ISSUE DATE: DECEMBER 22, 2023

CONSTRUCTION DOCUMENTS

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

KAHLER SLATER PROJECT: 223010.00 WAUWATOSA PROJECT: #8036; CONTRACT #24-60



MEP ENGINEERS:

17400 CAPITOL DR.

(414) 778-1700

RING & DUCHATEAU

BROOKFIELD, WI 53045

JEFFREY C.

D 1900 P GRAFTON, WI

12/22/2023

PLUMBING DRAWINGS

MEP ENGINEERS:

RING & DUCHATEAU

BROOKFIELD, WI 53045

MICHAEL A.

BARTLEY

MILWAUKEE,

12.22.2023

MECHANICAL DRAWINGS

17400 CAPITOL DR.

(414) 778-1700

MEP ENGINEERS:

RING & DUCHATEAU

BROOKFIELD, WI 53045

HEATHER

ST. LEDGER

MILWAUKEE,

12-22-23

ELECTRICAL DRAWINGS

TOS/ONAL KI

17400 CAPITOL DR.

(414) 778-1700

ICE ENGINEERS:

2211 O'NEIL RD.

(651) 256-3090

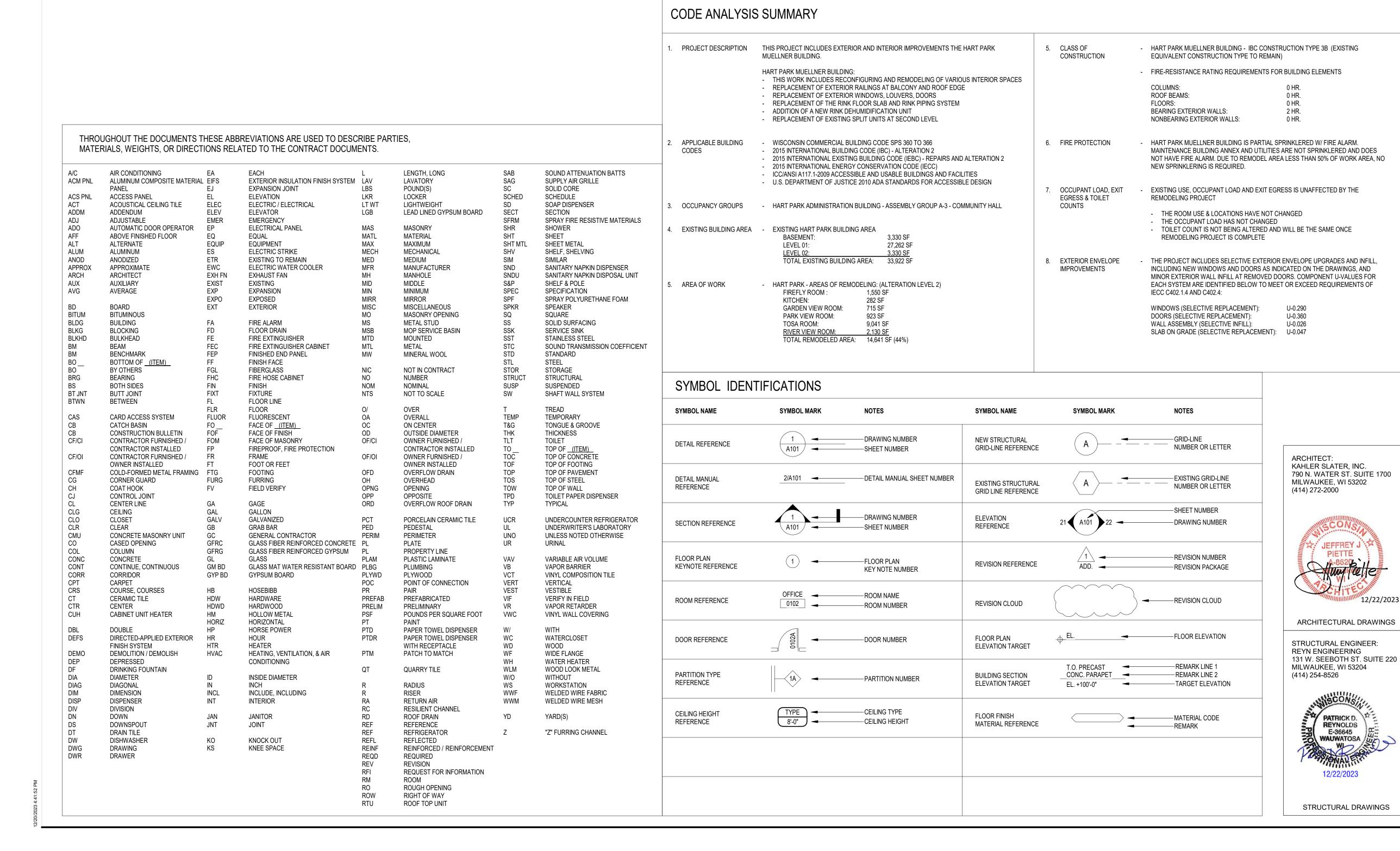
HUDSON, WI 54016

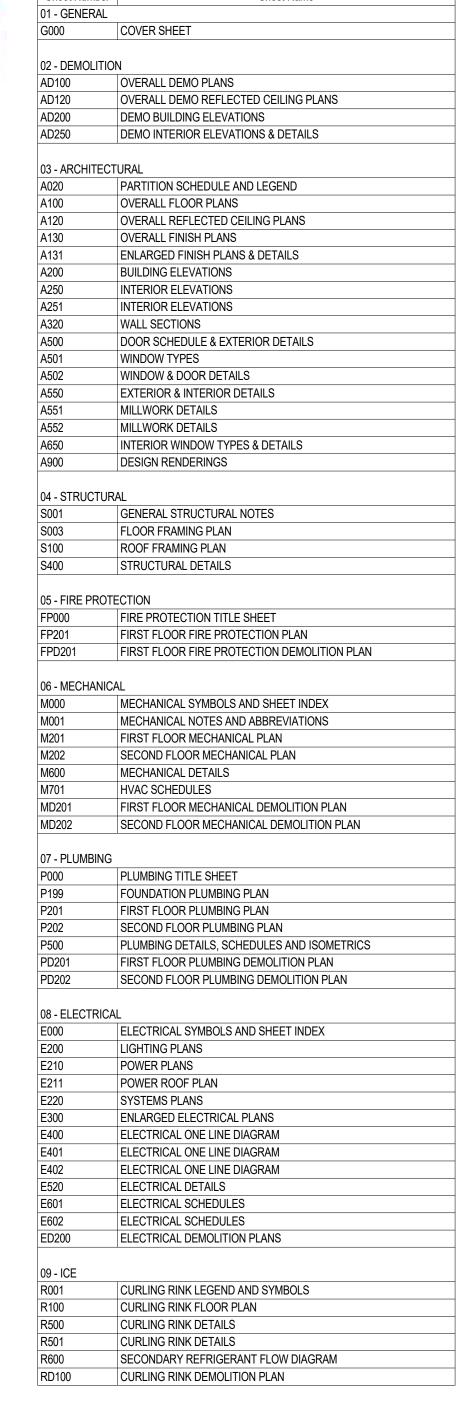
B32 ENGINEERING GROUP

WARD 34714-006 ST. PAUL.

RINK DRAWINGS

Issued for Board of Public Works Approvals Only Not To Be Used For Bidding





Revisions

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MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. CITY OF WALLWATOSA WALLWATOSA

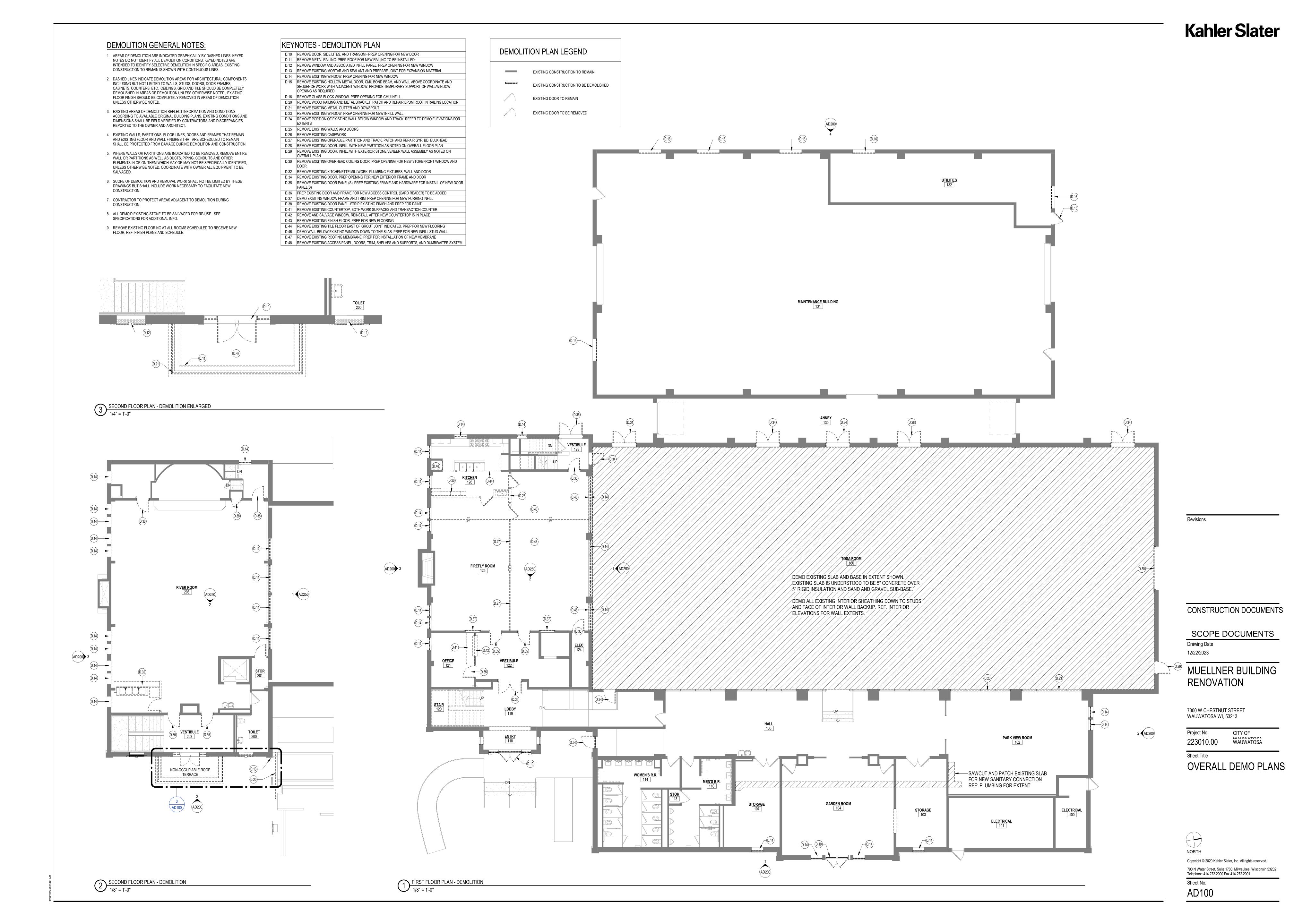
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COVER SHEET

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Sheet No.



DEMO RCP LEGEND								
	EXISTING CEILING SYSTEM TO REMAIN		EXISTING LIGHT FIXTURES TO REMAIN					
	EXISTING CEILING SYSTEM TO BE DEMOLISHED		EXISTING LIGHT FIXTURES TO BE DEMOLISHED					

KEYNOTES - DEMOLITION PLAN

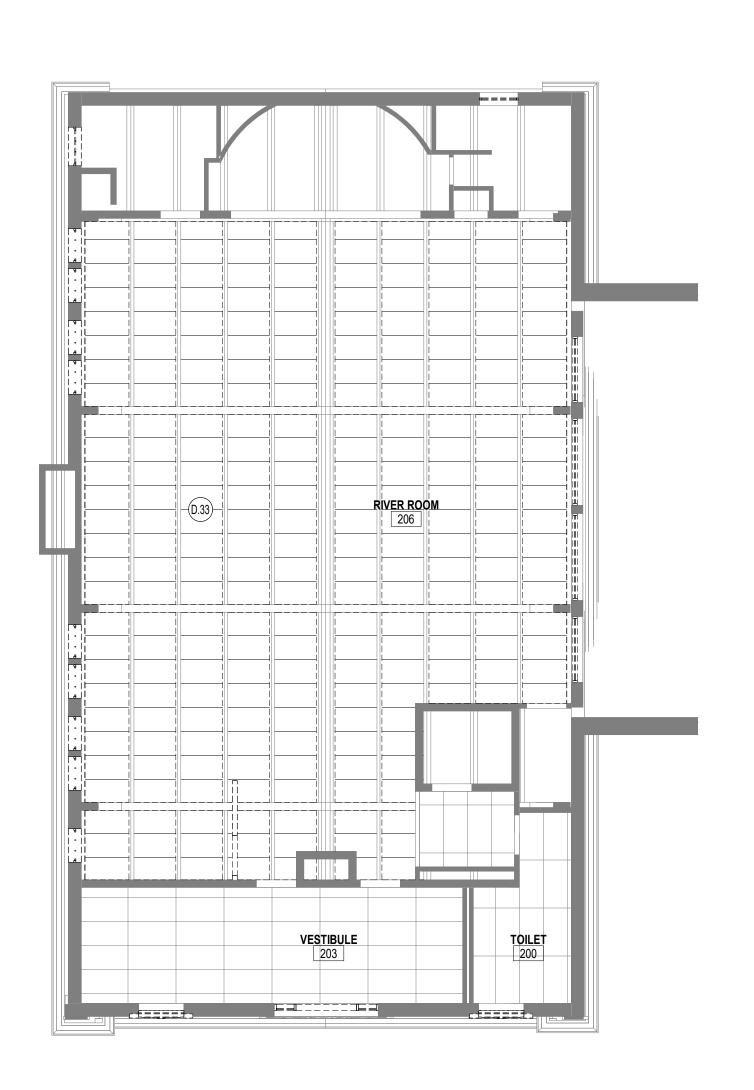
- D.27 REMOVE EXISTING OPERABLE PARTITION AND TRACK. PATCH AND REPAIR GYP. BD. BULKHEAD
 D.31 REMOVE EXISTING SOFFIT, TYP. FOR LENGTH OF TOSA ROOM
- D.31 REMOVE EXISTING SOPPTI, TTP. FOR LENGTH OF TOSA ROOM

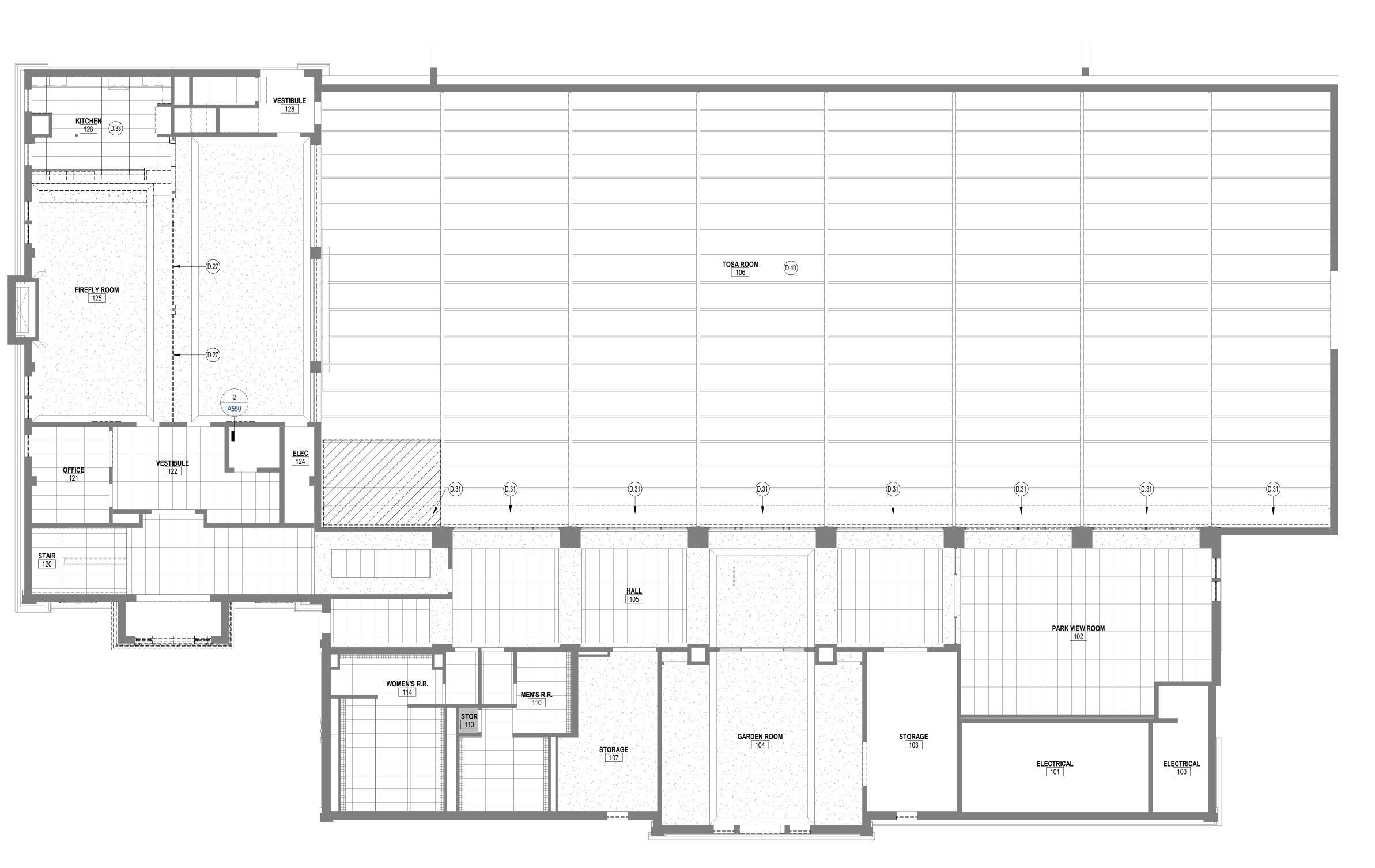
 D.33 REMOVE EXISTING CEILING GRID AND TILES, TYP. EXISTING GRID AND TRIM TO BE SALVAGED AND
- PAINTED FOR INSTALLATION WITH NEW CEILING TILES

 D.40 REMOVE ALL EXISTING PLASTIC CEILING SHEETING AND SUB-FRAMING. FILL FASTENER HOLES AND PREP EXISTING WOOD STRUCTURE AND DECK FOR SEALING
- D.45 DEMO EXISTING ROOF DECK & STRUCTURE AS REQUIRED FOR NEW DUCT PENETRATIONS. EXISTING DUCT OPENINGS TO BE INFILLED WITH NEW WOOD ROOF DECK TO MATCH EXISTING

DEMOLITION GENERAL NOTES:

- AREAS OF DEMOLITION ARE INDICATED GRAPHICALLY BY DASHED LINES. KEYED NOTES DO NOT IDENTIFY ALL DEMOLITION CONDITIONS. KEYED NOTES ARE INTENDED TO IDENTIFY SELECTIVE DEMOLITION IN SPECIFIC AREAS. EXISTING CONSTRUCTION TO REMAIN IS SHOWN WITH CONTINUOUS LINES.
- 2. DASHED LINES INDICATE DEMOLITION AREAS FOR ARCHITECTURAL COMPONENTS INCLUDING BUT NOT LIMITED TO WALLS, STUDS, DOORS, DOOR FRAMES, CABINETS, COUNTERS, ETC. CEILINGS, GRID AND TILE SHOULD BE COMPLETELY DEMOLISHED IN AREAS OF DEMOLITION UNLESS OTHERWISE NOTED. EXISTING FLOOR FINISH SHOULD BE COMPLETELY REMOVED IN AREAS OF DEMOLITION UNLESS OTHERWISE NOTED.
- EXISTING AREAS OF DEMOLITION REFLECT INFORMATION AND CONDITIONS
 ACCORDING TO AVAILABLE ORIGINAL BUILDING PLANS. EXISTING CONDITIONS AND
 DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTORS AND DISCREPANCIES
 REPORTED TO THE OWNER AND ARCHITECT.
- 4. EXISTING WALLS, PARTITIONS, FLOOR LINES, DOORS AND FRAMES THAT REMAIN AND EXISTING FLOOR AND WALL FINISHES THAT ARE SCHEDULED TO REMAIN SHALL BE PROTECTED FROM DAMAGE DURING DEMOLITION AND CONSTRUCTION.
- 5. WHERE WALLS OR PARTITIONS ARE INDICATED TO BE REMOVED, REMOVE ENTIRE WALL OR PARTITIONS AS WELL AS DUCTS, PIPING, CONDUITS AND OTHER ELEMENTS IN OR ON THEM WHICH MAY OR MAY NOT BE SPECIFICALLY IDENTIFIED, UNLESS OTHERWISE NOTED. COORDINATE WITH OWNER ALL EQUIPMENT TO BE SALVAGED.
- SCOPE OF DEMOLITION AND REMOVAL WORK SHALL NOT BE LIMITED BY THESE DRAWINGS BUT SHALL INCLUDE WORK NECESSARY TO FACILITATE NEW CONSTRUCTION.
- 7. CONTRACTOR TO PROTECT AREAS ADJACENT TO DEMOLITION DURING CONSTRUCTION.
- 8. ALL DEMO'D EXISTING STONE TO BE SALVAGED FOR RE-USE. SEE SPECIFICATIONS FOR ADDITIONAL INFO.
- 9. REMOVE EXISTING FLOORING AT ALL ROOMS SCHEDULED TO RECEIVE NEW FLOOR. REF: FINISH PLANS AND SCHEDULE.





Revisions

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MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. CITY OF WALIWATOSA

Sheet Title

12/22/2023

OVERALL DEMO REFLECTED CEILING PLANS

NORTH

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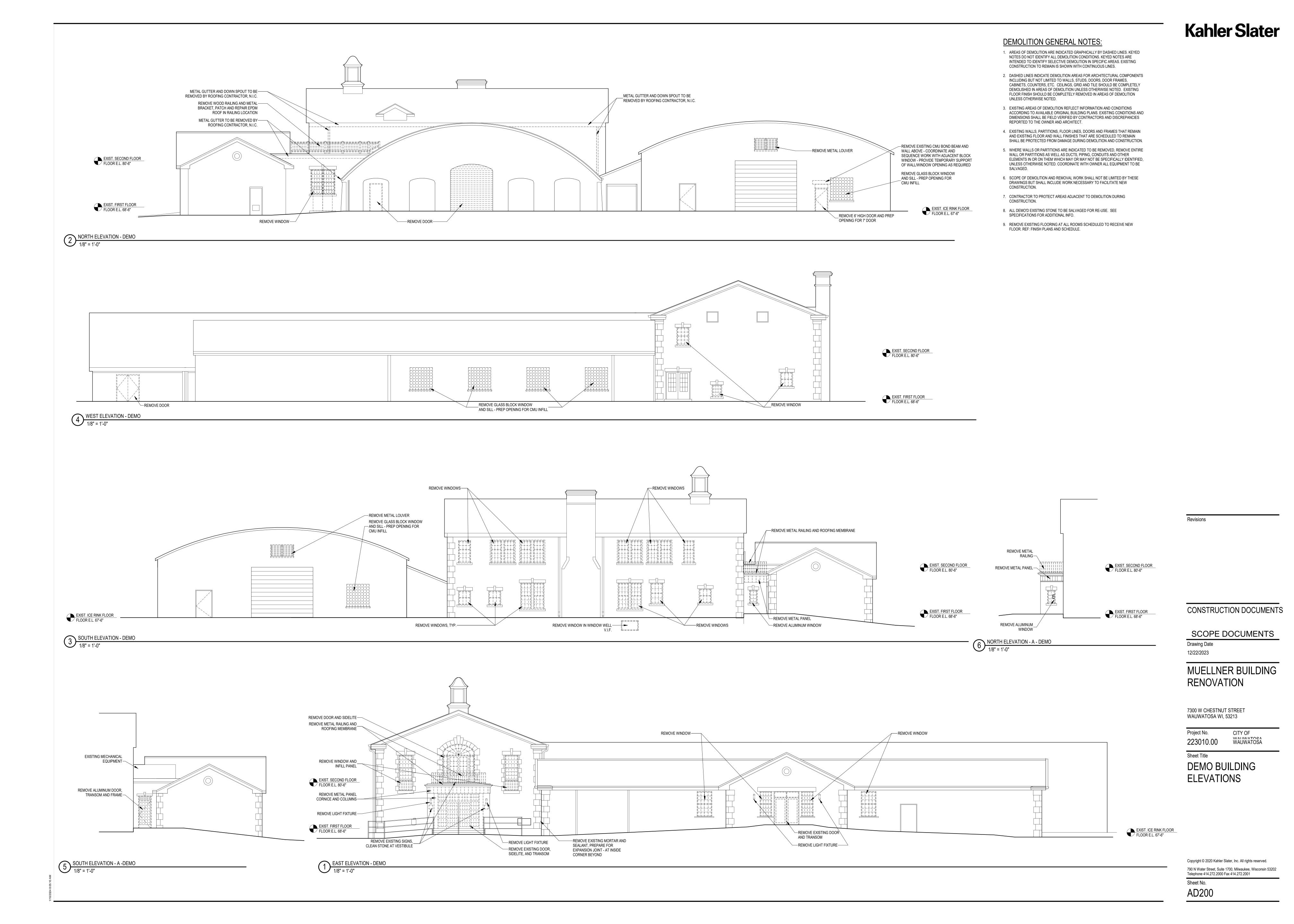
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AD120

SECOND FLOOR REFLECTED CEILING PLAN - DEMOLITION

1/8" = 1'-0"

FIRST FLOOR REFLECTED CEILING PLAN - DEMOLITION

1/8" = 1'-0"



DEMOLITION GENERAL NOTES:

- 1. AREAS OF DEMOLITION ARE INDICATED GRAPHICALLY BY DASHED LINES. KEYED NOTES DO NOT IDENTIFY ALL DEMOLITION CONDITIONS. KEYED NOTES ARE INTENDED TO IDENTIFY SELECTIVE DEMOLITION IN SPECIFIC AREAS. EXISTING CONSTRUCTION TO REMAIN IS SHOWN WITH CONTINUOUS LINES.
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- 3. EXISTING AREAS OF DEMOLITION REFLECT INFORMATION AND CONDITIONS ACCORDING TO AVAILABLE ORIGINAL BUILDING PLANS. EXISTING CONDITIONS AND DIMENSIONS SHALL BE FIELD VERIFIED BY CONTRACTORS AND DISCREPANCIES REPORTED TO THE OWNER AND ARCHITECT.
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- 5. WHERE WALLS OR PARTITIONS ARE INDICATED TO BE REMOVED, REMOVE ENTIRE WALL OR PARTITIONS AS WELL AS DUCTS, PIPING, CONDUITS AND OTHER ELEMENTS IN OR ON THEM WHICH MAY OR MAY NOT BE SPECIFICALLY IDENTIFIED, UNLESS OTHERWISE NOTED. COORDINATE WITH OWNER ALL EQUIPMENT TO BE SALVAGED.
- 6. SCOPE OF DEMOLITION AND REMOVAL WORK SHALL NOT BE LIMITED BY THESE DRAWINGS BUT SHALL INCLUDE WORK NECESSARY TO FACILITATE NEW CONSTRUCTION.
- 7. CONTRACTOR TO PROTECT AREAS ADJACENT TO DEMOLITION DURING CONSTRUCTION.
- 8. ALL DEMO'D EXISTING STONE TO BE SALVAGED FOR RE-USE. SEE SPECIFICATIONS FOR ADDITIONAL INFO.
- 9. REMOVE EXISTING FLOORING AT ALL ROOMS SCHEDULED TO RECEIVE NEW FLOOR. REF: FINISH PLANS AND SCHEDULE.

KEYNOTES - DEMOLITION ELEVATION

- D.14 REMOVE EXISTING WINDOW. PREP OPENING FOR NEW WINDOW
- D.27 REMOVE EXISTING OPERABLE PARTITION AND TRACK. PATCH AND REPAIR GYP. BD. BULKHEAD
- D.31 REMOVE EXISTING SOFFIT, TYP. FOR LENGTH OF TOSA ROOM D.34 REMOVE EXISTING DOOR. PREP OPENING FOR NEW EXTERIOR FRAME AND DOOR
- D.35 REMOVE EXISTING DOOR PANEL(S). PREP EXISTING FRAME AND HARDWARE FOR INSTALL OF NEW DOOR
- D.37 DEMO EXISTING WINDOW FRAME AND TRIM. PREP OPENING FOR NEW FURRING INFILL D.39 REMOVE EXISTING CMU WALL. PREP FOR NEW FRAMED INFILL WALL

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date 12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

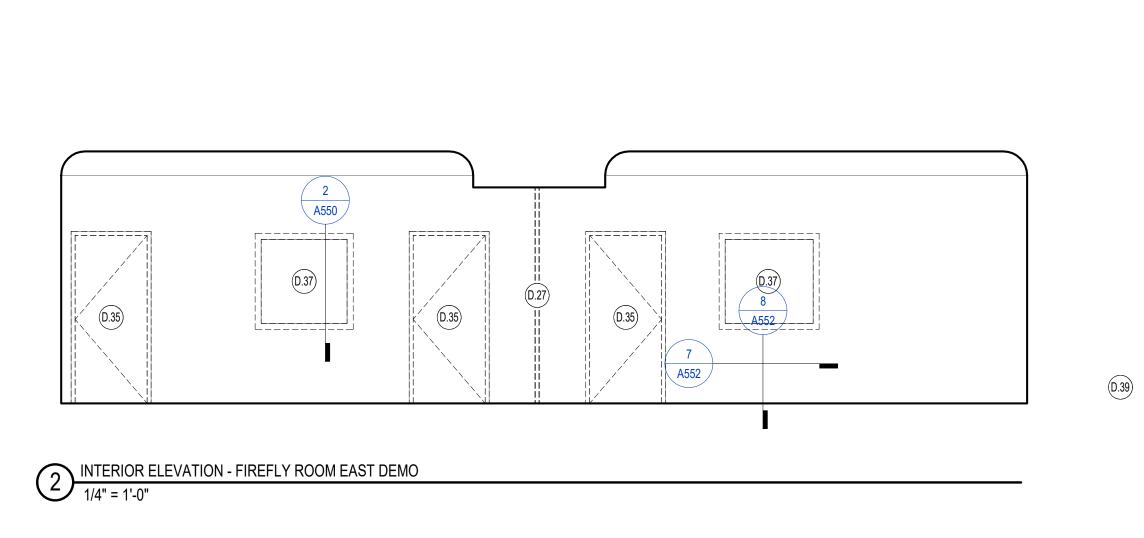
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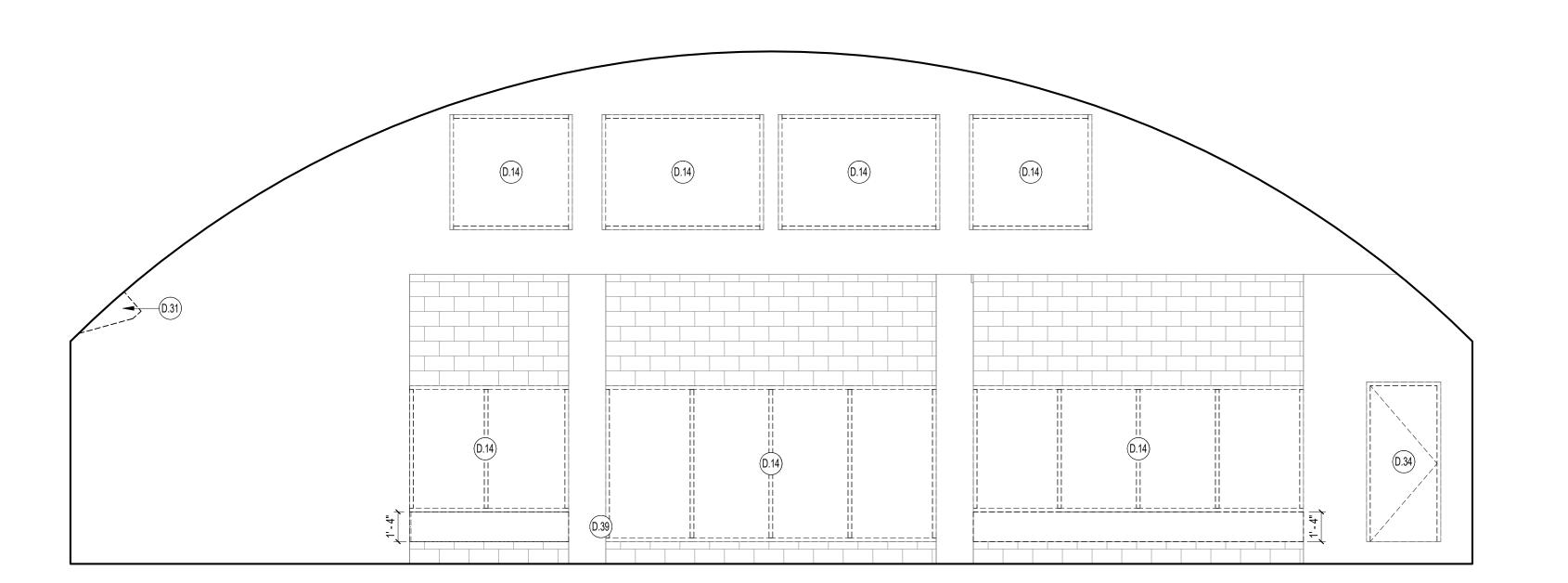
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DEMO INTERIOR ELEVATIONS & DETAILS

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Sheet No. AD250





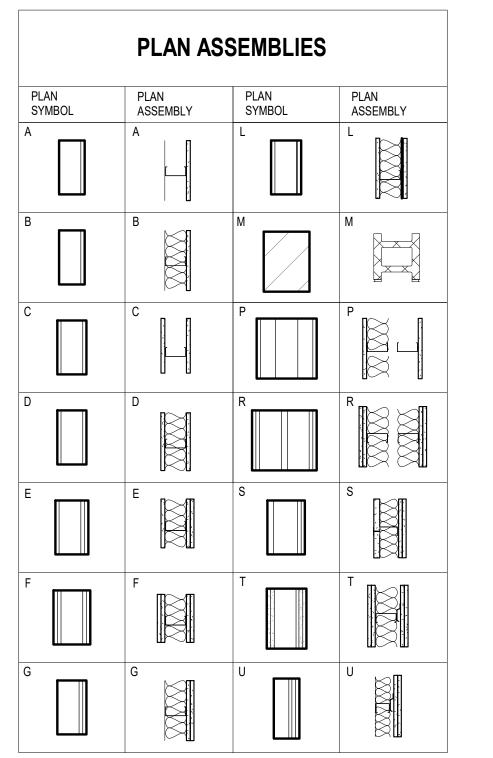
INTERIOR ELEVATION - TOSA ROOM SOUTH DEMO

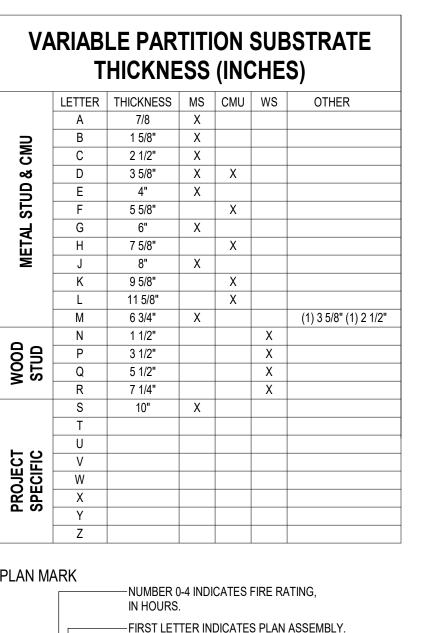
1/4" = 1'-0"

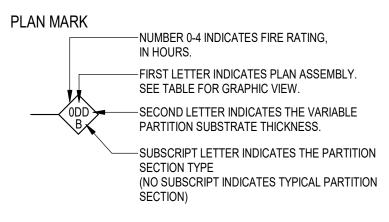
PLAN		SUBSTRATE	FINIS	SH SIDE 1	FINIS	FINISH SIDE 2		PART	ACOUSTIC		FIRE		PARTITION SPECIFIC
MARK	MATERIAL	WIDTH	MATERIAL	THICKNESS	MATERIAL	THICKNESS	THICKNESS	SECT	INSULATION	STC	RATING	UL	KEYED NOTES
		T					41 0"		T				
Δ							1' - 3"						
DAC	MS	2 1/2"	GYP BD	5/8"			3 1/8"	Α					
)AD	MS	3 5/8"	GYP BD	5/8"			4 1/4"	Α					
3			<u> </u>		-			-	•				
OBC	MS	2 1/2"	GYP BD	5/8"			3 1/8"	В					
OBD	MS	3 5/8"	GYP BD	5/8"			4 1/4"	В					
С													
OCC	MS	2 1/2"	GYP BD	5/8"			3 3/4"	Α	SAB				
)CD	MS	3 5/8"	GYP BD	5/8"			4 7/8"	Α	SAB				
D			·										
DC	MS	2 1/2"	GYP BD	5/8"			3 1/8"	В	SAB				
)DG	MS	6"	GYP BD	5/8"			6 5/8"	В	SAB				
E													
0ED	MS	3 5/8"	GYP BD	5/8"	GYP BD	5/8"	4 7/8"	Α		45-49			

GENERAL NOTES

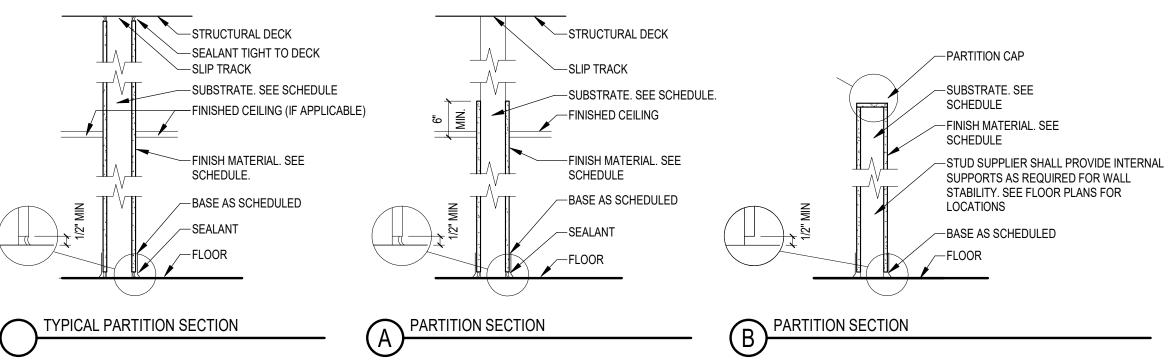
- A. REFER TO FLOOR PLANS FOR PARTITION LOCATIONS.
- B. ALL PARTITIONS RUN TO DECK ABOVE ("TYPICAL PARTITION SECTION" TYPE) UNLESS NOTED OTHERWISE BY SUBSCRIPT IN PLAN MARK. SEE PARTITION SECTION TYPES BELOW.
- C. AT THE INTERSECTION OF PARTITIONS OF DISSIMILAR RATINGS, THE PARTITION OF THE HIGHER RATING SHALL CONTINUE THROUGH UNINTERRUPTED AND SHALL TAKE PRECEDENCE OVER THE LOWER PARTITION RATING.
- D. SEE DRAWINGS FOR SPECIFIC PARTITION DETAILS.
- E. PROVIDE ACOUSTICAL JOINT SEALANTS AT PENETRATIONS.
- F. PROVIDE BOND BEAM AT TOP OF ALL CMU WALLS, UNO.

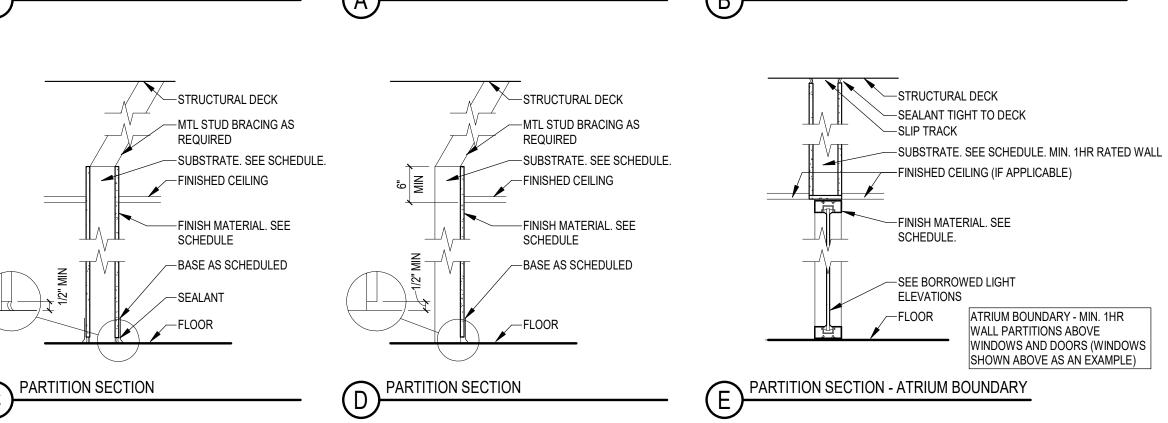






PARTITION SECTION TYPES





Revisions

CONSTRUCTION DOCUMENTS

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Drawing Date

MUELLNER BUILDING

7300 W CHESTNUT STREET

RENOVATION

WAUWATOSA WI, 53213

Project No. CITY OF WALIWATOSA WAUWATOSA

Sheet Title

A020

PARTITION SCHEDULE AND LEGEND

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Sheet No.

24 8:04:50 AM

RCP LEGEND SUSPENDED ACOUSTIC TILE CEILING SYSTEM LIGHT FIXTURES - SEE ELECTRICAL DRAWINGS OCCUPCANY SENSOR - ELAN LIGHTING: ACUITY CONTROLS SENSOR SWITCH MODEL CM PDT OR EQUAL - SEE NOTE 5

CEILING PLAN GENERAL NOTES

CUT DOWN LARGER PANELS AS REQUIRED.

CEILING HEIGHTS ARE 9'-0" ABOVE CURRENT FLOOR PLAN ELEVATION UNLESS NOTED OTHERWISE ON THE DRAWINGS.

2. BALANCE OR CENTER CEILING GRIDS WITHIN ROOMS OR SPACES EACH TO MINIMIZE TILES CUT TO LESS THAN 1'-0". TILE WIDTHS LESS THAN 4" ARE NOT PERMITTED.

3. PROVIDE CUT-OUTS AND OPENINGS FOR ITEMS WHICH PENETRATE THROUGH CEILINGS SYSTEMS (INCLUDING SPECIAL EQUIPMENT HANGERS AND DEVICES, CONDUIT, PIPING, ELECTRICAL REQUIREMENTS, ETC.).

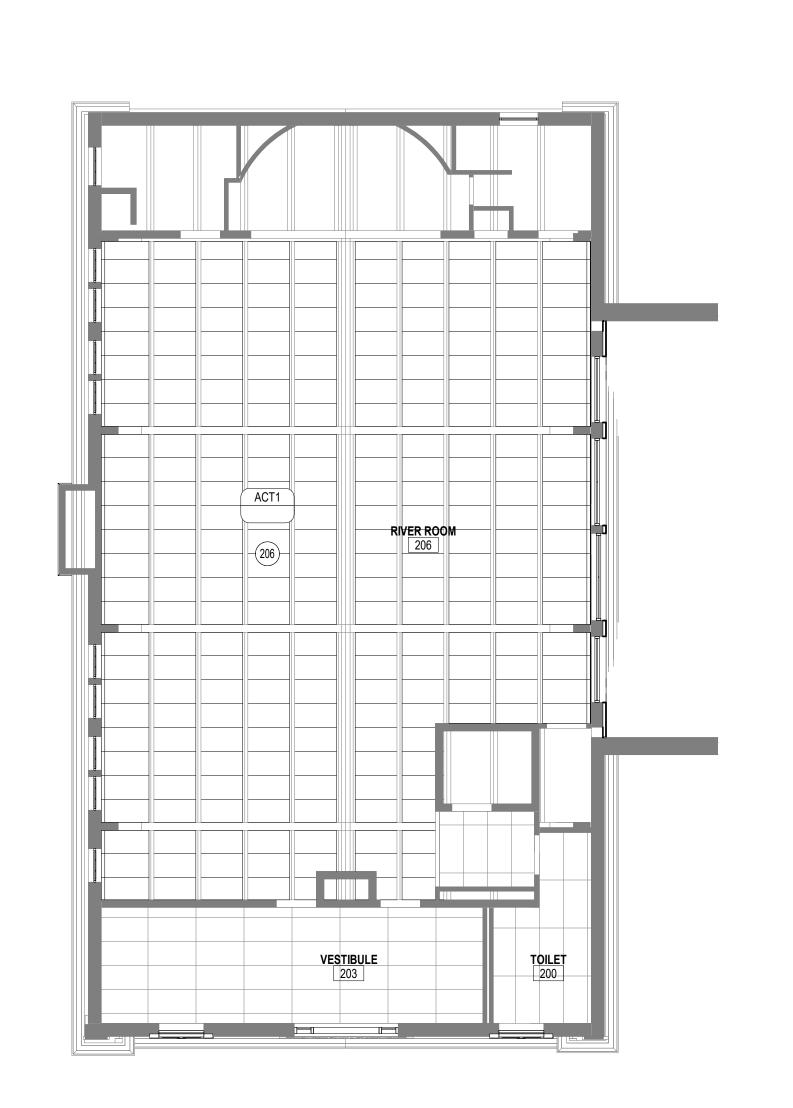
4. CENTER ALL LIGHTS, SPEAKERS, SPRINKLERS, HVAC GRILLES, SMOKE DETECTORS, ETC. IN CENTER OF CEILING TILES UNO.

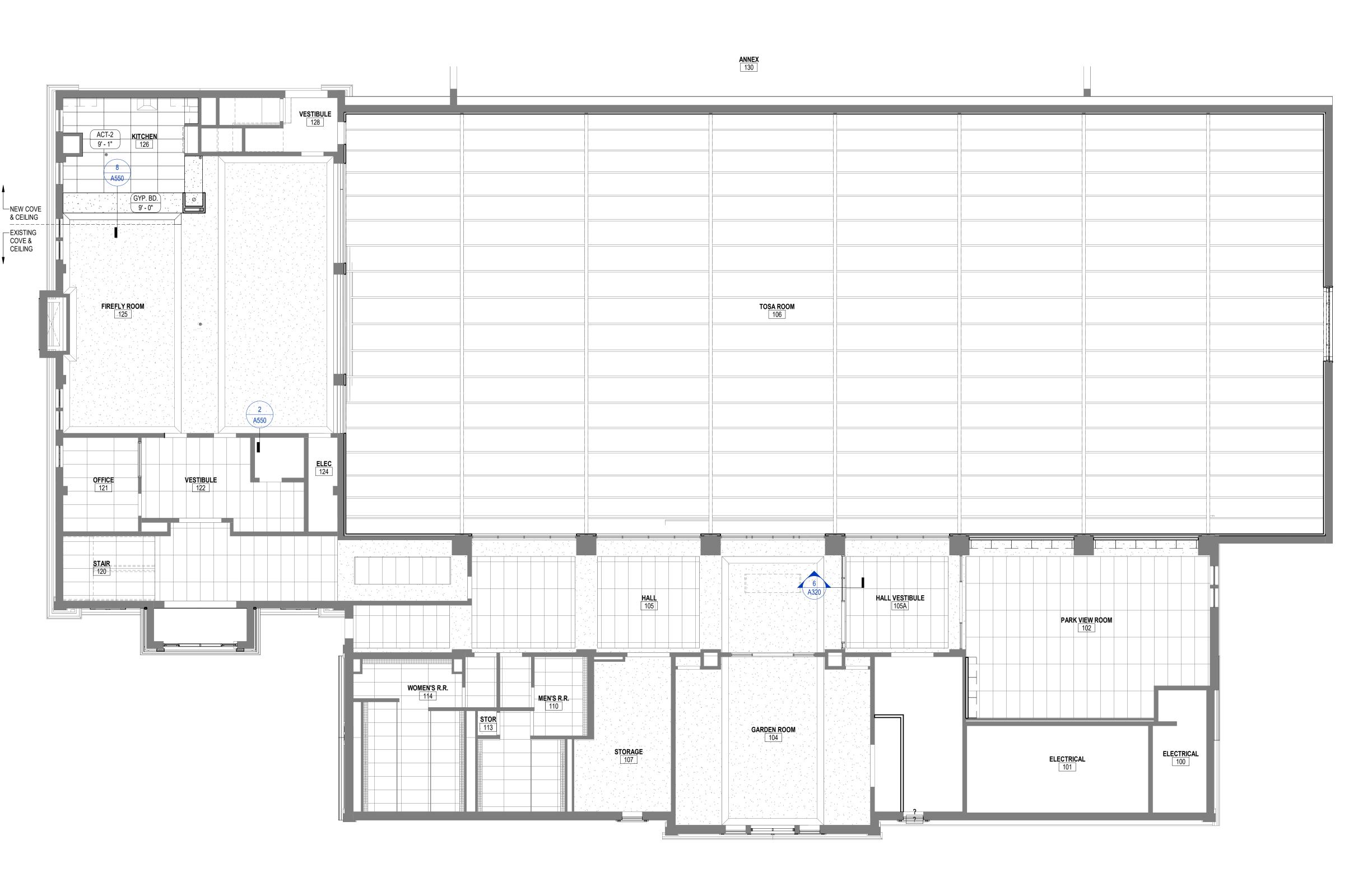
5. PATCH AND REPAIR AROUND REPLACEMENT LIGHTING FIXTURES IN EXISTING GYPSUM BOARD CEILINGS.

6. ACCESS PANELS SHOULD BE PAINTED TO MATCH CEILING.

KEYNOTES - REFLECTED CEILING PLAN

206 CEILING HEIGHT VARIES. REPLACE EXISTING CEILING PANELS. SALVAGE EXISTING GRID AND TRIM AND REPAINT FOR INSTALLATION WITH NEW CEILING PANELS





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MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

CITY OF 223010.00

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12/22/2023

OVERALL REFLECTED **CEILING PLANS**



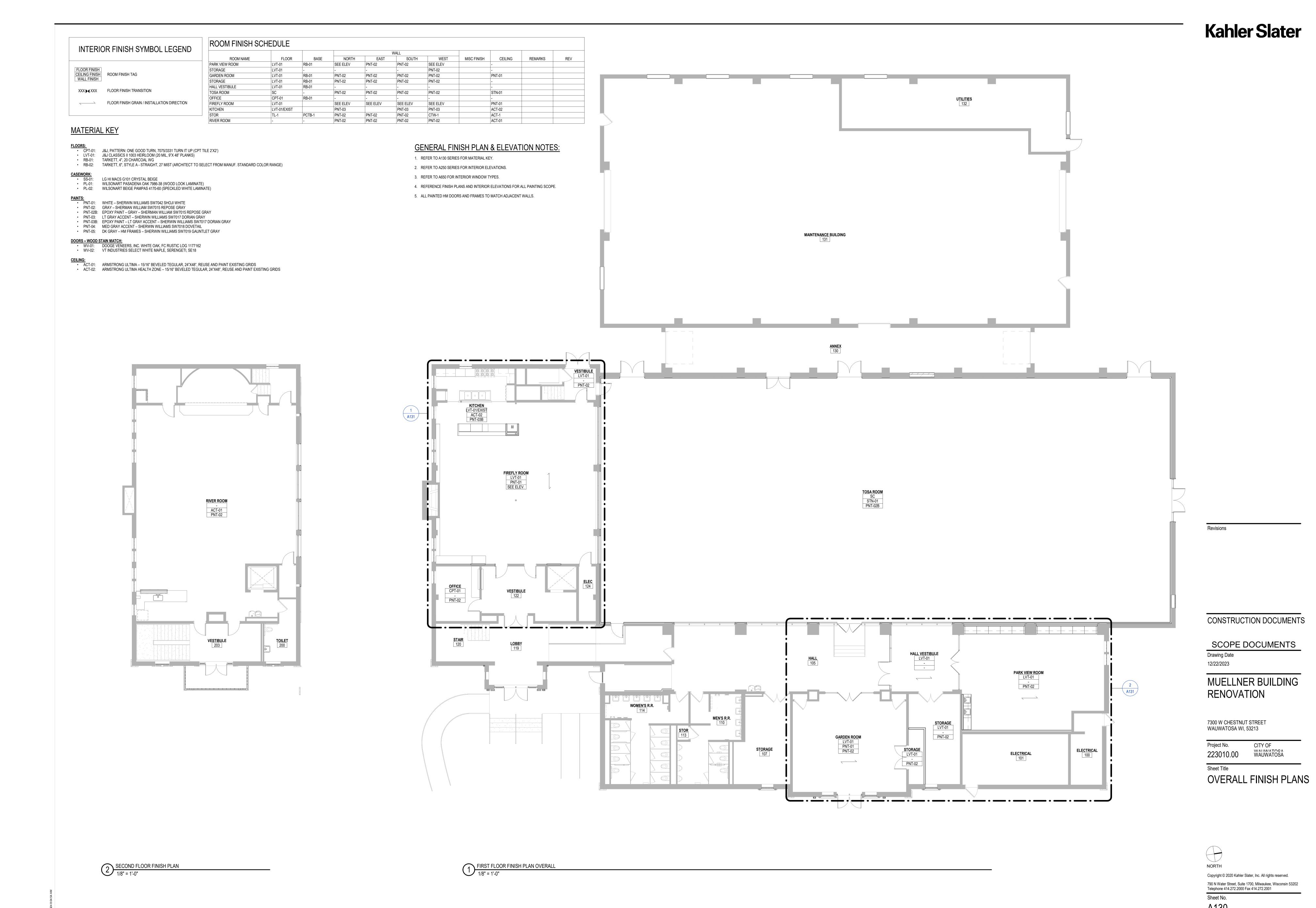
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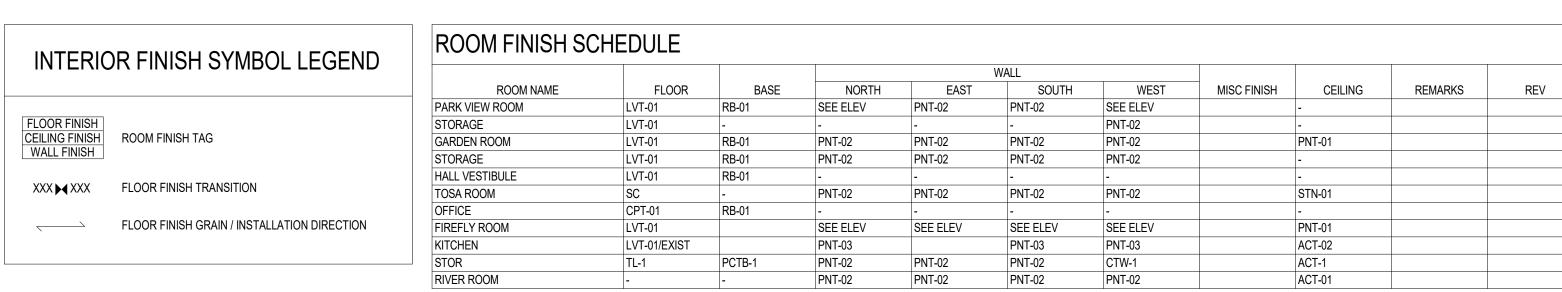
SECOND FLOOR REFLECTED CEILING PLAN

1/8" = 1'-0"

FIRST FLOOR REFLECTED CEILING PLAN

1/8" = 1'-0"





MATERIAL KEY

 RB-01: TARKETT, 4", 20 CHARCOAL WG ` • RB-02: TARKETT, 6", STYLE A - STRAIGHT, 27 MIST (ARCHITECT TO SELECT FROM MANUF. STANDARD COLOR RANGE)

CASEWORK:
SS-01: LG HI MACS G101 CRYSTAL BEIGE
PL-01: WILSONART PASADENA OAK 7986-38 (WOOD LOOK LAMINATE) PL-02: WILSONART BEIGE PAMPAS 4170-60 (SPECKLED WHITE LAMINATE)

PAINTS: PNT-01: WHITE – SHERWIN WILLIAMS SW7042 SHOJI WHITE PNT-02: GRAY – SHERMAN WILLIAM SW7015 REPOSE GRAY

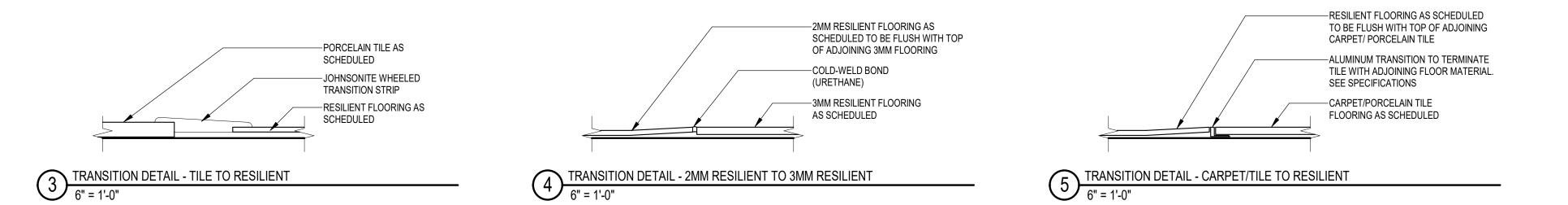
- PNT-02B: EPOXY PAINT GRAY SHERMAN WILLIAM SW7015 REPOSE GRAY
- PNT-03: LT GRAY ACCENT SHERWIN WILLIAMS SW7017 DORIAN GRAY
 PNT-03B: EPOXY PAINT LT GRAY ACCENT SHERWIN WILLIAMS SW7017 DORIAN GRAY PNT-04: MED GRAY ACCENT – SHERWIN WILLIAMS SW7018 DOVETAIL

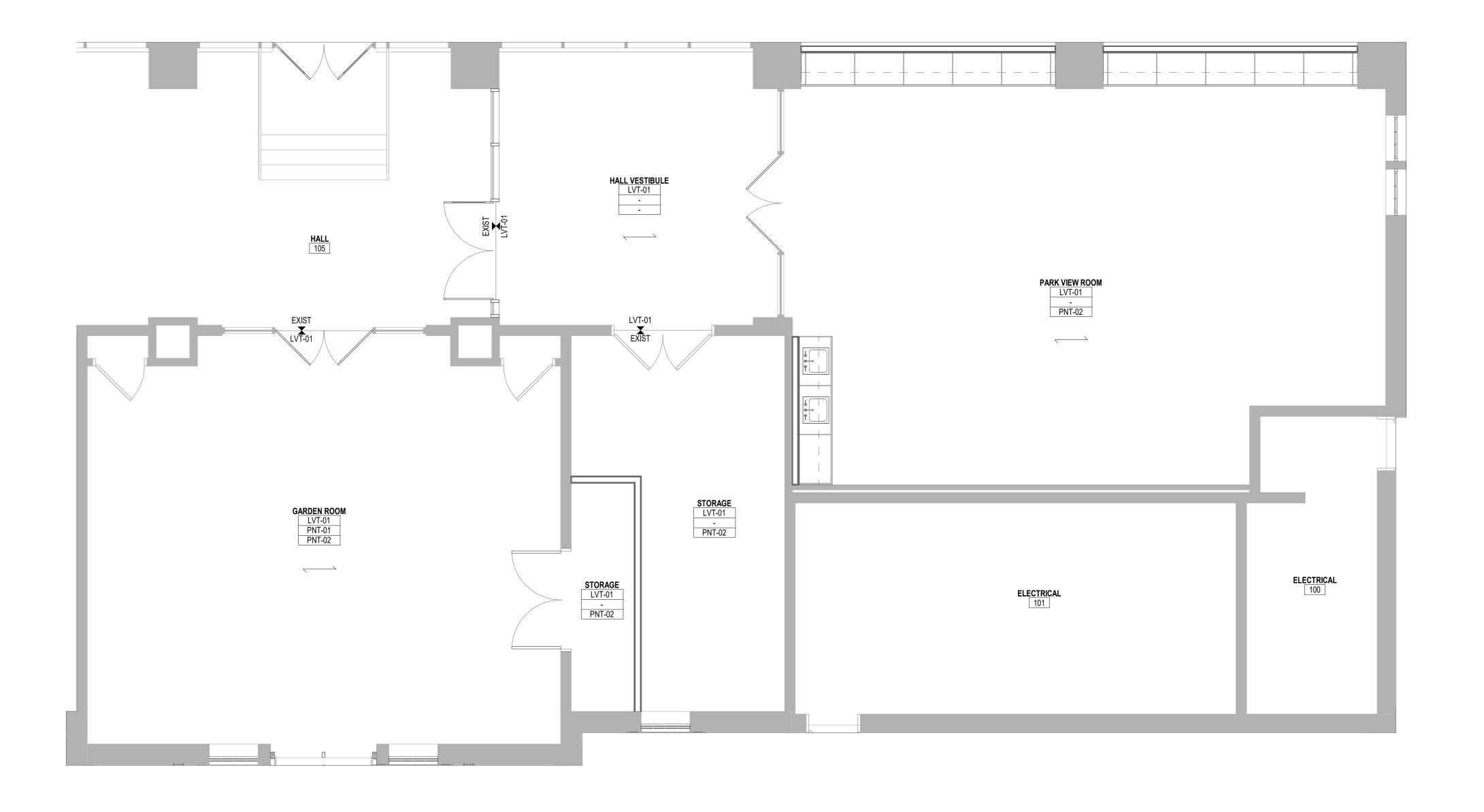
PNT-05: DK GRAY – HM FRAMES – SHERWIN WILLIAMS SW7019 GAUNTLET GRAY

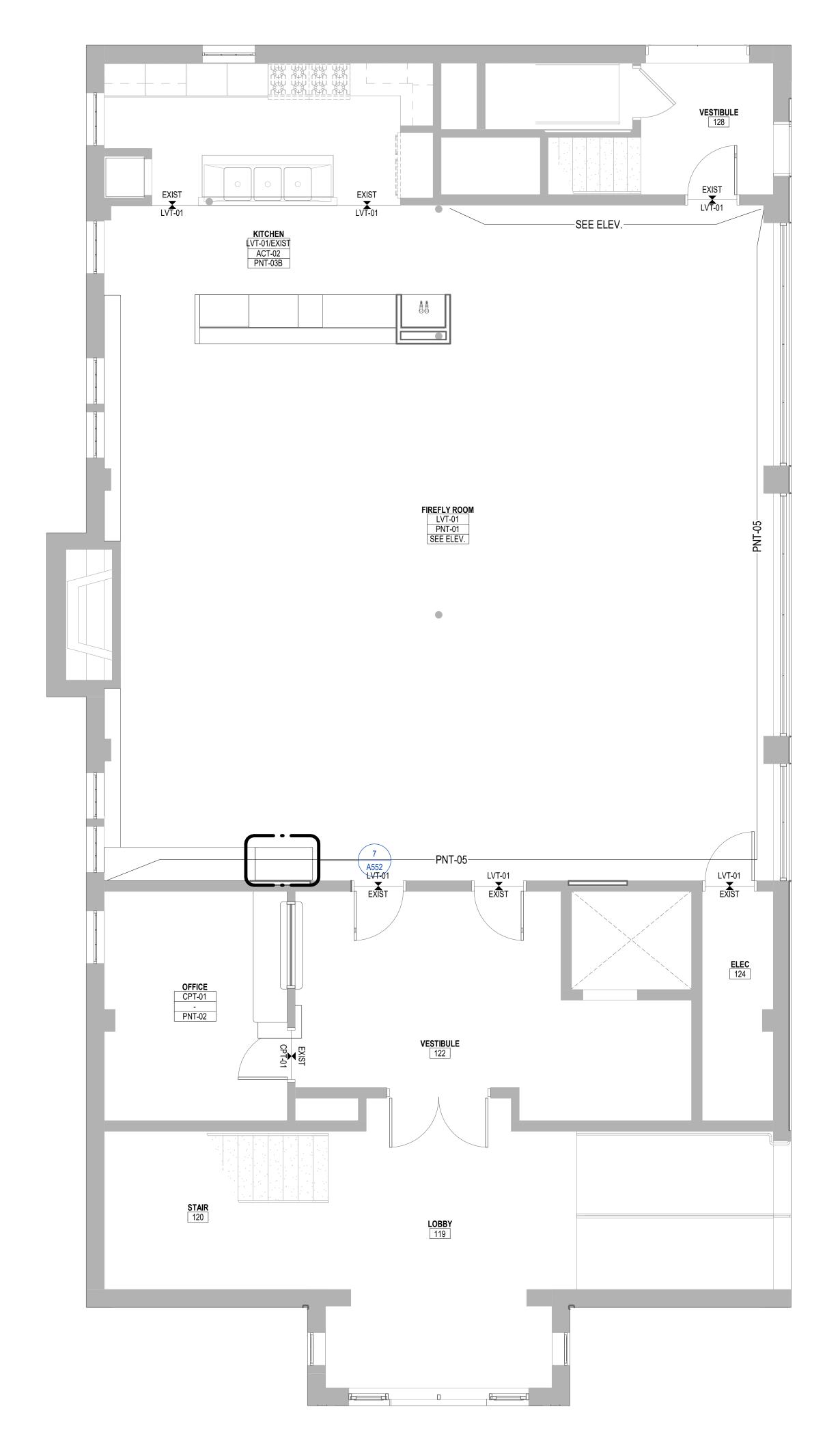
DOORS – WOOD STAIN MATCH:
 WV-01: DOOGE VENEERS, INC. WHITE OAK, FC RUSTIC LOG 1177162
 WV-02: VT INDUSTRIES SELECT WHITE MAPLE, SERENGETI, SE18

CEILING:

• ACT-01: ARMSTRONG ULTIMA – 15/16" BEVELED TEGULAR, 24"X48", REUSE AND PAINT EXISTING GRIDS • ACT-02: ARMSTRONG ULTIMA HEALTH ZONE – 15/16" BEVELED TEGULAR, 24"X48", REUSE AND PAINT EXISTING GRIDS







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Drawing Date 12/22/2023

MUELLNER BUILDING RENOVATION

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CITY OF 223010.00

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ENLARGED FINISH PLANS & DETAILS

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Sheet No.

