

BUILDING RENOVATION FOR

# BREWSTER WHEELER RECREATION CENTER

2900 ST. ANTOINE STREET  
DETROIT, MI 49201

ARCHITECT'S PROJECT #1356-23

BULLETIN #2



MARCH 05, 2024

## ABBREVIATIONS

ABOVE FINISH FLOOR	AFF	GALVANIZED GAUGE	GALV	QUARRY TILE	QT
ACOUSTICAL TILE	ACT	GLASS	GL		
ADJACENT	ADJ	GRADE	GR	RADIUS	R
AIR ADMITTANCE VALVE	AAV	GYPSPUM BOARD	GYP BD	REFRIGERATOR REINFORCEMENT	R REFRIG REINF
ALUMINUM	AL	GLAZED MASONRY UNIT	GMU	REQUIRED ROOF DRAIN	REQ'D RD
AMERICAN DISABILITIES ACT	ADA			ROUGH VENT ROOM	RV RM
ANODIZED	ANOD	HAND DRYER	HD	ROUGH OPENING	RO RO
APPROXIMATELY	APPROX	HANDICAPPED	HDGP	RUBBER FLOOR TILE	RFT
AREA DRAIN	AD	HARDWOOD	HDWD		
AT	@	HEATING	HTG		
		HEATING VENTILATION AND AIR CONDITIONING	HVAC		
BASEMENT	BSMT	HEIGHT	HT	SANITARY SECTION	SAN SECT
BEARING	BRG	HIGH POINT	HP	SHEET	SHT
BENCH MARK	BM	HIGHWAY	HINY	HOLLOW METAL	HM
BETWEEN	BTWN	HORIZONTAL	HORIZ	SIMILAR TO	SIM TO
BARRIER FREE	B.F.	HOT WATER	HW	SMART BOARD	SB
BLOCK	BLK	HOT/COLD WATER	HGW	SPECIFICATION	SPEC
BOARD	BD			SQUARE	SQ
BOTTOM OF	B.O.S.	INCLUDE INFORMATION	INCL INFO	STAINLESS STEEL	SS
BOTTOM OF STEEL BUILDING	BLDG	INSIDE DIMENSION	ID	STANDARD	STD
		INSULATION	INSUL	START POINT	SP
CABINET	CAB			STEEL STORAGE	STL STR
CARPET	CPT	JANITOR	JAN	STRUCTURAL	STRUC
CATCH BASIN	CB	JANITOR CLOSET	JC	SUSPENDED	SUSP
CEILING	CLG	JOINT	JT		
CENTER LINE	CL	JOIST	JST	TACK BOARD	TB
CLEAN OUT	CO			TEMPERED	TEMP
COLD WATER	CW	LAMINATE	LAM	TONGUE & GROOVE	T & G
COLUMN	COL	LINEAR	LIN	TOP OF FOOTING	T.O. FTG
CONCRETE	CONC	LONG LEG VERTICAL	LLV	TOP OF FOUNDATION	T.O. FND
CONCRETE MASONRY UNIT	CMU	LONG POINT	LP	TOP OF STEEL	T.O.S.
CONTINUOUS	CONT	LOWER LEVEL	LL	TOP OF WALL	T.O.W.
CONTROL JOINT	C.J.	MAN HOLE	MH	THICK	THK
CUBIC	CU	MANUFACTURER	MFR	THROUGH	THRU
		MARKER BOARD	MB	TYPICAL	TYP.
DEMOLITION	DEMO	MASONRY OPENING	MO		
DETAIL	DET	MECHANICAL	MECH	UNDERWRITER'S LABORATORY UNLESS NOTED OTHERWISE	UL UNO
DIAMETER	DIA	METAL	MTL		
DIMENSION	DIM	MINIMUM	MIN	VENT THROUGH ROOF	VTR
DOWN	DN	MISCELLANEOUS	MISC	VENTILATION	VENT
DOWNSPOUT	DNF	MOUNTED	MTD	VERIFY IN FIELD	V.I.F.
DRAWING	DWG			VERTICAL	VERT
		NOMINAL	NOM	VINYL COMPOSITE TILE	VCT
EACH	EA	NOT IN CONTRACT	NIC	VINYL WALL COVERING	VWC
ELECTRIC	ELEC	NUMBER	NUM	VOLUME	VOL
ELECTRIC WATER COOLER	EW				
ELEVATION	ELEV	ON CENTER	O.C.	WALL CLEAN OUT	W.C.O.
EQUAL	EQ	OPENING	OPNG	WELDED WIRE FABRIC	WWF
EQUIPMENT	EQUIP	OPPOSITE	OPP	WELDED WIRE MESH	WWM
EXISTING	EXIST	OPPOSITE HAND	O.H.	WITH	W
EXPANSION	EXP	OUTSIDE DIAMETER	OD	WITHOUT	W/O
EXPANSION JOINT	EJ	OVER HEAD DOOR	OHD	WOOD	WD
				WOLMANIZED	WOLM
FEET	FT			WORK POINT	WP
FINISHED	FIN				
FINISHED FLOOR	FF	PAIR	PR	YARD CLEAN OUT	Y.C.O.
FIRE EXTINGUISHER	FE	PLASTER CEMENT	PLSC		
FIRE EXTINGUISHER CABINET	FEC	PLASTER GYPSUM	PLSG		
FLOOR	FL	PLATE	PLT		
FLOOR DRAIN	FD	PLYWOOD	PLYWD		
FOOTING	FTG	PORCELAIN CERAMIC TILE	PCT		
FOUNDATION	FND	PRESSURE TREATED	PT		
FROM FINISHED FLOOR	FFF				

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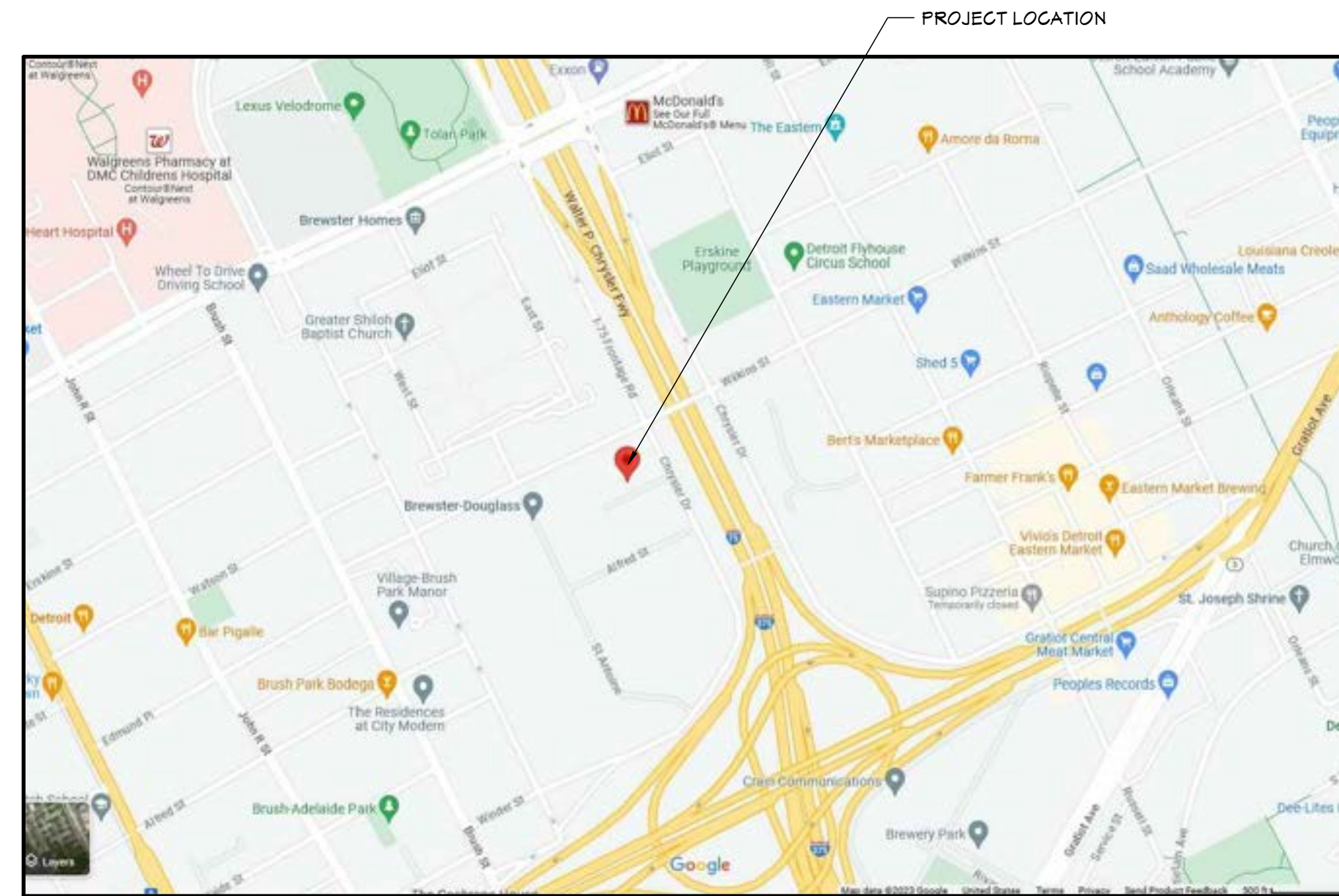
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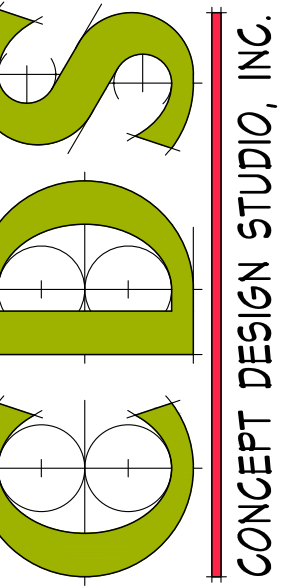
## SITE LOCATION MAP



## PROJECT DIRECTORY

<b>ARCHITECT</b> CONCEPT DESIGN STUDIO, INC. KYLE OSTERHART, AIA, LEED AP 800 EAST ELLIS ROAD, SUITE 508 NORTON SHORES, MI 49441 P.231.799.4838	<b>OWNER</b> MHT HOUSING, INC. T. VAN FOX 32500 TELEGRAPH ROAD, SUITE 100 BINGHAM FARMS, MI 48025 P.248.833.0552
<b>STRUCTURAL ENGINEER</b> JDH ENGINEERING DAVID BENDERT, P.E. 3000 IVANREST SW, SUITE B GRANDVILLE, MI 49418 P.616.531.6020	<b>HISTORIC CONSULTANT</b> KIDORF PRESERVATION KRISTINE KIDORF 451 E. FERRY STREET DETROIT, MI 48202 P.313.300.9376
<b>ELECTRICAL ENGINEER</b> WPF ENGINEERING LYNN SURDOCK, P.E. 8200 PEACHTREE AVENUE ROCKFORD, MI 49341 P.616.340.9627	<b>MECHANICAL / PLUMBING ENGINEER</b> ABILITY ENGINEERING CHRIS NOLAN, P.E. 5210 WEST RIVER DRIVE NE, SUITE C COMSTOCK PARK, MI 49321 P.616.232.5817
<b>BUILDING OFFICIAL</b> CITY OF DETROIT BSEED 2 WOODWARD AVENUE, SUITE 401 DETROIT, MI 48226 P.313.224.2733	<b>CONSTRUCTION MANAGER</b> MHT CONSTRUCTION, INC. T. VAN FOX 32500 TELEGRAPH ROAD, SUITE 100 BINGHAM FARMS, MI 48025 P.248.833.0552

CONCEPT DESIGN STUDIO, INC.  
800 E. ELLIS ROAD, SUITE 508  
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BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMITS 12.24.2023

BULLETIN #1 02.08.2024

BULLETIN #2 03.05.2024



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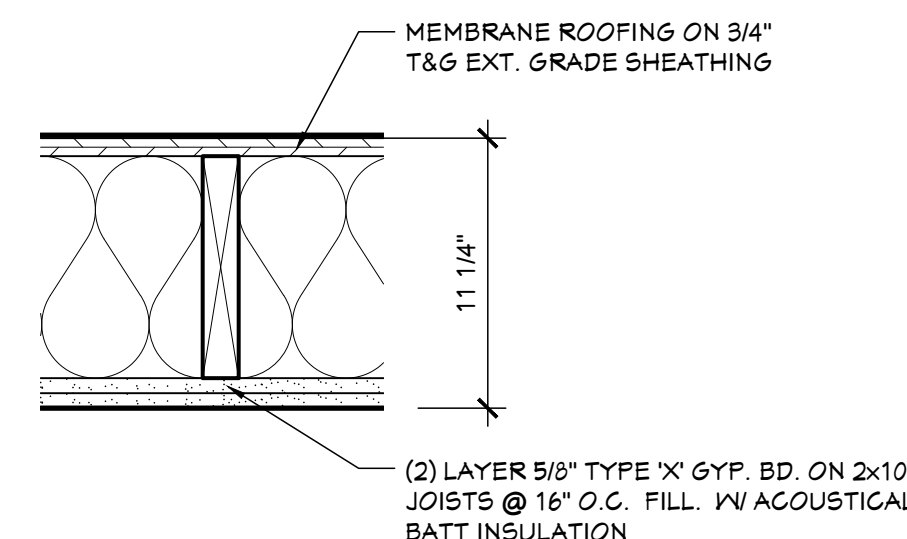
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SHEET TITLE

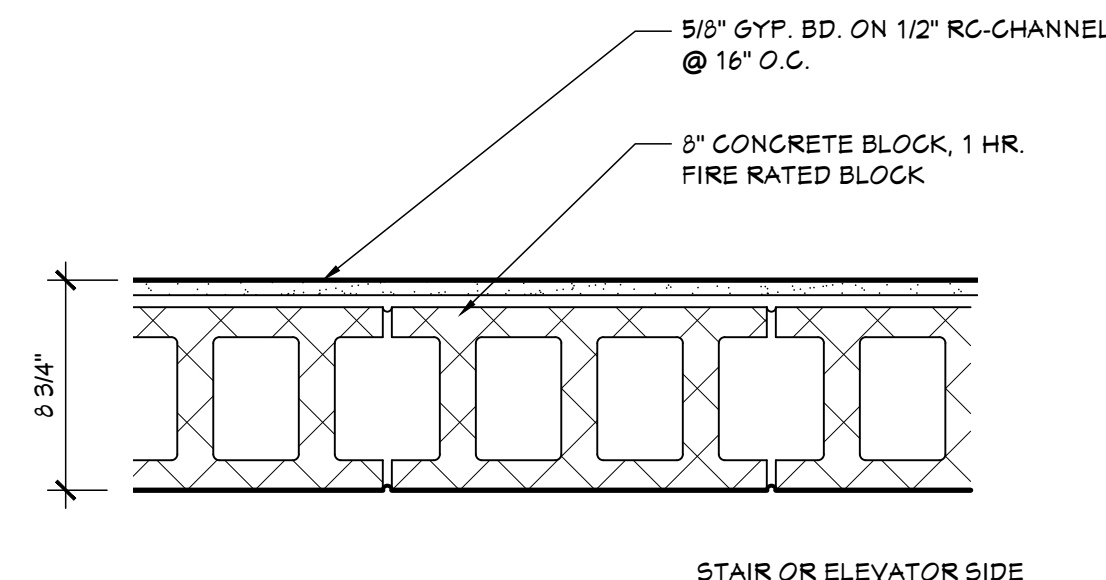
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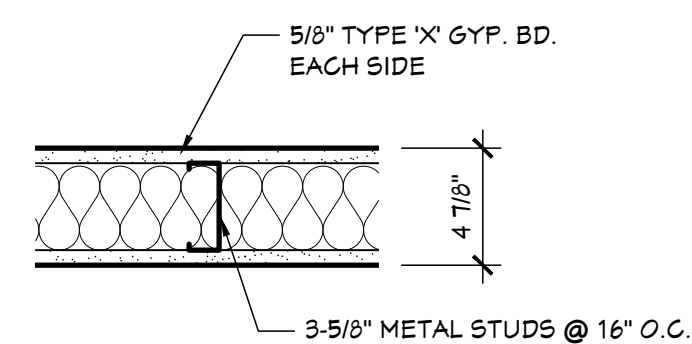
T1.01



**03 ELEVATOR ROOF DETAIL**  
**T2.00** SCALE: 1-1/2" = 1'-0"  
 EQUAL TO GA W/P 1012 / FM DESIGN 415  
 FIRE RATED WALL SYSTEM



**02 ELEVATOR WALL**  
**T2.00** SCALE: 1-1/2" = 1'-0"  
 EQUAL TO GA W/P 1012 / FM DESIGN 415  
 FIRE RATED WALL SYSTEM



**01 (1) HOUR TYP. GYP. BD. WALL**  
**T2.00** SCALE: 1-1/2" = 1'-0"  
 EQUAL TO GA W/P 1012 / FM DESIGN 415  
 FIRE RATED WALL SYSTEM

**CODE COMPLIANCE LEGEND**

- 1 HOUR FIRE RESISTIVE RATING
- ◀ EXIT
- F.E.C. FIRE EXTINGUISHER CABINET
- F.E. FIRE EXTINGUISHER

**CODE REVIEW NOTES**

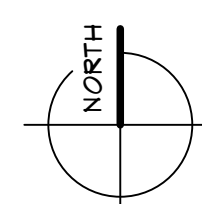
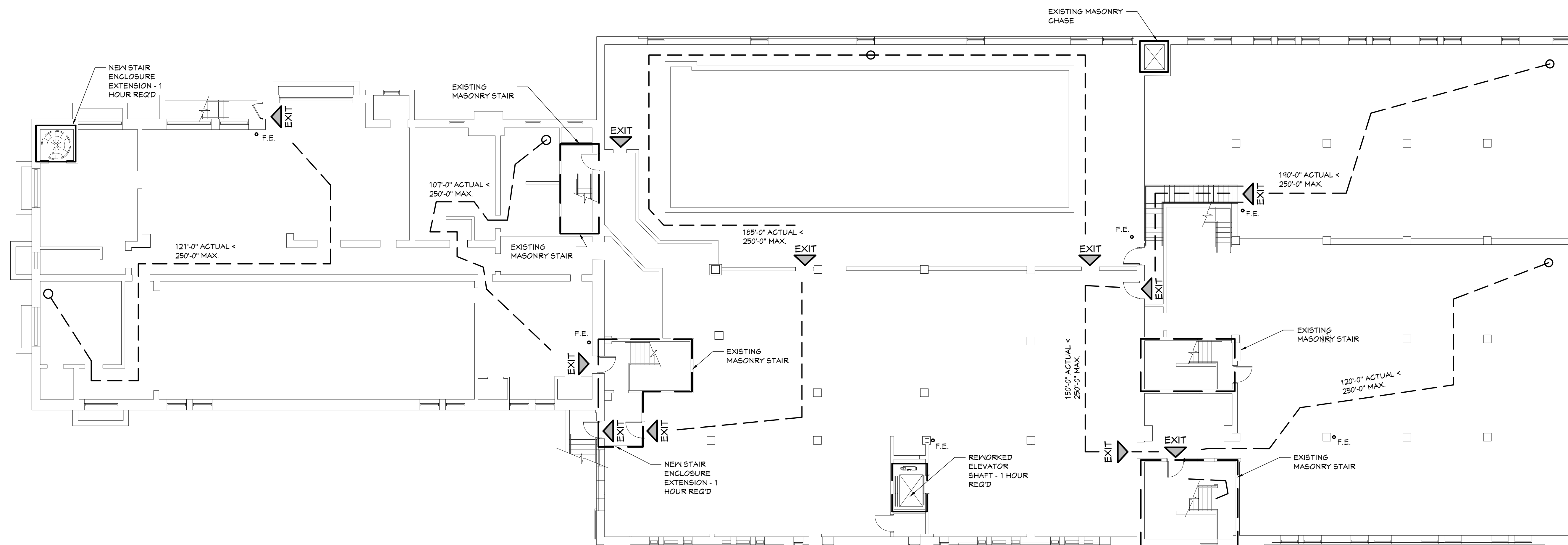
BUILDING: 2015 MICHIGAN REHABILITATION CODE  
 FOR EXISTING BUILDING: REPAIR  
 MECHANICAL: 2015 MICHIGAN MECHANICAL CODE  
 PLUMBING: 2015 MICHIGAN PLUMBING CODE  
 ELECTRICAL: 2017 NATIONAL ELECTRICAL CODE  
 BARRIER FREE: ICC/ANSI A117.1-2009  
 FIRE CODE: 2018 INTERNATIONAL FIRE CODE  
 ENERGY CODE: ASHRAE 90.1-2013 W/ AMENDMENTS

**BUILDING DATA:**

BUILDING USE GROUP = A-3, B  
 CONSTRUCTION TYPE = III-B  
 ALLOWABLE AREA = 28,500 S.F., 3 STORIES  
 ACTUAL AREA =  
 BASEMENT = 21,511 S.F.  
 FIRST FLOOR = 23,641 S.F.  
 SECOND FLOOR = 7,150 S.F.  
 OCCUPANT LOAD MAX. = A-3 = 635 PEOPLE  
 B = 140 PEOPLE  
 NUMBER OF EXITS = MULTIPLE REQ'D  
 EXIT TRAVEL DISTANCE = 250'  
 FIRE SUPPRESSION = NFPA-13 REQUIRED, G.C. TO  
 PROVIDE SEALED FIRE  
 SUPPRESSION DRAWINGS

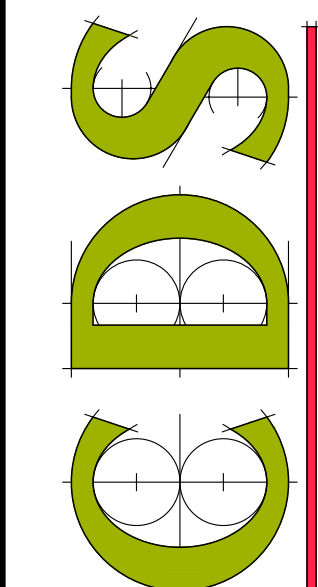
**CONSTRUCTION RATING REFERENCE**

ASSEMBLY	FIRE RATING	STC RATING	IIC RATING	UL #	DETAIL	OPENING RATING
STAIR	1 HOUR REQ'D	NOT APPLICABLE	NOT APPLICABLE	GA W/P 1012	01/T2.00	60 MINUTE
ELEVATOR	1 HOUR REQ'D	NOT APPLICABLE	NOT APPLICABLE	GMU MASONRY	02/T.200	60 MINUTE
ELEV. ROOF	1 HOUR REQ'D	NOT APPLICABLE	NOT APPLICABLE	GA FILE NO. FC 5420	03/T2.00	60 MINUTE



**BASEMENT FLOOR CODE COMPLIANCE PLAN**  
 SCALE: 3/32" = 1'-0"

CONCEPT DESIGN STUDIO, INC.  
 800 E. ELLIS ROAD, SUITE 508  
 NORTON SHORES, MI 49441  
 PH. (231) 799-4838  
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 637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

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*Kyle Oberhart*  
 01.3.2024  
 Brewster Rec Center

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SHEET TITLE  
**BASEMENT CODE COMPLIANCE  
 PLAN, CODE  
 REVIEW NOTES &  
 DETAILS**

SHEET NO.

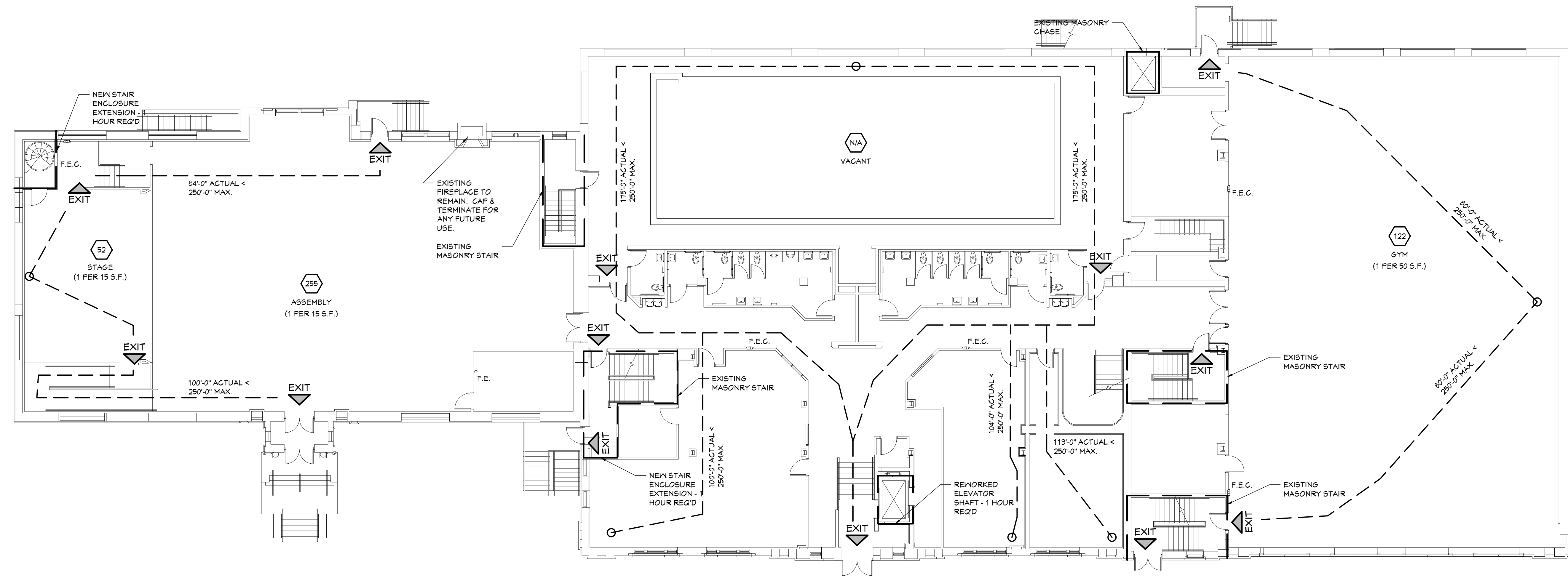
**T2.00**

**CODE COMPLIANCE LEGEND**

- — — — — 1 HOUR FIRE RESISTIVE RATING
- ◀ EXIT
- F.E.C. FIRE EXTINGUISHER CABINET
- F.E. FIRE EXTINGUISHER

**CONSTRUCTION RATING REFERENCE**

ASSEMBLY	FIRE RATING	STC RATING	IIC RATING	UL #	DETAIL	OPENING RATING
STAIR	1 HOUR REQ'D	NOT APPLICABLE	NOT APPLICABLE	GA W/P 1072	01/T2.00	60 MINUTE
ELEVATOR	1 HOUR REQ'D	NOT APPLICABLE	NOT APPLICABLE	CMU MASONRY	02/T.200	60 MINUTE
ELEV. ROOF	1 HOUR REQ'D	NOT APPLICABLE	NOT APPLICABLE	GA FILE NO. FC 5420	03/T2.00	60 MINUTE



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 RECREATION CENTER**  
 637 BREWSTER STREET, DETROIT, MICHIGAN

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*K.R. OSERHART*  
 01.3.2024  
 BREWSTER REC CENTER

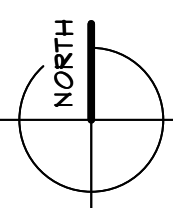
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SHEET TITLE  
**FIRST FLOOR  
 CODE  
 COMPLIANCE  
 PLAN**

SHEET NO.

**T2.01**



**FIRST FLOOR CODE COMPLIANCE PLAN**

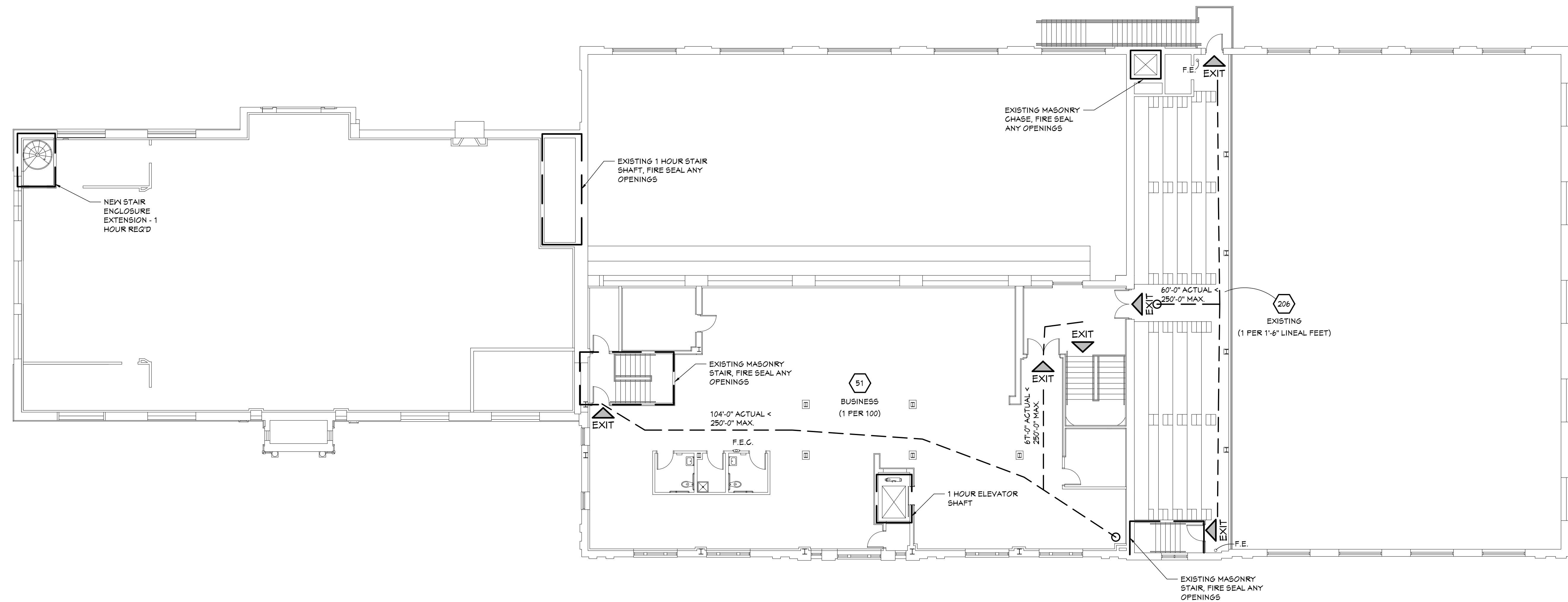
SCALE: 3/32" = 1'-0"

**CODE COMPLIANCE LEGEND**

- — — — — 1 HOUR FIRE RESISTIVE RATING
- ◀ EXIT
- F.E.C. FIRE EXTINGUISHER CABINET
- F.E. FIRE EXTINGUISHER
- ⌋ — — — — — PATH OF TRAVEL LINE W/ DISTANCE TO EXIT

**CONSTRUCTION RATING REFERENCE**

ASSEMBLY	FIRE RATING	STC RATING	IIC RATING	UL #	DETAIL	OPENING RATING
STAIR	1 HOUR REQ'D	NOT APPLICABLE	NOT APPLICABLE	GA W/P 1072	01/T2.00	60 MINUTE
ELEVATOR	1 HOUR REQ'D	NOT APPLICABLE	NOT APPLICABLE	CMU MASONRY	02/T.200	60 MINUTE
ELEV. ROOF	1 HOUR REQ'D	NOT APPLICABLE	NOT APPLICABLE	GA FILE NO. FC 3420	03/T2.00	60 MINUTE



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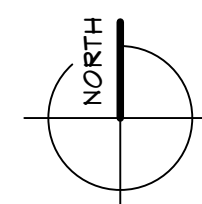
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SHEET TITLE  
**SECOND FLOOR  
 CODE  
 COMPLIANCE  
 PLAN**

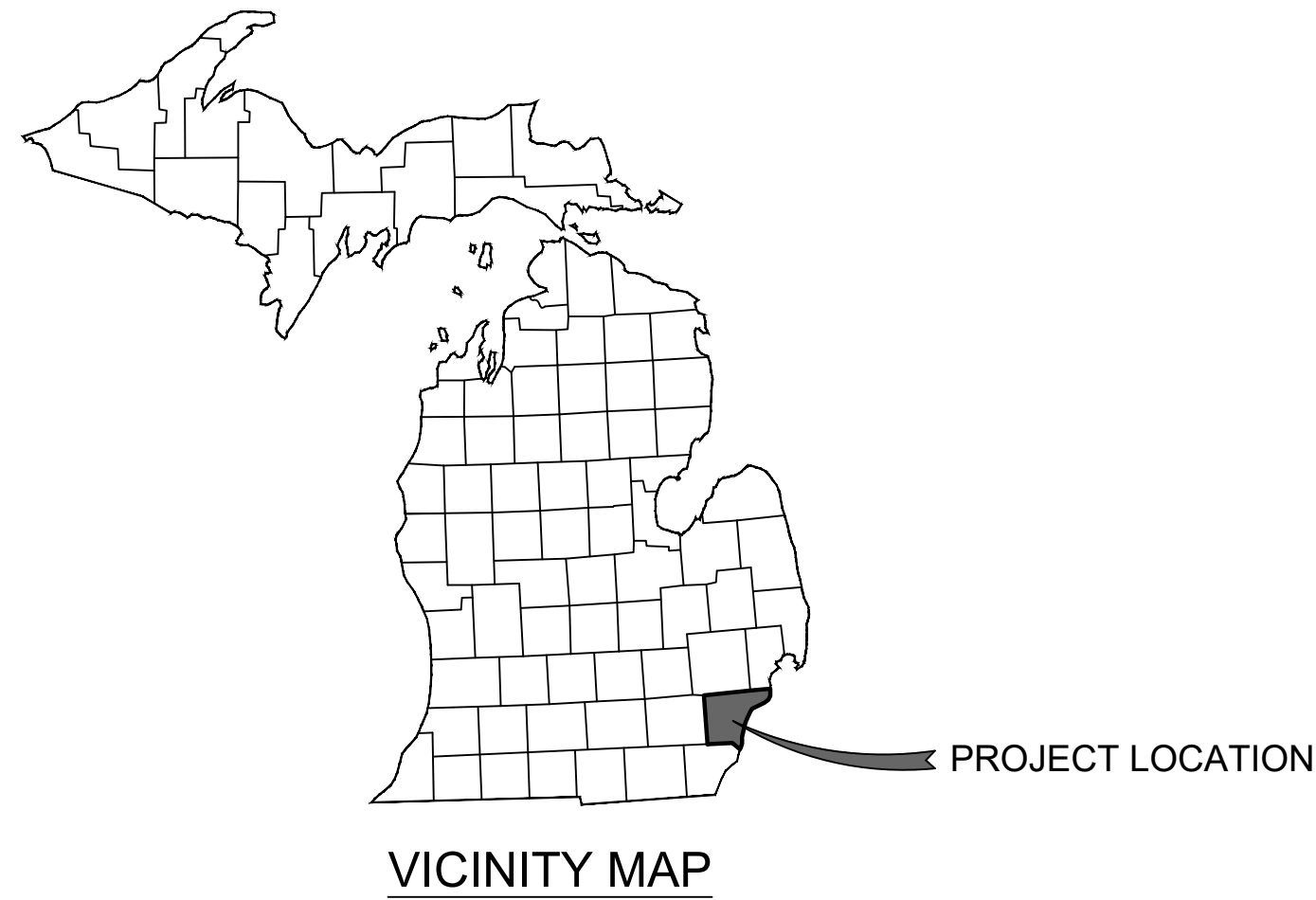
SHEET NO.

**T2.02**



**SECOND FLOOR CODE COMPLIANCE PLAN**

SCALE: 3/32" = 1'-0"



# BREWSTER WHEELER RECREATION CENTER

## 2900 SAINT ANTOINE STREET WAYNE COUNTY, MICHIGAN 48201

INDEX OF SHEETS	
CS	COVER SHEET
C0.2	REMOVALS PLAN
C1.0	SITE PLAN
C2.0	GRADING, DRAINAGE, & SESC PLAN
C3.0 - C3.3	X-SECTIONS, NOTES, AND DETAILS
L1.0	LANDSCAPE PLAN

Property Address:  
2900 St. Antoine Street  
City of Detroit, Michigan 48201

Parcel Number:  
0300316070

Property Description:

THE LAND SITUATED IN THE COUNTY OF WAYNE, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:

LOTS 172 THROUGH 197 OF THE CRANE & WESSONS SUBDIVISION, AS RECORDED IN LIBER 1, PAGE 9 OF PLATS, WAYNE COUNTY RECORDS, ALSO NORTH ALFRED LOTS 1 THROUGH 7, SOUTH BREWSTER LOTS 1 THROUGH 7, NORTH BREWSTER LOTS 1 THROUGH 7, SOUTH WILKINS LOTS 1 THROUGH 7 AND VACATED BREWSTER AND ALLEYS ADJACENT C. MORAN FARM SUBDIVISION, AS RECORDED IN LIBER 1 PAGE 254 OF PLATS WAYNE COUNTY RECORDS.

ADDRESS 2900 S. ANTOINE STREET.

Total Acreage:  
6.24 Acres (271,814 sq. ft.)

Property Zoning:  
PD - Planned Development District

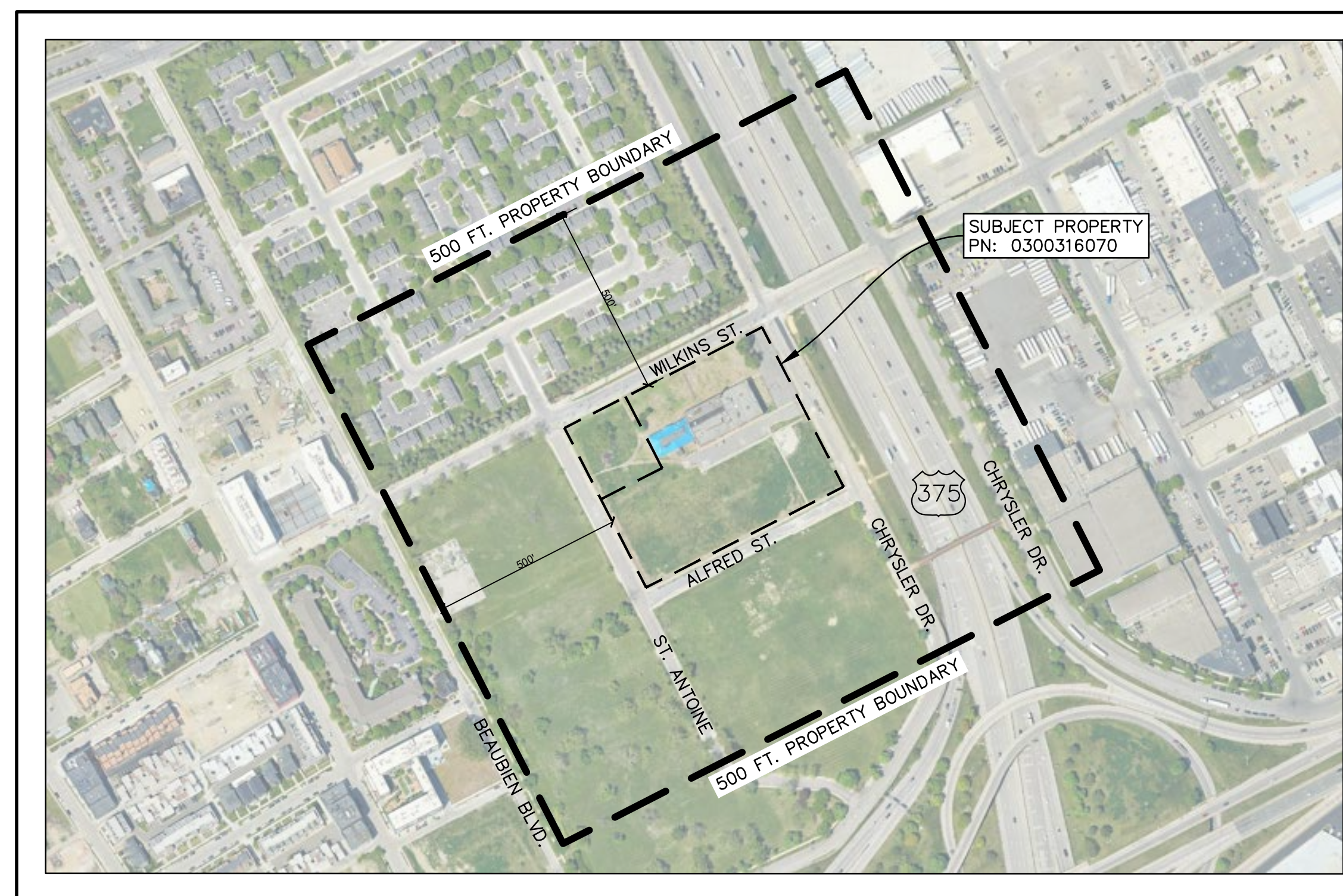
Setbacks:

Front: 00 ft.

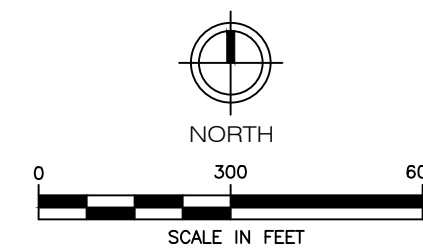
Side: 0 ft.

Rear: 0 ft.

Maximum Allowable  
Building Height: xx ft.



NEIGHBORHOOD MAP



Know what's below.  
Call before you dig.

For protection of underground utilities, the CONTRACTOR shall dial 1-800-482-7171 OR 811 a minimum of three working days, excluding Saturdays, Sundays and holidays, prior to excavation in the vicinity of utility lines. All "MISS DIG" participating members will thus be routinely notified. This does not relieve the CONTRACTOR of the responsibility of notifying the utility owners who may not be part of the "MISS DIG" alert system.

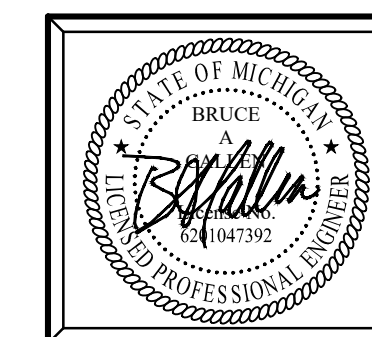
**BENCH MARKS:**

- BM 1 NAIL IN NORTH SIDE OF POWER POLE AT THE SOUTHWEST CORNER OF ALFRED STREET AND CHRYSLER DRIVE.  
Elevation: 619.92 ft. (NAVD 88)
- BM 2 ARROW ON HYDRANT NORTHWEST OF VEHICULAR APPROACH TO SITE.  
Elevation: 622.09 ft. (NAVD 88)
- BM 3 ARROW ON HYDRANT AT SOUTH CENTER OF PROPERTY NORTH OF ALFRED STREET.  
Elevation: 621.87 ft. (NAVD 88)

LAND USE TABLE					
TOTAL LAND AREA:	271,814	SFT	6.24	ACRES	
IMPERVIOUS AREA	40,863	SFT	15.0%		
PERVIOUS AREA	230,951	SFT	85.0%		
	IMPERVIOUS AREA		PERVIOUS AREA		
	BUILDINGS	PAVEMENTS	SIDEWALKS	LANDSCAPE / LAWN	
	23,341	10,663	6,859	230,951	SFT
	8.6	%	3.9	2.5	%
				85.0	%

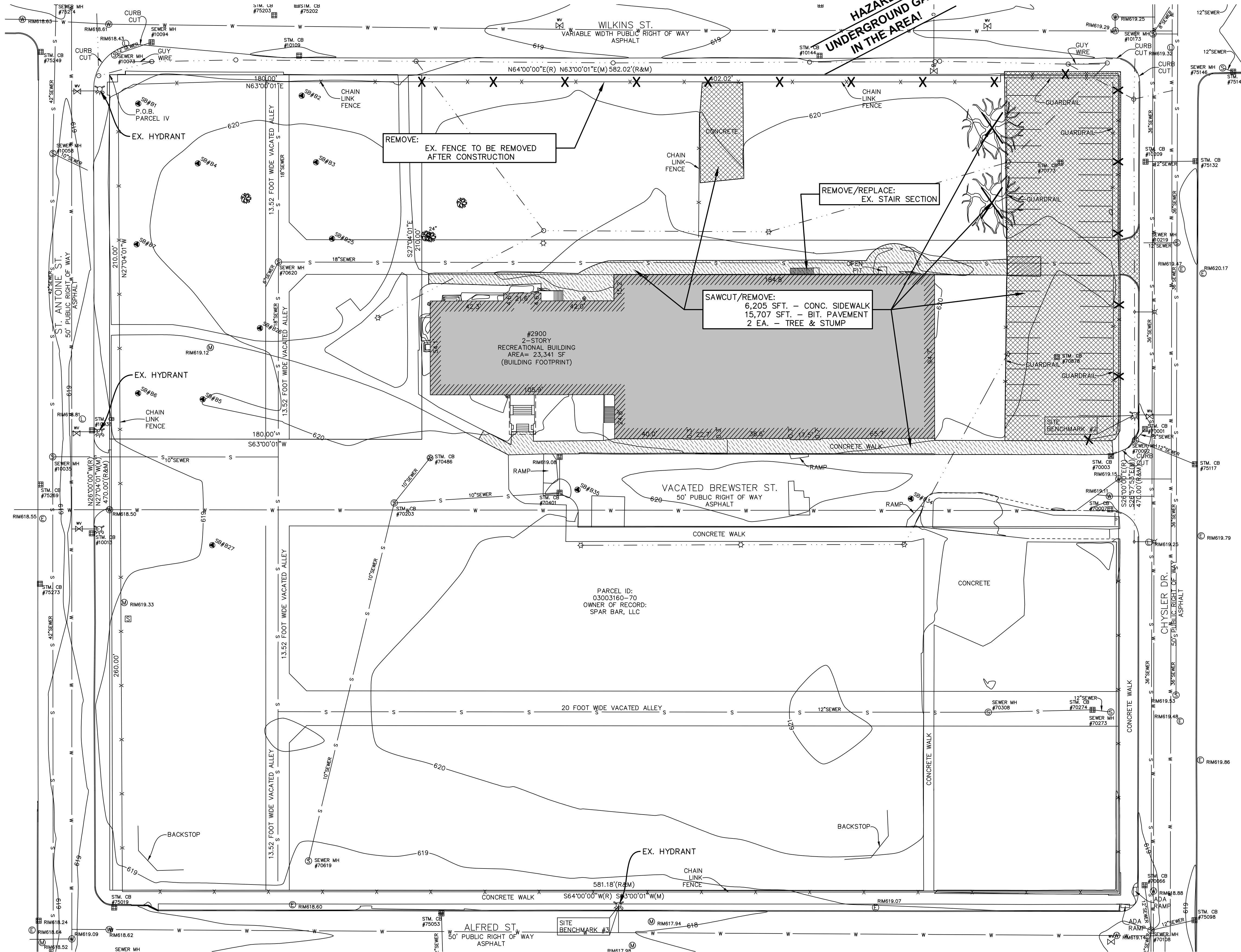
**OWNER**

MHT HOUSING, INC.  
32500 TELEGRAPH ROAD, SUITE 100  
DETROIT, MICHIGAN 48025  
PHONE: 248-833-0552



Plan Prepared By:  
Bruce A. Callen, PE  
Callen Engineering, Inc.  
108 E. Savidge St.  
Spring Lake, Michigan 49456  
Tel: 616-414-5260  
email: bcallen@callenengineering.com  
DATE OF PLAN: 02-07-24

ISSUANCES	
FOR PERMITS	01-23-24
BULLETIN #1	02-07-24
REVISIONS	
DESIGNED BY:	
<b>Callen Engineering, Inc.</b> 108 East Savidge Street Spring Lake, MI 49456 T.616.414.5260 www.callenengineering.com	
Drawn by	J.W.C.
Engineer	B.A.C. Check A.J.B.
Callen Engineering Project No.	
023 - BREWSTER	Sheet No. CS



**DEMOLITION NOTES**

ALL MATERIAL THAT IS NOT SUITABLE AS BACKFILL AND MATERIALS THAT ARE EXCESS SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.

ALL AREAS OF UNDERGROUND DEMOLITION, UTILITY LINE REMOVAL, AND UNDERGROUND TREE, STUMP, AND VEGETATION REMOVAL SHALL BE BACKFILLED.

BACKFILLING SHALL PROMPTLY FOLLOW UNDERGROUND DEMOLITION OR REMOVAL WORK AND SHALL CONTINUE AS THE DEMOLITION PROGRESSES.

CONTRACTOR SHALL BE RESPONSIBLE FOR APPLYING FOR AND OBTAINING ALL NECESSARY DEMOLITION PERMITS AND PAYING FOR ANY ASSOCIATED PERMIT FEES.

NOTIFY ARCHITECT/ENGINEER OF ANY OTHER UNDERGROUND MATERIALS OR EQUIPMENT ENCOUNTERED DURING EXCAVATION NOT SPECIFICALLY NOTED ON THE DRAWING(S).

PRIVATE UTILITY REMOVAL - CONTRACTOR TO COORDINATE PRIVATE UTILITY (GAS, ELECTRIC, PHONE, CABLE, ETC.) REMOVAL WITH APPROPRIATE AUTHORITY. ALTHOUGH ALL PRIVATE UTILITY SERVICES MAY NOT BE SHOWN ON THIS DRAWING, CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SERVICE AS NECESSARY.

PUBLIC UTILITY REMOVAL - CONTRACTOR TO COORDINATE PUBLIC UTILITY (WATER, SEWER, STORM) REMOVAL WITH APPROPRIATE UTILITY COMPANY. ALTHOUGH ALL PUBLIC UTILITY SERVICES MAY NOT BE SHOWN ON THIS DRAWING, CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF SERVICE AS NECESSARY.

WHERE CURBING OR PAVEMENT IS INDICATED TO BE REMOVED, IT SHALL BE SAWCUT FULL DEPTH, REMOVE TO THE NEAREST JOINT, IF THE JOINT IS WITHIN 3 FEET OF THE REMOVAL LINE. VERIFY REMOVAL LIMITS WITH ENGINEER PRIOR TO BEGINNING WORK.

Property Address: 2900 St. Antoine Street  
City of Detroit, Michigan 48201

Parcel Number: 0300316070

Property Description:  
THE LAND SITUATED IN THE COUNTY OF WAYNE, STATE OF MICHIGAN, IS DESCRIBED AS FOLLOWS:  
LOTS 172 THROUGH 197 OF THE CRANE & WESSONS SUBDIVISION, AS RECORDED IN LIBER 1, PAGE 9 OF PLATS, WAYNE COUNTY RECORDS, ALSO NORTH ALFRED LOTS 1 THROUGH 7, SOUTH BREWSTER LOTS 1 THROUGH 7, NORTH BREWSTER LOTS 1 THROUGH 7, SOUTH WILKINS LOTS 1 THROUGH 7 AND VACATED BREWSTER AND ALLEYS ADJACENT C. MORAN FARM SUBDIVISION, AS RECORDED IN LIBER 1 PAGE 254 OF PLATS WAYNE COUNTY RECORDS.

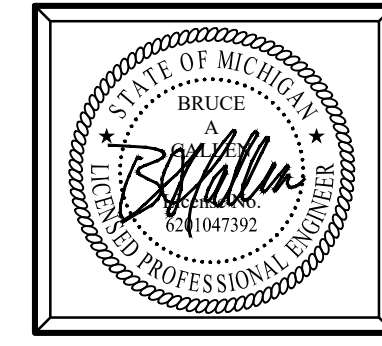
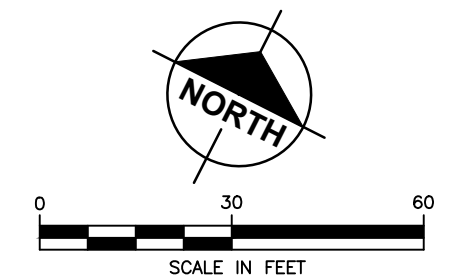
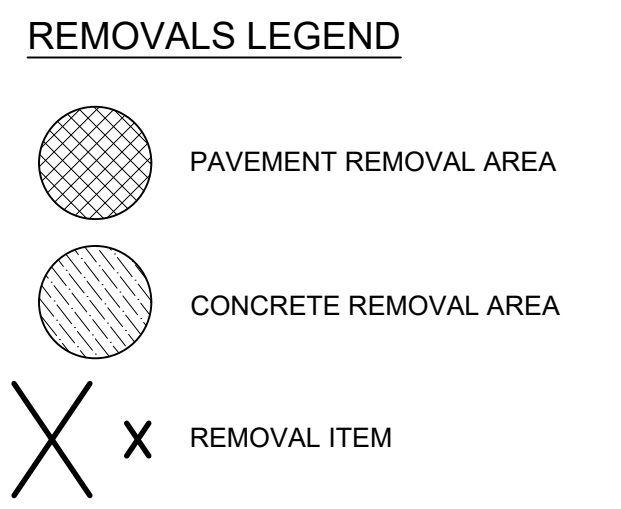
Address 2900 S. ANTOINE STREET.

Total Acreage: 6.24 Acres (271,814 sft.)

Property Zoning: PD - Planned Development District

Setbacks:  
Front: 0 ft.  
Side: 0 ft.  
Rear: 0 ft.

Maximum Allowable Building Height: NA



Plan Prepared By:  
Bruce A. Callen, PE  
Callen Engineering, Inc.  
108 E. Savidge St.  
Spring Lake, Michigan 49456  
Tel: 616-414-5260  
email: bcallen@callenengineering.com

For protection of underground utilities, the CONTRACTOR shall dial 1-800-482-7171 OR 811 a minimum of three working days, excluding Saturdays, Sundays and holidays, prior to excavation in the vicinity of utility lines. All "MISS DIG" participating members will thus be routinely notified. This does not relieve the CONTRACTOR of the responsibility of notifying the utility owners who may not be part of the "MISS DIG" alert system.

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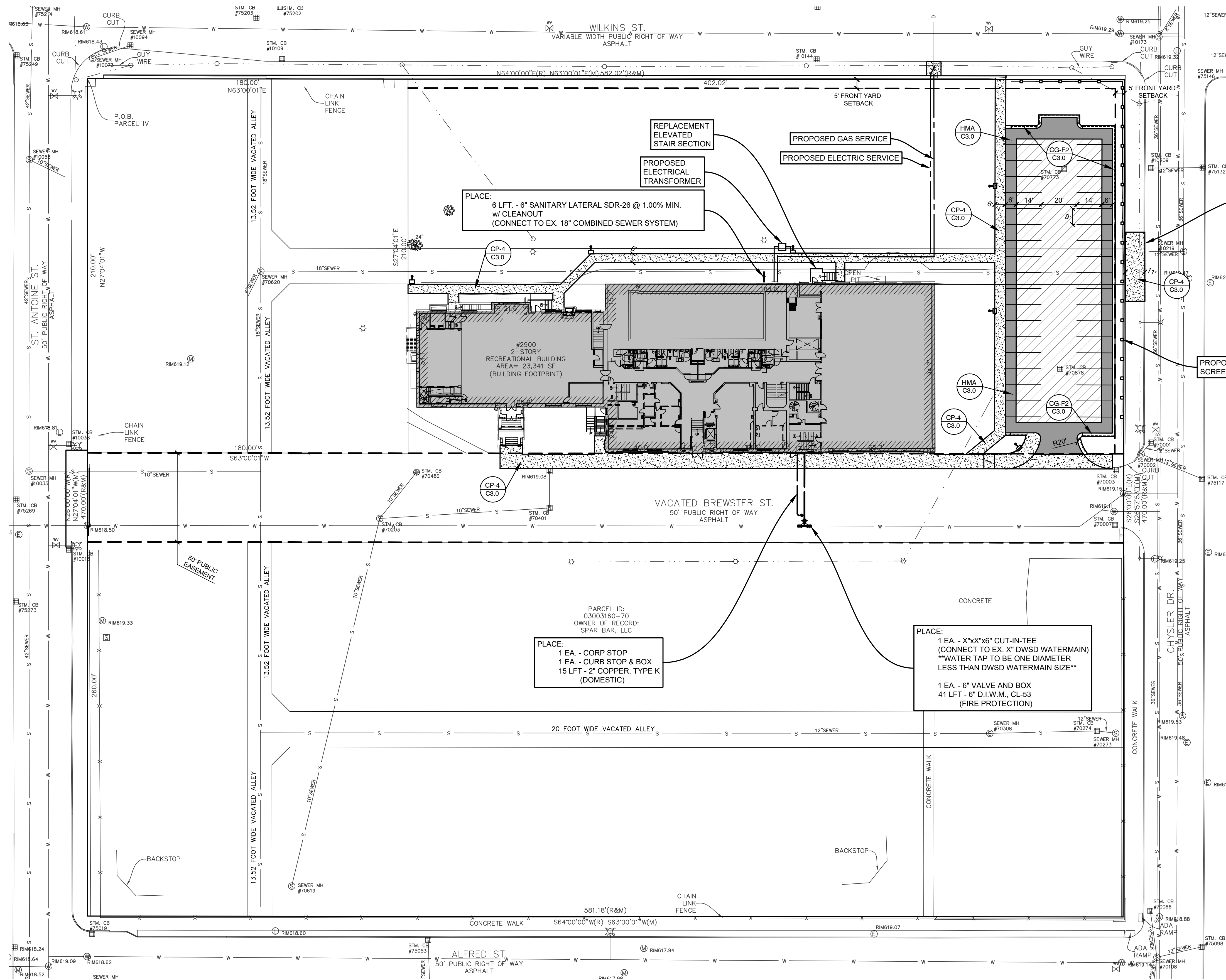
MHT HOUSING, INC.  
32500 TELEGRAPH ROAD, SUITE 100  
DETROIT, MICHIGAN 48025  
248-833-0552

NO.	ISSUANCE / REVISION	DATE
1	FOR PERMITS	01-23-24
2	BULLETIN #1	02-07-24

BREWSTER WHEELER RECREATION CENTER  
2900 SAINT ANTOINE STREET  
DETROIT, MI 48201  
WAYNE COUNTY, MICHIGAN  
EXISTING CONDITIONS & REMOVALS PLAN

DRAWN BY	DATE
J.W.C.	DEC '23
ENGINEER	DATE
B.A.C.	DEC '23
EDIT	DATE
J.W.C.	JAN '24
SCALE	PILOT SCALE
DRAWING	1:1
AS NOTED	1:1

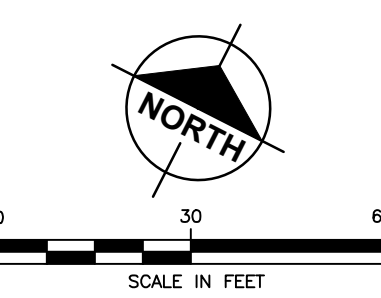
PROJECT 023 BREWSTER  
SHEET NO. C0.1  
DATE OF PLAN: 02-07-24



PROPOSED CONCRETE CURB, DETAIL CD W/ 1\"/>

PROPOSED 8 FT. SCREENING FENCE

- GENERAL NOTES**
- PROJECT INCLUDES REHABILITATION OF ONE (1) EXISTING TWO (2) STORY RECREATION BUILDING. RELATED IMPROVEMENTS INCLUDE EXISTING PARKING LOT REPAIRS, LANDSCAPING, SIGNAGE, LIGHTING, AND UTILITIES.
  - THE DEVELOPMENT SHALL BE SERVED BY PUBLIC WATER MAIN AND PUBLIC SANITARY SEWER.
  - ACCESS TO THE DEVELOPMENT SHALL BE VIA ONE (1) EX. CURB CUT ONTO CHRYSLER DR.
  - ALL WORK IN THE CITY RIGHTS-OF-WAY SHALL BE ACCORDANCE WITH CITY OF DETROIT DPW STANDARDS.
  - LESS THAN 21,780 SFT. OF IMPERVIOUS SURFACE IS BEING REPLACED OR CREATED THEREFORE THIS SITE IS NOT SUBJECT TO THE DWSD PCSWMO. EXISTING ON-SITE STORM INFRASTRUCTURE AND PAVEMENT FLOW LINES WILL BE MAINTAINED.
  - PARKING AND DRIVE AREAS SHALL BE PAVED WITH BITUMINOUS AND CONCRETE PAVEMENTS.
  - PARKING:  
PROVIDED:  
**TOTAL = 40 SPACES, INCLUDING TWO (2) BARRIER FREE SPACES.**
  - ALL PAVEMENT MARKINGS AND SIGNS SHALL CONFORM TO THE STANDARDS SET FORTH IN THE CURRENT EDITION OF THE MICHIGAN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
  - PROPOSED SITE LIGHTING SHALL BE A COMBINATION OF PROPOSED WALL & POLE-MOUNTED FIXTURES, DIRECTED TO INHIBIT LIGHTING BEYOND PROPERTY LIMITS, MEETING THE REQUIREMENTS OF APPLICABLE SECTIONS OF THE CITY OF DETROIT ZONING ORDINANCE.
  - LANDSCAPING AND SCREENING SHALL MEET THE INTENT OF THE CITY OF DETROIT ZONING ORDINANCE.
  - THE OMISSION OF ANY CURRENT STANDARD DETAIL DOES NOT RELIEVE THE CONTRACTOR FROM THIS REQUIREMENT. THE WORK SHALL BE PERFORMED IN COMPLETE CONFORMANCE WITH THE CURRENT DWSD STANDARD SPECIFICATIONS AND DETAILS.
  - ALL DAMAGED PUBLIC SIDEWALKS ADJACENT TO THE PROPERTY SHALL BE REMOVED AND REPLACED IN ACCORDANCE WITH DPW STANDARDS.



**PROPOSED PERMANENT SIGNAGE LEGEND**

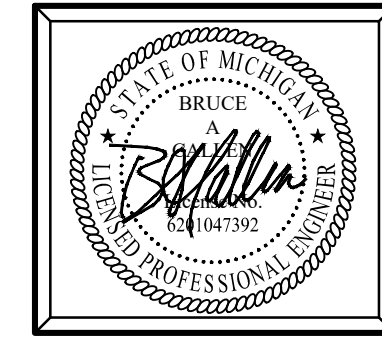


**PROPOSED FEATURES LEGEND**

- NEW LIGHT DUTY CONCRETE SIDEWALK AREA
- NEW HMA PAVEMENT AREA
- NEW HEAVY DUTY CONCRETE PAVEMENT AREA
- MILL / OVERLAY AREA



Know what's below.  
Call before you dig.



Plan Prepared By:  
Bruce A. Callen, PE  
Callen Engineering, Inc.  
108 E. Savidge St.  
Spring Lake, Michigan 49456  
Tel: 616-414-5260  
email: bcallen@callenengineering.com

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DATE OF PLAN: 02-07-24

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www.callenengineering.com



MHT HOUSING, INC.  
32500 TELEGRAPH ROAD, SUITE 100  
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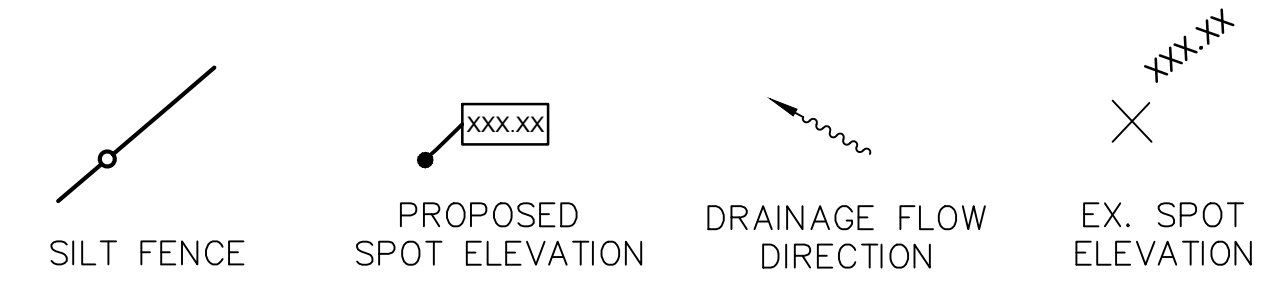
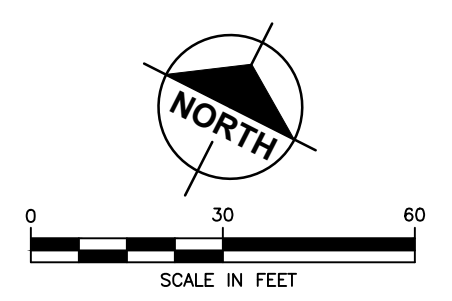
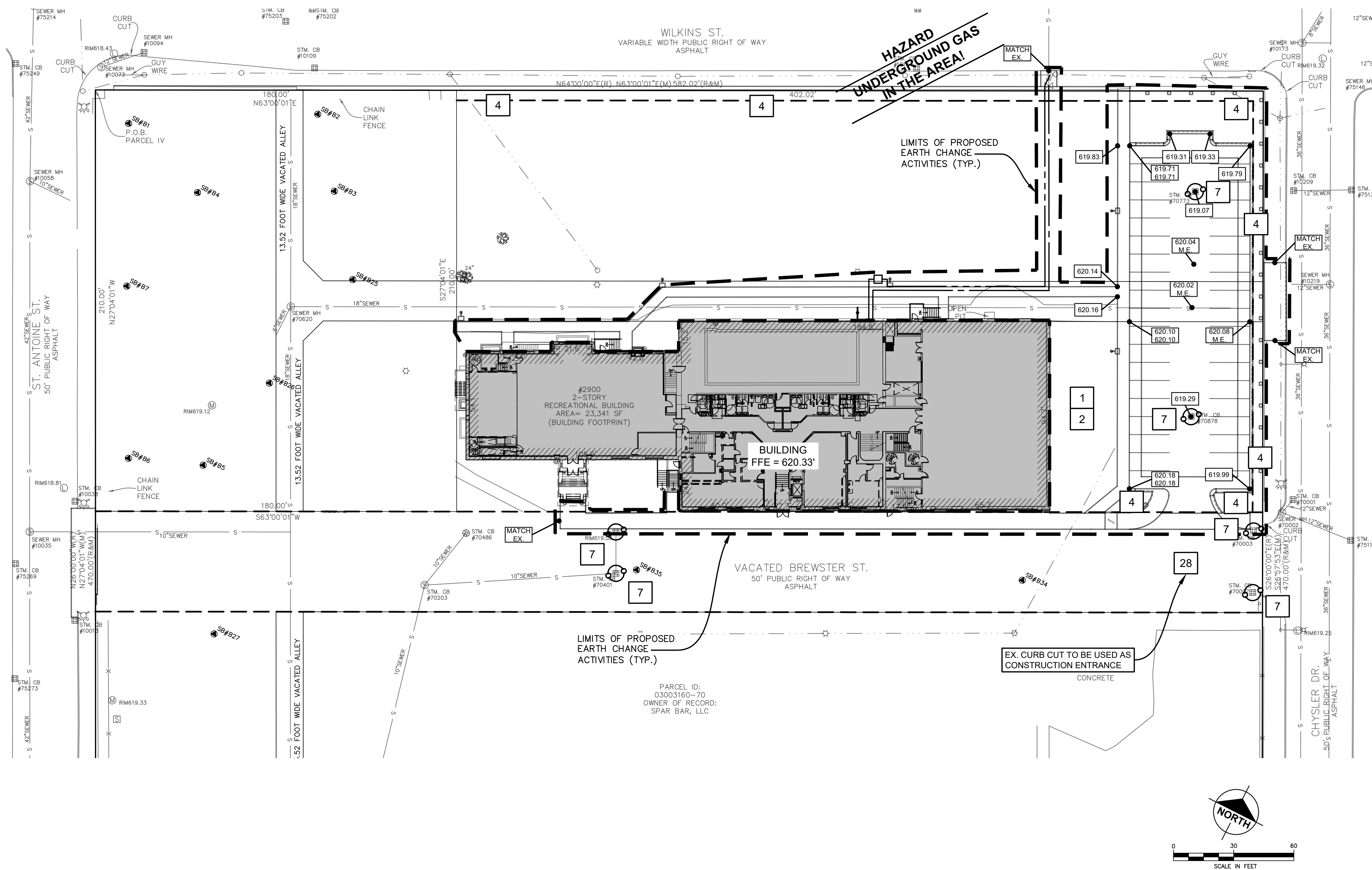
NO.	ISSUANCE / REVISION	DATE
1	FOR PERMITS	01-24-24
2	BULLETIN #1	02-07-24

BREWSTER WHEELER RECREATION CENTER  
2900 SAINT ANTOINE STREET  
DETROIT, MI 48201  
WAYNE COUNTY, MICHIGAN

DRAWN BY	DATE
J.W.C.	DEC '23
ENGINEER	DATE
B.A.C.	DEC '23
EDIT	DATE
J.W.C.	JAN '24

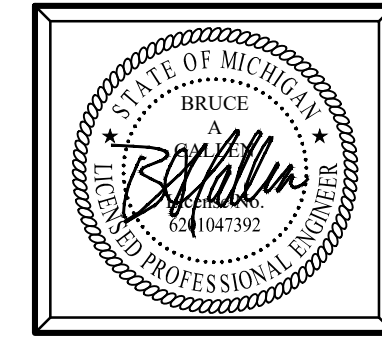
SCALE: AS NOTED  
PROJECT: 023 BREWSTER

SHEET NO. C1.0



**SUBSURFACE CONDITIONS**

Contractor(s) shall familiarize themselves with the information and findings presented in the Geotechnical Evaluation Report prepared by SME dated Apr. 28, 2023.  
SME Project No. 092556.00



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EROSION CONTROL MEASURES			
KEY	SESC MEASURE	SYMBOL	WHERE USED
1	Seeding		When bare soil is exposed, temporarily or permanently, to erosive forces from wind and/or water on flat areas, mild slopes, grassed waterways and spillways, diversion ditches and dikes, borrow and stockpile areas, and spoil piles.
2	Mulch		On flat areas, slopes, grassed waterways and spillways, diversion ditches and dikes, borrow and stockpile areas, and spoil piles when areas are subject to raindrop impact, and erosive forces from wind and/or water.
4	Trees, Shrubs, Vines and Ground Cover		When bare soil or recently vegetated slopes are exposed to erosive forces from wind and/or water.
5	Perimeter Sediment Control Measures (Silt Fence, Straw Wattles, etc.)		As a temporary measure used to capture sediment from sheet flow. May also divert small volumes of sheet flow to protected outlets.
7	Storm Drain Inlet Protection		Around the entrance to a catch basin or an inlet that will capture runoff from an earth change activity.
28	Stone Construction Access		At locations where construction equipment will enter and exit the drain easement and tracking of soil is anticipated.

