





ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

SKATIUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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SEAL:

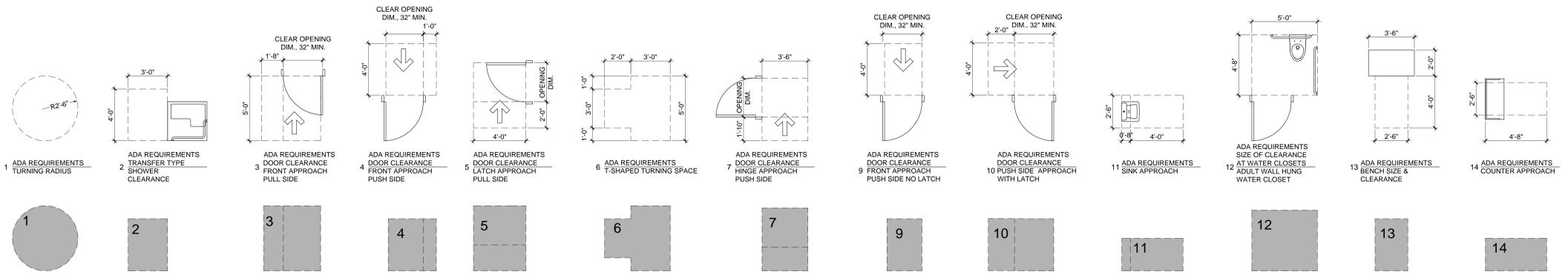


DATE: SEPTEMBER 19, 2024  
PROJECT NO: 2024-02  
DRAWN BY: SJZ  
CHECKED BY: JHP  
SUBMISSION DATE: 8/19/2024  
PERMIT SET DATE: 8/19/2024  
BID SET DATE: 9/19/2024

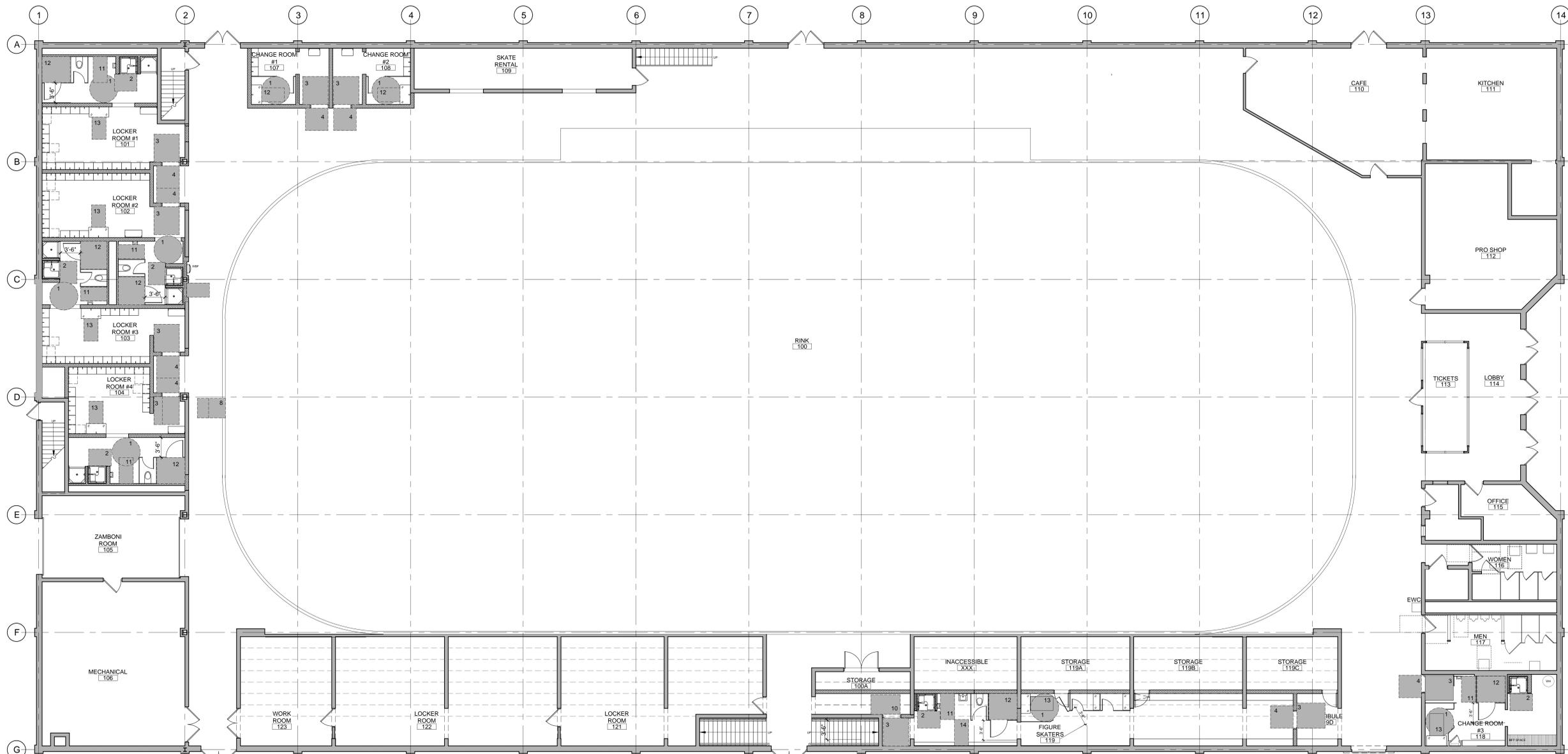
REVISION	DATE

DRAWING TITLE:  
FIRST FLOOR  
ACCESSIBILITY  
PLAN

DRAWING NO:  
G-002



Q1 ACCESSIBILITY CLEARANCES  
1/4"=1'-0"



A1 FIRST FLOOR PLAN  
1/8"=1'-0"



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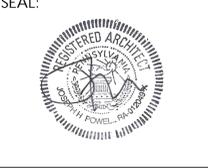
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DRAWING TITLE:  
**FIRST FLOOR  
DEMOLITION  
PLAN**

DRAWING NO:  
**AD-101**

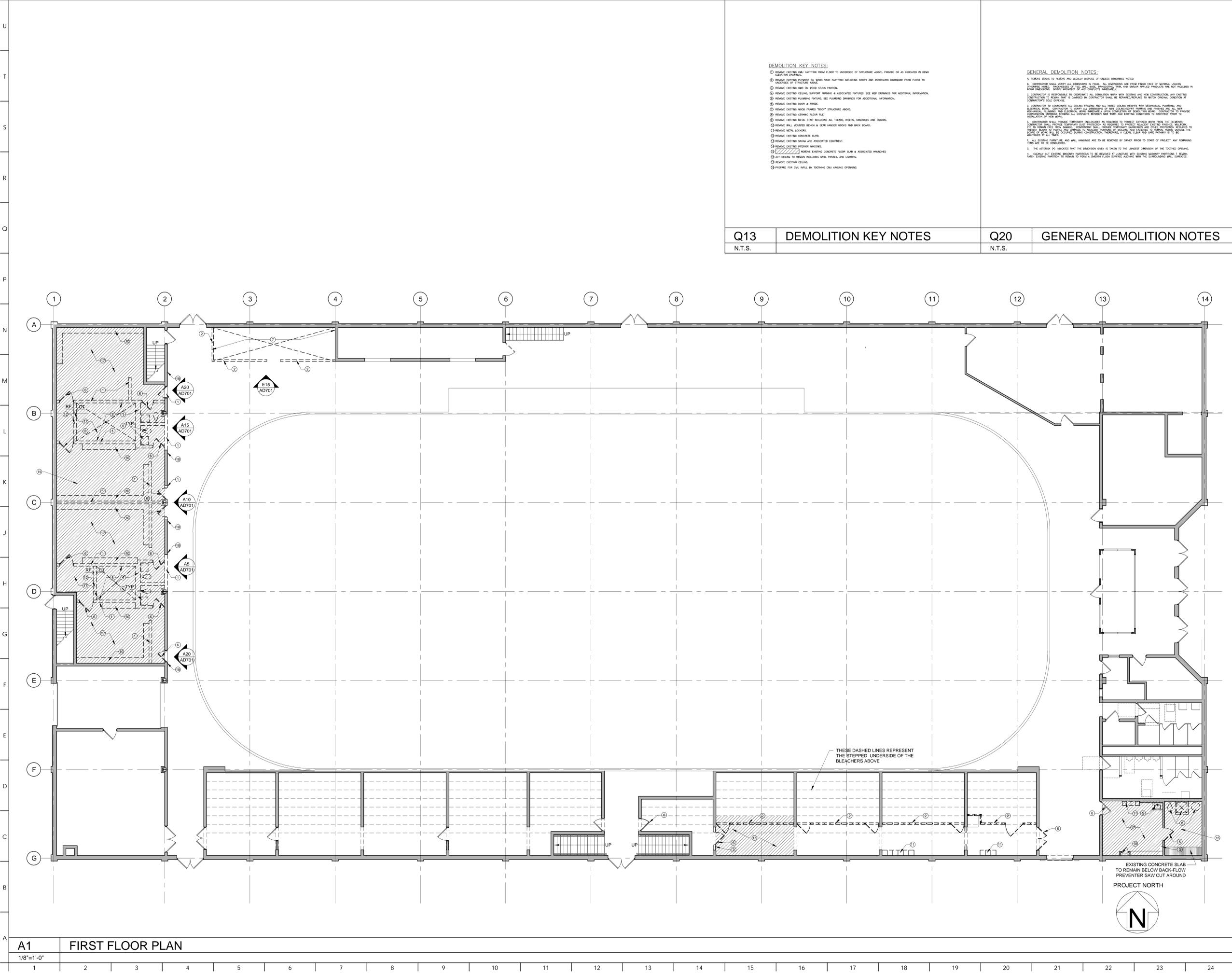
**DEMOLITION KEY NOTES:**

- 1 REMOVE EXISTING CMU PARTITION FROM FLOOR TO UNDERSIDE OF STRUCTURE ABOVE. PROVIDE OR AS INDICATED IN DEMO ELEVATION DRAWINGS.
- 2 REMOVE EXISTING 1/2" X 2" ON WOOD STUD PARTITION INCLUDING DOORS AND ASSOCIATED HARDWARE FROM FLOOR TO UNDERSIDE OF STRUCTURE ABOVE.
- 3 REMOVE EXISTING CMU OR WOOD STUD PARTITION.
- 4 REMOVE EXISTING CEILING, SUPPORT FRAMING & ASSOCIATED FIXTURES. SEE MEP DRAWINGS FOR ADDITIONAL INFORMATION.
- 5 REMOVE EXISTING PLUMBING FIXTURES. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- 6 REMOVE EXISTING DOOR & FRAME.
- 7 REMOVE EXISTING WOOD FRAMED "ROOF" STRUCTURE ABOVE.
- 8 REMOVE EXISTING CERAMIC FLOOR TILE.
- 9 REMOVE EXISTING METAL STAIR INCLUDING ALL TREADS, RISERS, HANDRAILS AND GUARDS.
- 10 REMOVE WALL MOUNTED BENCH & GEAR HANGER HOOKS AND BACK BOARD.
- 11 REMOVE METAL LOCKERS.
- 12 REMOVE EXISTING CONCRETE CURB.
- 13 REMOVE EXISTING DRAIN AND ASSOCIATED EQUIPMENT.
- 14 REMOVE EXISTING WOODEN WINDOVS.
- 15 REMOVE EXISTING CONCRETE FLOOR SLAB & ASSOCIATED HANGERS.
- 16 NOT CEILING TO REMAIN INCLUDING GYPSUM PANELS AND LIGHTING.
- 17 REMOVE EXISTING CEILING.
- 18 PREPARE FOR CMU FILL BY TOOTHING CMU AROUND OPENING.

**GENERAL DEMOLITION NOTES:**

- A. REMOVE MEANS TO REMOVE AND LEGALLY DISPOSE OF UNLESS OTHERWISE NOTED.
- B. CONTRACTOR SHALL VERIFY ALL DIMENSIONS & FIELD. ALL DIMENSIONS ARE FROM FIRST FACE OF MATERIAL UNLESS OTHERWISE NOTED. VERIFY ALL DIMENSIONS & FIELD. ALL DIMENSIONS ARE FROM FIRST FACE OF MATERIAL UNLESS OTHERWISE NOTED. VERIFY ALL DIMENSIONS & FIELD. ALL DIMENSIONS ARE FROM FIRST FACE OF MATERIAL UNLESS OTHERWISE NOTED.
- C. CONTRACTOR IS RESPONSIBLE TO COORDINATE ALL DEMOLITION WORK WITH EXISTING AND NEW CONSTRUCTION. ANY EXISTING CONSTRUCTION TO REMAIN THAT IS DAMAGED BY CONTRACTOR SHALL BE REPAIRED/REPLACED TO MATCH ORIGINAL CONDITION OF CONTRACTOR'S SOLE EXPENSE.
- D. CONTRACTOR TO COORDINATE ALL CEILING REMOVAL WITH MECHANICAL, PLUMBING AND ELECTRICAL WORK. CONTRACTOR TO VERIFY ALL DIMENSIONS OF NEW CEILING/ROOF FRAMING AND PARTS AND ALL NEW MECHANICAL, PLUMBING AND ELECTRICAL WORK IMMEDIATELY UPON COMPLETION OF DEMOLITION WORK. CONTRACTOR TO PROVIDE CONSTRUCTION LOGS THROUGHOUT ALL CONFLICTS BETWEEN NEW WORK AND EXISTING CONDITIONS TO ARCHITECT PRIOR TO COMMENCEMENT OF NEW WORK.
- E. CONTRACTOR SHALL REMOVE TEMPORARY PROTECTIVE MEASURES TO PROTECT REMAINING WORK FROM THE ELEMENTS. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTIVE MEASURES AS REQUIRED TO PROTECT REMAINING EXISTING STRUCTURE, INCLUDING, BUT NOT LIMITED TO, PROTECTIVE SHEETING, BRACING AND PROTECTIVE STRUCTURE. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTIVE MEASURES TO PROTECT REMAINING WORK FROM THE ELEMENTS. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTIVE MEASURES AS REQUIRED TO PROTECT REMAINING EXISTING STRUCTURE, INCLUDING, BUT NOT LIMITED TO, PROTECTIVE SHEETING, BRACING AND PROTECTIVE STRUCTURE. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTIVE MEASURES TO PROTECT REMAINING WORK FROM THE ELEMENTS. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTIVE MEASURES AS REQUIRED TO PROTECT REMAINING EXISTING STRUCTURE, INCLUDING, BUT NOT LIMITED TO, PROTECTIVE SHEETING, BRACING AND PROTECTIVE STRUCTURE.
- F. ALL EXISTING UTILITIES AND WALL HANGINGS ARE TO BE REMOVED BY OWNER PRIOR TO START OF PROJECT. ANY REMAINING ITEMS ARE TO BE IDENTIFIED.
- G. THE DIMENSION (CY) INDICATED THE DIMENSION GIVEN IS TAKEN TO THE LONGEST DIMENSION OF THE TOOTHED OPENING.
- H. CLEARLY CUT EXISTING MASONRY PARTITIONS TO BE REMOVED AT JUNCTIONS WITH EXISTING MASONRY PARTITIONS TO REMAIN. PATCH EXISTING PARTITION TO REMAIN TO FORM A SMOOTH FLOOR SURFACE ALONG WITH THE EXISTING WALL SURFACES.

Q13	DEMOLITION KEY NOTES	Q20	GENERAL DEMOLITION NOTES
N.T.S.		N.T.S.	



A1 FIRST FLOOR PLAN  
1/8"=1'-0"

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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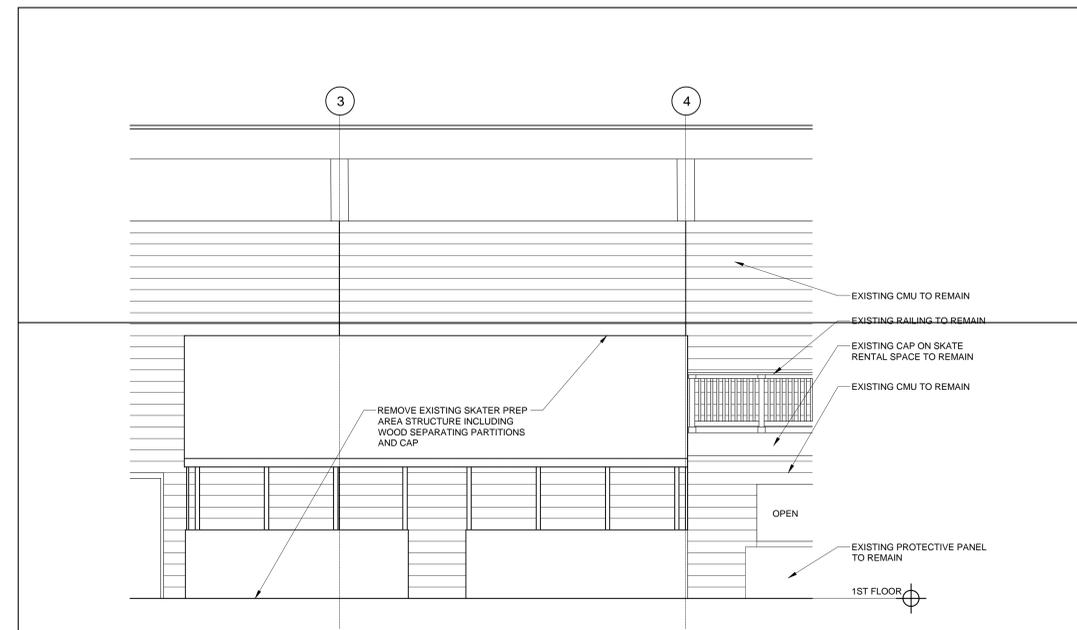


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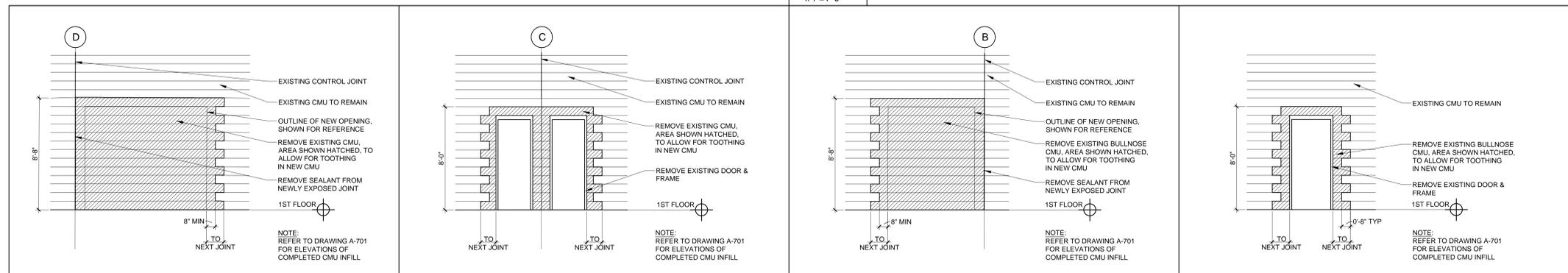
DRAWING TITLE:  
**DEMOLITION ELEVATIONS**

DRAWING NO:  
**AD-701**



**E15 DEMO OF SKATER PREP STRUCTURE**

1/4"=1'-0"



**A5 MASONRY DEMO. ELEV.      A10 MASONRY DEMO. ELEV.      A15 MASONRY DEMO. ELEV.      A20 TYP. DR. IN MAS. DEMO. ELEV.**

1/4"=1'-0"      1/4"=1'-0"      1/4"=1'-0"      1/4"=1'-0"

U  
T  
S  
R  
Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A

1    2    3    4    5    6    7    8    9    10    11    12    13    14    15    16    17    18    19    20    21    22    23    24



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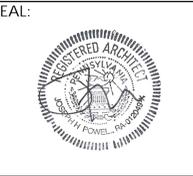
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DRAWING TITLE:  
**PARTITION  
DETAILS & MISC.  
SCHEDULES**

DRAWING NO.:  
**A-101**

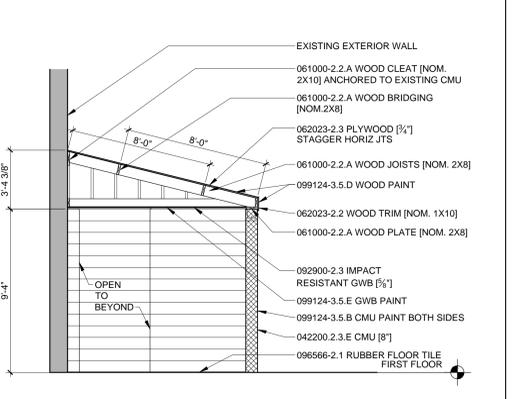
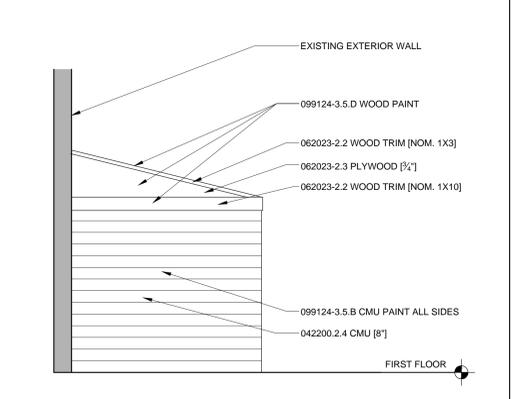
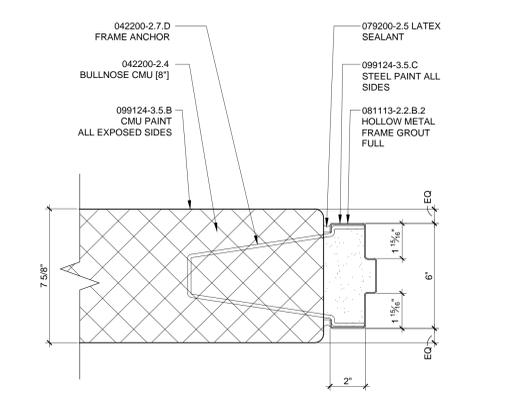
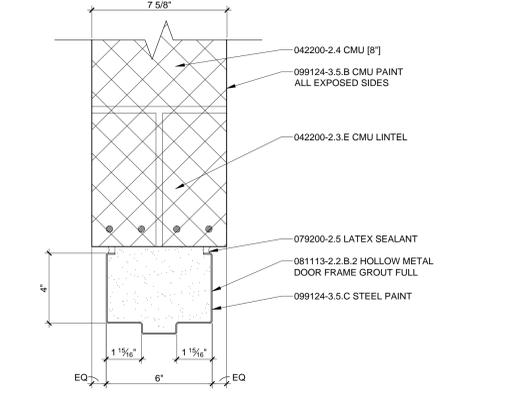
DOOR NO.	LOCATION		TYPE	RATING	MATERIAL	DOOR			FRAME		HEAD/JAMB	HARDWARE	NOTES	DOOR NO.		
	FROM	TO				FINISH	WIDTH	HEIGHT	THICKNESS	MATERIAL					FINISH	
100A.1	RINK 100	STORAGE 100A	B	--	HOLLOW METAL	PAINTED	6'-0"	3'-3 3/4"	0'-1 1/2"	HOLLOW METAL	PAINTED	2	K10/A-101,Q1/A-201 SIMILAR	SEE HARDWARE SCHEDULE	DOOR AND FRAME SIZED TO FIT UNDER EXISTING STEPPED SEATING TIERS	100A.1
101.1	RINK 100	LOCKER ROOM 101	A	--	HOLLOW METAL	PAINTED	3'-0"	7'-0"	0'-1 1/2"	HOLLOW METAL	PAINTED	1	K10/A-101, K5/A-101	SEE HARDWARE SCHEDULE		101.1
102.1	RINK 100	LOCKER ROOM 102	A	--	HOLLOW METAL	PAINTED	3'-0"	7'-0"	0'-1 1/2"	HOLLOW METAL	PAINTED	1	K10/A-101, K5/A-101	SEE HARDWARE SCHEDULE		102.1
103.1	RINK 100	LOCKER ROOM 103	A	--	HOLLOW METAL	PAINTED	3'-0"	7'-0"	0'-1 1/2"	HOLLOW METAL	PAINTED	1	K10/A-101, K5/A-101	SEE HARDWARE SCHEDULE		103.1
104.1	RINK 100	LOCKER ROOM 104	A	--	HOLLOW METAL	PAINTED	3'-0"	7'-0"	0'-1 1/2"	HOLLOW METAL	PAINTED	1	K10/A-101, K5/A-101	SEE HARDWARE SCHEDULE		104.1
107.1	RINK 100	CHANGE RM #1 107	A	--	HOLLOW METAL	PAINTED	3'-0"	7'-0"	0'-1 1/2"	HOLLOW METAL	PAINTED	1	K10/A-101, K5/A-101	SEE HARDWARE SCHEDULE		107.1
108.1	RINK 100	CHANGE RM #2 108	A	--	HOLLOW METAL	PAINTED	3'-0"	7'-0"	0'-1 1/2"	HOLLOW METAL	PAINTED	1	K10/A-101, K5/A-101	SEE HARDWARE SCHEDULE		108.1
119.1	VESTIBULE 119D	FIGURE SKATERS 119	A	--	HOLLOW METAL	PAINTED	3'-0"	7'-0"	0'-1 1/2"	HOLLOW METAL	PAINTED	1	K10/A-101, K5/A-101	SEE HARDWARE SCHEDULE		119.1
119.2	RINK 100	FIGURE SKATERS 119	A	--	HOLLOW METAL	PAINTED	3'-0"	7'-0"	0'-1 1/2"	HOLLOW METAL	PAINTED	1	K10/A-101, K5/A-101	SEE HARDWARE SCHEDULE		119.2
119A.1	FIGURE SKATERS 119	STORAGE 119A	A	--	HOLLOW METAL	PAINTED	2'-6"	5'-10 1/4"	0'-1 1/2"	HOLLOW METAL	PAINTED	2	K10/A-101,Q1/A-201	SEE HARDWARE SCHEDULE	DOOR AND FRAME SIZED TO FIT UNDER EXISTING STEPPED SEATING TIERS	119A.1
119B.1	FIGURE SKATERS 119	STORAGE 119B	A	--	HOLLOW METAL	PAINTED	2'-6"	5'-10 1/4"	0'-1 1/2"	HOLLOW METAL	PAINTED	2	K10/A-101,Q1/A-201	SEE HARDWARE SCHEDULE	DOOR AND FRAME SIZED TO FIT UNDER EXISTING STEPPED SEATING TIERS	119B.1
119C.1	VESTIBULE 119D	STORAGE 119C	A	--	HOLLOW METAL	PAINTED	2'-6"	5'-10 1/4"	0'-1 1/2"	HOLLOW METAL	PAINTED	2	K10/A-101,Q1/A-201	SEE HARDWARE SCHEDULE	DOOR AND FRAME SIZED TO FIT UNDER EXISTING STEPPED SEATING TIERS	119C.1

R1	DOOR TYPES
NTS	

R5	FRAME TYPES
NTS	

R10	DOOR SCHEDULE
NTS	

ROOM	DOOR NUMBER					
	100A.2	119.1	119A.1	119B.1	119C.1	119.2
CONTINUOUS HINGE	X(2)	X	X	X	X	X
MORTISE LOCKSET	X	X	X	X	X	X
MORTISE AUXILIARY LOCK	X	X	X	X	X	X
SURFACE BOLTS (1 PAIR)	X	X	X	X	X	X
LOCK CYLINDER	X	X	X	X	X	X
PUSH PLATE	X	X	X	X	X	X
PULL	X	X	X	X	X	X
CLOSER	X	X	X	X	X	X
WALL STOP	X	X	X	X	X	X
KICKPLATE	X	X	X	X	X	X



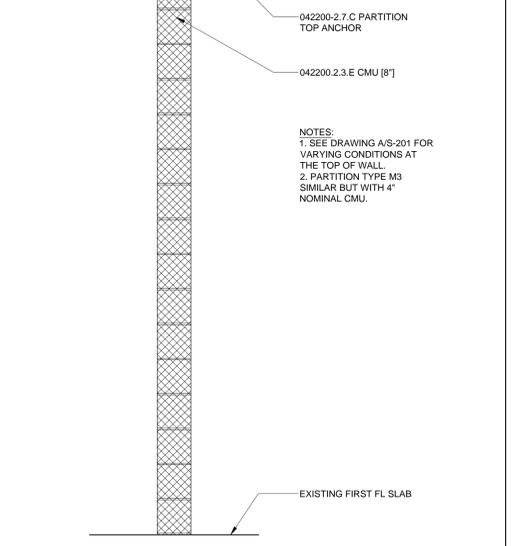
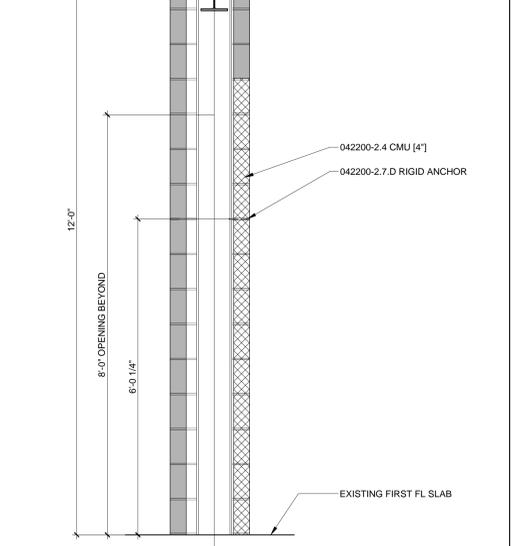
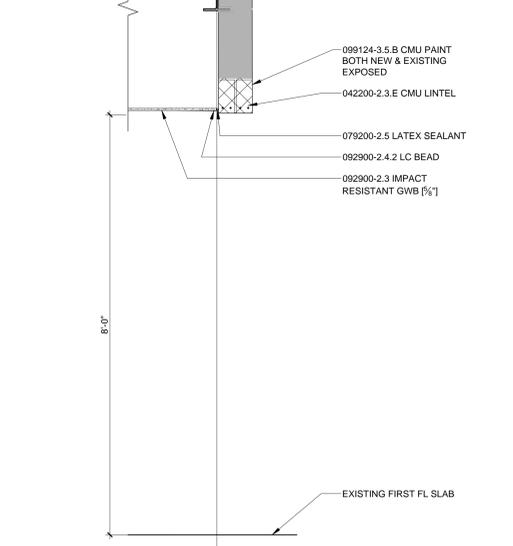
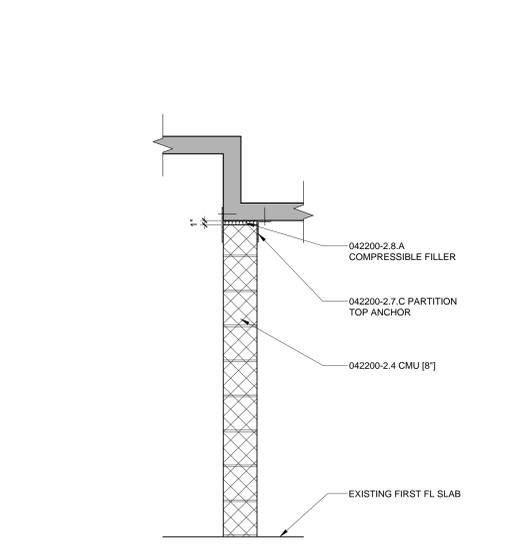
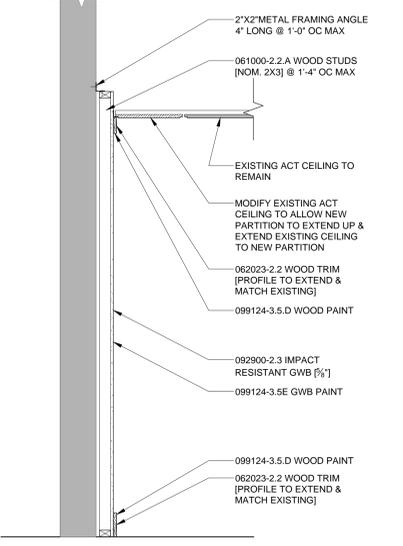
K1	HARDWARE SCHEDULE
3/4"=1'-0"	

K5	DETAIL - DOOR HEAD
3/4"=1'-0"	

K10	DETAIL - DOOR JAMB
3/4"=1'-0"	

K15	ELEVATION OF CHANGE ROOM
1/4"=1'-0"	

K20	SECTION THRU CHANGE ROOM
1/4"=1'-0"	



A1	G1 PARTITION
3/4"=1'-0"	

A5	M1 PARTITION
3/4"=1'-0"	

A10	SECTION AT OPENING
3/4"=1'-0"	

A15	SECTION AT COLUMN
3/4"=1'-0"	

A20	PARTITION TYPE M2 & M3
3/4"=1'-0"	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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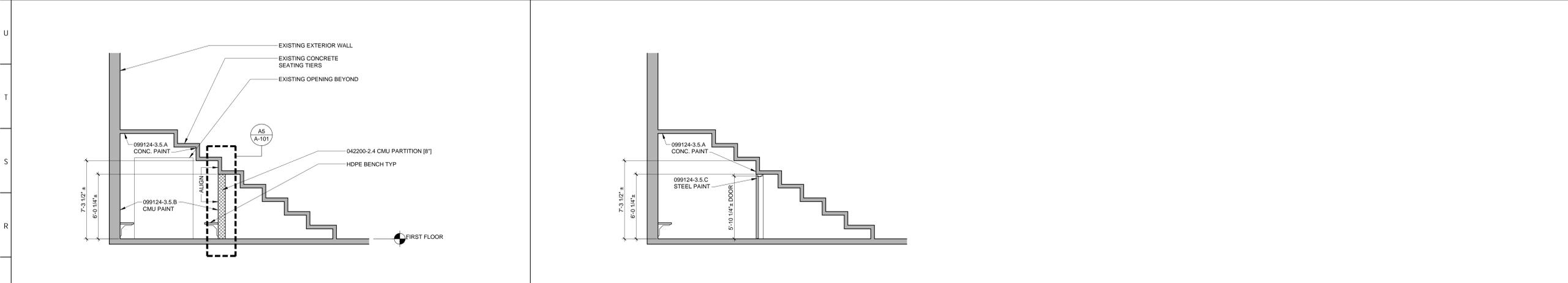


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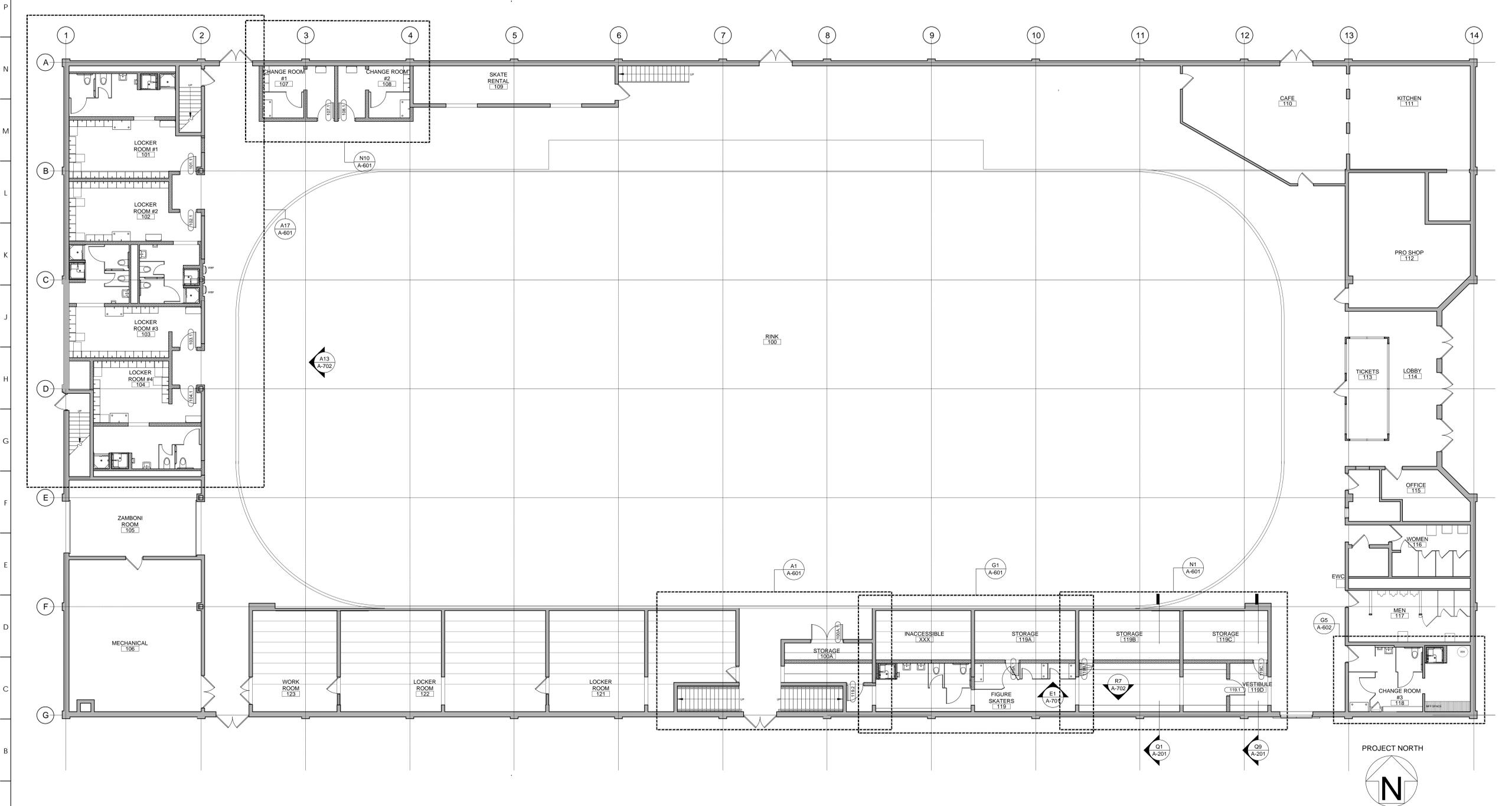
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DRAWING TITLE:  
FIRST FLOOR  
PLAN & SEATING  
SECTIONS

DRAWING NO:  
**A-201**



**Q1 SECTION THRU SEATING** 1/4"=1'-0"      **Q9 SECTION THRU DOOR TO STORAGE** 1/4"=1'-0"



**A1 FIRST FLOOR PLAN** 1/8"=1'-0"





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SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

SKATIUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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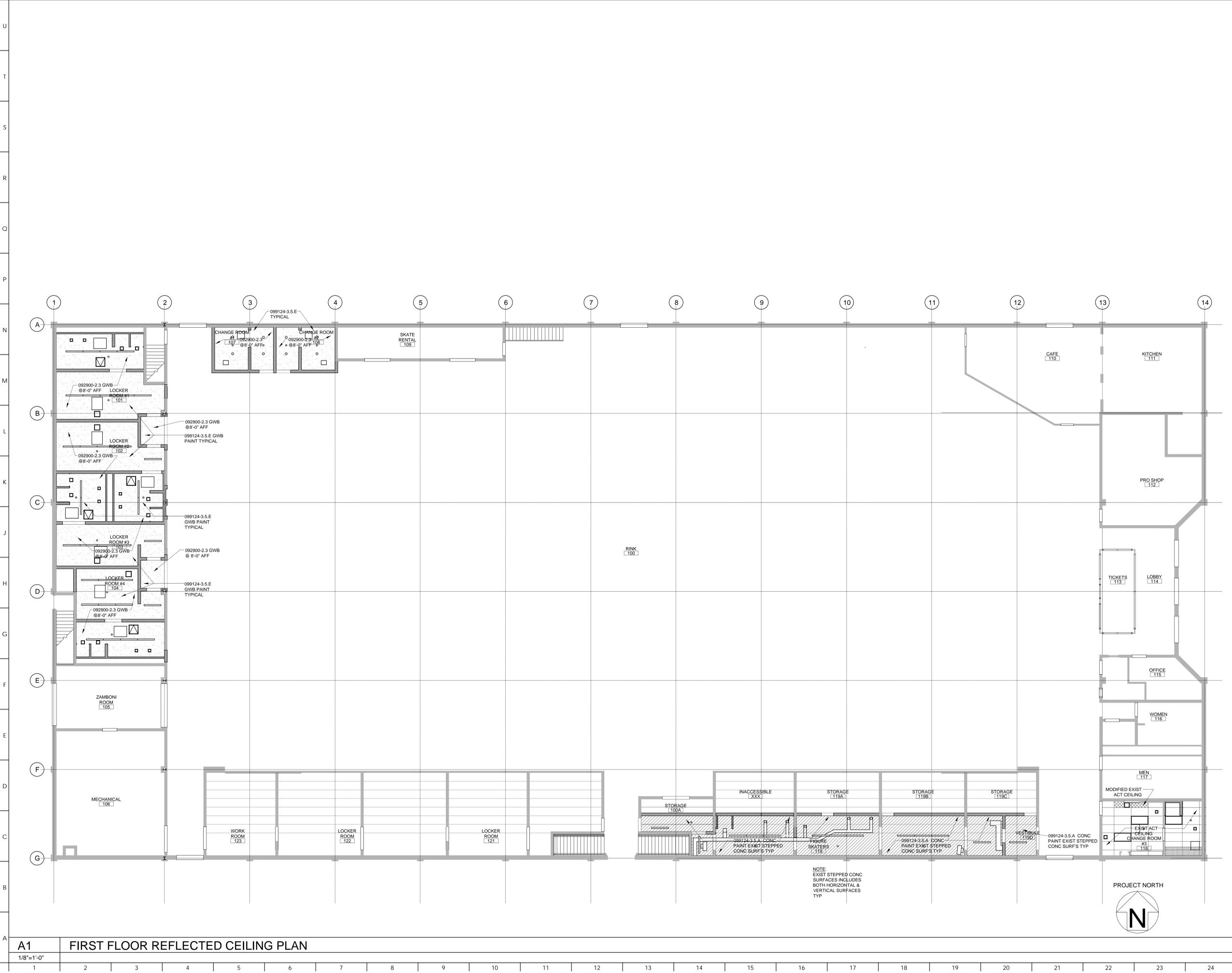


