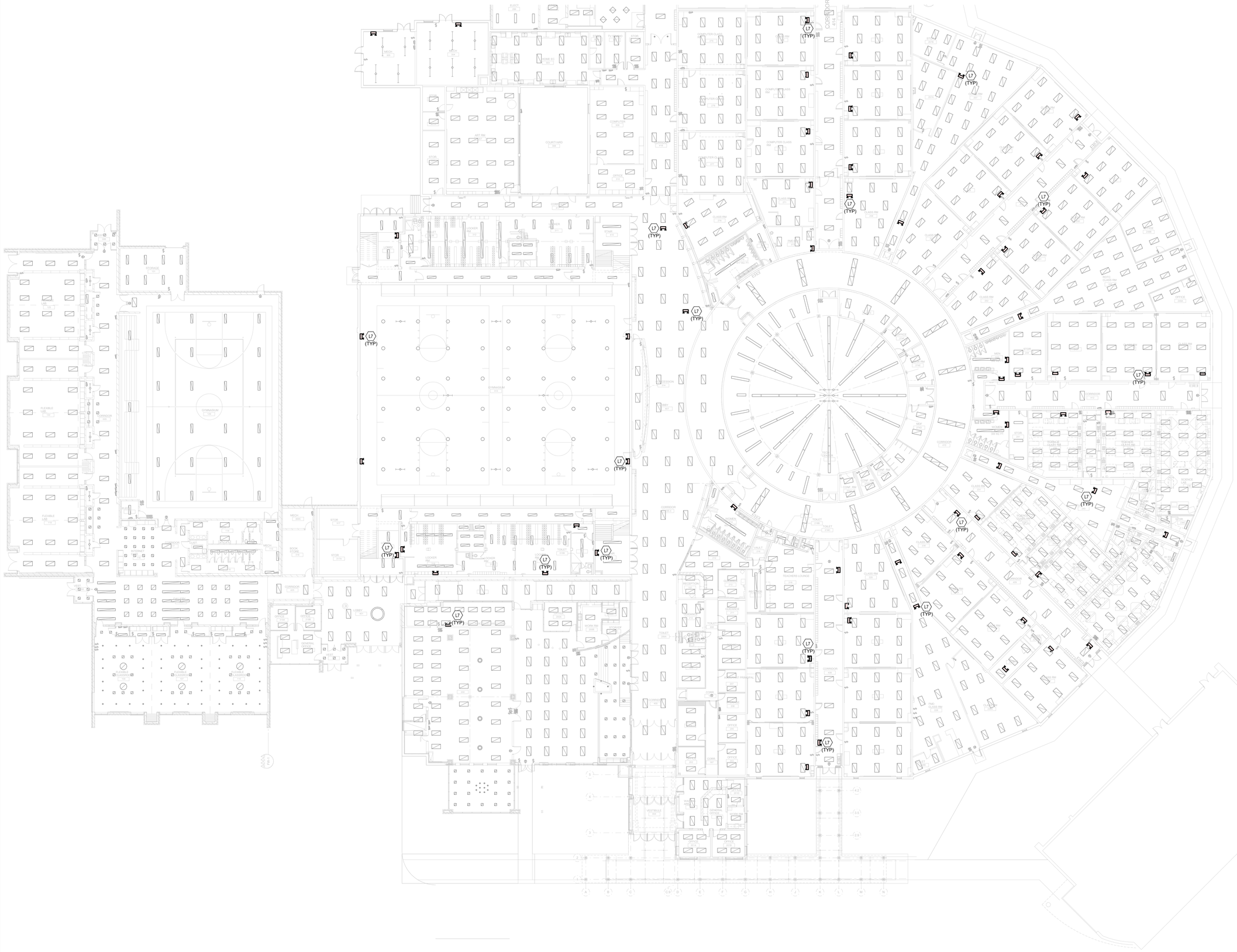

1 BULLITT CENTRAL - FIRST FLOOR PLAN - DEMOLITION - AREA A

SCALE: 1/16" = 1'-0"

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BULLITT CENTRAL – DEMOLITION – AREA A

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KEYNOTES:

L7 DEMOLISH EXISTING 2 HEAD EMERGENCY UNIT EQUIPMENT AND CIRCUIT COMPLETELY BACK TO SOURCE - TYPICAL.

GENERAL NOTES (DEMOLITION):

A. DOTTED LINES INDICATE ITEMS FOR REMOVAL (UON) AND GRAY SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.

B. DEVICES INDICATED WITH AN "R" SHALL BE RELOCATED. REMOVE, PROTECT, AND REINSTALL IN NEW LOCATION INDICATED ON NEW WORK PLANS. INTERCEPT AND EXTEND ALL EXISTING CABLING TO NEW LOCATION. CLEAN AND RE-LAMP RELOCATED LUMINAIRES.

C. THE CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT CONTAIN DEVICES OR EQUIPMENT THAT ARE TO REMAIN. WHEN DEMOLITION OF AN ELECTRICAL DEVICE (OR CIRCUIT) IS INDICATED ON THE DRAWINGS: THE CONTRACTOR SHALL ENSURE THAT OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" ON THE CIRCUITS SHALL REMAIN IN "PRE-DEMOLITION" WORKING ORDER. "LEFT-OVER" CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.

D. LOCATIONS OF DEVICES, CONNECTIONS, ETC., INDICATED ON THIS DRAWING WERE TAKEN FROM VARIOUS SOURCES. THEY ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO VARIATION FROM EXISTING CONDITIONS. CERTAIN EXISTING ELEMENTS MAY NOT BE INDICATED AT ALL. THE CONTRACTOR PROPOSING TO DO ANY PART OF THE WORK INDICATED HEREON SHALL VISIT THIS SITE AND DETERMINE TO HIS SATISFACTION THAT THEY MAY COMPLETE ALL WORK REQUIRED FOR THE BID WHICH HE PROPOSES.

E. REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES / FIXTURES / ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON). CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE SHOWN TO BE REMOVED (PATCH AND REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS).

F. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.

G. COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.

H. PROVIDE TEMPORARY EMERGENCY EXIT LIGHTS AT CONSTRUCTION BARRIERS AS REQUIRED.

I. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS / CEILINGS AS REQUIRED WHERE DEVICES ARE BEING REMOVED OR INSTALLED.

J. UNUSED/ABANDONED CONDUCTORS DISCOVERED ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED IN ACCORDANCE WITH NEC REQUIREMENTS.

K. EXISTING ELECTRICAL SYSTEMS IN CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED TO PERMIT INSTALLATION OF DEVICES AND EQUIPMENT SHOWN ON PLANS.

L. CONTRACTOR SHALL SEAL ALL EXISTING AND NEW PENETRATIONS OF BUILDING ENVELOPE (EXTERIOR WALLS, ROOF, ETC.) WATER-TIGHT AND AS APPROVED BY ARCHITECT AND ENGINEER. ROOFING SHALL BE RESTORED BY A LICENSED ROOFING CONTRACTOR BASED ON WRITTEN INSTRUCTIONS AND DETAILS FROM ROOFING MANUFACTURER AS REQUIRED TO MAINTAIN ROOF WARRANTY. REFER TO ARCHITECTURAL AND ENGINEERING PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.

M. ALL EXISTING PANELS AFFECTED BY THIS CONTRACTOR'S WORK SHALL BE PROVIDED WITH NEW TYPE-WRITTEN PANEL DIRECTORIES AND INSERT SLEEVES. PANEL DIRECTORIES SHALL NOT USE ROOM NAMES OR NUMBERS FROM THESE DRAWINGS. DIRECTORIES SHALL BE DETAILED AND COORDINATED WITH OWNER'S SUITE NUMBERS, FINAL ROOM NUMBERS, IT RACK NAMES, WORKSTATION DESIGNATIONS, ETC. UNUSED BREAKERS SHALL BE IN OFF POSITION.

N. MANY EXISTING UNDERGROUND PRIVATE UTILITIES EXISTING IN AREAS OF RENOVATION. CONTRACTOR SHALL TAKE CARE TO WORK AROUND/OFFSET FROM EXISTIGN UTILITIES. HYDRO EXCAVATE AS REQUIRED.

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A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER N.E.C. #300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C.#100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

C. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. ALSO, MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

D. LOCATE CHAIN-HUNG INDUSTRIAL FIXTURES IN MECHANICAL ROOMS TO AVOID DUCTWORK AND PIPING, TO MAXIMIZE AVAILABLE LIGHT. SPACE AROUND EQUIPMENT, AIR HANDLERS, ETC. TO PROVIDE ADEQUATE LIGHTING TO ALL AREAS OF ROOM. PROVIDE ADDITIONAL FIXTURES OF SAME TYPE AS NEEDED TO FULFILL THIS REQUIREMENT.

E. LOCATE EXIT SIGNS FOR MAXIMUM VIEWING AREA TO IDENTIFY EGRESS PATHS AS INDICATED ON PLANS. COORDINATE LOCATIONS SUCH THAT ARCHITECTURAL FEATURES OR EQUIPMENT FROM OTHER TRADES DO NOT OBSTRUCT VIEW.

F. ALL LIGHTING FIXTURE LENSES, PARABOLIC LOUVERS, DOWNLIGHTING ALZAK CONES AND "PARACUBE" LOUVERS SHALL BE HANDLED WITH COTTON GLOVES DURING INSTALLATION AND LAMPING TO AVOID FINGERPRINTS OR DIRT DEPOSITS. IT IS PREFERRED THAT FIXTURES BE SHIPPED AND INSTALLED WITH CLEAR PLASTIC BAGS TO PROTECT LOUVERS. AT CLOSE OF PROJECT, AND AFTER CONSTRUCTION AIR FILTERS ARE CHANGED, REMOVE BAGS. ANY LOUVER OR CONE SHOWING DIRT OR FINGER PRINTS SHALL BE CLEANED WITH SOLVENT RECOMMENDED BY THE MANUFACTURER, OR REPLACED AS NECESSARY IN ORDER TO TURN OVER TO THE OWNER NEW FIXTURES AT OCCUPANCY.

G. CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO ALL EXIT SIGNS, EMERGENCY INVERTER BATTERY PACKS, AND NIGHT LIGHTS AS REQUIRED.

H. LIGHTING CONTROL POWER PACKS AND EMERGENCY TRANSFER RELAYS, ETC ARE TO BE LOCATED CONCEALED ABOVE ACCESSIBLE CEILINGS. IN EXPOSED AREAS, LOCATE AT THE NEAREST CONCEALED ACESSIBLE CEILING AREA.

I. PROVIDE NORMAL POWER (CONTROLLED AND UNCONTROLLED) FROM ASOCATED NORMAL POWER FIXTURE TO EMERGENCY RELAY WHERE EMERGENCY FIXTURE IS IN SAME ZONE. INSTALL COMPLETE WHETHER CIRCUTING OR EMERGENCY RELAY IS INDICATED OR NOT.

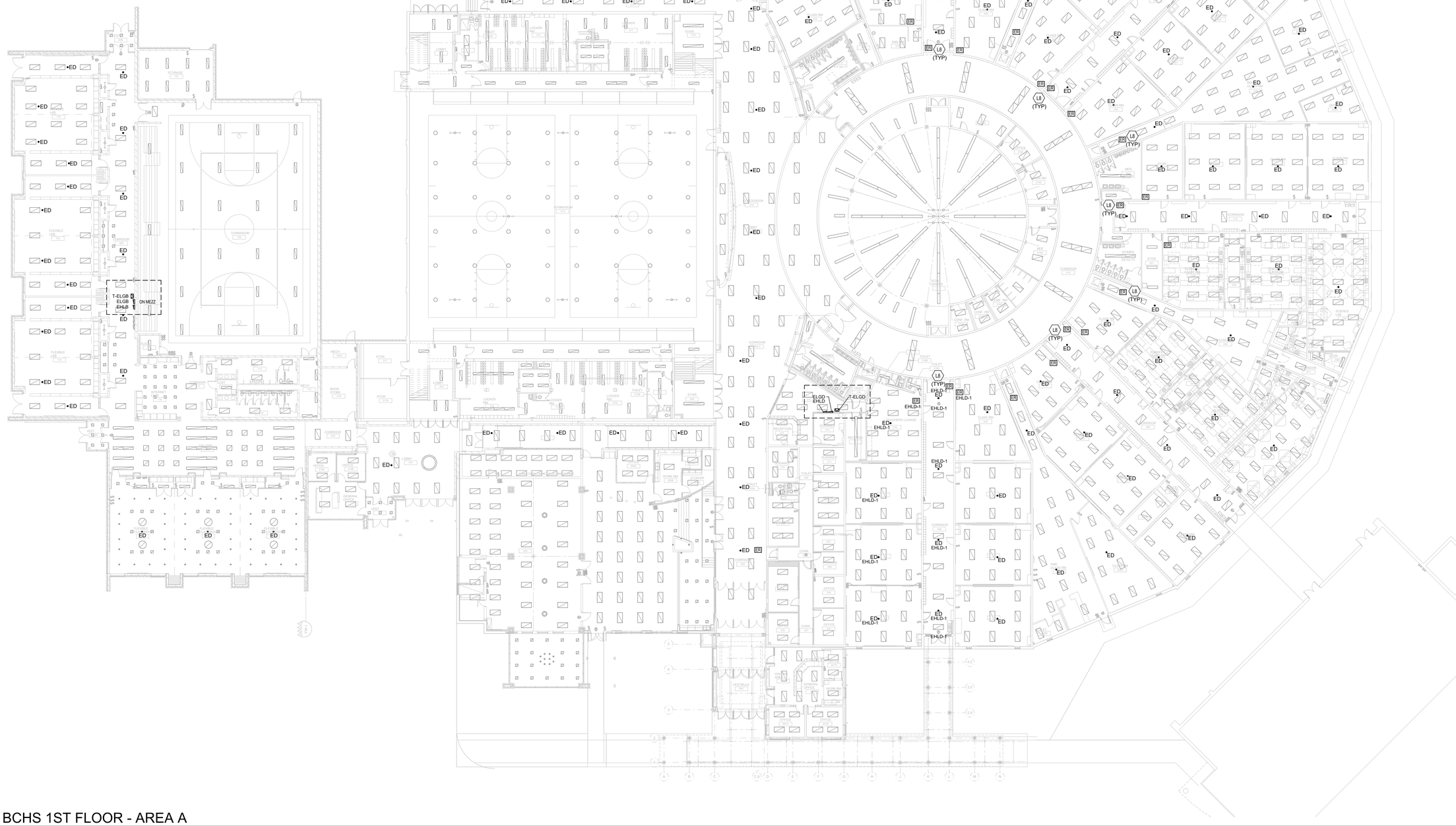
J. REFER TO STRUCTURAL DRAWINGS DETAIL - TYPICAL SECTION OF CONDUIT OPENING LOCATIONS IN PRECAST CONCRETE SLAB FOR ATTACHMENT AND PENETRATION OF ALL ELECTRICAL EQUIPMENT.

K. REFER TO ARCHITECTS FLOOR PLANS FOR HARD CEILING AREAS. PROVIDE ACCESS PANELS AS REQUIRED FOR JUNCTION BOX ACCESS. COORDINATE LOCATIONS ON-SITE WITH ARCHITEXT AND ALL TRADES TO CONSOLIDATE ACCESS PANELS THAT ARE OUT OF SIGHT AS MUCH AS POSSIBLE.

L. AT ALL EXTERIOR LIGHTS PART OF THIS PROJECT, LOOP CIRCUITS THROUGH CONTACTOR AND HOA SWITCHES FOR CONTROL. REFER TO EXTERIOR LIGHTING CONTROL DETAIL ON E5.0. PROVIDE (1) AT IN MDF OF EACH FIELD HOUSE.

KEYNOTES:

L8 TIE INTO NORMAL UTILITU MONITORING POWER INTO NEAREST NORMAL POWER CIRCUIT FOR UTILITU MONITORING - TYPICAL



1 BCHS 1ST FLOOR - AREA A

SCALE: 1/16" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

BULLITT CENTRAL – EM POWER – AREA A

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BG 25-145

BG# 25-145

DATE : 04.22.2025
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REVISIONS :

2023-50.1

E3.0 BCHS

GENERAL NOTES (LIGHTING):

A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER N.E.C. #300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C #100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

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K. REFER TO ARCHITECTS FLOOR PLANS FOR HARD CEILING AREAS. PROVIDE ACCESS PANELS AS REQUIRED FOR JUNCTION BOX ACCESS. COORDINATE LOCATIONS ON-SITE WITH ARCHITEXT AND ALL TRADES TO CONSOLIDATE ACCESS PANELS THAT ARE OUT OF SIGHT AS MUCH AS POSSIBLE.

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KEYNOTES:

L8 TIE INTO NORMAL UTILITU MONITORING POWER INTO NEAREST NORMAL POWER CIRCUIT FOR UTILITU MONITORING - TYPICAL

1 BCHS 1ST FLOOR - AREA B

SCALE: 1/16" = 1'-0"

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BC MOVING FORWARD

SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

BULLITT CENTRAL – EM POWER – AREA B

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BG# 25-145

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BCHS

KEYNOTES:

GENERAL NOTES (POWER/SYSTEMS):

A. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

B. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

C. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

D. LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.

E. REFER TO "SYSTEM INSTALLATION MATRIX" (ON SYSTEMS LEGEND SHEET) AND SPECIFICATIONS FOR CONTRACTOR REQUIREMENTS OF EACH SYSTEM.

F. PROVIDE 2 TIER 4" J-HOOK CABLING PATH OUTSIDE OF MAIN EXPOSED PRACTICE FIELD FOR CABLE ROUTING. PROVIDE ON BOTH FLOORS. PROVIDE (2) 3" HILTI SPEED SLEEVES WHERE PASSING THROUGH VERTICAL PARTITIONS. PROVIDE (2) 4" SLEEVES BETWEEN 1ST AND 2ND FLOOR CABLING PATHS.

G. 20A BRANCH CIRCUITS OUTSIDE OF 100' RADIUS OF POWER PANELS SHALL BE #10 WIRE AND GROUND.

H. THE CONTRACTOR SHALL ROUTE ALL "SYSTEM CONDUIT STUB-UPS" TO THE NEAREST CORRIDOR CABLING PATH (SEE "STUB-UP" DETAILS). REFER TO CABLING PATH INSTALLATION DETAIL FOR ADDITIONAL REQUIREMENTS.

I. CONTRACTOR SHALL PAINT ALL SYSTEMS CONDUIT STUB-UPS LIGHT BLUE FOR SYSTEMS CABLING INTO THE CORRIDOR CABLING PATH. PROVIDE PULL STRINGS IN ALL NEW CONDUIT RUNS FOR SYSTEM CABLING INSTALLATION.

J. CCTV DEVICE ROUGH-INS AT EXTERIOR WALL ARE TO BE NIPPLES WITH LENGTH OF RACEWAY AS REQUIRED CUT FLUSH WITH EXTERIOR WALL TO ALLOW FOR OWNER TO MOUNT CCTV CAMERA OVER CONDUIT. CONDUIT TO BE SUPPORT BY INTERIOR JUNCTION BOX FASTENED TO BUILDING. PENETRATION AND CONDUIT SHALL BE WEATHER SEALED.