SESC MEASURES SHALL COMPLY WITH MICHIGAN ASSOCIATION OF COUNTY DRAIN COMMISSIONERS' SESC MANUAL SPECIFICATIONS

**STORM STRUCTURE NOTES**

STORM SEWER LENGTHS PROVIDED ARE MEASURED FROM CENTER OF STRUCTURE. RIM ELEVATIONS ARE MEASURED AT EDGE OF METAL.

STORM SEWER SHALL BE WATER-TIGHT, SOLID-WALL HDPE OR APPROVED EQUAL, UNLESS INDICATED ON THE PLANS.

MANHOLES AND CATCH BASINS SHALL BE IN ACCORDANCE WITH MDOT STANDARD SPECIFICATIONS. CATCH BASINS SHALL INCLUDE 2-FT SUMP.

ALL EXISTING CATCH BASINS TO REMAIN SHALL BE CLEANED AND INSPECTED TO VERIFY OPERABILITY.

CONNECTIONS TO MANHOLES SHALL BE MADE WITH A RESILIENT CONNECTOR FOR PIPE DIAMETERS 24 INCHES OR LESS.

MANHOLE RIM ELEVATIONS SHALL BE SET 1/4" BELOW PLAN GRADE.  
CATCH BASIN RIM ELEVATIONS SHALL BE SET 1 1/8" BELOW PLAN GRADE.

ALL CURB DIMENSIONS ARE MEASURED FROM EDGE OF METAL.

THE CONTRACTOR SHALL EXPOSE AND VERIFY LOCATION AND DEPTH OF EXISTING UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONFLICTS IN GRADES SHALL BE REPORTED TO ENGINEER AND ADJUSTMENTS SHALL BE MADE AT NO ADDITIONAL COST TO OWNER.

**SESC NOTES**

TOTAL DISTURBED AREA: 62,003 SFT (1.42 ACRES)

ADDITIONAL EROSION CONTROL MEASURES NOT SHOWN ON THE SITE PLAN MAY BE NECESSARY AS SITE WORK PROGRESSES. PERMITTEE IS RESPONSIBLE FOR ALL MEASURES NECESSARY TO PREVENT OFFSITE SEDIMENTATION.

GEOTEXTILE SILT FENCE AND ALL CATCH BASIN PROTECTION MEASURES SHALL BE PROPERLY PLACED AS SHOWN ON PLANS AND AS NEEDED TO RETAIN SOILS ONSITE. PERIODIC MAINTENANCE AND INSPECTION OF SESC MEASURES IS REQUIRED FOR PROPER EFFECTIVENESS.

STABILIZE SITE AS SOON AS POSSIBLE.

CONSTRUCTION IS ANTICIPATED TO BEGIN APRIL 2024 WITH SUBSTANTIAL SITEWORK COMPLETION NO LATER THAN JULY 2025.

Callen Engineering, Inc.  
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callen  
civil engineers

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248-833-0552

NO.	ISSUANCE / REVISION FOR PERMITS	DATE
1		01-23-24
2		02-07-24

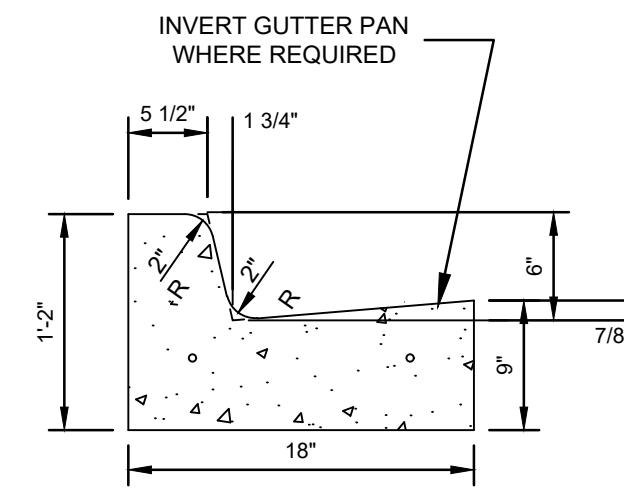
REVISION IN ACCORDANCE WITH CONSTRUCTION RECORDS

BREWSTER WHEELER RECREATION CENTER  
2900 SAINT ANTOINE STREET  
DETROIT, MI 48201  
WAYNE COUNTY, MICHIGAN  
GRADING, DRAINAGE, AND SESC PLAN

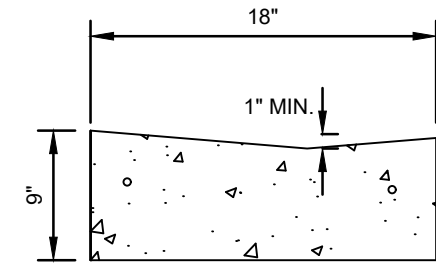
DRAWN BY	DATE
J.W.C.	DEC '23
ENGINEER	DATE
B.A.C.	DEC '23
EDIT	DATE
J.W.C.	JAN '24
SCALE	SCALE
DRAWING	PLOT SCALE
AS NOTED	1:1

PROJECT 023 BREWSTER  
SHEET NO. C2.0  
DATE OF PLAN: 02-07-24

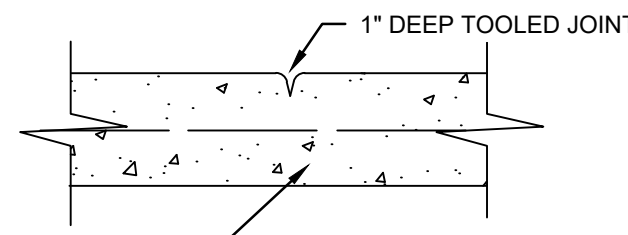




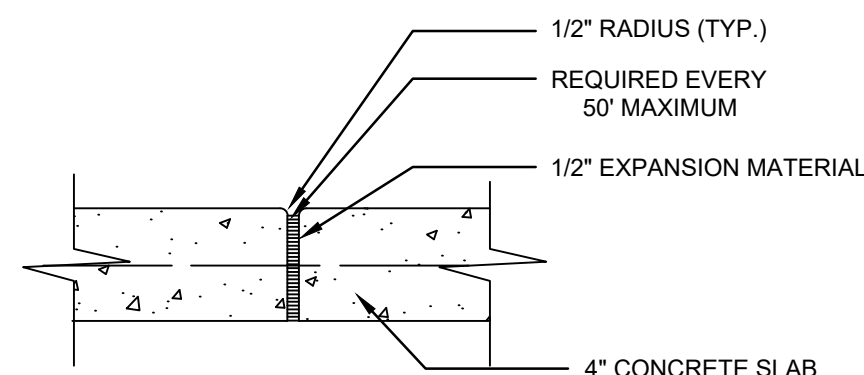
**CONCRETE CURB & GUTTER** (CG-F2)  
DETAIL F2, MODIFIED  
NO SCALE



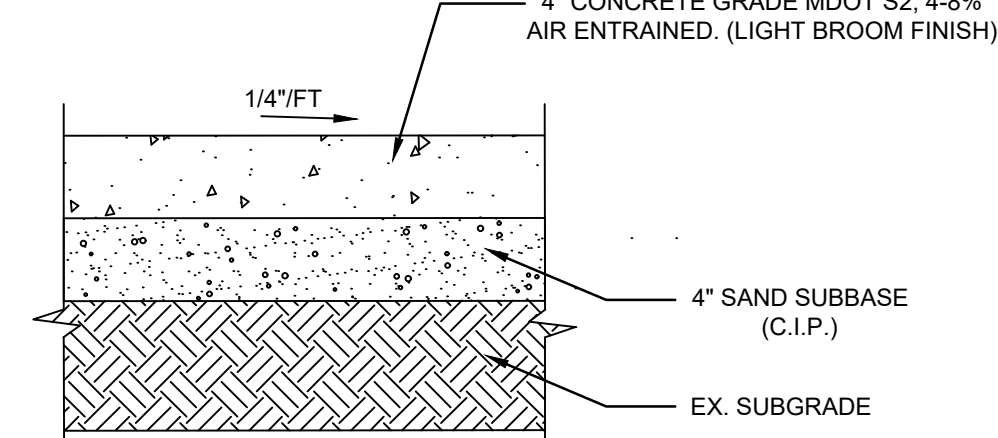
**GUTTER DETAIL** (CG-G)  
NO SCALE



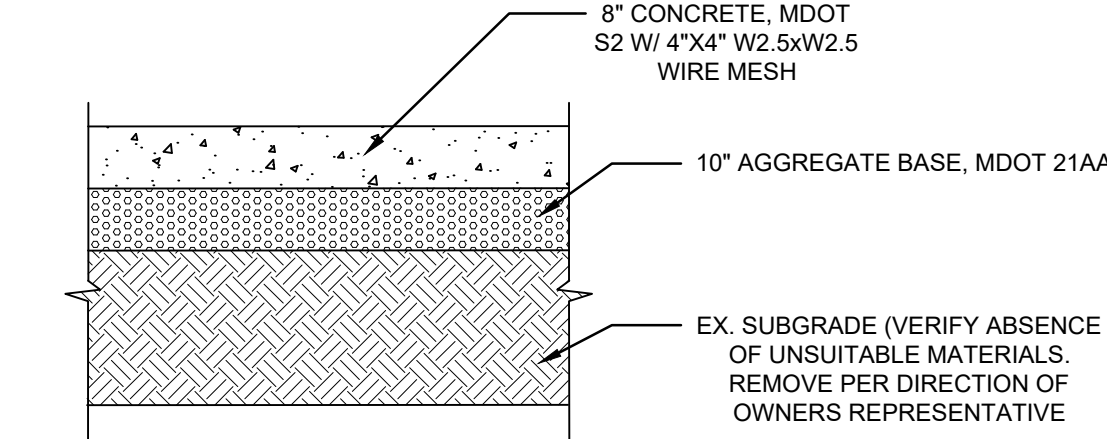
**WALK CONTROL JOINT** (SW-CJ)  
NO SCALE  
4" CONCRETE SLAB  
U.N.O. SEE PLANS FOR REINF. IF REQUIRED



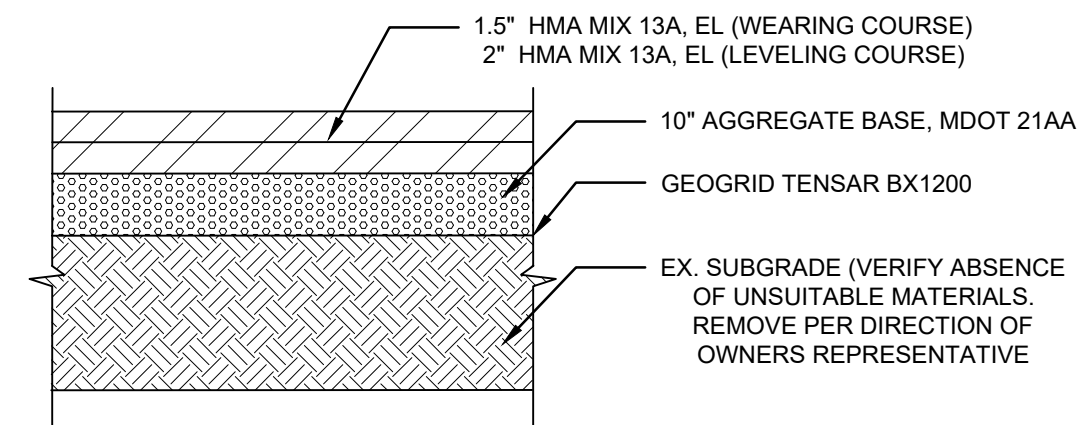
**WALK EXPANSION JOINT** (SW-EJ)  
NO SCALE  
1/2" RADIUS (TYP.)  
REQUIRED EVERY 50' MAXIMUM  
1/2" EXPANSION MATERIAL  
4" CONCRETE SLAB  
U.N.O. SEE PLANS FOR REINF. IF REQUIRED



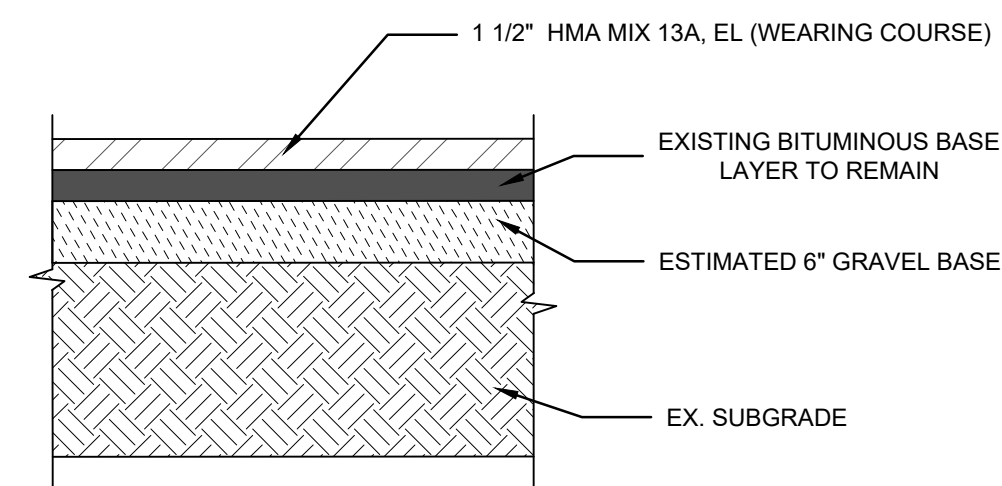
**CONCRETE SIDEWALK SECTION** (CP-4)  
NO SCALE  
NOTE: 1) PROVIDE CONTROL JOINTS AT 5' O/C



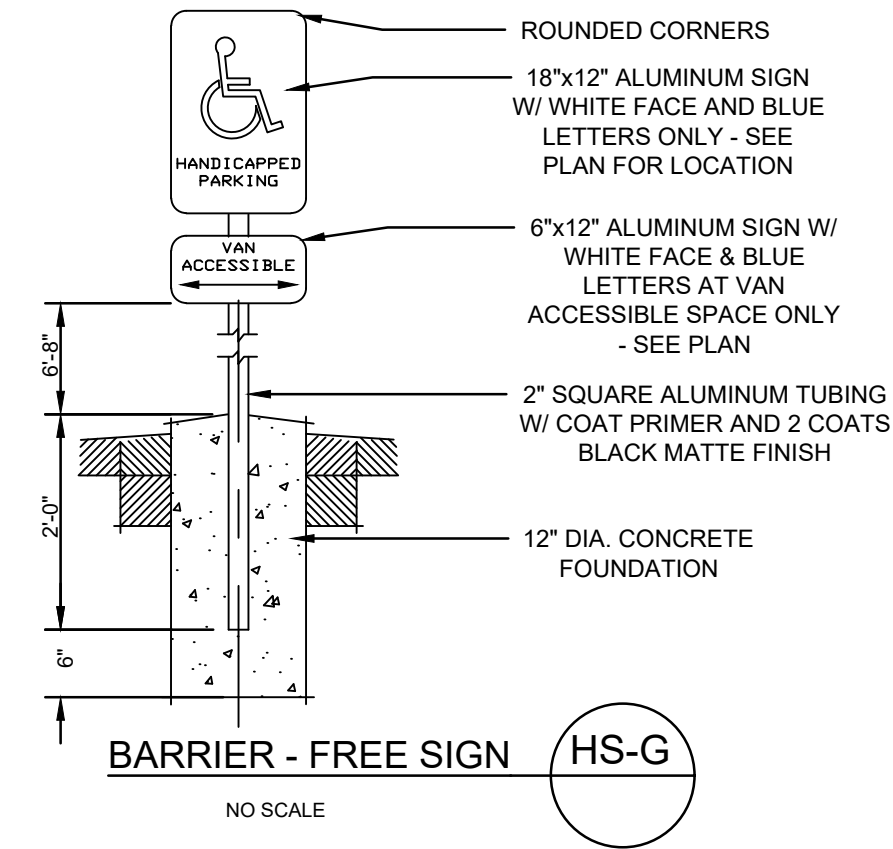
**6" CONCRETE PAVEMENT SECTION** (CP-8)  
NO SCALE  
NOTE: CONTRACTOR(S) SHALL FAMILIARIZE THEMSELVES WITH THE INFORMATION AND FINDINGS PRESENTED IN THE GEOTECHNICAL EVALUATION REPORT PREPARED BY SME DATED: APRIL 28, 2023. PROJECT NO.092556.00



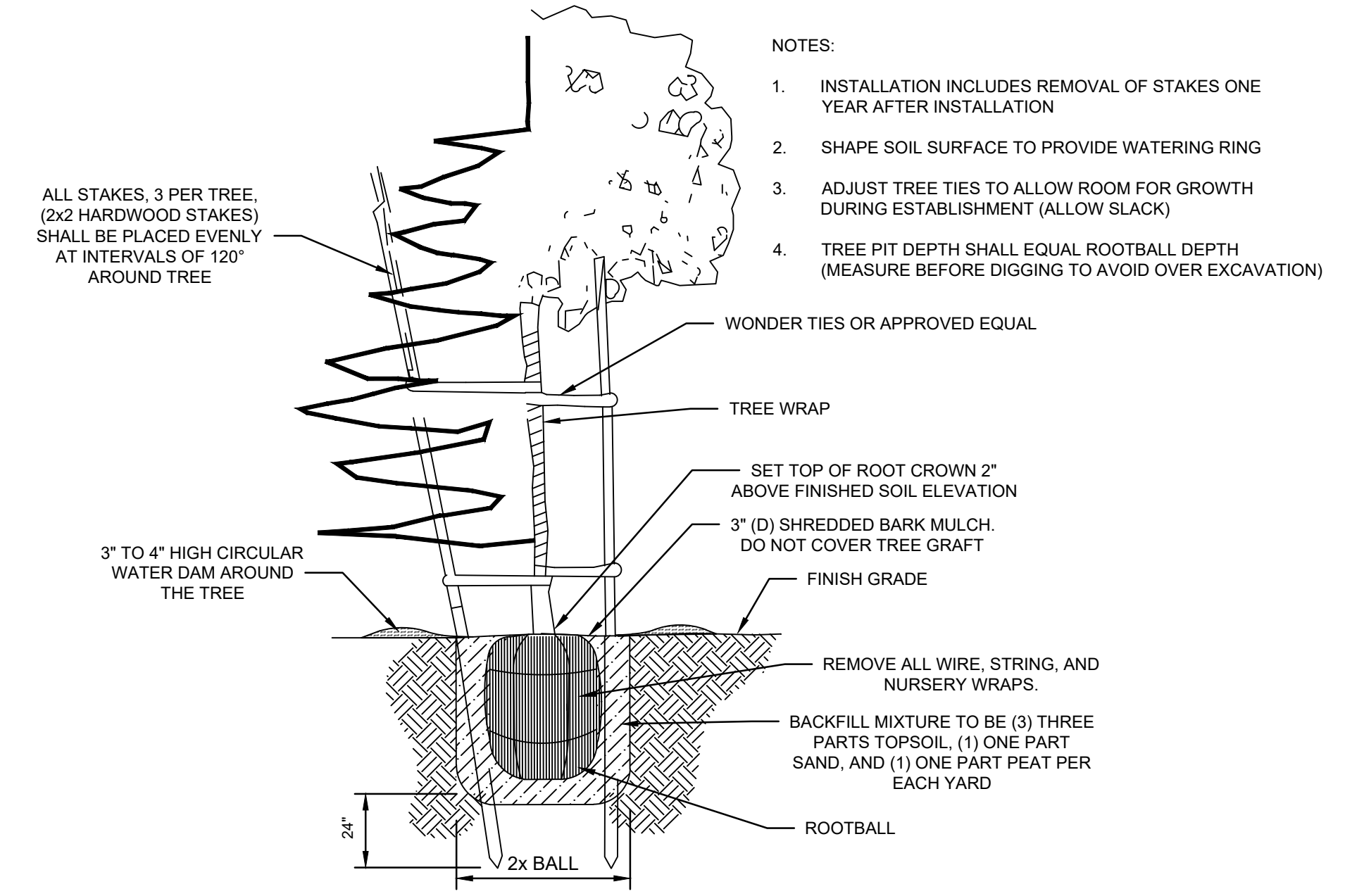
**HMA PAVEMENT SECTION** (HMA)  
NO SCALE  
NOTE: CONTRACTOR(S) SHALL FAMILIARIZE THEMSELVES WITH THE INFORMATION AND FINDINGS PRESENTED IN THE GEOTECHNICAL EVALUATION REPORT PREPARED BY SME DATED: APRIL 28, 2023. PROJECT NO.092556.00



**HMA MILL/OVERLAY PAVEMENT SECTION**  
NO SCALE

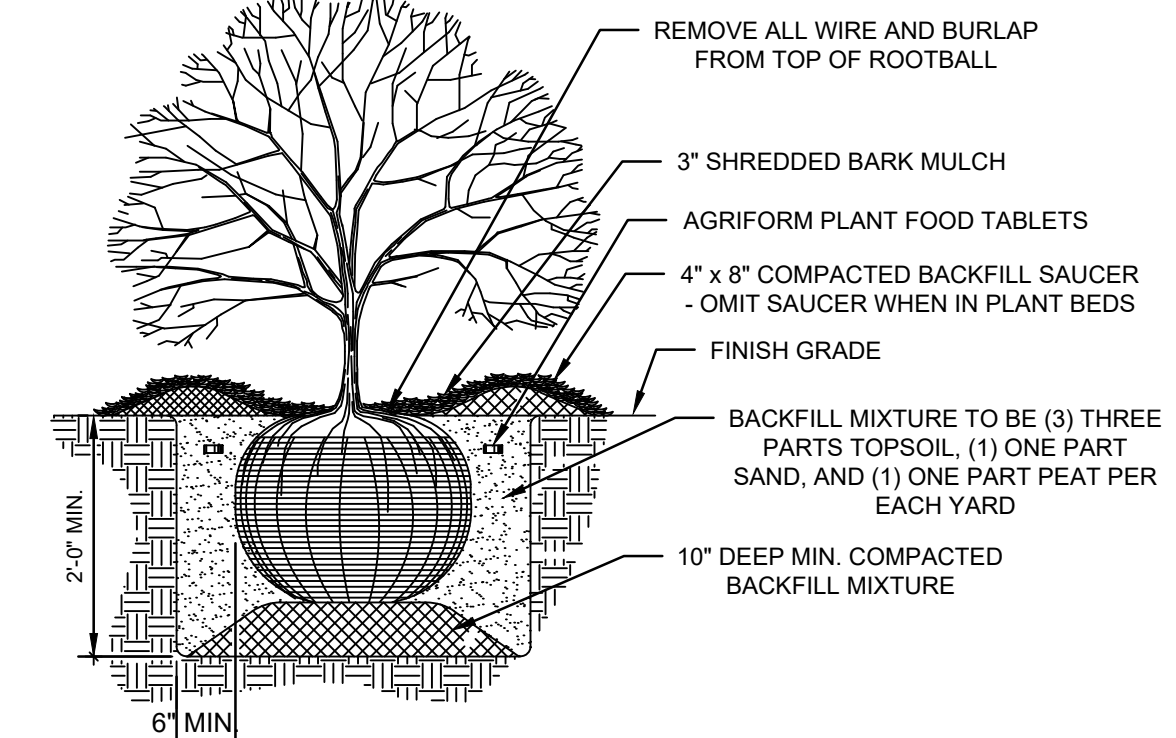


**BARRIER - FREE SIGN** (HS-G)  
NO SCALE

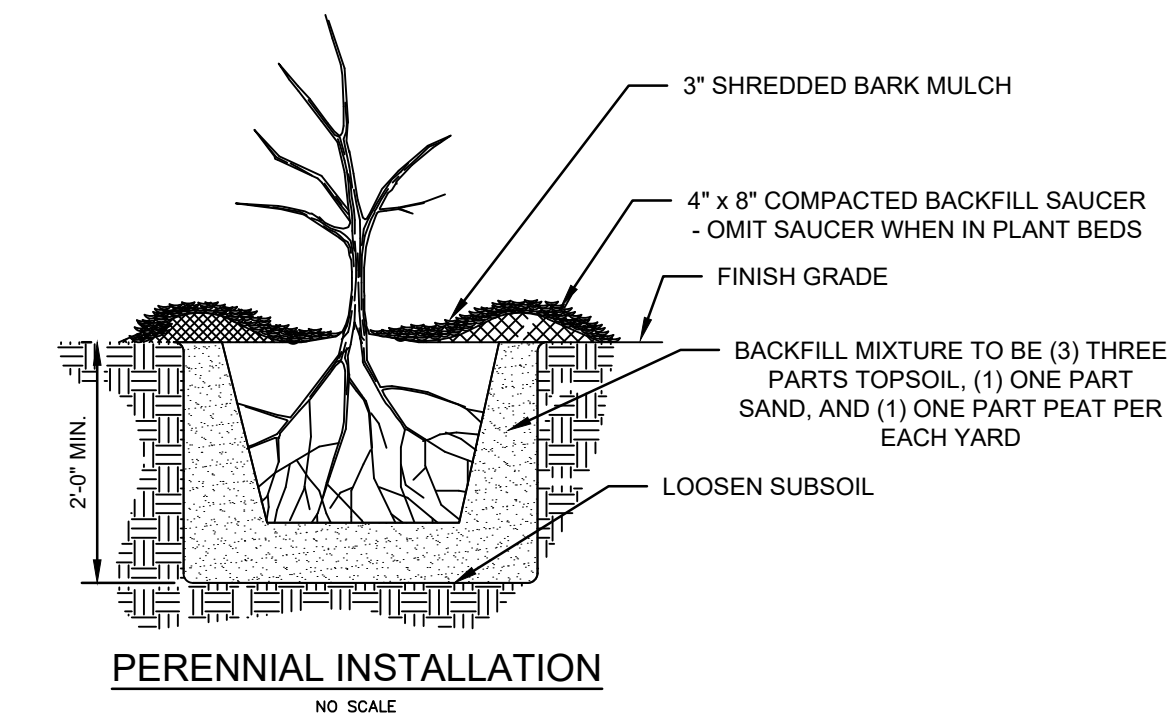


21 GRAM "AGRIFORM" PLANTING TABLETS AS FOLLOWS:  
2 TABLETS PER 1 GAL. PLANT  
3 TABLETS PER 5 GAL. PLANT  
4 TABLETS PER 15 GAL. PLANT  
LARGER PLANTS (2) TWO TABLETS PER 1/2" DIAM. OF TRUNK CALIPER

**TYPICAL - TREE STAKING**  
NO SCALE



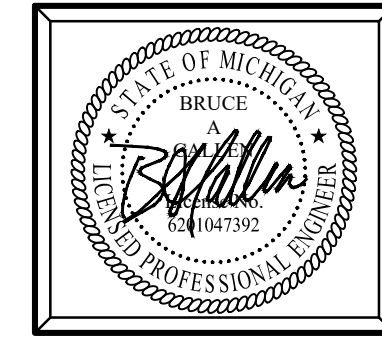
**SHRUB INSTALLATION**  
NO SCALE



**PERENNIAL INSTALLATION**  
NO SCALE



Know what's below.  
Call before you dig.



Plan Prepared By:  
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DATE OF PLAN: 02-07-24

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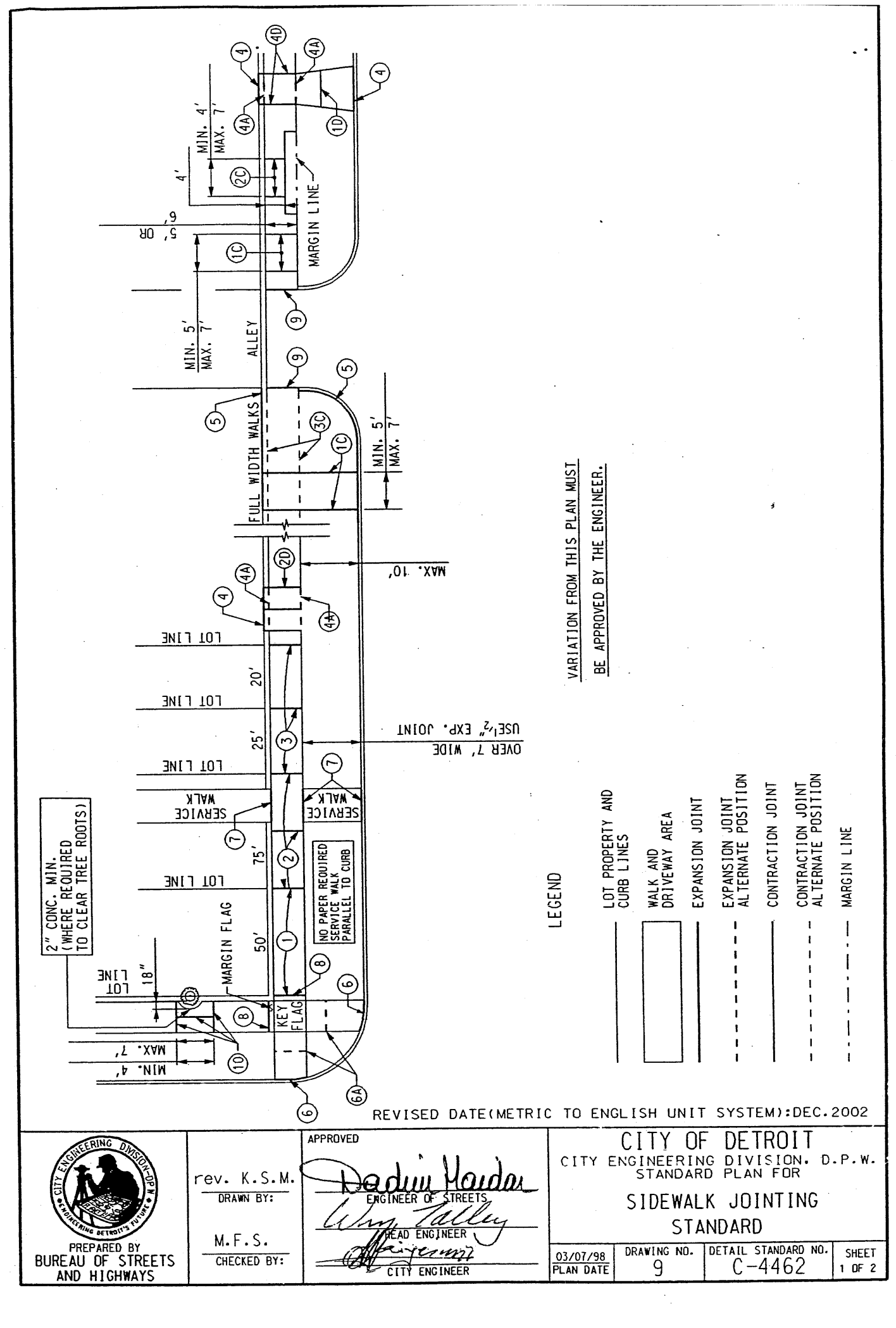
NO.	ISSUANCE / REVISION	DATE
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BREWSTER WHEELER RECREATION CENTER  
2900 SAINT ANTOINE STREET  
DETROIT, MI 48201  
WAYNE COUNTY, MICHIGAN  
X-SECTIONS, NOTES, AND DETAILS

DRAWN BY	DATE
J.W.C.	NOV '23
ENGINEER	DATE
B.A.C.	NOV '23
EDIT	DATE
J.W.C.	JAN '24

SCALE	SCALE
DRAWING	PILOT SCALE
AS NOTED	1:1

PROJECT 023 BREWSTER  
SHEET NO. C3.0

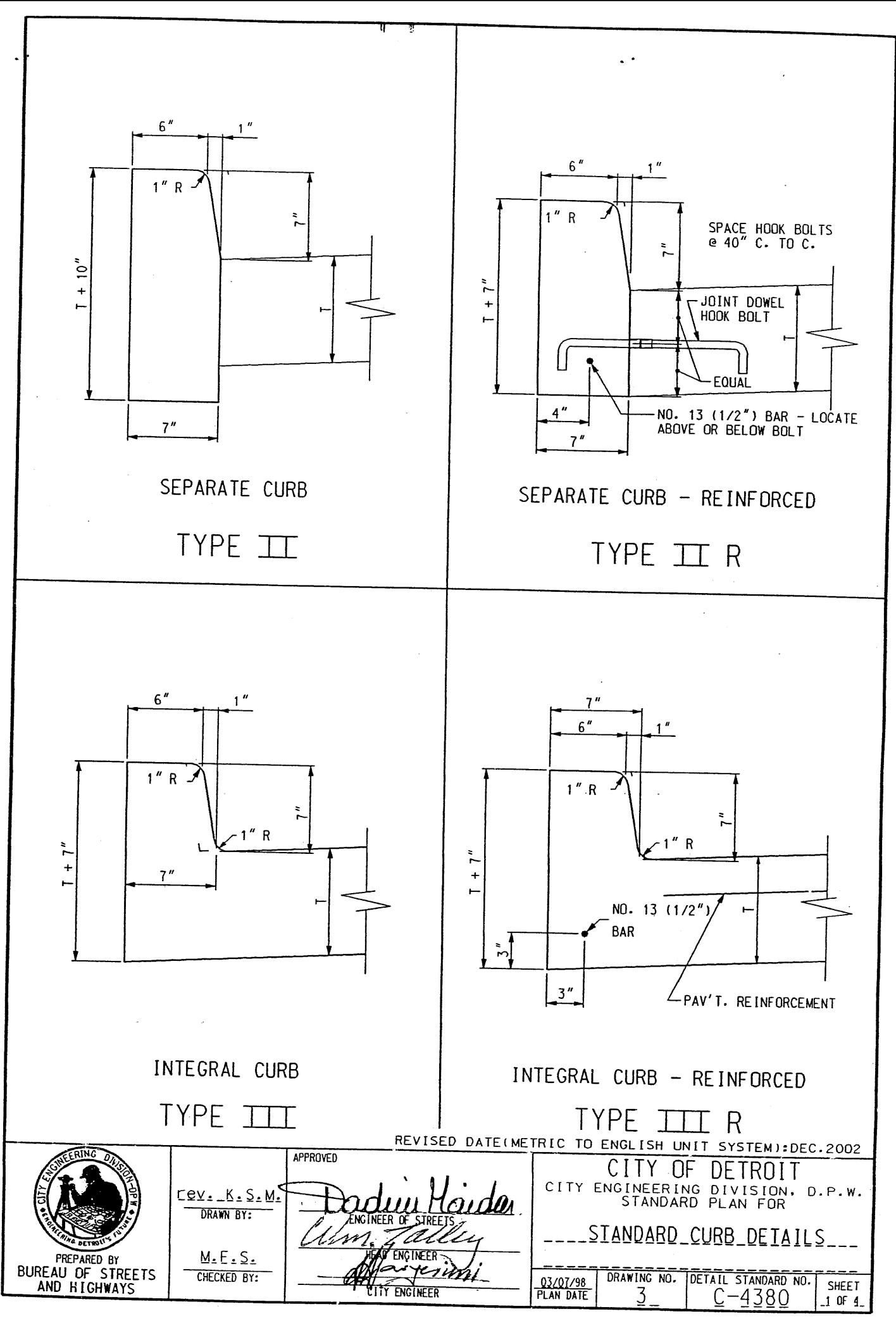


APPROVED  
CITY OF DETROIT  
CITY ENGINEERING DIVISION - D.P.W.  
STANDARD PLAN FOR  
SIDEWALK JOINTING  
STANDARD

DESIGNED BY: Rev. K.S.M. Dardun Haidar  
ENGINEER OF STREETS

CHECKED BY: M.F.S. [Signature]  
CITY ENGINEER

DATE: 03/07/28  
DRAWING NO.: 9  
DETAIL STANDARD NO.: C-4462  
SHEET 1 OF 2



APPROVED  
CITY OF DETROIT  
CITY ENGINEERING DIVISION - D.P.W.  
STANDARD PLAN FOR  
STANDARD CURB DETAILS

DESIGNED BY: Rev. K.S.M. Dardun Haidar  
ENGINEER OF STREETS

CHECKED BY: M.F.S. [Signature]  
CITY ENGINEER

DATE: 03/07/28  
DRAWING NO.: 3  
DETAIL STANDARD NO.: C-4380  
SHEET 1 OF 4

**EXPANSION JOINTS**

ALL EXPANSION JOINT PAPER SHALL EXTEND 1" BELOW THE BOTTOM OF THE THINNER OF ADJOINING PAVEMENT SECTIONS.

- PLACE 1/2" PAPER EXPANSION JOINTS AT LOT LINES WHEN LOT LINES ARE BETWEEN 25' AND 50' APART.
- PLACE ADDITIONAL 1/2" PAPER EXPANSION JOINTS SO THAT THE DISTANCE BETWEEN JOINTS DOES NOT EXCEED 15.2 m WHEN LOT LINES ARE OVER 15.240 m APART.
- PLACE 1/2" PAPER EXPANSION JOINTS AT EVERY SECOND LOT LINE AND CONTRACTION JOINT AT INTERVENING LOT LINE WHEN LOT LINES ARE LESS THAN 25' APART.
- PLACE 1" PAPER EXPANSION JOINTS AT CURB AND BUILDING OR PROPERTY LINE OR AT ALTERNATE POSITION (A) AS SHOWN FOR DRIVEWAY.
- PLACE 1" PAPER EXPANSION JOINTS AT CURB AND BUILDING OR PROPERTY LINE FOR FULL WIDTH SIDEWALK EXCEEDING 7' IN WIDTH.
- PLACE 1" PAPER EXPANSION JOINTS AT CURB CIRCLES OR AT ALTERNATE POSITION (A) AS SHOWN.
- PLACE 1" PAPER EXPANSION JOINTS AT INTERSECTIONS OF SERVICE WALKS AND SIDEWALKS AND SERVICE WALKS AND CURBS.
- PLACE 1" PAPER EXPANSION JOINTS AT MARGIN FLAGS AT CROSSWALKS.
- PLACE 1" PAPER EXPANSION JOINTS AT ALLEY APRONS.
- PLACE 1/2" PAPER EXPANSION JOINT BOTH SIDES OF SIDEWALK FLAG ABUTTING TREE AND ON CENTERLINE JOINT.

**CONTRACTION JOINTS**

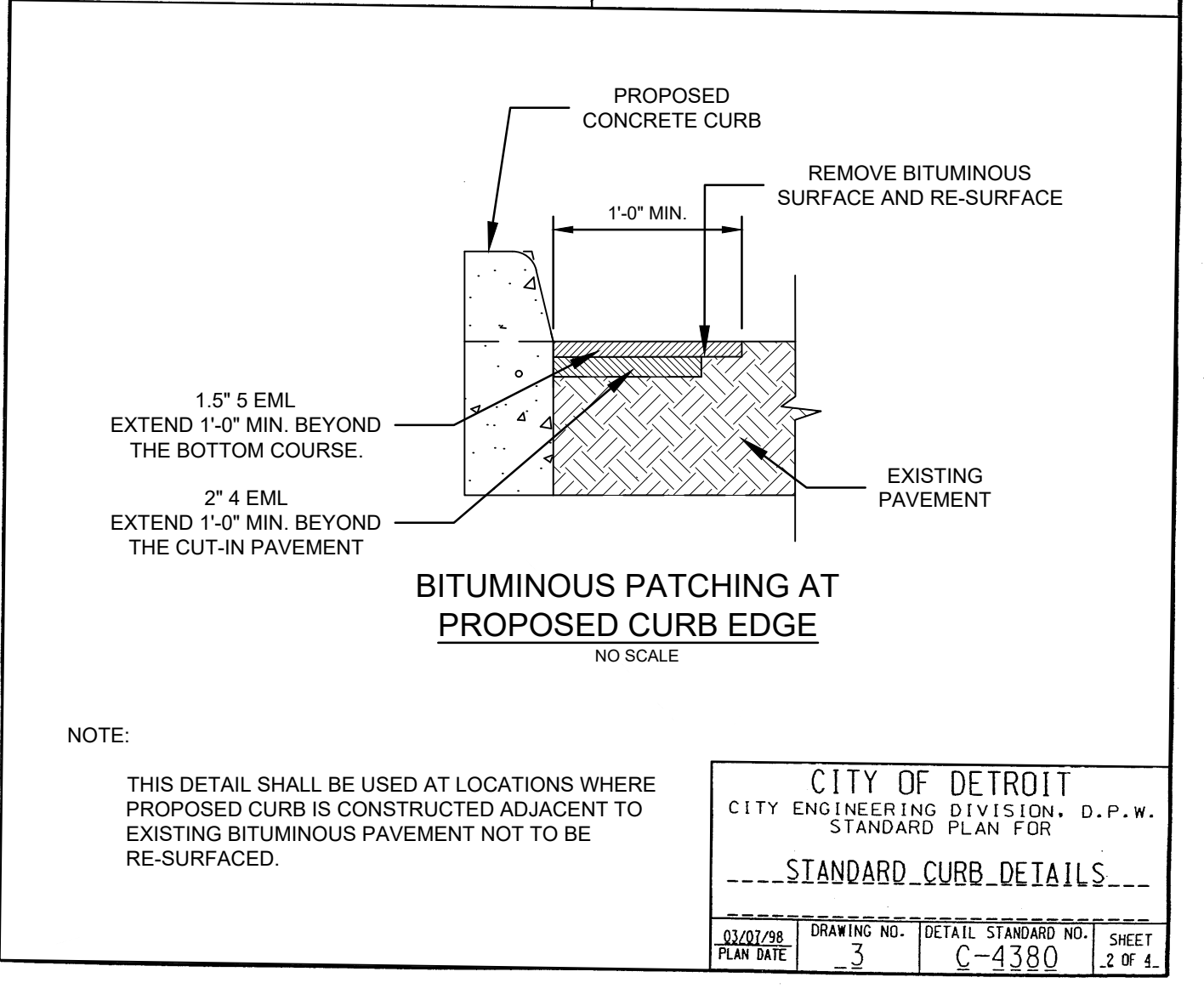
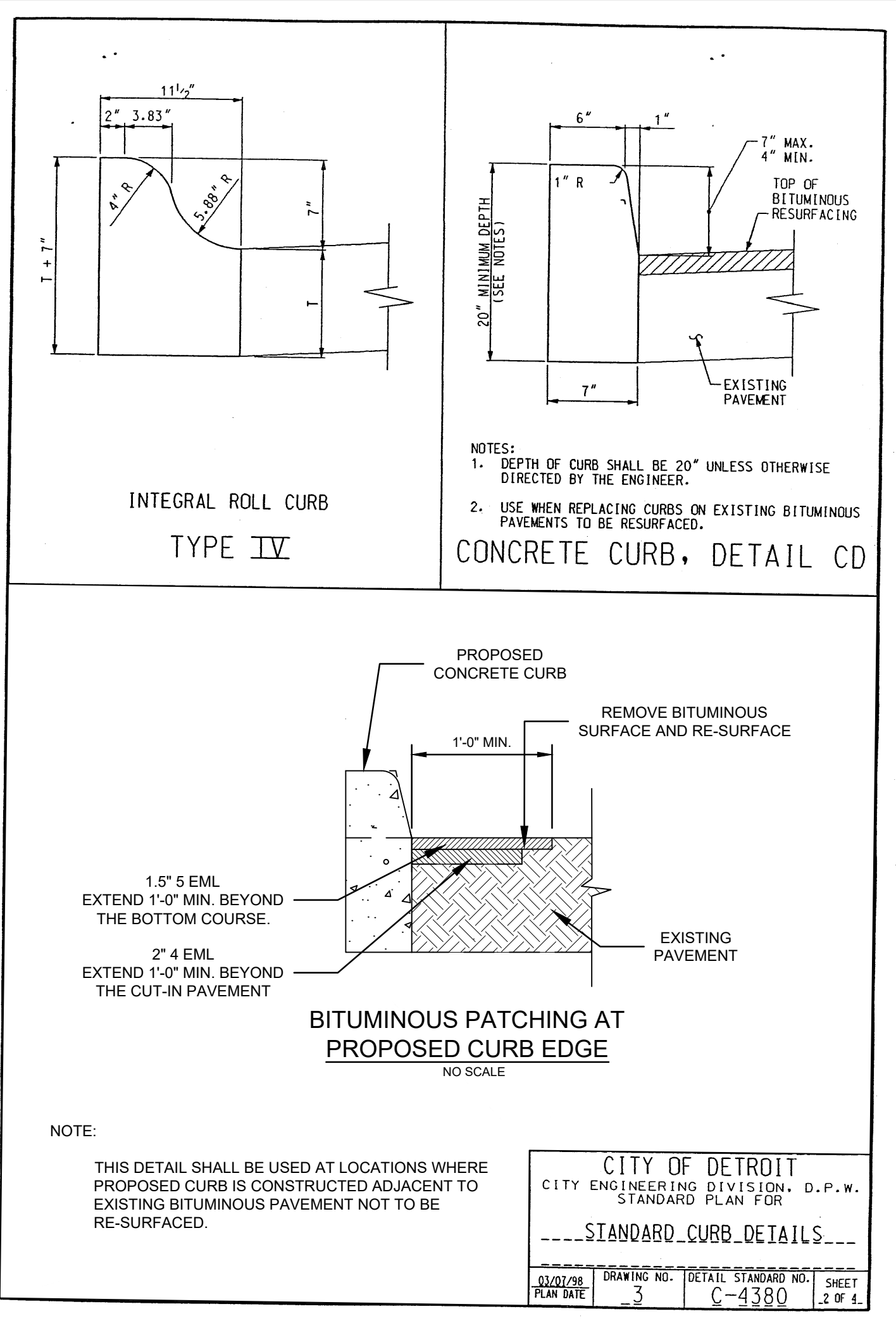
- PLACE CONTRACTION JOINTS AT INTERVALS OF NOT LESS THAN 5' NOR MORE THAN 7' ON WALKS 5' WIDE OR WIDER, INCLUDING FULL WIDTH WALKS.
- PLACE CONTRACTION JOINTS AT INTERVALS OF NOT LESS THAN 4' NOR MORE THAN 7' ON WALKS 4' WIDE.
- PLACE CONTRACTION JOINTS AT THE MARGIN LINE ON FULL WIDTH WALKS (OPTIONAL).

**DRIVEWAYS**

- PLACE CONTRACTION JOINTS IN DRIVEWAYS SO THAT NO SLAB WILL EXCEED THE DIMENSIONS OF 15' BY 15'.
- PLACE 1" PAPER EXPANSION JOINTS ON ALL SIDES OF COMMERCIAL DRIVES.
- PLACE CONTRACTION OR CONTRACTION JOINT ON CENTERLINE WHEN WIDTH OF DRIVEWAY EXCEEDS 15'
- PLACE 1/2" PAPER EXPANSION JOINTS ON BOTH SIDES OF RESIDENTIAL DRIVEWAYS. IF DRIVEWAY EDGE IS WITHIN 2' OF LOT LINE, PLACE THIS EXPANSION PAPER AT PROPERTY LINE.

**CITY OF DETROIT**  
CITY ENGINEERING DIVISION - D.P.W.  
STANDARD PLAN FOR  
SIDEWALK JOINTING  
STANDARD

DATE: 03/07/28  
DRAWING NO.: 9  
DETAIL STANDARD NO.: C-4462  
SHEET 2 OF 2



NOTE:  
THIS DETAIL SHALL BE USED AT LOCATIONS WHERE PROPOSED CURB IS CONSTRUCTED ADJACENT TO EXISTING BITUMINOUS PAVEMENT NOT TO BE RE-SURFACED.

**CITY OF DETROIT**  
CITY ENGINEERING DIVISION - D.P.W.  
STANDARD PLAN FOR  
STANDARD CURB DETAILS

DATE: 03/07/28  
DRAWING NO.: 3  
DETAIL STANDARD NO.: C-4380  
SHEET 2 OF 4



Know what's below.  
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Plan Prepared By:  
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**callen**  
civil engineers

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MHT HOUSING, INC.  
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248-833-0552

NO.	DATE	ISSUANCE / REVISION
1	01-24-24	FOR PERMITS
2	02-07-24	BULLETIN #1

REVISION IN ACCORDANCE WITH CONSTRUCTION RECORDS

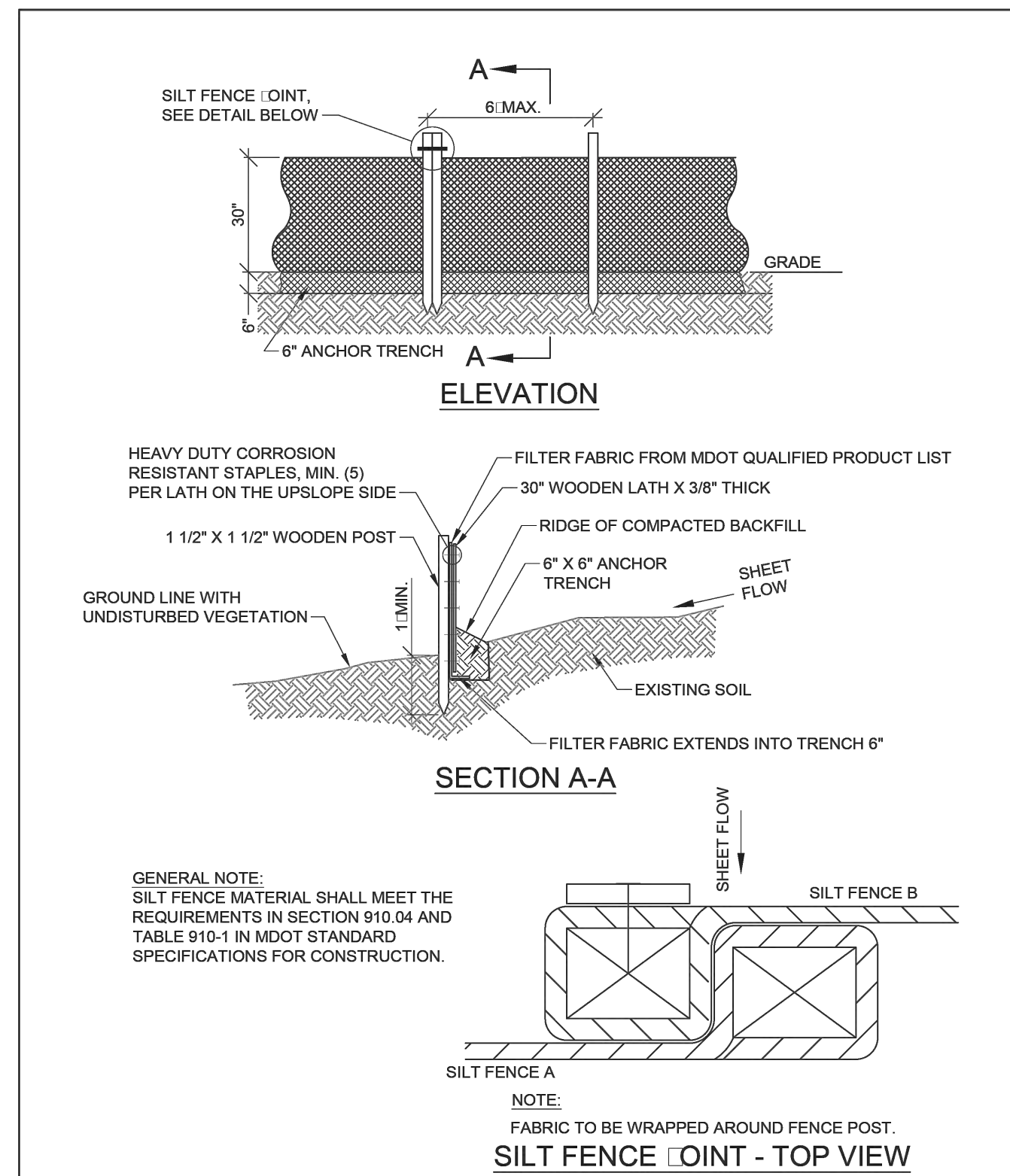
**BREWSTER WHEELER RECREATION CENTER**  
2900 SAINT ANTOINE STREET  
DETROIT, MI 48201  
WAYNE COUNTY, MICHIGAN  
X-SECTIONS, NOTES, AND DETAILS

DRAWN BY: J.W.C.	DATE: DEC '23
ENGINEER: B.A.C.	DATE: DEC '23
EDIT: J.W.C.	DATE: JAN '24
SCALE: AS NOTED	PLOT SCALE: 1:1

PROJECT: 023 BREWSTER

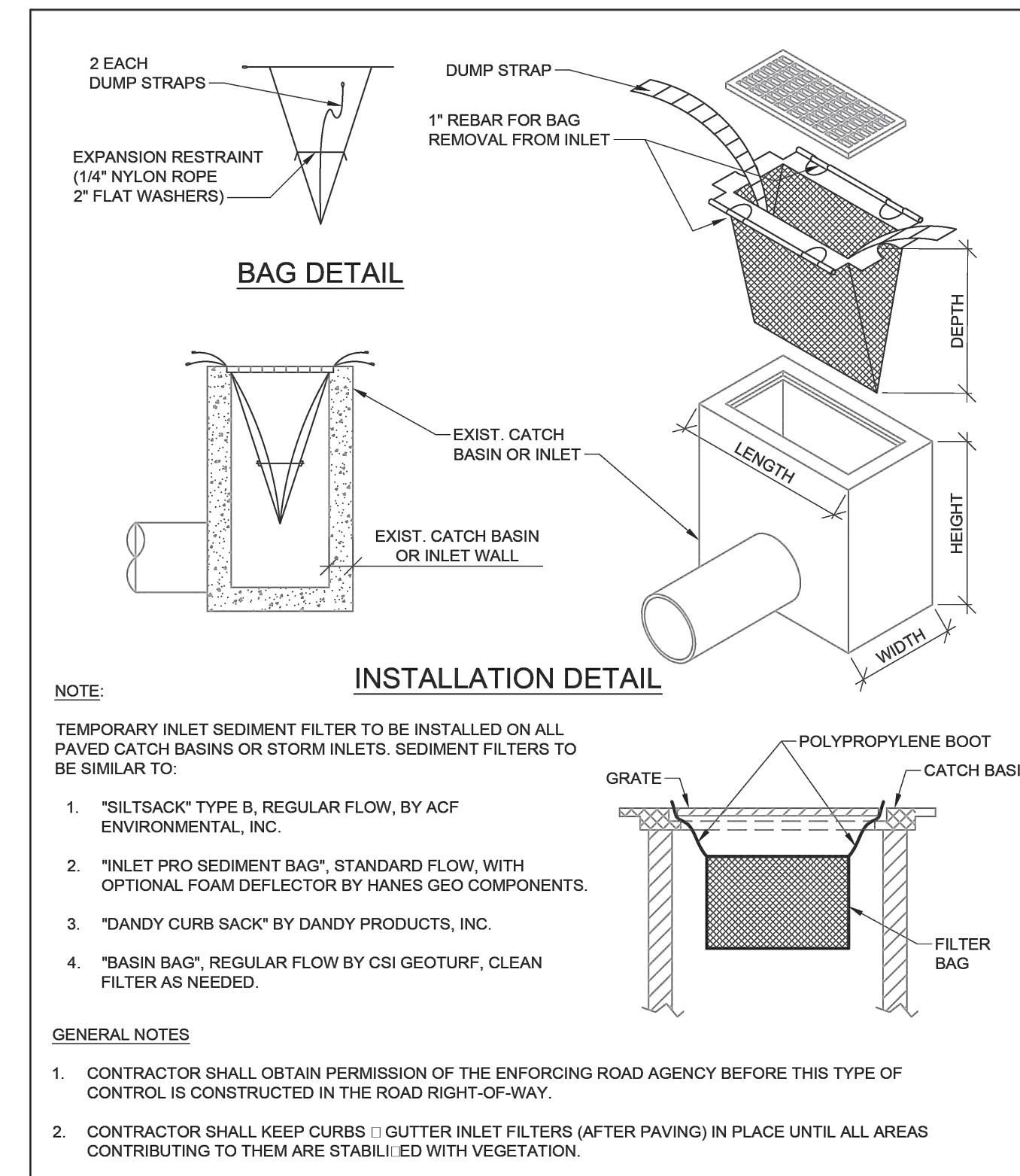
DATE OF PLAN: 02-07-24

**C3.1**



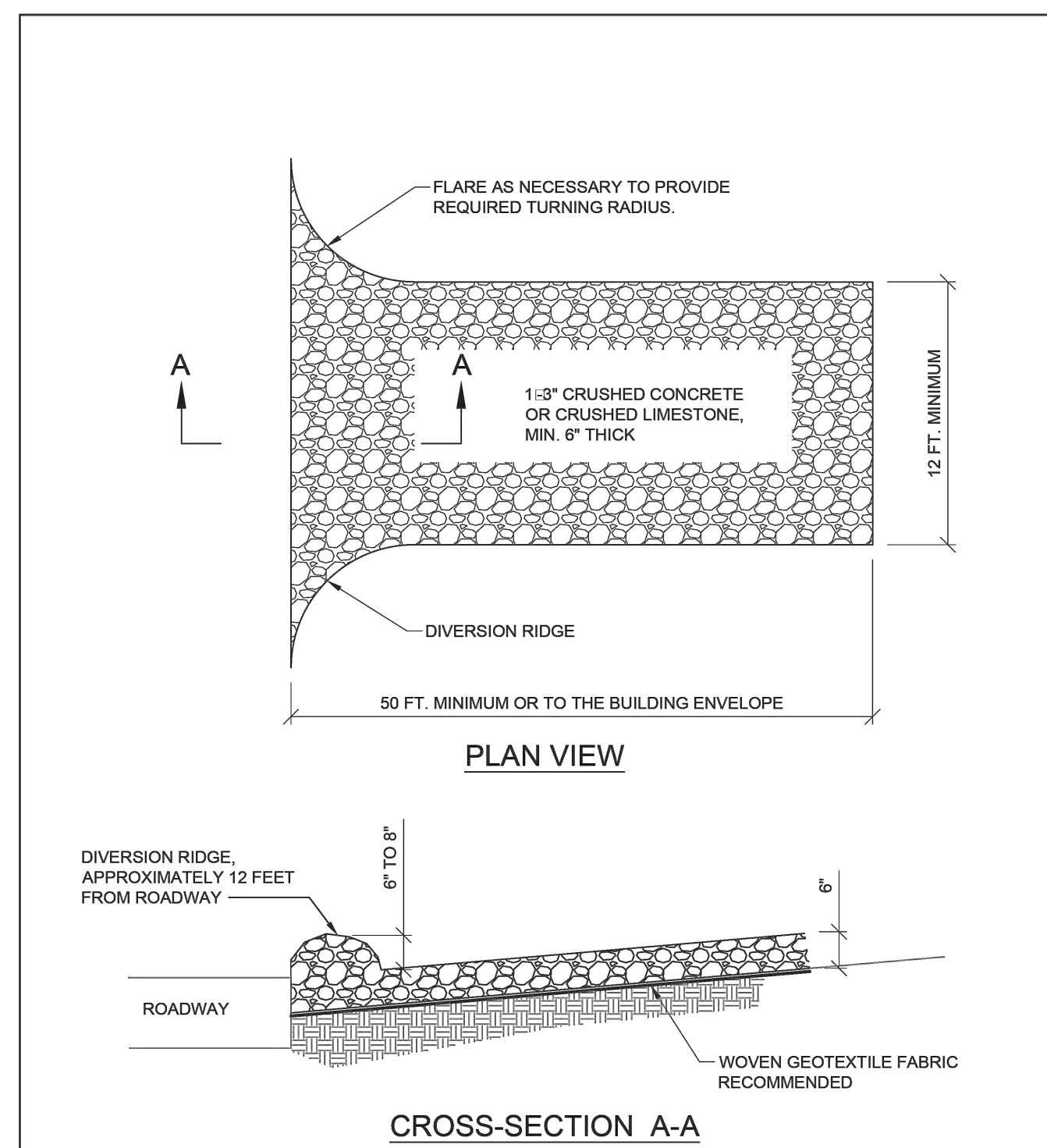
REV	DESCRIPTION	DATE

<b>EROSION CONTROL, SILT FENCE</b>		 CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	1 OF 1	
NONE	SHEET	
DATE	DWG. No.	
09/2018	015:13:02	



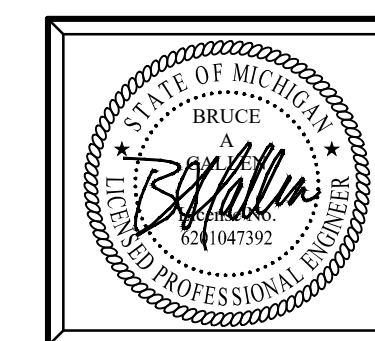
REV	DESCRIPTION	DATE

<b>INLET PROTECTION FABRIC DROP</b>		 CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	1 OF 1	
NONE	SHEET	
DATE	DWG. No.	
09/2018	015:13:05	



REV	DESCRIPTION	DATE

<b>GRAVEL ACCESS APPROACH</b>		 CITY OF DETROIT WATER AND SEWERAGE DEPARTMENT ENGINEERING DIVISION
SCALE	1 OF 1	
NONE	SHEET	
DATE	DWG. No.	
09/2018	015:13:01	



Plan Prepared By:  
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DATE OF PLAN: 02-07-24