FIRST FLOOR FINISH PLAN AREA A

1/4" = 1'-0"

FIRST FLOOR FINISH PLAN AREA B

1/4" = 1'-0"



- DO NOT SCALE THE DRAWINGS. VERIFY ALL CONDITIONS ON-SITE BEFORE PROCEEDING WITH WORK.
- 2. ANY CONFLICT OR DISCREPANCY BETWEEN INFORMATION ON DRAWINGS AND ACTUAL FIELD CONDITIONS SHALL BE BROUGHT TO ARCHITECT'S ATTENTION FOR RESOLUTION PRIOR TO COMMENCING WORK.
- 3. PATCH, PAINT, AND REPAIR EXTERIOR WOOD TRIM
- 4. PAINT ALL METAL TRIM

PAINT EXISTING CMU WALL

-CMU INFILL IN EXISTING OPENING

EXIST. ICE RINK FLOOR FLOOR E.L. 67'-6"

NEW METAL LOUVER
IN EXISTING OPENING

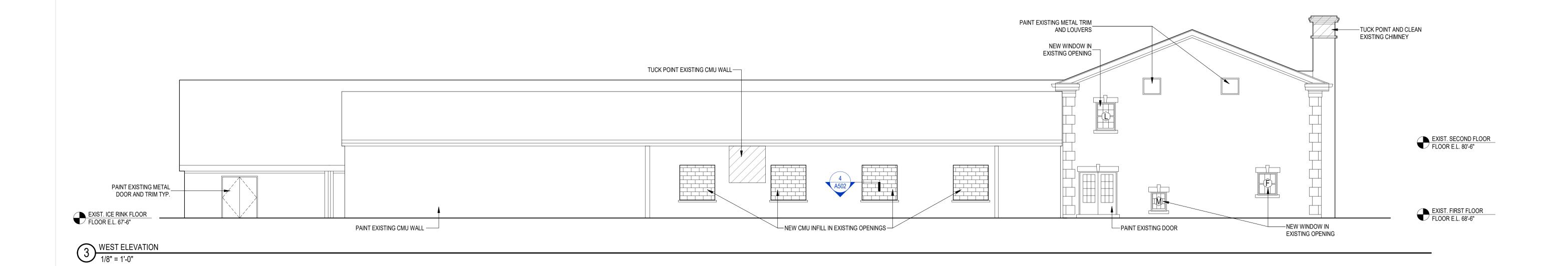
└NEW 7' DOOR IN

EXISTING OPENING

PAINT EXISTING METAL

DOOR AND TRIM TYP.

- 5. PAINT ALL EXISTING DOORS, MUNTINS, AND ASSOCIATED TRIM
- 6. TUCK POINT EXISTING STONE AS REQUIRED 7. CLEAN STONE ON BUILDING AS NEEDED
- 8. EXISTING AND FUTURE BALCONY IS UNOCCUPIED. THE RAILING THAT IS BEING INSTALLED FOR STRUCTURAL PERFORMANCE. THE RAIL IS DECORATIVE AND HAS LARGER OPENINGS BUT SINCE IT IS NOT OCCUPIED THIS IS NOT A CODE CONCERN
- 9. REFER TO A501 FOR EXTERIOR WINDOW TYPES



CLEAN STONE

NEW STOREFRONTIN

EXISTING OPENING

PAINT CUPOLA——

EXISTING OPENING

EXIST. SECOND FLOOR FLOOR E.L. 80'-6"

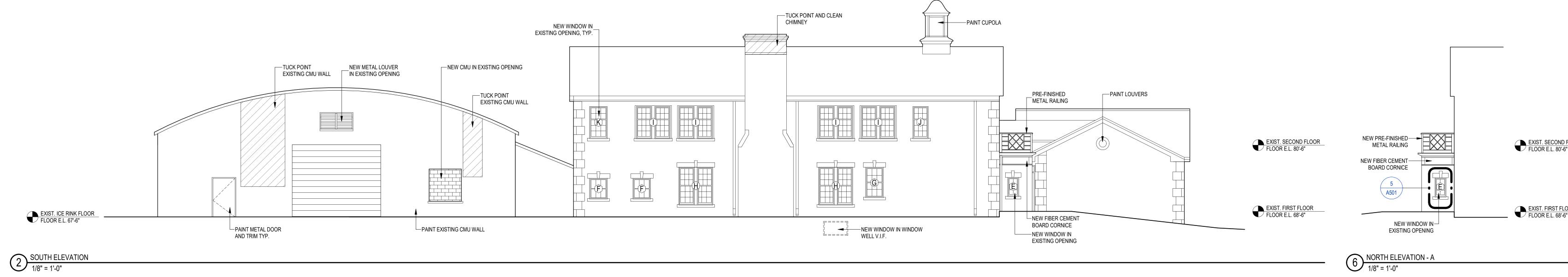
EXIST. FIRST FLOOR FLOOR E.L. 68'-6"

NORTH ELEVATION

1/8" = 1'-0"

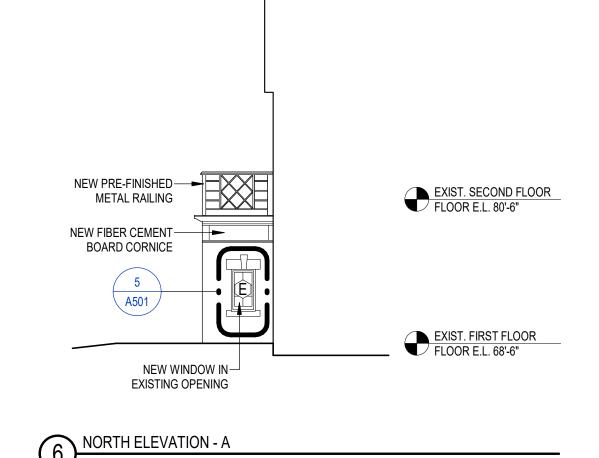
PAINT EXISTING METAL

DOOR AND TRIM TYP.



TUCK POINT, PATCH, AND PAINT———

EXISTING MASONRY WALL



SCOPE DOCUMENTS

Drawing Date 12/22/2023

CONSTRUCTION DOCUMENTS

MUELLNER BUILDING RENOVATION

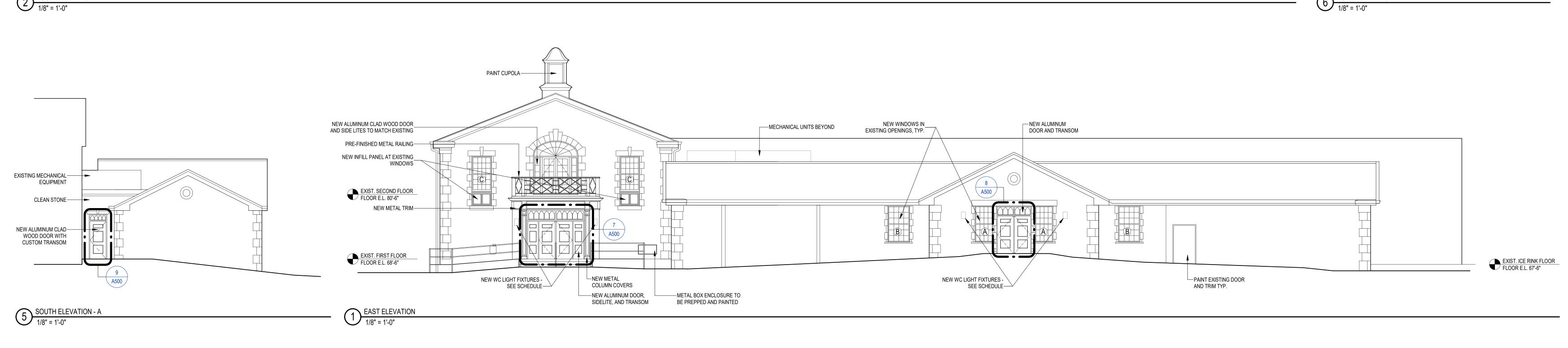
7300 W CHESTNUT STREET WAUWATOSA WI, 53213

CITY OF
WALIWATOSA
WAUWATOSA Project No. 223010.00

Sheet Title

BUILDING ELEVATIONS

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2' - 8" 3 3 4" EA. SIDE PL-01 PANELS AT —— EA. SIDE -KNEE SPACE - PROVIDE PL-01 PANELS EA. FACE 3'-0" 3'-0" 4'-2" 7' - 9 1/2" 15' - 3 1/2" 15' - 7" 15 INTERIOR ELEVATION - PARK VIEW ROOM SOUTH INTERIOR ELEVATION - PARK VIEW ROOM WEST 1/4" = 1'-0" 9 INTERIOR ELEVATION - EAST ISLAND 1/4" = 1'-0" INTERIOR ELEVATION - WEST ISLAND 1/4" = 1'-0" **GENERAL FINISH PLAN & ELEVATION NOTES:** --PREP AND PAINT ----——PNT-02— EXISTING KITCHEN CASEOWORK, TYP. 1. REFER TO A130 SERIES FOR MATERIAL KEY. 2. REFER TO A250 SERIES FOR INTERIOR ELEVATIONS. 3. REFER TO A650 FOR INTERIOR WINDOW TYPES. 4. REFERENCE FINISH PLANS AND INTERIOR ELEVATIONS FOR ALL PAINTING SCOPE. OPEN TO BEYOND PNT-03B 5. ALL PAINTED HM DOORS AND FRAMES TO MATCH ADJACENT WALLS. 6 INTERIOR ELEVATION - SOUTH KITCHEN 1/4" = 1'-0" 8 INTERIOR ELEVATION - WEST KITCHEN 1/4" = 1'-0" 7 INTERIOR ELEVATION - NORTH KITCHEN 1/4" = 1'-0" INFILL WALL AT EXISTING WINDOW OPENING PNT-02 PNT-05 1/4" = 1'-0" 16 INTERIOR ELEVATION - WEST RIVER VIEW ROOM KITCHENETTE 13 INTERIOR ELEVATION - EAST RIVER VIEW ROOM 1/4" = 1'-0" PNT-05 PNT-04 PNT-02 EXISTING STAGE OPENING KNEE SPACE - PROVIDE FINISHED PANELS EA. FACE 12' - 9 1/2" 1/4" = 1'-0" INTERIOR ELEVATION - EAST RIVER VIEW ROOM KITCHENETTE 1/4" = 1'-0" EXISTING STAGE PLATFORM 12 INTERIOR ELEVATION - WEST RIVER VIEW ROOM 1/4" = 1'-0" 3 INTERIOR ELEVATION - NORTH FIREFLY ROOM 1/4" = 1'-0" INTERIOR ELEVATION - SOUTH RIVER VIEW ROOM KITCHENETTE 1/4" = 1'-0" INTERIOR ELEVATION - NORTH RIVER VIEW ROOM 1/4" = 1'-0" 4 A552 PNT-02 ▲ RB-01 | 10 INTERIOR ELEVATION - SOUTH RIVER VIEW ROOM 1/4" = 1'-0" 2 INTERIOR ELEVATION - SOUTH FIREFLY ROOM 1/4" = 1'-0"

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Revisions

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MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. CITY OF WALIWATOSA WALIWATOSA

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INTERIOR ELEVATIONS

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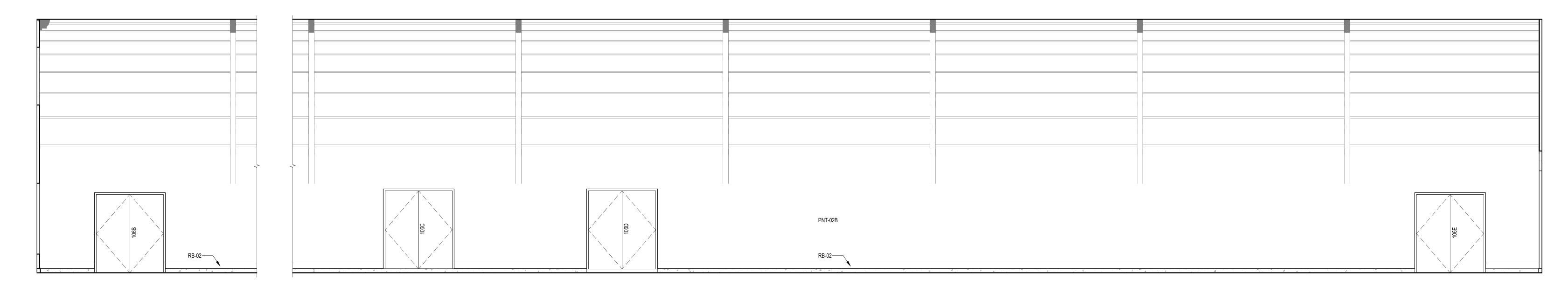
790 N Water Street, Suite 1700, Milwaukee, Wisconsin 53202
Telephone 414.272.2000 Fax 414.272.2001

Sheet No. **A250**

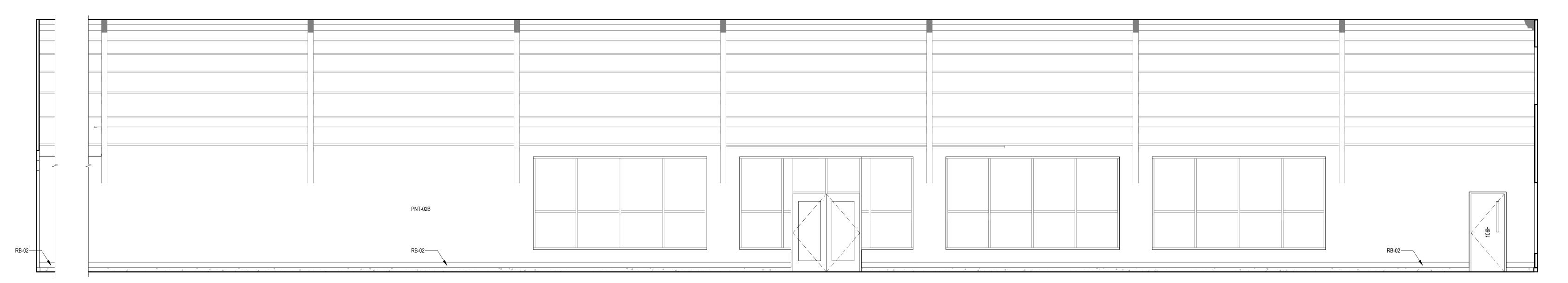
GENERAL FINISH PLAN & ELEVATION NOTES:

1. REFER TO A130 SERIES FOR MATERIAL KEY.

- 2. REFER TO A250 SERIES FOR INTERIOR ELEVATIONS.
- 3. REFER TO A650 FOR INTERIOR WINDOW TYPES.
- 4. REFERENCE FINISH PLANS AND INTERIOR ELEVATIONS FOR ALL PAINTING SCOPE.
- 5. ALL PAINTED HM DOORS AND FRAMES TO MATCH ADJACENT WALLS.

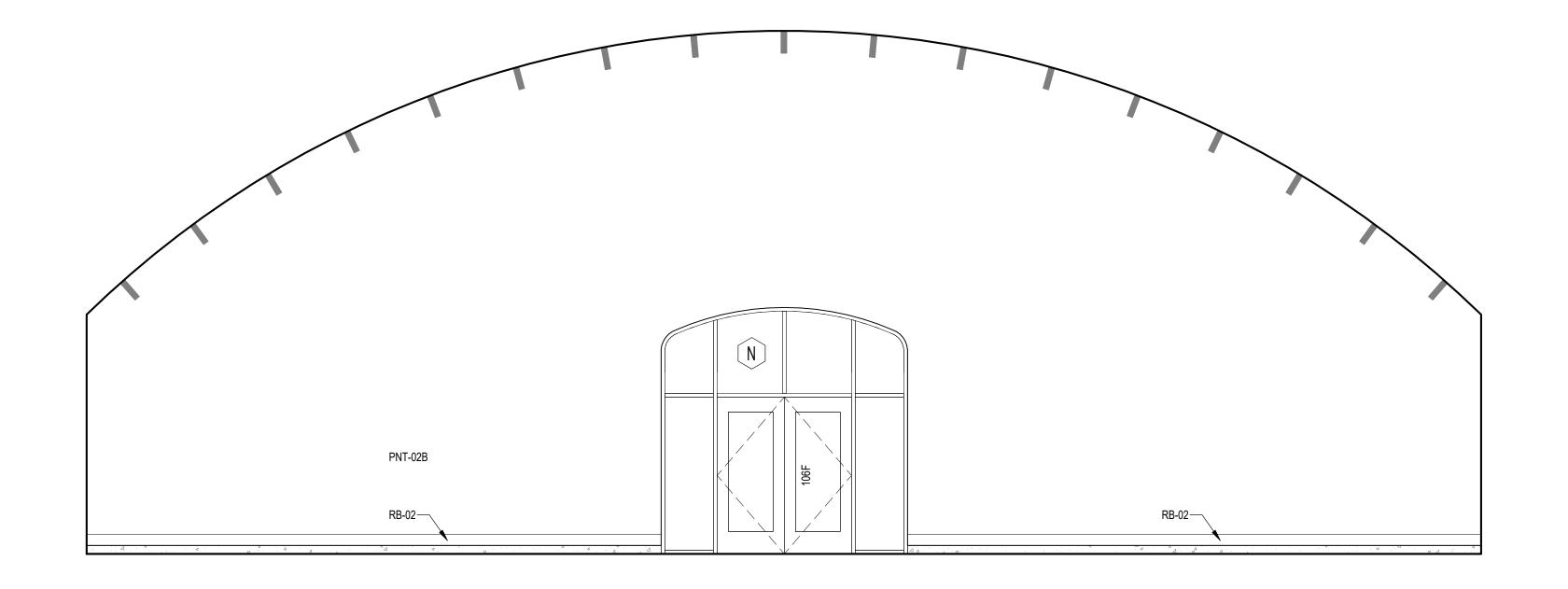


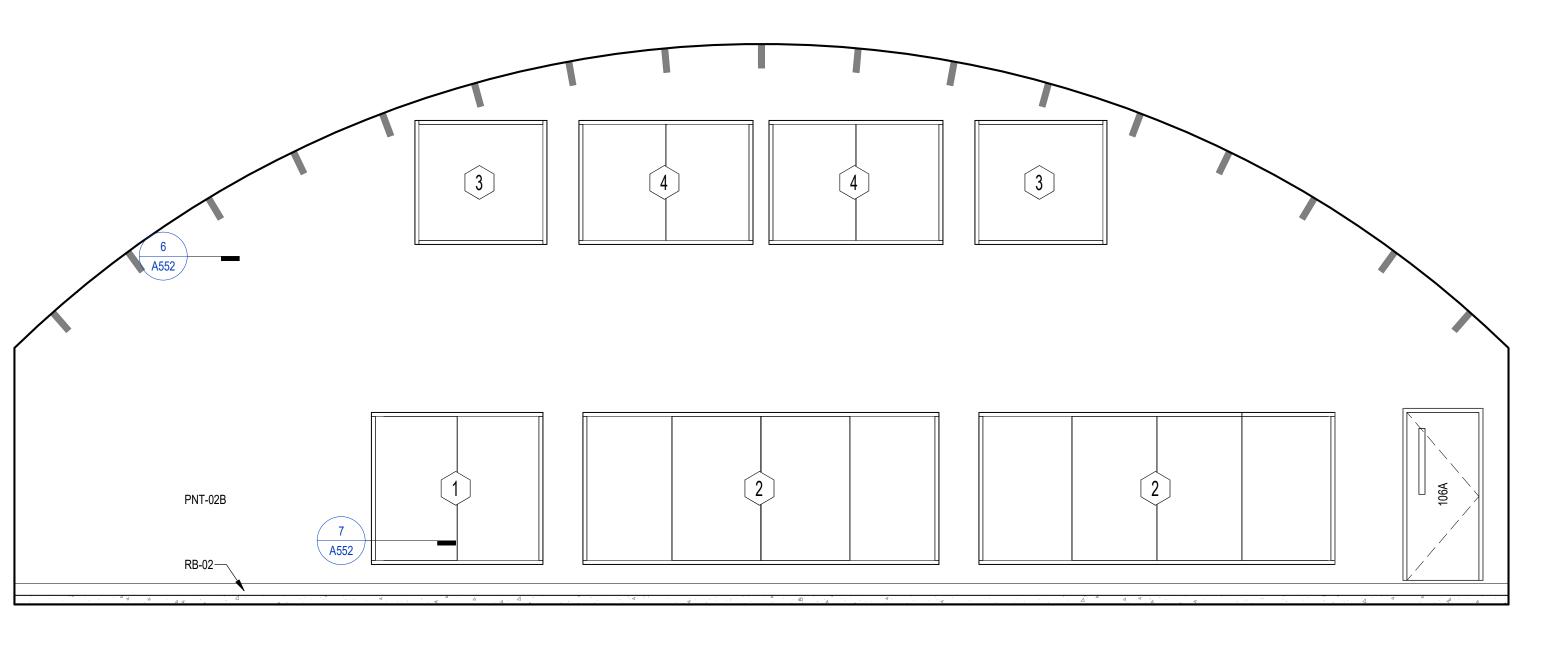
2) INTERIOR ELEVATION - WEST TOSA ROOM 1/4" = 1'-0"



3 INTERIOR ELEVATION - EAST TOSA ROOM 1/4" = 1'-0"

1) INTERIOR ELEVATION - NORTH TOSA ROOM
1/4" = 1'-0"





INTERIOR ELEVATION - SOUTH TOSA ROOM

1/4" = 1'-0"

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS Drawing Date

12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. CITY OF WALIWATOSA WALIWATOSA

Sheet Title

INTERIOR ELEVATIONS

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Sheet No. A251

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date

12/22/2023 MUELLNER BUILDING

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

RENOVATION

Project No.

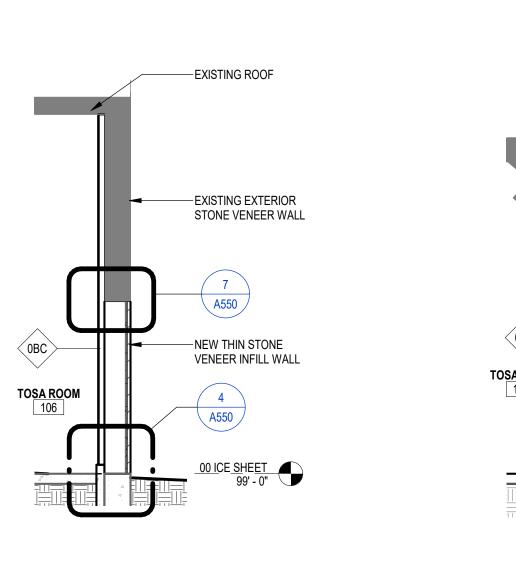
CITY OF WALIWATOSA WAUWATOSA 223010.00

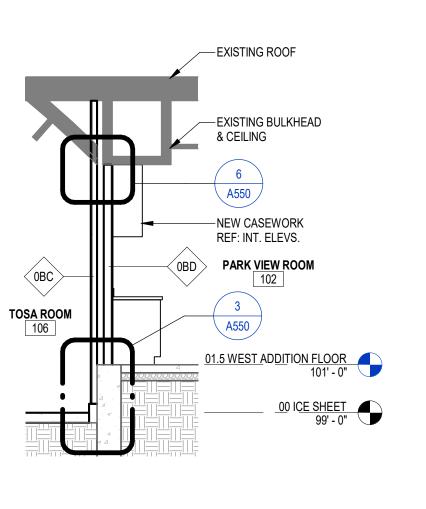
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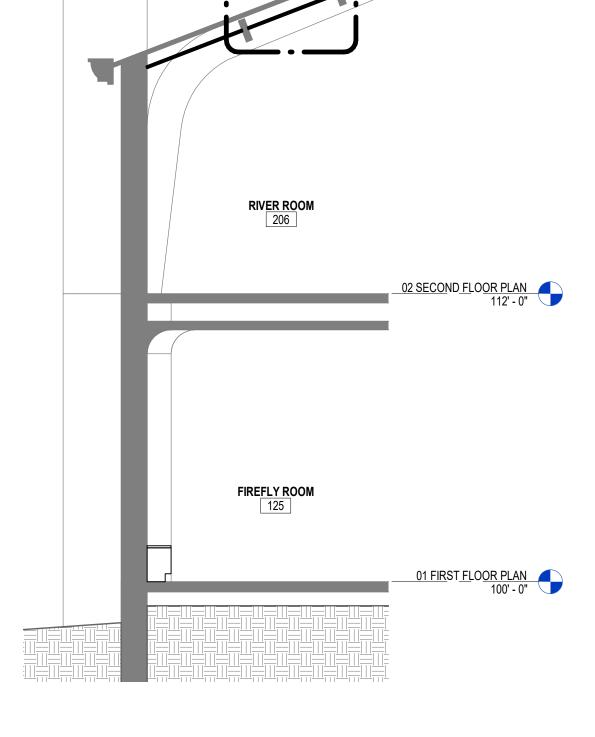
WALL SECTIONS

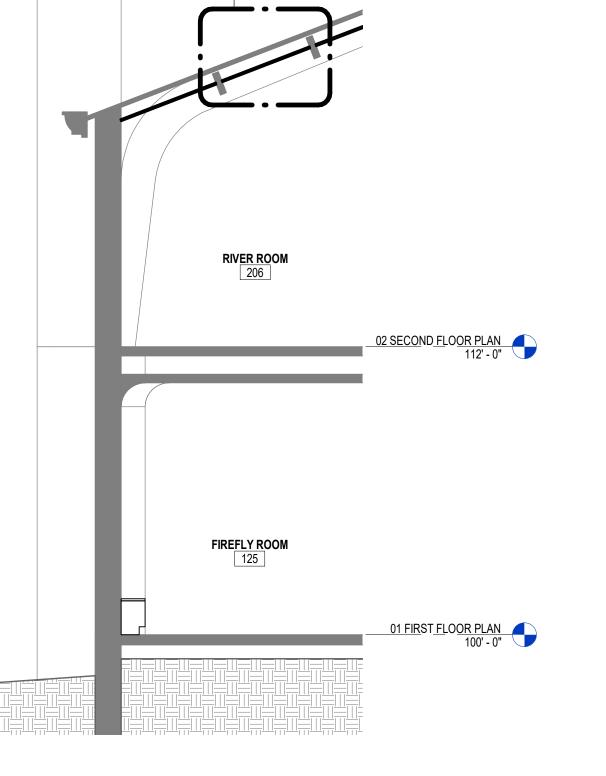
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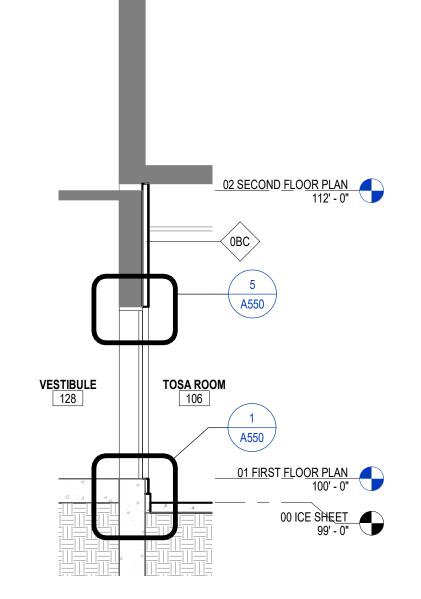
Sheet No. A320











RIVER ROOM

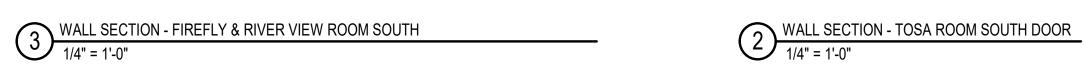
02 SECOND FLOOR PLAN 112' - 0"

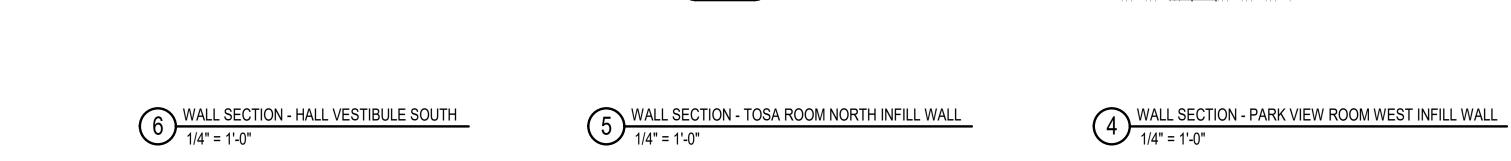
01 FIRST FLOOR PLAN 100' - 0"

00 ICE SHEET 99' - 0"

WALL SECTION - FIREFLY & RIVER VIEW ROOM NORTH WINDOW 1/4" = 1'-0"







—EXISTING ROOF

HALL VESTIBULE

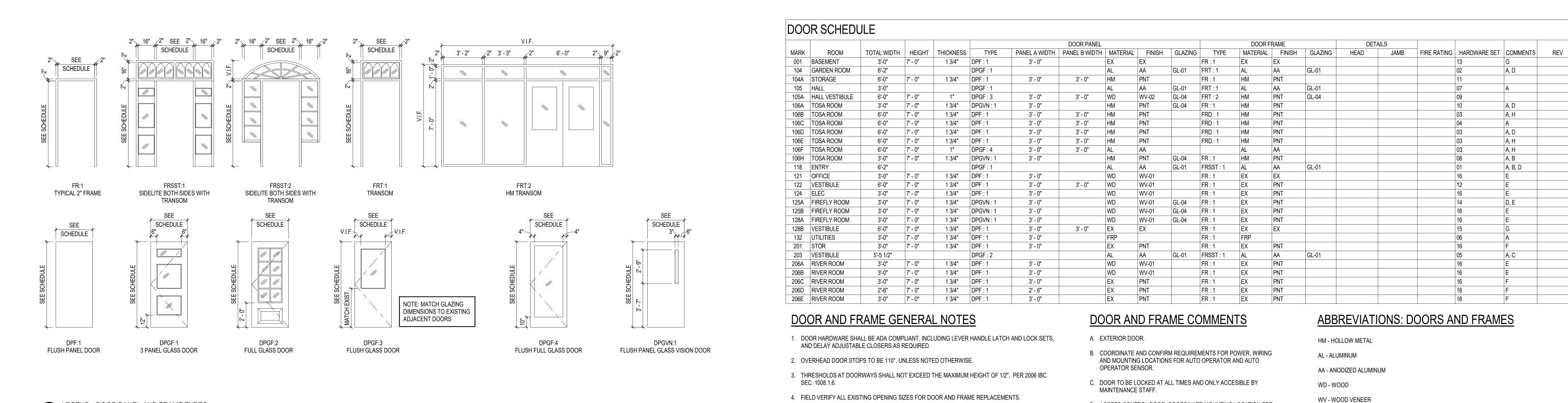
EXISTING BULKHEAD

A502

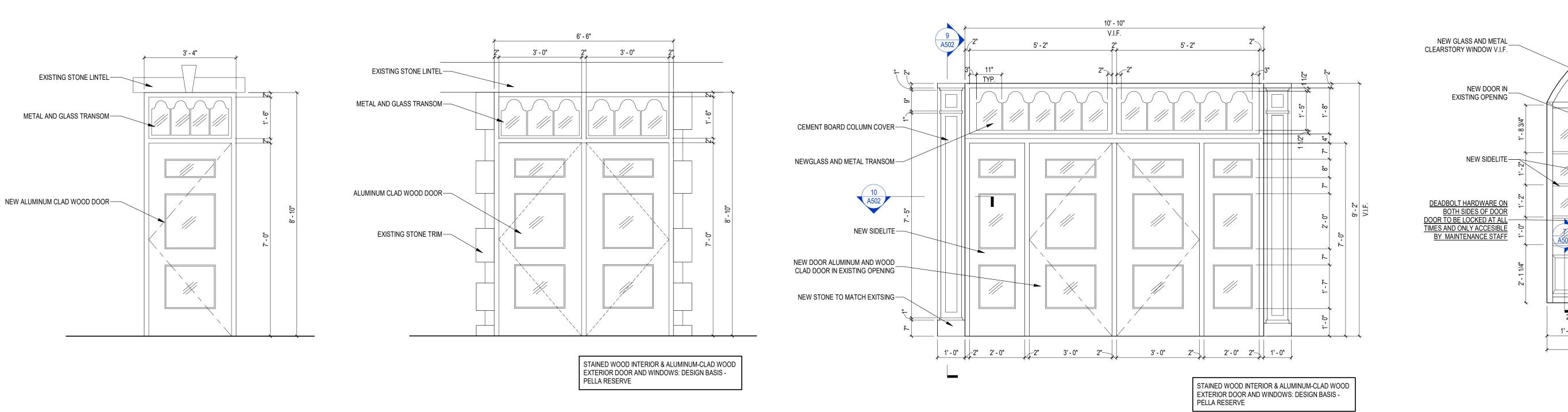
— NEW HM DOOR & FRAME REF: DOOR SCHEDULE (105A)

01.5 WEST ADDITION FLOOR 101' - 0"

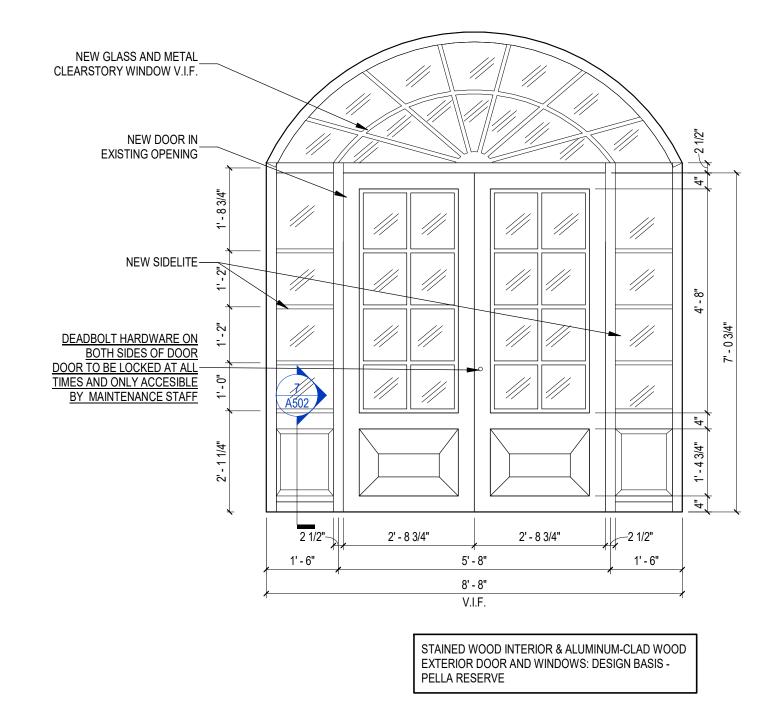
A, B, D



5. ALL PAINTED HM DOORS AND FRAMES TO MATCH ADJACENT WALLS.



LEGEND - DOOR PANEL AND FRAME TYPES



PNT - PAINT

EX - EXISTING

D. ACCESS CONTROL DOOR. COORDINATE MOUNTING LOCATION FOR

F. STRIP, PREP, AND REPAINT EXISTING DOOR PANEL. REUSE EXISTING

E. NEW DOOR PANEL(S) ONLY. REUSE EXISTING HARDWARE AND

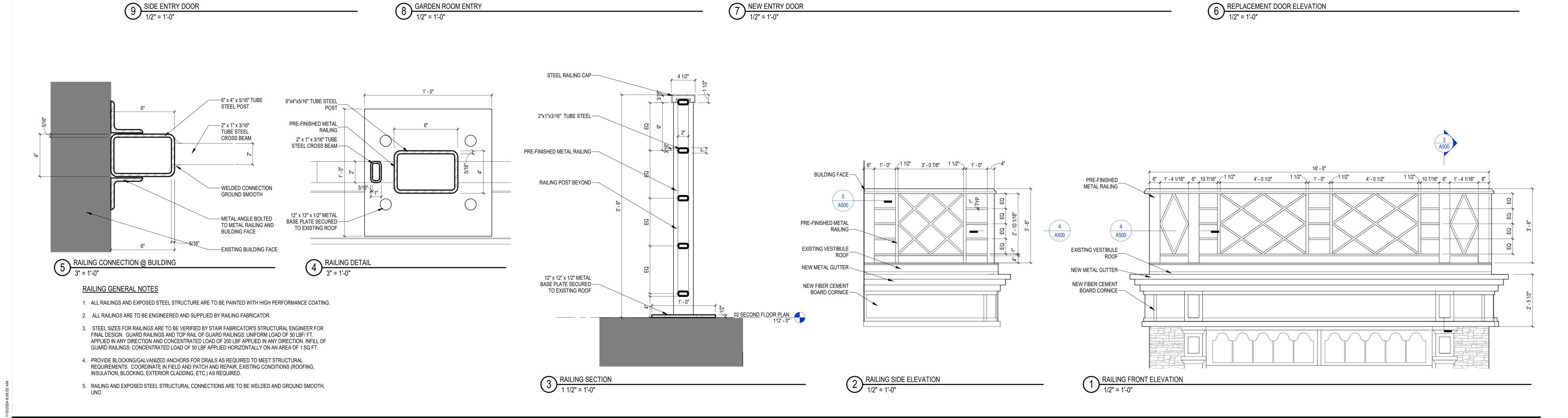
G. ACCESS CONTROL ONLY. PREP EXISTING DOOR AND FRAME. COORDINATE MOUNTING LOCATION FOR CARD READER.

HARDWARE AND REPAINT EXISTING FRAME.

H. PROVIDE REMOVABLE CENTER MULLION.

REPAINT EXISTING FRAME.

CARD READER. PREP EXISTING DOOR AND FRAME WHERE APPLICABLE.



CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS Drawing Date

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

12/22/2023

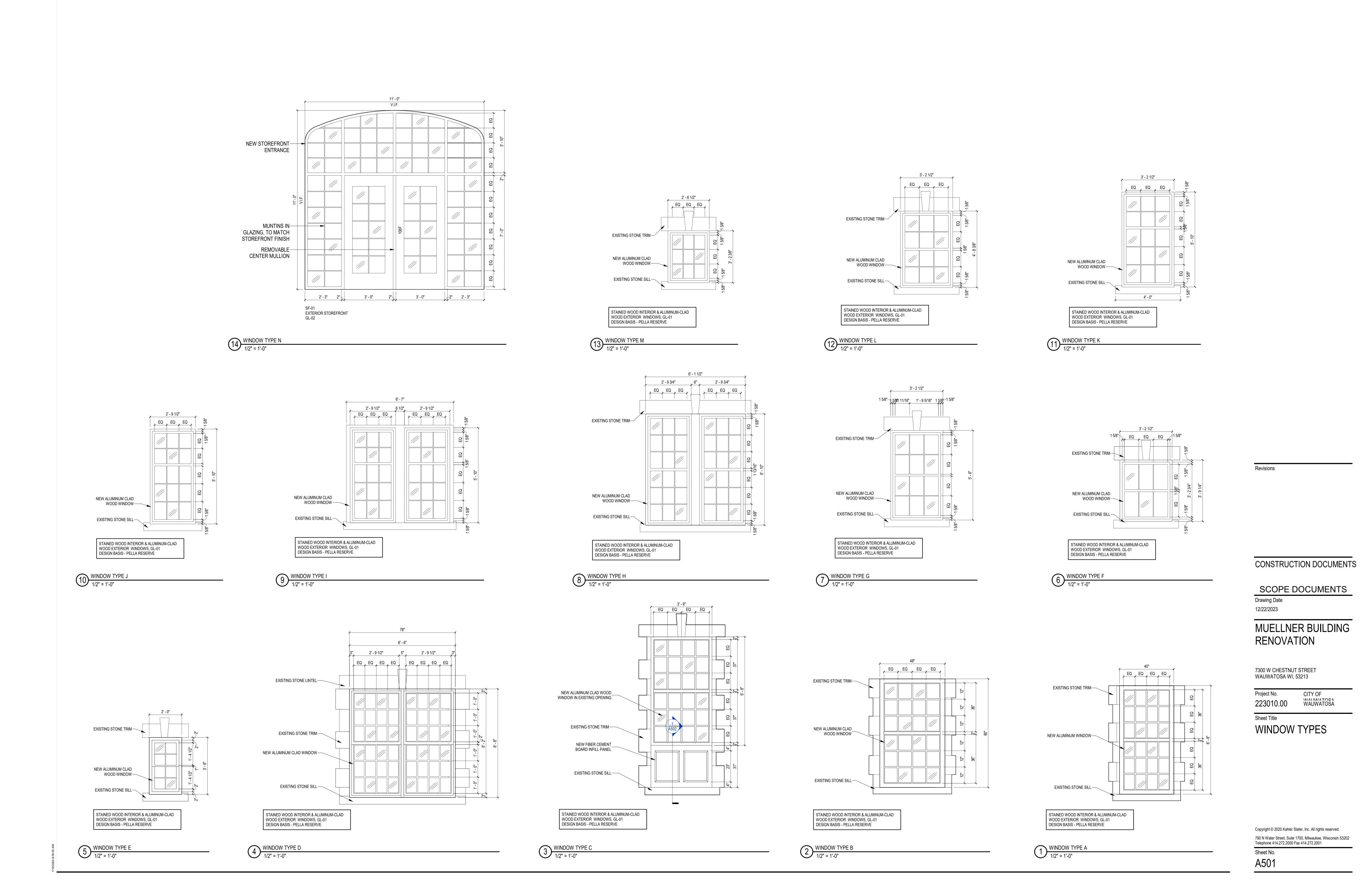
CITY OF Project No. WAUWATOSA 223010.00

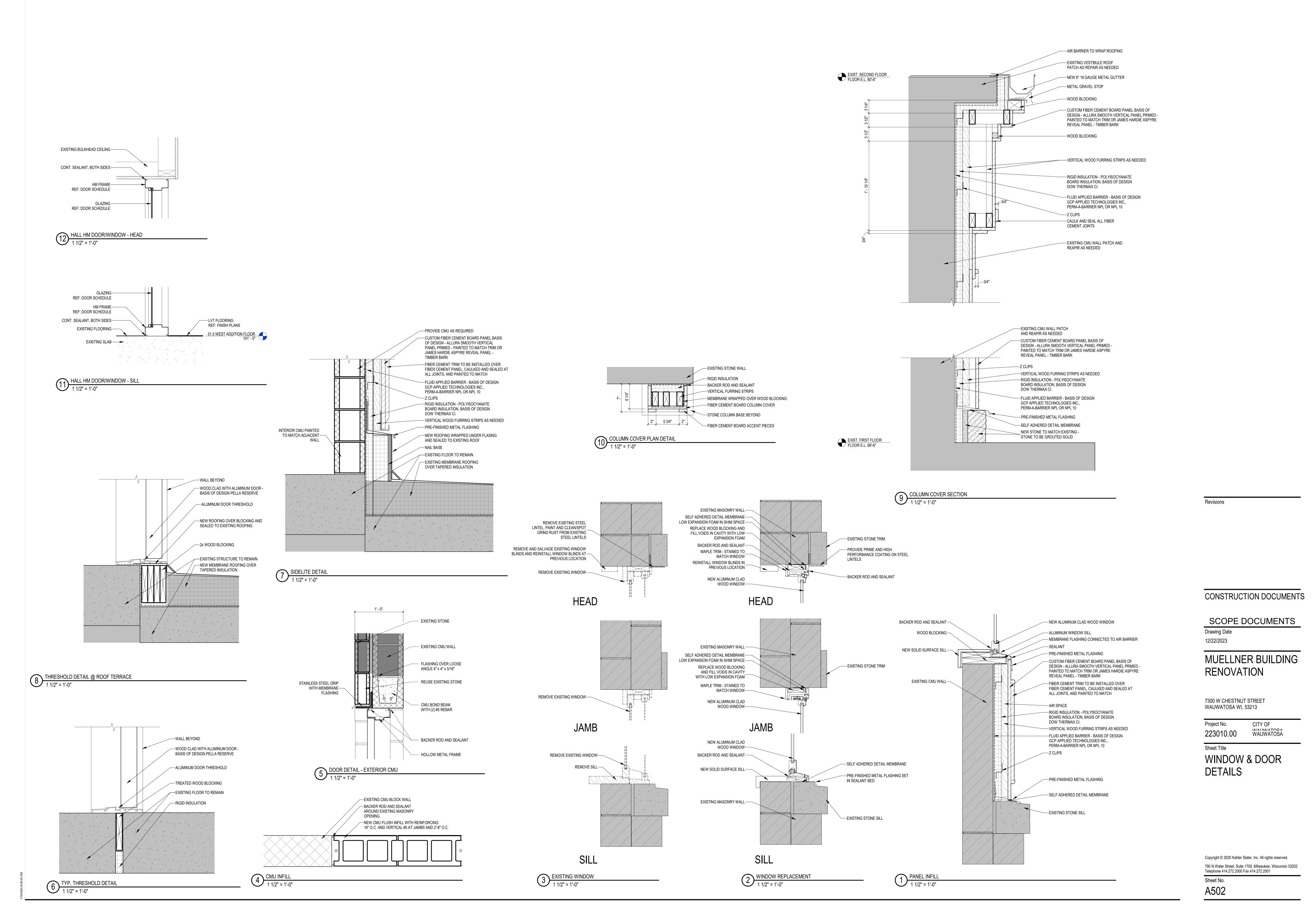
Sheet Title

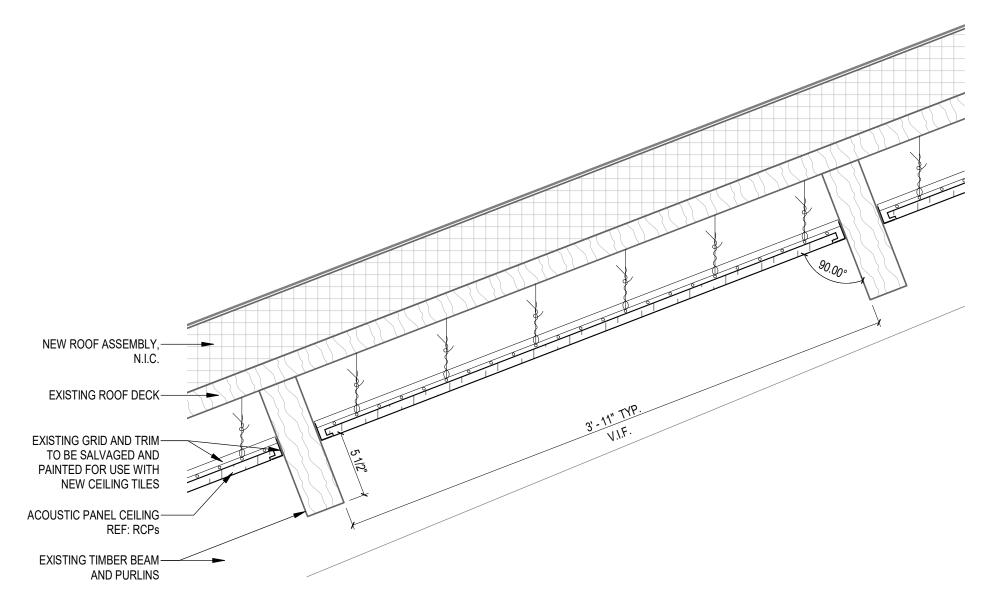
DOOR SCHEDULE &

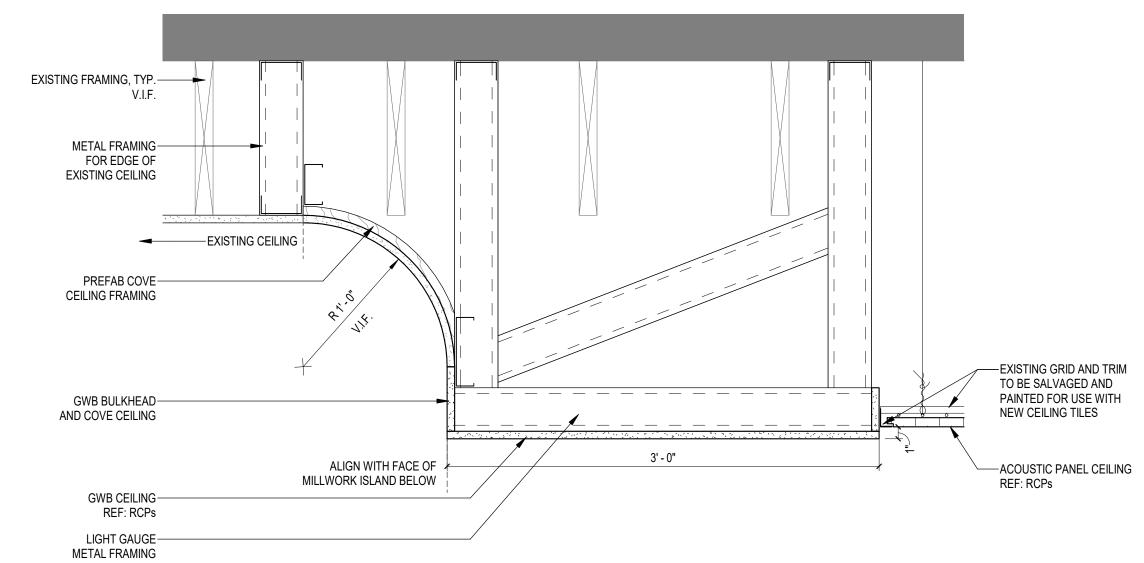
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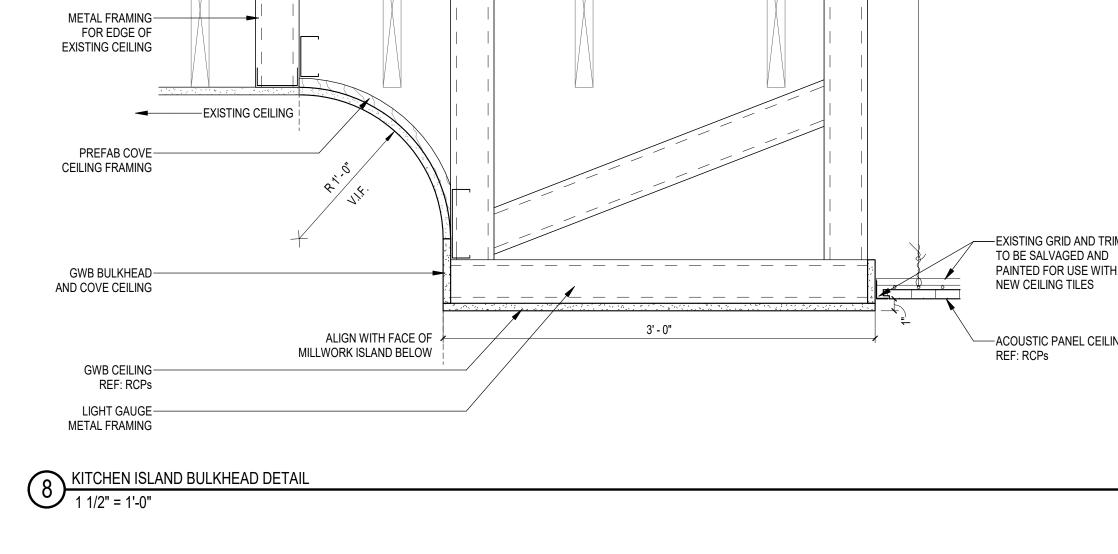
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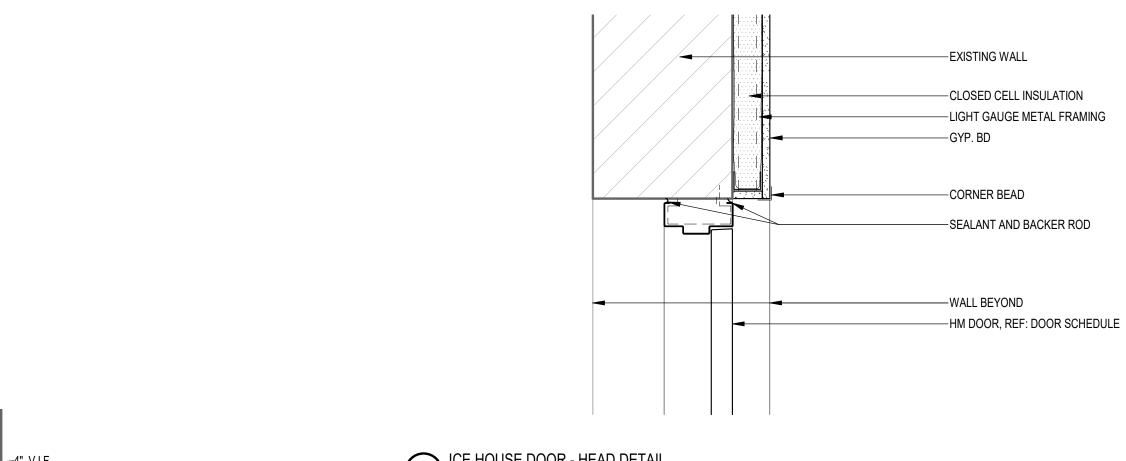


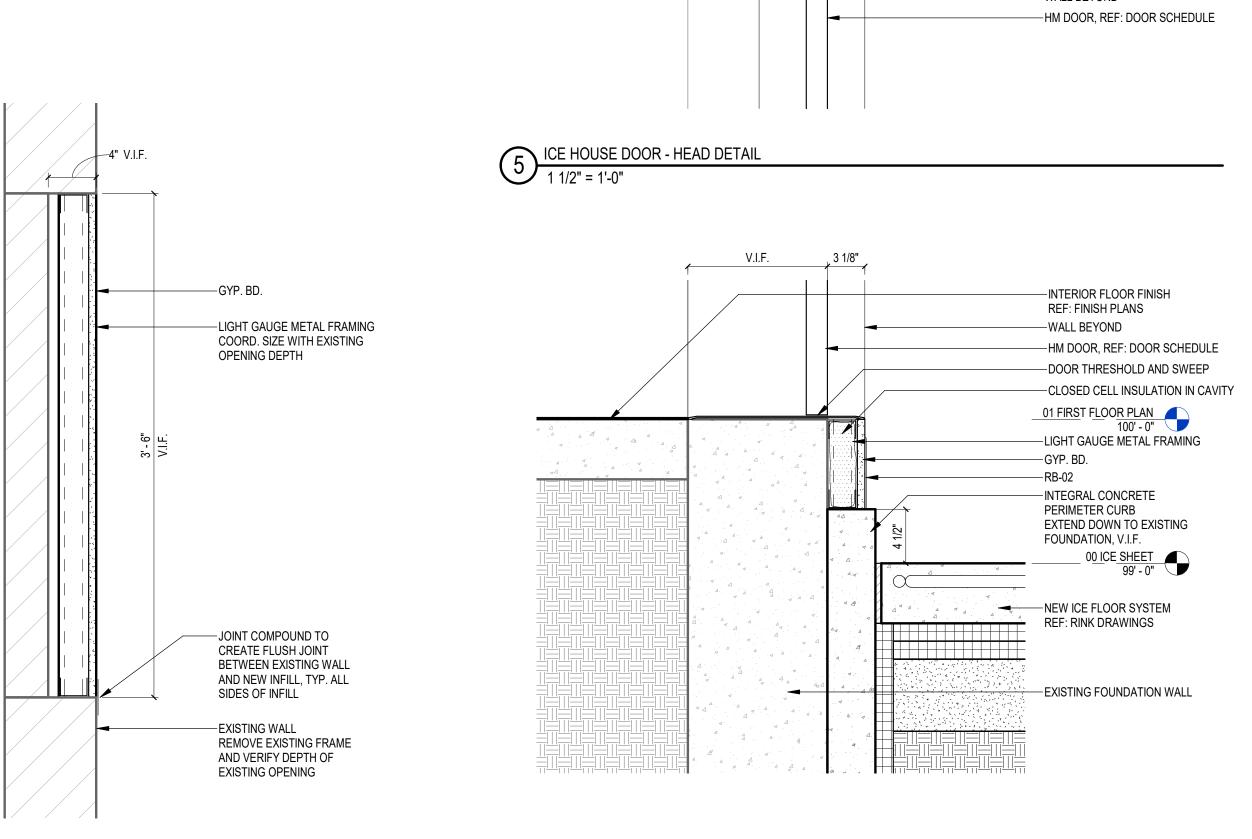






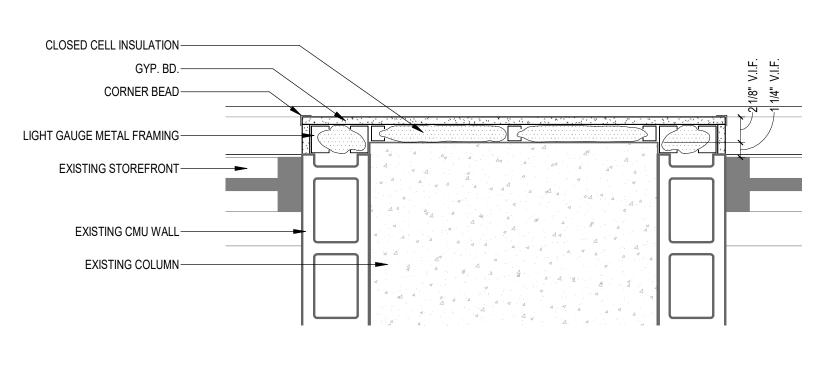




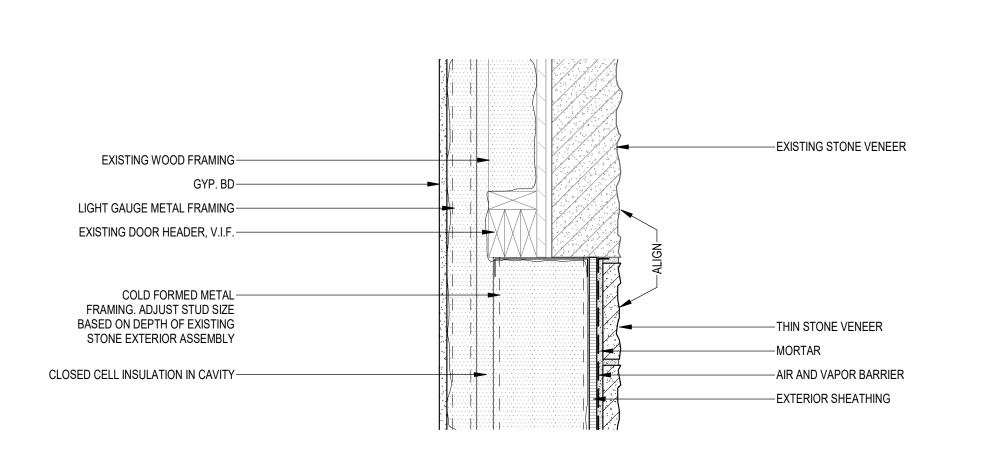


1 1/2" = 1'-0"

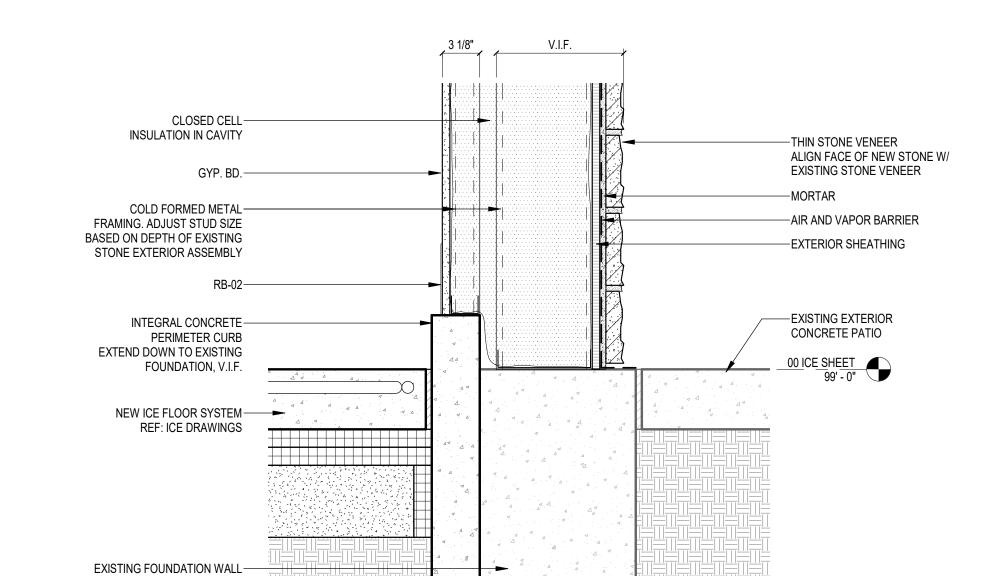
2 INFILL WALL AT FIREFLY WINDOW OPENING
1 1/2" = 1'-0"



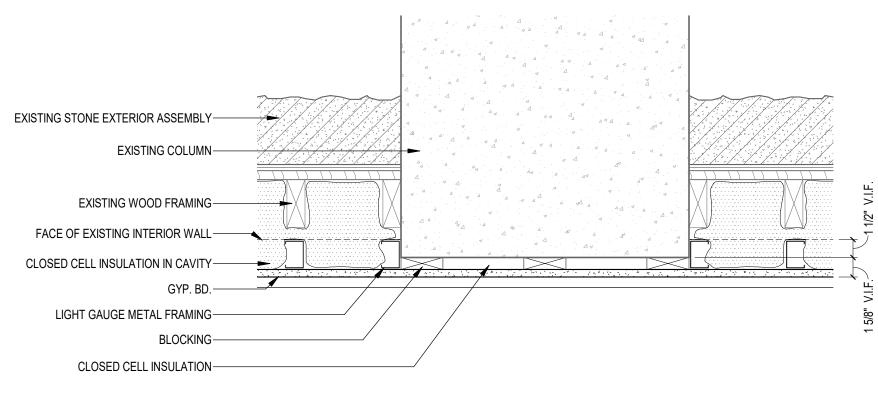




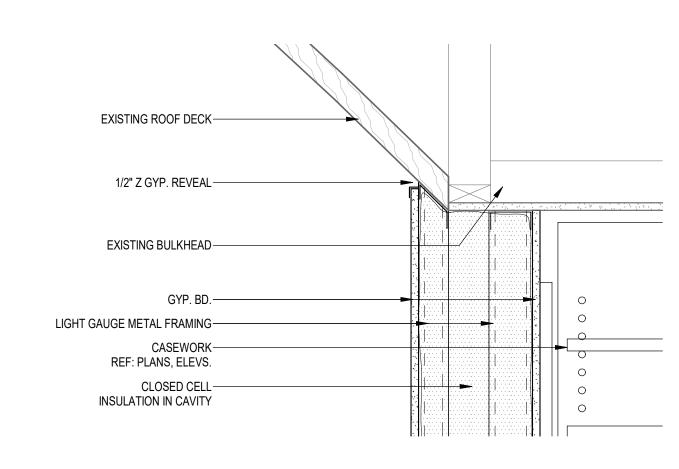
TOSA ROOM FURRED WALL HEAD - EXTERIOR1
1 1/2" = 1'-0"



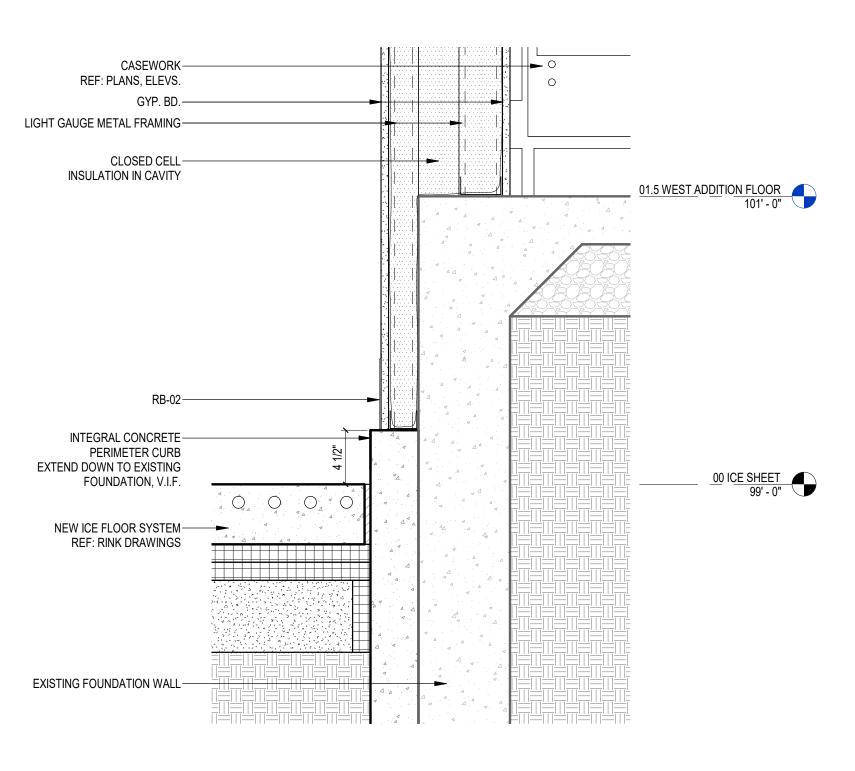
TOSA ROOM CURB DETAIL - EXTERIOR
1 1/2" = 1'-0"



TYP. EXTERIOR TOSA ROOM FURRING DETAIL AT COLUMN
1 1/2" = 1'-0"



6 PARK VIEW ROOM INFILL WALL HEAD DETAIL
1 1/2" = 1'-0"



PARK VIEW ROOM INFILL WALL SILL DETAIL

1 1/2" = 1'-0"

12/22/2023 MUELLNER BUILDING RENOVATION 7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Drawing Date

Project No. CITY OF WAUWATOSA 223010.00

Sheet Title

EXTERIOR & INTERIOR DETAILS

CONSTRUCTION DOCUMENTS

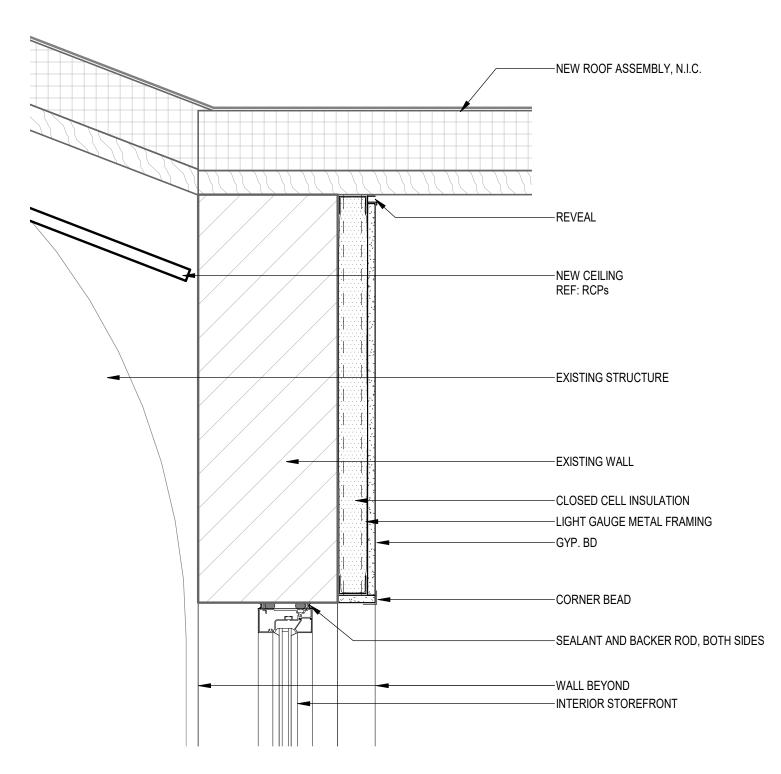
SCOPE DOCUMENTS

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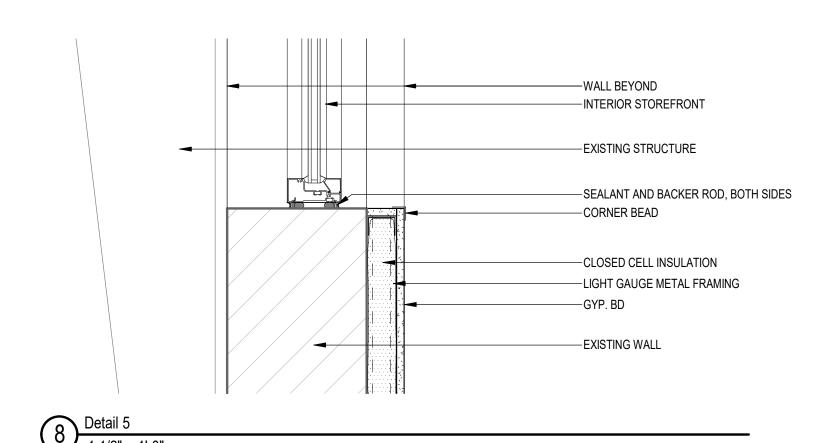
Sheet No. A550

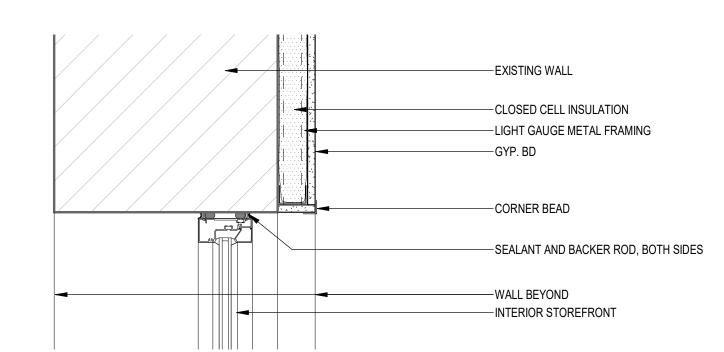
Kahler Slater —— <u>AT STUD WALLS</u> TYPICAL UNO - #10 SMS @ 1'-4" OC AT EVERY BACKING PLATE +7'-0" AFF U.N.O. —EASED EDGE AS AT CMU WALLS TYPICAL UNO - 1/4" DIA SIMPSON TITEN MASONRY SCREW @ 16" O.C. — APRON TO MATCH COUNTERTOP MATERIAL TYPICAL U.N.O. - BACKING PLATE TYPE 1, PER 5/A5.53 -VANITY SUPPORT BRACKET SEE —ADJUSTABLE SHELVES, QUANTITY AS INDICATED ON INTERIOR ELEVATIONS, TYP. -REMOVABLE PRIVACY PANEL —BASE CABINET WITH EXPOSED FASTENERS (PAN HEAD SCREWS OR EQUAL) — MAINTAIN ADAAG KNEE AND TOE ----3/8" HILTI KB TZ WITH 2" SAME AS BASE CLEARANCE AS REPRESENTED BY THE SHADED AREA. SHADED AREA IS FOR REFERENCE ONLY (DO NOT BUILD) MIN EMBED, @ 4'-0" OC —BAR EQUIPMENT - OFOI ----#10 WOOD SCREWS —48" CLEAR FLOOR SPACE STARTS @ 2'-0" OC -SEE TYPICAL CASEWORK ANCHORAGE DETAIL 6" MAX 11" MIN 17" MIN -PROVIDE PULLS AS BASE & WALL FREESTANDING FINISHED SURFACES PL-01 U.N.O. SPECIFIED BASE- SEE FINISH SCHEDULE -SEE TYPICAL CASEWORK TYPICAL CASEWORK ANCHORAGE 1/2" = 1'-0" 6 KNEE AND TOE CLEARANCE 1" = 1'-0" ANCHORAGE DETAIL FINISHED SURFACES PL-01 U.N.O. 302 - UPPER CABINET 1 1/2" = 1'-0" FINISHED SURFACES PL-01 U.N.O. 11 ISLAND DETAIL - 3 1 1/2" = 1'-0" 3' - 3 1/2" POCKET CABINET -SEE PLUMBING DRAWINGS 2' - 8" DOORS FOR SINK AND FAUCET U.N.O. ACCURIDE 123 -SEE INTERIOR HINGE (B.O.D.) -COUNTERTOP AND ELEVATIONS FOR MATERIAL TYPE, TYP. BACKSPLASH- SEE ELEVATIONS FOR MATERIAL SS-01 COUNTER-DRIP TRAY— PROVIDE 1/4" ROUTERED——— REVEAL BETWEEN SS AND PL ON ALL SIDES. PAINT BLACK. 1-1 1-1 PROVIDE BLOCKING WHERE NEEDED DRAWER OR FIXED PANEL -CABINET SIDE PANEL BEYOND EXISTING COLUMN TO REMAIN -OPEN CABINET OR KNEE SPACE FINISHED SURFACES PL-01 U.N.O. 13 ISLAND - PLAN DETAIL 1 1/2" = 1'-0" 9 COUNTER EDGE 6" = 1'-0" FINISHED SURFACES PL-01 U.N.O. 7 ISLAND DETAIL - 2 1 1/2" = 1'-0" -SEE TYPICAL CASEWORK ANCHORAGE DETAIL FINISHED SURFACES PL-01 U.N.O. 210M - BASE OPEN SINGLE DRAWER 1 1/2" = 1'-0" — SEE PLUMBING DRAWINGS FOR SINK AND FAUCET TYPE 2' - 0" 1' - 0" U.N.O. —COUNTERTOP AND BACKSPLASH-SEE ELEVATIONS FOR MATERIAL —PROVIDE SOLID WOOD EDGE AT WOOD CABINETS ALIGN FINISHED FACES — WITHIN KNEE SPACE, TYP. PL-01 ON BACK SURFACE ——OF END WALL —CABINET DOOR(S) AS INDICATED ON ELEVATIONS —FACING MATERIAL 8 SECTION - TOP OF CABINET SCRIBE 6" = 1'-0" —ADJUSTABLE SHELVING AS INDICATED ON ELEVATIONS PROVIDE FINISHED PL-01 IN — KNEE SPACE AT ALL -RECESSED CAN LIGHTING EXPOSED SURFACES, TYP. —ACCURIDE 123 HINGE (B.O.D.) BLOCKING AS REQ'D-SEE FINISH PLAN FOR — FLOORING MATERIALS —POCKET CABINET DOOR CONSTRUCTION DOCUMENTS —BASE AS SCHEDULED DOOR OR DRAWER SCOPE DOCUMENTS FINISHED SURFACES PL-01 U.N.O. 3 ISLAND DETAIL - 1 1 1/2" = 1'-0" Drawing Date -PROVIDE PULLS AS SPECIFIED -SEE TYPICAL CASEWORK ANCHORAGE DETAIL 12/22/2023 —DRAFT TAPPERS PROVIDED BY OTHERS MUELLNER BUILDING FINISHED SURFACES PL-01 U.N.O. 212S - BASE CABINET - DOOR & DRAWER 1 1/2" = 1'-0" —BASE AS SCHEDULED ON PL-01 RENOVATION **ROOM FINISH** — COUNTERTOP AND BACKSPLASH- SEE FINISH SCHEDULE SCHEDULE -FLOOR FINISH SHALL STOP @ CASEWORK —COUNTERTOP AND BACKSPLASH- SEE 2' - 0" 7300 W CHESTNUT STREET WAUWATOSA WI, 53213 U.N.O. FINISH SCHEDULE REF: ELEVS FOR—BACKSPLASH LOCATIONS REF: ELEVS FOR-U.N.O. BACKSPLASH LOCATIONS —SOLID SURFACE 5 TOE KICK 6" = 1'-0" COUNTER CITY OF Project No. 223010.00 Sheet Title MILLWORK DETAILS DOOR —DOOR LINES WHERE NEEDED FACING MATERIAL, TYP -COORDINATE DRIP TRAY -ADJUSTABLE SHELVES, -ADJUSTABLE DRAIN WITH PLUMBING SHELVES, QUANTITY AS INDICATED ON ELEVATIONS QUANTITY AS INDICATED ON ELEVATIONS EXISTING COLUMN——— WOOD BLOCKING----RECESSED WOOD LAMINATE SEE FINISH PLAN FOR FINISHED SURFACES PL-01 U.N.O. -PROVIDE PULLS AS SPECIFIED -SEE TYPICAL CASEWORK ANCHORAGE DETAIL -PROVIDE PULLS AS SPECIFIED -SEE TYPICAL CASEWORK — FINISHED BOTTOM OF CABINET-Copyright © 2020 Kahler Slater, Inc. All rights reserved. FINISH SHALL BE AS SPECIFIED FOR SEMI-EXPOSED SURFACES ANCHORAGE DETAIL 790 N Water Street, Suite 1700, Milwaukee, Wisconsin 53202 Telephone 414.272.2000 Fax 414.272.2001 FINISHED SURFACES PL-01 U.N.O. FINISHED SURFACES PL-01 U.N.O. 212 - BASE CABINET - DOOR & DRAWER 1 1/2" = 1'-0" Sheet No.