K. DEVICE ELEVATIONS ARE TO BE CONFIRMED PRIOR TO ROUGH-IN.

L. ALL ELECTRIC WATER COOLERS (EWC'S) TO BE PROVIDED WITH A GFCI TYPE CIRCUIT BREAKER.

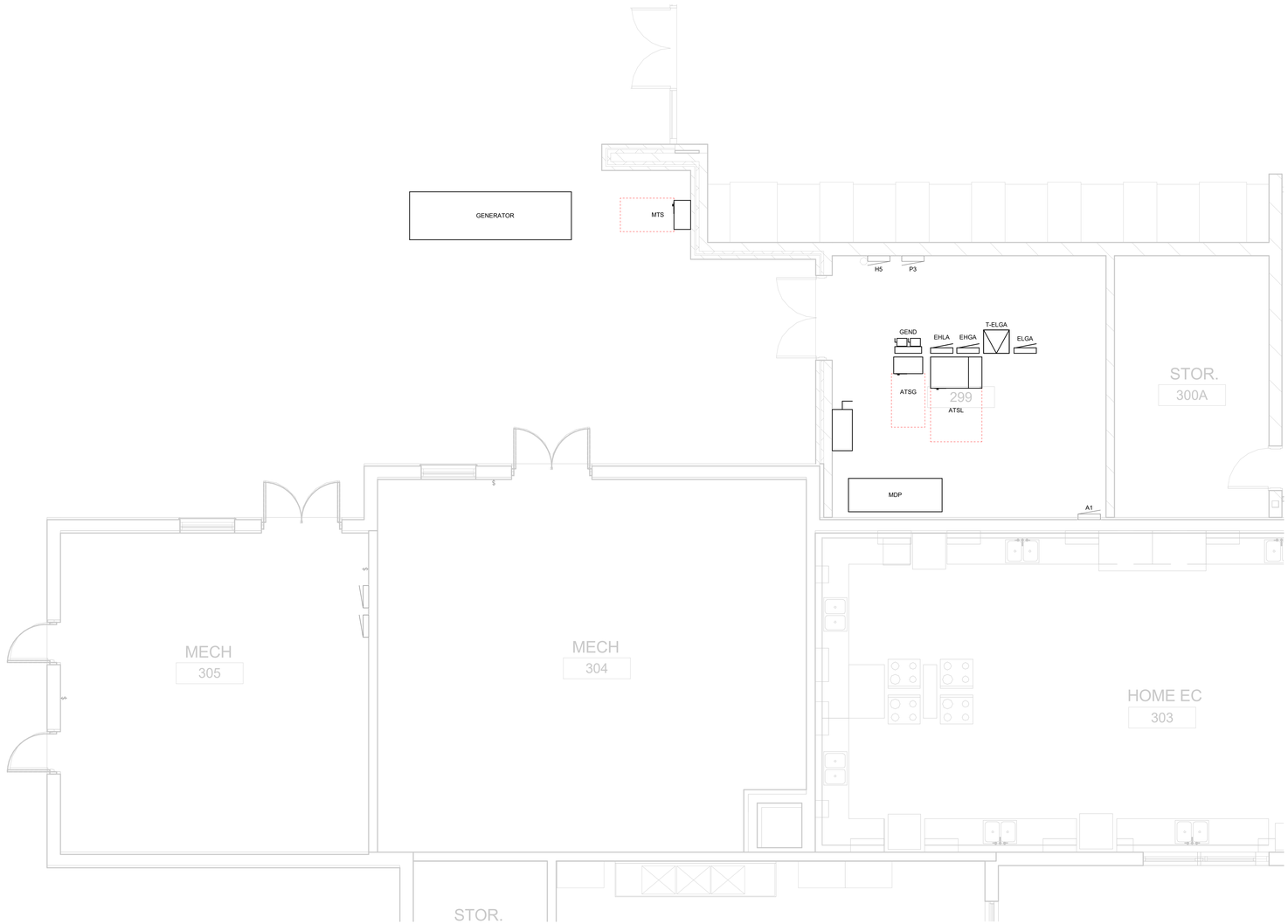
M. REFER TO STRUCTURAL DRAWINGS DETAIL - TYPICAL SECTION OF CONDUIT OPENING LOCATIONS IN PRECAST CONCRETE SLAB FOR ATTACHMENT AND PENETRATION OF ALL ELECTRICAL EQUIPMENT. DETAIL IS VIEW "L" S4..3.

N. INTERCEPT AND EXTEND EXISTING CIRCUITS AS REQUIRED FOR RELOCATION.

O. ROUGH-INS ARE PROVIDED FOR LOW VOLTAGE BUT CONDUITS MUST BE RUN UNDER PRESSBOX FOR INTERCONNECTION OF SOUND AND DATA CABLES. PROVIDE INTERCONNECTION AS REQUIRED.

P. REFER TO ARCHITECTS FLOOR PLANS FOR HARD CEILING AREAS. PROVIDE ACCESS PANELS AS REQUIRED FOR JUNCTION BOX ACCESS. COORDINATE LOCATIONS ON-SITE WITH ARCHITEXT AND ALL TRADES TO CONSOLIDATE ACCESS PANELS THAT ARE OUT OF SIGHT AS MUCH AS POSSIBLE.

Q. MANY UNDERGROUND PRIVATE UTILITIES EXISTING IN AREA OF RENOVATION. CONTRACTOR SHALL TAKE OF TO WORK AROUND / OFFSET FROM EXISTING UTILITIES. HYDRO EXCAVATE AS REQUIRED.



1 ENLARGED EMERGENCY GENERATOR CENTRAL PLANT

SCALE: 1/4" = 1'-0"

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SCHEMATIC DESIGN & DEVELOPMENT DOCUMENTS

BULLITT CENTRAL – ENLARGED EMERGENCY GENERATOR CENTRAL PLANT

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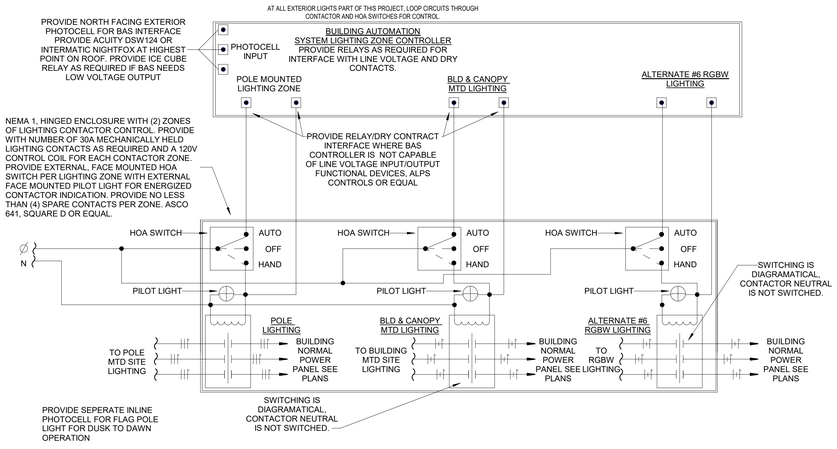
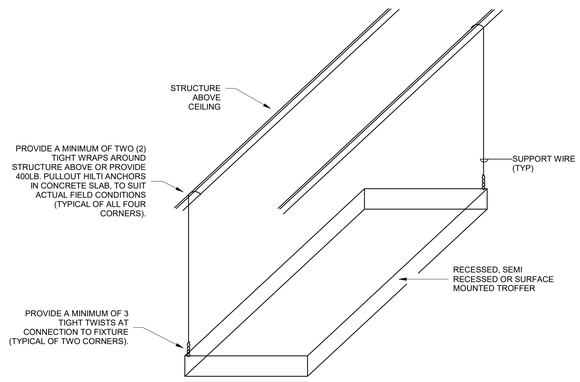


3 EXTERIOR LIGHTING CONTROL DETAIL

NO SCALE



GENERAL TROFFER SUPPORT DETAIL NOTES:

A. SUPPORT WIRES SHALL BE GALVANIZED REGULAR COATING, SOFT TEMPER, 0.1055 INCHES IN DIAMETER (12 GAGE).

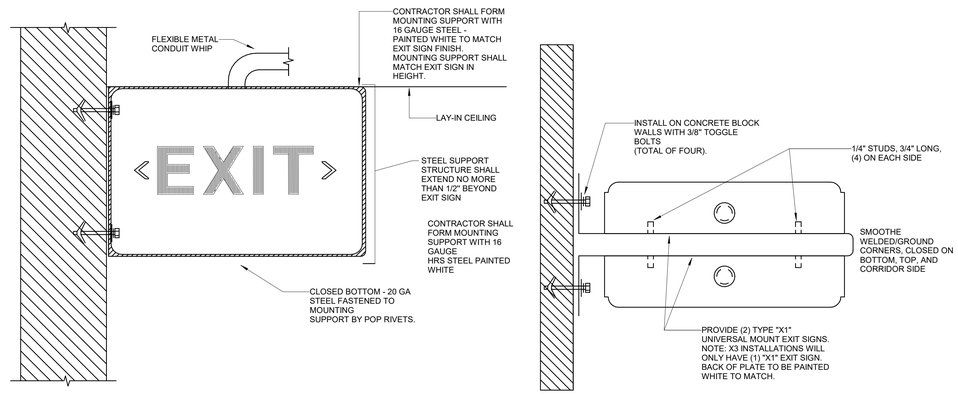
B. ALTERNATELY, CONTRACTOR MAY SUPPORT FIXTURES WITH SINGLE WIRE FROM ALL FOUR CORNERS OF FIXTURE PER SPECIFICATIONS WITH NUMBER OF TWISTS AT FIXTURE AND NUMBER OF WRAPS AROUND STRUCTURE INDICATED IN THIS DETAIL.

2 TROFFER SUPPORT DETAIL

NO SCALE

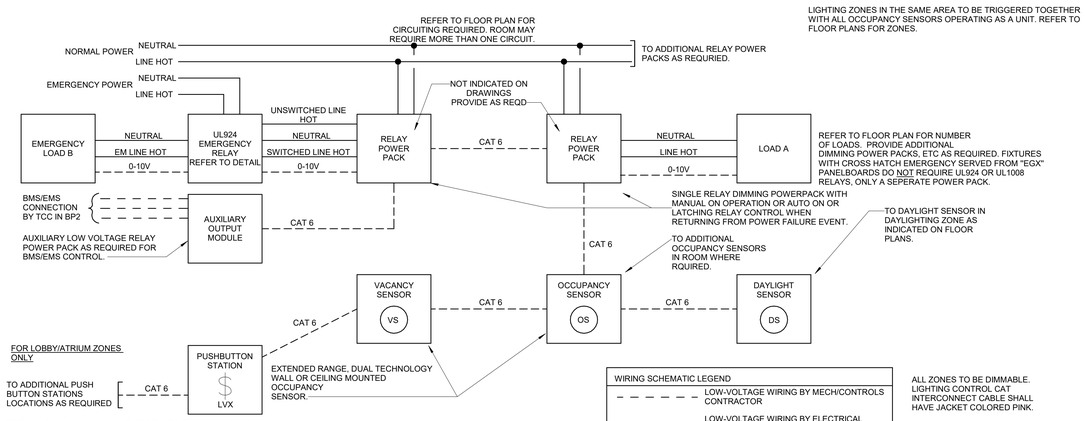
BP2 - BUILDING LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	BASIS OF DESIGN	EQUAL MANUFACTURERS	MOUNTING	LAMPS / CCT	MINIMUM LUMENS	MAXIMUM WATTAGE	VOLTAGE	REMARKS
A0	SAME AS A2 EXCPT WITH 1X4 FLANGEE KIT	METALUX #24GR-LD5-42-F125-UNV-L840-HCD	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	4200	35	120	PROVIDE FLANGE KIT WHERE HARD CEILING
A0E	SAME AS A2E EXCPT WITH 1X4 FLANGEE KIT BATTERY PACK	METALUX #24GR-LD5-64-F125-UNV-L840-HCD	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	4200	35	120	PROVIDE FLANGE KIT WHERE HARD CEILING
A2	2X4 LED TROFFER	METALUX #24GR-LD5-42-F125-UNV-L840-HCD	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	4200	35	120	PROVIDE FLANGE KIT WHERE HARD CEILING
A2P	2X4 LED SUSPENDED PANEL	LITHONIA #CPANL-2X4-AL06-SWW7-M2-PAC 2DF			4000K	4000	36	120	AIRCRAFT CABLE SUSPENDED.PROVIDE WITH CORD.
A3	2X4 LED TROFFER	METALUX #24GR-LD5-64-F125-UNV-L840-HCD	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	6400	48	120	PROVIDE FLANGE KIT WHERE HARD CEILING
A3P	2X4 LED SUSPENDED PANEL	LITHONIA #CPANL-2X4-AL06-SWW7-M2-PAC 2DF			4000K	6000	30	120	AIRCRAFT CABLE SUSPENDED.PROVIDE WITH CORD.
B	4'-0"IMPACT RESISTANT WRAP	MERCURY #LW25W-4-5000-40K-PF-1%-NI-R5PF-100	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	5020	50	120	FACTORY PROVIDE PHILLIPS IN LIEU OF TAMPER PROOF SCREWS
BE	SAME AS B EXCEPT WITH INTEGRAL BATTERY	MERCURY #LW25W-4-5000-40K-PF-1%-NI-R5PF-100-EM10	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	5020	50	120	FACTORY PROVIDE PHILLIPS IN LIEU OF TAMPER PROOF SCREWS
BW	VANDAL RESISTANT WALL FIXTURE	MERCURY #LW25W-4-5000-40K-PF-1%-NI-R5PF-100	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	5020	50	120	FACTORY PROVIDE PHILLIPS IN LIEU OF TAMPER PROOF SCREWS
D	<varies>	<varies>	<varies>		<varies>	<varies>	<varies>	<varies>	
DE	INDUSTRIAL STRIP FIXTURE WITH AIRCRAFT CABLE SUSPENSION AND W/REGUARD	COOPER #4SNX-33SL-LW-UNV-L840-CD-1-XX-W-G-SNX/SN-4FT-B-Y-TOGGLE-10-2PK	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	3618	21	120	
DV	WET LOCATION INDUSTRIAL STRIP	METALUX #4VT3-LD5-4000-WPC-UNV-L840-CD1-VT3-SS-SBK	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	4767	31	120	PROVIDE WITH STAINLESS STEEL CHAIN SUSPENSION.
DVE	WET LOCATION INDUSTRIAL STRIP WITH INTEGRAL BATTERY	LITHONIA #CSVT-L48-5000LM-MVOLT-40K-80CRI-STSL-MHCH36 SS-IE7WCP			4000K	4767	31	120	PROVIDE WITH STAINLESS STEEL CHAIN SUSPENSION.
DW	WALL MOUNTED INDUSTRIAL STRIP	COOPER #4SNX-33SL-LW-UNV-L840-CD-1-XX-W-G-SNX/SN-4FT-B	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	3618	21	120	
DW2	WALL MOUNTED INDUSTRIAL STRIP	COOPER #4SNX-33SL-LW-UNV-L840-CD-1-XX-W-G-SNX/SN-4FT-B	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	3618	21	120	
DWE	WALL MOUNTED INDUSTRIAL STRIP WITH EMERGECY	COOPER #4SNX-33SL-LW-UNV-L840-CD-1-XX-W-G-SNX/SN-4FT-B-Y-TOGGLE-10-2PK-EL10W	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	3618	21	120	
ED	6" RECESSED CAN LIGHT FIXTURE						37	277	
EM	<varies>	<varies>			<varies>		0	<varies>	
EM2	OPEN AREA HIGH BAY	METALUX #VHB-24 W UNV L840-CD-XXX-VHB-WG-LOOP10-Y-TOGGLE- -2PK	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	24234	0	120	
FL1	FIELD HOUSE WALL PACK	LUMARK #XTOR6B-W-XX-WGXTORMX			4000K	6000	58	120	
FL3	10" SURFACE CANOPY FIXTURE	FC LIGHTING #FCW3050-UNV-4K-CRI85-25L-XXX-LD-SP20	LUMINAIRE EQUAL, PHILLIPS EQUAL		4000K	3600	43	120	
FL4	WALL MOUNTED RGBW FLOOD LIGHT	LIGMAN KWH-50022-VW	OR EQUAL		4000K	6000	58	120	FINISH SELECTED BY ARCHITECT. TIE INTO RGBW LIGHTING CONTROLS
G	LINEAR RECESSED	CORELITE #CL4DR-F-80D-840-1-UNV-STD-TX-XX	MARK EQUAL, PHILLIPS EQUAL		4000K	3204	27	120	
GE	LINEAR RECESSED EMERGENCY	CORELITE #CL4DR-F-80D-840-1-UNV-STD-TX-XX-B2	MARK EQUAL, PHILLIPS EQUAL		4000K	3204	27	120	
GWE	LINEAR WALL EMERGENCY	CORELITE #SQW-F-050U-075D-840-2-D-UNV-STD-XX-WM-XX-BSL 6	MARK EQUAL, PHILLIPS EQUAL		4000K	5072	42	120	
HA	OPEN AREA HIGH BAY	METALUX #VHB-24 W UNV L840-CD-XXX-VHB-WG-LOOP10-Y-TOGGLE- -2PK	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	24234	166	120	
HB	OPEN AREA HIGH BAY	METALUX #VHB-18 W UNV L840-CD-XXX-VHB-WG-LOOP10-Y-TOGGLE- -2PK	LITHONIA EQUAL, PHILLIPS EQUAL		4000K	18285	125	120	
SW	WET LOCATION CAN LIGHT	HALO #HC6-15-D010-HM6-0525-840-61PSMDW	METALUX EQUAL, PHILLIPS EQUAL		4000K	1500	17	120	
TR	STAIRWELL ELEVATOR WALL WASHER	JESCO #J1TR #J2HVFE24N #J2-L519L-40-90-XX-L519LLVX	LITHONIA EQUAL, PHILLIPS EQUAL		4000K		10	120	PROVIDE TRACK HEADS ON 4'-0" CENTERS AROUND ELEVATOR LOBBY TO LIGHT ELEVATOR TOWER
V	ELEVATOR PIT LIGHT	METALUX #2VT3-LD5-4000-WPC-UNV-L840-CD1-VT3-SS-SBK	LITHONIA EQUAL, PHILLIPS EQUAL		4000K		59	120	
X1	EXIT SIGN	SURE-LITES #UX7-1-XX-SD	LITHONIA EQUAL, PHILLIPS EQUAL		3000K		3	277	
X2	EXIT SIGN DUAL FACE	ISOLITE MAX2.0			3000K		3	120	



4 X2 AND X3 FLAG MOUNT EXIT SIGN DETAIL

NO SCALE



OCCUPANCY/VACANCY/DAYLIGHT SENSOR GENERAL NOTES :

1. SYSTEM SHALL BE WATTSTOPPER DLM OR SENSOR SWITCH nLIGHT EQUAL. SYSTEM SHALL BE PROVIDED, WIRED AND CONTROLLED AS A COMPLETE AND OPERABLE SYSTEM.
2. VERIFY ALL WIRING REQUIREMENTS WITH MANUFACTURER OF OCCUPANCY SENSOR PRIOR TO ROUGH-IN. THIS DIAGRAM IS MEANT TO BE ILLUSTRATIVE ONLY.
3. ALL POWER PACKS TO BE LOCATED IN CONCEALED LOCATIONS ABOVE ACCESSIBLE CEILINGS.
4. ALL UNITS TO BE DUAL TECHNOLOGY SENSORS WITH POWER PACKS.
5. PROVIDE J-HOOKS ON 4' CENTERS ABOVE CEILING FOR ALL CONTROL CABLING INDICATED BETWEEN RELAYS.
6. CONTRACTOR SHALL PROVIDE AN EXTRA 10' OF CONTROL WIRING COILED UP ABOVE CEILING AT OCCUPANCY SENSOR.
7. WHERE MULTIPLE CIRCUITS SERVE ONE AREA, CONTRACTOR SHALL PROVIDE ADDITIONAL RELAY PACKS AS REQUIRED TO CONTROL ALL CIRCUITS/ZONES IN ROOM/AREA TOGETHER. REFER TO MANUFACTURER'S WIRING DIAGRAMS FOR WIRING REQUIREMENTS.
8. WHERE MULTIPLE SENSORS AND MULTIPLE POWER PACKS ARE REQUIRED IN ONE ROOM, CONTRACTOR SHALL CONNECT SENSORS AND POWER PACKS SUCH THAT MOTION DETECTION BY ANY SENSOR IN THE ROOM SHALL ALLOW ALL CIRCUITS IN THE ROOM TO OPERATE. PROVIDE ALL ACCESSORIES AND WIRE DEVICES PER MANUFACTURER'S REQUIREMENTS FOR OPERATION AS DESCRIBED.
9. OCC SENSORS SHALL BE DUAL TECHNOLOGY (PIR AND ULTRASONIC) CEILING OR WALL TYPE. WHERE INDICATED AS WALL TYPE, PROVIDE WITH WITH RECESS BACKBOX, STUB-OUT AND GROMMETED COVERPLATE FOR CABLING. PROVIDE WITH ADDITIONAL EMS RELAY FOR BUILDING MANAGEMENT AND ZONE OCCUPANCY REGARDLESS OF LIGHTING CONDITION.
10. DAYLIGHT SENSOR OPERATION: DEVICE SHALL BE SET TO MAINTAIN 50FC OR 75FC (VERIFY WITH ENGINEER). LOW DIMMING RANGE SHALL BE SET LOWER THAN 30% OF FIXTURES OUTPUT LEVEL. TRANSITION OFF TIME SHALL BE SET AT 10 MINUTES. TRANSITION ON TIME SHALL BE 45 SEC. SYSTEM SHALL BE "BURNT" IN FOR 100 HOURS. SYSTEM SHALL BE CONFIGURED AND TESTED PRIOR TO END OF PROJECT.
11. SWITCHES TO BE FACTORY LABELED. COORDINATE DURING SHOP DRAWINGS.