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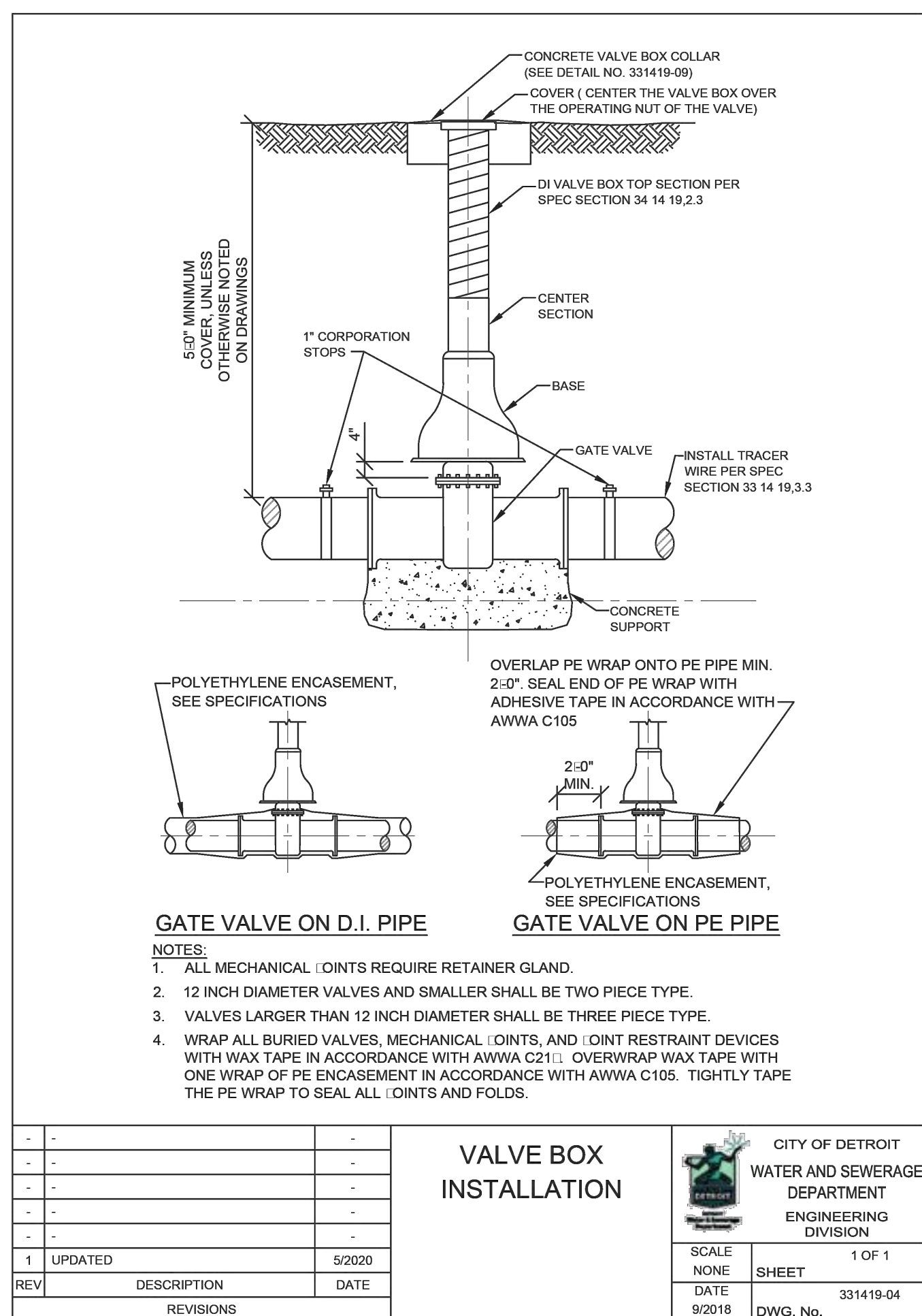
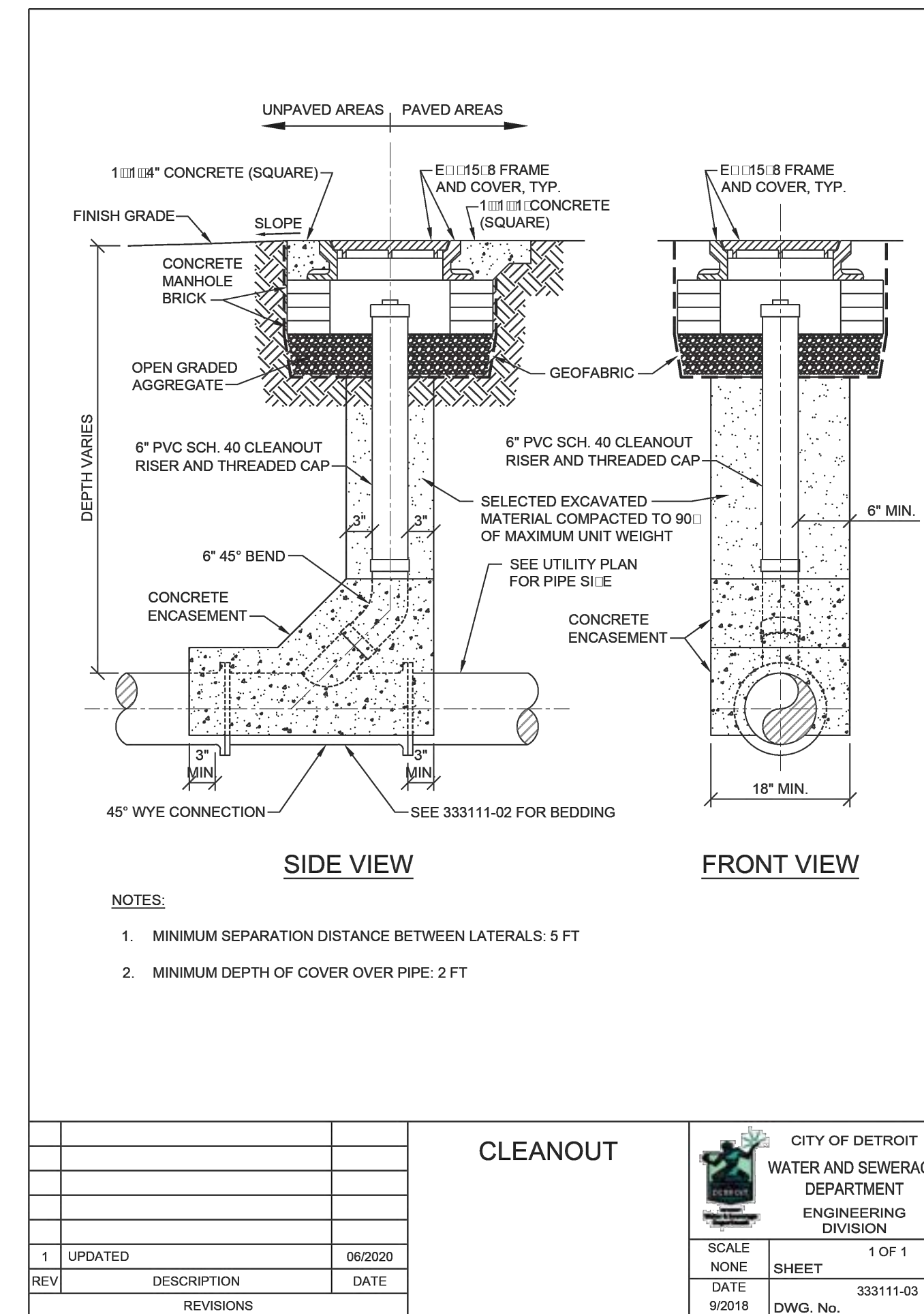
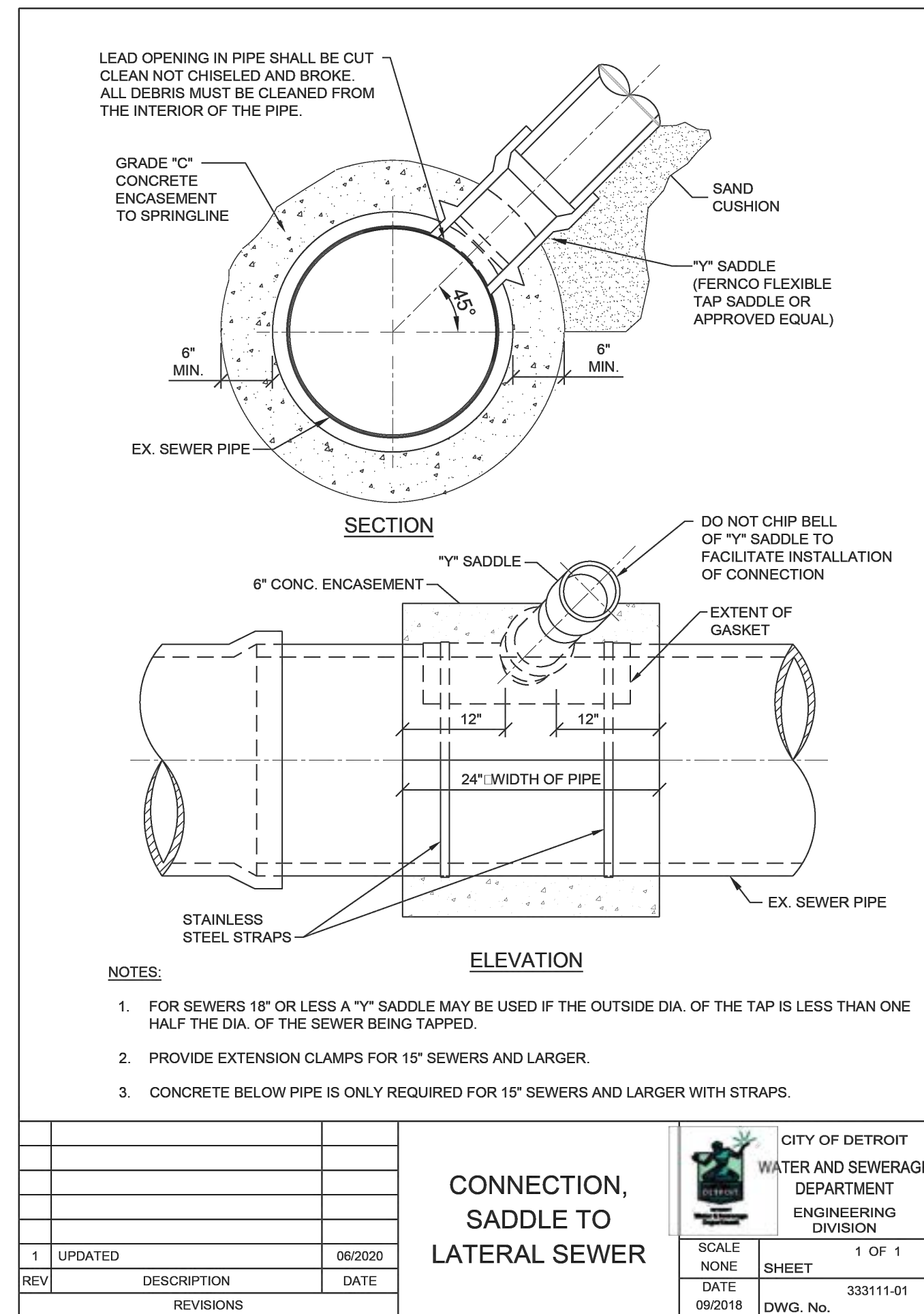
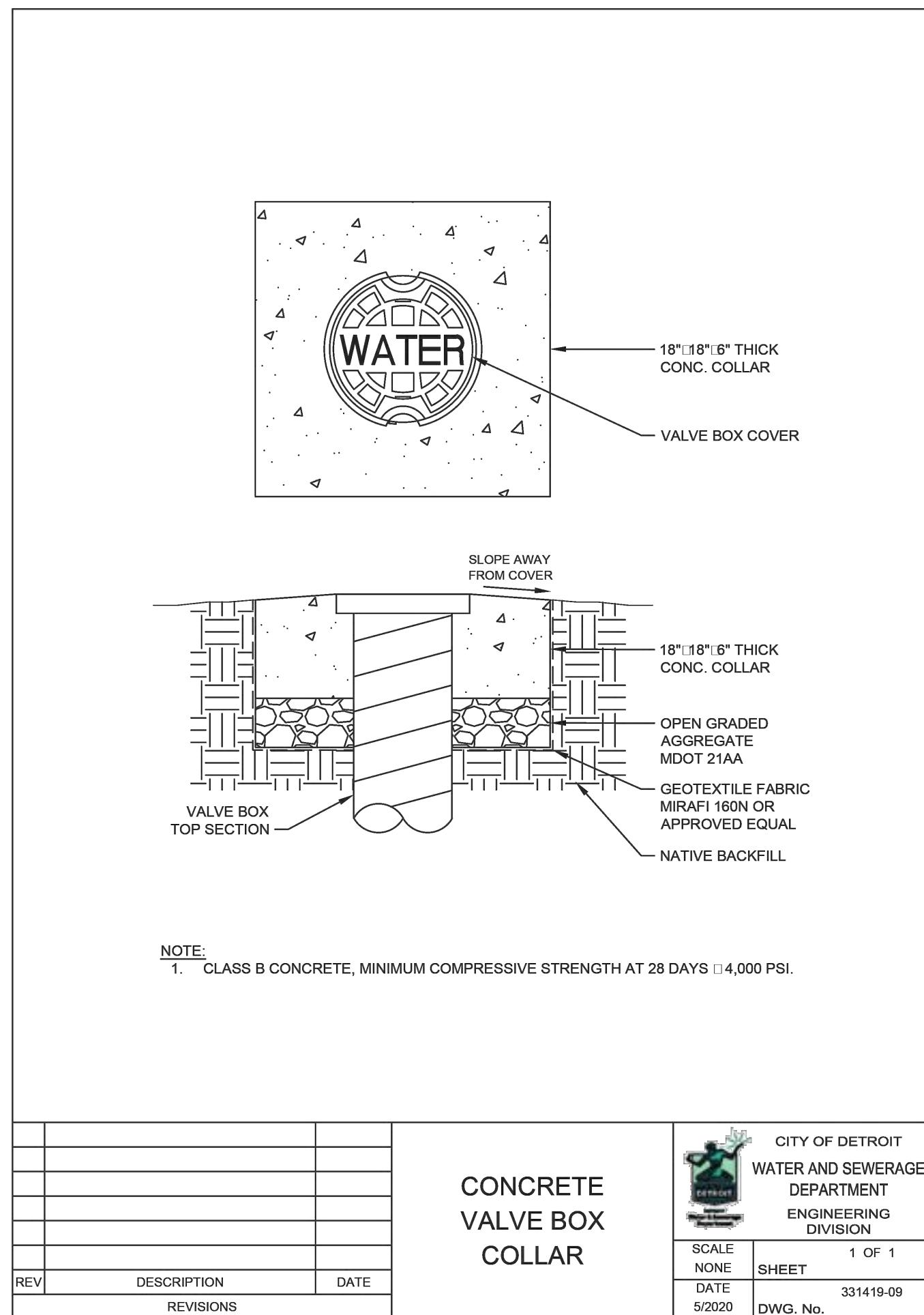
MHT HOUSING, INC.  
 32500 TELEGRAPH ROAD, SUITE 100  
 DETROIT, MICHIGAN 48025  
 248-833-0552

NO.	ISSUANCE / REVISION	DATE
1	FOR PERMITS	01-23-24
2	BULLETIN #1	02-07-24

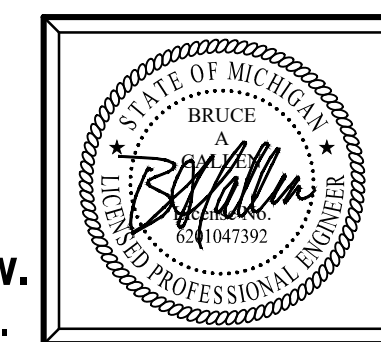
BREWSTER WHEELER RECREATION CENTER  
 2900 SAINT ANTOINE STREET  
 DETROIT, MI 48201  
 WAYNE COUNTY, MICHIGAN

X-SECTIONS, NOTES, AND DETAILS

DRAWN BY	DATE
J.W.C.	DEC '23
ENGINEER	DATE
B.A.C.	DEC '23
EDIT	DATE
J.W.C.	JAN '24
SCALE	PILOT SCALE
DRAWING	AS NOTED
AS NOTED	1:1
PROJECT	023 BREWSTER
SHEET NO.	C3.2



**811**  
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DATE OF PLAN: 02-07-24

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civil engineers

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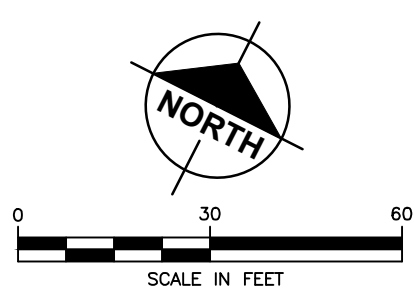
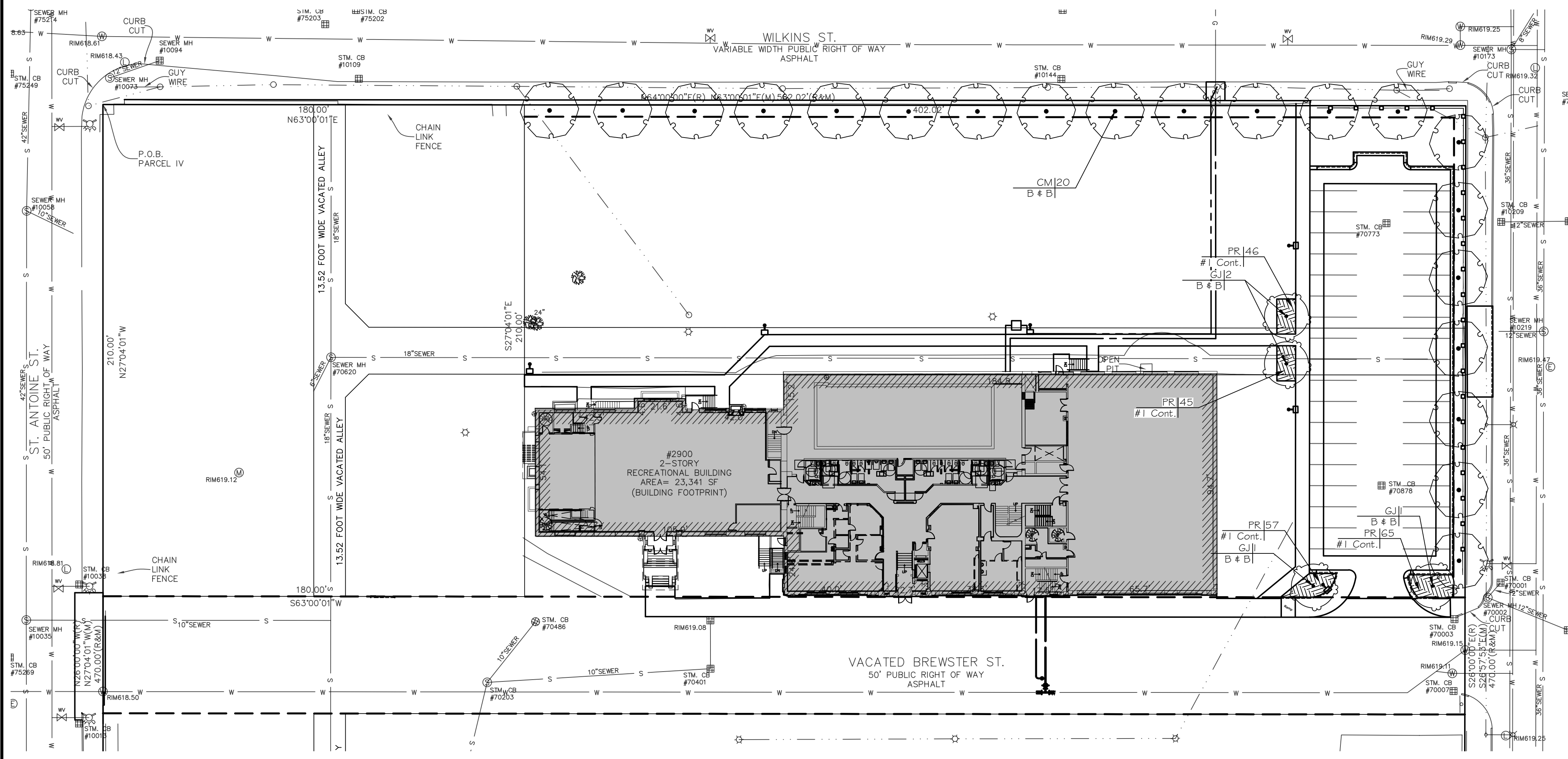
NO.	DATE	BY	ISSUANCE / REVISION
1	01-23-24	B.A.C.	FOR PERMITS
2	02-07-24	B.A.C.	BULLETIN #1

BREWSTER WHEELER RECREATION CENTER  
2900 SAINT ANTOINE STREET  
DETROIT, MI 48201  
WAYNE COUNTY, MICHIGAN

X-SECTIONS, NOTES, AND DETAILS

NO.	DATE	BY	ISSUANCE / REVISION
1	DEC '23	J.W.C.	ENGINEER
2	DEC '23	B.A.C.	EDITOR
3	JAN '24	J.W.C.	SCALE DRAWING
4			AS NOTED

PROJECT: 023 BREWSTER  
SHEET NO. **C3.3**



**PLANT SCHEDULE**

SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT	CAL	QTY	
<b>TREES</b>						
	CM	Celtis x Magnifica / Magnifica Common Hackberry	B & B	2.5" Cal	20	
	GJ	Ginkgo biloba 'Autumn Gold' / Jade Butterfly Ginkgo	B & B	2.5" Cal	4	
SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT	SPACING	SPACING	QTY
<b>GROUND COVERS</b>						
	PR	Perennial	#1 Cont.		20' o.c.	213

**LANDSCAPE DATA**

<b>SETBACK AREA STREET TREES</b>		
TREES	SETBACK AREA =	335 LFT
	TREES REQ. (1 TREE / 30 LFT) =	11 TREES
	TREES PROVIDED:	11 TREES
<b>OFF STREET PARKING SCREENING</b>		
<b>TREES</b>		
A)	SCREENING AREA =	275 LFT.
	TREES REQ. (1 TREE / 30 LFT) =	9 TREES
	TREES PROVIDED:	9 TREES
B)	REQUIRED:	CONTINUOUS SCREENING AT LEAST 30" HT. AND NOT MORE THE 36" HT.
	PROVIDED:	MASONRY WALL W/ METAL FENCE TOPPING
<b>INTERIOR PARKING LOT LANDSCAPE AREA</b>		
A)	18 SFT PER PARKING PLACE =	38 SPACES
	LANDSCAPE AREA REQ. (18 SFT / 38 SPACES) =	684 SFT.
	LANDSCAPE AREA PROVIDED:	723 SFT.
B)	1 TREE PER 250 SFT. INTERIOR LS AREA =	684 SFT.
	LANDSCAPE AREA REQ. (684 SFT / 250 SFT.) =	3 TREES
	LANDSCAPE AREA PROVIDED:	4 TREES

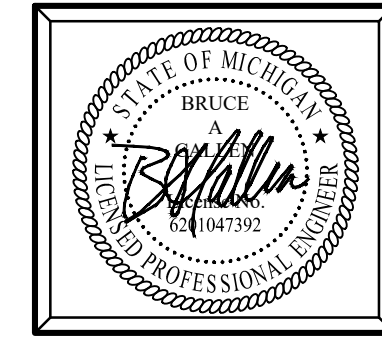
TREES ARE REQUIRED TO BE PLANTED IN THE INTERIOR OF THE OFF STREET PARKING.

**LANDSCAPE NOTES**

- ALL PLANTING BEDS SHALL RECEIVE 4" OF EVENLY SPREAD SHREDDED HARDWOOD BARK MULCH OVER 4" OF TOPSOIL. MULCH BLANKET SHALL BE PLACED AT ALL LOCATIONS WITH SLOPES 1:3 OR STEEPER. NO MULCH SHALL BE PLACED IN DETENTION / RETENTION BASIN BOTTOM AREA.
- CONTRACTOR SHALL NOTIFY "MISS DIG" TO LOCATE ANY UNDERGROUND UTILITY LINES OR STRUCTURES PRIOR TO STARTING CONSTRUCTION.
- CONTRACTOR SHALL PROVIDE SPECIFIED SHRUBS, GROUNDCOVERS AND OTHER PLANT MATERIALS THAT COMPLY WITH ALL RECOMMENDATIONS AND REQUIREMENTS OF ANSI 280.1 "AMERICAN STANDARD FOR NURSERY STOCK". PLANT MATERIAL SHALL BE CERTIFIED TO BE HARDY TO WAYNE COUNTY, FREE OF DISEASE AND INSECTS AND BE HEALTHY, VIGOROUS STOCK. GROWN WITH GOOD HORTICULTURAL PRACTICE AND INSTALLED IN ACCORDANCE WITH METHODS ESTABLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. ALL LANDSCAPING SHALL BE MAINTAINED IN A HEALTHY, NEAT AND ORDERLY STATE, FREE FROM REFUSE AND DEBRIS. ANY DEAD OR DISEASED PLANTS SHALL BE REPLACED.
- ALL LANDSCAPE BEDS AND MULCH BORDERS ADJACENT TO LAWN AREAS SHALL HAVE A METAL EDGE UNLESS SPECIFIED OTHERWISE.
- SEED SHALL BE PLACED OVER 4" OF TOPSOIL IN ALL PROPOSED LAWN AREAS AND ALL AREAS DISTURBED BY CONSTRUCTION WITH SLOPES LESS THAN 1:3. SEED MIXES SHALL BE AS FOLLOWS:  
 10% TALL FESCUE  
 20% PERENNIAL RYE GRASS  
 30% CREEPING RED FESCUE  
 40% KENTUCKY BLUEGRASS  
 @ 6 LBS PER 1000 SFT  
 SEED MIXES SHALL BE DROUGHT TOLERANT @ 6 LBS PER 1,000 SFT.
- ALL PLANTINGS AND LANDSCAPE IMPROVEMENTS SHALL BE CONSISTENT WITH LOCAL ZONING REQUIREMENTS.



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DATE OF PLAN: 02-07-24

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NO.	ISSUANCE / REVISION	DATE
1	FOR PERMITS	01-23-24
2	BULLETIN #1	02-07-24

BREWSTER WHEELER RECREATION CENTER  
 2900 SAINT ANTOINE STREET  
 DETROIT, MI 48201  
 WAYNE COUNTY, MICHIGAN  
 LANDSCAPE PLAN

NO.	DATE	SCALE
DRAWN BY	J.W.C.	DATE DEC '23
ENGINEER	B.A.C.	DATE DEC '23
EDIT	J.W.C.	DATE JAN '24
SCALE	DRAWING	PILOT SCALE
AS NOTED		1:1
PROJECT	023 BREWSTER	
SHEET NO.	L1.0	

STRUCTURAL ABBREVIATION INDEX

Table with 2 columns: ABBREVIATION, ITEM. Lists various structural components like Architect/Engineer, Anchor Bolt, etc.

STRUCTURAL ABBREVIATION INDEX

Table with 2 columns: ABBREVIATION, ITEM. Lists various structural components like Inside Diameter, Inside Face, etc.

GENERAL FOUNDATION AND CONCRETE NOTES

- 1. A registered geotechnical engineer shall be retained to confirm that the soils at the site are capable of the design soil bearing pressure.
2. It is strongly recommended that the geotechnical engineer of record that produces the report be retained to provide the soils testing and inspections during construction.
3. Fill material shall be thoroughly compacted prior to placement of concrete...

GENERAL STRUCTURAL NOTES

- 1. All work shall be performed in accordance with the contract documents. In case of a conflict within the contract documents, the more stringent condition shall govern, unless directed otherwise by the engineer of record.
2. In the event that certain details of construction are not indicated or noted in the drawings, details for similar conditions that are indicated or noted shall be utilized, subject to the structural engineer's approval.
3. Openings and penetrations through structural elements, and items embedded in structural elements that are not indicated in the structural drawings shall be reviewed by the structural engineer prior to fabrication, erection and/or construction...

STEEL NOTES

- 1. Structural steel shall be finished as follows:
a. Non-fireproofed interior steel shall be shop painted with min. 1.5 mil dry film thickness of a rust inhibiting primer.
b. Unless noted otherwise, exterior exposed steel, including veneer relief angles, shall be:
- Contractors Option: Galvanized and prepared for paint or Zinc rich primed plus finish paint as directed by the architect.
c. Refer to lintel schedule for finish requirements of lintels.
2. Erector is to provide temporary bracing sufficient to hold frame in position until all construction necessary for building stability is complete...

WOOD NOTES

- 1. Comply with National Design Specification (NDS), American Forest Products Association (AFPA), and American Institute of Wood Construction (AIWC).
2. Bolt wall plates with 1/2" dia. anchor bolts at 32" o.c., unless otherwise noted. Bolt beam plates with 1 1/2" diameter bolts at 24" o.c., staggered.
3. When treated lumber is in contact with steel (bolts, nails, fasteners, hangers, etc.), steel shall be G-185 galvanized or stainless.
4. Unless noted, align studs above and below with joists. Provide squash blocking to transfer loads to joists or trusses.

GENERAL POST INSTALLED ANCHOR NOTES

- 1. Post installed anchors shall only be used where specified on the construction documents. The contractor shall obtain approval from the Architect prior to installing post installed anchors in place of missing or misplaced cast-in-place anchors.
2. Unless otherwise noted in the drawings all post installed anchors are based on Hilti Corporation product information.
3. If the contractor wants to submit an alternate anchor they must provide sealed calculations at least 2 weeks prior to product use. These calculations must show that the strength of the substituted anchor meets or exceeds the strength of the specified anchor at each application in the project where a substituted anchor is proposed...

CONCRETE NOTES

- 1. All concrete shall be done in accordance with ACI 117, 211, 301, 302, 315, 347 and 318 requirements, and as stated on contract documents.
2. Provide submittals for Product Data, Design Mixes, Steel Reinforcement Shop Drawings, Material Test Reports, and Material Certifications.
3. All exposed exterior concrete retaining and foundation walls shall be considered to have an Architecturally exposed class "A" finish, in accordance with ACI 347. Finish concrete walls as directed by Architect.

ENGINEERING DATA

Table with 2 columns: Description, Value. Includes Design soil bearing pressure (2000 psf), Design stresses (Concrete, Steel, Lumber), Structural design requirements (Floor live load, Risk Category, Roof snow load, Wind Load, Earthquake, etc.), Specific Design Loads (Floor dead loads, Roof dead loads, Roof truss design loads), Design codes (Michigan Building Code 2015, ACI 318, AISC 360 - ASD, NDS).



2023-06-01
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800 E. ELLIS ROAD, SUITE 508
NORTON SHORES, MI 49441
PH: (231) 799-4838
FAX: (231) 799-4837



CONCEPT DESIGN STUDIO, INC.
DETROIT, MICHIGAN

BREWSTER WHEELER REC.
DETROIT, MICHIGAN

PROJECT #

ISSUANCES

PERMIT SET 12/28/23

DRAWN BY MB

SHEET TITLE STRUCTURAL NOTES

SHEET NO.

S0.01



12/28/2023

EXISTING BUILDING NOTE:

THIS PROJECT IS AN ADDITION AND EXTENSION OF AN EXISTING BUILDING. THE DRAWINGS REFLECT WHAT IS KNOWN ABOUT THE EXISTING BUILDING, BUT EXISTING CONDITIONS MUST BE VERIFIED BEFORE FABRICATION AND CONSTRUCTION. A BUTTING CONSTRUCTION MUST MATCH UP. VERIFY ALL SUCH CONDITIONS, AND NOTIFY AE IF ACTUAL CONDITIONS DIFFER FROM THE CONTRACT DOCUMENTS. AN ATTEMPT HAS BEEN MADE TO ANTICIPATE CONDITIONS IN THE EXISTING STRUCTURE.

STRUCTURAL SPECIAL INSPECTION SCHEDULE (2015 IBC - Chapter 17)				
ITEM	CONTR <sup>2</sup>	PERIODIC <sup>2</sup>	REFERENCE STANDARD	NOTES
<b>PRE-FABRICATED CONSTRUCTION (1704.2.5)</b>				
STRUCTURAL STEEL CONSTRUCTION (1705.2)				13
Verify Bolt, Nut & Washer Materials		X	ASTM specs/AISC 360 - A3.3	
Inspect Bearing-type Connections		X	AISC 360 - M2.5	
Inspect Slip-critical Connections	X		AISC 360 - M2.5	5
Verify Structural Steel Materials		X	ASTM A 6/ASTM A 568	
Verify Weld Filler Materials		X	AISC 360 - A3.5	
Partial / Complete Penetration Welds, Multipass Fillet Welds, Single-pass Fillet Welds > 5/16"	X		AWS D1.1	6&7
Single-pass Fillet Welds ≤ 5/16", Anchor / Stud Welds, Stair / Railing Welds		X	AWS D1.1	6
Inspect Steel Frame Joint Details		X		
<b>OPEN WEB STEEL JOISTS AND JOIST GIRDERS (1705.2.3)</b>				
End connections - welding or bolted		X	SJI SPECIFICATIONS LISTED IN SECTION 2207.1	
Bridging - horizontal or diagonal (listed in section 2207.1 and others)		X	SJI SPECIFICATIONS LISTED IN SECTION 2207.1	
<b>CONCRETE CONSTRUCTION (1705.3)</b>				
Reinforcing Steel Placement		X	ACI 318: Ch. 20, Ch 25, 26.6	9
Welding of Reinforcing Steel			AWS D1.4/ACI 318: 26.6.4	8
Verification of weldability of reinforcing steel other than ASTM A 706		X	AWS D1.4/ACI 318 - 26.6	
Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement.	X		AWS D1.4/ACI 318 - 26.6	
Shear reinforcement	X		AWS D1.4/ACI 318 - 26.6	
Other reinforcing steel		X	AWS D1.4/ACI 318 - 26.6	
Embedded Bolts & Plates		X	ACI 318: 17.8.2, 26.7, 26.8	
Verify Required Mix Design		X	ACI 318: Ch 19, 26.4.3, 26.4.4 IBC: 1904.1, 1904.2, 1908.2, 1908.3	
Concrete Sampling	X		ASTM C 172/ASTM C 31/ACI 318: 26.12	
Concrete / Shotcrete Placement	X		ACI 318: 26.4, 26.5 IBC: 1908	
Curing Temperature & Techniques		X	ACI 318: 26.5.3, 26.5.4 IBC: 1908.9	
Application of Prestressing Forces		X	ACI 318: 26.10	
Grouting Bonded Prestressing Tendons		X	ACI 318: 26.10	
Erection of Precast Members		X	ACI 318: 26.9	
Verify In-Situ Strength		X	ACI 318: 26.12	10
Formwork Shape, Location & Dimensions		X	ACI 318: 26.11	
Post-Installed Anchor Placement		X	ACI 318: 17.8.2.4, 17.8.2, 26.7	11
Retaining Walls Bent Dowels Placement and Projection	X			
<b>MASONRY CONSTRUCTION (1705.4)</b>				
Proportions of Site-Prepared Mortar / Grout		X	TMS 402/ACI 530/ASCE 5	15,16
Mortar Joint Construction		X	TMS 602 - ART. 2.1, 2.6A, 2.6B, 2.6C 2.4G.1.b	
Reinforcement / Connector Placement		X	TMS 402 - SEC. 6.1, 6.2.1, 6.2.6, 6.1.7 & TMS 602 - ART. 3.2E, 3.4, 3.6A	
Size & Location of Structural Elements		X	TMS 602 - ART. 3.3F	
Type, Size & Location of Anchors		X	TMS 402 - SEC. 1.2.1(a), 6.1.4.3, 6.2.1	
Size, Grade & Type of Reinforcement		X	TMS 402 - SEC. 6.1 & TMS 602 - ART. 2.4, 3.4	
Welding of Reinforcing Steel	X		TMS 402 - SEC. 8.1, 6.7.2, 9.3.3.4(c), 11.3.3.4(b)	7
Hot or Cold Weather Protection		X	TMS 602 ART. 1.8C, 1.8D	
Verify Clean Grout Space		X	TMS 602 ART 3.2D, 3.2F	
Grout Placement	X		TMS 602 ART 3.5, 3.6C	
Observe Preparation of: Test Specimens / Prisms		X	TMS 602 ART 1.4B.2.a.3, 1.4B.2.b.3, 1.4B.2.c.3, 1.4B.3, 1.4B.4	
Compliance w/ Const. Docs & Submittals		X	TMS 602 ART 1.5	
<b>WOOD CONSTRUCTION (1705.5) (1704.2.5 FOR PREFABRICATED CONSTRUCTION)</b>				
High load diaphragms as specified on drawings: Sheathing grade and thickness, size of framing members at panel edges, fastener diameter and length, number of fastener lines, and spacing of fasteners in each line.		X		
At trusses greater than 60ft clear span, verify that the temporary restraint/bracing are installed in accordance w/approved truss submittal package & BCSI 1-13.		X	BCSI 1-13 (BY WTCA & TPI)	
At all trusses, verify that permanent truss bracing is in accordance with approved building plans & BCSI 1-13.		X	BCSI 1-13 (BY WTCA & TPI)	
Verify wood size, spacing and grade for studs in all bearing walls		X		
Verify header sizes, grades and detailing		X		
Verify jamb stud configuration (full height bearing studs)		X		
Verify squash blocking installed in joist space between wall above and below		X		
Verify shear wall nailing both size and spacing of nails	X			
Verify shear wall anchorage at top and bottom of wall	X			
Verify shear wall uplift anchors are per shear wall schedule (stud quantity, bolt size, anchor size, etc.)	X			
Verify shear wall sheathing	X			
All specified metal hardware (hurricane ties, joist hangers, clip angles, etc.)	X			
Post alignment per story	X			
<b>SOILS (1705.6)</b>				
Verify materials below shallow foundations are adequate to achieve the design bearing capacity		X		12
Verify excavations are extended to proper depth and have reach proper material		X		
Perform classification and testing of compacted fill materials		X		
Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill	X			
Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly		X		

**STRUCTURAL SPECIAL INSPECTION SCHEDULE NOTES:**

- Items marked with an 'X' shall be inspected in accordance with chapter 17 of the building code by a certified special inspector from an established testing agency. For material sampling and testing requirements, refer to the project specifications and the specific general notes sections. The testing agency shall send copies of all structural testing and inspection reports directly to the architect, engineer, contractor, and building official. Any items which fail to comply with the approved construction documents shall immediately be brought to the attention of the contractor for correction. If discrepancies are not corrected, they shall be brought to the attention of the building official, architect, and engineer prior to completion of that phase of the work. Special inspection testing requirements apply equally to all bidder designed components.
- Continuous special inspection means the full-time observation of work requiring special inspection by an approved special inspector who is present in the area where the work is being performed. Periodic special inspection means the part-time or intermittent observation of work requiring special inspection by an approved special inspector who is present in the area where the work has been or is being performed and at the completion of the work. (sect 1702)
- Special inspection is not required for work performed by an approved fabricator per section 1704.2.5.1
- Inspection for pre-fabricated construction shall be the same as if the material used in the construction took place on site. Continuous inspection will not be required during pre-fabrication if the approved agency certifies the construction and furnishes evidence of compliance.
- Slip-critical connections may have periodic special inspection provided that direct tension indicators, twist-off bolts, or turn-of-the-nut method with match marking techniques are used.
- All welds shall be visibly inspected.
- All complete penetration welds shall be tested ultrasonically or by using another approved method.
- Periodic special inspection is allowed for verification of the weldability of reinforcing steel other than ASTM A 706 and single pass fillet welds (maximum 5/16") in accordance with building code section 1705.3.1. Continuous special inspection is required for inspection of all other welds not included in the periodic special inspection requirements noted above.
- Special inspection is not required for isolated spread footings (≤ 3 stories), non-structural slabs, foundation walls, patios, driveways and sidewalks provided the requirements of section 1705.3 are met.
- Periodic special inspection is required for verification of in-situ concrete strength for post-tensioned concrete prior to tensioning tendons and for beams and structural slabs before removing shoring or forms.
- Continuous special inspection is required for adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads in accordance with building code section 1705.3. Periodic special inspections is allowed for mechanical anchors and adhesive anchors not defined in the continuous special inspections requirements noted above. Post-installed anchors into masonry or concrete may be used only when approved by architect and/or engineer using an approved product with current published ICC-ES research report issued by an approved source in accordance with 17.8.2 in ACI318 or other qualification procedures.
- Special inspection of soils shall reference the approved soils report to determine compliance.
- Special inspection for structural steel shall be per AISC 303, Section 8 or the project contract documents, whichever is more stringent.
- Any construction or material that has failed inspection shall be subject to removal and replacement.
- UNO, reference masonry standards are TMS 402/ACI 530/ASCE 5 and TMS 602/ACI 530.1/ASCE 6.
- MINIMUM TESTS:  
Verification of Slump flow and Visual Stability Index (VSI) as delivered to the project site in accordance with TMS 602 Specification Article 1.5B.1.b.3 for self-consolidation grout. Verification of fm and fAAC in accordance with TMS 602 Specification Article 1.4B prior to construction, except where specifically exempted by this code.
- This table and notes represent code requirements for structural portions of the project and is not a complete representation of what may be required by chapter 17 of the building code. See chapter 17 and project specifications for additional requirements.

REINFORCEMENT DEVELOPMENT AND LAP SPLICE LENGTH - HORIZONTAL TOP BARS- UNCOATED				
BAR SIZE	DEVELOPMENT LENGTH (d)		LAP SPLICE LENGTH	
	CASE 1	CASE 2	CASE 1	CASE 2
#3	19"	28"	25"	37"
#4	25"	37"	33"	49"
#5	31"	47"	41"	61"
#6	37"	56"	49"	73"
#7	54"	81"	71"	106"
#8	62"	93"	81"	121"
#9	70"	105"	91"	136"
#10	79"	118"	102"	153"
#11	87"	131"	114"	170"

REINFORCEMENT DEVELOPMENT AND LAP SPLICE LENGTH - ...				
BAR SIZE	DEVELOPMENT LENGTH (d)		LAP SPLICE LENGTH	
	CASE 1	CASE 2	CASE 1	CASE 2
#3	15"	22"	19"	28"
#4	19"	29"	25"	37"
#5	24"	36"	31"	47"
#6	29"	43"	37"	56"
#7	42"	63"	54"	81"
#8	48"	72"	62"	93"
#9	54"	81"	70"	105"
#10	61"	91"	79"	118"
#11	67"	101"	87"	131"

**REINFORCEMENT DEVELOPMENT AND LAP SPLICE LENGTH NOTES:**

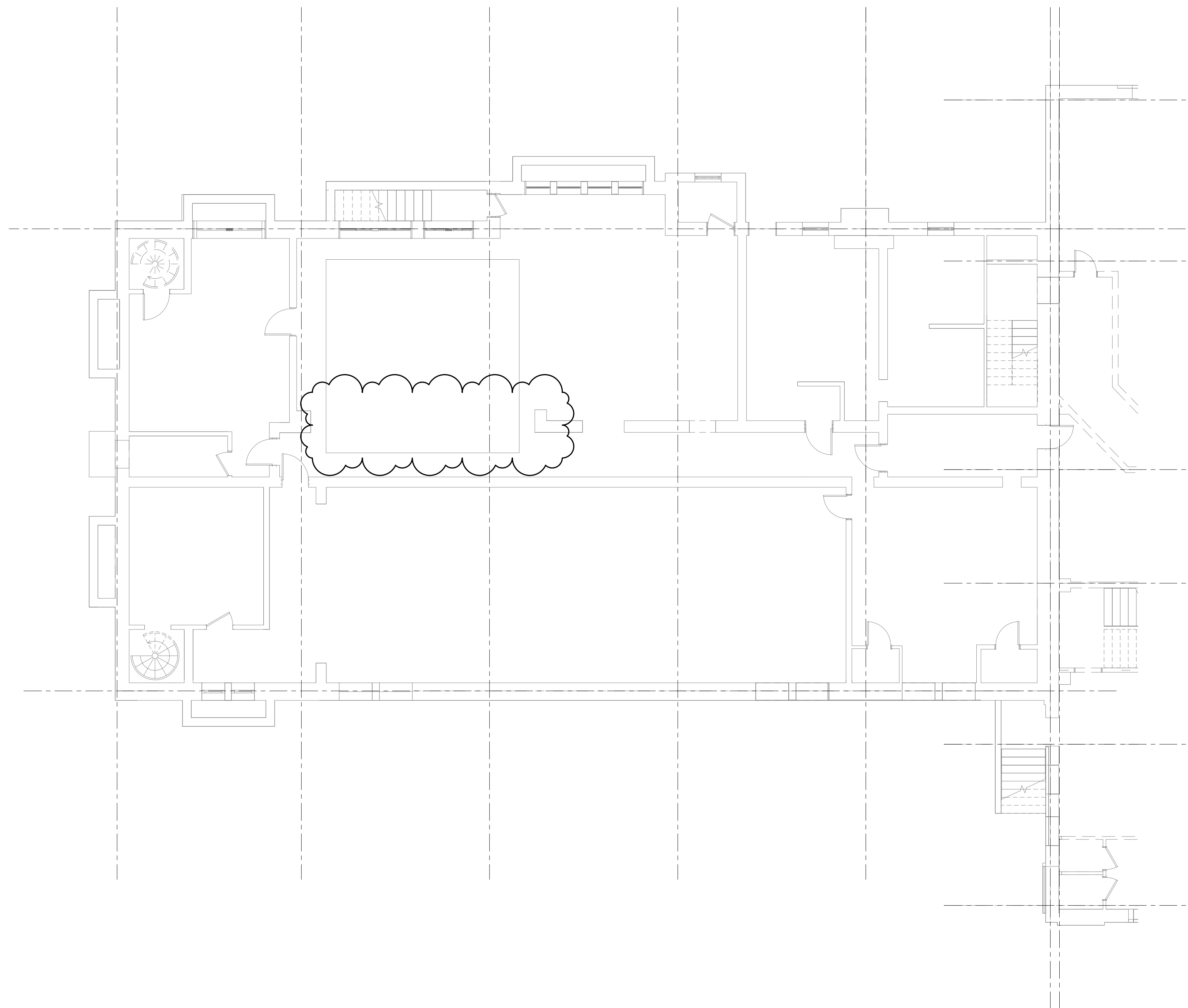
- HORIZONTAL BOTTOM BARS ARE HORIZONTAL BARS SO PLACED THAT 12" OR LESS OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE DEVELOPMENT LENGTH OR SPLICE.
- HORIZONTAL TOP BARS ARE HORIZONTAL BARS SO PLACED THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE DEVELOPMENT LENGTH OR SPLICE.
- CASE 1: CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN db; CLEAR COVER NOT LESS THAN db; AND STIRRUPS OR TIES THROUGHOUT (d) NOT LESS THAN THE CODE MINIMUM OR CLEAR SPACING OF BARS BEING DEVELOPED OR SPLICED NOT LESS THAN 2db AND CLEAR COVER NOT LESS THAN db.
- CASE 2: OTHER CASES
- CASE 3: EPOXY COATED REINFORCEMENT WITH COVER LESS THAN 3db, OR CLEAR SPACING LESS THAN 8db.
- MULTIPLY VALUES SHOWN BY 1.3 FOR LIGHTWEIGHT CONCRETE.

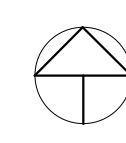


12/28/2023

**EXISTING BUILDING NOTE:**  
THIS PROJECT IS AN ADDITION AND EXTENSION OF AN EXISTING BUILDING. THE DRAWINGS REFLECT WHAT IS KNOWN ABOUT THE EXISTING BUILDING, BUT EXISTING CONDITIONS MUST BE VERIFIED BEFORE FABRICATION AND CONSTRUCTION. BUTTING CONSTRUCTION MUST MATCH UP. VERIFY ALL SUCH CONDITIONS, AND NOTIFY AE IF ACTUAL CONDITIONS DIFFER FROM THE CONTRACT DOCUMENTS. AN ATTEMPT HAS BEEN MADE TO ANTICIPATE CONDITIONS IN THE EXISTING STRUCTURE.

PROJECT #	
ISSUANCES	
PERMIT SET	12/28/23
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SHEET TITLE	STRUCTURAL SCHEDULES
SHEET NO.	S0.02



 PARTIAL FOUNDATION PLAN  
WEST  
SCALE: 1/8" = 1'-0"

**FOUNDATION PLAN NOTES**

1. UNO on plan, slab on grade shall be 4" thick normal weight concrete.
2. Top of interior footing elevation to match top of slab elevation uno.
3. Footings shall be centered under columns and walls unless detailed or dimensioned otherwise.
4. Refer to architectural drawings for all dimensions not indicated.
5. Refer to architectural drawings for all slab recesses.

**EXISTING BUILDING NOTE:**

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PROJECT #	
ISSUANCES	
PERMIT SET	12/28/23
STRUCTURAL REVISIONS #1	02/06/24

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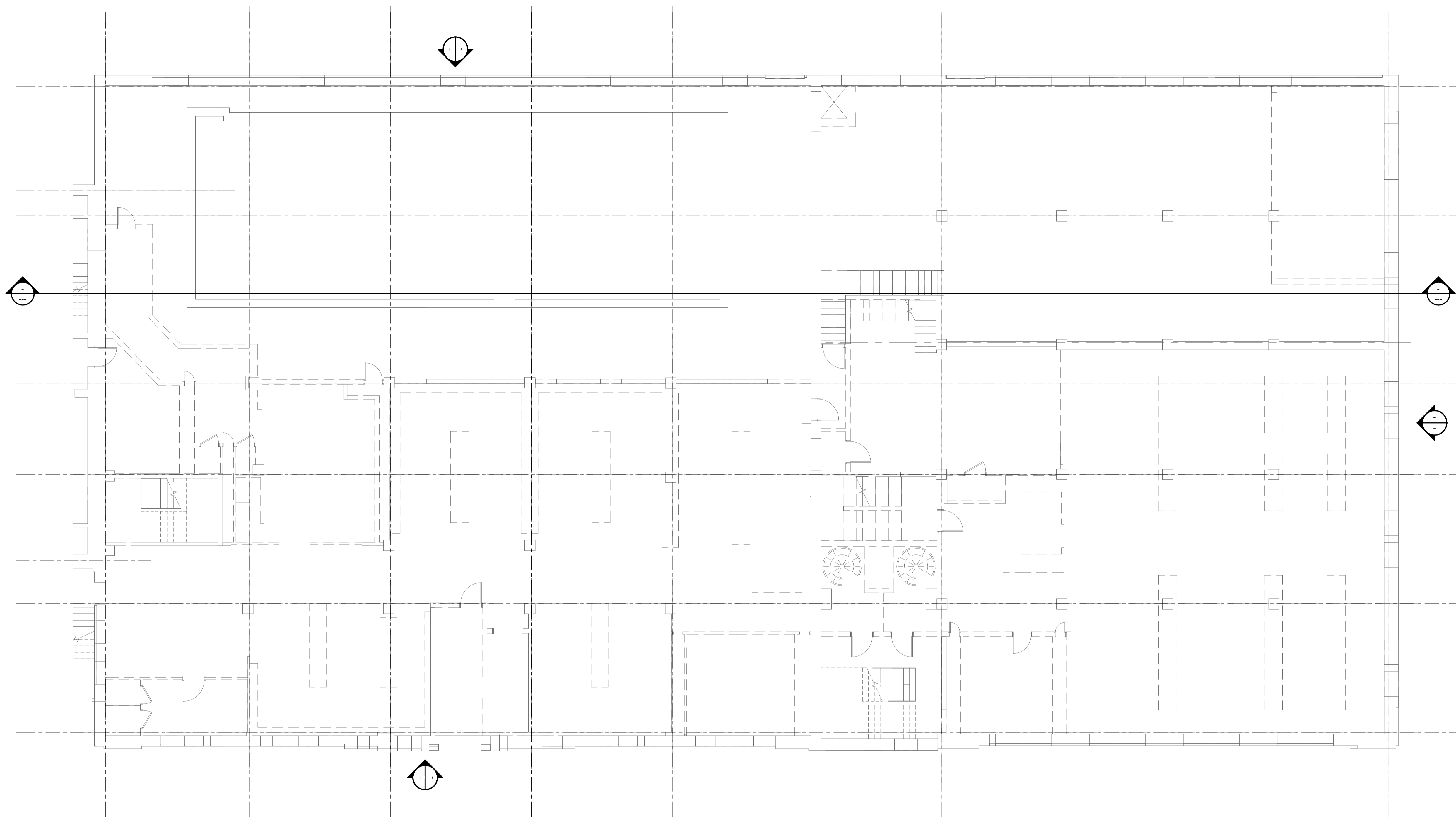
SHEET TITLE  
PARTIAL  
FOUNDATION  
PLAN WEST

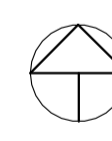
SHEET NO.

**S1.0A**

**BREWSTER WHEELER REC.**  
DETROIT, MICHIGAN





 PARTIAL FOUNDATION PLAN  
EAST  
SCALE: 1/8" = 1'-0"

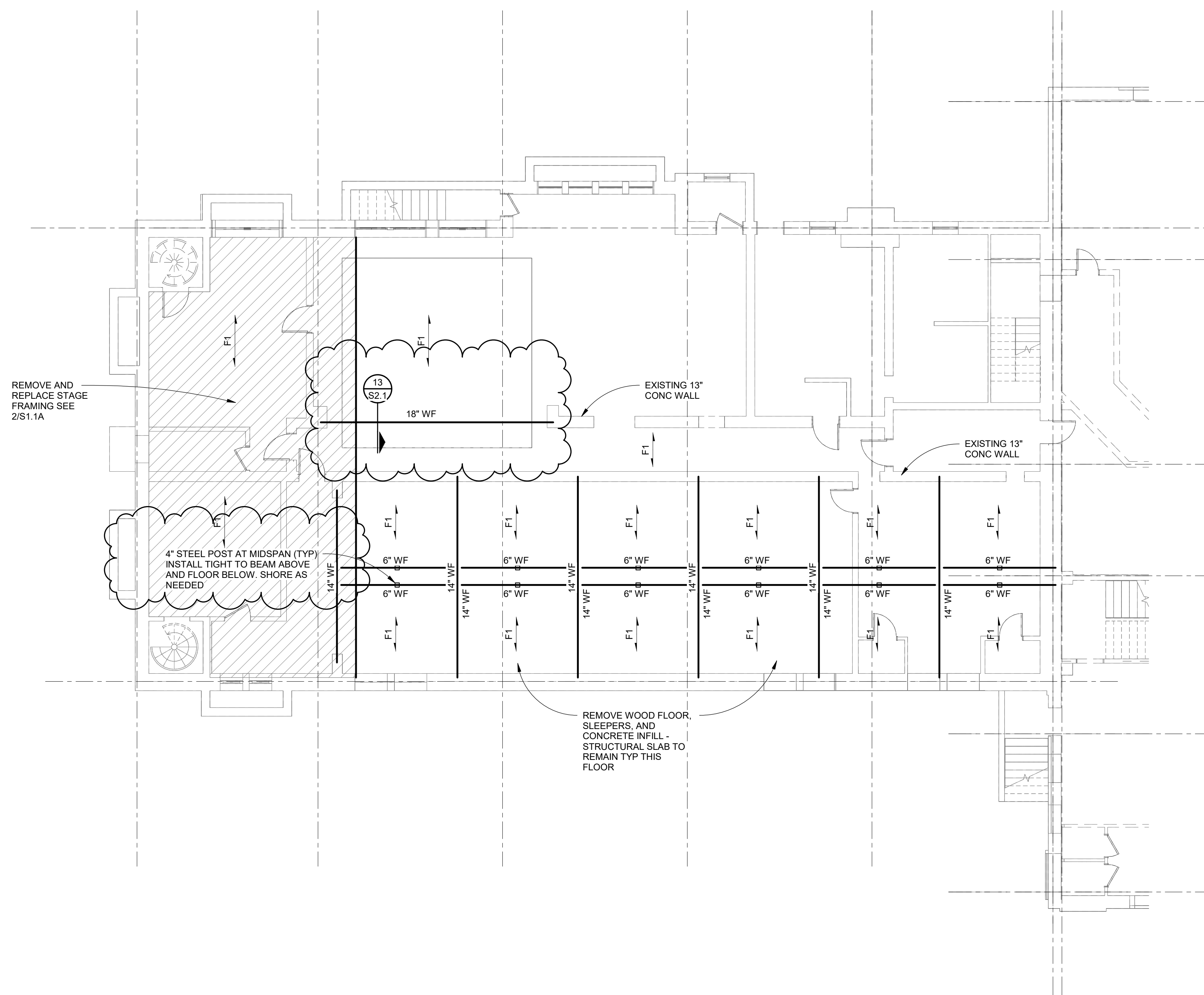
NO FOUNDATION WORK  
EXPECTED IN THIS AREA

STATE OF MICHIGAN  
**DAVID A. BENDERT**  
ENGINEER  
No. 57046  
*[Signature]*  
12/28/2023

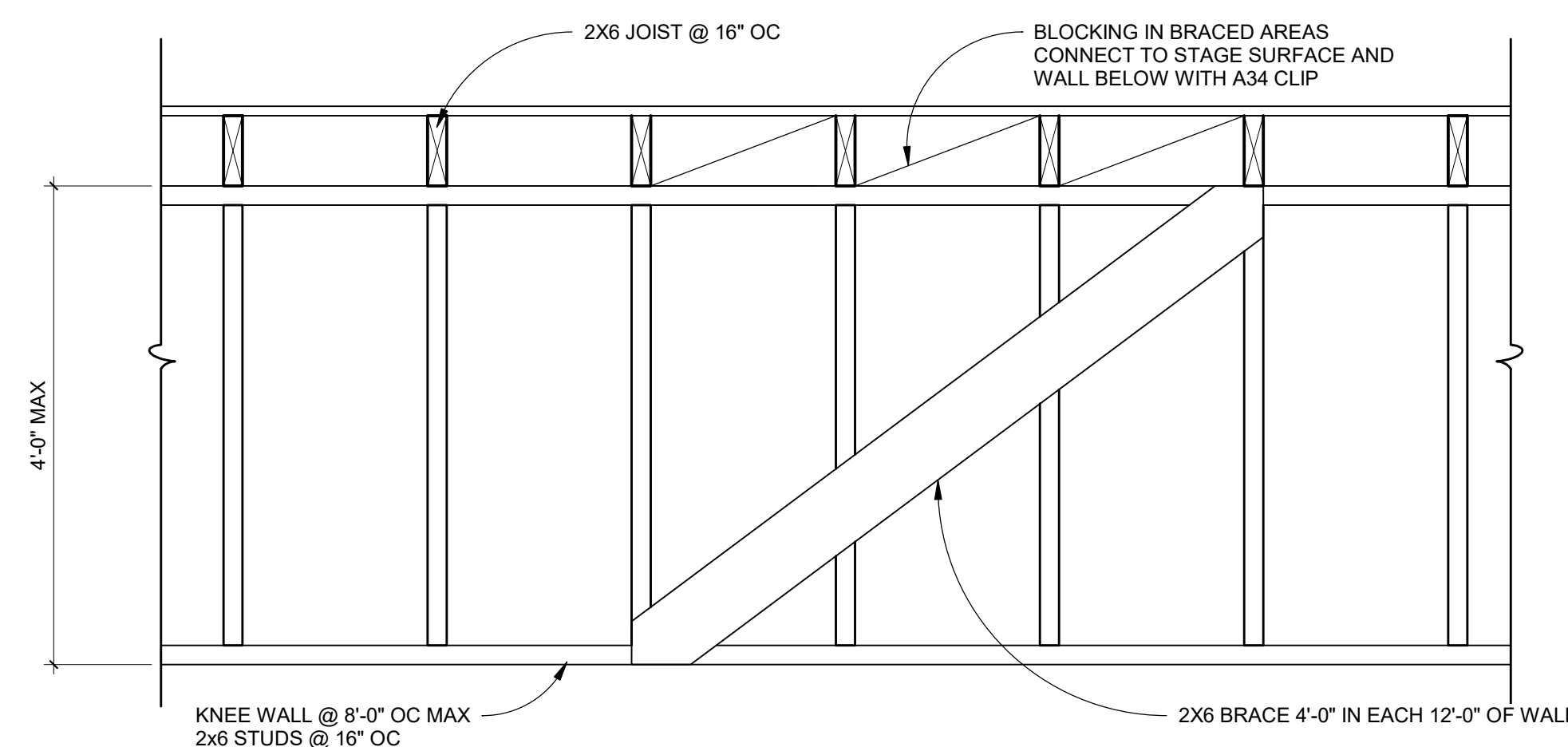
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PROJECT #	
ISSUANCES	
PERMIT SET	12/28/23
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DRAWN BY	MB
SHEET TITLE	PARTIAL FOUNDATION PLAN EAST
SHEET NO.	<b>S1.0B</b>

**BREWSTER WHEELER REC.**  
DETROIT, MICHIGAN



**PARTIAL FIRST FLOOR  
FRAMING PLAN WEST**  
SCALE: 1/8" = 1'-0"



**2  
S1.1A**  
STAGE FRAMING  
SCALE: 1" = 1'-0"

**WOOD FLOOR FRAMING PLAN NOTES**

- Existing floor framing to remain in place unless degradation from exposure to moisture has caused the member to have reduced capacity.
- Layout of existing floor framing is based on observations. Differences between what is shown here and actual conditions shall be communicated to the engineer.
- Brace ceiling framing top chord at 4ft on center. At 8ft on center bracing should be full depth.
- Live load for ceiling framing (12 psf) should be posted at entrance to space.

- F1 EX CONCRETE SLAB AND JOISTS
- F2 CONC SLAB ON METAL LATH AND 8" BAR JOISTS
- F3 CONC SLAB ON METAL LATH AND 12" BAR JOISTS
- R1 2X8 RAFTERS @ 16" OC
- R2 2X10 ROOF JOISTS @ 16" OC TOP CUT TO SLOPE
- R3 2X ROOF RAFTERS @ 16" OC
- R4 WOOD DECK BOARDS SPANNING OVER ROOF PURLINS
- R5 WOOD ROOF BEAMS AND DECK BOARDS SPANNING BETWEEN ROOF TRUSSES

**EXISTING BUILDING NOTE:**

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PROJECT #	
ISSUANCES	
PERMIT SET	12/28/23
STRUCTURAL REVISIONS #1	02/06/24

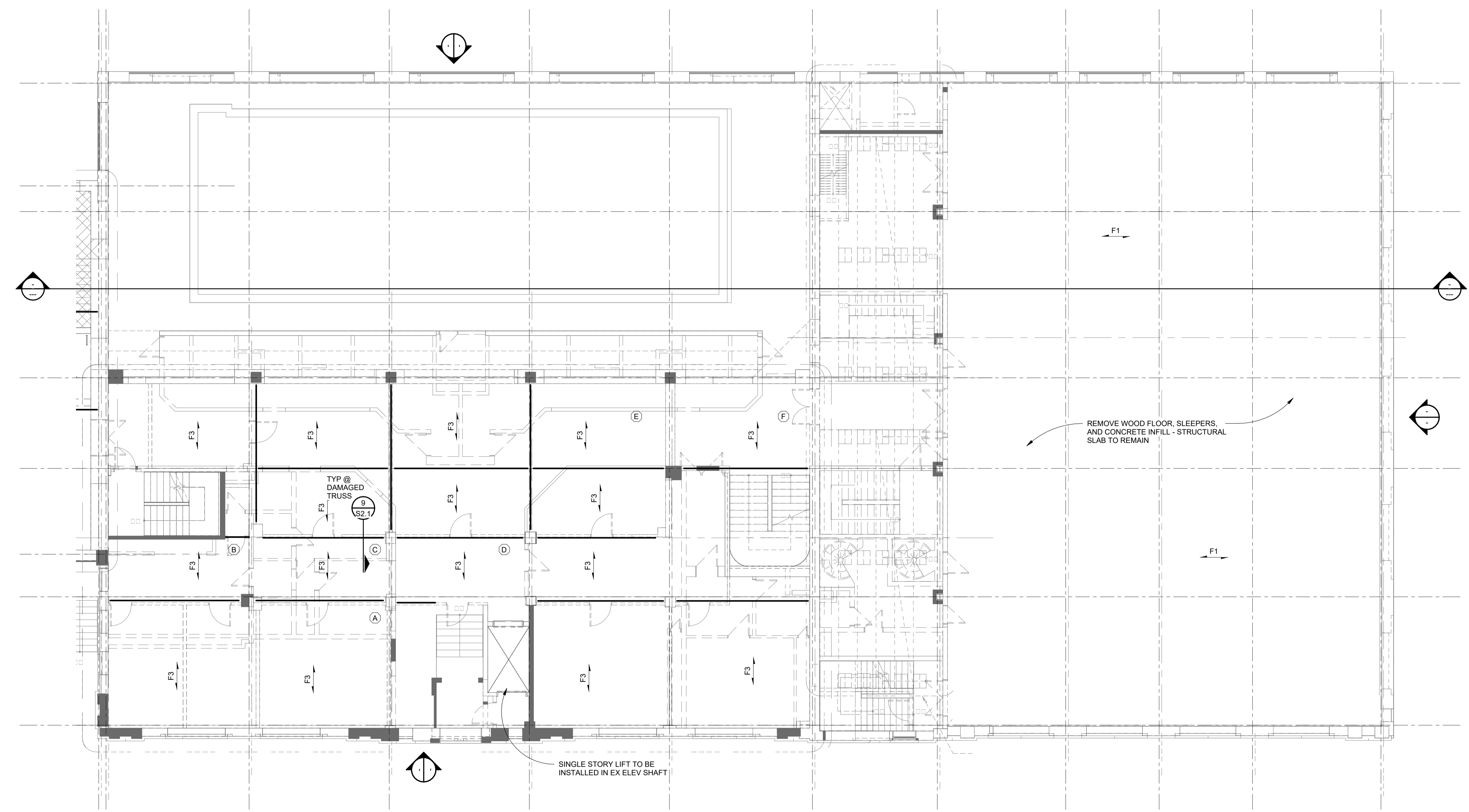
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SHEET TITLE  
**PARTIAL FIRST FLOOR FRAMING PLAN WEST**

SHEET NO.

**S1.1A**



**FIRST FLOOR FRAMING PLAN**  
SCALE: 1/8" = 1'-0"

**WOOD FLOOR FRAMING PLAN NOTES**

- Existing floor framing to remain in place unless degradation from exposure to moisture has caused the member to have reduced capacity.
- Layout of existing floor framing is based on observations. Differences between what is shown here and actual conditions shall be communicated to the engineer.
- Brace ceiling framing top chord at 4ft on center. At 8ft on center bracing should be full depth.
- Live load for ceiling framing (12 psf) should be posted at entrance to space.

- F1 → EX CONCRETE SLAB AND JOISTS
- F2 → CONC SLAB ON METAL LATH AND 8" BAR JOISTS
- F3 → CONC SLAB ON METAL LATH AND 12" BAR JOISTS
- R1 → 2X8 RAFTERS @ 16" OC
- R2 → 2X10 ROOF JOISTS @ 16" OC TOP CUT TO SLOPE
- R3 → 2X ROOF RAFTERS @ 16" OC
- R4 → WOOD DECK BOARDS SPANNING OVER ROOF PURLINS
- R5 → WOOD ROOF BEAMS AND DECK BOARDS SPANNING BETWEEN ROOF TRUSSES

**KEYNOTES**

- (A) 1st (3) JOISTS FROM EAST NEED TO BE REPLACED
- (B) (9) JOISTS TO BE REPLACED
- (C) (5) JOISTS TO BE REPLACED
- (D) (2) JOISTS TO BE REPLACED
- (E) (6) JOISTS TO BE REPLACED
- (F) (4) JOISTS TO BE REPLACED



**EXISTING BUILDING NOTE:**  
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PROJECT #

ISSUANCES

PERMIT SET 12/28/23

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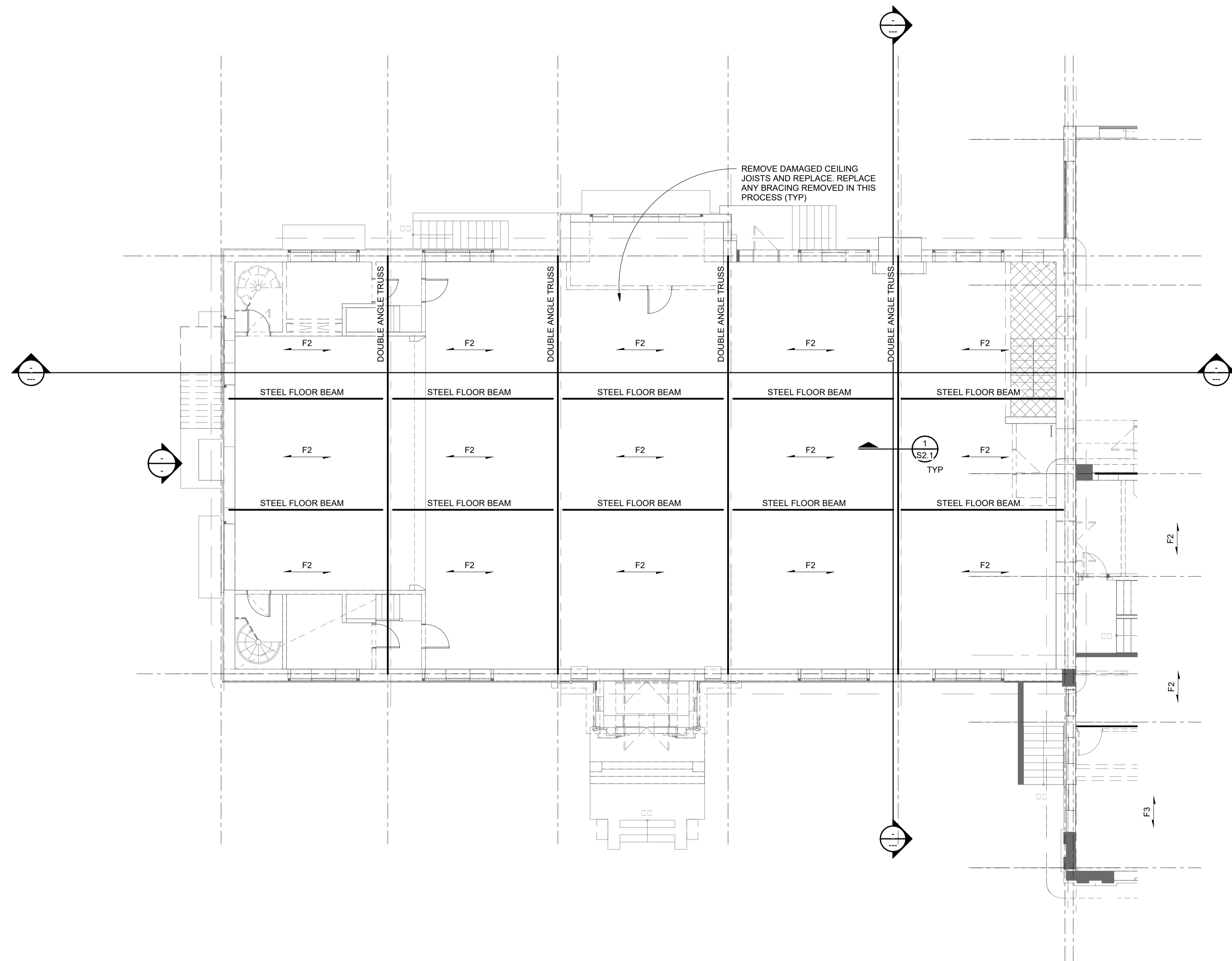
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SHEET TITLE  
**PARTIAL FIRST FLOOR FRAMING PLAN EAST**

SHEET NO.

**S1.1B**









**BREWSTER WHEELER REC.**  
DETROIT, MICHIGAN



 **PARTIAL CEILING FRAMING PLAN**  
SCALE: 1/8" = 1'-0"

**WOOD FLOOR FRAMING PLAN NOTES**

- Existing floor framing to remain in place unless degradation from exposure to moisture has caused the member to have reduced capacity.
- Layout of existing floor framing is based on observations. Differences between what is shown here and actual conditions shall be communicated to the engineer.
- Brace ceiling framing top chord at 4ft on center. At 8ft on center bracing should be full depth.
- Live load for ceiling framing (12 psf) should be posted at entrance to space.

	EX CONCRETE SLAB AND JOISTS
	CONC SLAB ON METAL LATH AND 8" BAR JOISTS
	CONC SLAB ON METAL LATH AND 12" BAR JOISTS
	2X8 RAFTERS @ 16" OC
	2X10 ROOF JOISTS @ 16" OC TOP CUT TO SLOPE
	2X ROOF RAFTERS @ 16" OC
	WOOD DECK BOARDS SPANNING OVER ROOF PURLINS
	WOOD ROOF BEAMS AND DECK BOARDS SPANNING BETWEEN ROOF TRUSSES



**EXISTING BUILDING NOTE:**  
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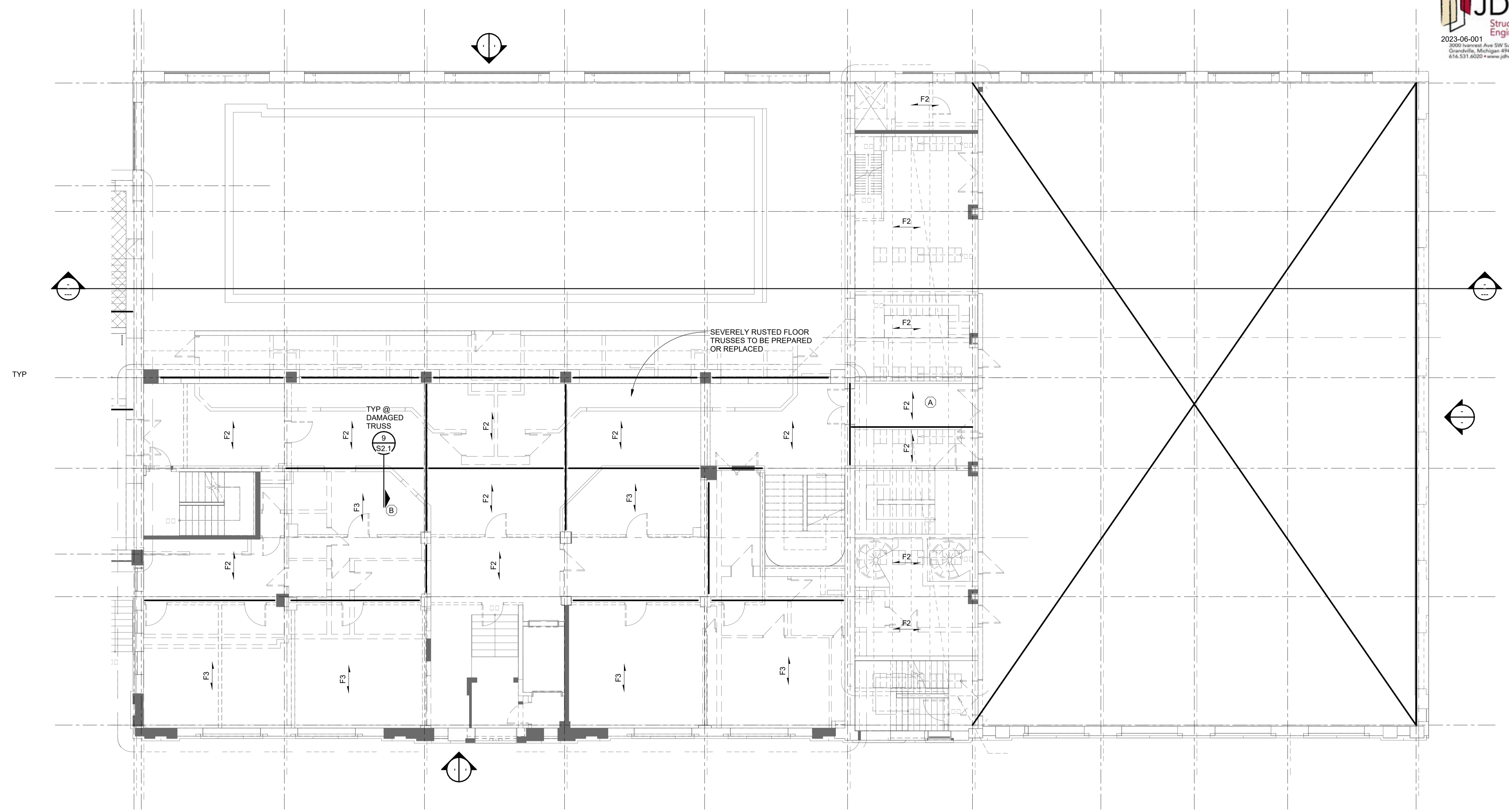
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SHEET TITLE  
**PARTIAL SECOND FLOOR FRAMING PLAN WEST**

SHEET NO.