Kahler Slater LIVE WOOD EDGE-RECLAIMED LUMBER - OFCI-1/2" REVEAL-GYP. BD. - 3/4" PLYWOOD LIGHT GAUGE METAL FRAMING— — CABINET DOOR(S) AS INDICATED ON ELEVATIONS — CABINET DOOR(S) AS INDICATED ON ELEVATIONS 1/4" ROUTERED REVEAL - PAINT BLACK —ADJUSTABLE SHELVING AS INDICATED ON ELEVATIONS —ADJUSTABLE SHELVING AS INDICATED ON ELEVATIONS PL-01 - ALIGN W/ FACE OF ADJACENT FIREPLACE PLYWOOD— -ADJUSTABLE SHELVING AS INDICATED ON ELEVATIONS -BASE AS SCHEDULED LIVE WOOD EDGE— BASE AS SCHEDULED BASE - AS SCHEDULED-02 SECOND FLOOR PLAN 112' - 0" 02 SECOND FLOOR PLAN 112' - 0" 02 SECOND FLOOR PLAN 112' - 0" FINISHED SURFACES PL-01 U.N.O. FINISHED SURFACES PL-01 U.N.O. FINISHED SURFACES PL-01 U.N.O. FINISHED SURFACES PL-01 U.N.O. 212 - RIVER ROOM MILLWORK - SINK DETAIL 1 1/2" = 1'-0" 211 - RIVER ROOM MILLWORK - CABINET DETAIL 2 1 1/2" = 1'-0" 9 FIREFLY MILLWORK - BENCH DETAIL 1 1/2" = 1'-0" 211 - RIVER ROOM MILLWORK - CABINET DETAIL 1 1/2" = 1'-0" CASEWORK— REF: PLANS 15' - 0" PL-01 FACE PANEL PL-01 SIDE LEG PANEL ─► -PL-01 BACK PANEL LIGHT GAUGE ---METAL FRAMING PL-01 CASTER--PL-01 BACK PANEL SS-01----/----PL-01 SUPPORT BLOCKING, TYP. BOTH SIDES GYP. BD.— CONCEALED 180-DEGREE HINGE, TYP. 1/2" REVEAL— HAFELE SOSS 203 BASE CABINET REF: ELEVS. WHEEL BELOW, TYP. PL-01 PANEL BEYOND 6 RIVERVIEW ROOM MILLWORK - REVEAL PLAN DETAIL 1 1/2" = 1'-0" 5 FIREFLY MILLWORK - WEST 1/2" = 1'-0" LOCKING CASTER WHEEL BEYOND SS COUNTER ABOVE SS-01 COUNTER ABOVE ---PL-01 FACE PANEL ABOVE-01 FIRST FLOOR PLAN 100' - 0" — CONCEALED 180-DEGREE HINGE, TYP. HAFELE SOSS 203 LINE OF SWING 8 SWINGING DESK - SECTION DETAIL 1/2" = 1'-0" SWINGING DESK - PLAN DETAIL 1 1/2" = 1'-0" 11' - 8 3/4" PNT-03B FIREFLY MILLWORK - EAST 1/2" = 1'-0" —EXISTING WALL -BLOCKING —FURRING STRIP CONSTRUCTION DOCUMENTS PLYWOOD VENEER PANEL, PL-01 SCOPE DOCUMENTS —PLYWOOD VENEER PANEL, PL-01 Drawing Date -ADJUSTABLE SHELF BRACKET 12/22/2023 —FURRING STRIP, TYP. —ADJUSTABLE PLYWOOD VENEER SHELVES, PL-01, TYP. MUELLNER BUILDING RENOVATION -- PLYWOOD VENEER DOOR, -PLYWOOD VENEER SHELF, 7300 W CHESTNUT STREET WAUWATOSA WI, 53213 CITY OF Project No. —PLYWOOD VENEER DOOR, PL-01 223010.00 3 A552 Sheet Title —ADJUSTABLE SHELF, BEYOND MILLWORK DETAILS —PLYWOOD VENEER DOOR, PL-01 —HINGE, XXXX —EXISTING WALL —EXISTING WALL -BLOCKING —EXISTING WALL AND TILE BASE 2' - 5 3/8" V.I.F. -EXISTING TILE BASE Copyright © 2020 Kahler Slater, Inc. All rights reserved. 790 N Water Street, Suite 1700, Milwaukee, Wisconsin 53202 Telephone 414.272.2000 Fax 414.272.2001 3 DUMBWAITER - SECTION DETAIL 1 1/2" = 1'-0" Sheet No.

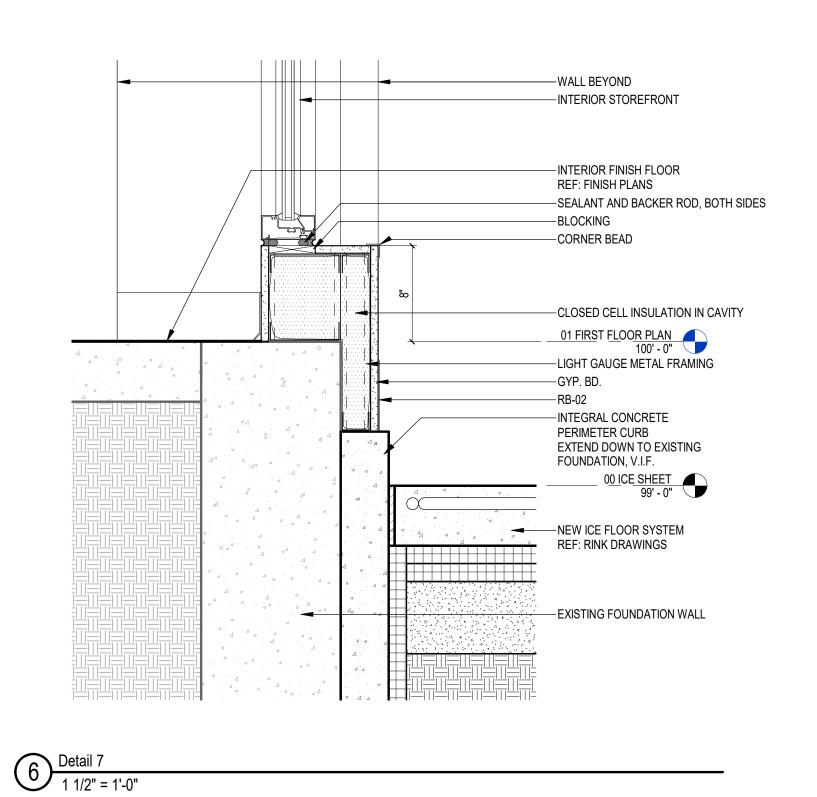


9 Detail 4 1 1/2" = 1'-0"





7 Detail 6 1 1/2" = 1'-0"



Revisions

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date
12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. CITY OF WALIWATOSA WAUWATOSA

Sheet Title

INTERIOR WINDOW TYPES & DETAILS

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790 N Water Street, Suite 1700, Milwaukee, Wisconsin 53202
Telephone 414.272.2000 Fax 414.272.2001

Sheet No.

A650

3 INTERIOR WINDOW TYPE 3

1/4" = 1'-0"

1/4" = 1'-0"

1/4" = 1'-0"

02 SECOND FLOOR PLAN 112' - 0" GL-03

SF-02 INTERIOR STOREFRONT

02 SECOND FLOOR PLAN 112' - 0"

GL-03

SF-02 INTERIOR STOREFRONT

GL-03

GENERAL . ALL MATERIALS, CONSTRUCTION, PLANS AND DETAILS SHALL CONFORM WITH THE APPLICABLE CODES AND STANDARDS AS SHOWN IN THESE DRAWINGS AS WELL AS THE PROJECT SPECIFICATIONS. FIRE UNDERWRITER RULES AND REGULATIONS AND ASTM STANDARDS RELATED TO EACH ELEMENT. 2. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL BE FAMILIAR WITH THE ENTIRE SET OF CONSTRUCTION DOCUMENTS (NOT LIMITED TO CIVIL, ARCHITECTURAL, PLUMBING, ELECTRICAL, STRUCTURAL, AND MECHANICAL, ETC.) IN ORDER TO PROVIDE ALL CONSTRUCTION AND MATERIALS FOR THE 3. THE CONTRACTOR SHALL REFER TO ALL DRAWINGS OF THE CONSTRUCTION DOCUMENTS FOR ADDITIONAL SPECIFIED ITEMS SUCH AS MEMBERS, ELEVATIONS, BRICK LEDGES, DIMENSIONS, SLEEVES, PENETRATIONS DEPRESSIONS, ETC. NOT SHOWN ON THE STRUCTURAL DRAWINGS THAT MAY BE REQUIRED FOR COMPLETION OF THE PROJECT. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER. 5. DETAILS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE DUPLICATED IN SIMILAR PORTIONS OF THE BUILDING UNLESS NOTED OTHERWISE. DRAWINGS REPRESENT THE FINISHED STRUCTURAL SYSTEM AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, LAGGING, SHORING, BRACING, FORM WORK, ETC. AS REQUIRED FOR THE PROTECTION AND SAFETY OF LIFE AND PROPERTY DURING CONSTRUCTION. OBSERVATION VISITS TO THE SITE BY THE ARCHITECT OR STRUCTURAL ENGINEER WILL NOT INVOLVE REVIEW OF THESE ITEMS. ALL INSPECTIONS REQUIRED BY THE BUILDING CODES, JURISDICTION OR THESE PLANS SHALL BE PROVIDED BY AN INDEPENDENT INSPECTION AGENCY OR THE BUILDING DEPARTMENT. SITE VISITS BY THE ARCHITECT OR STRUCTURAL ENGINEER DO NOT CONSTITUTE AN INSPECTION. 8. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR FULL COMPLIANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS CONCERNING THE HEALTH AND SAFETY OF WORKERS AND THE PUBLIC IN AND AROUND THE CONSTRUCTION SITE . CONSTRUCTION MATERIALS SHALL BE UNIFORMLY LAID OUT SUCH THAT NOTED STRUCTURAL DESIGN LIVE LOAD PER SQUARE FOOT IS NOT EXCEEDED. 10. PLANS ARE NOT TO BE SCALED. 1. NOTES ON SPECIFIC PLANS AND DETAILS AS SHOWN ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. 2. IN NO CASE SHALL STRUCTURAL ALTERATIONS, MODIFICATIONS OR WORK AFFECTING STRUCTURAL MEMBERS BE MADE WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER. 3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS RELATED TO ELEVATOR/ESCALATOR/EQUIPMENT PITS AND SHAFTS WITH SELECTED 1. CONTRACTOR SHALL CONFIRM ELEVATOR/ESCALATOR/EQUIPMENT SUPPORT BEAM/GUIDE RAIL ELEVATIONS AND LOCATIONS WITH THE APPROVED ELEVATOR/ESCALATOR/EQUIPMENT SHOP DRAWINGS. 5. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATING REQUIREMENTS. 6. UNLESS NOTED OTHERWISE, CENTERLINE OF FRAMING ELEMENTS COINCIDE WITH COLUMN CENTERLINES. FRAMING BETWEEN MEMBERS SHALL BE EQUALLY SPACED UNLESS NOTED OTHERWISE. 7. IF ANY ERRORS OR OMISSIONS APPEAR IN THESE DRAWINGS, SPECIFICATIONS OR OTHER DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND STRUCTURAL ENGINEER IN WRITING PRIOR TO PROCEEDING WITH WORK. 18. NO PROVISIONS HAVE BEEN MADE FOR FUTURE EXPANSION. EXISTING CONSTRUCTION CONTRACTOR SHALL FIELD VERIFY ALL EXISTING STRUCTURAL ELEMENTS, CONSTRUCTION PRIOR TO CONSTRUCTION AND PROCUREMENT OF MATERIAL CONTRACTOR TO NOTIFY ARCHITECT AND STRUCTURAL ENGINEER OF ANY DISCREPANCIES. EXISTING CONDITIONS SHOWN REPRESENT THE BEST AVAILABLE INFORMATION. NO WARRANTY IS MADE TO THE ACCURACY OF THE INFORMATION PRESENTED. 2. REMOVE, REPLACE, AND MODIFY ALL EXISTING MATERIAL (ARCHITECTURAL, ELECTRICAL, MECHANICAL, STRUCTURAL, ETC.) AS REQUIRED TO PLACE NEW STRUCTURAL WORK SHOWN IN THE CONSTRUCTION DOCUMENTS. 3. ANY EXISTING CONDITIONS THAT ARE UNCOVERED DURING THE COURSE OF THE PROJECT THAT THE CONTRACTOR DEEMS UNSAFE SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF SHORING, BRACING, ETC. REQUIRED TO SAFELY CONSTRUCT THE PROJECT.

CAST-IN-PLACE CONCRETE

CONCRETE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND ACI 301 'SPECIFICATIONS FOR STRUCTURAL CONCRETE." CONCRETE SLAB CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 302 "GUIDE TO CONCRETE FLOOR AND SLAB CONSTRUCTION." CONCRETE MIXING, TRANSPORTING AND PLACEMENT SHALL CONFORM TO ACI 304 "GUIDE FOR MEASURING, MIXING, TRANSPORTING, AND PLACING

> CONCRETE PLACED DURING HOT OR COLD WEATHER SHALL CONFORM TO ACI 305 "GUIDE TO HOT WEATHER CONCRETING" AND ACI 306 "GUIDE TO COLD CONCRETE SHALL BE MECHANICALLY CONSOLIDATED IN ACCORDANCE WITH AC

VIBRATED AROUND EMBEDDED ITEMS, THICKENED SLABS, TRENCHES, FLOOR CONCRETE CURING SHALL CONFORM TO ACI 308 "GUIDE TO EXTERNAL CURING OF CONCRETE" OR ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE," WHICHEVER IS APPLICABLE UNLESS ALTERNATE METHODS ARE APPROVED BY ARCHITECT AND STRUCTURAL ENGINEER. WHERE CURING

COMPOUNDS ARE APPROVED, CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING COMPATIBILITY WITH FLOORING PRIOR TO CURING COMPOUND MAXIMUM UNCONFINED CONCRETE FREE FALL SHALL BE LIMITED TO 5'-0". WATER SHALL BE CLEAN AND POTABLE AND SHALL CONFORM TO ASTM C94. NO WATER SHALL BE ADDED AT THE JOBSITE UNLESS SPECIFICALLY APPROVED IN

WRITING BY THE CONCRETE SUPPLIER. CONCRETE MIXING OPERATION SHALL CONFORM TO ASTM C94. CLEAR COVER REQUIREMENTS FOR CONCRETE REINFORCEMENT SHALL

CONFORM TO THE FOLLOWING UNLESS SPECIFICALLY NOTED OTHERWISE: CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH CONCRETE EXPOSED TO EARTH OR WEATHER #5 AND SMALLER #6 THROUGH #18 CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND

 SLABS, WALLS, JOISTS: #11 AND SMALLER BEAMS, COLUMNS: PRIMARY, TIES, STIRRUPS OR SPIRALS UNLESS OTHERWISE DETAILED, PROVIDE (2) #5 BARS AROUND ALL OPENINGS AND (2) #5 DIAGONAL BARS AT ALL OPENINGS AND RE-ENTRANT CORNERS. BARS SHALL EXTEND A MINIMUM OF 30" PAST OPENING.

EXISTING SURFACES THAT ARE TO RECEIVE NEW CONCRETE SHALL BE INTENTIONALLY ROUGHENED TO AN AMPLITUDE OF 1/4" UNLESS NOTED

BASE PLATE GROUT SHALL BE NON-SHRINK, NON-METALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI. THICKNESS SHALL BE AS DETAILED. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4" CHAMFER UNLESS SPECIFICALLY DETAILED OTHERWISE. TOP SURFACES OF WALLS EXPOSED TO VIEW SHALL BE FINISHED SMOOTH UNLESS NOTED OTHERWISE. ALL REINFORCING BARS, ANCHOR BOLTS, WIRE MESH, DOWELS, AND OTHER CONCRETE INSERTS SHALL BE WELL SECURED IN FINAL POSITION PRIOR TO

PLACING CONCRETE. PROVIDE SLEEVES FOR PLUMBING, ELECTRICAL AND MECHANICAL PENETRATIONS. PENETRATIONS THROUGH BEAMS AND COLUMNS ARE ONLY PERMITTED WHERE SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS INDICATING LOCATION OF ALL PENETRATIONS AND EMBEDDED CONDUIT THROUGH OR IN CONCRETE. CONCRETE IS NOT TO BE CUT OR CORED WITHOUT PRIOR APPROVAL OF STRUCTURAL ENGINEER. COORDINATION OF OTHER TRADES RELATED TO THE CONCRETE WORK IS THE RESPONSIBILITY OF THE CONTRACTOR.

CONDUIT, PIPES OR SIMILAR ITEMS RUNNING THROUGH OR IN CONCRETE SHALL BE PLACED SO THEY ARE NOT CLOSER THAN 3 DIAMETERS ON CENTER, CONCRETE COVER IS NOT LESS THAN 1" AND NO REINFORCING STEEL IS DISPLACED UNLESS APPROVED BY THE STRUCTURAL ENGINEER.

 CALCIUM CHLORIDE SHALL NOT BE USED IN CONCRETE MIXES. CONTRACTOR IS RESPONSIBLE FOR REPAIR OF IRREGULARITIES OR DEFECTS IN CONCRETE WORK PRIOR TO PLACEMENT OF FINISH MATERIALS. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS AND TEST DATA COMPLIANT WITH REFERENCED ACI STANDARDS AND THE LOCAL BUILDING CODE.

MIX IS TO BE USED IN THE STRUCTURE. CONTRACTOR SHALL HIRE A MATERIALS TESTING LABORATORY TO CAST AND TEST CYLINDERS. SAMPLING, PREPARATION AND TESTING SHALL CONFORM TO ASTM C172, ASTM C31 AND ASTM C39. TEST RESULTS MUST BE SUBMITTED TO ARCHITECT AND STRUCTURAL ENGINEER. ACCEPTANCE CRITERIA WILL BE BASED ON ACI 318. TEST RESULTS SHALL PROVIDE THE FOLLOWING INFORMATION AT A • LOCATION IN PROJECT WHERE SAMPLE WAS TAKEN WITH MIX DESIGNATION. • COMPRESSIVE STRENGTH AT 7 DAYS. COMPRESSIVE STRENGTH AT 28 DAYS. • AIR CONTENT.

MIX DESIGNS SHALL INCLUDE THE PROJECT NAME AND INDICATE WHERE EACH

• WATER ADDED AT JOB SITE. SHOP DRAWINGS FOR REINFORCEMENT DETAILING, FABRICATING, BENDING AND PLACING OF CONCRETE REINFORCEMENT SHALL CONFORM TO ACI 318 AND CRS MANUAL OF STANDARD PRACTICE. BAR SCHEDULES, STIRRUP SPACING, BENT BAR DIAGRAMS, AND ARRANGEMENT OF REINFORCEMENT SHALL BE SHOWN. • CONCRETE REINFORCING BARS SHALL CONFORM TO ASTM A615 (GRADE 60). ALL SPLICES IN CONCRETE REINFORCEMENT SHALL BE CLASS B LAP SPLICES UNLESS NOTED OTHERWISE. ADJACENT SPLICES SHALL BE STAGGERED A MINIMUM OF 3'-0" UNLESS DETAILED OTHERWISE. REFER TO LAP SPLICE AND

 PROVIDE CORNER BARS AT ALL CORNERS AND WALL INTERSECTIONS. SLAB-ON-GRADE CONTROL JOINTS SHALL BE PLACED AS INDICATED ON STRUCTURAL DRAWINGS. SAW CUTTING SHALL BE PERFORMED AS SOON AS CUT WILL NOT RAVEL THE JOINT.

DEVELOPMENT LENGTH SCHEDULE.

 1/2" EXPANSION JOINT MATERIAL SHALL BE PLACED WHERE SLABS ABUT ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064. WELDED WIRE FABRIC SHALL BE LAPPED ONE WIRE SPACE PLUS 2" FOR PLAIN WIRE AND 8" FOR

SMOOTH FACED FORMS SHALL BE USED FOR ALL CONCRETE EXPOSED TO VIEW.

STRUCTURAL STEEL

DESIGN. DETAILING (INCLUDING CONNECTIONS), FABRICATION AND ERECTION OF

STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH CODE REFERENCED STANDARDS OF AISC 360 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS" AND AISC 303 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND 2. WELDS SHALL CONFORM TO AWS D1.1 UNLESS NOTED OTHERWISE. WELDING SHALL BE DONE BY WELDERS HOLDING CURRENT CERTIFICATES IN THE TYPE OF WELDS SHOWN ON THE CONSTRUCTION DRAWINGS. ALL MISCELLANEOUS FILLET

WELDS NOT NOTED, INCLUDING THOSE FOR STIFFENERS, MISCELLANEOUS

PLATES, ETC SHALL BE PER AISC 360, TABLE 2.4 CONTRACTOR SHALL SUBMIT STRUCTURAL STEEL SHOP DRAWINGS IN ACCORDANCE WITH AISC 360 AND AISC 303. CONTRACTOR MUST REVIEW AND STAMP SHOP DRAWINGS PRIOR TO SUBMITTING TO THE ARCHITECT. . CONTRACTOR SHALL DETERMINE. FURNISH AND INSTALL TEMPORARY BRACINI 309 "GUIDE FOR CONSOLIDATION OF CONCRETE." SLAB-ON-GRADE NEED ONLY BE REQUIRED TO SAFELY ERECT STRUCTURAL STEEL IN ACCORDANCE WITH AISC 303 AND OSHA REQUIREMENTS. BRACING SHALL BE LEFT IN PLACE UNTIL THE PERMANENT STRUCTURE IS IN PLACE AND SECURE.

> STRUCTURAL STEEL SHALL BE TRUE AND PLUMB BEFORE FINAL CONNECTIONS ARE SECURED AND PRIOR TO PLACING OR APPLYING OTHER MATERIALS TO THE 6. BEAMS SHALL BE ERECTED WITH THE NATURAL OR DESIGN CAMBER (WITHIN MILL TOLERANCE) WITH THE CROWN OF THE CAMBER AT THE TOP.

. CONTRACTOR SHALL COORDINATE WORK BETWEEN THE STEEL SUPPLIER AND STEEL JOIST SUPPLIER. B. STEEL CONNECTIONS SHALL BE DETAILED AS INDICATED ON THE CONSTRUCTION DRAWINGS. WHERE CONNECTIONS ARE NOT DETAILED, THE FABRICATOR IS ALLOWED TO DETAIL THE CONNECTIONS BASED ON THE BEAM REACTIONS SHOWN AND THE FOLLOWING: A. ALL REACTIONS ARE SERVICE LEVEL.

B. SELECTION OF CONNECTIONS SHALL BE BASED ON ASD. C. USE OF STANDARD DETAILS SHOWN ON CONSTRUCTION DRAWINGS. . ALTERNATE CONNECTIONS TO THOSE SHOWN MAY BE CONSIDERED. APPROVAL BY THE STRUCTURAL ENGINEER IS REQUIRED. O. ANY HOLES, CUTS OR COPING OF STEEL IN THE FIELD MUST BE APPROVED BY THE STRUCTURAL ENGINEER PRIOR TO WORK. CONTRACTOR SHALL COORDINATE ALL HOLES REQUIRED BY OTHER TRADES WITH STRUCTURAL ENGINEER PRIOR TO

UNLESS SPECIFICALLY INDICATED ON THE CONSTRUCTION DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER. 2. ALL BOLTS SHALL BE A325-N UNLESS NOTED OTHERWISE AND INSTALLED SNUC TIGHT UNLESS NOTED OTHERWISE. BOLTS SHALL CONFORM TO THE SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS." 3. SPLICES SHALL BE ALLOWED ONLY AT LOCATIONS INDICATED ON CONSTRUCTION DRAWINGS UNLESS APPROVED BY STRUCTURAL ENGINEER.

4 CONTRACTOR SHALL COORDINATE EMBEDDED ITEMS AND CONNECTION

MATERIALS THAT ARE PART OF THE WORK OF OTHER TRADES BUT THAT WILL

. OVERSIZED OR SLOTTED HOLES SHALL NOT BE USED FOR ANY CONNECTIONS

RECEIVE STRUCTURAL STEEL. 5. BASE PLATES SHALL BE GROUTED IMMEDIATELY AFTER THE STRUCTURAL STEEL FRAME OR PORTION THEREOF HAS BEEN PLUMBED. 6. STAIRS, HANDRAILS, AND GUARDRAILS SHALL BE DESIGNED AND DETAILED BY THE STEEL SUPPLIER. CONNECTIONS INTO SURROUNDING STRUCTURE SHALL BE APPROVED BY THE STRUCTURAL ENGINEER. 7. PROVIDE 3/16" CAP PLATES AT THE ENDS OF ALL EXPOSED HSS AND PIPE MEMBERS, UNLESS NOTED OTHERWISE.

8. WEEP HOLES SHALL BE PROVIDED IN EXTERIOR HSS AND PIPE COLUMNS. HOLES SHALL BE 1/2" DIA AND CENTERED 1" ABOVE THE BASEPLATE. 19. COAT STEEL BELOW GRADE STEEL SUBJECTED TO MOISTURE WITH COLD APPLIED ASPHALT EMULSION PER ASTM D1187. 20. REFER TO ARCHITECTURAL PLANS FOR MISCELLANEOUS STEEL NOT DETAILED

ON THE STRUCTURAL PLANS.

SHOP DRAWINGS

SHOP DRAWINGS SHALL BE SUBMITTED FOR ALL STRUCTURAL ITEMS IN ADDITION TO ITEMS REQUIRED BY PROJECT SPECIFICATIONS. . THE CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS PRIOR TO SUBMITTING TO THE ARCHITECT. ITEMS NOT IN CONFORMANCE WITH THE CONTRACT DOCUMENTS SHALL BE NOTED UPON CONTRACTOR'S REVIEW. ANY CHANGES, SUBSTITUTIONS, OR DEVIATIONS FROM THE CONTRACT DOCUMENTS SHALL BE CLOUDED BY THE MANUFACTURER OR FABRICATOR. ANY OF THE AFOREMENTIONED ITEMS THAT ARE NOT CLOUDED OR NOTED BY SUBMITTING PARTIES, SHALL NOT BE CONSIDERED APPROVED AFTER ENGINEER'S

CONTRACT DOCUMENTS AT ANYTIME BEFORE OR AFTER SHOP DRAWING REVIEW. THE SHOP DRAWINGS DO NOT REPLACE THE CONTRACT DOCUMENTS. ITEMS OMITTED OR SHOWN INCORRECTLY AND ARE NOT FLAGGED BY THE STRUCTURAL OR ARCHITECT SHALL NOT BE CONSIDERED CHANGES TO THE CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ITEMS ARE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. 6. THE ADEQUACY OF ENGINEERING DESIGNS AND LAYOUT PERFORMED BY OTHERS RESTS WITH THE DESIGNING OR SUBMITTING AUTHORITY. REVIEWING IS INTENDED ONLY AS AN AID TO THE CONTRACTOR IN OBTAINING CORRECT SHOP DRAWINGS. RESPONSIBILITY FOR THE CORRECTNESS SHALL

. THE ENGINEER HAS THE RIGHT TO APPROVE OR DISAPPROVE ANY CHANGES TO

DEFERRED SUBMITTALS

DEFERRED SUBMITTAL LIST:

. PRECAST WALL PANELS AND CONNECTIONS 2. COLD-FORMED FRAMING STEEL JOISTS I. METAL PLATE WOOD TRUSSES 5. HEAVY TIMBER TRUSSES AND CONNECTIONS 6. GLULAM FRAMING PREFARRICATED RAI CONIES 8. PREFABRICATED RAILINGS 9. CURTAIN WALL

REST WITH THE CONTRACTOR.

REVIEW UNLESS NOTED ACCORDINGLY.

ALL DEFERRED SUBMITTALS SHALL BE IN GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. . ALL DEFERRED SUBMITTALS SHALL BE SUBMITTED FOR REVIEW BY THE BUILDING OFFICIAL, ARCHITECT, AND STRUCTURAL ENGINEER, AND ITEMS SHALL NOT BE INSTALLED, ERECTED, OR FABRICATED UNTIL APPROVED.

COLUMN BASE PLATE SCHEDULE 1 REFER TO PLAN FOR TOP OF CONCRETE ELEVATIONS 2. PROVIDE ANCHOR RODS WITH NUT/WASHER ABOVE BASE PLATE AND LEVELING NUT/WASHER BELOW BASE PLATE. TACK WELD A NUT TO THE ROD END. AT FABRICATOR'S OPTION. SETTING PLATE MAY BE USED. 3. PROVIDE GROUT BED CONSISTING ON NON-SHRINK. NON-METALLIC GROUT. GROUT TO HAVE MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI, PROVIDE GROUT HOLES IN THE BASE PLATE AS NECESSARY, 4 BASE PLATES SHALL BE FINISHED IN ACCORDANCE WITH AISC 360 CHAPTER M 5. COLUMN BASES SHALL BE SET LEVEL AND TO CORRECT ELEVATION WITH FULL BEARING ON CONCRETE OR MASONRY. REFER TO SNOW LOAD 125 PSF 1/2" BASE PLATE WITH (4) 5/8" DIA x 4" SIMPSON TITEN

DESIGN INFORMATION

BUILDING CODE

INTERNATIONAL BUILDING CODE 2015

GRAVITY SYSTEM

SNOW CRITERIA

Pg = 30 PSF

WIND CRITERIA

DESIGN INFORMATION

120 MPH (ULTIMATE)

Kd = 0.85

GCPI = +-0.18

SIMPLE DIAPHRAGM

ROOF SURFACE WIND PRESSURES ULTIMATE

-56.2 PSF

-84.7 PSF

-79.5 PSF

-33.2 PSF

-40.9 PSF

30.7 PSF

SEISMIC CRITERIA

GEOTECHNICAL CRITERIA

DESIGN INFORMATION

145 PCF (ASSUMED)

50 PSF/FT (ASSUMED)

150 PCI (ASSUMED)

3,000 PSF (ASSUMED)

DESCRIPTION OF SOILS

STEEL DESIGN STRENGTHS

0.35 (ASSUMED)

300 PSF (ASSUMED)

-31.5 PSF

-42.3 PSF

-50.8 PSF

16.0 PSF

-46.3 PSF

-39.8 PSF

-28.7 PSF

-31.9 PSF

26.2 PSF

DESIGN INFORMATION

= 4.60%g

SD1 = 0.074

RESISTANCE

Cs = 0.039

BASED ON REPORT NUMBER XXX PREPARED BY XXX FOR

STRUCTURAL STEEL SYSTEMS NOT

SPECIFICALLY DETAILED FOR SEISMIC

EQUIVALENT LATERAL FORCE ANALYSIS

STRENGTH

Fy = 60 ksi

Fy = 65 ksi

Fy = 50 ksi

Fy = 36 ksi

Fy = 36 ksi

Fy = 35 ksi

Fy = 33 ksi

Fy = 50 ksi

ASTM A325

ASTM A563 ASTM F436

ASTM F1852

ASTM F959

ASTM A36

ASTM A29

AISI C-1035

AISI C-1030

AISI C-1018, GR 2

ASTM C1107

ASTM F1554

y = 46 ksi

-36.4 PSF

-36.4 PSF

16.0 PSF

-45.5 PSF

-25.6 PSF

-25.6 PSF

23.0 PSF

27 PSF PLUS DRIFT WHERE INDICATED

LECTRICAL PLATFORM

CODE INFORMATION

DESIGN SNOW LOAD

THERMAL FACTOR

GROUND SNOW

FLAT ROOF SNOW LOAD

SNOW EXPOSURE FACTOR

SNOW IMPORTANCE FACTOR

RAIN ON SNOW SURCHAGE

SLOPED ROOF FACTOR

CODE INFORMATION

MEAN ROOF HEIGHT

BASIC WIND SPEED (3 SECOND GUST)

WIND DIRECTIONALITY FACTOR

WIND IMPORTANCE FACTOR

WIND EXPOSURE CATEGORY

TOPOGRAPHIC FACTOR

DESIGN PROCEDURE

NEGATIVE ZONE

NEGATIVE ZONE 2

NEGATIVE ZONE 3

POSITIVE ZONE ALL ZONES

OVERHANG ZONE 1 AND 2

VERHANG ZONE 3

NEGATIVE ZONE 4

NEGATIVE ZONE 5

POSTIVE ZONE 4 AND 5

CODE INFORMATION

OCCUPANCY CATEGORY

SEISMIC DESIGN CATEGORY

SEISMIC RESPONSE COEFFICIENT

AT-REST PRESSURE (BRACED)

COEFFICIENT OF SLIDING FRICTION

ALLOWABLE NET BEARING PRESSURE

RESPONSE MODIFICATION FACTOR

DESIGN BASE SHEAR

ANALYSIS PROCEDURE

SOIL UNIT WEIGHT

PASSIVE PRESSURE

SUBGRADE MODULUS

REINFORCING STEEL

STRUCTURAL STEEL:

WIDE FLANGE, ASTM A992

PIPES, ASTM A53, GRADE B

COLD-FORMED STEEL 18 GAUGE AND THINNER

16 GAUGE AND THICKER

THREADED RODS

SLEEVE NUTS

SHEAR STUD CONNECTORS

CLEVISES AND TURNBUCKLES

STEEL EYE NUTS AND STEEL EYE BOLTS

FILLER METAL FOR WELDS, ANSI/AWS D1 FILLER METAL FOR REINFORCING BARS

NON-METALLIC, NON-SHRINK GROUT

METALLIC COATING DESIGNATION

BOLTS (PLAIN AND GALVANIZED)

TWIST-OFF TENSION CONTROL BOLTS

COMPRESSIBLE WASHER TYPE DIRECT TENSION

ANCHOR RODS (GRADE SPECIFIED ON PLANS)

ASTM A615, DEFORMED

ASTM A706, LOW ALLOY, WELDABLE

PLATE AND BAR STOCK, ASTM A36

ASTM A1064, WELDED WIRE REINFORCEMENT

CHANNELS, ANGLES, S SHAPES, ASTM A36

RECT HSS MEMBERS, ASTM A500, GRADE B

SEISMIC IMPORTANCE FACTOR

MAPPED SPECTRAL RESPONSE ACCELERATION (SHORT)

ACTIVE EARTH PRESSURE (MOVEMENT) 35 PSF/FT (ASSUMED)

MAPPED SPECTRAL RESPONSE ACCELERATION (LONG)

SPECTRAL RESPONSE COEFFICIENT (SHORT

SPECTRAL RESPONSE COEFFICIENT (LONG)

BASIC SEISMIC FORCE RESISTING SYSTEM

WIND OCCUPANCY CATEGORY

INTERNAL PRESSURE COEFFICIENT

CONCRETE DESIGN STRENGTHS										
ELEMENT	CONCRETE STRENGTH	MAX AGGREGATE	MAX w/c RATIO	AIR CONTENT	SLUMP					
FOOTINGS	3,000 PSI	1-1/2"	0.59	NONE	5"					

Revisions



CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS Drawing Date

MUELLNER BUILDING

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

CITY OF Project No. WAUWATOSA

GENERAL STRUCTURAL

SHEET INDEX

S001 GENERAL STRUCTURAL NOTES
S100 FLOOR FRAMING PLAN S110 ROOF FRAMING PLAN 400 STRUCTURAL DETAILS



790 N Water Street, Suite 1700, Milwaukee, Wisconsin 53202 Telephone 414.272.2000 Fax 414.272.2001 Sheet No.



CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS Drawing Date

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. 223010.00

12/22/2023

Sheet Title

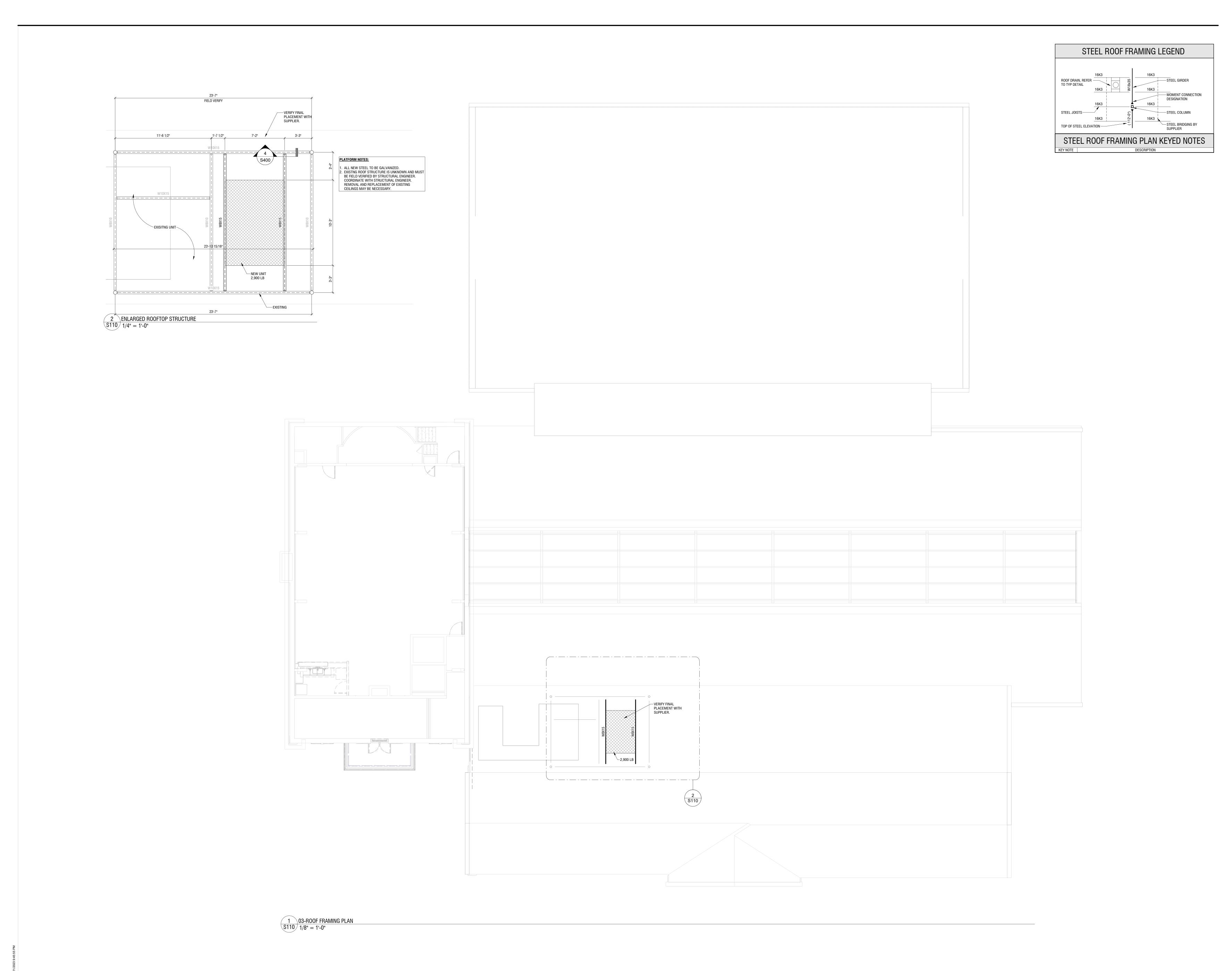
FLOOR FRAMING PLAN

CITY OF WAUWATOSA



790 N Water Street, Suite 1700, Milwaukee, Wisconsin 53202 Telephone 414.272.2000 Fax 414.272.2001

Sheet No.







CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date

12/22/2023 MUELLNER BUILDING

RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

CITY OF WAUWATOSA Project No. 223010.00

Sheet Title

ROOF FRAMING PLAN



790 N Water Street, Suite 1700, Milwaukee, Wisconsin 53202 Telephone 414.272.2000 Fax 414.272.2001 Sheet No.



CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS Drawing Date

12/22/2023 MUELLNER BUILDING

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

RENOVATION

Project No.

CITY OF WAUWATOSA 223010.00

Sheet Title

EXISTING MASONRY WALL

BAR GRATING. MCNICHOLS — GW-100 OR APPROVED EQUAL. PROVIDE SADDLE CLIPS AT 24" o/c.

STEEL BEAM, REFER —/ TO PLAN

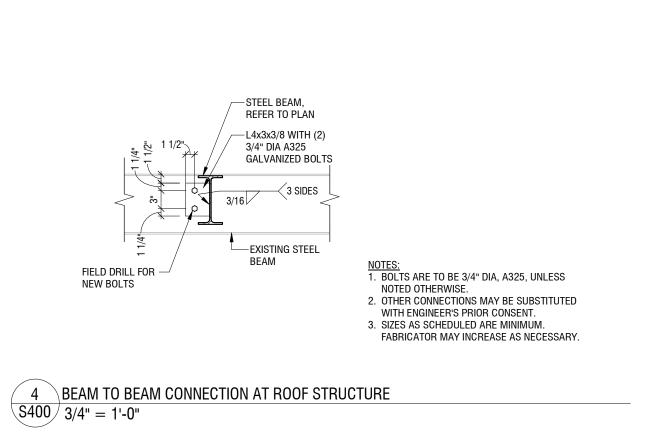
SECTION AT ELECTRICAL ROOM PLATFORM
3/4" = 1'-0"

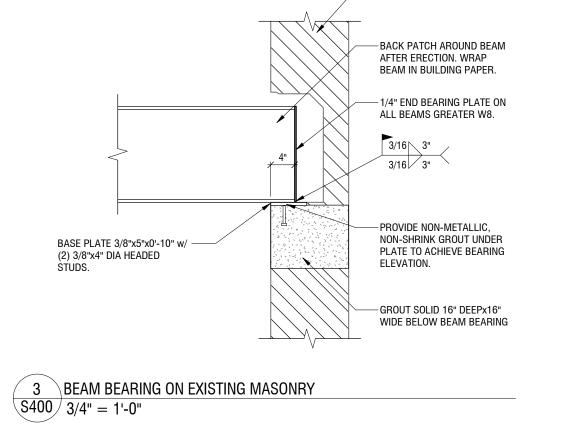
L4x4x1/4xCONT. ATTACH TO
MASONRY WITH 1/2" DIA A36
HILTI HY 270 ADHESIVE
ANCHOR. FASTENERS SPACED
AT 12" o/c. 4" EMBEDMENT
WITH SCREEN TUBES.

STRUCTURAL DETAILS

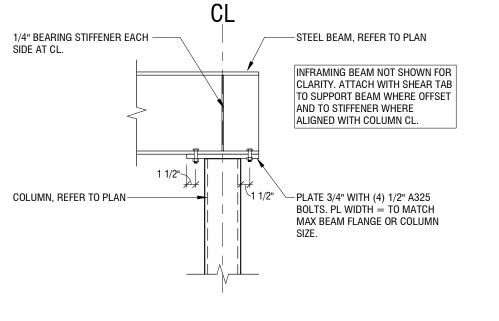


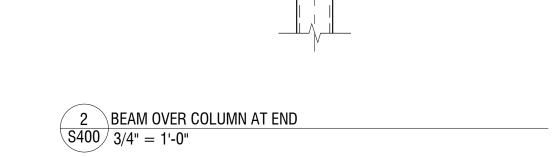
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—EXISTING MASONRY WALL





FIRE PROTECTION SYMBOLS:

DP/SP	DRY PIPE SPRINKLER SYSTEM
ITD	INSPECTORS TEST DRAIN
PA/SP	PRE-ACTION SPRINKLER SYSTE
SP	WET PIPE SPRINKLER SYSTEM
———FDC———	FIRE DEPARTMENT CONNECTIO
•	CONCEALED SPRINKLER HEAD
0	PENDENT SPRINKLER HEAD
\otimes	PENDENT HEAD W/ CAGE
	PENDENT DRY SPRINKLER HEAI
	PENDENT HIGH TEMP
\Box	SIDEWALL SPRINKLER HEAD
	SIDEWALL CONCEALED HEAD
\bigcirc	UPRIGHT SPRINKLER HEAD

	48/18 SA	OBSTRUCTION FRO	OM DUCTWORK 48"
$\stackrel{\blacktriangle}{\boxtimes}$	CHECK VALVE	\otimes	RISER
$\stackrel{lack}{\square}$	ALARM CHECK VALVE		DOUBLE CHECK (OS&Y
\aleph	TAMPER DETECTION VALVE		DOUBLE CHECK (BUTTERFLY W/ TAMPE
\bowtie	DRY PIPE VALVE	****	,
ightharpoons	INDICATING BUTTERFLY VALVE	<u>+</u> X	REDUCED PRESSURE Z
\bigstar	POST INDICATOR VALVE	X	EQUIPMENT TAG
$ \downarrow $	VALVE NONRISING STEM	₩ ₽₽₽₽₽₽ ₩	FDC FREE STANDING
\not	OS&Y VALVE		
\Diamond	PREACTION VALVE		
D	HORN/STROBE		
	FIRE DEPARTMENT CONNECTION		

SPRINKLER HEAD SCHEDULE											
STYLE	LINKAGE TYPE	FINISH	QUICK RESPONSE	MISC. REQUIRED	AREA(S) TO BE INSTALLED						
RECESSED PENDENT	GLASS	1	0	0	0	155	RECESSED ESCUTCHEON TO MATCH FINISH	CONDITIONED SPACES WITH FINISHED CEILING			
RECESSED DRY PENDENT	GLASS	1	0	0	0	155	RECESSED ESCUTCHEON TO MATCH FINISH	UNCONDITIONED SPACES WITH FINISHED CEILING			
UPRIGHT/ PENDENT	GLASS	2	0	0	0	155	-	AREAS WITHOUT CEILINGS			
HORIZONTAL SIDEWALL	GLASS	2	0	0	0	155	-	TOSA ROOM			

FINISHES 1. CHROME PLATE 2. BRASS 3. WHITE 4. BLACK	O NOT APPLICABLE O APPLICABLE
5. OTHER:	

SYSTEM DESIGN SCHEDULE									
HAZARD CLASSIFICATION	DENSITY/AREA	SPACING MAX. HD.	HOSE DEMAND	OCCUPANCY					
LIGHT	0.10 GPM/1500 S.F.	225 S.F	100 GPM	OFFICES PUBLIC AREAS LOCKER ROOMS STAFF WORK AREAS					
ORDINARY/GROUP 1	0.15 GPM/1500 S.F.	130 S.F	250 GPM	EQUIPMENT ROOM WITHOUT GAS FIRED EQUIPMENT STORAGE UP TO 8 FEET JANITOR CLOSETS ELEVATOR EQUIPMENT ELECTRICAL EQUIPMENT COMMUNICATION EQUIPMENT LARGE OPEN AREAS					
ORDINARY/GROUP 2	0.20 GPM/1500 S.F.	130 S.F.	250 GPM	STORAGE, UP TO 12 FEET SHOP AREAS EQUIPMENT ROOM WITH GAS FIRED EQUIPMENT					

FIRE PROTECTION GENERAL NOTES

SYSTEM DESIGN SCHEDULE ON THE DRAWINGS.

FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING WORK.

REPRESENTATIVE.

- REFER TO PROJECT MANUAL FOR SPECIFICATIONS AND CONTRACT REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR THE NEW CEILING WORK. REFERENCE THE MECHANICAL AND ELECTRICAL DRAWINGS FOR LIGHTS, GRILLES, ETC. 4. PROPER PRECAUTION SHALL BE TAKEN TO KEEP THE BUILDING CLEAN OF DUST, DIRT, AND CONSTRUCTION DEBRIS.
- MODIFY EXISTING PIPING AS REQUIRED FOR NEW SPRINKLER HEAD LOCATIONS WITHIN RENOVATION
- 6. FIRE PROTECTION SYSTEMS LOCATED OUTSIDE OF THE CURRENT CONSTRUCTION PHASE OR AREA SHALL BE OPERATIONAL AT THE END OF EACH WORK DAY, UNLESS APPROVED BY THE OWNERS
- 7. MODIFY EXISTING PIPING AS REQUIRED TO COORDINATE WITH WORK OF OTHER CONTRACT
- 8. VERIFY EXISTING FIRE PROTECTION PIPING LOCATIONS, SIZES, AND HYDRAULIC FLOW DATA AS
- REQUIRED FOR SCOPE OF WORK. 9. COMPLY WITH NFPA 13 FOR COVERAGE AND DENSITY, UNLESS INDICATED OTHERWISE IN THE
- 10. FIRE STOPPING SHALL COMPLY WITH THE REQUIREMENTS OF THE SPECIFICATIONS. 11. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES, SIZES, CAPACITIES, ACCESSORIES, SEQUENCES, MATERIALS, MEANS AND METHODS, PERFORMANCE, FABRICATION PROCESSES. AND TECHNIQUES OF CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THAT OF OTHER TRADES. THE CONTRACTOR IS SOLELY RESPONSIBLE

FOR DESIGN/BUILD CHANGES, EQUIPMENT SUBSTITUTIONS, AND VALUE ENGINEERING CHANGES

- PERFORMED BY THE CONTRACTOR. 12. SEAL ALL PIPING PENETRATIONS AIR TIGHT THRU WALLS, FLOORS, OR PARTITIONS IDENTIFIED AS SOUND WALLS, SMOKE TIGHT WALLS, FIRE BARRIERS, SMOKE BARRIERS, SHAFTS OR FIRE RATED CONSTRUCTION INDICATED ON THE ARCHITECTURAL LIFE SAFETY DRAWINGS. MAINTAIN ALL
- DESIGNATED FIRE RATINGS, SMOKE RATINGS AND UL LISTINGS. 13. FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM TO ALL
- 14. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, AT A LEVEL OF QUALITY AND WORKMANSHIP CONSISTENT WITH THE
- 15. PRIOR TO STARTING WORK, SUBMIT SHOP DRAWINGS FOR ALL FIRE PROTECTION EQUIPMENT AND
- 16. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND SHALL ARRANGE FOR ALL INSPECTIONS AS REQUIRED.

FIRE PROTECTION DEMOLITION NOTES:

REQUIREMENTS OF APPLICABLE CODES.

- 1. INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS SUCH AS PRESENT LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION APPEARS ON THE DRAWINGS. WHILE SUCH INFORMATION HAS BEEN BASED ON AVAILABLE RECORDS AND COLLECTED WITH REASONABLE CARE, THE ARCHITECT AND ENGINEER DOES NOT ASSUME ANY EXPRESSED OR IMPLIED GUARANTEE THAT CONDITIONS SO INDICATED ARE SHOWN ENTIRELY COMPLETE, CORRECT AND REPRESENTATIVE OF THOSE ACTUALLY EXISTING. ALL CONTRACTORS SHALL SATISFY THEMSELVES AS TO ALL EXISTING JOB CONDITIONS PRIOR TO BIDDING, AND VERIFY ALL DIMENSIONS AT THE SITE.
- 2. ALL EXISTING FIRE PROTECTION SHOWN HATCHED AND/OR DESIGNATED WITH AN "X" SHALL BE REMOVED. ALL FIRE PROTECTION NOT INDICATED TO BE REMOVED SHALL REMAIN.
- EXISTING PIPING SHALL BE REMOVED BACK TO PIPING TO REMAIN. EXISTING PIPING SHALL NOT BE ABANDONED IN PLACE UNLESS APPROVED BY THE ENGINEER AND OWNER'S REPRESENTATIVE.
- REFER TO THE SPECIFICATIONS FOR CUTTING AND PATCHING REQUIREMENTS. 5. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING NECESSARY FOR THE
- WORK OF THIS CONTRACT UNLESS SPECIFICALLY INDICATED OTHERWISE WITHIN THE ARCHITECTURAL DRAWINGS OR SPECIFICATIONS. 6. SEAL ALL EXISTING PIPE PENETRATIONS IN EXISTING CONSTRUCTION WHERE PIPING IS REMOVED.
- SEALED PENETRATIONS SHALL MATCH RATING OF THE CONSTRUCTION IN WHICH THEY OCCUR. FIRE PROTECTION CONTRACTOR SHALL REMOVE, AND REINSTALL OR REPLACE, EXISTING CEILINGS AS REQUIRED FOR ACCESS TO FIRE PROTECTION SYSTEMS. THIS INCLUDES AREAS OUTSIDE THE PROJECT CONSTRUCTION LIMITS.
- WHERE EXISTING PIPING IS REMOVED, REMAINING PIPING SHALL BE CAPPED BELOW FINISHED FLOORS, WITHIN WALLS AND ABOVE SUSPENDED CEILINGS.

FIRE PROTECTION SYSTEM DESCRIPTION:

1. FIRE PROTECTION CONTRACTOR SHALL REMODEL THE EXISTING DRY SPRINKLER SYSTEM IN ACCORDANCE TO THE CONTRACT SCOPE DOCUMENTS, THE LATEST EDITIONS OF NFPA 13, AND THE LOCAL AHJ.

THIS PROJECT IS A SINGLE PHASE PROJECT. THE FIRE PROTECTION CONTRACTOR SHALL DO TESTING ON EXISTING DRY SPRINKLER PIPING TO DETERMINE THE CONDITION OF THE PIPING DUE TO CORROSION. TESTING SHALL BE DONE IN ALL AREAS OF EXISTING PIPING TO DETERMINE THE OVERALL SCOPE OF REPLACING EXISTING PIPING. RESULTS OF TESTING, RECOMMENDATIONS AND BUDGET FOR PIPE REPLACEMENT SHALL BE SHARED WITH THE OWNER, ARCHITECT, ENGINEER AND CM TO DETERMINE EXTEND OF WORK APPROVED FOR THIS PROJECT.

FIRE PROTECTION SHEET INDEX

FPD201 FIRST FLOOR FIRE PROTECTION DEMOLITION PLAN

FP000 FIRE PROTECTION TITLE SHEET

FP201 FIRST FLOOR FIRE PROTECTION PLAN

17400 West Capitol Drive - Brookfield, WI 53045 301 South Blount Street, Suite 101 - Madison, WI 53703 Phone: 414.778.1700 / Fax: 414.778.2360 / r-d@ringdu.com RD Project Number: 223003.00

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

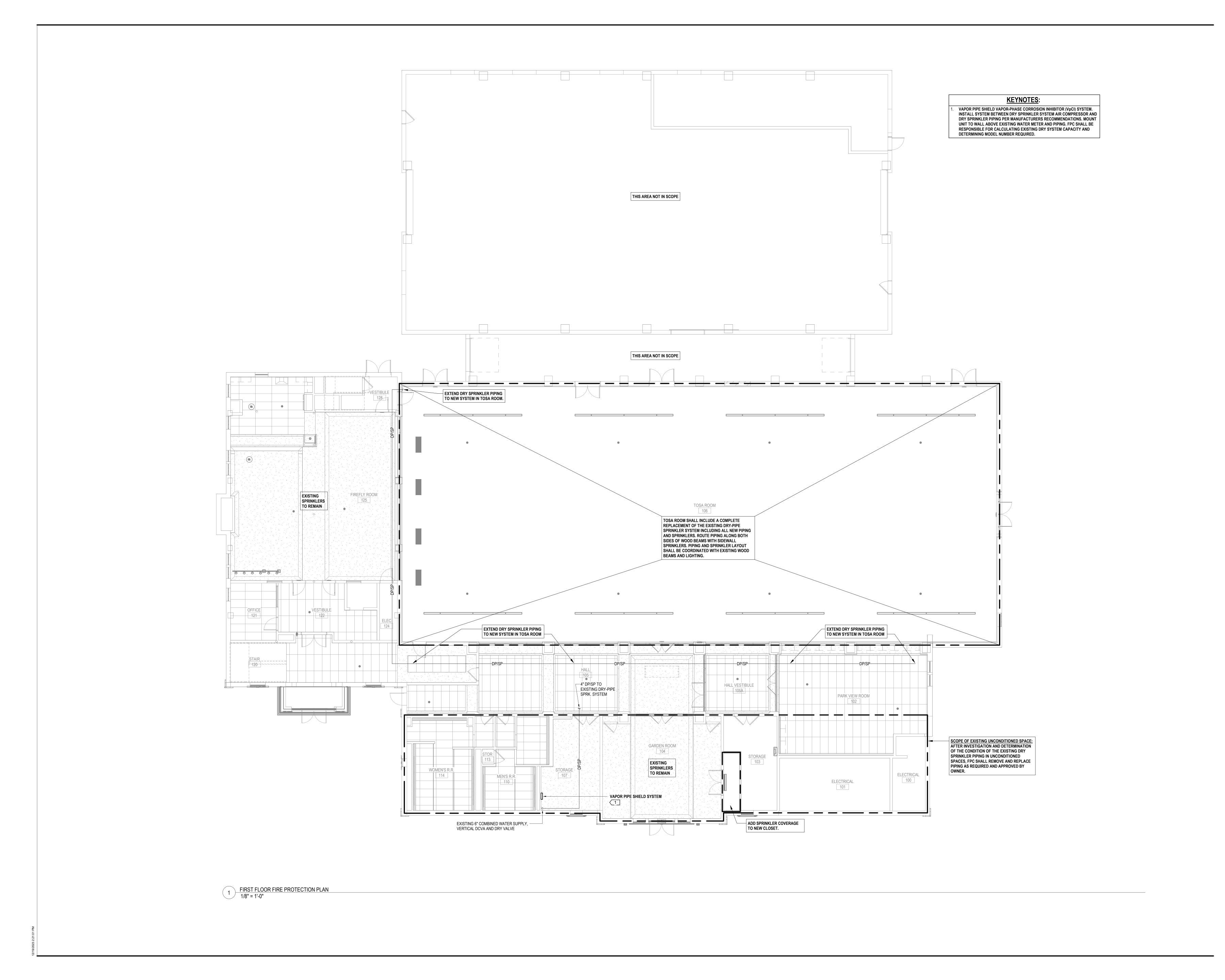
Project No. CITY OF WAUWATOSA

FIRE PROTECTION TITLE SHEET

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Sheet No.