OCCUPANCY/VACANCY/DAYLIGHT SENSOR LIGHTING CONTROL WIRING DIAGRAM

NO SCALE

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LIGHT FIXTURE SCHEDULE

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG JOB #25-145

BG# 25-145

DATE : 04.22.2025
DRAWN BY : CMTA
CHECKED BY : CMTA
REVISIONS :
1 ADD#8 12.01.24

2023-50.1

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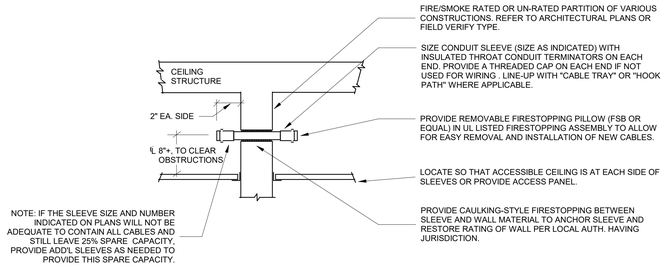
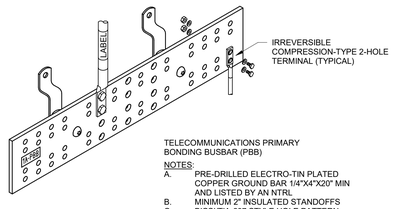


GENERAL NOTES:
- A. PROVIDE ONE 2" SPARE CONDUIT SLEEVE THROUGH ALL FULL HEIGHT PARTITIONS FOR FUTURE USE. LABEL AS SPARE FOR OWNER'S USE ONLY. REFER TO ARCHITECTURAL PLANS FOR FULL HEIGHT PARTITION LOCATIONS.
- B. USE AT ALL "OPEN" TYPE CABLING PENETRATIONS THROUGH WALLS, FLOORS, ETC.

11 SYSTEMS CABLING SLEEVE INSTALLATION

NO SCALE

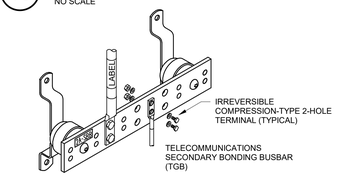


TELECOMMUNICATIONS PRIMARY BONDING BUSBAR (PBB)

NOTES:
- A. PRE-DRILLED ELECTRO-TIN PLATED COPPER GROUND BAR 1/4"X4"X20" MIN AND LISTED BY AN NTRL
- B. MINIMUM 2" INSULATED STANDOFFS
- C. BICSI/TIA-607 STYLE HOLE PATTERN
- D. CLEAN SURFACE AND APPLY ANTI-OXIDANT PRIOR TO FASTENING OF CONDUCTORS.
- E. PROVIDE IDENTIFICATION FOR GROUND BAR AND GROUNDING CONDUCTORS IN ACCORDANCE WITH TIA/EIA-606-B.

10 TELECOMM BUSBAR - PBB

NO SCALE



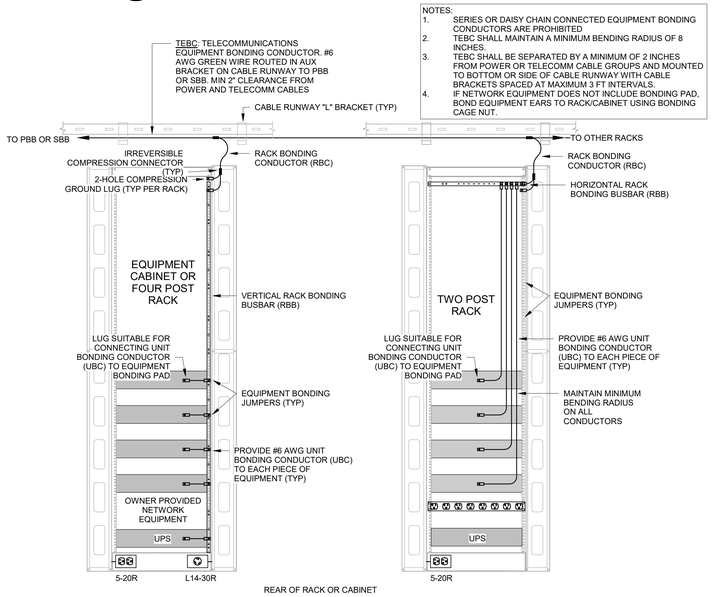
TELECOMMUNICATIONS SECONDARY BONDING BUSBAR (TGB)

NOTES:
- A. PRE-DRILLED ELECTRO-TIN PLATED COPPER GROUND BAR 1/4"X2"X12" MIN AND LISTED BY AN NTRL
- B. MINIMUM 2" INSULATED STANDOFFS
- C. BICSI/TIA-607 STYLE HOLE PATTERN
- D. CLEAN SURFACE AND APPLY ANTI-OXIDANT PRIOR TO FASTENING OF CONDUCTORS.
- E. PROVIDE IDENTIFICATION FOR GROUND BAR AND GROUNDING CONDUCTORS IN ACCORDANCE WITH TIA/EIA-606-B.

5 TELECOMM BUBAR - SBB

NO SCALE

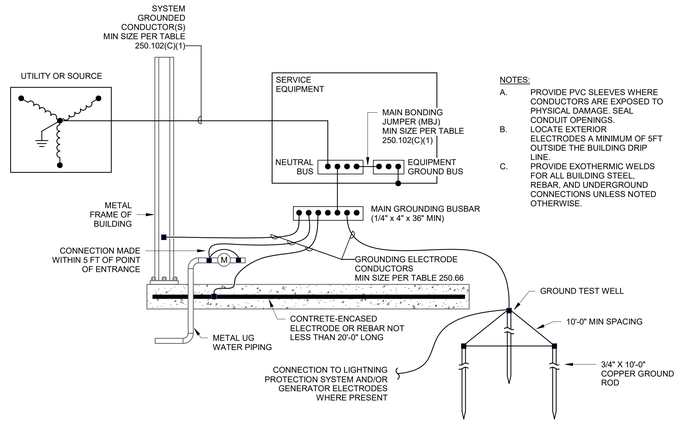
NOTES:
1. SERIES OR DAISY CHAIN CONNECTED EQUIPMENT BONDING CONDUCTORS ARE PROHIBITED
2. TEBC SHALL MAINTAIN A MINIMUM BENDING RADIUS OF 8 INCHES.
3. TEBC SHALL BE SEPARATED BY A MINIMUM OF 2 INCHES FROM POWER OR TELECOMM CABLE GROUPS AND MOUNTED TO BOTTOM OR SIDE OF CABLE RUNWAY WITH CABLE BRACKETS SPACED AT MAXIMUM 3 FT INTERVALS.
4. IF NETWORK EQUIPMENT DOES NOT INCLUDE BONDING PAD, BOND EQUIPMENT EARS TO RACK/CABINET USING BONDING CAGE NUT.



RACKS ARE PROVIDED IN SEPERATE CONTRACT - GRONDING OF THOSE RACKS IS IN THIS CONTRACT

7 RACK GROUNDING AND POWER DETAIL

NO SCALE

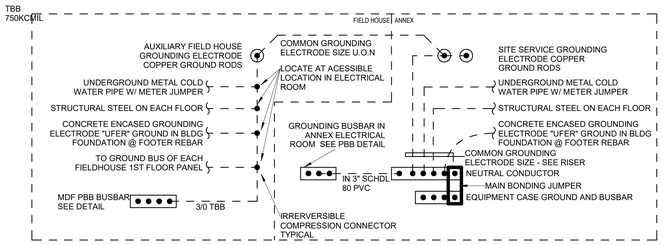


NOTES:
- A. PROVIDE PVC SLEEVES WHERE CONDUCTORS ARE EXPOSED TO PHYSICAL DAMAGE. SEAL CONDUIT OPENINGS.
- B. LOCATE EXTERIOR ELECTRODES A MINIMUM OF 5FT OUTSIDE THE BUILDING DRIP LINE.
- C. PROVIDE EXOTHERMIC WELDS FOR ALL BUILDING STEEL, REBAR, AND UNDERGROUND CONNECTIONS UNLESS NOTED OTHERWISE.

9 GROUNDING ELECTRODE SYSTEM DETAIL

NO SCALE

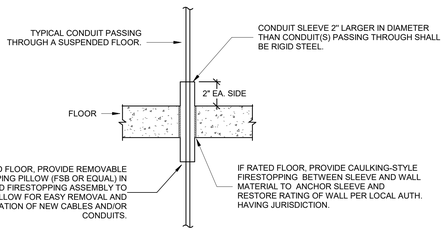
TELECOM GROUNDING NOTES:
1. ALL WORK TO BE DONE IN ACCORDANCE WITH ANSI/TIA STD-607-C
2. LOCATE PBB IN TELECOMM ENTRANCE FACILITY (MDF).
3. ALL GROUNDING AND BONDING CONDUCTORS SHALL BE GREEN INSULATED COPPER CONDUCTORS AND LISTED FOR INTENDED APPLICATION.
4. LABEL ALL GROUNDING AND BONDING CONDUCTORS IN ACCORDANCE WITH ANSI/TIA-606 REQUIREMENTS.
5. ALL CONNECTIONS TO THE PBB/SBB AND TBB SHALL BE EXOTHERMIC WELD, LISTED COMPRESSION TWO-HOLE LUGS, OR OTHER IRREVERSIBLE COMPRESSION TYPE CONNECTION.
6. TBBs SHALL BE CONTINUOUS FROM THE PBB TO THE FURTHEST SBB.



NOTES:
- A. SIZE GROUNDING ELECTRODE CONDUCTORS PER NEC 250.66 OR SIZE LISTED ABOVE, WHICHEVER IS HIGHER.
- B. REFER TO FEEDER SCHEDULES FOR SIZES OF EQUIPMENT GROUNDING CONDUCTORS.
- C. MAIN GROUND BUS BAR TO BE PRE DRILLED ELECTRO-TIN PLATED COPPER GROUND BAR, 1/4"x4" LENGTH AS REQUIRED FOR NUMBER OF CONNECTIONS. PROVIDE WITH 2" INSULATED STANDOFFS. CLEAN SURFACE AND PROVIDE ANTIOXIDANT PRIOR TO FASTENING CONDUCTORS.
- D. EXPOSED GROUND CONDUCTORS INDICATED IN THIS DETAIL IN INTERIOR SPACES TO BE PROVIDED IN SCHEDULE 80 PVC (OTHER RACEWAY WHERE NOT IN PLENUM SPACE). EXTERIOR GROUND CONDUCTORS SHALL NOT BE EXPOSED AND SHALL BE ROUTED IN 1.5" DIRECT BURIED SCHEDULE 80 PVC - MIN BURY 36".
- E. PROVIDE PVC SLEEVE WHERE CONDUCTORS ARE EXPOSED TO PHYSICAL DAMAGE. SEAL CONDUIT OPENINGS. LOCATE EXTERIOR ELECTRODES A MINIMUM OF 5FT OUTSIDE THE BUILDING DRIP LINE.

2 GROUNDING ELECTRODE INTERCONNECTION DETAIL

NO SCALE

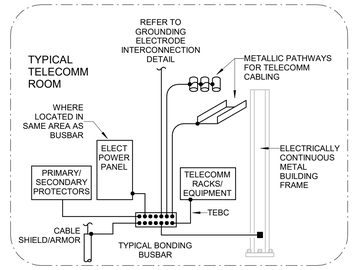


GENERAL FLOOR PENETRATION NOTES :
- A. WHERE CONDUITS PENETRATE A FLOOR SLAB AND ARE EXPOSED, PROVIDE SQUARE 4" HIGH CONCRETEPAD AROUND CONDUIT SLEEVE AND EXTEND SLEEVE 4" ABOVE PAD.
- B. WHERE CONDUITS OR SLEEVES PENETRATE FLOORS IN GROUPS, THE CONCRETE PAD SHOULD BE CONTINUOUS AROUND ALL CONDUITS OR SLEEVES.

3 CONDUIT PENETRATION SLEEVE INSTALLATION

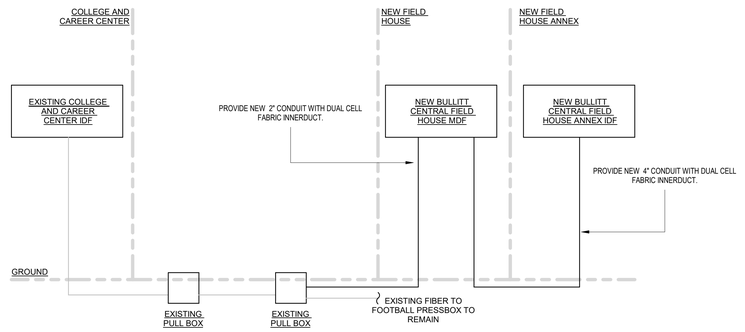
NO SCALE

NOTES:
1. ALL WORK TO BE DONE IN ACCORDANCE WITH ANSI/TIA STD-607-C AND ALL GROUNDING AND BONDING CONDUCTORS SHALL BE GREEN INSULATED COPPER CONDUCTORS AND LISTED FOR INTENDED APPLICATION.
2. LABEL ALL GROUNDING AND BONDING CONDUCTORS IN ACCORDANCE WITH ANSI/TIA/EIA 606 REQUIREMENTS.
3. ALL CONNECTIONS SHALL BE EXOTHERMIC WELD, LISTED COMPRESSION TWO-HOLE LUGS, OR OTHER IRREVERSIBLE COMPRESSION TYPE CONNECTION.
4. ALL METALLIC RACEWAYS FOR TELECOMM CABLING SHALL BE BONDED TO BUSBAR IF LOCATED IN SAME ROOM OR AREA.
5. WHERE THE OSP OR BACKBONE CABLING INCORPORATES A SHIELD OR METALLIC ARMOR, IT SHALL BE BONDED TO THE BUSBAR WHERE THE CABLES ARE TERMINATED OR WHERE THE PAIRS ARE BROKEN OUT FROM THE CABLE SHEATH.
6. BONDING CONDUCTOR TO BUILDING STEEL SHALL BE SIZED TO MATCH BACKBONE CONDUCTOR, OTHER BONDING CONDUCTORS SHALL BE A MINIMUM #6 AWG AND INSTALLED WITH A MINIMUM 8-INCH BEND RADIUS.
7. BONDING CONDUCTORS FOR ENTRANCE PROTECTORS AND CABLE SHIELDING CAPABLE OF CONDUCTING LIGHTNING AND FAULT CURRENTS SHALL MAINTAIN A MINIMUM OF 1FT SEPARATION FROM ALL TELECOMM CABLING.



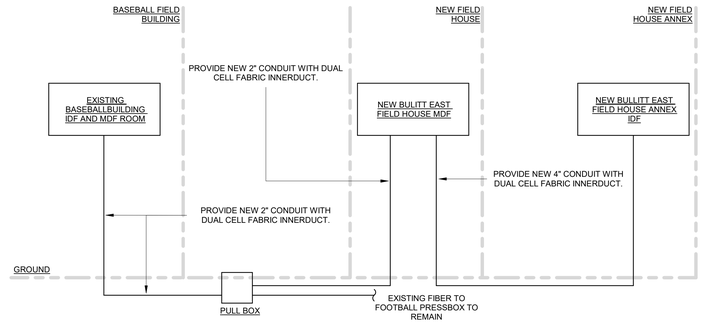
8 TELECOMM BUSBAR PBB/SBB CONNECTIONS

NO SCALE



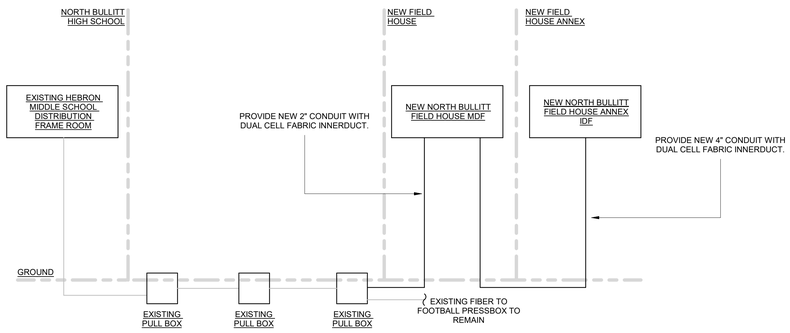
1 COMMUNICATIONS RISER DIAGRAM - BULLITT CENTRAL FIELD HOUSE

NO SCALE



4 COMMINICATIONS RISER DIAGRAM - BULLITT EAST FIELD HOUSE

NO SCALE



6 COMMUNICATIONS RISER DIAGRAM - NORTH BULLITT FIELD HOUSE

NO SCALE

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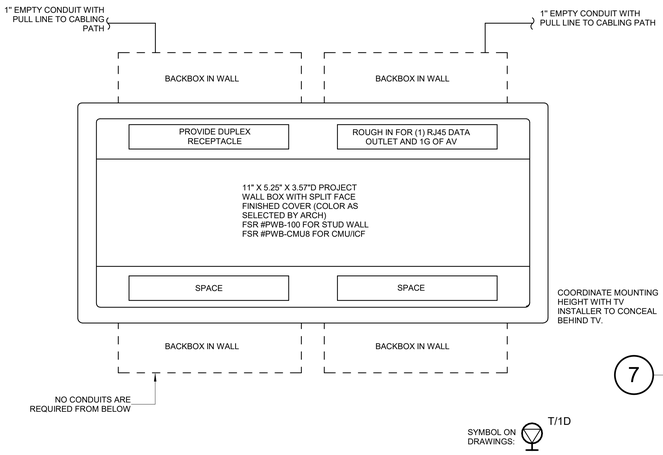


5 TELEVISION OUTLET DETAIL

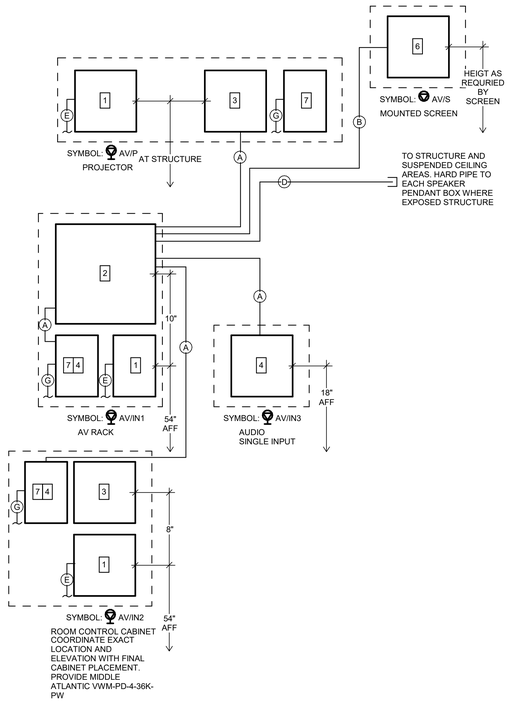
NO SCALE

BACBOX AND DEVICE LEGEND:

1. RECESSED DUPLEX RECEPTACLE - POWER BY EC
2. 6X6x4d RECESSED AV INTERCONNECT BACKBOX BY EC
3. FUTURE AV
4. MICROPHONE INPUT
5. 1G RECESSED BACKBOX HORIZONTALLY MOUNTED IN BLEACHERS WITH 1G STAINLESS STEEL COVERPLATE BY EC.
6. 2G BACBOX SURFACE MOUNTED BESIDE PROJECTOR SCREEN ABOVE CEILING WITH PLASTIC COVERPLATE BY EC.
7. 1D DATA DROP ROUGH-IN - DATA BY BP4.

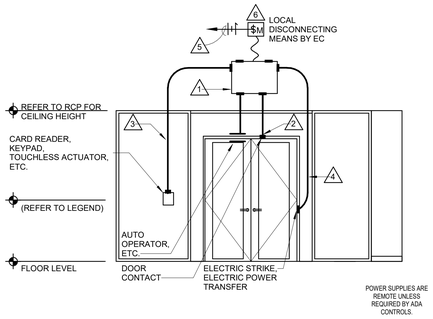
CONDUIT LEGEND:

A. 1" EMT RACEWAY BY EC
B. 3/4" EMT RACEWAY BY EC
C. 3/4" FLEX UMBILICAL SUPPORTED ALONG TELESCOPING BLEACHERS BY EC
D. 1-1/4" EMT RACEWAY BY EC
E. RACEWAY AND POWER WIRING AS INDICATED ON FLOOR PLANS BY EC
F. 1" CHASE NIPPLE THROUGH BACK TO BACK BOXES BY EC
G. 1" EMT RACEWAY TO CABLING PATH BY EC



7 FIELD HOUSE AV ROUGH - IN SCHEMATIC - PROVIDE COMPLETE SYSTEM PER SPECS

NO SCALE



ACCESS CONTROL SYSTEM (TAGGED NOTES)

1. 12X16X4D DOOR INTERCONECTION BOX ABOVE ACCESSIBLE CEILING OR AS LOCATED ON FLOOR PLANS - C.F.C.I. REFER TO DOOR HARDWARE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. PROVIDE 3/4" CONDUIT STUB-OUT FROM DOOR FRAME TO 6" ABOVE CEILING AT DOOR LOCATION AS REQUIRED FOR DOOR POSITION CONTACT SWITCHES, AUTO OPERATORS, ETC. PROVIDE ADDITIONAL CONDUITS AND LOCATIONS AS REQUIRED FOR ADDITIONAL DEVICES. REFER TO DOOR HARDWARE SPECIFICATION AND FLOOR PLANS FOR ADDITIONAL REQUIREMENTS.
3. PROVIDE 3/4" CONDUIT STUB-OUT FROM DOOR OPERATOR DEVICE 6" ABOVE CEILING AT DOOR LOCATION AS REQUIRED FOR CARD READERS, TOUCHLESS ACTUATORS, KEYPADS, ETC. PROVIDE ADDITIONAL CONDUITS AND LOCATIONS AS REQUIRED FOR ADDITIONAL DEVICES. REFER TO DOOR HARDWARE SPECIFICATION AND FLOOR PLANS FOR ADDITIONAL REQUIREMENTS.
4. PROVIDE 3/4" CONDUIT STUB-OUT FROM DOOR FRAME TO 6" ABOVE CEILING AT DOOR LOCATION AS REQUIRED FOR ELECTRIC POWER TRANSFER, ELECTRIC STRIKE, ETC. PROVIDE ADDITIONAL CONDUITS AT LOCATIONS AS REQUIRED FOR ADDITIONAL DEVICES. REFER TO DOOR HARDWARE SPECIFICATION AND FLOOR PLANS FOR ADDITIONAL REQUIREMENTS.
5. ROUTE 120V POWER TO ALL DOOR POWER SUPPLIES, AUTO DOOR OPERATORS, ETC. AS REQUIRED. REFER TO DOOR HARDWARE SPECIFICATIONS AND FLOOR PLANS FOR DEVICES REQUIRED. PROVIDE LOCAL MOTOR RATED SNAP SWITCH ABOVE CEILING FOR LOCAL DISCONNECT OF DOOR POWER SUPPLIES.
6. O.F.C.I POWER SUPPLY ABOVE ACCESSIBLE CEILNG. POWER SUPPLIES ARE REMOTE UNLESS PART OF ADA OPERATOR/ACTUATORS.