DATE:	SEPTEMBER 19, 2024
PROJECT NO.:	2024-02
DRAWN BY:	SJZ
CHECKED BY:	JHP
SUBMISSION DATE:	
PERMIT SET DATE:	8/19/2024
BID SET DATE:	9/19/2024

REVISION	DATE

DRAWING TITLE:  
**FIRST FLOOR REFLECTED CEILING PLAN**

DRAWING NO:  
**A-301**



**A1 FIRST FLOOR REFLECTED CEILING PLAN**

1/8"=1'-0"



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

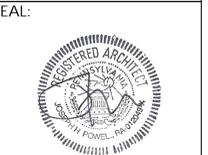
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H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
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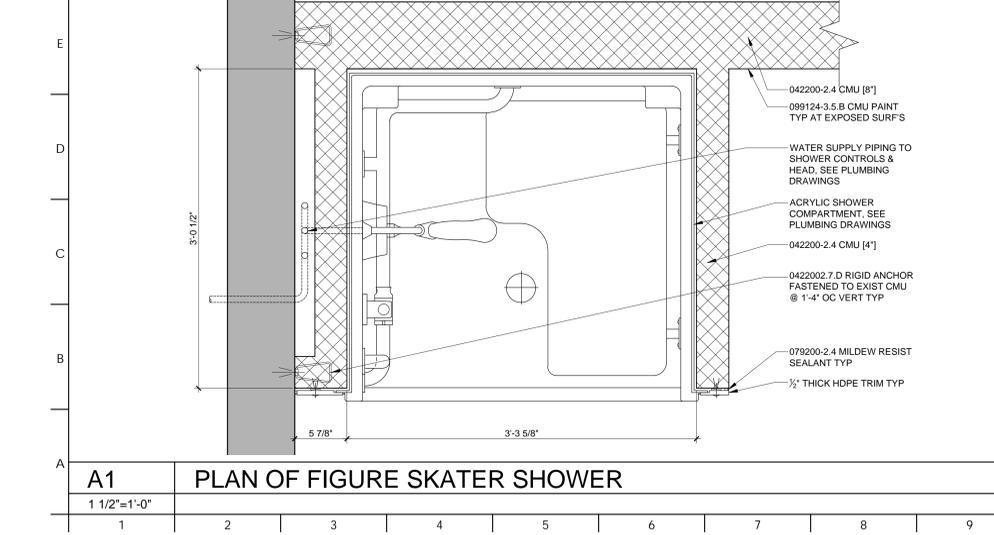
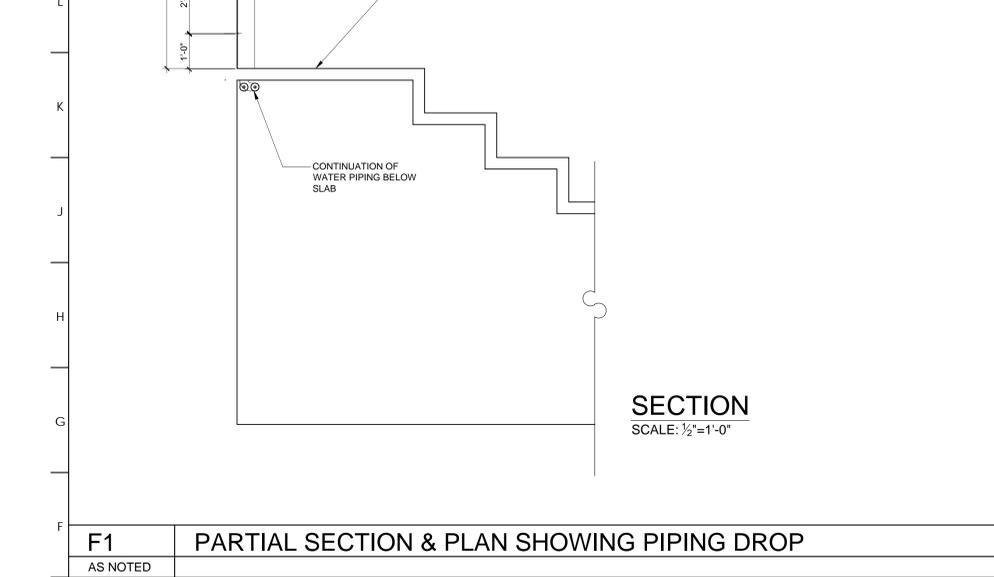
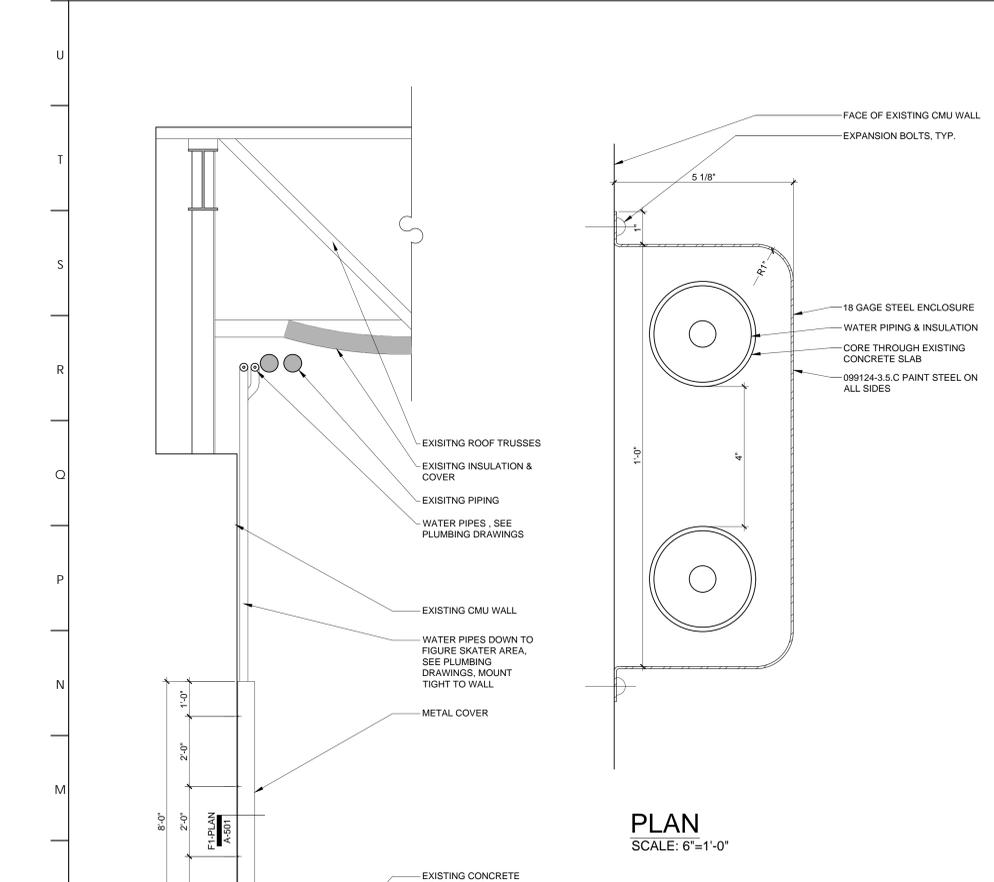
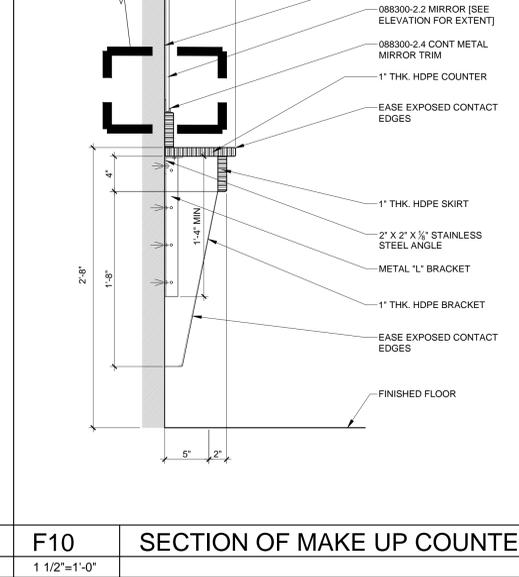
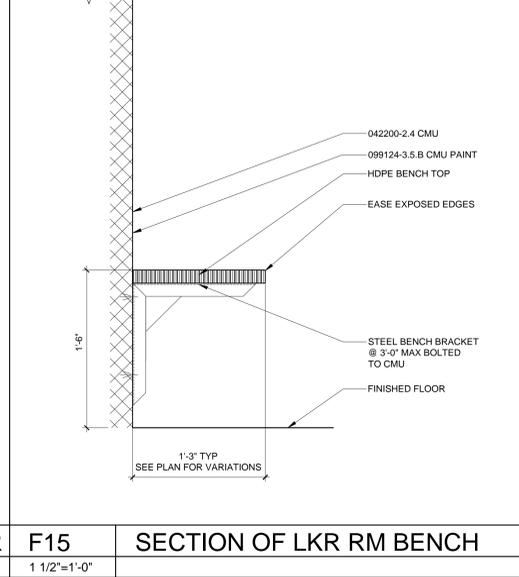
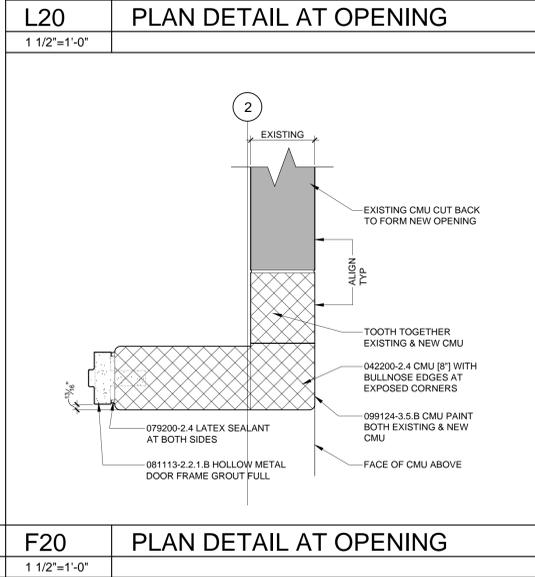
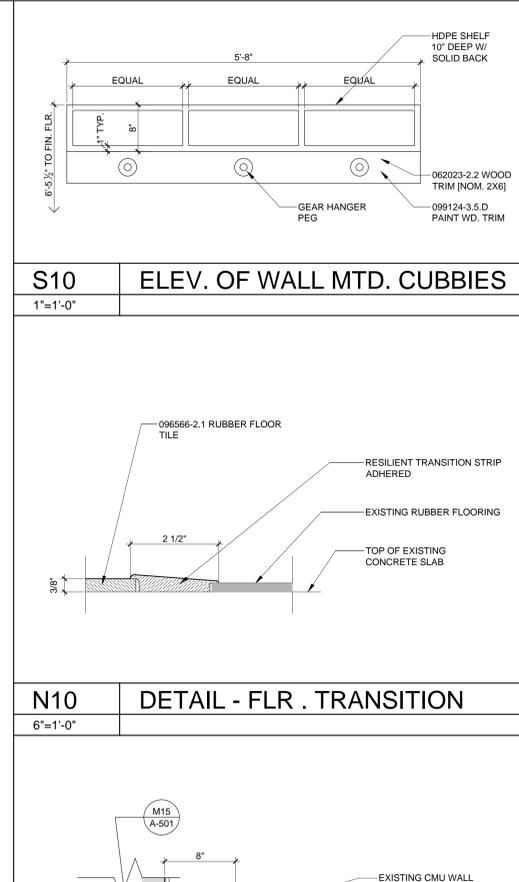
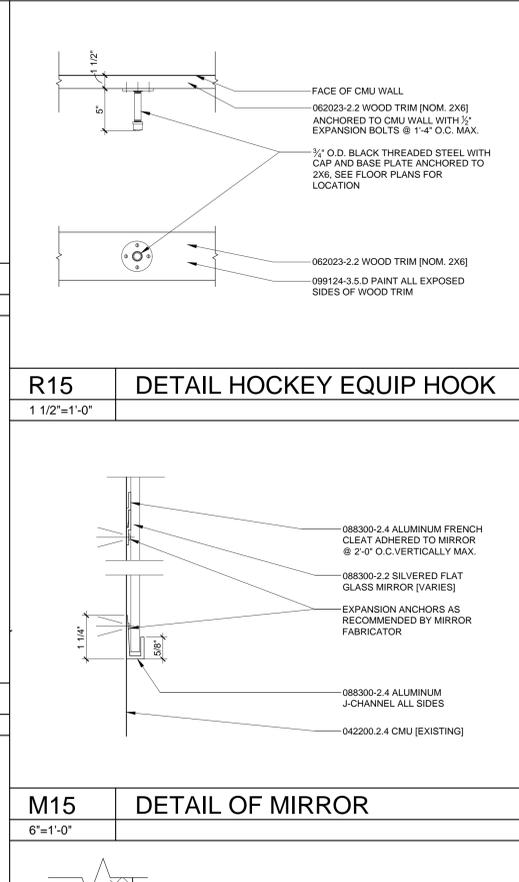
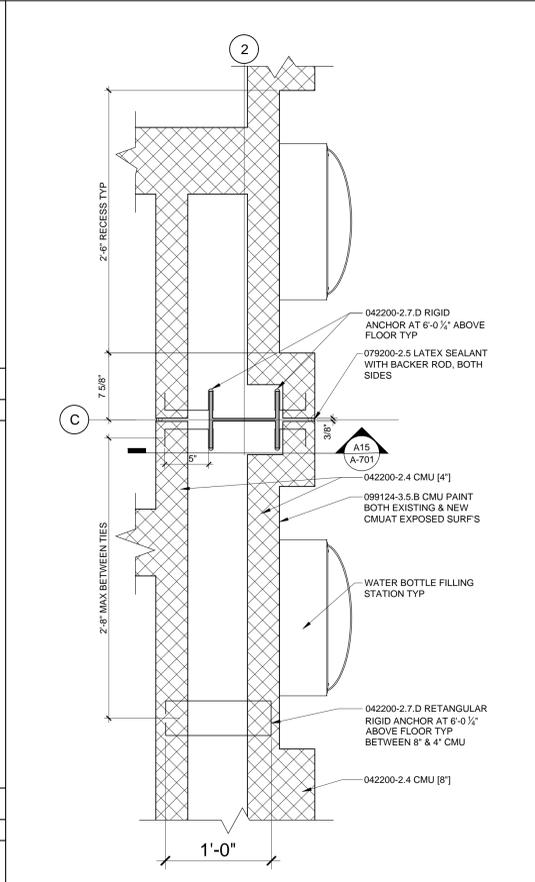


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CHECKED BY: JHP  
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PERMIT SET: 8/19/2024  
BID SET: 9/19/2024

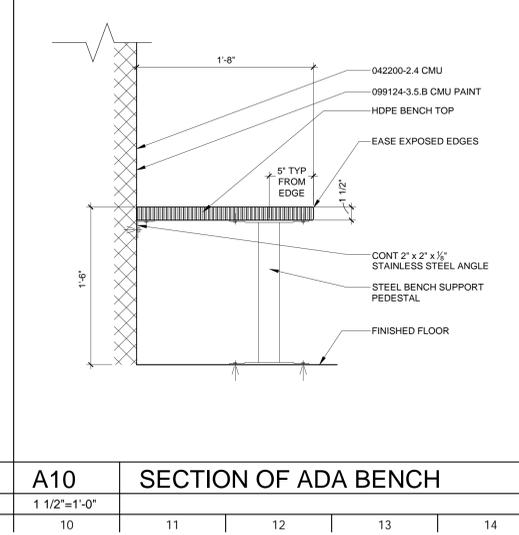
REVISION	DATE

DRAWING TITLE:  
**PLAN DETAILS**

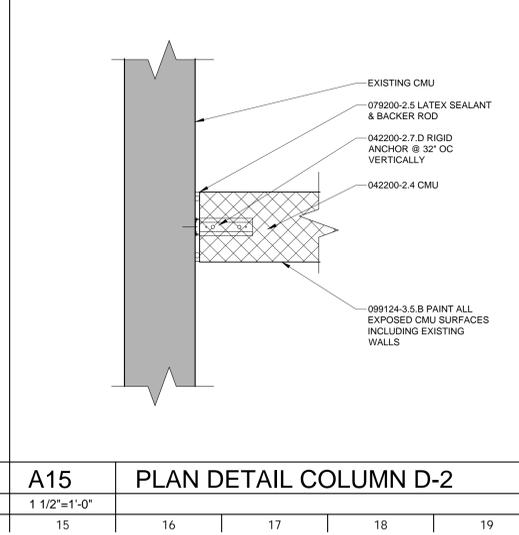
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**A-501**



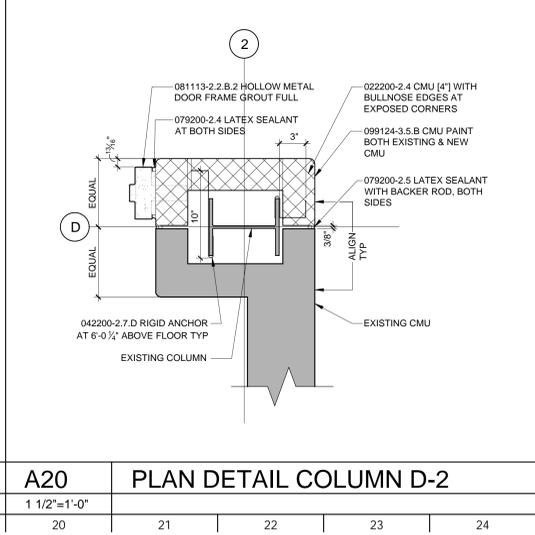
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10	11	12	13	14
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15	16	17	18	19
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20	21	22	23	24
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ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15004  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

SKATIUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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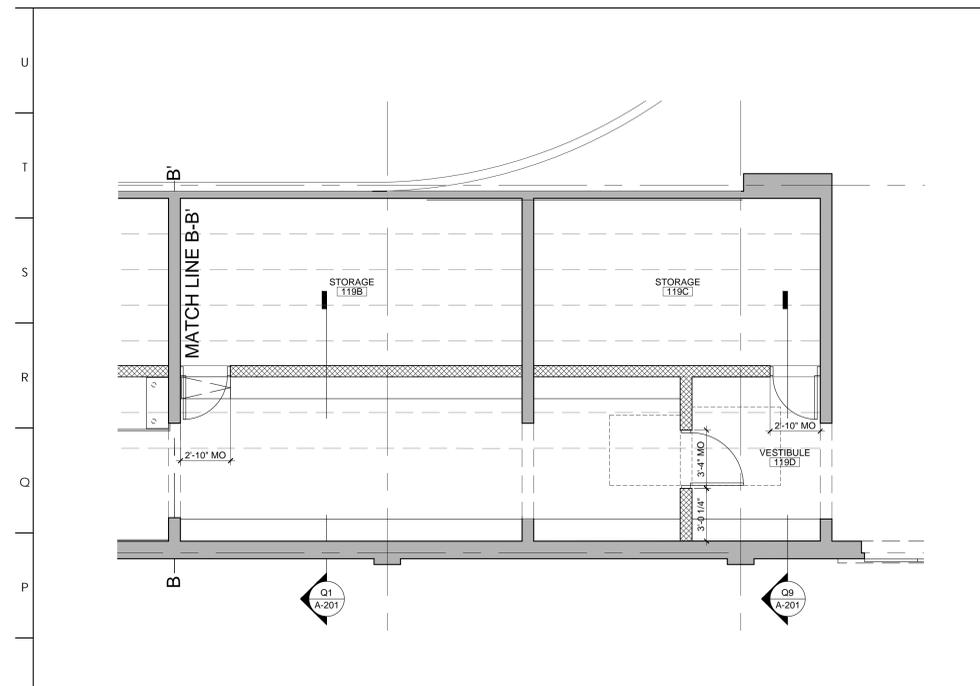


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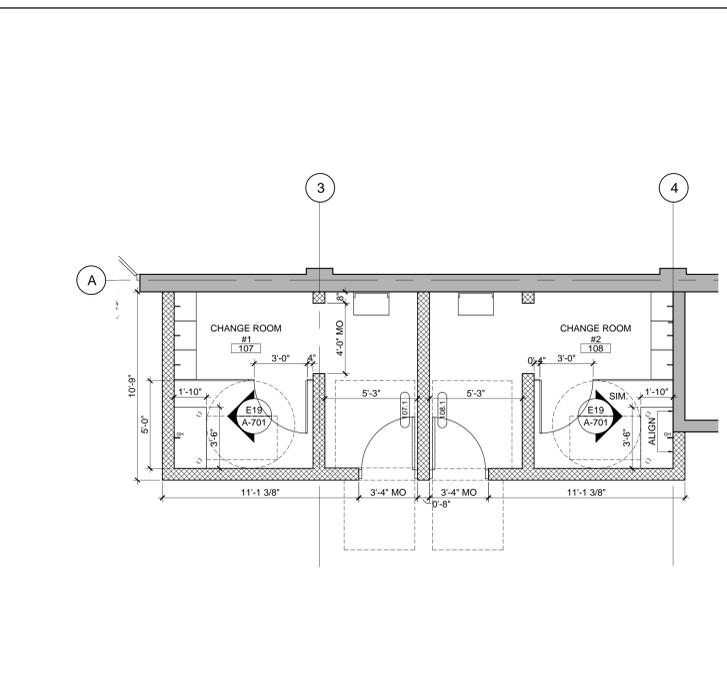
DRAWING TITLE:  
**ENLARGED  
LOCKER ROOM  
PLANS**

DRAWING NO:  
**A-601**



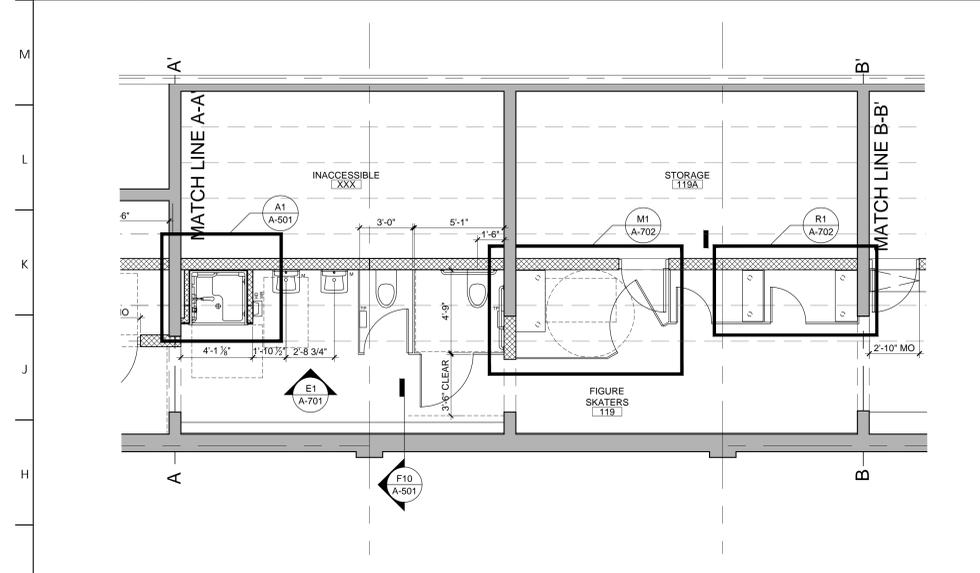
**N1** FIGURE SKATERS LOCKER ROOM PARTIAL PLAN 3

1/4"=1'-0"



**N10** CHANGE ROOMS #1 & #2 PLAN

1/4"=1'-0"



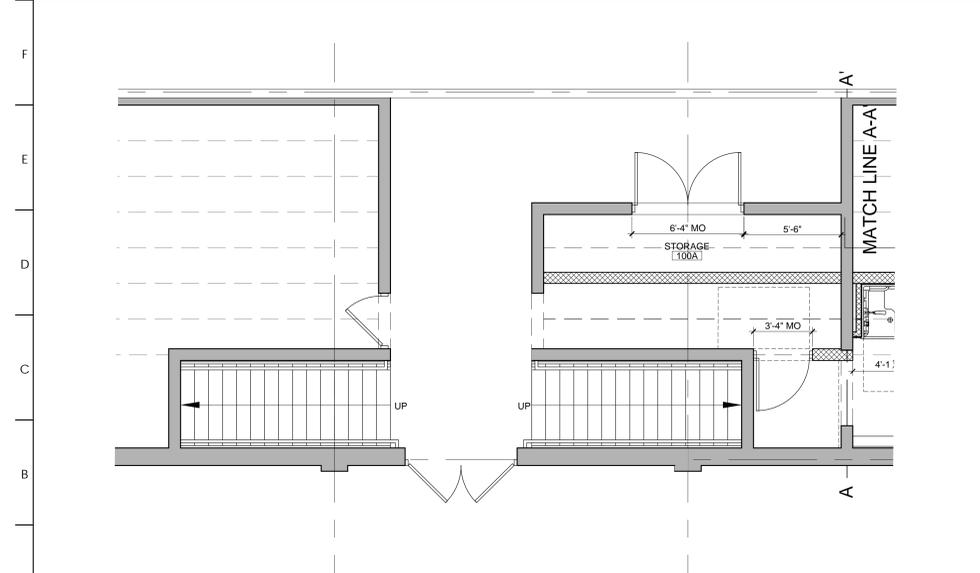
**G1** FIGURE SKATERS LOCKER ROOM PARTIAL PLAN 2

1/4"=1'-0"



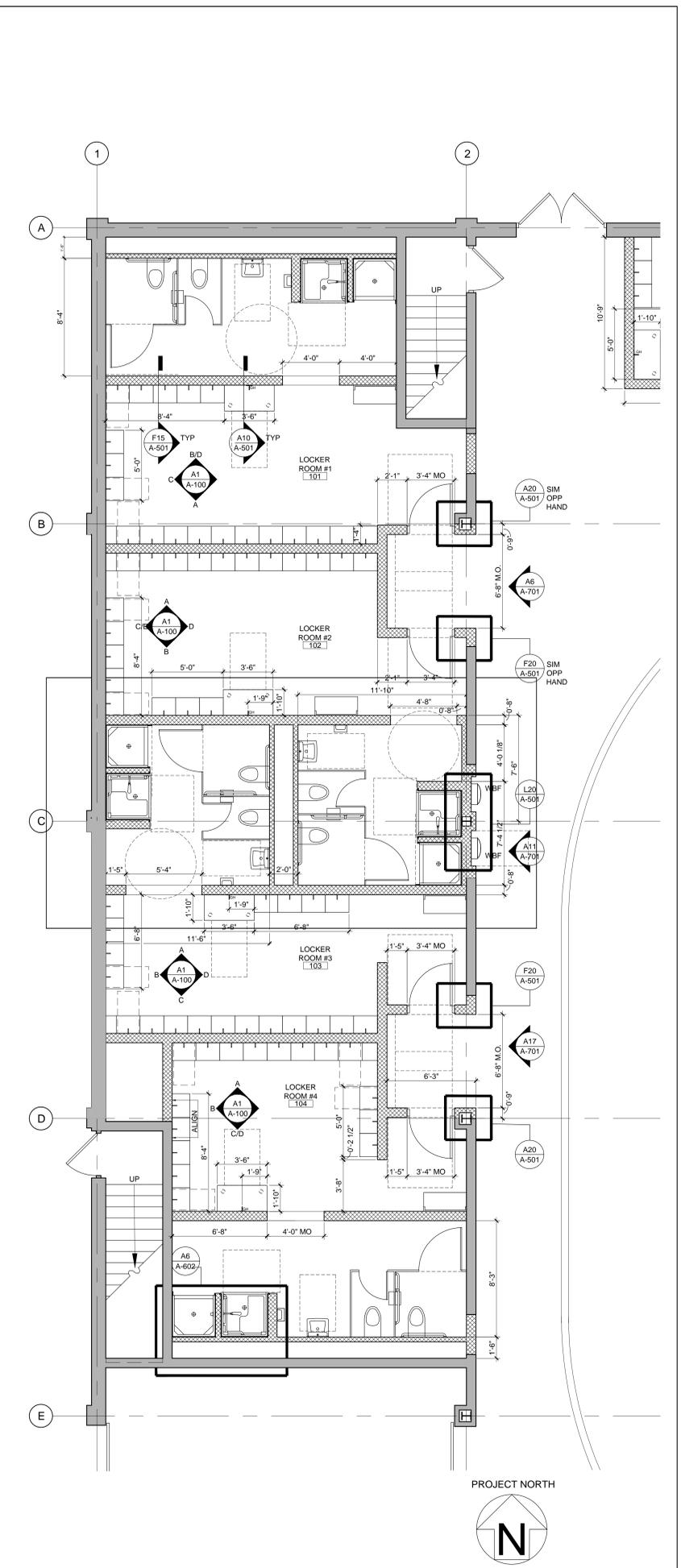
**A10** CHANGE ROOM PLAN

1/4"=1'-0"



**A1** FIGURE SKATERS LOCKER ROOM PARTIAL PLAN 1

1/4"=1'-0"



**A17** HOCKEY LOCKER ROOMS PLAN

1/4"=1'-0"

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

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HAVERFORD TOWNSHIP  
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1014 DARBY ROAD  
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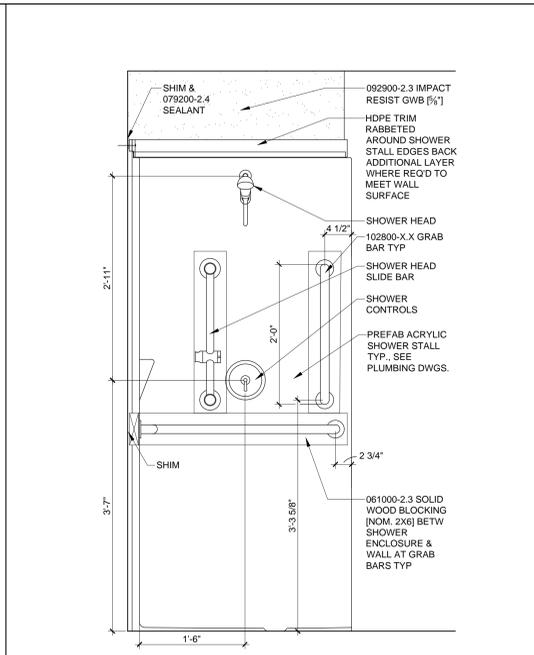
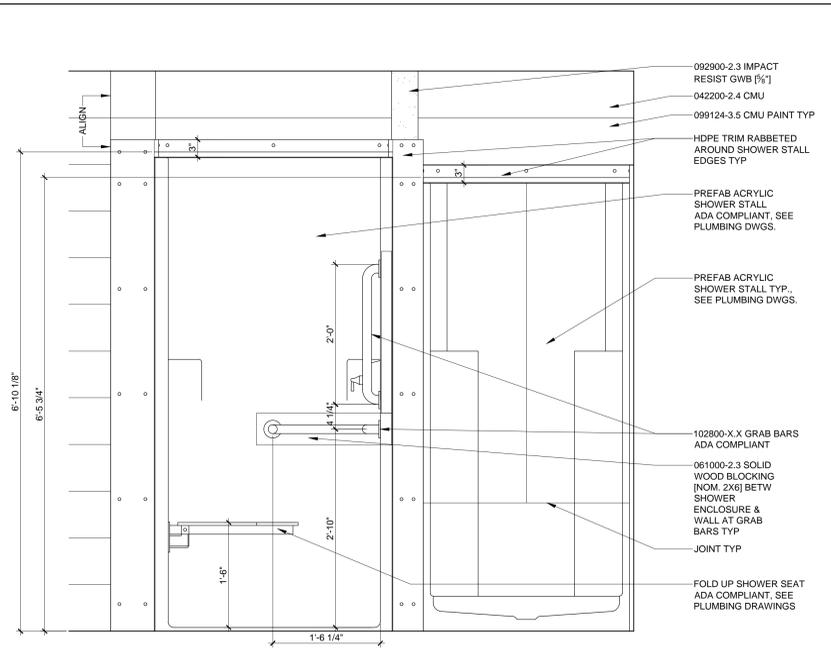


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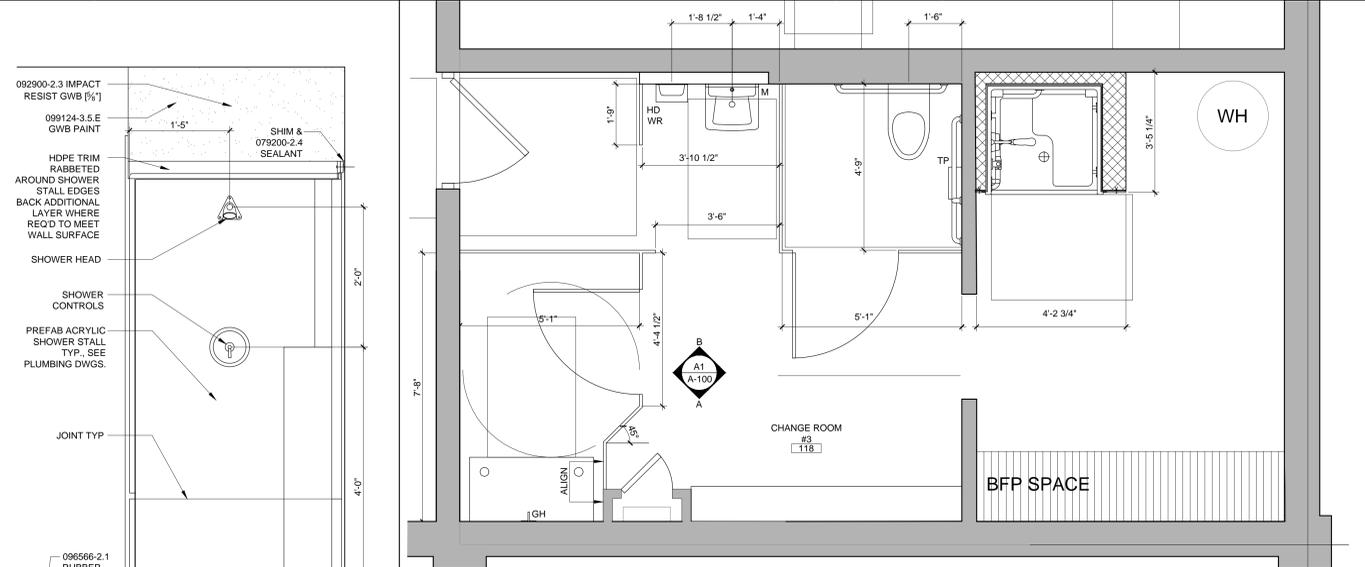
DRAWING TITLE:  
ENLARGED  
BATHROOM  
PLANS

DRAWING NO:  
**A-602**

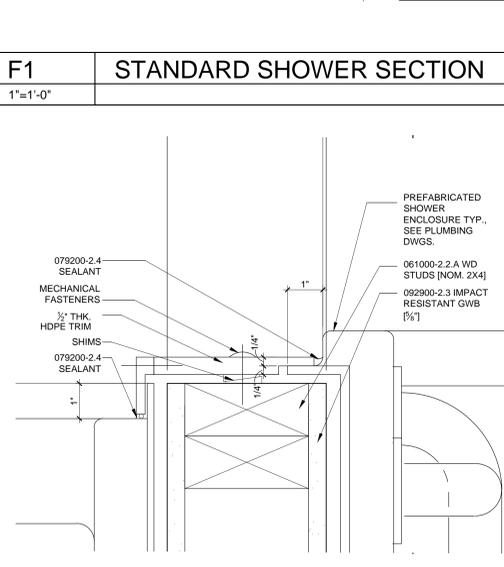


**N1** TYPICAL SHOWER ELEVATION  
1/2"=1'-0"

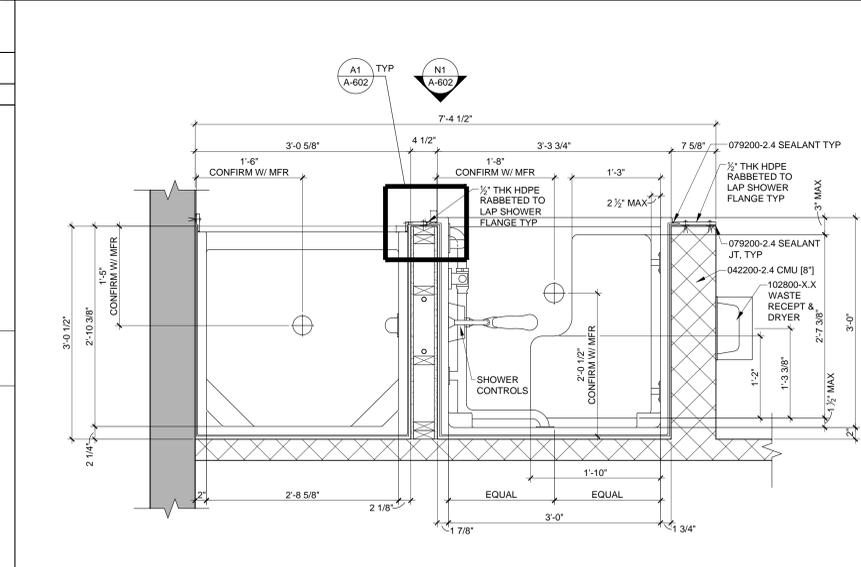
**N9** ADA SHOWER SECTION  
1/2"=1'-0"