PING & DUCHATEAU CONSULTING ENGINEERS 17400 West Capitol Drive - Brookfield, WI 53045 301 South Blount Street, Suite 101 - Madison, WI 53703 Phone: 414.778.1700 / Fax: 414.778.2360 / r-d@ringdu.com RD Project Number: 223003.00

Revisions

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date 12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No.

223010.00 WAUWATOSA

CITY OF

Sheet Title

FIRST FLOOR FIRE PROTECTION PLAN

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Sheet No. FP201

UTILITIES 132 THIS AREA NOT IN SCOPE MAINTENANCE BUILDING 131 0 + + │├**====**==≒=╕ ╭<u>╭</u>╚*╌*┤│ REMOVE EXISTING DRY-PIPE SPRINKLER SYSTEM IN TOSA ROOM INCLUDING ALL PIPING AND SPRINKLERS. EXISTING SPRINKLERS TO REMAIN FIREFLY ROOM ELEC STAIR 120 4" DP/SP TO EXISTING DRY-PIPE SPRK. SYSTEM PARK VIEW ROOM 102 WOMEN'S R.R. MEN'S R.R. SCOPE OF EXISTING UNCONDITIONED SPACE: FPC SHALL DETERMINE THE CONDITION OF EXISTING DRY SPRINKLER PIPING IN THE UNCONDITIONED SPACE AND THE EXTENT THAT REQUIRES REPLACEMENT. INFORM THE OWNER AND ARCHITECT OF SPECIFIC FINDINGS AND BUDGET PRICING FOR WORK EXISTING SPRINKLERS STORAGE TO REMAIN **GARDEN ROOM ELECTRICAL ELECTRICAL** 104 101 EXISTING 6" COMBINED WATER SUPPLY, - VERTICAL DCVA AND DRY VALVE REVISE EXISTING SPRINKLER PIPING TO SIDEWALL SPRINKLERS SERVING GARDEN ROOM. PIPING SHALL BE CLEAR OF NEW DOOR OPENING. 1 FIRST FLOOR FIRE PROTECTION DEMOLITION PLAN 1/8" = 1'-0"

Kahler Slater



Revisions

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date 12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No.

223010.00 WAUWATOSA

CITY OF

Sheet Title

FIRST FLOOR FIRE PROTECTION DEMOLITION PLAN

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Sheet No.

Sheet No. FPD201

PLUMBING DEMOLITION NOTES

- 1. INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS PRESENT LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION APPEARS ON THE DRAWINGS. WHILE SUCH INFORMATION HAS BEEN BASED ON AVAILABLE RECORDS AND COLLECTED WITH REASONABLE CARE. THE ARCHITECT AND ENGINEER DOES NOT ASSUME ANY EXPRESSED OR IMPLIED GUARANTEE THAT CONDITIONS SO INDICATED ARE SHOWN ENTIRELY COMPLETE, CORRECT AND REPRESENTATIVE OF THOSE ACTUALLY EXISTING. ALL CONTRACTORS SHALL SATISFY THEMSELVES AS TO ALL EXISTING JOB CONDITIONS PRIOR TO BIDDING, AND VERIFY ALL DIMENSIONS AT THE SITE.
- ALL EXISTING PLUMBING SHOWN HATCHED AND/OR DESIGNATED WITH AN "X" SHALL BE REMOVED. ALL PLUMBING NOT INDICATED TO BE REMOVED SHALL REMAIN.
- WHERE EXISTING PIPING IS TO BE REMOVED AT A SLAB ON GRADE, CAP EXISTING PIPING FLUSH OR BELOW FLOOR LEVEL SO AS NOT TO INTERFERE WITH NEW FLOOR FINISHES. EXISTING PIPING SHALL NOT BE ABANDONED IN PLACE UNLESS APPROVED BY THE ENGINEER AND OWNER'S REPRESENTATIVE.
- 4. EXISTING PIPING SHALL BE REMOVED BACK TO PIPING TO PIPING TO REMAIN. EXISTING PIPING SHALL NOT BE ABANDONED IN PLACE UNLESS APPROVED BY THE ENGINEER AND OWNER'S REPRESENTATIVE.
- REPAIR PIPE INSULATION ON EXISTING PIPING WHERE DAMAGED BY DEMOLITION OR NEW
- REFER TO THE SPECIFICATIONS FOR CUTTING AND PATCHING REQUIREMENTS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING NECESSARY FOR THE WORK OF THIS CONTRACT UNLESS SPECIFICALLY INDICATED OTHERWISE WITHIN THE ARCHITECTURAL DRAWINGS OR SPECIFICATIONS.
- 8. SEAL ALL EXISTING PIPE PENETRATIONS IN EXISTING CONSTRUCTION WHERE PIPING IS REMOVED. SEALED PENETRATIONS SHALL MATCH RATING OF THE CONSTRUCTION IN WHICH THEY OCCUR.
- 9. PLUMBING CONTRACTOR SHALL REMOVE, AND REINSTALL OR REPLACE, EXISTING CEILINGS AS REQUIRED FOR ACCESS TO PLUMBING SYSTEMS. THIS INCLUDES, CEILINGS ON THE FLOORS BELOW THE PROJECT AREA AND AREAS OUTSIDE THE PROJECT CONSTRUCTION
- 10. WHERE EXISTING PIPING IS REMOVED, REMAINING PIPING SHALL BE CAPPED BELOW FINISHED FLOORS, WITHIN WALLS AND ABOVE SUSPENDED CEILINGS.
- 11. CONTRACTOR SHALL VISIT JOB SITE AND BECOME FAMILIAR WITH EXISTING CONDITIONS PRIOR TO STARTING WORK. 12. SAWCUT AND PATCH FLOOR SLAB AS REQUIRED FOR ALL DEMOLITION AND NEW WORK. COORDINATE WITH THE OWNER AND CONSTRUCTION MANAGER. FIELD VERIFY ALL PIPE SIZES, LOCATIONS AND INVERT ELEVATIONS.
- 13. WHERE FLOOR DRAINS OCCUR WITHIN THE LIMITS OF CONSTRUCTION, PREVENT CONSTRUCTION DEBRIS FROM ENTERING DRAIN BODY BY SEALING DRAIN OPENING PRIOR TO START OF WORK. UNSEAL DRAINS AT COMPLETION OF CONSTRUCTION.

GENERAL PLUMBING NOTES

REQUIREMENTS.

EXCEEDING 1" THICK.

- 1. FIELD VERIFY EXISTING CONDITIONS PRIOR TO BEGINNING WORK. 2. REFER TO PROJECT MANUAL FOR SPECIFICATIONS AND OTHER CONTRACT
- THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES, SIZES, CAPACITIES, ACCESSORIES, SEQUENCES, MATERIALS, MEANS AND METHODS, PERFORMANCE, FABRICATION PROCESSES, AND TECHNIQUES OF CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THAT OF OTHER TRADES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGN/BUILD CHANGES, EQUIPMENT SUBSTITUTIONS, AND VALUE ENGINEERING CHANGES PERFORMED BY THE CONTRACTOR.
- DO NOT SCALE DRAWINGS FOR DRAIN LOCATIONS NEAR OR SERVING EQUIPMENT. OBTAIN EQUIPMENT PAD LOCATIONS AND EQUIPMENT CONNECTION REQUIREMENTS FROM OTHER CONTRACT DIVISIONS PRIOR TO LOCATING DRAINS. SEAL ALL PIPING PENETRATIONS AIR TIGHT THRU WALLS, FLOORS, OR PARTITIONS IDENTIFIED AS SOUND WALLS, SMOKE TIGHT WALLS, FIRE BARRIERS, SMOKE BARRIERS.
- DRAWINGS. MAINTAIN ALL DESIGNATED FIRE RATINGS, SMOKE RATINGS AND UL LISTINGS. INSTALL ALL SHUTOFF VALVES, CONTROL VALVES, DRAIN VALVES, AIR VENTS, AND ACCESSORIES IN ACCESSIBLE LOCATIONS. DEVICES LOCATED ABOVE CEILINGS SHALL BE INSTALLED WITHIN 3 FEET ABOVE THE CEILING TO MAINTAIN ACCESSIBILITY. PROVIDE VALVE HANDLE EXTENSIONS FOR ALL VALVES SERVING INSULATED PIPING

SHAFTS OR FIRE RATED CONSTRUCTION INDICATED ON THE ARCHITECTURAL LIFE SAFETY

EXPOSED PIPING IN OCCUPIED ROOMS WITH SUSPENDED CEILINGS IS PROHIBITED. IN ROOMS WITH WITHOUT CEILINGS, INSTALL EXPOSED PIPING AS HIGH AS PRACTICAL. 9. PRIOR TO MAKING ANY NEW PLUMBING FLOOR PENETRATIONS IN EXISTING BUILDINGS, X-RAY THE EXISTING CONSTRUCTION TO AVOID INTERFERENCES WITH STEEL

REINFORCEMENT. COORDINATE WITH THE GENERAL CONTRACTOR.

- 10. AREAS OF THE BUILDING UTILIZING THE SPACE ABOVE SUSPENDED CEILINGS AND MECHANICAL EQUIPMENT ROOMS AS RETURN AIR PLENUMS SHALL COMPLY WITH NFPA
- 90A FOR ALLOWABLE MATERIALS WITHIN PLENUMS. 11. DESIGN OF ALL PLUMBING EQUIPMENT SUPPORTS SHALL BE THE RESPONSIBILITY OF THE
- PLUMBING CONTRACTOR. POWDER-ACTUATED ANCHORS ARE PROHIBITED. 13. RING AND CLEVIS PIPE HANGERS SHALL BE OVERSIZED TO ACCOMMODATE THE OUTSIDE
- DIAMETER OF THE PIPE INSULATION. 14. ALL PIPE INSULATION ENDS SHALL BE SEALED AT THRU-WALL AND IN-WALL STUD FRAMING PENETRATIONS.
- 15. ALL NON-INSULATED PIPING WITHIN WALLS SHALL HAVE GROMMETS INSTALLED AT
- PENETRATIONS THRU WALL FRAMING. LOCATE PLUMBING ROOF VENTS A MINIMUM OF 25FT FROM OUTSIDE AIR INTAKE LOUVERS. 17. FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING SYSTEM, AND SHALL CONFORM
- TO ALL REQUIREMENTS OF APPLICABLE CODES. 18. LOCATE PIPING MINIMUM 4 FEET AWAY FROM THE SPACE ABOVE ELECTRICAL PANELS, TRANSFORMERS AND OTHER ELECTRICAL EQUIPMENT.
- 19. PIPE SIZES SHOWN SHALL BE CONTINUED IN THE DIRECTION OF FLOW UNTIL ANOTHER SIZE IS SHOWN. 20. FOR EQUIPMENT CONNECTIONS AND PIPE SIZES NOT SHOWN ON THE PLANS, REFER TO
- DETAILS AND SCHEDULES. 21. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S
- WRITTEN INSTALLATION INSTRUCTIONS, AT A LEVEL OF QUALITY AND WORKMANSHIP CONSISTENT WITH THE SPECIFICATIONS. 22. LOCATIONS OF PIPING AND EQUIPMENT AS INDICATED ON THE DRAWING, ARE
- APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES TO AVOID INTERFERENCE IN THE FIELD. 23. PRIOR TO STARTING WORK, SUBMIT SHOP DRAWINGS FOR ALL PLUMBING EQUIPMENT AND
- 24. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND SHALL ARRANGE FOR ALL INSPECTIONS AS REQUIRED.
- 25. MINIMUM PITCH FOR SANITARY AND STORM PIPING SHALL COMPLY WITH APPLICABLE CODES, UNLESS A GREATER PITCH IS INDICATED ON DRAWINGS.

PLUMBING SYMBOLS:

COLD WATER

—————— HOT WATER

——————————————————————————————————————	HOT WATER 140°	-∮ -	BALANCING VALVE
	HOT WATER RETURN	-₹-	SHUT-OFF VALVE
	HOT WATER RETURN 140°	O	WATER HAMMER ARRESTER
NP	NON-POTABLE WATER		FLOW ARROW
TW	TEMPERED WATER	-3	CAPPED CONNECTION
DI	DEIONIZED WATER	→	PIPE CONTINUATION
DIR	DEIONIZED RETURN PIPING	-	CLEANOUT
RO	REVERSE OSMOSIS WATER	1 1	UNION
ROR	REVERSE OSMOSIS RETURN WATER	œ–	PIPING DOWN
SAN	SANITARY WASTE	0-	PIPING UP
	SANITARY VENT	-	HOSE BIB
— DT— —	DRAIN TILE		FLOOR DRAIN
	CLEARWATER WASTE		FLOOR SINK
clv	CLEARWATER VENT	\bigcirc	SITE DRAIN
ST	STORM DRAINAGE		FLOOR CLEANOUT
OF	OVERFLOW STORM DRAINAGE		VENT THRU ROOF
AW	ACID / CHEMICAL WASTE		ROOF DRAIN
$\cdot AV$	ACID / CHEMICAL VENT	\bigcirc	INLINE PUMP

WATER METER

-**応** CHECK VALVE

-- SOLENOID VALVE

- PRESSURE REDUCING VALVE

CONNECT TO EXISTING

EQUIPMENT BY OTHERS

THERMOMETER

(#) KEYED NOTE

WATER CALCULATION WORKSHEET

----- GREASE WASTE

PUMP DISCHARGE

——CA———— COMPRESSED AIR

LABORATORY VACUUM PIPING

LABORATORY AIR PIPING

- Information need for Water Distribution Sizing. (p.s.i./100' of pipe).
- A. 19 Pressure available for uniform loss (p.s.i./100' of pipe).
- C. <u>30</u> Pressure needed at controlling fixture.
- D. <u>6.5</u> Difference in elevation between water meter and controlling fixture in <u>15</u> feet x .434 p.s.i./ft.
- E. 0 Pressure loss due to water softeners, water treatment devices, instantaneous water heaters and backflow preventers. Conventional water heaters usually do not have a pressure loss.

- Using the following formula, find the pressure available for uniform loss $A = B - (C + D + E) \times 100 / F$
- B. <u>80</u> Available pressure after water meter. (See item 9, above)
- With pressure available for uniform loss, go to applicable table for distribution sizing.

ABV	ABOVE	LA	LAB AIR
AD	AREA DRAIN	LB	POUND
ADB	ACID / CHEMICAL DILUTION BASIN	LB/HR	POUNDS PER HOUR
ADD	ADDENDUM	LP	LOW PRESSURE
AFF	ABOVE FINISHED FLOOR	LPG	LIQUEFIED PETROLEUM GAS
AFG	ABOVE FINISHED GRADE	LS	LAB SINK
ALT	ALTERNATE	LT	LAUNDRY TRAY
AP	ACCESS PANEL	LV	LAB VACUUM
ARCH	ARCHITECT/ARCHITECTURAL	LWT	LEAVING WATER TEMPERATURE
AV	ACID / CHEMICAL VENT	MAX	MAXIMUM
AVTR	ACID / CHEMICAL VENT THRU ROOF	MB	MOP BASIN
AW	ACID / CHEMICAL WASTE	MBH	ONE THOUSAND BTU PER HOUR
AWC	AUTOMATIC WASHER CONNECTION	MC	MECHANICAL CONTRACTOR
BFF	BELOW FINISHED FLOOR	MCF	ONE THOUSAND CUBIC FEET
BFP	BACKFLOW PREVENTER	MECH	MECHANICAL
BLW	BELOW	MFR	MANUFACTURER
BT	BATH TUB	MH	MANHOLE
BVA	BALANCING VALVE	MIN	MINIMUM
CA	COMPRESSED AIR	MISC	MISCELLANEOUS
СВ	CATCH BASIN	NC	NORMALLY CLOSED
CC	CAPPED CONNECTION	NIC	NOT IN CONTRACT
CFM	CUBIC FEET PER MINUTE	NO	NORMALLY OPEN
CHW	COLD HARD WATER	NP	NON-POTABLE
CKVA		NTS	NOT TO SCALE
CLG	CEILING	0	OXYGEN
CLV	CLEAR WATER VENT	OF	OVERFLOW
	CLEAR WATER VENT THRU ROOF	OD	OVERFLOW ROOF DRAIN
CLW	CLEAR WATER WASTE	PC	PLUMBING CONTRACTOR
CO	CLEAN OUT	PD	PUMP DISCHARGE
COND	CONDUCTOR	PG	PRESSURE GAUGE
CONN	CONNECTION	PIV	POST INDICATOR VALVE
COTG	CLEAN OUT TO GRADE		PLUMBING
CS	CUP SINK		PRESSURE
CSS	CLINICAL SERVICE SINK	PRV	PRESSURE REDUCING VALVE
CSW	COLD SOFT WATER	PSI	POUNDS PER SQUARE INCH
CW	COLD WATER	PSIG	POUNDS PER SQUARE INCH GAUGE
DCP	DOMESTIC CIRCULATING PUMP	PW	PURE WATER
DF.	DRINKING FOUNTAIN	PWR	POWER
DI	DEIONIZED WATER	RD	ROOF DRAIN
DIA	DIAMETER	REC	RECESSED
DN	DOWN	RED	REDUCER
DR	DRAIN	RIO	ROUGH-IN ONLY
DT	DRAIN TILE	RM	ROOM
DTCO	DRAIN TILE CLEANOUT	RO	REVERSE OSMOSIS
DTR	DRAIN TILE RECEIVER	RPBP	REDUCED PRESSURE BACKFLOW PREVENT
EA	EACH	RPM	REVOLUTIONS PER MINUTE
EC	ELECTRICAL CONTRACTOR	RW	RAIN WATER
EEW	EMERGENCY EYE WASH	S/SK	SINK
EL	ELEVATION	SAN	SANITARY
ELEC	ELECTRICAL	SD	SITE DRAIN
			OF LEGICO

SEWAGE EJECTOR

SQUARE FOOT

SURFACE MOUNT

SUMP PUMP

SERVICE SINK

STM STEAM

STP STANDPIPE

SVA SOLENOID VALVE

TC TEST CONNECTION

TD TRENCH DRAIN

TEMP TEMPERATURE

UG UNDERGROUND

UNEXC UNEXCAVATED

WC WATER CLOSET

WCO WALL CLEAN OUT WH WALL HYDRANT

WS WATER SOFTENER

WHA WATER HAMMER ARRESTOR

VENT

WM WATER MAIN

WV WET VENT

TW TEMPERED WATER

TP TRAP PRIMER

TYP TYPICAL U/UR URINAL

TEMPERATURE DROP

STORAGE TANK

T&P VA TEMPERATURE & PRESSURE RELIEF VALVE

WC/L COMBINATION WATER CLOSET/LAVATORY

SHOWER

- F. 225 Developed length from water meter to controlling fixture in 150 feet x 1.5.

ELEC ELECTRICAL EQUIP EQUIPMENT

- ES EMERGENCY SHOWER ESEW EMERGENCY SHOWER-EYE WASH ET EXPANSION TANK EWC ELECTRIC WATER COOLER EWH ELECTRIC WATER HEATER
- EWT ENTERING WATER TEMPERATURE EX EXISTING DEGREES FAHRENHEIT FCO FLOOR CLEAN OUT
- FLOOR DRAIN FDC FIRE DEPARTMENT CONNECTION FFE FINISHED FLOOR ELEVATION FUME HOOD
- FLOOR FLOOR SINK FOOT / FEET GALLON
- GENERAL CONTRACTOR GCB GARAGE CATCH BASIN **GAS-FIRED** GF GLY GLYCOL GPM GALLONS PER MINUTE
- GREASE TRAP GREASE WASTE GWH GAS WATER HEATER HOSE BIB HORSE POWER
- HOT WATER HWR HOT WATER RETURN HYD HYDRANT INDIRECT INVERT ELEVATION
- INCH L/LAV LAVATORY ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET. THE

SYMBOLS AND ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

PIPING VOLUME AND MAXIMUM PIPING LENGTHS TABLE

	VOLUME	MAXIMUM PIPING LENGTH (FEET)				
NOMINAL PIPE SIZE (INCHES)	(LIQUID OUNCES PER FOOT LENGTH)	PUBLIC LAVATORY FAUCETS	OTHER FIXTURES AND APPLIANCES			
1/4	0.33	6	50			
5/16	0.5	4	50			
3/8	0.75	3	50			
1/2	1.5	2	43			
5/8	2	1	32			
3/4	3	0.5	21			
7/8	4	0.5	16			
1	5	0.5	13			
1-1/4	8	0.5	8			
1-1/2	11	0.5	6			
2 OR LARGER	18	0.5	4			

INTERNATIONAL ENERGY CONSERVATION CODE:

The maximum allowable piping length from the nearest source of heated water to the termination of the fixture supply pipe shall be in accordance with the following. Where the piping contains more than one size of pipe, the largest size of pipe within the piping shall be used for determining the maximum allowable length of the piping (see table above).

Hot water mains 1-1/4" and smaller shall be installed with a standard 3-5/8" wall. Hot water mains 1-1/2" to 3" shall be installed within a 6" wall.

Table 382.40-5 - May 2016 MAXIMUM ALLOWABLE LOAD FOR COPPER TUBE - TYPE L, ASTM B88 (C=150) PIPE DIAMETER (IN INCHES) FRICTION (IN LBS. PER 100 FT WSFU means water supply fixture units. GPM means gallons per minute. FM means predominately flushometer type water closets or syphon jet urinals. FT means predominately flush tank type water closets or wash down urinals. NP means not permitted, velocities exceed 8 feet per second. For using this table, round the calculated pressure loss due to friction to the next higher number shown. SPS 382.40 (7) (f) and (g) specifies minimum sizes for water distribution piping.

PLUMBING SHEET INDEX

- P000 PLUMBING TITLE SHEET PD201 FIRST FLOOR PLUMBING DEMOLITION PLAN PD202 SECOND FLOOR PLUMBING DEMOLITION PLAN
- P199 FOUNDATION PLUMBING PLAN
- P201 BASEMENT AND FIRST FLOOR PLUMBING PLAN P202 SECOND FLOOR PLUMBING PLAN

P500 PLUMBING DETAILS, SCHEDULES AND ISOMETRICS

Sheet No.

17400 West Capitol Drive - Brookfield, WI 53045

RD Project Number: 223003.00

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CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET

12/22/2023

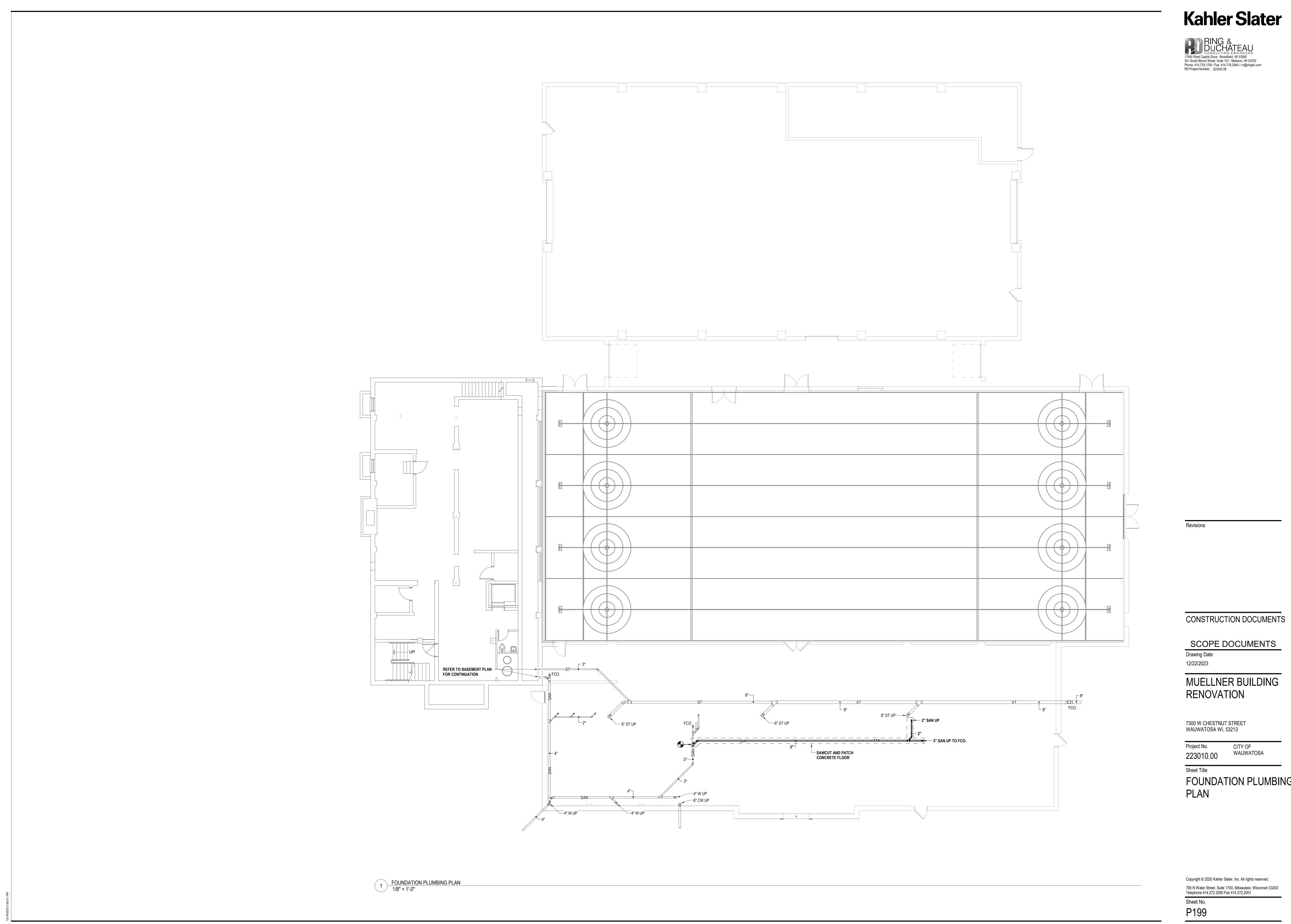
WAUWATOSA WI, 53213 CITY OF Project No.

223010.00

PLUMBING TITLE SHEET

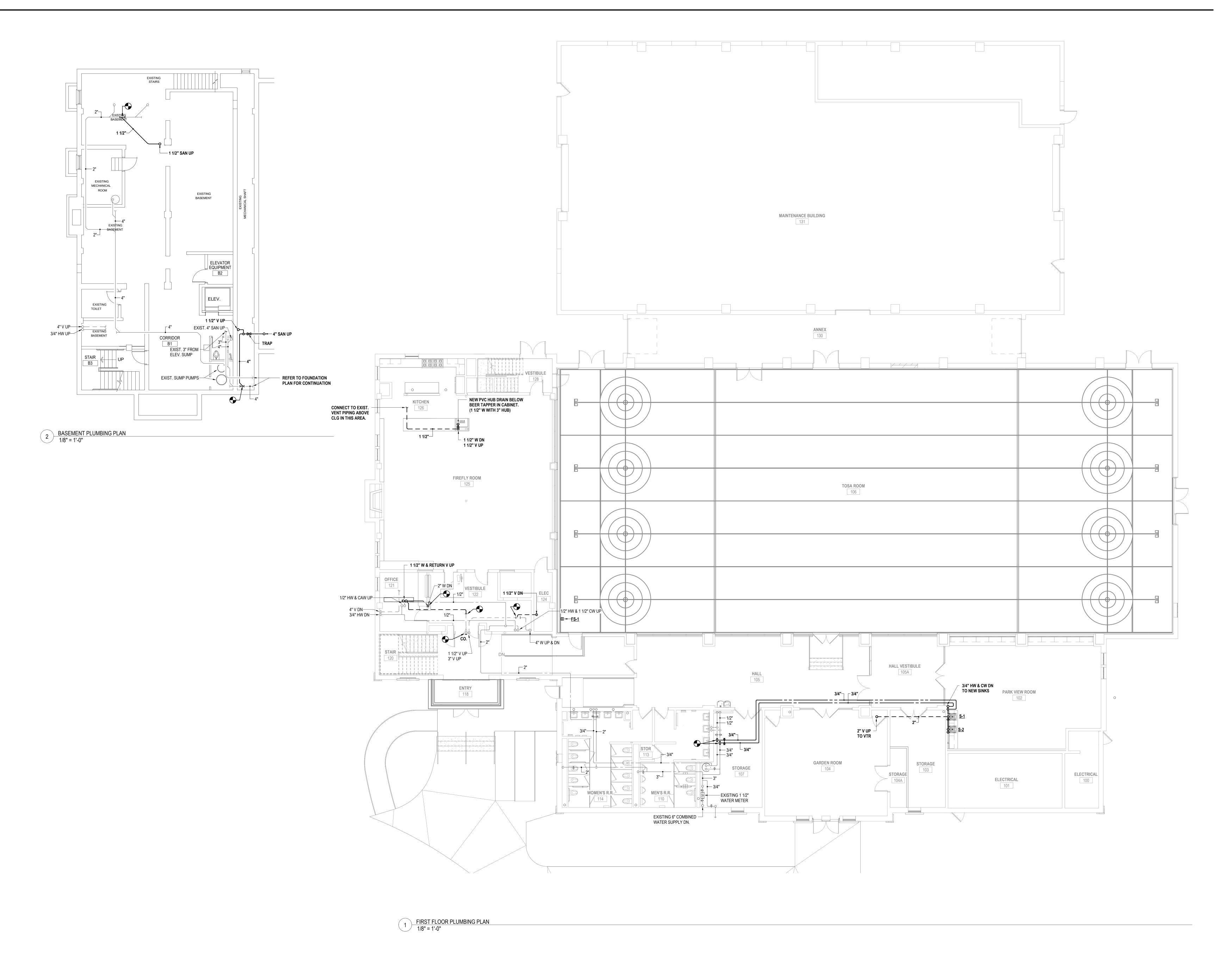
WAUWATOSA

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FOUNDATION PLUMBING

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SCOPE DOCUMENTS Drawing Date

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7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. 223010.00

12/22/2023

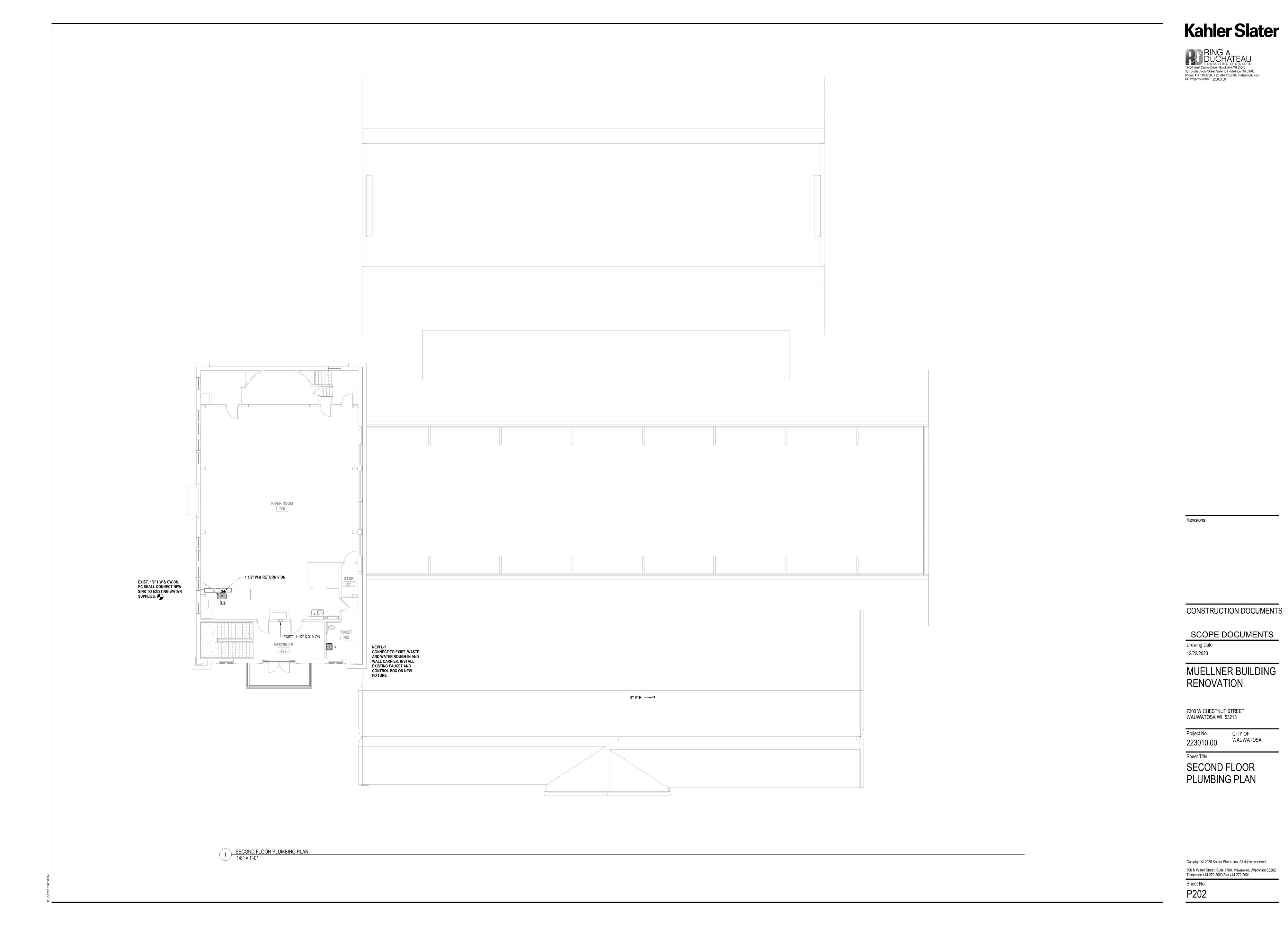
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Sheet Title

BASEMENT AND FIRST FLOOR PLUMBING PLAN

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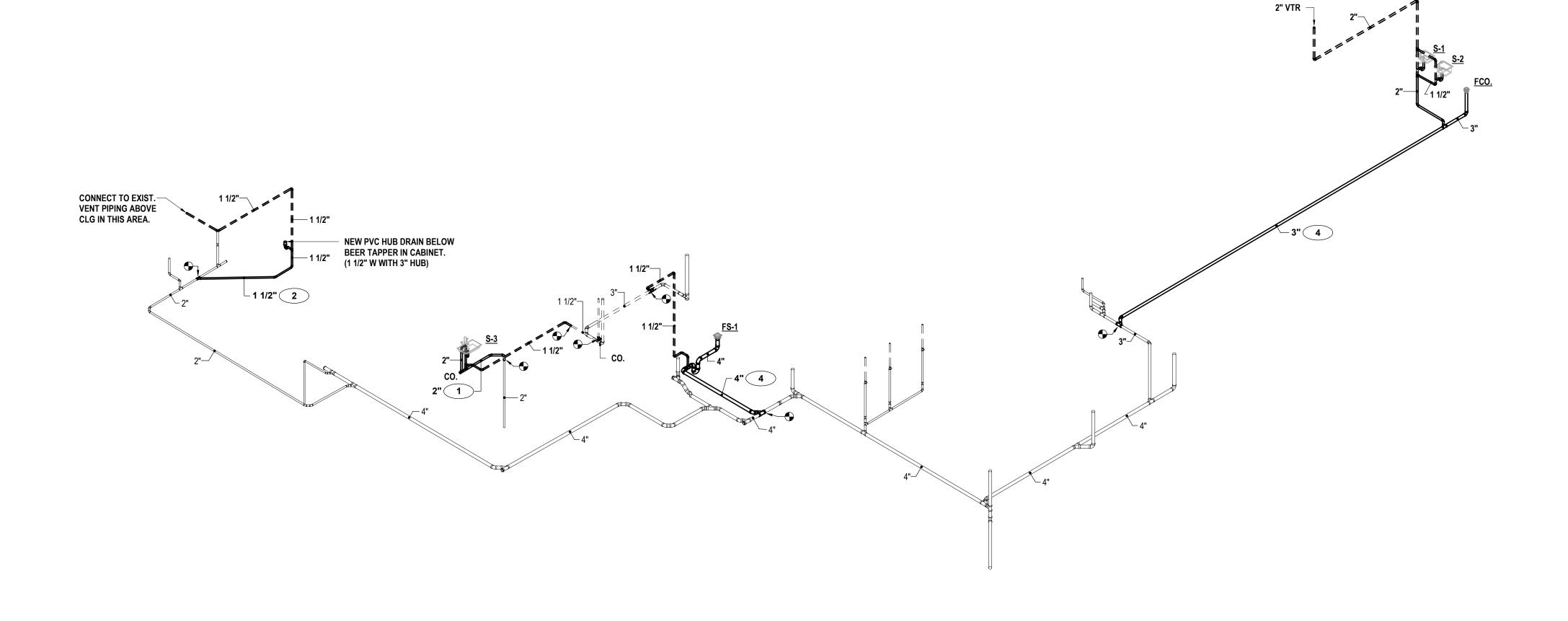


FIXT	FIXTURE SCHEDULE SINKS											
NOTE: PLUMBING CONTRACTOR TO VERIFY QUANITIES OF FIXTURES FROM ARCHITECTURAL DRAWINGS.												
TAG FIXTURE TYPE MANUFACTURER FIXTURE MODEL NO. FIXTURE DESCRIPTION FAUCET FAUCET MODEL NO. FAUCET DESCRIPTION DRAIN TRAP STOPS / SUPPLIES												
S-1	SINGLE BOWL DROP-IN ADA SINK	ELKAY	LRAD191965-3	STAINLESS STEEL 19-1/2" X 19" X 6-1/2" SINGLE BOWL DROP-IN ADA SINK WITH (3) FAUCET HOLES. 18 GAUGE 304 STAINLESS STEEL.	KOHLER	K-596	PULL-DOWN KITCHEN SINK FAUCET WITH THREE-FUNCTION SPRAYHEAD	LK35 STAINLESS STEEL STRAINER BASKET WITH FLEX STEM RUBBER STOPPER AND TAIL PIECE	McGUIRE 8912 1-1/2", 17 GAUGE, C.P. CAST BRASS P-TRAP WITH CLEANOUT PLUG.	MCGUIRE LFH2165CCLK, LEAD FREE 1/2 x 3/8 HEAVY SUPPLIES WITH LOOSE KEY STOPS.		
S-2	SINGLE BOWL DROP-IN SINK	ELKAY	DLR191910-3	STAINLESS STEEL 19-1/2" X 19" X 10-1/8" SINGLE BOWL DROP-IN SINK WITH (3) FAUCET HOLES. 18 GAUGE 304 STAINLESS STEEL.	KOHLER	K-596	PULL-DOWN KITCHEN SINK FAUCET WITH THREE-FUNCTION SPRAYHEAD	LK35 STAINLESS STEEL STRAINER BASKET WITH FLEX STEM RUBBER STOPPER AND TAIL PIECE	McGUIRE 8912 1-1/2", 17 GAUGE, C.P. CAST BRASS P-TRAP WITH CLEANOUT PLUG.	MCGUIRE LFH2165CCLK, LEAD FREE 1/2 x 3/8 HEAVY SUPPLIES WITH LOOSE KEY STOPS.		
S-3	SINGLE BOWL DROP-IN SINK	ELKAY	DLR312210-3	STAINLESS STEEL 31" X 22" X 10-1/8" SINGLE BOWL DROP-IN SINK WITH (3) FAUCET HOLES. 18 GAUGE 304 STAINLESS STEEL.	KOHLER	K-596	PULL-DOWN KITCHEN SINK FAUCET WITH THREE-FUNCTION SPRAYHEAD	LK35 STAINLESS STEEL STRAINER BASKET WITH FLEX STEM RUBBER STOPPER AND TAIL PIECE	McGUIRE 8912 1-1/2", 17 GAUGE, C.P. CAST BRASS P-TRAP WITH CLEANOUT PLUG.	MCGUIRE LFH2165CCLK, LEAD FREE 1/2 x 3/8 HEAVY SUPPLIES WITH LOOSE KEY STOPS.		

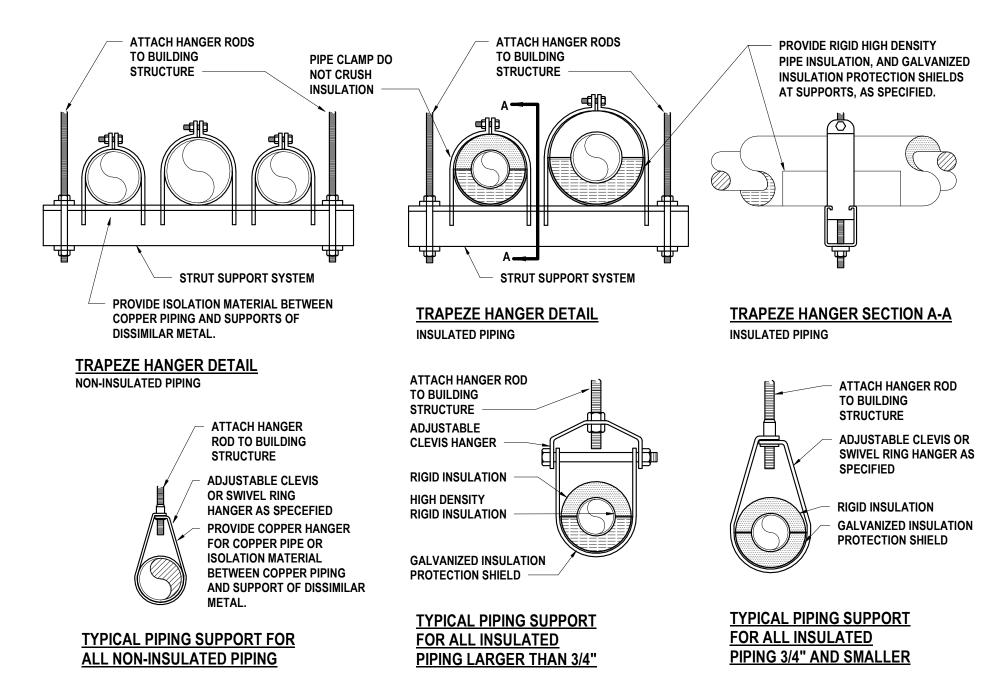
FIXTURE SCHEDULE LAVATORYS NOTE: PLUMBING CONTRACTOR TO VERIFY QUANITIES OF FIXTURES FROM ARCHITECTURAL DRAWINGS.										
TAG	FIXTURE TYPE	MANUFACTURER	FIXTURE MODEL NO.	FIXTURE DESCRIPTION	FAUCET MANUFACTURER	FAUCET MODEL NO.	FAUCET DESCRIPTION	LAVATORY CARRIER	DRAIN AND TRAP	STOPS / SUPPLIES
L-1	LAVATORY WALL MOUNT ADA	KOHLER	KINGSTON K-2007-0	WALL MOUNT BARRIER FREE WHITE VITREOUS CHINA LAVATORY DRILLED FOR CONCEALED ARM CARRIER WITH CENTER FAUCET OPENING.	SLOAN (EXISTING)	-	EXISTING BATTERY OPERATED FAUCET WITH BLUETOOTH CONTROL BOX TO BE REMOVED AND REINSTALLED ON NEW LAVATORY.	EXISTING CARRIER TO REMAIN	MCGUIRE PW2150WC, 1-1/2, 17 GAUGE, PRE-WRAPPED OFFSET DRAIN ASSEMBLY, STRAINER AND ADJUSTABLE P-TRAP WITH CLEANOUT AND TRAP, DRAIN AND SUPPLY STOP COVERS.	MCGUIRE LFH2165CCLK, LEAD FREE 1/2 x 3/8 HEAVY SUPPLIES WITH LOOSE KEY STOPS.

FIX	FIXTURE SCHEDULE DRAIN SCHEDULE										
NOTE	NOTE: PROVIDE FLASHING FOR ALL DRAINS INSTALLED ABOVE GRADE.										
TAG	DESCRIPTION	LOCATION	MATERIAL FLAS			FLASHING	IG MISC.	TRAP PRIMER	TRAP SEAL	MANUFACTURER	MODEL NUMBER
I IAC	DESCRIPTION		BODY	TOP	STRAINER	CLAMP	MIGC.	I KAP PRIIVIER	IRAP SEAL	WANUFACTURER	WODEL NUMBER
FS-	STAINLESS STEEL FLOOR SINK	TOSA ROOM FLOOR	STAINLESS STEEL	STAINLESS STEEL	STAINLESS STEEL	NO	STAINLESS STEEL FLOOR SINK WITH STAINLESS STEEL INTERIOR DOME STRAINER AND SOLID GASKETED COVER	NO	NO	ZURN	Z1750-SG

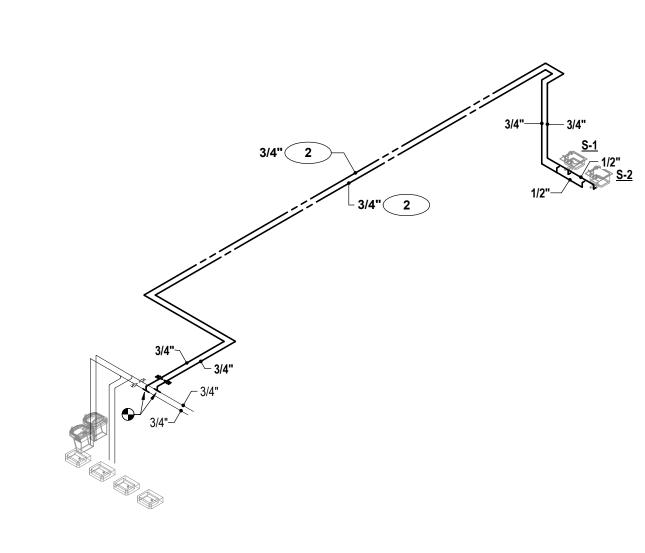
FIXTURE SCHEDULE CLEANOUT SCHEDULE												
TAG	DESCRIPTION	MATERIAL			ANCHOR PLATE	CONCRETE PAD	MISCELLANEOUS	MANUFACTURER	MODEL NUMBER			
IAG	DESCRIPTION	BODY	COVER	FACE PLATE	ANCHUR PLATE	CONCRETE PAD	WIISCELLANEOUS	WANUFACTURER	WIODEL NOWIDER			
FCO.	FLOOR CLEANOUT W/ ROUND TOP	CAST IRON	POLISHED NICKEL BRONZE	NICKEL BRONZE	NO	NO		ZURN	ZN1400			



2 DOMESTIC WATER RISER DIAGRAM NOT TO SCALE



1 TYPICAL PIPE SUPPORT DETAILS
NOT TO SCALE



3 DOMESTIC WATER RISER DIAGRAM NOT TO SCALE

CONSTRUCTION DOCUMENTS

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SCOPE DOCUMENTS

Drawing Date

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

223010.00

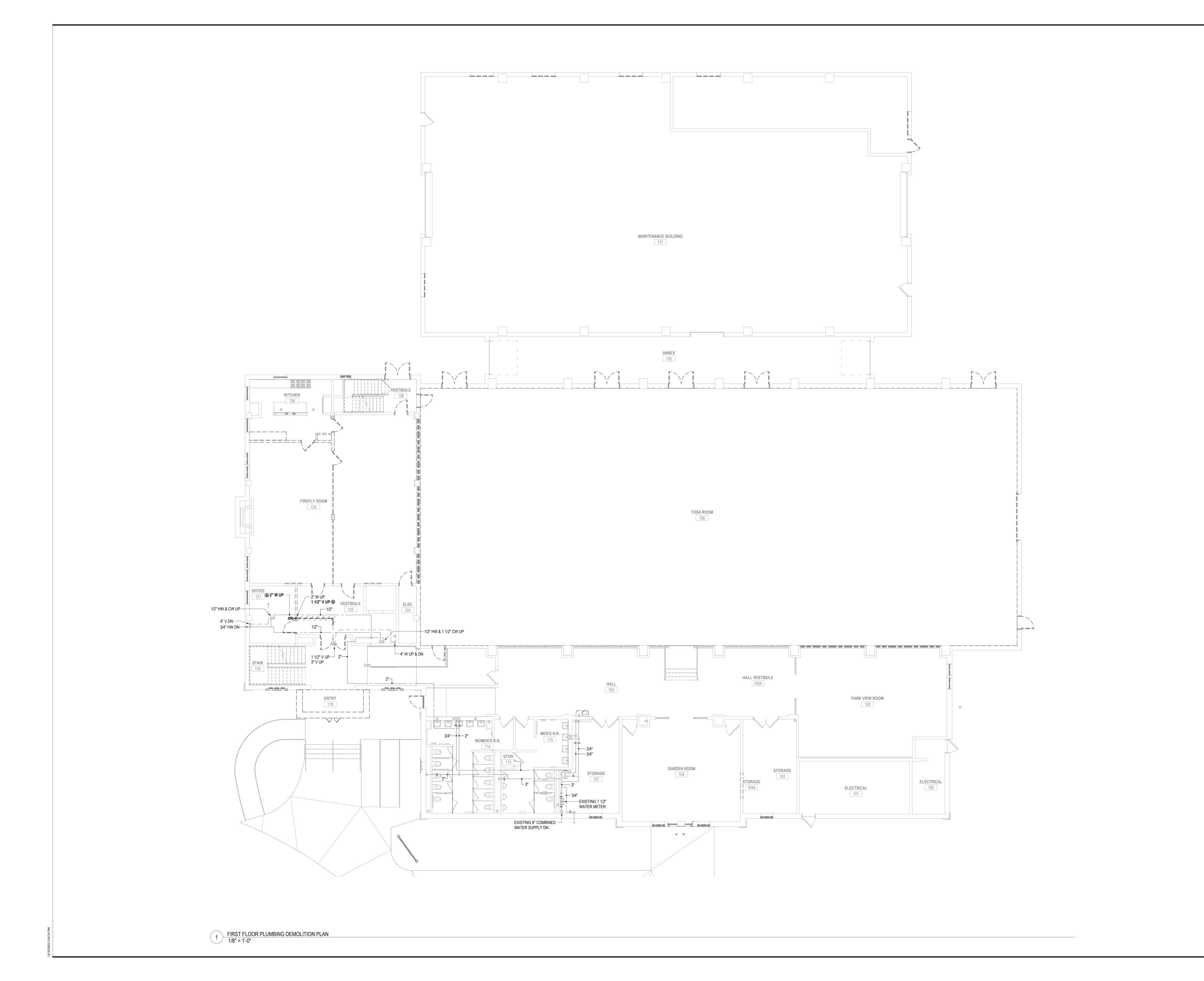
CITY OF WAUWATOSA

Sheet Title PLUMBING DETAILS,

SCHEDULES AND ISOMETRICS

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Drawing Date 12/22/2023

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7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. 223010.00

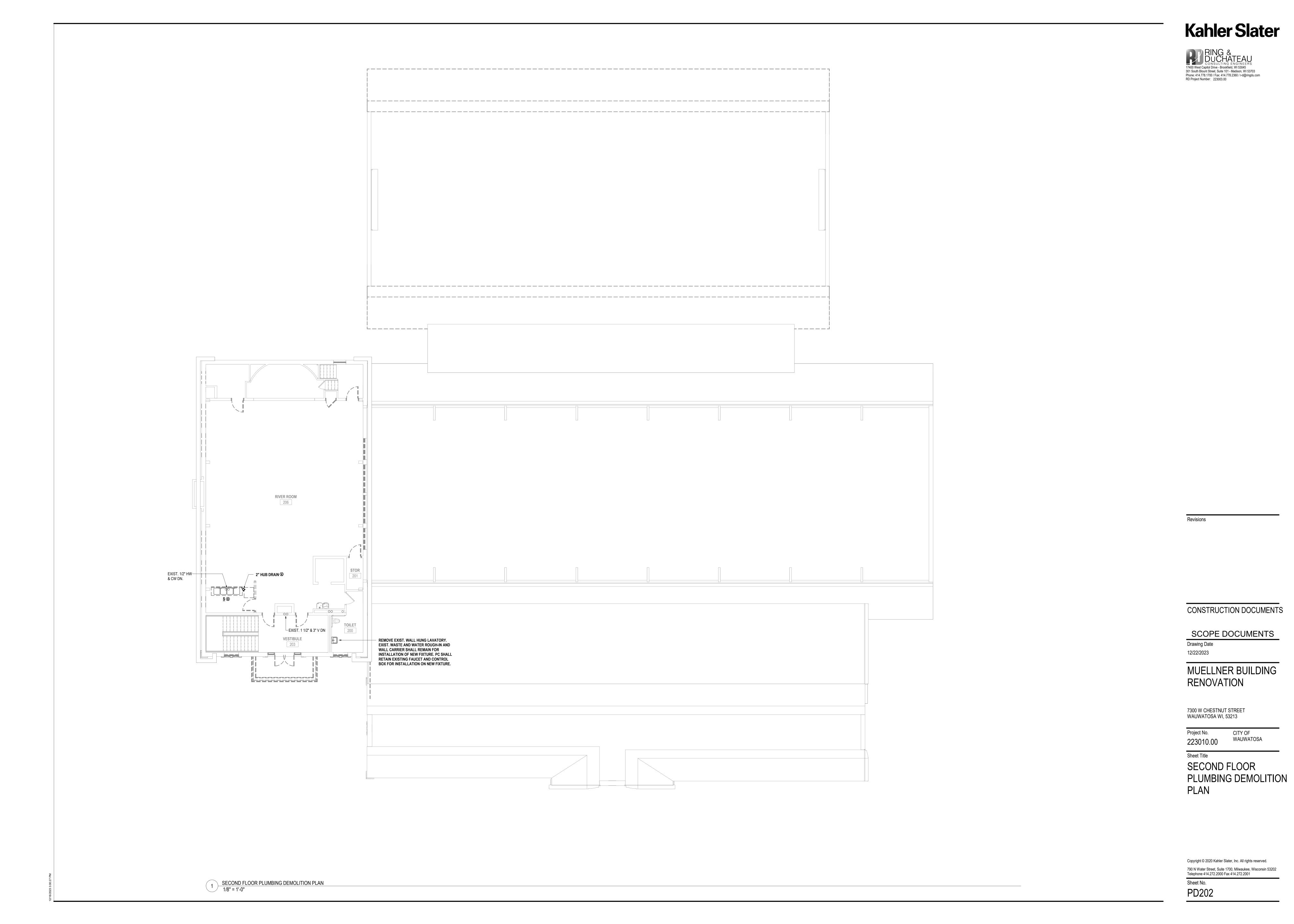
CITY OF WAUWATOSA

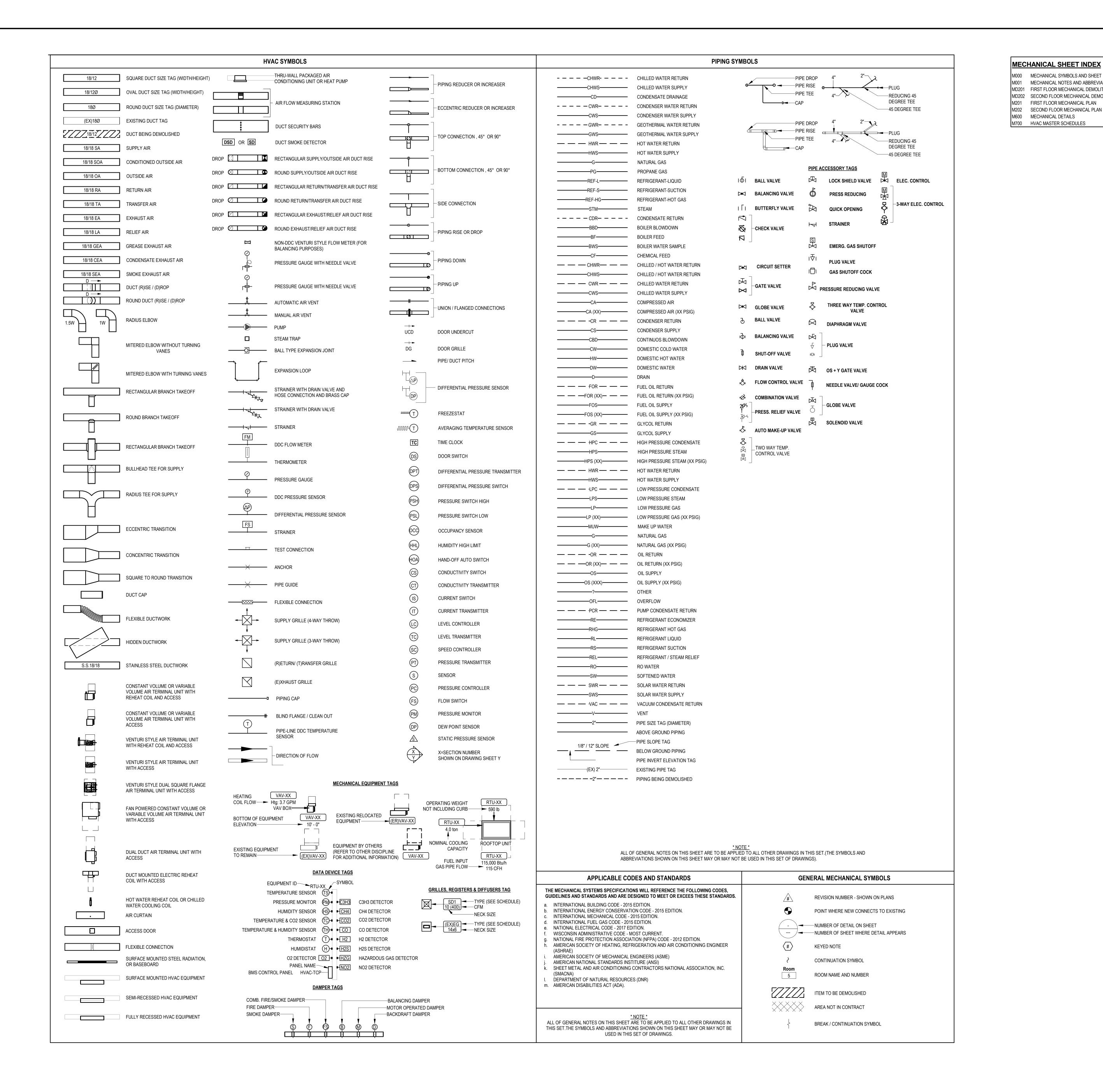
Sheet Title

FIRST FLOOR PLUMBING **DEMOLITION PLAN**

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PD201





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M000 MECHANICAL SYMBOLS AND SHEET INDEX M001 MECHANICAL NOTES AND ABBREVIATIONS MD201 FIRST FLOOR MECHANICAL DEMOLITION PLAN MD202 SECOND FLOOR MECHANICAL DEMOLITION PLAN

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS Drawing Date

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

CITY OF Project No. WAUWATOSA 223010.00

12/22/2023

MECHANICAL SYMBOLS AND SHEET INDEX

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	ABBREVIATIO		MAKE UD AIR UNIT	
	ROUND POUND	MAU MAV	MAKE-UP AIR UNIT MANUAL AIR VENT	
	AUTOMATIC AIR VENT AIR BLENDER	MAX MBH	MAXIMUM ONE THOUSAND BTU PER HOUR	
	ABOVE AIR CONDITIONING	MCA MCC	MINIMUM CIRCUIT AMPACITY MOTOR CONTROL CENTER	
	AIR CONDITIONING UNIT AIR-COOLED CHILLER	MCF MECH	ONE THOUSAND CUBIC FEET MECHANICAL	
	AIR COOLING CONDENSING UNIT AIR CHANGES PER HOUR	MERV MFR	MINIMUM EFFICIENCY REPORTING VALUE MANUFACTURER	
	ACCESS DOOR ADDENDUM	MIN. MISC	MINIMUM MISCELLANEOUS	
	ABOVE FINISHED FLOOR AIR FLOW MEASURING STATION	MOCP MOD	MAXIMUM OVER-CURRENT PROTECTION MOTOR OPERATED DAMPER	
	ANNUAL FUEL UTILIZATION EFFICIENCY AIR HANDLING UNIT	MTR MUW	MOTOR MAKE-UP WATER	
	ALTERNATE AUTO MAKE-UP VALVE	NC NC	NOISE CRITERIA NORMALLY CLOSED	
	ACCESS PANEL AIR PRESSURE DROP	NIC NO	NOT IN CONTRACT NUMBER	
	ARCHITECT/ARCHITECTURAL AIR SEPARATOR	NO NO2	NORMALLY OPEN NITROGEN DIOXIDE	
	AIR TERMINAL UNIT BOILER	NPSH NTS	NET POSITIVE SUCTION HEAD NOT TO SCALE	
	BASEBOARD RADIATION BOILER BLOWDOWN	OA OCC	OUTSIDE AIR OCCUPANCY	
	BLOWER COIL UNIT BACKDRAFT DAMER	ODP OFL	OPEN DRIP PROOF OVERFLOW	
	BLIND FLANGE BOILER FEED	OS OS&Y	OCCUPANCY SENSOR OUTSIDE STEM AND YOKE	
	BELOW FINISHED FLOOR	Р	PUMP	
	BRAKE HORSEPOWER BELOW	P P.C.	PRESSURE PLUMBING CONTRACTOR	
	BOTTOM OF DUCT BOTTOM OF PIPE	PB PC	PUSH BUTTON PRESSURE CONTROLLER	
ł	BRITISH THERMAL UNITS BRITISH THERMAL UNITS PER HOUR	PC PCR	PUMPED CONDENSATE PUMPED CONDENSATE RETURN	
	BALANCING VALVE CAPACITY	PD PH	PRESSURE DROP PHASE	
	CONSTANT AIR VOLUME CENTRIFUGAL	PIV PL	POST INDICATOR VALVE PILOT LIGHT	
	CUBIC FEET PER MINUTE CHILLER	PLBG PM	PLUMBING PRESSURE MONITOR	
	CHILLED WATER RETURN CHILLED WATER SUPPLY	PPH	POUNDS PER HOUR PRESSURE	
	CHECK VALVE CHILLED WATER PUMP	PRS PRV	PRESSURE REDUCING STATION POWER ROOF VENTILATOR	
	CHILLED WATER FOWIF CEILING CLEAN OUT	PRV PRV	PRESSURE REDUCING VALVE POWER ROOF VENTILATOR	
	CONDUCTIVITY SWITCH	PRV PSH PSI	PRESSURE SWITCH HIGH	
	COOLING TOWER COOLING TOWER CARRINGT LINIT HEATER	PSIA	POUNDS PER SQUARE INCH POUNDS PER SQUARE INCH ATMOSPHERE POUNDS PER SQUARE INCH CALICE	
	CABINET UNIT HEATER COMBINATION VALVE	PSIG PSL	POUNDS PER SQUARE INCH GAUGE PRESSURE SWITCH LOW	
	COLD WATER DRAIN	PT PTAC	PRESSURE TRANSMITTER PACKAGED AIR TERMINAL AIR CONDITIONING	
	DROP DEGREE	PWR R	POWER RISE	
	DECIBELS DRY BULB	(R) RA	EXISTING, RELOCATED RETURN AIR	
	DRY COOLER DUCT MOUNTED COIL	RAO RC	RETURN AIR OPENING REHEAT COIL	
	DOMESTIC WATER CIRCULATING PUMP DIAMETER	RCP RE	RADIANT CEILING PANEL REFRIGERANT ECONOMIZER	
	DOWN DEWPOINT	REC RED	RECESSED REDUCER	
	DIFFERENTIAL PRESSURE SENSOR DIFFERENTIAL PRESSURE TRANSMITTER	REF REL	RETURN/EXHAUST FAN REFRIGERANT/STEAM RELIEF	
	DOOR SWITCH	RF	RETURN FAN	
	DUCT SMOKE DETECTOR DUCTLESS SPLIT SYSTEM	RG RH	RETURN GRILLE RELATIVE HUMIDITY	
	DOOR TRANSFER GRILLE DRAIN VALVE	RHG RL	REFRIGERANT HOT GAS REFRIGERANT LIQUID	
ı	DOMESTIC WATER DOUBLE WIDTH DOUBLE INLET EXISTING	RLA RM	RELIEF AIR ROOM	
	EXISTING ELECTRICAL CONTACTOR	RO RPM	REVERSE OSMOSIS REVOLUTIONS PER MINUTE	
	EACH EXHAUST AIR	RS RTU	REFRIGERANT SUCTION ROOFTOP UNIT	
	EXHAUST AIR ENTERING AIR TEMPERATURE	R-XXX SA		
	ELECTRIC BASEBOARD RADIATION ELECTRICALLY COMMUTATED MOTOR	SB SC	STEAM BOILER SPEED CONTROLLER	
	ELECTRIC DUCT COIL EXHAUST FAN	SC SCR	SHADING COEFFICIENT SILICONE CONTROLLED RECTIFIER	
	EXHAUST GRILLE	SD	SUPPLY DIFFUSER	
ΙP	ELECTRICAL EQUIPMENT	SD SF	SMOKE DAMPER SUPPLY FAN	
	EXTERNAL STATIC PRESSURE EXPANSION TANK	SF SG	SQUARE FOOT SUPPLY GRILLE	
	EXISTING TO REMAIN ENTERING WATER TEMPERATURE	SM SOV	SURFACE MOUNT SHUT OFF VALVE	
	FILTER DEGREES FAHRENHEIT	SP SP	STATIC PRESSURE SUMP PUMP	
	FORWARD CURVED FLOOR CLEAN OUT	SPL SR	SOUND POWER LEVEL STEEL RADIATION	
	FAN COIL UNIT FLOW CONTROL VALVE	SSV STM	STEAM SAFETY VALVE STEAM	
	FIRE DAMPER FLOOR	STR SW	STARTER SOFTENED WATER	
	FULL LOAD AMPERES FLOW METER	SWR SWS	SOLAR WATER RETURN SOLAR WATER SUPPLY	
	FUEL OIL FUEL OIL RETURN	SWSI T	SINGLE WIDTH SINGLE INLET THERMOSTAT	
	FUEL OIL SUPPLY FUEL OIL VENT	T.C.C. TA	TEMPERATURE CONTROL CONTRACTOR TRANSFER AIR	
	FEET PER MINUTE	TAO	TRANSFER AIR OPENING	
١V	FINNED PIPE RADIATION FAN POWERED VARIABLE AIR VOLUME	TC TCP	TIME CLOCK TEMPERATURE CONTROL PANEL	
	COMB. FIRE/ SMOKE DAMPER FOOT/FEET	TD TEAO	TEMPERATURE DROP TOTALLY ENCLOSED AIR OVER	
	FIN TUBE RADIATION NATURAL GAS	TEFC TEMP	TOTALLY ENCLOSED FAN COOLED TEMPERATURE	
	GENERAL CONTRACTOR GALLON	TF TF	TRANSFER FAN FREEZESTAT	
	GENERAL CONTRACTOR GAS-FIRED	TG TOD	TRANSFER GRILLE TOP OF DUCT	
	GLOBE VALVE GALLONS PER MINUTE	TOP TS	TOP OF PIPE TEMPERATURE SENSOR	
	GALLONS PER MINUTE GLYCOL WATER RETURN	TSP TTS	TOTAL STATIC PRESSURE TIGHT TO STRUCTURE	
	GRAVITY ROOF VENTILATOR GLYCOL WATER SUPPLY	TYP UCD	TYPICAL UNDER CUT DOOR	
	HEATING / HVAC CONTRACTOR HOSE BIB	UG UH	UNDERGROUND UNIT HEATER	
4	HIGH EFFICIENCY PARTICULATE ARRESTANCE	UV	UNIT VENTILATOR	
	HUMIDITY HIGH LIMIT HAND-OFF-AUTO	UV V	ULTRA VIOLET VOLTAGE	
	HORSEPOWER HIGH PRESSURE CONDENSATE	V VAC	VENT VACUUM	
	HIGH PRESSURE STEAM HOUR	VAC VAV	VACUUM VARIABLE AIR VOLUME	
	HEAT RECOVERY UNIT HEATING	VD VEL	VOLUME DAMPER VELOCITY	
	HEATER HUMIDIFIER	VENT VFD	VENTILATION VARIABLE FREQUENCY DRIVE	
	HOT WATER (DOMESTIC) HOT WATER	VRF W	VARIABLE REFRIGERANT FLOW WATT	
	HOT WATER PUMP HEATING WATER PUMP	WB WC	WET BULB WATER COLUMN	
	HOT WATER RETURN HOT WATER SUPPLY	WCC WCO	WATER COLOMIN WATER-COOLED CHILLER WALL CLEAN OUT	
	HERTZ	WFMS	WATER FLOW MEASURING STATION	
	CURRENT INDIRECT	WFR WFS	WELL FIELD RETURN WELL FIELD SUPPLY	
	INCH INVERT	WH	WALL HYDRANT WATER HEATER	
	CURRENT SWITCH CURRENT TRANSMITTER	WPD WSRV	WATER PRESSURE DROP WATER SAFETY RELIEF VALVE	
	KILOWATT	WWM	WELDED WIRE MESH	
	LEAVING AIR TEMPERATURE			
				•
R	LEAVING AIR TEMPERATURE POUND POUNDS PER HOUR LEVEL CONTROLLER			
R	LEAVING AIR TEMPERATURE POUND POUNDS PER HOUR LEVEL CONTROLLER LIQUID PETROLEUM LOW PRESSURE			
R	LEAVING AIR TEMPERATURE POUND POUNDS PER HOUR LEVEL CONTROLLER LIQUID PETROLEUM LOW PRESSURE LOW PRESSURE CONDENSATE LIQUEFIED PETROLEUM GAS			
R	LEAVING AIR TEMPERATURE POUND POUNDS PER HOUR LEVEL CONTROLLER LIQUID PETROLEUM LOW PRESSURE LOW PRESSURE CONDENSATE LIQUEFIED PETROLEUM GAS LOW PRESSURE STEAM LOCKED ROTOR AMPERES			
R	LEAVING AIR TEMPERATURE POUND POUNDS PER HOUR LEVEL CONTROLLER LIQUID PETROLEUM LOW PRESSURE LOW PRESSURE CONDENSATE LIQUEFIED PETROLEUM GAS LOW PRESSURE STEAM			

GENERAL NOTES

AND EXISTING CONDITIONS PRIOR TO FINAL BID.