**S1.2A**

**BREWSTER WHEELER REC.**  
DETROIT, MICHIGAN



**SECOND FLOOR FRAMING PLAN**  
SCALE: 1/8" = 1'-0"

**WOOD FLOOR FRAMING PLAN NOTES**

- Existing floor framing to remain in place unless degradation from exposure to moisture has caused the member to have reduced capacity.
- Layout of existing floor framing is based on observations. Differences between what is shown here and actual conditions shall be communicated to the engineer.
- Brace ceiling framing top chord at 4ft on center. At 6ft on center bracing should be full depth.
- Live load for ceiling framing (12 psf) should be posted at entrance to space.

- F1 EX CONCRETE SLAB AND JOISTS
- F2 CONC SLAB ON METAL LATH AND 8" BAR JOISTS
- F3 CONC SLAB ON METAL LATH AND 12" BAR JOISTS
- R1 2X8 RAFTERS @ 16" OC
- R2 2X10 ROOF JOISTS @ 16" OC TOP CUT TO SLOPE
- R3 2X ROOF RAFTERS @ 16" OC
- R4 WOOD DECK BOARDS SPANNING OVER ROOF PURLINS
- R5 WOOD ROOF BEAMS AND DECK BOARDS SPANNING BETWEEN ROOF TRUSSES

**KEYNOTES**

- (A) 1st (2) JOISTS FROM EAST END WILL BE REPLACED
- (B) 1st (5) JOISTS FROM WEST NEED TO BE REPLACED

**EXISTING BUILDING NOTE:**

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ISSUANCES

PERMIT SET 12/28/23

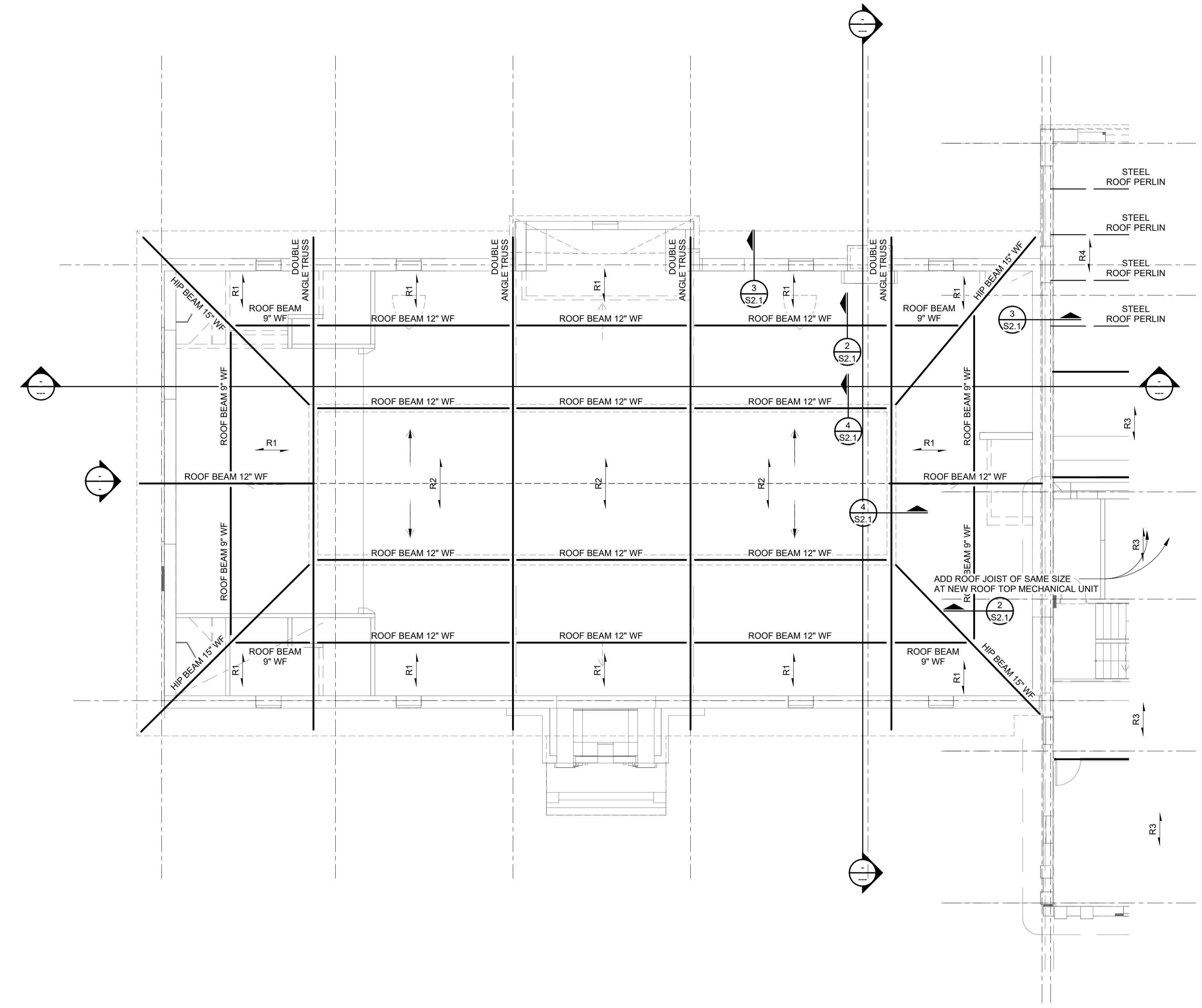
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SHEET TITLE  
**PARTIAL SECOND FLOOR FRAMING PLAN EAST**

SHEET NO.

**S1.2B**

**BREWSTER WHEELER REC.**  
DETROIT, MICHIGAN



**ROOF FRAMING PLAN**  
SCALE: 1/8" = 1'-0"

**WOOD ROOF FRAMING PLAN NOTES**

- Existing roof framing to remain in place unless degradation from exposure to moisture has caused the member to have reduced capacity.  
See Arch for truss bearing elevation.
- Layout of existing roof framing is based on observations. Difference between what is shown here and actual conditions shall be communicated to the engineer.
- Where roof deck boards span exceeds 24" OC roof deck boards shall match the existing board depth nailed to roof trusses as indicated in nailing schedule, UNO. Sheathing shall be placed with long direction across framing members and with joints staggered.
- 2 1/2" wood top plate present on all steel members.

- F1 → EX CONCRETE SLAB AND JOISTS
- F2 → CONC SLAB ON METAL LATH AND 8" BAR JOISTS
- F3 → CONC SLAB ON METAL LATH AND 12" BAR JOISTS
- R1 → 2X8 RAFTERS @ 16" OC
- R2 → 2X10 ROOF JOISTS @ 16" OC TOP CUT TO SLOPE
- R3 → 2X ROOF RAFTERS @ 16" OC
- R4 → WOOD DECK BOARDS SPANNING OVER ROOF PURLINS
- R5 → WOOD ROOF BEAMS AND DECK BOARDS SPANNING BETWEEN ROOF TRUSSES

**EXISTING BUILDING NOTE:**  
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STATE OF MICHIGAN  
**DAVID A. BENDERT**  
ENGINEER  
No. 57048  
12/28/2023

**BREWSTER WHEELER REC.**  
DETROIT, MICHIGAN

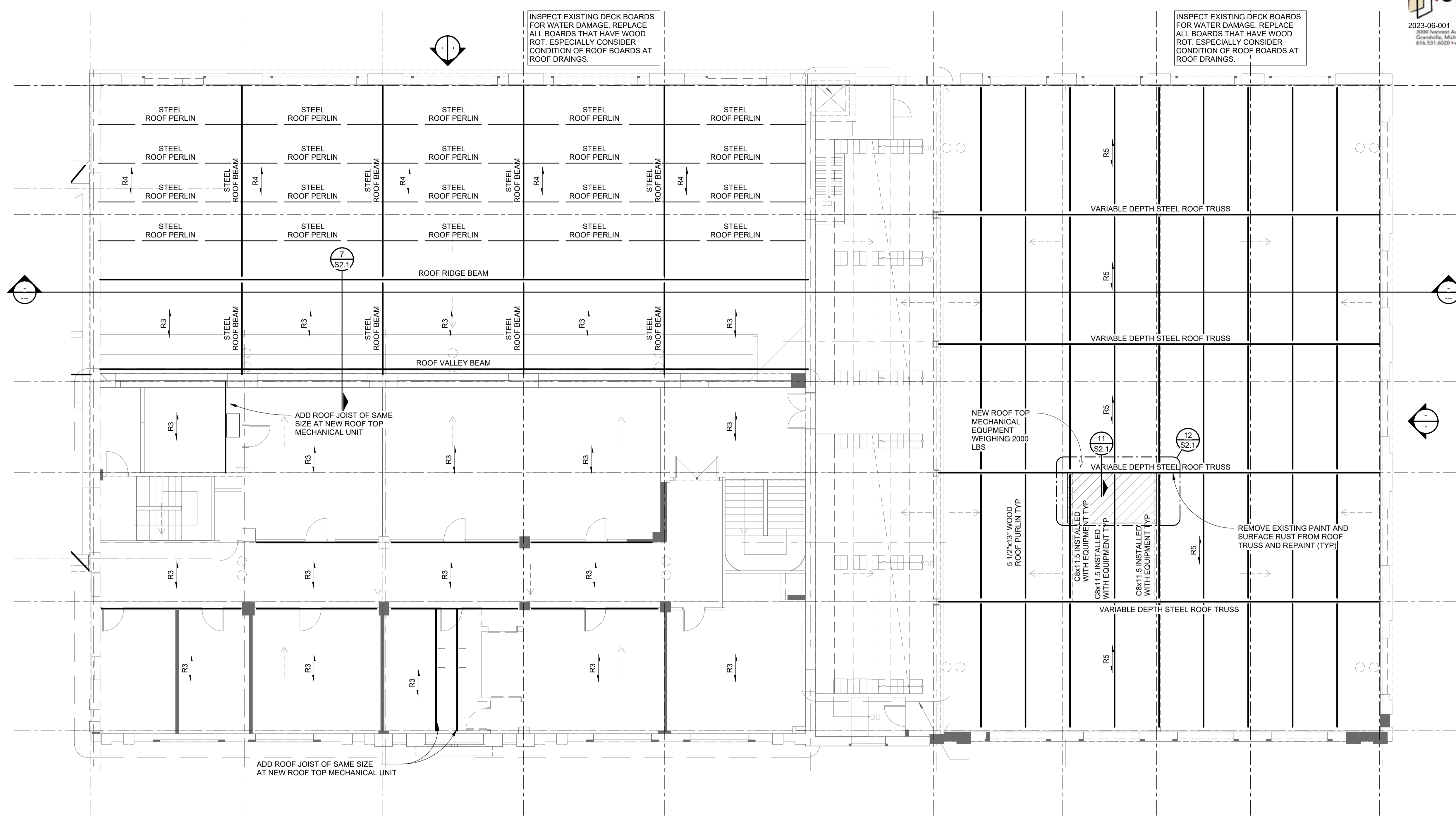
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SHEET TITLE  
**PARTIAL ROOF FRAMING PLAN WEST**

SHEET NO.

**S1.3A**



**ROOF FRAMING PLAN**  
SCALE: 1/8" = 1'-0"

**WOOD ROOF FRAMING PLAN NOTES**

- Existing roof framing to remain in place unless degradation from exposure to moisture has caused the member to have reduced capacity.
- See Arch for truss bearing elevation.
- Layout of existing roof framing is based on observations. Difference between what is shown here and actual conditions shall be communicated to the engineer.
- Where roof deck boards span exceeds 24" OC roof deck boards shall match the existing board depth nailed to roof trusses as indicated in nailing schedule. UNO. Sheathing shall be placed with long direction across framing members and with joints staggered.
- 2 1/2" wood top plate present on all steel members.

- F1 EX CONCRETE SLAB AND JOISTS
- F2 CONC SLAB ON METAL LATH AND 8" BAR JOISTS
- F3 CONC SLAB ON METAL LATH AND 12" BAR JOISTS
- R1 2X8 RAFTERS @ 16" OC
- R2 2X10 ROOF JOISTS @ 16" OC TOP CUT TO SLOPE
- R3 2X ROOF RAFTERS @ 16" OC
- R4 WOOD DECK BOARDS SPANNING OVER ROOF PURLINS
- R5 WOOD ROOF BEAMS AND DECK BOARDS SPANNING BETWEEN ROOF TRUSSES

**EXISTING BUILDING NOTE:**  
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PROJECT #

ISSUANCES

PERMIT SET 12/28/23

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SHEET TITLE  
**PARTIAL ROOF FRAMING PLAN EAST**

SHEET NO.

**S1.3B**

**BREWSTER WHEELER REC.**  
DETROIT, MICHIGAN

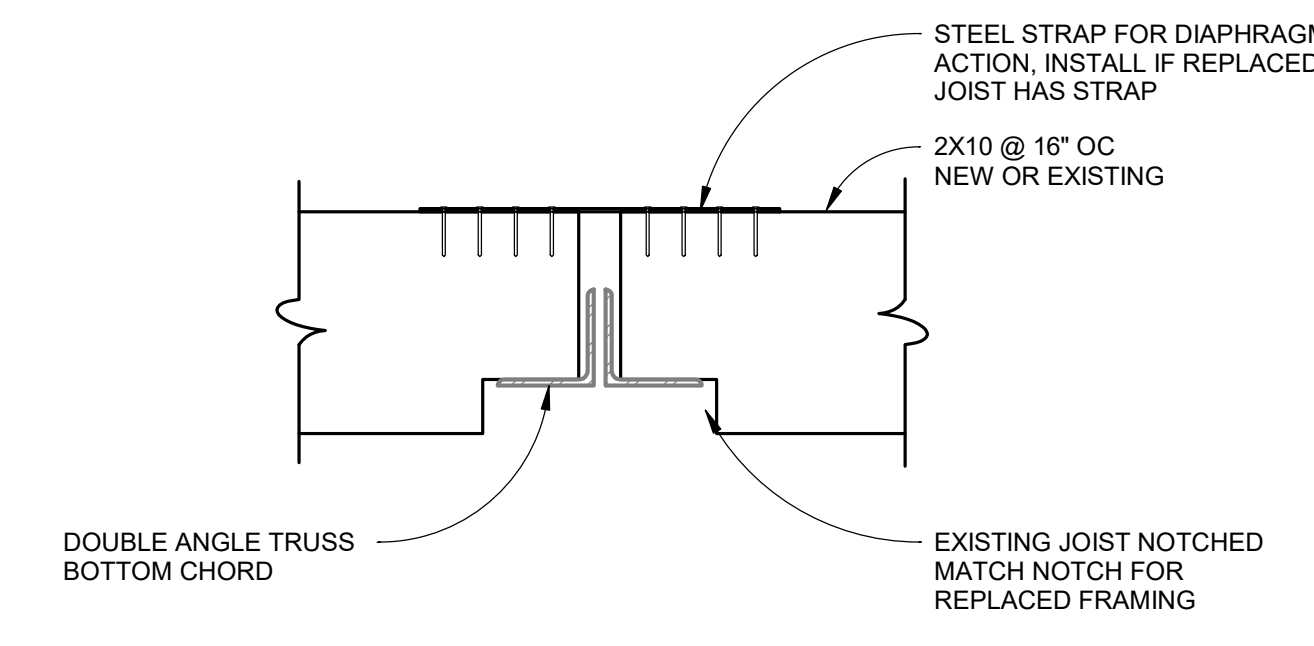
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ISSUANCES	
PERMIT SET	12/28/23

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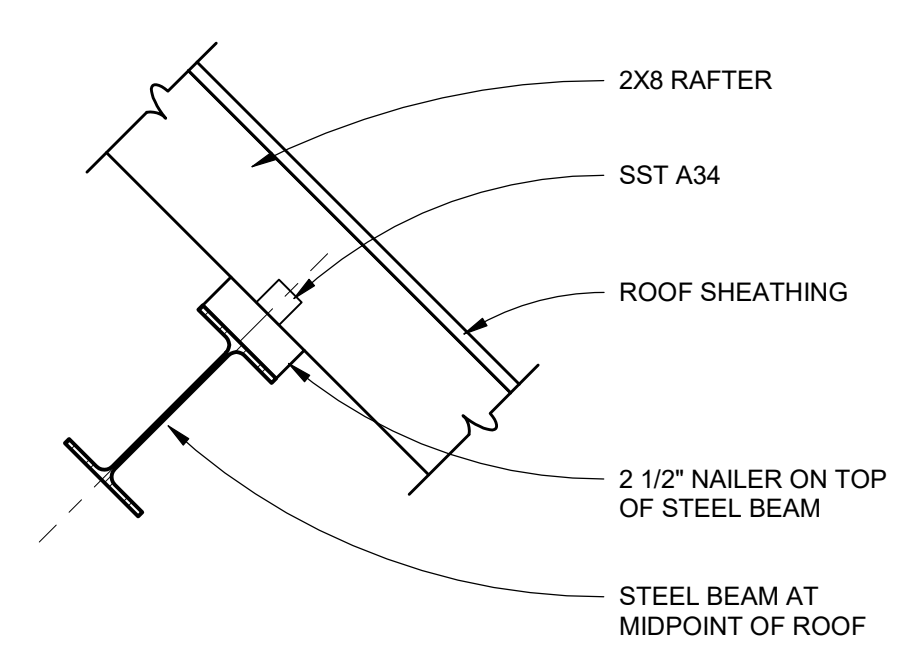
SHEET TITLE  
**STRUCTURAL DETAILS**

SHEET NO.

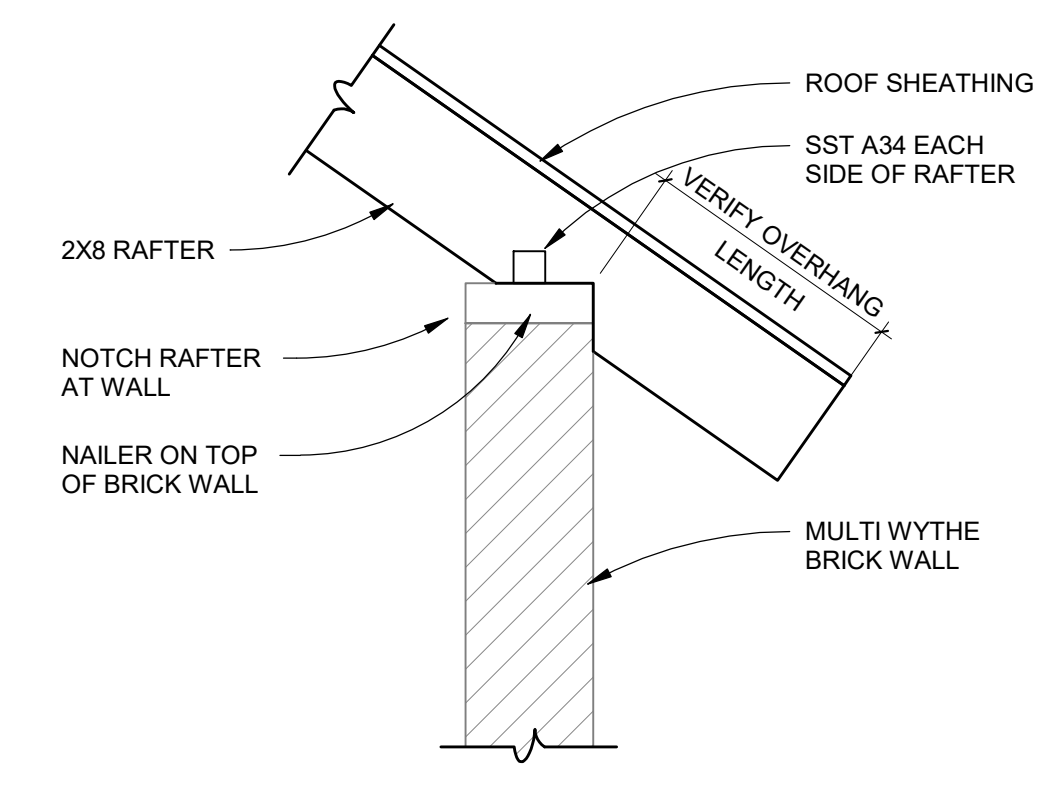
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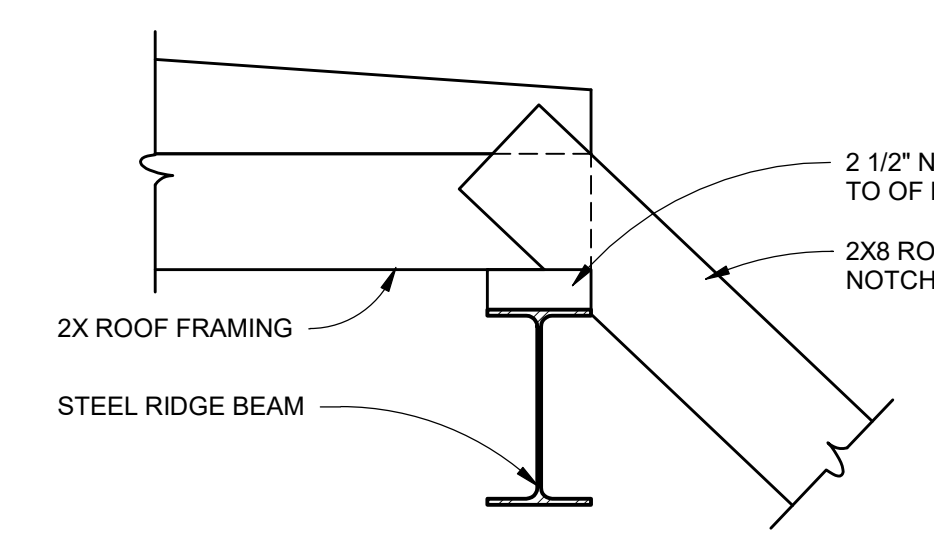
**1**  
S2.1  
**BOTTOM CHORD BRACING**  
SCALE: 1 1/2" = 1'-0"



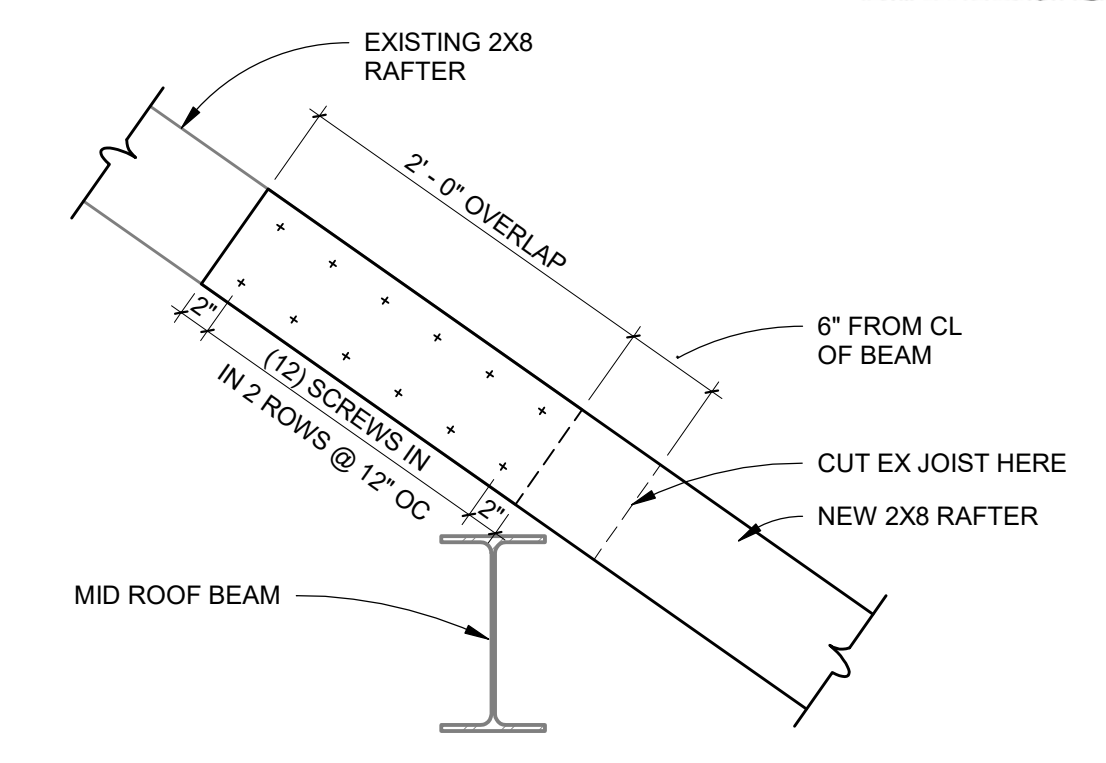
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S2.1  
**ROOF DETAIL**  
SCALE: 1" = 1'-0"



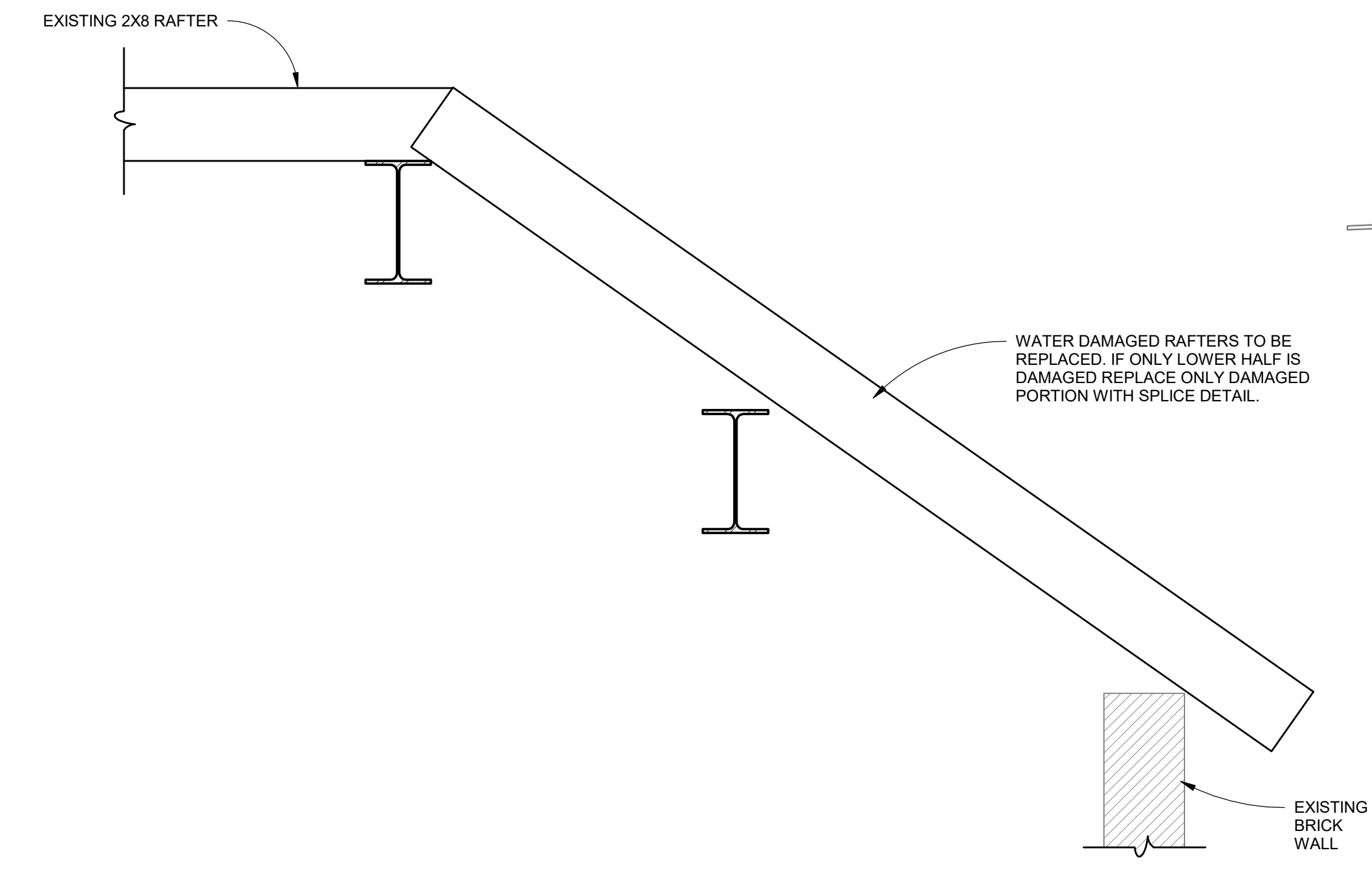
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S2.1  
**ROOF DETAIL**  
SCALE: 1" = 1'-0"



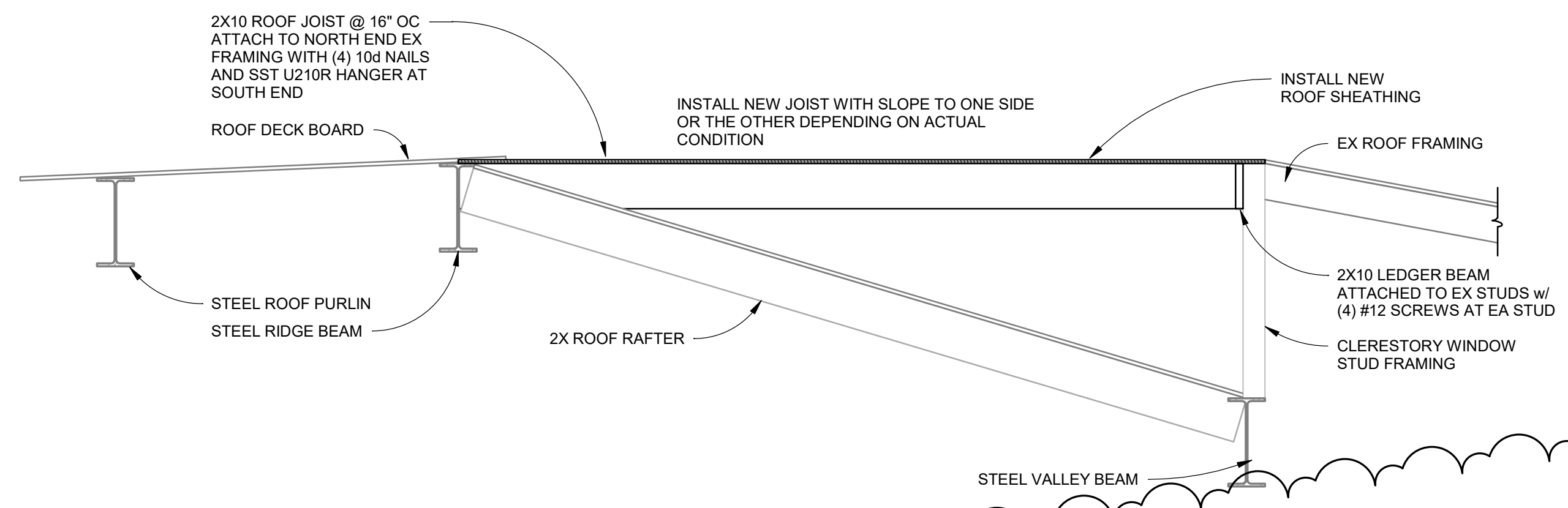
**4**  
S2.1  
**ROOF DETAIL**  
SCALE: 1" = 1'-0"



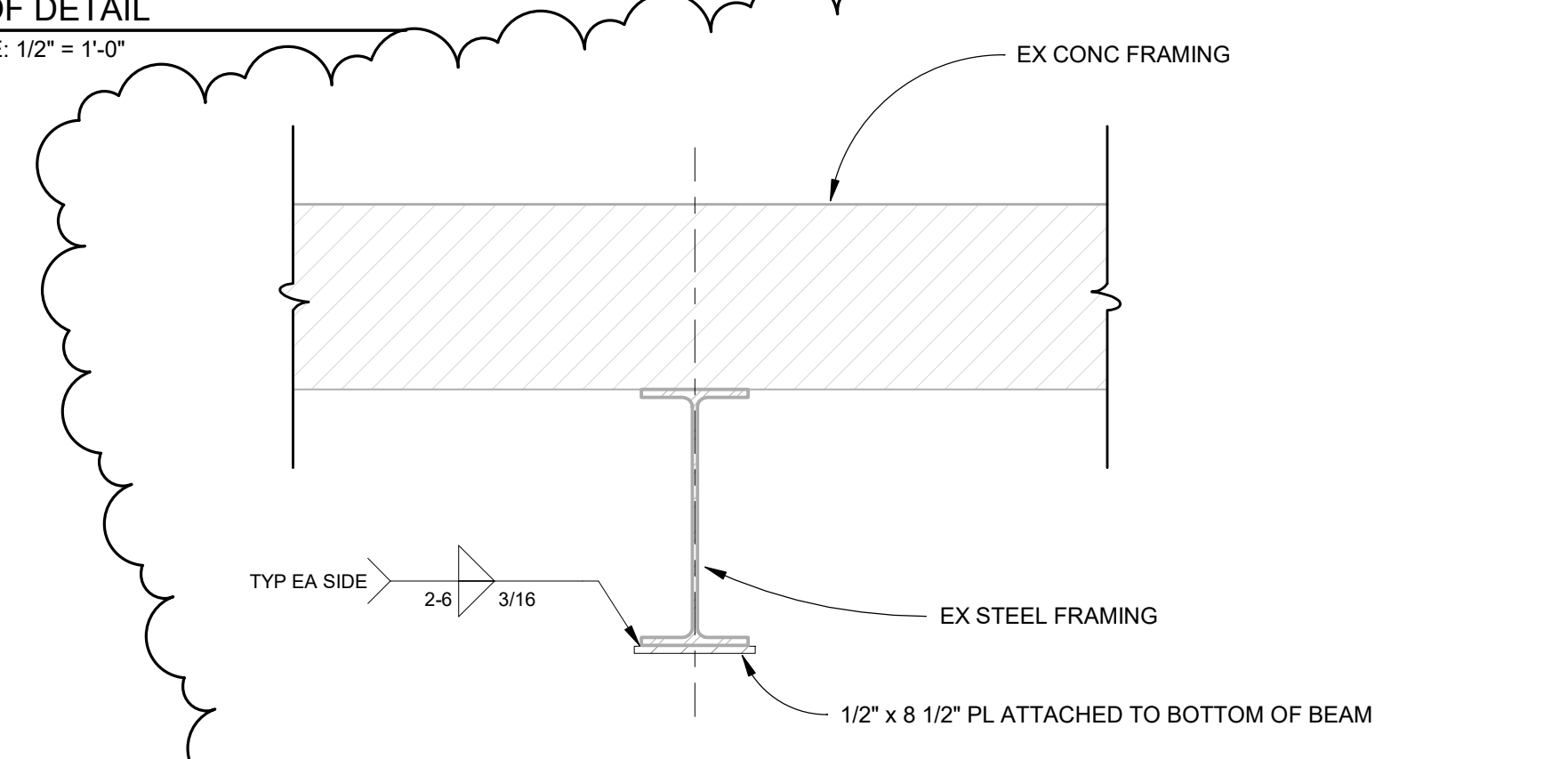
**5**  
S2.1  
**ROOF RAFTER SPLICE DETAIL**  
SCALE: 1" = 1'-0"



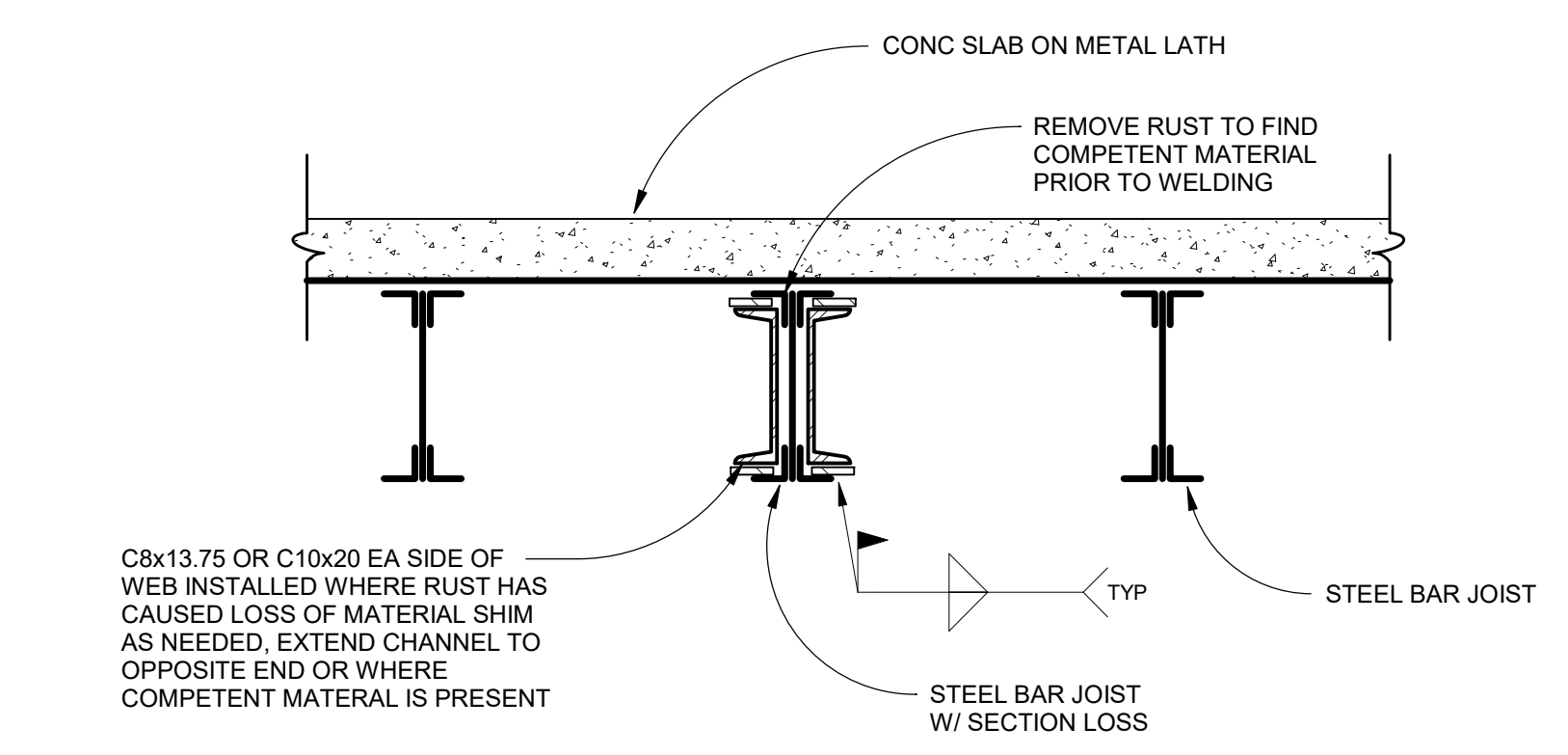
**6**  
S2.1  
**ROOF RAFTER DETAIL**  
SCALE: 1" = 1'-0"



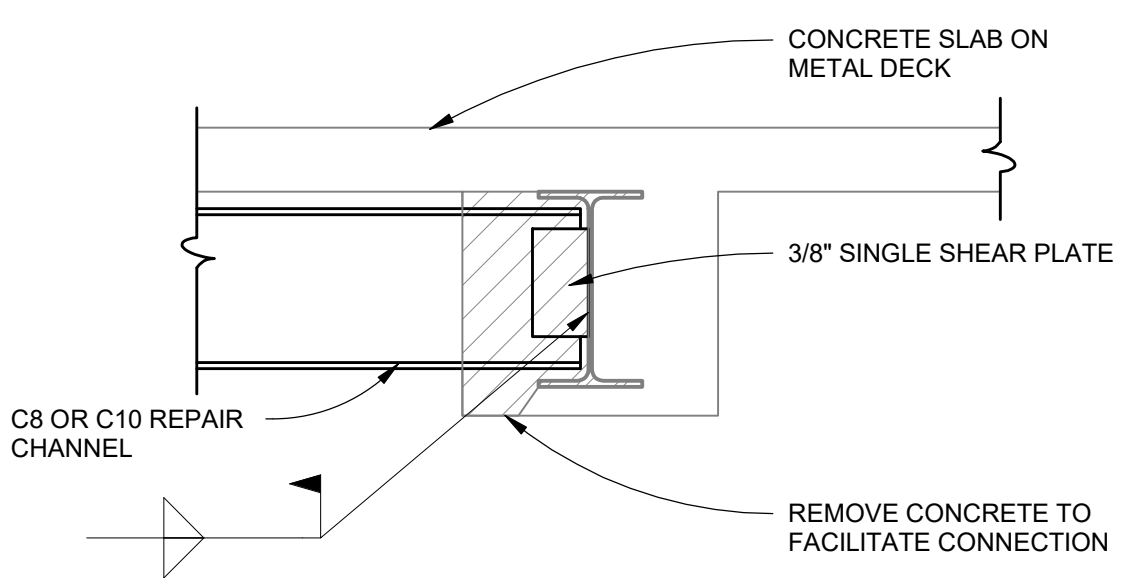
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S2.1  
**ROOF DETAIL**  
SCALE: 1/2" = 1'-0"



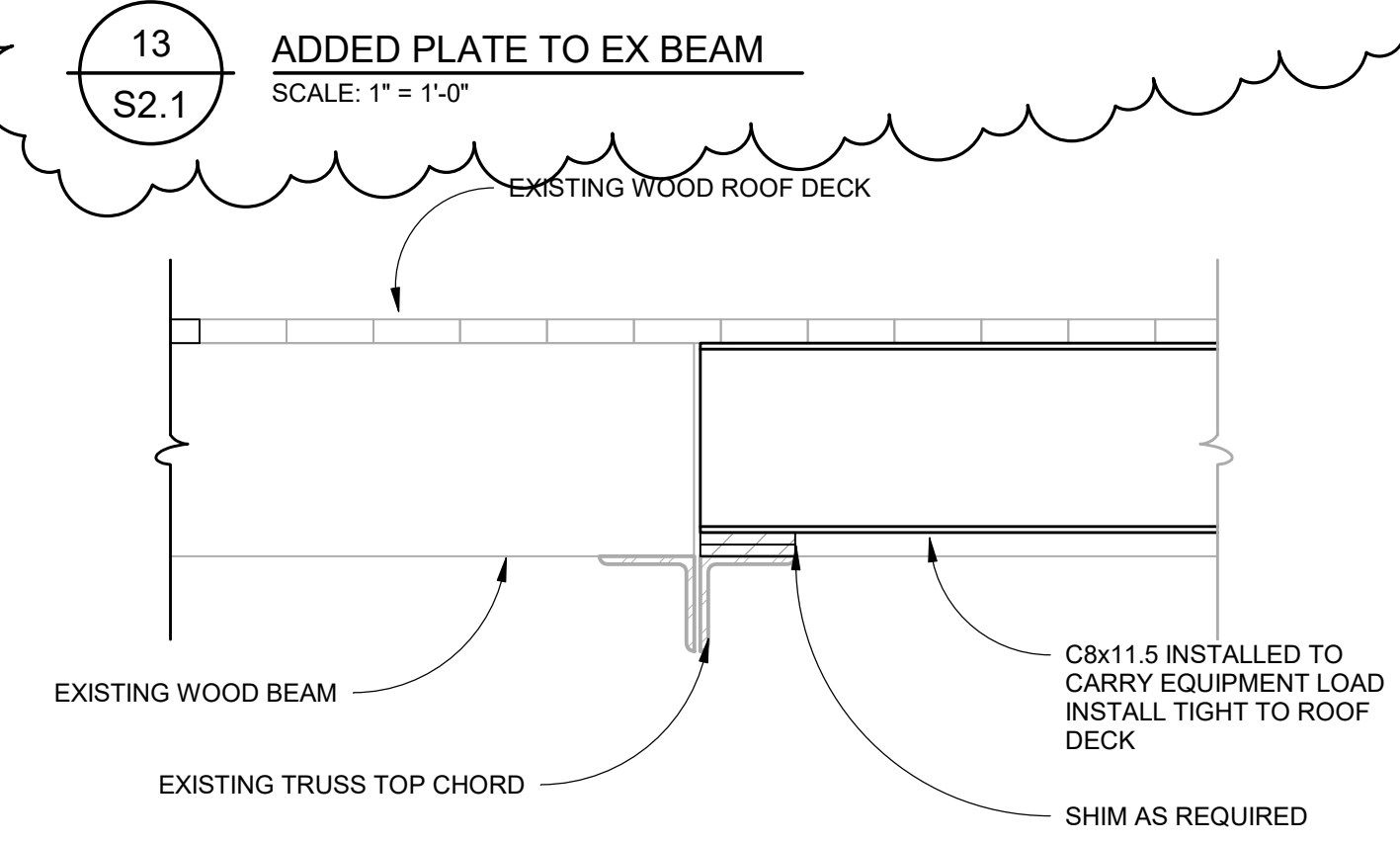
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S2.1  
**DETAIL NOT USED**  
SCALE: 3/4" = 1'-0"



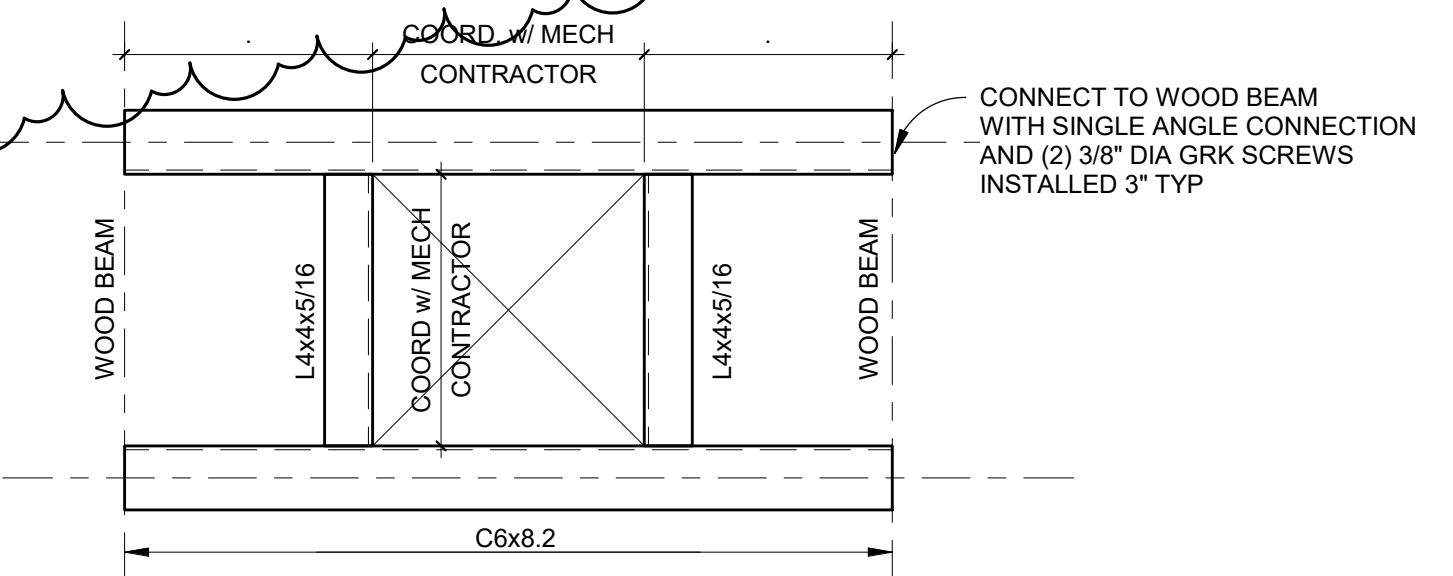
**9**  
S2.1  
**JOIST END REPAIR**  
SCALE: 1" = 1'-0"



**10**  
S2.1  
**JOIST END REPAIR END CONDITION**  
SCALE: 1" = 1'-0"



**11**  
S2.1  
**EQUIPMENT SUPPORT BEARING DETAIL**  
SCALE: 1" = 1'-0"

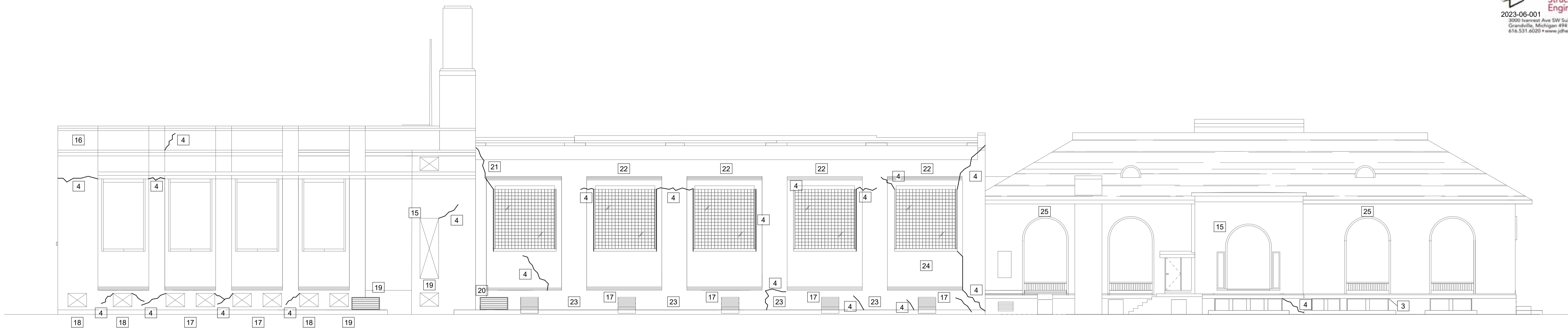


- NOTES:
- This detail applies to all roof openings. All openings are not necessarily shown on structural drawings. Coordinate openings with final Arch and Mechanical drawings.
  - field weld frame together as required to allow for installation and tolerance.

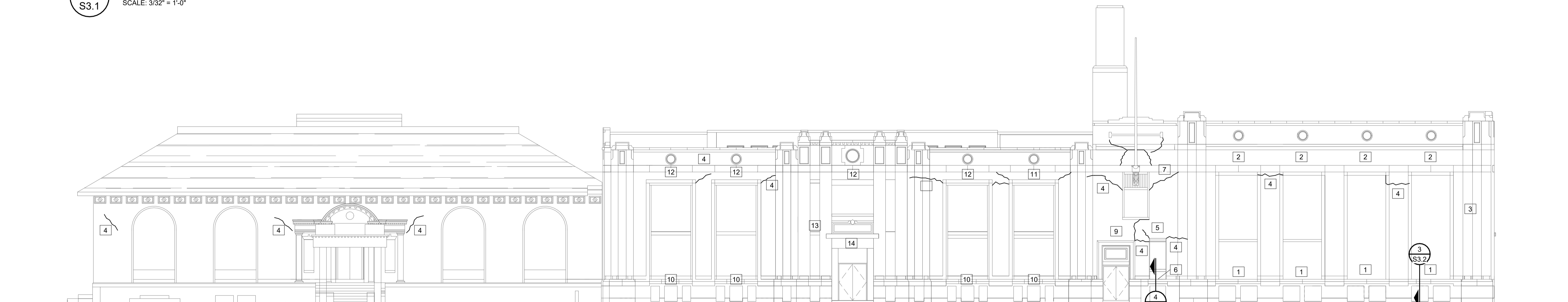
**12**  
S2.1  
**TYPICAL ROOF OPENING FRAME**  
SCALE: 1" = 1'-0"

**EXISTING BUILDING NOTE:**  
THIS PROJECT IS AN ADDITION AND EXTENSION OF AN EXISTING BUILDING. THE DRAWINGS REFLECT WHAT IS KNOWN ABOUT THE EXISTING BUILDING, BUT EXISTING CONDITIONS MUST BE VERIFIED BEFORE FABRICATION AND CONSTRUCTION. BUTTING CONSTRUCTION MUST MATCH UP. VERIFY ALL SUCH CONDITIONS, AND NOTIFY A/E IF ACTUAL CONDITIONS DIFFER FROM THE CONTRACT DOCUMENTS. AN ATTEMPT HAS BEEN MADE TO ANTICIPATE CONDITIONS IN THE EXISTING STRUCTURE.





**1**  
S3.1 NORTH ELEVATION  
SCALE: 3/32" = 1'-0"



**2**  
S3.1 SOUTH ELEVATION  
SCALE: 3/32" = 1'-0"

**BRICK REPAIR NOTES**

1. AREAS OF TUCK POINTING WILL BE REQUIRED IN MULTIPLE PLACES THAT ARE NOT NOTED.
2. LINTEL TO BE REPLACED WHERE RUST IS FOUND ON EXISTING LINTEL THAT WILL CAUSE BRICK MOVEMENT OR LINTEL SHAPE TO CHANGE. MULTIPLE LINTELS ARE PRESENT AT EACH OPENING. REPLACE ALL LINTELS THAT SHOW DETERIORATION.
3. BRICK THAT HAS MOVED ABOVE LINTEL SHALL BE REPLACED.
4. CRACKED AND BROKEN BRICKS SHALL BE REPLACED.
5. THIS BUILDING IS A MULTIPLE WYTHE BRICK BEARING STRUCTURE. REMOVAL OF INTERIOR BRICK MAY AFFECT FLOOR AND ROOF SUPPORTING ELEMENTS. SHORING OF THESE ELEMENTS MUST BE COMPLETED PRIOR TO REMOVING BRICK.
6. EXTERIOR REPAIR AREAS WILL NEED TO BE SELECTED TO ENSURE BRICK CAN BE REPAIRED OR REPLACED WITHOUT AFFECTING SURROUNDING BRICK AREAS. SHORING OF BRICK WALL MAY BE REQUIRED TO SAFELY REPAIR BRICK.

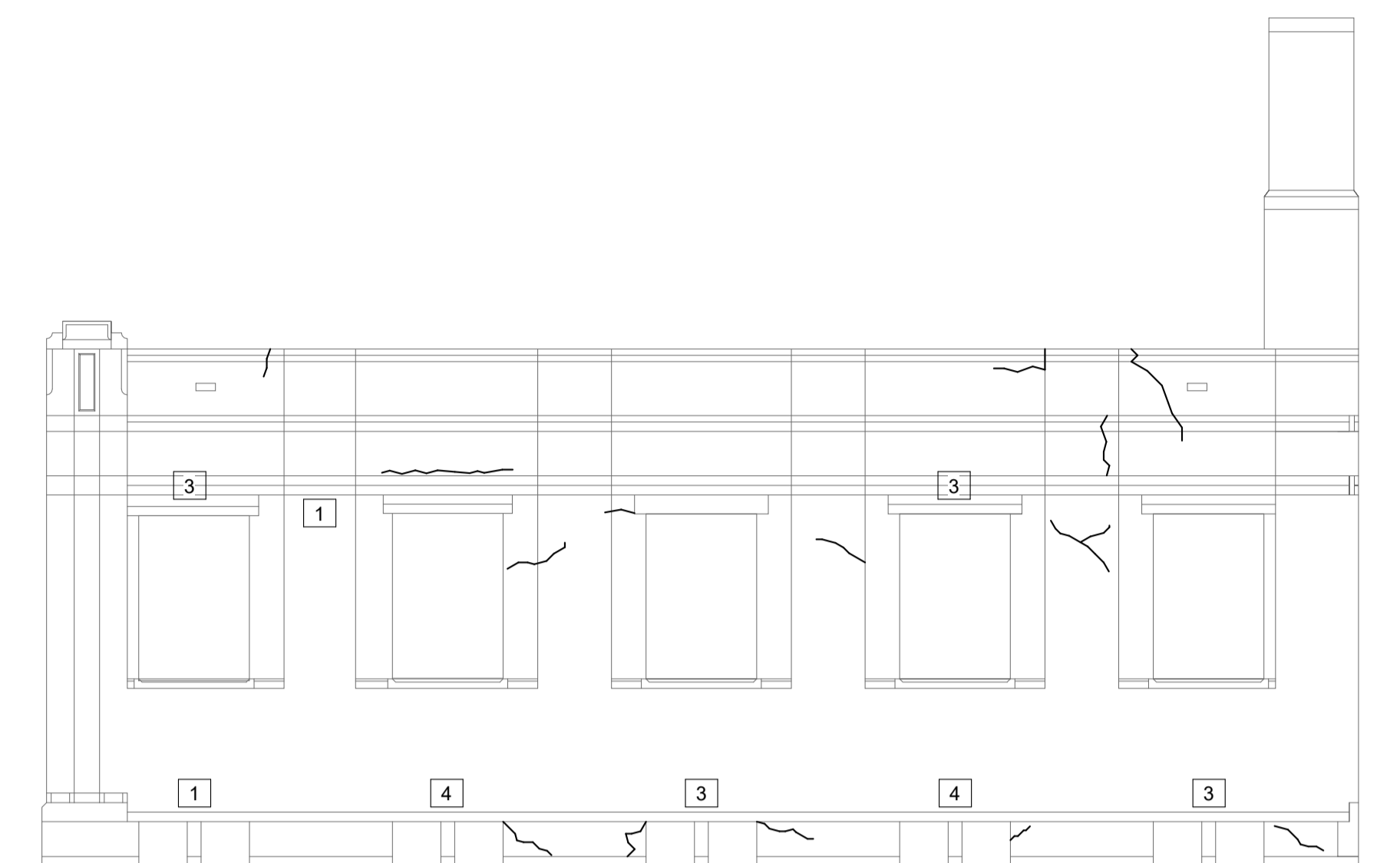
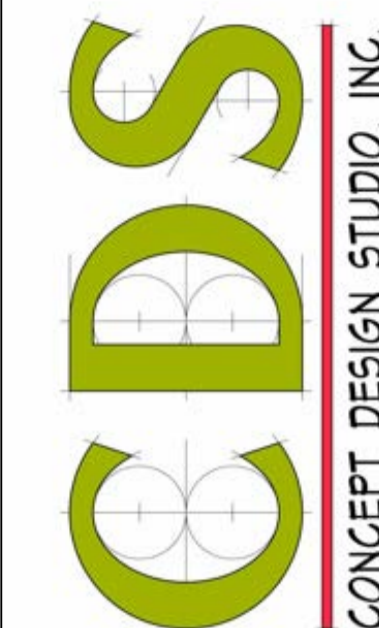
**ELEVATION KEYNOTE LEGEND**

1. EXTERIOR STEEL LINTEL WITH PACK RUST AND SECITON LOSS. LINTEL NEEDS TO BE REPLACED.
  - A. CAP COURSE IS CRACKED
  - B. BRICK IS KICKING OUT ABOVE AND BELOW THE WINDOW. THIS BRICK SHOULD BE REMOVED AND REBUILT.
2. BRICK MOVING OUT OR MISSING. REBUILD BRICK OVER LINTEL.
  - A. CONCRETE LINTEL MOVING AT CENTER TWO LOCATIONS.
3. REPLACE MISSING BRICK
4. REPLACE OR REPAIR BROKEN BRICKS ALONG CRACK IN WALL.
5. REPLACE RUSTED STEEL LINTEL.
  - A. REPAIR OR REPLACE CRACKED BRICKS FROM TOP CORNER OF WINDOWS.
6. INSPECT LINTEL FOR RUST. REPLACE LINTEL IF RUST CAUSES BRICK MOVEMENT
7. REPLACE STEEL LINTEL RUSTED WITH PACK RUST.
  - A. REPAIR OR REPLACE CRACKED BRICK FROM TOP AND BOTTOM RIGHT CORNER OF WINDOW.
8. REPLACE LINTEL AND REBUILD BRICK. RUSTING LINTEL IS CAUSING BRICK TO MOVE.
  - A. REPAIR OR REPLACE CRACKED BRICK AT TOP CORNERS OF OPENING.
  - B. REPLACE BRICK MISSING AT THE TOP LEFT CORNER.
9. CONCRETE AROUND DOOR IS WORN FROM ENVIRONMENTAL EXPOSURE. NO CRACKS NOTED
10. EXPOSED PORTION OF LINTEL IS IN OK CONDITION. REPLACE IF SIGNIFICANT RUST IS UNCOVERED.
  - A. BRICK HAS SMALL AMOUNT OF MOVEMENT.
11. REPAIR OR REPLACE BRICK ALONG LARGE CRACKS IN WALL.
12. REPLACE LINTEL AND REPAIR BRICK CRACKS AT TOP OF WINDOW. BRICK MOVEMENT IS CAUSED BY RUSTING LINTEL.
13. REPLACE LINTEL. LINTEL IS CAUSING MOVEMENT IN THE BRICK.
14. REPAIR OR REPLACE BROKEN CONCRETE AT CORNERS.
15. VEGETATION COVERS BRICK. UNCOVER BRICK FOR FURTHER INSPECTION.
16. TUCK POINT PARAPET BRICK AS REQUIRED.
17. REPLACE LINTEL IF RUST CAUSES BRICK TO MOVE.
18. OPENING IS COVERED IN PLYWOOD. REMOVE PLYWOOD TO INSPECT LINTEL.
19. CLEAN AND PAINT EXISTING LINTEL. REPLACE LINTEL IF RUST COULD DAMAGE BRICK.
20. TUCK POINT BRICK.
21. REPAIR OR REPLACE BRICK THAT IS CRACKING.
22. REPAIR OR REPLACE BRICK AT LARGE CRACKS RUNNING VERTICAL ALONG WINDOW.
  - A. REPLACE LINTEL
  - B. GLASS BLOCK IS BROKEN. UNCLEAR IF THIS FROM MOVEMENT OR PROJECTILES.
23. REPAIR OR REPLACE MISSING CONCRETE AT BOTTOM OF OPENING.
24. REPAIR OR REPLACE MISSING CONCRETE LINTEL.
25. REPAIR OR REPLACE DAMAGED CONCRETE.

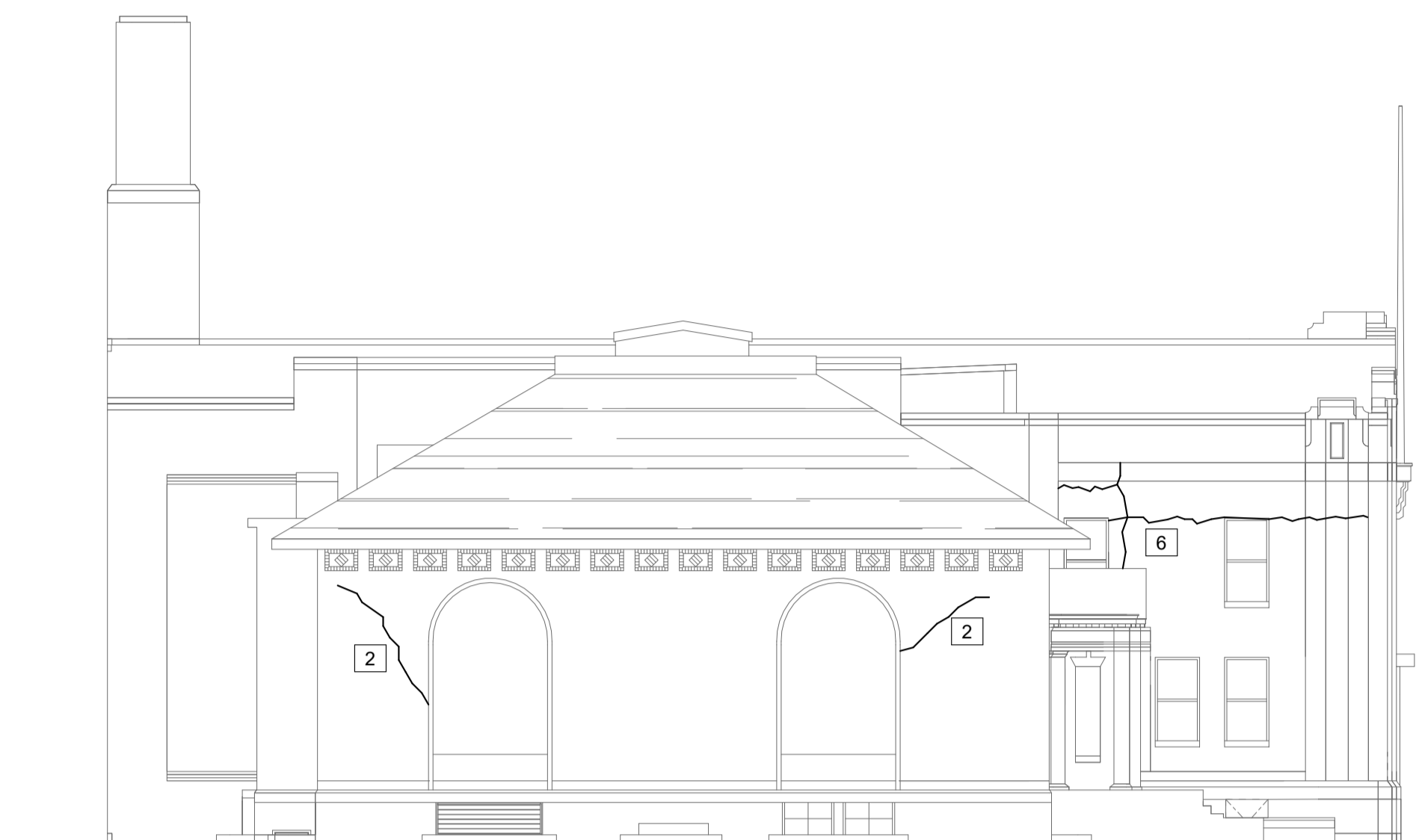


PROJECT #	
ISSUANCES	
PERMIT SET	12/28/23
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DRAWN BY	Author
SHEET TITLE	STRUCTURAL ELEVATIONS
SHEET NO.	S3.1

**BREWSTER WHEELER REC.**  
DETROIT, MICHIGAN

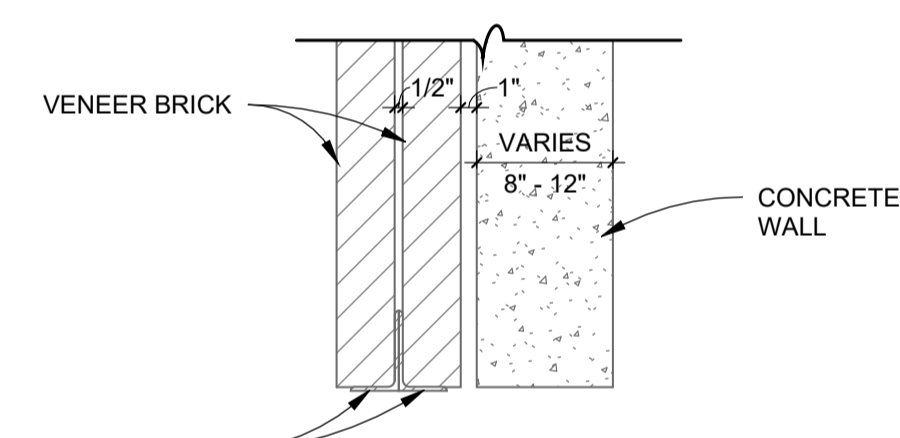


1 WEST ELEVATION  
SCALE: 3/32" = 1'-0"

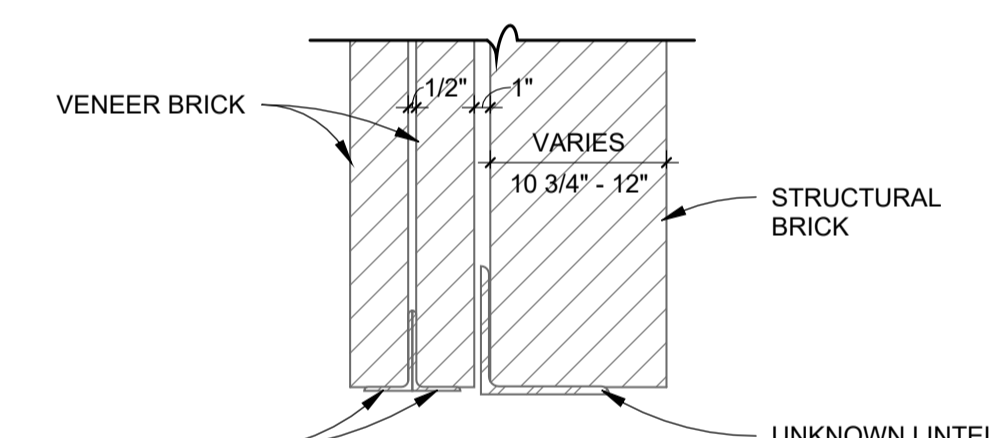


2 EAST ELEVATION  
SCALE: 3/32" = 1'-0"

- ELEVATION KEYNOTE LEGEND
- EXTERIOR STEEL LINTEL WITH PACK RUST AND SECTION LOSS. LINTEL NEEDS TO BE REPLACED.
    - A. CAP COURSE IS CRACKED
    - B. BRICK IS KICKING OUT ABOVE AND BELOW THE WINDOW. THIS BRICK SHOULD BE REMOVED AND REBUILT.
  - BRICK MOVING OUT OR MISSING. REBUILD BRICK OVER LINTEL.
    - A. CONCRETE LINTEL MOVING AT CENTER TWO LOCATIONS. REPLACE LINTEL.
    - B. REPLACE MISSING BRICK.
  - REPLACE OR REPAIR BROKEN BRICKS ALONG CRACK IN WALL.
  - REPLACE RUSTED STEEL LINTEL.
    - A. REPAIR OR REPLACE CRACKED BRICKS FROM TOP CORNER OF WINDOWS.
  - INSPECT LINTEL FOR RUST. REPLACE LINTEL IF RUST CAUSES BRICK MOVEMENT.
  - REPLACE STEEL LINTEL RUSTED WITH PACK RUST.
    - A. REPAIR OR REPLACE CRACKED BRICK FROM TOP AND BOTTOM RIGHT CORNER OF WINDOW.
  - REPLACE LINTEL AND REBUILD BRICK. RUSTING LINTEL IS CAUSING BRICK TO MOVE.
    - A. REPAIR OR REPLACE CRACKED BRICK AT TOP CORNERS OF OPENING.
    - B. REPLACE BRICK MISSING AT THE TOP LEFT CORNER.
  - CONCRETE AROUND DOOR IS WORN FROM ENVIRONMENTAL EXPOSURE. NO CRACKS NOTED.
  - EXPOSED PORTION OF LINTEL IS IN OK CONDITION. REPLACE IF SIGNIFICANT RUST IS UNCOVERED.
    - A. BRICK HAS SMALL AMOUNT OF MOVEMENT.
  - REPAIR OR REPLACE BRICK ALONG LARGE CRACKS IN WALL.
  - REPLACE LINTEL AND REPAIR BRICK CRACKS AT TOP OF WINDOW. BRICK MOVEMENT IS CAUSED BY RUSTING LINTEL.
  - REPLACE LINTEL. LINTEL IS CAUSING MOVEMENT IN THE BRICK.
  - REPAIR OR REPLACE BROKEN CONCRETE AT CORNERS.
  - VEGETATION COVERS BRICK. UNCOVER BRICK FOR FURTHER INSPECTION.
  - TUCK POINT PARAPET BRICK AS REQUIRED.
  - REPLACE LINTEL IF RUST CAUSES BRICK TO MOVE.
  - OPENING IS COVERED IN PLYWOOD. REMOVE PLYWOOD TO INSPECT LINTEL.
  - CLEAN AND PAINT EXISTING LINTEL. REPLACE LINTEL IF RUST COULD DAMAGE BRICK.
  - TUCK POINT BRICK.
  - REPAIR OR REPLACE BRICK THAT IS CRACKING.
  - REPAIR OR REPLACE BRICK AT LARGE CRACKS RUNNING VERTICAL ALONG WINDOW.
    - A. REPLACE LINTEL
    - B. GLASS BLOCK IS BROKEN. UNCLEAR IF THIS FROM MOVEMENT OR PROJECTILES.
  - REPAIR OR REPLACE MISSING CONCRETE AT BOTTOM OF OPENING.
  - REPAIR OR REPLACE MISSING CONCRETE LINTEL.
  - REPAIR OR REPLACE DAMAGED CONCRETE  
BRICK REPAIR RULES



3 LINTEL SECTION A  
SCALE: 1" = 1'-0"



4 LINTEL SECTION B  
SCALE: 1" = 1'-0"

- AREAS OF TUCK POINTING WILL BE REQUIRED IN MULTIPLE PLACES THAT ARE NOT NOTED.
- LINTEL TO BE REPLACED WHERE RUST IS FOUND ON EXISTING LINTEL THAT WILL CAUSE BRICK MOVEMENT OR LINTEL SHAPE TO CHANGE. MULTIPLE LINTELS ARE PRESENT AT EACH OPENING. REPLACE ALL LINTELS THAT SHOW DETERIORATION.
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- CRACKED AND BROKEN BRICKS SHALL BE REPLACED.
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- EXTERIOR REPAIR AREAS WILL NEED TO BE SELECTED TO ENSURE BRICK CAN BE REPAIRED OR REPLACED WITHOUT AFFECTING SURROUNDING BRICK AREAS. SHORING OF BRICK WALL MAY BE REQUIRED TO SAFELY REPAIR BRICK.