**G5** CHANGE ROOM #3 BATHROOM PLAN  
1/2"=1'-0"

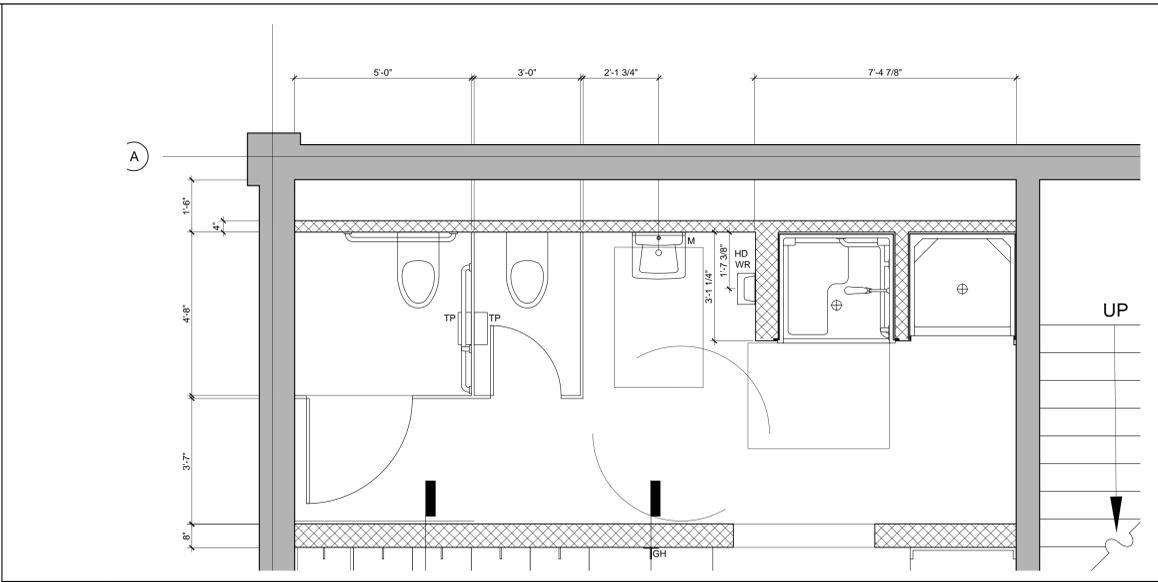


**F1** STANDARD SHOWER SECTION  
1/2"=1'-0"

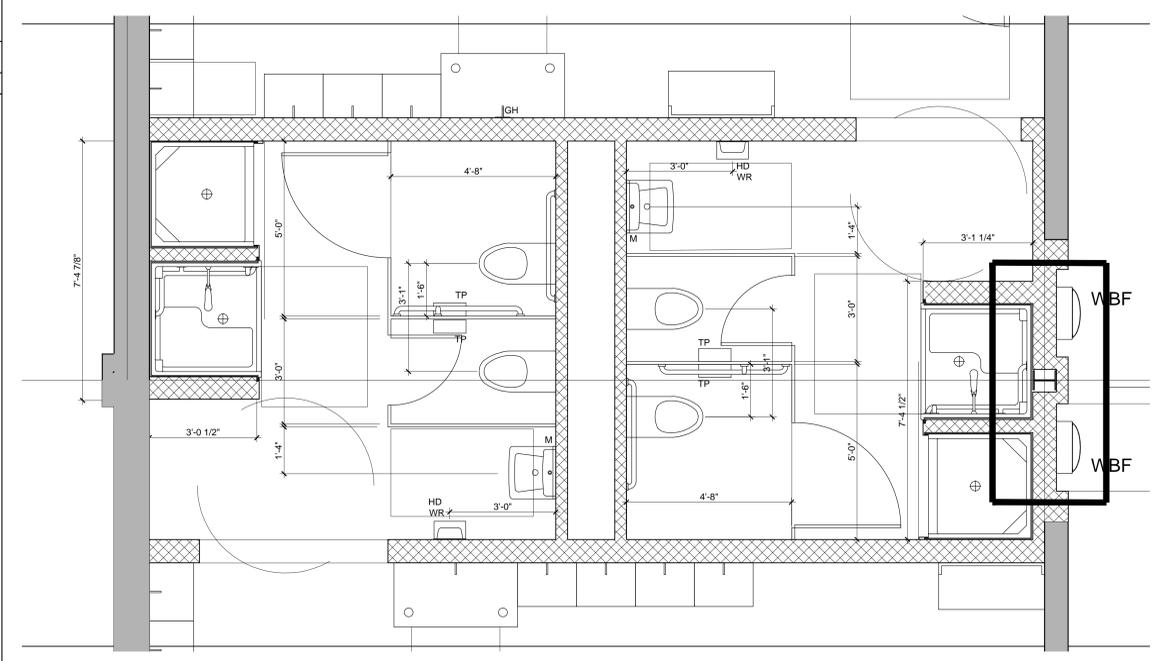


**A6** TYPICAL SHOWER STALL PLAN  
1/2"=1'-0"

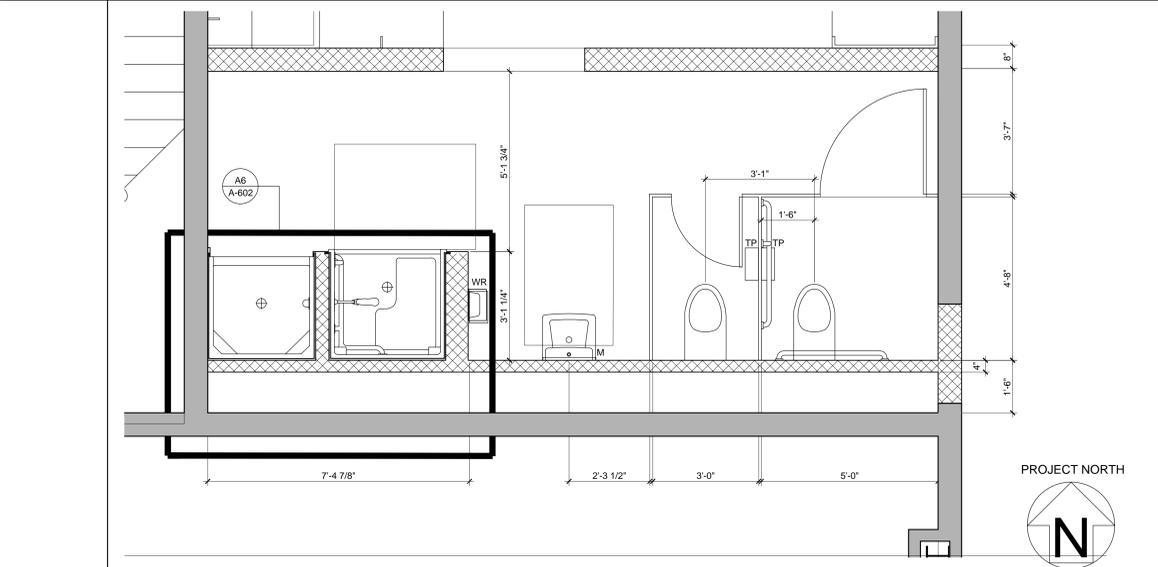
**A1** DETAIL TYP SHOWER TRIM  
6"=1'-0"



**P14** LOCKER ROOM 101 BATHROOM PLAN  
1/2"=1'-0"



**G14** LOCKER ROOMS 102 & 103 BATHROOM PLAN  
1/2"=1'-0"



**A15** LOCKER ROOM 104 BATHROOM PLAN  
1/2"=1'-0"

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24



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BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

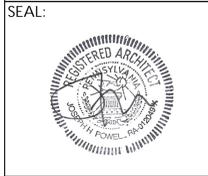
MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F. KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

SKATIUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
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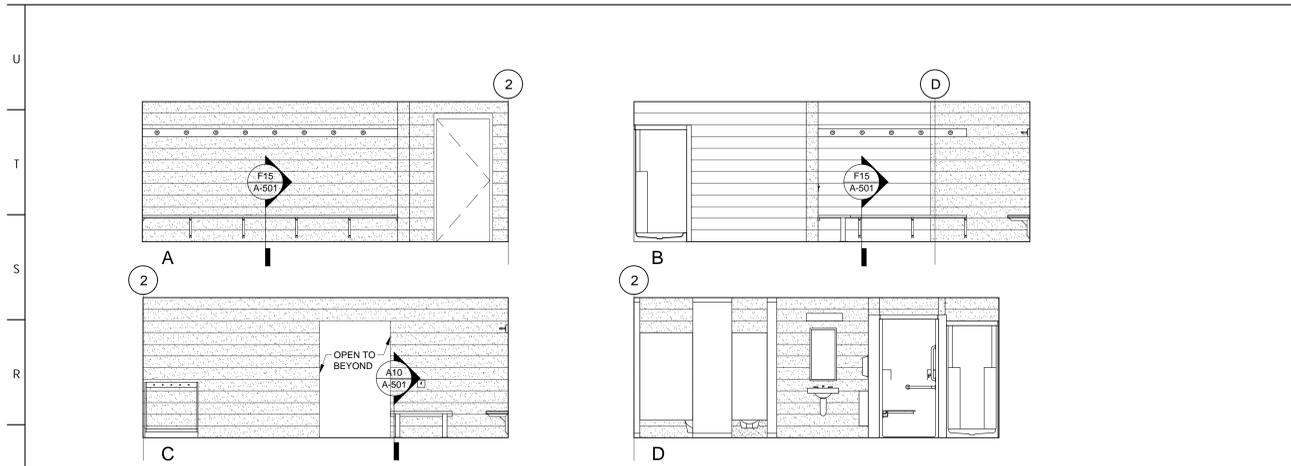


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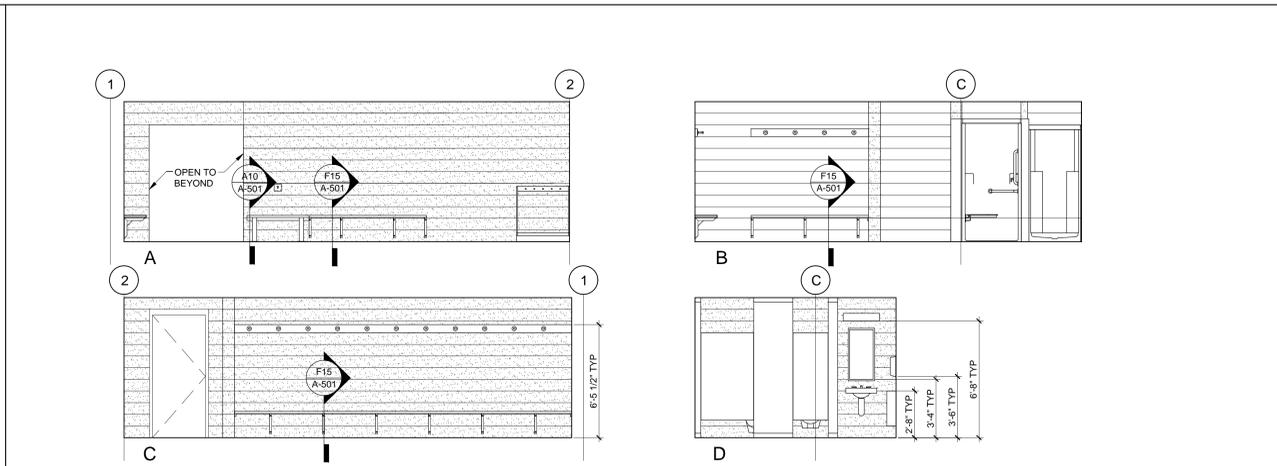
REVISION	DATE

DRAWING TITLE:  
**INTERIOR ELEVATIONS**

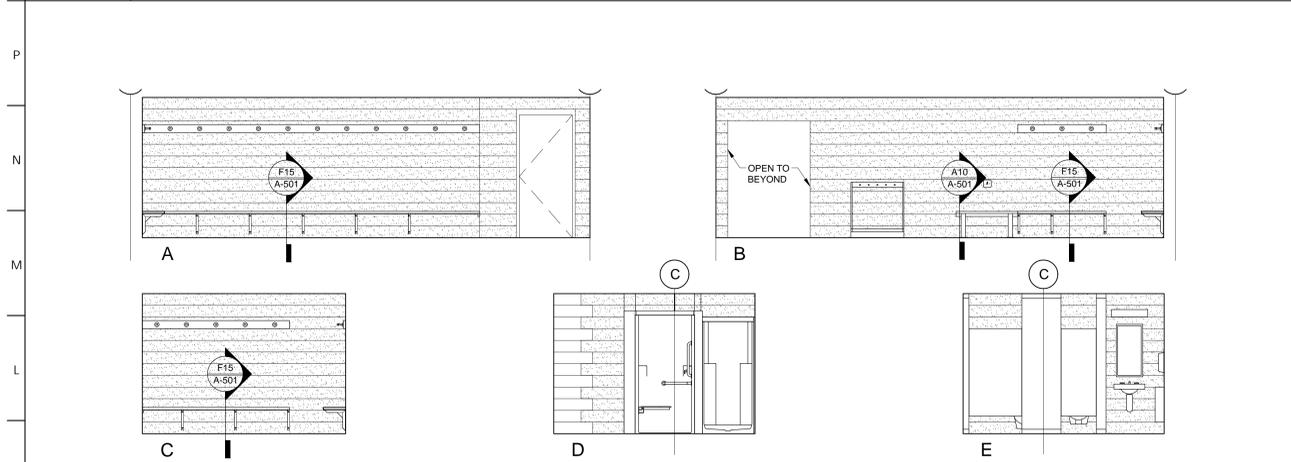
DRAWING NO:  
**A-701**



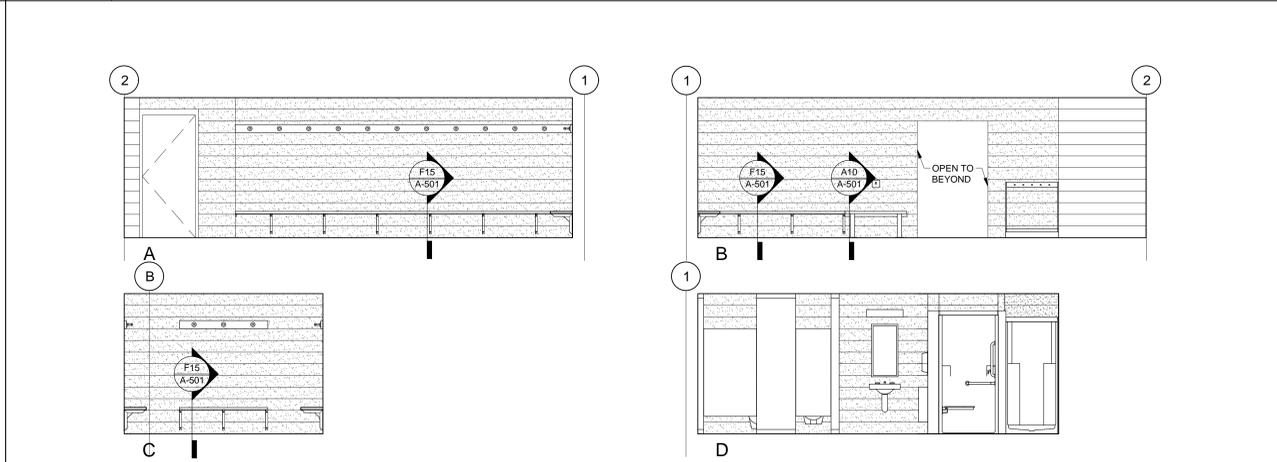
**Q1** ELEVATION OF LOCKER ROOM 104  
1/4"=1'-0"



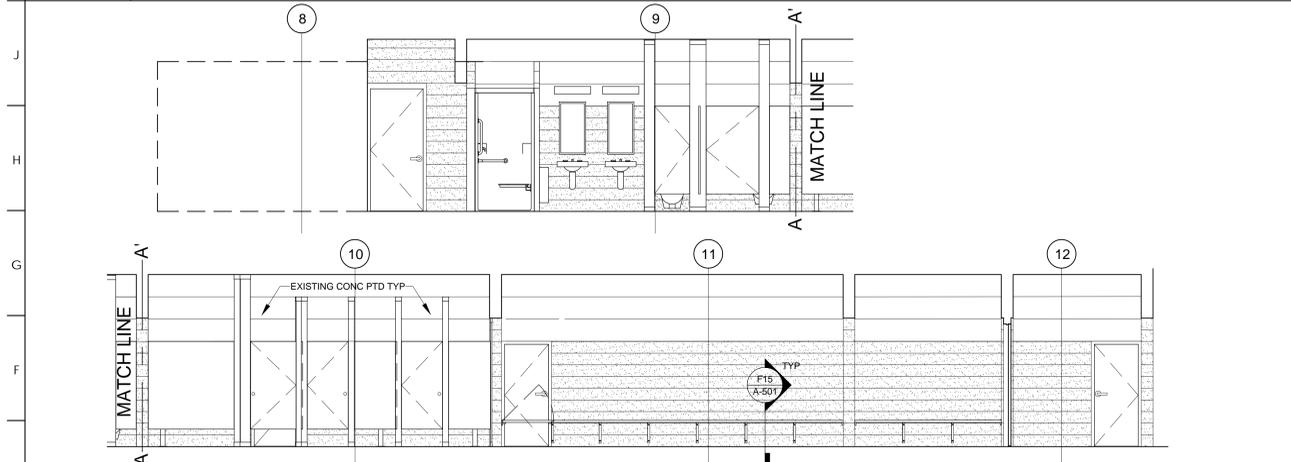
**Q13** ELEVATION OF LOCKER ROOM 103  
1/4"=1'-0"



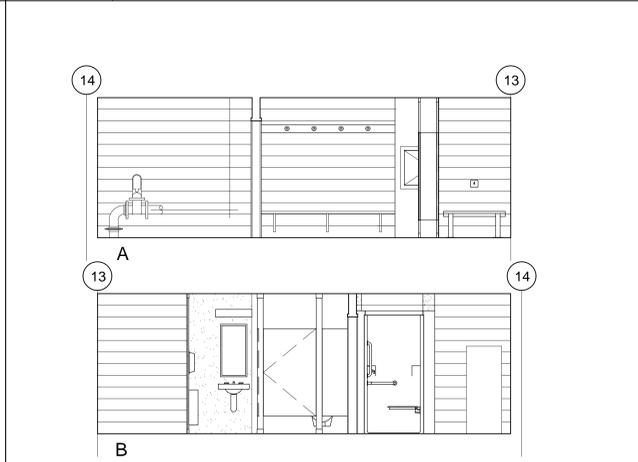
**K1** ELEVATION OF LOCKER ROOM 102  
1/4"=1'-0"



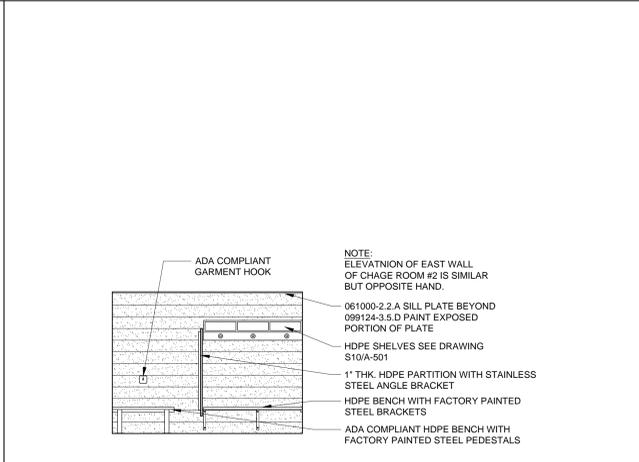
**K13** ELEVATION OF LOCKER ROOM 101  
1/4"=1'-0"



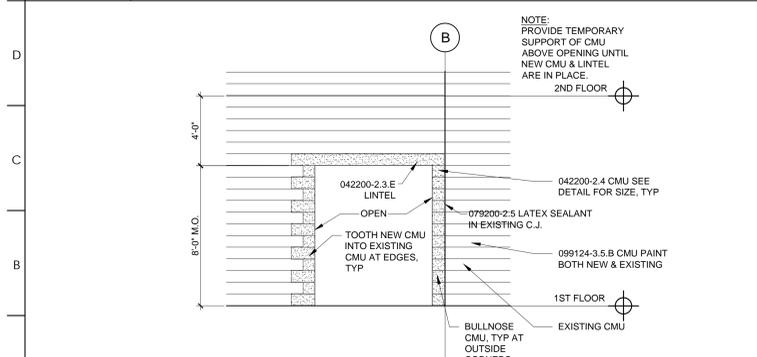
**E1** ELEVATION OF LOCKER RM 120 LOOKING WEST  
1/4"=1'-0"



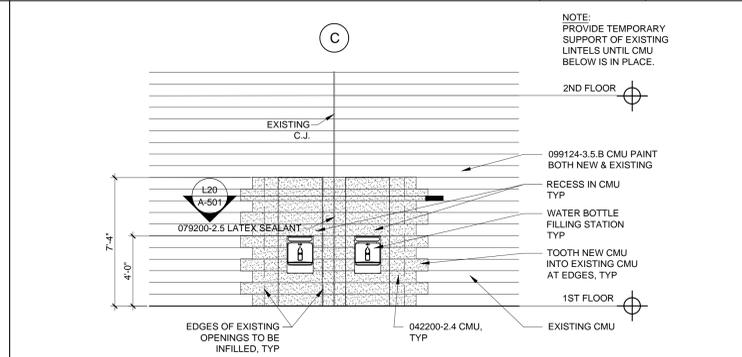
**E13** ELEVATION OF LOCKER RM 118  
1/4"=1'-0"



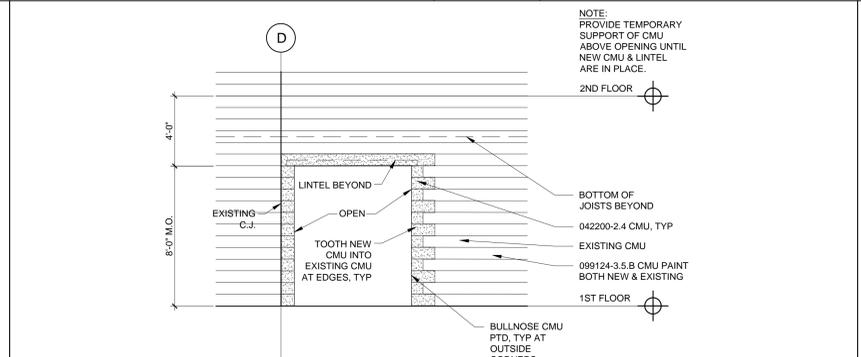
**E19** ELEVATION OF CHANGE ROOM #1 & #2  
1/4"=1'-0"



**A1** ELEVATION OF NEW OPENING  
1/4"=1'-0"



**A8** ELEVATION OF CMU INFILL  
1/4"=1'-0"



**A15** ELEVATION OF NEW OPENING  
1/4"=1'-0"

**WALL MATERIAL KEY**

[Pattern]	NO STIPPLING & COURSING INDICATES EXISTING CMU TO REMAIN, PAINT FINISH
[Pattern]	STIPPLING & COURSING INDICATES NEW CMU, PAINT FINISH
[Pattern]	STIPPLING INDICATES NEW GWB, PAINT FINISH

**A23** KEY  
NTS



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

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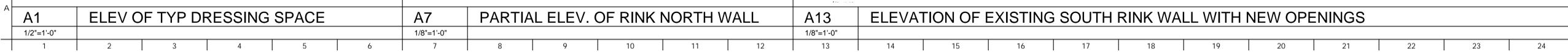
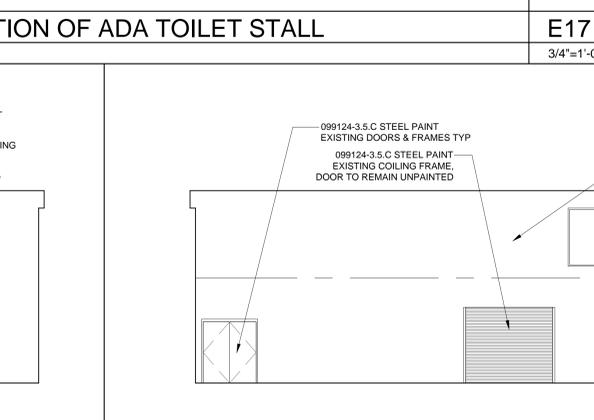
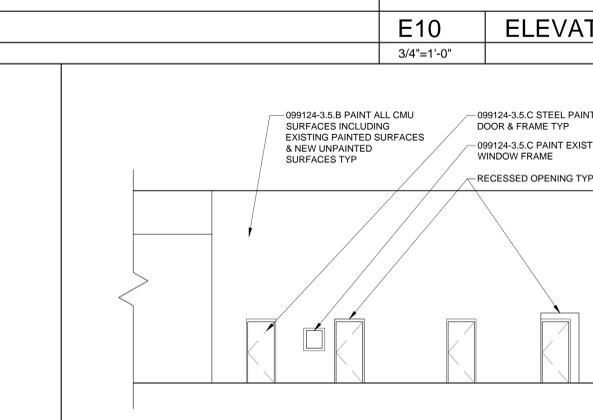
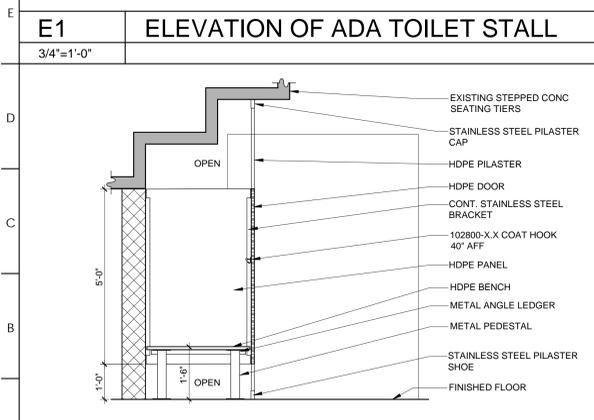
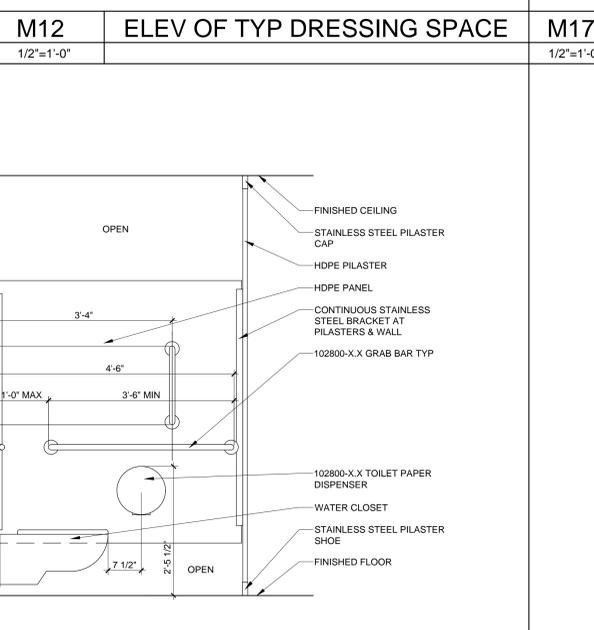
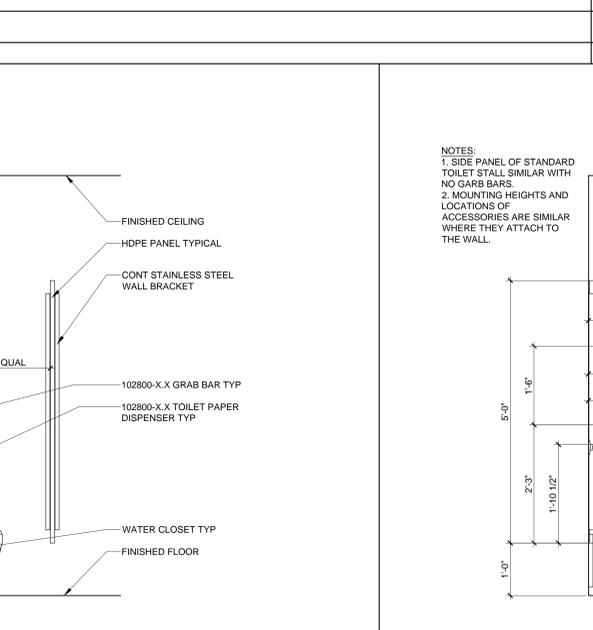
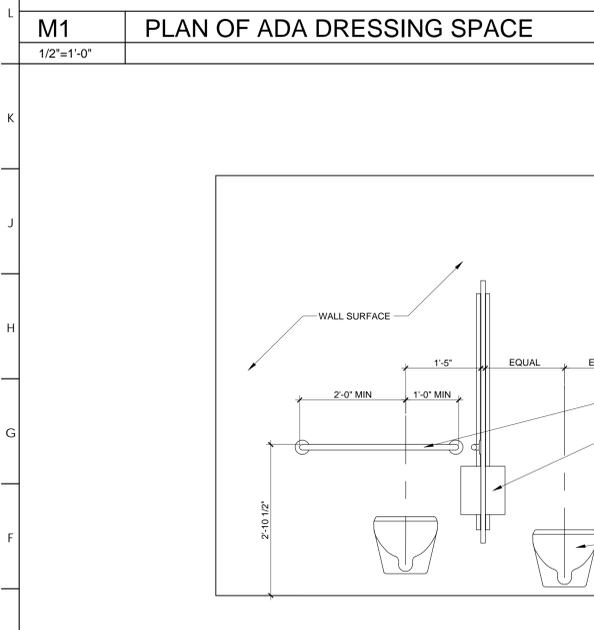
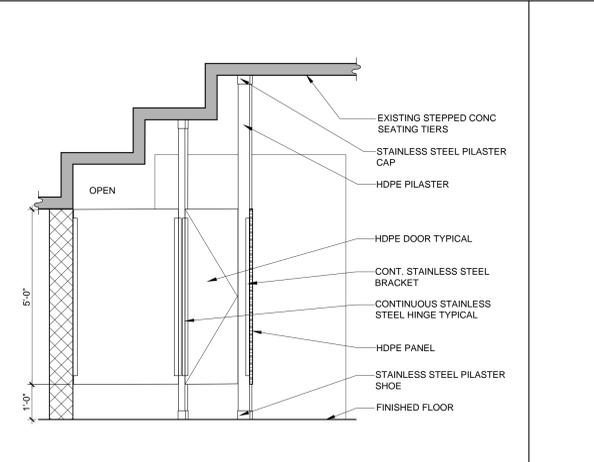
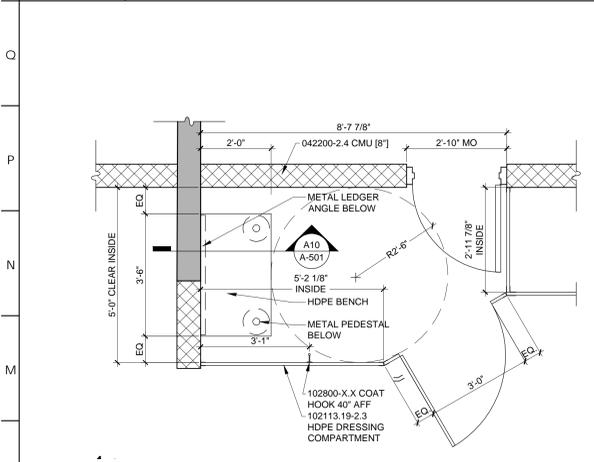
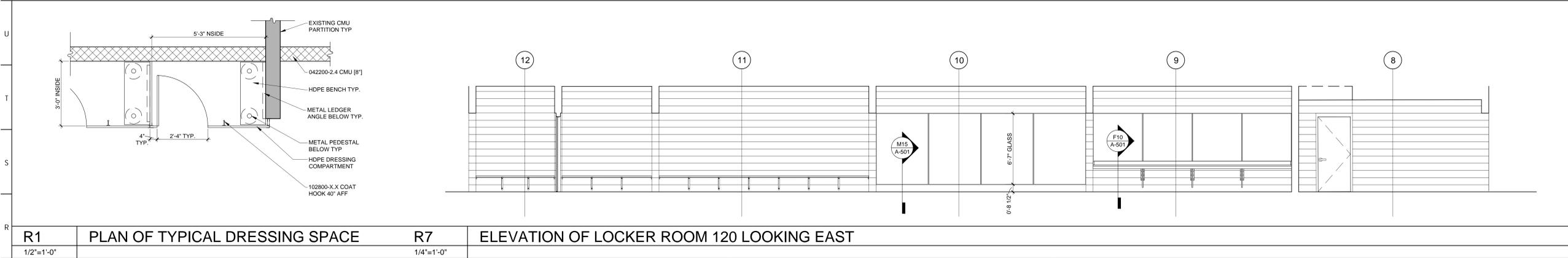


DATE: SEPTEMBER 19, 2024  
PROJECT NO: 2024-02  
DRAWN BY: SJZ  
CHECKED BY: JHP  
SUBMISSION DATE: 8/19/2024  
PERMIT SET: 8/19/2024  
BID SET: 9/19/2024

REVISION	DATE

DRAWING TITLE:  
**INTERIOR ELEVATIONS & MISC. PLANS**

DRAWING NO:  
**A-702**





ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

SKATIUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

THIS DRAWING IS TO ILLUSTRATE THE WORK TO BE DONE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES USED TO DO THE WORK OR THE SAFETY ASPECTS OF CONSTRUCTION AND NOTHING ON THIS DRAWING EXPRESSED OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTAL OF A BID TO PERFORM THE WORK IS AN ACKNOWLEDGEMENT OF THESE RESPONSIBILITIES AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK AND THE BID PRICE. NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.

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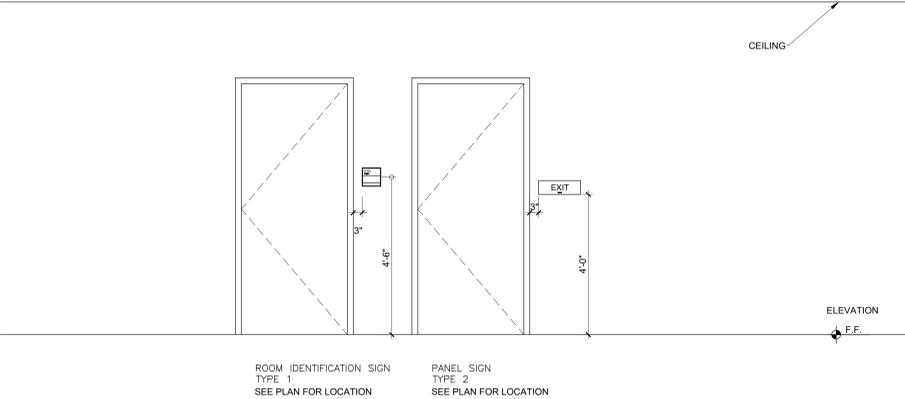
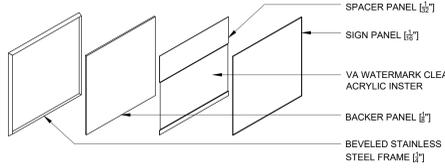
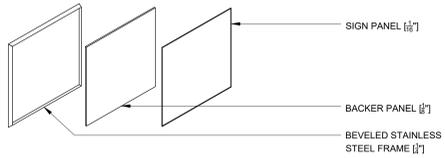


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BID SET DATE:	9/19/2024
	JM

REVISION	DATE

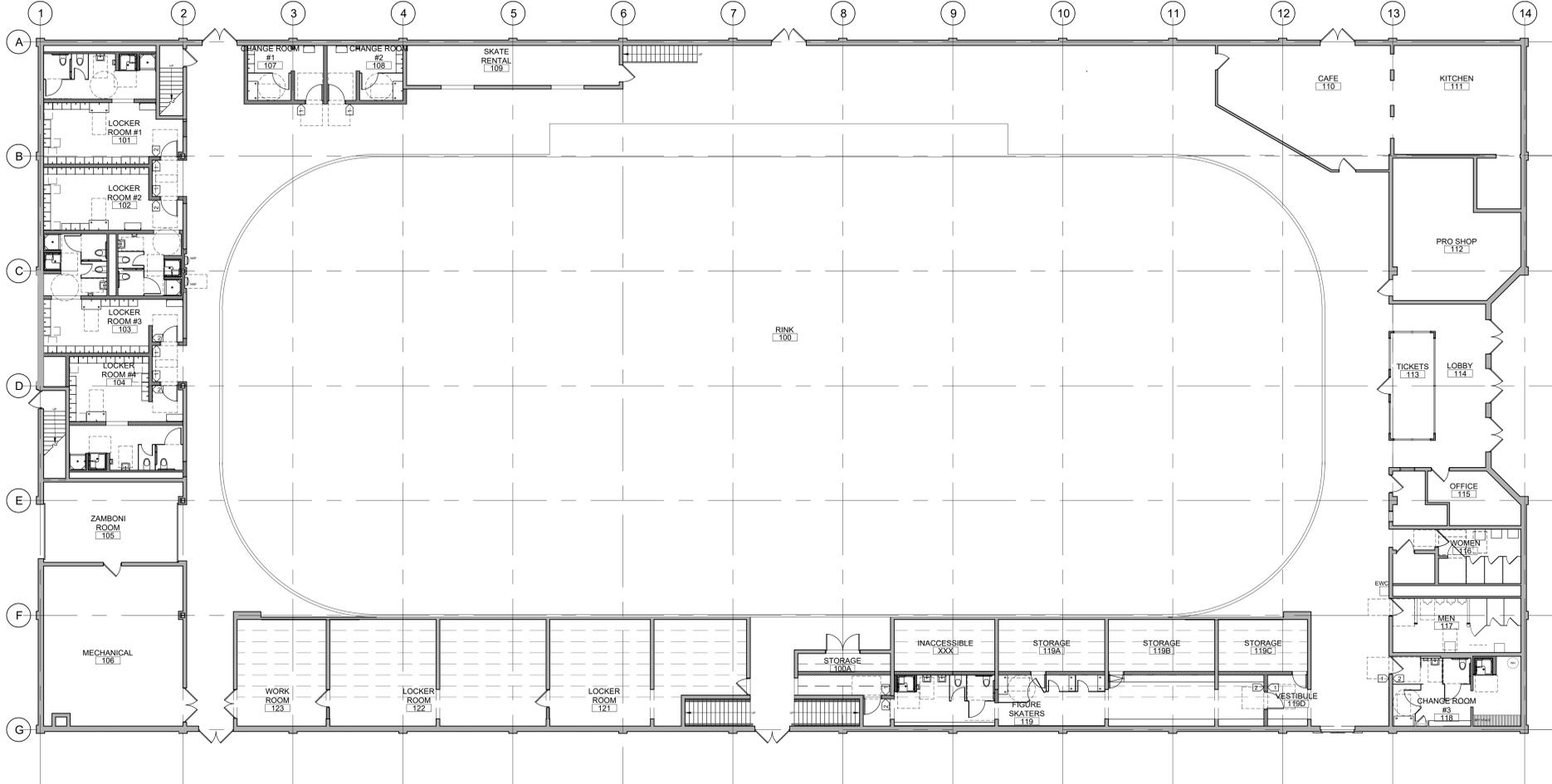
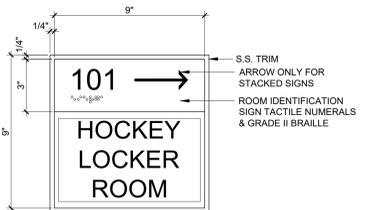
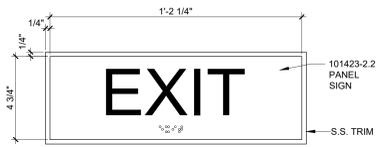
DRAWING TITLE:  
FIRST FLOOR  
PLAN - SIGNAGE

DRAWING NO.:  
**A-901**



**N1** TYPICAL SIGN CONSTRUCTION  
N.T.S.

**N9** MOUNTING HEIGHTS  
1/2"=1'-0"



**A1** SIGNS  
3/8"=1'-0"

**A6** FIRST FLOOR PLAN  
3/32"=1'-0"

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

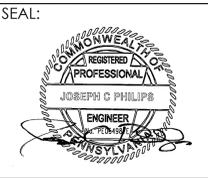
MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBCI ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1260  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

SKATIUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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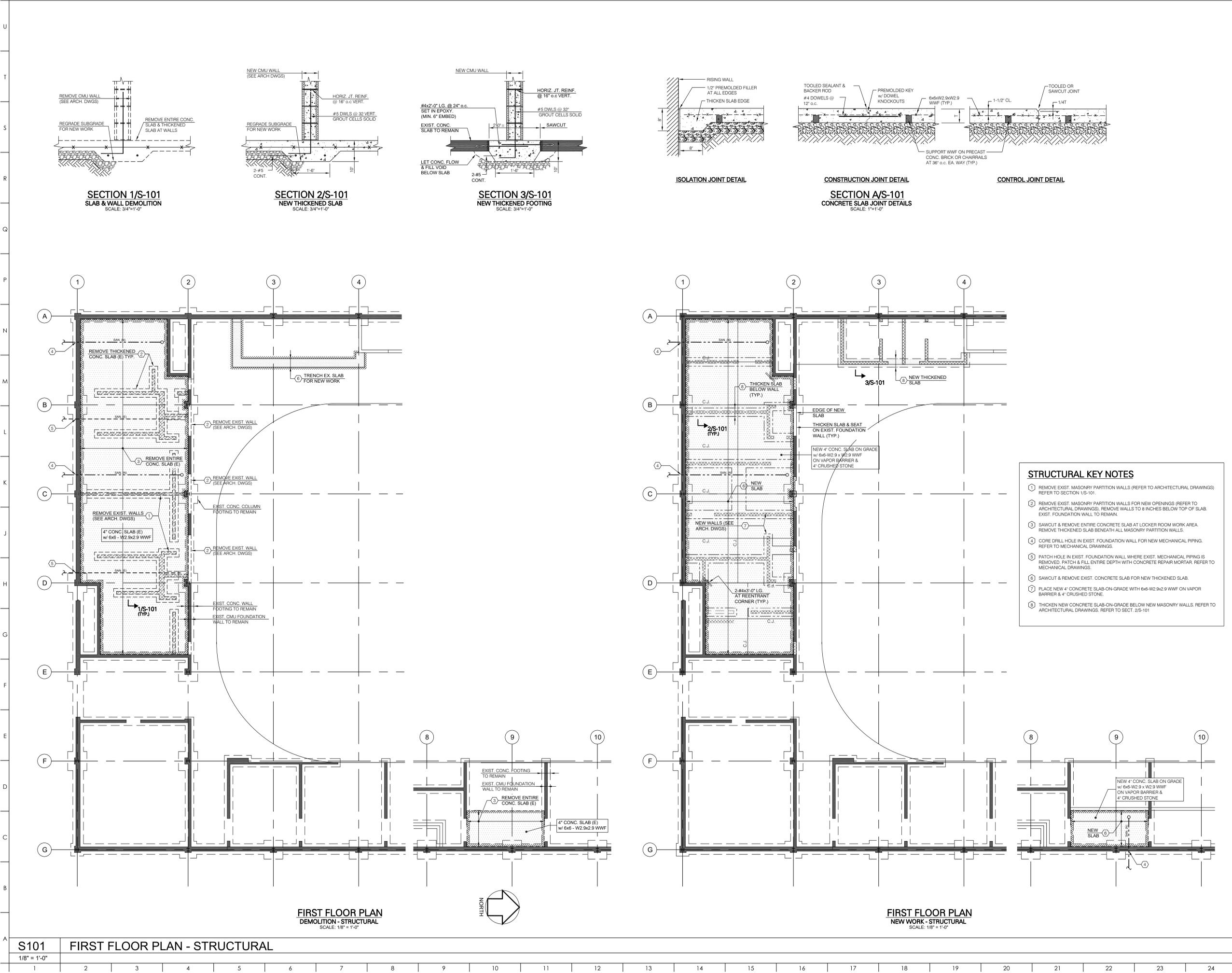