AND DATA REQUIREMENTS PROVIDED BY THE T.C.C.

OWNER PRIOR TO COMPLETING WORK.

BOTH HORIZONTAL AND VERTICAL TAKEOFFS.

SAME SIZE AS VAV BOX OUTLET.

EQUIPMENT MANUFACTURER.

OTHERWISE.

REQUIREMENTS.

THE DRAWINGS.)

AS POSSIBLE.

LOCATION.

OUTDOORS.

MANAGER.

EXTENT OF DEMOLITION WORK PRIOR TO BEGINNING ANY WORK. ANY

OWNER. REMOVE ALL UNUSED PIPING, DUCTWORK AND ACCESSORIES.

3. ALL ELECTRICAL AND TECHNOLOGY WORK REQUIRED FOR THE CONTROLS

SYSTEM NOT SPECIFICALLY SHOWN ON THE ELECTRICAL DRAWINGS SHALL BE PROVIDED BY THE T.C.C. LOCATIONS FOR ADDITIONAL TEMPERATURE

COORDINATED WITH THE ENGINEER AND BUILDING OWNER, WITH POWER

INCLUDE THE COST FOR THE CONFLICT RESULTING IN THE HIGHEST FIRST

5. PROVIDE GALVANIZED OR STAINLESS STEEL CONSTRUCTION MATERIALS FOR

4. IF THERE IS CONFLICTING INFORMATION IN THE BIDDING DOCUMENTS.

ALL SUPPORTS, HARDWARE, FASTENERS AND ISOLATORS LOCATED

6. HC SHALL COORDINATE ALL SYSTEM SHUT DOWN AND START-UP WITH

8. CERTAIN AREAS OF THE BUILDING UTILIZE A RETURN AIR PLENUM. ALL

MATERIALS IN PLENUM SPACES SHALL MEET NFPA 90 AND IMC 602.

CERTAIN OFFSETS ARE SHOWN IN THE DUCTWORK AND PIPING TO INDICATE

ADDITIONAL OFFSETS, SIMILAR TO THOSE SHOWN, AS REQUIRED BY FIELD

10. ALL BRANCH DUCTWORK TAKEOFFS SHALL BE EXPANDED AT 45° ANGLE, FOR

11. BRANCH DUCTWORK TO VAV BOXES SHALL BE SAME SIZE AS VAV BOX INLET CONNECTION, UNLESS SHOWN OTHERWISE. PROVIDE TRANSITIONS FROM

VAV BOX OUTLETS TO DUCT SIZES AS SHOWN ON THE DRAWINGS. WHERE DUCT SIZE IS NOT LISTED DOWNSTREAM OF VAV BOX, DUCT SIZE SHALL BE

EXHAUST DUCTWORK. ONLY ONE (1) 90° BEND ALLOWED PER SECTION OF

12. CONTRACTOR MAY USE UP TO FIVE (5) FEET OF FLEXIBLE DUCT FOR CONNECTION OF EXHAUST GRILLES TO TOILET AND MISCELLANEOUS

13. ALL FIRE DAMPERS SHALL BE TWO (2) HOUR RATED UNLESS NOTED

14. COORDINATE ALL DUCT AND PIPE CONNECTIONS REQUIRED FOR OWNER

REQUIRED FOR COMPLETE INSTALLATION AND RECOMMENDED BY

15. SEE PROJECT MANUAL FOR SPECIFICATIONS AND OTHER CONTRACT

EQUIPMENT MANUFACTURER. VERIFY EXACT REQUIREMENTS WITH

FURNISHED EQUIPMENT. PROVIDE DAMPERS, SHUTOFF VALVES, ETC. AS

16. INSTALL ALL HVAC WORK TO BEST SUIT FIELD CONDITIONS; DRAWINGS ARE

COORDINATE INSTALLATION OF DUCTWORK AND PIPING WITH STRUCTURE, LIGHT FIXTURES, AND WORK OF OTHER TRADES. PROVIDE OFFSETS AND

TRANSITIONS AS REQUIRED, MAINTAIN MAXIMUM CLEARANCE BELOW WORK

MISALIGNMENTS ETC. INSTALL WORK LEVEL AND IN A NEAT MANNER FOR EXPOSED APPLICATION. COORDINATE HEIGHT OF DIFFUSERS WITH LIGHT

20. COORDINATE ALL FINAL THERMOSTAT LOCATIONS WITH THE ARCHITECT AND

CONSTRAINTS DO NOT ALLOW. FOR ALL DUCTWORK WITH ASPECT RATIOS

TO PREVENT EXCESSIVE VIBRATIONS, PULSATIONS, BOWING, CONCAVING,

22. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR ALL FINAL LOCATIONS

23. AVOID BLOCKING RETURN AIR TRANSFER PATHWAYS WITH DUCTWORK AND

24. ALL DUCTWORK SHALL BE CONSTRUCTED OF SHEETMETAL EXCEPT FOR

FLEXIBLE BRANCH DUCTS. DUCT DIMENSIONS ON PLANS FOR THE SUPPLY,

RETURN, EXHAUST AND TRANSFER DUCTWORK ARE THE INTERIOR FREE AREA DIMENSIONS, WHICH DO NOT INCLUDE LINING, INSULATION OR

REINFORCEMENT. ADJUST STHEET METAL SIZE FOR DUCT LINING WHERE

25. BRANCH DUCTWORK TO GRILLES AND DIFFUSERS SHALL BE THE SAME SIZE

PROVIDE TRANSITIONS FOR TAKEOFFS FROM BRANCH DUCTWORK TO

26. CONTRACTOR SHALL LOCATE THERMOSTATS AND TEMPERATURE SENSORS PER ADA REQUIREMENTS, AND ALIGN HORIZONTALLY WITH LIGHT SWITCHES

27. ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK SHALL BE RATED FOR

28. PROVIDE DIFFUSERS AND REGISTERS WITH 4-WAY BLOW PATTERN UNLESS

29. PROVIDE A MIN. 4" HOUSEKEEPING PAD FOR EACH PIECE OF MECHANICAL EQUIPMENT. COORDINATE SIZES WITH MECHANICAL EQUIPMENT SELECTED.

30. THE CONTRACTOR SHALL BE REQUIRED TO REPLACE FILTERS ON HVAC EQUIPMENT AFTER ALL DUST PRODUCING CONSTRUCTION HAS BEEN COMPLETED AND PRIOR TO THE FINAL PUNCH. ALL EQUIPMENT AND DUCTWORK UTILIZED DURING CONSTRUCTION SHALL BE THOROUGHLY

31. T.C.C SHALL COORDINATE ALL FINAL DEHUMIDIFICATION CONTROL SENSOR

* NOTE *

ALL OF GENERAL NOTES ON THIS SHEET ARE TO BE APPLIED TO ALL OTHER DRAWINGS IN THIS SET.THE SYMBOLS AND

ABBREVIATIONS SHOWN ON THIS SHEET MAY OR MAY NOT BE USED IN THIS SET OF DRAWINGS.

PRESSURE CLASS AS INDICATED IN THE SPECIFICATIONS.

CLEANED PRIOR TO USE WITH REPLACED FILTERS.

LOCATIONS WITH EQUIPMENT, MANUF. AND OWNER.

GRILLES AND DIFFUSERS AS REQUIRED. SEE GRILLE AND DIFFUSER

AS THE INLET CONNECTIONS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

OF CEILING GRILLES AND DIFFUSERS, AND CEILING TYPES.

GREATER THAN 4:1 PROVIDE ADDITIONAL REINFORCEMENT AND STIFFENERS

21. MAXIMUM DUCT ASPECT RATIO SHALL BE 4:1, EXCEPT WHERE BUILDING

DIAGRAMMATIC AND SHALL NOT BE SCALED TO DETERMINE EXACT

17. EXPOSED PIPING AND DUCTWORK IN OCCUPIED SPACES IS PROHIBITED.

18. FOR AREAS OF THE PROJECT THAT HAVE EXPOSED STRUCTURE.

19. WORK IN EXPOSED AREAS SHALL BE FREE OF DEFECTS, DENTS,

FIXTURES FOR A LEVEL CEILING PLANE.

AND PREMATURE FAILURE.

SCHEDULES FOR INLET SIZES.

AND OTHER DEVICES.

OTHERWISE NOTED.

APPLICABLE.

THE GENERAL POSITION AND RELATIONSHIP OF THE SYSTEMS. PROVIDE

7. COORDINATE CONSTRUCTION PHASING WITH OWNER AND CONSTRUCTION

CONTROLS PANELS NOT SHOWN ON THE DRAWING SHALL BE REVIEWED AND

ADDITIONAL ITEMS FOUND NEEDING TO BE DEMOLISHED THAT ARE NOT SHOWN ON THE PLANS SHALL BE REMOVED AT NO ADDITIONAL COST TO THE

- OUTDOOR DESIGN TEMPERATURES BASED ON WISCONSIN ADMINISTRATIVE CODE SPS 363 WEATHER DATA: A. WINTER: -10 DEGREES F.
- SUMMER: 89/77 DEGREES F. DEHUMIDIFICATION DP/MCDB AND HR: DB 82.6 DEGREES F, WB 76.7 DEGREES F, DP 73.9 DEGREES F, HR 129.8 GR/LB., RH 76.70%

DESIGN CONDITION

D. HOURS OF OCCUPANCY a. AIR HANDLING UNIT OPERATION HOURS MAY BE SCHEDULED OCCUPANCY THRU THE FMS.

BUILDING ENVELOPE

- BUILDING ENVELOPE WILL COMPLY WITH THE STATE OF WISCONSIN CODE (IHLAR 63): SPECIFIC CONSTRUCTION MATERIAL COEFFICIENTS AND U-VALUES TO BE DETERMINED. THE FOLLOWING COEFFICIENTS HAVE BEEN USED FOR PRELIMINARY CALCULATIONS: A. WALL CONSTRUCTION "U" = 0.06
- ROOF CONSTRUCTION "U" = 0.07 ANY CURTAIN WALL CONSTRUCTION "U" = NA D. GLASS
- a. "SC" = 0.31
 - b. "U" = 0.29 THE BUILDING HEAT LOSS WILL INCLUDE AN INFILTRATION LOAD FOR THE BUILDING BASED ON A 0.1 CFM/SF OF GROSS EXTERIOR WALL AREA.

LIFE SAFETY REQUIREMENTS

ELECTRICAL CONTRACTOR SHALL FURNISH, INSTALL AND WIRE ALL SMOKE DETECTORS AS PART OF THE FIRE ALARM SYSTEM

32. FINAL PRODUCT SHALL BE A COMPLETE AND FUNCTIONING 1. THE M.C. SHALL BE RESPONSIBLE FOR FIELD VERIFYING SCOPE OF WORK SYSTEM, AND SHALL CONFORM TO ALL REQUIREMENTS OF APPLICABLE FEDERAL, STATE, AND LOCAL CODES, INCLUDING BUT 2. DEMOLITION SHOWN IS BASED ON FIELD VERIFICATION OF EXISTING NOT LIMITED TO THE INTERNATIONAL BUILDING CODE AND DRAWINGS. THE M.C. SHALL FIELD VERIFY EXISTING CONDITIONS AND INTERNATIONAL MECHANICAL CODE.

CEILING.

- 33. LOCATE EQUIPMENT REQUIRING ACCESS 2'-0" MAXIMUM ABOVE
- 34. ALL ROOF MOUNTED EQUIPMENT SHALL BE A MINIMUM 10'-0" FROM
- EDGE OF ROOF. 35. LOCATE DUCTWORK, PIPING AND MECHANICAL EQUIPMENT AWAY FROM THE SPACE ABOVE ELECTRICAL PANELS, TRANSFORMERS,
- AND OTHER ELECTRICAL EQUIPMENT. PER NEC REQUIREMENTS. 36. PENETRATIONS OF RATED ASSEMBLIES SHALL BE FIRE STOPPED. FIRE STOPPING SHALL BE AN APPROVED MATERIAL AS PRESCRIBED IN CSFM STANDARD 43-1 AND SHALL BE U.L. LISTED.
- 37. PROVIDE SLEEVES AND/OR OPENINGS TO RUN PIPES AND DUCTS THROUGH FOUNDATIONS, FLOORS, WALLS, AND ROOF.

SEE ARCHITECTURAL SPECIFICATIONS.

- 38. MAINTAIN CLEAR ACCESS TO SERVICE EQUIPMENT AND OTHER ACCESSORIES REQUIRING SERVICE, VISUAL INSPECTION OR HAND OPERATION. WHERE INDICATED OR REQUIRED, PROVIDE ACCESS PANELS OF THE TYPE SELECTED TO SUIT MATERIALS IN WHICH INSTALLED.
- 39. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH THE RESPECTIVE MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS, AT A LEVEL OF QUALITY AND WORKMANSHIP CONSISTENT WITH THE SPECIFICATIONS.
- 40. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS AND SHALL ARRANGE FOR ALL INSPECTIONS AS
- 41. PROVIDE MANUAL VOLUME DAMPERS IN ALL BRANCH DUCTS SERVING SUPPLY, RETURN, AND EXHAUST GRILLES, AND WHERE REQUIRED TO ACHIEVE PROPER BALANCING, AS DIRECTED BY THE TAB CONTRACTOR. ELEVATED PLATFORMS SHALL BE INSTALLED ON ANY INSULATED DUCTWORK.
- 42. PROVIDE WIRE MESH SCREENS FOR ALL OPEN ENDED DUCTS AND TRANSFER DUCT OPENINGS LOCATED IN EXPOSED AREAS WHERE GRILLES ARE NOT INDICATED.
- 43. SEAL ALL PIPING AND DUCTWORK PENETRATIONS AIR TIGHT THRU WALLS, FLOORS, OR PARTITIONS IDENTIFIED AS SOUND WALLS, SMOKE TIGHT WALLS, FIRE BARRIERS, SMOKE BARRIERS, SHAFTS, OR FIRE RATED CONSTRUCTION INDICATED ON THE ARCHITECTURAL DRAWINGS. MAINTAIN ALL DESIGNATED FIRE RATINGS, SMOKE RATINGS, AND UL LISTINGS.
- 44. PROVIDE ACCESS PANELS IN DUCTWORK, WALLS, AND CEILINGS FOR ACCESS TO ALL CONCEALED TURNING VANES, CONTROL DAMPERS, SMOKE DETECTORS, CONTROLS, CONTROL VALVES, SHUT-OFF VALVES, AIR VENTS, AIR TERMINALS, EXPANSION COMPENSATING DEVICES, HEATING COILS, COOLING COILS, BOOSTER COILS, FILTERS, FANS, AND EQUIPMENT.
- 45. THE CONTRACTOR IS RESPONSIBLE FOR CONFIRMING AND CORRELATING ALL QUANTITIES, SIZES, CAPACITIES, ACCESSORIES, SEQUENCES, MATERIALS, MEANS AND METHODS, SPACE REQUIREMENTS, ACCESSIBILITY, CODE CLEARANCES. PERFORMANCE, FABRICATION PROCESSES, AND TECHNIQUES OF CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THAT OF ALL OTHER TRADES, AND PERFORM ALL WORK IN A (EXCEPT FOR ROOMS WITHOUT SUSPENDED CEILINGS, OR WHERE NOTED ON SAFE MANNER. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DESIGN/BUILD CHANGES, EQUIPMENT SUBSTITUTIONS, AND VALUE ENGINEERING CHANGES PERFORMED BY THE CONTRACTOR.
 - 46. PROVIDE ALL OPENINGS FOR HVAC WORK, PROVIDE LINTELS FOR ALL HVAC OPENINGS IN ACCORDANCE WITH REQUIREMENTS SHOWN ON THE STRUCTURAL DRAWINGS.
 - 47. DESIGN OF ALL HVAC SUPPORTS AND DUCT LINTELS IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.
 - 48. BRANCH PIPING TO FINNED PIPE RADIATION SHALL BE 1/2" UNLESS NOTED OTHERWISE ON THE DRAWINGS.
 - 49. LOCATE BRANCH SHUT-OFF VALVES WITHIN 3 FEET OF COILS
 - 50. INSTALL ALL SHUT-OFF VALVES, CONTROL VALVES, STRAINERS, DRAIN VALVES, AIR VENTS, AND ACCESSORIES IN ACCESSIBLE LOCATIONS.
 - 51. CONDENSATE DRAINS SHALL BE SUPPLIED FOR ALL COOLING EQUIPMENT. CONTRACTOR SHALL ENSURE PROPER INSTALLATION AND DRAINAGE AS REQUIRED BY FEDERAL, STATE, AND LOCAL CODES. PITCH ALL CONDENSATE DRAIN PIPING AT A MINIMUM 1" PER 40 FEET AS REQUIRED BY APPLICABLE CODES, OR AS INDICATED ON DRAWINGS. PROVIDE CLEANOUT AT END OF PIPE MAINS AND CHANGES IN DIRECTION.
 - 52. ALL DUCT SMOKE DETECTORS PROVIDED BY E.C. COORDINATE LOCATIONS AND REQUIREMENTS WITH E.C.
 - 53. PROVIDE ALL CUTTING, PATCHING AND SEALING REQUIRED FOR ALL NEW HVAC WORK. PATCHING SHALL MATCH EXISTING ADJACENT SURFACE MATERIALS.
 - 54. ALL DUCTWORK & PIPING INSULATION DAMAGED DURING CONSTRUCTION OR OTHERWISE SHALL BE PATCHED TO MATCH EXISTING AND MAINTAIN INSULATION VAPOR BARRIER.

CONSTRUCTION DOCUMENTS

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RD Project Number: 223003.00

SCOPE DOCUMENTS

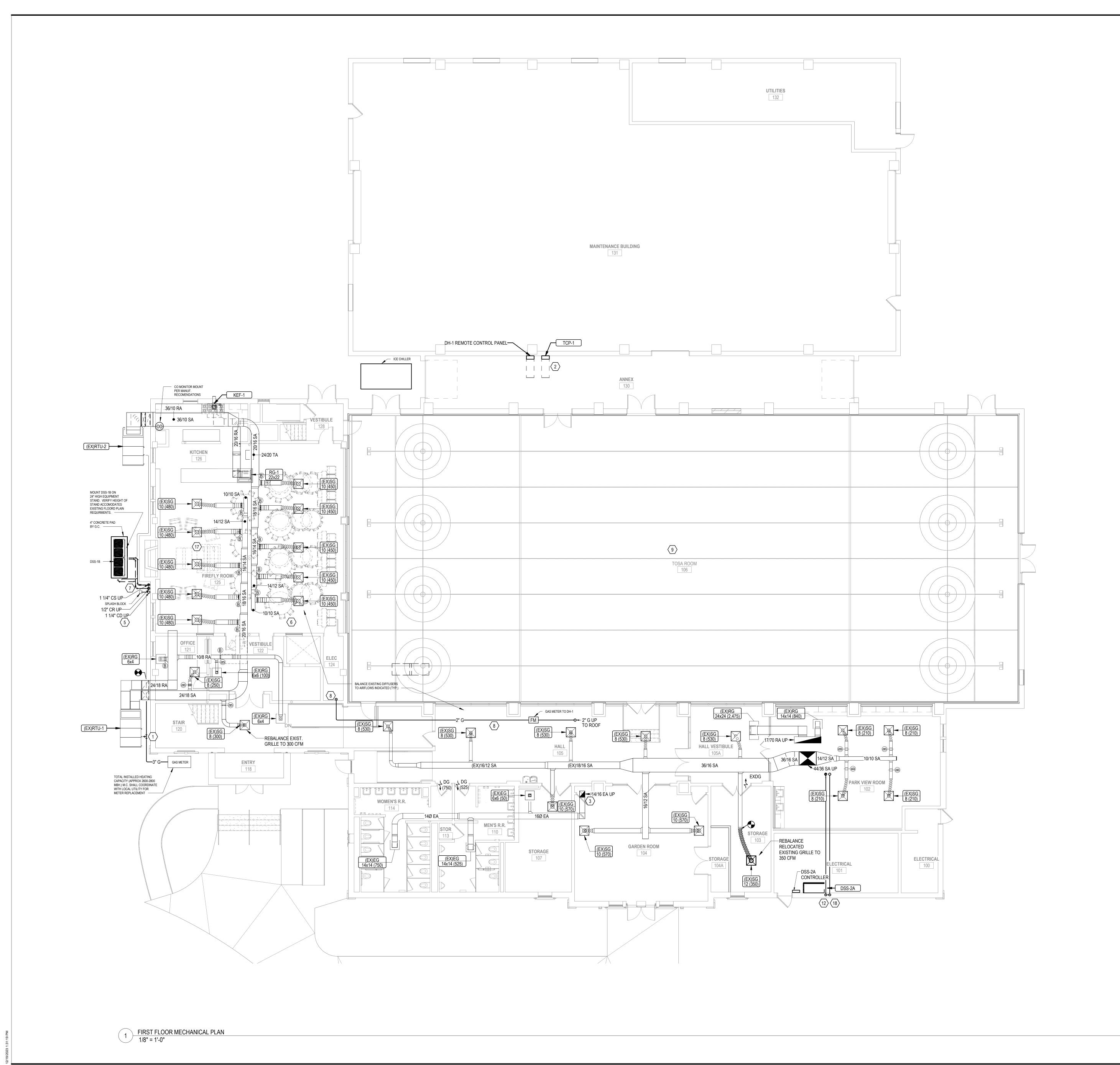
MUELLNER BUILDING

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

CITY OF Project No. WAUWATOSA

MECHANICAL NOTES AND ABBREVIATIONS

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- 1. RECONNECT EXIST. GAS PIPING ASSOC. WITH EXRTU-1
- 2. CODE REQUIRED ELECTRICAL CLEARANCE.
- 3. NEW EXHAUST AIR SMOKE DUCT DETECTOR BY E.C.
- 4. REFRIGERANT PIPING FROM INDOOR UNITS TO OUTDOOR CONDENSING UNIT DSS-1B SIZES AND MAX. REFRIGERANT LINE LENGTHS AS RECOMMENDED BY UNIT MANUFACTURER.
- 5. 1-1/4" COOLING COIL CONDENSATE DRAIN LINE. ROUTE CONDENSATE OUTDOORS TO GRADE. TERMINATE DRAIN LINE AT SPLASH BLOCK. PITCH ALL HORIZONTAL PIPING TOWARDS VERTICAL DRAIN PIPE TERMINATING AT GRADE. FIELD VERIFY EXACT DRAIN TERMINATION. SPLASH BLOCK PROVIDED BY M.C.
- 6. CLEAN ALL EXISTING DUCTWORK AND GRILLES PRIOR TO REINSTALLATION. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- 7. COVER ALL INTERIOR AND EXTERIOR REFRIGERANT PIPING WITH LINE HIDE SET COVER SYSTEM.
- 8. NEW 2" GAS PIPE. RUN NEW PIPING PARALLEL TO EXISTING 1-1/2" LINE. FOLLOW EXISTING GAS PIPING ROUTING BACK TO METER CONNECTION POINT INDICATED.
- 9. LOCATE TEMPERATURE AND DEW POINT SENSOR LOCATION PER HUMIDIFICATION MANUFACTURES RECOMMENDATIONS, TO INSURE OPTIMAL PERFORMANCE.

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CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date 12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No.

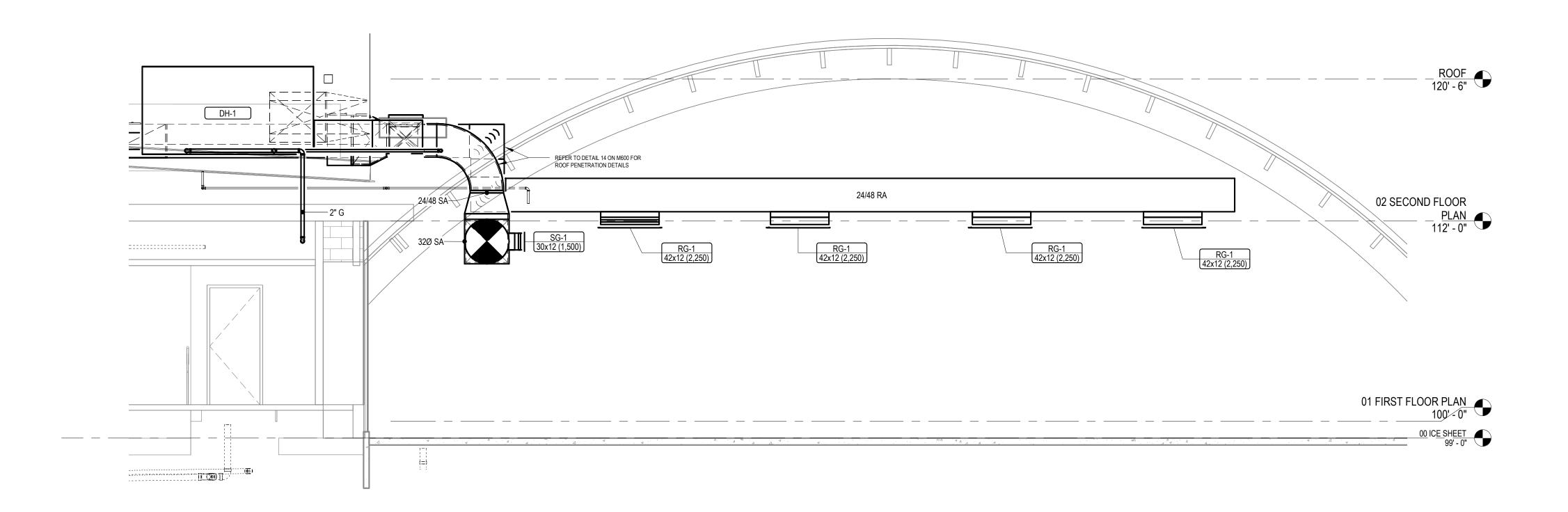
WAUWATOSA 223010.00

CITY OF

Sheet Title

FIRST FLOOR MECHANICAL PLAN

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1 Section 43 1/4" = 1'-0" MOUNTED 8'-6" ABOVE LEVEL —ACOUSTICLLY LINED SUPPLY. LINE ALL NEW SUPPLY DUCT AND ASSCOCIATED ELBOWS / TRANSITIONS FROM EXISTING CONNECTION POINT TO SQUARE TO ROUND TRANSITION WITHIN TOSA TRANS. TO DUCT FURNACE AS REQ.'D. ---48/24 SA DN¬ -28Ø SA-—20Ø SA— 1 1/4" G DURA-BLOK GAS PIPE SUPPORTS TYP. 24/24 SA • (EX)PRV-1 — DH-1 HAS BEEN PRE-PURCHASED BY THE WAUWATOSA CURLING CLUB UNDER SEPERATE CONTRACT. INSTALLATION OF UNIT TO OCCURE AS PART OF THIS PROJECT. G.C. & M.C. SHALL COORDINATE INSTALLATION WITH THE WAUWATOSA CURLING CLUB.

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KEYED NOTES: **◄**

- 1. MANUFACTURE REQUIRED CLEARANCES.
- 2. ALL EXTERIOR DUCTWORK SHALL BE JACKETED PER INSULATION SPECIFICATION 23 07 13.
- 3. NEW GAS PIPING TO DH-1. INSTALL PER MANUFACTURES REQUIREMENTS. M.C. SHALL PROVIDE GAS REGULATOR AS REQUIRED. PROVIDE PIPE SUPPORTS PER SPECIFICATION 23.05.29
- 4. NEW EQUIPMENT ROOF SUPPORT RAILS FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR. MOUNT TO TOP OF EXISTING ROOF RTU SUPPORT RAILS.
- 5. DUCT ROOF SUPPORT SYSTEM (TYP.) SEE DETAIL ON SHEET M600 AND SPECIFICATION SECTION 23.05.29 FOR FURTHER REQUIREMNTS.
- 6. DUCT MOUNTED SUPPLY AND RETURN AIR SMOKE DUCT DETECTORS PROVIDED BY, INSTALLED BY, AND WIRED BY E.C. INSTALL / MOUNT PER MFR'S REQUIREMENTS. SEE SPECIFICATION 23 09 93 - SMOKE DETECTION SYSTEM FOR FURTHER INFORMATION.
- 7. CODE REQUIRED ELECTRICAL CLEARANCE.
- 8. NEW EXHAUST AIR SMOKE DUCT DETECTOR BY E.C.
- 9. ALL SUPPLY AND RETURN DUCTWORK SERVING (EX)RTU-4 & DH-1 SHALL BE INTERNALLY LINED. DUCT SIZES REFLECTED ARE CLEAR INSIDE DIMENSIONS.
- 10. REFRIGERANT PIPING FROM INDOOR UNITS TO OUTDOOR CONDENSING UNIT CU-1 SIZES AND MAX. REFRIGERANT LINE LENGTHS AS RECOMMENDED BY UNIT MANUFACTURER.
- 11. 1-1/4" COOLING COIL CONDENSATE DRAIN LINE. ROUTE CONDENSATE OUTDOORS TO GRADE. TERMINATE DRAIN LINE AT SPLASH BLOCK. PITCH ALL HORIZONTAL PIPING TOWARDS VERTICAL DRAIN PIPE TERMINATING AT GRADE. FIELD VERIFY EXACT DRAIN TERMINATION. SPLASH BLOCK PROVIDED BY M.C.
- 12. MOTORIZED ISOLATION DAMPERS AND ASSOCIATED 24"x24" ACCESS PANELS.
- 13. PROVIDE NEMA 4 WEATHERTIGHT ENCLOSURES FOR DAMPER ACTUATORS AND WEATHERTIGHT ACCESS PANELS.

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No.

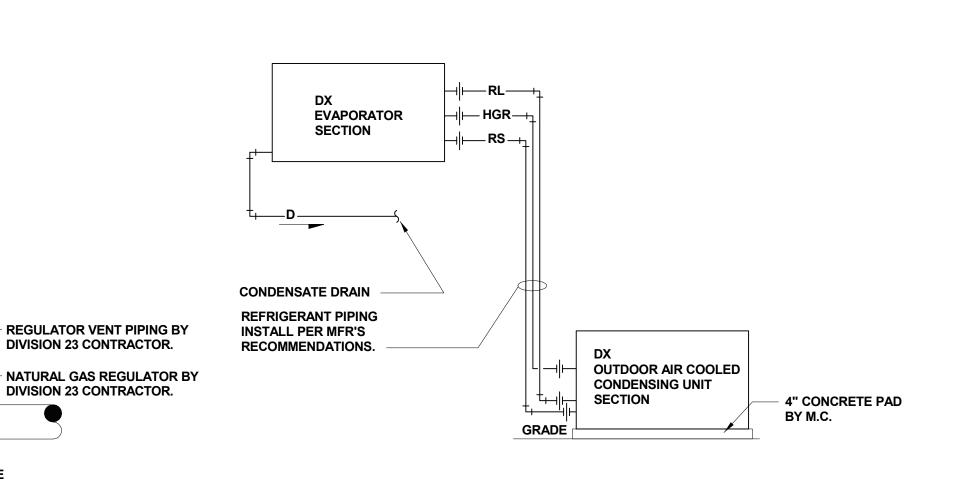
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SECOND FLOOR MECHANICAL PLAN

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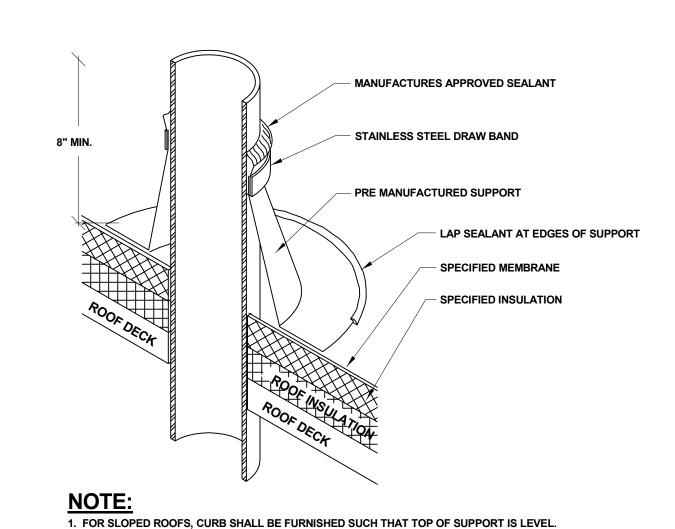


NOTE: 1. IF THE NATURAL GAS REGULATOR IS INSTALLED IN THE UPRIGHT POSITION, A J-PIPE SHALL BE INSTALLED TO PREVENT RAIN FROM ENTERING VENT

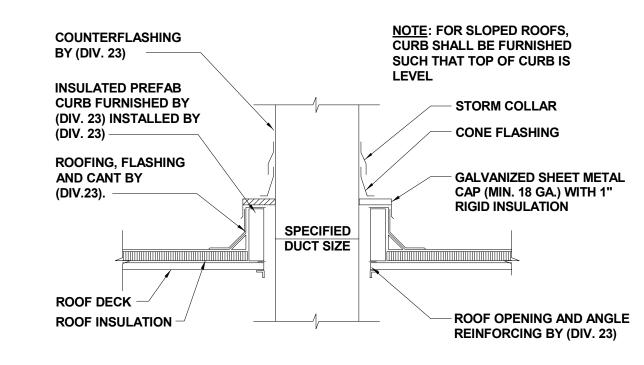
12 NATURAL GAS PIPING SCHEMATIC NO SCALE

DIVISION 23 CONTRACTOR.

DIVISION 23 CONTRACTOR.



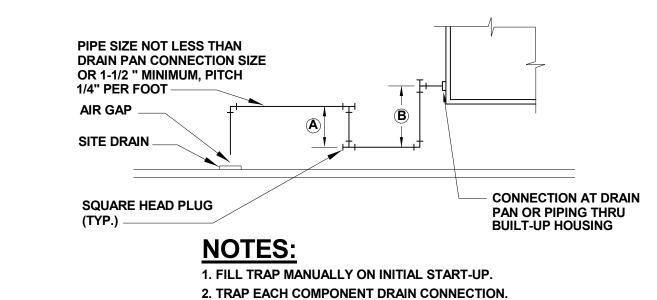
2. PROVIDE WHERE CONDENSER, OVERFLOW SUMP SWEEPER AND DRAIN PIPING PENETRATES ROOF. PIPE PENETRATION DETAIL
NO SCALE



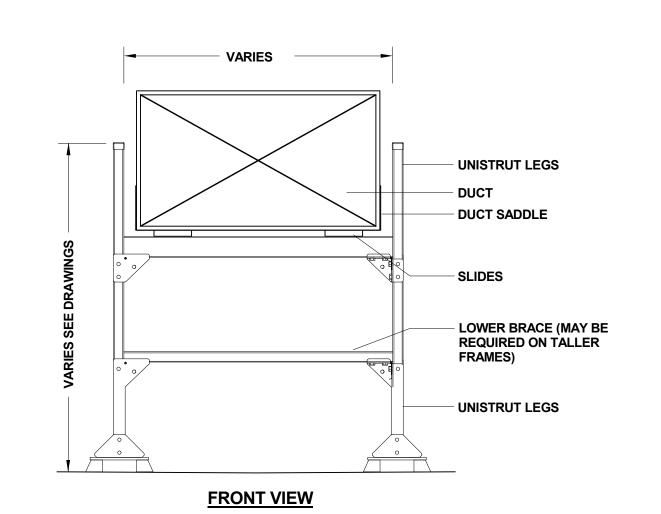
14 DUCT THROUGH ROOF CURB DETAIL NO SCALE

DX INDOOR UNIT AND AIR COOLED CONDENSING UNIT DETAIL NO SCALE

COND	ENSATE	E DRAIN	N PIPING	DATA
EQUIP. NO.	COMPONENT	A	В	REMARKS
DDS-A1-4	COOLING COIL (DX)		R MFR. ENDATIONS	PER MFR. RECOMMENDATIONS
DU-1	REACT. DRAIN		R MFR. ENDATIONS	PER MFR. RECOMMENDATIONS



3. TRAPS PROVIDED BY M.C. 4. TYP. OF TWO (2) REACT. DRAINS. (10) CONDENSATE DRAIN TRAP PIPING DETAIL

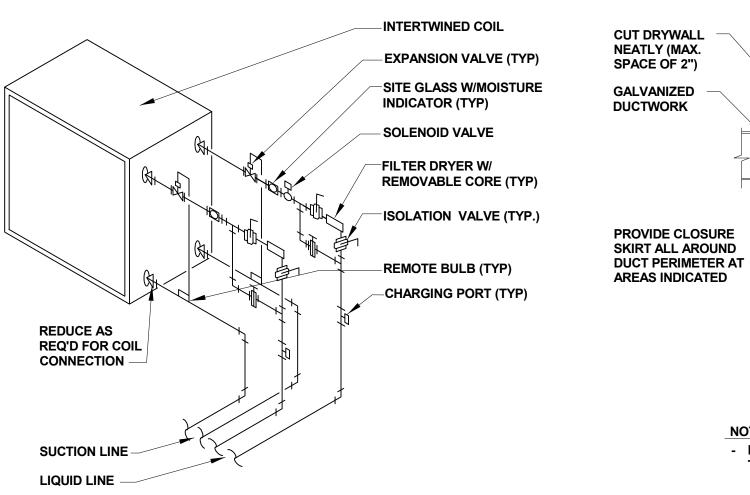


DUCT SUPPORT SYSTEMS DESIGN WILL VARY BY MANUFACTURE. DETAIL REFLECTED ABOVE MAY BE VISUALLY DIFFERENT FROM CONTENT CONTAINED WITHIN THE DESIGN MODEL. DUCT SUPPORT MANUFACTURE BASIS OF DESIGN: MIRO INDUSTRIES ROOFTOP SUPPORT PRODUCTS

NOTES:

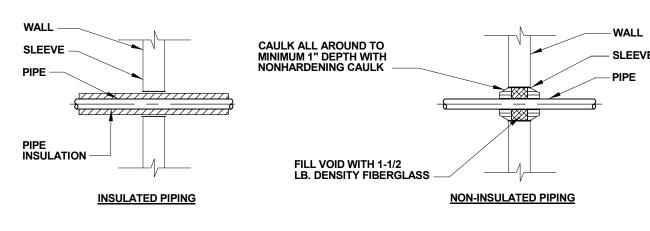
- 1. SUPPORT RAILS SHALL BE OF HEAVY GA. GALVANIZED STEEL, UNITIZED CONSTRUCTION WITH INTERNAL BASE PLATE, CONTINUOUS WELDED CORNER SEAMS, PRESSURE TREATED WOOD NAILER, COUNTERFLASHING WITH SCREWS. INTERNALLY RE-INFORCED TO CONFORM WITH SUPPORT MANUFACTURES LOAD BEARING FACTORS. 2. DUCT MOUNTING HARDWARE SHALL INCLUDE UNISTRUT LEGS. SUPPORT SADDLE AND SLIDES TO ALLOW FOR DUCT
- MOVEMENT, VERTICAL AND HORIZONTAL ADJUSTMENT. 3. SUPPORT SPACING PER MANUFACTURES REQUIREMENTS. 4. SEE SPECIFICATIONS FOR ADDITIONAL SUPPORT REQUIREMENTS.

DUCT ROOF SUPPORT SYSTEM DETAIL



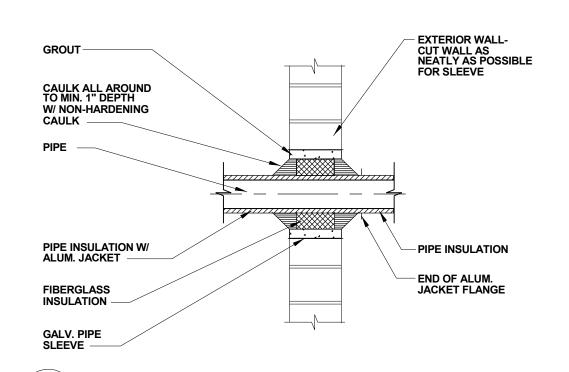
NOTE: DETAIL AOVE DOES NOT REFLECT HOT GAS REHEAT PIPING OR ASSOCIATED COMPONENTS. SEE MANUFACTURES SCHEMATIC DIAGRAM FOR FIELD INSTALLED HOT GAS REHEAT PIPING.

5 DX COOLING COIL PIPING DETAIL

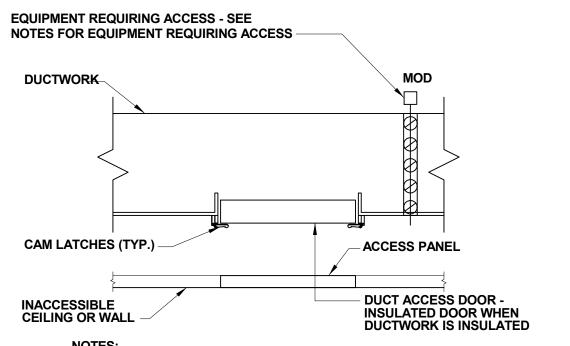


 PROVIDE ESCUTCHEON PLATES FOR ALL PIPES PASSING THROUGH FINISHED PIPE SLEEVE IN MECH. ROOMS SHALL EXTEND MIN. 6" ABOVE FLOOR SURFACE.

PIPING PENETRATION DETAIL-6 NON-RATED WALLS & FLOORS



PIPING THRU EXTERIOR WALL DETAIL



ACCESS PANELS ARE REQUIRED IN DUCTWORK, WALLS, AND CEILINGS FOR ACCESS TO ALL CONCEALED FIRE, SMOKE, & FIRE/SMOKE DAMPERS, TURNING VANES, CONTROL DAMPERS, BACKDRAFT DAMPERS, SMOKE DETECTORS, CONTROLS, CONTROL VALVES. SHUT-OFF VALVES. AIR VENTS. AIR TERMINALS. EXPANSION COMPENSATING DEVICES, HEATING COILS, COOLING COILS, BOOSTER COILS, FILTERS, FANS, HUMIDIFIER DISPERSION TUBES AND EQUIPMENT. PROVIDE TWO ACCESS PANELS WHEN DUCTWORK WIDTH IS 60" OR GREATER DETAIL APPLIES TO SUPPLY, RETURN, EXHAUST & OUTSIDE AIR DUCTWORK.

8 ACCESS DETAIL NO SCALE

DUCTWORK THROUGH INTERIOR WALLS & PARTITIONS DETAIL

THROUGH ANY BUILDING WALL OR PARTITION UNLESS SPECIFICALLY SHOWN OR DETAILED OTHERWISE.

- DETAILS APPLY TO ALL DUCTWORK (SUPPLY, RETURN, EXHAUST, TRANSFER, ETC.), PASSING

SLEEVE BLOCK

WALL AS

POSSIBLE

NEATLY AS

GALVANIZED

DUCTWORK

WITH

CAULK ALL AROUND

DUCT, 1" DEPTH MIN.

NON-HARDENING

FIRESTOP MATERIAL

WHERE REQUIRED) -

CAULKING. (OR

GYPSUM

REQUIRED)

SECURE TO

SKIRT.

THROUGH STUD WALLS

DRYWALL 12"

O.C. ALL AROUND

FILL WITH NON-HARDENING

CAULKING (OR FIRESTOP

MATERIAL WHERE

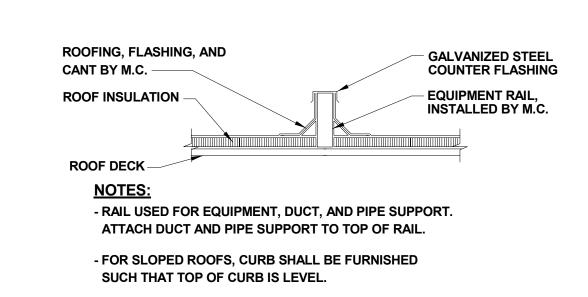
BLOCK WALL

FILL VOID WITH

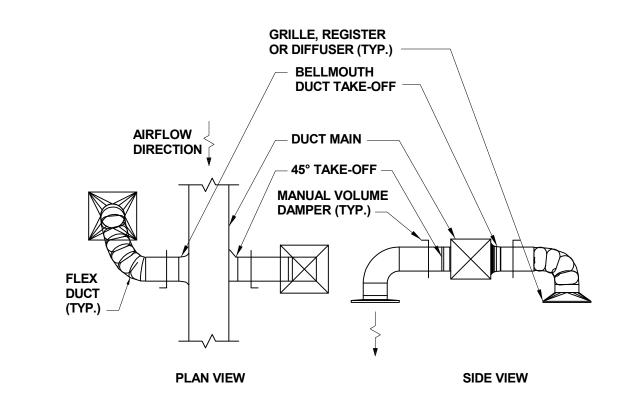
FIBERGLASS

THROUGH MASONRY WALLS

1-01/2 LB. DENSITY

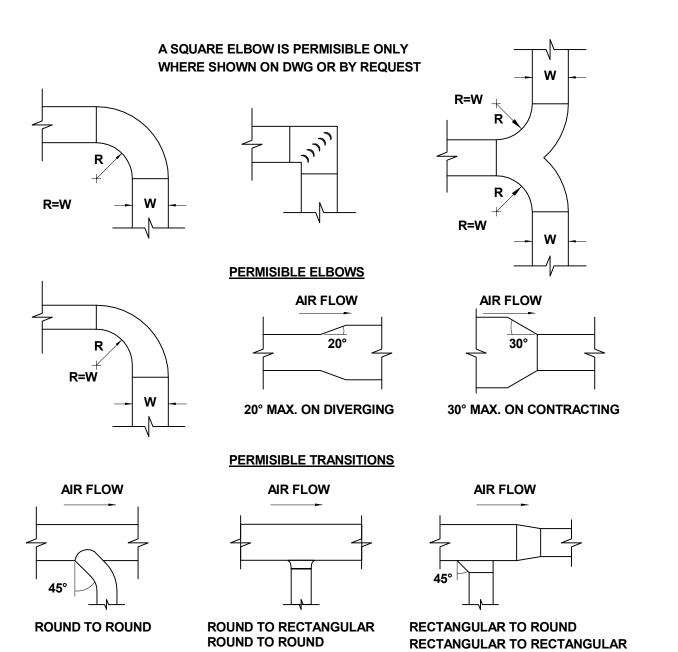


2 ROOF SUPPORT RAIL DETAIL NO SCALE



PROVIDE MANUAL VOLUME DAMPERS IN ALL BRANCH DUCTS SERVING SUPPLY, RETURN AND EXHAUST DUCT TAKE-OFFS FOR EACH GRILLE, REGISTER OR DIFFUSER. BALANCE GRILLES, REGISTERS AND DIFFUSERS TO AIRFLOWS SHOWN ON DRAWINGS.

MANUAL VOLUME DAMPER DETAIL



4 PERMISIBLE DUCT BRANCH TAKEOFF
NO SCALE

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS Drawing Date

12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

CITY OF Project No. WAUWATOSA 223010.00

MECHANICAL DETAILS

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EMERGENCY POWER YES NO STANDBY	ANNEX	YPE DISCONNECT RESTART	FURN. BY MFR.	INST. BY	ACCESS	ORIES	TYPE (OUTDOOR)	(NF)	FURN. BY EC	INST. BY EC	REMARKS SEE NOTE 1 BELOW -
25 X -	ANNEX	YPE DISCONNECT RESTART	MFR.	BY	ACCESS	ORIES		(NF)	BY EC	BY	-
		SNETIC YES -		MFR.			(OUTDOOR)	(NF)	EC	EC	SEE NOTE 1 BELOW
X -	INTEGRAL MAGN	SNETIC YES -	MFR.	MFR.							-
X -	INTEGRAL MAGN	SNETIC YES -	MFR.	MFR.							+
						-	(OUTDOOR)	(NF)	EC	EC	-
											-
15 X -	NEAR UNIT MAN	NUAL YES -	MFR.	MFR.		-	(INDOOR)	(NF)	EC	EC	SEE NOTES 2 & 4 BELOV
70 - X -	INTEGRAL MAGN	GNETIC YES -	MFR.	MFR.		-	(OUTDOOR)	(NF)	EC	EC	SEE NOTES 3 BELOW
- X	NEAR UNIT MAN	NUAL YES -	MFR.	MFR.		-	(INDOOR)	(NF)	EC	EC	SEE NOTES 1 & 4 BELO
- x	INTEGRAL MAGN	GNETIC YES -	MFR.	MFR.		-	(OUTDOOR)	(NF)	EC	EC	-
											-
- x -			-	-		-	(INDOOR)	(NF)	EC	EC	PROVIDE W/ DATA JACK (BY
	70 - X -	70 - X - INTEGRAL MAC	70 - X - INTEGRAL MAGNETIC YES - - X NEAR UNIT MANUAL YES - - - X INTEGRAL MAGNETIC YES -	70 - X - INTEGRAL MAGNETIC YES - MFR. - X NEAR UNIT MANUAL YES - MFR. - - X INTEGRAL MAGNETIC YES - MFR.	70 - X - INTEGRAL MAGNETIC YES - MFR. MFR. - X NEAR UNIT MANUAL YES - MFR. MFR. - - X INTEGRAL MAGNETIC YES - MFR. MFR.	70 - X - INTEGRAL MAGNETIC YES - MFR. MFR. - - - X NEAR UNIT MANUAL YES - MFR. MFR. - - - - X INTEGRAL MAGNETIC YES - MFR. MFR. - -	70 - X - INTEGRAL MAGNETIC YES - MFR. MFR. - - - - X NEAR UNIT MANUAL YES - MFR. MFR. - - - - X INTEGRAL MAGNETIC YES - MFR. MFR. - - -	70 - X - INTEGRAL MAGNETIC YES - MFR. MFR (OUTDOOR) - X NEAR UNIT MANUAL YES - MFR. MFR (INDOOR) - X INTEGRAL MAGNETIC YES - MFR. MFR (OUTDOOR)	70 - X - INTEGRAL MAGNETIC YES - MFR. MFR (OUTDOOR) (NF) - X NEAR UNIT MANUAL YES - MFR. MFR (INDOOR) (NF) - X INTEGRAL MAGNETIC YES - MFR. MFR (OUTDOOR) (NF)	70	70 - X - INTEGRAL MAGNETIC YES - MFR. MFR (OUTDOOR) (NF) EC EC - X NEAR UNIT MANUAL YES - MFR. MFR (INDOOR) (NF) EC EC - X INTEGRAL MAGNETIC YES - MFR. MFR (OUTDOOR) (NF) EC EC

ABBREVIATIONS:

MOP MAX. OVERCURRENT PROTECTION

FLA FULL LOAD AMPS

MCA MIN. CIRCUIT AMPS

VFD VARIABLE FREQUENCY

MCC MOTOR CONTROL

CENTER

(HOA) HAND-OFF-AUTO (OUTDOOR) WEATHER PROOF (PL) PILOT LIGHT (PB) PUSH BUTTON

ACCESSORIES:

(INDOOR) NON-WEATHER PROOF (F) FUSED (NF) NON-FUSED

DISCONNECT TYPE:

(1) UNIT IS SINGLE-POINT POWER. (2) TYPICAL OF FOUR (INDOOR UNITS) DESIGN CRITERIA IS PER INDOOR UNIT. (3) TYPICAL OF TWO (OUTDOOR UNITS) DESIGN CRITERIA IS PER OUTDOOR UNIT.

MC MECHANICAL CONTRACTOR

EC ELECTRICAL CONTRACTOR

TCC TEMPERATURE CONTROL

(4) INDOOR UNITS POWERED FROM OUTDOOR UNITS.

MFR. MANUFACTURER

CONTRACTOR

DESICO	ANT DEHUMII	DIFICATIO	N SYST	TEM SCH	EDUL	E (DH	-1)													
				SUPP	LY AIR				REA	ACTIVATION A	IR.			DIR	ECT FIRED		DESICCANT	MANUFACTURER	MODEL	REMARKS
TAG	SERVICE	LOCATION	CFM	TSP	RPM	ВНР	HP	CFM	ESP	FAN RPM	ВНР	HP	GAS PRESS. (W.C.)	FUEL TYPE	MAX. REACT. MBH	MANIFOLD PRESS.	MATERIAL			
DH-1	TOSA ROOM	ROOF	5,000	2.0" W.C.	3,510	6.77	7.5	1,350	0" W.C.	3,600	1.81	3.0	7"-14"	NATURAL GAS	359.0	1.9"	SILICA GEL	"CLIMATE BY DESIGN"	CDH-138	SEE NOTES BELOW

(1) UNIT DESIGN CONDITIONS: SUMMER: 82.6 °F DB | 76.7 °F WB | 129.8 GR/LB | RH 76.70% WINTER: -10 °F (2) PROVIDE BACNET INTERFACE FOR MONITOR AND ALARM. SEE SPECIFICATION FOR UNIT CONTROLS.

(3) FILTERS - SUPPLY: MERV 8, QTY: THREE (3) 20x24x2 | REACTIVATION: MERV 8, QTY: ONE (1) 20x20x2. (4) SEE SPECIFICATIONS FOR UNIT OPTIONS.

(5) MINIMUM 0A=300 DURING OCCUPIED MODE.

(6) UNIT INCLUDES COIL SECTION FOR FUTURE POST COOLING. DURING SUMMER OPERATING CONDITIONS, THE INTENT OF DESIGN IS TO UTILIZE THE COOLING MASS OF THE ICE SHEET. SUMMER RINK DRY BULB TEMPERATURE RANGE SHALL BE MAINTAINED BETWEEN 40°-45° F (ADJ.). (7) SEE OUTDOOR GAS-FIRED DUCT FURNACE SCHEDULE FOR POST HEAT INFORMATION.

(8) UNIT HAS BEEN PRE-PURCHASED BY THE WAUWATOSA CURLING CLUB. SCHEDULE FOR REFERENCE ONLY.

GAS	S DUCT FUF	RNACE	SCHE	DULE	E (G.E).F.)							
NO.	SERVES	TOTAL CFM	EAT (°F)	LAT (°F)	TEMP. RISE	INPUT CAPACITY (MBH)	APD	OUTPUT CAPACITY (MBH)	GAS PRESSURE (IN. W.C.)	BURNER TYPE	CONTROL	MODEL	REMARKS
1	DH-1	5,000	34	56.5	22.5	150	0.4	121.5	7-14"	TWO STAGE, 4:1 TURNDOWN	SEE NOTE BELOW	MODINE HFP150	SEE NOTES 1, 2,3, 4, & 5 BELOW

(1) UNIT SHALL BE PROVIDED WITH 409 STAINLESS STEEL HEAT EXCHANGER. (2) M.C. SHALL PROVIDE GAS REGULATOR AS REQUIRED.

(3) MOUNT UNIT PER UNIT MANUFACTURES INSTALLATION RECOMMENDATIONS.

(4) POWER VENTED: 120/1, 1.68 AMPS

DUCTLES	S SPLIT SYSTEM AIR	CONDITION	IING UI	NIT SCHI	EDULE ((D.S.S.)																
		TOTAL	SENS.					INDO	OR UNIT (A)			OUTDOOR U	INIT (B)					REFRIG	G. TUBING			
NO.	SERVES		RATED COOLING CAP. (MB	G H) TONS	RATED. HEATING CAP. (MBH)	CFM RANGE (HI	MCA	MOP	MODEL	COMP. TYPE	(TOTAL SYSTEM) RATED HEATING CAP. (MBH)	(TOTAL SYSTEM) RATED COOLING CAP. (MBH)	RLA	MCA	МОР	MODEL	MAX. LENGTH (FT)	MAX. LIFT (FT)	RS SIZE (IN.)	RL SIZE (IN.)	MANUFACTURE	REMARKS
1	RIVER ROOM	36.0	25.1	3.0	40.0	830(H) 670 (L)	1.4	15	FXHQ36MVJU (SEE NOTE # 2BELOW)	VARIABLE SPEED - INVERTER	154	144	23.9	60.8	70	RXLQ144TATJA (SEE NOTE #3 BELOW)	SEE NOTE # 6	SEE NOTE # 6	SEE NOTE # 6	SEE NOTE #6	DAIKIN	SEE NOTES BELOW
2	ELEC. 101	34.0	22.2	3.0	-	915(H) 572 (L)	-	-	FTX36NVJU	VARIABLE SPEED - INVERTER	-	34.4	16.3	17.0	20	RK36NMVJU	SEE NOTE # 6	SEE NOTE # 6	SEE NOTE # 6	SEE NOTE #6	DAIKIN	SEE NOTES 1, 4, 5, 6, 7, 8, 9, 10,12,14,15

(1) CAPACITY DATA IS AT AHRI CONDITIONS.

(2) TYPICAL OF FOUR (INDOOR UNITS) DESIGN CRITERIA IS PER INDOOR UNIT.

(3) TYPICAL OF TWO (OUTDOOR UNITS) DESIGN CRITERIA IS PER OUTDOOR UNIT. UNLESS OTHERWISE NOTED. (4) REFRIGERANT TYPE IS R-410A.

(5) REFRIGERANT PIPE SIZES AND MAX. LENGTHS AND MAX. VERTICAL SEPARATION BY MANUFACTURE. CONTRACTOR SHALL CONFIRM PROJECT SPECIFIC PIPE LAYOUT WITH MFR. FINAL SYSTEM FIELD CHARGE REQUIRED PER MFR. / M.C.. (6) PROVIDE WITH WALL MOUNTED WIRED CONTROLLER.

(7) INDOOR UNIT POWERED FROM OUTDOOR UNIT. (8) RUN CONDENSATE PIPING FROM INDOOR UNIT TO EXTERIOR OF BUILDING. TERMINATE DRAIN PIPING AT GRADE WITH CONCRETE SPLASH BLOCKS. CONDENSATE REMOVAL FROM INDOOR UNIT TO OUTDOORS BY GRAVITY.

(9) COVER ALL INTERIOR AND EXTERIOR REFRIGERANT PIPING WITH LINE HIDE SET COVER SYSTEM.

(10) PROVIDE WITH STANDARD FILTRATION.

(11) RATED HEATING CAPACITY SCHEDULED ABOVE IS AT 47°F DB, 43 °F WB OUTDOOR CONDITIONS.

(12) RATED COOLING CAPACITY SCHEDULED ABOVE IS AT 95°F DB, 75°F WB OUTDOOR CONDITIONS.

(13) SYSTEM SHALL HAVE THE ABILITY TO HEAT DOWN TO -22 $\,^\circ$ F.

(14) PROVIDE EQUIPMENT WITH BACNET INTEGRATION TO EXISTING BAS. (15) LOW AMBIANT OPERATION DOWN TO -22°F.

EXISTING AIR HANDLING LINIT AIR BALANCING SCHEDULE

EXISTING A	IR HANDLING C	JNII AIR BA	ALANCING	2CHEDOLE	•		
NO.	AREA SERVED	DESIGN AIRFL	OW (MAX. CFM)	DESIGN MIN.	OUTSIDE AIR	MANUFACTURER	REMARKS
140.	AILA SLIVED	ORIGINAL	NEW	ORIGINAL	NEW	MANOLACTORER	KLIMAKKO
EXRTU-1	125 FIREFLY ROOM	3,000	3,000	675	675	TRANE	SEE NOTES BELOW
EXRTU-2	125 FIREFLY ROOM	2,250	2,250	795	795	TRANE	SEE NOTES BELOW
EXRTU-3	SEE PLANS	5,800	5,800	1,800	1,800	TRANE	SEE NOTES BELOW
EXRTU-4	TOSA ROOM	9,000	9,000	2,250	2,250	TRANE	SEE NOTES BELOW

(1) SEE SPECIFICATION FOR REQUIEMTNS ASSOCAITED WITH REBALANING OF EXISTING EQUIPMENT.

(2) SEE DRAWINGS FOR INDIVIDUAL ZONE AIRFLOWS AND SPECIFIC ZONE AIR-FLOW MODIFICATIONS.