ACCESS CONTROL SYSTEM (GENERAL NOTES)

- PROVIDE ALL NECESSARY BACKBOXES, CONDUITS AND ROUGH-INS REQUIRED. REFER TO DOOR HARDWARE SPECIFICATION FOR DOOR RISER REQUIREMENTS PER DOOR AND FOR EQUIPMENT ITEMS AND CONNECTIONS.
- REFER TO DOOR HARDWARE SPECIFICATIONS SECTION AND 087100 FOR ADDITIONAL REQUIREMENTS. PROVIDE ALL CONDUITS AND FINAL TERMINATIONS OF PATHWAYS AT ALL DOOR FRAMES, WALLS, BACKBOXES, ETX AS REQUIRED FOR WIRING PATHWAYS
- PROVIDE 3/4" CONDUIT MINIMUM FOR ALL ACCESS CONTROL ROUGH-IN AND STUB-OUTS. **FLEXIBLE RACEWAYS WILL NOT BE ACCEPTED.**
- ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL ROUGH-INS AND CONDUIT ARE PROVIDED IN THE DOOR FRAME DURING INSTALLATION (STRIKE, ELECTRIC POWER TRANSFER DEVICE, AUTO DOOR OPERATOR/ ACTUATOR AND DEVICE, ETC.) **SURFACE CONNECTIONS ON NEW HARDWARE WILL NOT BE ACCEPTED.** COORDINATE WITH OWNER, DOOR HARDWARE VENDOR AND GENERAL CONTRACTOR.
- CONTRACTOR SHALL PROVIDE ALL ACCESS CONTROL FIRE ALARM DOOR CONTROL TIE-INS WHERE REQUIRED FOR FREE EGRESS, COORDINATE WITH DOOR HARDWARE SPECIFICATIONS.
- CONTRACTOR SHALL PROVIDE INTERFACE FROM OWNERS ACCESS CONTROL SYSTEM TO DRY-CONTACT INPUT AT FIRE ALARM SYSTEM TO RELEASE ALL DOOR HOLD OPENS UPON ACTIVATION OF THE PANIC BUTTON MODE.

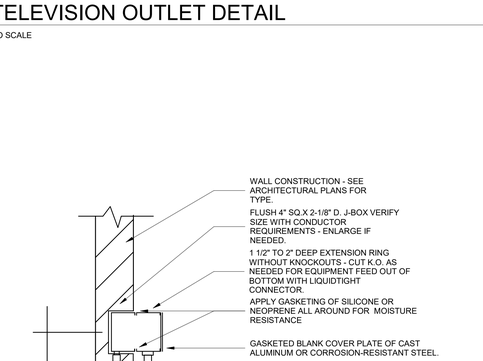
A PRECONSTRUCTION MEETING SHALL BE ARRANGED BY THE ELECTRICAL CONTRACTOR, GC, DIVISION 08 DOOR HARDWARE VENDOR AND OWNER/ENGINEER FOR COORDINATION PRIOR TO ANY INSTALLATION OF FRAMES OR ROUGH-INS THAT CONTAIN ANY LOW VOLTAGE INTEGRATION.

NO FRAMES OR ROUGH-INS ARE TO BE INSTALLED PRIOR TO THIS MEETING AND WHERE INSTALLATION OCCURS PRIOR TO THIS MEETING, ALL INSTALLATION WILL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE. NO EXCEPTIONS.

WHERE FLEXIBLE CONDUIT IS INSTALLED AFTER THIS MEETING, ALL INSTALLATION WILL BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE. NO EXCEPTIONS.

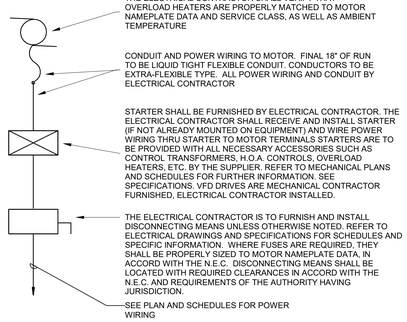
3 TYPICAL ACCESS CONTROLLED DOOR DETAIL

NO SCALE



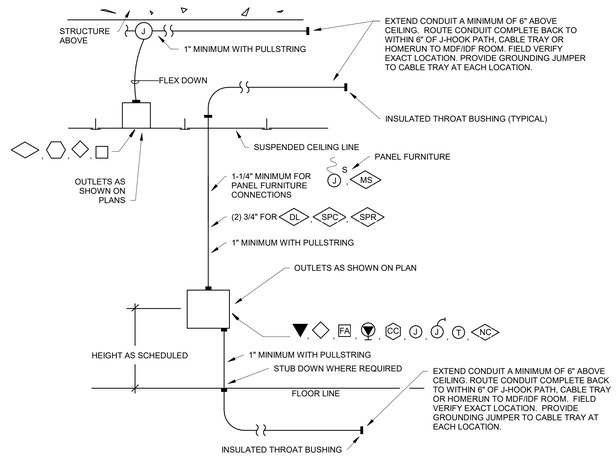
2 TYPICAL HARD-WIRED CONNECTION

NO SCALE



4 DETAIL OF TYPICAL MOTOR/STARTER INSTALLATION

NO SCALE



NOTES:

A. EXTEND CONDUIT TO NEAREST WIRING PATH UNLESS CABLING TERMINATES AT ANOTHER OUTLET IN THE SAME ROOM (IN WHICH CASE, STUB CONDUIT OUT ABOVE THE ROOM'S SUSPENDED CEILING). REFER TO GENERAL NOTES LOCATED ON ALL SYSTEM'S DRAWINGS. ACCESS CONTROL CONDUITS SHALL STUB ABOVE ACCESSIBLE CEILING FOR VENDOR FURNISHED ACCESS CONTROL CABLING, ETC.
B. WHERE OPEN CABLING IS INSTALLED WITHIN ENVIRONMENT AIR PLENUMS, SUCH CABLING SHALL MEET NEC REQUIREMENTS FOR SUCH INSTALLATIONS.
C. LABEL BACK OF OUTLET BOXES AND ENDS OF CONDUIT WITH UNIQUE NUMBER TO IDENTIFY EACH STUB-UP. USE PERMANENT MARKER PEN, 3/4" HIGH LETTERS. MATCH NUMBER ON OUTLET BOX TO END OF CONDUIT
D. INSTALL TELECOMMUNICATION AND CABLE TV OUTLETS WITHIN 6" OF POWER RECEPTACLE WHERE POWER RECEPTACLE IS SHOWN ON POWER PLANS IN SAME GENERAL LOCATION.

1 ROUGHING-IN DETAIL FOR STUB-OUTS

NO SCALE

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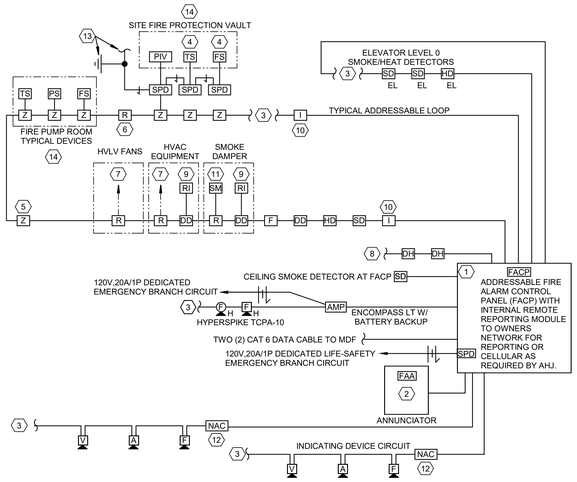
TAGGED NOTES:

1. PROVIDE NEW RECESSED MOUNTED, MICROPROCESSOR BASED, FIRE ALARM TRANSPONDER PANEL / CENTRAL PROCESSING UNIT (C.P.U.), PANEL SHALL BE CAPABLE OF MONITORING ALL INDIVIDUALLY ADDRESSABLE ALARM INDICATING DEVICES OR POINTS AS INDICATED AND WITH A MINIMUM OF 20% SPARE CAPACITY FOR FUTRE EXPANISON. ALL SYSTEM EQUIPMENT SHALL BE HOUSED IN A SINGLE CABINET. REFER TO SPECIFICATIONS FOR FURTHER REQUIREMENTS.
2. NEW REMOTE FLUSH-MOUNTED FIRE ALARM ANNUNCIATOR STATION WITH LCD DISPLAY. SEE FLOOR PLANS FOR LOCATIONS AND QUANTITY.
3. TO ALL OTHER DEVICES ON LOOP/CIRCUIT AS REQUIRED. REFER TO FLOOR PLAN FOR PROPOSED DEVICE LOCATIONS.
4. COORDINATE WITH DRAWINGS FOR ACTUAL NUMBER OF TAMPER, FLOW AND PRESSURE SWITCHES REQUIRED TO BE MONITORED ON THE FIRE SUPPRESSION RISER AND THE SUPPRESSION ZONES ON EACH FLOOR.
5. PROVIDE ZONE ADDRESSABLE MODULE FOR SUPERVISION OF ANCILLARY FIRE PROTECTION/MONITORING SYSTEMS. DEVICE SHALL BE SURFACE MOUNTED IN NEMA-1 ENCLOSURE, ABOVE SUSPENDED CEILING. PROVIDE QUANTITY AND TYPE AS REQUIRED FOR: FIRE PROTECTION TAMPER, FLOW AND PRESSURE SWITCHES, FIRE PROTECTION POST-INDICATOR VALVE, DRY/CHEMICAL FIRE SUPPRESSION SYSTEMS, AND KITCHEN HOOD FIRE SUPPRESSION SYSTEM.
6. PROVIDE ADDRESSABLE FIRE ALARM RELAY FOR SIGNAL OUTPUT TO ANCILLARY BUILDING SYSTEMS. DEVICE SHALL BE SURFACE MOUNTED IN NEMA-1 ENCLOSURE, ABOVE SUSPENDED CEILING. PROVIDE QUANTITY AND TYPE AS REQUIRED. OPERABLE FIRE SHUTTERS TO CLOSE ON FIRE ALARM. ACCESS CONTROL DOORS TO UNLOCK AND POSITIVELY LATCH ON FIRE ALARM. ELEVATOR FOR ALL SPECIFIED AND REQUIRED FUNCTIONS.
7. ROUTE CONTROL WIRING (IN CONDUIT) BACK TO NEW HVAC EQUIPMENT/CONTROLS FOR AUTOMATIC SHUTDOWN. PROVIDE ADDRESIBLE AND LINE VOLTAGE RELAY AS REQUIRED FOR EQUIPMENT CONTROL.
8. TO ALL OTHER DOOR HOLDERS ON INDICATED FLOOR. DOOR HOLDERS SHALL BE POWERED FROM THE FIRE ALARM SYSTEM CABINETS AND SHALL RELEASE ON FIRE ALARM AS REQUIRED. REFER TO ARCHITECTURAL DOOR HARDWARE SCHEDULES AND DIVISION 8 AND 28 SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
9. PROVIDE NEW FLUSH-MOUNTED REMOTE ALARM/POWER INDICATING KEY RESET/TEST STATION ON CORRIDOR WALL (WHENEVER POSSIBLE) AT 7'- 6" AFF BELOW SMOKE DAMPER/DUCT SMOKE DETECTOR LOCATION AS REQUIRED.
10. PROVIDE AN "ISOLATOR MODULE" AT ALL BRANCH RUNS. MOUNT IN A SURFACE NEMA-1 ENCLOSURE ABOVE THE SUSPENDED CEILING. PROVIDE AS REQUIRED BY SYSTEM MANUFACTURER TO ISOLATE LOOPS ON EACH FLOOR AND WITHIN EACH SMOKE COMPARTMENT.
11. ROUTE 120V POWER WIRING THROUGH ADDRESSABLE RELAY MODULE FOR CONTROL OF DAMPER VIA ASSOCIATED DUCT/AREA SMOKE DETECTOR.
12. PROVIDE NUMBER OF NOTIFICATION APPLIANCE POWER SUPPLIES AS REQUIRED. LOCATE IN ELECTRICAL ROOMS. SUBMIT PROPOSED LOCATIONS IN SHOP DRAWINGS FOR REVIEW. PROVIDE SMOKE DETECTOR AT ALL NAC LOCATIONS.
13. PROVIDE SURGE PROTECTION DEVICE AT POINT OF CONDUIT ENTRANCE INTO BUILDING. PROVIDE 5/8" X 10'-0" COPPER-WELD GROUND ROD AT PERIMETER OF BUILDING NEXT TO CONDUIT ENTRANCE AND CONNECT TO SPD'S, COLD WATER LINE, AND BUILDING STEEL WITH #3 AWG INSULATED GROUND IN 3/4" CONDUIT.
14. PROVIDE # OF DEVICES AND TYPE AS REQUIRED FOR FIRE PUMP ROOM AND FIRE VAULT MONITORING AS REQUIRED BY FIRE PROTECTION SHOP DRAWINGS, FIRE PROTECTION DESIGN DRAWINGS AND CIVIL DESIGN DRAWINGS

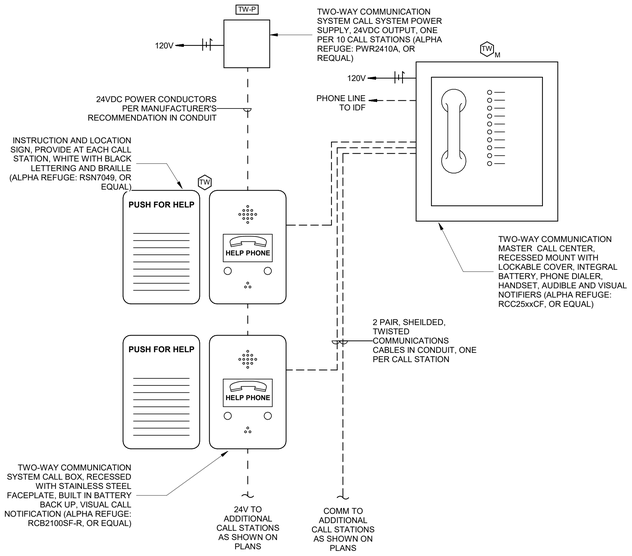


FIRE ALARM SYSTEM GENERAL NOTES:

- PROVIDE AN INTELLIGENT ADDRESSABLE FIRE ALARM SYSTEM FOR THE NEW FACILITY. THIS FIRE ALARM SYSTEM SHALL BE CAPABLE OF MONITORING THE INCOMING FIRE SUPPRESSION RISER, MANUAL PULL-STATIONS, ALL CEILING MOUNTED AUTOMATIC SMOKE AND HEAT DETECTORS AND ALL DUCT-MOUNTED AUTOMATIC SMOKE DETECTORS. IN ADDITION, PROVIDE THIS SYSTEM WITH A DIGITAL DIALER CONNECTED TO A MONITORING SERVICE SO THAT THE PROPER AUTHORITIES ARE NOTIFIED IN THE EVENT OF AN ALARM CONDITION.
- THIS RISER IS PARTIAL. ALL THE DEVICES CONNECTED TO THE FIRE ALARM CONTROL PANEL (FACP) UNITS ARE NOT SHOWN. THE CONTRACTOR SHALL REFER TO THE ELECTRICAL FLOOR PLANS FOR ADDITIONAL REQUIREMENTS.
- ANNUNCIATE ALL INDIVIDUAL FIRE ALARM DEVICES AS WELL AS AUXILIARY FUNCTIONS AT EACH ANNUNCIATOR. REFER TO SPECIFICATIONS, AS WELL AS GENERAL NOTES AND SCHEDULES THIS SHEET.
- FIELD VERIFY THE EXACT NUMBERS AND LOCATIONS OF ALL MECHANICAL RELATED ITEMS (EX. SPRINKLER CONNECTIONS, EXSTINGUISHING SYSTEMS, SMOKE DAMPERS, ETC.) AND MAKE CONNECTIONS AS REQUIRED/INDICATED.
- THE BUILDING FIRE ALARM SYSTEM ALSO FUNCTIONS IN SMOKE CONTROL MODE. IN SMOKE CONTROL MODE, ALL SMOKE EVACUATION FANS SHALL RUN. ALL ATRIUM DOORS SHALL OPEN. ALL FANS SHALL RUN AND DOORS REMAIN OPEN UNTIL THE FIRE ALARM SIGNAL IS CLEARED AT THE FIRE ALARM PANEL OR OVERRIDDEN AT THE FIRE FIGHTERS OVERRIDE PANEL. ALL CONTROLS FOR THE SYSTEM SHALL BE UL864 LISTED.
- PROVIDE A DUCT-MOUNTED SMOKE DETECTOR IN THE DUCTWORK SERVING EACH AUTOMATIC FIRE/SMOKE DAMPER. THESE DETECTORS ARE TO MONITOR THE DUCT OPENING IN A SMOKE OR FIRE RATED PARTITION. THESE DETECTORS ARE TO BE PROVIDED WITH AN AUXILIARY, 24V, NORMALLY-CLOSED, RELAY WHICH HOLDS THE DAMPER OPEN. THIS RELAY IS TO KEEP THE DAMPER OPEN UNDER NORMAL CONDITIONS, THIS RELAY IS TO BE WIRED SO THAT IT OPENS, THUS ALLOWING THE DAMPER TO CLOSE, IN THE EVENT OF AN ALARM OR LOSS OF POWER CONDITION. THESE DETECTORS ARE TO BE SUPPLIED AND CONNECTED TO THE FIRE ALARM SYSTEM BY THE ELECTRICAL CONTRACTOR AND SHALL BE INSTALLED IN THE DUCTWORK BY THE MECHANICAL CONTRACTOR.
- PROVIDE ADDRESSABLE NOTIFICATION APPLIANCES WITH THIS SYSTEM. THESE APPLIANCES ARE TO BE WHITE WITH RED LETTERING. AUDIBLE NOTIFICATION APPLIANCES ARE TO UTILIZE AN AUDIBLE HORN SETTING AT A MINIMUM OF 87dB. VISUAL NOTIFICATION APPLIANCES SHALL BE CAPABLE OF MULTIPLE CANDELA SETTINGS UP TO 110 CANDELAS. ALL CONDUIT IN THE FIRE ALARM SYSTEM SHALL BE 3/4" SIZE EXCEPT AS OTHERWISE NOTED. PROVIDE LARGER CONDUIT IF REQUIRED TO MAINAIN CONDUCTORS AT 40% MAXIMUM FILL.
- FIRE ALARM MANUAL STATIONS SHALL BE DOUBLE-ACTION TYPE, POSITIVE VISUAL INDICATION OF OPERATION, KEY RESET, AND ALL SHOULD BE KEYED ALIKE.
- AVOID PLACEMENT OF HEAT DETECTORS CLOSE TO HEAT-PRODUCING EQUIPMENT WHERE RATE-OF-RISE WILL DEGRADE DETECTOR PERFORMANCE OR PRODUCE NUISANCE ALARMS. USE DEVICES CAPABLE FIXED TEMPERATURE (165 F TO 200 F) DETECTION IN SUCH AREAS.
- THE ENTIRE FIRE ALARM SYSTEM INSTALLATION SHALL BE IN FULL ACCORDANCE WITH THE CURRENT EDITION OF NFPA, KBC, AMERICANS WITH DISABILITIES ACT AND ALL OTHER APPLICABLE CODES.
- COORDINATE WITH THE DOOR HARDWARE SET SPECIFICATIONS AND THE OWNER'S SECURITY REPRESENTATIVE TO VERIFY THE DOORS THAT WILL REQUIRE CONNECTION TO THE FIRE ALARM SYSTEM.
- ALL TAMPER, FLOW AND PRESSURE SWITHCES THAT ARE PROVIDED IN THE CONTRACT SHALL BE CONNECTED TO THE FIRE ALARM SYSTEM BY FIRE ALARM CONTRACTOR. WHERE IN UNDERGROUND VAULTS, USE SEALED WATERPROOF CONNECTORS AND SWITCHES. REFER TO FIRE SUPPRESSION SYSTEM SHOP DRAWING FOR EACH TYPE OF DEVICE AND LOCATIONS.
- ALL FIRE ALARM STROBE LIGHTS SHALL BE SYCHRONIZED TO ACCOMIDATE BUILDING STANDARDS.
- ALL FIRE ALARM SYSTEM CABLING SHALL BE ROUTED IN CONDUIT. CONDUIT SHALL BE 3/4" MINIMUM OR AS REQUIREDTO SUIT CONDUCTORS. CONDUIT SHALL BE MANUFACTURED RED IN COLOR - FIELD PAINTED RED CONDUIT SHALL NOT BE ACCEPTED.
- PROVIDE DUCT MOUNTED SMOKE DETECTORS FOR AIR HANDLING UNITS THAT ARE 2000 CFM OR GREATER.
- THE SENSITIVITY OF SMOKE DETECTORS SHALL BE ADJUSTED FOR THE SERVICE DUTY IN THE AREA INDICATED, TO SUIT BUILDING OPERATIONAL CONDITIONS.
- WIRE SIZE SELECTIONS FOR AUDIO/VISUAL UNITS SHALL BE CALCULATED AND SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- RISER DIAGRAM FOR FIRE ALARM SYSTEM IS FOR BID PURPOSES ONLY. SYSTEM SHALL BE INSTALLED AND CONNECTED IN ACCORDANCE WITH WIRING DIAGRAMS OBTAINED FROM MANUFACTURER AND THAT HAVE BEEN APPROVED BY THE STATE FIRE MARSHALL'S OFFICE OR THE LOCAL AUTHORITY HAVING JURISDICTION, AS APPLICABLE. IT IS THE RESPONIBILITY OF THE CONTRACTOR TO CONFIRM ALL QUANITIES AND LOCATION OF FIRE ALARM DEVICES PRIOR TO SYSTEM ACTIVATION.
- AUTOMATIC FIRE ALARM DETECTORS SHALL BE LOCATED SO AS TO PREVENT SHIELDING BY DUCTWORK, EQUIPMENT AND PIPING ON CEILING. SPACING BETWEEN DETECTORS SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS IN ANY CASE. ADDITIONAL DETECTORS SHALL BE PROVIDED IF NEEDED TO INSURE COMPLETE COVERAGE OF THE INDICATED SPACE.
- WHEN CONNECTING TO RANGEHOOD FIRE EXTINGUISHING SYSTEM, COORDINATE WITH SYSTEM INSTALLER TO PROVIDE A NORMALLY - OPEN AUXILIARY CONTACT TO CLOSE ON SYSTEM DISCHARGE FOR ALARM.
- FIRE ALARM SIGNALING DEVICES SHALL BE SEMI-FLUSH TYPE AUDIBLES WITH FLASHING LAMP MOUNTED ON SAME PLATE. SURFACE-MOUNTED UNITS MAY BE LISED IN UNFINISHED AREAS.
- NO SMOKE DETECTORS SHALL BE LOCATED CLOSER THAN 36" TO SUPPLY, RETURN OR EXHAUST AIR OPENINGS NOR CLOSER THAN 12' TO WALL/CEILING INTERSECTIONS.
- SMOKE EVACUATION FAN CONTACTORS (STARTERS) SHALL BE PROVIDED BY FIRE ALARM CONTRACTOR.
- FIRE ALARM CONTRACTOR SHALL PROVIDE 100% BEAM TYPE SMOKE DETECTOR FOR ATRIUM.
- VERIFY THE FINAL ROOM NAME AND NUMBERING SCHEME USED FOR ANNUNCIATOR LEGENDS IS IN ACCORD WITH THE ACTUAL ROOM NAMES AND NUMBERS FINALLY CHOSEN BY THE OWNER.
- ALL ANNUNCIATOR LEGEND NUMBERING AND/OR ALPHANUMERIC DISPLAY LEGENDS SHALL BE APPROVED BY THE ARCHITECT, OWNER, AND LOCAL FIRE DEPARTMENT AUTHORITY, AS APPLICABLE. SUBMIT THIS INFORMATION WITH SHOP DRAWINGS.
- A TECHNICAL REPRESENTATIVE OF FIRE ALARM MANUFACTURER SHALL BE PRESENT AT ALL TIMES DURING FIRE ALARM CERTIFICATION.
- WRITTEN CERTIFICATION OF ENTIRE FIRE ALARM SYSTEM SHALL BE SUBMITTED TO OWNER AND CMTA AT CLOSE OF PROJECT.
- FIRE ALARM EXTENDER PANELS SHALL NOT BE LOCATED IN MDF OR IDF ROOMS. ONLY FIRE ALARM DEVICES SERVING MDF OR IDF ROOMS SHALL BE ALLOWED IN MDF OR IDF ROOMS.