DATE: SEPTEMBER 19, 2024
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DRAWING TITLE:  
**FIRST FLR PLAN  
STRUCTURAL**

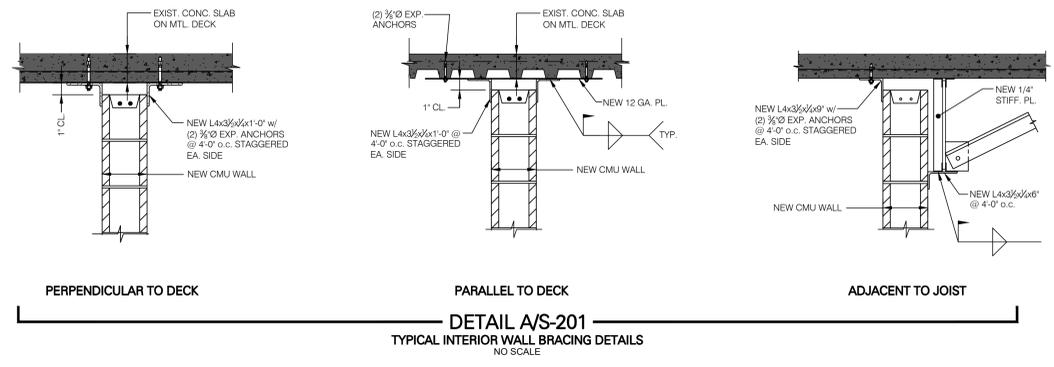
DRAWING NO:  
**S-101**



S101 FIRST FLOOR PLAN - STRUCTURAL  
1/8" = 1'-0"

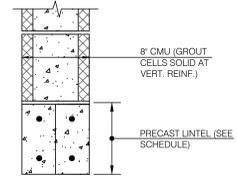
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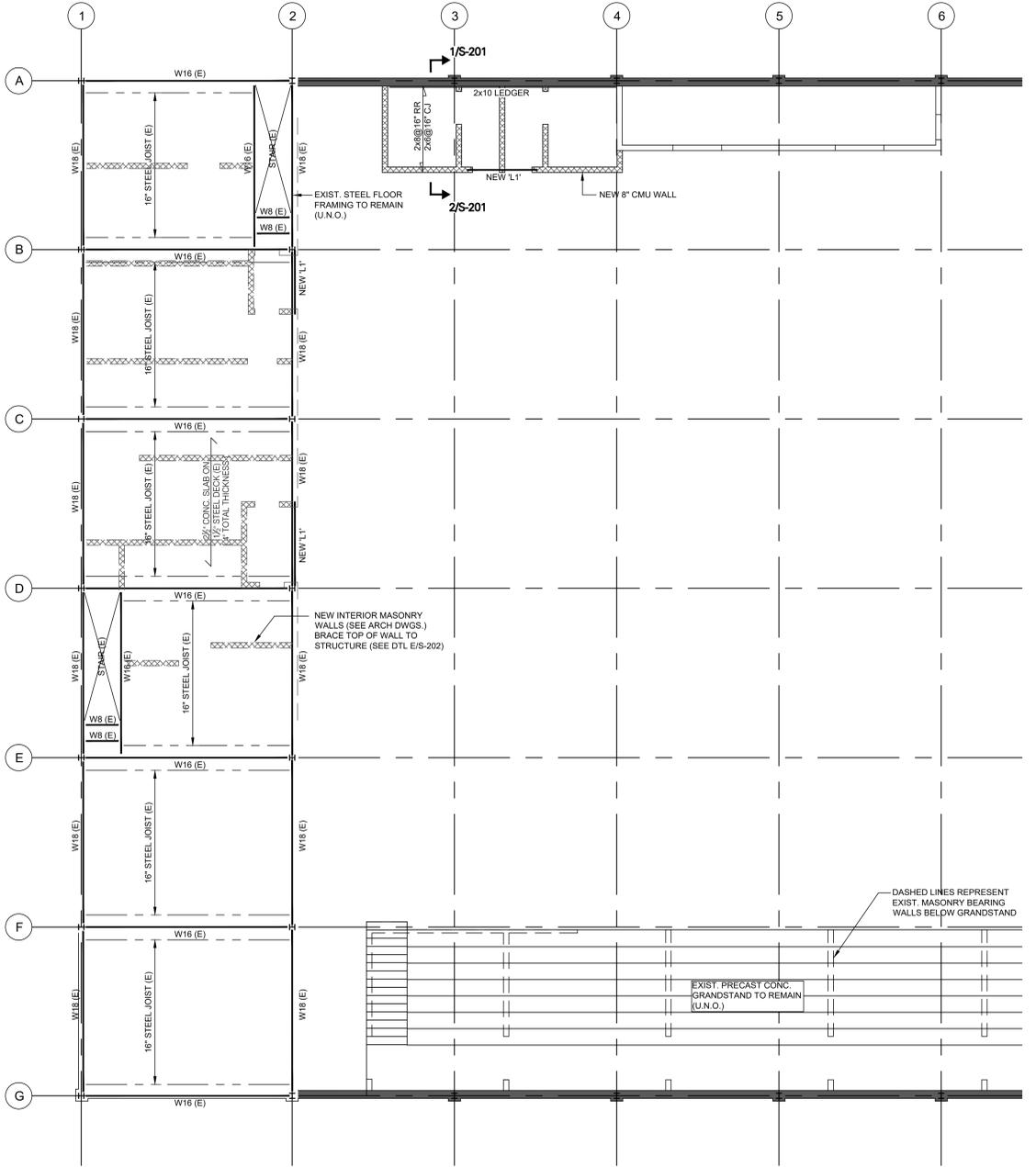
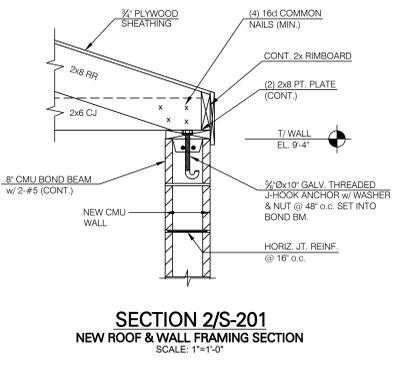
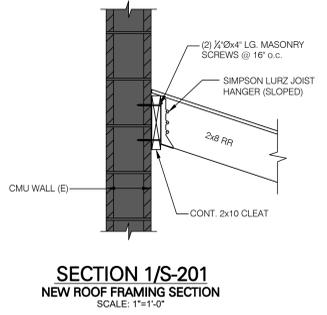


STRUCTURAL LINTEL SCHEDULE		
8" NOMINAL CMU		
NO.	SIZE	REQ'D BEARING
L1	(2) 4x8 RBL w 1-#4 T&B	4" BRG. EA. END (MIN.)

SEE LINTEL DETAILS ON THIS DRAWING FOR ADDTL. INFORMATION



CONTRACTOR MUST SHORE & STABILIZE BOND BEAM DURING CONSTRUCTION. DO NOT REMOVE SHORING UNTIL GROUTED CMU HAS ATTAINED FULL DESIGN STRENGTH.



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
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1617 JOHN F KENNEDY BLVD.  
SUITE 1260  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

**SKATIUM LOCKER ROOM RENOVATIONS**  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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CHECKED BY: JP
SUBMISSION DATE: 8/19/2024
PERMIT SET: 9/3/2024
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REVISION	DATE

DRAWING TITLE:  
**SECOND FLOOR PLAN STRUCTURAL**

DRAWING NO:  
**S-201**



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
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DATE:	SEPTEMBER 19, 2024
PROJECT NO.:	2024-02
DRAWN BY:	WGC
CHECKED BY:	WAM
SUBMISSION DATE:	
PERMIT SET:	8/19/2024
BID SET:	9/19/2024

REVISION	DATE

DRAWING TITLE:  
SYMBOLS,  
ABBREVIATIONS, AND  
GENERAL NOTES -  
MECHANICAL

DRAWING NO.:

# M001

### MECHANICAL GENERAL NOTES:

- THE HEATING CONTRACTOR SHALL COORDINATE WITH OTHER CONTRACTORS IN THE LOCATION OF DUCTWORK, PIPING, ETC.
- ALL DUCTWORK AND PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE UNLESS NOTED OTHERWISE.
- DO NOT SCALE DRAWINGS - ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE. NOTIFY ENGINEER OF ANY DEVIATIONS FROM THE DRAWINGS.
- THE DRAWINGS ARE DIAGRAMMATIC AND SHOW ONLY THE GENERAL ARRANGEMENTS OF ALL PIPING AND EQUIPMENT. BECAUSE OF THE SMALL SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO SHOW OR INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED TO AVOID PIPING, CONDUIT OR STRUCTURAL FEATURES
- ALL PIPING, CONDUIT, DUCTWORK, ETC., SHALL BE INSTALLED IN A MANNER WHICH WILL NOT DEFACE OR ALTER ANY AREAS. ROUTING OF THE ABOVE EQUIPMENT SHALL BE APPROVED BY THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
- ALL WORK PERFORMED ON THIS BUILDING SHALL BE IN COMPLIANCE WITH ALL PERTINENT CODES, RULES, ORDINANCES, AND REGULATIONS OF THE LOCAL STATE AND NATIONAL GOVERNING AUTHORITIES.
- ALL WORK PERFORMED UNDER AND IN CONNECTION WITH THESE DRAWINGS AND SPECIFICATIONS SHALL BE IN STRICT COMPLIANCE WITH THE LATEST SAFETY AND HEALTH STANDARDS.
- REPORT ANY DISCREPANCIES FOUND IN THE DRAWINGS AND/OR IN THE SPECIFICATIONS DURING THE BIDDING PROCESS FOR CLARIFICATION BY THE ARCHITECT/ENGINEER.
- CONTRACTOR SHALL PROVIDE AND INSTALL ACCESS PANELS AS REQUIRED FOR ACCESS TO VALVES, TRAPS, CLEAN OUTS, CONTROLS, FIRE DAMPERS, ETC.. THE CONTRACTOR SHALL COORDINATE INSTALLATION OF ACCESS PANELS WITH FINISH WORK AND ALL OTHER TRADES.
- ALL PIPING AND DUCTWORK TO BE LOCATED AND COORDINATED WITH ARCHITECTURAL PLANS. ALL PIPING AND DUCTWORK SHALL BE CONCEALED IN FINISHED AREAS.
- ALL PIPE PENETRATIONS THROUGH CHASES, WALLS, OR FLOORS WHICH ARE FIRE-RATED, SHALL BE PROPERLY SEALED TO MAINTAIN FIRE PROTECTION. CONTRACTOR SHALL SUBMIT PROPOSED UL SYSTEM FOR REVIEW.
- ALL DUCTS THAT PENETRATE CHASES, WALLS, OR FLOORS WHICH ARE FIRE-RATED SHALL BE INSTALLED WITH FIRE DAMPERS IN ACCORDANCE WITH THE BUILDING CODE.
- ANY PHYSICAL INSTALLATION MODIFICATIONS, DUE TO FIELD CONDITIONS, SHALL BE RESOLVED BY THE MECHANICAL CONTRACTOR IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE MECHANICAL ENGINEER.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF DUCTWORK WITH ALL PIPING BEING INSTALLED.
- ALL PIPING AND DUCTS IN FURNISHED ROOMS OR SPACES SHALL BE CONCEALED IN FURRED CHASES OR ABOVE SUSPENDED CEILING.
- FIRST FIGURE OF DUCT SIZE INDICATES DIMENSION OF FACE SHOWN OR INDICATED.
- THE LOCATION OF ALL SUPPLY DIFFUSERS, REGISTERS AND GRILLES TO BE COORDINATED W/ CEILING TYPES & DETAILS SHOWN ON ARCHITECTURAL DWGS.

### DUCTWORK NOTES:

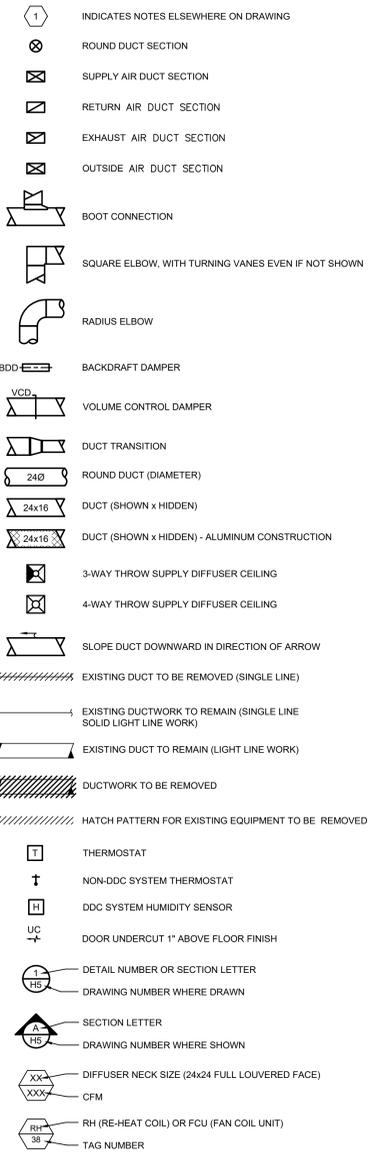
- ALL DUCTWORK SIZES NOTED ARE FREE AREA SIZES.
- TURNING VANES SHALL BE PROVIDED IN ALL DUCT ELBOWS.
- ALL DUCT JUNCTIONS SHALL BE CONSTRUCTED OF STANDARD 45 DEGREES. ENTRY BRANCHES WITH BALANCING DAMPERS DOWNSTREAM OF DUCT BRANCH ENTRY.
- COORDINATE LOCATIONS OF ALL LINES AND EQUIPMENT WITH OTHER CONTRACTORS.
- CEILING DIFFUSER AND GRILLE SIZES SHOWN ON FLOOR PLANS ARE NECK SIZES.
- TOTAL STATIC PRESSURE NOTED IN SCHEDULES INCLUDES DUCT SYSTEM, TERMINAL UNITS, FILTERS, COILS, ETC.

### GENERAL DEMOLITION NOTES:

- THESE DRAWINGS, BY THEIR NATURE, CANNOT REVEAL ALL CONDITIONS THAT EXIST ON THE SITE. THE DRAWINGS INDICATE THE GENERAL LAYOUT AND DO NOT NECESSARILY REPRESENT A COMPLETE FIELD VERIFIED LAYOUT. GENERALLY, ALL MECHANICAL DEMOLITION IS DESCRIBED BY THE NOTES AND HATCHING. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS WITHIN THE DEMOLITION AREAS AND REPORT ANY DISCREPANCIES FOUND TO THE ARCHITECT FOR CLARIFICATION BEFORE PROCEEDING.
- ALL MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, CONDUIT, WIRING, ETC., INDICATED ON THE DRAWINGS DESCRIBED IN THE NOTES AND WHICH IS NOT REQUIRED TO FUNCTION AS PART OF THE FINAL SYSTEM, SHALL BE REMOVED IN ITS ENTIRETY.
- ALL REMOVED MATERIAL, UNLESS DESIGNATED BY THESE DOCUMENTS OR TAGGED BY THE OWNER FOR SALVAGE, SHALL BE IMMEDIATELY REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS. SALVAGED ITEMS SHALL BE SAFELY REMOVED, PROTECTED AND STORED BY THE CONTRACTOR ON SITE IN A LOCATION DESIGNATED BY THE OWNER.
- WHERE IT BECOMES NECESSARY TO TEMPORARILY DISTURB SYSTEMS TO PERMIT EXECUTION OF THE DEMOLITION PROCESS, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT THE OWNER, THROUGH THE ARCHITECT, TO SCHEDULE A SHUTDOWN. THE CONTRACTOR SHALL GIVE A MINIMUM OF 48-HOUR ADVANCE NOTICE FOR ANY SUCH GIVEN SHUTDOWN. IF THE SHUTDOWN INCLUDES MAJOR SYSTEMS OR EQUIPMENT THAT WILL DISRUPT BUILDING USAGE, TWO-WEEK NOTICE SHALL BE REQUIRED.
- ALL EXISTING GENERAL CONSTRUCTION INCLUDING WALLS, FLOORS, CEILING, AND OTHER SURFACES IN AND ADJACENT TO A DEMOLITION AREA, SHALL BE PROTECTED FROM DAMAGE. THESE FACILITIES SHALL ONLY BE DISTURBED AS NECESSARY FOR THE EXECUTION OF THE WORK DESCRIBED AND SHALL BE PATCHED AND REPAIRED TO MATCH EXISTING ADJACENT CONSTRUCTION AND/OR FINISHES.
- THE MECHANICAL CONTRACTOR SHALL COORDINATE AND SCHEDULE WITH THE ELECTRICAL CONTRACTOR DISCONNECTION AND RECONNECTION OF ALL ASSOCIATED FIRE ALARM SYSTEM CIRCUITS DISTURBED AS PART OF THE MECHANICAL SCOPE OF WORK. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY CONFLICTS WITH A LIFE SAFETY SYSTEM ON ELEMENTS THAT ARE INDICATED TO BE REMOVED. ANY WORK RELATED TO THE FIRE ALARM SYSTEM REQUIRES ADVANCE NOTIFICATION TO HAVERFORD TOWNSHIP PROJECT MANAGER.
- ALL EXISTING SYSTEMS AND EQUIPMENT NOT ASSOCIATED WITH THE SCOPE OF WORK AND NOT SHOWN OR DESCRIBED IN THE DOCUMENTS SHALL REMAIN INTACT THROUGHOUT THE CONSTRUCTION PROCESS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION, SUPPORT AND REPAIR TO ANY SYSTEM OR EQUIPMENT DISTURBED AS PART OF THE PERFORMANCE OF THEIR SCOPE OF WORK.
- THE HVAC CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF DISCONNECTING AND REMOVING ALL EQUIPMENT, DUCTWORK, PIPING, AND ASSOCIATED SYSTEM DEVICES, CONTROLS, ETC., NOT REQUIRED FOR SYSTEM FUNCTION AT THE COMPLETION OF THE SCOPE OF THIS CONTRACT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL AND CLEANUP OF ALL DEBRIS ASSOCIATED WITH THE DEMOLITION PROCESS.
- ALL WORK DONE IN ASSOCIATION WITH THE REMOVAL OF ANY HAZARDOUS MATERIALS IS SOLELY UNDER THE DIRECTION OF THE OWNER'S REPRESENTATIVE. THE ARCHITECT AND/OR ENGINEER HAVE NO KNOWLEDGE OR ASSOCIATION WITH THE EXACT LOCATIONS OF ANY HAZARDOUS MATERIALS OR THEIR NEED FOR REMOVAL. THE DEMOLITION CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF ANY ABATEMENT CONTRACTOR THROUGH THE OWNER'S REPRESENTATIVE. IF THE CONTRACTOR ENCOUNTERS ANY SUBSTANCE(S) SUSPECTED OF CONTAINING HAZARDOUS MATERIALS SHALL NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY - WITHOUT PROCEEDING WITH THE WORK - UNTIL THE SUSPECT MATERIAL IS IDENTIFIED. THE RECOMMENDATIONS DESCRIBED SHALL NOT BE CONSTRUED AS A REQUIREMENT OF THIS CONTRACT, UNLESS SPECIFICALLY REFERENCED IN THE CONTRACT DOCUMENTS.

### SYMBOLS AND ABBREVIATIONS

ABV	ABOVE	LAT	LEAVING AIR TEMPERATURE, °F
ACCU	AIR COOLED CONDENSING UNIT	LF	LINEAR FEET
AFB	ABOVE FINISHED FLOOR	LRA	LOCK ROTOR AMPS
APPROX	APPROXIMATELY	MAU	MAKE-UP AIR UNIT
ATC	AUTOMATIC TEMPERATURE CONTROL	MBC	MAIN BRANCH CONTROLLER
BB	BASEBOARD	MBH	THOUSAND BTUH
BDD	BACKDRAFT DAMPER	MFGR	MANUFACTURER
BLDG	BUILDING	MIN	MINIMUM
BLW	BELOW	MOD	MOTOR OPERATED DAMPER
BTM	BOTTOM	MTL	METAL
BTUH	BRITISH THERMAL UNIT PER HOUR	No	NUMBER
CFM	CUBIC FEET PER MINUTE	OA	OUTSIDE AIR
CHAR	CHARACTERISTIC	OD	OUTSIDE DIAMETER
CLG	CEILING	OPNG	OPENING
CV	CONSTANT VOLUME	PC	PLUMBING CONTRACTOR
CLG	CEILING	PG	PROPYLENE GLYCOL
CO	CLEAN OUT	PRV	POWER ROOF VENTILATOR
CONC	CONCRETE	PTAC	PACKAGED TERMINAL AIR CONDITIONER
Db	DRY BULB TEMPERATURE, °F	RA	RELIEF/RETURN AIR
DIA	DIAMETER	RAC	RETURN AIR CANOPY
DISCH	DISCHARGE	RGC	RELIEF/RETURN GRILLE CEILING
DN	DOWN	RH	RE-HEAT COIL
DPR	DAMPER	RPM	REVOLUTIONS PER MINUTE
DWG	DRAWING	RRR	RETURN REGISTER CEILING
EA	EACH, EXHAUST AIR	RRW	RETURN REGISTER WALL
EAT	ENTERING AIR TEMPERATURE, °F	SA	SUPPLY AIR
EC	ELECTRICALLY COMMUTATED	SBC	SUB BRANCH CONTROLLER
EF	EXHAUST FAN	SCH	SCHEDULE
EHUH	ELECTRIC HORIZONTAL UNIT HEATER	SD	SMOKE DETECTOR
ELECT	ELECTRIC	SDC( )	SUPPLY DIFFUSER CEILING - (THROWS)
ELEV	ELEVATION	SF	SUPPLY FAN
EQUIP	EQUIPMENT	SP	STATIC PRESSURE (INCHES OF WATER)
ERC	EXHAUST REGISTER CEILING	SRC	SUPPLY REGISTER CEILING
ETR	EXISTING TO REMAIN	SRW	SUPPLY REGISTER WALL
EVH	ELECTRIC WALL HEATER	SSAHU	SPLIT SYSTEM AIR HANDLING UNIT
EXH	EXHAUST	SSCHP	SPLIT SYSTEM CEILING (CASSETTE) HEAT PUMP - VRF
°F	FAHRENHEIT	SSHHP	SPLIT SYSTEM HORIZONTAL (DUCTED) HEAT PUMP - VRF
FAT	FINAL AIR TEMPERATURE, °F	SSWHP	SPLIT SYSTEM WALL HEAT PUMP - VRF
FC	FLEXIBLE CONNECTION	TA	THROW AWAY
FCU	FAN COIL UNIT	TEMP	TEMPERATURE
FLR	FLOOR	TGC	TRANSFER GRILLE CEILING
FPM	FEET PER MINUTE	TGW	TRANSFER GRILLE WALL
FR	FROM	THK	THICK
FV	FACE VELOCITY	TOT	TOTAL
GALV	GALVANIZED	TRANS	TRANSITION
GC	GENERAL CONTRACTOR	TSTAT	THERMOSTAT
GRV	GRAVITY ROOF VENTILATOR	TYP	TYPICAL
GWS	GLYCOL WATER SUPPLY	UC	UNDERCUT
GWR	GLYCOL WATER RETURN	V	VOLTAGE
H	HEIGHT	VCD	VOLUME CONTROL DAMPER (MANUAL)
HC	HEATING CONTRACTOR	VRF	VARIABLE REFRIGERANT FLOW
HP	HORSE POWER/HEAT PUMP	W	WIDTH
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	W/	WITH
HWR	HOT WATER RETURN	Wb	WET BULB TEMPERATURE, °F
HWS	HOT WATER SUPPLY		
IN	INCHES		
KW	KILOWATT		



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ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

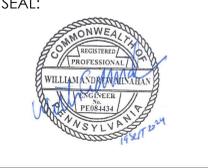
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1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

SKATUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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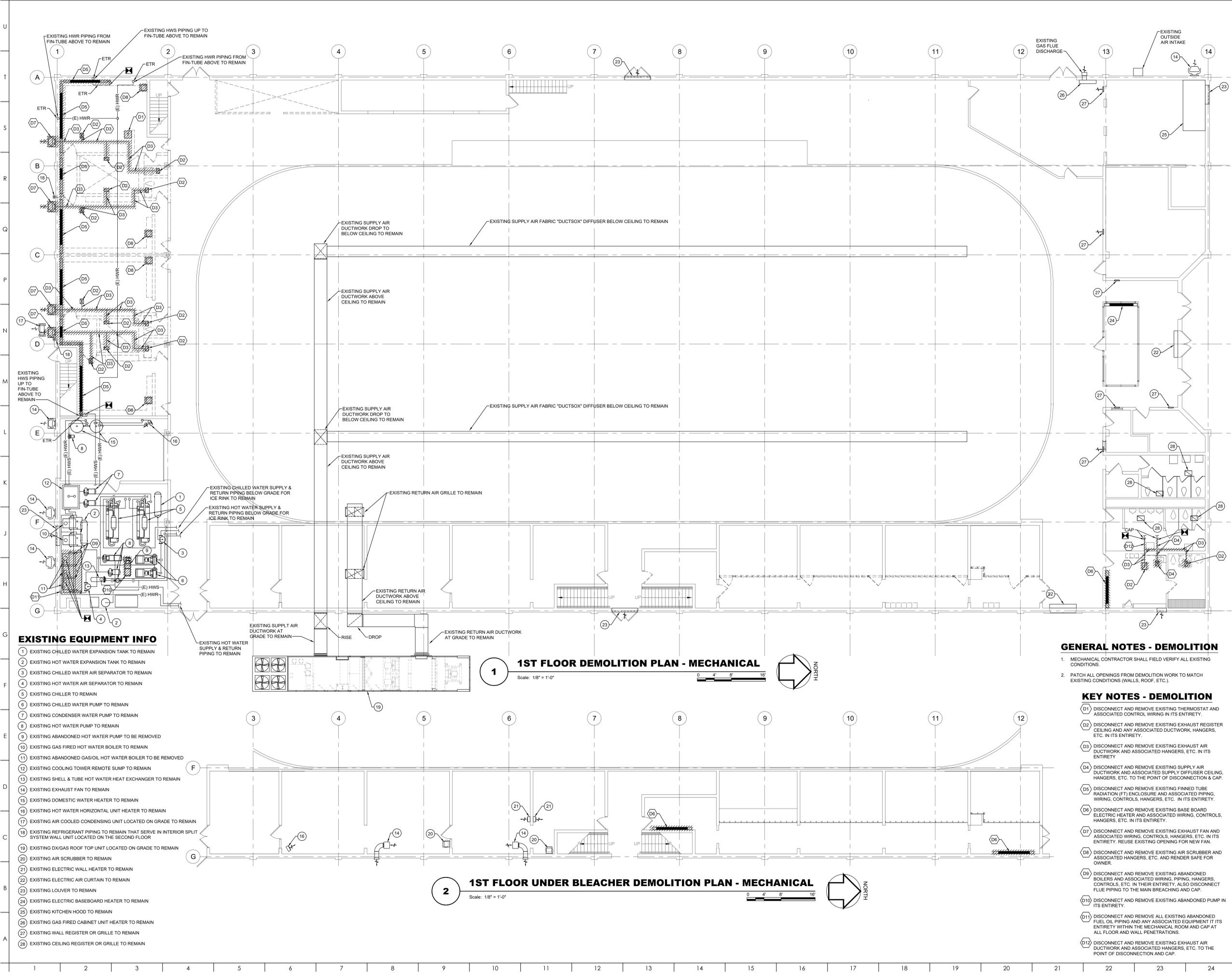


DATE:	SEPTEMBER 19, 2024
PROJECT NO.:	2024-02
DRAWN BY:	WGC
CHECKED BY:	WAM
SUBMISSION DATE:	
PERMIT SET DATE:	8/19/2024
BID SET DATE:	9/19/2024

REVISION	DATE

DRAWING TITLE:  
1ST FLOOR HOCKEY  
LKR PLAN -  
DEMOLITION -  
MECHANICAL

DRAWING NO:  
**M101**



**EXISTING EQUIPMENT INFO**

- 1 EXISTING CHILLED WATER EXPANSION TANK TO REMAIN
- 2 EXISTING HOT WATER EXPANSION TANK TO REMAIN
- 3 EXISTING CHILLED WATER AIR SEPARATOR TO REMAIN
- 4 EXISTING HOT WATER AIR SEPARATOR TO REMAIN
- 5 EXISTING CHILLER TO REMAIN
- 6 EXISTING CHILLED WATER PUMP TO REMAIN
- 7 EXISTING CONDENSER WATER PUMP TO REMAIN
- 8 EXISTING HOT WATER PUMP TO REMAIN
- 9 EXISTING ABANDONED HOT WATER PUMP TO BE REMOVED
- 10 EXISTING GAS FIRED HOT WATER BOILER TO REMAIN
- 11 EXISTING ABANDONED GAS/OIL HOT WATER BOILER TO BE REMOVED
- 12 EXISTING COOLING TOWER REMOTE SUMP TO REMAIN
- 13 EXISTING SHELL & TUBE HOT WATER HEAT EXCHANGER TO REMAIN
- 14 EXISTING EXHAUST FAN TO REMAIN
- 15 EXISTING DOMESTIC WATER HEATER TO REMAIN
- 16 EXISTING HOT WATER HORIZONTAL UNIT HEATER TO REMAIN
- 17 EXISTING AIR COOLED CONDENSING UNIT LOCATED ON GRADE TO REMAIN
- 18 EXISTING REFRIGERANT PIPING TO REMAIN THAT SERVE IN INTERIOR SPLIT SYSTEM WALL UNIT LOCATED ON THE SECOND FLOOR
- 19 EXISTING DX/GAS ROOF TOP UNIT LOCATED ON GRADE TO REMAIN
- 20 EXISTING AIR SCRUBBER TO REMAIN
- 21 EXISTING ELECTRIC WALL HEATER TO REMAIN
- 22 EXISTING ELECTRIC AIR CURTAIN TO REMAIN
- 23 EXISTING LOUVER TO REMAIN
- 24 EXISTING ELECTRIC BASEBOARD HEATER TO REMAIN
- 25 EXISTING KITCHEN HOOD TO REMAIN
- 26 EXISTING GAS FIRED CABINET UNIT HEATER TO REMAIN
- 27 EXISTING WALL REGISTER OR GRILLE TO REMAIN
- 28 EXISTING CEILING REGISTER OR GRILLE TO REMAIN

**1 1ST FLOOR DEMOLITION PLAN - MECHANICAL**  
Scale: 1/8" = 1'-0"

**2 1ST FLOOR UNDER BLEACHER DEMOLITION PLAN - MECHANICAL**  
Scale: 1/8" = 1'-0"

**GENERAL NOTES - DEMOLITION**

1. MECHANICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS.
2. PATCH ALL OPENINGS FROM DEMOLITION WORK TO MATCH EXISTING CONDITIONS (WALLS, ROOF, ETC.).

**KEY NOTES - DEMOLITION**

- D1 DISCONNECT AND REMOVE EXISTING THERMOSTAT AND ASSOCIATED CONTROL WIRING IN ITS ENTIRETY.
- D2 DISCONNECT AND REMOVE EXISTING EXHAUST REGISTER CEILING AND ANY ASSOCIATED DUCTWORK, HANGERS, ETC. IN ITS ENTIRETY.
- D3 DISCONNECT AND REMOVE EXISTING EXHAUST AIR DUCTWORK AND ASSOCIATED HANGERS, ETC. IN ITS ENTIRETY.
- D4 DISCONNECT AND REMOVE EXISTING SUPPLY AIR DUCTWORK AND ASSOCIATED SUPPLY DIFFUSER CEILING, HANGERS, ETC. TO THE POINT OF DISCONNECTION & CAP.
- D5 DISCONNECT AND REMOVE EXISTING FINNED TUBE RADIATION (FT) ENCLOSURE AND ASSOCIATED PIPING, WIRING, CONTROLS, HANGERS, ETC. IN ITS ENTIRETY.
- D6 DISCONNECT AND REMOVE EXISTING BASE BOARD ELECTRIC HEATER AND ASSOCIATED WIRING, CONTROLS, HANGERS, ETC. IN ITS ENTIRETY.
- D7 DISCONNECT AND REMOVE EXISTING EXHAUST FAN AND ASSOCIATED WIRING, CONTROLS, HANGERS, ETC. IN ITS ENTIRETY. REUSE EXISTING OPENING FOR NEW FAN.
- D8 DISCONNECT AND REMOVE EXISTING AIR SCRUBBER AND ASSOCIATED HANGERS, ETC. AND RENDER SAFE FOR OWNER.
- D9 DISCONNECT AND REMOVE EXISTING ABANDONED BOILERS AND ASSOCIATED WIRING, PIPING, HANGERS, CONTROLS, ETC. IN THEIR ENTIRETY. ALSO DISCONNECT FLUE PIPING TO THE MAIN BREACHING AND CAP.
- D10 DISCONNECT AND REMOVE EXISTING ABANDONED PUMP IN ITS ENTIRETY.
- D11 DISCONNECT AND REMOVE ALL EXISTING ABANDONED FUEL OIL PIPING AND ANY ASSOCIATED EQUIPMENT IT ITS ENTIRETY WITHIN THE MECHANICAL ROOM AND CAP AT ALL FLOOR AND WALL PENETRATIONS.
- D12 DISCONNECT AND REMOVE EXISTING EXHAUST AIR DUCTWORK AND ASSOCIATED HANGERS, ETC. TO THE POINT OF DISCONNECTION AND CAP.



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

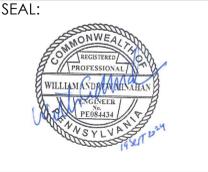
MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
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SKATIUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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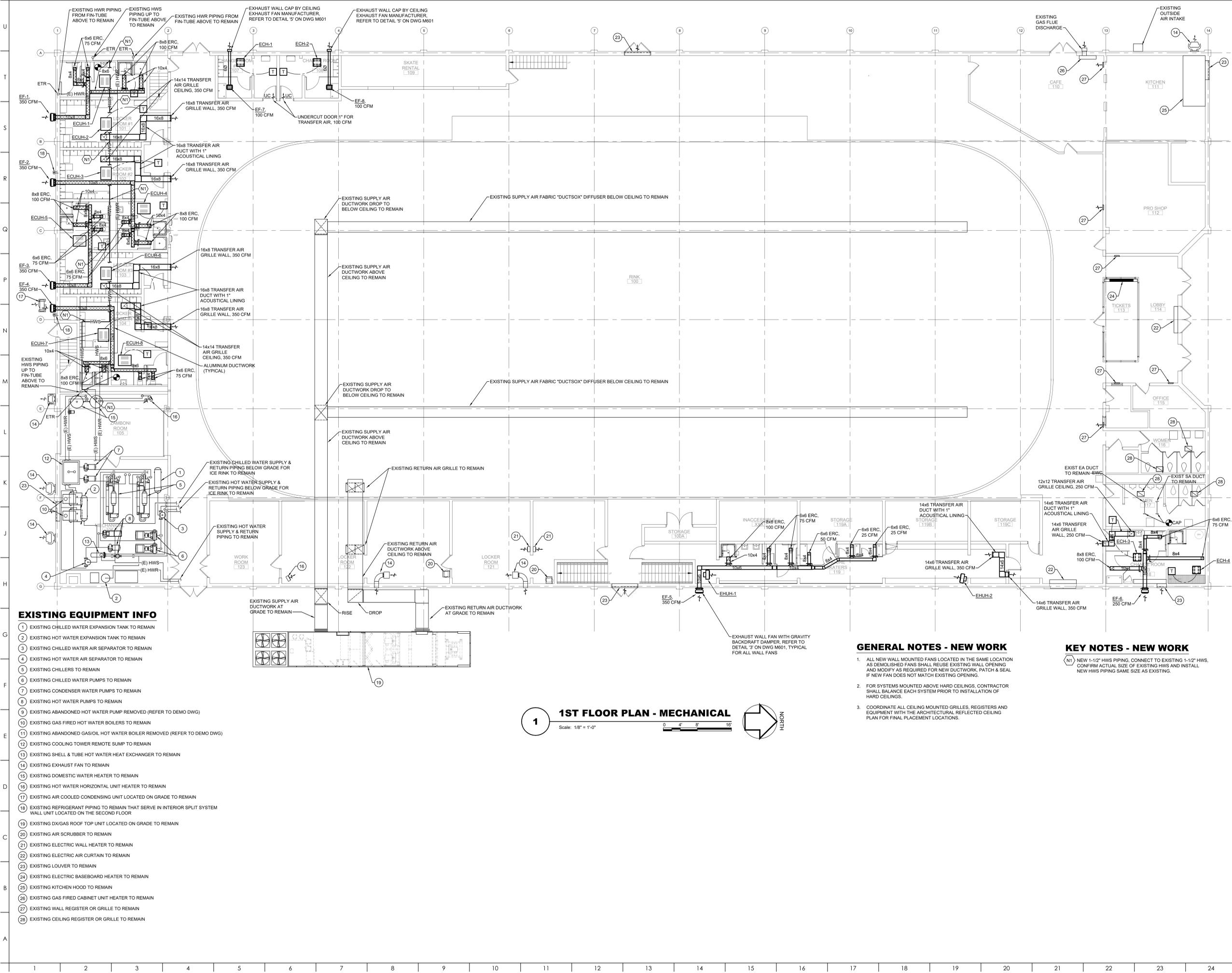
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DRAWING TITLE:  
1ST FLOOR PLAN -  
MECHANICAL

DRAWING NO.:

# M201



**EXISTING EQUIPMENT INFO**

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- 2 EXISTING HOT WATER EXPANSION TANK TO REMAIN
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- 4 EXISTING HOT WATER AIR SEPARATOR TO REMAIN
- 5 EXISTING CHILLERS TO REMAIN
- 6 EXISTING CHILLED WATER PUMPS TO REMAIN
- 7 EXISTING CONDENSER WATER PUMPS TO REMAIN
- 8 EXISTING HOT WATER PUMPS TO REMAIN
- 9 EXISTING ABANDONED HOT WATER PUMP REMOVED (REFER TO DEMO DWG)
- 10 EXISTING GAS FIRED HOT WATER BOILERS TO REMAIN
- 11 EXISTING ABANDONED GAS/OIL HOT WATER BOILER REMOVED (REFER TO DEMO DWG)
- 12 EXISTING COOLING TOWER REMOTE SUMP TO REMAIN
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- 28 EXISTING CEILING REGISTER OR GRILLE TO REMAIN

**1 1ST FLOOR PLAN - MECHANICAL**  
Scale: 1/8" = 1'-0"  
0 4' 8' 16'

**GENERAL NOTES - NEW WORK**

1. ALL NEW WALL MOUNTED FANS LOCATED IN THE SAME LOCATION AS DEMOLISHED FANS SHALL REUSE EXISTING WALL OPENING AND MODIFY AS REQUIRED FOR NEW DUCTWORK, PATCH & SEAL IF NEW FAN DOES NOT MATCH EXISTING OPENING.
2. FOR SYSTEMS MOUNTED ABOVE HARD CEILINGS, CONTRACTOR SHALL BALANCE EACH SYSTEM PRIOR TO INSTALLATION OF HARD CEILINGS.
3. COORDINATE ALL CEILING MOUNTED GRILLES, REGISTERS AND EQUIPMENT WITH THE ARCHITECTURAL REFLECTED CEILING PLAN FOR FINAL PLACEMENT LOCATIONS.

**KEY NOTES - NEW WORK**

- N1 NEW 1-1/2" HWS PIPING, CONNECT TO EXISTING 1-1/2" HWS. CONFIRM ACTUAL SIZE OF EXISTING HWS AND INSTALL NEW HWS PIPING SAME SIZE AS EXISTING.