			SIZE (IN.)											
NO.	TYPE	CFM RANGE	SQ.	ROUND	DIFF.	MAX. NC	OPTIONS	MAT'L	FINISH	FRAME	DAMPER	MOUNTING HEIGHT	MODEL	MANUF.	REMARKS
SG-1	DRUM	1500	30/12	-	2-WAY	30	1	ALUM.	w	F	Y	DUCT	AHCD	"PRICE"	SEE NOTES 1 & 2 BELOW
															-
RG-1	LOUVER FACE	2250	48/24	-	N/A	30		ALUM.	w	F	-	DUCT	630	"PRICE"	SEE NOTE 1 BELOW
PTIONS	S :														
1-	OPPOSED BLADE DAMPER					5- EQUALIZ	ZING GRID								
2-	BUTTERFLY DAMPER					6- RADIAL									
3-	FIRE DAMPER					7- FILTER									
4-	COMBINATION DAMPER					8- WHITE B	LANK-OFF PANEL F	OR LAY-IN CEILI	NG						
BBREV	IATIONS:				FRAMI	E:									
	A-	ANODIZED			(C- CHANNE	L					SP-	SATIN POL	JSH	
	ALUM	ALUMINUM			!	F- FLANGE						S.S	STAINLES	S STEEL	
	E-	ENAMEL/EPO	OXY		1	L- LAY-IN						STL	STEEL		
	EG-	EXHAUST GF	RILLE		s	SI- SNAP-IN						TG-	TRANSFER	R GRILLE	
	PERF	PERFORATE	D GRILLE			T- TEGULA	R					W-	WHITE		
	RG-	RETURN GRI	LLE												
	SG-	SUPPLY GRI	IIF												

(1) COLOR AS SELECTED BY ARCHITECT. (2) SPIRAL DUCT MOUTING. PROVIDE SPIRAL FRAME, SPLIT BLADE, AND OPPOSED BLADE VOL. DAMPER. CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

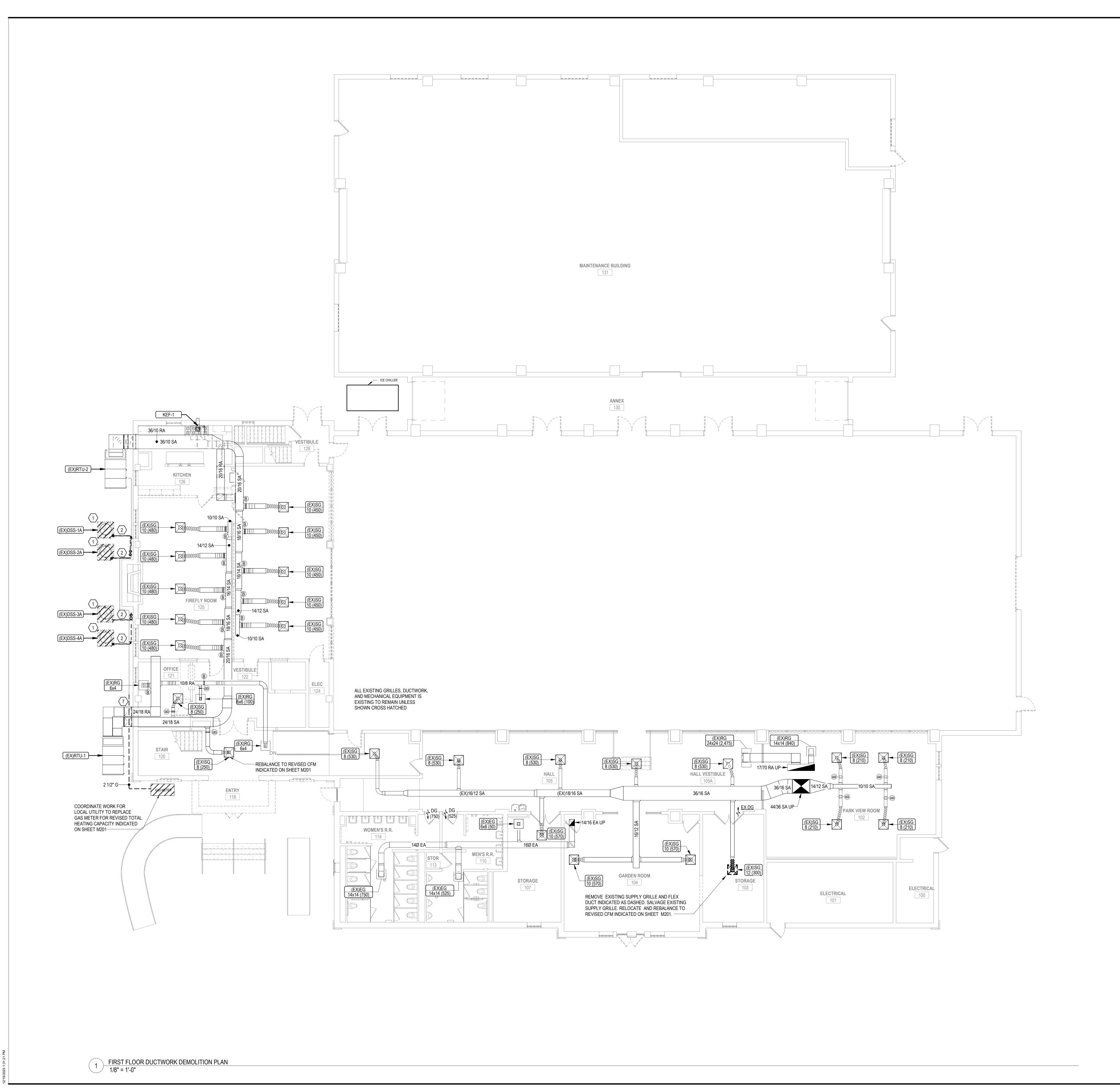
MUELLNER BUILDING

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

WAUWATOSA

12/22/2023

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17400 West Capitol Drive - Brookfield, WI 53045 301 South Blount Street, Suite 101 - Madison, WI 53703 Phone: 414.778.1700 / Fax: 414.778.2360 / r-d@ringdu.com RD Project Number: 223003.00

KEYED NOTES: ▼

1. REMOVE EXISTING DUCTLESS SPLIT SYSTEM OUTDOOR UNIT INDICATED AS DASHED.
2. REMOVE EXISTING REFRIGERANT PIPING, & DRAIN LINES INDICATED AS DASHED.
3. REMOVE EXISTING DUCTLESS SPLIT SYSTEM INDOOR UNITS AND ASSOCIATED ELECTRICAL CONNECTIONS, CONTROLS, PIPING INDICATED AS DASHED.
4. REMOVE EXISTING RETURN DUCTWORK, GRILLES, FITTINGS

INDICATED AS DASHED. 5. REMOVE EXISTING FABRIC SUPPLY DUCT INDICATED AS DASHED.6. REMOVE DUCTWORK UP THROUGH ROOF INDICATED AS DASHED.

PATCH EXISTING OPENING IN ROOF WEATHER TIGHT. 7. REMOVE GAS PIPING UP TO POINT AND REFERENCE SHEET M201

FOR CONNECTION OF NEW TO EXISTING.

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date 12/22/2023

> MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. 223010.00

WAUWATOSA

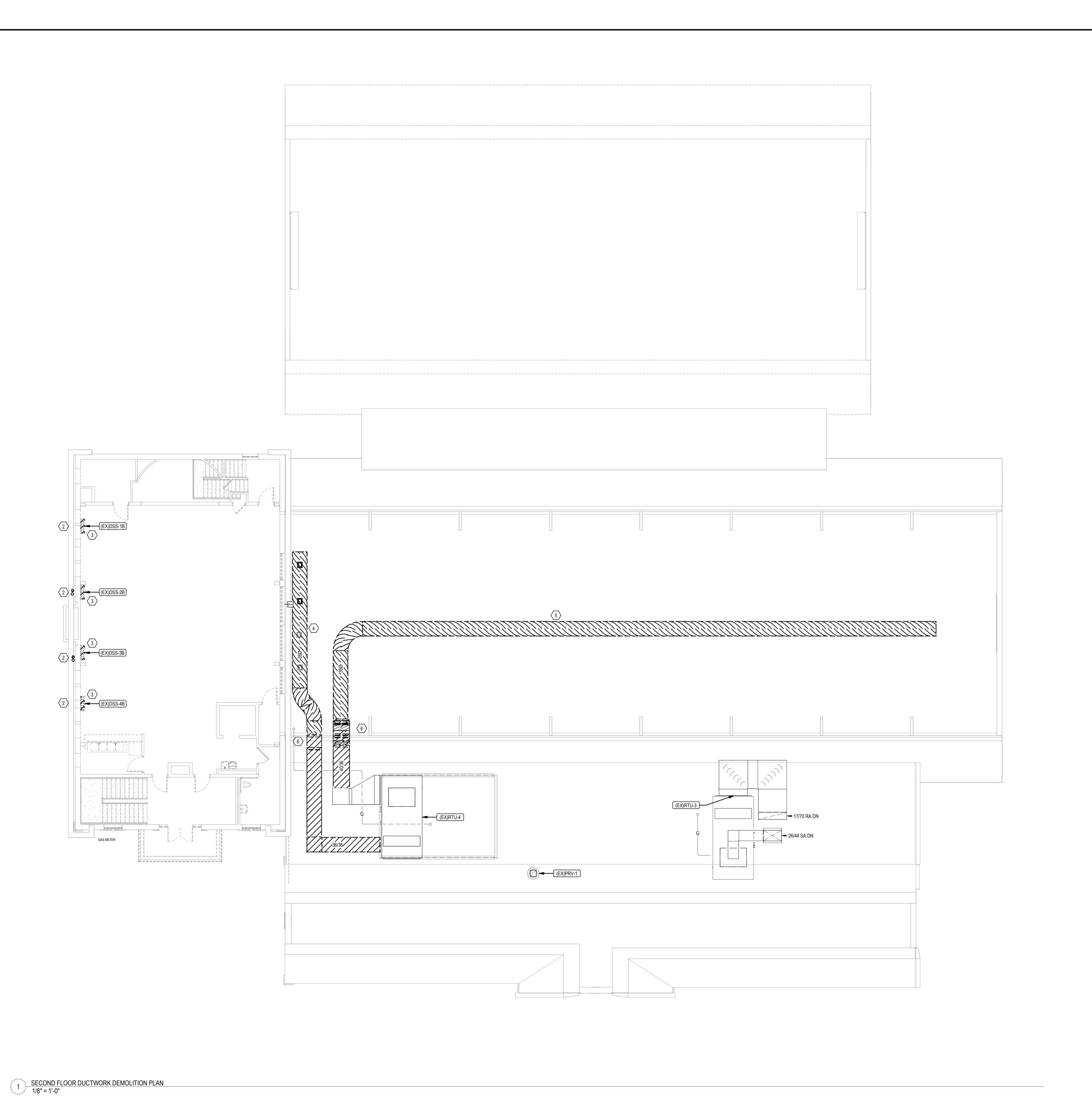
CITY OF

Sheet Title

FIRST FLOOR MECHANICAL
DEMOLITION PLAN

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- REMOVE GAS PIPING UP TO POINT AND REFERENCE SHEET M201 FOR CONNECTION OF NEW TO EXISTING.

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS
Drawing Date

12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. 223010.00

CITY OF WAUWATOSA

Sheet Title

SECOND FLOOR MECHANICAL DEMOLITION PLAN

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Sheet No. MD202

ELECTRICAL ABBREVIATIONS LIST ELECTRICAL SYMBOL LEGEND ELECTRICAL SHEET INDEX MAN MANUAL MOTOR STARTER **DESCRIPTION** SYMBOL DESCRIPTION SYMBOL DESCRIPTION <u>SYMBOL</u> **DESCRIPTION** MAX MAXIMUM ABOVE COUNTER MAGNETIC STARTER GENERAL NOTE FOR LIGHT FIXTURE SYMBOLS SINGLE RECEPTACLE E000 ELECTRICAL SYMBOLS AND SHEET INDEX SECURITY, ACCESS CONTROL AND DOOR ACLG ABOVE CEILING MOMENTARY CONTACT SYSTEMS EQUIPMENT CABINET DUPLEX RECEPTACLE ED200 ELECTRICAL DEMOLITION PLANS MONITORING WALL MOUNT ADO AUTOMATIC DOOR OPENER MECHANICAL CONTRACTOR AREA OF REFUGE THE MOUNTING TYPE OF LIGHT FIXTURES IS INDICATED IN THE MCB MAIN CIRCUIT BREAKER AMP FRAME E200 LIGHTING PLANS (GFB) GROUND FAULT BREAKER (CA) CABLE TELEVISION SYMBOLS ON THE DRAWINGS AS FOLLOWS: SECURITY, ACCESS CONTROL AND DOOR (GFI) GROUND FAULT INTERUPTER ABOVE FINISHED FLOOR MOTOR CONTROL CENTER E210 POWER PLANS (CB) CODE BUTTON - NO CENTER DOT INDICATES FIXTURE IS RECESSED. MONITORING CEILING MOUNT X/X , ISOLATED GROUND ABOVE FINISHED GRADE MAIN DISTRIBUTION CENTER (CC) CLOSED CIRCUIT TELEVISION E211 POWER ROOF PLAN - FILLED CENTER DOT INDICATES FIXTURE IS SURFACE/PENDANT (CR) CARD READER ARC FAULT CIRCUIT MAIN DISTRIBUTION PANEL TAMPER RESISTANCE (CLK) CLOCK SYSTEM MOUNTED. (CXX) CLOSED CIRCUIT CAMERA - SEE E220 SYSTEMS PLANS INTERRUPTER MER MAIN EQUIPMENT ROOM (AKA "MDF") (USB) W/ USB CHARGING DOOR BELL REFER TO LIGHT FIXTURE SCHEDULE AND LIGHTING PLAN NOTES FOR CAMERA SCHEDULES (XX-DENOTES E300 ENLARGED ELECTRICAL PLANS AHU AIR HANDLING UNIT MFR MANUFACTURER (WP) WEATHERPROOF DIGITAL TELEVISION FURTHER INFORMATION. SPECIFIC UNIT) ALUMINUM MFS MAIN FUSED DISCONNECT SW E400 ELECTRICAL ONE LINE DIAGRAM EMERGEMCY COMMUNICATION DUPLEX RECEPTACLE - MOUNTED AT SPECIAL DURESS BUTTON ALT ALTERNATE MANHOLE E401 ELECTRICAL ONE LINE DIAGRAM FIRE ALARM MOUNTING HEIGHT INDICATED ON DRAWING DOOR CONTACT AMP AMPERE MICROPHONE • HOUSE PAGING E402 ELECTRICAL ONE LINE DIAGRAM OR AS INDICATED IN THE ASSOCIATED ELECTRONIC LATCH/LOCK AMPL AMPLIFIER MINIMUM INTERCOM E520 ELECTRICAL DETAILS ARCHITECTURAL ELEVATION. ELECTRIC STRIKE SQUARE/RECTANGULAR LIGHTING ANN ANNUNCIATOR MISC MISCELLANEOUS INTRUSION DETECTION —INDICATES MOUNTING HEIGHT WHEN GLASS BREAK DETECTOR E601 ELECTRICAL SCHEDULES FIXTURE APPROX APPROXIMATELY MLO MAIN LUGS ONLY INFANT SECURITY KEYLESS ENTRY E602 ELECTRICAL SCHEDULES ARCH ARCHITECT, ARCHITECTURAL MOA MULTIOUTLET ASSEMBLY LOCAL MUSIC DUPLEX RECEPT. MOUNTED ABOVE COUNTER KEYPAD - SECURITY SYSTEM AS AMP SWITCH MPOE MAIN POINT OF ENTRANCE E603 ELECTRICAL SCHEDULES LOCAL PAGING BACKSPLASH KEYED SWITCH AMP TRIP MSB MAIN SWITCHBOARD MASTER ANTENNAE TELEVISION SPLIT DUPLEX RECEPTACLE LATCHBOLT MONITOR ATS AUTOMATIC TRANSFER SWITCH LINEAR LIGHTING FIXTURE MOUNT MASS NOTIFICATION DUPLEX RECEPTACLE ON EMERGENCY MOTION SENSOR - DUAL TECHNOLOGY AUTO AUTOMATIC MTS MANUAL TRANSFER SWITCH MUSIC SYSTEM MOTION SENSOR - INFRARED AUX AUXILIARY MTR MOTOR, MOTORIZED NURSE CALL ROUND/RING LIGHTING FIXTURE FLOOR DUPLEX RECEPTACLE MAGNETIC LOCK AV AUDIO VISUAL NORMALLY CLOSED PROCEDURE ROOM -TWO WAY COMMUNICATION CLOSED CIRCUIT TELEVISION MONITOR AWG AMERICAN WIRE GAUGE NEC NATIONAL ELECTRICAL CODE CEILING DUPLEX RECEPTACLE PROCEDURE ROOM -MUSIC SYSTEM MOTION SENSOR - ULTRASONIC BATT BATTERY NEMA NATIONAL ELECTRICAL PUBLIC ADDRESS CLOSED CIRCUIT TELEVISION REMOTE CODES FOR THIS PROJECT QUADRAPLEX RECEPTACLE BLDG BUILDING MANUFACTURER'S ASSOCIATION SECURITY ACCESS CAMERA CONTROLS WALL WASH LIGHTING FIXTURE BMS NOT IN CONTRACT BUILDING MANAGEMENT SYSTEM (GFB) GROUND FAULT BREAKER SYSTEM CLOCK REQUEST FOR EXIT - MOTION С CONDUIT NIGHT LIGHT TELECOMMUNICATIONS (GFI) GROUND FAULT INTERUPTER **EDITION** CODE REQUEST FOR EXIT PUSH BUTTON NORMALLY OPEN ISOLATED GROUND (TV) (VD) TELEVISION VIDEO RECORDER CAT CATALOG NORMAL POWER FACTOR TAMPER RESISTANCE VOICE DATA WISCONSIN 361 - 366 ADMINISTRATION AND CEILING FAN LIGHTING FIXTURE CATV CABLE TELEVISION NTS NOT TO SCALE (USB) W/ ISB CHARGING (WŔ) WIRED RADIO DOOR HARDWARE - SEE DETAILS, ARCHITECTURAL PLANS AND ENFORCEMENT CIRCUIT BREAKER NEAR UNIT (WP) WEATHERPROOF THIS INCLUDES THE 2015 EDITION OF: SPECIFICATIONS. DEVICES FURNISHED BY OTHERS: ROUGH-IN AND CCTV CLOSED CIRCUIT TELEVISION OVERHEAD QUADRAPLEX RECEPT. MOUNTED ABOVE ANNUNCIATOR INTERNATIONAL BUILDING CODE WIRING BY EC. CKT CIRCUIT OVERLOADS COUNTER BACKSPLASH BACKBOARD INTERNATIONAL ENERGY CODE CLG CEILING OSP OUTSIDE PLANT QUADRAPLEX RECEPTACLE - MOUNTED AT CONTROL PANEL (CP) INTERNATIONAL MECHANICAL CODE WALL-MOUNTED FIXTURES COMB COMBINATION OM UNIT —(AA) AUTODOOR ACTUATOR (PUSH PLATE) SPECIAL MOUNTING HEIGHT INDICATED ON **EQUIPMENT RACK** INTERNATIONAL FUEL GAS CODE CMPR COMPRESSOR PUBLIC ADDRESS AUTODOOR ACTUATOR (MOTION SENSOR) DRAWINGS OR AS INDICATED IN THE TERMINAL CABINET (TC) INTERNATIONAL EXISTING BUILDING CODE PULL BOX OR PUSHBUTTON AUTODOOR OPERATOR CONN CONNECTION ASSOCIATED ARCHITECTURAL ELEVATION. WALL FIELD CONST CONSTRUCTION PLUMBING CONTRACTOR ELECTRIC EXITING DEVICE (NAC) NOTIFICATION APPLIANCE PANEL BY ADOPTING THE 2015 INTERNATIONAL BUILDING —INDICATES MOUNTING HEIGHT WHEN → DIRECTIONAL LIGHT, TRACK, FLOOD CONT CONTINUATION OR CONTINUOUS PE SW PNEUMATIC ELECTRIC DELAYED EGRESS MODULE CODE, THE FOLLOWING NFPA CODES ARE ADOPTED: SHOWN CRT CATHODE-RAY TUBE PED PEDESTAL ELECTRONIC LATCH/LOCK ⊞ LIGHT TRACK 2013 NFPA 20 STANDARD FOR THE FLOOR QUADRAPLEX RECEPTACLE CONTROL PANEL PEN PENDANT ANTENNA ELECTRIC STRIKE INSTALLATION OF STATIONARY PUMPS FOR POWER FACTOR COMBINATION STARTER - - - - LOW VOLTAGE LINEAR LIGHT KEY SWITCH CEILING QUADRAPLEX RECEPTACLE FIRE PROTECTION CURRENT TRANSFORMER MAGNETIC LOCK —(BO) BY OTHERS QUADRAPLEX RECEPTACLE ON EMERGENCY 2013 NFPA 72 NATIONAL FIRE ALARM AND EMERGENCY LIGHTING UNIT, CEILING-CTR CENTER PLBG PLUMBING POWER SUPPLY DISTRIBUTED ANTENNA SYSTEM (DAS) SIGNALING CODE MOUNTED, INTEGRAL BATTERY CU COPPER PNL PANEL POWER TRANSFER HINGE DIRECTIONAL WALL EQUIPMENT CONNECTION 2015 NFPA 101 LIFE SAFETY CODE DATA CENTER POWER POLE RELAY MODULE EMERGENCY LIGHTING UNIT, CEILING-▶•• FIRST RESPONDER RADIO CEILING EQUIPMENT CONNECTION 2013 NFPA 110 STANDARD FOR EMERGENCY DEPT DEPARTMENT PAIR SEPARATELY MOUNTED REQUEST TO EXIT MOTION MOUNTED, REMOTE BATTERY (MD) MULTIDIRECTIONAL FLOOR EQUIPMENT CONNECTION AND STANDBY SYSTEMS DET DETAIL PRIMARY SENSOR NOT ASSOCIATED WITH SECURITY SYSTEM (OD) OMNI DIRECTIONAL DIA DIAMETER PROJ PROJECTION WALL JUNCTION BOX EMERGENCY BATTERY UNIT, WALL-PAGING AND SOUND SYSTEMS RECESSED DISC DISCONNECT POWER ROOF VENTILATOR WISCONSIN SPS 316 STATE ELECTRICAL CODE INCLUDES FLOOR JUNCTION BOX MOUNTED, INTEGRAL BATTERY DIST DISTRIBUTION POTENTIAL TRANSFORMER 2019 2017 EDITION OF NFPA 70 CEILING JUNCTION BOX PVC POLYVINYL CHLORIDE (CONDUIT) DN DOWN PAGING AND SOUND SYSTEMS SURFACE HE XX FIRE ALARM WALL MOUNT SAFETY DISCONNECT SWITCH PWR POWER EMERGENCY BATTERY UNIT, WALL-WALL MOUNT LIGHTING ENERGY CALCULATION METHOD: FIRE ALARM CEILING MOUNT F XX —FB - FLOOR BOX DOUBLE THROW QUAN QUANTITY MOUNTED, REMOTE BATTERY (P)XX PAGING AND SOUND SYSTEMS RECESSED CEILING MOUNT IECC 2015 PT - POKE THROUGH DWG DRAWING R RELAY -(CMX) CONTROL MODULE. X DENOTES SPECIFIC UNIT. PAGING AND SOUND SYSTEMS SURFACE **DXX** CT - COUNTER TOP RECPT RECEPTACLE **ELECTRICAL CONTRACTOR** EXIT LIGHT, CEILING-MOUNTED, SHADING SEE CONTROL MODULE SCHEDULE CEILING MOUNT TT - TABLE TOP ENTRANCE FACILITY (LEC) REQD REQUIRED AND ARROWS INDICATE FACES AND (CO) CHIME ONLY ELEC ELECTRIC, ELECTRICAL RM ROOM **▶**—BOX TYPE DOORBELL SPEAKER (COD) CARBON MONOXIDE DETECTOR **ELECTRICAL CIRCUITING** ELEV ELEVATOR ROOF TOP UNIT DEPARTMENT PAGING SPEAKER CHIME W/ 15 CANDELA STROBE EXIT LIGHT, WALL-MOUNTED, SHADING FLOOR BOX EBU EMERGENCY BATTERY UNIT RVS REDUCED VOLTAGE STARTING HOSPITAL PAGING SPEAKER (CV2) CHIME W/ 30 CANDELA STROBE EMER EMERGENCY SEC AND ARROWS INDICATE FACES AND SECONDARY HOSPITAL WIDE PAGING & WIRED RADIO SPEAKER (CV3) CHIME W/ 75 CANDELA STROBE FMS FNERGY MANAGEMENT SYSTE LOCAL MUSIC SPEAKER CHIME W/ 110 CANDELA STROBE ELECTRICAL METALLIC TUBING PROCEDURE ROOM COMMUNICATIONS CEILING MOUNTED MICROPHONE —NUMBER OF DUPLEX DOOR HOLDER **LIGHTING FIXTURES:** EOL SOLID NEUTRAL END OF LINE RESISTOR S/N PROCEDURE ROOM COMMUNICATIONS SPEAKER IONIZATION SMOKE DETECTOR (DUCT) RECEPTACLES FP FLECTRIC PNFUMATION SPEC SPECIFICATION EXIT/EBU COMBO TELEVISION SYSTEM SPEAKER PHOTOMETRIC SMOKE DETECTOR (DUCT) EQUIP EQUIPMENT SPKR WIRED RADIO SPEAKER INDICATES FIXTURE TYPE (TYPICAL) HEAT/COMBINATION (RATE OF RISE/FIXED) EXISTING RELOCATED SPARE PROCEDURE ROOM MUSIC SPEAKER HEAT DETECTOR (FIXED) EXPOSED STRUCTURE STAINLESS STEEL DOORBELL PUSH BUTTON PT PT A POKE THROUGH HORN ONLY POLE/AREA LIGHTS **EXISTING TO REMAIN** SELECTOR SWITCH DEPARTMENT PAGING MICROPHONE OUTLET HEAT DETECTOR (RATE OF RISE) STOP/START PUSHBUTTONS ELECTRIC WATER COOLER DEPARTMENT PAGING VOLUME CONTROL 1a,3b X-3* (X-*) HORN W/ 15 CANDELA STROBE POST-TOP AREA LIGHT EXH STA STATION FXHAUST HOSPITAL PAGING MICROPHONE OUTLET HORN W/ 30 CANDELA STROBE EXP EXPLOSION PROOF STD STANDARD EMERGENCY LIGHTING CONTROL DESIGNATOR (TYPICAL) HOSPITAL PAGING VOLUME CONTROL **BOLLARD LIGHT** HORN W/ 75 CANDELA STROBE FI USH SURF SURFACE MOUNTED —SECOND DESIGNATOR (TYPICAL) HOSPITAL PAGING & WIRED RADIO MICROPHONE OUTLET (HV4) HORN W/ 110 CANDELA STROBE FIRE ALARM SWITCH SOLID HATCH INDICATES LIGHT ON AN MO A MULTI ASSEMBLY OUTLETS HOSPITAL PAGING & WIRED RADIO VOLUME CONTROL FIRST DESIGNATOR (TYPICAL) (MMX) MONITOR MODULE - SEE MONITOR MODULE FABP FIRE ALARM BOOSTER POWER SWBD SWITCHBOARD LIFE SAFETY/EMERGENCY CIRCUIT HOSPITAL PAGING & WIRED RADIO VOLUME CONTROL WITH STATION SELECTOR SCHEDULE (X-DENOTES SPECIFIC UNIT) SUPPLY PANEL SYM SYMMETRICAL LOCAL MUSIC SYSTEM VOLUME CONTROL <u>LIGHTING CIRCUITING NOTES -</u> PULL STATION DIAGONAL HATCH INDICATES LIGHT ON A CABLE TRAY FACP FIRE ALARM CONTROL PANEL SYS SYSTEM PROCEDURE ROOM COMMUNICATIONS MICROPHONE RE-ENTRANT HORN CRITICAL/OPTIONAL CIRCUIT TELECOMMUNICATION BONDING FBO FURNISHED BY OTHER TBB TELEVISION SYSTEM VOLUME CONTROL FIRST DESIGNATOR INDICATES THE CIRCUIT AND CONTROL MEANS ASSOCIATED WITH ONE **IONIZATION SMOKE DETECTOR** FDR FEEDER BACKBONE PARTIAL DIAGONAL HATCH INDICATES PART OF WIRED RADIO VOLUME CONTROL SPEAKER ONLY DRIVER CONNECTED TO SOME OF THE LED BOARDS WITHIN FIXTURE. REFER TO LIGHT FIXT FIXTURE TIME CLOCK WIRED RADIO VOLUME CONTROL WITH STATION SELECTOR LIGHT ON A NORMAL CIRCUITAND PART OF PHOTOELECTRIC SMOKE DETECTOR FIXTURE SCHEDULE FOR MORE INFORMATION. FLR FLOOR TCC TEMPERATURE CONTROL LIGHT ON A CRITICAL/OPTIONAL CIRCUIT ——INDICATES DEPTH (IN INCHES) MASS NOTIFICATION SPEAKER FLUOR FLUORESCENT CONTRACTOR MASS NOTIFICATION COMBO SPEAKER SECOND DESIGNATOR INDICATES THE CIRCUIT AND CONTROL MEANS ASSOCIATED WITH ONE ———INDICATES WIDTH (IN INCHES) TCP TEMPERATURE CONTROL PANEL FS FLOW SWITCH SINGLE POLE SWITCH DRIVER CONNECTED TO SOME OF THE LED BOARDS WITHIN FIXTURE. REFER TO LIGHT FU FUSE TELECOMMUNICATIONS ENCLOSURE MASS NOTIFICATION STROBE FIXTURE SCHEDULE FOR MORE INFORMATION. UNDERFLOOR DUCT FVNR FULL VOLTAGE NON-REVERSING **∽**3 SPEAKER W/ 15 CANDELA STROBE TEL/DATA TELEPHONE/DATA GA GAUGE 4-WAY SWITCH SINGLE DESIGNATOR INDICATES THE CIRCUIT AND MEANS OF CONTROL FOR THE ENTIRE SPEAKER W/ 30 CANDELA STROBE GAL TERM TERMINAL GALLON (SV3) SPEAKER W/ 75 CANDELA STROBE KEYED SWITCH GALV GALVANIZED TGB TELECOMMUNICATIONS GROUNDING **GRAPHICAL REPRESENTATION OF PHASING, TYPICAL FOR ALL SYMBOLS.** SPEAKER W/ 110 CANDELA STROBE GENERAL CONTRACTOR ⇔PL SWITCH W/PILOT — INDICATES DEPTH (IN INCHES) DESIGNATOR SHOWN WITHIN () INDICATES CIRCUITING AND/OR CONTROL VIA AN VISUAL UNIT ONLY TWIST LOCK GENERATOR (VO1) VISUAL UNIT ONLY, 15 CANDELA STROBE ——INDICATES WIDTH (IN INCHES) EMERGENCY LIGHTING CONTROL UNIT. REFER TO LIGHTING DETAILS FOR WIRING BDLS DUAL LEVEL SWITCH GFB GROUND FAULT BREAKER TMGB TELECOMMUNICATIONS MAIN (VO2) VISUAL UNIT ONLY, 30 CANDELA STROBE EXISTING TO REMAIN RELOCATED DEMOLISHED DIMMER SWITCH GROUND FAULT CIRCUIT INTERRUPTER GROUNDING BUSBAR (VO3) VISUAL UNIT ONLY, 75 CANDELA STROBE MY TELECOMMUNICATIONS OUTLET SURGICAL LIGHT CONTROL GROUND FAULT PROTECTOR (VO4) VISUAL UNIT ONLY, 110 CANDELA STROBE DIAGONAL HATCH INDICATES FIXTURE SERVED FROM CRITICAL CIRCUIT AND SOLID HATCH GRD GROUND TAMPER RESISTANT MOMENTARY CONTACT SWITCH INDICATES FIXTURE SERVED FROM EMERGENCY OR LIFE SAFETY CIRCUIT. GALVANIZED RIGID STEEL (CONDUIT) DIGITAL DISTRIBUTED IN-ROOM SWITCH GYPSUM BOARD TYPICAL ITEM TO BE REMOVED HOA HANDS-OFF-AUTOMATIC SWITCH UNDER COUNTER **◆**→ DIGITAL DISTRIBUTED IN-ROOM DIMMER EXISTING TO REMAIN HORIZ HORIZONTAL UNDERGROUND ELECTRICAL EXISTING TO BE REMOVED HP HORSEPOWER UNDERGROUND REFER TO SEQUENCE OF OPERATIONS IN WALL PHONE OUTLET **⊲**W AREA NOT IN HPF HIGH POWER FACTOR UNIV UNIVERSAL SPECIFICATIONS 26 09 29 OR SEQUENCE OF DESIGNATOR DESCRIPTION: **──**NEW G/1 GENERATOR CONTRACT UNDERGROUND TELEPHONE TELECOMMINCATIONS OUTLET MOUNTED OPERATION SCHEDULE HIGH VOLTAGE UTIL UTILITY ABOVE COUNTER BACKSPLASH OCCUPANCY SENSOR W/ MANUAL SWITCH USS UNIT SUBSTATION HVAC HEATING, VENTILATING AND AIR ASSOCIATED FIXTURE. ABSENCE OF ANY LETTER INDICATES FIXTURES WALL MOUNT TELECOMMINCATIONS OUTLET - MOUNTED AT CONDITIONING ULTRAVIOLET CONTROLLED VIA SWITCH(ES) IN THE ASSOCIATED ROOM. UPPERCASE "U" OCCUPANCY SENSOR CEILING MOUNT MOTOR SPECIAL MOUNTING HEIGHT INDICATED ON INTERRUPTING CAPACITY VOLT INDICATES ASSOCIATED FIXTURES ARE UNSWITCHED. DRAWING OR AS INDICATED IN THE REVISION NUMBER - SHOWN ON PLANS VA VOLT-AMPERES ISOLATED GROUND DAYLIGHT SENSOR WALL MOUNT ASSOCIATED ARCHITECTURAL ELEVATION. IMC INTERMEDIATE METAL CONDUIT VERT VERTICAL - INDICATES MOUNTING HEIGHT WHEN —INDICATES THE CIRCUIT NUMBER SERVING FIXTURES. VARIABLE FREQUENCY DRIVE INCAND INCANDESCENT DAYLIGHT SENSOR CEILING MOUNT - NUMBER OF DETAIL ON SHEET SAFETY DISCONNECT SWITCH (NON-FUSED) VOL VOLUME IR INFRARED - INDICATES BRANCH PANELBOARD SERVING THE FIXTURE. SEE PLAN FOR AREAS --- / NUMBER OF SHEET WHERE DETAIL APPEARS INTERLOCK WITH WATT TIME CLOCK - SEE TIME CLOCK SCHEDULE SERVED BY PANELBOARD(S). J-BOX JUNCTION BOX WITH SAFETY DISCONNECT SWITCH (FUSED) HTC TIME CONTROL SWITCH ——SEE TELECOMMUNICATIONS KV KILOVOLT WITHOUT W/O **ELECTRICAL DEVICES:** KEYED NOTE HORIZONTAL CABLING SCHEDULE FOR KVA KILOVOLT-AMPERE WEATHERPROOF **PUSH BUTTON** ADDITIONAL INFORMATION. KVAR KILOVOLT-AMPERE REACTIVE XFMR TRANSFORMER ROOM NAME AND NUMBER LOW VOLTAGE SWITCH STATION - SEE LOW —INDICATES JACK/CABLE QUANTITY KW KILOWATT XFR TRANSFER XX SPECIAL OUTLET KWH KILOWATT HOUR **VOLTAGE SWITCHING STATION SCCHEDULE** TRANSFORMER FLOOR TELECOMMUNICATIONSOUTLET LEC LOCAL EXCHANGE CARRIER (E.G AT&T) @ AT DESIGNATOR - INDICATES DETAIL DESIGNATOR DIGITAL DISTRIBUTED LOW VOLATGE SWITCH LAY-IN GRID DELTA STATION SCHEDULE - SEE DISTRIBUTED LOW PANELBOARDS. PANELBOARD DOORS MAY BE -DESIGNATOR-LOC LOCATE OR LOCATION ▼ CEILING TELECOMMUNICATIONS OUTLET FEET VOLTAGE SWITCH STATION SCHEDULE SEE SECTION DETAIL SHOWN TO INDICATE OPENING SIDE OF LT " INCHES RECESSED PANELBOARDS. SEE PANELBOARD LTG LIGHTING # NUMBER WIRELESS SWITCH - LINE VOLTAGE SOURCE IDENTIFICATION FOR DESIGNATION CODES. LTNG LIGHTNING INDICATES SHEET NUMBER Ø PHASE SWITCH STATION - SEE SWITCH STATION LV LOW VOLTAGE C CENTER LINE 12" ANALOG CLOCK, SINGLE FACE → FLOOR CLEARANCE AREA SCHEDULE P PLATE 9" ANALOG CLOCK, SINGLE FACE **DESIGNATOR DESCRIPTION:** CONTACTOR - SEE CONTACTOR SCHEDULE 12" ANALOG CLOCK, DOUBLE FACE 9" ANALOG CLOCK, DOUBLE FACE POWER POLE (OPEN OFFICE STYLE) UL924 EMERGENCY LIGHTING CONTROL DIGITAL CLOCK, HR:MIN:SEC DEVICE WALL MOUNT DIGITAL CLOCK, HR:MIN STATIC GROUND RECEPTACLE UL924 EMERGENCY LIGHTING CONTROL —INDICATES THE CIRCUIT NUMBER SERVING DEVICE. DIGITAL CLOCK, ELAPSED TIMER DEVICE CEILING MOUNT —(GM) GROUND MODULE ELAPSED TIMER CONTROL — INDICATES BRANCH PANELBOARD SERVING THE DEVICE. SEE PLAN FOR AREAS SERVED BY (PG) POWER GROUND REMOTE INDICATOR PLY PLYWOOD NOTE DESCRIPTION: DATA RACK GENERAL NOTES - NOTES THAT APPLY TO ALL DRAWINGS WITHIN THE DRAWING SET. SHEET NOTES - NOTES THAT APPLY TO THE SHEET ON WHICH THEY APPEAR. KEYED NOTES - NOTES THAT APPLY TO AN AREA, ITEM AND/OR DEVICE ON A FLOOR PLAN OR DETAIL. DETAIL NOTES - NOTES THAT APPLY TO A SPECIFIC DETAIL.

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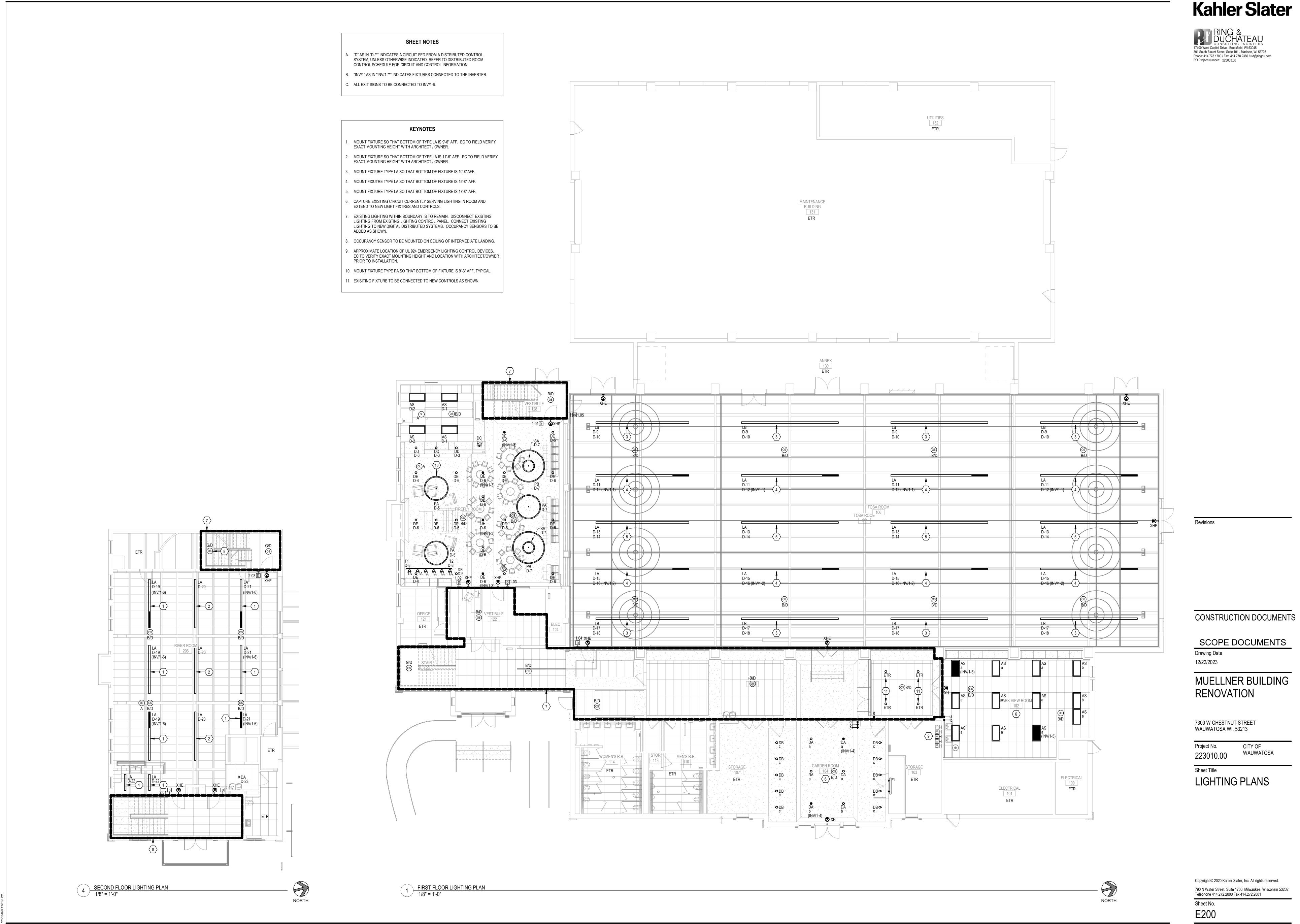
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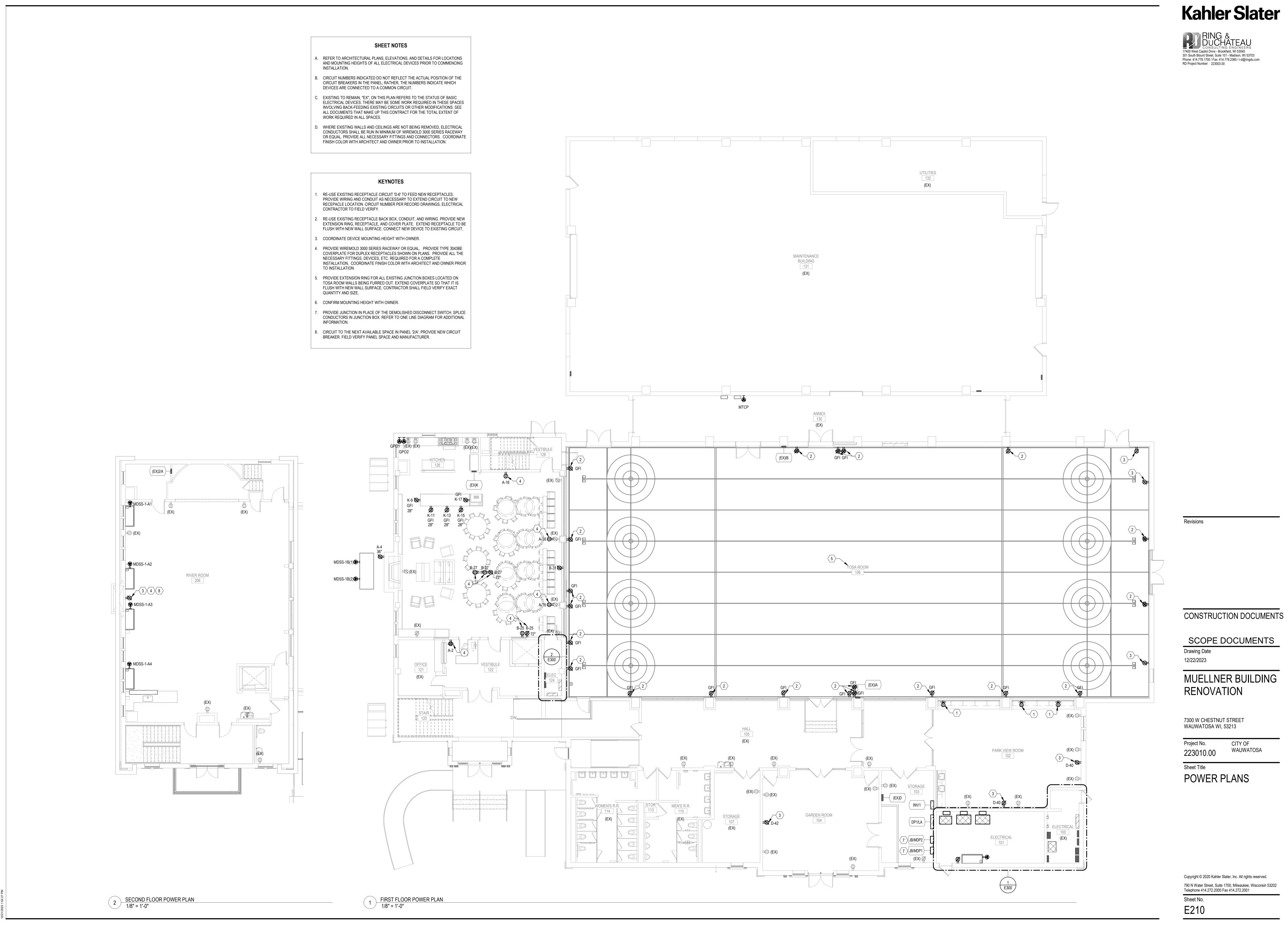
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ELECTRICAL SYMBOLS AND SHEET INDEX

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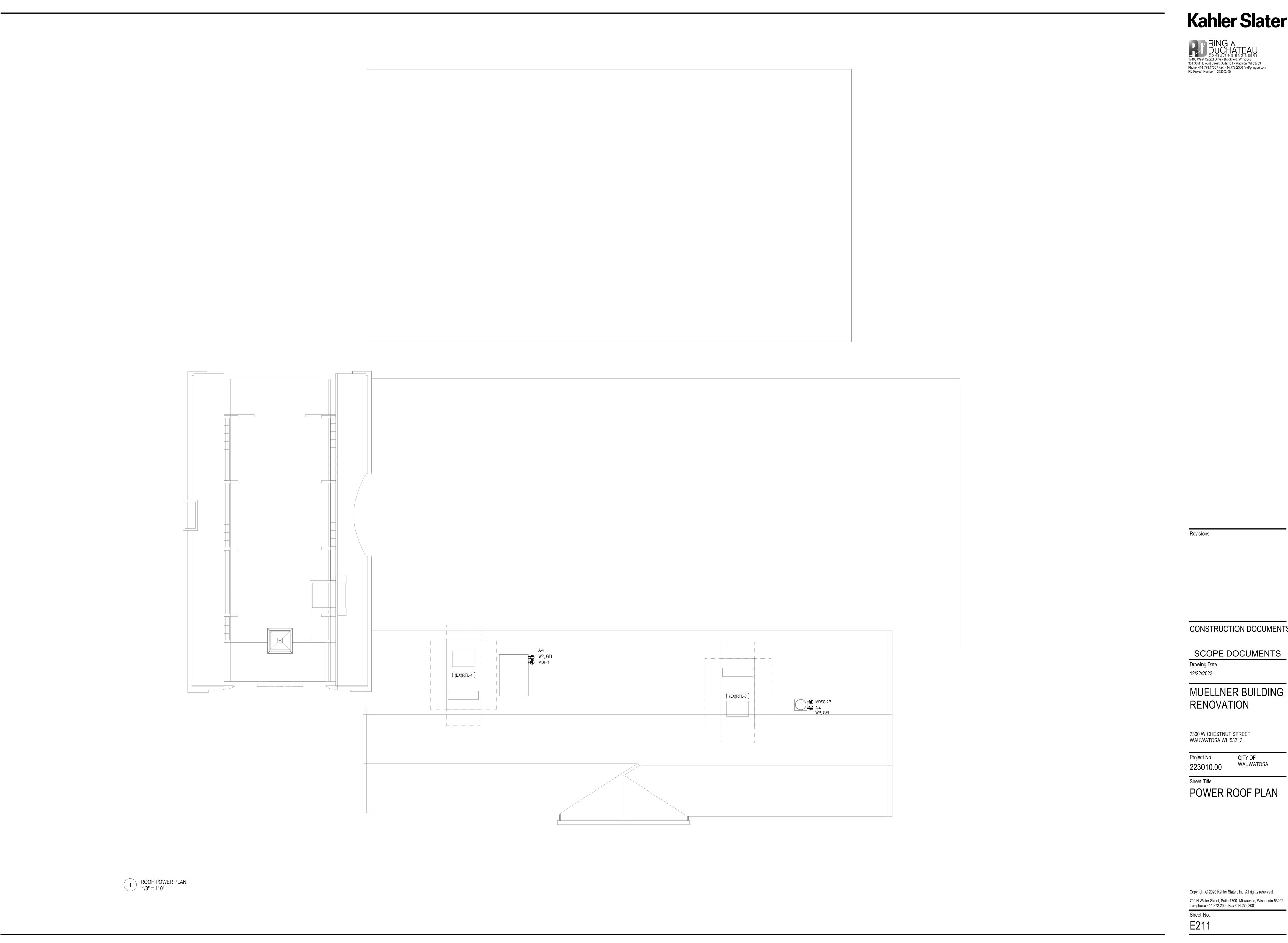
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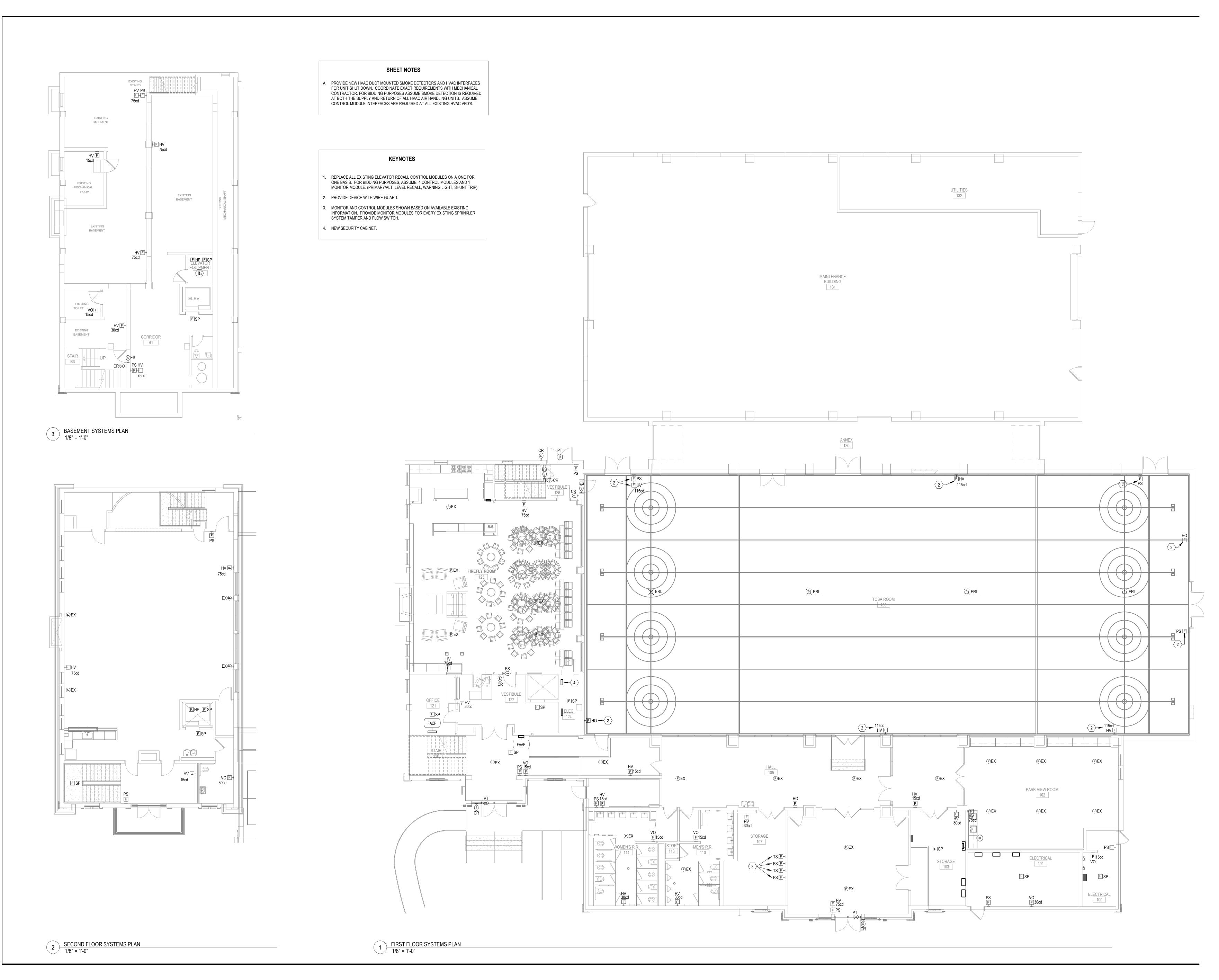
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POWER ROOF PLAN

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SYSTEMS PLANS

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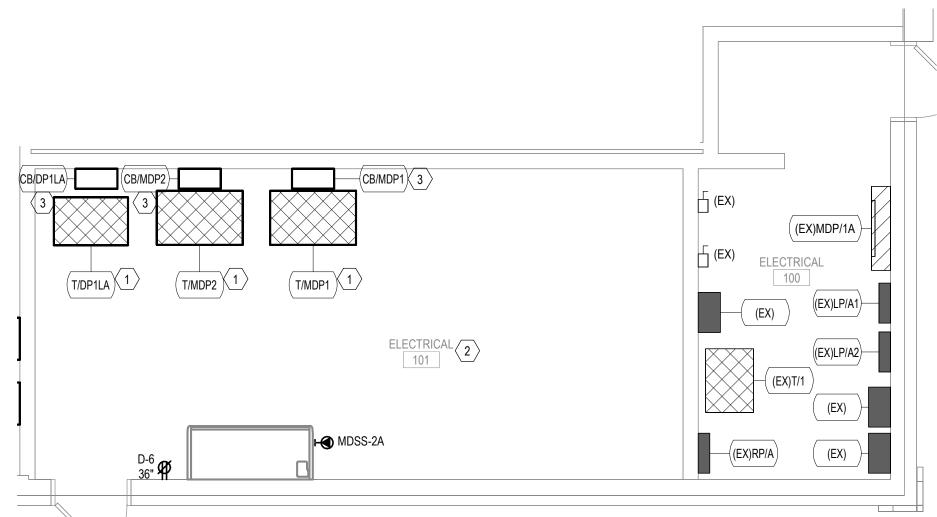
(EX)B 2 ENLARGED ELEC 124 1/4" = 1'-0"

KEYNOTES

MOUNT TRANSFORMER TO STRUCTURAL SUPPORT PLATFORM LOCATED AT 7' 6" AFF.

2. PATCH AND SEAL ALL OPENINGS IN THE FLOOR, WALLS AND CEILING IN THIS ROOM.

ENCLOSED CIRCUIT BREAKER SHALL BE MOUNTED DIRECTLY BELOW TRANSFORMER.



1 ENLARGED ELECTRICAL ROOM POWER PLAN 1/4" = 1'-0"

Revisions

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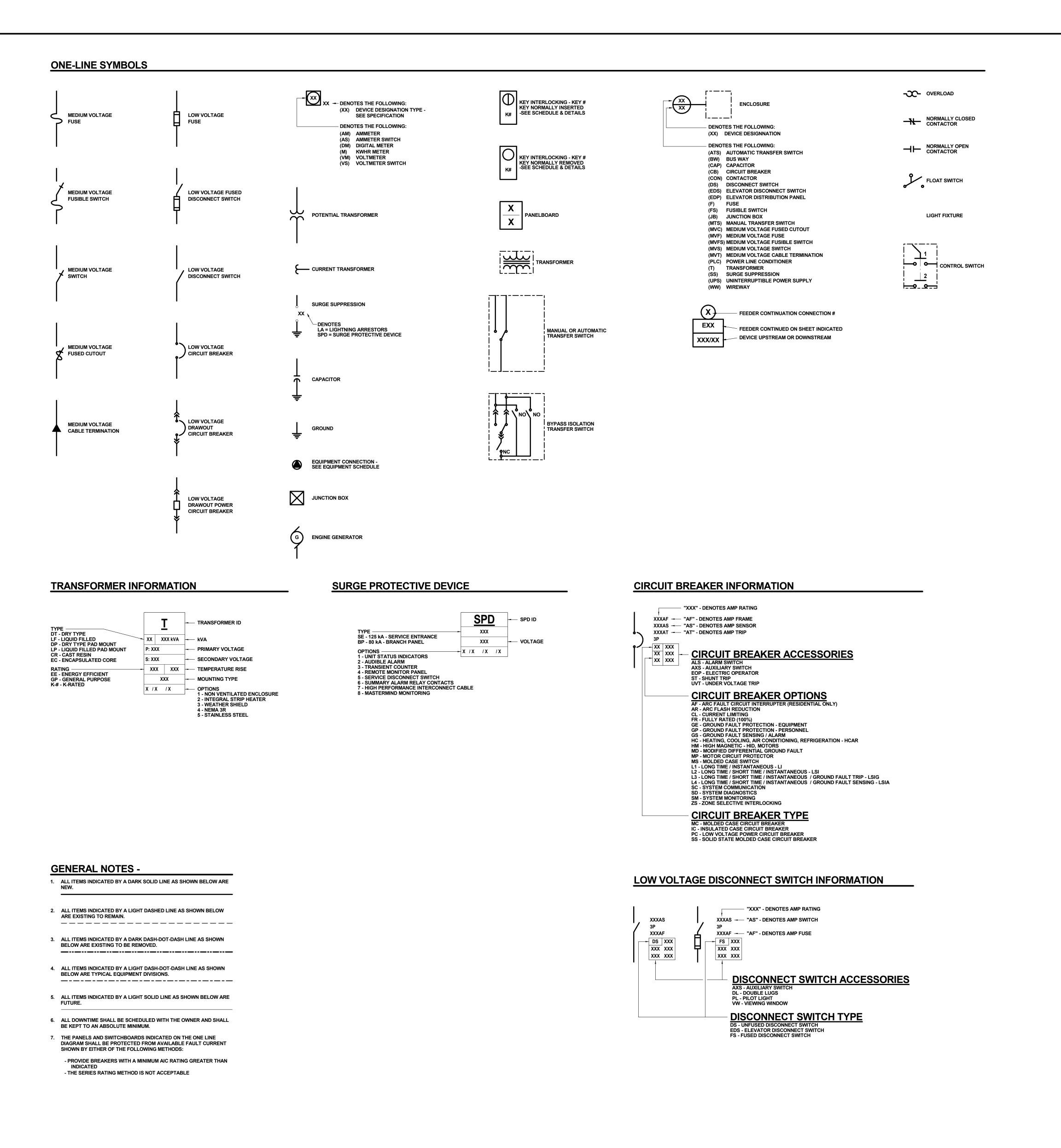
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ENLARGED ELECTRICAL PLANS

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ELECTRICAL ONE LINE DIAGRAM

CITY OF

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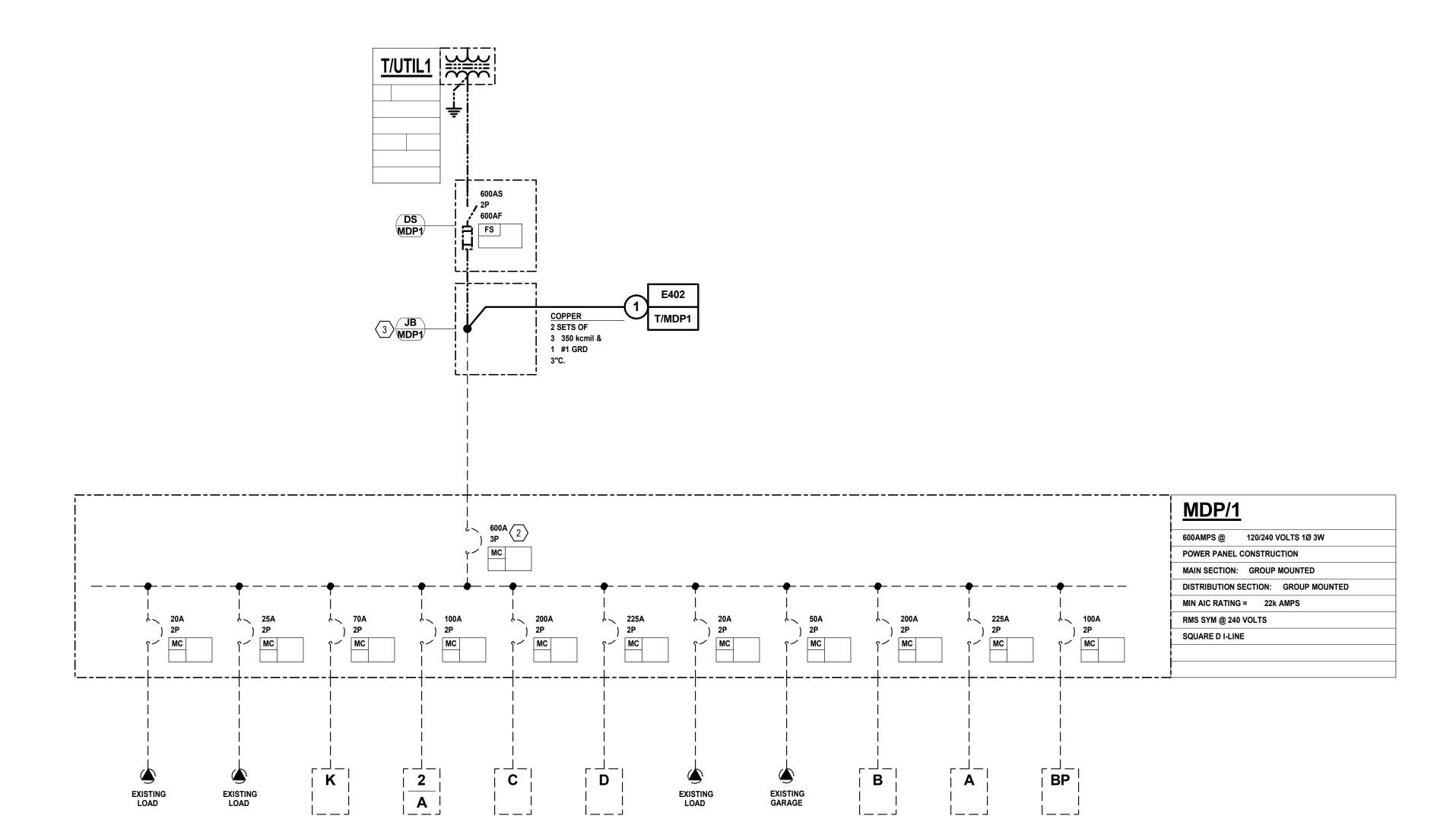


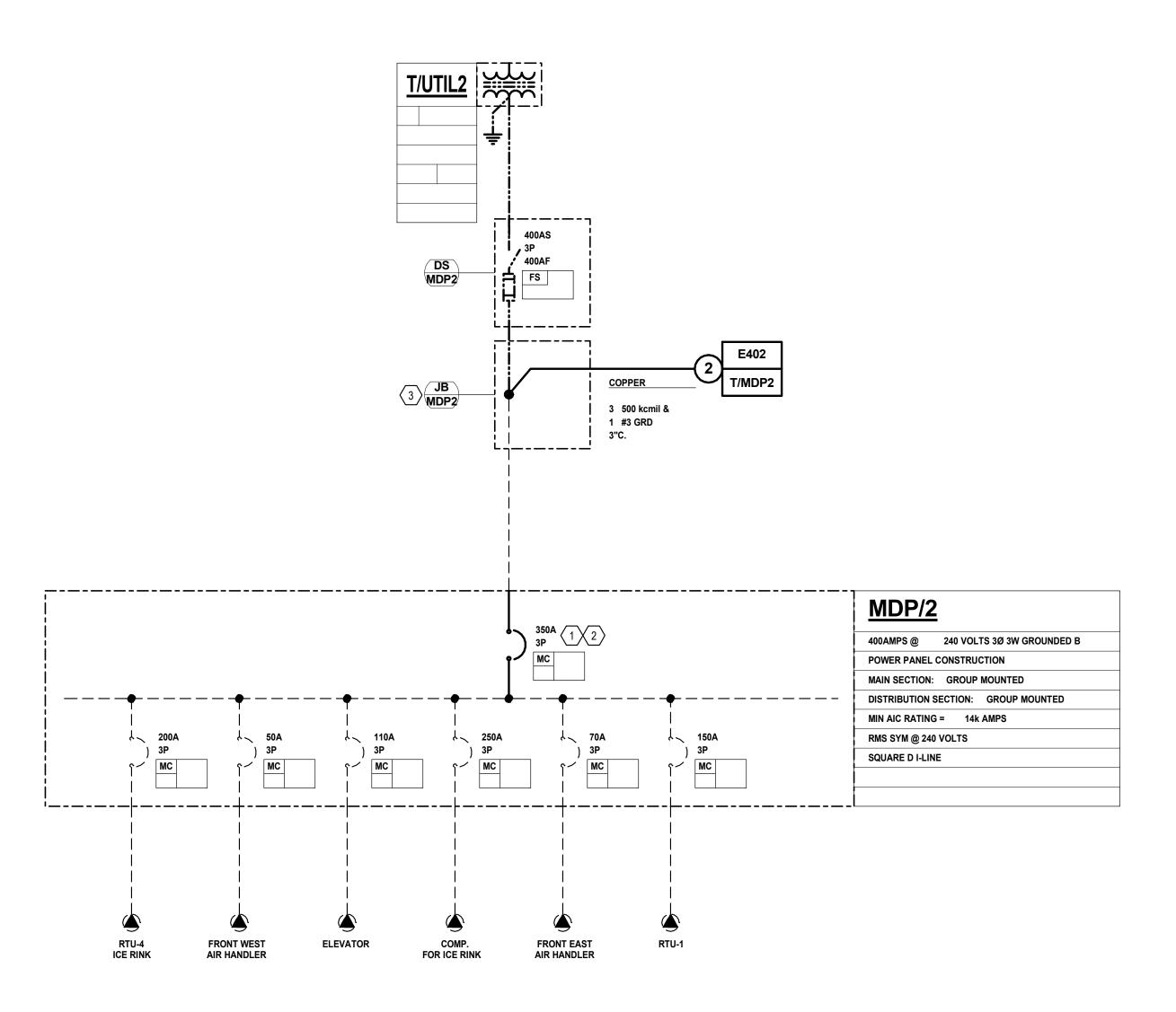
KEYED NOTES

1. PROVIDE NEW SQUARE D CIRCUIT BREAKER AS SHOWN.

3. PROVIDE NEW JUNCTION BOX IN PLACE OF DISCONNECT SWITCH.

2. PROVIDE LABEL AT BREAKER THAT READS "DISCONNECT LOCATED IN ELECTRICAL ROOM 101".





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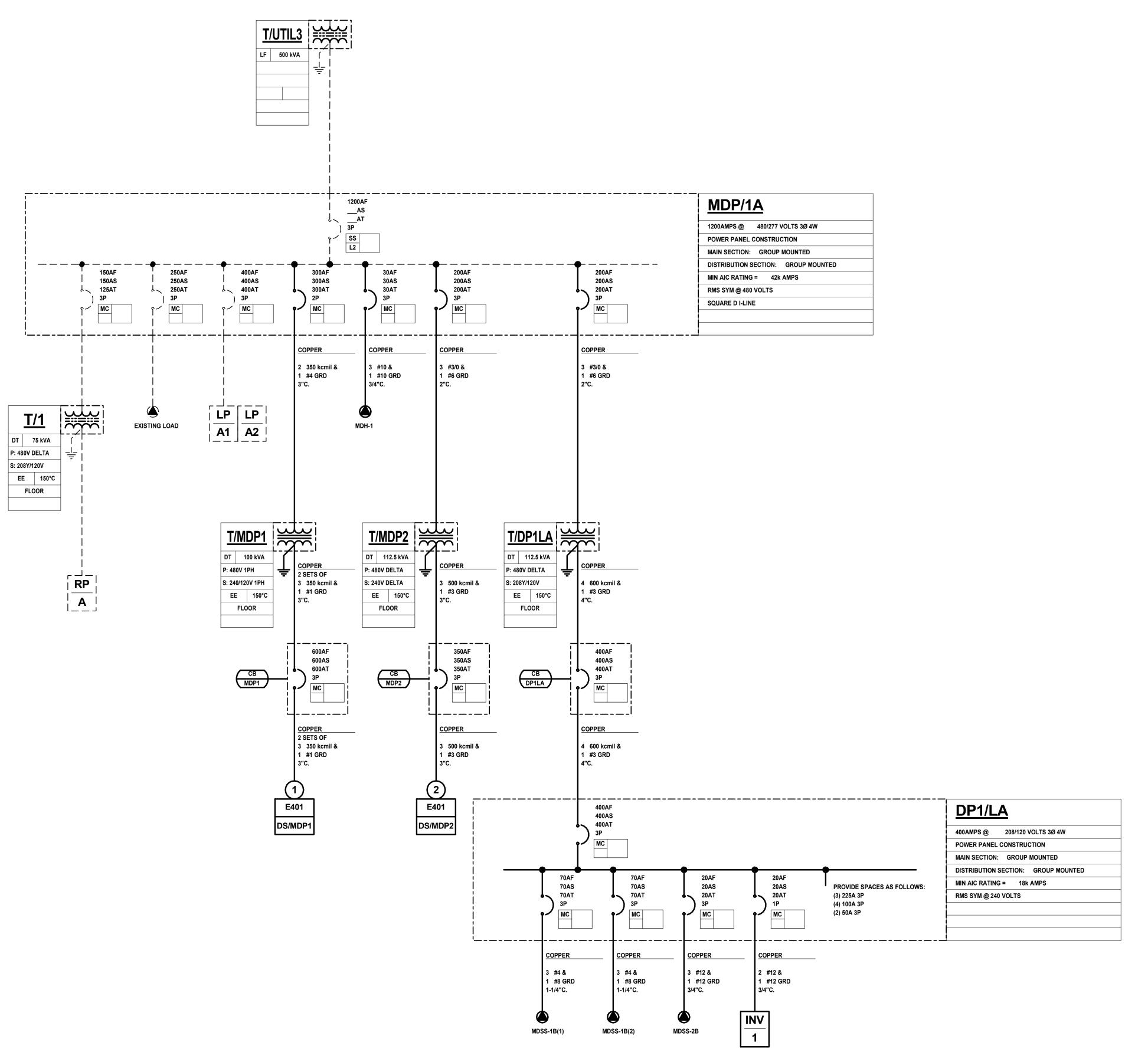
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ELECTRICAL ONE LINE DIAGRAM

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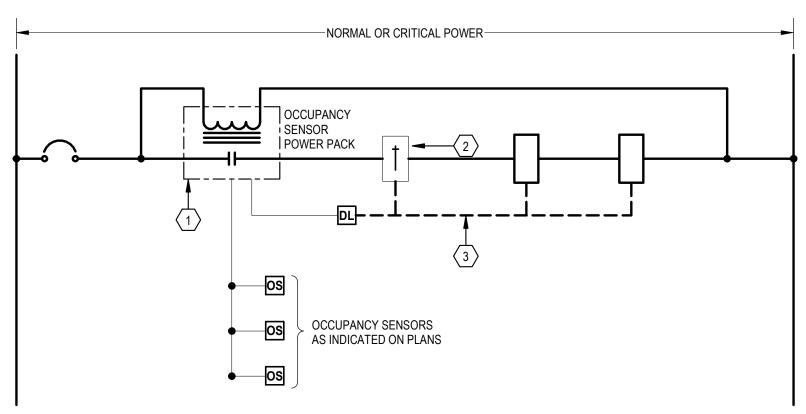
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ELECTRICAL ONE LINE DIAGRAM

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DETAIL NOTES -

- 1. DETAIL INDICATES A TYPICAL OCCUPANCY SENSOR WIRING DIAGRAM. SEE FLOOR PLANS FOR THE REQUIRED LIGHTING CONTROL CONFIGURATION. PROVIDE THE NECESSARY CONTROL COMPONENTS AND WIRING FOR A COMPLETE SYSTEM.
- 2. SEE FLOOR PLANS FOR QUANTITIES, TYPES AND LOCATIONS OF OCCUPANCY SENSORS.
- 3. ALL FIXTURES LOCATED IN THE ROOM MONITORED BY OCCUPANCY SENSORS SHALL BE CONTROLLED BY THESE SENSORS.