PROJECT #	
ISSUANCES	
PERMIT SET	12/28/23
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DRAWN BY	Author

SHEET TITLE	STRUCTURAL ELEVATIONS AND DETAILS
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SHEET NO.	
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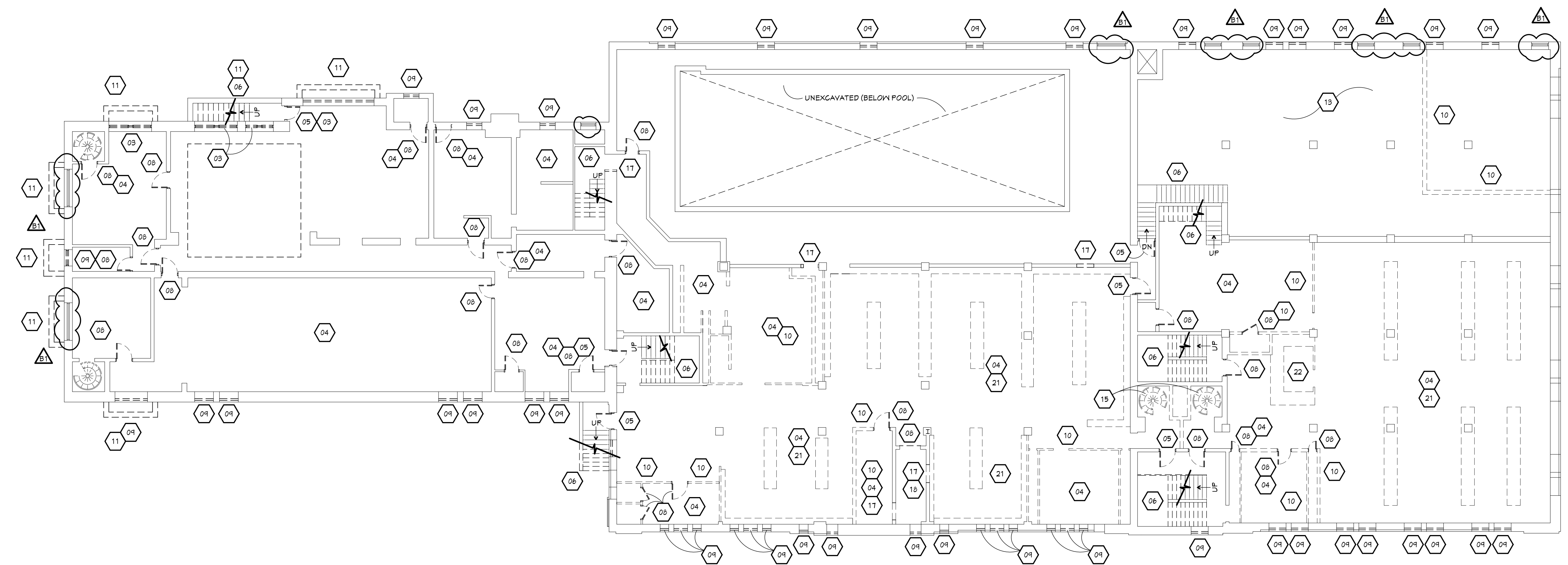
*Kyle Oberhart*  
 01.3.2024  
 BREWSTER REC CENTER

**DEMOLITION NOTES**

- |   |  |
|---|--|
| <p>01 REMOVE EXISTING FINISH FLOOR MATERIAL DOWN TO EXISTING CONCRETE FLOOR SLAB. ALL EXISTING TILE AND TERRAZZO FLOORS TO REMAIN. PATCH, REPAIR AND PREP SLAB FOR NEW FINISH FLOOR SYSTEM. PROVIDE PROTECTION OF EXISTING FLOOR FINISHES TO REMAIN.</p> <p>02 REMOVE PORTION OF EXISTING MASONRY BEARING WALL. CONTRACTOR TO PROVIDE TEMPORARY SHORING FOR EXISTING WALLS AND FLOORS AS REQUIRED UNTIL NEW CONSTRUCTION FRAMING IS IN-PLACE. REFER TO STRUCTURAL DRAWINGS FOR NEW FRAMING MEMBER SIZES, LOCATIONS AND DESIGN.</p> <p>03 REMOVE EXISTING REMAINING WINDOW ASSEMBLY, TRIM AND DAMAGED STONE OR PRECAST SILL. PATCH AND REPAIR EXISTING ADJACENT WALLS AS REQ'D FOR NEW WINDOW &amp; SILL INSTALLATION.</p> <p>04 REMOVE EXISTING LATH &amp; PLASTER CEILING TO EXISTING CEILING JOIST AND PREP FOR NEW CONSTRUCTION. (TYPICAL THROUGHOUT EACH FLOOR). REMOVE ALL EXISTING SUSPENDED CEILING AND SUSPENSION HANGERS AND WIRE.</p> <p>05 REMOVE EXISTING DOOR &amp; FRAME, PREP OPENING FOR NEW DOOR &amp; FRAME. REFER TO DOOR &amp; FRAME SCHEDULE.</p> <p>06 CLEAN, PREP / REPAIR EXISTING TREADS, RISERS &amp; STRINGERS. DEMO ALL HANDRAILS FOR REPLACEMENT.</p> <p>07 REMOVE EXISTING CANOPY &amp; PIPE COLUMNS. PATCH AND REPAIR EXISTING BRICK AS NECESSARY.</p> <p>08 REMOVE EXISTING DOOR AND FRAME. PATCH AND REPAIR ADJACENT WALLS FOR NEW INFILL / OPENING IF REQUIRED.</p> <p>09 REMOVE EXISTING TEMPORARY INFILL WINDOW. PATCH AND REPAIR ADJACENT WALLS FOR NEW INFILL.</p> <p>10 REMOVE ALL EXISTING INTERIOR PLASTER WALLS &amp; FIRE BLOCK PARTITION WALLS. FULL HEIGHT EXCEPT AS NOTED. PATCH EXISTING FLOOR, CEILING AND SIDE WALLS AS REQUIRED. REMOVE ALL EXISTING PLASTER FINISH AT EXTERIOR WALLS DOWN TO THE EXISTING CLAY BLOCK AND OR MASONRY BRICK OR BLOCK WALLS.</p> <p>11 VERIFY / REPAIR EXISTING EGRESS CONCRETE WINDOW WELL / EGRESS STAIR. PREP FOR REPLACEMENT TO MATCH EXISTING.</p> | <p>12 REMOVE EXISTING PLUMBING FIXTURES &amp; DISCONNECT PLUMBING LINES AS REQ'D FOR NEW FIXTURES.</p> <p>13 REMOVE EXISTING ABANDONED MECH. EQUIPMENT. G.C. TO VERIFY EXISTING CONDITIONS.</p> <p>14 REMOVE EXISTING STAIR, PREP FLOOR OPENING FOR NEW INFILL.</p> <p>15 REMOVE EXISTING STAIR &amp; GUARDRAILS / HANDRAILS. PATCH &amp; REPAIR EXISTING WALLS AS REQ'D FOR NEW CONSTRUCTION.</p> <p>16 REMOVE EXISTING GLASS BLOCK, PREP OPENING FOR NEW GLASS BLOCK.</p> <p>17 REMOVE EXISTING WALL AS REQUIRED FOR NEW OPENING OR DOOR &amp; FRAME.</p> <p>18 REMOVE EXISTING ELEVATOR EQUIPMENT. PREP SHAFT FOR NEW ELEVATOR. COORD. W/ ELEVATOR SHOP DRAWINGS.</p> <p>19 REMOVE EXISTING STAGE, PATCH &amp; REPAIR ADJACENT WALLS AS REQUIRED.</p> <p>20 REMOVE EXISTING CONCRETE SIDEWALK, CURB, STEPS AND PORCH SLAB.</p> <p>21 REMOVE ALL CONCRETE CURBS. PATCH &amp; REPAIR CONCRETE AS REQ'D.</p> <p>22 REMOVE EXISTING CASEWORK, PATCH &amp; REPAIR ADJ. FINISHES AS REQUIRED.</p> <p>23 REMOVE &amp; REPLACE DAMAGED STONE TREADS &amp; CURBS WITH NEW STONE UNITS TO MATCH EXISTING.</p> |
|---|--|

**GENERAL DEMOLITION NOTES**

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS BEFORE DEMOLITION. DIMENSIONS SHOWN ARE GUIDELINES, COORDINATE DEMOLITION WITH NEW CONSTRUCTION WORK.
2. PROVIDE TEMPORARY SHORING OF EXISTING FRAMING AS REQUIRED UNTIL NEW CONSTRUCTION IS IN-PLACE.
3. DEMOLITION CONTRACTOR TO TAKE CARE IN REMOVING / DISMANTLING OF FLOOR DECKING, BEAMS, COLUMNS AND CONNECTION PLATES TO SAFELY REMOVE MATERIALS WITHOUT CAUSING DAMAGE TO THE EXISTING STRUCTURE.
4. SAVE EXISTING BRICK IN DEMOLITION AREAS FOR BRICK INFILL AND BRICK PATCH AREAS. CLEAN AND STACK FOR REUSE.
5. DASHED LINES INDICATE MATERIALS TO BE REMOVED, COORDINATE WITH NEW CONSTRUCTION.
6. REMOVE ALL PIPING AND ACCESSORIES NOT BEING REUSED. SPRINKLER PIPING TO REMAIN UNTIL NEW SYSTEM IS IN-PLACE.
7. DISCONNECT AND REMOVE ALL MECHANICAL, ELECTRICAL, AND PLUMBING DEVICES, PIPING AND DUCT WORK.
8. PROVIDE FIRE EXTINGUISHERS (AMOUNT TBD, AS REQ'D BY CODE) AT EACH FLOOR DURING DEMOLITION.
9. COORDINATE ALL DEMOLITION WORK WITH ENVIRONMENT ABATEMENT WORK. ASBESTOS & LEAD BASE PAINT REMOVAL OR ENCAPSULATION WORK IS BY OTHERS AND NOT INCLUDED UNDER THIS CONTRACT.
10. COORDINATE SAW CUTTING OF EXISTING WALLS AND FLOORS WITH MECHANICAL, ELECTRICAL, AND PLUMBING LOCATIONS.
11. VERIFY ALL DOOR & WINDOW ROUGH OPENINGS & FINISHED OPENINGS DIMENSIONS.
12. COORDINATE FOR APPROVAL W/ OWNER ON THE REMOVAL OF ANY INTERIOR ARTWORK.



**BASEMENT FLOOR DEMOLITION PLAN**  
 SCALE: 3/32" = 1'-0"

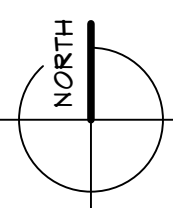
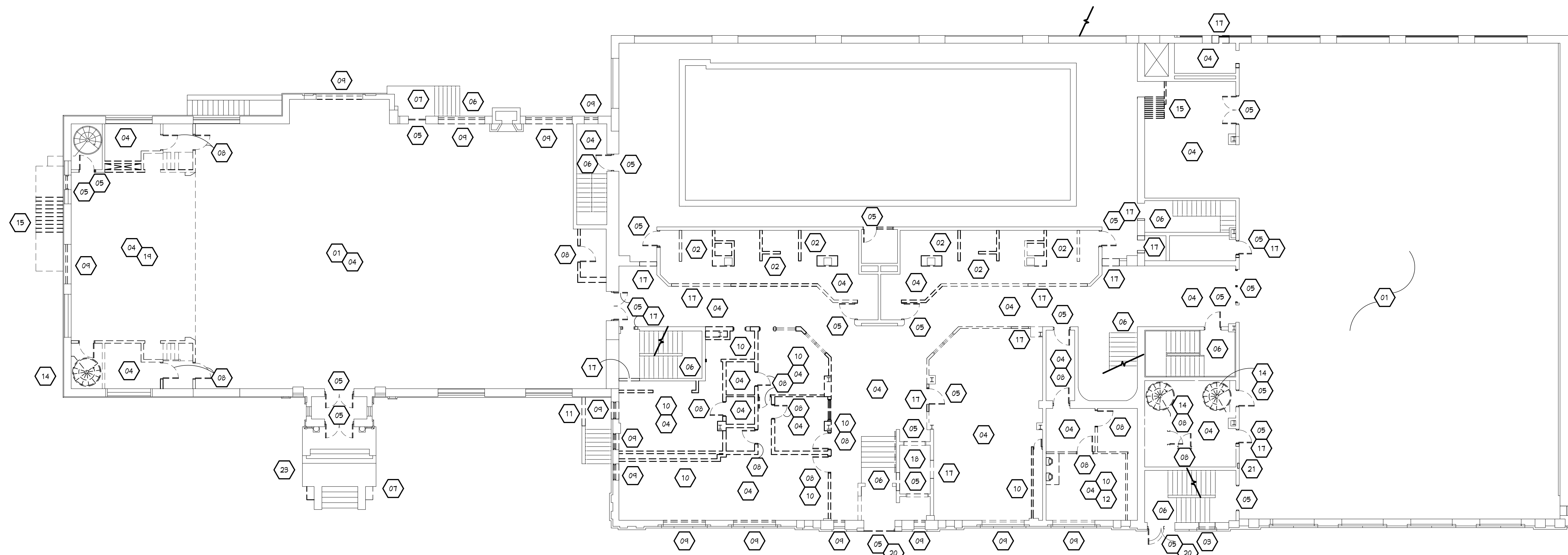
*Kyle Oberhart*  
 01.3.2024  
 BREWSTER REC CENTER

**DEMOLITION NOTES**

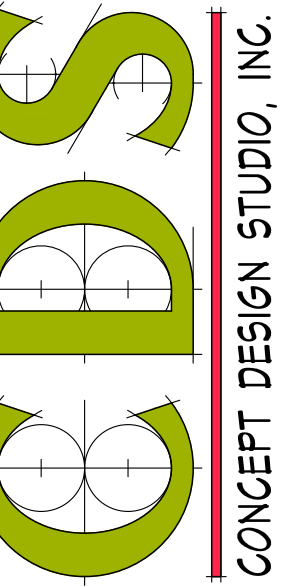
- 01 REMOVE EXISTING FINISH FLOOR MATERIAL DOWN TO EXISTING CONCRETE FLOOR SLAB. ALL EXISTING TILE AND TERRAZZO FLOORS TO REMAIN. PATCH, REPAIR AND PREP SLAB FOR NEW FINISH FLOOR SYSTEM. PROVIDE PROTECTION OF EXISTING FLOOR FINISHES TO REMAIN.
- 02 REMOVE PORTION OF EXISTING MASONRY BEARING WALL. CONTRACTOR TO PROVIDE TEMPORARY SHORING FOR EXISTING WALLS AND FLOORS AS REQUIRED UNTIL NEW CONSTRUCTION FRAMING IS IN-PLACE. REFER TO STRUCTURAL DRAWINGS FOR NEW FRAMING MEMBER SIZES, LOCATIONS AND DESIGN.
- 03 REMOVE EXISTING REMAINING WINDOW ASSEMBLY, TRIM AND DAMAGED STONE OR PRECAST SILL. PATCH AND REPAIR EXISTING ADJACENT WALLS AS REQ'D FOR NEW WINDOW & SILL INSTALLATION.
- 04 REMOVE EXISTING LATH & PLASTER CEILING TO EXISTING CEILING JOIST AND PREP FOR NEW CONSTRUCTION. (TYPICAL THROUGHOUT EACH FLOOR). REMOVE ALL EXISTING SUSPENDED CEILING AND SUSPENSION HANGERS AND WIRE.
- 05 REMOVE EXISTING DOOR & FRAME, PREP OPENING FOR NEW DOOR & FRAME. REFER TO DOOR & FRAME SCHEDULE.
- 06 CLEAN, PREP / REPAIR EXISTING TREADS, RISERS & STRINGERS. DEMO ALL HANDRAILS FOR REPLACEMENT.
- 07 REMOVE EXISTING CANOPY & COLUMNS. PATCH AND REPAIR EXISTING BRICK / FACADE AS NECESSARY.
- 08 REMOVE EXISTING DOOR AND FRAME. PATCH AND REPAIR ADJACENT WALLS FOR NEW INFILL / OPENING IF REQUIRED.
- 09 REMOVE EXISTING TEMPORARY INFILL WINDOW. PATCH AND REPAIR ADJACENT WALLS FOR NEW INFILL.
- 10 REMOVE ALL EXISTING INTERIOR PLASTER WALLS & FIRE BLOCK PARTITION WALLS. FULL HEIGHT EXCEPT AS NOTED. PATCH EXISTING FLOOR, CEILING AND SIDE WALLS AS REQUIRED. REMOVE ALL EXISTING PLASTER FINISH AT EXTERIOR WALLS DOWN TO THE EXISTING CLAY BLOCK AND OR MASONRY BRICK OR BLOCK WALLS.
- 11 VERIFY / REPAIR EXISTING EGRESS CONCRETE WINDOW WELL / EGRESS STAIR. PREP FOR REPLACEMENT TO MATCH EXISTING.
- 12 REMOVE EXISTING PLUMBING FIXTURES & DISCONNECT PLUMBING LINES AS REQ'D FOR NEW FIXTURES.
- 13 REMOVE EXISTING ABANDONED MECH. EQUIPMENT. G.C. TO VERIFY EXISTING CONDITIONS.
- 14 REMOVE EXISTING STAIR, PREP FLOOR OPENING FOR NEW INFILL.
- 15 REMOVE EXISTING STAIR & GUARDRAILS / HANDRAILS. PATCH & REPAIR EXISTING WALLS AS REQ'D FOR NEW CONSTRUCTION.
- 16 REMOVE EXISTING GLASS BLOCK, PREP OPENING FOR NEW GLASS BLOCK.
- 17 REMOVE EXISTING WALL AS REQUIRED FOR NEW OPENING OR DOOR & FRAME.
- 18 REMOVE EXISTING ELEVATOR EQUIPMENT. PREP SHAFT FOR NEW ELEVATOR. COORD. W/ ELEVATOR SHOP DRAWINGS.
- 19 REMOVE EXISTING STAGE, PATCH & REPAIR ADJACENT WALLS AS REQUIRED.
- 20 REMOVE EXISTING CONCRETE SIDEWALK, CURB, STEPS AND PORCH SLAB.
- 21 REMOVE ALL CONCRETE CURBS. PATCH & REPAIR CONCRETE AS REQ'D.
- 22 REMOVE EXISTING CASEWORK, PATCH & REPAIR ADJ. FINISHES AS REQUIRED.
- 23 REMOVE & REPLACE DAMAGED STONE TREADS & CURBS WITH NEW STONE UNITS TO MATCH EXISTING.

**GENERAL DEMOLITION NOTES**

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS BEFORE DEMOLITION. DIMENSIONS SHOWN ARE GUIDELINES, COORDINATE DEMOLITION WITH NEW CONSTRUCTION WORK.
2. PROVIDE TEMPORARY SHORING OF EXISTING FRAMING AS REQUIRED UNTIL NEW CONSTRUCTION IS IN-PLACE.
3. DEMOLITION CONTRACTOR TO TAKE CARE IN REMOVING / DISMANTLING OF FLOOR DECKING, BEAMS, COLUMNS AND CONNECTION PLATES TO SAFELY REMOVE MATERIALS WITHOUT CAUSING DAMAGE TO THE EXISTING STRUCTURE.
4. SAVE EXISTING BRICK IN DEMOLITION AREAS FOR BRICK INFILL AND BRICK PATCH AREAS. CLEAN AND STACK FOR REUSE.
5. DASHED LINES INDICATE MATERIALS TO BE REMOVED, COORDINATE WITH NEW CONSTRUCTION.
6. REMOVE ALL PIPING AND ACCESSORIES NOT BEING REUSED. SPRINKLER PIPING TO REMAIN UNTIL NEW SYSTEM IS IN-PLACE.
7. DISCONNECT AND REMOVE ALL MECHANICAL, ELECTRICAL, AND PLUMBING DEVICES, PIPING AND DUCT WORK.
8. PROVIDE FIRE EXTINGUISHERS (AMOUNT TBD, AS REQ'D BY CODE) AT EACH FLOOR DURING DEMOLITION.
9. COORDINATE ALL DEMOLITION WORK WITH ENVIRONMENT ABATEMENT WORK. ASBESTOS & LEAD BASE PAINT REMOVAL OR ENCAPSULATION WORK IS BY OTHERS AND NOT INCLUDED UNDER THIS CONTRACT.
10. COORDINATE SAW CUTTING OF EXISTING WALLS AND FLOORS WITH MECHANICAL, ELECTRICAL, AND PLUMBING LOCATIONS.
11. VERIFY ALL DOOR & WINDOW ROUGH OPENINGS & FINISHED OPENINGS DIMENSIONS.
12. COORDINATE FOR APPROVAL W/ OWNER ON THE REMOVAL OF ANY INTERIOR ARTWORK.



**FIRST FLOOR DEMOLITION PLAN**  
 SCALE: 3/32" = 1'-0"



PROJECT # 1356-23

ISSUANCES

FOR PERMITS 12.24.2023

BULLETIN #1 02.08.2024

BULLETIN #2 03.05.2024

*Kyle Oberhart*  
 01.3.2024  
 BREWSTER REC CENTER

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SHEET TITLE  
**SECOND FLOOR  
 DEMOLITION  
 PLAN**

SHEET NO.

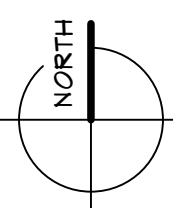
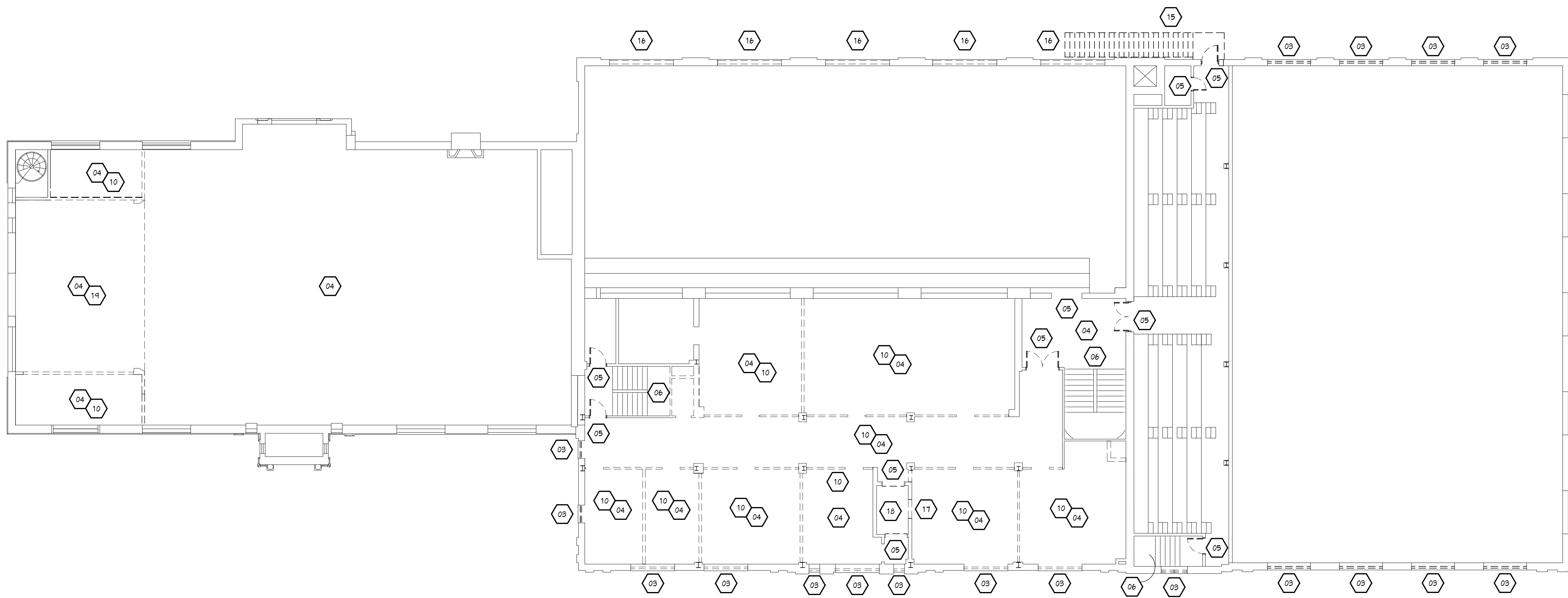
**A0.02**

**DEMOLITION NOTES**

- |   |  |
|---|--|
| <p>01 REMOVE EXISTING FINISH FLOOR MATERIAL DOWN TO EXISTING CONCRETE FLOOR SLAB. ALL EXISTING TILE AND TERRAZZO FLOORS TO REMAIN. PATCH, REPAIR AND PREP SLAB FOR NEW FINISH FLOOR SYSTEM. PROVIDE PROTECTION OF EXISTING FLOOR FINISHES TO REMAIN.</p> <p>02 REMOVE PORTION OF EXISTING MASONRY BEARING WALL. CONTRACTOR TO PROVIDE TEMPORARY SHORING FOR EXISTING WALLS AND FLOORS AS REQUIRED UNTIL NEW CONSTRUCTION FRAMING IS IN-PLACE. REFER TO STRUCTURAL DRAWINGS FOR NEW FRAMING MEMBER SIZES, LOCATIONS AND DESIGN.</p> <p>03 REMOVE EXISTING REMAINING WINDOW ASSEMBLY, TRIM AND DAMAGED STONE OR PRECAST SILL. PATCH AND REPAIR EXISTING ADJACENT WALLS AS REQ'D FOR NEW WINDOW &amp; SILL INSTALLATION.</p> <p>04 REMOVE EXISTING LATH &amp; PLASTER CEILING TO EXISTING CEILING JOIST AND PREP FOR NEW CONSTRUCTION. (TYPICAL THROUGHOUT EACH FLOOR). REMOVE ALL EXISTING SUSPENDED CEILING AND SUSPENSION HANGERS AND WIRE.</p> <p>05 REMOVE EXISTING DOOR &amp; FRAME. PREP OPENING FOR NEW DOOR &amp; FRAME. REFER TO DOOR &amp; FRAME SCHEDULE.</p> <p>06 CLEAN, PREP / REPAIR EXISTING TREADS, RISERS &amp; STRINGERS. DEMO ALL HANDRAILS FOR REPLACEMENT.</p> <p>07 REMOVE EXISTING CANOPY &amp; PIPE COLUMNS. PATCH AND REPAIR EXISTING BRICK AS NECESSARY.</p> <p>08 REMOVE EXISTING DOOR AND FRAME. PATCH AND REPAIR ADJACENT WALLS FOR NEW INFILL / OPENING IF REQUIRED.</p> <p>09 REMOVE EXISTING TEMPORARY INFILL WINDOW. PATCH AND REPAIR ADJACENT WALLS FOR NEW INFILL.</p> <p>10 REMOVE ALL EXISTING INTERIOR PLASTER WALLS &amp; FIRE BLOCK PARTITION WALLS. FULL HEIGHT EXCEPT AS NOTED. PATCH EXISTING FLOOR, CEILING AND SIDE WALLS AS REQUIRED. REMOVE ALL EXISTING PLASTER FINISH AT EXTERIOR WALLS DOWN TO THE EXISTING CLAY BLOCK AND OR MASONRY BRICK OR BLOCK WALLS.</p> <p>11 VERIFY / REPAIR EXISTING EGRESS CONCRETE WINDOW WELL / EGRESS STAIR. PREP FOR REPLACEMENT TO MATCH EXISTING.</p> | <p>12 REMOVE EXISTING PLUMBING FIXTURES &amp; DISCONNECT PLUMBING LINES AS REQ'D FOR NEW FIXTURES.</p> <p>13 REMOVE EXISTING ABANDONED MECH. EQUIPMENT. G.C. TO VERIFY EXISTING CONDITIONS.</p> <p>14 REMOVE EXISTING STAIR, PREP FLOOR OPENING FOR NEW INFILL.</p> <p>15 REMOVE EXISTING STAIR &amp; GUARDRAILS / HANDRAILS. PATCH &amp; REPAIR EXISTING WALLS AS REQ'D FOR NEW CONSTRUCTION.</p> <p>16 REMOVE EXISTING GLASS BLOCK, PREP OPENING FOR NEW GLASS BLOCK.</p> <p>17 REMOVE EXISTING WALL AS REQUIRED FOR NEW OPENING OR DOOR &amp; FRAME.</p> <p>18 REMOVE EXISTING ELEVATOR EQUIPMENT. PREP SHAFT FOR NEW ELEVATOR. COORD. W/ ELEVATOR SHOP DRAWINGS.</p> <p>19 REMOVE EXISTING STAGE, PATCH &amp; REPAIR ADJACENT WALLS AS REQUIRED.</p> <p>20 REMOVE EXISTING CONCRETE SIDEWALK, CURB, STEPS AND PORCH SLAB.</p> <p>21 REMOVE ALL CONCRETE CURBS. PATCH &amp; REPAIR CONCRETE AS REQ'D.</p> <p>22 REMOVE EXISTING CASEWORK, PATCH &amp; REPAIR ADJ. FINISHES AS REQUIRED.</p> <p>23 REMOVE &amp; REPLACE DAMAGED STONE TREADS &amp; CURBS WITH NEW STONE UNITS TO MATCH EXISTING.</p> |
|---|--|

**GENERAL DEMOLITION NOTES**

1. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS BEFORE DEMOLITION. DIMENSIONS SHOWN ARE GUIDELINES, COORDINATE DEMOLITION WITH NEW CONSTRUCTION WORK.
2. PROVIDE TEMPORARY SHORING OF EXISTING FRAMING AS REQUIRED UNTIL NEW CONSTRUCTION IS IN-PLACE.
3. DEMOLITION CONTRACTOR TO TAKE CARE IN REMOVING / DISMANTLING OF FLOOR DECKING, BEAMS, COLUMNS AND CONNECTION PLATES TO SAFELY REMOVE MATERIALS WITHOUT CAUSING DAMAGE TO THE EXISTING STRUCTURE.
4. SAVE EXISTING BRICK IN DEMOLITION AREAS FOR BRICK INFILL AND BRICK PATCH AREAS. CLEAN AND STACK FOR REUSE.
5. DASHED LINES INDICATE MATERIALS TO BE REMOVED, COORDINATE WITH NEW CONSTRUCTION.
6. REMOVE ALL PIPING AND ACCESSORIES NOT BEING REUSED. SPRINKLER PIPING TO REMAIN UNTIL NEW SYSTEM IS IN-PLACE.
7. DISCONNECT AND REMOVE ALL MECHANICAL, ELECTRICAL, AND PLUMBING DEVICES, PIPING AND DUCT WORK.
8. PROVIDE FIRE EXTINGUISHERS (AMOUNT TBD, AS REQ'D BY CODE) AT EACH FLOOR DURING DEMOLITION.
9. COORDINATE ALL DEMOLITION WORK WITH ENVIRONMENT ABATEMENT WORK. ASBESTOS & LEAD BASE PAINT REMOVAL OR ENCAPSULATION WORK IS BY OTHERS AND NOT INCLUDED UNDER THIS CONTRACT.
10. COORDINATE SAW CUTTING OF EXISTING WALLS AND FLOORS WITH MECHANICAL, ELECTRICAL, AND PLUMBING LOCATIONS.
11. VERIFY ALL DOOR & WINDOW ROUGH OPENINGS & FINISHED OPENINGS DIMENSIONS.
12. COORDINATE FOR APPROVAL W/ OWNER ON THE REMOVAL OF ANY INTERIOR ARTWORK.



**SECOND FLOOR DEMOLITION PLAN**

SCALE: 3/32" = 1'-0"

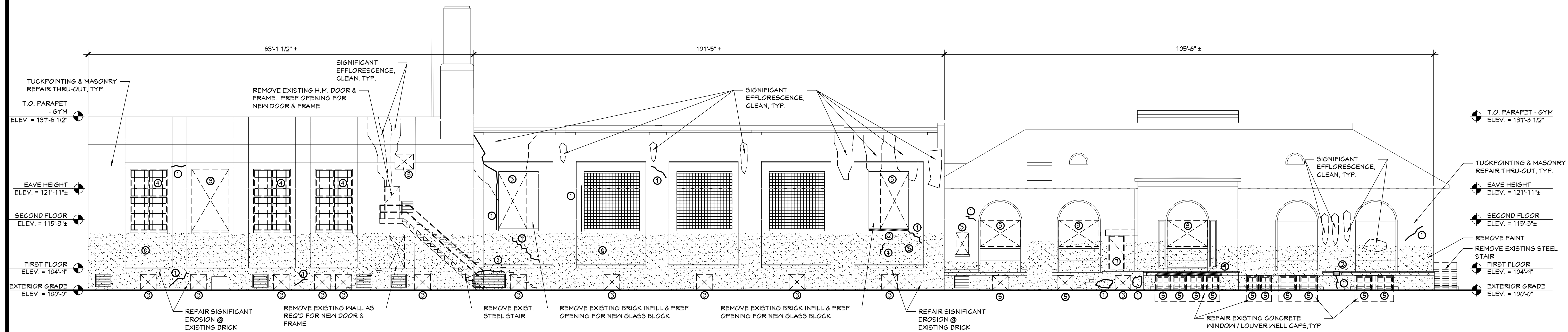
*Kyle Oberhart*  
 01.3.2024  
 Brewster Rec Center

**KEYED NOTES**

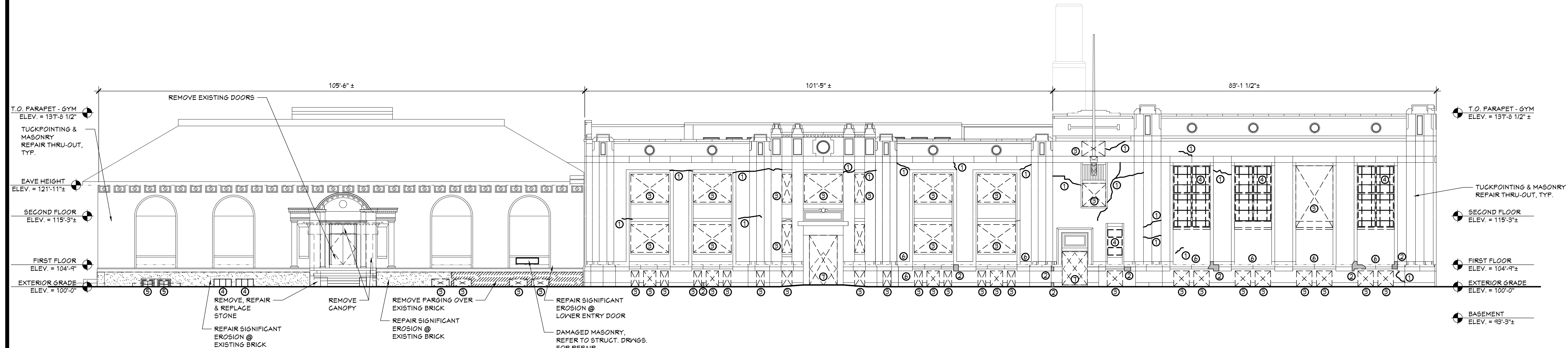
- |  |  |
|--|--|
| <p>KEY NOTE ①<br/>                 SIGNIFICANT CRACK IN BRICK, REFER TO STRUCT. DRNGS. FOR REPAIR</p> <p>KEY NOTE ②<br/>                 SIGNIFICANT STONE DAMAGE / DISPLACEMENT, REFER TO STRUCT. DRNGS. FOR REPAIR</p> <p>KEY NOTE ③<br/>                 EXISTING OPENING INFILLED W/ DAMAGED PLYWOOD, G.C. TO REMOVE TEMPORARY INFILL T PREP OPENING FOR NEW WINDOW &amp; FRAME</p> <p>KEY NOTE ④<br/>                 EXISTING STEEL WINDOW FRAME &amp; GLAZING, G.C. TO REMOVE &amp; PREP OPENING FOR NEW WINDOW FRAME &amp; GLAZING. REFER TO WINDOW SCHEDULES FOR DETAILS &amp; PHOTOS</p> | <p>KEY NOTE ⑤<br/>                 EXISTING WOOD WINDOW FRAME &amp; GLAZING, G.C. TO REMOVE &amp; PREP OPENING FOR NEW WINDOW FRAME &amp; GLAZING. REFER TO WINDOW SCHEDULES FOR DETAILS &amp; PHOTOS</p> <p>KEY NOTE ⑥<br/>                 REMOVE EXISTING COATING &amp; GRAFFITI</p> <p>KEY NOTE ⑦<br/>                 REMOVE EXISTING WOOD INFILL FROM OPENING, PREP OPENING FOR NEW DOOR &amp; FRAME. REFER TO DOOR SCHEDULES</p> <p>KEY NOTE ⑧<br/>                 SIGNIFICANT EFFLORESCENCE / STAINING ON BRICK, CLEAN W/ APPROPRIATE METHODS.</p> <p>KEY NOTE ⑨<br/>                 MISSING EXTERIOR MATERIAL, REPLACE W/ APPROPRIATE MATERIAL TO MATCH EXISTING.</p> |
|--|--|

**GENERAL NOTES**

- REFER TO STRUCTURAL SHEETS FOR MASONRY REPAIRS
- CLEAN EXISTING EXTERIOR EXPOSED BRICK, REFER TO SPECIFICATIONS.
- REFER TO STRUCTURAL SHEETS FOR SILL REPAIRS AND/OR REPLACEMENT.
- REFER TO STRUCTURAL SHEETS FOR RE POINTING MORTAR BED JOINTS.
- RECESS NEW BRICK IN EXISTING OPENING 3/4" IN EXISTING WINDOW OR DOOR OPENINGS. USE NEW BRICK ONLY, COLOR AND SIZE AS SELECTED BY ARCHITECT.
- USE EXISTING / RECLAIMED BRICK OR MATCH IN REPAIR AREAS.



**02 NORTH DEMOLITION ELEVATION**  
 A0.03 SCALE: 3/32" = 1'-0"

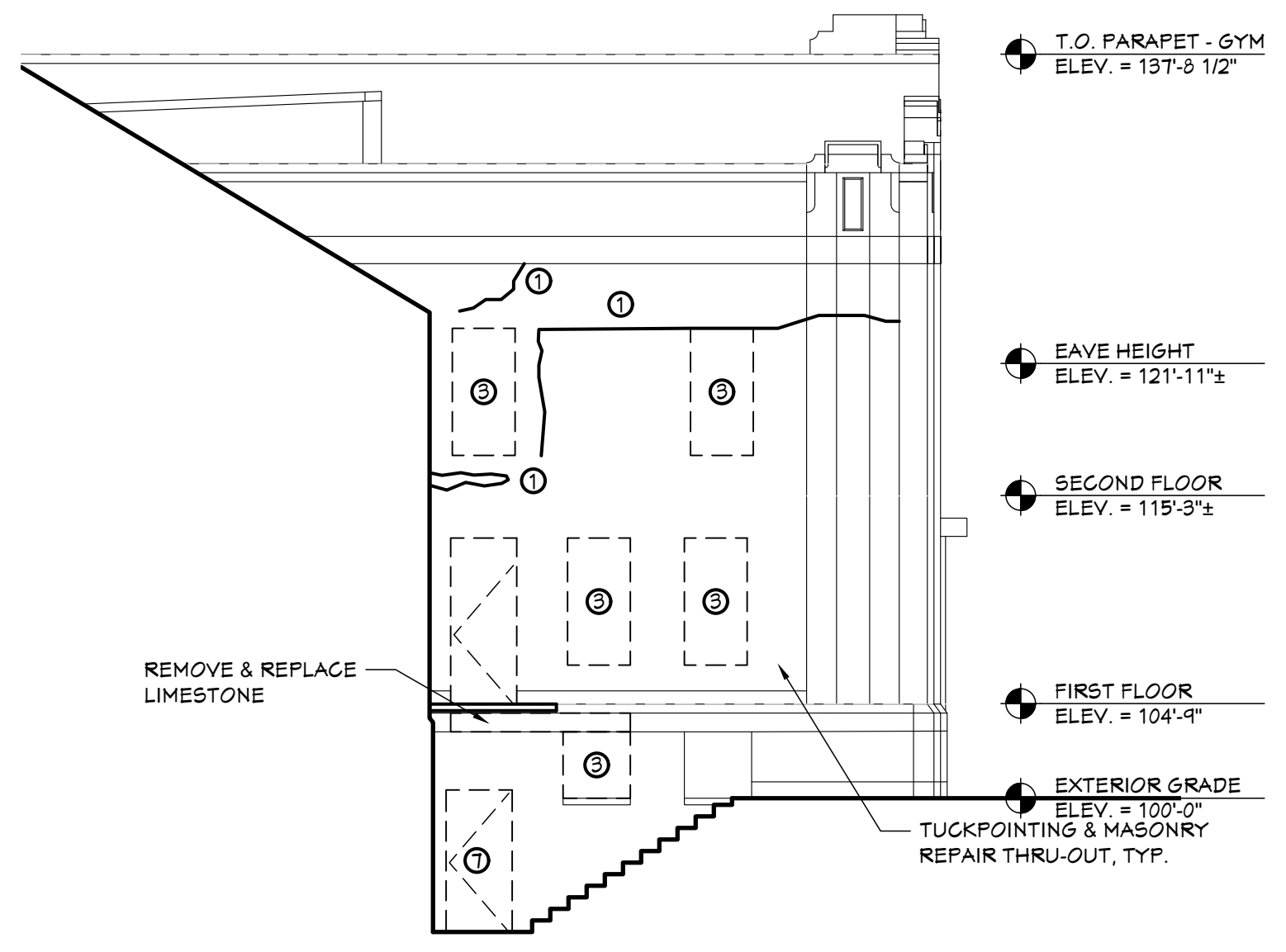


**01 SOUTH ELEVATION**  
 A0.03 SCALE: 3/32" = 1'-0"

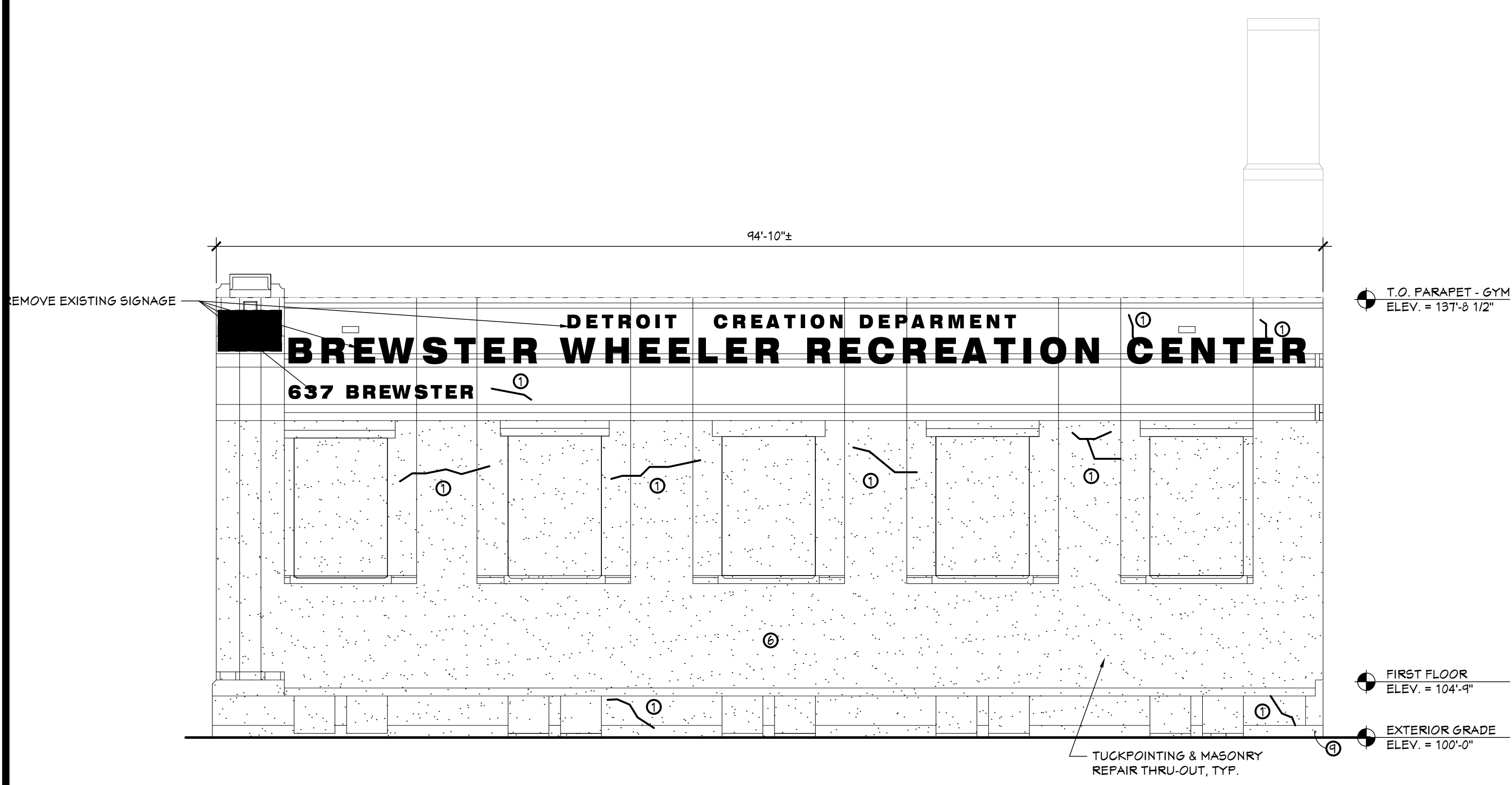
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- GENERAL NOTES**
- REFER TO STRUCTURAL SHEETS FOR MASONRY REPAIRS
  - CLEAN EXISTING EXTERIOR EXPOSED BRICK. REFER TO SPECIFICATIONS.
  - REFER TO STRUCTURAL SHEETS FOR SILL REPAIRS AND/OR REPLACEMENT.
  - REFER TO STRUCTURAL SHEETS FOR RE POINTING MORTAR BED JOINTS.
  - RECESS NEW BRICK IN EXISTING OPENING 3/4" IN EXISTING WINDOW OR DOOR OPENINGS. USE NEW BRICK ONLY. COLOR AND SIZE AS SELECTED BY ARCHITECT.
  - USE EXISTING / RECLAIMED BRICK OR MATCH IN REPAIR AREAS.

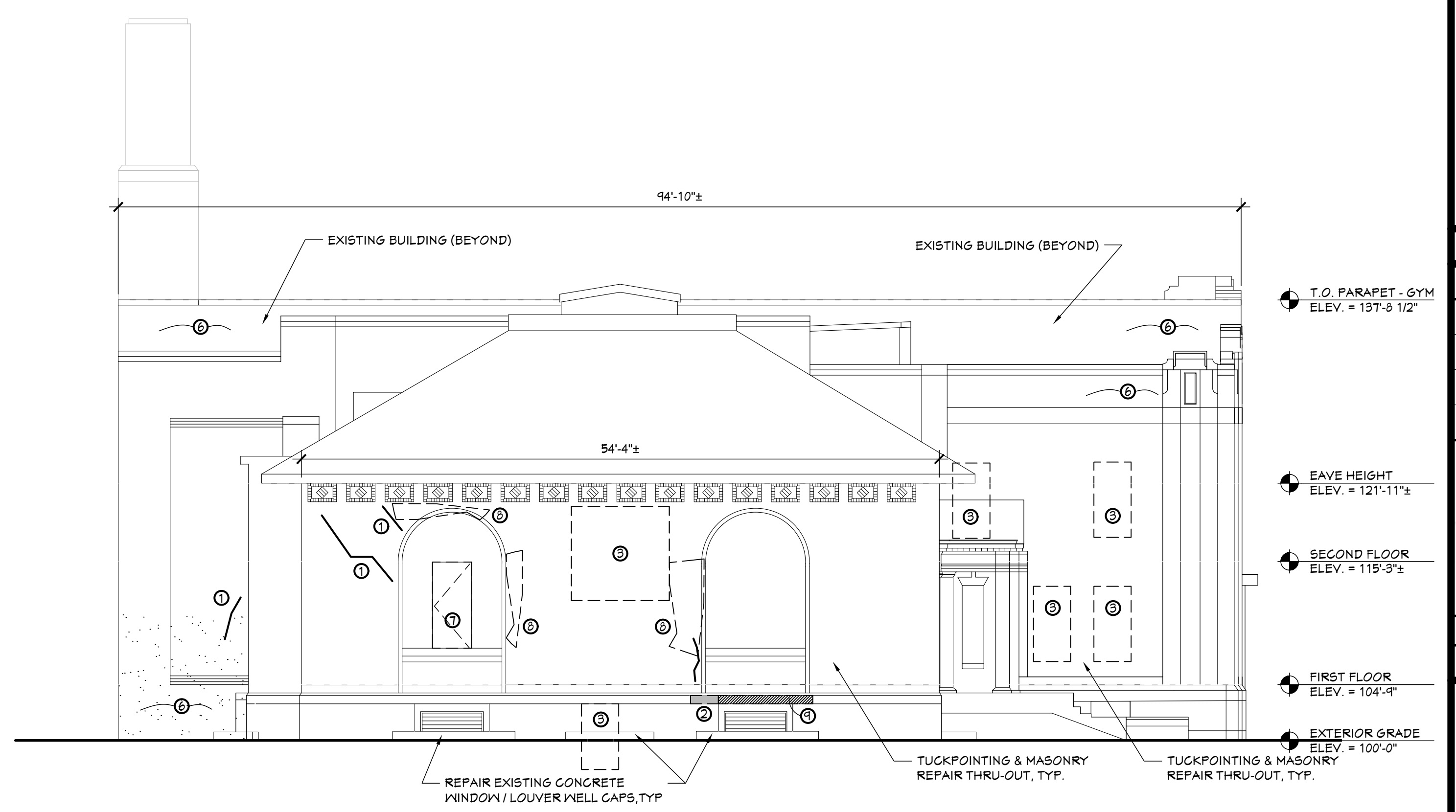
- KEYED NOTES**
- KEY NOTE ①  
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- KEY NOTE ②  
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- KEY NOTE ⑦  
 REMOVE EXISTING WOOD INFILL FROM OPENING. PREP OPENING FOR NEW DOOR & FRAME. REFER TO DOOR SCHEDULES.
- KEY NOTE ⑧  
 SIGNIFICANT EFFLORESCENCE / STAINING ON BRICK. CLEAN W/ APPROPRIATE METHODS.
- KEY NOTE ⑨  
 MISSING EXTERIOR MATERIAL. REPLACE W/ APPROPRIATE MATERIAL TO MATCH EXISTING.



**04 PARTIAL WEST ELEVATION**  
 SCALE: 1/8" = 1'-0"



**02 EAST ELEVATION (REFER TO K3 FOR PHOTO)**  
 SCALE: 1/8" = 1'-0"



**01 WEST ELEVATION**  
 SCALE: 1/8" = 1'-0"

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BUILDING RENOVATIONS FOR  
**BREUNSTER WHEELER  
 RECREATION CENTER**  
 637 BREUNSTER STREET, DETROIT, MICHIGAN

PROJECT #	1356-23
ISSUANCES	
FOR PERMITS	12.24.2023
BULLETIN #1	02.08.2024
BULLETIN #2	03.05.2024

*K. OSEBART*  
 01.3.2024  
 BREUNSTER REC. CENTER

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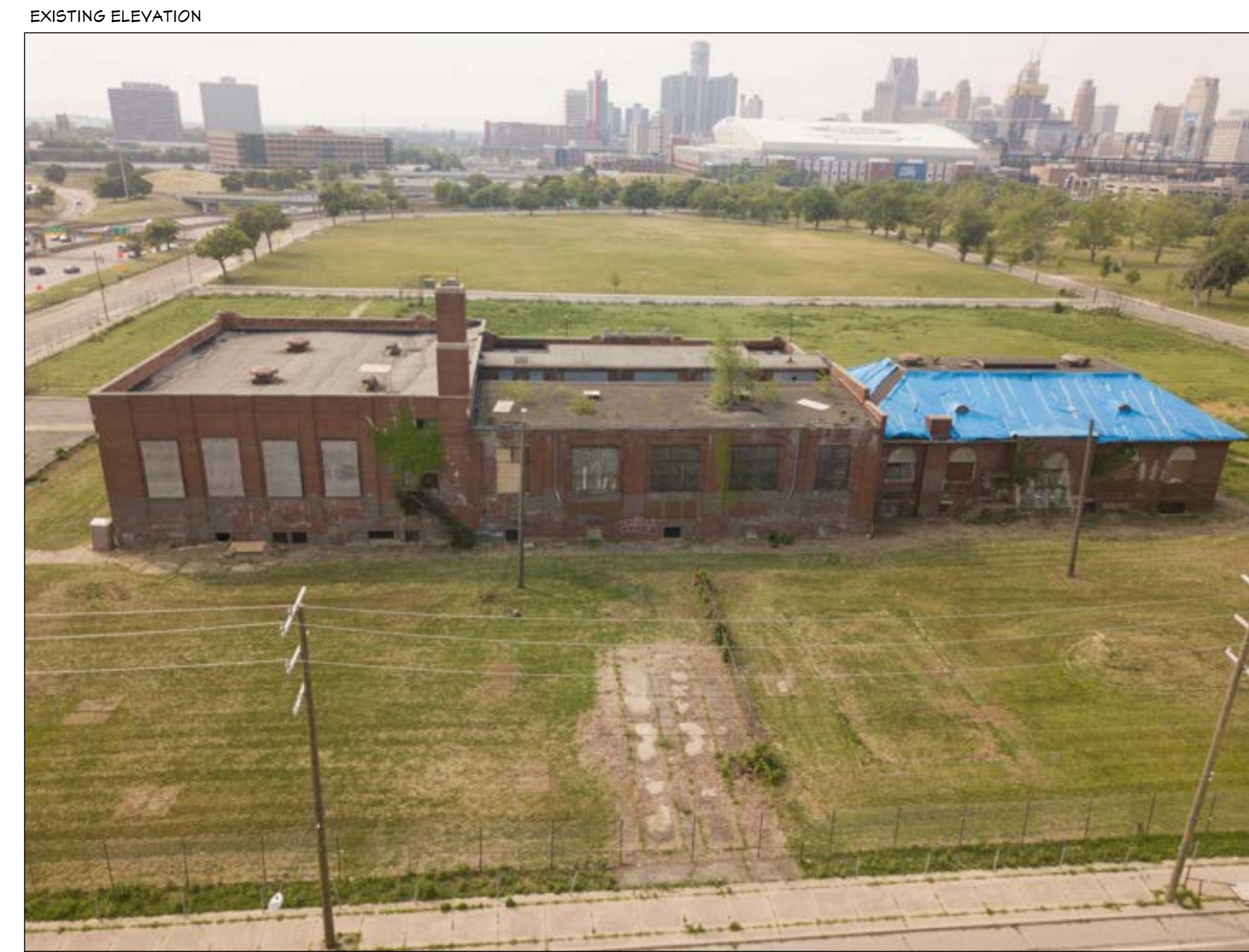
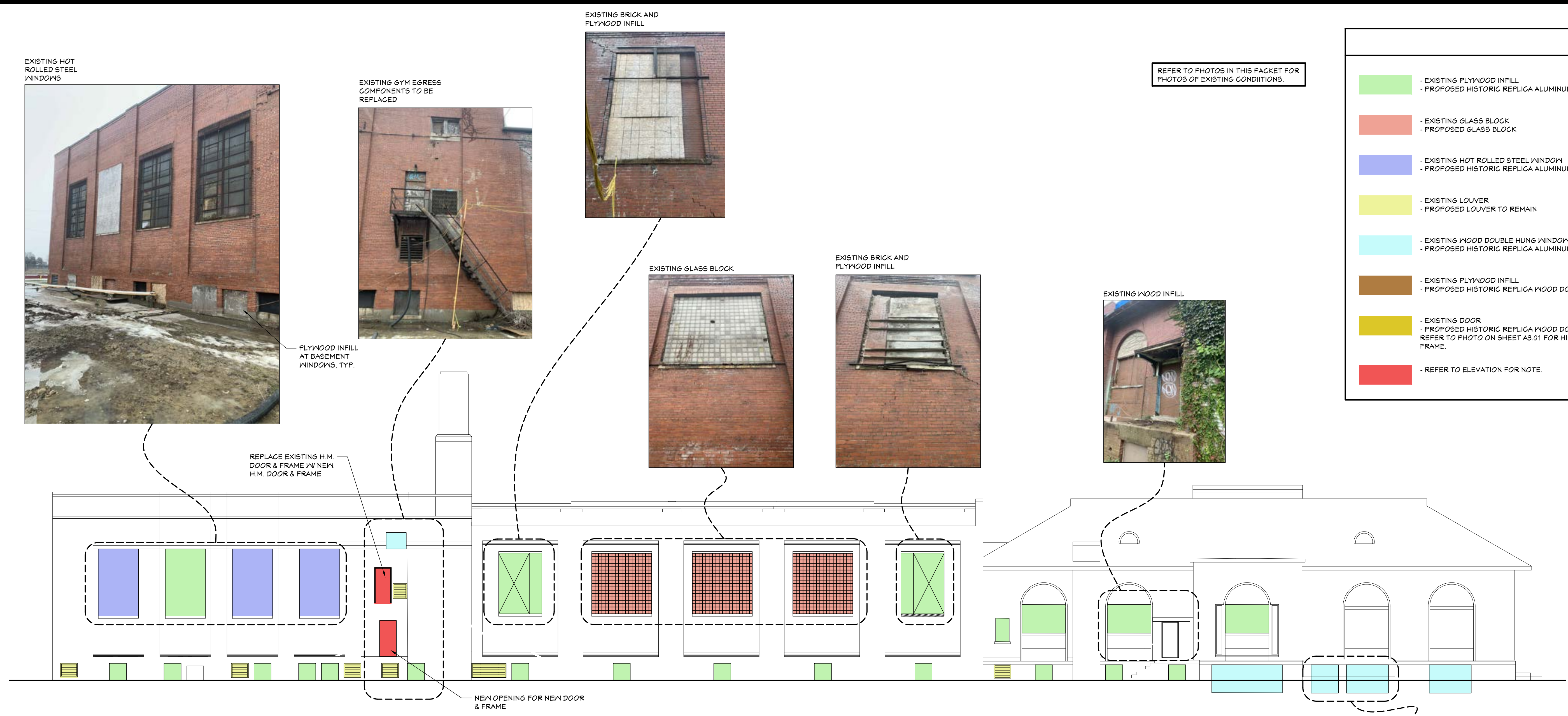
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SHEET TITLE  
 EXISTING  
 OPENING  
 CONDITIONS

SHEET NO.  
**A0.05**

LEGEND	
	- EXISTING FLYWOOD INFILL - PROPOSED HISTORIC REPLICA ALUMINUM WINDOW
	- EXISTING GLASS BLOCK - PROPOSED GLASS BLOCK
	- EXISTING HOT ROLLED STEEL WINDOW - PROPOSED HISTORIC REPLICA ALUMINUM WINDOW
	- EXISTING LOUVER - PROPOSED LOUVER TO REMAIN
	- EXISTING WOOD DOUBLE HUNG WINDOW - PROPOSED HISTORIC REPLICA ALUMINUM WINDOW
	- EXISTING FLYWOOD INFILL - PROPOSED HISTORIC REPLICA WOOD DOOR & FRAME
	- EXISTING DOOR - PROPOSED HISTORIC REPLICA WOOD DOOR & FRAME REFER TO PHOTO ON SHEET A3.01 FOR HISTORIC DOOR & FRAME.
	- REFER TO ELEVATION FOR NOTE.

REFER TO PHOTOS IN THIS PACKET FOR PHOTOS OF EXISTING CONDITIONS.

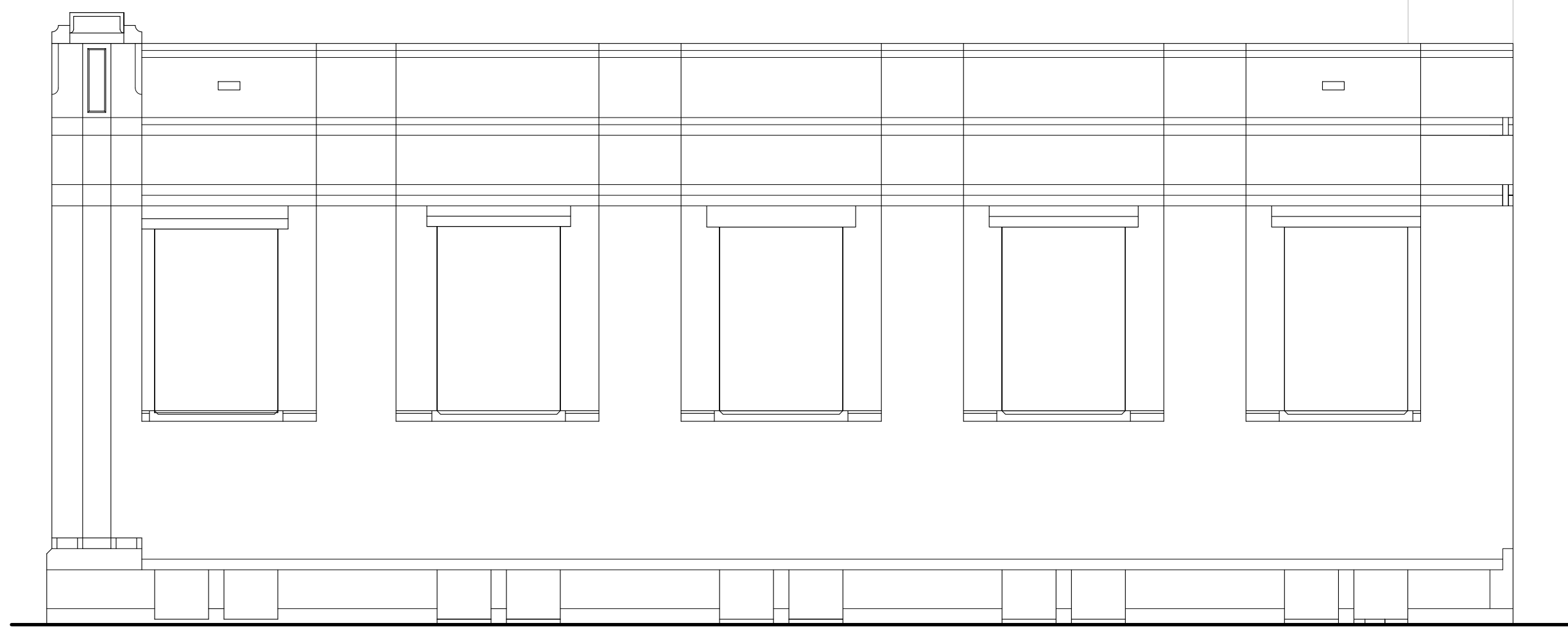


**01**  
**A0.05** NORTH ELEVATION - OPENING CONDITIONS  
 SCALE: 3/32" = 1'-0"



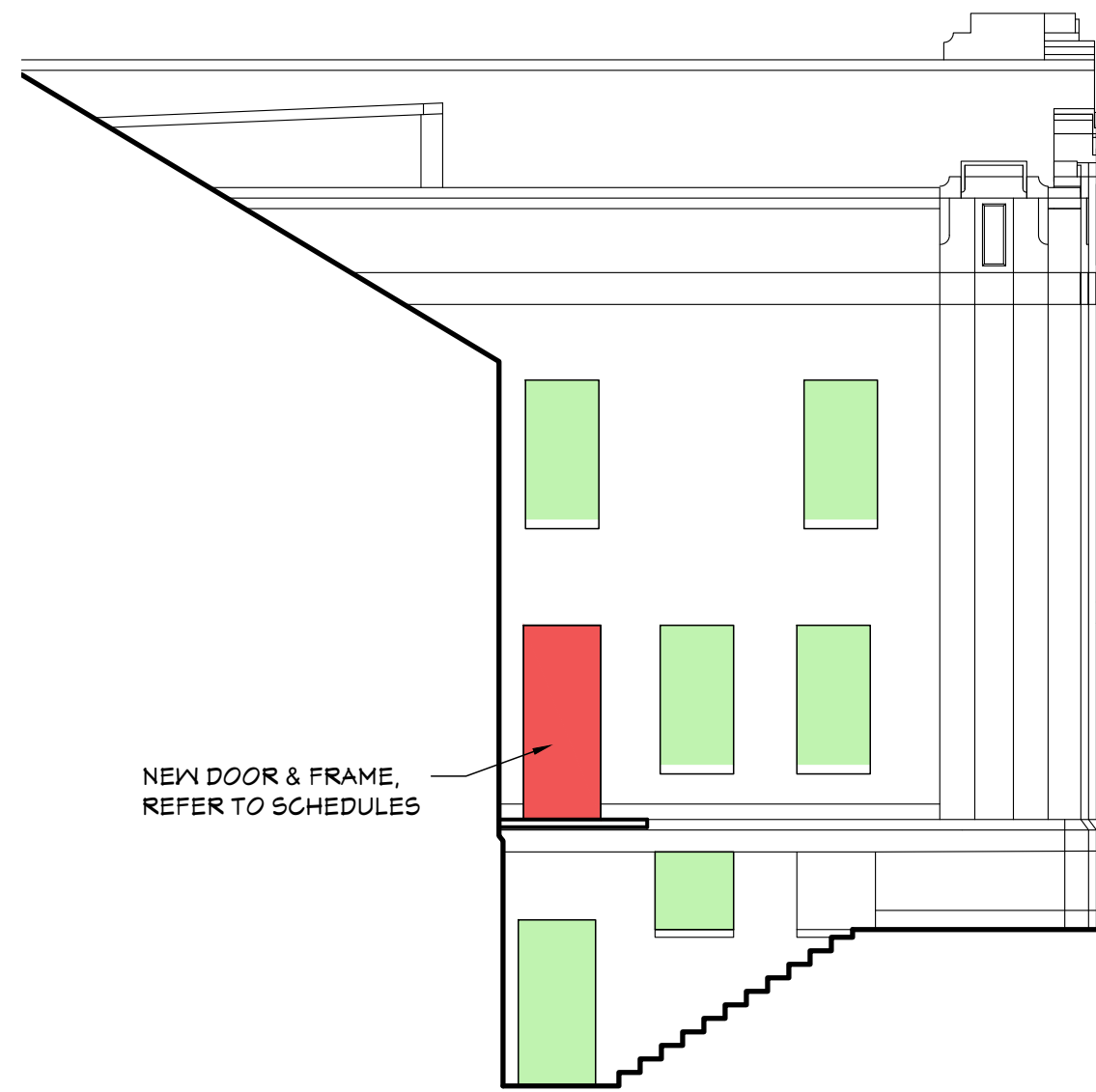


EXISTING ELEVATION



02 EAST ELEVATION - OPENING CONDITIONS  
A0.06 SCALE: 1/8" = 1'-0"

REFER TO PHOTOS IN THIS PACKET FOR PHOTOS OF EXISTING CONDITIONS.