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BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

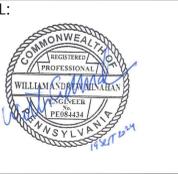
MEP ENGINEER:  
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1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

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SUITE 1655  
PHILADELPHIA, PA

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HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
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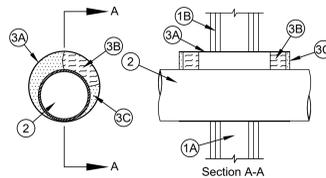
DATE: SEPTEMBER 19, 2024  
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REVISION DATE

DRAWING TITLE:  
DETAILS &  
SCHEDULES -  
MECHANICAL

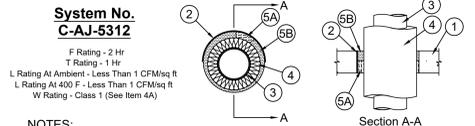
DRAWING NO:  
**M601**

**System No. W-L-1303**  
F Rating - 1 and 2 Hr (See Item 1)  
T Rating - 14 Hr



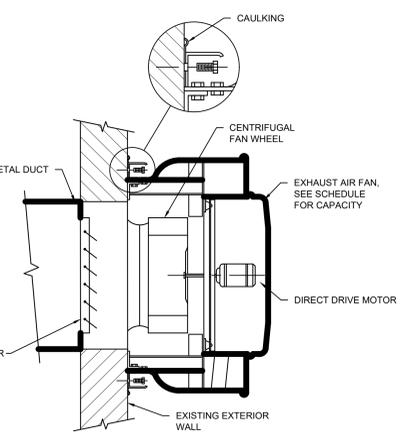
- NOTES:**
- Wall Assembly - The fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
    - Studs - Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide and spaced max 24 in. (610 mm) OC.
    - Gypsum Board - Thickness, type, number of layers and fasteners as required in the individual Wall and Partition Design. Max diam of opening is 16 in. (406 mm). Max diam of opening is 12 in. (305 mm) when wood studs are used.
  - Through Penetrants - One metallic pipe, conduit or tube installed concentrically or eccentrically within the firestop system. Annular space to be min 0 in. (point contact) to max 3 in. (76 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
    - Steel Pipe - Nom 12 in. (305 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe.
    - Iron Pipe - Nom 12 in. (305 mm) diam (or smaller) cast or ductile iron pipe.
    - Conduit - Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit, nom 4 in. (102 mm) diam (or smaller) electrical metallic tubing (EMT) or nom 1 in. (25 mm) diam (or smaller) flexible steel conduit.
    - Copper Pipe or Tubing - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe or Type L (or heavier) copper tube.
  - Firestop System - The firestop system shall consist of the following:
    - Metallic Sleeve - Cylindrical sleeve fabricated from min 0.016 in. (0.41 mm) thick (30 gauge) galv sheet steel and having a min 1 in. (25 mm) lap along the longitudinal seam. Sheet steel coated to a diam less than circular cutouts in wall assembly, inserted through both sides of wall and allowed to uncut against the circular cutouts in the wall assembly. Sleeve to be installed flush with or extending max 4 in. (102 mm) beyond each surface of the wall assembly.
    - Packing Material - Min 2 in. (51 mm) thickness of nom 4 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation tightly-packed into ends of steel sleeve and recessed to accommodate required thickness of fill material (item 3C).
    - Fill, Void or Cavity Material - Sealant - Min 1/2 in. (13 mm) thickness of fill material applied within annular space flush with top surface of floor or with both surfaces of wall.
- SPECIFIED TECHNOLOGIES INC. - Penial 300 Sealant or SpecSeal Series SIL300 Sealant for floors and walls and Penial 300 Sealant or SpecSeal Series SIL300S Sealant for floors only.**  
\*Bearing the UL Classification Mark

**1 FIRE/SMOKE WALL PENETRATION DETAIL #1**  
NOT TO SCALE

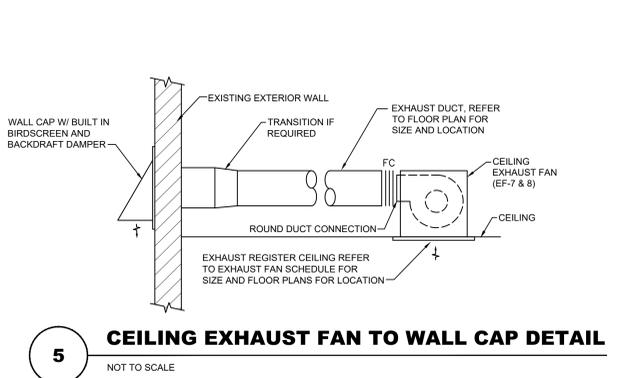


- System No. C-AJ-5312**  
F Rating - 2 Hr  
T Rating - 1 Hr  
L Rating At Ambient - Less Than 1 CFM/sq ft  
L Rating At 400 F - Less Than 1 CFM/sq ft  
W Rating - Class 1 (See Item 4A)
- NOTES:**
- Floor Assembly - Min 4-1/2 in. (114 mm) thick reinforced lightweight or normal weight (100-150 pcf or 1600-2400 kg/m<sup>3</sup>) concrete. Min thickness of concrete wall is 6-1/2 in. (165 mm). Wall may also be constructed of any UL Classified Concrete Blocks\*. Max diam of opening is 10 in. (254 mm). See Concrete Blocks (CAZT) in Fire Resistance Directory for names of manufacturers.
  - Steel Sleeve - (Optional) - Nom 10 in. (254 mm) diam (or smaller) Schedule 10 (or heavier) steel sleeve cast into floor assembly. As an alternate, nom 10 in. (254 mm) diam (or smaller) sleeve fabricated from nom 0.019 in. (0.48 mm) thick galv steel cast into floor assembly flush with floor surfaces.
  - Through Penetrant - One metallic pipe or tubing to be installed concentrically or eccentrically within opening. Penetrant to be rigidly supported on both sides of floor. The following types and sizes of metallic pipe or tube may be used:
    - Steel Pipe - Nom 4 in. (102 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
    - Iron Pipe - Nom 4 in. (102 mm) diam (or smaller) cast or ductile iron pipe.
    - Copper Pipe - Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.
    - Copper Tubing - Nom 4 in. (102 mm) diam (or smaller) Type M (or heavier) copper tube.
  - Pipe Covering\* - Max 2 in. (51 mm) thick hollow cylindrical heavy density glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt strip tape supplied with the product. The annular space between the pipe covering and the edge of the opening shall be min 1/4 in. (6 mm) to max 1-5/8 in. (41 mm). See Pipe and Equipment Covering - Materials\* (BRGU) category in Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
  - PVC Jacket\* - (Not Shown) - An additional PVC jacket, supplied in sheet form, shall be tightly wrapped around the all service jacket on the pipe covering when a W Rating is required in floor assemblies. The longitudinal seam of the PVC jacket shall be continuously sealed using the adhesive supplied with the jacket. The jacket is to be nom 48 in. (1.22 m) wide by nom 20 or 30 mil (0.5 or 0.8 mm) thick. The PVC jacket shall be positioned with its top edge located 37 in. to 40 in. (0.94 to 1.02 m) above the top surface of the floor assembly and shall extend downward into and/or through the floor opening.
- See Plastics (CIMFZ2) category in the Plastics Recognized Component Directory for names of manufacturers. Any Recognized Component tube insulation material meeting the above specifications and having a UL 94 Flammability Classification of 94-5VA may be used.
- Firestop System - The details of the firestop system shall be as follows:
    - Packing Material - Min 2-1/2 in. (64 mm) thickness of firmly packed mineral wool batt insulation used as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall to accommodate the required thickness of fill material (item 5B).
    - Fill, Void or Cavity Material - Sealant - Min 2 in. (51 mm) thickness of fill material applied in annular space flush with top surface of floor or with both surfaces of wall.
- SPECIFIED TECHNOLOGIES INC. - Penial 300 Sealant or SpecSeal Series SIL300 Sealant for floors and walls and Penial 300 Sealant or SpecSeal Series SIL300S Sealant for floors only.**  
\*Bearing the UL Classification Mark

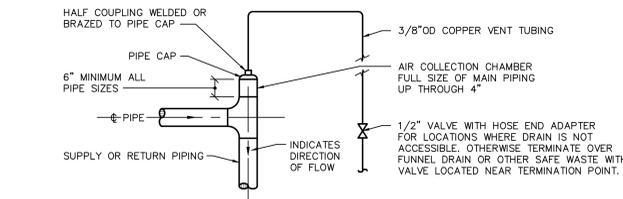
**3 UB WALL TYPE EXHAUST FAN DETAIL**  
NOT TO SCALE



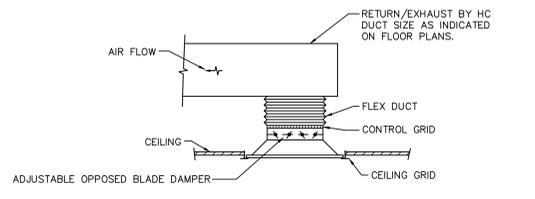
**4 PIPING SYSTEM DRAIN DETAIL**  
NOT TO SCALE



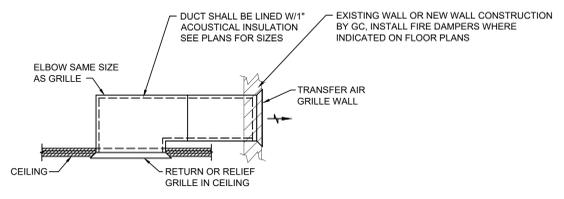
**5 CEILING EXHAUST FAN TO WALL CAP DETAIL**  
NOT TO SCALE



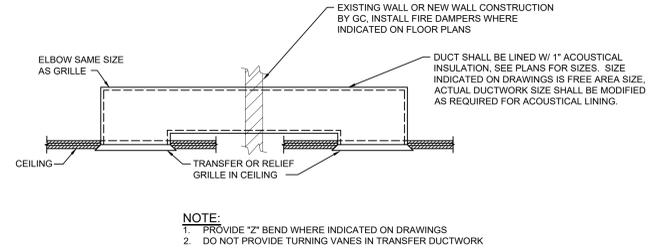
**6 MANUAL AIR VENT FOR MAINS 4" DIA OR SMALLER**  
NOT TO SCALE



**7 RETURN/EXHAUST GRILLES TYPICAL CONNECTION**  
NOT TO SCALE



**8 RELIEF/TRANSFER AIR GRILLE BOX DETAIL #1**  
NOT TO SCALE



**9 RELIEF/TRANSFER AIR GRILLE BOX DETAIL #2**  
NOT TO SCALE

EXHAUST FAN SCHEDULE															
SYMBOL	LOCATION	SERVES	TYPE	ROOF OR WALL OPENING (SIZE)	SYSTEM CFM	FAN CFM	RPM	STATIC PRESSURE	TIP SPEED	DRIVE	HP	ELECT CHAR	CONTROL TYPE	NOTES	REMARKS
EF-1	SOUTH WALL	LOCKER ROOM #1 - 101	UB WALL FAN	15" x 15"	350	350	1631	0.375	4643	DIRECT	1/10	1-60-120V	INTERLOCK WITH OCC SENSOR	LOCKER ROOM EXH/VENT	GREENHECK CUE-080-VG
EF-2	SOUTH WALL	LOCKER ROOM #2 - 102	UB WALL FAN	15" x 15"	350	350	1631	0.375	4643	DIRECT	1/10	1-60-120V	INTERLOCK WITH OCC SENSOR	LOCKER ROOM EXH/VENT	GREENHECK CUE-080-VG
EF-3	SOUTH WALL	LOCKER ROOM #3 - 103	UB WALL FAN	15" x 15"	350	350	1631	0.375	4643	DIRECT	1/10	1-60-120V	INTERLOCK WITH OCC SENSOR	LOCKER ROOM EXH/VENT	GREENHECK CUE-080-VG
EF-4	SOUTH WALL	LOCKER ROOM #4 - 104	UB WALL FAN	15" x 15"	350	350	1631	0.375	4643	DIRECT	1/10	1-60-120V	INTERLOCK WITH OCC SENSOR	LOCKER ROOM EXH/VENT	GREENHECK CUE-080-VG
EF-5	EAST WALL	FEMALE FIG SKTRS - 119	UB WALL FAN	15" x 15"	350	350	1631	0.375	4643	DIRECT	1/10	1-60-120V	INTERLOCK WITH OCC SENSOR	LOCKER ROOM EXH/VENT	GREENHECK CUE-080-VG
EF-6	EAST WALL	M FIG SKTRS/REFS - 118	UB WALL FAN	13" x 13"	250	250	1707	0.375	3631	DIRECT	1/15	1-60-120V	INTERLOCK WITH OCC SENSOR	LOCKER ROOM EXH/VENT	GREENHECK CUE-070-VG
EF-7	CEILING	FEMALE LOCKER RM - 107	UB WALL FAN	6"Ø	100	100	1053	0.25	-	DIRECT	18W	1-60-120V	INTERLOCK WITH OCC SENSOR	LOCKER ROOM EXH/VENT	GREENHECK SP-A125
EF-8	CEILING	FEMALE LOCKER RM - 108	UB WALL FAN	6"Ø	100	100	1053	0.25	-	DIRECT	18W	1-60-120V	INTERLOCK WITH OCC SENSOR	LOCKER ROOM EXH/VENT	GREENHECK SP-A125

- NOTE:**
- ADJUST BELT DRIVEN FANS TO PROVIDE SYSTEM CFM. PROVIDE SPEED CONTROL FOR DIRECT DRIVE FANS TO PROVIDE SYSTEM CFM WITHOUT EC (V VARI-GREEN) MOTORS.
  - EF-1, EF-2, EF-3, EF-4, EF-5 & EF-6: PROVIDE THE FOLLOWING OPTIONS AND ACCESSORIES:
    - VARI-GREEN (VG) EC MOTOR & DIAL FOR BALANCING CONTROL
    - SIDEWALL MOUNTING - FAN CONFIGURED FOR WALL-MOUNTED APPLICATIONS WITH WALL BRACKET AND GRAVITY BACKDRAFT DAMPER
  - EF-7 & EF-8: PROVIDE THE FOLLOWING OPTIONS AND ACCESSORIES:
    - SOLID STATE SPEED CONTROL
    - 6" ROUND HOODED WALL CAP WITH BACKDRAFT DAMPER (COLOR AS SELECTED BY THE ARCHITECT)
    - ALUMINUM FAN WHEEL
    - MOTOR RATED FOR CONTINUOUS USE WITH THERMAL OVERLOAD

CABINET UNIT HEATER SCHEDULE (ELECTRIC)									
SYMBOL	CFM	KW	FAT °F	MOTOR	AMPS	ELECT CHAR	RECESS	MOUNTED	BASIS OF DESIGN
ECUH-1	200	3	107	ECM	10.9	1-60-277V	FLUSH	CEILING	TRANE FORCE FLO MODEL FFE0203A**DDF1CAU00-030-00400
ECUH-2	200	3	107	ECM	10.9	1-60-277V	FLUSH	CEILING	TRANE FORCE FLO MODEL FFE0203A**DDF1CAU00-030-00400
ECUH-3	200	3	107	ECM	10.9	1-60-277V	FLUSH	CEILING	TRANE FORCE FLO MODEL FFE0203A**DDF1CAU00-030-00400
ECUH-4	200	3	107	ECM	10.9	1-60-277V	FLUSH	CEILING	TRANE FORCE FLO MODEL FFE0203A**DDF1CAU00-030-00400
ECUH-5	200	3	107	ECM	10.9	1-60-277V	FLUSH	CEILING	TRANE FORCE FLO MODEL FFE0203A**DDF1CAU00-030-00400
ECUH-6	200	3	107	ECM	10.9	1-60-277V	FLUSH	CEILING	TRANE FORCE FLO MODEL FFE0203A**DDF1CAU00-030-00400
ECUH-7	200	3	107	ECM	10.9	1-60-277V	FLUSH	CEILING	TRANE FORCE FLO MODEL FFE0203A**DDF1CAU00-030-00400
ECUH-8	200	3	107	ECM	10.9	1-60-277V	FLUSH	CEILING	TRANE FORCE FLO MODEL FFE0203A**DDF1CAU00-030-00400

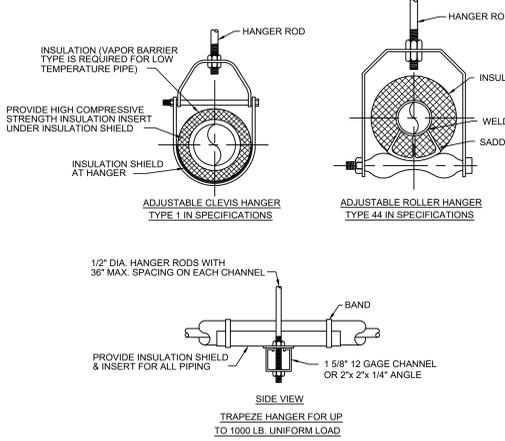
- NOTE:**
- FAT BASED ON 60°F ENTERING AIR TEMPERATURE.
  - PROVIDE 1" THROUGHWAY MERV 8 FILTERS + 1 EXTRA FOR EACH UNIT.

CEILING HEATER SCHEDULE (ELECTRIC)						
SYMBOL	SERVES	CFM	AMPS	ELECT CHAR	KW	REMARKS
ECH-1	FEMALE LOCKER ROOM 107	300	7.2	1-60-277V	2	FULL CEILING QMARK MODEL CDF-547
ECH-2	FEMALE LOCKER ROOM 108	300	7.2	1-60-277V	2	FULL CEILING QMARK MODEL CDF-547
ECH-3	MEN FIG SKTR/REFS 118	300	14.4	1-60-277V	4	FULL CEILING QMARK MODEL CDF-547
ECH-4	WATER ROOM 118A	300	7.2	1-60-277V	2	FULL CEILING QMARK MODEL CDF-547

- NOTE:**
- PROVIDE A LINE VOLTAGE REMOTE WALL THERMOSTAT.

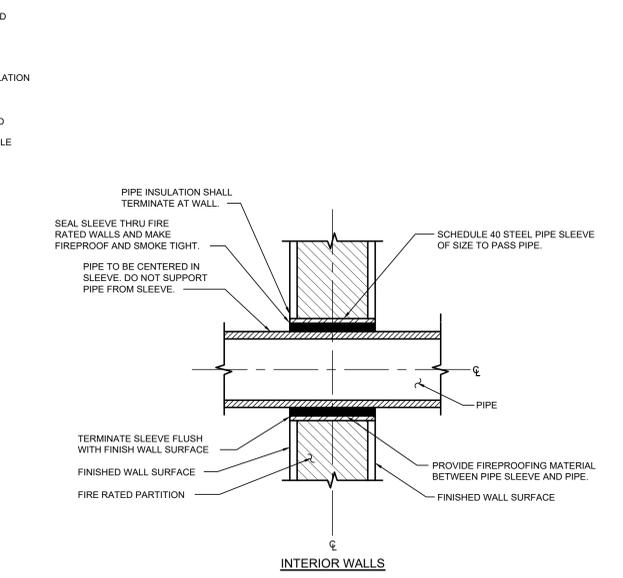
HORIZONTAL UNIT HEATER SCHEDULE (ELECTRIC)									
SYMBOL	CFM	RPM	HP	ELECT CHAR	KW	FAT °F	MOUNTING HEIGHT	REMARKS	
EHUH-1	650	1600	1/30	3-60-480V	7.5	97	8'-0"	QMARK MODEL MUH-07-4	
EHUH-2	650	1600	1/30	3-60-480V	7.5	97	8'-0"	QMARK MODEL MUH-07-4	

- NOTE:**
- CAPACITIES BASED ON 60°F EAT.



- NOTE:**
- FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.

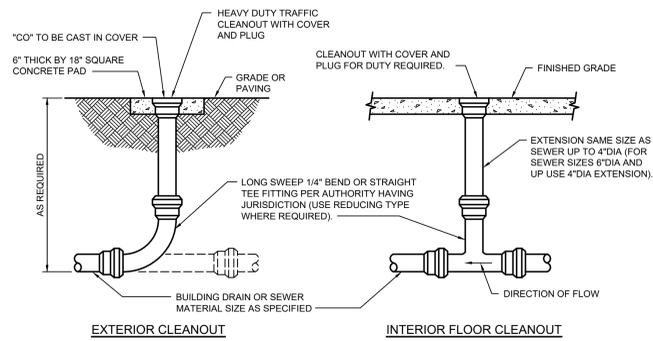
**10 PIPE HANGER DETAIL**  
NOT TO SCALE



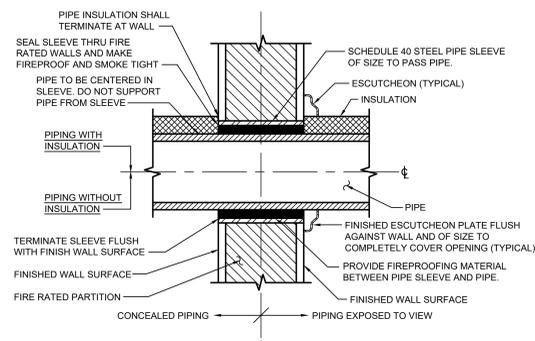
**11 PIPE SLEEVE THRU FIRE-RATED WALL DETAIL**  
NOT TO SCALE

MAXIMUM PIPE/TUBING SUPPORT SPACING, FEET						
NOM. SIZE	THRU 3/4"	1	1 1/4	1 1/2	2	2 1/2
PIPE	7 FT	7	7	9	10	11
TUBING	5 FT	6	7	8	8	9

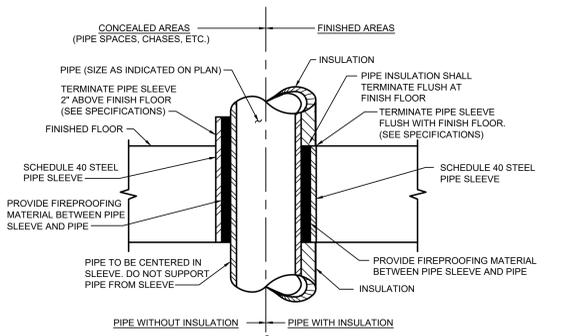
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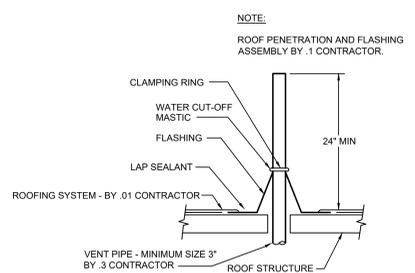
**1**  
P001  
**DETAIL OF CLEANOUTS**  
NOT TO SCALE



**2**  
P001  
**PIPE SLEEVE THRU WALL DETAIL**  
NOT TO SCALE



**3**  
P001  
**PIPE SLEEVE THRU FLOOR DETAIL**  
NOT TO SCALE



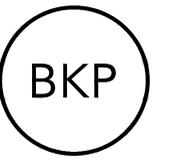
**4**  
P001  
**TYPICAL PLUMBING VENT THRU ROOF DETAIL**  
NOT TO SCALE

**PLUMBING GENERAL NOTES:**

- THE DRAWINGS ARE DIAGRAMMATIC AND SHOW ONLY THE GENERAL ARRANGEMENTS OF PIPING AND EQUIPMENT. ALL OFFSETS, FITTINGS, AND ACCESSORIES ARE NOT SHOWN, WHICH MAY BE REQUIRED TO AVOID STRUCTURAL FEATURES.
- DO NOT SCALE DRAWINGS - ALL DIMENSIONS AND CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR AT THE SITE. NOTIFY ENGINEER AND/OR ARCHITECT OF ANY DEVIATIONS FROM THE DRAWINGS.
- REPORT ANY DISCREPANCIES FOUND IN THE DRAWINGS AND/OR IN THE SPECIFICATIONS DURING THE BIDDING PROCESS FOR CLARIFICATION BY THE ENGINEER AND/OR ARCHITECT.
- ALL WORK THAT IS TO BE PERFORMED UNDER AND IN CONNECTION WITH THESE DRAWINGS AND SPECIFICATIONS SHALL BE IN COMPLIANCE WITH ALL PERTINENT CODES, RULES, ORDINANCES, AND REGULATIONS OF THE LOCAL GOVERNING AUTHORITIES, STATE GOVERNING AUTHORITIES AND NATIONAL GOVERNING AUTHORITIES.
- ALL WORK THAT IS TO BE PERFORMED UNDER AND IN CONNECTION WITH THESE DRAWINGS AND SPECIFICATIONS SHALL BE IN STRICT COMPLIANCE WITH THE LATEST OSHA SAFETY AND HEALTH STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE GENERAL CONTRACTOR AND UTILITY AUTHORITIES FOR INSTALLATION REQUIREMENTS, REGULATIONS, FEES, PERMITS AND APPROVALS AS NECESSARY TO COMPLETE THE UTILITY INSTALLATION.
- ALL PIPE PENETRATIONS THROUGH CHASE, WALLS OR FLOORS WHICH ARE FIRE-RATED, SHALL BE PROPERLY SEALED TO MAINTAIN FIRE PROTECTION. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR THE LOCATIONS AND RATING OF WALLS, FLOORS AND CEILINGS WITH SUBMITTAL OF ALL PROPOSED "UL" LISTED PENETRATION / SEALANT SYSTEMS FOR APPROVAL.
- ALL WORK TO BE LOCATED AND COORDINATED WITH ARCHITECTURAL DRAWINGS, SPECIFICATIONS AND OTHER CONTRACTORS.
- THE REMOVAL AND CLEANUP OF ALL DEBRIS ASSOCIATED WITH WORK THAT IS TO BE PERFORMED BY THE PLUMBING CONTRACTOR SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF PLUMBING PIPING AND EQUIPMENT WITH ALL HVAC PIPING, DUCTWORK, HVAC EQUIPMENT, ELECTRICAL CONDUIT AND ELECTRICAL EQUIPMENT THAT IS TO BE INSTALLED BY OTHER CONTRACTORS.
- WHERE THE SPACE ABOVE CEILINGS IN THE BUILDING IS DESIGNATED AS A RETURN AIR PLENUM, ALL EQUIPMENT, PIPING VALVES, FITTINGS, ETC. IN THIS SPACE SHALL BE RATED AND APPROVED FOR THIS APPLICATION.
- THE CONTRACTOR SHALL LOCATE UNDERGROUND PIPING WITHIN LIMITS OF THE STRUCTURE IN COORDINATION WITH THE GENERAL CONTRACTOR, TO ASSURE NO FOOTING WILL BE UNDERMINED BY TRENCHING. ANY PIPING TRENCH SHALL BE LOCATED SO THE TRENCH EDGE IS NOT CLOSER TO ANY STRUCTURAL FOOTING THAN 1 1/2 TIMES THE VERTICAL DISTANCE FROM TRENCH BOTTOM TO FOOTING BOTTOM. IN ANY EVENT THIS CONDITION IS NOT MET, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR INSTALLING THE PIPING TO FILL THE TRENCH WITH LEAN CONCRETE. AFTER PIPING IS INSTALLED, TO AN ELEVATION WHERE THE SURFACE OF THE CONCRETE SHALL BE NOT CLOSER TO ANY FOOTING THAN TWICE THE VERTICAL DISTANCE BETWEEN FOOTING BOTTOM AND THE CLOSEST EDGES OF THE CONCRETE POURED IN THE TRENCH.
- WHERE EXCAVATIONS FOR PIPING EXTEND UNDER AND PERPENDICULAR TO A WALL FOOTING, THE CONTRACTOR INSTALLING THE PIPING SHALL FILL THE TRENCH WITH CONCRETE SOLIDLY TO BOTTOM OF FOOTING FOR A TRENCH LENGTH OF 3'-0" BEYOND EACH WALL FACE.
- ALL WATER LINES IN EXTERIOR WALLS SHALL BE INSULATED AND LOCATED WITHIN THE INSULATION ENVELOPE OF THE BUILDINGS EXTERIOR WALL.
- INSTALL WALL HYDRANTS AT A MINIMUM OF 2'-0" ABOVE FINISHED GRADE, UNLESS OTHERWISE INDICATED.
- SET ALL FLOOR AND TRENCH DRAINS OVER P-TRAPS, UNLESS SPECIFIED OTHERWISE.
- PROVIDE SHUT-OFF COCK AT EACH CONNECTION TO GAS EQUIPMENT AND DIRT LEGS AT BOTTOM OF ALL VERTICAL RISERS AND DROPS IN GAS LINES.
- THE CONTRACTOR SHALL REFER TO APPLICABLE CODES FOR ACCEPTABLE DRAINAGE SYSTEM FITTINGS.
- DIELECTRIC UNIONS AND FLANGES SHALL BE USED ON ALL CONNECTIONS BETWEEN DISSIMILAR METALS.
- ALL HORIZONTAL PIPING ABOVE CEILING, AT CEILING OR BELOW FLOOR SHALL BE INSTALLED (AS HIGH AS POSSIBLE) TIGHT TO UNDERSIDE OF SLAB/STRUCTURE WITH SPACE FOR INSULATION AND HANGERS AS REQUIRED, UNLESS LINES ARE RUN BELOW SLAB ON GRADE.
- PROVIDE CLEANOUTS IN ALL GRAVITY DRAINAGE PIPING SYSTEMS AT ENDS OF RUNS, AT CHANGES IN DIRECTION, AT BASE OF STACKS AND AT 50 FOOT INTERVALS IN HORIZONTAL PIPING RUNS. EXTEND ALL CLEANOUTS ON GRAVITY DRAINAGE PIPING SYSTEMS INSTALLED BELOW SLAB ON GRADE TO FINISHED FLOOR LEVEL.
- ALL INTERIOR, HORIZONTAL SANITARY SEWER PIPING SYSTEMS, 4" AND LARGER, SHALL BE SLOPED AT A MINIMUM OF 1/8" PER FOOT, UNLESS NOTED OTHERWISE. ALL INTERIOR, HORIZONTAL SANITARY SEWER PIPING SYSTEMS, 3" AND SMALLER, SHALL BE SLOPED AT A MINIMUM OF 1/4" PER FOOT, UNLESS NOTED OTHERWISE.
- THE CONTRACTOR SHALL REFERENCE THE ARCHITECTURAL DRAWINGS TO IDENTIFY THE RATING OF ALL FLOORS, WALLS AND CEILINGS TO PROVIDE THE PROPER SLEEVES, SEALS AND FIREPROOFING MATERIALS AT ALL PIPE PENETRATION LOCATIONS. (TYPICAL)

**PLUMBING SYMBOLS AND ABBREVIATIONS SCHEDULE**

— SANITARY SEWER LINE (SAN)	Ⓜ	GAS REGULATOR
— STORM SEWER LINE (STM)	Ⓜ-H	WALL HYDRANT
— W WATER SERVICE LINE	Ⓜ-HB	HOSE BIBB
— G GAS LINE (G)	Ⓜ+H	COMBINATION HOSE BIBB
— G- GAS VENT (GV)	Ⓜ+H	NEW CONNECTION TO EXISTING
— G- BRANCH VENT LINE (V)	Ⓜ+H	POINT OF DISCONNECTION
— C COLD WATER LINE (C)	Ⓜ+H	FUNNEL DRAIN
— H HOT WATER LINE (H)	Ⓜ+H	FLOOR DRAIN
— R HOT WATER RETURN LINE (R)	Ⓜ+H	ROOF DRAIN
— 120" 120" HOT WATER SUPPLY/RETURN	Ⓜ+H	SUPERVISED VALVE
— 140" 140" HOT WATER SUPPLY/RETURN	Ⓜ+H	PRESSURE GAUGES
— TW TEMPERED HOT WATER LINE (TEMP H)	Ⓜ+H	RECIRCULATING PUMP
— PD PUMP DISCHARGE	Ⓜ+H	TRAP PRIMER LINE
— TP TRAP PRIMER LINE	Ⓜ+H	ON DRAWING AND NOTE NUMBER
— BALL VALVE	Ⓜ+H	DETAIL/PLAN REFERENCE SYMBOL
— GATE OR GLOBE VALVE	Ⓜ+H	INDICATES DETAIL/PLAN NUMBER
— GAS, AIR, VACUUM COCK	Ⓜ+H	THE DETAIL/PLAN IS LOCATED
— NEW COMBINATION BALANCING/ SHUT-OFF VALVE	Ⓜ+H	SQUARE FOOT
— LOCKING VALVE/WIDENTIFICATION	Ⓜ+H	ABV ABOVE
— STRAINER	Ⓜ+H	BLW BELOW
— CHECK VALVE	Ⓜ+H	CLG CEILING
— CHECK VALVE	Ⓜ+H	EC ELECTRICAL CONTRACTOR
— REDUCED PRESSURE TYPE BACK FLOW PREVENTER	Ⓜ+H	FLR FLOOR
— UNION	Ⓜ+H	FNL DR FUNNEL DRAIN
— WATER HAMMER ARRESTER	Ⓜ+H	GC GENERAL CONTRACTOR
— PIPE ANCHOR	Ⓜ+H	HC HEATING CONTRACTOR
— PIPE GUIDE	Ⓜ+H	INV ELEV INVERT ELEVATION
— CAP OR PLUG	Ⓜ+H	PC PLUMBING CONTRACTOR
— CLEANOUT EXTENDED UP TO FLOOR/GRADE	Ⓜ+H	RWC RAIN WATER CONDUCTOR
— CLEANOUT END OF LINE	Ⓜ+H	SS SOIL STACK
— TRAP PRIMER	Ⓜ+H	VS VENT STACK
— GAS METER (SEE SPECIFICATIONS)	Ⓜ+H	VTR VENT THROUGH ROOF
	Ⓜ+H	WR WATER RISER
	Ⓜ+H	WS WASTE STACK
	Ⓜ+H	CFH CUBIC FOOT PER HOUR
	Ⓜ+H	GPM GALLONS PER MINUTE
	Ⓜ+H	DFU DRAINAGE FIXTURE UNIT
	Ⓜ+H	WSFU WATER SUPPLY FIXTURE UNIT



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

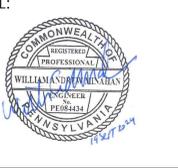
MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

**SKATIUM LOCKER ROOM RENOVATIONS**  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

THIS DRAWING IS TO ILLUSTRATE THE WORK TO BE DONE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES USED TO DO THE WORK OR THE SAFETY ASPECTS OF CONSTRUCTION AND NOTHING ON THIS DRAWING EXPRESSED OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTAL OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGEMENT OF THESE RESPONSIBILITIES AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK AND THE BID PRICE. NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.

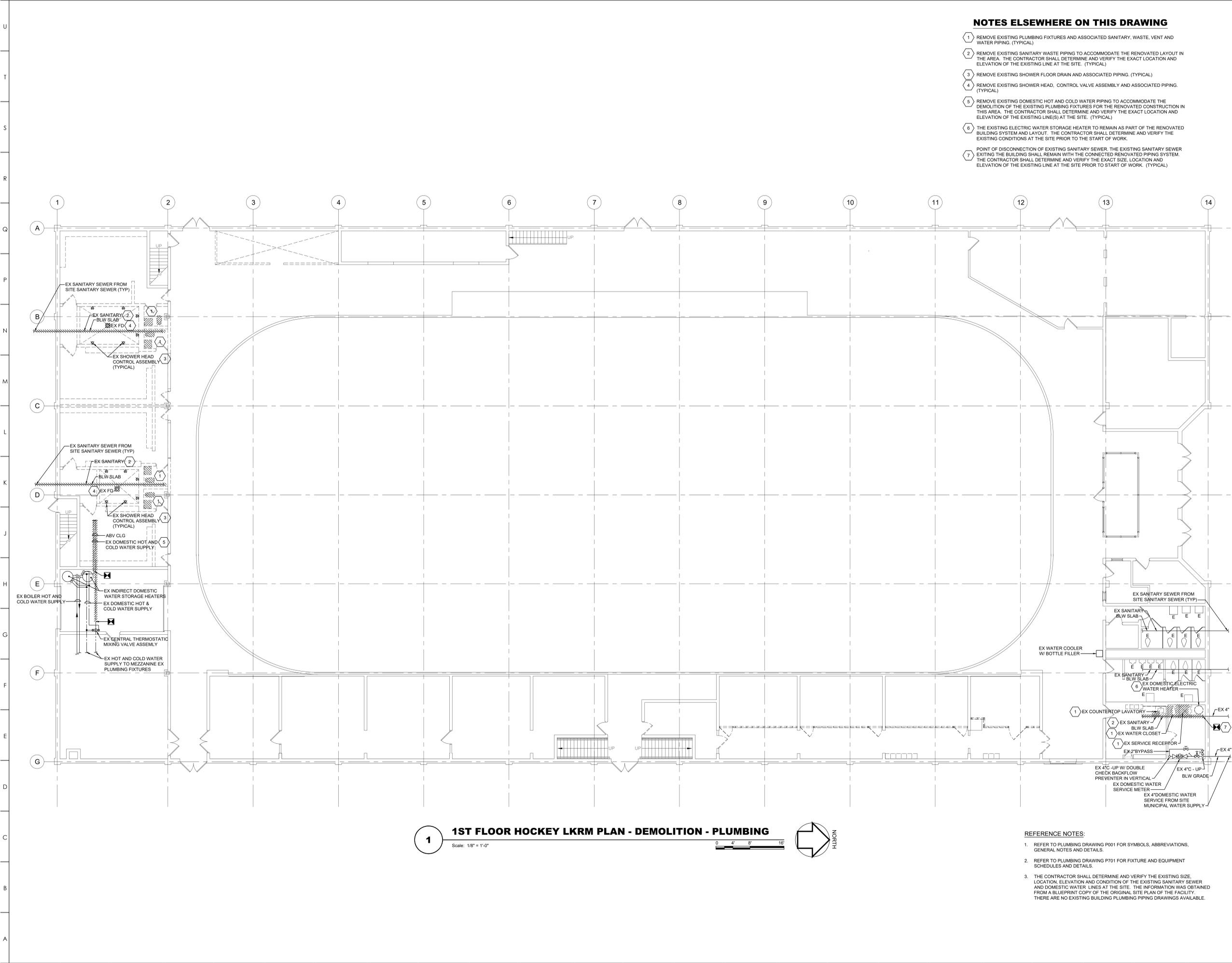


DATE:	SEPTEMBER 19, 2024
PROJECT NO.:	2024-02
DRAWN BY:	SJK
CHECKED BY:	WAM
SUBMISSION DATE:	8/19/2024
PERMIT SET DATE:	9/19/2024
BID SET DATE:	9/19/2024

REVISION	DATE

DRAWING TITLE:  
**SYMBOLS, ABBREVIATIONS, AND GENERAL NOTES - PLUMBING**

DRAWING NO:  
**P001**



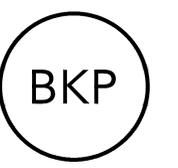
**NOTES ELSEWHERE ON THIS DRAWING**

- 1 REMOVE EXISTING PLUMBING FIXTURES AND ASSOCIATED SANITARY, WASTE, VENT AND WATER PIPING. (TYPICAL)
- 2 REMOVE EXISTING SANITARY WASTE PIPING TO ACCOMMODATE THE RENOVATED LAYOUT IN THIS AREA. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT LOCATION AND ELEVATION OF THE EXISTING LINE AT THE SITE. (TYPICAL)
- 3 REMOVE EXISTING SHOWER FLOOR DRAIN AND ASSOCIATED PIPING. (TYPICAL)
- 4 REMOVE EXISTING SHOWER HEAD, CONTROL VALVE ASSEMBLY AND ASSOCIATED PIPING. (TYPICAL)
- 5 REMOVE EXISTING DOMESTIC HOT AND COLD WATER PIPING TO ACCOMMODATE THE DEMOLITION OF THE EXISTING PLUMBING FIXTURES FOR THE RENOVATED CONSTRUCTION IN THIS AREA. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT LOCATION AND ELEVATION OF THE EXISTING LINE(S) AT THE SITE. (TYPICAL)
- 6 THE EXISTING ELECTRIC WATER STORAGE HEATER TO REMAIN AS PART OF THE RENOVATED BUILDING SYSTEM AND LAYOUT. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXISTING CONDITIONS AT THE SITE PRIOR TO THE START OF WORK.
- 7 POINT OF DISCONNECTION OF EXISTING SANITARY SEWER, THE EXISTING SANITARY SEWER EXITING THE BUILDING SHALL REMAIN WITH THE CONNECTED RENOVATED PIPING SYSTEM. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION AND ELEVATION OF THE EXISTING LINE AT THE SITE PRIOR TO START OF WORK. (TYPICAL)

**1 1ST FLOOR HOCKEY LCRM PLAN - DEMOLITION - PLUMBING**  
 Scale: 1/8" = 1'-0"  
 0 4' 8' 16'  
 NORTH

**REFERENCE NOTES:**

- 1. REFER TO PLUMBING DRAWING P001 FOR SYMBOLS, ABBREVIATIONS, GENERAL NOTES AND DETAILS.
- 2. REFER TO PLUMBING DRAWING P701 FOR FIXTURE AND EQUIPMENT SCHEDULES AND DETAILS.
- 3. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXISTING SIZE, LOCATION, ELEVATION AND CONDITION OF THE EXISTING SANITARY SEWER AND DOMESTIC WATER LINES AT THE SITE. THE INFORMATION WAS OBTAINED FROM A BLUEPRINT COPY OF THE ORIGINAL SITE PLAN OF THE FACILITY. THERE ARE NO EXISTING BUILDING PLUMBING PIPING DRAWINGS AVAILABLE.