KEYED NOTES -

- 1. MOUNT IN JUNCTION BOX ABOVE ACCESSIBLE CEILING.
- 2. 0-10V, CLASS 2 WIRES.
- OPTIONAL WALLBOX DIMMER.

LIGHTING

CONTROL PANEL

ROOM

SYSTEM

ROOM

SYSTEM

L----

1. LOW VOLTAGE NETWORK WIRE. USE MANUFACTURER

3. TCP/IP CONNECTION TO BUILDING LAN TO ALLOW PROGRAMMING

4. NETWORK BRIDGE. PROVIDE ONE PER ROOM/AREA DEFINED AS IN -

5. LOW VOLTAGE CONNECTION BETWEEN NETWORK BRIDGE AND IN -

ROOM SYSTEM. USE MANUFACTURER RECOMMENDED WIRE.

AND OVERRIDE ACCESS TO LIGHTING CONTROL SYSTEM.

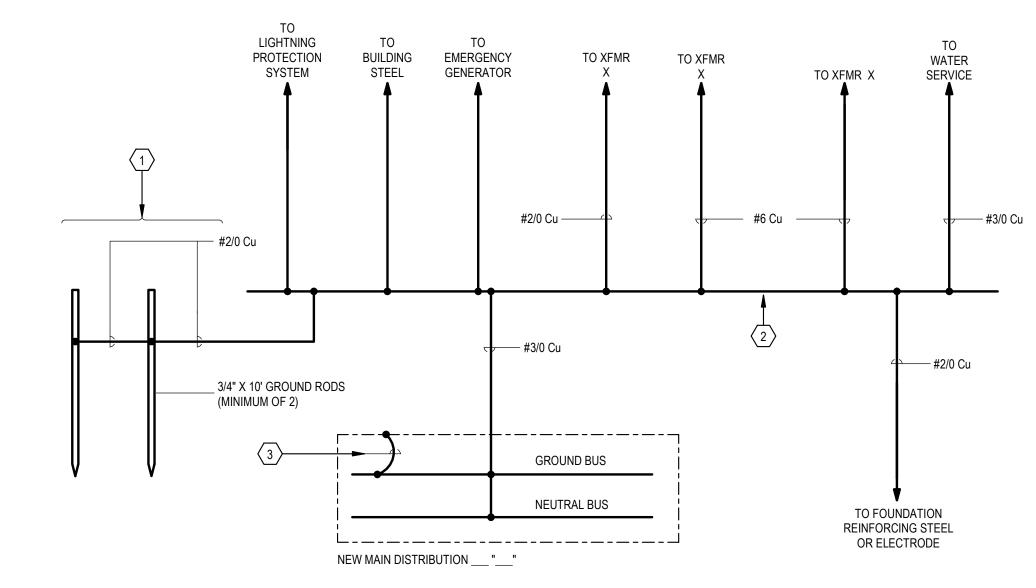
RECOMMENDED WIRE AND TOPOLOGY.

2. POWER CONNECTION TO MAIN CONTROLLER.

KEYED NOTES -

ROOM SYSTEM.

CEILING MOUNTED OCCUPANCY SENSOR WITH 0-10V DAYLIGHT SENSOR DETAIL NOT TO SCALE



DETAIL NOTES -

1. ROUTE GROUNDING CONDUCTOR IN METAL CONDUIT. BOND RACEWAY AT BOTH ENDS TO GROUNDING CONDUCTOR.

KEYED NOTES -1. LOCATE GROUND RODS IN MAIN ELECTRICAL EQUIPMENT ROOM. ONE GROUND ROD SHALL BE LOCATED IN THE NORTHEAST CORNER AND THE OTHER IN THE SOUTHEAST CORNER. THE TOP OF THE GROUND

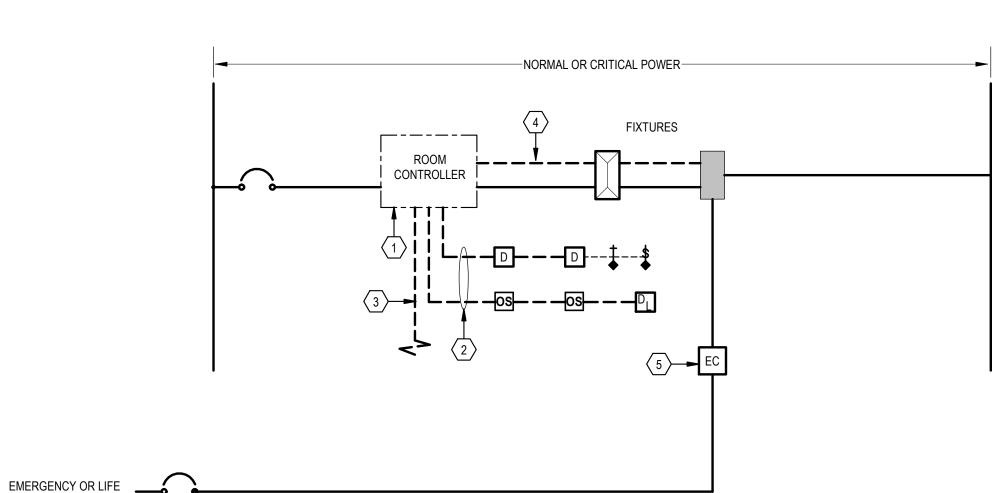
- 2. COPPER GROUND BUS 1/4"X2"X36" LONG. LOCATION AS INDICATED ON FLOOR PLAN. MOUNT BUS TO WALL ON 2" INSULATED STAND-

3. BOND ENCLOSURE PER NEC ARTICLE 250.

RODS SHALL HAVE 3" EXPOSED ABOVE CONCRETE.

SYSTEM GROUNDING DETAIL ✓ NOT TO SCALE

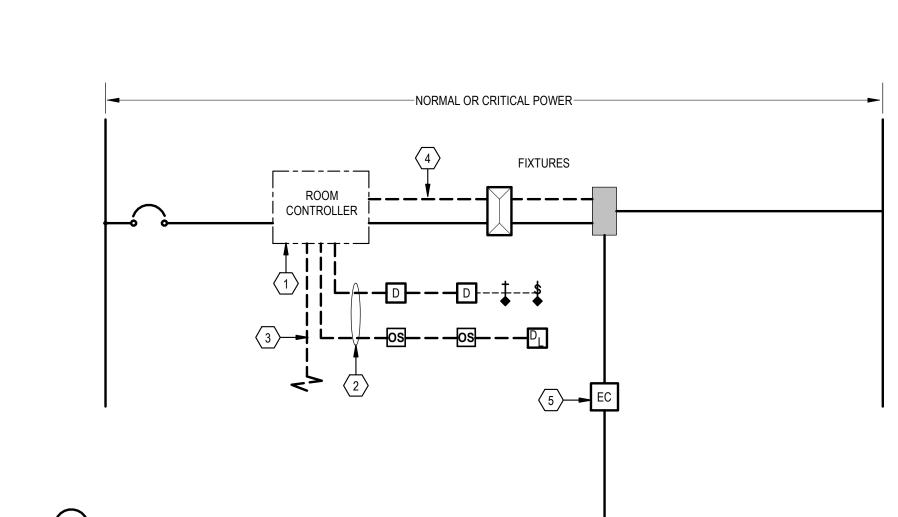
SAFETY POWER



- 1. DETAIL INDICATES A TYPICAL STANDALONE DISTRIBUTED CONTROL SYSTEM ONE LINE SERVING ONE ROOM OR AREA. PROVIDE THE SYSTEM. ONE LINE IS DIAGRAMMATIC TO SHOW INTENT OF CONNECTIONS BUT DOES NOT SHOW EACH INSTANCE OF CONNECTION ON SYSTEM.
- 2. REFER TO DISTRIBUTED ROOM CONTROL SCHEDULE AND DIGITAL LOW VOLTAGE SWITCH STATION SCHEDULES FOR MORE INFORMATION WHEN DIGITAL WALL SWITCH STATIONS AND "D-*" CIRCUIT DESIGNATIONS ARE SHOWN ON PLANS. REFER TO SEQUENCE OF OPERATIONS SCHEDULE AND ROOM TAGS FOR MORE INFORMATION ON CONTROL REQUIREMENTS FOR SPACES NOT ON

KEYED NOTES -

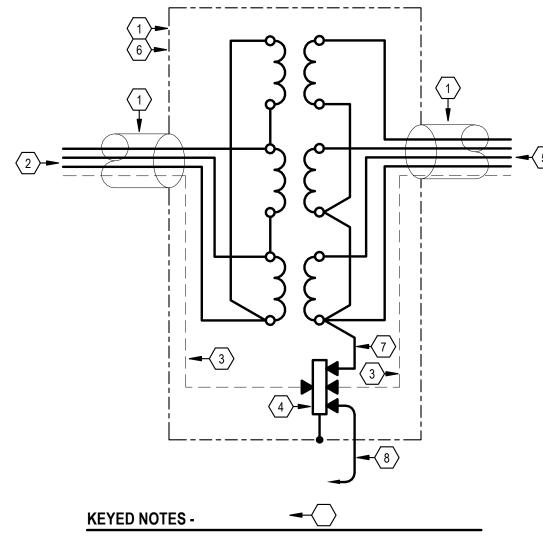
- 2. LOW VOLTAGE CONNECTION FROM LOCAL LOW VOLTAGE DEVICES.
- USE MANUFACTURER RECOMMENDED WIRE FOR EACH DEVICE TYPE.
- 3. CONNECTION TO ADDITIONAL ROOM CONTROLLERS SERVING THE
- 4. CLASS 2, 0-10V DIMMING WIRES.
- 5. REFER TO DETAILS ON E500 FOR WIRING DIAGRAM OF UL924 EMERGENCY CONTROL DEVICE



DETAIL NOTES -

- NECESSARY CONTROL COMPONENTS AND WIRING FOR A COMPLETE
- DISTRIBUTED ROOM CONTROL SCHEDULE.
- 3. SEE FLOOR PLANS FOR QUANTITIES, TYPES AND LOCATIONS OF ALL ASSOCIATED DEVICES.

- PROVIDE REQUIRED ROOM CONTROLLERS NECESSARY TO ACCOMMODATE DIFFERENT VOLTAGES, BRANCH SOURCES, AND CONTROL TYPES AS DESIGN REQUIREMENTS.

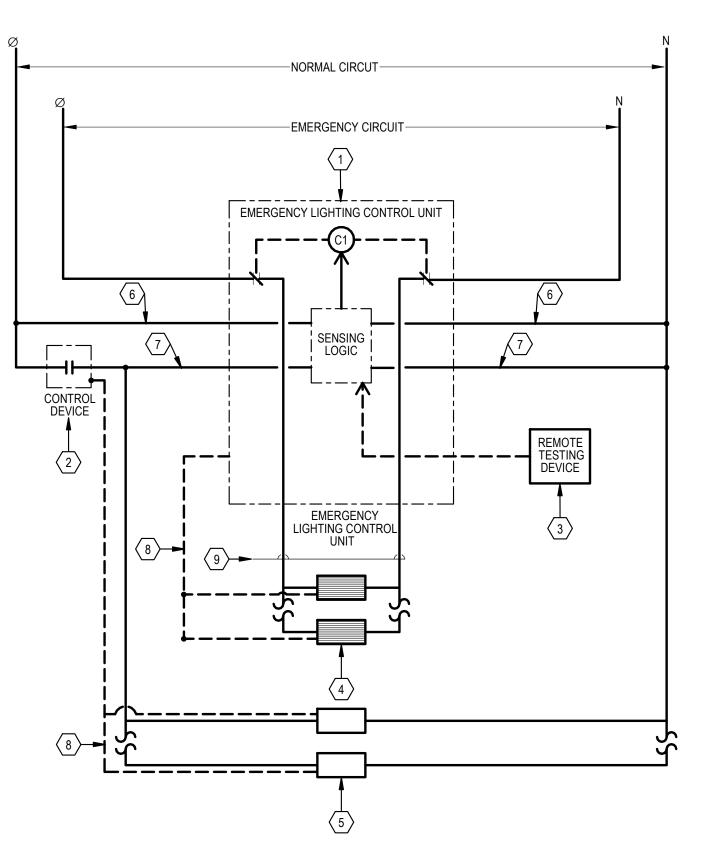


- 1. TYPICAL EQUIPMENT GROUND CONDUCTORS (RACEWAYS &
- 2. TRANSFORMER PRIMARY (600 VOLTS OR LESS AS SPECIFIED).
- 3. SUPPLEMENTAL EQUIPMENT GROUND CONDUCTOR(WHERE
- 4. FORMED BUS OR LUG BONDED TO TRANSFORMER ENCLOSURE. SEE SPECIFICATIONS.
- 5. TRANSFORMER SECONDARY (600 VOLTS OR LESS AS SPECIFIED).
- TRANSFORMER ENCLOSURE.

ENCLOSURES).

- 7. BONDING JUMPER PER NEC 250-66
- 8. GROUNDING ELECTRODE CONDUCTOR TO BUILDING WATER PIPE, BUILDING STEEL, OR AS DIRECTED BY LOCAL AUTHORITY HAVING JURISDICTION.

SEPARATELY DERIVED ELECTRICAL SYSTEM GROUNDING / NOT TO SCALE



KEYED NOTES -

- 1. PROVIDE LVS MODEL EPC-1-D OR EQUIVALENT EMERGENCY LIGHTING CONTROL UNIT. PROVIDE UL924 LISTED DEVICE. UNDER NORMAL OPERATING CONDITIONS, THE DESIGNATED EMERGENCY LIGHTS, SERVED FROM EMERGENCY CIRCUIT, WILL FOLLOW NORMAL LIGHTING CONTROLS. UPON LOSS OF NORMAL POWER, THE DESIGNATED EMERGENCY LIGHTS WILL TURN ON TO FULL ILLUMINATION, BYPASSING THE NORMAL LIGHTING CONTROLS.
- 2. THE NORMAL LIGHTING CONTROL DEVICE CAN CONSIST OF EITHER LINE OR LOW VOLTAGE LIGHTING CONTROLS, 0-10V OR DALI DIMMING, ETC...SEE FLOOR PLANS FOR EXACT CONTROL REQUIREMENTS.
- 3. PROVIDE A REMOTE TESTING SWITCH FOR EACH EMERGENCY LIGHTING CONTORL UNIT THAT DOES NOT HAVE A SELF-DIAGNOSTIC TEST FEATURE. MOUNT TEST SWITCH ADJACENT TO CONTROL UNIT IN AN ACCESSIBLE LOCATION, OR AS NOTED ON PLANS. FIXTURES, CONTROLLED BY CONTROL UNIT, REQUIRED TO BE VISIBLE FROM TEST SWITCH LOCATION. FIELD VERIFY LOCATION OF REMOTE TEST SWITCH WITH OWNER/ARCHITECT.
- 4. EMERGENCY LIGHTING FIXTURES. SEE FLOOR PLANS FOR LOCATIONS AND QUANTITIES.
- 5. NORMAL LIGHTING FIXTURES. SEE FLOOR PLANS FOR
- LOCATIONS AND QUANTITIES.
- 6. NORMAL UNSWITCHED SENSING CIRCUIT.
- 7. NORMAL SWITCH LEG SENSE.
- 8. PROVIDE DEDICATED RACEWAY FOR ALL WIRING ASSOCIATED TO THE EMERGENCY FIXTURES TO MEET THE APPLICABLE NATIONAL ELECTRICAL CODE - EMERGENCY WIRING REQUIREMENTS.
- 9. PROVIDE DEDICATED RACEWAY FOR ALL WIRING ASSOCIATED TO THE EMERGENCY FIXTURES TO MEET THE APPLICABLE NATIONAL ELECTRICAL CODE - EMERGENCY WIRING REQUIREMENTS.

TYPICAL DISTRIBUTED IN-ROOM CONTROL DETAIL WITH EGRESS

YEMERGENCY LIGHTING CONTROL UNIT WIRING DIAGRAM - TYPE B

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TYPICAL NETWORKED DISTRIBUTED CONTROL DETAIL

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CONTROLLER

DETAIL NOTES -

1. DETAIL INDICATES A GLOBAL NETWORKED DISTRIBUTED CONTROL

2. REFER TO DISTRIBUTED ROOM CONTROL SCHEDULE AND DIGITAL

CIRCUIT DESIGNATIONS ARE SHOWN ON PLANS. REFER TO

3. SEE FLOOR PLANS FOR QUANTITIES, TYPES AND LOCATIONS OF

4. LOCATE IN-ROOM CONTROLLERS ABOVE ENTRY DOOR TO ROOM

INFORMATION WHEN DIGITAL WALL SWITCH STATIONS AND "D-*"

SEQUENCE OF OPERATIONS SCHEDULE AND ROOM TAGS FOR MORE

INFORMATION ON CONTROL REQUIREMENTS FOR SPACES NOT ON

LOW VOLTAGE SWITCH STATION SCHEDULES FOR MORE

COMPONENTS AND WIRING FOR A COMPLETE SYSTEM. ONE LINE IS

DIAGRAMATIC TO SHOW INTENT OF CONNECTIONS BUT DOES NOT

SYSTEM ONE LINE. PROVIDE THE NECESSARY CONTROL

SHOW EACH INSTANCE OF CONNECTION TO SYSTEM.

DISTRIBUTED ROOM CONTROL SCHEDULE.

THEY ARE SERVING, UNLESS OTHERWISE.

OCCUPANCY SENSORS.

EQUIPMENT	LOCATION			LOAD		F	FED FROM			OCPD			FEEDE	R			M	OTOR STA	RTER				DISCO	NNECT S	WITCH		CONN	NECTION	
ID DESCRIPTION	NAME	VOLTAGE PHASE	Е НР	FLA	KVA	PANEL	CIRCUIT	BRANCH	TYPE	SIZE	POLE	QTY F	PHASE (GRD C	OND F	URN BY	INST BY	WIRE BY	LOC	TYPE OP		FURN BY	INST BY	WIRE BY	LOC	OPTIONS	NEMA TYPE	OPTIONS	NOTES
MDH-1 DEHUMIDIFICATION SYSTEM	ROOF	480 3	0	14.4 A	12	MDP/1A	2	N	СВ	30	3	3	10	10	3/4	MFR	MFR	MFR	IU		-	EC	EC	EC	NU	6	-	3, 10	
IDSS-1-A1 DUCTLESS SPLIT SYSTEM	RIVER ROOM	208 3	0	1.1 A	0.4			N	-	15	3	3	12	12	1/2	MFR	MFR	MFR	IU	MAN	-	EC	EC	EC	NU	-	-	3, 10	INDOOR UNIT IS FED FROM OUTDOOR UN
IDSS-1-A2 DUCTLESS SPLIT SYSTEM	RIVER ROOM	208 3	0	1.1 A	0.4			N	-	15	3	3	12	12	1/2	MFR	MFR	MFR	IU	MAN	-	EC	EC	EC	NU	-	-	3, 10	INDOOR UNIT IS FED FROM OUTDOOR UN
IDSS-1-A3 DUCTLESS SPLIT SYSTEM	RIVER ROOM	208 3	0	1.1 A	0.4			N	-	15	3	3	12	12	1/2	MFR	MFR	MFR	IU	MAN	-	EC	EC	EC	NU	-	-	3, 10	INDOOR UNIT IS FED FROM OUTDOOR UN
IDSS-1-A4 DUCTLESS SPLIT SYSTEM	RIVER ROOM	208 3	0	1.1 A	0.4			N	-	15	3	3	12	12	1/2	MFR	MFR	MFR	IU	MAN	-	EC	EC	EC	NU	-	-	3, 10	INDOOR UNIT IS FED FROM OUTDOOR UN
DSS-1B(1) DUCTLESS SPLIT SYSTEM	SITE	208 3	0	48.6 A	17.5	DP1/LA	1	N	СВ	70	3	3	4	8 1	-1/4	MFR	MFR	MFR	IU	MAG	-	EC	EC	EC	NU	6	-	3, 10	
DSS-1B(2) DUCTLESS SPLIT SYSTEM	SITE	208 3	0	48.6 A	17.5	DP1/LA	2	N	СВ	70	3	3	4	8 1	-1/4	MFR	MFR	MFR	IU	MAG	-	EC	EC	EC	NU	6	-	3, 10	
MDSS-2A DUCTLESS SPLIT SYSTEM		208 3	0	1 A	0.4			N	-	15	3	3	12	12	1/2	MFR	MFR	MFR	IU	MAN	-	EC	EC	EC	NU	-	-	3, 10	INDOOR UNIT IS FED FROM OUTDOOR UN
MDSS-2B DUCTLESS SPLIT SYSTEM	ROOF	208 3	0	13.6 A	4.9	DP1/LA	3	N	СВ	20	3	3	10	10	3/4	MFR	MFR	MFR	IU	MAG	-	EC	EC	EC	NU	6	-	3, 10	
MTCP TEMPERATURE CONTROL PANEL	ANNEX	120 1	0	4.2 A	0.5	В	29	N	СВ	20	1	2	12	12	1/2	-	-	-	-	-	-	-	-	-	-	-	-	3, 10	

EQUIPMENT SCHEDULE - GENERAL

	EQUIPMENT	LOCATION				LOAD			FED FROM			OCPD			FEED	ER			MOTOR :	STARTE	R			DISC	ONNECT S	SWITCH		CONI	NECTION	
																			WIRE	≣			FURN	INST	WIRE			NEMA		NOTES
ID	DESCRIPTION	NAME	VOLTAGE	PHASE	HP	FLA	KVA	PANEL	CIRCUIT	BRANCH	TYPE	SIZE	POLE	QTY F	PHASE	GRD C	COND FURN E	Y ∣ INST BY	' BY	LOC	TYPI	E OPTIONS	BY	BY	BY	LOC	OPTIONS	TYPE	OPTIONS	
GPO	1 PIZZA OVEN	KITCHEN	240	1	0	13.3 A	3.2	В	33,35	N	СВ	20	2	2	12	12	1/2" -	-	-	-	-	-	-	-	-	-	-	6-20	1	VERIFY CONNECTION TYPE, LOAD AND CIRCUIT SIZE WITH OWNER PROVIDED EQUIPMENT.
GPO	2 PIZZA OVEN	KITCHEN	240	1	0	13.3 A	3.2	В	37,39	N	СВ	20	2	2	12	12	1/2" -	-	-	-	-	-	-	-	-	-	-	6-20	1	VERIFY CONNECTION TYPE, LOAD AND CIRCUIT SIZE WITH OWNER PROVIDED EQUIPMENT.

EQUIPMENT SCHEDULE GENERAL NOTES

- A. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH OTHER TRADES TO AVOID CONFLICTS AND TO VERIFY ALL EQUIPMENT CONNECTION REQUIREMENTS AND CLEARANCE OF ACCESS POINTS AND DOOR PER THE NEC AND MANUFACTURER REQUIREMENTS.
- B. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A COMPLETE ELECTRICAL SYSTEM PER CONTRACT DOCUMENTS AND ENSURING THE SYSTEM IS OPERATIONAL UPON JOB COMPLETION.
- C. PROVIDE ALL POWER WIRING INCLUDING ALL CIRCUITRY CARRYING ELECTRICAL ENERGY FROM PANELBOARD OR OTHER SOURCE THROUGH STARTERS AND DISCONNECTS TO MOTORS, PACKAGED EQUIPMENT, OR PACKAGED CONTROLS PANELS. PROVIDE ALL WIRING BETWEEN CONTROL PANELS AND MOTORS. INCLUDE STARTERS DISCONNECTS, AND OVERLOAD PROTECTION IF NOT INCLUDED IN SPECIFICATIONS. COORDINATE WITH EQUIPMENT SUPPLIER.
- D. VERIFY ELECTRICAL REQUIREMENTS INCLUDING VOLTAGE, HORSEPOWER, STARTER TYPE, AND DISCONNECTING MEANS FOR MOTORS AND EQUIPMENT PRIOR TO ORDERING CIRCUIT BREAKERS, DISCONNECT SWITCHES, AND STARTERS.
- E. THE SHORT CIRCUIT CURRENT RATING (SCCR) IS THE MINIMUM CALCULATED VALUE AT THE UPSTREAM OVERCURRENT PROTECTIVE DEVICE. THE RESPECTIVE CONTRACTOR PROVIDING ANY MOTOR CONTROLLERS, CONTROL PANELS, FUSIBLE DISCONNECT SWITCHES, ETC. ASSOCIATED WITH THIS PIECE OF EQUIPMENT SHALL PROVIDE EQUIPMENT WITH LISTED SHORT CIRCUIT CURRENT RATINGS. EQUIPMENT NAMEPLATE SHALL CLEARLY INDICATE THE UL LISTED SCCR RATING FOR THE EQUIPMENT.
- F. WHERE THE HORSEPOWER (HP) COLUMN INDICATES A ZERO (0), THERE IS NO STANDARD HP RATING ASSOCIATED WITH THIS EQUIPMENT. THE OCPD AND CONDUCTOR SIZING ARE BASED UPON THE FLA , KVA AND/OR VENDOR PROVIDED POWER REQUIREMENTS.

EQUIPMENT SCHEDULE OPTIONS

1 = SINGLE RECEPTACLE
2 = DUPLEX RECEPTACLE
3 = DIRECT CONNECTION
4 = NON-FUSIBLE DISCONNECT

5 = FUSIBLE DISCONNECT

13 = GFI RECEPTACLE

6 = WEATHERPROOF
7 = LOCKABLE
8 = CONCEALED
9 = TOGGLE SWITCH

10 = VERIFY WITH MANUFACTURER PRIOR TO INSTALLATION
11 = SURFACE MOUNTED
12 = FLUSH MOUNTED
13 = GFI RECEPTACLE
14 = GFI BREAKER

14 = GFI BREAKER
15 = LOCKABLE MOTOR RATED SWITCH
16 = SHUNT TRIP BREAKER

15 = LOCKABLE MOTOR RATED SWITCH

N = NORMAL BRANCH

N = NORMAL BRANCH
LS = ARTICLE 517, LIFE SAFETY BRANCH
CR = ARTICLE 517, CRITICAL CARE BRANCH
EQ = ARTICLE 517, EQUIPMENT BRANCH
700 = ARTICLE 700, EMERGENCY BRANCH
701 = ARTICLE 701, LEGALLY REQUIRED STANDBY BRANCH
702 = ARTICLE 702, OPTIONAL STANDBY BRANCH
UPS = UNINTERRUPTIBLE POWER SUPPLY

OCPD = OVERCURRENT PROTECTIVE DEVICE CB = CIRCUIT BREAKER F = FUSE BOL = BUILT-IN OVERLOAD

CS = COMBINATION MOTOR CONTROLLER
ECM = ELECTRICALLY COMMUTATED MOTOR
MAG = MAGNETIC MOTOR CONTROLLER
MAN = MANUAL MOTOR CONTROLLER
RVS = REDUCEE VOLTAGE MOTOR CONTROLLER
SS = SOLID STATE MOTOR CONTROLLER

VFD = VARIABLE FREQUENCE DRIVE

FETY BRANCH
AL CARE BRANCH
MENT BRANCH
MEN

FS = FOOD SERVICE EQUIP. CONTRACTOR
GC = GENERAL CONTRACTOR
MC = MECHANICAL CONTRACTOR
MFR = MANUFACTURER
OWN = OWNER
PC = PLUMBING CONTRACTOR

EC = ELECTRICAL CONTRACTOR

SA = SEE ARCHITECTURAL DETAILS SD = SEE DRAWINGS SFP = SEE FLOOR PLANS SFS = SEE FOOD SERVICE PLANS

PANEL SCHEDULE ABBREVIATIONS AND OPTIONS

EXISTING PANEL: K FED FROM: MDP/1 PANEL LOCATION: KITCHEN 126 MAIN SIZE, TYPE: 100 A MCB BRANCH: N PANEL BUS AMPS: 100 AMPS **VOLTAGE**: 120/240 1 Ø 3 W PANEL TYPE: LOAD CENTER S.C.C.R: 10kA MANUFACTURER: **MOUNTING:** RECESSED **PANEL OPTIONS:** CKT LOAD DESCRIPTION POLES OCPD NOTE LOAD DESCRIPTION CKT NOTE OCPD POLES A В
 NOTE
 OCPD
 POLES
 A
 B
 POLES
 OCPD
 NOTE
 LOAD D

 ECB
 15 A
 1
 0
 0
 1
 15 A
 ECB
 EXISTING LOAD

 ECB
 20 A
 1
 0
 0
 1
 20 A
 ECB
 EXISTING LOAD

 ECB
 20 A
 1
 0.18
 0
 1
 20 A
 ECB
 EXISTING LOAD

 NCB
 20 A
 1
 0.18
 0
 1
 20 A
 ECB
 EXISTING LOAD

 NCB
 20 A
 1
 0.18
 - 1
 - SPACE

 NCB
 20 A
 1
 0.18
 - 1
 - SPACE

 NCB
 20 A
 1
 0.18
 - 1
 - SPACE

 NCB
 - 1
 - - 1
 - SPACE

 NCB
 - 1
 - - 1
 - SPACE

 NCB
 - 1 EXISTING LOAD 3 EXISTING LOAD 5 EXISTING LOAD 7 EXISTING LOAD 9 RCPT 11 RCPT FIREFLY ROOM 125 13 RCPT FIREFLY ROOM 125 15 RCPT FIREFLY ROOM 125 17 RCPT FIREFLY ROOM 125 19 SPACE Total Load: 0.54 kVA 0.36 kVA Total Amps: 4.5 A 3 A LOAD CLASSIFICATION PANEL TOTALS CONNECTED LOAD N.E.C. DEMAND LOAD 0.9 kVA 0.9 kVA CONNECTED LOAD: 0.9 kVA N.E.C. DEMAND LOAD: 0.9 kVA CONNECTED CURRENT: 3.8 A N.E.C. DEMAND CURRENT: 3.8 A

Equipment 6.9 kVA 6.9 kVA		FED FROM: MAIN SIZE, TYPE: 200 A M PANEL BUS AMPS: 200 AMPS PANEL TYPE: BRANCH MANUFACTURER: SQUARE I				VC	RANCH DLTAGE S.C.C.R UNTING	: 120/240 : 10kA : SURFA	1 (Ø 3 W					
3 EXISTING LOAD	СКТ	LOAD DESCRIPTION	NOTE	OCPD	POLES	A	\	E	3	POLES	OCPD	NOTE	LOAD DES	SCRIPTION	СКТ
SEXISTING LOAD	1	EXISTING LOAD		20 A	1	0	0			1	20 A		EXISTING LOAD		2
Total Card Fire Price Fire Price Pri	3	EXISTING LOAD		20 A	1			0	0	1	20 A		EXISTING LOAD		4
SEXISTING LOAD	5	EXISTING LOAD		20 A	1	0	0			1	20 A		EXISTING LOAD		6
11	7	EXISTING LOAD		20 A	1			0	0	1	20 A		EXISTING LOAD		8
13					1	0	0			1					10
15	11	EXISTING LOAD			1			0	0	1	20 A		EXISTING LOAD		12
17					1	0	0			1					14
19					1			0	0	1					16
21					1	0	0			1					18
23								0	0	-					20
25 RCPT FIREFLY ROOM-1 125-1 NCB 20 A 1 0.36 0 0 1 20 A EXISTING LOAD					'	0	0								22
27 RCPT FIREFLY ROOM-1 125-1 NCB 20 A								0	0						24
29 Equipment ANNEX 130 NCB 20 A 1 0.5 0 0.18 0 1 20 A EXISTING LOAD						0.36	0			•					26
SPACE SPAC					·			0.54	0						28
33 Equipment KITCHEN 126 NCB 20 A 2 1.6 0 1 20 A EXISTING LOAD					·	0.5	0								30
SPACE SPAC		RCPT FIREFLY ROOM 125	NCB	20 A	1			0.18	0	•					32
37		Equipment KITCHEN 126	NCB	20 A	2	1.6	0				20 A				34
SPACE SPAC		Equipment (1) of ET (12)		2071	_			1.6					II.		36
SPACE 1		Equipment KITCHEN 126	NCB	20 A	2	1.6				'			II.		38
Total Load: 4.06 kVA 3.92 kVA				2071	_			1.6					II.		40
LOAD CLASSIFICATION CONNECTED LOAD N.E.C. DEMAND LOAD PANEL TOTALS Equipment 6.9 kVA 6.9 kVA CONNECTED LOAD: 7.98 kVA RCPT 1.08 kVA 1.08 kVA N.E.C. DEMAND LOAD: 7.98 kVA N.E.C. DEMAND LOAD: 7.98 kVA CONNECTED CURRENT: 33.3 A	41	SPACE			1					1			SPACE		42
LOAD CLASSIFICATION CONNECTED LOAD N.E.C. DEMAND LOAD PANEL TOTALS Equipment 6.9 kVA 6.9 kVA CONNECTED LOAD: 7.98 kVA RCPT 1.08 kVA 1.08 kVA CONNECTED LOAD: 7.98 kVA N.E.C. DEMAND LOAD: 7.98 kVA 7.98 kVA CONNECTED CURRENT: 33.3 A 33.3 A				Tot	al Load:	4.06	kVA								
Equipment 6.9 kVA 6.9 kVA CONNECTED LOAD: 7.98 kVA RCPT 1.08 kVA N.E.C. DEMAND LOAD: 7.98 kVA N.E.C. DEMAND LOAD: 7.98 kVA 7.98 kVA				Tota	al Amps:	33.8	8 A	32.	7 A						
Equipment 6.9 kVA 6.9 kVA CONNECTED LOAD: 7.98 kVA RCPT 1.08 kVA 1.08 kVA CONNECTED LOAD: 7.98 kVA N.E.C. DEMAND LOAD: 7.98 kVA CONNECTED CURRENT: 33.3 A	LOAD C	LASSIFICATION	CON	NECTE	D LOAD		N.	E.C. DEM	AND LO	AD			PANEL	TOTALS	
RCPT 1.08 kVA 1.08 kVA CONNECTED LOAD: 7.98 kVA N.E.C. DEMAND LOAD: 7.98 kVA CONNECTED CURRENT: 33.3 A															
N.E.C. DEMAND LOAD: 7.98 kVA CONNECTED CURRENT: 33.3 A													CONNECTED LOAD:	7.98 kVA	
CONNECTED CURRENT: 33.3 A												N			
						+									
N.L.O. DEMAND CORRENT. 33.3 A						+									
												14.2.0	DEMINIO CONTRACTO	33.3 A	
NOTES:	NOTES:														

	FED FROM: MDP/1 MAIN SIZE, TYPE: MLO PANEL BUS AMPS: 225 AMPS PANEL TYPE: BRANCH MANUFACTURER: SQUARE				VC MOI	CATION: SRANCH: DLTAGE: S.C.C.R: UNTING: PTIONS:	N 120/240 10kA	1 Ø	3 W					
СКТ	LOAD DESCRIPTION	NOTE	OCPD	POLES	,	A		3	POLES	OCPD	NOTE	LOAD DES	SCRIPTION	СК
1	EXISTING LOAD	ECB	20 A	1	0	0.18			1	20 A	NCB	RCPT VESTIBULE 122	1	2
3	EXISTING LOAD	ECB	20 A	1			0	0.54	1	20 A	NCB			4
5	EXISTING LOAD	ECB	20 A	1	0	0			1	20 A	ECB	EXISTING LOAD		6
7	EXISTING LOAD	ECB	30 A	2			0	0	1	20 A	ECB	EXISTING LOAD		8
9	EAISTING LUAD	ECB	30 A	2	0	0			1	20 A	ECB	EXISTING LOAD		10
11	EXISTING LOAD	ECB	30 A	2			0	0	1	20 A	ECB	EXISTING LOAD		12
13	LAISTING LOAD		30 A		0	0			1	20 A		EXISTING LOAD		14
15	EXISTING LOAD	ECB	20 A	1			0	0.54	1	20 A		RCPT FIREFLY ROOM	l-1 125-1	16
17	EXISTING LOAD	ECB	20 A	1	0	0			1	20 A		EXISTING LOAD		18
19	EXISTING LOAD	ECB	20 A	1			0	0	1	20 A		EXISTING LOAD		20
21	EXISTING LOAD	ECB	20 A	1	0	0			1	20 A		EXISTING LOAD		22
23	EXISTING LOAD	ECB	20 A	1			0	0	1	20 A		EXISTING LOAD		24
25	EXISTING LOAD	ECB	20 A	1	0	0			1	20 A		EXISTING LOAD		26
27	EXISTING LOAD	ECB	20 A	1			0	0	1	20 A		EXISTING LOAD		28
29	EXISTING LOAD	ECB	20 A	1	0	0			1	20 A		EXISTING LOAD		30
31	EXISTING LOAD	ECB	20 A	1			0	0	1	20 A		EXISTING LOAD		32
33	EXISTING LOAD	ECB	20 A	1	0	0			1	20 A		EXISTING LOAD		34
35	EXISTING LOAD	ECB	30 A	2			0	0	1	20 A		EXISTING LOAD		36
37			5571		0	0			1	20 A		EXISTING LOAD		38
39	EXISTING LOAD	ECB	30 A	2			0	0	1	20 A		EXISTING LOAD		40
41					0	0			1	20 A	ECB	EXISTING LOAD		42
				tal Load: al Amps:		kVA 5 A	1.08 9	kVA A						
OAD C	LASSIFICATION	CON	NECTE	D LOAD		N.E	.C. DEM	AND LOA	AD.			PANEL '	TOTALS	
RCPT			1.26 k				1.26							
												CONNECTED LOAD:	1.26 kVA	
											N	I.E.C. DEMAND LOAD:		
												NNECTED CURRENT:		
												DEMAND CURRENT:		
											0		5.57	

	FED FROM: MAIN SIZE, TYPE: MLO PANEL BUS AMPS: 225 AMPS PANEL TYPE: BRANCH MANUFACTURER: SQUARE D				V MC	DCATION: BRANCH: OLTAGE: S.C.C.R: DUNTING: DPTIONS:	120/240 10kA SURFA		ð 3 W					
						_		_						
CKT	LOAD DESCRIPTION	NOTE		POLES		A		В	POLES				SCRIPTION	СКТ
1	EXISTING LOAD		20 A	1	0	0			1	20 A		EXISTING LOAD		2
3	EXISTING LOAD		20 A	1	_	0.70	0	0	1	20 A		EXISTING LOAD	OM 102	4
5	EXISTING LOAD		20 A	1	0	0.72	^	_	1	20 A		RCPT PARK VIEW RO	OM 102	6
7	EXISTING LOAD		20 A	1	_		0	0	1	20 A		EXISTING LOAD		8
9	EXISTING LOAD		20 A	1	0	0	0	_	1	20 A		EXISTING LOAD		10
11	EXISTING LOAD		20 A	1	_		0	0	1	20 A		EXISTING LOAD		12
13	EXISTING LOAD EXISTING LOAD		20 A	1	0	0			1	20 A		EXISTING LOAD		14
15			20 A			0	0	0	1	20 A		EXISTING LOAD		16
17	EXISTING LOAD		20 A	1	0	0	^	0	1	20 A		EXISTING LOAD		18
19	EXISTING LOAD		20 A	1	0		0	0	1	20 A		EXISTING LOAD		20 22
21	EXISTING LOAD		30 A	2	0	0	0	0	1	20 A 20 A		EXISTING LOAD		24
25	EXISTING LOAD		20 A	1	0	0	0	0	1	20 A		EXISTING LOAD		26
27	EXISTING LOAD		20 A	1	0	0	0	0	1	20 A		EXISTING LOAD EXISTING LOAD		28
29	EXISTING LOAD EXISTING LOAD		20 A	1	0	0	U	0	1	20 A		EXISTING LOAD		30
31	EXISTING LOAD EXISTING LOAD		20 A	1	U	0	0	0	1	20 A		EXISTING LOAD		32
33	EXISTING LOAD		20 A	1	0	0	U	0	1	20 A		EXISTING LOAD		34
35	EXISTING LOAD		20 A	1	U	0	0	0	1	20 A		EXISTING LOAD		36
37	EXISTING LOAD		20 A	1	0	0	U	0	1	20 A		EXISTING LOAD		38
39			20 A	1	U		0	0.36	1	20 A		RCPT		40
41	EXISTING LOAD		30 A	2	0	0.18	<u> </u>	0.50	1	20 A		RCPT		42
<u> </u>			Tot	tal Load:	-	kVA	U 36	b kVA	'	207		ITOI I		72
				al Amps:		5 A		B A	_					
DAD C	LASSIFICATION	CON	NECTE	D LOAD		N.E	E.C. DEN	MAND LO	AD			PANEL ¹	TOTALS	
CPT			1.26 k	/A			1.26	6 kVA						
												CONNECTED LOAD:	1.26 kVA	
											N	N.E.C. DEMAND LOAD:	1.26 kVA	
												NNECTED CURRENT:		
												DEMAND CURRENT:		

ABBREVIATIONS: ACC = CIRCUIT BREAKER ACCESSORIES ECB = EXISTING CIRCUIT BREAKER FM = FLUSH MOUNTED PM = PAD MOUNTED

PM = PAD MOUNTED
SM = SURFACE MOUNTED
MLO = MAIN LUGS ONLY
MCB = MAIN CIRCUIT BREAKER
NCB = NEW CIRCUIT BREAKER
OPT = CIRCUIT BREAKER OPTIONS
SFP = SEE FLOOR PLAN

CIRCUIT BREAKER OPTIONS:

ALS = ALARM SWITCH

AXS = AUXILIARY SWITCH

EOP = ELECTRICAL OPERATOR

ST = SHUNT TRIP

UVT = UNDER VOLTAGE TRIP

CCB = CONTROLLABLE CIRCUIT BREAKER

SD = SEE ONELINE DIAGRAM

CIRCUIT TYPES: MC = MOLDED CASE

SS = SOLID STATE

CIRCUIT BREAKER ACCESSORIES:

AF = ARC FAULT CIRCUIT INTERRUPTER (RESIDENTIAL ONLY)

AR = ARC FLASH REDUCTION

CL = CURRENT LIMINTIN

FR = FULLY RATED (100%)

GE = GROUND FAULT PRÓTECTION (EQUIPMENT)
GP = GROUND FAULT PROTECTION (PERSONNEL)
GS = GROUND FAULT SENSING/ALARM
HC = HEATING, COOLING, AC, REFRIGERATION (HCAR)
HM = HIGH MAGNETIC (HID MOTORS)
MS = MOLDED CASE SWITCH

MP = MOTOR CIRCUIT PROTECTOR
L1 = LONG TIME/INSTANTANEOUS(LI)
L2 = LONG TIME/SHORT TIME/INST.(LSI)
L3 = LONG TIME/SHORT TIME/INST./GROUND FAULT TRIP(LSIG)
L4 = LONG TIME/SHORT TIME/INST./GROUND FAULT SENSING(LSIA)

SC = SYSTEM COMMUNICATION
SD = SYSTEM DIAGNOSTICS
SM = SYSTEM MONITORING
ZS = ZONE SELECTIVE INTERLOCKING

PANEL OPTIONS:

1 = 200% NEUTRAL

2 = ISOLATED GROUND BUS

3 = DUAL MAIN LUGS

4 = FEED THROUGH LUGS

PANEL TYPES:

P = POWER PANEL CONSTRUCTION
B = BRANCH PANEL CONSTRUCTION
L = LOAD CENTER CONSTRUCTION
CB = CONTROLLABLE BRANCH PANEL

*REFER TO ONE-LINE DIAGRAM GENERAL NOTES FOR ADDITIONAL INFORMATION ON AIC RATING.

301 South Blount Street, Suite 101 - Madison, WI 53703 Phone: 414.778.1700 / Fax: 414.778.2360 / r-d@ringdu.com RD Project Number: 223003.00

Revisions

CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. CITY OF WAUWATOSA

Sheet Title

12/22/2023

ELECTRICAL SCHEDULES

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Sheet No.

3 1:52:49 PM

Mathematical Math		FIXTURE SCHEDULE			LIGHT SOL	URCE				BALLASTS/DRI	VERS	INPUT	V/01 T	BAOLINIT	SURFACE	FIXTURE	FIXTURE SPECIFICATION AND ACCEPTABLE MANUFACTURERS	OPTIONS	SEE
Mathematical Control			TYPE	NO.		WATTS	К	CRI (MIN.)	TYPE	CONTROL	CIRCUITS	WATTS	VOLT	MOUNT	TYPE	DEPTH		OPTIONS	NOTE
March Marc			LED	-	DELIVERED	39	3500	80	DR	DM10	1	39	UNV	R	LG	<4"		1	1C
March 1985		All DIA DOMANI IOLIT			2000														
March 1	Α	50 DEG DISTRIBUTION WHITE BEZEL & WHITE TRIM	LED	-	DELIVERED LUMENS	16	3500	80	DR	DM1	1	16	UNV	R	V	<5"	WH-WH-NC-UNV-DIM10		1D
Property of the content of the con	3	WALL WASH DISTRIBUTION WHITE BEZEL & WHITE TRIM	LED	-	DELIVERED LUMENS	16	3500	80	DR	DM1	1	16	UNV	R	V	<5"	WH-WH-NC-UNV-DIM10		1D
Part)	40 DEG DISTRIBUTION	LED	-	DELIVERED LUMENS	9	3500	80	DR	DM1	1	9	UNV	R	V	<6"	DIM10-NC-*FINISH*		1D
Mathematical	D	DECORATIVE DROP RING	LED	-	DELIVERED LUMENS	16	3500	80	DR	DM1	1	16	UNV	R	V	<6"	WH-NC-UNV-DIM10		1D
Martin	<u> </u>	65 DEG DISTRIBUTION	LED	-	DELIVERED	12	3500	80	DR	DM1	1	12	UNV	R	V	<5"	WH-WH-NC-UNV-DIM10		1D
March Marc		4' CLOSET LIGHT			2500												COLUMBIA MPS-4-35-XW-CP-W-E-U-ODPG		
Part	-	LENSED SHIELDING	LED	-	DELIVERED	18	3500	80	DR	SW	1	18	UNV	S	W	-		1,55	1C
Second Control Contr					1250 DN / 1350 UP	11 W DN /						11 W DN /					LITECONTROL 4L-P-ID-LPA-*LENGTH*-08-SOF-		
Margine Marg		SOFT DIFFUSE LENSING 5" WIDE LINEAR SUSPENDED		-	LUMENS PER FT. 1000 DN / 1350 UP	PER FT. 8 W DN/					2	PER FT. 8 W DN/				-	*FINISH*-35K9-I135-D125-D01-2C- UNV-*SUSPENSION*-W2-L1 LITECONTROL 4L-P-ID-LPA-*LENGTH*-08-SOF-		11, 2, 3, 4, 5,
March Marc			LED	-			3500	80	DR	DM1	2		UNV	SUSP	WD	-	UNV-*SUSPENSION*-W2-L1		11, 2, 3, 4, 5,
March Marc	.	DIRECT DISTRIBUTION	LED	-	DELIVERED	110	3500	80	DR	DM1	1	110	UNV	SUSP	DW	-	ALW MR1.5/TS-D6-SS-LOW-80-3500K-V01- LENS-N-N-*FINISH*-UNV-N	1,28,36,37,58	11
Procession Process P	3	8' DIA x 1.5" W RING PENDANT DIRECT DISTRIBUTION	LED	-	9000 DELIVERED	147	3500	80	DR	DM1	1	147	UNV	SUSP	DW	-	LENS-N-N-*FINISH*-UNV-N		11
March Marc		DIFFUSED ACRYLIC SHIELDING			LUMENS														
STATE OF CHARGE AND A STATE OF CHARGE AND		DIRECT DISTRIBUTION	LED	-	DELIVERED	54	3500	80	DR	DM1	1	54	UNV	S	DW	-	LENS-N-N-*FINISH*-UNV-N		11
March Marc			150			47	3500	00	DD	FIV	1	47	420	6	TDACK		BRUCK GX15-15LM-35K-90-20D-120-ELV-		15
Part	-	20 DEG DISTRIBUTION LINE VOLTAGE TRACK	LED	-		17	3500	90	DR	ELV	1	17	120	S		-	BRUCK ECO H TRACK		1E
MINISTRATION 10		SINGLE CIRCUIT	-	-	•	-	-	-	-		1	-	120	S	DW	-			1E
RESPICATION SECTION 2 AS THE ADMINISTRATIVE PROJUCTION FOR ADMINISTRATIVE PROJUCTION AND ACCESSIONES REFERRICED FTHE COLUMN TITLED SPITONS. PROJUCTION COLUMN TO ACCESSIONES AND ACCESSIONES REFERRICED FTHE COLUMN TITLED SPITONS. PROJUCTION COLUMN TO ACCESSIONES AND ACCESSIONES REFERRICED FTHE COLUMN TITLED SPITONS. PROJUCTION COLUMN TO ACCESSIONES AND ACCESSIONES REFERRICED FTHE COLUMN TITLED SPITONS. PROJUCTION C			LED	-	IN UNIT	3	-	-	-	-	-	3	UNV	S	V	-	LITHONIA LQM-S-3-R-MVOLT	61,62	1K
Control Cont																			
1. 0. 0. 0. 0. 0. 0. 0.	ACT	URERS AS ACCEPTABLE SHALL MEET ALL REQUIREMEN											UMN TITLED "C	OPTIONS".					
Dec 1.00 Marka 0-100 1.00 1	BL BT CAB CL	= BI-LEVEL SWITCHING = BLUETOOTH = UNDERCABINET = CLEAR	DR DW ELV EM	= DRIVER = DRYWAL = ELECTR = EMERGE	L ONIC LOW VOLTAGE DII		GRD H HAL HBF	D = GRADE H = HID = HALOGEN = HIGH BALI	LAST FACTO			PD POE PL PS	= PENDANT = POWER O' = PLASTER = PULSE STA			SUSP SW T TW	P = SUSPENDED T = SWITCHING T = CERAMIC/GLASS TILE T = TUNABLE WHITE LED		
1 POST PAINTED FINSH 2 FERRESS DALUMINUM DOOR FRAME 3 FERRESS DALUMINUM DOOR FRAME 4 FERRESS DALUMINUM DOOR FRAME 5 FERRESS DALUMINUM DOOR FRAME 6 FERRISS WITH HEIGH DOOR 6 FERRISS WITH HEIGH DOOR 6 FERRESS DALUMINUM DOOR FRAME 6 FERRESS DALUMINUM	DM0 DM1 DM5 DM10	= LED DIMMING 0-10V, 0 -100% = LED DIMMING 0-10V, 1 -100% = LED DIMMING 0-10V, 5 -100% = LED DIMMING 0-10V, 10 -100%	ET F FD1	= ELECTRON = FLUORE = FLUORE	ONIC BALLAST SCENT SCENT DIMMING 1-100%		LBF LG MLV	= LOW BALL = LAY-IN GR = MAGNETIO	AST FACTO RID C LOW VOLT	AGE DIMMING		RGB RM S SPEC	= RED, GREI = REMOTE = SURFACE = SPECIAL	,		W WD WR	## = WALL MOUNTED = WOOD = WIRELESS		
5 STAINLESS STEEL TRIM AND DOOR FRAME 5 FURNISH WITH DOOR 5 FURNISH WITH DUST COVER 46 FURNISH WITH FEROFATED DIFFUSER 46 FURNISH WITH FEROFATED DIFFUSER 46 FURNISH WITH FEROFATED DIFFUSER 47 FURNISH WITH SOFTENDING LONG AND ADDRESS OF FURNISH WITH FORTALD ADDRESS OF FURNISH WITH FURNIS	1 2	= POST PAINTED FINISH = REGRESSED ALUMINUM DOOR FRAME			2	22 = FURNISH	WITH WIRE	E GUARD	PABILITY			42	= FURNISH \	WITH SYMMETR	RICAL REFLECT	OR	62 = FURNISH WITH FIELD ADJUSTABLE CHEV	RONS	
10 PEPS RATING 30 PEPURISH IN CUSTOM CONFIGURATION-REFER TO PLANS 50 PERS AT ING 50 PEPURISH IN CUSTOM CONFIGURATION-REFER TO PLANS 50 PEPURISH WITH LINEAR SPREAD LENS 50 PEPURISH WITH SPREA	5 6 7 8	= STAINLESS STEEL TRIM AND DOOR FRAME = FURNISH WITH SPRING LOADED LATCHES = FURNISH WITH HINGED DOOR = DAMP LOCATION CONSTRUCTION	S		2 2 2	25 = FURNISH 26 = FURNISH 27 = CUSTOM 28 = STANDAR	WITH SOLI WITH DUS FINISH - SE RD FINISH -	ID FRONT T COVER ELECTION TBD	BD			45 46 47 48	= FURNISH \\ = FURNISH \\ = FURNISH \\ = FURNISH \	VITH LOUVER VITH PERFORA VITH EGGCRAT VITH SOFTENIN	TED DIFFUSER E LOUVER IG LENS		65 = FURNISH WITH INTEGRAL HIGH CAPACITY 66 = FURNISH WITH SELF DIAGNOSTICS 67 = FURNISH WITH AUXILIARY EMERGENCY B 68 = SPARE		ADS)
15 = ADA COMPLIANT 55 = FURNISH WITH SWIVEL CANOPY 55 = FURNISH WITH INTEGRAL OCC. SENSOR 75 = FURNISH WITH LOW VOLTAGE CONTROL (LVC) 16 = DOUBLE GASKETED-LENS TO TRIM TO CEILING 56 = FURNISH WITH ADJUSTABLE AIRCRAFT CABLE MOUNTING 56 = FURNISH WITH INTEGRAL DAYLIGHT SENSOR 76 = SPARE	10 11 12	= IP65 RATING = IP66 RATING = IP67 RATING			3	30 = FURNISH 31 = SPARE 32 = FURNISH	IN CUSTON	M CONFIGURA VER OVER AIRO	TION-REFER			50 51 52	= FURNISH \ = FURNISH \ = SPARE	WITH LINEAR SI	PREAD LENS		70 = SPARE 71 = FURNISH WITH ANTI-MICROBIAL FINISH 72 = CERTIFIED FOR MIL-STD461F	(ADVANCE RIF-1) FOR EACH [DRIVER
18 = FURNISH WITH TAMPER RESISTANT HARDWARE 38 = FURNISH WITH MANUFACTURER'S CUSTOM JUNCTION BOX 58 = FURNISH WITH REMOTE DRIVER 78 = SPARE	15 16 17	= ADA COMPLIANT = DOUBLE GASKETED-LENS TO TRIM TO CEILING = TRIPLE GASKETED-LENS TO DOOR TO HOUSING TO) CEILING		3 3 3	34 = FURNISH 35 = FURNISH 36 = FURNISH 37 = FURNISH	WITH RIGII WITH SWIN WITH ADJU	D STEM MOUN VEL CANOPY USTABLE AIRC USTABLE MOU	TING RAFT CABLE NTING HARE	OWARE		55 56 57	= FURNISH \ = FURNISH \ = FURNISH \	WITH INTEGRAL WITH INTEGRAL WITH INTEGRAL	. OCC. SENSOR . DAYLIGHT SEI . PHOTOCELL		74 = FURNISH WITH ACRYLIC LENS WITH INTE 75 = FURNISH WITH LOW VOLTAGE CONTROL 76 = SPARE 77 = SPARE	GRAL RFI SHIELDING	

60 = FURNISH QUANTITY OF DRIVERS AS REQUIRED

80 = SPARE

GENERAL NOTES:

20 = SPARE

1. VERIFY CEILING T-BAR WIDTH (I.E. 9/16", 15/16", 1.5") WITH THE ARCHITECT/INTERIORS SPECIFICATION PRIOR TO ORDERING LAY-IN FIXTURES.

2. IN ALL INSULATED OR FIRE RATED CEILINGS, THE EC SHALL BE RESPONSIBLE FOR THE PROPER TENTING (OR FIRE BOXING) OF THE RECESSED FIXTURES. FOR PREFAB PRODUCTS REFER TO TENMAT OR SPECIALTY PRODUCTS AND INSULATION.

40 = FURNISH WITH CORD MOUNTING

3. VERIFY DIMMING BALLAST / DRIVER COMPATIBILITY WITH DIMMING CONTROL.

4. REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT LOCATION AND MOUNTING HEIGHT.

5. TO MEET SPECIFIED DELIVERED LUMEN PACKAGE PROVIDE PROGRAMMED DRIVER AS REQUIRED.

6. FIXTURE PERFORMANCE TOLERANCES: CCT +/- 200 DEGREES; DELIVERED LUMENS +/- 5%; ENERGY CONSUMPTION +/- 5%; BEAM SPREAD DISTRIBUTION +/- 5 DEGREES AND AS OUTLINED IN 26 50 00.

7. IF SUBMITTING A FIXTURE FOR APPROVAL AS AN EQUAL, PROVIDE CUT SHEET AND IES PHOTOMETRIC FILE PRIOR TO BIDDING. A WORKING SAMPLE OF THE FIXTURE IS REQUIRED FOR APPROVAL BY THE A/E.

LIGHT FIXTURE SCHEDULE CONTINUED ON SHEET E603

Kahler Slater



CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

2/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No.

223010.00 WAU

oot Titlo

ELECTRICAL SCHEDULES

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Sheet No.

19 I KIBU I EI	D LOVY VOL	IAGE SV	VITCH STATION SCHED	OLL	
LOCATION	DESIGNATION	BUTTON	ZONES CONTROLLED	DESCRIPTIONS	SEE NOTE
			D-1, D-2	KITCHEN	1,2
			D-3	COUNTER DOWNLIGHTS	1,2
FIREFLY ROOM 125	1.01	5	D-4, D-5, D-6, D-7, D-8	CURLING CLUB	1,2
			D-4, D-5, D-6, D-7, D-8	SENIOR CENTER	1,2
			D-4, D-5, D-6, D-7, D-8	EVENT	1,2
			D-1, D-2	KITCHEN	1,2
			D-3	COUNTER DOWNLIGHTS	1,2
FIREFLY ROOM 125	1.02	5	D-4, D-5, D-6, D-7, D-8	CURLING CLUB	1,2
			D-4, D-5, D-6, D-7, D-8	SENIOR CENTER	1,2
			D-4, D-5, D-6, D-7, D-8	EVENT	1,2
			D-1, D-2	KITCHEN	1,2
			D-3	COUNTER DOWNLIGHTS	1,2
FIREFLY ROOM 125	1.03	5	D-4, D-5, D-6, D-7, D-8	CURLING CLUB	1,2
			D-4, D-5, D-6, D-7, D-8	SENIOR CENTER	1,2
			D-4, D-5, D-6, D-7, D-8	EVENT	1,2
			D-9, D-10, D-11, D-12, D-13, D-14, D-15, D-16, D-17, D-18	CURLING	1,2
TOSA ROOM 106	1.04	3	D-9, D-10, D-11, D-12, D-13, D-14, D-15, D-16, D-17, D-18	DAYTIME EVENT	1,2
			D-9, D-10, D-11, D-12, D-13, D-14, D-15, D-16, D-17, D-18	NIGHTTIME EVENT	1,2
			D-9, D-10, D-11, D-12, D-13, D-14, D-15, D-16, D-17, D-18	CURLING	1,2
TOSA ROOM 106	1.05	3	D-9, D-10, D-11, D-12, D-13, D-14, D-15, D-16, D-17, D-18	DAYTIME EVENT	1,2
			D-9, D-10, D-11, D-12, D-13, D-14, D-15, D-16, D-17, D-18	NIGHTTIME EVENT	1,2
			D-19, D-20, D-21, D-22, D-23	DAYTIME EVENT	1,2
RIVER ROOM 206	2.01	3	D-19, D-20, D-21, D-22, D-23	NIGHTTIME EVENT	1,2
			D-19, D-20, D-21, D-22, D-23	MEETING	1,2
			D-19, D-20, D-21, D-22, D-23	DAYTIME EVENT	1,2
RIVER ROOM 206	2.02	3	D-19, D-20, D-21, D-22, D-23	NIGHTTIME EVENT	1,2
			D-19, D-20, D-21, D-22, D-23	MEETING	1,2
			D-19, D-20, D-21, D-22, D-23	DAYTIME EVENT	1,2
RIVER ROOM 206	2.03	3	D-19, D-20, D-21, D-22, D-23	NIGHTTIME EVENT	1,2
			D-19, D-20, D-21, D-22, D-23	MEETING	1,2

DISTRIBUTED LOW VOLTAGE SWITCH STATION GENERAL NOTES:

- 1. REFER TO DISTRIBUTED IN-ROOM CONTROL SCHEDULE FOR MORE INFORMATION.
- 2. CONFIRM ALL SCENES/GROUPS WITH ARCHITECT AND OWNER DURING ON SITE PROGRAMMING.
- 3. DESCRIPTIONS ARE SUGGESTED BUTTON LABELS, OWNER TO CONFIRM SWITCH LABELS PRIOR TO ORDER RELEASE.

DISTRIBUTED LOW VOLTAGE SWITCH STATION SCHEDULE NOTES:

1. PROGRAM SWITCH BUTTON AS A PRESET SCENE, WHICH MAY INCLUDE MULTIPLE ZONES AND DIFFERENT DIMMED LEVELS OF THOSE ZONES.

SEQUENCE OF OPERATIONS

1. REFER TO PLANS FOR APPLICATION OF SEQUENCE OF OPERATIONS (SO#) PER ROOM TYPES. PROVIDE DEVICES TO SUPPORT THE SO#.

- 2. IN SPACES THAT DO NOT HAVE A SO# APPLIED, REFER TO PLANS AND SCHEDULES TO IDENTIFY CONTROLS APPLICATION. PROVIDE DEVICES TO SUPPORT THE APPLICATION.
- 3. WHERE INDICATED ON PLAN PROVIDE INTERFACE FOR CONNECTION TO MECHANICAL VAV BOXES. STATUS OF LIGHTING SHALL NOT AFFECT OPEN/CLOSE OF INTERFACE TO HVAC SYSTEM.
- 4. CONTROL EMERGENCY FED LIGHTING FIXTURES WITH NORMALLY FED FIXTURES. UTILIZE UL924 LISTED EMERGENCY CONTROL DEVICE(S) TO FORCE EMERGENCY FED LIGHTING TO 100% OUTPUT TO ACHIEVE EGRESS ILLUMINATION REQUIREMENTS. REFER TO PLANS FOR DESIGNATED
- 5. PROGRAM HIGH END TRIM OF EACH LIGHTING LOAD AT 80% OUTPUT AT THE ROOM / RELAY LEVEL. IDENTIFY IN PROGRAMMING MANUAL, ALL ZONES WITH HIGH END TRIM CAP AND METHOD FOR OWNER ADJUSTMENT AT FUTURE DATE.
- 6. BUILDING OPERATING HOURS ARE 5AM 8PM, 7 DAYS PER WEEK.