1 FIRE ALARM SYSTEM RISER DIAGRAM

NO SCALE

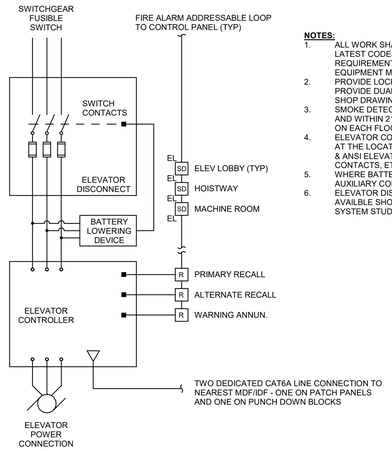


GENERAL NOTES:

A. INSTALLED SYSTEM SHALL BE IBC, NFPA, ADAAG, AND ELEVATOR CODE COMPLIANT.
B. COORDINATE EQUIPMENT LOCATIONS WITH ARCHITECTURAL ELEVATIONS AND ELEVATOR CALL STATIONS (WHEN APPLICABLE).
C. PROVIDE SYSTEM CAPACITY FOR NUMBER OF CALL BOXES SHOWN ON PLANS.
D. INSTALL POWER SUPPLY ABOVE ACCESSIBLE CEILING NEAR MASTER STATION.
E. SYSTEM TO HAVE INTEGRAL BATTERY BACKUP.
F. CALL CENTER CABINET SHALL BE ABLE TO ACCEPT FIREMAN'S LOCK (BY OTHERS).
G. PROVIDE 'ABL-VOIP' WHERE USED WITH VOIP PHONE SYSTEM.
H. SYSTEM SHALL BE CAPABLE OF DIALING OUT TO FIVE REMOTE PHONE NUMBERS INCLUDING 911.

2 TWO-WAY COMMUNICATION DETAIL

NO SCALE



NOTES:

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH LATEST CODES AND AUTHORITY HAVING JURISDICTION (AHJ) REQUIREMENTS AND SHALL BE COORDINATED WITH ELEVATOR EQUIPMENT MANUFACTURER.
2. PROVIDE LOCKABLE ELEVATOR POWER FUSED DISCONNECT. PROVIDE DUAL ELEMENT TIME DELAY FUSES PER ELEVATOR SHOP DRAWINGS.
3. SMOKE DETECTORS SHALL BE INSTALLED IN MACHINE ROOM, AND WITHIN 21 FEET OF EACH ELEVATOR DOOR CENTERLINE ON EACH FLOOR FOR EMERGENCY ELEVATOR RECALL.
4. ELEVATOR CONTROLLER - MAKE ALL REQUIRED CONNECTIONS AT THE LOCATIONS INDICATED BY ELEVATOR SHOP DRAWINGS & ANSI ELEVATOR CODES. PROVIDE ADDITIONAL RELAYS, DRY CONTACTS, ETC. AS REQUIRED FOR A COMPLETE SYSTEM.
5. WHERE BATTERY LOWERING DEVICE IS SPECIFIED, PROVIDE AUXILIARY CONTACT AND POWER WIRING.
6. ELEVATOR DISCONNECT TO HAVE SCCR EXCEEDING MAXIMUM AVAILBLE SHORT CIRCUIT RATING AS DETERMINED BY POWER SYSTEM STUDY.

3 ELEVATOR CONNECTION DIAGRAM

NO SCALE

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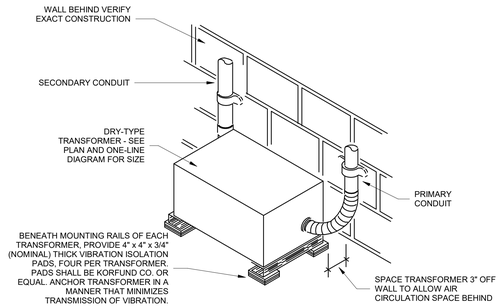
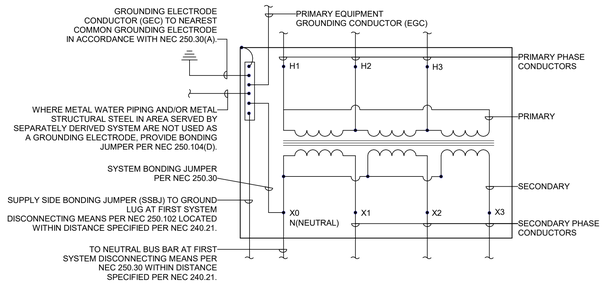


NOTES:
A. THE FINAL 12" TO 18" OF RACEWAY CONNECTION TO BOTH PRIMARY AND SECONDARY SIDES SHALL BE "SEALTITE" TYPE UA FLEXIBLE CONDUIT OR EQUAL, FOR VIBRATION ISOLATION.
B. ALL FLOOR - MOUNTED TRANSFORMERS 75KVA AND HIGHER TO HAVE A 4" HIGH REINFORCED CONCRETE PAD.

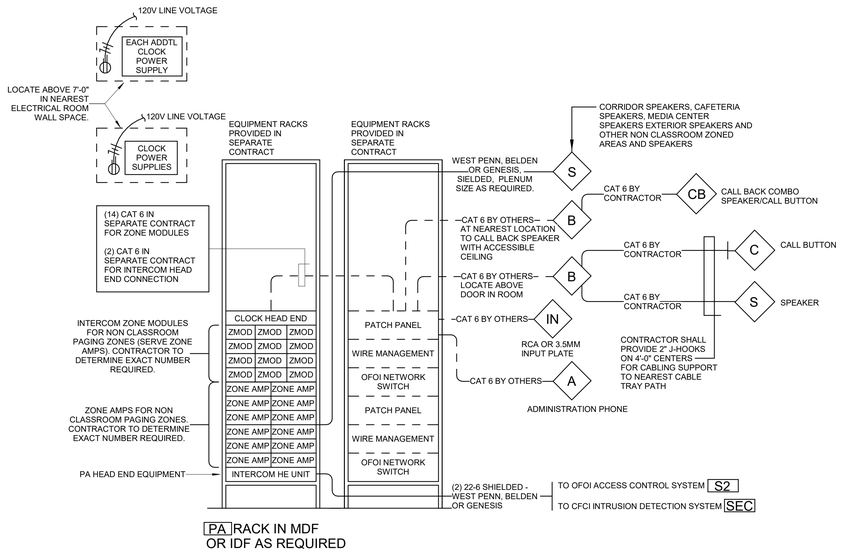
4 DETAIL OF TYPICAL DRY-TYPE TRANSFORMER INSTALLATION

NO SCALE



6 TRANSFORMER (DRY-TYPE) GROUNDING DETAIL

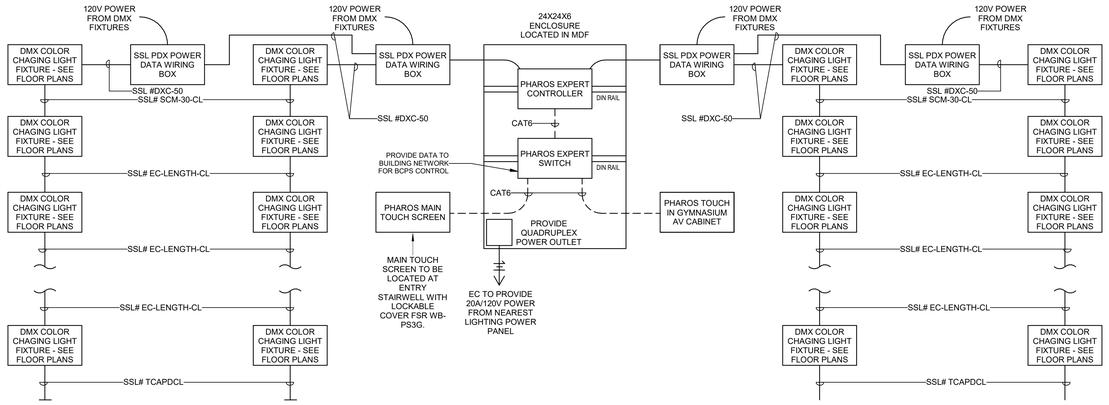
NO SCALE



PA RACK IN MDF OR IDF AS REQUIRED

2 PAGING SYSTEM INTERCONNECTION DETAIL

NO SCALE



DIGITAL TOUCH SCREEN CONTROLLER

CT

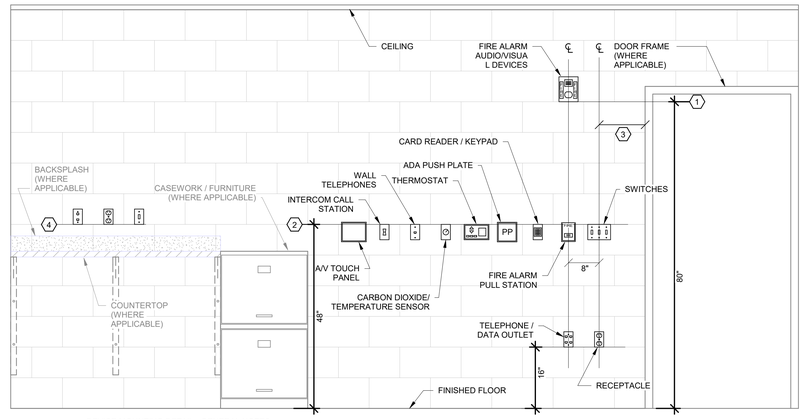
SYMBOL:

COLOR CHANGING CONTROL SYSTEM GENERAL NOTES:

1. VERIFY ALL WIRING REQUIREMENTS WITH MANUFACTURER OF SYSTEM AND ALL OTHER DEVICES PRIOR TO ROUGH-IN. THIS DIAGRAM IS MEANT TO BE ILLUSTRATIVE ONLY.
2. ALL DEVICE TO BE LOCATED IN CONCEALED LOCATIONS ABOVE ACCESSIBLE CEILINGS OR ACCESSIBLE IN ELECTRICAL ROOMS.
3. ALL CABLING SHALL BE ROUTED IN ENCLOSED RACEWAY WHERE EXPOSED.
4. SYSTEM SHALL BE PHAROS DMX LIGHTING CONTROL OR EQUAL.
5. SYSTEM SHALL BE CAPABLE MINIMALLY OF THE FOLLOWING:
   A. (4) PRESET COLORS FOR EACH ZONE (ZONE 1 - BUILDING WINDOW FACADE AND ZONE 2 - FIELD HOUSE GATEWAY ENTRY
   B. (2) COLOR CHASE SEQUENCES
   C. MULTI PAGE USER INTERFACE
   D. USER LOCKOUT
   E. CUSTOM COLOR SELECTION
6. SYSTEM TO BE APART OF ALTERNATE #6. MAIN PHAROS TOUCH PANEL TO BE LOCATED AT ENTRY STAIRWELL WITH LOCKABLE COVER FSR WB-PS3G
7. PROVIE WITH (2)-HOURS OF ON-SITE TRAINING

3 ALTERNATE 7: RGBW COLOR TUNING CONTROL SCHEMATIC

NO SCALE



DEVICE MOUNTING DETAIL - GENERAL NOTES:

A. WHERE DEVICES OF ANY DISCIPLINE ARE LOCATED IN THE SAME GENERAL AREA ON THE PLANS AND ARE SHOWN TO BE MOUNTED AT A SIMILAR HEIGHT, ALIGN HORIZONTALLY ALONG TOP OF DEVICE BACKBOX (AS SHOWN IN DETAIL AND DESCRIBED IN KEY NOTE #2).

B. WHERE DEVICES OF ANY DISCIPLINE ARE LOCATED IN THE SAME GENERAL AREA ON THE PLANS AND ARE SHOWN MOUNTED AT DIFFERENT HEIGHTS, ALIGN VERTICALLY ALONG THE CENTERLINE OF THE DEVICE BACKBOX (AS SHOWN IN DETAIL).

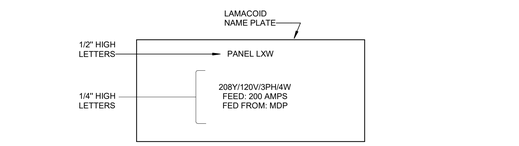
C. FOR ANY WALL OTHER THAN PAINTED GYPSUM BOARD OR CMU, DEVICE LOCATIONS MUST BE FIELD APPROVED BY ENGINEER OR ARCHITECT PRIOR TO INSTALLATION OF FINISHES.

DEVICE MOUNTING DETAIL - KEY NOTES:

1. MOUNT VISUAL NOTIFICATION APPLIANCES SO THAT ENTIRE LENS IS BETWEEN 80" AND 96" AFF. IF CEILING IS TOO LOW FOR DEVICE TO BE MOUNTED ABOVE 80", MOUNT SO THAT THE LENS IS WITHIN 6" OF FINISHED CEILING.
2. ALIGN BACKBOXES OF DEVICES AT THE MOUNTING HEIGHT INDICATED. MEASURE TO THE TOP OF THE BACKBOX FOR STANDARD OUTLET BOXES. NON-STANDARD BACKBOXES ARE TO BE INSTALLED SUCH THAT THE FINISHED DEVICES ARE ALIGNED ALONG THEIR RESPECTIVE CENTERLINES.
3. MOUNTING HEIGHTS SHOWN ILLUSTRATE DESIGN INTENT AND ARE TO BE FOLLOWED UNLESS CONTRADICTED BY APPLICABLE CODE. WHERE DEVICES ARE SHOWN ADJACENT TO DOOR FRAMES ON PLANS INSTALL 12" FROM FRAME TO AVOID SLUSHED SECTIONS OR BRACING. SPECIFIC DEVICES ARE SHOWN IN RELATIVE ORDER FROM DOOR FRAME; WHERE THESE DEVICES ARE NOT PRESENT AT A PARTICULAR LOCATION, ADJUST LOCATIONS CLOSER TO DOOR ACCORDINGLY.
4. THE CONTRACTOR IS TO COORDINATE ALL ROUGH-INS WITH ANY COUNTERTOPS/BACKSPLASHES TO AVOID CONFLICT. ALIGN DEVICE BACKBOXES IN THE BOTTOM OF THE NEXT FULL BLOCK ABOVE THE BACKSPLASH AS SHOWN. FOR NON-BLOCK WALLS ALIGN BOTTOM OF DEVICE BACKBOXES 4" ABOVE BACKSPLASH. COORDINATE WORK WITH CASEWORK AND KITCHEN SHOP DRAWINGS ACCORDINGLY. IF CONFLICT STILL ARISES CONTACT THE ENGINEER FOR DIRECTION ON HOW TO PROCEED.

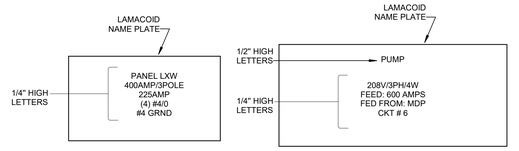
5 TYPICAL WALL DEVICE MOUNTING DETAIL

NO SCALE



NORMAL POWER LABELS SHALL BE BLACK WITH WHITE LETTERS
EMERGENCY POWER LABELS SHALL BE RED WITH WHITE LETTERS
UTILIZE SCREW-ON TYPE LAMACOID PLATES.

TYPICAL POWER PANEL NAMEPLATE DETAIL
NO SCALE



NORMAL POWER LABELS SHALL BE BLACK WITH WHITE LETTERS EMERGENCY POWER LABELS SHALL BE RED WITH WHITE LETTERS UTILIZE SCREW-ON TYPE LAMACOID PLATES.

TYPICAL SWITCHBOARD AND DISTRIBUTION PANELBOARD CIRCUIT LABEL NAMEPLATE DETAIL
NO SCALE

NORMAL POWER LABELS SHALL BE BLACK WITH WHITE LETTERS EMERGENCY POWER LABELS SHALL BE RED WITH WHITE LETTERS UTILIZE SCREW-ON TYPE LAMACOID PLATES.