**ARCHITECT:**  
 BKP ARCHITECTS P.C.  
 1525 LOCUST STREET  
 PHILADELPHIA, PA 19102  
 T: 215.557.6509

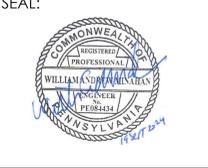
**MEP ENGINEER:**  
 H.F. LENZ CO.  
 1407 SCALP AVENUE  
 JOHNSTOWN, PA 15904  
 T: 814.269.9300

**STRUCTURAL ENGINEER:**  
 JBC ENGINEERS  
 1617 JOHN F KENNEDY BLVD.  
 SUITE 1655  
 PHILADELPHIA, PA

**CLIENT:**  
 HAVERFORD TOWNSHIP  
 DELAWARE COUNTY  
 1014 DARBY ROAD  
 HAVERTOWN, PA 19083-2551

**SKATIUM LOCKER ROOM RENOVATIONS**  
 1002 DARBY ROAD #3616  
 HAVERTOWN, PENNSYLVANIA 19083

THIS DRAWING IS TO ILLUSTRATE THE WORK TO BE DONE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES USED TO DO THE WORK OR THE SAFETY ASPECTS OF CONSTRUCTION AND NOTHING ON THIS DRAWING EXPRESS OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTAL OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGMENT OF THESE RESPONSIBILITIES AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK AND THE BID PRICE NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.



DATE: SEPTEMBER 19, 2024  
 PROJECT NO: 2024-02

DRAWN BY	SJK
CHECKED BY	WAM
SUBMISSION DATE	
PERMIT SET	8/19/2024
BID SET	9/19/2024

REVISION	DATE

**DRAWING TITLE:**  
 1ST FLOOR HOCKEY LCRM PLAN - DEMOLITION - PLUMBING

**DRAWING NO:**  
**P101**



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

**SKATUM LOCKER ROOM  
RENOVATIONS**  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

THIS DRAWING IS TO ILLUSTRATE THE WORK TO BE DONE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES USED TO DO THE WORK OR THE SAFETY ASPECTS OF CONSTRUCTION AND NOTHING ON THIS DRAWING EXPRESSLY OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTAL OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGEMENT OF THESE RESPONSIBILITIES AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK AND THE BID PRICE NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.

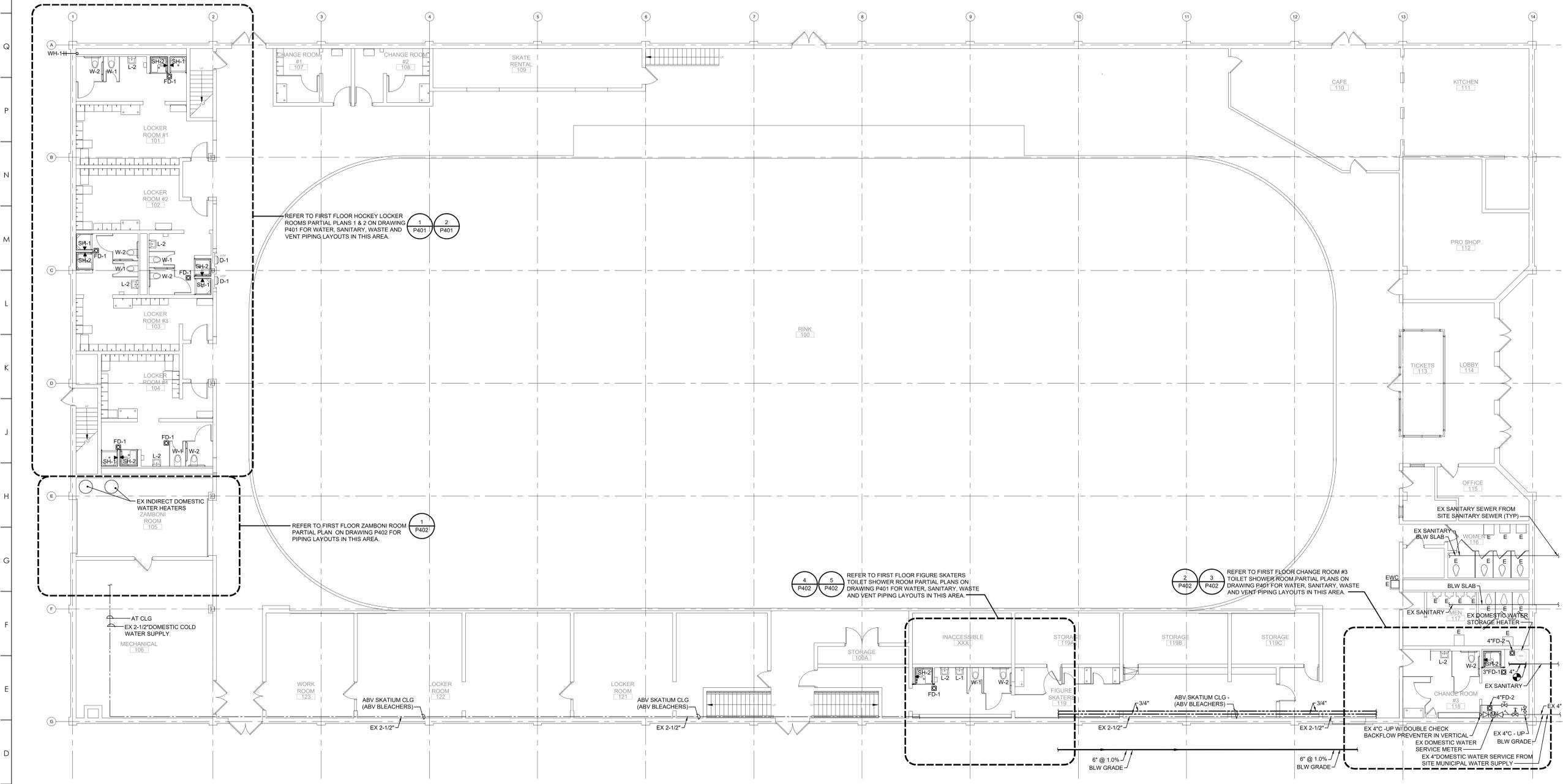


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SUBMISSION DATE
PERMIT SET: 8/19/2024
BID SET: 9/19/2024

REVISION	DATE

DRAWING TITLE:  
**1ST FLOOR HOCKEY  
LCRM PLAN - NEW  
WORK - PLUMBING**

DRAWING NO:  
**P201**



**1** **1ST FLOOR HOCKEY LCRM PLAN - NEW WORK - PLUMBING**  
Scale: 1/8" = 1'-0"  
0 4' 8' 16'

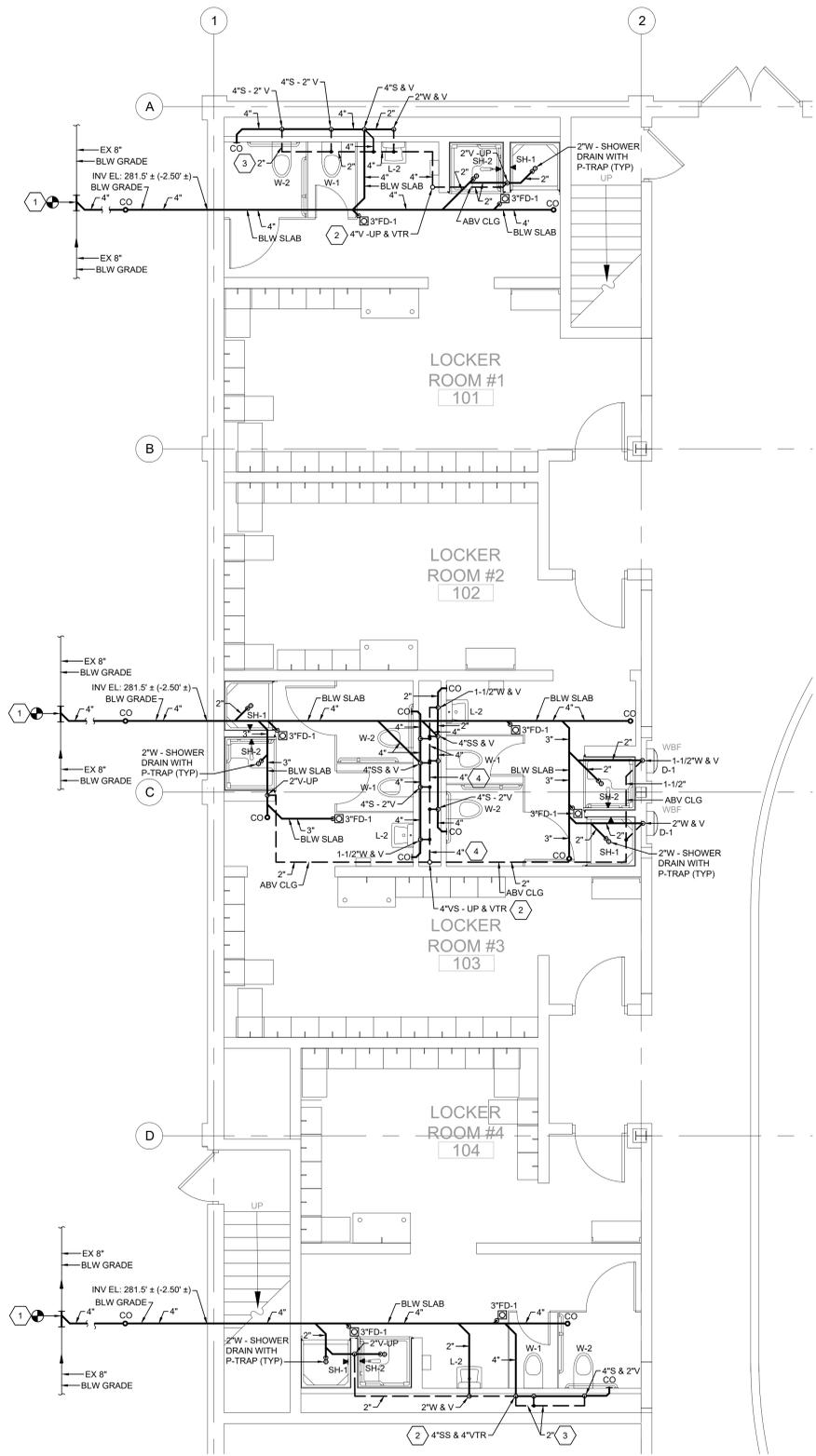
- REFERENCE NOTES:**
- REFER TO PLUMBING DRAWING P001 FOR SYMBOLS, ABBREVIATIONS, GENERAL NOTES AND DETAILS.
  - REFER TO PLUMBING DRAWING P701 FOR FIXTURE AND EQUIPMENT SCHEDULES AND DETAILS.
  - THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXISTING SIZE, LOCATION, ELEVATION AND CONDITION OF THE EXISTING SANITARY SEWER AND DOMESTIC WATER LINES AT THE SITE. THE INFORMATION WAS OBTAINED FROM A SITE WALK-THRU AND BLUEPRINT COPY OF THE ORIGINAL SITE PLAN OF THE FACILITY. THERE ARE NO EXISTING BUILDING PLUMBING PIPING DRAWINGS AVAILABLE.

**NOTES ELSEWHERE ON THIS DRAWING**

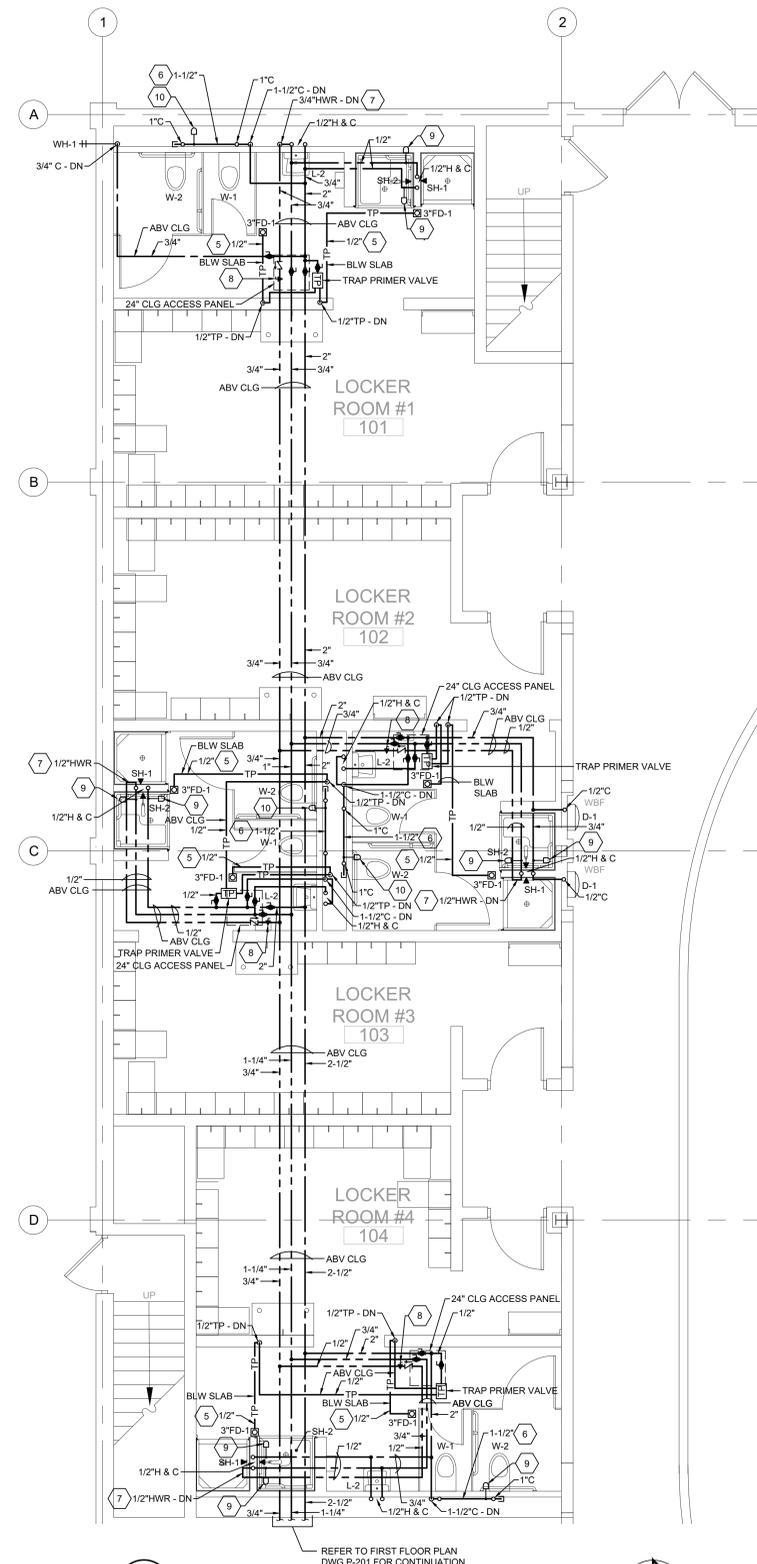
- 1 EXTEND AND CONNECT 4" SANITARY LINE WITH CLEANOUT TO FINISH GRADE TO THE EXISTING SITE SANITARY SEWER LINE. (THE EXISTING LINE RUNS ADJACENT TO THE BUILDING EXTERIOR WALL - APPROXIMATELY 4'-6" - 8'-0" FROM BUILDING) THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION, ELEVATION AND POINT OF CONNECTION TO THE EXISTING LINE PRIOR TO THE START OF WORK. (TYPICAL)
- 2 EXTEND 4" PLUMBING VENT UP THRU BUILDING ROOF AND TERMINATE 24" ABOVE THE FINISH ROOF. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE REQUIREMENTS OF THE ROOF WARRANTY AND CONSTRUCTION PRIOR TO MAKING ROOF PENETRATIONS.
- 3 RUN VENT PIPING IN PIPE CHASE AT A MINIMUM OF 12" ABOVE THE FLOOD RIM OF THE HIGHEST CONNECTED FIXTURE. (TYPICAL)
- 4 RUN FULL SIZE VENT PIPING HEADER IN PIPE CHASE AT A MINIMUM OF 12" ABOVE THE FLOOD RIM OF THE HIGHEST CONNECTED FIXTURE. (TYPICAL)
- 5 RUN TRAP PRIMER LINE IN PIPE SLEEVE BELOW SLAB. EXTEND AND CONNECT TO FLOOR DRAIN TRAP PRIMER CONNECTION. (TYPICAL)
- 6 RUN FULL SIZE WATER SUPPLY HEADER ALONG WALL IN PIPE CHASE NEAR THE FIXTURE ROUGH-IN CONNECTION. (TYPICAL)
- 7 EXTEND AND CONNECT THE HOT WATER RETURN CIRCULATION LINE TO THE FIXTURE HOT WATER SUPPLY ROUGH-IN CONNECTION TO ENSURE HOT WATER SUPPLY IS AVAILABLE UPON USE. (TYPICAL)
- 8 THERMOSTATIC BALANCING VALVE ASSEMBLY SET AT 110°F - WITH UNIFORM BODY, CHECK VALVE, BALL VALVES AND THERMOMETER. REFER TO SPECIFICATIONS.
- 9 WATER HAMMER ARRESTER - SIZE 'A' (REFER TO SPECIFICATIONS)
- 10 WATER HAMMER ARRESTER - SIZE 'B' (REFER TO SPECIFICATIONS)

**REFERENCE NOTES**

- 1 REFER TO PLUMBING DRAWING P001 FOR SYMBOLS, ABBREVIATIONS, GENERAL NOTES AND DETAILS.
- 2 REFER TO PLUMBING DRAWING P701 FOR FIXTURE AND EQUIPMENT SCHEDULES AND DETAILS.
- 3 THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXISTING SIZE, LOCATION, ELEVATION AND CONDITION OF THE EXISTING SANITARY SEWER AND DOMESTIC WATER LINES AT THE SITE. THE INFORMATION WAS OBTAINED FROM A BLUEPRINT COPY OF THE ORIGINAL SITE PLAN OF THE FACILITY. THERE ARE NO EXISTING BUILDING PLUMBING PIPING DRAWINGS AVAILABLE.



**1 1ST FLOOR HOCKEY LOCKER ROOM PARTIAL PLAN  
SANITARY, WASTE AND VENT PIPING LAYOUT**  
SCALE: 1/4" = 1'-0"



**2 1ST FLOOR HOCKEY LOCKER ROOM PARTIAL PLAN  
DOMESTIC WATER PIPING LAYOUT**  
SCALE: 1/4" = 1'-0"



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

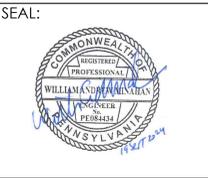
MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

**SKATIUM LOCKER ROOM  
RENOVATIONS**  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

THIS DRAWING IS TO ILLUSTRATE THE WORK TO BE DONE. THE ARCHITECT IS NOT RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES USED TO DO THE WORK OR THE SAFETY ASPECTS OF CONSTRUCTION AND NOTHING ON THIS DRAWING EXPRESSED OR IMPLIED CHANGES THIS CONDITION. CONTRACTOR SHALL BE RESPONSIBLE FOR KNOWING HOW THEY AFFECT THE WORK. SUBMITTAL OF A BID TO PERFORM THIS WORK IS AN ACKNOWLEDGMENT OF THESE RESPONSIBILITIES AND THAT THEY HAVE BEEN FULLY CONSIDERED IN PLANNING OF THE WORK AND THE BID PRICE NO CLAIMS FOR EXTRA CHARGES DUE TO THESE CONDITIONS WILL BE FORTHCOMING.



DATE: SEPTEMBER 19, 2024
PROJECT NO: 2024-02
DRAWN BY: SJK
CHECKED BY: WAM
SUBMISSION DATE:
PERMIT SET: 8/19/2024
BID SET: 9/19/2024

REVISION	DATE

DRAWING TITLE:  
**HOCKEY LOCKER  
ROOMS PARTIAL  
PLANS - PLUMBING**

DRAWING NO:  
**P401**



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

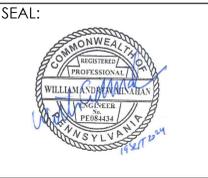
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RENOVATIONS**  
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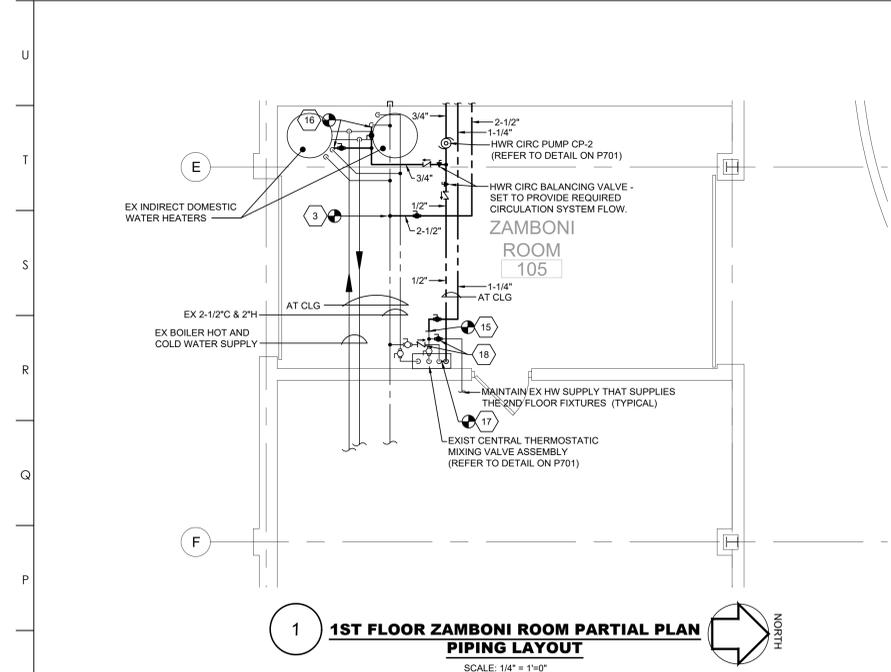


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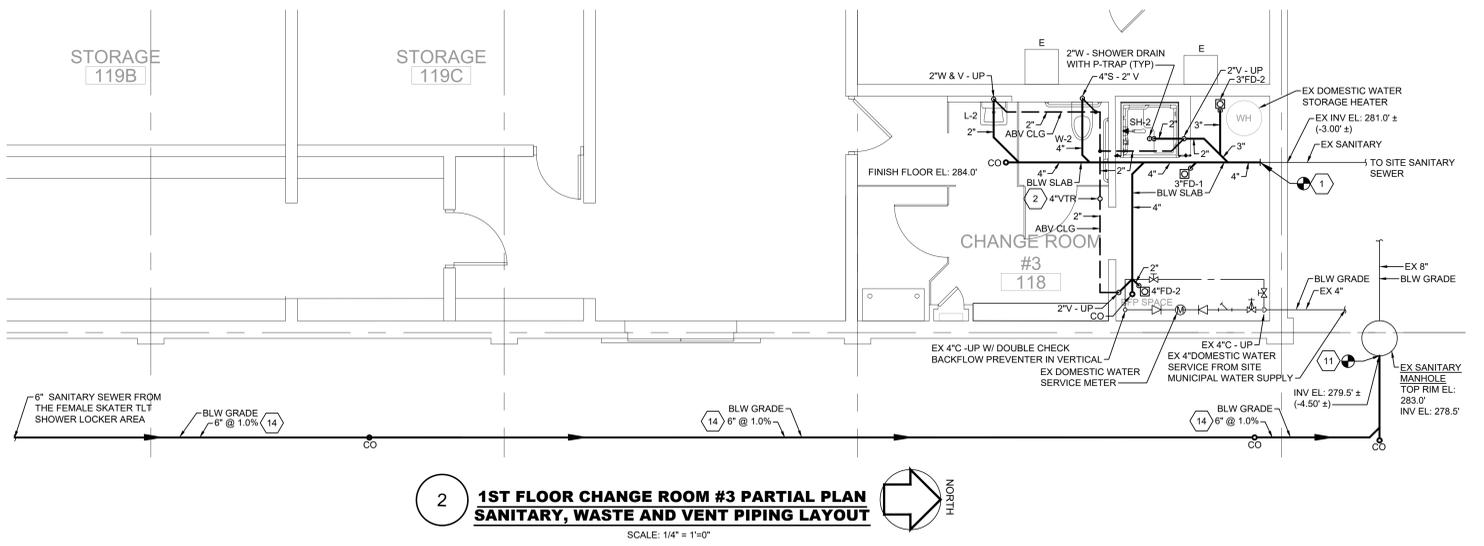
REVISION	DATE

DRAWING TITLE:  
**FIGURE SKATER  
LOCKER ROOMS  
PARTIAL PLANS -  
PLUMBING**

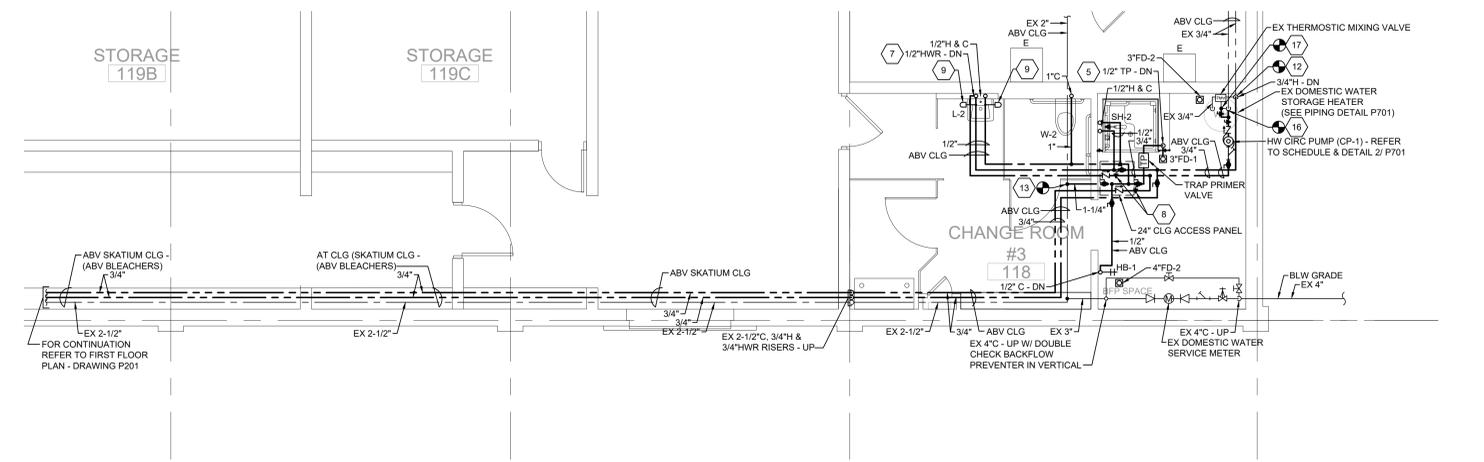
DRAWING NO:  
**P402**



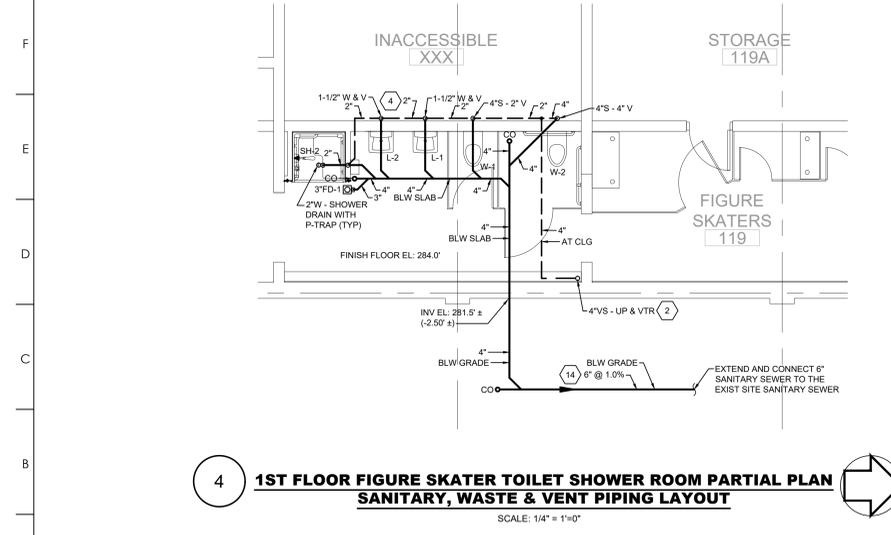
**1 1ST FLOOR ZAMBONI ROOM PARTIAL PLAN  
PIPING LAYOUT**  
SCALE: 1/4" = 1'-0"



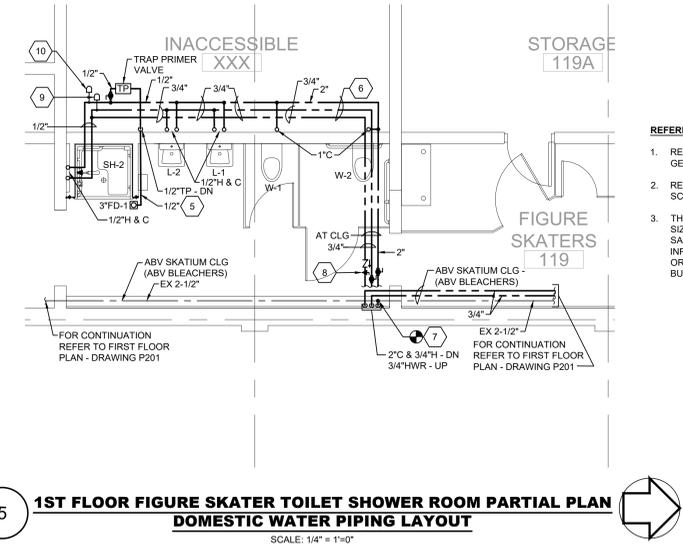
**2 1ST FLOOR CHANGE ROOM #3 PARTIAL PLAN  
SANITARY, WASTE AND VENT PIPING LAYOUT**  
SCALE: 1/4" = 1'-0"



**3 1ST FLOOR CHANGE ROOM #3 PARTIAL PLAN  
DOMESTIC WATER PIPING LAYOUT**  
SCALE: 1/4" = 1'-0"



**4 1ST FLOOR FIGURE SKATER TOILET SHOWER ROOM PARTIAL PLAN  
SANITARY, WASTE & VENT PIPING LAYOUT**  
SCALE: 1/4" = 1'-0"



**5 1ST FLOOR FIGURE SKATER TOILET SHOWER ROOM PARTIAL PLAN  
DOMESTIC WATER PIPING LAYOUT**  
SCALE: 1/4" = 1'-0"

**NOTES ELSEWHERE ON THIS DRAWING**

- EXTEND AND CONNECT 4" SANITARY LINE TO THE EXISTING SANITARY SEWER LINE. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION, ELEVATION AND POINT OF CONNECTION PRIOR TO THE START OF WORK. (TYPICAL)
- EXTEND 4" PLUMBING VENT UP THRU BUILDING ROOF AND TERMINATE 24" ABOVE THE FINISH ROOF. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE REQUIREMENTS OF THE ROOF WARRANTY AND CONSTRUCTION PRIOR TO MAKING ROOF PENETRATIONS.
- CONNECT AND EXTEND 2-1/2" C FROM THE EXISTING COLD WATER LINE TO SUPPLY THE RENOVATED LOCKER TOILET SHOWER FACILITIES. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION AND POINT OF CONNECTION OF EXISTING PRIOR TO THE START OF WORK. (TYPICAL)
- RUN FULL SIZE VENT PIPING HEADER IN PIPE CHASE AT A MINIMUM OF 12" ABOVE THE FLOOD RIM OF THE HIGHEST CONNECTED FIXTURE. (TYPICAL)
- RUN TRAP PRIMER LINE IN PIPE SLEEVE BELOW SLAB. EXTEND AND CONNECT TO FLOOR DRAIN TRAP PRIMER CONNECTION. (TYPICAL)
- RUN WATER SUPPLY PIPING ALONG WALL IN INACCESSIBLE SPACE WITH DROPS TO THE FIXTURE ROUGH-IN CONNECTIONS. (TYPICAL)
- EXTEND AND CONNECT THE HOT WATER RETURN CIRCULATION LINE TO THE FIXTURE HOT WATER SUPPLY ROUGH-IN CONNECTION TO ENSURE HOT WATER SUPPLY IS AVAILABLE UPON USE. (TYPICAL)
- THERMOSTATIC BALANCING VALVE ASSEMBLY SET AT 110°F - WITH UNION BODY, CHECK VALVE, BALL VALVES AND THERMOMETER. REFER TO SPECIFICATIONS.
- WATER HAMMER ARRESTER - SIZE 'A' (REFER TO SPECIFICATIONS)
- WATER HAMMER ARRESTER - SIZE 'B' (REFER TO SPECIFICATIONS)
- EXTEND AND CONNECT 6" SANITARY LINE TO THE EXISTING SITE SANITARY SEWER MANHOLE. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION, ROUTE, ELEVATION AND POINT OF CONNECTION PRIOR TO THE START OF WORK. (TYPICAL)
- EXTEND AND CONNECT 3/4" TO THE EXISTING HOT WATER LINE TO MAINTAIN THE SUPPLY TO THE EXISTING TOILET FACILITIES THAT REMAIN. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION AND POINT OF CONNECTION TO EXISTING PRIOR TO THE START OF WORK. (TYPICAL)
- CONNECT AND EXTEND COLD WATER FROM THE EXISTING COLD WATER LINE TO SUPPLY THE RENOVATED LOCKER TOILET SHOWER FACILITIES. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION AND POINT OF CONNECTION OF EXISTING PRIOR TO THE START OF WORK. (TYPICAL)
- THE EXCAVATION AND INSTALLATION OF THE SANITARY SEWER LINE SHALL BE LOCATED WITH IN THE GRASS AREA ALONG THE EXTERIOR PERIMETER OF THE BUILDING. THE 6" SANITARY SEWER LINE SHALL RUN ADJACENT TO THE BUILDING EXTERIOR - APPROXIMATELY 5'-0" FROM THE BUILDING TO MINIMIZE THE DISTURBANCE TO EXISTING SIDEWALKS) TYPICAL.
- CONNECT AND EXTEND 1-1/4" TO THE EXISTING HOT WATER SUPPLY OUTLET OF THE EXISTING CENTRAL MIXING VALVE TO SUPPLY THE RENOVATED TOILET SHOWER LOCKER FACILITIES. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION AND POINT OF CONNECTION TO EXISTING PRIOR TO THE START OF WORK. (TYPICAL)
- EXTEND AND CONNECT 3/4" HWR CIRCULATION LINE TO THE EXISTING COLD WATER SUPPLY LINE AT EACH EX WATER HEATER(S) FOR THE DOMESTIC HOT WATER SYSTEM CIRCULATION FOR THE RENOVATED TOILET SHOWER LOCKER FACILITIES. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION AND POINT OF CONNECTION TO EXISTING PRIOR TO THE START OF WORK. (TYPICAL)
- EXTEND AND CONNECT 1/2" HWR CIRCULATION LINE TO THE EXISTING COLD WATER SUPPLY LINE AT THE EX CENTRAL MIXING VALVE FOR THE DOMESTIC HOT WATER SYSTEM CIRCULATION. COORDINATE THE RECOMMENDED POINT OF CONNECTION WITH THE MIXING VALVE MANUFACTURER AND THE REQUIRED FLOW. THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXACT SIZE, LOCATION AND POINT OF CONNECTION TO EXISTING PRIOR TO THE START OF WORK. (TYPICAL)
- FURNISH AND INSTALL NEW SHUT-OFF VALVE(S) AND CHECK VALVE(S) ON THE EXISTING WATER PIPING SYSTEM TO REMAIN AS PART OF THE RENOVATED SYSTEM TO MAINTAIN ISOLATION AND PROPER FLOW. (TYPICAL)

**REFERENCE NOTES**

- REFER TO PLUMBING DRAWING P001 FOR SYMBOLS, ABBREVIATIONS, GENERAL NOTES AND DETAILS.
- REFER TO PLUMBING DRAWING P701 FOR FIXTURE AND EQUIPMENT SCHEDULES AND DETAILS.
- THE CONTRACTOR SHALL DETERMINE AND VERIFY THE EXISTING SIZE, LOCATION, ELEVATION AND CONDITION OF THE EXISTING SANITARY SEWER AND DOMESTIC WATER LINES AT THE SITE. THE INFORMATION WAS OBTAINED FROM A BLUEPRINT COPY OF THE ORIGINAL SITE PLAN OF THE FACILITY. THERE ARE NO EXISTING BUILDING PLUMBING PIPING DRAWINGS AVAILABLE.



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1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
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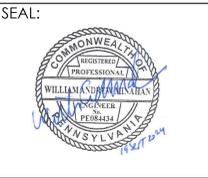
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SKATIUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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DRAWING TITLE:  
PLUMBING SCHEDULES

DRAWING NO:  
P701

**PLUMBING FIXTURE ABBREVIATIONS**

W	WATER CLOSET	SS	SERVICE SERVICE RECEPTOR
L	LAVATORY	WH	WALL HYDRANT
S	SINK	HB	HOSE BIBB
SH	SHOWER	FD	FLOOR DRAIN

NOTES:  
1. SUFFIXES FOR FIXTURE LETTERS AS SPECIFIED.  
2. REFER TO PROJECT SPECIFICATIONS FOR PLUMBING ACCESSORIES, SPECIALTIES AND EQUIPMENT.

**PLUMBING FIXTURE CONNECTION SCHEDULE**

FIXTURE	WATER	WASTE, SOIL & VENT (UNO)
WATER CLOSET	1" C	4" S & 2" V
LAVATORY	1/2" H & C	1 1/2" W & V
SINK	AS NOTED	AS NOTED
SHOWER	1/2" H & C	AS NOTED
SERVICE RECEPTOR BASIN / SINK	1/2" H & C	3" W - 2" V
FLOOR DRAIN	AS NOTED	AS NOTED
WALL HYDRANT (EXTERIOR)	3/4" C	----
HOSE BIBB (INTERIOR)	3/4" C	----

**FLOOR DRAIN SCHEDULE**

FIXTURE IDENTIFICATION	APPLICATION AND LOCATION	DESCRIPTION	FIXTURE MANUFACTURER AND MODEL NUMBER (OR APPROVED EQUAL)	FOOTNOTES
FD-1	GENERAL AREA FLOOR DRAIN TOILET SHOWER FACILITIES	COATED CAST IRON BODY WITH ADJUSTABLE POLISHED NICKEL BRONZE STRAINER W/ SEDIMENT BUCKET AND CLAMPING COLLAR	ZURN MODEL #ZN-415-6B-Y W/ TYPE 'B' STRAINER	1, 2, 3
FD-2	MECHANICAL EQUIPMENT / UTILITY ROOM AREAS (FLOOR DRAIN W/ FUNNEL)	MEDIUM DUTY COATED CAST IRON BODY WITH 9" DIAMETER FLAT SLOTTED GRATE TOP, REMOVABLE SEDIMENT BUCKET AND 4" ROUND FUNNEL CONVERTING ASSEMBLY	ZURN MODEL #Z-551-Y W/ Z-328-4 JR SMITH #2270-B, 3580	1, 2, 3

- FLOOR DRAIN FOOTNOTES:**
- REFER TO SPECIFICATIONS FOR REQUIREMENTS OF MATERIALS, COLOR, FINISHES, INSTALLATION, APPROVED EQUAL MANUFACTURERS, ETC.
  - PROVIDE COMPLETE WITH INDIVIDUAL DEEP SEAL TRAP FOR ALL FLOOR DRAINS AND FLOOR SINKS UNLESS OTHERWISE NOTED.
  - PROVIDE IN-LINE FLOOR DRAIN TRAP SEAL PROTECTION INSERT - RECTOR SEAL - SURE SEAL "TRAP SEAL" TYPE COMPATIBLE WITH THE SCHEDULED AND SPECIFIED DRAINS. (TYPICAL)

**LAVATORIES**

FIXTURE IDENTIFICATION	DESCRIPTION	MOUNTING REQUIREMENTS	FIXTURE MANUFACTURER AND MODEL NUMBER (OR APPROVED EQUAL)	FIXTURE ACCESSORIES MAKE AND MODEL NUMBER (OR APPROVED EQUAL)	FOOTNOTES
L-1	LAVATORY 20" x 18" - 4" OC VITREOUS CHINA (PUBLIC TLT FACILITIES)	STANDARD ACCESSIBLE WALL MOUNTED	(AMERICAN STD. KOHLER OR ZURN) 20" x 18" LAVATORY - 4" OC VITREOUS CHINA ZURN - MODEL #Z5114	(CHICAGO FAUCET, MOEN OR ZURN) 4" OC MANUAL LEVER OPERATED POLISHED CHROME FINISHED FAUCET ASSEMBLY - BOD: MOEN - COMMERCIAL MODEL #8210F12	1, 2, 3, 4
L-2	LAVATORY 20" x 18" - 4" OC VITREOUS CHINA (PUBLIC TLT FACILITIES)	ADA / HANDICAP ACCESSIBLE WALL MOUNTED	(AMERICAN STD. KOHLER OR ZURN) 20" x 18" LAVATORY - 4" OC VITREOUS CHINA ZURN - MODEL #Z5114	(CHICAGO FAUCET, MOEN OR ZURN) 4" OC MANUAL LEVER OPERATED POLISHED CHROME FINISHED FAUCET ASSEMBLY - BOD: MOEN COMMERCIAL MODEL #8210F12	1, 2, 3, 4

- LAVATORIES FOOTNOTES:**
- REFER TO SPECIFICATIONS FOR REQUIREMENTS OF MATERIALS, COLOR, FINISHES, INSTALLATION, APPROVED EQUAL MANUFACTURERS, ETC.
  - PROVIDE COMPLETE WITH CHAIR CARRIER, SUPPLY AND WASTE ROUGH-IN ASSEMBLIES IN ACCORDANCE WITH SPECIFICATIONS.
  - THE CONTRACTOR WILL FURNISH AND INSTALL AN ASSE 1070 APPROVED THERMOSTATIC MIXING VALVE FOR MULTIPLE FAUCETS OR INDIVIDUAL FAUCET AS THE APPLICATION WARRANTS.
  - PROVIDE SUPPLY AND DRAIN INSULATION KIT ON EXPOSED PIPING BELOW DESIGNATED ADA / HANDICAP ACCESSIBLE LAVATORIES AS SPECIFIED.