NEW DOOR & FRAME, REFER TO SCHEDULES



EXISTING ELEVATION

04 PARTIAL WEST ELEVATION - OPENING CONDITIONS  
A0.06 SCALE: 1/8" = 1'-0"



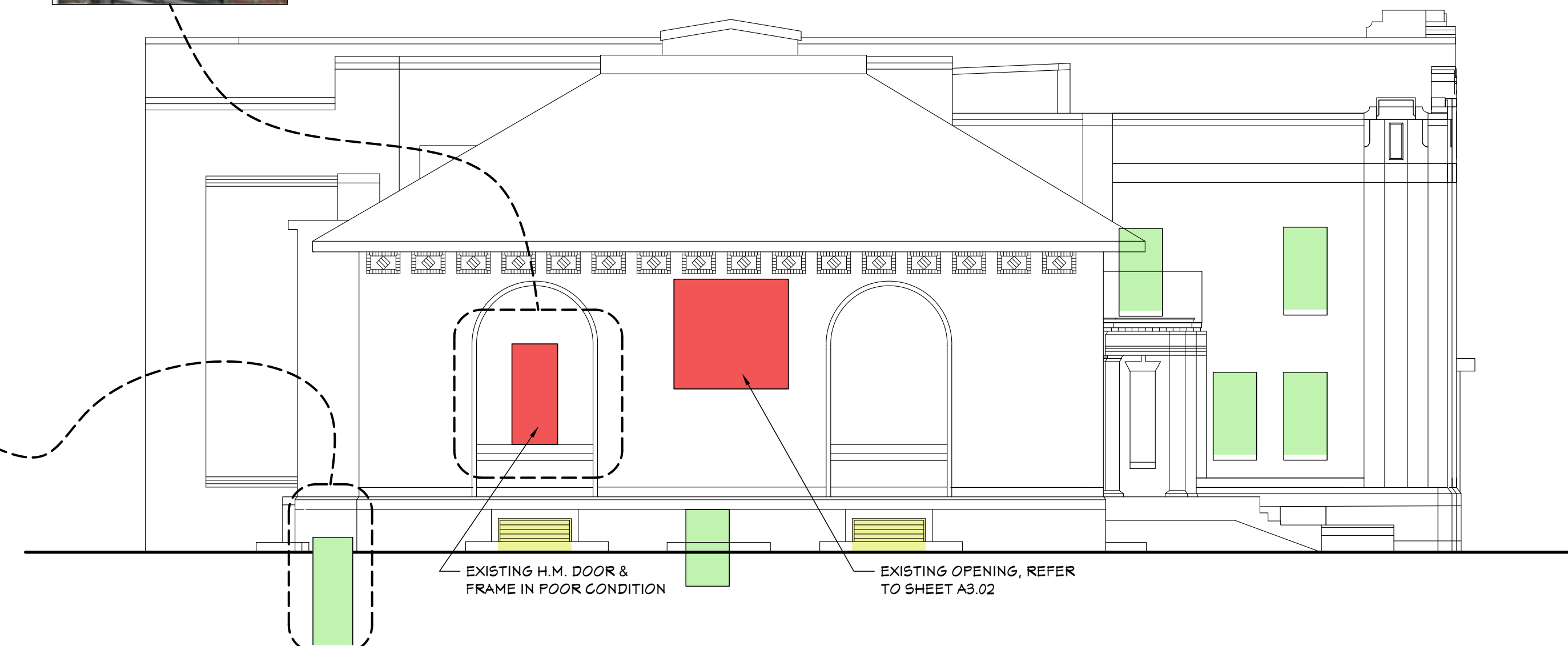
EXISTING H.M. DOOR FRAME W/ FLYWOOD INFILL

REFER TO PHOTOS IN THIS PACKET FOR PHOTOS OF EXISTING CONDITIONS.

EXISTING ELEVATION



EXISTING WOOD DOOR FRAME W/ FLYWOOD INFILL



EXISTING H.M. DOOR & FRAME IN POOR CONDITION

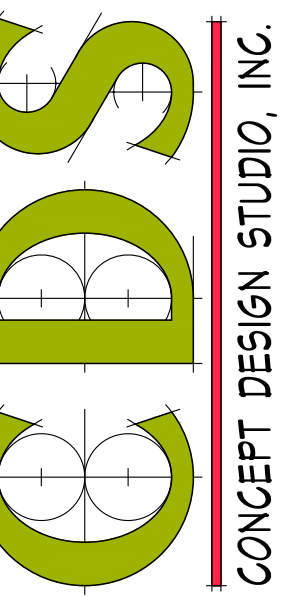
EXISTING OPENING, REFER TO SHEET A3.02

01 WEST ELEVATION - OPENING CONDITIONS  
A0.06 SCALE: 1/8" = 1'-0"

LEGEND

- EXISTING FLYWOOD INFILL  
- PROPOSED HISTORIC REPLICA ALUMINUM WINDOW
- EXISTING GLASS BLOCK  
- PROPOSED GLASS BLOCK
- EXISTING HOT ROLLED STEEL WINDOW  
- PROPOSED HISTORIC REPLICA ALUMINUM WINDOW
- EXISTING LOUVER  
- PROPOSED LOUVER TO REMAIN
- EXISTING WOOD DOUBLE HUNG WINDOW  
- PROPOSED HISTORIC REPLICA ALUMINUM WINDOW
- EXISTING FLYWOOD INFILL  
- PROPOSED HISTORIC REPLICA WOOD DOOR & FRAME
- EXISTING DOOR  
- PROPOSED HISTORIC REPLICA WOOD DOOR & FRAME REFER TO PHOTO ON SHEET A3.01 FOR HISTORIC DOOR & FRAME.
- REFER TO ELEVATION FOR NOTE.

CONCEPT DESIGN STUDIO, INC.  
800 E. ELLIS ROAD, SUITE 508  
NORTON SHORES, MI 48441  
PH. (231) 799-4838  
FAX (231) 799-4837



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMITS 12.24.2023

BULLETIN #1 02.08.2024

BULLETIN #2 03.05.2024

*Kyle Oberhart*  
01.3.2024  
BREWSTER REC CENTER

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SHEET TITLE  
EXISTING OPENING CONDITIONS

SHEET NO.

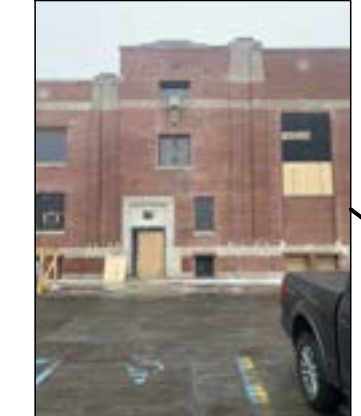
A0.06

3/5/2024 12:51 PM Z:\PROJ\1356-23 MHT Housing - Brewster Wheeler Recreation Center\3-Drawings\1356-23A301.dwg



LEGEND	
	- EXISTING FLYWOOD INFILL - PROPOSED HISTORIC REPLICA ALUMINUM WINDOW
	- EXISTING GLASS BLOCK - PROPOSED GLASS BLOCK
	- EXISTING HOT ROLLED STEEL WINDOW - PROPOSED HISTORIC REPLICA ALUMINUM WINDOW
	- EXISTING LOUVER - PROPOSED LOUVER TO REMAIN
	- EXISTING WOOD DOUBLE HUNG WINDOW - PROPOSED HISTORIC REPLICA ALUMINUM WINDOW
	- EXISTING FLYWOOD INFILL - PROPOSED HISTORIC REPLICA WOOD DOOR & FRAME
	- EXISTING DOOR - PROPOSED HISTORIC REPLICA WOOD DOOR & FRAME REFER TO PHOTO ON SHEET A3.01 FOR HISTORIC DOOR & FRAME.
	- REFER TO ELEVATION FOR NOTE.

EXISTING INFILL - TYPICAL AT WOOD WINDOWS



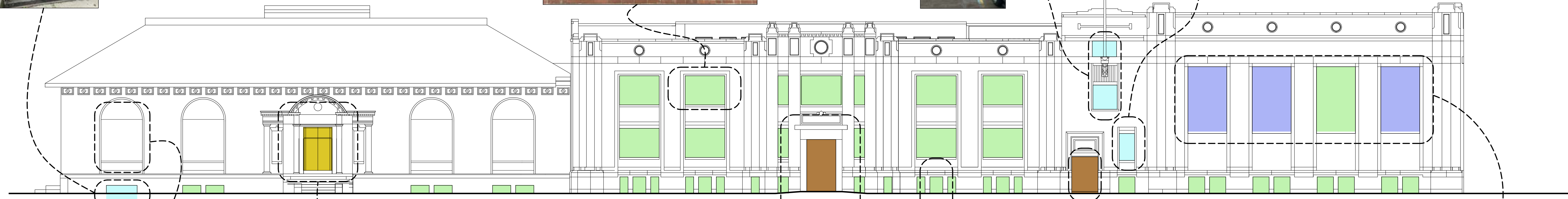
EXISTING WOOD WINDOWS



EXISTING HOT ROLLED STEEL WINDOW



EXISTING WOOD WINDOW



EXISTING BRICK INFILL TO REMAIN - TYPICAL



REPLACEMENT DOOR (ADDED W/ CANOPY DUE TO DECREASING CEILING HEIGHT) TO BE REMOVED AND RESTORED TO ORIGINAL DOOR & FRAME PER HISTORIC PHOTOS



EXISTING TEMPORARY DOOR INFILL CONDITION - TYPICAL



EXISTING BASEMENT WINDOW CONDITION - TYPICAL



EXISTING TEMPORARY DOOR INFILL CONDITION - TYPICAL

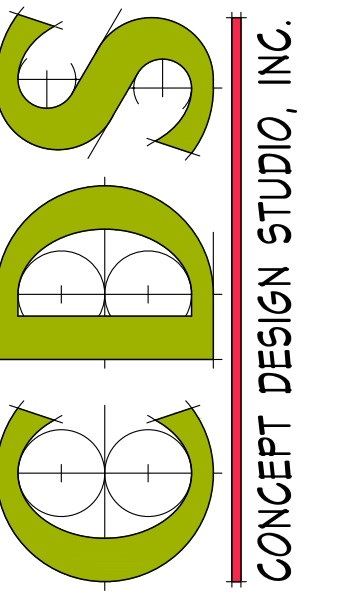


EXISTING HOT ROLLED STEEL WINDOW



REFER TO OTHER PHOTOS IN THIS PACKET FOR PHOTOS OF EXISTING CONDITIONS.

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FAX (231) 799-4837



BUILDING RENOVATIONS FOR  
**BREWNSTER WHEELER  
RECREATION CENTER**  
637 BREWNSTER STREET, DETROIT, MICHIGAN

PROJECT #	1356-23
ISSUANCES	
FOR PERMITS	12.24.2023
BULLETIN #1	02.08.2024
BULLETIN #2	03.05.2024

*Kyle Oberhart*  
01.3.2024  
Brewnster Rec Center

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SHEET TITLE  
EXISTING  
OPENING  
CONDITIONS

SHEET NO.  
**A0.07**

01 SOUTH ELEVATION - OPENING CONDITIONS  
A0.07 SCALE: 3/32" = 1'-0"

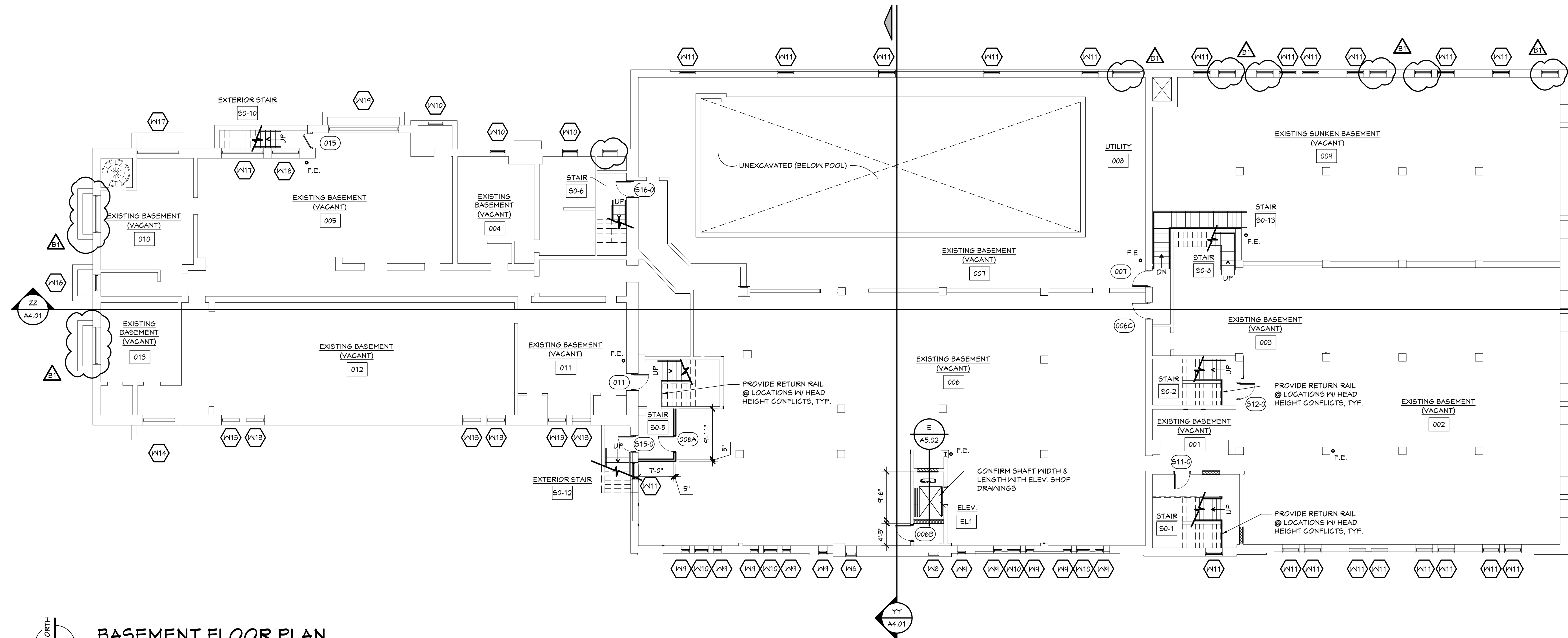
3/5/2024 12:50 PM Z:\PROJ\1356-23\NHT Housing - Brewnster Wheeler Recreation Center\3-Drawings\1356-23\A0.01.dwg

**GENERAL NOTES**

- PATCH, REPAIR & PREP EXISTING WALLS, FLOORS AND CEILING FOR NEW FINISHES.
- CLEAN EXISTING INTERIOR EXPOSED BRICK, PLASTER AND CONCRETE WALLS.
- FURNISH AND INSTALL APPROVED FIRE ASSEMBLIES (FIRE CAULKING, FIRE COLLARS AND FIRE SLEEVES) AS REQUIRED AT ALL PENETRATIONS THRU FIRE SEPARATIONS.
- ALL PERIMETER WALLS TO BE FURRED INSULATED, DRYWALL AND PAINTED. EXCEPT AT GYMNASIUM & VACANT POOL, OR OTHER PREFINISHED WALLS.
- ALL MECHANICAL CHASES SHALL BE EXTENDED TO BOT. OF ROOF DECK.
- DO NOT NOTCH, CUT OR DRILL EXISTING BEAMS AND JOISTS. FIELD ADJUST CHASES AND PENETRATIONS TO AVOID DAMAGE TO EXISTING FRAMING; COORDINATE WITH MECHANICAL ENGINEER.
- COORDINATE WITH OTHER TRADES TO AVOID INTERFERENCE.
- INSTALL ALL EQUIPMENT, DUCTWORK AND PIPING AS HIGH AS POSSIBLE TO MAXIMIZE CLEARANCES. FOLLOW BUILDING LINES WHEREVER POSSIBLE.
- WHERE MATERIALS ARE TO BE EXPOSED, ARRANGE AND INSTALL NEATLY TO MINIMIZE VISUAL IMPACT.
- VERIFY FIELD CONDITIONS PRIOR TO PROCEEDING WITH WORK. REPORT SIGNIFICANT DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS.
- INSTALLATION SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS.
- FIRE SUPPRESSION SYSTEM IS REQUIRED, COMPLY WITH NFPA 13.
- G.C. TO PROVIDE NEW HANDRAILS EA. SIDE OF EXIST. STAIR. PAINTED 1-1/2" Ø STEEL @ 34" A.F.F. MAX., TYPICAL @ ALL STAIRS

**WALL LEGEND**

- 1 ——— EXISTING WALL, CLEAN & PATCH AS NECESSARY.
- 2 ——— 8" CONCRETE BLOCK
- 3 ——— 5/8" GYP. BOARD BOTH SIDES OF METAL STUDS (REFER TO PLAN FOR THICKNESS) @ 16" O.C. - FILL WITH SOUND BATT INSUL.
- 4A ——— TYPICAL EXTERIOR WALL: 5/8" GYP. BD. ON 3-5/8" METAL STUD @ 16" O.C. TO DECK ABOVE & FILL W/ ACOUSTICAL BATT INSULATION ON EXISTING MASONRY WALL
- 4B ——— TYPICAL INTERIOR WALL: 5/8" GYP. BD. ON METAL FURRING (REFER TO PLAN FOR THICKNESS) ON EXISTING MASONRY WALL
- 5 ——— 5/8" GYP. BOARD ON METAL FURRING (REFER TO PLAN FOR THICKNESS) @ 16" O.C. ON NEW MASONRY WALL



**BASEMENT FLOOR PLAN**  
 SCALE: 3/32" = 1'-0"

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
 RECREATION CENTER**  
 637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT #	1356-23
ISSUANCES	
FOR PERMITS	12.24.2023
BULLETIN #1	02.08.2024
BULLETIN #2	03.05.2024

*Kyle Oberhart*  
 01.3.2024  
 BREWSTER REC CENTER

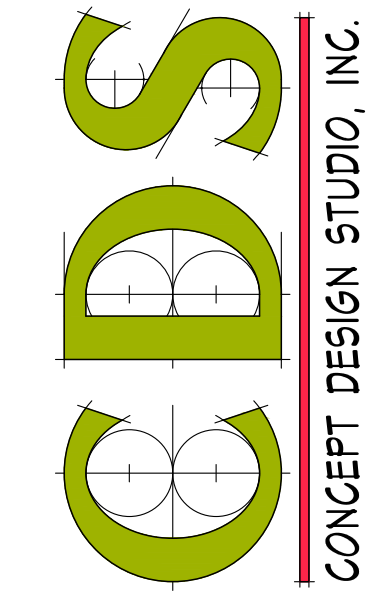
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SHEET TITLE  
**BASEMENT FLOOR PLAN**

SHEET NO.

**A1.00**



PROJECT #	1356-23
ISSUANCES	
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SHEET TITLE  
**FIRST FLOOR  
 PLAN &  
 ENLARGED  
 PLANS**

SHEET NO.

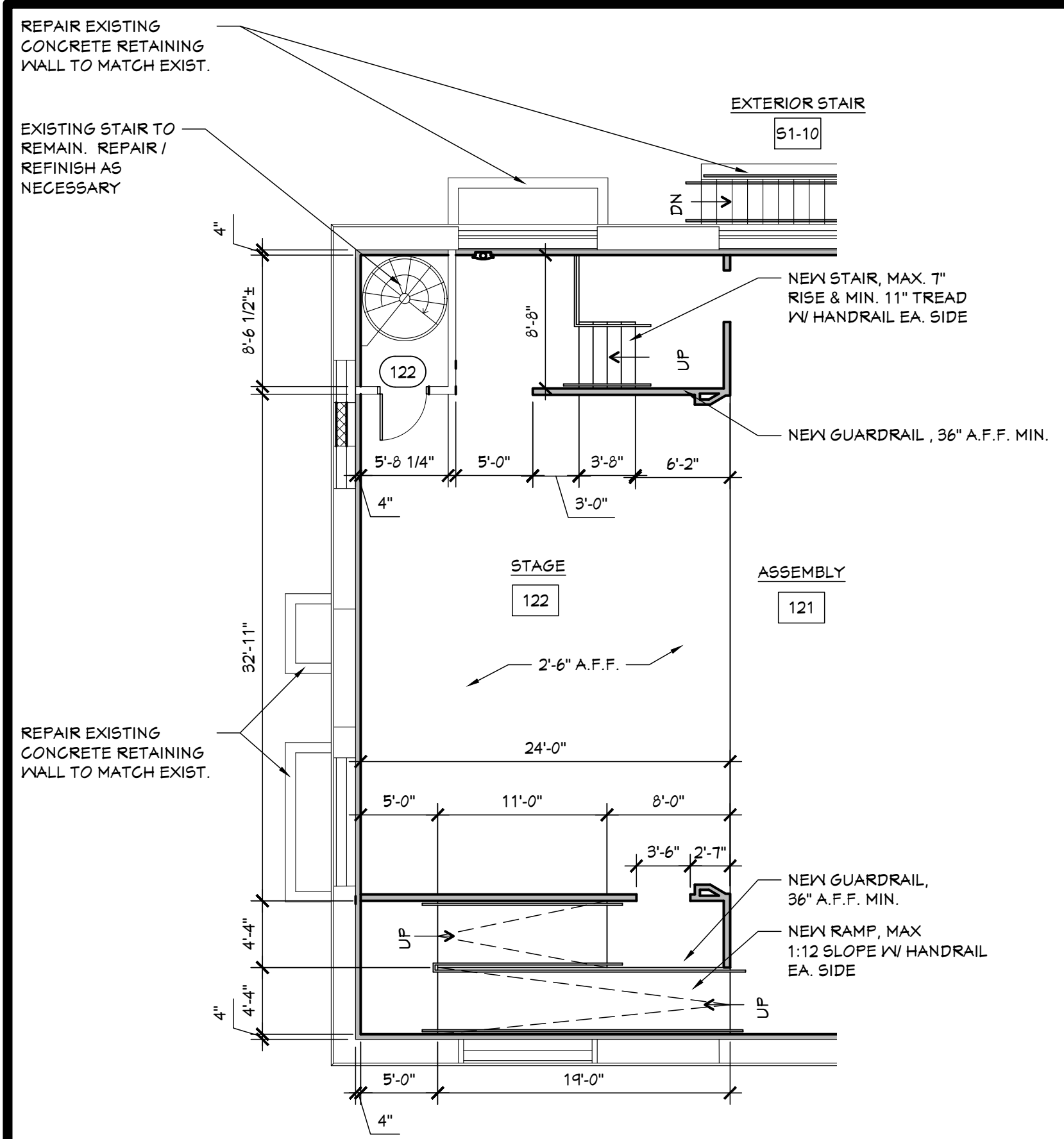
**A1.01**

**GENERAL NOTES**

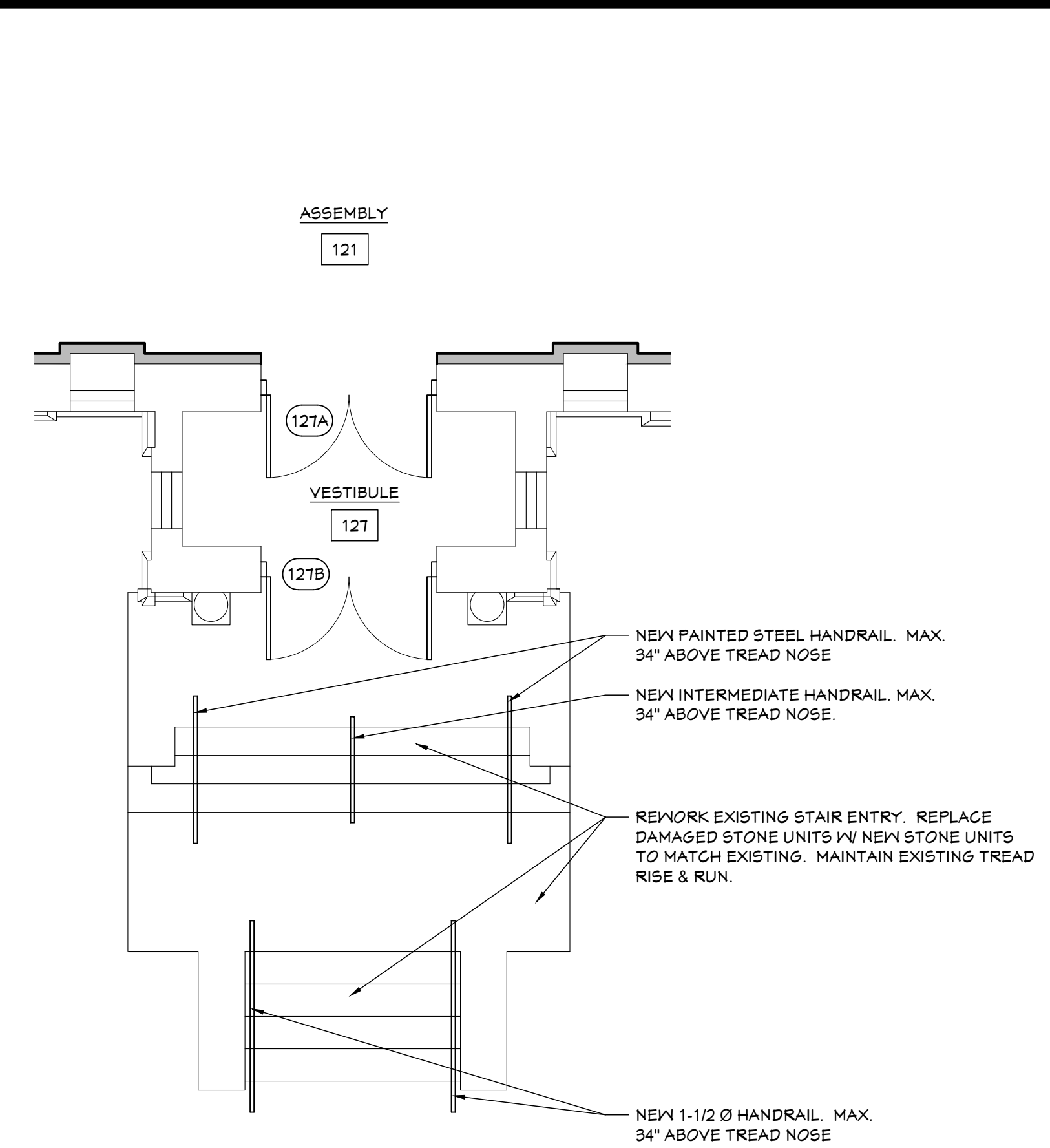
- PATCH, REPAIR & PREP EXISTING WALLS, FLOORS AND CEILING FOR NEW FINISHES.
- CLEAN EXISTING INTERIOR EXPOSED BRICK, PLASTER AND CONCRETE WALLS.
- FURNISH AND INSTALL APPROVED FIRE ASSEMBLIES (FIRE CAULKING, FIRE COLLARS AND FIRE SLEEVES) AS REQUIRED AT ALL PENETRATIONS THRU FIRE SEPARATIONS.
- ALL PERIMETER WALLS TO BE FURRED INSULATED, DRYWALL AND PAINTED. EXCEPT AT GYMNASIUM & VACANT POOL, OR OTHER PREFINISHED WALLS.
- ALL MECHANICAL CHASES SHALL BE EXTENDED TO BOT. OF ROOF DECK.
- DO NOT NOTCH, CUT OR DRILL EXISTING BEAMS AND JOISTS. FIELD ADJUST CHASES AND PENETRATIONS TO AVOID DAMAGE TO EXISTING FRAMING; COORDINATE WITH MECHANICAL ENGINEER.
- COORDINATE WITH OTHER TRADES TO AVOID INTERFERENCE.
- INSTALL ALL EQUIPMENT, DUCTWORK AND PIPING AS HIGH AS POSSIBLE TO MAXIMIZE CLEARANCES. FOLLOW BUILDING LINES WHEREVER POSSIBLE.
- WHERE MATERIALS ARE TO BE EXPOSED, ARRANGE AND INSTALL NEATLY TO MINIMIZE VISUAL IMPACT.
- VERIFY FIELD CONDITIONS PRIOR TO PROCEEDING WITH WORK. REPORT SIGNIFICANT DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS.
- INSTALLATION SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS.
- FIRE SUPPRESSION SYSTEM IS REQUIRED, COMPLY WITH NFPA 13.
- G.C. TO PROVIDE NEW HANDRAILS EA. SIDE OF EXIST. STAIR. PAINTED 1-1/2" Ø STEEL @ 34" A.F.F. MAX., TYPICAL @ ALL STAIRS

**WALL LEGEND**

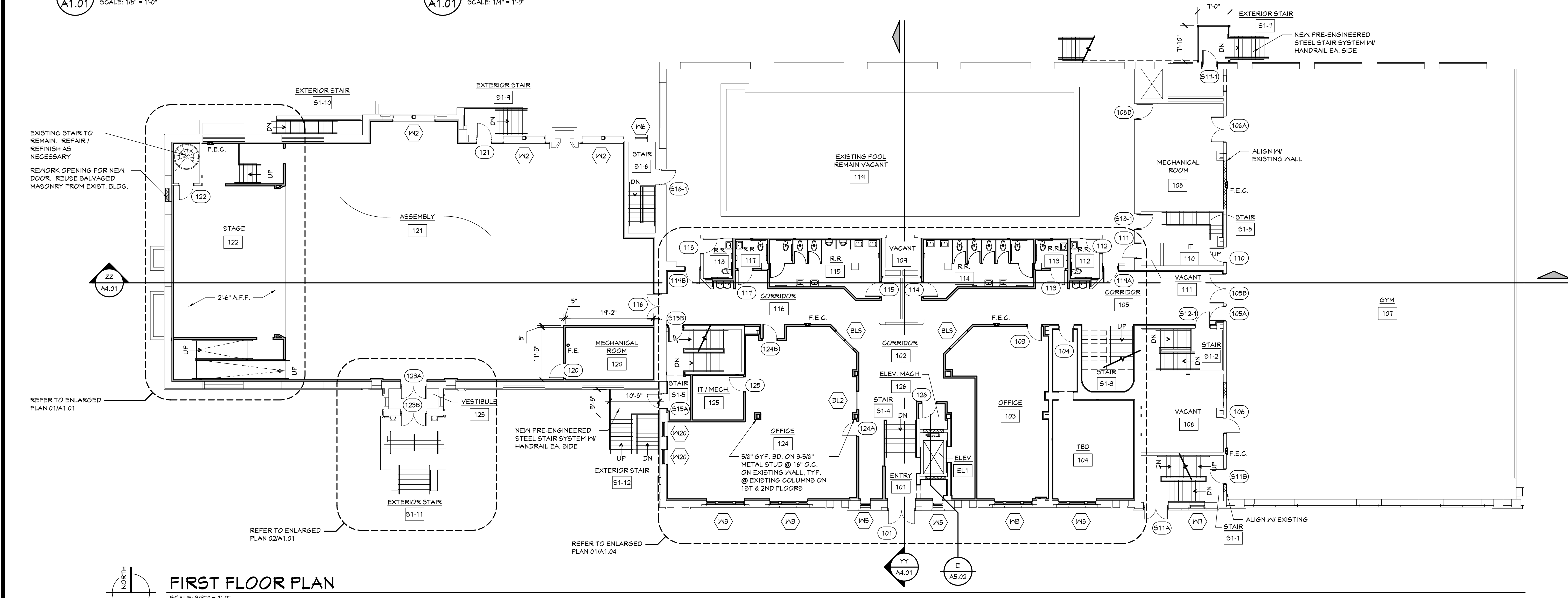
1	EXISTING WALL, CLEAN & PATCH AS NECESSARY.
2	8" CONCRETE BLOCK
3	5/8" GYP. BOARD BOTH SIDES OF METAL STUDS (REFER TO PLAN FOR THICKNESS) @ 16" O.C. - FILL WITH SOUND BATT INSUL.
4A	TYPICAL EXTERIOR WALL: 5/8" GYP. BD. ON 3-5/8" METAL STUD @ 16" O.C. TO DECK ABOVE & FILL W/ ACOUSTICAL BATT INSULATION ON EXISTING MASONRY WALL
4B	TYPICAL INTERIOR WALL: 5/8" GYP. BD. ON METAL FURRING (REFER TO PLAN FOR THICKNESS) ON EXISTING MASONRY WALL
5	5/8" GYP. BOARD ON METAL FURRING (REFER TO PLAN FOR THICKNESS) @ 16" O.C. ON NEW MASONRY WALL



**01 ENLARGED STAGE PLAN**  
 A1.01 SCALE: 1/8" = 1'-0"



**02 ENLARGED LIBRARY ENTRANCE PLAN**  
 A1.01 SCALE: 1/4" = 1'-0"



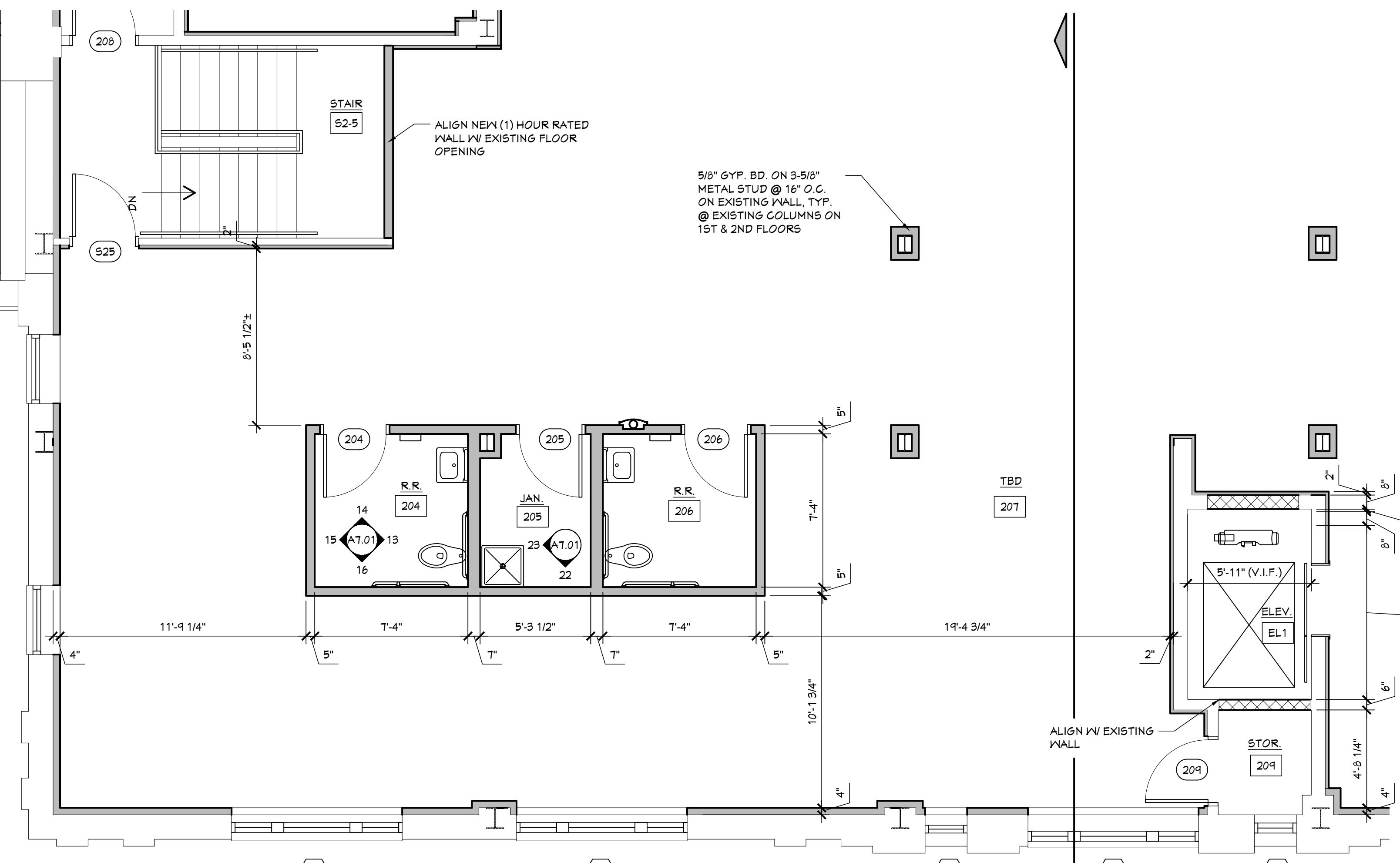
**FIRST FLOOR PLAN**  
 SCALE: 3/32" = 1'-0"

*Kyle Oberhart*  
 01.3.2024  
 BREWSTER REC CENTER

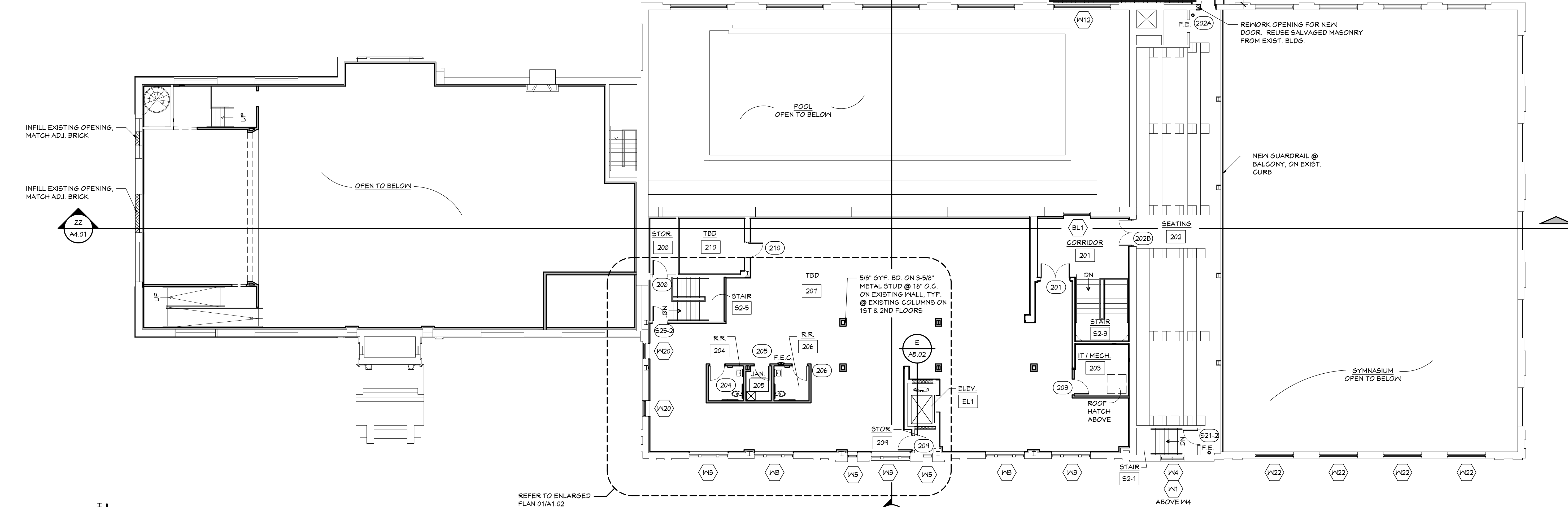
- ### GENERAL NOTES
- PATCH, REPAIR & PREP EXISTING WALLS, FLOORS AND CEILING FOR NEW FINISHES.
  - CLEAN EXISTING INTERIOR EXPOSED BRICK, PLASTER AND CONCRETE WALLS.
  - FURNISH AND INSTALL APPROVED FIRE ASSEMBLIES (FIRE CAULKING, FIRE COLLARS AND FIRE SLEEVES) AS REQUIRED AT ALL PENETRATIONS THRU FIRE SEPARATIONS.
  - ALL PERIMETER WALLS TO BE FURRED INSULATED, DRYWALL AND PAINTED. EXCEPT AT GYMNASIUM & VACANT POOL, OR OTHER PREFINISHED WALLS.
  - ALL MECHANICAL CHASES SHALL BE EXTENDED TO BOT. OF ROOF DECK.
  - DO NOT NOTCH, CUT OR DRILL EXISTING BEAMS AND JOISTS. FIELD ADJUST CHASES AND PENETRATIONS TO AVOID DAMAGE TO EXISTING FRAMING; COORDINATE WITH MECHANICAL ENGINEER.
  - COORDINATE WITH OTHER TRADES TO AVOID INTERFERENCE.
  - INSTALL ALL EQUIPMENT, DUCTWORK AND PIPING AS HIGH AS POSSIBLE TO MAXIMIZE CLEARANCES. FOLLOW BUILDING LINES WHEREVER POSSIBLE.
  - WHERE MATERIALS ARE TO BE EXPOSED, ARRANGE AND INSTALL NEATLY TO MINIMIZE VISUAL IMPACT.
  - VERIFY FIELD CONDITIONS PRIOR TO PROCEEDING WITH WORK. REPORT SIGNIFICANT DISCREPANCIES BETWEEN DRAWINGS AND ACTUAL CONDITIONS.
  - INSTALLATION SHALL MEET THE REQUIREMENTS OF ALL APPLICABLE CODES AND REGULATIONS.
  - FIRE SUPPRESSION SYSTEM IS REQUIRED, COMPLY WITH NFPA 13.
  - G.C. TO PROVIDE NEW HANDRAILS EA. SIDE OF EXIST. STAIR. PAINTED 1-1/2" Ø STEEL @ 34" A.F.F. MAX., TYPICAL @ ALL STAIRS

### WALL LEGEND

1		EXISTING WALL, CLEAN & PATCH AS NECESSARY.
2		8" CONCRETE BLOCK
3		5/8" GYP. BOARD BOTH SIDES OF METAL STUDS (REFER TO PLAN FOR THICKNESS) @ 16" O.C. - FILL WITH SOUND BATT INSUL.
4A		TYPICAL EXTERIOR WALL: 5/8" GYP. BD. ON 3-5/8" METAL STUD @ 16" O.C. TO DECK ABOVE & FILL W/ ACOUSTICAL BATT INSULATION ON EXISTING MASONRY WALL
4B		TYPICAL INTERIOR WALL: 5/8" GYP. BD. ON METAL FURRING (REFER TO PLAN FOR THICKNESS) ON EXISTING MASONRY WALL
5		5/8" GYP. BOARD ON METAL FURRING (REFER TO PLAN FOR THICKNESS) @ 16" O.C. ON NEW MASONRY WALL

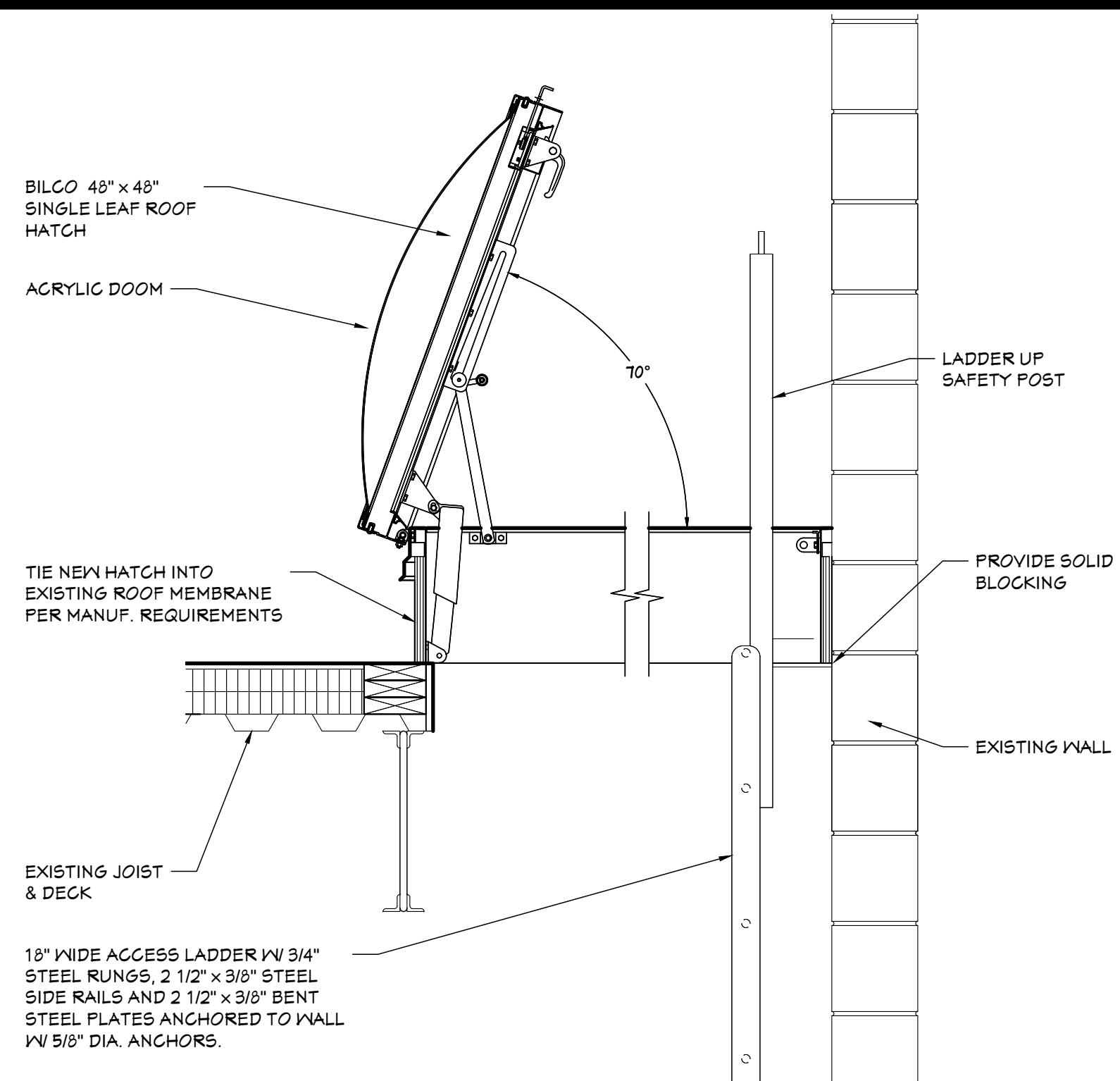


**01 ENLARGED SECOND FLOOR PLAN**  
 SCALE: 1/4" = 1'-0"

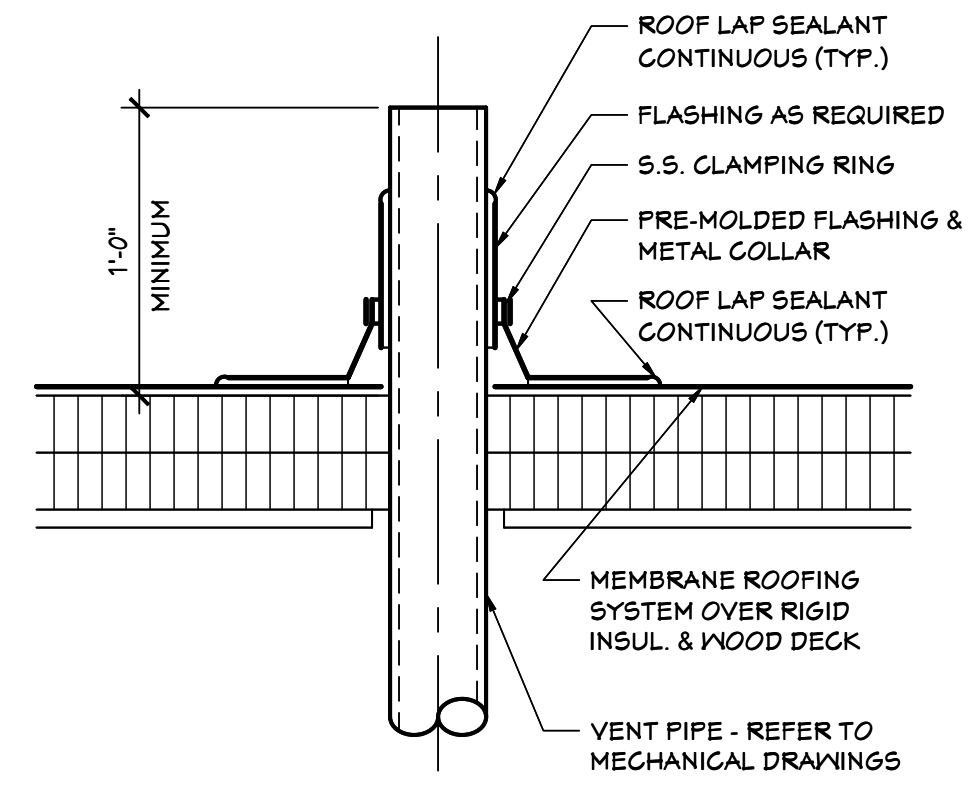


**SECOND FLOOR PLAN**  
 SCALE: 3/32" = 1'-0"

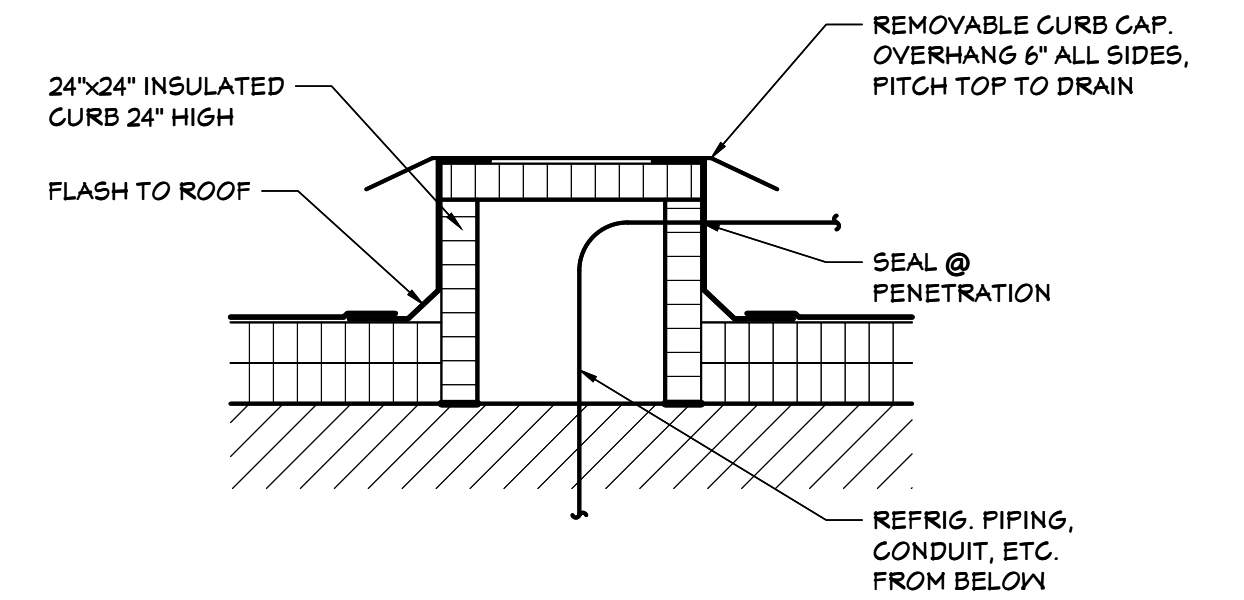
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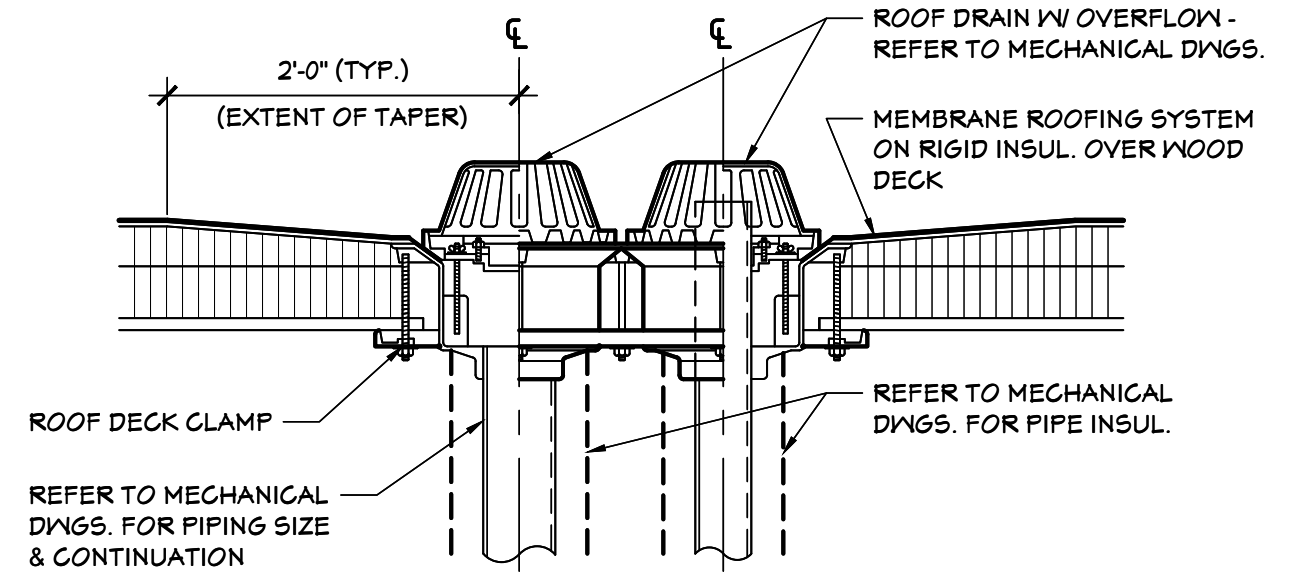
**04 ROOF HATCH DETAIL**  
 A1.03 SCALE: 1" = 1'-0"



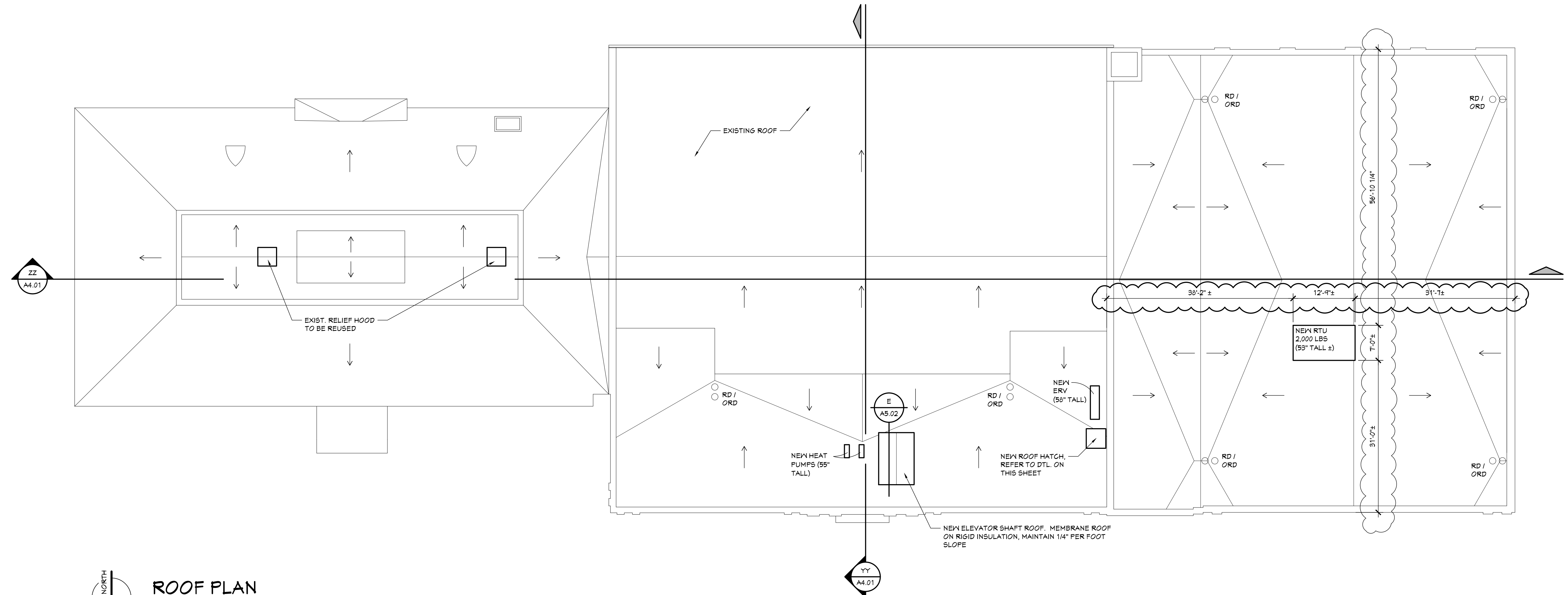
**03 TYPICAL ROOF VENT DETAIL**  
 A1.03 SCALE: 1 1/2" = 1'-0"



**02 CONDENSER CURB DETAIL**  
 A1.03 SCALE: N.T.S.



**01 ROOF DRAIN W/ OVERFLOW DETAIL**  
 A1.03 SCALE: 1" = 1'-0"



**ROOF PLAN**  
 SCALE: 3/16" = 1'-0"

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*Kyle Oberhart*  
 01.3.2024  
 BREWSTER REC CENTER

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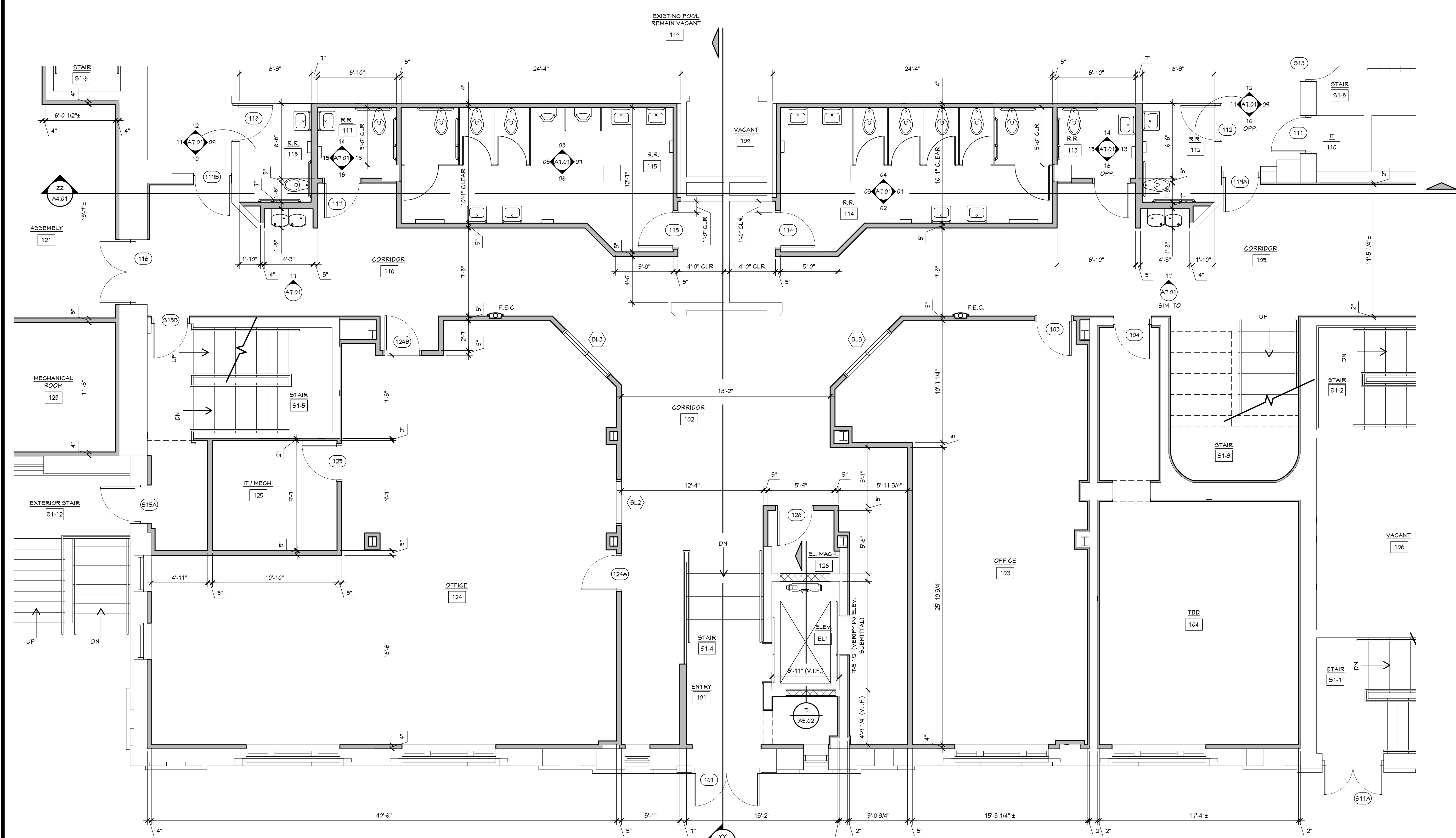
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SHEET TITLE  
**ROOF PLAN & DETAILS**

SHEET NO.

**A1.03**

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
 RECREATION CENTER**  
 637 BREWSTER STREET, DETROIT, MICHIGAN



**01 ENLARGED FIRST FLOOR PLAN**  
 A1.04 SCALE: 1/4" = 1'-0"

PROJECT #	1356-23
ISSUANCES	
FOR PERMITS	12.24.2023
BULLETIN #1	02.08.2024
BULLETIN #2	03.05.2024

*Kyle Oberhart*  
 01.3.2024  
 BREWSTER REC CENTER

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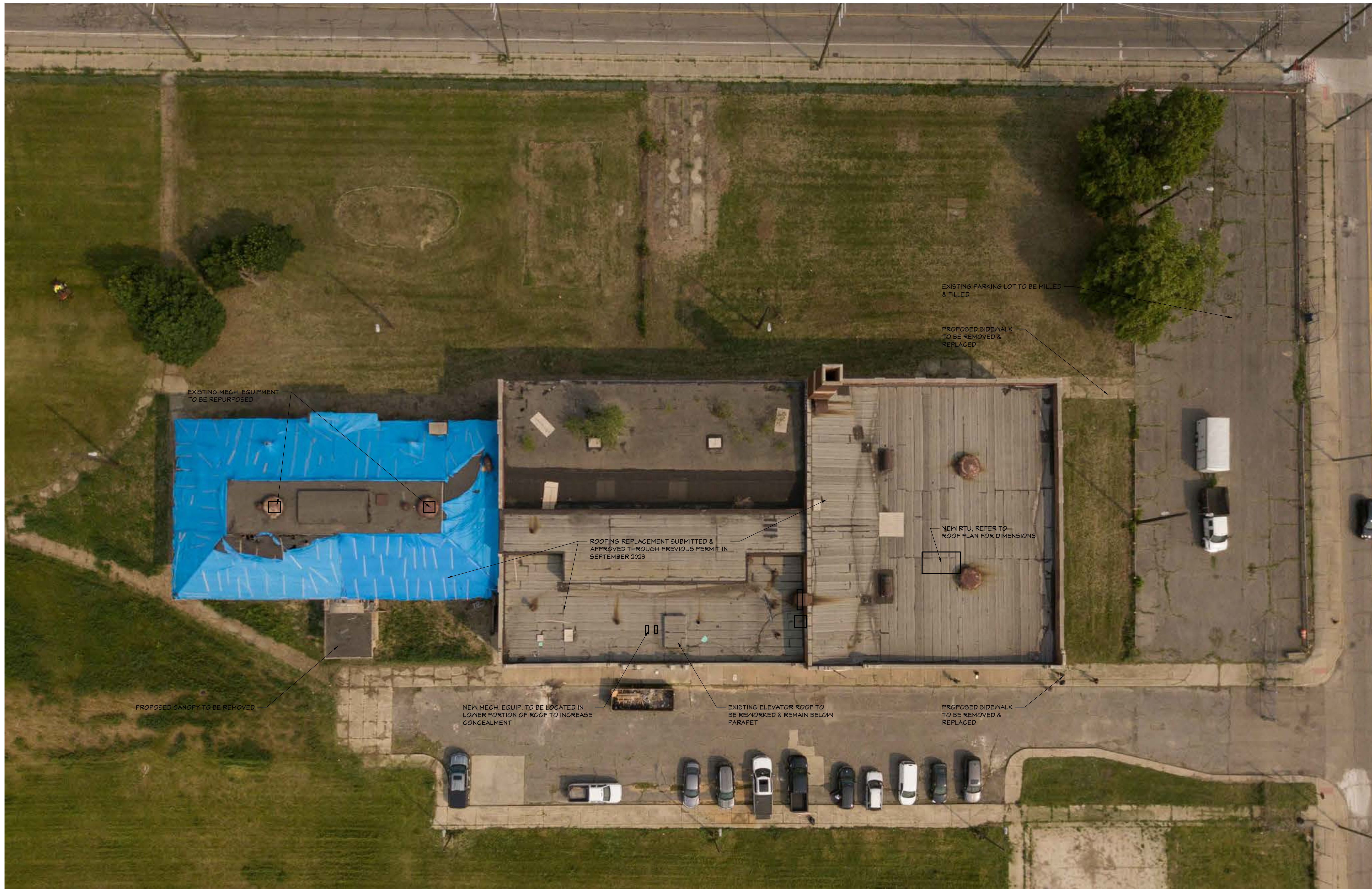
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**ENLARGED FIRST FLOOR PLAN**

SHEET NO.