TYPICAL DISCONNECT AND COMBINATION STARTER/DISCONNECT NAMEPLATE DETAIL
NO SCALE

1 PANEL LABELING DETAILS

NO SCALE

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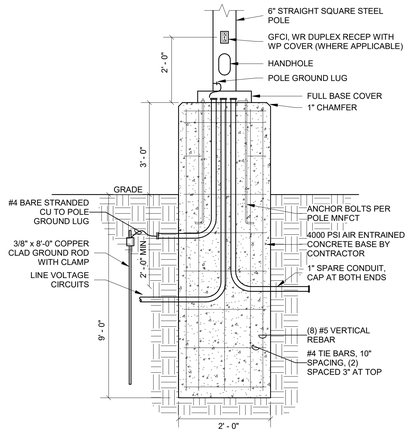
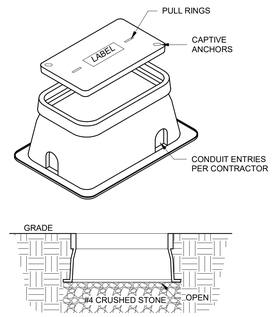


1 POLE BASE DETAIL

NO SCALE

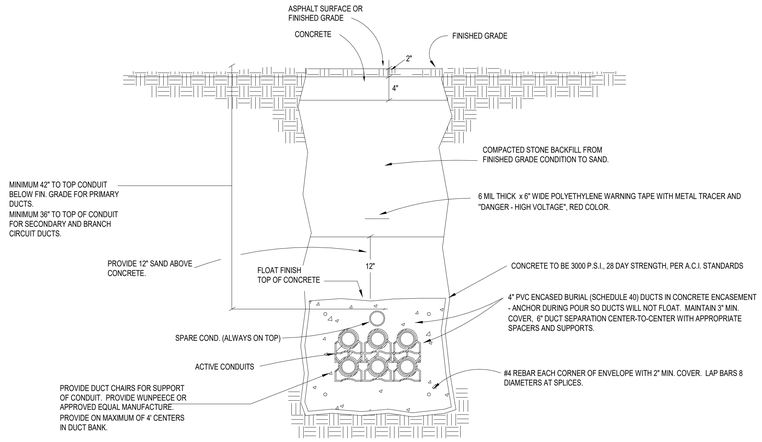


NOTES:

A. BOXES TO BE SIZED PER NEC 314.28 BASED UPON FIELD CONFIGURATION OF CONDUIT ENTRIES. PROVIDE EXTENSIONS WHERE REQUIRED.
B. BOX AND LID TO BE CONSTRUCTED OF POLYMER CONCRETE. LID TIER RATING PER INSTALLED LOCATION.
C. REFER TO SPECIFICATIONS FOR RELATED INFORMATION.
D. PULL BOX TO BE QUAZITE PG TYPE OR EQUAL WITH TIER 8 MIN COVER IN GRASS/ SIDE WALK AREAS, TEIR 22 ANYWHERE ELSE. PROVIDE (4) 27" QUAZITE COVER HOOK PULLERS - #CO82908 OR EQUAL.

2 PULL BOX DETAIL

NO SCALE



NOTES:
USE SWEEPING BENDS AT ALL TURNS AND RIGID STEEL ELLS WHERE RISING EXCEPT IN PRIMARY DUCTBANK AND SECONDARY OUT OF UTILITY TRANSFORMER

GENERAL NOTES :

A. REFER TO POWER RISER, FLOOR PLANS AND PLAN NOTES FOR EXACT QUANTITY AND SIZE OF CONDUITS.
B. COMMUNICATIONS/FIBER RACEWAYS SHALL BE ROUTED IN DUCT BANK ENCASED CONSTRUCTION, CONSTRUCTED SAME AS SHOWN, EXCEPT FOR NUMBER AND SIZE OF CONDUIT.
C. DUCT BANK CONSTRUCTION FOR SECONDARY SERVICE SHALL BE SAME AS SHOWN, EXCEPT WITH GREATER NUMBER OF CONDUITS. REFER TO POWER RISER DIAGRAM AND SITE PLAN FOR REQUIREMENTS AND PLAN NOTES.
D. REFER TO POWER RISER DIAGRAM FOR REQUIREMENTS AND PLAN NOTES.
E. POUR CONCRETE AGAINST UNDISTURBED EARTH.
F. REFER TO SPECIFICATION SECTION 260544 FOR EXCAVATION, TRENCHING, BACKFILLING AND GRADING REQUIREMENTS. REFER TO EARTHWORK SPECIFICATIONS FOR GENERAL ROCK REMOVAL AND EARTHWORK REQUIREMENTS.
G. REFER TO SPECIFICATION SECTION 260533 FOR ADDITIONAL DUCT BANK REQUIREMENTS.

4 TYPICAL DUCTBANK DETAIL

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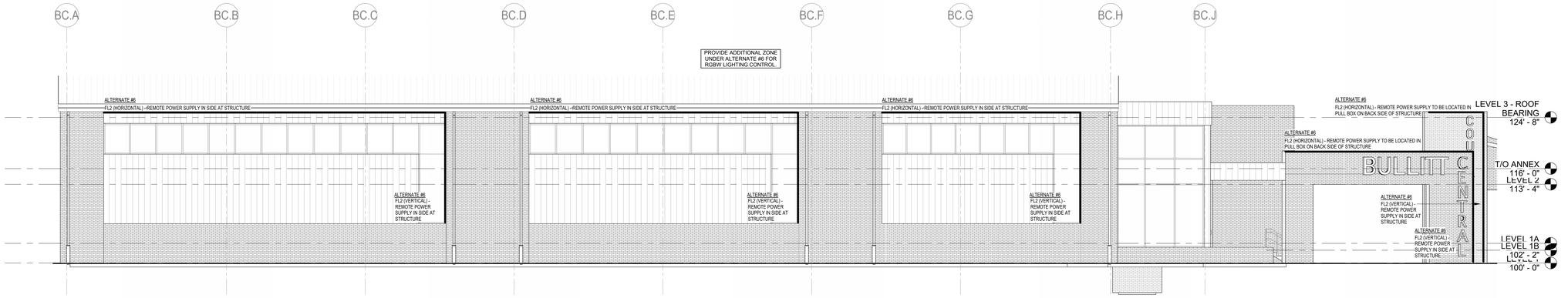

1 ALTERNATE #6 - RGBW FACADE LIGHTING - TYPICAL FOR ALL THREE HIGH SCHOOLS

NO SCALE REF: E1.11 BCHS

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ALTERNATE #6 – RGBW FRONT FACADE LIGHTING

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
850 25-145

BG# 25-145

DATE : 04.22.2025
DRAWN BY : Author
CHECKED BY :CMTA
REVISIONS :
2 Addendum 2 07.16.24

2023-50.1

E6.6
BCHS

ELECTRICAL FEEDER SCHEDULE BP2

EQUIPMENT NAME	FED FROM	VOLTAGE	RATING	SETS	PHASE SIZE	NEUTRAL SIZE	GROUND SIZE	CONDUIT SIZE
ATS-G	MDP	480 V	20 A					
ATS-L	MDP	480 V	20 A					
ATSG	GEND	480 V	20 A					
ATSL	GEND	480 V	20 A					
EHGA	ATSG	480 V	20 A					
EHGB	EHGA	480 V	20 A					
EHGC	EHGA	480 V	20 A					
EHLA	ATSL	480 V	20 A					
EHLC	EHLA	480 V	20 A					
EHLD	EHLA	480 V	20 A					
ELGA	T-ELGA	208 V	20 A					
ELGB		208 V	20 A					
ELGD		480 V	20 A					
GEND	MTS	480 V	20 A					
MDP	UTIL XFMR NORTH	480 V	20 A					
MTS	GENERATOR	480 V	20 A					
T-ELGA	EHGA	480 V	20 A					
T-ELGB	EHLB	480 V	20 A					
T-ELGC	ELGC	480 V	20 A					
T-ELGD	ELGD	480 V	20 A					

ELECTRICAL TRANSFORMER SCHEDUL...

NAME	SIZE (kVA)	MOUNT	GEC
T-ACL	225	FLOOR	3/0
T-AEL	300	FLOOR	250
T-ANL	225	FLOOR	3/0

POWER RISER GENERAL NOTES :

A. ALL NEW CONDUCTORS SHALL BE COPPER (SEE SPECIFICATIONS FOR TYPES). WHERE EXISTING ALUMINUM FEEDERS ARE UTILIZED THAT ARE TO BE EXTENDED CONTRACTOR SHALL PROVIDE BI-METAL CONNECTORS AND EXTEND WITH COPPER CONDUCTORS SIZED TO MATCH OR EXCEED AMPERAGE RATING OF EXISTING ALUMINUM CONDUCTORS. FIELD VERIFY EXACT REQUIREMENTS.

B. REFER TO DETAIL FOR TYPICAL PANEL LABELING REQUIREMENTS.

C. ALL CONNECTIONS TO EXISTING FEEDERS/BRACH CIRCUITS SHALL BE ACCOMPLISHED WITH INSULATED PEDESTAL AND HANDHOLE CONNECTORS. CONNECTORS SHALL BE SIZED AND RATED ACCORDING TO EXISTING/NEW FEEDER SIZES AND MATERIALS. CONNECTORS SHALL BE LISTED FOR CONNECTION OF ALUMINUM/COPPER AS REQUIRED.

D. CONTRACTOR SHALL PROVIDE EQUIPMENT SHOP DRAWINGS OF PROPOSED ELECTRICAL EQUIPMENT FOR REVIEW AND APPROVAL NO LATER THAN 48 HOURS AFTER NOTICE TO PROCEED.

E. AS PART OF THIS CONTRACT, PROVIDE AN ARC FLASH STUDY FOR POWER DISTRIBUTION DEVICES ON THIS PROJECT - THIS INCLUDES THE EXISTING EQUIPMENT THE NEW EQUIPMENT CONNECTS TO. PROVIDE ALL LABELS, WARNING SIGNAGE, ETC. PER NFPA-70 FOR NEW EQUIPMENT AS REQUIRED. REFER TO SPECIFICATIONS. .

F. WHERE GFCI BREAKERS ARE UTILIZED, CONTRACTOR SHALL LABEL OUTLETS TO INDICATE PANEL AND CIRCUIT WHERE GFCI PROTECTED FROM.

G. ALL NEW BRANCH PANELS SHALL BE COMPLETELY FILLED WITH 20A/1P BREAKERS.

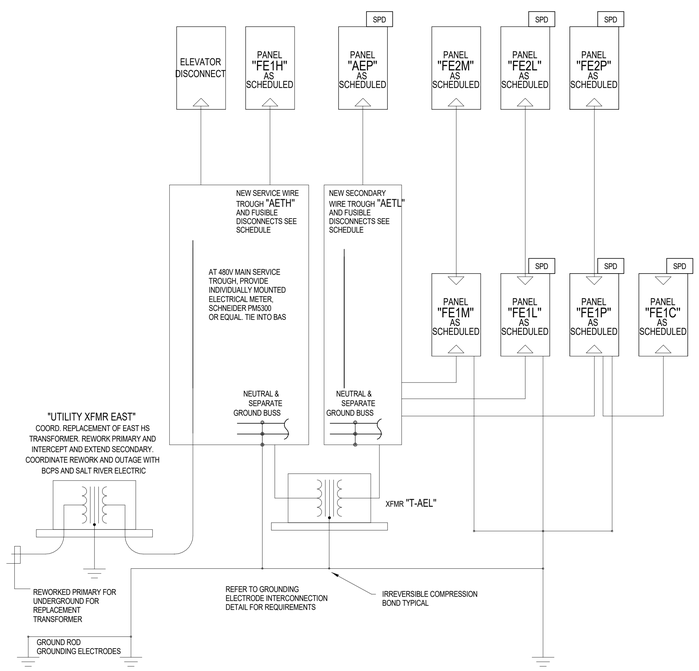
H. AT ALL WIRING TROUGHS PROVIDE INSULATED PEDESTAL TAPS AND FUSIBLE DISCONNECTS AS REQUIRED FOR FEEDS. PROVIDE FUSES AS REQUIRED PER "TRIP" COLUMN.

I. REFER TO ELECTRICAL OUTAGES. ANY OUTAGE TO BE AT OFF HOURS COORDINATE A MONTH IN ADVANCE WITH BCPS.

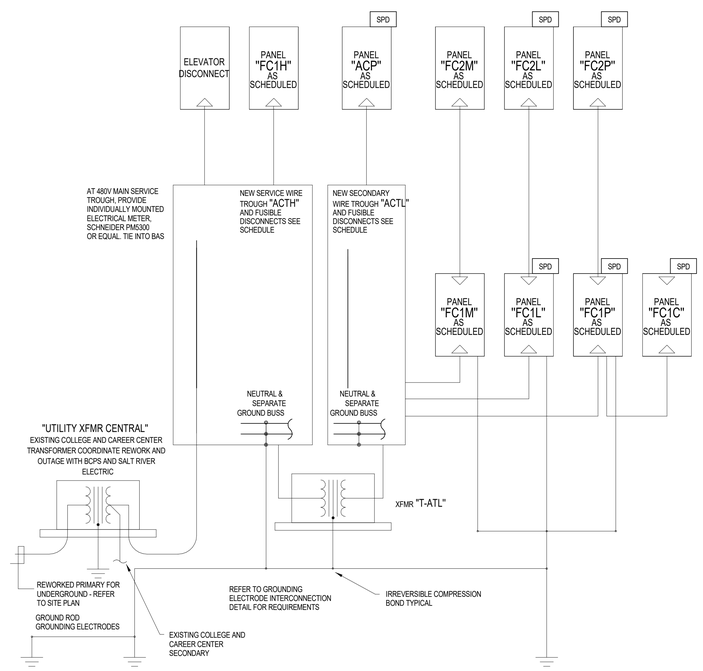
J. 277/480V POWER PANELS TO BE 22KAIC

K. 120/208 OR 120/240 POWER PANELS ARE TO BE 18KAIC

BULLITT EAST FIELDHOUSE ELECTRICAL RISER



BULLITT CENTRAL FIELDHOUSE ELECTRICAL RISER



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CONSTRUCTION DOCUMENTS – ISSUED FOR BID

MOVING FORWARD

ELECTRICAL RISER

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 25-145

DATE : 04.22.2025
DRAWN BY : CMTA
CHECKED BY :CMTA
REVISIONS :
1 Addendum 1 06.09.24

2023-50.1

E7.0
BCHS

SERVICE WIRING TROUGH

TROUGH: ACTH | MAINS TYPE: | SCCR (kA): 22KAIC
VOLTAGE: 480Y/277V,3P,4W | SPD: | AVAIL FAULT CURRENT (kA):
AMPERES: 600 A | MOUNTING: FLOOR | SUPPLY FROM: UTIL XFMR CENTRAL

CKT	CIRCUIT DESCRIPTION	SETS	WIRE	GND	COND	POLES	FRAME	TRIP	Load	REMARKS
1	T-ACS		500	3	3"	3	400 A	350 A	0.0	
2	FC1H	2	350	2	4"	3	600 A	500 A	336.5	
3	ELEVATOR		4	8	1.25	3	400 A	80 A	31.0	
4	SPD		6	6	1"	3	400 A	20 A	0.2	
5	SPARE	--	--	--	--	1	400 A	20 A	0.0	
6	SPARE	--	--	--	--	1	400 A	20 A	0.0	

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	367746 VA	100.00%	367746 VA	TOTAL CONNECTED LOAD: 368 kVA
				TOTAL ESTIMATED DEMAND: 368 kVA
				TOTAL CONNECTED CURRENT: 442 A
				TOTAL ESTIMATED DEMAND CURRENT: 442 A

NOTES:

SECONDARY WIRING TROUGH

TROUGH: ACTL | MAINS TYPE: | SCCR (kA): 18KAIC
VOLTAGE: None,Not ComputedP,Not ComputedW | SPD: | AVAIL FAULT CURRENT (kA):
AMPERES: 400 A | MOUNTING: FLOOR | SUPPLY FROM:

CKT	CIRCUIT DESCRIPTION	SETS	WIRE	GND	COND	POLES	FRAME	TRIP	Load	REMARKS
1										
2										
3										
4										
5										
6										

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	200092 VA	100.00%	200092 VA	TOTAL CONNECTED LOAD: 266 kVA
LTNG	23959 VA	100.00%	23959 VA	TOTAL ESTIMATED DEMAND: 250 kVA
REC	42440 VA	61.78%	26220 VA	TOTAL CONNECTED CURRENT: Not Computed
				TOTAL ESTIMATED DEMAND CURRENT: Not Computed

NOTES:

PANELBOARD AND WIRING SCHEDULE

PANEL: ACP | MAINS TYPE: 100AMCB | SCCR (kA): 18KAIC
VOLTAGE: 208Y/120V,3P,4W | SPD: | AVAIL FAULT CURRENT (kA):
AMPERES: 100 A | MOUNTING: SURFACE | SUPPLY FROM:

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
TICKETS - REC	10	10		20	1	1	1.9	1.1		2	1	20		10	10	LAUNDRY, MECH/ELEC,...
WET ROOM, STORAGE AND...	10	10		20	1	3		1.1	0.2	4	1	20		10	10	WASHER #1 - REC
WASHER #2 - REC	10	10		20	1	5			0.2	6	1	20		10	10	WASHER #3 - REC
DRYER #1 - REC	10	10		20	2	7	0.8	0.8		8						
						9		0.8	0.8	10	2	20		10	10	DRYER #2 - REC
DRYER #3 - REC	10	10		20	2	11			0.8	12	1	30				TICKETS EXTERIOR S/AV1 AND...
						13	0.8	2.5		14	2	30		10	10	LTG CONTACTOR - CONNECTOR
LTG CONTACTOR - CONNECTOR	10	10		30	2	15		2.5	2.5	16						
						17			2.5	4.0	18					
DP-1				20	1	19	0.3	4.0		20	3	45	1*	10	8	DWH-3
REC				20	1	21		0.2	4.0	22						
EQUIP				20	1	23			0.5	0.3	24					
GARAGE DOOR				20	1	25	0.5	0.3		26	2	20				ICE MACHINE
EQUIP				20	2	27		0.0	0.0	28	1	20	--	--	--	SPARE
						29			0.0	0.0	30	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	31	0.0	0.0		32	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	33		0.0	0.0	34	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	35			0.0	0.0	36	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	37	0.0	0.0		38	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	39		0.0	0.0	40	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	41			0.0	0.0	42	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	12.7 kVA	11.9 kVA	8.5 kVA						
							TOTAL CURRENT (A):	110 A	104 A	71 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	29750 VA	100.00%	29750 VA	TOTAL CONNECTED LOAD: 33 kVA
REC	3420 VA	100.00%	3420 VA	TOTAL ESTIMATED DEMAND: 33 kVA
				TOTAL CONNECTED CURRENT: 92 A
				TOTAL ESTIMATED DEMAND CURRENT: 92 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FC1C | MAINS TYPE: | SCCR (kA): 18KAIC
VOLTAGE: 208Y/120V,3P,4W | SPD: | AVAIL FAULT CURRENT (kA):
AMPERES: 100 A | MOUNTING: FLUSH | SUPPLY FROM: FC1P

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
CONCESSIONS BC-102 - REC				20	1	1	0.2	0.2		2	1	20				CONCESSIONS BC-102 - REC
CONCESSIONS BC-102 - REC				20	1	3		0.2	0.2	4	1	20				CONCESSIONS BC-102 - REC
CONCESSIONS BC-102 - REC				20	1	5			0.2	6	1	20				CONCESSIONS BC-102 - REC
CONCESSIONS BC-102 - REC				20	1	7	0.2	0.2		8	1	20				CONCESSIONS BC-102 - REC
ICE MACHINE				20	2	9		0.3	0.0	10	1	20	--	--	--	SPARE
						11			0.3	0.0	12	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	13	0.0	0.0		14	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	15		0.0	0.0	16	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	17			0.0	0.0	18	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	19	0.0	0.0		20	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	21		0.0	0.0	22	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	23			0.0	0.0	24	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	25	0.0	0.0		26	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	27		0.0	0.0	28	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	29			0.0	0.0	30	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	0.7 kVA	0.6 kVA	0.8 kVA						
							TOTAL CURRENT (A):	6 A	5 A	7 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	500 VA	100.00%	500 VA	TOTAL CONNECTED LOAD: 2 kVA
REC	1620 VA	100.00%	1620 VA	TOTAL ESTIMATED DEMAND: 2 kVA
				TOTAL CONNECTED CURRENT: 6 A
				TOTAL ESTIMATED DEMAND CURRENT: 6 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FC1L | MAINS TYPE: 100AMCB | SCCR (kA): 18KAIC
VOLTAGE: 208Y/120V,3P,4W | SPD: Yes | AVAIL FAULT CURRENT (kA):
AMPERES: 100 A | MOUNTING: SURFACE | SUPPLY FROM:

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
RESTROOM, GEOTHERMAL, A/V,...	10	10		20	1	1	1.4	1.5		2	1	20				FOOTBALL LOCKER ROOM - LTNG
OPEN AREA PARACTICE FIELD,...	10	10		20	1	3		1.4	1.0	4	1	20				CONCESSIONS, STORAGE,...
SOCCER MENS OFFICE, FIRE...	10	10		20	1	5			0.8	0.5	6	1	20				ANNEX - LTNG
EXTERIOR - LTNG				20	1	7	0.9	0.7		8	1	20		10	10	EXTERIOR - LTNG
GLASS STAIR BC-100 EXTERIOR ...	10	10		20	1	9		0.1	0.0	10	1	20	--	--	--	SPARE
						11			0.0	0.0	12	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	13	0.0	0.0		14	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	15		0.0	0.0	16	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	17			0.0	0.0	18	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	19	0.0	0.0		20	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	21		0.0	0.0	22	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	23			0.0	0.0	24	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	25	0.0	0.0		26	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	27		0.0	0.0	28	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	29			0.0	0.0	30	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	11.7 kVA	6.2 kVA	5.5 kVA						
							TOTAL CURRENT (A):	98 A	53 A	46 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
LTNG	23495 VA	100.00%	23495 VA	TOTAL CONNECTED LOAD: 23 kVA
				TOTAL ESTIMATED DEMAND: 23 kVA
				TOTAL CONNECTED CURRENT: 65 A
				TOTAL ESTIMATED DEMAND CURRENT: 65 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FC2L | MAINS TYPE: MLO | SCCR (kA): 18KAIC
VOLTAGE: 208Y/120V,3P,4W | SPD: Yes | AVAIL FAULT CURRENT (kA):
AMPERES: 100 A | MOUNTING: SURFACE | SUPPLY FROM: FC1L

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
MECH PLATFORM - LTNG	10	10		20	1	1	0.1	1.2		2	1	20				WEIGHT ROOM - LTNG
WEIGHT ROOM, OFFICE, MDF -...				20	1	3		0.8	0.8	4	1	20		10	10	OPEN AREA - LTNG
WRESTLING MAT ROOM, PE...				20	1	5			1.5	0.9	6	1	20	10	10	PE AND WRESTLING LOCKER...
MAIN OPEN AREA - LTNG	10	10		20	1	7	1.5	2.2		8	1	20	10	10	10	MAIN OPEN AREA - LTNG
LTNG	10	10		20	1	9		2.2	0.0	10	1	20	--	--	--	SPARE
LTNG	10	10		20	1	11			1.8	0.0	12	1	20	--	--	--	SPARE
LTNG	10	10		20	1	13	2.2	0.0		14	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	15		0.0	0.0	16	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	17			0.0	0.0	18	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	19	0.0	0.0		20	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	21		0.0	0.0	22	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	23			0.0	0.0	24	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	25	0.0	0.0		26	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	27		0.0	0.0	28	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	29			0.0	0.0	30	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	7.1 kVA	3.8 kVA	4.2 kVA						
							TOTAL CURRENT (A):	60 A	31 A	36 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
LTNG	15084 VA	100.00%	15084 VA	TOTAL CONNECTED LOAD: 15 kVA
				TOTAL ESTIMATED DEMAND: 15 kVA
				TOTAL CONNECTED CURRENT: 42 A
				TOTAL ESTIMATED DEMAND CURRENT: 42 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FC1P | MAINS TYPE: 225AMCB | SCCR (kA): 18KAIC
VOLTAGE: 208Y/120V,3P,4W | SPD: Yes | AVAIL FAULT CURRENT (kA):
AMPERES: 225 A | MOUNTING: SURFACE | SUPPLY FROM:

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
RESTROOM - REC	10	10		20	1	1	0.9	0.4		2	1	20				A/V RACK - REC
FOOTBALL LOCKER ROOM - REC				20	1	3		0.9	1.8	4	1	20				FOOTBALL OFFICE / STORAGE -...
FOOTBALL OFFICE - REC				20	1	5			0.9	1.4	6	1	20				TRAINING ROOM - REC
TRAINING ROOM AND STORAGE ...				20	1	7	0.7	0.2		8	1	20				ACCESS CONTROL - AD
STORAGE - REC				20	1	9		0.7	0.7	10	1	20				SOCCER OFFICE WOMENS - REC
SOCCER LOCKER ROOM - REC				20	1	11			0.5	1.1	12	1	20	10	10	SOCCER MENS OFFICE - REC
SOCCER MENS OFFICE - REC	10	10		20	1	13	0.9	0.2		14	1	20		10	10	ELEVATOR - REC
OPEN AREA PRACTICE FIELD -...	10	10		20	1	15		0.5	1.9	16	1	20		10	10	OPEN AREA PRACTICE FIELD -...
OPEN AREA PRACTICE FIELD -...				20	1	17			1.1	1.0	18	1	20	10	10	FUTURE PROJECTOR - EQUIP
OPEN AREA WATER FOUTAIN -...				20	1	19	1.0	1.0		20	1	20		10	10	ARCHERY CURTAIN
ARCHERY CURTAIN	10	10		20	1	21		1.0	1.0	22	1	20		10	10	ARCHERY CURTAIN
HAND DRYER	10	10		20	1	23			1.5	1.5	24	1	20	10	10	HAND DRYER
HAND DRYER	10	10		20	1	25	1.5	1.5		26	1	20		10	10	HAND DRYER
FIELD CORRIDOR - REC				20	1	27		0.5	0.5	28	1	20				FOOTBALL LOCKER ROOM -...
HAND DRYER				20	1	29			1.5	1.5	30	1	20				HAND DRYER
SOCCER OFFICE WOMENS - REC				20	1	31	0.7	0.4		32	1	20				SOCCER WOMENS LOCKER ROO...
HAND DRYER				20	1	33		1.5	1.5	34	1	20				HAND DRYER
HAND DRYER				20	1	35			1.5	1.5	36	1	20				HAND DRYER
SOCCER MENS LOCKER ROOM -...	10	10		20	1	37	0.4	0.7		38	1	20		10	10	SOCCER MENS OFFICE - REC
ELEVATOR - REC	10	10		20	1	39		0.2	0.5	40	1	20		10	10	OPEN AREA PRACTICE FIELD -...
ARCHERY CURTAIN				20	1	41			1.0	0.7	42						
EQUIP				20	1	43	0.2	0.6		44	3	70	1*	8	6	FC1C
GEOTHERMAL - REC	10	10		20	1	45		0.5	0.8	46						
DP-1				20	1	47			0.5	0.0	48	2	30	1*	10	10	L3-30R DISCONNECT
DP-1				20	1	49	0.5	0.0		50						
EQUIP				20	1	51		0.5	0.5	52	1	20				REC
L3-30R	10	10	1*	30	1	53			0.2	54						
SECURITY TW				20	1	55	1.0	0.3		56	2	20				ICE MACHINE - BC-103
EQUIP	10	10		20	1	57		0.5	0.3	58						
AV/IN2	10	10		20	1	59			0.2	0.0	60	1	20	--	--	--	SPARE
CU-1 - REC				20	1	61	0.2	0.0		62	1	20	--	--	--	SPARE
HAND DRYER				20	1	63		1.0	0.0	64	1	20	--	--	--	SPARE
EQUIP				20	1	65			0.2	0.0	66	1	20	--	--	--	SPARE
EXTERIOR - REC				20	1	67	0.7	0.0		68	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	69		0.0	0.0	70	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	71			0.0	0.0	72	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	22.5 kVA	26.9 kVA	25.7 kVA						
							TOTAL CURRENT (A):	187 A	228 A	218 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	35640 VA	100.00%	35640 VA	TOTAL CONNECTED LOAD: 75 kVA
LTNG	464 VA	100.00%	464 VA	TOTAL ESTIMATED DEMAND: 61 kVA
REC	39020 VA	62.81%	24510 VA	TOTAL CONNECTED CURRENT: 209 A
				TOTAL ESTIMATED DEMAND CURRENT: 168 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FC2P | MAINS TYPE: MLO | SCCR (kA): 18KAIC
VOLTAGE: 208Y/120V,3P,4W | SPD: | AVAIL FAULT CURRENT (kA):
AMPERES: 225 A | MOUNTING: SURFACE | SUPPLY FROM: FC1P

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
MECH PLATFORM - REC	10	10		20	1	1	0.7	0.5		2	1	20				WEIGHT ROOM - REC
WEIGHT ROOM - REC				20	1	3			0.7	0.7	4	1	20				WRESTLING OFFICE - REC
WRESTLING MAT ROOM - REC				20	1	5				0.9	0.5	6	1	20			WRESTLING MAT ROOM - REC
WRESTLING LOCKER ROOM - REC				20	1	7	1.1	1.1		8	1	20		10	10	PE LOCKER ROOM - REC
PE HALL AND STORAGE - REC				20	1	9			0.4	0.7	10	1	20		10	10	WEIGHT ROOM BC-204 - FUTURE...
WEIGHT ROOM - REC	10	10		20	1	11				0.5	0.5	12	1	20			WEIGHT ROOM - REC
WRESTLING MAT ROOM FUTURE...				20	1	13	0.2	0.5		14	1	20				WRESTLING MATT ROOM - REC
HAND DRYER				20	1	15			1.5	1.5	16	1	20				HAND DRYER
WRESTLING LOCKER ROOM...				20	1	17				0.4	0.4	18	1	20			MDF - REC
MDF - REC				20	1	19	0.4	0.4				20	1	20			MDF - REC
MDF - REC				20	1	21			0.4	0.4		22	1	20			MDF - REC
MDF - REC				20	1	23				0.4	0.4	24	1	20			MDF - REC
LTNG				20	1	25	0.5	0.0				26	1	20	--	--	SPARE
S2-AC				20	1	27			0.5	0.0		28	1	20	--	--	SPARE
FACP				20	1	29				0.5	0.0	30	1	20	--	--	SPARE
OL2 LIGHTING CONTROL				20	1	31	0.4	0.0				32	1	20	--	--	SPARE
EXTERIOR LLTG CONTROL...				20	1	33			0.5	0.0		34	1	20	--	--	SPARE
DUPLEX - REC FOR LA				20	1	35				0.2	0.0	36	1	20	--	--	SPARE
HAND DRYER				20	1	37	1.0	0.0				38	1	20	--	--	SPARE
HAND DRYER				20	1	39			1.0	0.0		40	1	20	--	--	SPARE
HAND DRYER				20	1	41				1.0	0.0	42	1	20	--	--	SPARE
EQUIP				20	1	43	1.0	0.0				44	1	20	--	--	SPARE
DUPLEX - REC FOR LA				20	1	45			0.2	0.0		46	1	20	--	--	SPARE
BALCONY - REC				20	1	47				0.9	0.0	48	1	20	--	--	SPARE
BALCONY - REC				20	1	49	0.9	0.0				50	1	20	--	--	SPARE
WATER FOUTAIN(GFI BREAKER)				20	1	51			1.0	0.0		52	1	20	--	--	SPARE
locker room - rec				20	1	53				1.4	0.0	54	1	20	--	--	SPARE
							TOTAL LOAD (kVA):	8.6 kVA	9.4 kVA	7.9 kVA						
							TOTAL CURRENT (A):	72 A	79 A	66 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	11940 VA	100.00%	11940 VA	TOTAL CONNECTED LOAD: 26 kVA
LTNG	464 VA	100.00%	464 VA	TOTAL ESTIMATED DEMAND: 24 kVA
REC	13500 VA	87.04%	11750 VA	TOTAL CONNECTED CURRENT: 72 A
				TOTAL ESTIMATED DEMAND CURRENT: 67 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD SCHEDULE SYMBOLS :
GFI PROVIDE G.F.C.I. TYPE CIRCUIT BREAKER
PANELBOARD SCHEDULE NOTES :
A. ALL NEW PANELBOARDS SHALL BE ORDERED WITH "DOOR-IN-DOOR" OPTION. B. PROVIDE LOCK-OUT TYPE CIRCUIT BREAKERS FOR ALL HARD-WIRED EQUIPMENT. C. CIRCUIT BREAKERS SERVING HVAC EQUIPMENT SHALL BE HACR TYPE. D. REFER TO SPECIFICATIONS FOR EQUAL PANELBOARD MANUFACTURERS BY SIEMENS, CUTLER HAMMER AND GE. E. PROVIDE TYPEWRITTEN SCHEDULES AT ALL PANELBOARDS. INDICATE ROOM NUMBERS BEING SERVED BY CIRCUIT ON SCHEDULE. F. AT ALL WIRING TROUGHS PROVIDE INSULATED PEDESTAL TAPS AND FUSIBLE DISCONNEWCTS AS REQUIRED FOR FEEDS. PROVIDE FUSES AS REQUIRED PER "TRIP" COLUMN.
SPARE CONDUIT NOTE:
PROVIDE (4) SPARE 1" CONDUITS TO ACCESSIBLE CEILING FROM ALL NEW RECESSED PANELBOARDS.

1 PANELBOARD SCHEDULE NOTES
NO SCALE

CONSTRUCTION DOCUMENTS – ISSUED FOR BID

studio kremer architects
1231 S Shelby St, Louisville, KY 40203
TEL 502.499.1100 FAX 502.499.1101

CMTA A LEGENCE Company
10411 Meeting Street | Louisville, KY 40059 | 502.326.3083 | cmta.com

BC MOVING FORWARD

ELECTRICAL SCHEDULE

PHASE III | PHYSICAL SCIENCE CENTER
BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 25-145

DATE : 04.22.2025
DRAWN BY : CMTA
CHECKED BY : CMTA
REVISIONS :
1 Addendum 1 06.06.24
2 Addendum 2 07.15.24

2023-50.1

E7.1
BCHS

PANELBOARD AND WIRING SCHEDULE

PANEL: FC1H — **MAINS TYPE:** 500MCB — **SCCR (kA):** 22KAIC
VOLTAGE: 480Y/277V,3P,4W — **SPD:** — **AVAIL FAULT CURRENT (kA):**
AMPERES: 600 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** ACTH

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		B		C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
						1	4.9	4.9					2						
VFD-3(DOAS-1)	10	10	1"	35	3	3			4.9	4.9			4	3	35	1"	10	10	VFD-4(DOAS-1)
						5					4.9	4.9	6						
VFD-5(DOAS-1)	12	12	3/4"	15	3	7	0.3	13.4					8						
						9			0.3	13.4			10	3	80	1-1/4"	8	4	HPC-1
						11					0.3	13.4	12						
						13	5.0						14						
VHP-120	10	10	3/4"	25	3	15			5.0	3.9			16						
						17					5.0	3.9	18	3	25	3/4"	10	10	VFD-1A
						19	3.9	3.9					20						
VFD-1B	10	10	3/4"	25	3	21			3.9	3.9			22						
						23					3.9	3.9	24	3	25	3/4"	10	10	VFD-1C
						25	2.6	3.9					26						
VHP-060	12	12	3/4"	15	3	27			2.6	27.3			28						
						29					2.6	27.3	30	3	110	2-1/2"	6	2	AHU-1
						31	12.0	27.3					32						
DHW-4	6	10	1"	55	3	33			12.0	15.0			34						
						35					12.0	15.0	36	3	80	1-1/4"	8	4	DWH-1
						37	15.0	15.0					38						
DWH-2	4	8	1-1/4"	80	3	39			15.0	0.0			40	1	20	--	--	--	SPARE
						41					15.0	0.0	42	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	43	0.0	0.0					44	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	45			0.0	0.0			46	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	47					0.0	0.0	48	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	49	0.0	0.0					50	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	51			0.0	0.0			52	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	53					0.0	0.0	54	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	55	0.0	0.0					56	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	57			0.0	0.0			58	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	59					0.0	0.0	60	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	61	0.0	0.0					62	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	63			0.0	0.0			64	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	65					0.0	0.0	66	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	67	0.0	0.0					68	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	69			0.0	0.0			70	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	71					0.0	0.0	72	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	73	0.0	0.0					74	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	75			0.0	0.0			76	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	77					0.0	0.0	78	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	79	0.0	0.0					80	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	81			0.0	0.0			82	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	83					0.0	0.0	84	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	112.2 kVA	112.2 kVA		112.2 kVA								
							TOTAL CURRENT (A):	405 A	405 A		405 A								

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	336546 VA	100.00%	336546 VA	**TOTAL CONNECTED LOAD:** 337 kVA
				TOTAL ESTIMATED DEMAND: 337 kVA
				TOTAL CONNECTED CURRENT: 405 A
				TOTAL ESTIMATED DEMAND CURRENT: 405 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FC1M — **MAINS TYPE:** 300AMCB — **SCCR (kA):** 18KAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** — **AVAIL FAULT CURRENT (kA):**
AMPERES: 400 A — **MOUNTING:** SURFACE — **SUPPLY FROM:**

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		B		C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
						1		1.4					2	1	15	3/4"	12	12	VHP-012
CF-2	12	12	3/4"	15	1	3			0.1	0.5			4	1	20				EF-4
EUH-1	10	10	3/4"	35	1	5					5.0	0.0	6	1	20	--	--	--	SPARE
CF-2	12	12	3/4"	15	1	7	0.1	5.0					8	1	35	3/4"	10	10	EUH-1
						9			1.5	5.0			10	1	35	3/4"	10	10	EUH-1
CU-1	10	10	1"	25	2	11					1.5	0.1	12						
EF-4				20	1	13	0.5	0.1					14	2	15	3/4"	12	12	AC-1
						15			2.5	2.5			16						
EWH-2	10	10		30	2	17					2.5	2.5	18	2	30		10	10	EWH-2
						19	2.5	2.5					20						
EWH-2	10	10		30	2	21			2.5	2.5			22	2	30		10	10	EWH-2
						23					2.5	2.5	24						
EWH-2	10	10		30	2	25	2.5	2.5					26	2	30		10	10	EWH-2
						27			2.5	2.5			28						
EWH-2	10	10		30	2	29					2.5	2.5	30	2	30		10	10	EWH-2
						31	2.5	2.5					32						
EWH-1	10	10		20	2	33			2.5	2.5			34	2	20				
						35					1.5	2.5	36						EWH-2
						37	1.5	2.5					38						
SPARE	--	--	--	20	1	39			0.0	0.0			40	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	41					0.0	0.0	42	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	45.9 kVA	45.5 kVA		42.7 kVA								
							TOTAL CURRENT (A):	386 A	383 A		355 A								

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	134042 VA	100.00%	134042 VA	**TOTAL CONNECTED LOAD:** 134 kVA
				TOTAL ESTIMATED DEMAND: 134 kVA
				TOTAL CONNECTED CURRENT: 372 A
				TOTAL ESTIMATED DEMAND CURRENT: 372 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FC2M — **MAINS TYPE:** MLO — **SCCR (kA):** 18KAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** — **AVAIL FAULT CURRENT (kA):**
AMPERES: 400 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** FC1M

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		B		C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
DOAS-1 CONTROLS	10	10	3/4"	15	1	1	0.3	1.6					2	1	20	3/4"	12	12	CF-1
VHP-012	12	12	3/4"	15	1	3			1.4	1.6			4	1	20	3/4"	10	10	CF-1
UV-012				20	1	5					3.2	0.1	6	1	20		10	10	TCP
						7	0.9	0.1					8	1	20				EQUIP
VFD-2	10	10	3/4"	25	3	9			0.9				10						
						11					0.9	0.9	12						
						13	1.0	0.9					14	3	25	3/4"	10	10	VFD-2
VHP-024	12	12	3/4"	15	3	15			1.0	0.9			16						
						17					1.0	1.2	18						
						19	1.2	1.2					20	3	20				VHP-036
VHP-036				20	3	21			1.2	1.2			22						
						23					1.2	1.2	24						
						25	1.8	1.2					26	3	20				VHP-036
VHP-048	10	10	3/4"	25	3	27			1.8	1.2			28						
						29					1.8	1.8	30						
						31	1.2	1.8					32	3	25	3/4"	10	10	VHP-048
VHP-036	10	10		20	3	33			1.2	1.8			34						
						35					1.2	2.5	36						
						37	2.5	2.5					38	2	30		10	10	EWH-2
EWH-2	10	10		30	2	39			2.5	0.0			40	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	41					0.0	0.0	42	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	43	0.0	0.0					44	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	45			0.0	0.0			46	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	47					0.0	0.0	48	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	49	0.0	1.6					50	1	20				CF-1
SPARE	--	--	--	20	1	51			0.0	1.6			52	1	20		10	10	CF-1
SPARE	--	--	--	20	1	53					0.0	0.0	54	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	55	0.0	0.0					56	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	57			0.0	0.0			58	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	59					0.0	0.0	60	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	61	0.0	0.0					62	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	63			0.0	0.0			64	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	65					0.0	0.0	66	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	67	0.0	0.0					68	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	69			0.0	0.0			70	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	71					0.0	0.0	72	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	19.8 kVA	18.3 kVA		17.1 kVA								
							TOTAL CURRENT (A):	167 A	155 A		142 A								