**SHOWER FIXTURES**

FIXTURE IDENTIFICATION	DESCRIPTION	MOUNTING REQUIREMENTS	FIXTURE MANUFACTURER AND MODEL NUMBER (OR APPROVED EQUAL)	FIXTURE ACCESSORIES MAKE AND MODEL NUMBER (OR APPROVED EQUAL)	FOOTNOTES
SH-1	36" x 36" x 77-1/4" SHOWER ONE-PIECE ACRYLIC ENCLOSURE 3-1/2" THRESHOLD - CENTER DRAIN (LOCKER - TLT / SHOWER AREA)	STANDARD ACCESSIBLE	36" x 36" 77-1/4" SECTIONAL ACRYLIC SHOWER ENCLOSURE W/ CENTER DRAIN AQUATIC MODEL # 136364PC	(SPEAKMAN, SYMMONS, ZURN) SHOWER VALVE ASSEMBLY SPEAKMAN - SENTINAL MARK II MODEL #CPT-3001-CPV-T2 SHOWER HEAD - MODEL #S-2460	1, 2, 3, 4
SH-2	36" x 36" x 77-1/4" SHOWER ONE-PIECE ACRYLIC ENCLOSURE 3/4" THRESHOLD - CENTER DRAIN (LOCKER - TLT / SHOWER AREA)	ADA HANDICAP ACCESSIBLE	36" x 36" 75-1/8" SECTIONAL ACRYLIC SHOWER ENCLOSURE W/ SEAT & GRAB BARS AQUATIC MODEL # 13636FC2P	(SPEAKMAN, SYMMONS, ZURN) SHOWER VALVE W/ DIVERTER ADA HAND HELD SHOWER & BAR SPEAKMAN - SENTINAL MARK II MODEL #CPT-3460-CPV-T2-DV SHOWER HEAD - MODEL #S-2460	1, 2, 3, 4

- SHOWER FIXTURES FOOTNOTES:**
- REFER TO SPECIFICATIONS FOR REQUIREMENTS OF MATERIALS, COLOR, FINISHES, INSTALLATION, APPROVED EQUAL MANUFACTURERS, ETC.
  - PROVIDE COMPLETE SUPPLY AND WASTE ROUGH-IN ASSEMBLIES, THERMOSTATIC SHOWER CONTROL VALVE WITH SHOWER HEADS IN ACCORDANCE WITH SCHEDULE AND SPECIFICATIONS.
  - THE CONTRACTOR SHALL DETERMINE AND COORDINATE THE REQUIRED ROUGH-IN DIMENSIONS OF THE SHOWER ENCLOSURE AND ORIENTATION LOCATION (RIGHT OR LEFT) OF THE SHOWER CONTROL VALVE / HEAD ASSEMBLY, DRAIN AND SEAT WITH THE ARCHITECTURAL DRAWINGS PRIOR TO ORDERING AND INSTALLATION. (TYPICAL)
  - THE CONTRACTOR SHALL FURNISH AND INSTALL SHOWER CURTAIN ROD, WHITE CURTAIN AND CURTAIN ATTACHMENTS WITH EACH SHOWER ENCLOSURE.

**DOMESTIC WATER CIRCULATING PUMP SCHEDULE**

CIRC. PUMP NUMBER	DESCRIPTION	LOCATION	PIPE SIZE PUMP FLANGE	SYSTEM DESIGN CHARACTERISTICS		PUMP PERFORMANCE CHARACTERISTICS		PUMP DESIGN SHUT-OFF		HP	RPM	ELECTRIC PH - HZ - VOLT	MAXIMUM OPERATING TEMPERATURE	MAXIMUM WORKING PRESSURE	BASIS OF DESIGN	FOOTNOTES
				GPM	FT/HD	GPM	FT/HD	GPM	FT/HD							
CP-1	120°F HW SYSTEM BUILDING	CHANGE ROOM #3 WATER HEATER	3/4"	3.5	7.5	5	8	0	30	1/12	1750	1-60 -120V	225°F	150 PSIG	B & G MODEL # PL-30	1, 2, 3
			3/4"			20	6									
CP-2	120°F HW SYSTEM BUILDING	ZAMBONI RM 105 EX WATER HEATER	3/4"	3.5	7.5	5	8	0	30	1/12	1750	1-60 -120V	225°F	150 PSIG	B & G MODEL # PL-30	1, 2, 3
			3/4"			20	6									

- DOMESTIC HOT WATER CIRCULATING PUMP FOOTNOTES:**
- THE CIRCULATION PUMP(S) SHALL BE CONNECTED OPERATED BY AN 24 / 7 PROGRAMMABLE TIME CLOCK THAT CAN BE SET AND SCHEDULED BY THE OWNER. THE PUMP OPERATION TIME SHALL BE SCHEDULED TO OPERATE DURING BUILDING OCCUPANCY AND USAGE TIMES OF THE FACILITY WITH THE CAPABILITY OF SCHEDULING SHUT-DOWN DURING NON-OCCUPIED/ NON-USE PERIODS. A MANUAL ON / OFF ELECTRICAL SWITCH SHALL ALSO BE FURNISHED FOR MANUAL SHUT OFF AND MAINTENANCE. (REFER TO SPECIFICATIONS)
  - THE CIRCULATION PUMP(S) AND ASSOCIATED PIPING, VALVES, FITTINGS AND COMPONENTS SHALL BE CERTIFIED AND LABELED "LEAD FREE" COMPLIANT TO THE NSF/ANSI 372 STANDARD.
  - THE CONTRACTOR SHALL INSTALL THE IN-LINE TEMPERATURE AQUASTAT IN THE MAIN HOT WATER RETURN LINE PRIOR TO THE LOCATION OF THE CIRCULATING PUMP(S). THE TEMPERATURE AQUASTAT SHALL BE SET 8° F - 10° F DEGREES LESS THAN THE HOT WATER SUPPLY OUTLET TO THE BUILDING FIXTURES AND OPERATE THE CIRCULATING PUMP.

**WATER CLOSETS**

FIXTURE IDENTIFICATION	DESCRIPTION	MOUNTING REQUIREMENTS	FIXTURE MANUFACTURER AND MODEL NUMBER (OR APPROVED EQUAL)	FIXTURE ACCESSORIES MAKE AND MODEL NUMBER (OR APPROVED EQUAL)	FOOTNOTES
W-1	WATER CLOSET 1.28 GALLON PER FLUSH HI-EFFICIENCY SIPHON JET ELONGATED BOWL VITREOUS CHINA (PUBLIC TOILET FACILITY)	WALL MOUNTED STANDARD ACCESSIBLE	(AMERICAN STD. KOHLER & ZURN) 1.28 GALLON PER FLUSH ELONGATED BOWL VITREOUS CHINA ZURN - ECO VANTAGE HET MODEL #Z5615-BWL-AM	(AMERICAN STD. SLOAN & ZURN) EXPOSED DIAPHRAGM TYPE MANUAL LEVER OPERATED FLUSH VALVE ZURN - AQUASAVANTAGE MODEL #Z6000AV-HET-YK	1, 2
W-2	WATER CLOSET 1.28 GALLON PER FLUSH HI-EFFICIENCY SIPHON JET ELONGATED BOWL VITREOUS CHINA (PUBLIC TOILET FACILITY)	WALL MOUNTED ADA HANDICAP ACCESSIBLE	(AMERICAN STD. KOHLER & ZURN) 1.28 GALLON PER FLUSH ELONGATED BOWL VITREOUS CHINA ZURN - ECO VANTAGE HET MODEL #Z5615-BWL-AM	(AMERICAN STD. SLOAN & ZURN) EXPOSED DIAPHRAGM TYPE MANUAL LEVER OPERATED FLUSH VALVE ZURN - AQUAVANTAGE MODEL #Z6000AV-HET-YK	1, 2

- WATER CLOSET FOOTNOTES:**
- REFER TO SPECIFICATIONS FOR REQUIREMENTS OF MATERIALS, COLOR, FINISHES, INSTALLATION, APPROVED EQUAL MANUFACTURERS, ETC.
  - PROVIDE COMPLETE WITH SEAT, WALL CHAIR CARRIER, SUPPLY AND WASTE ROUGH-IN ASSEMBLIES IN ACCORDANCE WITH SPECIFICATIONS.

**BOTTLE FILL STATION**

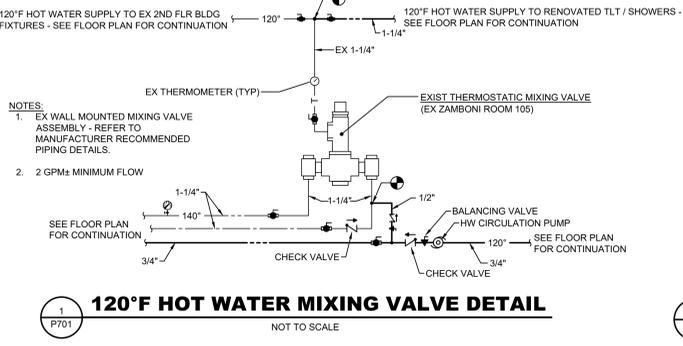
FIXTURE IDENTIFICATION	DESCRIPTION	MOUNTING REQUIREMENTS	FIXTURE MANUFACTURER AND MODEL NUMBER (OR APPROVED EQUAL)	FIXTURE ACCESSORIES MAKE AND MODEL NUMBER (OR APPROVED EQUAL)	FOOTNOTES
D-1	REFRIGERATED BOTTLE FILL STATION & FILTER 8 GPH - BARRIER-FREE	WALL MOUNTED ADA / HANDICAP ACCESSIBLE	ELKAY REFRIGERATED BOTTLE FILL STATION & FILTER ELKAY - EZH2O MODEL #LZWSM8K	ELKAY WATER SENTRY FILTER MODEL #S1300C	1, 2, 3, 4

- WATER COOLER FOOTNOTES:**
- REFER TO SPECIFICATIONS FOR REQUIREMENTS OF MATERIALS, COLOR, FINISHES, INSTALLATION, APPROVED EQUAL MANUFACTURERS, ETC.
  - PROVIDE COMPLETE WITH WALL MOUNTING FRAME/ CHAIR CARRIER, SUPPLY AND WASTE ROUGH-IN ASSEMBLIES IN ACCORDANCE WITH SPECIFICATIONS.
  - THE CONTRACTOR SHALL FURNISH AND INSTALL POINT OF USE - SEDIMENT - TASTE/ODOR WATER FILTER CARTRIDGE KIT ASSEMBLY ON WATER SUPPLY TO WATER COOLER. FILTER CAPACITY IS APPROXIMATELY 500 GALLONS
  - THE CONTRACTOR SHALL MAKE ALL ROUGH-INS AND FINAL SUPPLY AND WASTE CONNECTION WITH ALL ASSOCIATED FIXTURE ASSEMBLIES REQUIRED FOR OPERATION AND FUNCTION. COORDINATE THE INSTALLATION OF A DUPLEX GF1 120 V ELECTRICAL OUTLET BOX AND RECEPTACLE WITH A CONTRACTOR.

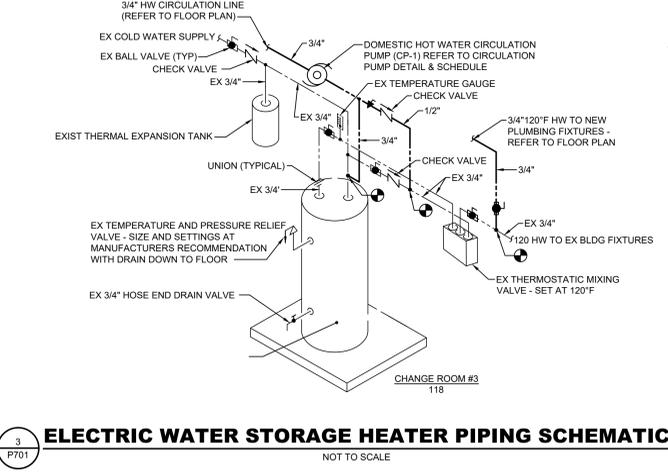
**WALL HYDRANT AND HOSE BIBB SCHEDULE**

FIXTURE IDENTIFICATION	DESCRIPTION	MOUNTING REQUIREMENTS	FIXTURE MANUFACTURER AND MODEL NUMBER (OR APPROVED EQUAL)	FIXTURE ACCESSORIES MAKE AND MODEL NUMBER (OR APPROVED EQUAL)	FOOTNOTES
WH-1	EXTERIOR WALL HYDRANT POLISHED BRONZE OR STAINLESS STEEL WALL BOX AND COVER (BUILDING PERIMETER)	24" ABOVE FINISH GRADE RECESSED WALL MOUNTED	(JR SMITH, WOODFORD & ZURN) NON-FREEZE, ANTI-SIPHON W/ BACKFLOW PREVENTION AND ALL BRONZE PARTS ZURN MODEL #Z-1300-3 / #Z-1300-13	REMOVABLE KEY FOR LOCKING COVER AND HYDRANT OPERATION WITH "WATER" STAMPED IN COVER	1, 2
HB-1	GENERAL BUILDING AND MECHANICAL/UTILITY SERVICE AREAS	42" ABOVE FINISH FLOOR WALL MOUNTED	(CHICAGO FAUCET, T & S & ZURN) CHROME PLATED LEVER HANDLE WITH HOSE END OUTLET ZURN #Z-80501 OR #Z80701	----	1, 3

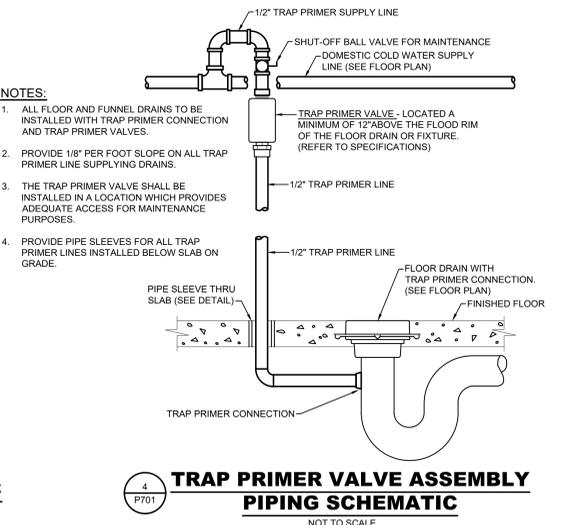
- HYDRANTS AND HOSE BIBB FOOTNOTES:**
- REFER TO SPECIFICATIONS FOR REQUIREMENTS OF MATERIALS, COLOR, FINISHES, INSTALLATION, APPROVED EQUAL MANUFACTURERS, ETC.
  - INSTALL WALL HYDRANT WALL BOX AND COVER FLUSH WITH EXTERIOR WALL FINISH. THE DEPTH OF THE VALVE STEM SHALL BE COORDINATED WITH THE THICKNESS OF THE EXTERIOR WALL AND THE DEPTH TO VALVE STOP WITHIN THE INTERIOR SPACE BEYOND THE INSULATION ENVELOPE. EXTEND 3/4" COLD WATER SUPPLY WITH ISOLATION SHUT-OFF VALVE TO THE WALL HYDRANT.
  - EXTEND 1/2" OR 3/4" HOT OR COLD WATER SUPPLY AS DESIGNATED WITH CONCEALED OR EXPOSED PIPING TO THE HOSE BIBB AS NOTED ON DRAWING.



**DOMESTIC HOT WATER CIRCULATION PIPING DIAGRAM**  
NOT TO SCALE



**ELECTRIC WATER STORAGE HEATER PIPING SCHEMATIC**  
NOT TO SCALE



- NOTES:**
- ALL FLOOR AND FUNNEL DRAINS TO BE INSTALLED WITH TRAP PRIMER CONNECTION AND TRAP PRIMER VALVES.
  - PROVIDE 1/8" PER FOOT SLOPE ON ALL TRAP PRIMER LINE SUPPLY DRAINS.
  - THE TRAP PRIMER VALVE SHALL BE INSTALLED IN A LOCATION WHICH PROVIDES ADEQUATE ACCESS FOR MAINTENANCE PURPOSES.
  - PROVIDE PIPE SLEEVES FOR ALL TRAP PRIMER LINES INSTALLED BELOW SLAB ON GRADE.

**TRAP PRIMER VALVE ASSEMBLY PIPING SCHEMATIC**  
NOT TO SCALE



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

SKATNUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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BID SET:	9/19/2024

REVISION	DATE

DRAWING TITLE:  
SYMBOLS,  
ABBREVIATIONS, AND  
GENERAL NOTES -  
ELECTRICAL

DRAWING NO:  
**E001**

## SYMBOL & ABBREVIATION SCHEDULE

### NOTES

- THIS SCHEDULE IS A STANDARD SCHEDULE. CERTAIN SYMBOLS & ABBREVIATIONS INDICATED ON THIS SCHEDULE MAY NOT APPEAR ON THE DRAWINGS.
- EQUIPMENT SYMBOLS SHOWN DASHED ON THE DRAWINGS INDICATE EXISTING EQUIPMENT.

### LIGHTING AND POWER LEGEND

	LIGHTING FIXTURE - RECESSED MOUNTED
	LIGHTING FIXTURE - SURFACE MOUNTED
	LIGHTING FIXTURE - PENDANT MOUNTED
	LIGHTING FIXTURE - WALL MOUNTED
	LIGHTING FIXTURE STRIP
	EMERGENCY LIGHTING FIXTURE
	RECESSED DOWN LIGHT
	LIGHTING FIXTURE - WALL MOUNTED
	FLOOD TYPE LIGHTING FIXTURE OR TRACK HEAD
	EMERGENCY BATTERY PACK LIGHTING FIXTURE
	REMOTE EMERGENCY LIGHTING UNIT
	PENDANT MOUNTED LIGHTING FIXTURE
	WALL WASH LIGHTING FIXTURE - RECESSED MOUNTED
	WALL SCONCE LIGHTING FIXTURE - WALL MOUNTED
	LIGHTING BOLLARD OR POST
	POLE MOUNTED AREA LUMINAIRE
	DECORATIVE ARCHITECTURAL LIGHTING
<b>NOTE</b> DESIGNATION INDICATES LIGHTING FIXTURE TYPE. REFER TO LIGHTING FIXTURE SCHEDULE ON DRAWING E702 FOR ADDITIONAL INFORMATION.	
	EXIT SIGN - BACK SURFACE MOUNTED - SINGLE FACE
	EXIT SIGN - CEILING MOUNTED - SINGLE FACE
	EXIT SIGN - CEILING MOUNTED - DOUBLE FACE
	EXIT SIGN - WALL MOUNTED - SINGLE OR DOUBLE FACE
SEE FLOOR PLANS FOR EXIT AND DESIGNATION SIGNS REQUIRING DIRECTIONAL ARROWS	
	SINGLE POLE SWITCH - MOUNTED 48" AFF UNO
	3-WAY SWITCH - MOUNTED 48" AFF UNO
	4-WAY SWITCH - MOUNTED 48" AFF UNO
	IN WALL-TYPE DIMMER - MOUNTED 48" AFF UNO
	KEY OPERATED SWITCH - MOUNTED 48" AFF UNO
	TIMER SWITCH SET WITH 30 MINUTE DIAL UNLESS NOTED OTHERWISE
	OCCUPANCY/VACANCY SENSOR SWITCH - DUAL TECHNOLOGY - WALL MOUNTED W/ ON/OFF OVERRIDE - MOUNTED 48" AFF UNO - REFER TO 3/E601 FOR ADDITIONAL INFORMATION
	WEATHERPROOF SWITCH - MOUNTED 48" AFF UNO
	LOW VOLTAGE SWITCH - MOUNTED 48" AFF UNO - NUMBER BESIDE DEVICE INDICATES NUMBER ON LOW VOLTAGE CONTROL SCHEDULES ON DRAWING E702
	DAY LIGHTING SENSOR - CEILING MOUNTED - NUMBER BESIDE DEVICE INDICATES NUMBER ON LOW VOLTAGE CONTROL SCHEDULES ON DRAWING E702
	OCCUPANCY/VACANCY SENSOR - DUAL TECHNOLOGY - CEILING MOUNTED - NUMBER BESIDE DEVICE INDICATES NUMBER ON LOW VOLTAGE CONTROL SCHEDULES ON DRAWING E702
	OCCUPANCY/VACANCY - DUAL TECHNOLOGY - WALL OR CEILING - NUMBER BESIDE DEVICE INDICATES NUMBER ON LOW VOLTAGE CONTROL SCHEDULES ON DRAWING E702
	OCCUPANCY/VACANCY - DUAL TECHNOLOGY - CEILING MOUNTED - (FOR HALLWAYS) - NUMBER BESIDE DEVICE INDICATES NUMBER ON LOW VOLTAGE CONTROL SCHEDULES ON DRAWING E702
	PHOTOELECTRIC CELL
	SWITCH WITH PILOT LIGHT (PILOT LIGHT IS ON WHEN SWITCH IS IN OFF POSITION) MOUNTED 48" AFF UNO
	SINGLE PHASE MANUAL MOTOR SWITCH WITH OVERLOADS - MOUNTED 48" AFF UNO
	ON-OFF-STOP PUSHBUTTON
	DUPLEX RECEPTACLE - MOUNTED 18" AFF UNO
	QUAD RECEPTACLE - MOUNTED 18" AFF UNO
	DUPLEX RECEPTACLE - MOUNTED 6" ABOVE BACK SPLASH OF COUNTERTOP
	DUPLEX GROUND FAULT INTERRUPTER TYPE RECEPTACLE - MOUNTED 18" AFF UNO
	DUPLEX GROUND FAULT INTERRUPTER TYPE WEATHERPROOF RECEPTACLE - MOUNTED 18" AFF UNO
	TWISTLOCK RECEPTACLE - RATING AS SHOWN ON DRAWINGS
	DUPLEX RECEPTACLE - MOUNTED FLUSH IN FLOOR - FINISH AS SELECTED BY ARCHITECT
	QUAD RECEPTACLE - MOUNTED FLUSH IN FLOOR - FINISH AS SELECTED BY ARCHITECT
	DUPLEX GROUND FAULT INTERRUPTER TYPE RECEPTACLE - ELECTRIC WATER COOLER - COORDINATE MOUNTING HEIGHT W/ EQUIPMENT MANUFACTURER
	DUPLEX RECEPTACLE WITH ONE (1) USB PORT AND ONE (1) USB-C PORT
	SWITCHED DUPLEX RECEPTACLE (TOP HALF ONLY)
	SWITCHED DOUBLE DUPLEX RECEPTACLE (TOP HALF ONLY)
	TELEVISION DUPLEX RECEPTACLE - REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHTS
	DUPLEX RECEPTACLE - CEILING MOUNTED - PROJECTOR
	SPECIAL PURPOSE RECEPTACLE - CONFIGURATION TO MATCH EQUIPMENT SUPPLIED

	JUNCTION BOX
	ENCLOSED CIRCUIT BREAKER - REFER TO MECHANICAL/PLUMBING/ETC EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL INFORMATION.
	VARIABLE FREQUENCY DRIVE
	COMBINATION DISCONNECT SWITCH AND STARTER - REFER TO MECHANICAL/PLUMBING/ETC EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL INFORMATION.
	NON-FUSED DISCONNECT SWITCH - REFER TO MECHANICAL/PLUMBING/ETC EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL INFORMATION.
	FUSED DISCONNECT SWITCH - REFER TO MECHANICAL/PLUMBING/ETC EQUIPMENT CONNECTION SCHEDULE FOR ADDITIONAL INFORMATION.
	MOTOR
	ELECTRICAL PANELBOARD - RECESSED MOUNTED
	ELECTRICAL PANELBOARD - SURFACE MOUNTED
	INDICATES KEYNOTES
	PHASE
	THERMOSTAT
	SWITCH LEG
	SWITCHED CIRCUIT
	BRANCH CIRCUIT
	UNDERGROUND SECONDARY ELECTRICAL
	UNDERGROUND PRIMARY ELECTRICAL
	UNDERGROUND EMERGENCY ELECTRICAL
	HOMERUN TO PANELBOARD ARROWS INDICATE NUMBER OF CIRCUITS IN CONDUIT (3#12 FOR EACH CIRCUIT-12"C UNLESS NOTED OTHERWISE)
	POWER SUPPLY 120V TO 24V DC
	COMBINATION POWER/TELECOMMUNICATION FLOOR BOX
	MOTOR OPERATED DAMPER PROVIDED WITH MANUAL MOTOR STARTER
	COMBINATION SMOKE AND FIRE DAMPER PROVIDED WITH MANUAL MOTOR STARTER
	SMOKE DAMPER WITH MANUAL MOTOR STARTER
	JUNCTION BOX FINAL CONNECTION TO EQUIPMENT
	CONNECTION TO FAN POWER BOX W/ SINGLE POLE SWITCH FOR DISCONNECTING MEANS
	ELECTRIC STRIKE
	DOUBLE OR TRIPLE COMPARTMENT SURFACE METAL RACEWAY - SEE FLOOR PLANS FOR TYPE, LENGTH AND QUANTITY OF DEVICES
	CONTACTOR - RATING AS NOTED
	PHOTO-ELECTRIC CELL
	RECESSED CEILING SPEAKER
	GROUNDING ELECTRODE
	TELEVISION OUTLET
	TELECOMMUNICATION OUTLET
	TELEPHONE OUTLET
	CROSSHATCHING INDICATES EQUIPMENT, CONDUIT/CONDUCTORS AND ASSOCIATED DISCONNECTING MEANS TO BE RENDERED DEAD AND REMOVED UNDER DEMOLITION WORK BACK TO THE SOURCE OR DESTINATION UNLESS NOTED OR SHOWN OTHERWISE

### SECTION/DETAIL MARKS

	SECTION NUMBER
	DRAWING NUMBER WHERE DRAWN
	DETAIL NUMBER
	DRAWING NUMBER WHERE DRAWN
	1/E601 1 = DETAIL DESIGNATION/ E601 = DRAWING NUMBER DETAIL IS SHOWN ON
	NEW CONNECTION TO EXISTING
	DISCONNECT EXISTING EQUIPMENT

### FIRE ALARM SYSTEM LEGEND

	CONTROL ZONE ADDRESSABLE MODULE
	FIRE ALARM SYSTEM - FLOW SWITCH FOR SPRINKLER SYSTEM FURNISHED AND INSTALLED BY PC, WIRED BY EC
	FIRE ALARM SYSTEM - TAMPER SWITCH (SUPERVISED VALVE) FOR SPRINKLER SYSTEM, FURNISHED AND INSTALLED BY PC, WIRED BY EC
	FIRE ALARM SYSTEM - PRESSURE SWITCH FOR SPRINKLER SYSTEM, FURNISHED AND INSTALLED BY PC, WIRED BY EC
	FIRE ALARM SYSTEM DUCT DETECTOR, FURNISHED AND WIRED BY EC INSTALLED BY HC COMPLETE W/ SHUTDOWN RELAY AND TEST STATION
	FIRE ALARM SYSTEM CONTROL PANEL
	FIRE ALARM SYSTEM ANNUCIATOR PANEL
	FIRE ALARM SYSTEM PULL STATION
	FIRE ALARM SYSTEM SMOKE DETECTOR - PHOTOELECTRIC TYPE
	FIRE ALARM SYSTEM HEAT DETECTOR - FIXED TEMPERATURE
	FIRE ALARM PHOTOELECTRIC SMOKE DETECTOR FOR ELEVATOR RECALL
	FIRE ALARM SYSTEM COMBINATION HORN/STROBE WALL MOUNTED - NUMBER IN (X) INDICATES CANDELLA RATING
	FIRE ALARM SYSTEM COMBINATION HORN/STROBE CEILING MOUNTED - NUMBER IN (X) INDICATES CANDELLA RATING
	FIRE ALARM SYSTEM ADA STROBE - WALL MOUNTED - NUMBER IN (X) INDICATES CANDELLA RATING
	FIRE ALARM SYSTEM DOOR HOLDER
	INDIVIDUAL ADDRESSABLE MODULE
	EXTERIOR FIRE ALARM SYSTEM COMBINATION HORN/STROBE - WEATHERPROOF - NUMBER IN (X) INDICATES CANDELLA RATING
	FIRE ALARM CARBON MONOXIDE DETECTOR

**NOTE:**  
REFER TO FIRE ALARM RECOMMENDED DEVICE MOUNTING HEIGHTS DETAIL 1/E601 FOR ADDITIONAL INFORMATION.

### GENERAL NOTES - ELECTRICAL

- REFER TO ARCHITECTURAL DETAILS, ELEVATIONS AND REFLECTED CEILING PLANS FOR LOCATION AND COORDINATION OF LIGHTING FIXTURES IN CEILING CONSTRUCTION.
- ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2020 NATIONAL ELECTRICAL CODE AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
- ALL WIRE, CONDUIT, CONNECTORS, OUTLETS BOXES, ETC. NECESSARY TO ACHIEVE A COMPLETE ELECTRICAL INSTALLATION WHERE AN ELECTRICAL DEVICE IS REQUIRED BY CODE BUT NOT SHOWN SHALL BE FURNISHED AND INSTALLED AS THOUGH FULLY SHOWN AND SPECIFIED.
- ALL CONDUIT, JUNCTION BOXES, ETC. ABOVE CEILINGS SHALL BE SUPPORTED FROM THE TOP OR BOTTOM CORD OF BAR JOIST. LIGHTING FIXTURES WHICH ARE INSTALLED IN SUSPENDED CEILING SYSTEM MUST BE MECHANICALLY FASTENED TO T-BAR SYSTEM AS PER SPECIFICATIONS.
- NO CONDUITS SHALL BE RUN THROUGH OR SUPPORTED FROM DUCTWORK.
- ALL ELECTRICAL WORK, WIRING, CONNECTIONS AND ASSOCIATED EQUIPMENT WITHIN THE AREA OF WORK SHALL BE AS PER APPLICABLE ARTICLES OF THE NATIONAL ELECTRICAL CODE. COORDINATE WITH SPECIFICATIONS FOR DEVICE REQUIREMENTS.
- IT IS CALLED TO THE CONTRACTOR'S ATTENTION THAT THE ENTIRE INSTALLATION MUST BE GROUNDED IN COMPLIANCE WITH THE NATIONAL ELECTRICAL CODE. ALL DEVICES, EQUIPMENT BOXES, ETC. MUST BE CONNECTED TO A SOLID, INSULATED GREEN, COPPER GROUNDING CONDUCTOR. THIS GROUNDING CONDUCTOR MUST BE CONTINUOUS WITHOUT SPLICES FROM POINT OF ORIGIN IN PANELBOARD TO ALL BOXES AND EQUIPMENT ON EACH BRANCH CIRCUIT. VERIFY GROUNDING VALUES AND SUBMIT A TYPEWRITTEN REPORT TO THE ARCHITECT INDICATING TESTING RESULTS OF EACH CIRCUIT AT THE COMPLETION OF THE PROJECT.
- FOR SINGLE PHASE 20 AMP CIRCUITS, UNLESS NOTED OTHERWISE, NEW WIRING INDICATED SHALL BE 2 #12 & #12 GROUND IN 1/2" CONDUIT. FOR THREE PHASE 20 AMP CIRCUITS, UNLESS NOTED OTHERWISE, NEW WIRING INDICATED SHALL BE 4 #12 & #12 GROUND IN 1/2" CONDUIT. FOR CIRCUITS THAT REQUIRE LONG TRAVEL DISTANCES, REFER TO VOLTAGE DROP NOTE THIS DRAWING.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL APPROVED FIRE STOPPING AT ALL FLOOR SLAB/CEILING AND WALL PENETRATIONS WITHIN THE LIMITS OF CONTRACT WORK AREA TO MAINTAIN THE FIRE RATED CONSTRUCTION.
- AFTER CONSTRUCTION, ALL UNUSED SPACES IN PANELS SHALL BE LABELED AS A 'PROVISION', ALL SPARE BREAKERS SHALL BE PLACED IN THE OFF POSITION AND LABELED AS 'SPARE'.
- COORDINATE EXACT LOCATIONS OF FLOOR BOXES WITH ARCHITECT PRIOR TO INSTALLATION.
- COORDINATE ALL ELECTRICAL DEVICE MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS.

### ABBREVIATIONS

A	AMPERE	MCA	MINIMUM CIRCUIT AMPACITY
AB	ABOVE COUNTER	MCB	MAIN CIRCUIT BREAKER
AC	ALTERNATING CURRENT	MCC	MOTOR CONTROL CENTER
ADA	AMERICANS W/ DISABILITIES ACT	MI	MINERAL INSULATED CABLE
AF	AMP FRAME, AMP FUSE	MH	METAL HALIDE
AFF	ABOVE FINISH FLOOR	MN	MINIMUM
AHU	AIR HANDLING UNIT	MLO	MAIN LUGS ONLY
APPROX	APPROXIMATELY	MMS	MANUAL MOTOR STARTER
AS	AMMETER SWITCH	MOD	MOTOR OPERATED DAMPER
AT	AMP TRIP	MOCP	MAXIMUM OVERCURRENT PROTECTION
@	AT	MTD	MOUNTED
ATC	AUTOMATIC TEMPERATURE CONTROL	NC	NORMALLY CLOSED
ATS	AUTOMATIC TRANSFER SWITCH	NE	NORMAL EMERGENCY
AUX	AUXILIARY	NEC	NATIONAL ELECTRICAL CODE
BAS	BUILDING AUTOMATION SYSTEM	NEUT	NEUTRAL
C	CONDUIT	NF	NON FUSED
CB	CIRCUIT BREAKER	NIC	NOT IN CONTRACT
CCTV	CLOSED CIRCUIT TV	NO	NORMALLY OPEN
CD	CANDELLA	P	POLE(S)
CKT	CIRCUIT	PC	PLUMBING CONTRACTOR
CL	CENTER LINE	PNL	PANEL
CLG	CEILING	PRI	PRIMARY
CT	CURRENT TRANSFORMER	PRV	POWER ROOF VENTILATOR
CUH	CABINET UNIT HEATER	PVC	POLYVINYL CHLORIDE
DFA	DOWN FROM ABOVE	RECP	RECEPTACLE
DIA	DIAMETER	REQD	REQUIRED
DIST	DISTRIBUTION	RTU	ROOF TOP UNIT
DC	DIRECT CURRENT	SBC	SUB BRANCH CONTROLLER
DN	DOWN	SEC	SECONDARY
DWG	DRAWING	SHT	SHEET
EA	EACH	SMR	SURFACE METAL RACEWAY
EC	ELECTRICAL CONTRACTOR	SPD	SURGE PROTECTION DEVICE
EF	EXHAUST FAN	SPDT	SINGLE POLE DOUBLE THROW
EHUH	ELECTRIC HORIZONTAL UNIT HEATER	SPECS	SPECIFICATIONS
ELEV	ELEVATOR	SSCHP	SPLIT SYSTEM CEILING HEAT PUMP
EMT	ELECTRIC METALLIC TUBING	SSHHP	SPLIT SYSTEM HORIZONTAL HEAT PUMP
EQ	EQUAL	SSWHP	SPLIT SYSTEM HORIZONTAL HEAT PUMP
EX	EXISTING (EXIST)	STR	STARTER
EWC	ELECTRIC WATER COOLER	SW	SWITCH
EWL	ELECTRIC WALL HEATER	TEMP	TEMPORARY
FPB	FAN POWERED BOX	TV	TELEVISION
FCU	FAN COIL UNIT	TYP	TYPICAL
FEC	FIRE EXTINGUISHER CABINET	UHT	HORIZONTAL UNIT HEATER
FDR	FEEDER	UNO	UNLESS NOTED OTHERWISE
FU	FUSE	UPE	UNDERGROUND PRIMARY ELECTRICAL
GFI	GROUND FAULT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SUPPLY
GRD	GROUND	USE	UNDERGROUND SECONDARY ELECTRICAL
HC	HVAC CONTRACTOR	UV	UNIT VENTILATOR
HP	HORSEPOWER	VFD	VARIABLE FREQUENCY DRIVE
IG	ISOLATED GROUND	V	VOLT
JB	JUNCTION BOX	W	WIRE
KCMIL	THOUSAND CIRCULAR MILS	W	WITH
KV	KILOVOLT	WCR	WITHSTAND AND CLOSING RATINGS
KVA	KILOVOLT AMPERES	WP	WEATHERPROOF
KW	KILOWATT	XP	EXPLOSION PROOF
LSI	LONG, SHORT, INSTANTANEOUS		
LTS	LIGHTS		
MBC	MAIN BRANCH CONTROLLER		
MC	METAL CLAD CABLE		



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
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SEAL:



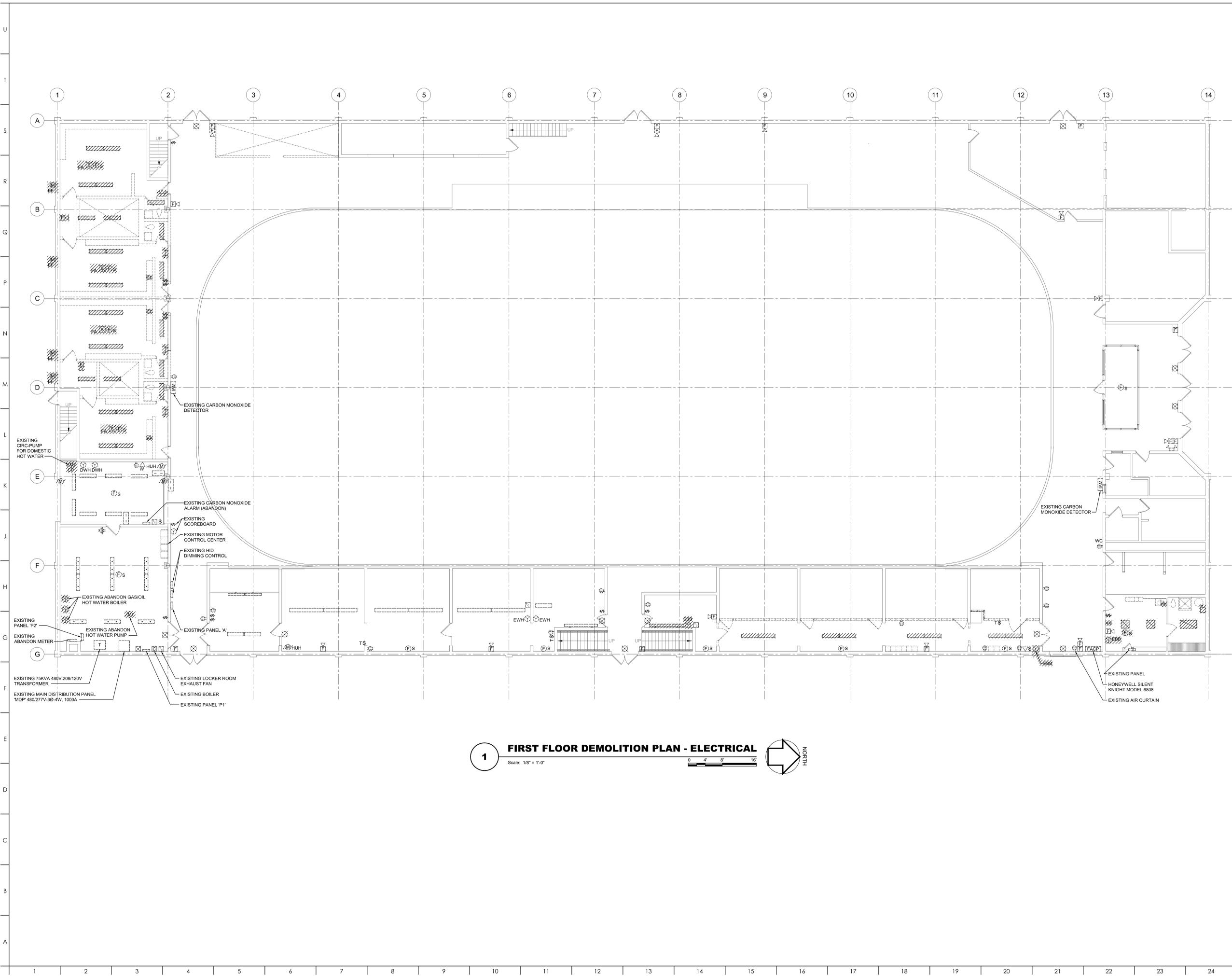
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DRAWING TITLE:  
FIRST FLOOR  
DEMOLITION PLAN -  
ELECTRICAL