**A1.04**

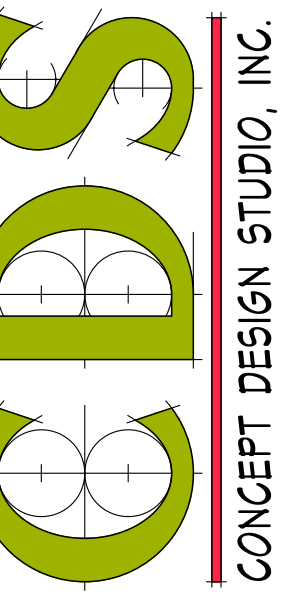
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01 EXISTING SITE AERIAL - FOR REFERENCE ONLY (REFER TO SITE PLANS FOR MORE INFORMATION)

A1.05 SCALE: 1/4" = 1'-0"

CONCEPT DESIGN STUDIO, INC.  
800 E. ELLIS ROAD, SUITE 508  
NORTON SHORES, MI 49441  
PH. (231) 799-4838  
FAX (231) 799-4837



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMITS 12.24.2023

BULLETIN #1 02.08.2024

BULLETIN #2 03.05.2024

01.3.2024  
BREWSTER REC. CENTER

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SHEET TITLE  
EXISTING SITE  
AERIAL

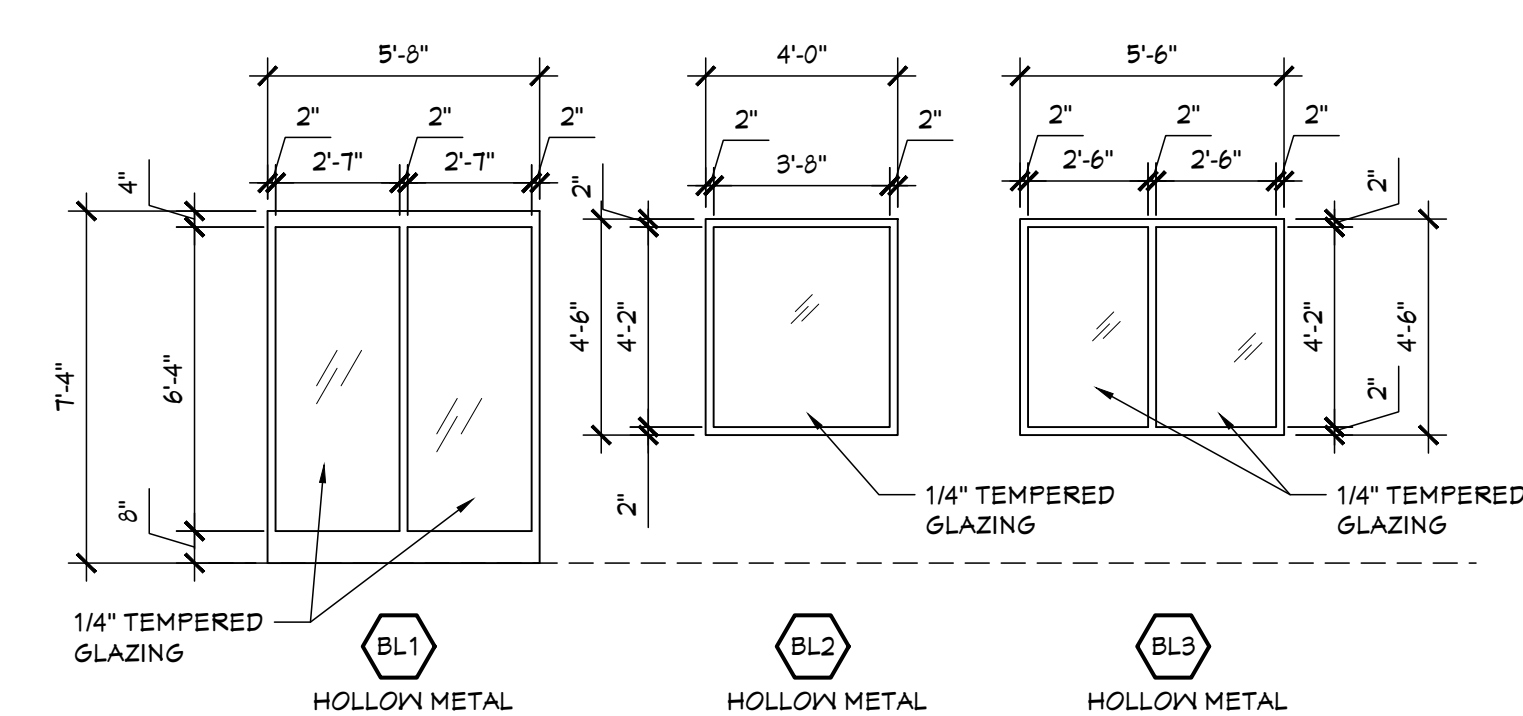
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A1.05

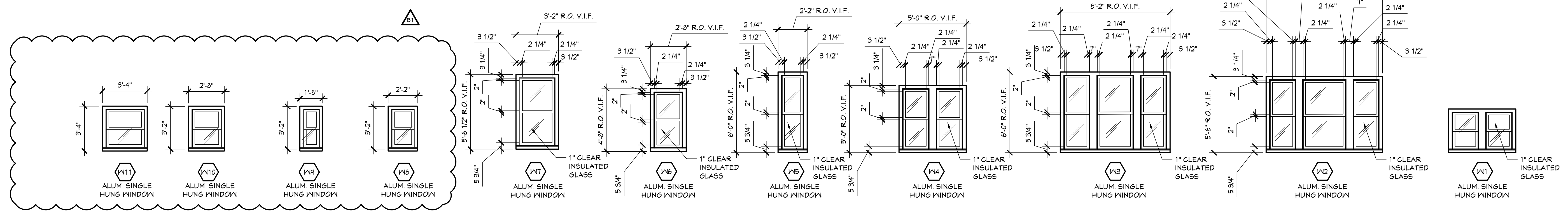
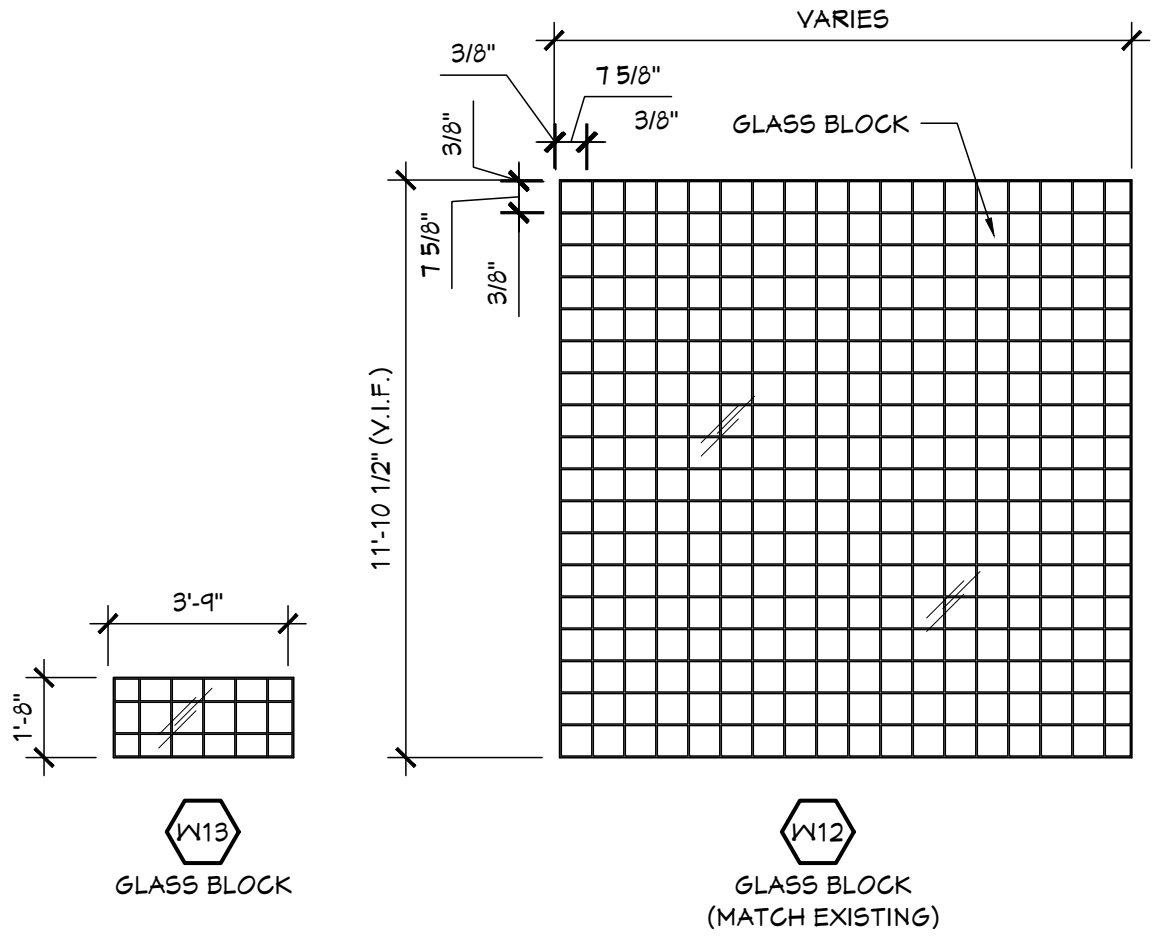
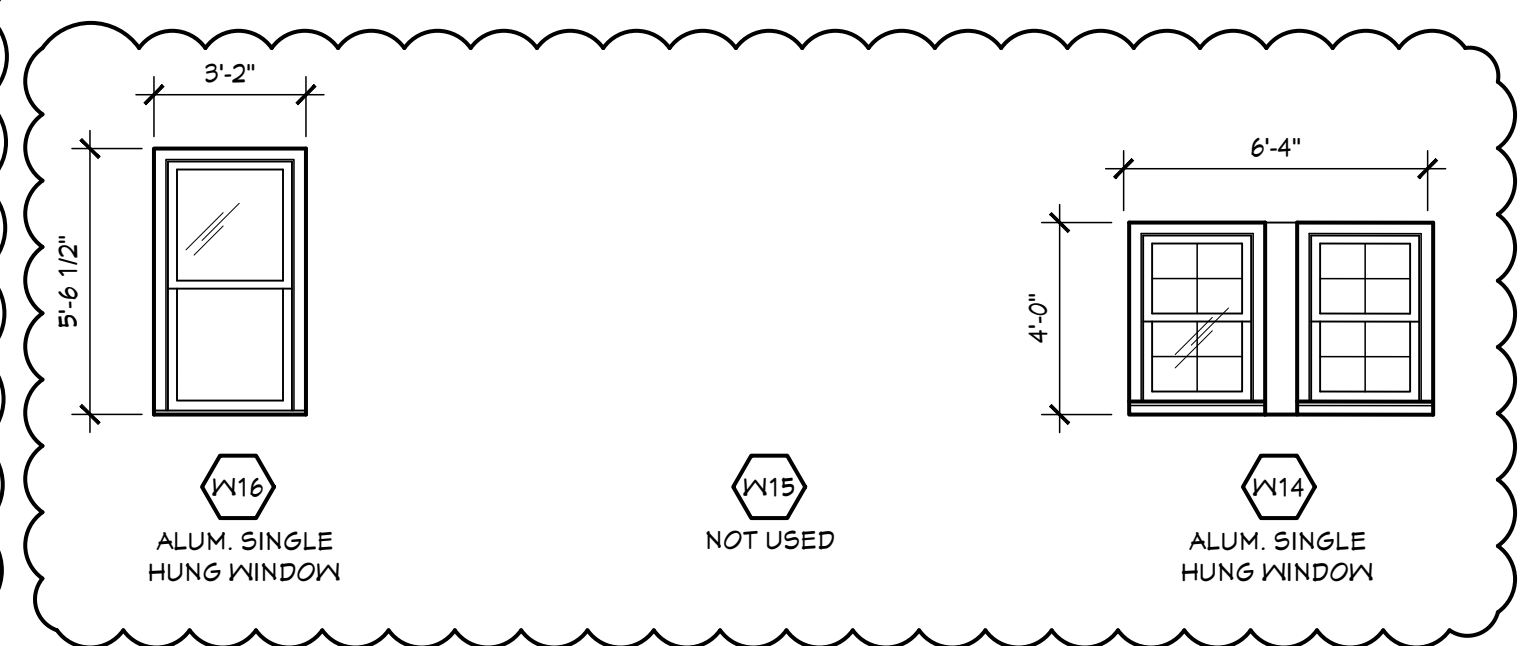
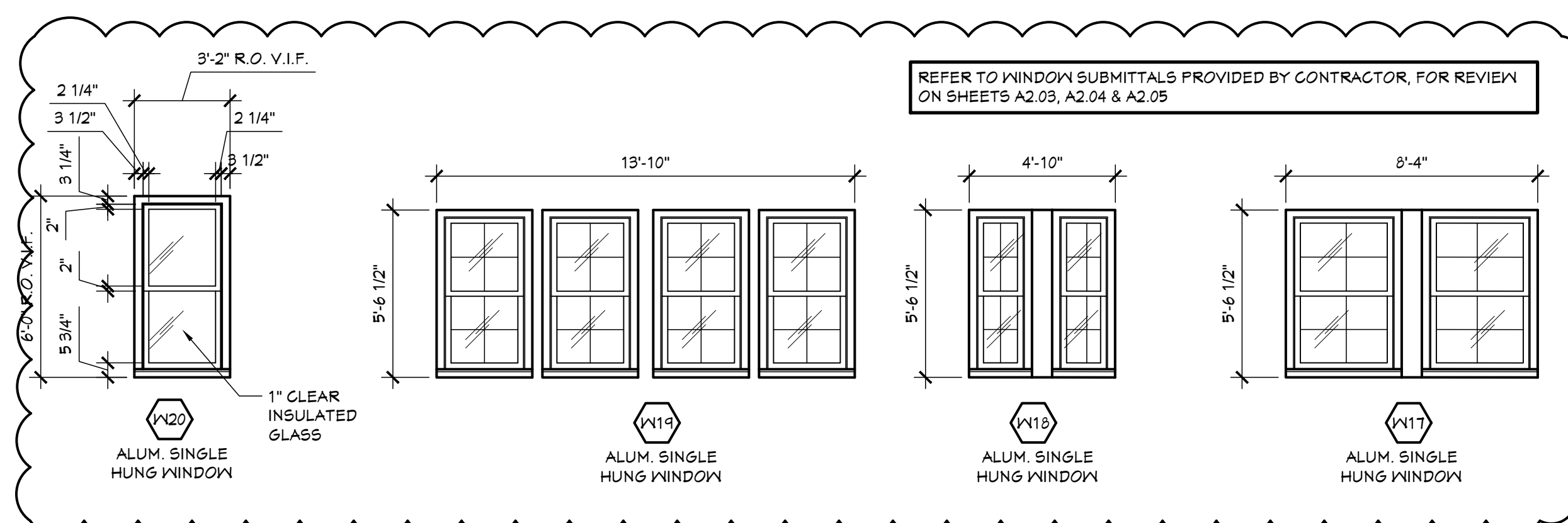
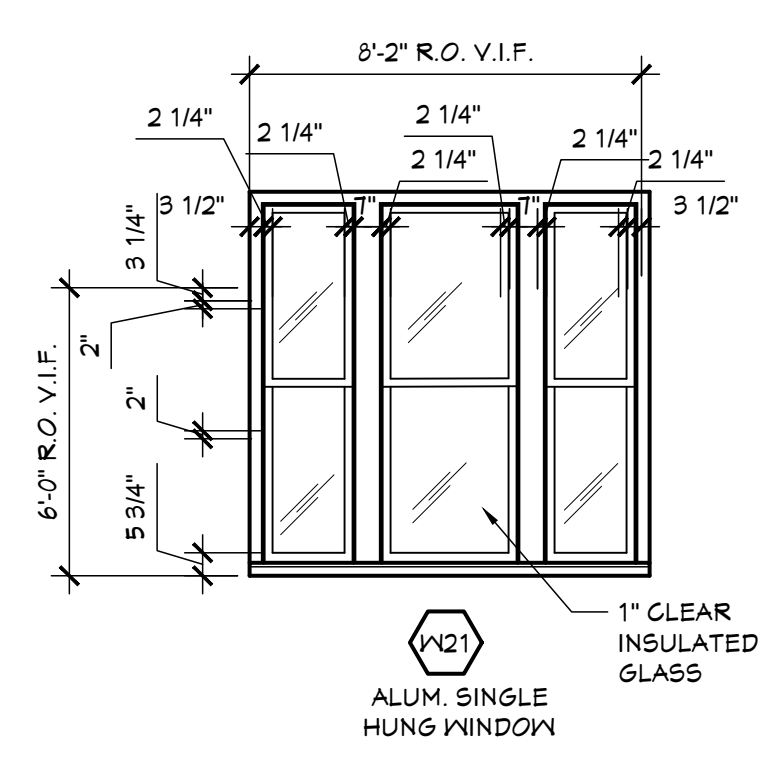
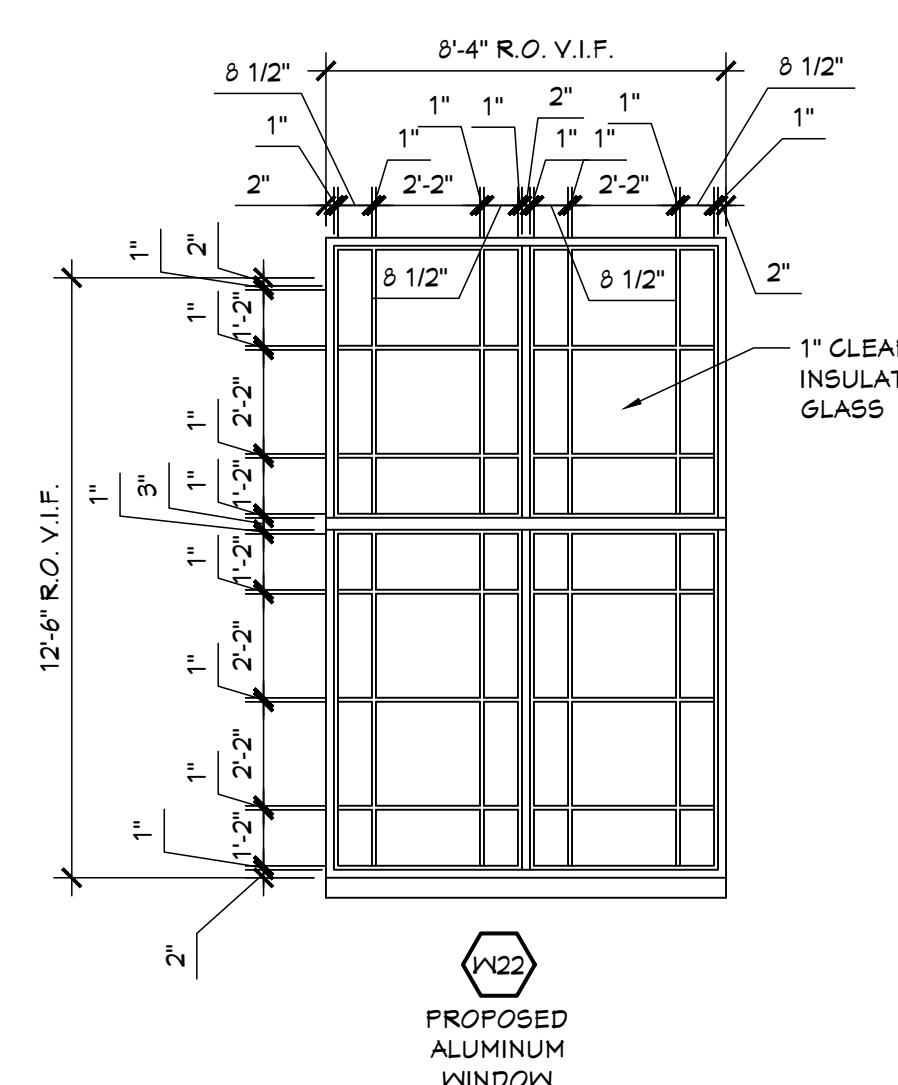
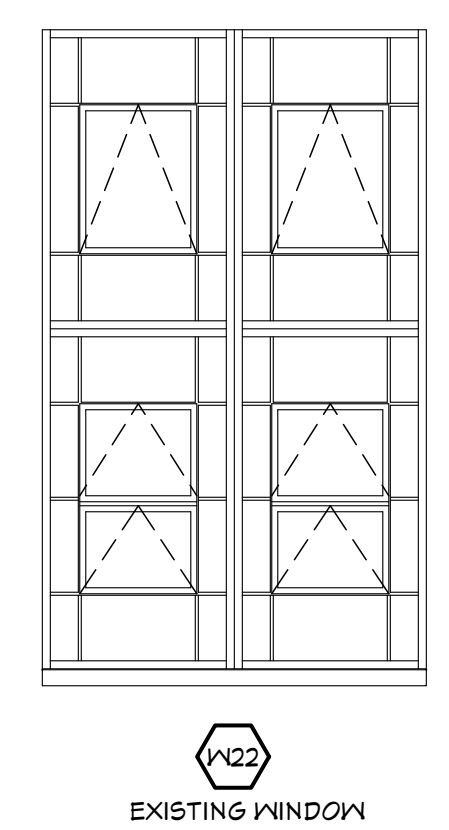
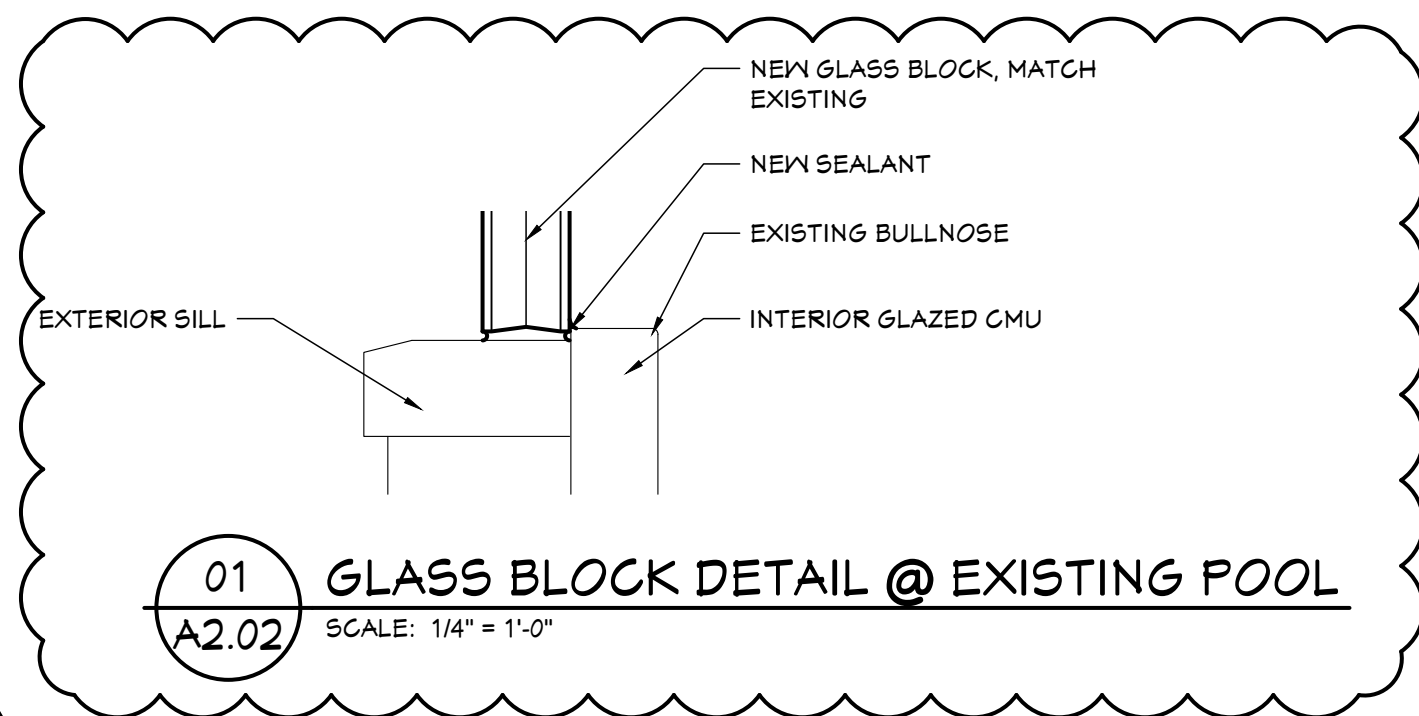
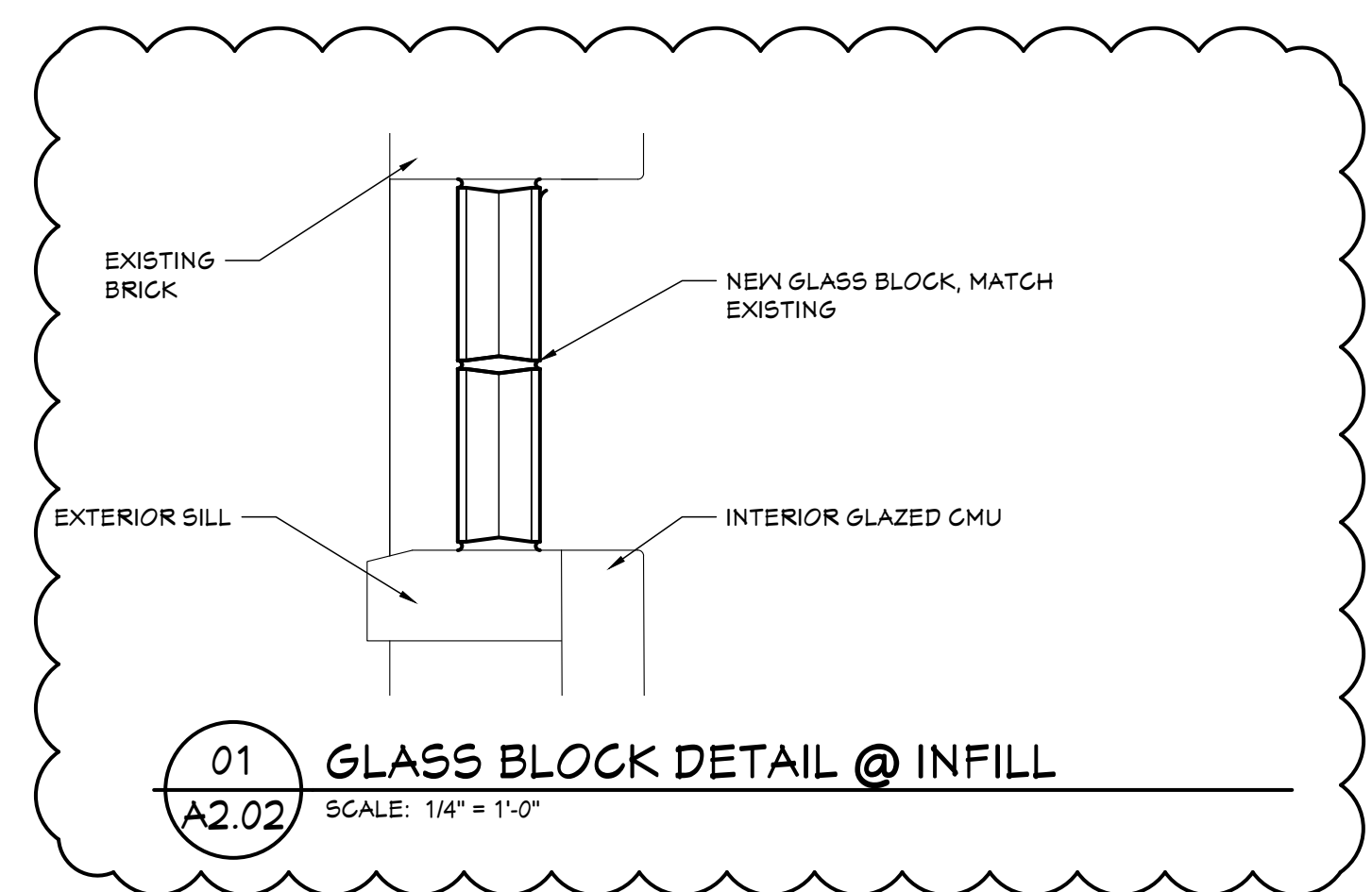
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**BORROWED LITE TYPES**  
 SCALE: 1/4" = 1'-0"



**WINDOW TYPES**  
 SCALE: 1/4" = 1'-0"

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
 637 BREWSTER STREET, DETROIT, MICHIGAN

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*Kyle Oberhart*  
 01.30.2024  
 Brewster Rec Center

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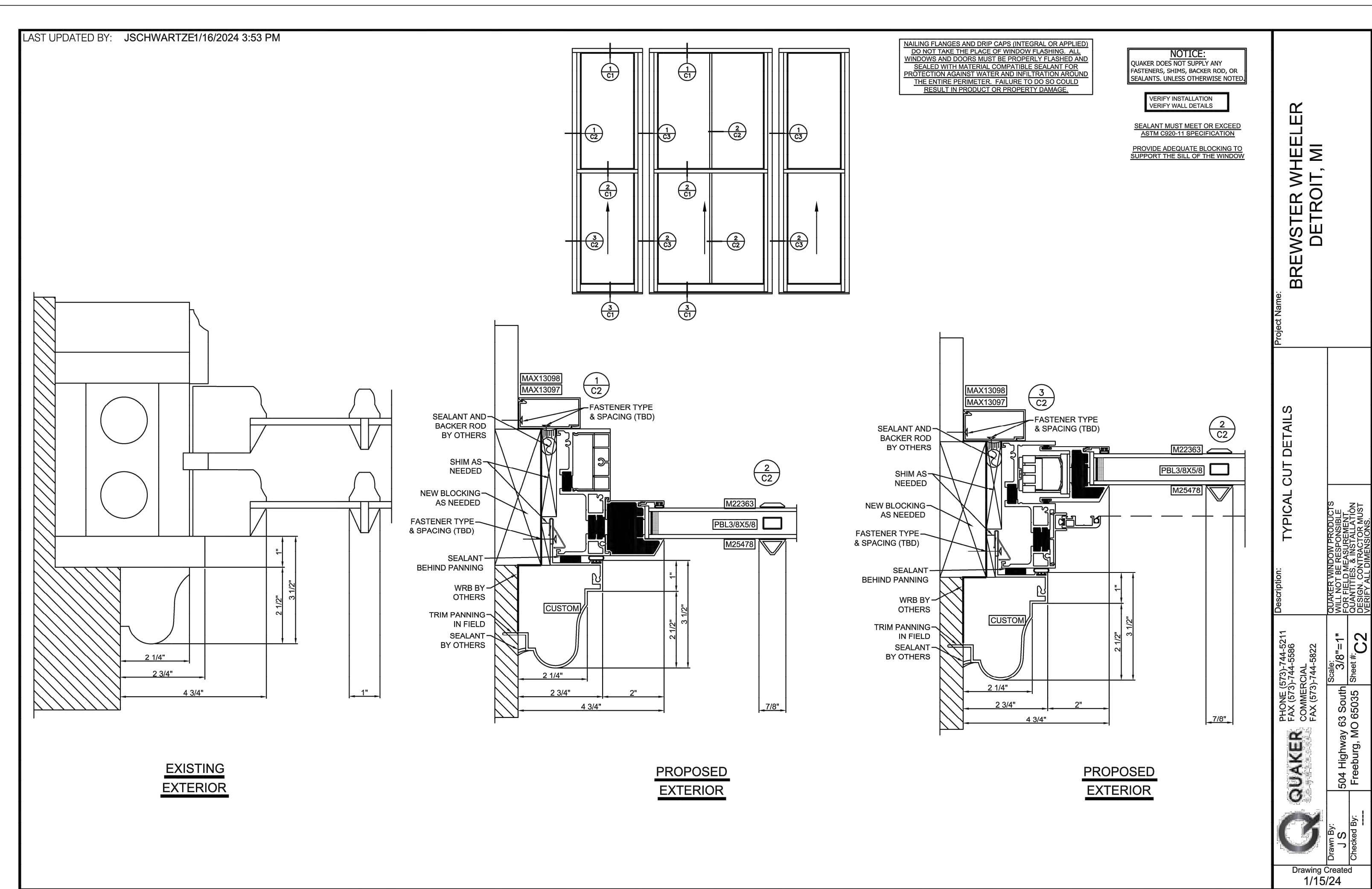
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 SHEET TITLE  
**WINDOW TYPES & BORROWED LITE TYPES**

SHEET NO.

**A2.02**

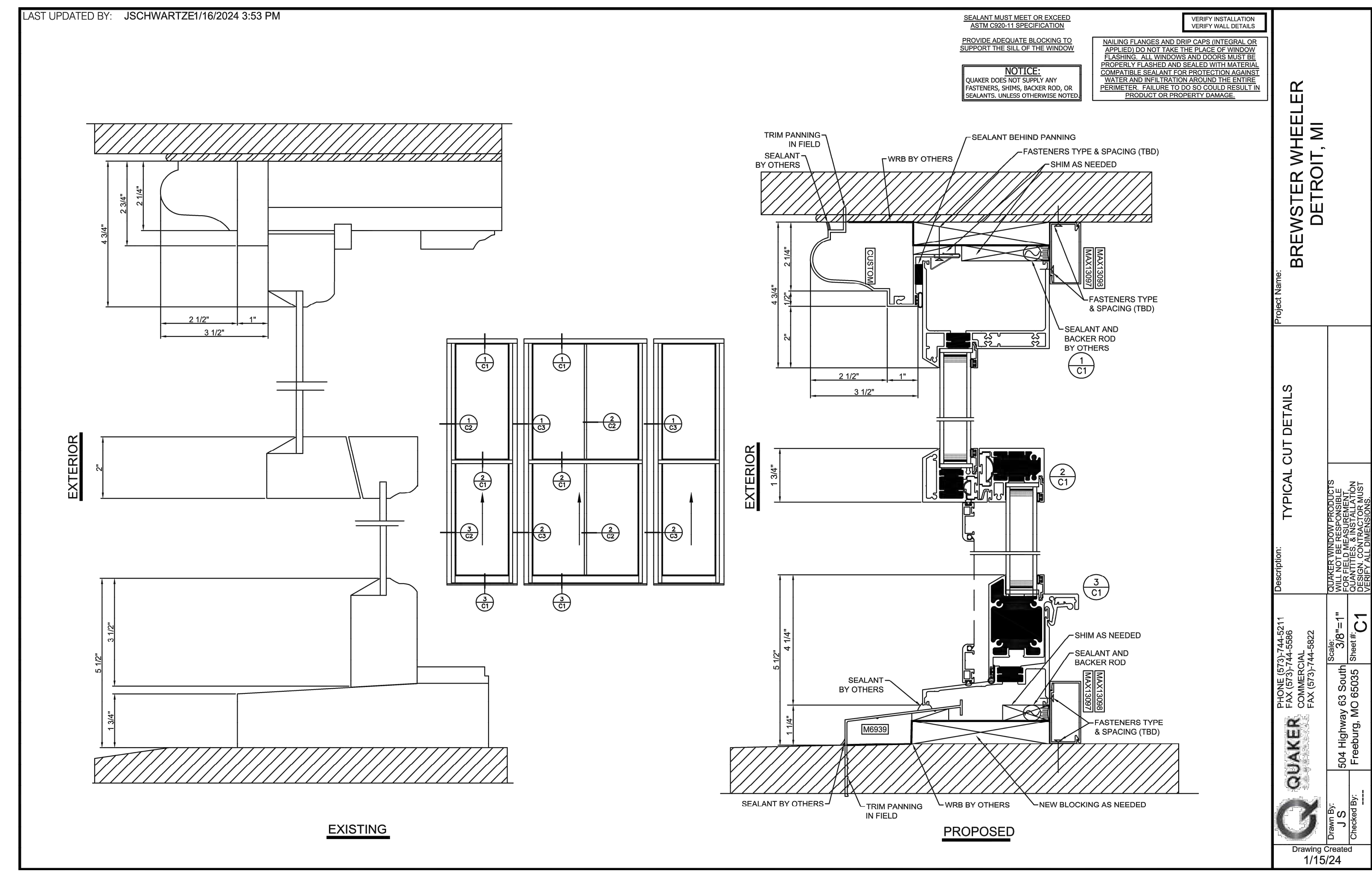
PROPOSED WINDOW SUBMITTAL  
(FOR HDC REVIEW) PROVIDED BY  
CONTRACTOR

SCALE: 3/8" = 1'-0"

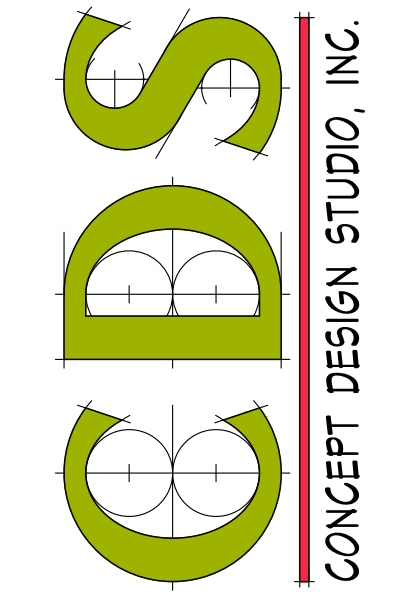


PROPOSED WINDOW SUBMITTAL  
(FOR HDC REVIEW) PROVIDED BY  
CONTRACTOR

SCALE: 3/8" = 1'-0"



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NORTON SHORES, MI 49441  
PH. (231) 799-4838  
FAX (231) 799-4837



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT #	1356-23
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01.3.2024  
Brewster Rec Center

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SHEET TITLE  
WINDOW  
SUBMITTAL  
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SHEET NO

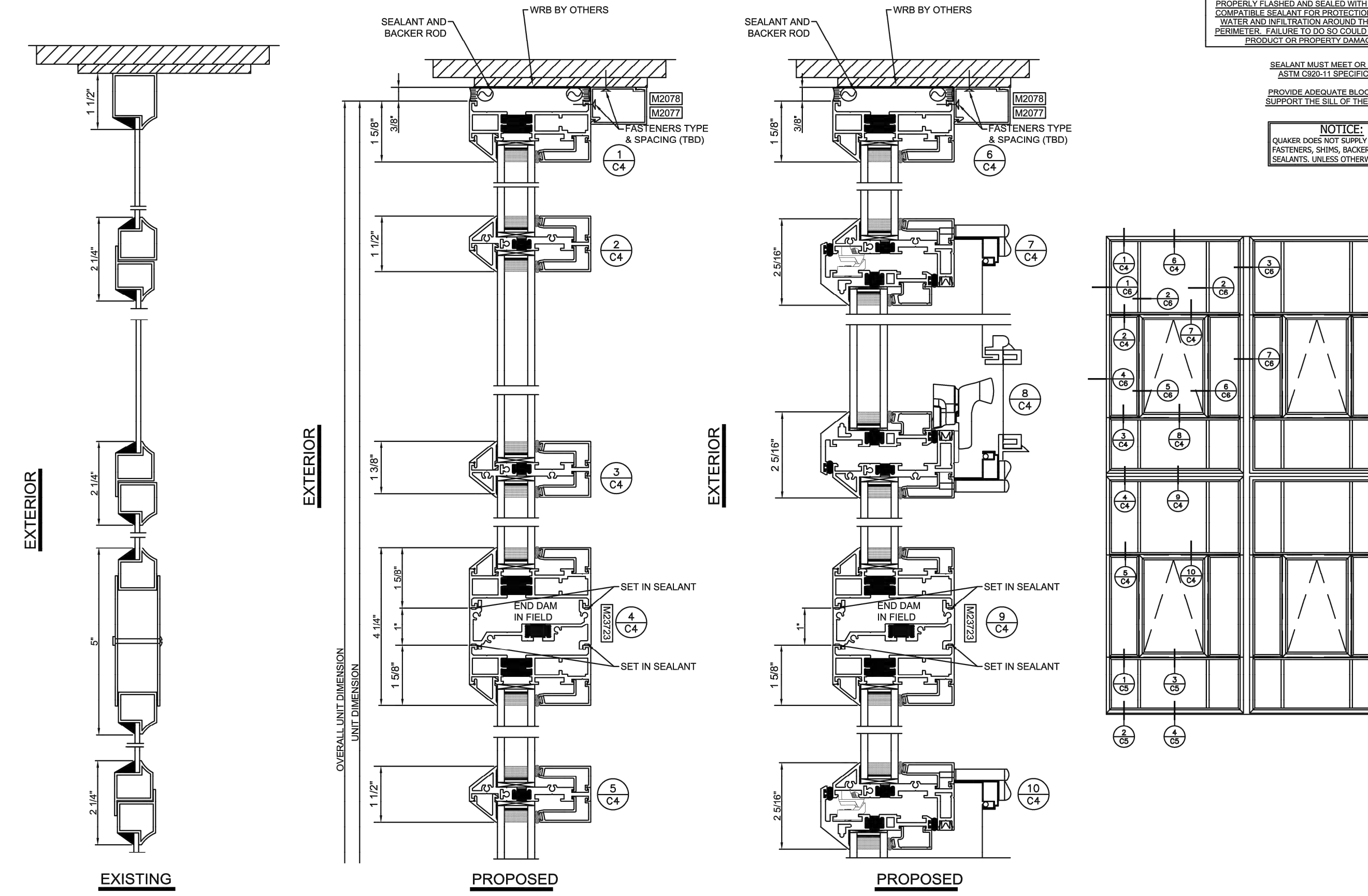
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**PROPOSED WINDOW SUBMITTAL  
(FOR HDC REVIEW) PROVIDED BY  
CONTRACTOR**

SCALE: 3/8" = 1'-0"

LAST UPDATED BY: JSCHWARTZEI/16/2024 3:53 PM



VERIFY INSTALLATION  
VERIFY WALL DETAILS

NAILING FLANGES AND DRIP CAPS (INTEGRAL OR APPLIED) ARE REQUIRED FOR ALL WINDOW FRAMING. ALL WINDOWS AND DOORS MUST BE PROPERLY FLASHED AND SEALED WITH MATERIALS COMPATIBLE WITH THE WINDOW MANUFACTURER'S RECOMMENDATIONS. WATER AND INFILTRATION AROUND THE ENTIRE PERIMETER. FAILURE TO DO SO WILL RESULT IN DAMAGE OR PROPERTY DAMAGE.

SEALANT MUST MEET OR EXCEED ASTM D3052 SPECIFICATION  
PROVIDE ADEQUATE BLOCKING TO SUPPORT THE SILL OF THE WINDOW

NOTICE:  
QUAKER DOES NOT SUPPLY ANY FASTENERS, SHIMS, BACKER ROD, OR SEALANTS, UNLESS OTHERWISE NOTED

Project Name: **BREWSTER WHEELER  
DETROIT, MI**

Description: **TYPICAL CUT DETAILS  
STEEL WINDOWS**

PHONE: (873) 744-5211  
FAX: (873) 744-5886  
504 Highway 63 South  
Freeburg, MO 65035

Scale: 3/8" = 1'-0"

Sheet: **C4**

Drawn By: J.S.  
Checked By: J.S.

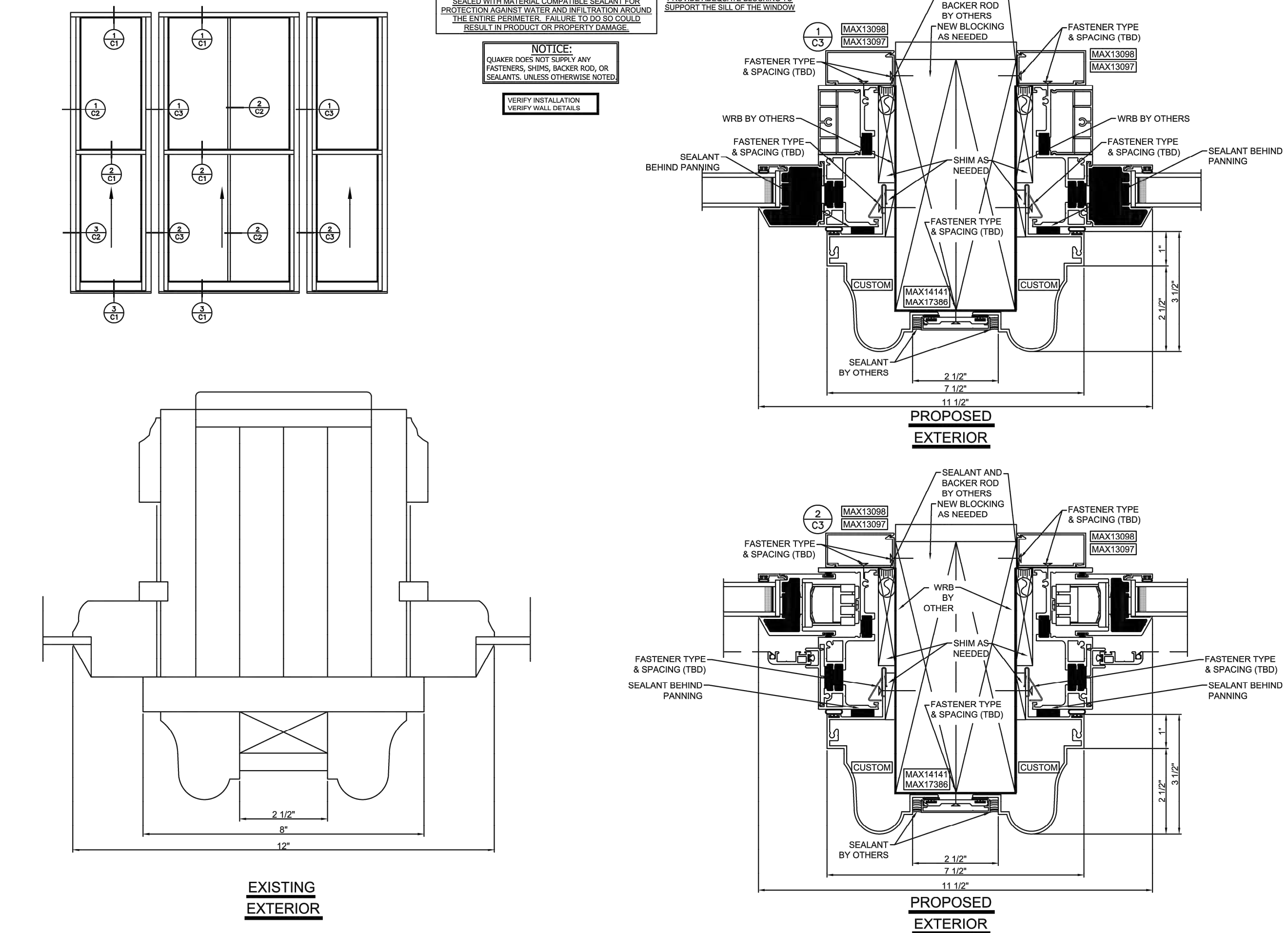
Quaker Window Products  
FOR FIELD MEASUREMENT  
QUANTITIES & INSTALLATION  
VERIFY ALL DIMENSIONS

Drawing Created: 1/15/24

**PROPOSED WINDOW SUBMITTAL  
(FOR HDC REVIEW) PROVIDED BY  
CONTRACTOR**

SCALE: 3/8" = 1'-0"

LAST UPDATED BY: JSCHWARTZEI/16/2024 3:53 PM



VERIFY INSTALLATION  
VERIFY WALL DETAILS

NAILING FLANGES AND DRIP CAPS (INTEGRAL OR APPLIED) TO THE TYPE OF WALL FOR WINDOW FLASHING. ALL WINDOWS AND DOORS MUST BE PROPERLY FLASHED AND SEALED WITH MATERIALS COMPATIBLE WITH THE WINDOW MANUFACTURER'S RECOMMENDATIONS. WATER AND INFILTRATION AROUND THE ENTIRE PERIMETER. FAILURE TO DO SO WILL RESULT IN DAMAGE OR PROPERTY DAMAGE.

NOTICE:  
QUAKER DOES NOT SUPPLY ANY FASTENERS, SHIMS, BACKER ROD, OR SEALANTS, UNLESS OTHERWISE NOTED

SEALANT MUST MEET OR EXCEED ASTM D3052 SPECIFICATION  
PROVIDE ADEQUATE BLOCKING TO SUPPORT THE SILL OF THE WINDOW

Project Name: **BREWSTER WHEELER  
DETROIT, MI**

Description: **TYPICAL CUT DETAILS**

PHONE: (873) 744-5211  
FAX: (873) 744-5886  
504 Highway 63 South  
Freeburg, MO 65035

Scale: 3/8" = 1'-0"

Sheet: **C3**

Drawn By: J.S.  
Checked By: J.S.

Quaker Window Products  
FOR FIELD MEASUREMENT  
QUANTITIES & INSTALLATION  
VERIFY ALL DIMENSIONS

Drawing Created: 1/15/24

PROJECT #	1356-23
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*Kyle Oberhart*  
01.3.2024  
Brewster Rec Center

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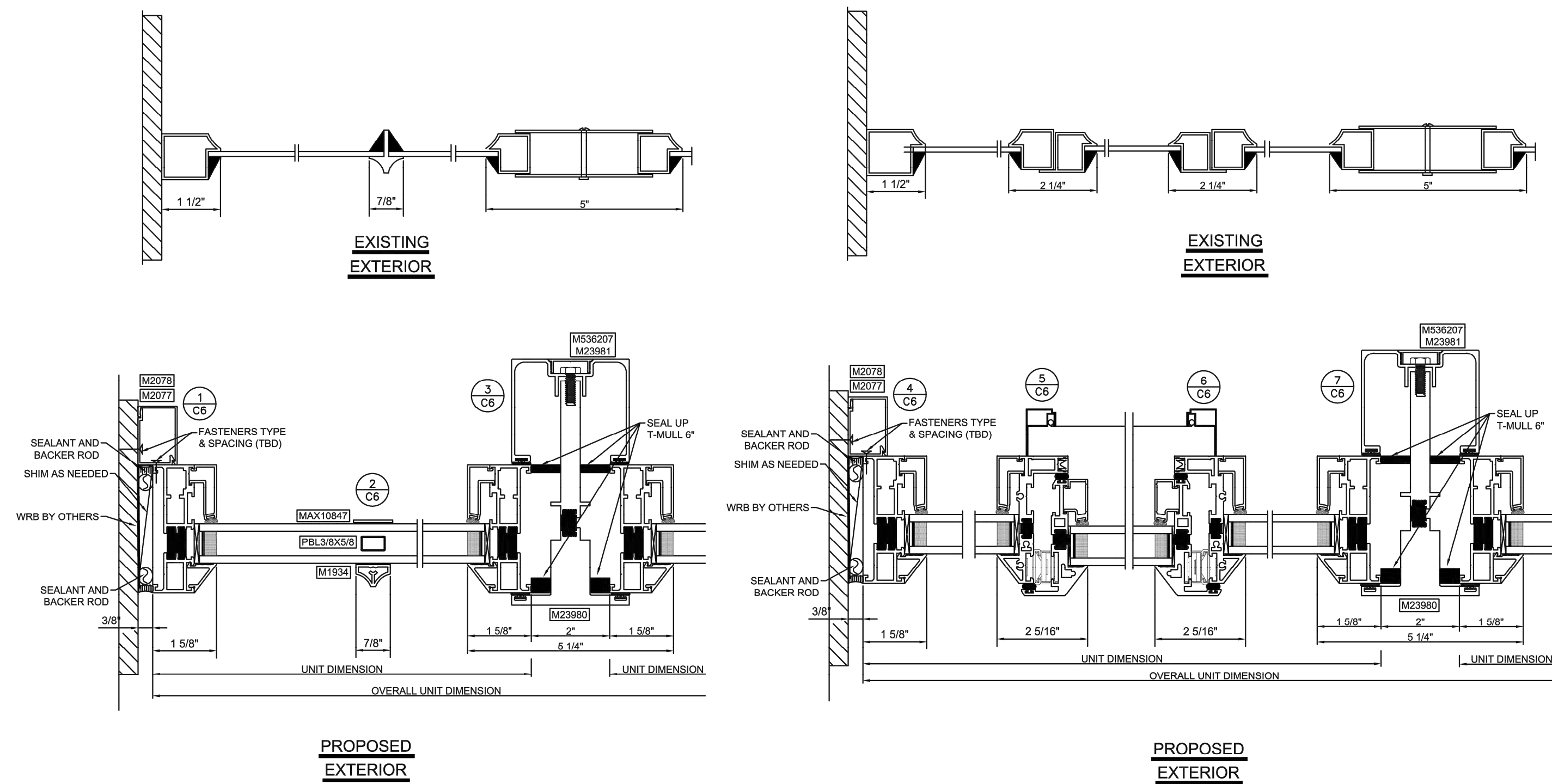
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SHEET TITLE  
**WINDOW  
SUBMITTAL  
PROVIDED BY  
CONTRACTOR**

SHEET NO.  
**A2.04**

LAST UPDATED BY: JSCHWARTZE1/16/2024 3:53 PM

NOTICE:  
QUAKER DOES NOT SUPPLY ANY FASTENERS, SHIMS, BACKER ROD, OR SEALANTS, UNLESS OTHERWISE NOTED.  
VERIFY INSTALLATION VERIFY WALL DETAILS  
SEALANT MUST MEET OR EXCEED ASTM C827.1 SPECIFICATION  
PROVIDE ADEQUATE BLOCKING TO SUPPORT THE SILL OF THE WINDOW.



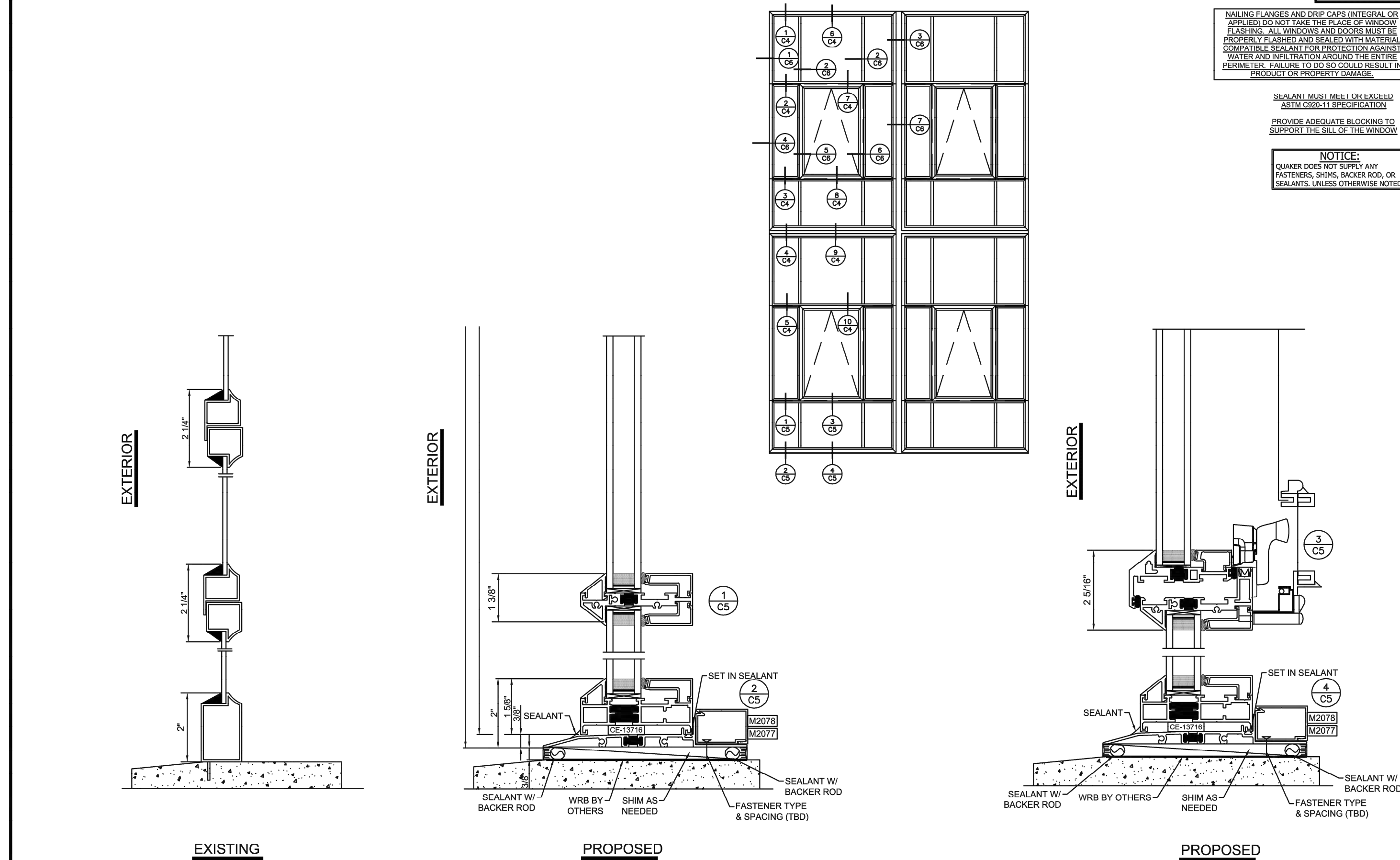
Project Name: BREWSTER WHEELER DETROIT, MI  
Description: TYPICAL CUT DETAILS STEEL WINDOWS  
Scale: 3/8" = 1"  
Sheet: C6  
Drawing Created: 1/15/24  
QUAKER COMMERCIAL  
504 Highway 63 South  
Freeburg, MO 65035  
PHONE (636) 744-5511  
FAX (636) 744-5598  
PA (636) 744-5522

PROPOSED WINDOW SUBMITTAL (FOR HDC REVIEW) PROVIDED BY CONTRACTOR

SCALE: 3/8" = 1'-0"

LAST UPDATED BY: JSCHWARTZE1/16/2024 3:53 PM

NOTICE:  
QUAKER DOES NOT SUPPLY ANY FASTENERS, SHIMS, BACKER ROD, OR SEALANTS, UNLESS OTHERWISE NOTED.  
VERIFY INSTALLATION VERIFY WALL DETAILS  
SEALANT MUST MEET OR EXCEED ASTM C827.1 SPECIFICATION  
PROVIDE ADEQUATE BLOCKING TO SUPPORT THE SILL OF THE WINDOW.

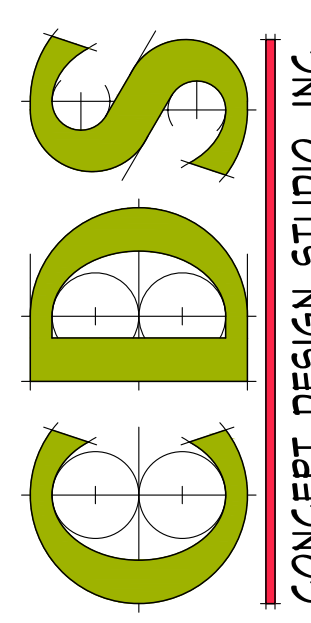


Project Name: BREWSTER WHEELER DETROIT, MI  
Description: TYPICAL CUT DETAILS STEEL WINDOWS  
Scale: 3/8" = 1"  
Sheet: C5  
Drawing Created: 1/15/24  
QUAKER COMMERCIAL  
504 Highway 63 South  
Freeburg, MO 65035  
PHONE (636) 744-5511  
FAX (636) 744-5598  
PA (636) 744-5522

PROPOSED WINDOW SUBMITTAL (FOR HDC REVIEW) PROVIDED BY CONTRACTOR

SCALE: 3/8" = 1'-0"

CONCEPT DESIGN STUDIO, INC.  
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NORTON SHORES, MI 48441  
PH. (231) 799-4935  
FAX (231) 799-4937



BUILDING RENOVATIONS FOR

# BREWSTER WHEELER RECREATION CENTER

637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT #	1356-23
ISSUANCES	
FOR PERMITS	12.24.2023
BULLETIN #1	02.08.2024
BULLETIN #2	03.05.2024

*Kyle Oberhart*  
01.3.2024  
Brewster Rec Center

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SHEET TITLE  
WINDOW SUBMITTAL PROVIDED BY CONTRACTOR

SHEET NO.

## A2.05

3/9/2024 12:54 PM Z:\PROJ\ECTS\1356-23 NHT Housing - Brewster Wheeler Recreation Center\3-Drawings\1356-23A201.dwg

### GENERAL NOTES

1. CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THIS PROJECT'S ASBESTOS AND LEAD BASE PAINT ABATEMENT SPECIFICATIONS AS PREPARED BY THE OWNER.
2. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF OWNER FURNISHED EQUIPMENT, INCLUDING THE DIMENSIONS OF SUCH AS THEY RELATE TO HIS/HER OWN WORK.
3. REPLACE DAMAGED AND/OR MISSING BRICK WITH EXISTING BRICK FROM DEMOLITION AREAS OR MATCH.
4. REPLACE DAMAGED WINDOW SILLS AND REPLACE WITH MATCHING REGAST SILLS.
4. TUCK-POINT MASONRY JOINTS ONLY AS REQUIRED, MATCH ADJACENT MORTAR COLOR, TEXTURE AND USE LIME BASE MORTAR.
6. CLEAN ALL BRICK MASONRY INCLUDING FOUNDATION STONE, SILLS AND METALS IN ACCORDANCE W/ NATIONAL PARK SERVICE STANDARDS, REFER TO SPECIFICATION.
7. WINDOW & DOOR CONTRACTOR TO FIELD VERIFY ALL ROUGH OPENING SIZES.
8. REPLACE DAMAGE CLAY TILE CAPS, CAP STONES, CLEAN AND REPAIR EXISTING CLAY CAPS IN GOOD CONDITION, MATCH NEW TO EXISTING COLOR AND PROFILE.
9. PAINT ALL EXISTING MISC. METALS TO REMAIN

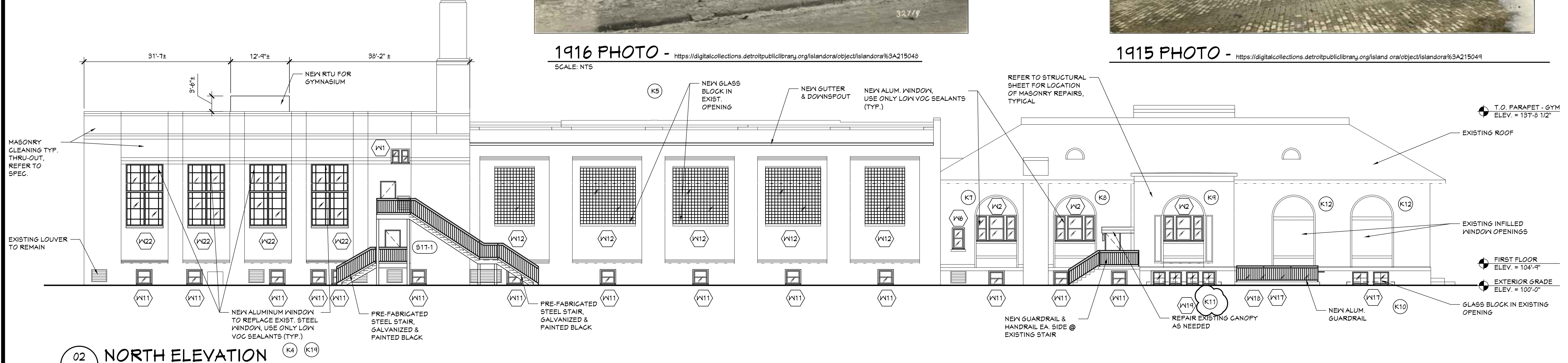
RESTORE ENTRANCE BACK TO THE ORIGINAL LIBRARY ENTRANCE BY REMOVAL OF THE CANOPY



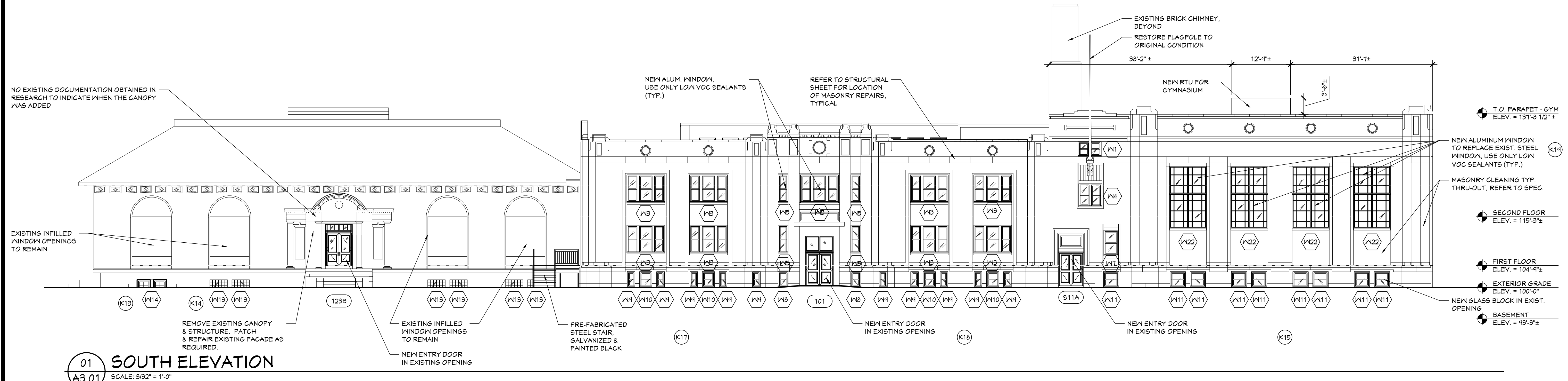
1916 PHOTO - <https://digitalcollections.detroitpubliclibrary.org/islandora/object/islandora%3A215048>  
SCALE: NTS



1915 PHOTO - <https://digitalcollections.detroitpubliclibrary.org/islandora/object/islandora%3A215049>



02 NORTH ELEVATION  
A3.01 SCALE: 3/32" = 1'-0"



01 SOUTH ELEVATION  
A3.01 SCALE: 3/32" = 1'-0"

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES	FOR PERMITS	DATE
BULLETIN #1	12.24.2023	02.08.2024
BULLETIN #2	02.08.2024	03.05.2024

*Kyle Oberhart*  
01.3.2024  
Brewster Rec Center

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SHEET TITLE  
NORTH ELEVATION & SOUTH ELEVATION

SHEET NO.  
A3.01

3/5/2024 12:50 PM Z:\PROJEC\1356-23 MHT Housing - Brewster Wheeler Recreation Center\3-Drawings\1356-23A3.01.dwg

PROJECT # 1356-23

ISSUANCES

FOR PERMITS 12.24.2023

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*Kyle Oberholt*  
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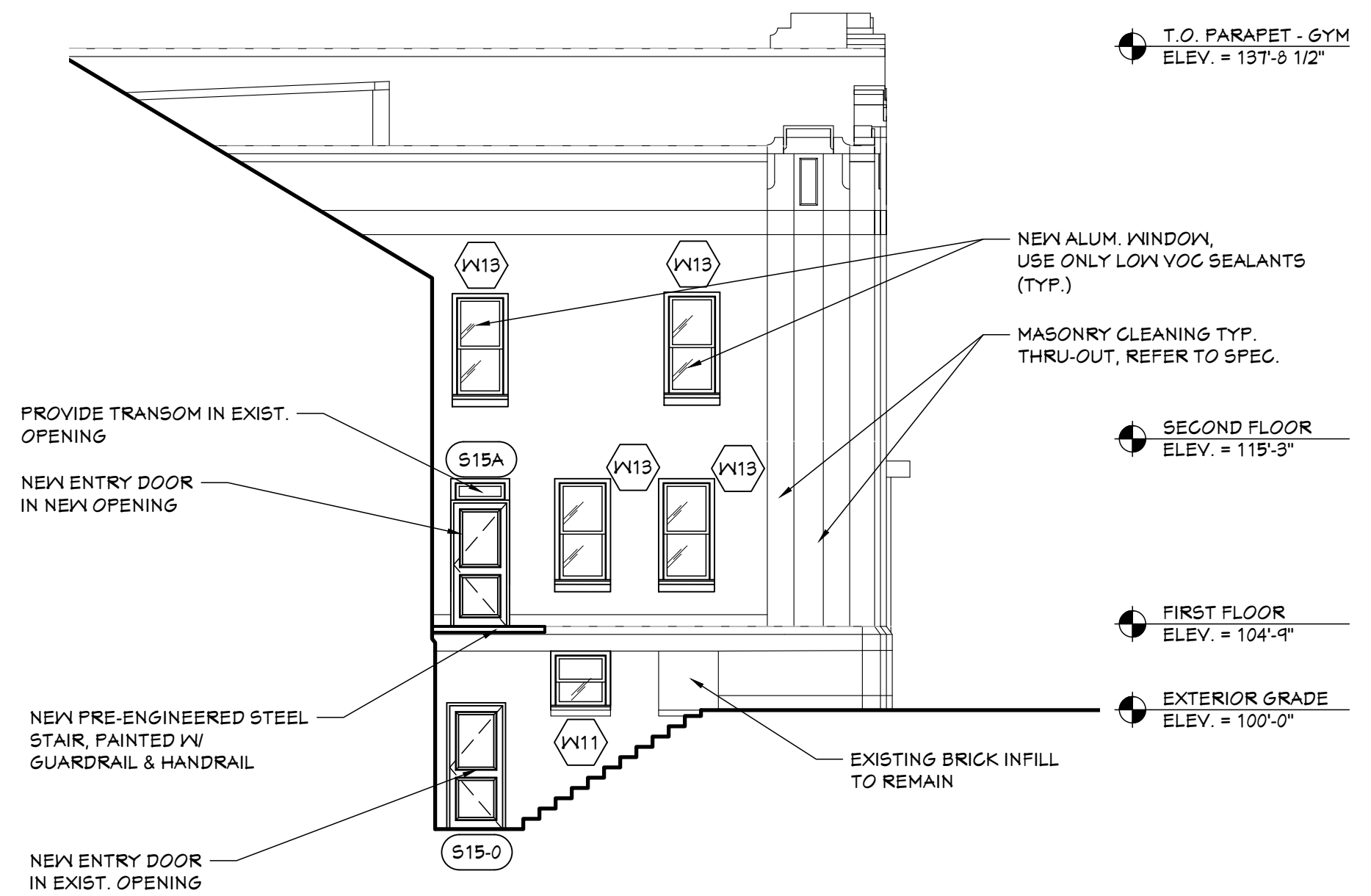
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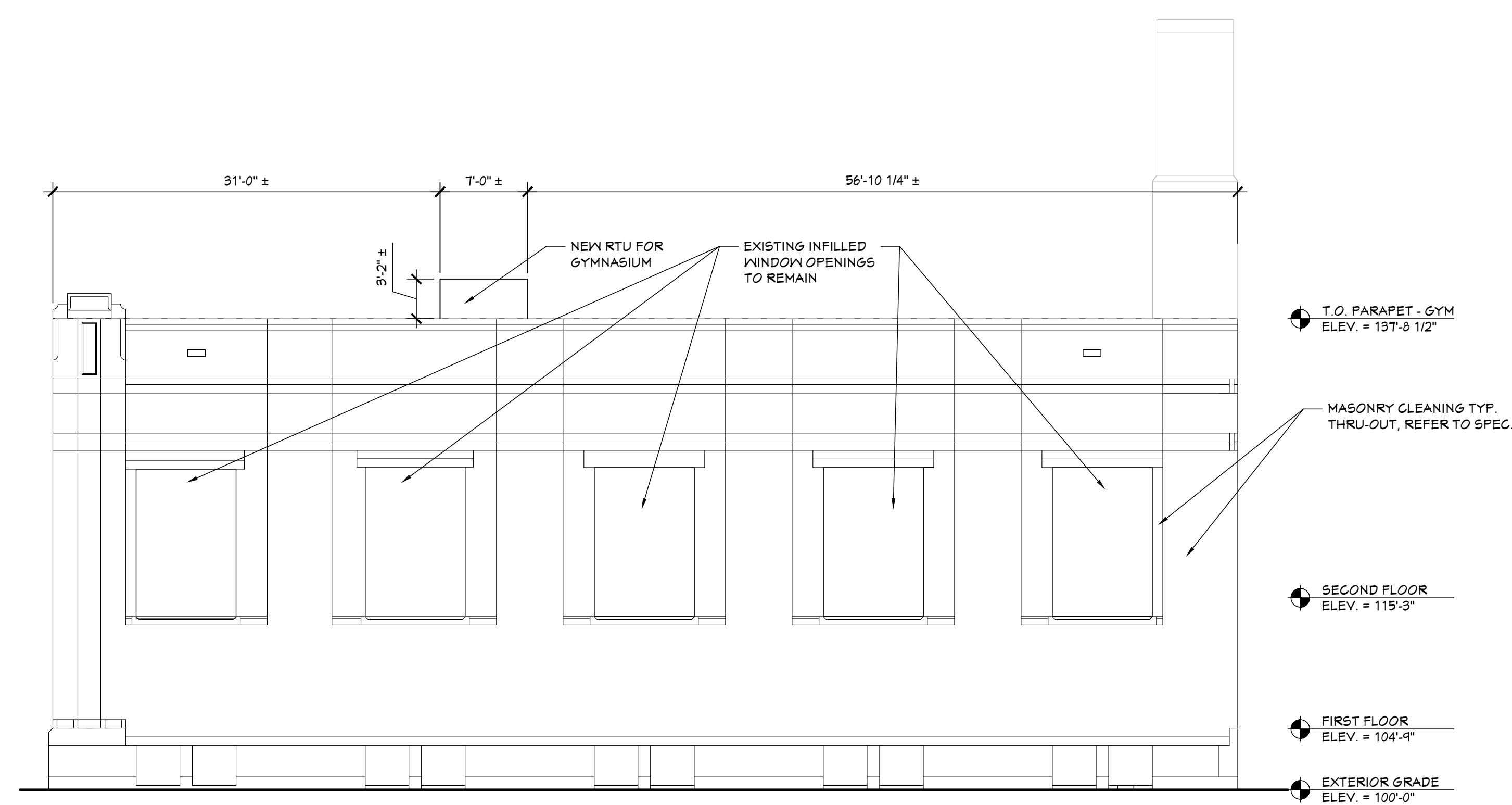
SHEET TITLE  
**EAST & WEST ELEVATION**

SHEET NO.