CONTROL STRATEGIES:

· LIGHTING IS MANUAL ON FROM DIGITAL WALL SWITCH/DIMMER(S). MANUAL CONTROL ALLOWS OCCUPANT ON/OFF, DIMMING, AND/OR SCENE PRESET CONTROL AS DESIGNED/SCHEDULED. AUTOMATIC SHÙTOFF FROM VACANCY SENSORS AFTER 20 MINUTES OF NO ACTIVITY.

- · LIGHTING IS MANUAL ON FROM DIGITAL WALL SWITCH/DIMMER(S). MANUAL CONTROL ALLOWS OCCUPANT ON/OFF, DIMMING, AND/OR SCENE PRESET CONTROL AS DESIGNED/SCHEDULED. AUTOMATIC SHÙTOFF FROM VACANCY SENSORS AFTER 20 MINUTES OF NO ACTIVITY.
- 2. UPON ACTIVATION OF LIGHTING (ON OR PRESET), AUTOMATIC DIMMING FROM DAYLIGHT SENSORS TAKES PRECEDENCE TO CONTROL FIXTURES IN DAYLIGHT ZONE. SENSORS PROVIDE CONTINUOUS DIMMING TO ACHIEVE DESIGNATED ILLUMINATION VALUES LISTED BELOW. DAYLIGHT SENSORS DO NOT TURN FIXTURES OFF WHEN LOW THRESHOLD IS REACHED. DAYLIGHT SENSOR ESTABLISHES HIGH TRIM, MANUAL DIMMING CAN CONTROL LIGHTS TO A LOWER DIMMED THRESHOLD OR OFF.
 - A. CORRIDORS: 15FC AT FLOOR PLANE
 - B. OFFICES, CLASSROOMS, RECEPTIONS DESKS, WAITING ROOMS: 30FC AT DESK HEIGHT. C. EXAM ROOMS: 50-75FC AT TABLE.

LIGHT FIXTURE SCHEDULE CONTINUED FROM SHEET E602

LIGHT FIXTURE SCHEDULE NOTES:

1. MANUFACTURERS, PRODUCTS, AND DESCRIPTIONS LISTED IN THE LIGHTING FIXTURE SCHEDULE ARE THE BASIS OF DESIGN SPECIFICATION FOR EACH FIXTURE TYPE. EQUAL PRODUCTS WILL BE ENTERTAINED UNLESS OTHERWISE NOTED. ALL PROPOSED EQUAL PRODUCTS ARE REQUIRED TO MEET OR EXCEED ALL OF THE SPECIFICATION REQUIREMENTS LISTED IN THE LIGHTING FIXTURE SCHEDULE INCLUDING BUT NOT LIMITED TO: PRODUCT GRADE, LIGHT SOURCE TECHNOLOGY, CONTROL TECHNOLOGY, OPTICAL PERFORMANCE (DELIVERED LUMENS OR CBCP), DISTRIBUTION, FIXTURE ACCESSORIES, CONSTRUCTION, DIMENSIONS, MOUNTING, FINISH, ENERGY PERFORMANCE, AND LISTINGS/RATINGS.

THE SPECIFIER HAS EVALUATED ALL OF THE MANUFACTURERS LISTED BELOW AND CONSIDERS THESE MANUFACTURERS TO BE OF A QUALITY THAT MEET GENERAL SPECIFICATION REQUIREMENTS FOR THE CATEGORY OF PRODUCT UNDER WHICH THEY ARE LISTED. ALTHOUGH MANUFACTURERS ARE LISTED BELOW IT DOES NOT ENSURE THAT THEY HAVE PRODUCTS THAT MEET ALL OF THE SPECIFICATION REQUIREMENTS FOR EACH FIXTURE TYPE. IT MEANS THAT THESE MANUFACTURERS HAVE ALREADY BEEN EVALUATED AND HAVE PRODUCTS THAT SHALL BE REVIEWED FOR APPLICABILITY AS EQUALS. MANUFACTURERS THAT ARE NOT LISTED BELOW WILL REQUIRE A WORKING SAMPLE FOR SPECIFIER TO REVIEW IN ORDER TO BE EVALUATED FOR APPLICABILITY.

THE BURDEN OF MEETING THE BASIS OF DESIGN SPECIFICATION IS ON THE DISTRIBUTOR QUOTING THE PROJECT. DETERMINATION OF EQUIVALENCY IS THE RESPONSIBILITY OF THE SPECIFIER. EVEN IF A PROPOSED EQUAL PRODUCT IS FROM ONE OF THE MANUFACTURERS LISTED BELOW, IF IT DOES NOT MEET THE BASIS OF DESIGN SPECIFICATION REQUIREMENTS THEN IT WILL BE REJECTED. THERE SHALL BE NO ADDITIONAL COST ASSOCIATED WITH REJECTION OF A FIXTURE NOT DEEMED EQUIVALENT BY THE SPECIFIER.

- A. ARCHITECTURAL GRADE TROFFERS: AXIS, FOCAL POINT, LEDALITE, LITECONTROL
- B. SPECIFICATION GRADE TROFFERS: CORONET, FINELITE, MARK ARCHITECTURAL LIGHTING, PRUDENTIAL
- C. COMMERCIAL TROFFERS AND WHITEGOODS: COLUMBIA, CREE, DAYBRITE, DAY-O-LITE, GE CURRENT, HE WILLIAMS, LITHONIA, METALUX, MERCURY, PMC
- D. ARCHITECTURAL GRADE DOWNLIGHTS / TRACK: EDISON PRICE, GOTHAM INCITO, IGUZZINI, INTENSE GRAVITY, KURT VERSEN, LEDRA ALPHABET NU PRO, LUCIFER, LUMENPULSE, PRESCOLITE LITEISTRY, TECH ELEMENT, USA ILLUMINATION(COMPLETE)
- E. SPECIFICATION GRADE DOWNLIGHTS / TRACK: 3G, BRUCK, CON-TECH, FOCAL POINT, GOTHAM EVO, HE WILLIAMS, INTENSE MX, JUNO-INDY, LEDRA ALPHABET NU ESSENTIALS, LIGHTOLIER (CALCULITE), NORA, PORTFOLIO, PRESCOLITE, SPECTRUM, TECH ELEMENT PRO, USA ILLUMINATION (BASIC) F. COMMERCIAL GRADE DOWNLIGHTS / TRACK: CONTRAST, CREE, DMF, GE CURRENT, HALO COMMERCIAL, JUNO, INTERLUX, LIGHTHEADED, LIGHTOLIER (LYTEPROFILE), LITON, LITHONIA, PEACHTREE, PRESCOLITE LITEFRAME COMMERCIAL, TECH ENTRA, USA ILLUMINATION(PRIMARY), VANTAGE
- G. MICROCELL DOWNLIGHTS: 3G, ALPHABET, ARTEMIDE, IGUZZINI, LED LINEAR, MODULAR LIGHTING, USA ILLUMINATION

DISTRIBUTED IN-ROOM CONTROL SCHEDULE

- H. SPECIFICATION LINEAR CUSTOM CONFIGURATIONS: ALIGHT, CORONET, FINELITE, FOCAL POINT, GAMMALUX, LUMENWERX I. SPECIFICATION LINEAR: A-LIGHT, ARCHITECTURAL LIGHTING WORKS, AXIS, CORONET, FINELITE, FOCAL POINT, GAMMALUX, HE WILLIAMS, LEDALITE, LITECONTROL, LUMINII, LUMIUM, MARK ARCHITECTURAL LIGHTING, MERCURY, NEORAY, PEERLESS, PRUDENTIAL, STARTEK, XAL
- J. COMMERCIAL GRADE LINEAR: CORELITE, DAY-O-LIGHT, LUMAX, NULITE, PMC K. EXIT AND EMERGENCY: BIG BEAM, CHLORIDE, DUAL-LITE, EMERGI-LITE, EVENLITE, HE WILLIAMS, ISOLITE, LITHONIA, MULE, SURE-LITES, UTOPIA
- 2. PROVIDE WITH CONTINUOUS ILLUMINATION ENTIRE LENGTH OF FIXTURE. FASTEN LENSING SO THAT AT NO POINT ARE LED NODES VISIBLE. FIXTURE TO ACCOMODATE LENGTHS TO 1/8" TOLERANCE. SHIP FIXTURES, IN ALL LENGTHS UP TO 8FEET LONG, AS A SINGLE EXTRUDED ALUMINIUM
- HOUSING WITH SINGLE LENS. INCLUDE PHYSICAL DEMONSTRATION OF MANUFACTURER'S FIELD JOINING PROCESS, FIT AND FINISH FOR FINAL APPROVAL, AS REQUESTED DURING PRIOR APPROVAL AND/OR SUBMITTAL PROCESS. 3. PROVIDE A WIDESPREAD BATWING DISTRIBUTION FOR INDIRECT DISTRIBUTION OF FIXTURE.
- 4. FORMAL FACTORY DRAWINGS ARE REQUIRED DURING SHOP DRAWING SUBMITTAL PROCESS. FACTORY DRAWINGS TO INCLUDE, BUT NOT LIMITED TO, OVERALL LAYOUT REPRESENTING LENGTHS, CONNECTIONS, MOUNTING HARDWARE, ETC. FOR EACH LENGTH AND CONFIGURATION OF TYPE. FINAL PRODUCT APPROVAL MAY BE CONTINGENT ON A/E REVIEW OF ASSOCIATED ARCHITECTRAL MATERIALS AND APPROVED ARCHITECTURAL PRODUCT SUBMITTALS, I.E. SPECIALTY CASEWORK OR CEILING DRAWINGS. THIS PRODUCT INTEGRATION PROCESS MAY ADD TO OVERALL PRODUCT REVIEW TIME.
- ⁵ PROVIDE DRIVER(S) TO CONTROL DIRECT AND INDIRECT DISTRIBUTIONS SEPARATELY.
- 6 WHERE CONTINUOUS FIXTURE IS SHOWN ON PLANS TO HAVE 4' SEGMENT(S) WIRED TO LIFE SAFETY CIRCUIT AND THE REMAINDER OF THE FIXTURE WIRED TO NORMAL CIRCUIT, PROVIDE WITH 2-CIRCUIT FEED: ONE FOR LIFE SAFETY CIRCUIT, ONE FOR NORMAL
- CIRCUIT. DEDICATE LIFE SAFETY CIRCUIT TO DIRECT DISTRIBUTION OF FIXTURE. CONSTRUCT FIXTURE SUCH THAT NORMAL AND LIFE SAFETY WIRING INSIDE FIXTURE ARE PHYSICALLY SEGREGATED WITHIN THE LUMINAIRE IN ACCORANCE WITH NEC 700. SEGMENT OF FIXTURE WIRED TO EMERGENCY WILL BE CONTROLLED VIA UL924 EMERGENCY CONTROL DEVICE. SEE PLANS FOR FURTHER INFORMATION.

ZONE CIRCUIT LOAD BRANCH CONTROL LOW VOLTAGE OCCUPANCY DAYLIGHT TIMECLOCK						SEQUENCE					
ZONE	CIRCUIT	LOAD	BRANCH		CONTROL	LOW VOLTAGE	OCCUPANCY / VACANCY	DAYLIGHT	TIMECLOCK	OF	SEE
DESIGNATION	CONTROLLED	DESCRIPTION	SOURCE	VOLTAGE	TYPE	SWITCH	SENSOR	SENSOR		OPERATIONS	NOTE
D-1	SEE NOTE	KITCHEN TROFFERS	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-2	SEE NOTE	KITCHEN TROFFERS DAYLIGHT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	DIM	SWEEP OFF	SO#1D	
D-3	SEE NOTE	KITCHEN DOWNLIGHTS	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-4	SEE NOTE	FIREFLY DOWNLIGHTS DAYLIGHT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	DIM	SWEEP OFF	SO#1D	
D-5	SEE NOTE	FIREFLY SOUTH PENDANTS	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-6	SEE NOTE	FIREFLY DOWNLIGHTS	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	1
D-7	SEE NOTE	FIREFLY NORTH PENDANTS	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-8	SEE NOTE	FIREFLY TRACK	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-9	SEE NOTE	TOSA ROOM WEST PERIMETER INDIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-10	SEE NOTE	TOSA ROOM WEST PERIMETER DIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-11	SEE NOTE	TOSA ROOM WEST INDIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-12	SEE NOTE	TOSA ROOM WEST DIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	1
D-13	SEE NOTE	TOSA ROOM CENTER INDIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-14	SEE NOTE	TOSA ROOM CENTER DIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-15	SEE NOTE	TOSA ROOM EAST INDIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-16	SEE NOTE	TOSA ROOM EAST DIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	1
D-17	SEE NOTE	TOSA ROOM EAST PERIMETER INDIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-18	SEE NOTE	TOSA ROOM PERIMETER DIRECT	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-19	SEE NOTE	RIVER ROOM SOUTH LINEARS	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	DIM	SWEEP OFF	SO#1D	1
D-20	SEE NOTE	RIVER ROOM CENTER LINEARS	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	-	SWEEP OFF	SO#1	
D-21	SEE NOTE	RIVER ROOM NORTH LINEARS	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	DIM	SWEEP OFF	SO#1D	1
D-22	SEE NOTE	RIVER ROOM BAR LINEARS	N	120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF	DIM	SWEEP OFF	SO#1D	
	SEE NOTE	RIVER ROOM RESTROOM ALCOVE		120	0-10V	ON / OFF / PRESET	MANUAL ON/ AUTO OFF		SWEEP OFF	SO#1D	
	DESIGNATION D-1 D-2 D-3 D-4 D-5 D-6 D-7 D-8 D-9 D-10 D-11 D-12 D-13 D-14 D-15 D-16 D-17 D-18 D-19 D-19 D-20 D-21	DESIGNATION CONTROLLED D-1 SEE NOTE D-2 SEE NOTE D-3 SEE NOTE D-4 SEE NOTE D-5 SEE NOTE D-6 SEE NOTE D-7 SEE NOTE D-9 SEE NOTE D-10 SEE NOTE D-11 SEE NOTE D-12 SEE NOTE D-13 SEE NOTE D-14 SEE NOTE D-15 SEE NOTE D-16 SEE NOTE D-17 SEE NOTE D-18 SEE NOTE D-19 SEE NOTE D-20 SEE NOTE D-21 SEE NOTE D-22 SEE NOTE	DESIGNATION CONTROLLED DESCRIPTION D-1 SEE NOTE KITCHEN TROFFERS D-2 SEE NOTE KITCHEN TROFFERS DAYLIGHT D-3 SEE NOTE KITCHEN DOWNLIGHTS D-4 SEE NOTE FIREFLY DOWNLIGHTS DAYLIGHT D-5 SEE NOTE FIREFLY DOWNLIGHTS DAYLIGHT D-6 SEE NOTE FIREFLY NORTH PENDANTS D-7 SEE NOTE FIREFLY NORTH PENDANTS D-8 SEE NOTE FIREFLY TRACK D-9 SEE NOTE TOSA ROOM WEST PERIMETER INDIRECT D-10 SEE NOTE TOSA ROOM WEST PERIMETER DIRECT D-11 SEE NOTE TOSA ROOM WEST INDIRECT D-12 SEE NOTE TOSA ROOM WEST DERECT D-13 SEE NOTE TOSA ROOM CENTER INDIRECT D-14 SEE NOTE TOSA ROOM CENTER DIRECT D-15 SEE NOTE TOSA ROOM EAST INDIRECT D-16 SEE NOTE TOSA ROOM EAST DIRECT D-17 SEE NOTE TOSA ROOM EAST DIRECT D-18 SEE NOTE TOSA ROOM EAST DIRECT D-19 SEE NOTE RIVER ROOM SOUTH LINEARS D-20 SEE NOTE RIVER ROOM CENTER LINEARS D-21 SEE NOTE RIVER ROOM NORTH LINEARS D-22 SEE NOTE RIVER ROOM NORTH LINEARS	DESIGNATION CONTROLLED DESCRIPTION SOURCE D-1 SEE NOTE KITCHEN TROFFERS N D-2 SEE NOTE KITCHEN TROFFERS DAYLIGHT N D-3 SEE NOTE KITCHEN DOWNLIGHTS N D-4 SEE NOTE FIREFLY DOWNLIGHTS DAYLIGHT N D-5 SEE NOTE FIREFLY SOUTH PENDANTS N D-6 SEE NOTE FIREFLY DOWNLIGHTS N D-7 SEE NOTE FIREFLY TRACK N D-8 SEE NOTE FIREFLY TRACK N D-9 SEE NOTE TOSA ROOM WEST PERIMETER INDIRECT N D-10 SEE NOTE TOSA ROOM WEST INDIRECT N D-11 SEE NOTE TOSA ROOM WEST DIRECT N D-12 SEE NOTE TOSA ROOM CENTER INDIRECT N D-13 SEE NOTE TOSA ROOM CENTER DIRECT N D-14 SEE NOTE TOSA ROOM EAST INDIRECT N D-16 SEE NOTE TOSA ROOM EAST DIRECT N D-17	DESIGNATION CONTROLLED DESCRIPTION SOURCE VOLTAGE D-1 SEE NOTE KITCHEN TROFFERS N 120 D-2 SEE NOTE KITCHEN TROFFERS DAYLIGHT N 120 D-3 SEE NOTE KITCHEN DOWNLIGHTS N 120 D-4 SEE NOTE FIREFLY DOWNLIGHTS N 120 D-5 SEE NOTE FIREFLY SOUTH PENDANTS N 120 D-6 SEE NOTE FIREFLY NORTH PENDANTS N 120 D-7 SEE NOTE FIREFLY NORTH PENDANTS N 120 D-8 SEE NOTE FIREFLY TRACK N 120 D-9 SEE NOTE TOSA ROOM WEST PERIMETER INDIRECT N 120 D-10 SEE NOTE TOSA ROOM WEST PERIMETER DIRECT N 120 D-11 SEE NOTE TOSA ROOM WEST DIRECT N 120 D-12 SEE NOTE TOSA ROOM CENTER INDIRECT N 120 D-13 SEE NOTE TOSA ROOM CENTER DIRECT N 120<	DESIGNATION CONTROLLED DESCRIPTION SOURCE VOLTAGE TYPE D-1 SEE NOTE KITCHEN TROFFERS N 120 0-10V D-2 SEE NOTE KITCHEN TROFFERS DAYLIGHT N 120 0-10V D-3 SEE NOTE KITCHEN DOWNLIGHTS N 120 0-10V D-4 SEE NOTE FIREFLY DOWNLIGHTS N 120 0-10V D-5 SEE NOTE FIREFLY DOWNLIGHTS N 120 0-10V D-6 SEE NOTE FIREFLY DOWNLIGHTS N 120 0-10V D-7 SEE NOTE FIREFLY NORTH PENDANTS N 120 0-10V D-8 SEE NOTE FIREFLY TRACK N 120 0-10V D-9 SEE NOTE TOSA ROOM WEST PERIMETER INDIRECT N 120 0-10V D-10 SEE NOTE TOSA ROOM WEST DIRECT N 120 0-10V D-11 SEE NOTE TOSA ROOM WEST DIRECT N 120 0-10V D-13<	DESIGNATION CONTROLLED DESCRIPTION SOURCE VOLTAGE TYPE SWITCH D-1 SEE NOTE KITCHEN TROFFERS N 120 0-10V ON / OFF / PRESET D-2 SEE NOTE KITCHEN TROFFERS DAYLIGHT N 120 0-10V ON / OFF / PRESET D-3 SEE NOTE KITCHEN DOWNLIGHTS N 120 0-10V ON / OFF / PRESET D-4 SEE NOTE FIREFLY DOWNLIGHTS N 120 0-10V ON / OFF / PRESET D-5 SEE NOTE FIREFLY DOWNLIGHTS N 120 0-10V ON / OFF / PRESET D-6 SEE NOTE FIREFLY DOWNLIGHTS N 120 0-10V ON / OFF / PRESET D-7 SEE NOTE FIREFLY NORTH PENDANTS N 120 0-10V ON / OFF / PRESET D-8 SEE NOTE FIREFLY NORTH PENDANTS N 120 0-10V ON / OFF / PRESET D-9 SEE NOTE FIREFLY NORTH PENDANTS N 120 0-10V ON / OFF / PRESET D-10 </td <td> CONTROL CIRCUIT LOAD BRANCH SOURCE VOLTAGE TYPE SWITCH SENSOR </td> <td> Designation Controlled Description Source Voltage Type Switch Switch</td> <td> CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONVENTOR CORDINARY MACANCY CONTROL TIMECLOCK </td> <td> CONTINE CAPA CAPA</td>	CONTROL CIRCUIT LOAD BRANCH SOURCE VOLTAGE TYPE SWITCH SENSOR	Designation Controlled Description Source Voltage Type Switch Switch	CONTROL CONTROL CONTROL CONTROL CONTROL CONTROL CONVENTOR CORDINARY MACANCY CONTROL TIMECLOCK	CONTINE CAPA CAPA

BRANCH SOURCES: N = NORMAL E1 = 517 LIFE SAFETY E2 = 700 EMERGENCY C = 517 CRITICAL CARE Q = 517 EQUIPMENT S1 = 701 LEGALLY REQUIRED STANDBY S2 = 702 OPTIONAL STANDBY

DISTRIBUTED IN-ROOM GENERAL NOTES:

- 1. PROVIDE ALL NECESSARY COMPONENTS FOR A COMPLETE AND OPERATING SYSTEM.
- 2. PROVIDE ADDITIONAL CONTROLLERS AS NECESSARY TO SEPARATE VOLTAGES AND BRANCH SOURCES AND ACCOMMODATE ALL CONTROL ZONES. 3. INSTALL CONTROLLERS FOR EACH IN-ROOM SYSTEM ARE INTENDED ABOVE ROOM'S ACCESSIBLE CEILING ABOVE DOOR ENTRY, OR IN NEAREST ACCESSIBLE LOCATION. INDICATE LOCATION OF CONTROLLERS ON RECORD DRAWINGS.
- 4. VERIFY ALL PROGRAMMING PARAMETERS WITH OWNER PRIOR TO FINAL COMMISSIONING.
- 5. REFER TO DISTRIBUTED LOW VOLTAGE SWITCH STATION SCHEDULE AND SEQUENCE OF OPERATIONS SCHEDULE FOR MORE INFORMATION.

DISTRIBUTED IN-ROOM CONTROL SCHEDULE NOTES:

1. EGRESS FIXTURES SHOWN ON PLAN, FED BY RELAY, UTLIZE A UL924 LISTED DEVICE. REFER TO DETAILS ON E520 FOR WIRING DIAGRAM. EC TO VERIFY COMPATIBLE TYPE(S).

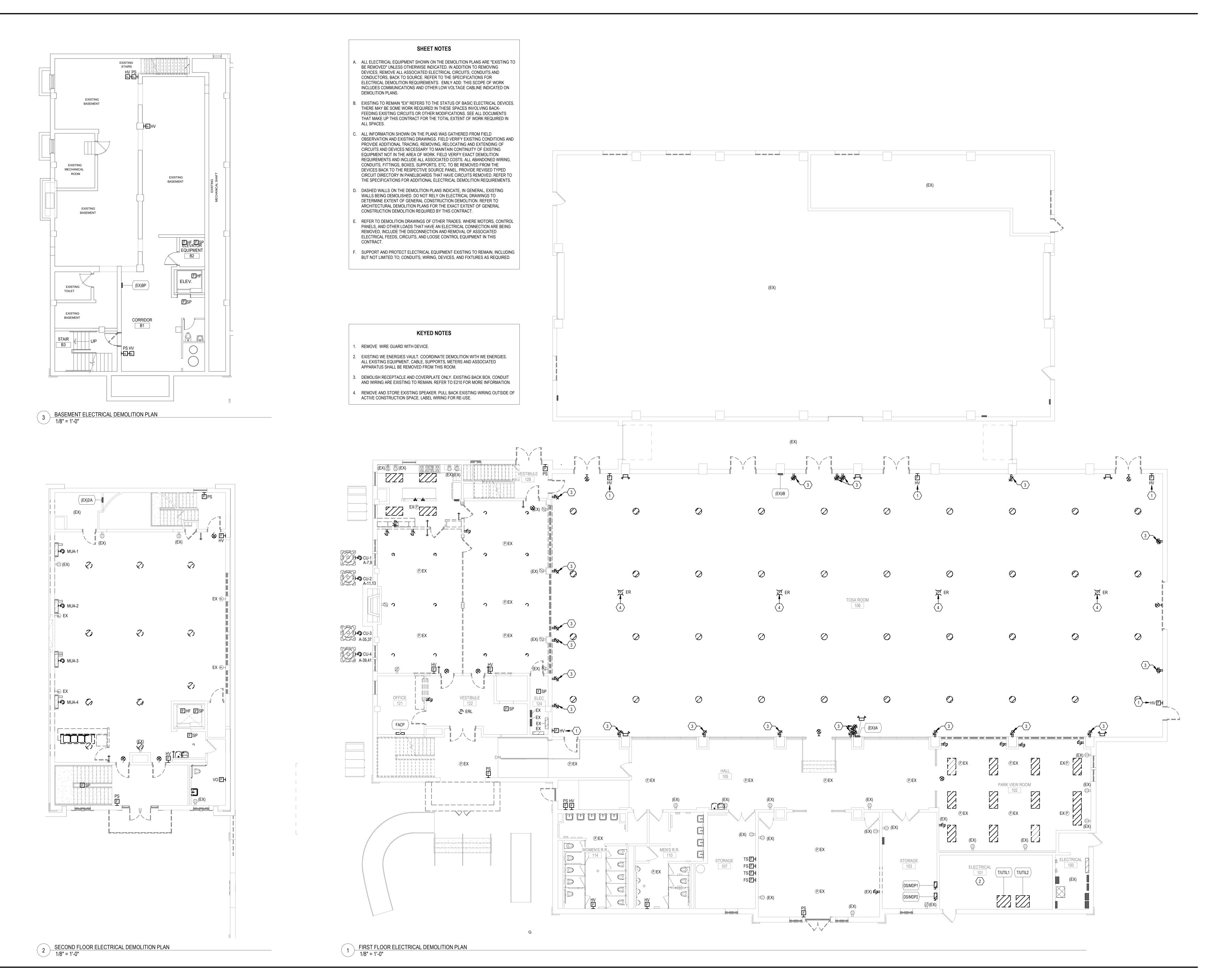


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SCHEDULES

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CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS Drawing Date 12/22/2023

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CITY OF WAUWATOSA Project No. 223010.00

Sheet Title

ELECTRICAL DEMOLITION PLANS

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Sheet No. ED200

LEGEND PROPOSED **EXISTING** CENTER LINE _____ ______ SPOT ELEVATIONS ×910.3 910.3 FLOW ARROW \rightarrow BURIED / COVERED **FENCE** _____X____ RISER EXISTING MATERIALS TO BE REMOVED SECTION OIL COOLER LINE OIL RETURN LINE HIGH PRESSURE LIQUID REFRIGERANT LOW PRESSURE LIQUID REFRIGERANT HIGH PRESSURE GAS/VAPOR REFRIGERANT LOW PRESSURE GAS/VAPOR REFRIGERANT **EQUALIZATION LINE** _____EL______EL____ VENT LINE **BRINE SUPPLY** BRINE RETURN GLYCOL SUPPLY GLYCOL RETURN CONDENSER WATER SUPPLY _____ CS_____ CONDENSER WATER RETURN COLD WATER SUPPLY COLD WATER RETURN HOT/COLD WATER SUPPLY HOT/COLD WATER RETURN FILL LINE DRAIN SANITARY SEWER BELOW FLOOR $\langle 1 \rangle$ **KEYNOTE** 1 CONTINUATION - SAME SHEET 1 CONTINUATION - SEPARATE SHEET **EQUIPMENT TAGS** P2 BOILER PUMP COMPRESSOR PUMPER DRUM CHEMICAL FEED PUMP CONDENSING UNIT TANK ELECTRIC UNIT HEATER **VESSEL** WATER HEATER **EXHAUST FAN** WATER SOFTNER **HEAT EXCHANGER** LOUVER

NOTE: NOT ALL SYMBOLS, ABBREVIATIONS OR LINETYPES SHOWN ON THIS SHEET ARE USED IN THIS SET OF DRAWINGS.

SYMBOLS

AIR LINE	<u> </u>	LEVEL EYE	
AIR SEPARATOR (INLINE)	<u></u>	LIQUID DRAINER	
AIR VENT, MANUAL		LONG RADIUS ELBOW	5
AUTOMATIC VENT	AV	NEEDLE VALVE	
BALL VALVE	$ +$ Φ $+$ $-$	OIL SEPARATOR	<u> </u>
BUCKET TRAP		PITCH OF PIPE, RISE (R) DROP (D)	<u></u> → R +
BUTTERFLY VALVE		PRESSURE GAGE AND COCK	9
CHECK VALVE		PRESSURE REGULATING VALVE	\bowtie
COMBINATION BALANCE AND FLOW MEASURING VALVE	<u> </u>	PRESSURE SWITCH	PS
CHECK , SPRING VALVE		REDUCER -	$\longrightarrow \!$
CONT. NOTE (SAME SHEET)	1	RELIEF VALVE	
CONT. NOTE (SEPERATE SHEET) 1	REVISION NOTE	\triangle
CONTROL SYSTEM NOTE	(1)	RUPTURE DISK	
EQUIPMENT TAG	P-2	SHORT RADIUS ELBOW	
BACK PRESSURE		SIGHT GLASS (IN-LINE)	▶ ⊙
REGULATING VALVE EXPANSION VALVE, HAND	Ŭ	SIGHT GLASS (EXTERNAL)	
EXPANSION VALVE, AUTOMATIC	\otimes	SOLENOID VALVE	
EXPANSION VALVE, THERMOSTA	ATIC S	STRAINER (BRINE/GLYCOL)	<u> </u>
FILTER AND DRIER		STRAINER (REFRIGERANT)	
FLANGE	— 	SUCTION DIFFUSER	PSD-
FLEXIBLE CONNECTOR		THREE-WAY VALVE	\bowtie
FLOAT SWITCH		THERMAL BULB	—
FLOAT SWITCH (PILOT TYPE)		THERMOMETER	<u> </u>
FLOAT VALVE, HIGH SIDE		THERMOMETER WELL, ONLY	T TW
FLOAT VALVE, LOW SIDE		THERMOSTAT, ELECTRIC	\bigcirc
FLOW ARROW	↑	THERMOSTAT, SELF-CONTAINED	T
FLOW CONTROL VALVE	\longrightarrow	THERMOSTAT, REMOTE BULB	₩
FLOW SWITCH	FS	TRIPLE DUTY VALVE	TDV —
GAS DETECTOR		UNION -	— I—
GATE VALVE	<u> </u>	VIBRATION ABSORBER —	-[*****]
GLOBE VALVE W/ SEAL CAP GLOBE VALVE W/ SEAL CAP, ANGLE		WATER METER -	<u> </u>

ABBREVIATIONS

ALT	ALTERNATE	INV	INVERT
AMP	AMPERE	KW	KILOWATT
APPROX	APPROXIMATE	KWH	KILOWATT HOUR
ARCH	ARCHITECT / ARCHITECTURAL	LBS	POUNDS
BHP	BREAK HORSEPOWER	LF	LINEAR FEET
BLDG	BUILDING	MAX	MAXIMUM
BTU	BRITISH THERMAL UNIT	MBH	THOUSAND BTU'S/HOUR
С	CELSIUS	MCC	MOTOR CONTROL CENTER
CFM	CUBIC FEET PER MINUTE	MIL	MIL
CO	CLEANOUT	MIN	MINIMUM
CONN	CONNECTION	MECH	MECHANICAL
CW	COLD WATER	NA	NOT APPLICABLE
DEMO	DEMOLITION	NC	NORMALLY CLOSED
DIA	DIAMETER	NO	NORMALLY OPEN
DWG	DRAWING	NTS	NOT TO SCALE
DX	DIRECT EXPANSION	OC	ON CENTER
EA	EACH	OD	OUTSIDE DIAMETER
ELEC	ELECTRIC	PH	PHASE (ELECTRIC)
ELEV	ELEVATION	POLY	POLYETHYLENE PIPE
EQUIP	EQUIPMENT	PSI	POUNDS PER SQUARE INCH
EX	EXISTING	PVC	POLYVINYL PIPE
EXH	EXHAUST EXPANSION	REBAR	REINFORCEMENT
F	FAHRENHEIT	REQ'D	REQUIRED
FD	FLOOR DRAIN	RH	RELATIVE HUMIDITY
FFE	FINISHED FLOOR ELEVATION	RM	ROOM
FT	FOOT OR FEET	RPM	REVOLUTIONS PER MINUTE
GAL	GALLONS	SF	SQUARE FEET
GPM	GALLONS PER MINUTE	SPEC	SPECIFICATION
HDR	HEADER	SS	STAINLESS STEEL
HDPE	HIGH DENSITY POLYETHYLENE	STD	STANDARD
HT	HEIGHT	TEMO	TEMPERATURE
HR	HOURS	TP	TEMPERATURE
HP	HORSEPOWER	TYP	TYPICAL
HVAC	HEATING, VENTING, AIR CONDITIONING	V	VOLTS
HX	HEAT EXCHANGER	VFD	VARIABLE FREQUENCY DRIVE
HZ	HERTZ	W/	WITH
ID	INSIDE DIAMETER	W/O	WITHOUT

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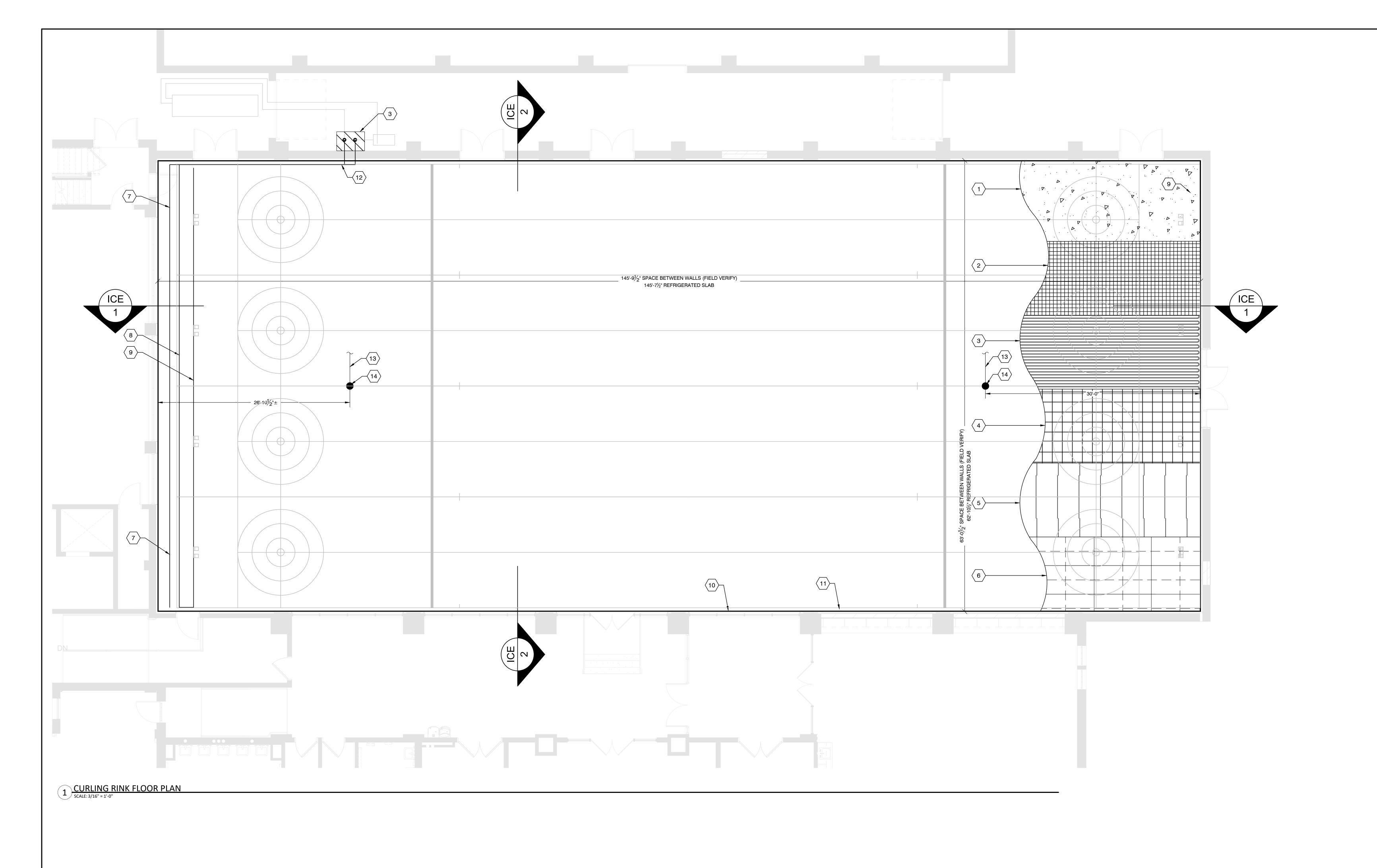
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Sheet Title

CURLING RINK LEGEND AND SYMBOLS



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GENERAL NOTES: $\langle x \rangle$ KEY NOTES: 15. NEW CONCRETE INFILL SLAB WHERE EXISTING SLAB WAS REMOVED. SEE DETAIL ICE-32 1. CONCRETE: 5" THICK 7. 6" SDR 11 POLYETHYLENE SUPPLY HEADER. 1. FIELD VERIFY ALL DIMENSIONS. FUSION WELDED CONNECTIONS. WIRE MESH: 6" X 6" X W2.1 X W2.1. 6" MINIMUM 2. PIPING SHOWN IN SCHEMATIC FORM. OVERLAP BETWEEN SHEETS. TIE TO REBAR EVERY 8. 6" SDR 11 POLYETHYLENE RETURN HEADER. FUSION WELDED CONNECTIONS. 24". TERMINATE 2" FROM RINK EDGE. RINK PIPING: 1" POLYETHYLENE PIPE @ 4" O.C. 9. 6" SDR 11 POLYETHYLENE REVERSE RETURN FUSION WELDED CONNECTIONS. HEADER. FUSION WELDED CONNECTIONS. 10. EXPANSION JOINT AROUND ENTIRE PERIMETER OF 4. REINFORCEMENT: #4 BARS @ 12" O.C. PARALLEL WITH RINK PIPING AND 12" O.C. PERPENDICULAR RINK FLOOR. SEE DETAIL ICE-81 WITH RINK PIPING. MINIMUM LAP OF 25". 11. 1" POLYETHYLENE PERIMETER PIPE AROUND ENTIRE PERIMETER OF RINK FLOOR. 5. PIPE AND REBAR SUPPORT CHAIRS @ 3'-0" O.C. THE ENTIRE LENGTH OF THE RINK. CHAIR SPACING SHALL BE 2'-0" O.C. IF MOTORIZED 12. 6" BURIED INSULATED SDR 17 POLYETHYLENE TRANSMISSION MAINS TO/FROM ICE EQUIPMENT WILL BE DRIVEN ON RINK PIPING REFRIGERATION ROOM. CONNECT TO EXISTING FOR CONCRETE PLACEMENT OR SCREEDING. SUPPORT CHAIR SECTIONS SHALL OVERLAP A STEEL PIPING IN ICE REFRIGERATION ROOM. MINIMUM OF TWO RINK PIPES. 13. 3/4" RIGID PVC CONDUIT AND CABLES. ROUTE CONDUIT FROM SENSOR DIRECTLY TO ICE FLOOR INSULATION: TWO (2) LAYERS OF EXTRUDED POLYSTYRENE 2" THICK, 4'-0" X 8'-0" EQUIPMENT ROOM. SHEETS, 25 PSI - STAGGER JOINTS. FINISHED 14. ICE AND SUB-FLOOR TEMPERATURE SENSOR, INSULATION THICKNESS SHALL BE 4". COVER INSULATION WITH VAPOR BARRIER. BOX AND CONDUIT. SEE DETAIL ICE-83.

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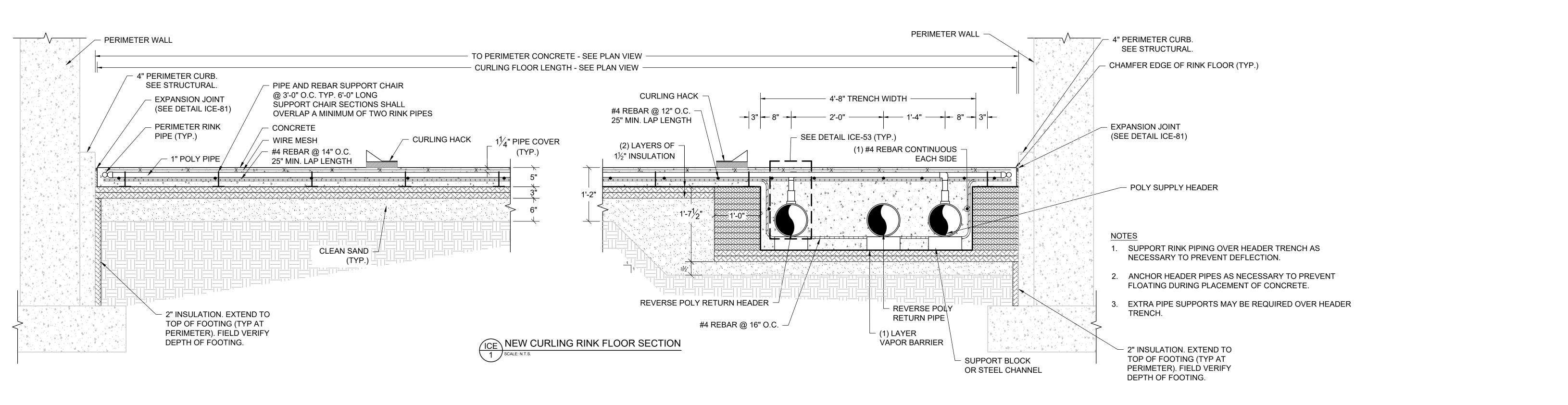
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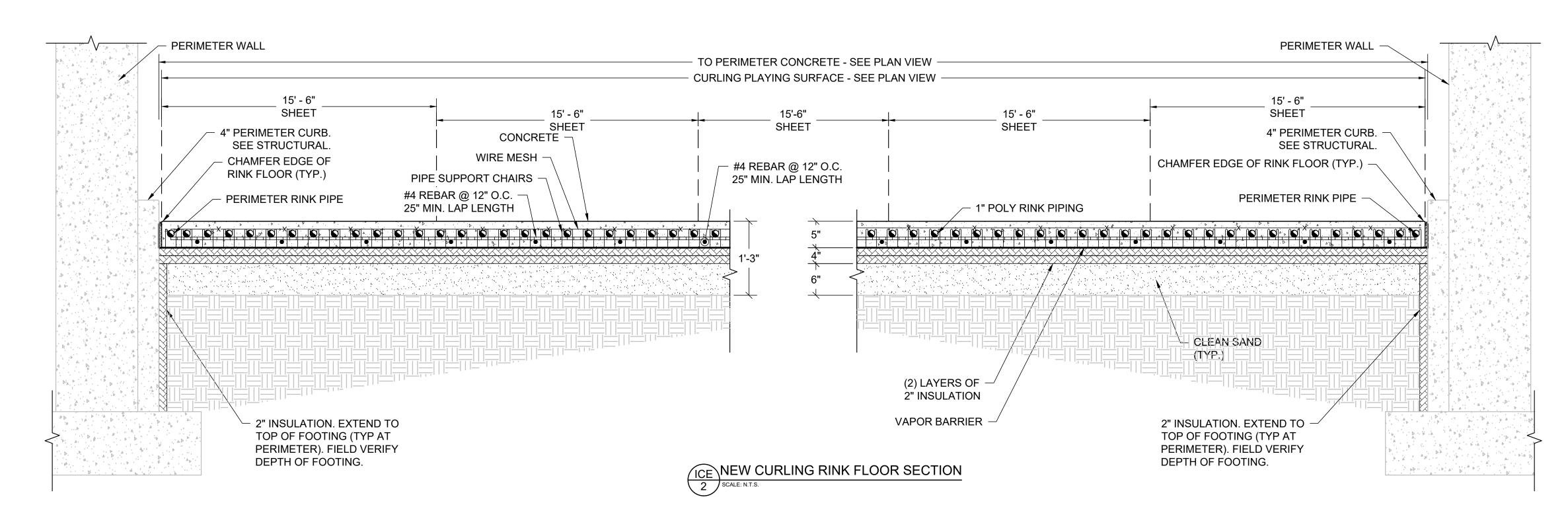
CURLING RINK FLOO PLAN

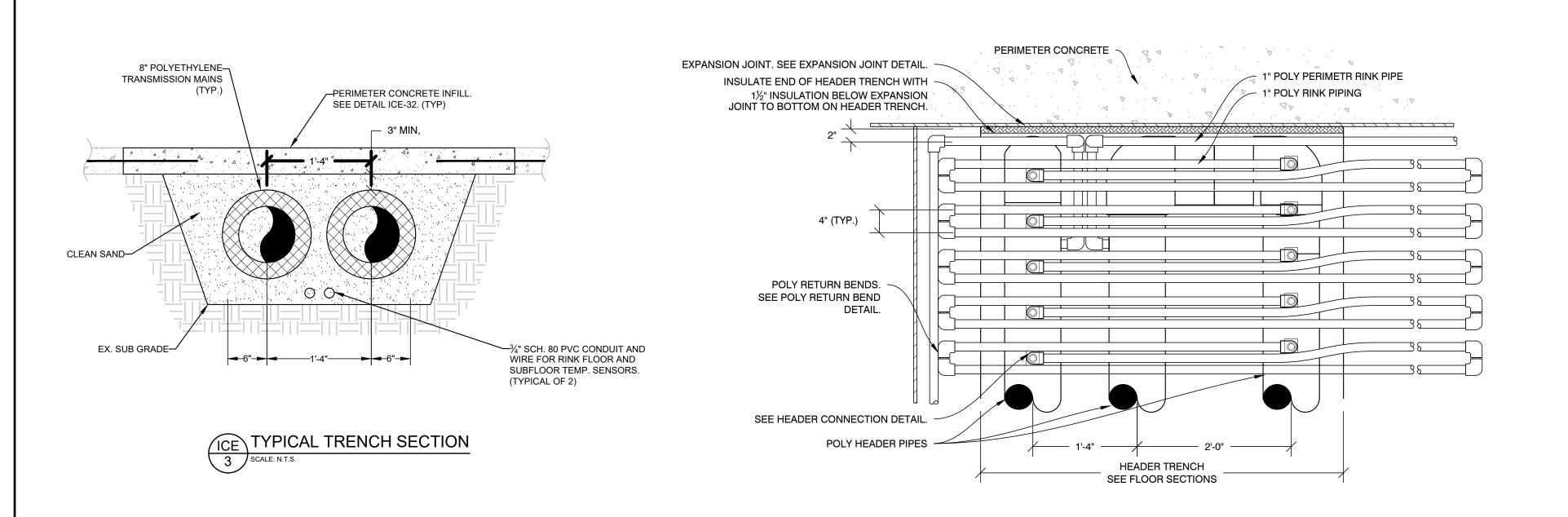
NORTH

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1" POLY RINK PIPE

1" POLY RINK PIPE

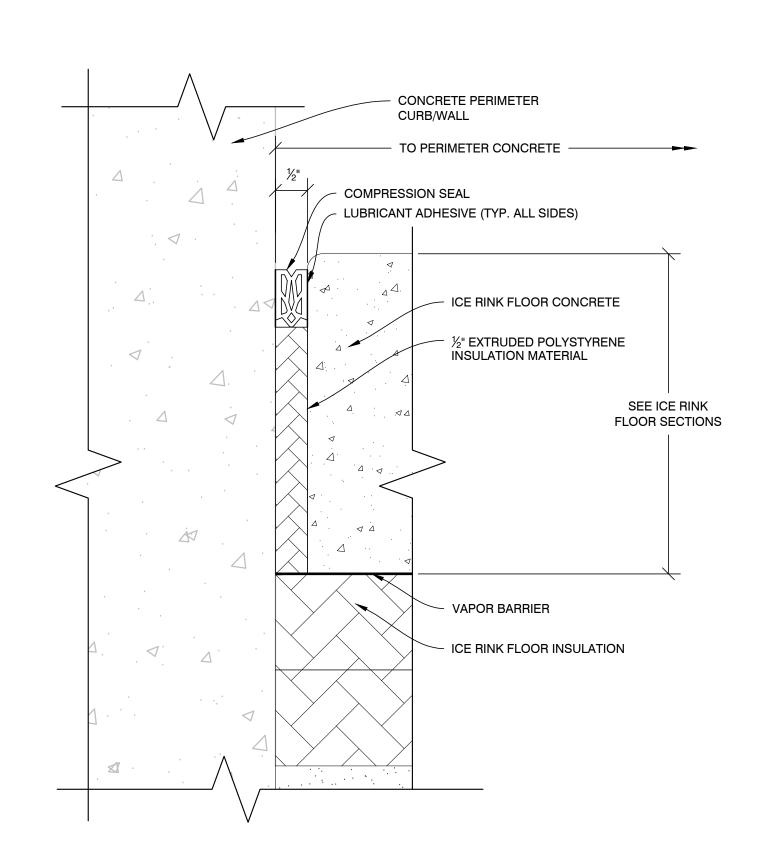
1" POLY SERVICE SADDLE
W/ RECTANGULAR BASE & SOCKET OUTLET

POLY HEADER PIPES

ELEVATION

ICE ICE RINK HEADER PIPE CONNECTION DETAIL

ICE ICE RINK HEADER PIPE CONNECTION DETAIL 52 SCALE: N.T.S.



NOTE:

1. EXPANSION JOINT SYSTEM SHALL BE INSTALLED PER MANUFACTURERS RECOMMENDATIONS.

2. CONTRACTOR SHALL FIELD VERIFY WIDTH OF JOINT PRIOR TO ORDERING MATERIALS.

ICE RINK EXPANSION JOINT DETAIL (INDOOR)
SCALE: N.T.S.

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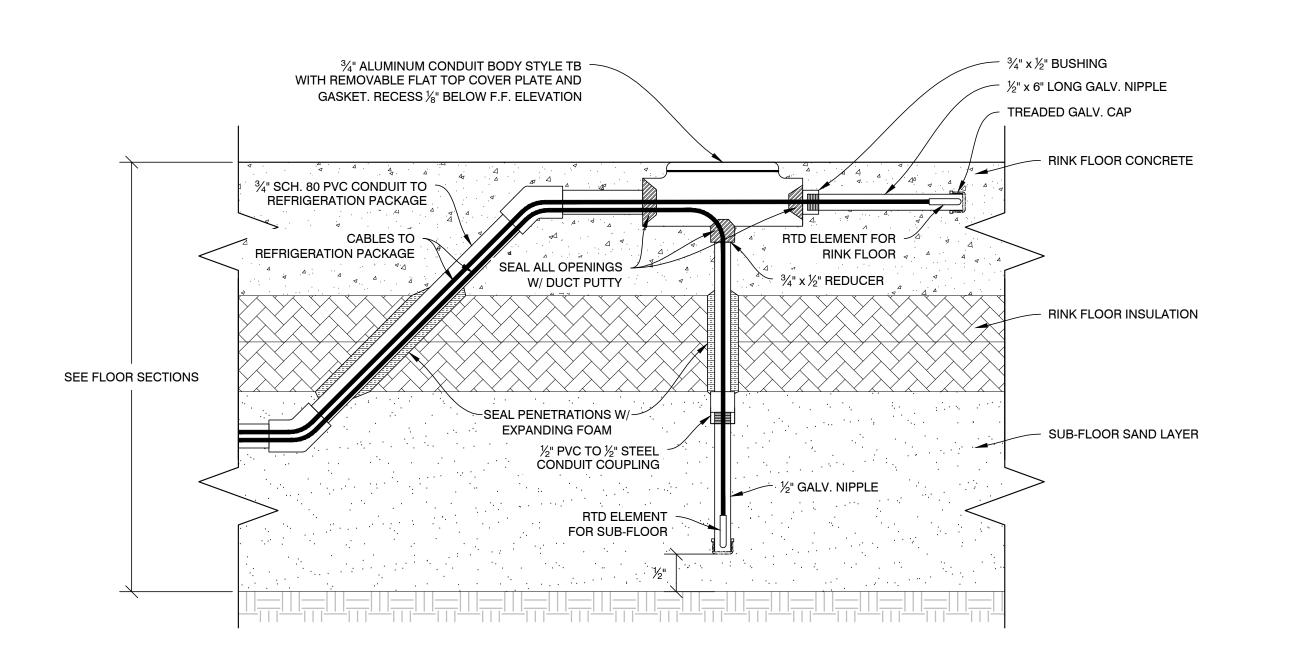
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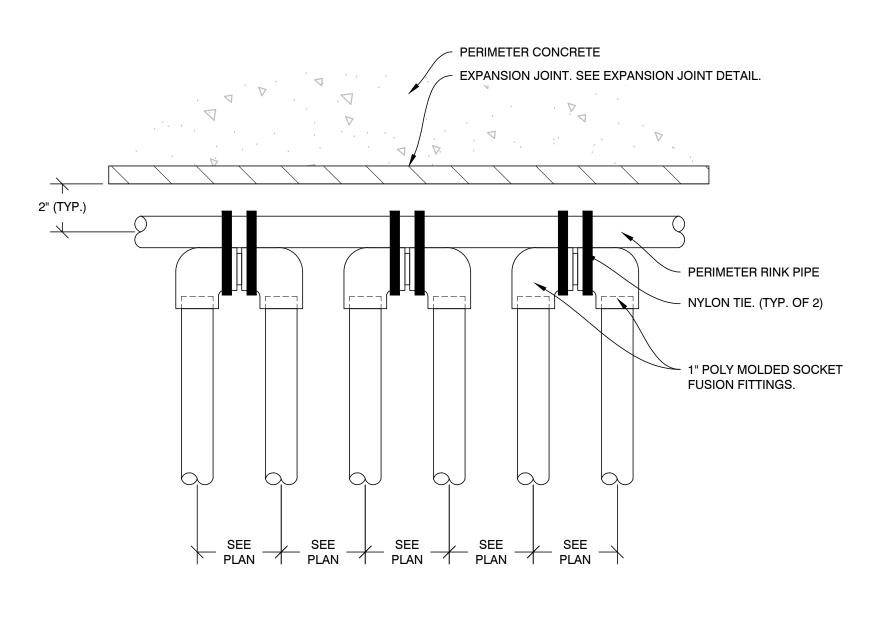
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CAST IN PLACE CONCRETE SLAB \neg INFILL TO MATCH EXISTING SLAB

THICKNESS OR 5" MIN. (FIELD VERIFY)

NO EXPANSION JOINT. 1/8" FINISHED EDGE W/ CAULK JOINT. (TYP.)

- EXISTING SLAB

- #4 REBAR @ 12" O.C. EACH WAY

#4 DOWEL @ 24" O.C. MAX USING HILTI HY200, 6" MIN EMBEDMENT

TYPICAL @ SLAB INFILL

TYPICAL CONCRETE SLAB INFILL DETAIL
32 SCALE: N.T.S.



ICE ICE RINK PIPING DETAIL
76 SCALE: N.T.S.

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CURLING RINK DETAILS

NORTH

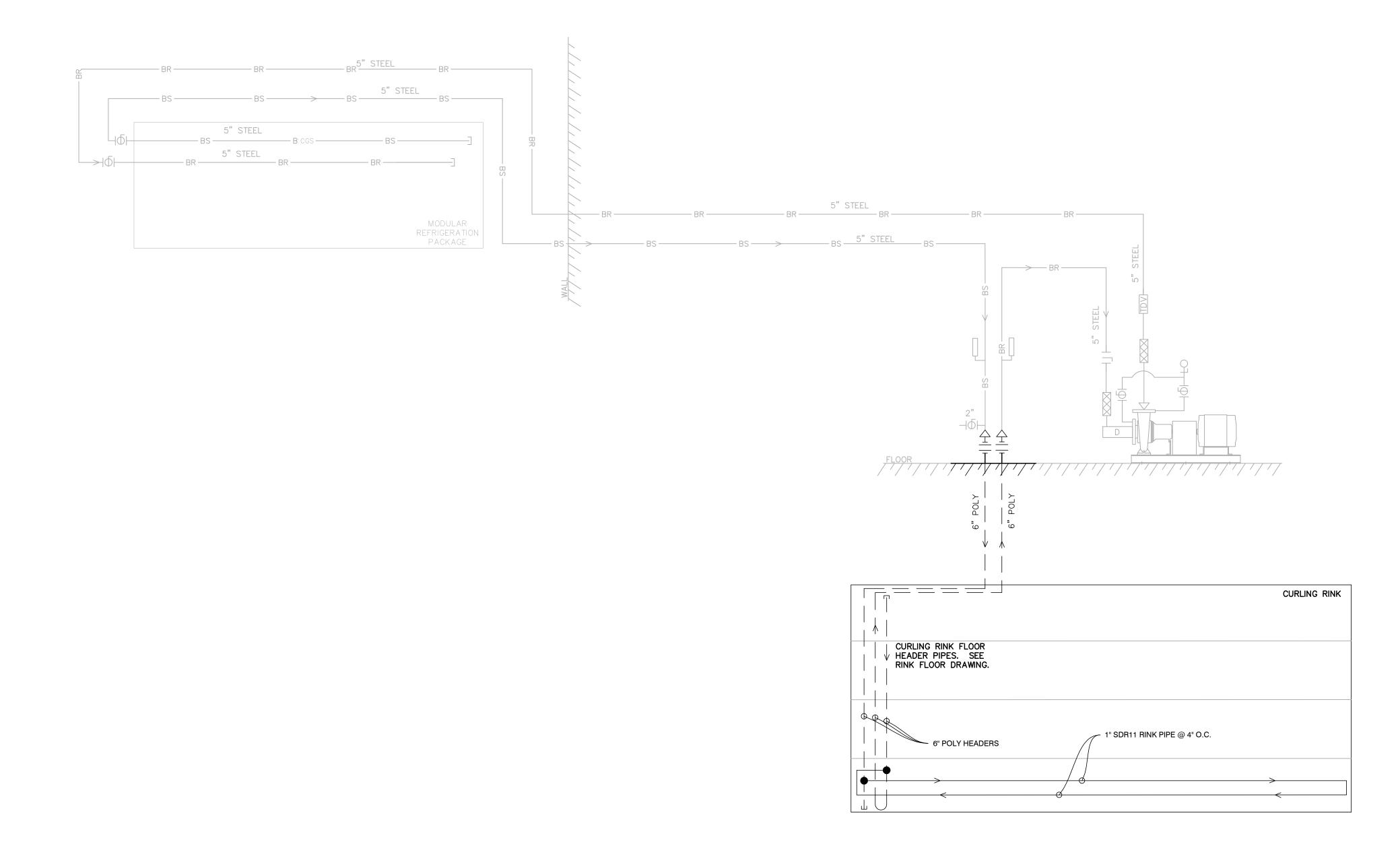
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Sheet No.

ICE RINK TEMPERATURE SENSOR DETAIL
83 SCALE: N.T.S.

EXPOSED ITEM	TYPE	THICKNESS	JACKET TYPE	JACKET COLOR
PIPE UP TO 1 1/4" DIA.	5	1 1/2"	2	WHITE
PIPE 1 1/2" TO 4" DIA. COLD BRINE, GLYCOL AND REF.	5	2"	2	WHITE
PIPE 1 1/2" TO 4" DIA. WARM BRINE, GLYCOL	5	2"	2	RED
PIPE 5" TO 8" DIA. COLD BRINE, GLYCOL	5	3"	2	WHITE
PIPE 10" AND UP DIA. COLD BRINE, GLYCOL	5	3"	2	WHITE
VALVES (WHERE PIPE IS INSULATED)	5	SAME AS PIPE	2	WHITE
RINK PUMPS	3	2"	NONE	-
CHILLER AND SURGE DRUM	5	3"	2	WHITE
WASTE HEAT EXCHANGERS	5	2"	2	RED
BURIED ITEM				
SNOW MELT PIT SYSTEM PIPING (INTERIOR)	5	2"	3	WHITE
SNOW MELT PIT SYSTEM PIPING (EXTERIOR)	5A	2"	SEE SPEC	SEE SPEC
SUB-FLOOR HEAT SYSTEM PIPING	NONE	-	NONE	-
BRINE/GLYCOL PIPING TO/FROM RINK FLOOR	5A	2 1/2"	SEE SPEC	SEE SPE

INSULATION SCHEDULE
163 SCALE: N.T.S.



GENERAL NOTES

- 1. THE REFRIGERATION FLOW DIAGRAM SHOWS GENERAL SYSTEM REQUIREMENTS ONLY. ICE CONTRACTOR TO FURNISH AND INSTALL ALL MATERIALS AND PIPING TO MAINTAIN A COMPLETE OPERATING SYSTEM WITH THE EXISTING ICE REFRIGERATION EQUIPMENT, AND AS NECESSARY TO MEET CURRENT STATE AND LOCAL MECHANICAL CODES.
- 2. EXISTING VALVES, SENSORS, EXPANSION TANKS AND OTHER ACCESSORIES NOT SHOWN. FIELD VERIFY LOCATION AND TYPE OF VALVES AND ACCESSORIES ON THE EXISTING SYSTEM.
- 3. PIPING MATERIAL AS SPECIFIED. INSULATE ALL PIPING AS SPECIFIED IN INSULATION SCHEDULE. SEE DETAIL ICE-163.
- 4. FIELD VERIFY EXISTING CHILLER ARRANGEMENT, PIPE ROUTING, AND PIPE
- INSTALL PIPE UNIONS ON EACH SIDE OF ALL EQUIPMENT AND VALVES FOR MAINTENANCE.
- 6. ALL VALVES AND PIPING SPECIALTIES SHALL BE FULL LINE SIZE.
- 7. ALL GAUGES SHALL BE MOUNTED AT EYE LEVEL WHERE POSSIBLE.
- 8. THE CONTRACTOR IS RESPONSIBLE FOR PLACEMENT AND DESIGN OF ALL HANGERS AND SUPPORT SYSTEMS AND SHALL VERIFY THAT BUILDING AND ROOF STRUCTURE IS DESIGNED TO SUPPORT SYSTEM LOADS. ALL EQUIPMENT, PIPING, TANKS, ETC. SHALL BE GROUND SUPPORTED.

O KEY NOTES (SEE SPECIFICATIONS FOR CONTROL REQUIREMENTS)

Kahler Slater

Engineering Group

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CONSTRUCTION DOCUMENTS

SCOPE DOCUMENTS

Drawing Date
12/22/2023

MUELLNER BUILDING RENOVATION

7300 W CHESTNUT STREET WAUWATOSA WI, 53213

Project No. CITY OF

223010.00 WAUWATOSA

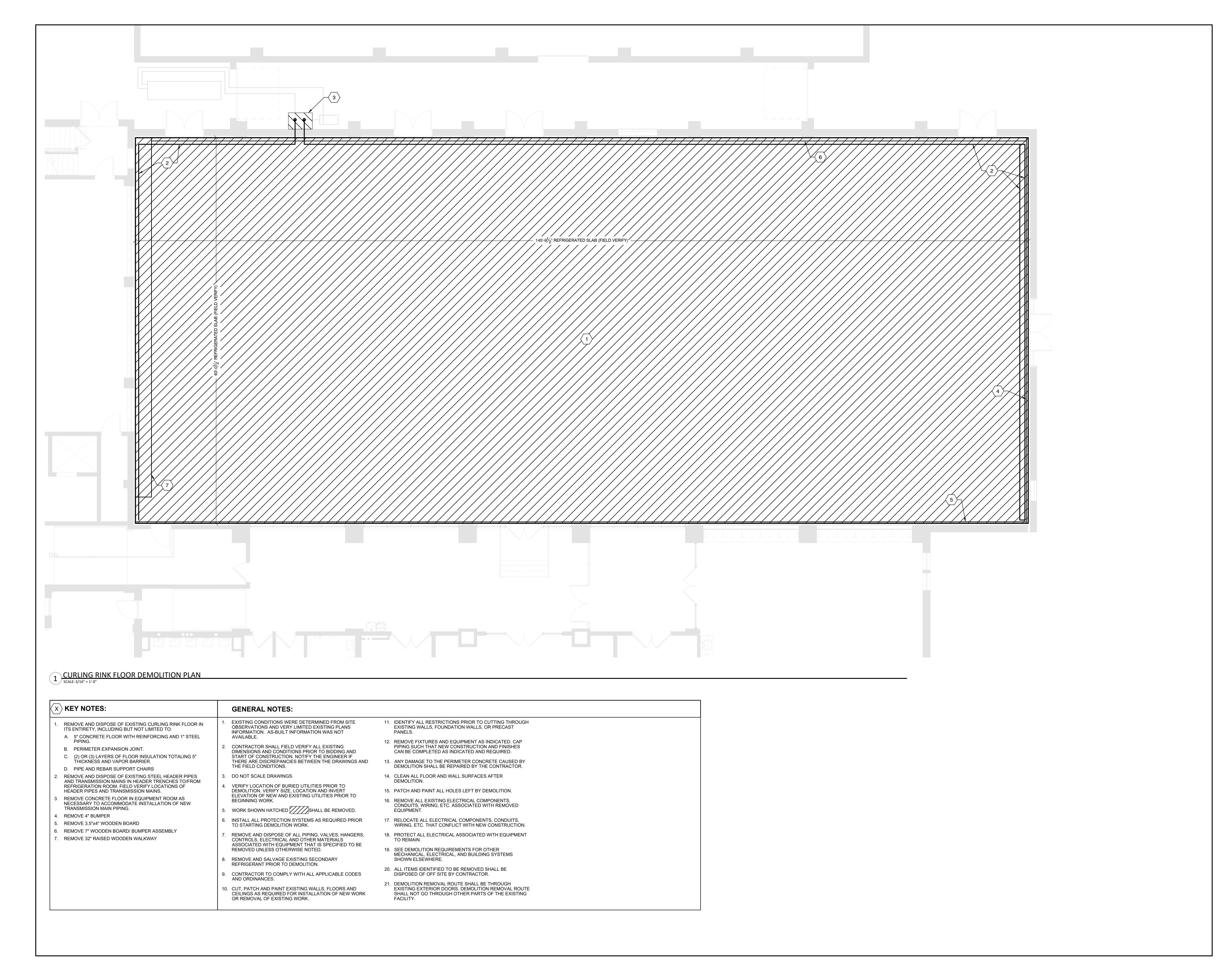
Sheet Title

SECONDARY REFRIGERANT FLOW DIAGRAM

NORTH

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Sheet Title

CURLING RINK
DEMOLITION PLAN

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