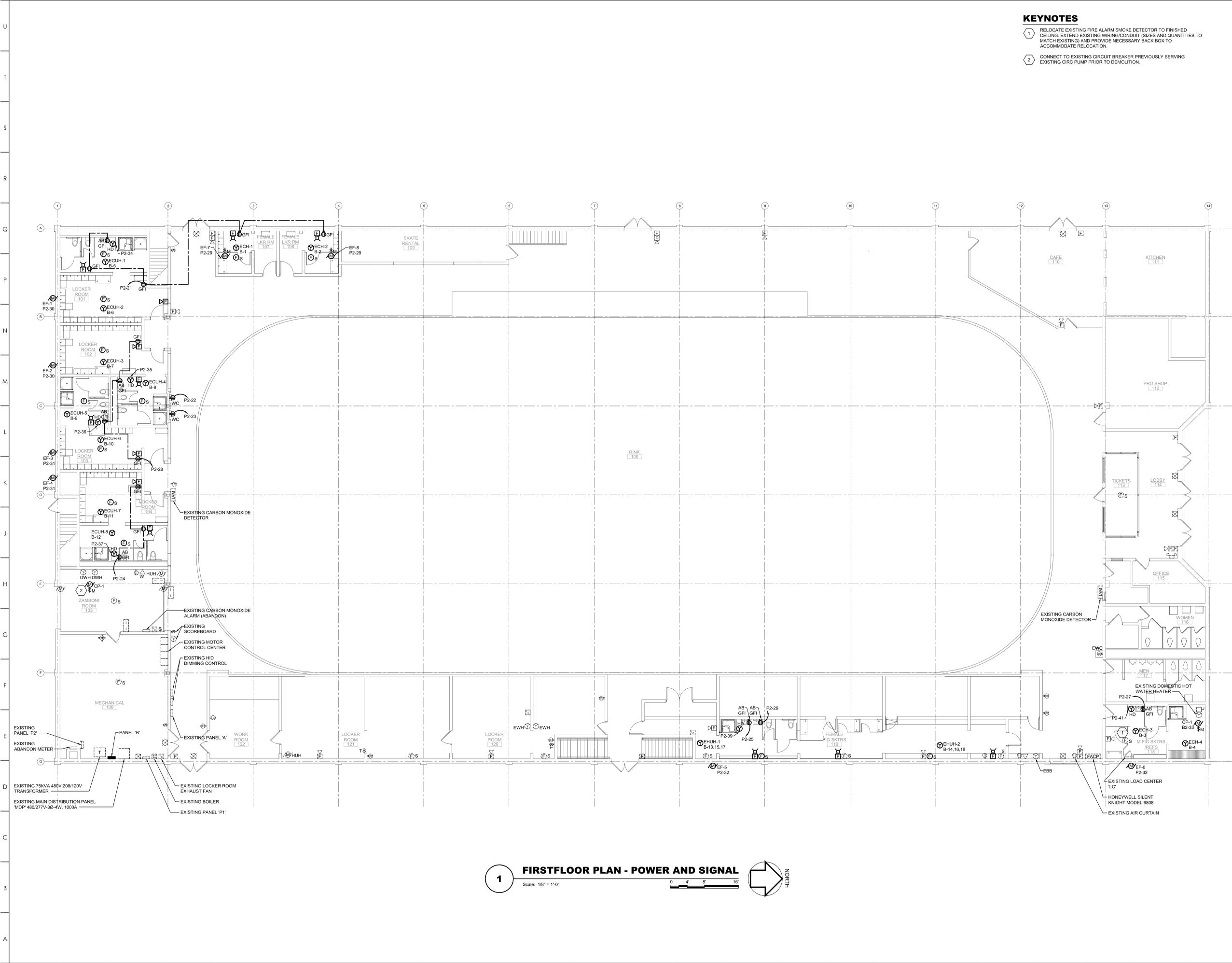
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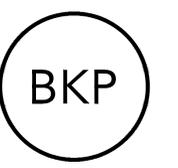
**1** **FIRST FLOOR DEMOLITION PLAN - ELECTRICAL**  
Scale: 1/8" = 1'-0"  
0 4' 8' 16'  
NORTH





**KEYNOTES**

- ① RELOCATE EXISTING FIRE ALARM SMOKE DETECTOR TO FINISHED CEILING. EXTEND EXISTING WIRING/CONDUIT (SIZES AND QUANTITIES TO MATCH EXISTING) AND PROVIDE NECESSARY BACK BOX TO ACCOMMODATE RELOCATION.
- ② CONNECT TO EXISTING CIRCUIT BREAKER PREVIOUSLY SERVING EXISTING CIRC PUMP PRIOR TO DEMOLITION.



ARCHITECT:  
 BKP ARCHITECTS P.C.  
 1525 LOCUST STREET  
 PHILADELPHIA, PA 19102  
 T: 215.557.6509

MEP ENGINEER:  
 H.F. LENZ CO.  
 1407 SCALP AVENUE  
 JOHNSTOWN, PA 15904  
 T: 814.269.9300

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 HAVERFORD TOWNSHIP  
 DELAWARE COUNTY  
 1014 DARBY ROAD  
 HAVERTOWN, PA 19083-2551

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 1002 DARBY ROAD #3616  
 HAVERTOWN, PENNSYLVANIA 19083

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DATE: SEPTEMBER 19, 2024
PROJECT NO: 2024-02
DRAWN BY: SMS
CHECKED BY: SPM
SUBMISSION DATE:
PERMIT SET: 8/19/2024
BID SET: 9/19/2024

REVISION	DATE

DRAWING TITLE:  
**FIRST FLOOR PLAN -  
 POWER AND SIGNAL**

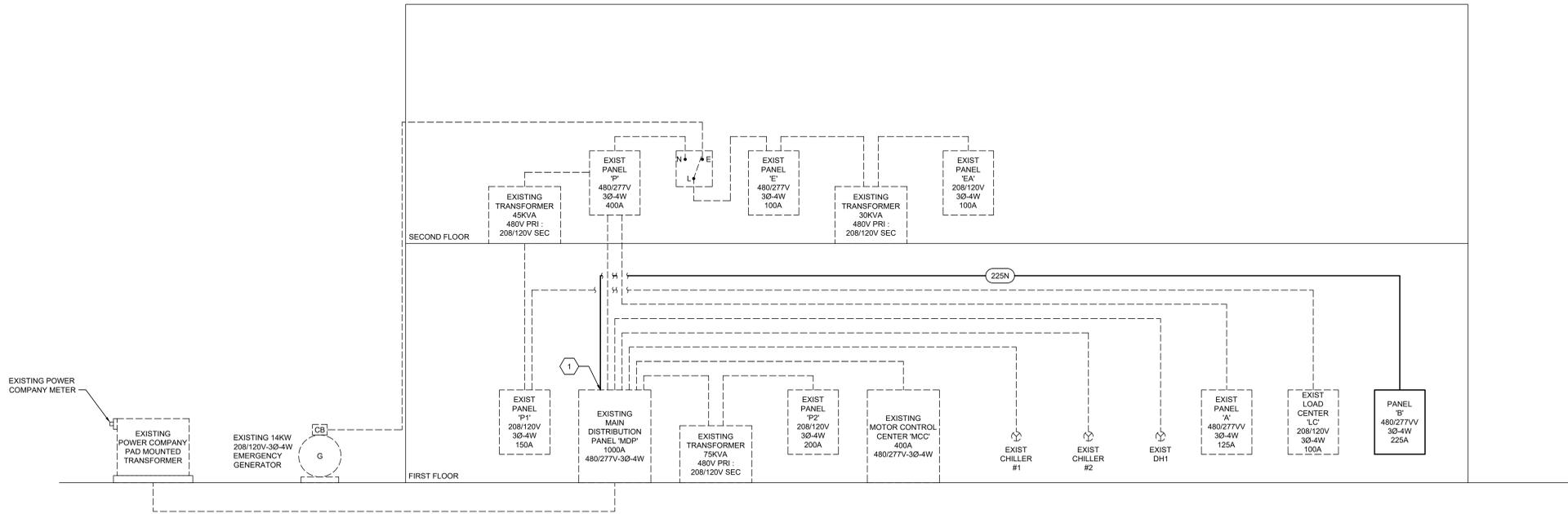
DRAWING NO:  
**E301**

**1 FIRSTFLOOR PLAN - POWER AND SIGNAL**  
 Scale: 1/8" = 1'-0"  
 0 4' 8' 16'

U  
T  
S  
R  
Q  
P  
N  
M  
L  
K  
J  
H  
G  
F  
E  
D  
C  
B  
A

**KEYNOTES**

1 PROVIDE A 225A-3P CIRCUIT BREAKER IN EXISTING MAIN DISTRIBUTION PANEL 'MDP' PROVISIONAL SPACE. REFER TO 2/E601 FOR ADDITIONAL INFORMATION.



**1 RISER DIAGRAM - ELECTRICAL**  
NOT TO SCALE

FEEDER SCHEDULE									
FEEDER NUMBER	QTY of SETS	PHASE CONDUCTORS (PER SET)		NEUTRAL CONDUCTORS (PER SET)		GROUND CONDUCTORS (PER SET)		CONDUIT SIZE (PER SET)	NOTES
		QTY	SIZE	QTY	SIZE	QTY	SIZE		
225N	1	3	4/0	1	4/0	1	4	2"	



EXISTING PROVISIONAL SPACE FOR 225A-3P CIRCUIT BREAKER FOR PANEL 'B'

EXISTING DATA  
MANUFACTURER: SQUARE D - OED SERIES 2  
1000A-480/277V-30-4W  
PLANT CODE 44  
CAT# 3863335-001

**2 EXISTING MAIN DISTRIBUTION PANEL 'MDP'**  
NOT TO SCALE



ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

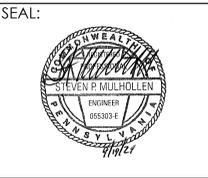
MEP ENGINEER:  
H.F. LENZ CO.  
1407 SCALP AVENUE  
JOHNSTOWN, PA 15904  
T: 814.269.9300

STRUCTURAL ENGINEER:  
JBC ENGINEERS  
1617 JOHN F KENNEDY BLVD.  
SUITE 1655  
PHILADELPHIA, PA

CLIENT:  
HAVERFORD TOWNSHIP  
DELAWARE COUNTY  
1014 DARBY ROAD  
HAVERTOWN, PA 19083-2551

SKATIUM LOCKER ROOM  
RENOVATIONS  
1002 DARBY ROAD #3616  
HAVERTOWN, PENNSYLVANIA 19083

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DRAWING TITLE:  
**RISER DIAGRAM - ELECTRICAL**

DRAWING NO.:

# E501





ARCHITECT:  
BKP ARCHITECTS P.C.  
1525 LOCUST STREET  
PHILADELPHIA, PA 19102  
T: 215.557.6509

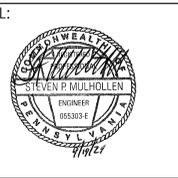
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1407 SCALP AVENUE  
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DRAWING TITLE:  
SCHEDULES -  
ELECTRICAL

DRAWING NO:  
E701

EXISTING PANEL A (NEW WORK)										
BUSING		100	AMPS	VOLTAGE	120/208V	1-Ph	3-W			
MAIN DEVICE		MLO	MOUNTING	SURFACE						
NO	DESCRIPTION	CB/P	CB/P	DESCRIPTION	NO	LOAD				
700	1	EXIST ZAMBONI ROOM	20/1	20/1	EXIST EXTERIOR LIGHTS SOUTH	2	1500			
	3	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST EXTERIOR LIGHTS NORTH	4	1500			
	5	EXIST NOT LABELED (ON POSITION)	20/1	20/1	LOCKER ROOM LIGHTING	6	1126			
	7	EXIST RICK'S OFFICE	20/1	20/1	LOCKER ROOM LIGHTING	8	420			
	9	EXIST NOT LABELED (ON POSITION)	20/1	20/1	SPARE	10				
	11	SPARE	20/1	20/1	SPARE	12				
	13	SPARE	20/1	20/1	SPARE	14				
	15	SPARE	20/1	20/1	SPARE	16				
	17	SPARE	20/1	20/1	EXIST RINK LIGHTS - R	18	2000			
	19	SPARE	20/1	20/1	EXIST RINK LIGHTS - U	20	2000			
	21	EXIST RINK LIGHTS - I	20/1	20/1	EXIST RINK LIGHTS - V	22	2000			
	23	EXIST RINK LIGHTS - A	20/1	20/1	EXIST RINK LIGHTS - K	24	2000			
	25	EXIST RINK LIGHTS - B	20/1	20/1	EXIST RINK LIGHTS - L	26	2000			
	27	EXIST RINK LIGHTS - C	20/1	20/1	EXIST RINK LIGHTS - M	28	2000			
	29	EXIST RINK LIGHTS - D	20/1	20/1	EXIST RINK LIGHTS - N	30	2000			
	31	EXIST RINK LIGHTS - E	20/1	20/1	EXIST RINK LIGHTS - O	32	2000			
	33	EXIST RINK LIGHTS - F	20/1	20/1	EXIST RINK LIGHTS - P	34	2000			
	35	EXIST RINK LIGHTS - G	20/1	20/1	EXIST RINK LIGHTS - Q	36	2000			
	37	EXIST RINK LIGHTS - H	20/1	20/1	EXIST RINK LIGHTS - R	38	2000			
	39	EXIST RINK LIGHTS - I	20/1	20/1	EXIST RINK LIGHTS - S	40	2000			
	41	EXIST RINK LIGHTS - J	20/1	20/1	EXIST RINK LIGHTS - T	42	2000			
MANUFACTURER: SQUARE D - TYPE NF										
7068	A	1=LIGHTING	6=	MISC	A	9920				
8000	B	2=POWER (RECEPT)	7=	AIR CONDITIONING	B	9500				
6000	C	3= MOTOR			C	9126				
				A PHASE WATTS	16988					
				B PHASE WATTS	17500					
				C PHASE WATTS	15126					
				TOTAL WATTS	49614	TOTAL CONNECTED AMPS=	60 A			

PANEL B									
BUSING		225	AMPS	VOLTAGE	480/277V	3-Ph	4-W		
S.C.R		25,000	AIC	SURFACE					
MAIN DEVICE		MLO	MOUNTING	SURFACE					
LOAD	NO	DESCRIPTION	CB/P	CB/P	DESCRIPTION	NO	LOAD		
2000	1	ECH-1	20/1	20/1	ECH-2	2	2000		
4000	3	ECH-3	20/1	20/1	ECH-4	4	2000		
3000	5	ECUH-1	20/1	20/1	ECUH-2	6	3000		
3000	7	ECUH-3	20/1	20/1	ECUH-4	8	3000		
3000	9	ECUH-5	20/1	20/1	ECUH-6	10	3000		
3000	11	ECUH-7	20/1	20/1	ECUH-8	12	3000		
2500	13	-	-	-	-	14	2500		
2500	15	EHUH-1	20/3	20/3	EHUH-2	16	2500		
2500	17	-	-	-	-	18	2500		
	19	SPARE	20/1	20/1	SPARE	20			
	21	SPARE	20/1	20/1	SPARE	22			
	23	SPARE	20/1	20/1	SPARE	24			
	25	SPARE	20/1	20/1	SPARE	26			
	27	SPARE	20/1	20/1	SPARE	28			
	29	SPARE	20/1	20/1	SPARE	30			
	31	PROVISION	-	-	PROVISION	32			
	33	PROVISION	-	-	PROVISION	34			
	35	PROVISION	-	-	PROVISION	36			
	37	PROVISION	-	-	PROVISION	38			
	39	PROVISION	-	-	PROVISION	40			
	41	PROVISION	-	-	PROVISION	42			
7500	A				A	7500			
9500	B				B	7500			
8500	C				C	8500			
				A PHASE WATTS	15000				
				B PHASE WATTS	17000				
				C PHASE WATTS	17000				
				TOTAL WATTS	49000	TOTAL CONNECTED AMPS=	59 A		

EXISTING PANEL P2 (NEW WORK)									
BUSING		200	AMPS	VOLTAGE	208/120V	3-Ph	4-W		
MAIN DEVICE		200A MCB	MOUNTING	SURFACE					
LOAD	NO	DESCRIPTION	CB/P	CB/P	DESCRIPTION	NO	LOAD		
3600	1	EXIST RIGHT EV CHARGER #2	40/2	40/2	EXIST LEFT EV CHARGER #1	2	3600		
3600	3	-	-	-	-	4	3600		
540	5	EXIST EXTERIOR RECEPTACLES	20/1	30/2	EXIST LOCKER ROOM HEATER	6	2500		
720	7	EXIST MECH ROOM RECEPTACLES	20/1	-	-	8	2500		
	9	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	10			
	11	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	12			
	13	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	14			
	15	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	16			
3600	17	EXIST RIGHT EV CHARGER (PUBLIC)	40/2	40/2	EXIST LEFT EV CHARGER (TOWNSHIP)	18	3600		
3600	19	-	-	-	-	20	3600		
900	21	RECEPTACLES	20/1	20/1	ELECTRIC WATER COOLER	22	500		
450	23	ELECTRIC WATER COOLER	20/1	20/1	RECEPTACLES	24	540		
180	25	RECEPTACLE	20/1	20/1	RECEPTACLE	26	180		
180	27	RECEPTACLE	20/1	20/1	RECEPTACLES	28	720		
36	29	EF-7 AND EF-8	20/1	20/1	EF-1 & EF-2	30	1056		
1056	31	EF-3 & EF-4	20/1	20/1	EF-5 & EF-6	32	1056		
950	33	CP-1	20/1	20/1	HAND DRYER	34	950		
950	35	HAND DRYER	20/1	20/1	HAND DRYER	36	950		
950	37	HAND DRYER	20/1	-	PROVISION	38			
950	39	HAND DRYER	20/1	-	PROVISION	40			
950	41	HAND DRYER	20/1	-	PROVISION	42			
MANUFACTURER: SQUARE D - TYPE NQ									
10106	A	1=LIGHTING	6=	MISC	A	10936			
6130	B	2=POWER (RECEPT)	7=	AIR CONDITIONING	B	5770			
5626	C	3= MOTOR			C	8646			
				A PHASE WATTS	21042				
				B PHASE WATTS	11900				
				C PHASE WATTS	14272				
				TOTAL WATTS	47214	TOTAL CONNECTED AMPS=	131 A		

EXISTING PANEL P (EXISTING CONDITIONS)									
BUSING		400	AMPS	VOLTAGE	480/277V	3-Ph	4-W		
MAIN DEVICE		MCB	MOUNTING	SURFACE					
NO	DESCRIPTION	CB/P	CB/P	DESCRIPTION	NO				
1	PROVISION	-	-	PROVISION	2				
3	PROVISION	-	-	PROVISION	4				
5	PROVISION	-	-	PROVISION	6				
7	EXIST HOT WATER HEATER ROOM A10	40/2	-	-	8				
9	-	-	100/3	EXIST TRANSFER SWITCH (NORMAL)	10				
11	PROVISION	-	-	-	12				
13	PROVISION	-	-	PROVISION	14				
15	PROVISION	-	-	PROVISION	16				
17	PROVISION	-	-	PROVISION	18				
19	-	-	-	-	20				
21	EXIST AIR COMPRESSOR	20/3	20/3	EXIST NOT LABELED (ON POSITION)	22				
23	-	-	-	-	24				
25	-	-	-	-	26				
27	EXIST PUMP P-1	60/3	XW3	EXIST OLD RANGE CIRCUIT NO LONGER USED	28				
29	-	-	-	-	30				
31	-	-	40/2	EXIST NOT LABELED (ON POSITION)	32				
33	EXIST NOT LABELED (ON POSITION)	100/3	-	-	34				
35	-	-	-	PROVISION	36				
37	-	-	-	PROVISION	38				
39	EXIST PANEL 'A'	125/3	-	PROVISION	40				
41	-	-	-	PROVISION	42				
MANUFACTURER: PENN PANEL & BOX CO. - CAT #CDP-42-4L									

EXISTING PANEL P1 (EXISTING CONDITIONS)									
BUSING		225	AMPS	VOLTAGE	208/120V	3-Ph	4-W		
MAIN DEVICE		150A MCB	MOUNTING	SURFACE					
NO	DESCRIPTION	CB/P	CB/P	DESCRIPTION	NO				
1	-	-	20/1	EXIST HEATER HOT WATER	2				
3	EXIST NOT LABELED (ON POSITION)	60/3	20/1	EXIST HEATER BOILER	4				
5	-	-	20/1	EXIST CONTROL CIRCUIT CHILLER	6				
7	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	8				
9	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST CONTROL CIRCUIT CHILLER	10				
11	EXIST 2ND FLOOR RECEPTACLES	20/1	20/1	EXIST HEATER CONTROL PANEL	12				
13	EXIST OFFICES 2ND FLOOR	20/1	20/1	EXIST OUTSIDE LIGHT CONTROL CIRCUIT	14				
15	EXIST LOCKER ROOM EXHAUST FAN TIMER	20/1	20/1	EXIST NOT LABELED (ON POSITION)	16				
17	EXIST MCC CONTROL	20/1	20/1	EXIST CIRC PUMP TOWER FILL SOLENOID VALVE	18				
19	EXIST CHILLER 2	20/1	20/1	EXIST CIRC PUMP HOT WATER TANK	20				
21	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	22				
23	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	24				
25	-	-	-	-	26				
27	EXIST NOT LABELED (ON POSITION)	100/3	30/3	EXIST NOT LABELED (ON POSITION)	28				
29	-	-	-	-	30				
31	EXIST RECEPTACLE AT TOP OF STANDS	20/1	20/1	EXIST ZAMBONI ROOM FANS	32				
33	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST CHILLER 1	34				
35	EXIST RECEPTACLE UNDER STANDS	20/1	20/1	EXIST LOCKER ROOM EMERGENCY LIGHTS	36				
37	EXIST 2ND FLOOR RESTROOM RECEPTACLES	20/1	20/1	EXIST NOT LABELED (ON POSITION)	38				
39	EXIST 2ND FLOOR RESTROOM RECEPTACLES	20/1	20/1	EXIST EXHAUST FAN MECH ROOM	40				
41	SPARE	20/1	20/1	EXIST UNIT HEATER ZAMBONI ROOM	42				
MANUFACTURER: SQUARE D - TYPE NQ									

EXISTING PANEL P2 (EXISTING CONDITIONS)									
BUSING		200	AMPS	VOLTAGE	208/120V	3-Ph	4-W		
MAIN DEVICE		200A MCB	MOUNTING	SURFACE					
NO	DESCRIPTION	CB/P	CB/P	DESCRIPTION	NO				
1	EXIST RIGHT EV CHARGER #2	40/2	40/2	EXIST LEFT EV CHARGER #1	2				
3	-	-	-	-	4				
5	EXIST EXTERIOR RECEPTACLES	20/1	30/2	EXIST LOCKER ROOM HEATER	6				
7	EXIST MECH ROOM RECEPTACLES	20/1	-	-	8				
9	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	10				
11	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	12				
13	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	14				
15	EXIST NOT LABELED (ON POSITION)	20/1	20/1	EXIST NOT LABELED (ON POSITION)	16				
17	EXIST RIGHT EV CHARGER (PUBLIC)	40/2	40/2	EXIST LEFT EV CHARGER (TOWNSHIP)	18				
19	-	-	-	-	20				
21	PROVISION	-	-	PROVISION	22				
23	PROVISION	-	-	PROVISION	24				
25	PROVISION	-	-	PROVISION	26				
27	PROVISION	-	-	PROVISION	28				
29	PROVISION	-	-	PROVISION	30				
31	PROVISION	-	-	PROVISION	32				
33	PROVISION	-	-	PROVISION	34				
35	PROVISION	-	-	PROVISION	36				
37	PROVISION	-	-	PROVISION	38				
39	PROVISION	-	-	PROVISION	40				
41	PROVISION	-	-	PROVISION	42				
MANUFACTURER: SQUARE D - TYPE NQ									

**GENERAL NOTES**

- EXISTING PANEL CONDITIONS WHERE OBTAINED FROM FIELD SURVEY NOTES. EC SHALL FIELD VERIFY ALL EXISTING CONDITIONS.
- BOLD LETTERING IN SCHEDULE INDICATES NEW CIRCUIT AND/OR CIRCUIT BREAKER INSTALLED IN EXISTING PANEL.
- AFTER CONSTRUCTION, ALL UNUSED SPACES IN PANELS SHALL BE LABELED AS 'PROVISION'. ALL SPARE BREAKERS SHALL BE PLACED IN THE OFF POSITION AND LABELED 'SPARE'.
- PANEL MUST BE BALANCED AFTER WORK IS COMPLETE AND PRIOR TO UPDATING PANEL DIRECTORY



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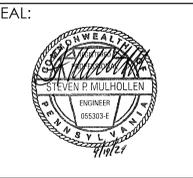
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DRAWING TITLE:  
SCHEDULES -  
ELECTRICAL

DRAWING NO:  
E702

**LIGHTING FIXTURE SCHEDULE**

DESIGNATION	DESCRIPTION	LED CHARACTERISTICS	VOLTAGE/ DRIVER	MOUNTING	MANUFACTURER	CATALOG NUMBER	REMARKS
A	4"W X 4"H X 4"-0" RECESSED LED LIGHTING FIXTURE WITH ONE-PIECE EXTRUDED FROST ACRYLIC DIFFUSER	24W LED 3000 LUMENS 80 CRI, 4000K	UNIVERSAL 1% 0-10V DIMMING	RECESSED	KENALL	MRS4-48-FL-SYM-750LFT-27/65K8-ATW-DV KIRLIN VRL-Q25VM-4FT-750L-DD-40K NECRAY S124DR-V795D92765-ETG4F0-1-UW2A-F-AMW	1
Ae	4"W X 4"H X 4"-0" RECESSED LED LIGHTING FIXTURE WITH ONE-PIECE EXTRUDED FROST ACRYLIC DIFFUSER AND INTEGRAL EMERGENCY BACKUP WITH REMOTE TEST SWITCH	24W LED 3000 LUMENS 80 CRI, 4000K	UNIVERSAL 1% 0-10V DIMMING	RECESSED	KENALL	MRS4-48-FL-SYM-750LFT-27/65K8-ATW-DV-LEL KIRLIN VRL-Q25VM-4FT-750L-DD-40K-89 NECRAY S124DR-V795D92765-ETG4F0-1B2-UW2A-F-AMW	1
B2	7"-0" LED WALL MOUNTED LIGHTING FIXTURE WITH ONE-PIECE 20 GAUGE CRS BASEPLATE AND END CAPS AND ONE PIECE .156 P12 POLYCARBONATE LENS	25W LED 3000 LUMENS 80 CRI, 4000K	UNIVERSAL 1% 0-10V DIMMING	ABOVE MIRROR	KENALL	RS-24-25L-40K-DCC-1-DV-156 LUMINAIRE LVP524-2FT-MINI-25W-40K-MVOLT-CLP-WHT FAIL-SAFE FVS4M-2-LD4-28TD-35-UNV-P187-EDD1	1
C	4" DIAMETER LED DOWNLIGHT WITH WHITE FINISH AND PRISMATIC LENS	35W LED 2100 LUMENS 80 CRI, 4000K	ELECTRONIC DRIVER	RECESSED	SPECTRUM LIGHTING	RDFO4XT30L40KMDIE1H12-RD4FTXMMWPGX MOBURN A4VEFLEDU-4040K-L4014SCL-ZDM PRECOLITE LFR-4RD-M-30L-40K8-MD-DM1EM-LFR-4RD-T-WCLFR-4RD-H/SFL4	1
Ce	4" DIAMETER LED DOWNLIGHT WITH WHITE FINISH AND PRISMATIC LENS AND INTEGRAL EMERGENCY BATTERY	35W LED 2100 LUMENS 80 CRI, 4000K	ELECTRONIC DRIVER	RECESSED	SPECTRUM LIGHTING	RDFO4XT30L40KMDIE1H12EM-RD4FTXMMWPGX MOBURN A4VEFLEDU-4040K-L4014SCL-ZDM-EMH17 PRECOLITE LFR-4RD-M-30L-40K8-MD-DM1EM-LFR-4RD-T-WCLFR-4RD-H/SFL4	1
D	3.5"W X 2.6"D X 4'-0" LED SURFACE MOUNTED LIGHTING FIXTURE WITH UV-STABILIZED, HIGH-EFFICIENCY DIFFUSED POLYCARBONATE LENS	24W LED 3200 LUMENS 80 CRI, 4000K	UNIVERSAL 1% 0-10V DIMMING	SURFACE	KENALL	MLHA3-48-F-MW-PP-800LF-40K8-DIM1-DV LUMINAIRE VPP4-4FT-PRD-800LMF-40K-MVOLT-OP-WHT FAIL-SAFE HVL52-4-LD4-STD-35-UNV-O-ED1D1-ALHA-SF1	1
De	3.5"W X 2.6"D X 4'-0" LED SURFACE MOUNTED LIGHTING FIXTURE WITH UV-STABILIZED, HIGH-EFFICIENCY DIFFUSED POLYCARBONATE LENS AND INTEGRAL 10W BATTERY BACKUP	24W LED 3200 LUMENS 80 CRI, 4000K	UNIVERSAL 1% 0-10V DIMMING	SURFACE	KENALL	MLHA3-48-F-MW-PP-800LF-40K8-DIM1-DV-LEL LUMINAIRE VPP4-4FT-PRD-800LMF-40K-MVOLT-OP-WHT-EMB310 FAIL-SAFE HVL52-4-LD4-STD-35-UNV-O-ED1D1-ALHA-SF1-EL10W	1
E	2' X 4' RECESSED LED FIXTURE WITH PRISMATIC LENS AND MATTE WHITE FINISH	27W LED 4000 LUMENS 80 CRI, 4000K	UNIVERSAL 10% 0-10V DIMMING	RECESSED	LITHONIA	SPX-2X4-4000LM-80CRI-40K-BFR-MPL-MIN10-2T-MVOLT-MW ADVANTAGE LIGHTING SOLUTIONS LPA-4-BACKLIT-FILM-MPR24 COLUMBIA SRP24-40MWG-ED1U	1
Ee	2' X 4' RECESSED LED FIXTURE WITH PRISMATIC LENS, MATTE WHITE FINISH AND 10W BATTERY BACKUP	27W LED 4000 LUMENS 80 CRI, 4000K	UNIVERSAL 10% 0-10V DIMMING	RECESSED	LITHONIA	SPX-2X4-4000LM-80CRI-40K-BFR-MPL-MIN10-2T-MVOLT-E10WLCP-MW ADVANTAGE LIGHTING SOLUTIONS LPA-4-BACKLIT-EM10SDFILM-MPR24 COLUMBIA SRP24-40MWG-ED1U-ELL14	1
EM	COMMERCIAL LED EMERGENCY LIGHTING UNIT WITH WHITE FINISH, WET PROTECTIVE VANDAL SHIELD AND NICAD BATTERY	TWO (2) 6.6W LED	120/277V	WALL 7'-6" AFF	LITHONIA	ELM4L-WPVS SURE-LITES SELP100R3 DUAL-LITE VRS	1
EX	SINGLE OR DOUBLE FACE LED EXIT SIGN WITH RED LETTERS, THERMOPLASTIC HOUSING, WHITE FINISH AND NICAD BATTERY	LED	120/277V	UNIVERSAL	LITHONIA	LQM S W 3 R 120/277 ELN SURE-LITES APX7RG COMPASS CER	1
F	2.25"W X 3"D X 4'-0" PENDANT LED STRIP LIGHT WITH SNAP ON LENS AND WHITE FINISH	41W LED 5000 LUMENS 80 CRI, 4000K	UNIVERSAL 10% 0-10V DIMMING	PENDANT 9'-0" AFF	LITHONIA	ZL1D L48-3000LM-FST-MVOLT-40K-80CRI-WH METALUX 4SNX-31SL-LW-UNV-L840-CD1-U COLUMBIA MP54-40VW-CW-ED1U/SS18	1

REMARKS  
1. THE EC IS RESPONSIBLE FOR ALL LIGHTING, MOUNTING ACCESSORIES, POWER SUPPLIES AND MISC PIECES TO INSURE A COMPLETE INSTALLATION. REFER TO FLOOR PLANS FOR LOCATION AND LENGTH OF RUNS.

**MECHANICAL/PLUMBING/ETC. EQUIPMENT CONNECTION SCHEDULE**

EQUIPMENT #	LOAD	VOLTAGE/ PHASE	WIRE SIZE	CONDUIT SIZE	SAFETY SWITCH ENCLOSURE	SIZE	NEMA/HP SIZE	STARTER ENCLOSURE	NOTES
CP-1	1/12 HP	120/1	2#12 & #12 GRD	1/2"	MMS	-	-	-	
ECH-1	2.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECH-2	2.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECH-3	4.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECH-4	2.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECUH-1	3.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECUH-2	3.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECUH-3	3.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECUH-4	3.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECUH-5	3.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECUH-6	3.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECUH-7	3.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
ECUH-8	3.0 KW	277/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
EF-1	1/10 HP	120/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
EF-2	1/10 HP	120/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
EF-3	1/10 HP	120/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
EF-4	1/10 HP	120/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
EF-5	1/10 HP	120/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
EF-6	1/15 HP	120/1	2#12 & #12 GRD	1/2"	-	-	-	-	1
EF-7	18 W	120/1	2#12 & #12 GRD	1/2"	-	-	-	-	1, 2
EF-8	18 W	120/1	2#12 & #12 GRD	1/2"	-	-	-	-	1, 2
EHUH-1	7.5 KW	480/3	3#12 & #12 GRD	1/2"	-	-	-	-	1
EHUH-2	7.5 KW	480/3	3#12 & #12 GRD	1/2"	-	-	-	-	1

NOTES:  
1. SINGLE POINT CONNECTION WITH INTEGRAL DISCONNECTING MEANS.  
2. INTERLOCKED WITH ROOM OCCUPANCY SENSORS.

**DIGITAL ROOM CONTROLLER (POWER PACK) SCHEDULE**

DRC NUMBER	RELAYS	AREA CONTROLLED	CONTROL	NOTES
101	1, 0-10V DIM	LOCKER ROOM 101 ALL FIXTURES	LVS, OS	AUTO ON, AUTO OFF AFTER 20 MINUTES WHEN UNOCCUPIED - REFER TO 2/E601
102	1, 0-10V DIM	LOCKER ROOM 102 ALL FIXTURES	LVS, OS	AUTO ON, AUTO OFF AFTER 20 MINUTES WHEN UNOCCUPIED - REFER TO 2/E601
103	1, 0-10V DIM	LOCKER ROOM 103 ALL FIXTURES	LVS, OS	AUTO ON, AUTO OFF AFTER 20 MINUTES WHEN UNOCCUPIED - REFER TO 2/E601
104	1, 0-10V DIM	LOCKER ROOM 104 ALL FIXTURES	LVS, OS	AUTO ON, AUTO OFF AFTER 20 MINUTES WHEN UNOCCUPIED - REFER TO 2/E601
107	1, 0-10V DIM	FEMALE LOCKER ROOM 107 ALL FIXTURES	LVS, OS	AUTO ON, AUTO OFF AFTER 20 MINUTES WHEN UNOCCUPIED - REFER TO 2/E601, NOTE 1
108	1, 0-10V DIM	FEMALE LOCKER ROOM 108 ALL FIXTURES	LVS, OS	AUTO ON, AUTO OFF AFTER 20 MINUTES WHEN UNOCCUPIED - REFER TO 2/E601, NOTE 1
118	1, 0-10V DIM	M FIG SKTRM ROOMS 118 ALL FIXTURES	LVS, OS	MANUAL ON, AUTO OFF AFTER 20 MINUTES WHEN UNOCCUPIED - REFER TO 2/E601
119b	1, 0-10V DIM	FEMALE FIG SKTRM 119 ALL FIXTURES	LVS, OS	AUTO ON, AUTO OFF AFTER 20 MINUTES WHEN UNOCCUPIED - REFER TO 2/E601
119c	1, 0-10V DIM	FEMALE FIG SKTRM 119 (RESTROOM) ALL FIXTURES	LVS, OS	AUTO ON, AUTO OFF AFTER 20 MINUTES WHEN UNOCCUPIED - REFER TO 2/E601

NOTES: TC = TIME CLOCK, PC = PHOTOELECTRIC CELL, OS = OCCUPANCY SENSOR, LVS = LOW VOLTAGE SWITCH, D = DAYLIGHT SENSOR, PLC = PLUG LOAD CONTROLLER  
1. PROVIDE DIGITAL ROOM CONTROLLER WITH AN EXTRA CONTACT FOR INTERLOCKING ROOM EXHAUST FAN CONTROL.

**LOW VOLTAGE CONTROL STATION SCHEDULE**

CONTROL STATION NUMBER	DESCRIPTION	BUTTON NUMBER	DIGITAL ROOM CONTROLLER NUMBER	NOTES
LVS-101	ON/OFF	-	DRC-101	0-10V DIMMING
LVS-102	ON/OFF	-	DRC-102	0-10V DIMMING
LVS-103	ON/OFF	-	DRC-103	0-10V DIMMING
LVS-104	ON/OFF	-	DRC-104	0-10V DIMMING
LVS-118	ON	1	DRC-118	0-10V DIMMING
LVS-118	OFF	2	DRC-118	0-10V DIMMING
LVS-119a	LINE VOLTAGE SWITCH	-	-	REFER TO 3/E601 - MANUAL ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES
LVS-119b	ON	1	DRC-119b	0-10V DIMMING
LVS-119c	OFF	2	DRC-119c	0-10V DIMMING
LVS-119d	ON	1	DRC-119d	0-10V DIMMING
LVS-119e	OFF	2	DRC-119e	0-10V DIMMING
CONTROL STATION NUMBER	DESCRIPTION	BUTTON NUMBER	DIGITAL ROOM CONTROLLER NUMBER	NOTES
OS-101	OCCUPANCY (DUAL TECH)	-	DRC-101	AUTO ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES
OS-102	OCCUPANCY (DUAL TECH)	-	DRC-102	AUTO ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES
OS-103	OCCUPANCY (DUAL TECH)	-	DRC-103	AUTO ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES
OS-104	OCCUPANCY (DUAL TECH)	-	DRC-104	AUTO ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES
OS-107	OCCUPANCY (DUAL TECH)	-	DRC-107	AUTO ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES
OS-108	OCCUPANCY (DUAL TECH)	-	DRC-108	AUTO ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES
OS-118	VACANCY (DUAL TECH)	-	DRC-118	MANUAL ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES
OS-119b	OCCUPANCY (DUAL TECH)	-	DRC-119b	AUTO ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES
OS-119c	OCCUPANCY (DUAL TECH)	-	DRC-119c	AUTO ON, UNOCCUPIED TIMEOUT AFTER 20 MINUTES

NOTES: LVS = LOW VOLTAGE SWITCH, OS = OCCUPANCY SENSOR, DRC = DIGITAL ROOM CONTROLLER, D = DAYLIGHT SENSOR