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	55228 VA	100.00%	55228 VA	**TOTAL CONNECTED LOAD:** 55 kVA
				TOTAL ESTIMATED DEMAND: 55 kVA
				TOTAL CONNECTED CURRENT: 153 A
				TOTAL ESTIMATED DEMAND CURRENT: 153 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

SERVICE WIRING TROUGH

TROUGH AETH — **MAINS TYPE:** — **SCCR (kA):** 22KAIC
VOLTAGE: 480Y/277V,3P,4W — **SPD:** — **AVAIL FAULT CURRENT (kA):**
AMPERES: 800 A — **MOUNTING:** FLOOR — **SUPPLY FROM:** UTIL XFMR EAST

CKT	CIRCUIT DESCRIPTION	SETS	WIRE	GND	COND	POLES	FRAME	TRIP	Load	REMARKS
1	T-AEL	2	250	2	2.5"	3	600 A	500 A	0.0	
2	FE1H	2	350	2	4"	3	400 A	500 A	334.9	
3	ELEVATOR		4	8	1.25	3	400 A	80 A	31.0	
4	SPD		6	6	1"	3	400 A	60 A	0.2	
5	SPARE	--	--	--	--	1	400 A	20 A	0.0	
6	SPARE	--	--	--	--	1	400 A	20 A	0.0	

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	366058 VA	100.00%	366058 VA	**TOTAL CONNECTED LOAD:** 366 kVA
				TOTAL ESTIMATED DEMAND: 366 kVA
				TOTAL CONNECTED CURRENT: 440 A
				TOTAL ESTIMATED DEMAND CURRENT: 440 A

NOTES:

SECONDARY WIRING TROUGH

TROUGH AETL — **MAINS TYPE:** DISCONNECT — **SCCR (kA):** 18KAIC
VOLTAGE: None,Not ComputedP,Not ComputedW — **SPD:** — **AVAIL FAULT CURRENT (kA):**
AMPERES: 600 A — **MOUNTING:** FLOOR — **SUPPLY FROM:**

CKT	CIRCUIT DESCRIPTION	SETS	WIRE	GND	COND	POLES	FRAME	TRIP	Load	REMARKS
1										
2										
3										
4										
5										
6										

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	206077 VA	100.00%	206077 VA	**TOTAL CONNECTED LOAD:** 272 kVA
LTNG	23089 VA	100.00%	23089 VA	**TOTAL ESTIMATED DEMAND:** 255 kVA
REC	42520 VA	61.76%	26260 VA	**TOTAL CONNECTED CURRENT:** Not Computed
				TOTAL ESTIMATED DEMAND CURRENT: Not Computed

NOTES:

PANELBOARD AND WIRING SCHEDULE

PANEL: AEP — **MAINS TYPE:** 100AMCB — **SCCR (kA):** 18KAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** No — **AVAIL FAULT CURRENT (kA):**
AMPERES: 100 A — **MOUNTING:** SURFACE — **SUPPLY FROM:**

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		B		C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
TICKETS / MECH ELEC ROOM -...				20	1	1	1.3	1.1					2	1	20				VEHICLE & GROOMING...
WET ROOM, TRACK STORAGE -...				20	1	3			0.9	0.4			4	1	20				WALL IDF - REC
WASHER #1 - REC				20	1	5					0.2	0.2	6	1	20				WASHER #2 - REC
WASHER #3 - REC				20	1	7	0.2	0.1					8						
DRYER #2 - REC				20	2	9							10	2	20				DRYER #3 - REC
						11			0.1	0.1			12						
LTG CONTACTOR - CONNECTOR				30	2	13	2.5	0.1					14	2	20				DRYER #1 - REC
						15					2.5	2.5	16						
						17							18	2	30				LTG CONTACTOR - CONNECTOR
GARAGE DOOR				20	1	19	0.5	0.3					20						
GARAGE DOOR				20	1	21			0.5	0.3			22	2	20				ICE MACHINE
						23					4.0	0.0	24						
DWH-3	8	10	1"	45	3	25	4.0	0.0					26	2	20				TICKETS BE-001 VIDEO WALL
						27			4.0	0.0			28	1	20	--	--	--	SPARE
EQUIP				20	1	29					0.3	0.0	30	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):		10.0 kVA		11.2 kVA		7.3 kVA						
							TOTAL CURRENT (A):		86 A		97 A		61 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	23750 VA	100.00%	23750 VA	**TOTAL CONNECTED LOAD:** 28 kVA
REC	4680 VA	100.00%	4680 VA	**TOTAL ESTIMATED DEMAND:** 28 kVA
				TOTAL CONNECTED CURRENT: 79 A
				TOTAL ESTIMATED DEMAND CURRENT: 79 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FE1L — **MAINS TYPE:** 100AMCB — **SCCR (kA):** 18KAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** Yes — **AVAIL FAULT CURRENT (kA):**
AMPERES: 100 A — **MOUNTING:** SURFACE — **SUPPLY FROM:**

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		B		C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
RESTROOM, GEOTHERMAL, A/V -...	10	10		20	1	1	1.3	1.5					2	1	20				FOOTBALL LOCKER ROOM,...
OPEN AREA PARACTICE FIELD -...	10	10		20	1	3			1.4	1.1			4	1	20				TRAINING, CONCESSIONS,...
MENS SOCCER LOCKER ROOM,...	10	10		20	1	5					0.9	0.5	6	1	20		10	10	ANNEX - LTNG
EXTERIOR - LTNG	10	10		20	1	7	0.6						8						
						9			0.0				10	1	20	--	--	--	SPARE
EXTERIOR - LTG				20	1	11					0.7	0.0	12	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	13	0.0	0.0					14	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	15			0.0	0.0			16	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	17					0.0	0.0	18	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	19	0.0	0.0					20	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	21			0.0	0.0			22	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	23					0.0	0.0	24	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	25	0.0	0.0					26	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	27			0.0	0.0			28	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	29					0.0	0.0	30	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):		10.6 kVA		6.3 kVA		6.2 kVA						
							TOTAL CURRENT (A):		89 A		53 A		51 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
LTNG	23089 VA	100.00%	23089 VA	**TOTAL CONNECTED LOAD:** 23 kVA
				TOTAL ESTIMATED DEMAND: 23 kVA
				TOTAL CONNECTED CURRENT: 64 A
				TOTAL ESTIMATED DEMAND CURRENT: 64 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FE2L — **MAINS TYPE:** — **SCCR (kA):** 18KAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** — **AVAIL FAULT CURRENT (kA):**
AMPERES: 100 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** FE1L

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		B		C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
MECH PLATFORM, WEIGHT ROO...	10	10		20	1	1	1.3	1.6					2	1	20				WEIGHT ROOM OFFICE, MDF -...
OPEN AREA - LTNG	10	10		20	1	3			0.8	1.1			4	1	20				WRESTLING LOCKER ROOM -...
PE LOCKER ROOM - LTNG	10	10		20	1	5					0.4	1.5	6	1	20		10	10	MAIN OPEN AREA - LTNG
MAIN OPEN AREA - LTNG	10	10		20	1	7	2.2	2.2					8	1	20				LTNG
LTNG				20	1	9			1.8	0.0			10	1	20	--	--	--	SPARE
LTNG				20	1	11					2.2	0.0	12	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	13	0.0	0.0					14	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	15			0.0	0.0			16	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	17					0.0	0.0	18	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	19	0.0	0.0					20	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	21			0.0	0.0			22	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	23					0.0	0.0	24	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	25	0.0	0.0					26	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	27			0.0	0.0			28	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	29					0.0	0.0	30	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):		7.2 kVA		3.8 kVA		4.1 kVA						
							TOTAL CURRENT (A):		61 A		32 A		34 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
LTNG	15084 VA	100.00%	15084 VA	**TOTAL CONNECTED LOAD:** 15 kVA
				TOTAL ESTIMATED DEMAND: 15 kVA
				TOTAL CONNECTED CURRENT: 42 A
				TOTAL ESTIMATED DEMAND CURRENT: 42 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FE1P — **MAINS TYPE:** 225AMCB — **SCCR (kA):** 18KAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** Yes — **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A — **MOUNTING:** SURFACE — **SUPPLY FROM:**

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A		B		C		CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
A/V RACK - REC	10	10		20	1	1	0.4	1.1					2	1	20		10	10	GEOTHERMAL AND RESTROOM -...
FOOTBALL LOCKER ROOM - REC				20	1	3			0.9	1.1			4	1	20				STORAGE - REC
FOOTBALL OFFICE - REC				20	1	5					1.1	1.1	6	1	20				TRAINING ROOM AND STORAGE ...
TRAINING ROOM - REC				20	1	7	0.9	0.7					8	1	20				CONCESSIONS AND STORAGE -...
AUTOMATIC DOOR				20	1	9			0.2	0.7			10	1	20				SOCCER OFFICE WOMENS - REC
SOCCER WOMENS LOCKER ROO...				20	1	11					0.9	1.1	12	1	20				MENS SOCCER LOCKER ROOM -...
SOCCER MENS OFFICE - REC	10	10		20	1	13	0.7	0.2					14	1	20		10	10	ELEVATOR - REC
OPEN AREA PRACTICE FIELD -...	10	10		20	1	15			0.5	1.1			16	1	20		10	10	OPEN AREA PRACTICE FIELD -...
PRACTICE FIELD PROJECTOR	10	10		20	1	17					1.0	1.3	18	1	20				OPEN AREA PRACTICE FIELD -...
OPEN AREA PRACTICE FIELD -...				20	1	19	0.4	1.0					20	1	20				OPEN AREA WATER FOUTAIN -...
GEOTHERMAL - REC	10	10		20	1	21			0.5	1.5

PANELBOARD AND WIRING SCHEDULE

PANEL: FE1H — **MAINS TYPE:** 500AMCB — **SCCR (KA):** 22KAIC
VOLTAGE: 480Y/277V,3P,4W — **SPD:** — **AVAIL FAULT CURRENT (KA):**
AMPERES: 600 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** AETH

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
						1	3.9	3.9		2						
VFD-1A	10	10	3/4"	25	3	3		3.9	3.9	4	3	25	3/4"	10	10	VFD-1B
						5			3.9	3.9	6					
						7	3.9	4.5		8						
VFD-1C	10	10	3/4"	25	3	9		3.9	4.5	10	3	25	3/4"	10	10	VHP-120
						11			3.9	4.5	12					
						13	13.4			14						
HPC-1	4	8	1-1/4"	80	3	15		13.4	4.9	16						
						17			13.4	4.9	18	3	35	1"	10	10	VFD-3(DOAS-1)
						19	4.9	4.9		20						
VFD-5(DOAS-1)	10	10	1"	35	3	21		4.9	0.3	22						
						23			4.9	0.3	24	3	15	3/4"	12	12	VFD-5(DOAS-1)
						25	2.5	0.3		26						
VHP-060	12	12	3/4"	15	3	27		2.5	27.3	28						
						29			2.5	27.3	30	3	110	2-1/2"	6	2	AHU-1
						31	27.3			32						
						33		12.0		34						
						35			15.0	12.0	36	3	55	1"	10	6	DWH-4
DWH-1	4	8	1-1/4"	80	3	37	15.0	12.0		38						
						39		15.0	15.0	40						
SPARE	--	--	--	20	1	41			0.0	15.0	42	3	80	1-1/4"	8	4	DWH-2
SPARE	--	--	--	20	1	43	0.0	15.0		44						
SPARE	--	--	--	20	1	45		0.0	0.0	46	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	47			0.0	0.0	48	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	49	0.0	0.0		50	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	51		0.0	0.0	52	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	53			0.0	0.0	54	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	55	0.0	0.0		56	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	57		0.0	0.0	58	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	59			0.0	0.0	60	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	61	0.0	0.0		62	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	63		0.0	0.0	64	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	65			0.0	0.0	66	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	67	0.0	0.0		68	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	69		0.0	0.0	70	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	71			0.0	0.0	72	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	73	0.0	0.0		74	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	75		0.0	0.0	76	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	77			0.0	0.0	78	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	79	0.0	0.0		80	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	81		0.0	0.0	82	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	83			0.0	0.0	84	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	111.6 kVA	111.6 kVA	111.6 kVA						
							TOTAL CURRENT (A):	403 A	403 A	403 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	334858 VA	100.00%	334858 VA	TOTAL CONNECTED LOAD:	335 kVA
				TOTAL ESTIMATED DEMAND:	335 kVA
				TOTAL CONNECTED CURRENT:	403 A
				TOTAL ESTIMATED DEMAND CURRENT:	403 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FE1M — **MAINS TYPE:** 300AMCB — **SCCR (KA):** 18KAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** — **AVAIL FAULT CURRENT (KA):**
AMPERES: 400 A — **MOUNTING:** SURFACE — **SUPPLY FROM:**

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
CF-2	12	12	3/4"	15	1	1	0.1	1.4		2	1	15	3/4"	12	12	VHP-012
EUH-1	10	10	1"	35	1	3		5.0	0.0	4	1	20	--	--	--	SPARE
CF-2	12	12	3/4"	15	1	5			0.1	0.0	6	1	20	--	--	--	SPARE
EUH-1	10	10	1"	35	1	7	5.0	5.0		8	1	35	1"	10	10	EUH-1
CU-1	10	10	1"	25	2	9		1.6	0.1	10	2	15	3/4"	10	10	AC-1
						11			1.6	0.1	12					
EWH-2	10	10	1"	30	2	13	2.5	2.5		14	2	30	1"	10	10	EWH-2
						15		2.5	2.5	16						
EWH-2	10	10	1"	30	2	17			2.5	2.5	18					
						19	2.5	2.5		20						
EWH-2	10	10	1"	30	2	21		2.5	2.5	22	2	30	1"	10	10	EWH-2
						23			2.5	2.5	24					
EWH-2	10	10	1"	30	2	25	2.5	2.5		26						
						27		2.5	2.5	28						
EWH-2	10	10	1"	30	2	29			2.5	1.5	30	2	20		10	10	EWH-1
						31	2.5	1.5		32						
SPARE	--	--	--	20	1	33		0.0	0.0	34	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	35			0.0	0.0	36	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	37	0.0	0.0		38	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	39		0.0	0.0	40	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	41			0.0	0.0	42	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	50.3 kVA	38.3 kVA	34.3 kVA						
							TOTAL CURRENT (A):	424 A	324 A	286 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	122862 VA	100.00%	122862 VA	TOTAL CONNECTED LOAD:	123 kVA
				TOTAL ESTIMATED DEMAND:	123 kVA
				TOTAL CONNECTED CURRENT:	341 A
				TOTAL ESTIMATED DEMAND CURRENT:	341 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FE2M — **MAINS TYPE:** — **SCCR (KA):** 18KAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** — **AVAIL FAULT CURRENT (KA):**
AMPERES: 100 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** FE1M

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
DOAS-1 CONTROLS	10	10	3/4"	15	1	1	0.3	1.6		2	1	15	3/4"	12	12	CF-1
VHP-012	10	10	3/4"	15	1	3		1.4	1.6	4	1	15	3/4"	10	10	CF-1
UV-012				20	1	5			3.2	0.1	6	1	20		10	10	TCP
						7	0.9	0.1		8	1	20		10	10	TCP
VFD-2	10	10	3/4"	15	3	9		0.9	0.0	10	1	20	--	--	--	SPARE
						11			0.9	0.9	12					
VHP-024	12	12	3/4"	15	3	13	1.0	0.9		14	3	15	3/4"	10	10	VFD-2
						15		1.0	0.9	16						
						17			1.0	1.2	18					
VHP-036				20	3	19	1.2	1.2		20	3	20				VHP-036
						21		1.2	1.2	22						
						23			1.2	1.2	24					
VHP-048	10	10	1"	25	3	25	1.8	1.2		26	3	20				VHP-036
						27		1.8	1.2	28						
						29			1.8	1.8	30					
EWH-2				30	2	31	2.5	1.8		32	3	25	1"	10	10	VHP-048
						33		2.5	1.8	34						
						35			2.5	1.1	36					
EWH-2				30	2	37	2.5	1.1		38	3	20				EQUIP
SPARE	--	--	--	20	1	39		0.0	1.1	40						
SPARE	--	--	--	20	1	41			0.0	1.6	42	1	20		10	10	CF-1
SPARE	--	--	--	20	1	43	0.0	0.0		44	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	45		0.0	0.0	46	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	47			0.0	0.0	48	1	20	--	--	--	SPARE
CF-1				20	1	49	1.6	0.0		50	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	51		0.0	0.0	52	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	53			0.0	0.0	54	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	55	0.0	0.0		56	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	57		0.0	0.0	58	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	59			0.0	0.0	60	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	61	0.0	0.0		62	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	63		0.0	0.0	64	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	65			0.0	0.0	66	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	67	0.0	0.0		68	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	69		0.0	0.0	70	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	71			0.0	0.0	72	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	19.7 kVA	16.7 kVA	18.5 kVA						
							TOTAL CURRENT (A):	167 A	139 A	157 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	54962 VA	100.00%	54962 VA	TOTAL CONNECTED LOAD:	55 kVA
				TOTAL ESTIMATED DEMAND:	55 kVA
				TOTAL CONNECTED CURRENT:	153 A
				TOTAL ESTIMATED DEMAND CURRENT:	153 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: FE1C — **MAINS TYPE:** — **SCCR (KA):** 18KAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** — **AVAIL FAULT CURRENT (KA):**
AMPERES: 100 A — **MOUNTING:** FLUSH — **SUPPLY FROM:** FE1P

CIRCUIT DESCRIPTION	WIRE	GND	C	OCP	P	CKT	A	B	C	CKT	P	OCP	C	GND	WIRE	CIRCUIT DESCRIPTION
CONCESSIONS - REC				20	1	1	0.2	0.2		2	1	20				CONCESSIONS - REC
CONCESSIONS - REC				20	1	3		0.2	0.2	4	1	20				CONCESSIONS - REC
CONCESSIONS - REC				20	1	5			0.2	0.4	6	1	20			CONCESSIONS - REC/ T1D
CONCESSIONS - REC				20	1	7	0.2	0.2		8	1	20				CONCESSIONS - REC
ICE MACHINE				20	2	9		0.3	0.0	10	1	20	--	--	--	SPARE
						11			0.3	0.0	12	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	13	0.0	0.0		14	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	15		0.0	0.0	16	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	17			0.0	0.0	18	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	19	0.0	0.0		20	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	21		0.0	0.0	22	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	23			0.0	0.0	24	1	20	--	--	--	SPARE
SPARE	--	--	--	20	1	25	0.0	0.0		26	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	27		0.0	0.0	28	1	20	--	--	--	--	SPARE
SPARE	--	--	--	20	1	29			0.0	0.0	30	1	20	--	--	--	SPARE
							TOTAL LOAD (kVA):	0.7 kVA	0.6 kVA	0.8 kVA						
							TOTAL CURRENT (A):	6 A	5 A	7 A						

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	500 VA	100.00%	500 VA	TOTAL CONNECTED LOAD:	2 kVA
REC	1620 VA	100.00%	1620 VA	TOTAL ESTIMATED DEMAND:	2 kVA
				TOTAL CONNECTED CURRENT:	6 A
				TOTAL ESTIMATED DEMAND CURRENT:	6 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

SECONDARY WIRING TROUGH

TROUGH AETL — **MAINS TYPE:** DISCONNECT — **SCCR (KA):** 18KAIC
VOLTAGE: None,Not ComputedP,Not ComputedW — **SPD:** — **AVAIL FAULT CURRENT (KA):**
AMPERES: 600 A — **MOUNTING:** FLOOR — **SUPPLY FROM:**

CKT	CIRCUIT DESCRIPTION	SETS	WIRE	GND	COND	POLES	FRAME	TRIP	Load	REMARKS
1										
2										
3										
4										
5										
6										

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	206077 VA	100.00%	206077 VA	TOTAL CONNECTED LOAD:	272 kVA
LTNG	23089 VA	100.00%	23089 VA	TOTAL ESTIMATED DEMAND:	255 kVA
REC	42520 VA	61.76%	26260 VA	TOTAL CONNECTED CURRENT:	Not Computed
				TOTAL ESTIMATED DEMAND CURRENT:	Not Computed

NOTES:

studio kremer architects
1231 S Shelby St, Louisville, KY 40203
TEL 502.499.1100 FAX 502.499.1101

CMTA
A LEGENCE Company
10411 Meeting Street | Louisville, KY 40059 | 502.326.3083 | cmta.com

BG
MOVING FORWARD

CONSTRUCTION DOCUMENTS – ISSUED FOR BID

ELECTRICAL SCHEDULE

PHASE III | PHYSICAL SCIENCE CENTER

BULLITT COUNTY PUBLIC SCHOOLS
BG 25-145

BG# 25-145

DATE : 04.22.2025
DRAWN BY : CMTA
CHECKED BY : CMTA
REVISIONS :

1	Addendum 1	06.28.24
0	RFP-01	13.25.24

2023-50.1

E7.3
BCHS