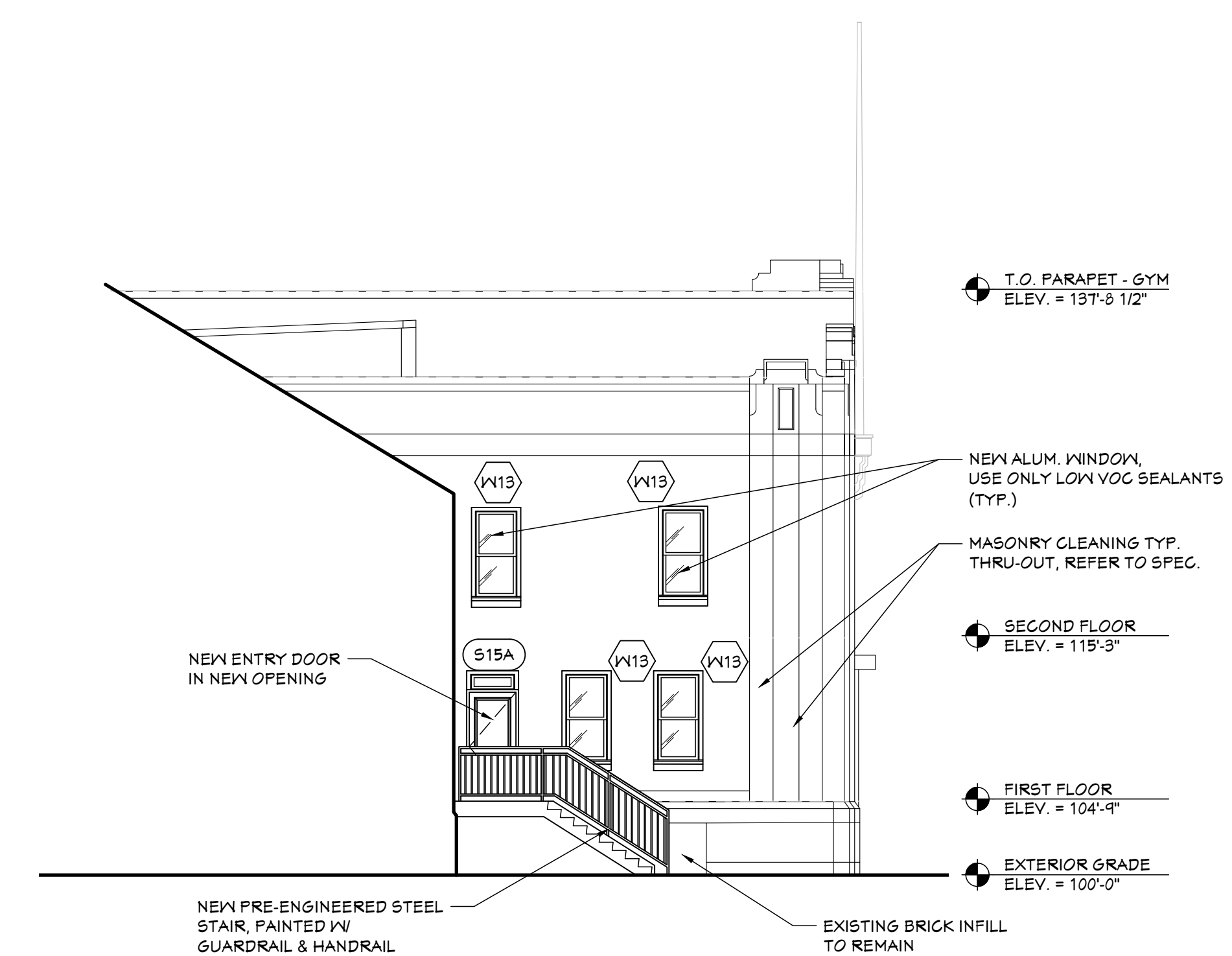
**A3.02**



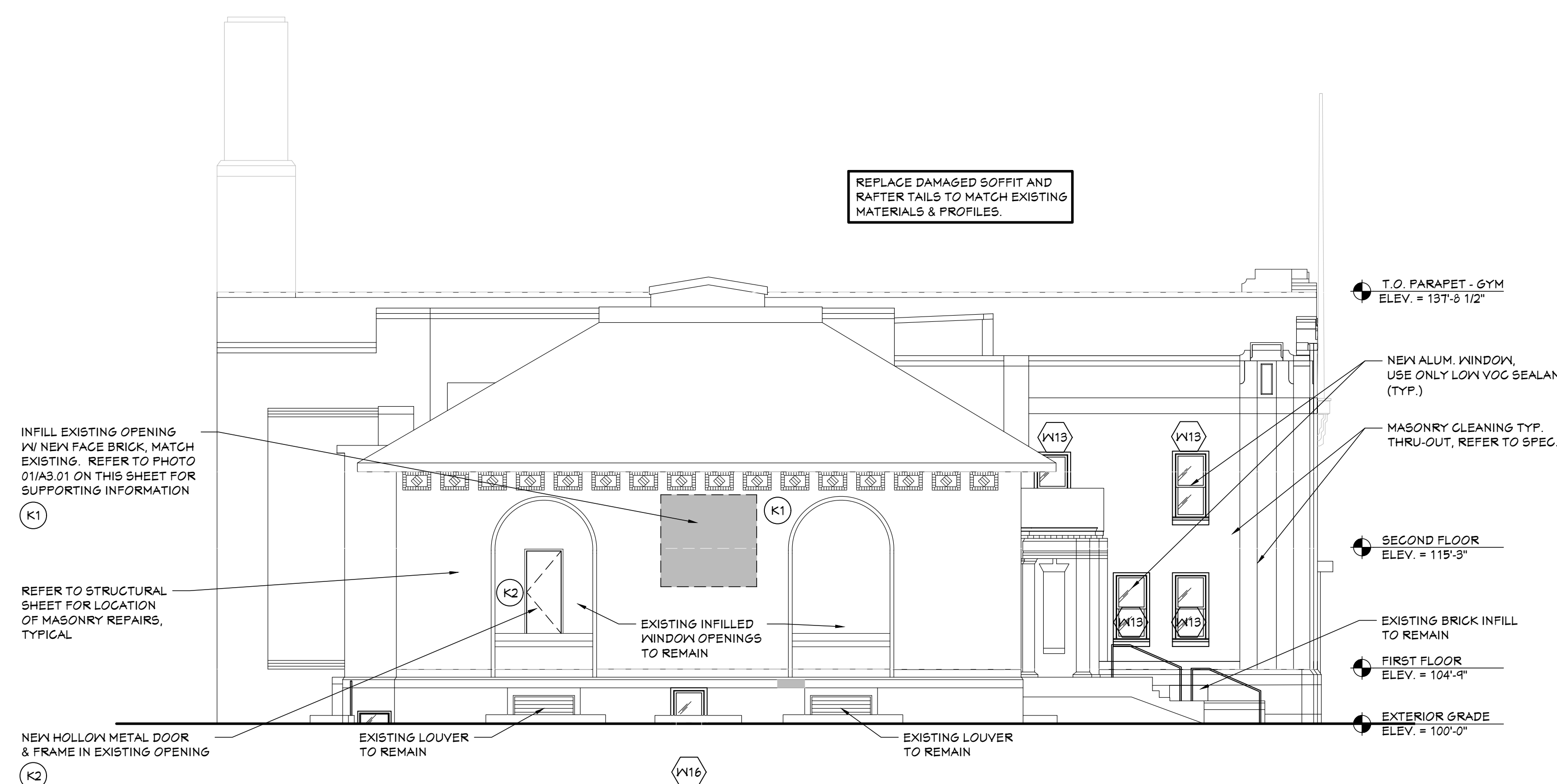
**04 PARTIAL WEST ELEVATION**  
 A3.02 SCALE: 1/8" = 1'-0"



**02 EAST ELEVATION (REFER TO K3 FOR PHOTO)**  
 A3.02 SCALE: 1/8" = 1'-0"



**03 PARTIAL WEST ELEVATION**  
 A3.02 SCALE: 1/8" = 1'-0"



**01 WEST ELEVATION**  
 A3.02 SCALE: 1/8" = 1'-0"

3/5/2024 12:48 PM Z:\PROJECTS\1356-23 MHT Housing - Brewster Wheeler Recreation Center\3-Drawings\1356-23\A3.01.dwg



(5) OPENING TO BE RESTORED WITH GLASS BLOCK INFILL



**K5**  
A3.03 KEYED PHOTO - K5  
SCALE: NTS



EXISTING BRICK INFILL TO REMAIN ON THE EAST ELEVATION, TYP.

REMOVE SIGNAGE, PATCH & REPAIR BRICK AS REQUIRED.

**K3**  
A3.03 KEYED PHOTO - K3  
SCALE: NTS



**K4**  
A3.03 KEYED PHOTO - K4  
SCALE: NTS



REMOVE EXISTING INFILL & REPLACE W/ NEW H.M. DOOR & FRAME

**K2**  
A3.03 KEYED PHOTO - K2  
SCALE: NTS

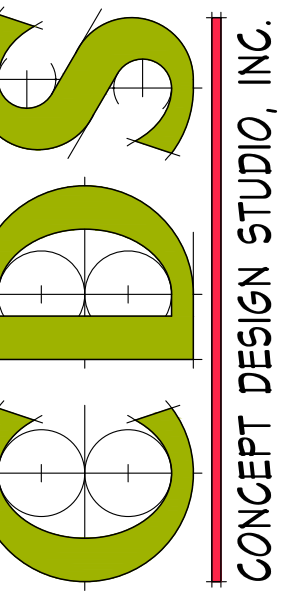


PROPOSED AREA TO BE INFILLED

**K1**  
A3.03 KEYED PHOTO - K1  
SCALE: NTS



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BUILDING RENOVATIONS FOR  
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SHEET TITLE  
KEYED PHOTOS

SHEET NO.

**A3.03**

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K16 KEYED PHOTO - K17  
A3.04 SCALE: NTS



K16 KEYED PHOTO - K16  
A3.04 SCALE: NTS



K15 KEYED PHOTO - K15  
A3.04 SCALE: NTS



K14 KEYED PHOTO - K14  
A3.04 SCALE: NTS



K13 KEYED PHOTO - K13  
A3.04 SCALE: NTS



K12 KEYED PHOTO - K12  
A3.04 SCALE: NTS



K11 KEYED PHOTO - K11  
A3.04 SCALE: NTS



K10 KEYED PHOTO - K10  
A3.04 SCALE: NTS



K9 KEYED PHOTO - K9  
A3.04 SCALE: NTS

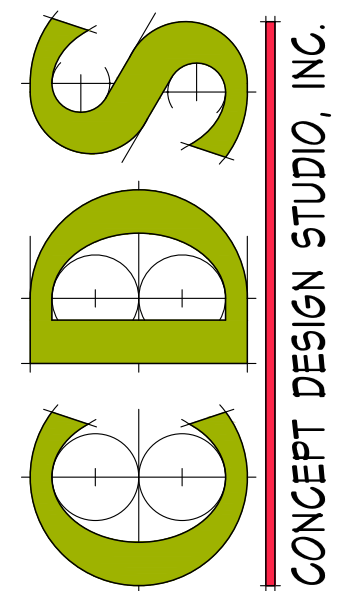


K8 KEYED PHOTO - K8  
A3.04 SCALE: NTS



K7 KEYED PHOTO - K7  
A3.04 SCALE: NTS

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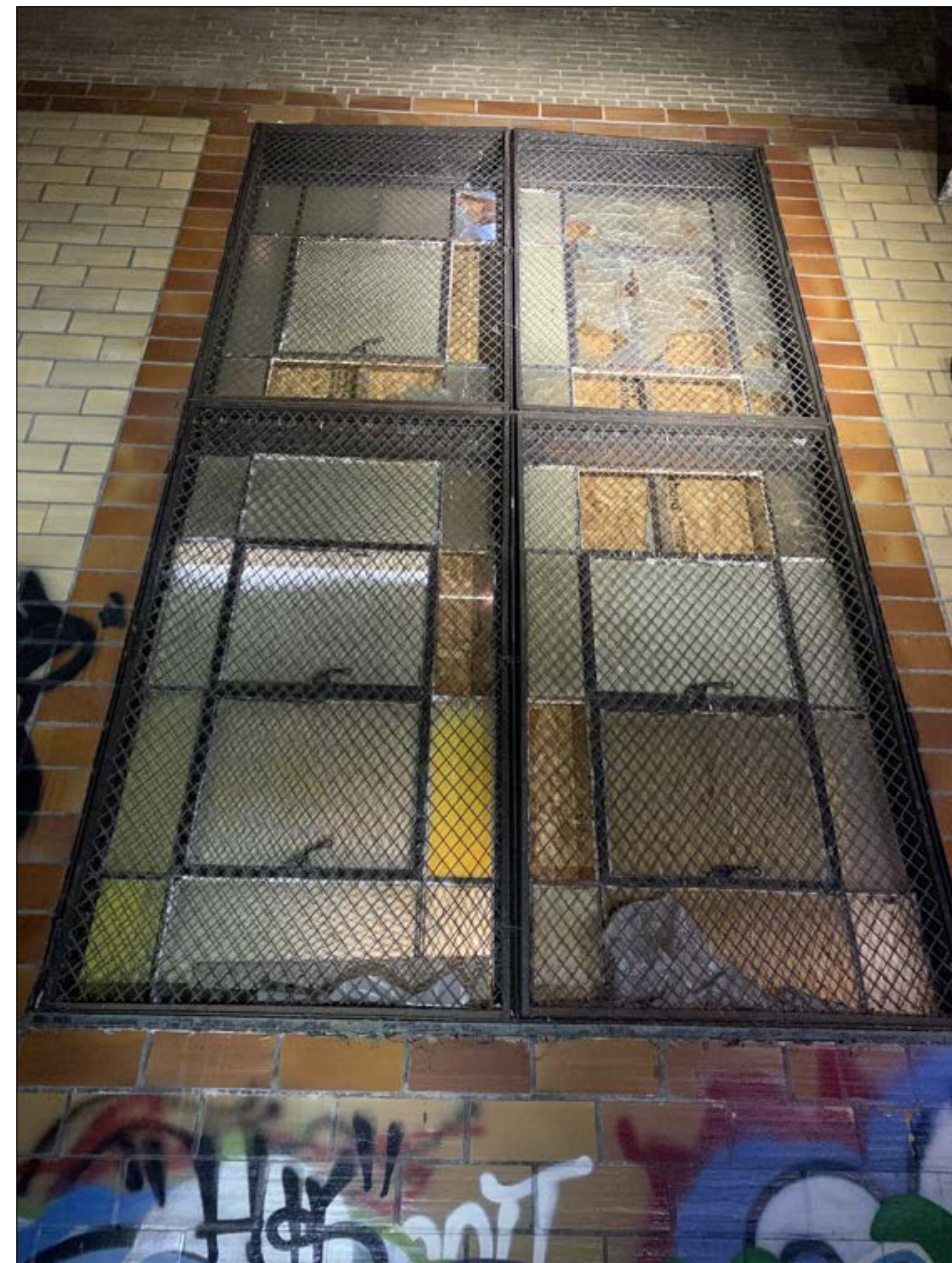
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SHEET TITLE  
KEYED PHOTOS

SHEET NO.  
**A3.04**

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**K19** KEYED PHOTO - K19  
 A3.05 SCALE: NTS



**K18** KEYED PHOTO - K18  
 A3.05 SCALE: NTS

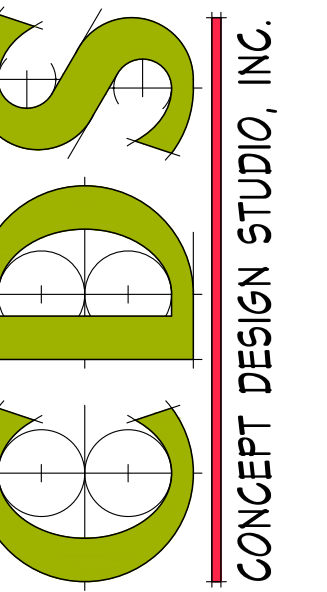


**K20** KEYED PHOTO - K20 <https://detroithistorical.pastperfectonline.com/Photo/F25F0G1E-26C5-4625-925C-011503181500>  
 A3.05 SCALE: NTS



**K18** KEYED PHOTO - K18  
 A3.05 SCALE: NTS

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BUILDING RENOVATIONS FOR  
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 637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT #	1356-23
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SHEET NO.  
**A3.05**

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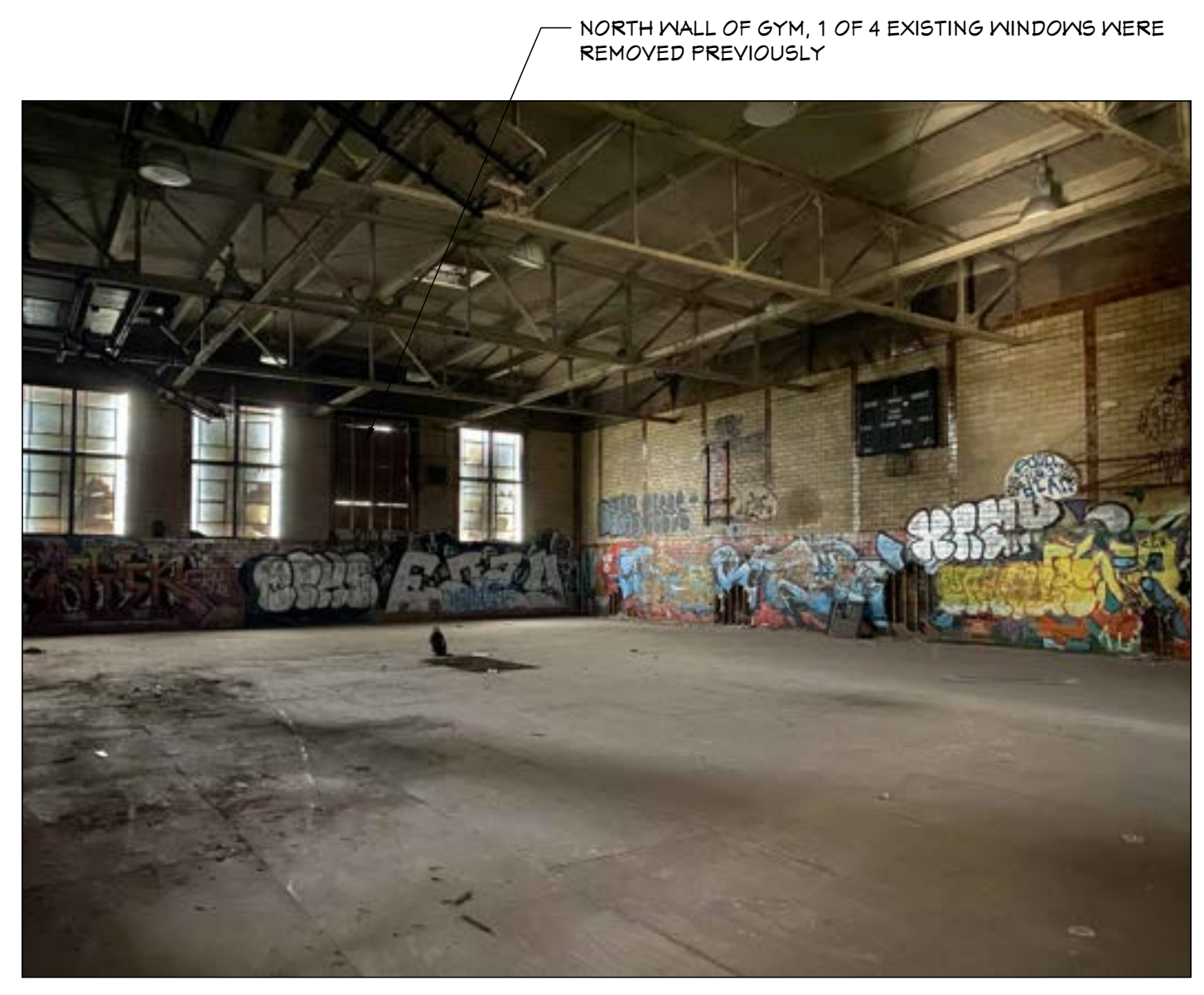
*K. OSEBART*  
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 BREWSTER REC. CENTER

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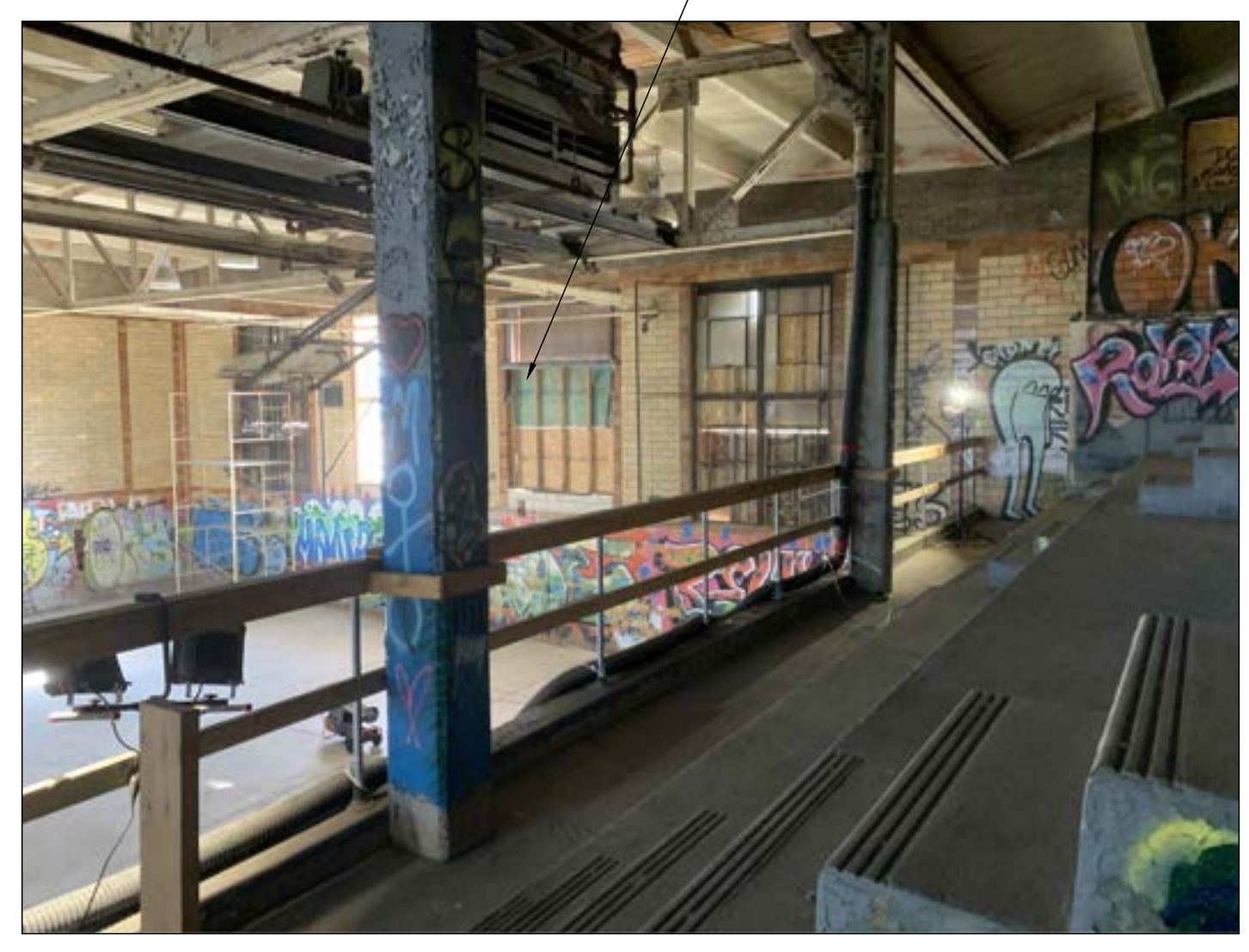
DRAWN BY KO

SHEET TITLE  
 KEYED PHOTOS

SHEET NO.  
**A3.06**



NORTH WALL OF GYM, 1 OF 4 EXISTING WINDOWS WERE REMOVED PREVIOUSLY



SOUTH WALL OF GYM, 2 OF 4 EXISTING WINDOWS WERE REMOVED PREVIOUSLY

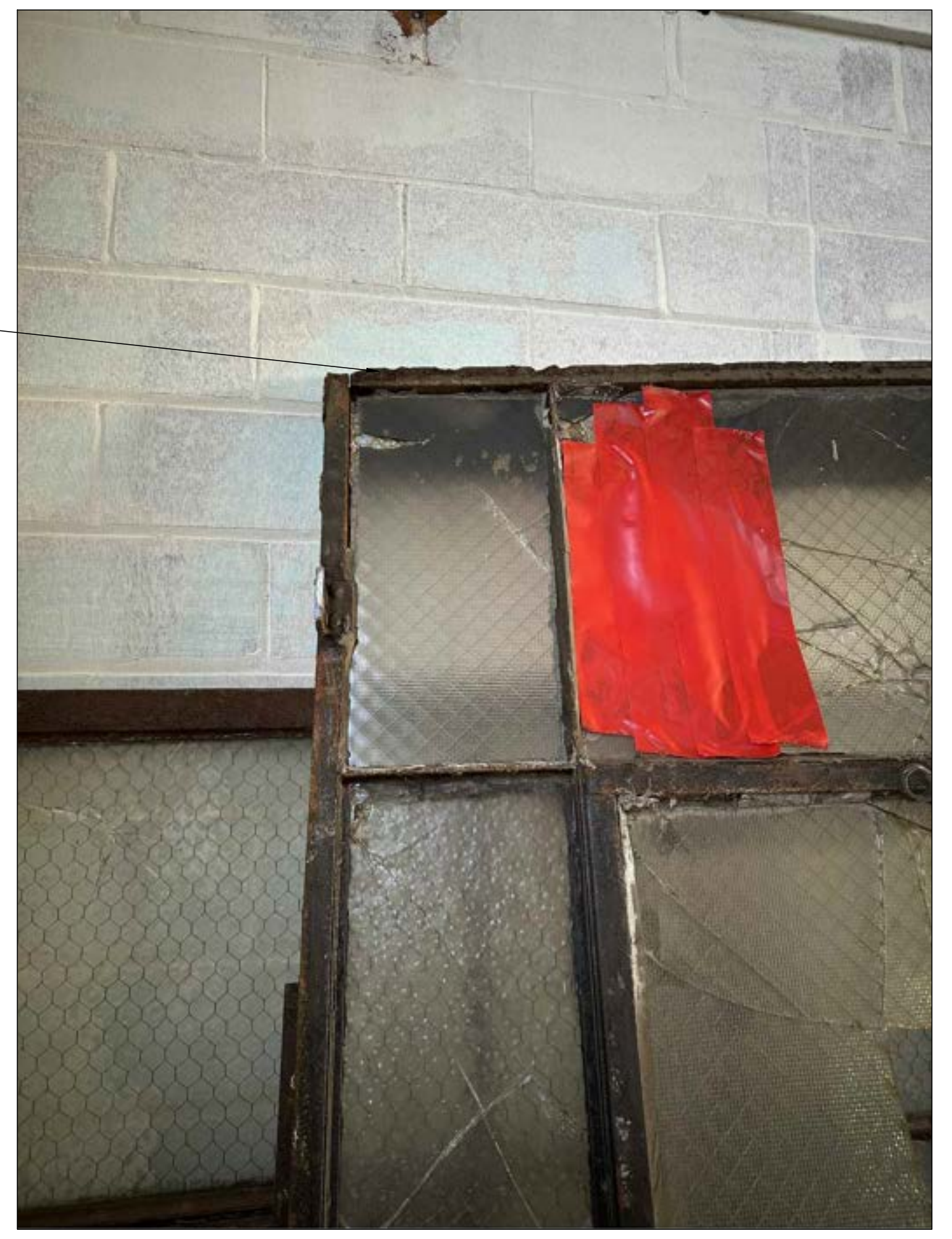
**K25**  
**A3.06** SCALE: NTS  
 KEYED PHOTO - K25



MULTIPLE AREAS OF SECTION LOSS THROUGHOUT FRAME

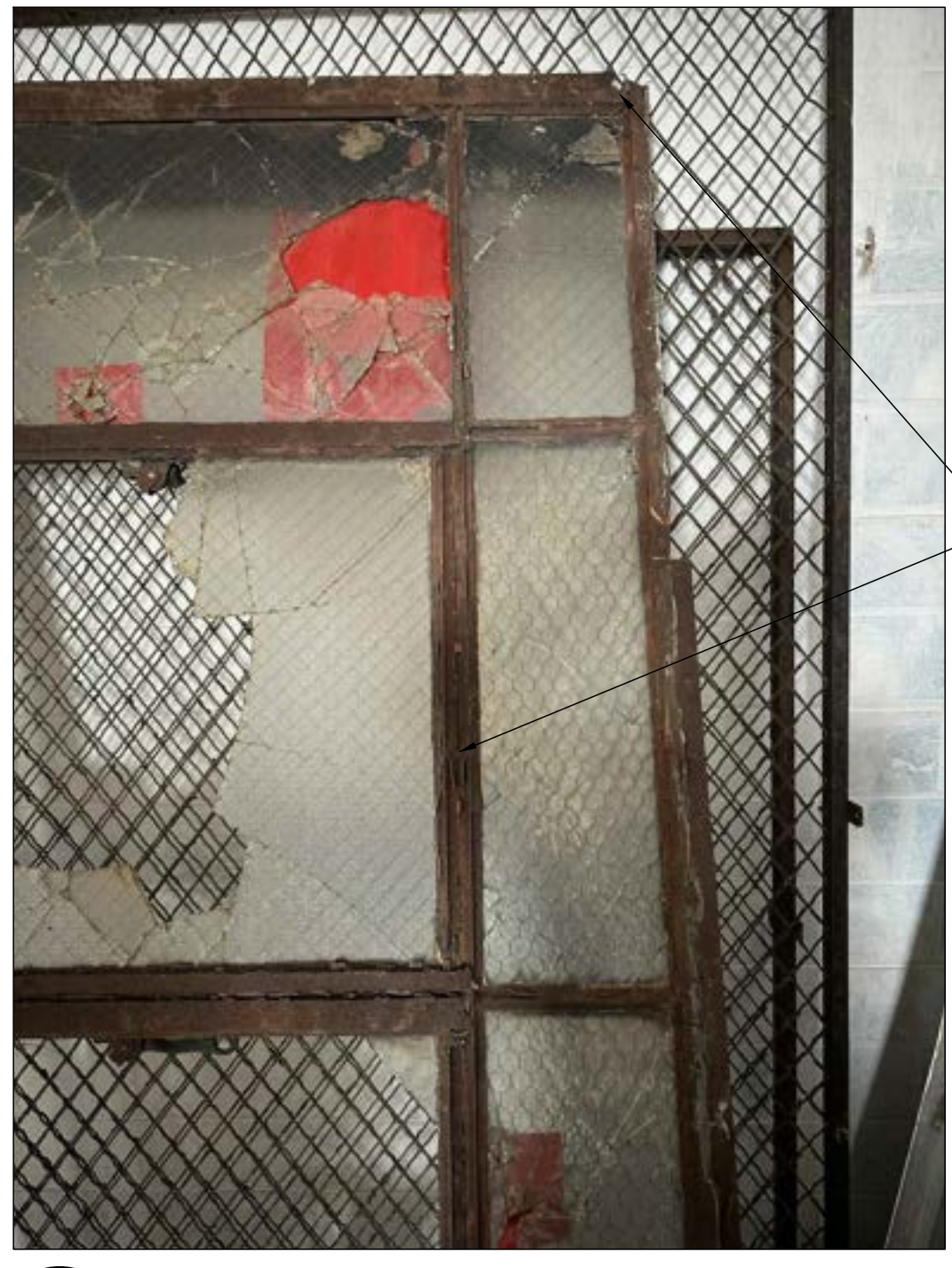
MULTIPLE AREAS OF SECTION LOSS THROUGHOUT FRAME

**K24**  
**A3.06** SCALE: NTS  
 KEYED PHOTO - K24



EXISTING SECTION LOSS THROUGHOUT FRAME

**K23**  
**A3.06** SCALE: NTS  
 KEYED PHOTO - K23



EXISTING SECTION LOSS THROUGHOUT FRAME

**K22**  
**A3.06** SCALE: NTS  
 KEYED PHOTO - K22



EXISTING SECTION LOSS THROUGHOUT FRAME

**K21**  
**A3.06** SCALE: NTS  
 KEYED PHOTO - K21



1916 PHOTO - <https://digitalcollections.detroitpubliclibrary.org/islandora/object/islandora%3A215049>  
SCALE: NT5



1915 PHOTO - <https://digitalcollections.detroitpubliclibrary.org/islandora/object/islandora%3A215049>



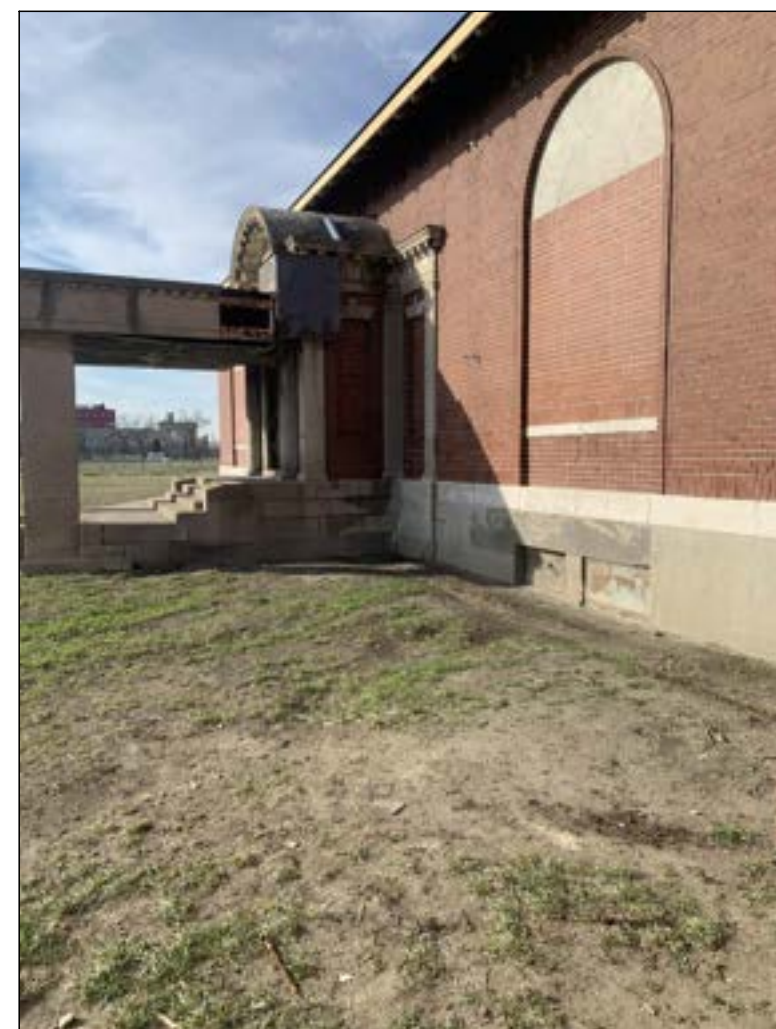
1950's PHOTO - <https://wayne.contentdm.oclc.org/digital/collection/vmc/id/19670>



1938 LIBRARY: <https://digitalcollections.detroitpubliclibrary.org/islandora/object/islandora%3A145174>

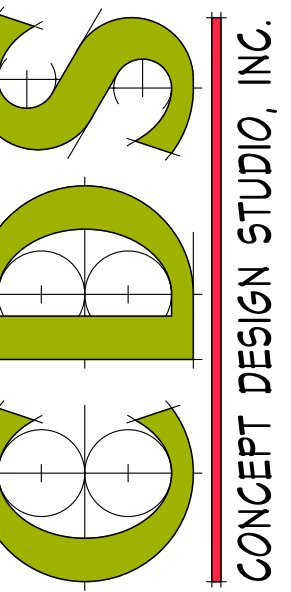


1924 LIBRARY: <https://digitalcollections.detroitpubliclibrary.org/islandora/object/islandora%3A261136>



EXISTING CANOPY (PROPOSED TO BE REMOVED) PHOTOS

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BUILDING RENOVATIONS FOR  
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637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

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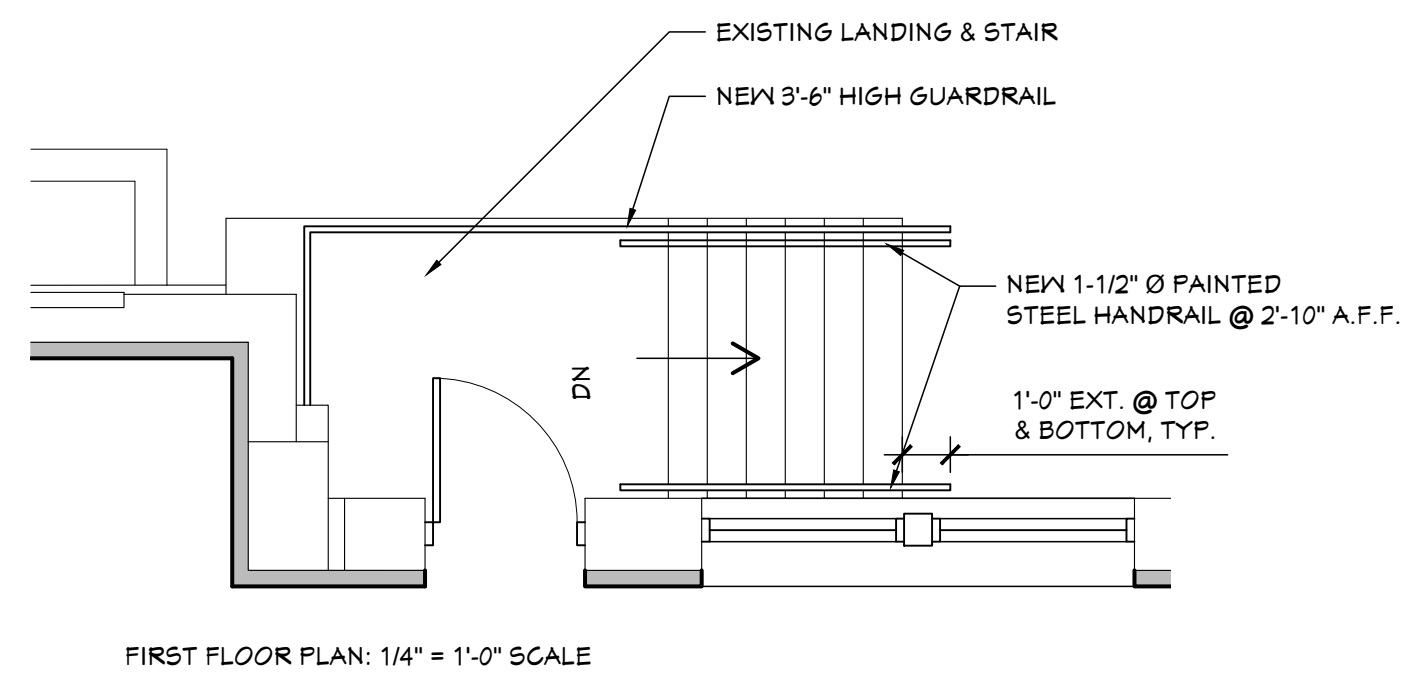
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CANOPY  
REMOVAL  
DOCUMENTATION

SHEET NO.

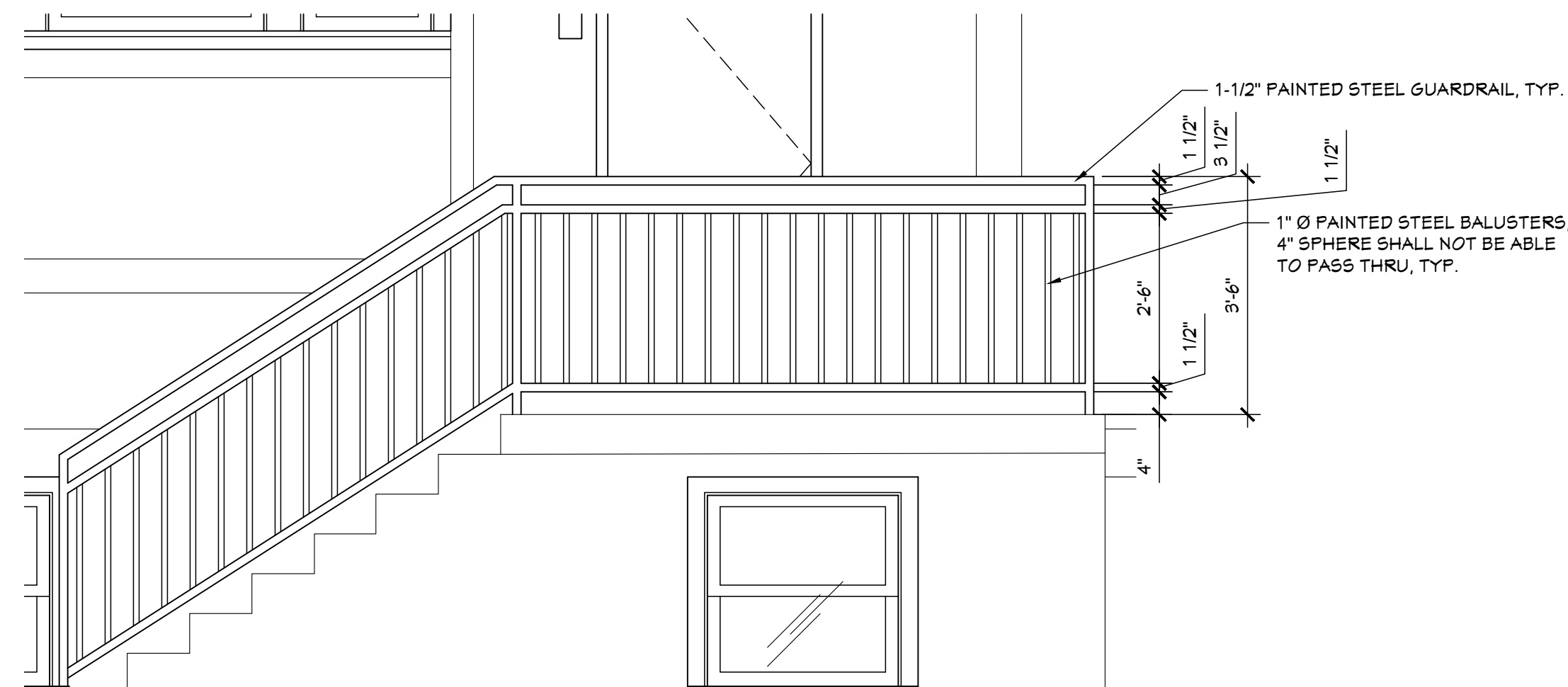
**A3.07**



EXISTING RAIL IS CUT AND REMOVED  
EXISTING PHOTO



FIRST FLOOR PLAN: 1/4" = 1'-0" SCALE

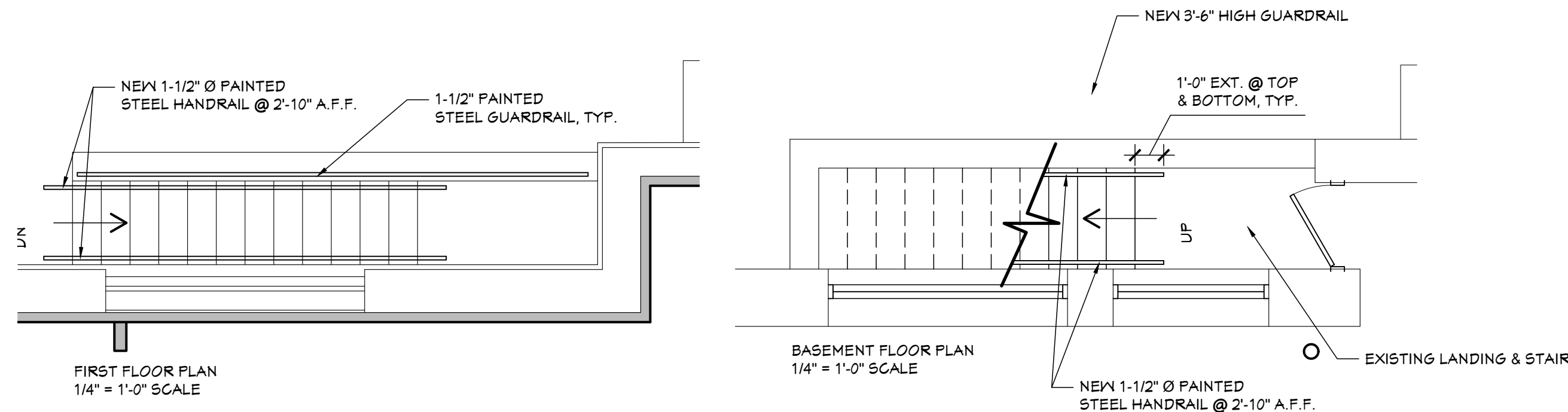


ELEVATION: 1/2" = 1'-0" SCALE

01  
A3.08  
EXTERIOR STAIR 1-9

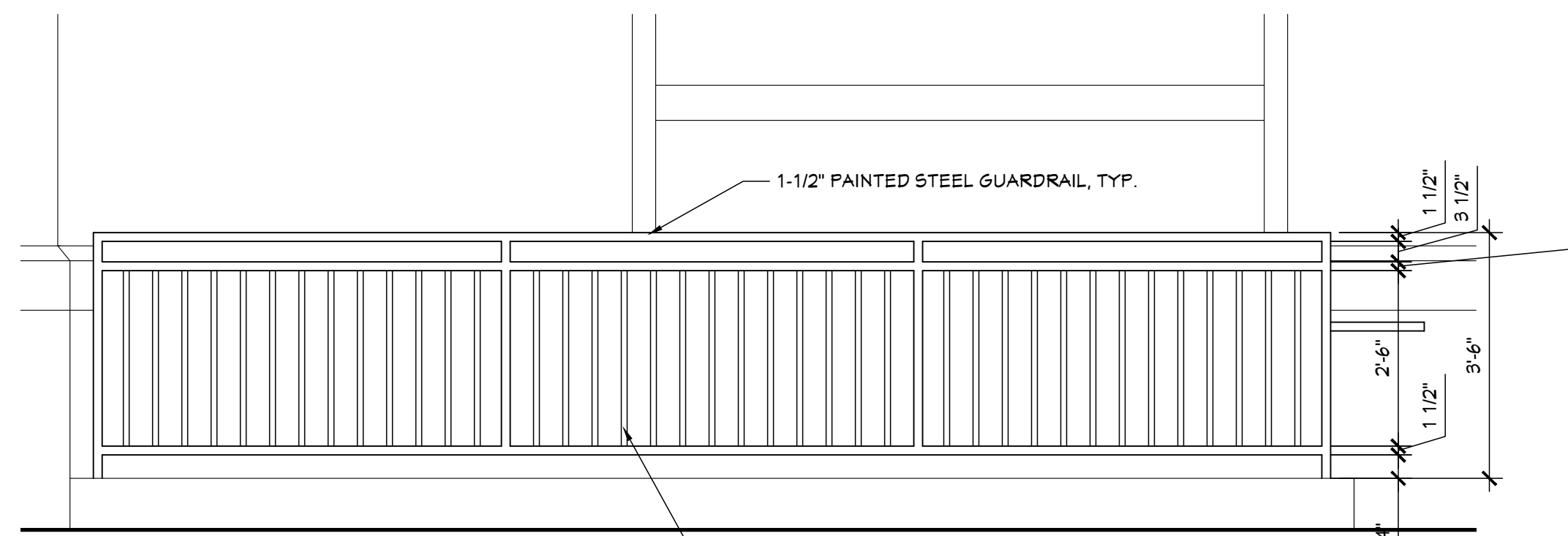


EXISTING PHOTO



FIRST FLOOR PLAN  
1/4" = 1'-0" SCALE

BASEMENT FLOOR PLAN  
1/4" = 1'-0" SCALE



ELEVATION: 1/2" = 1'-0" SCALE

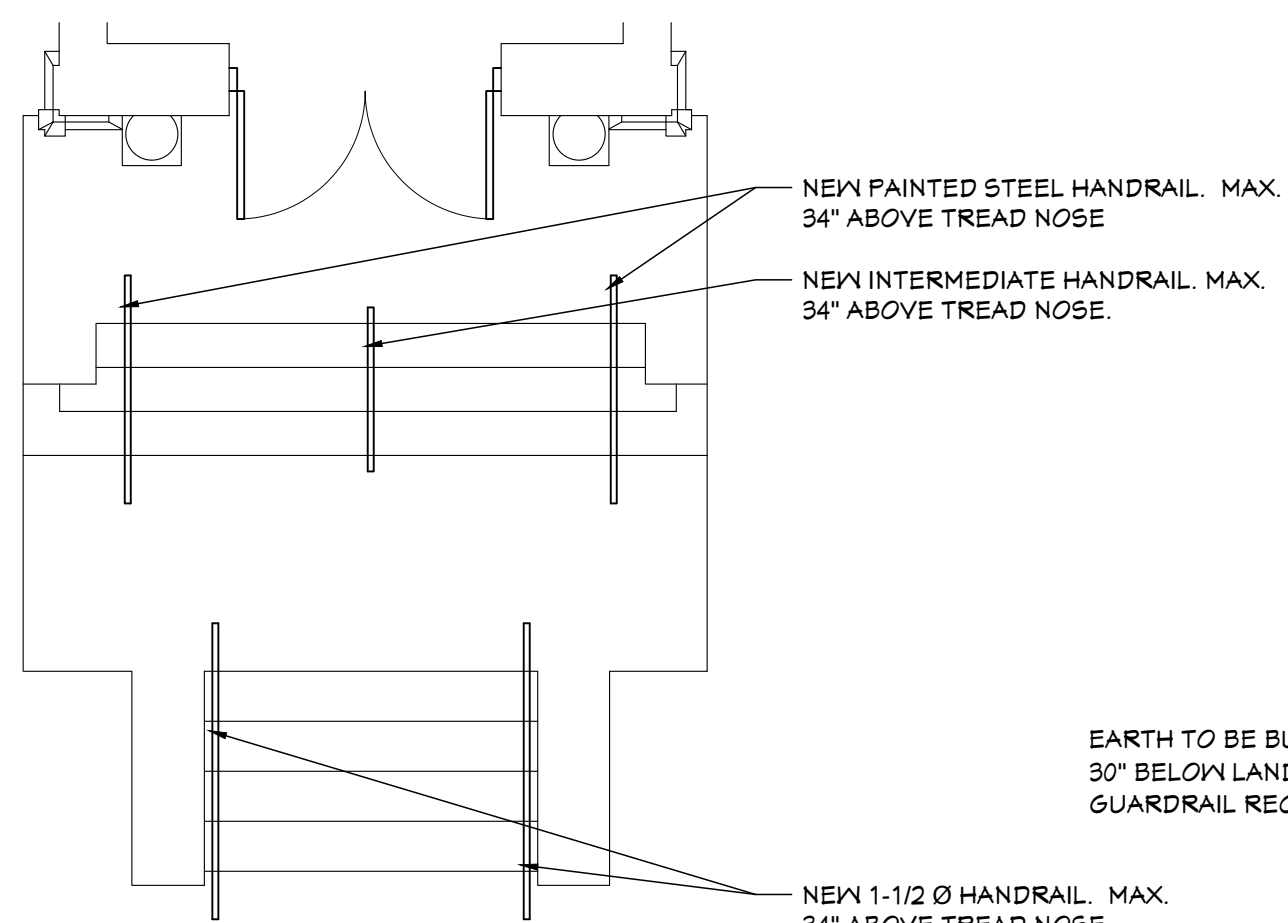
02  
A3.08  
EXTERIOR STAIR 1-10



EXISTING PHOTO

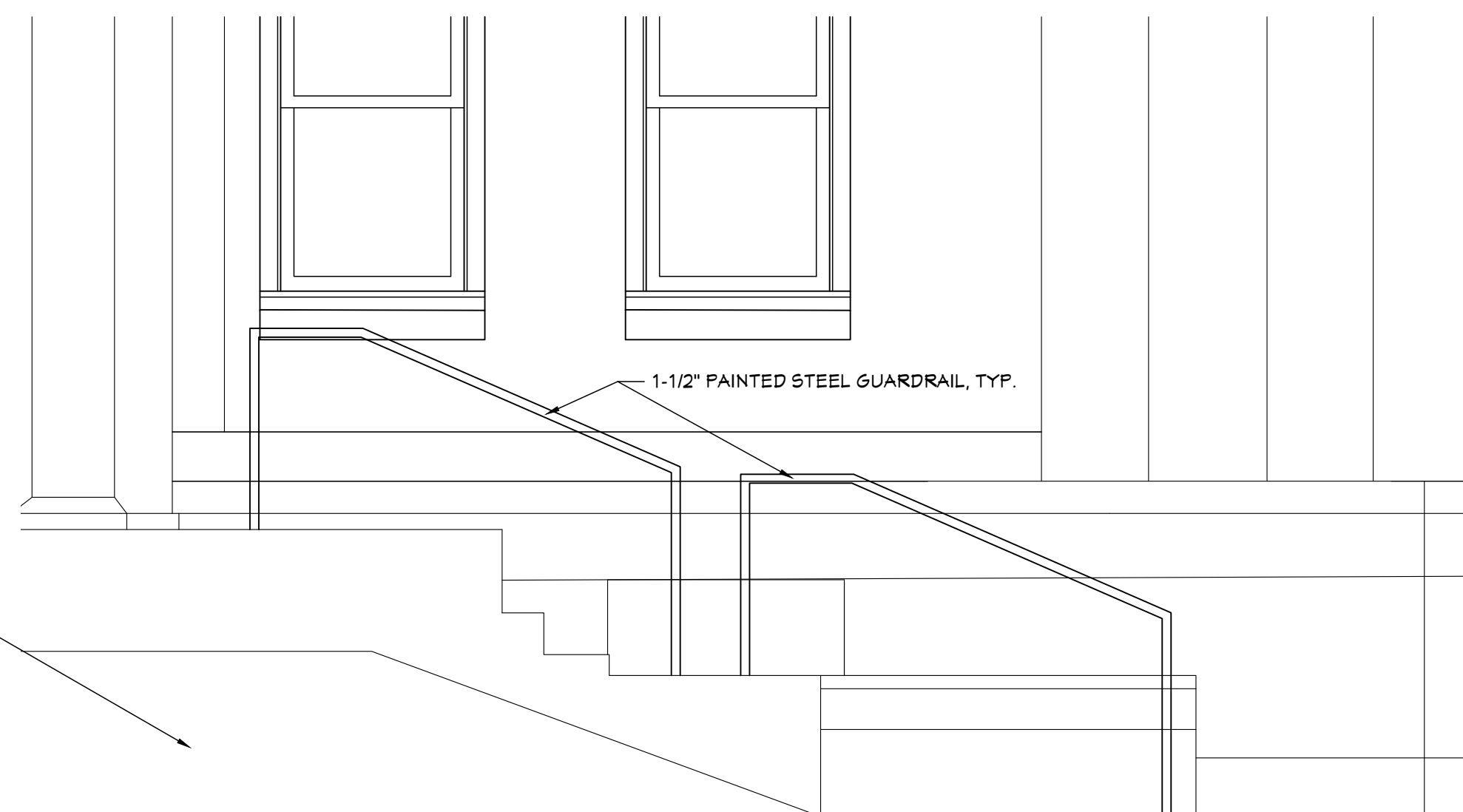


HISTORIC PHOTO  
1915 PHOTO - <https://digitalcollections.detroitpubliclibrary.org/islandora/object/islandora%3A215049>



FIRST FLOOR PLAN  
1/4" = 1'-0" SCALE

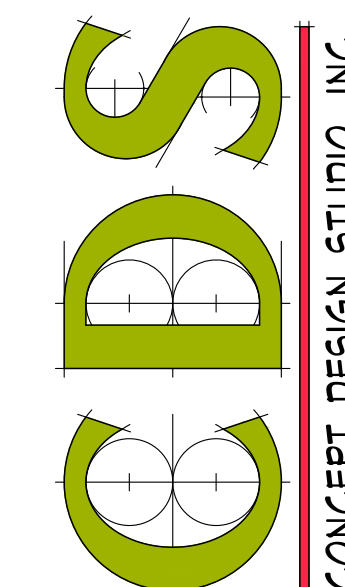
EARTH TO BE BUILT UP TO MIN. 30" BELOW LANDINGS. (NO GUARDRAIL REQ'D)



ELEVATION: 1/2" = 1'-0" SCALE

02  
A3.08  
EXTERIOR STAIR 1-11

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BUILDING RENOVATIONS FOR  
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637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

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SHEET TITLE  
EXTERIOR  
RAILING  
ELEVATIONS &  
DETAILS

SHEET NO.

A3.08

3/5/2024 12:46 PM Z:\PROJ\1356-23 MHT Housing - Brewster Wheeler Recreation Center\3-Drawings\1356-23\A3.01.dwg

PROJECT #	1356-23
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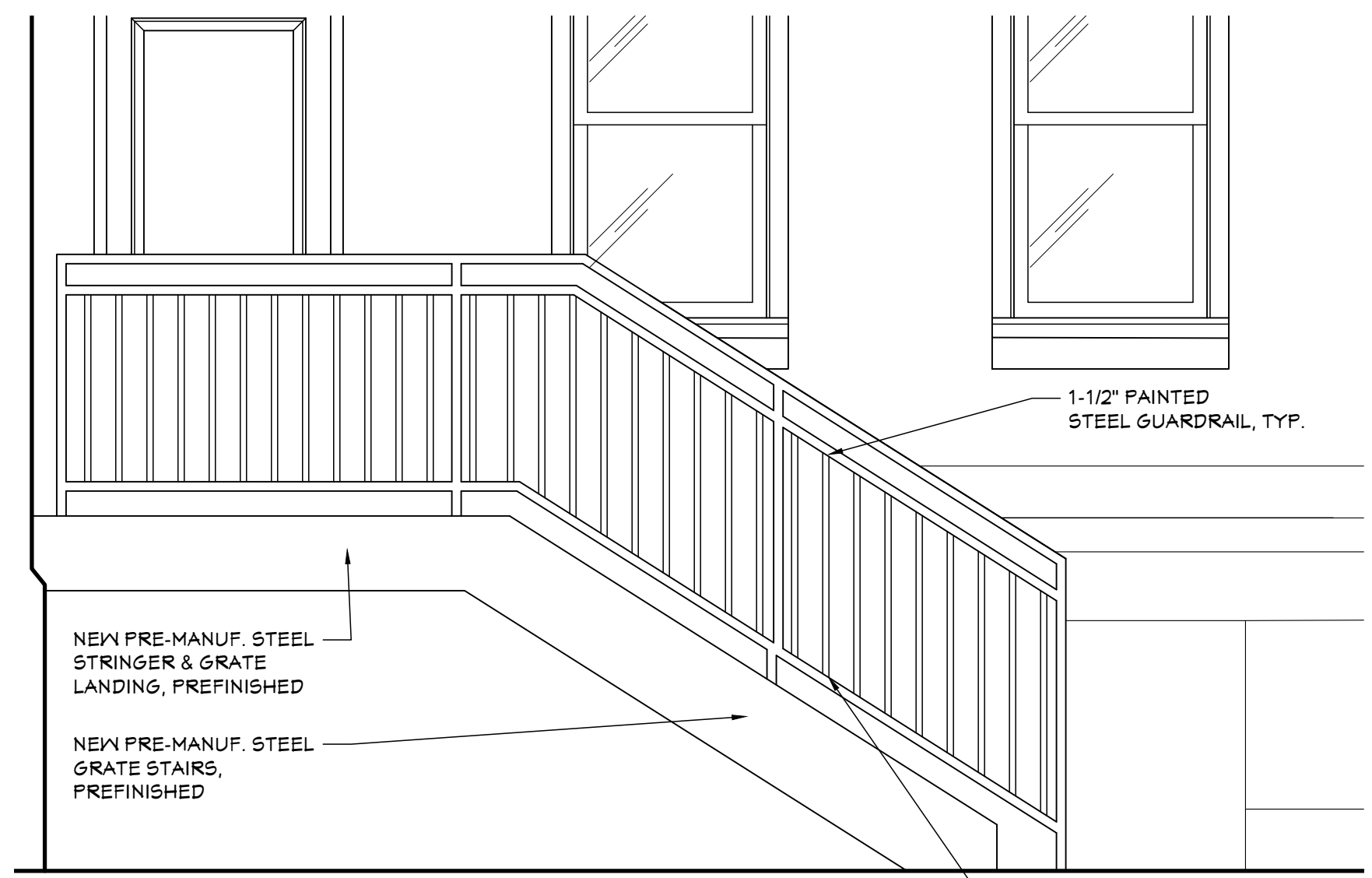
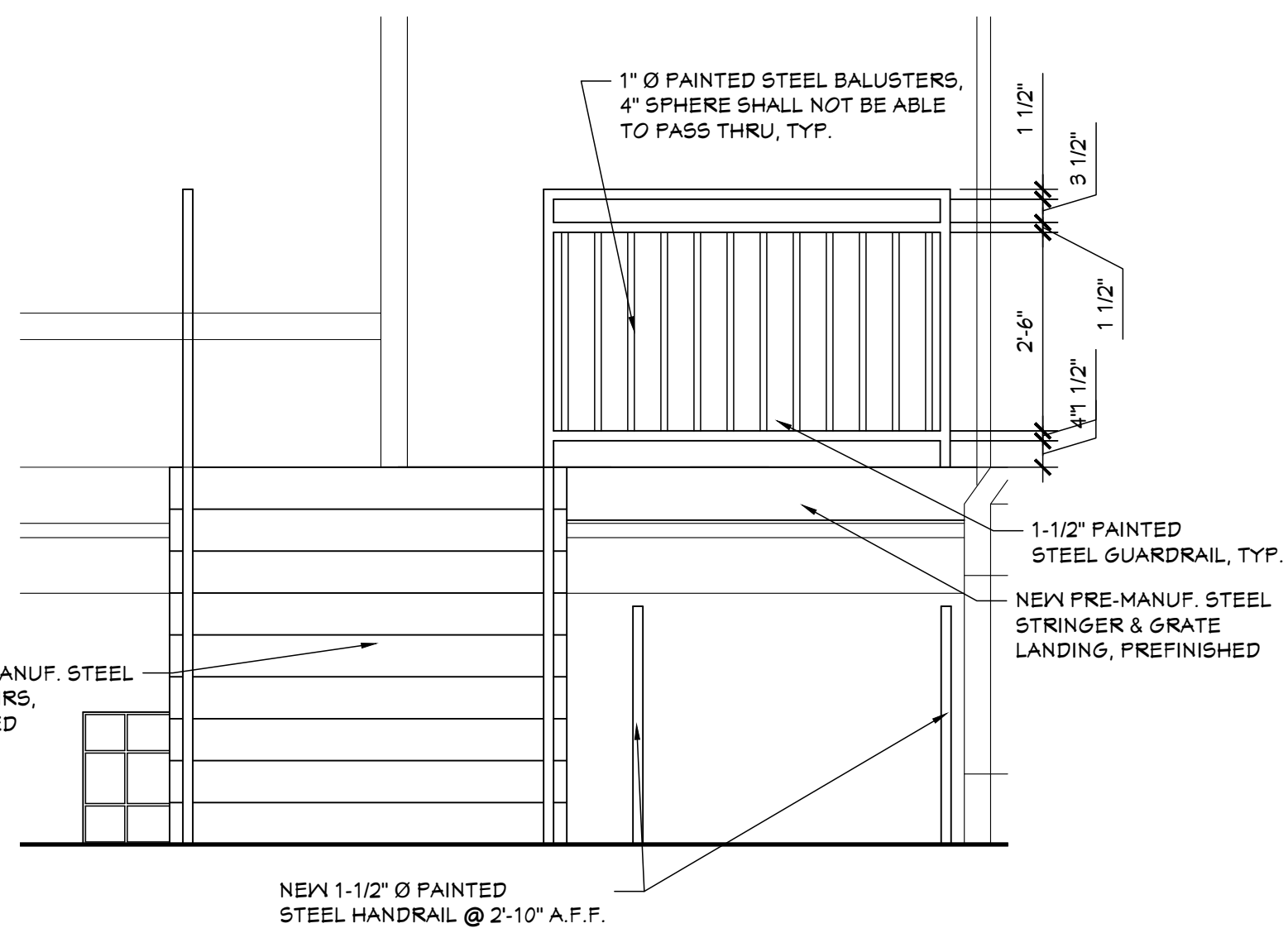
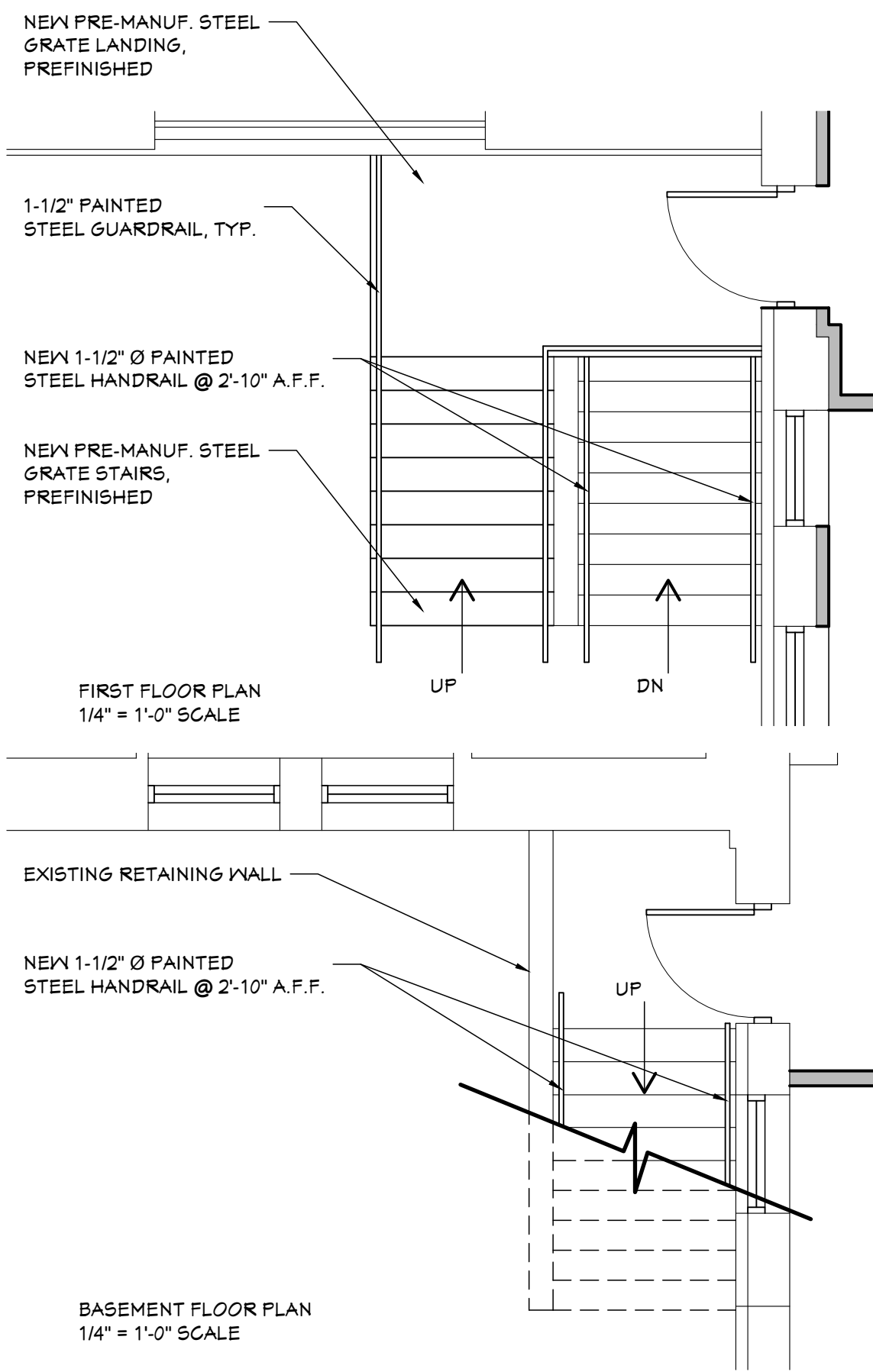
SHEET TITLE  
**EXTERIOR  
 RAILING  
 ELEVATIONS &  
 DETAILS**

SHEET NO.

**A3.09**



EXISTING PHOTO



01  
 A3.09  
**EXTERIOR STAIR 1-12**

BUILDING RENOVATIONS FOR  
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PROJECT #	1356-23
ISSUANCES	
FOR PERMITS	12.24.2023
BULLETIN #1	02.08.2024
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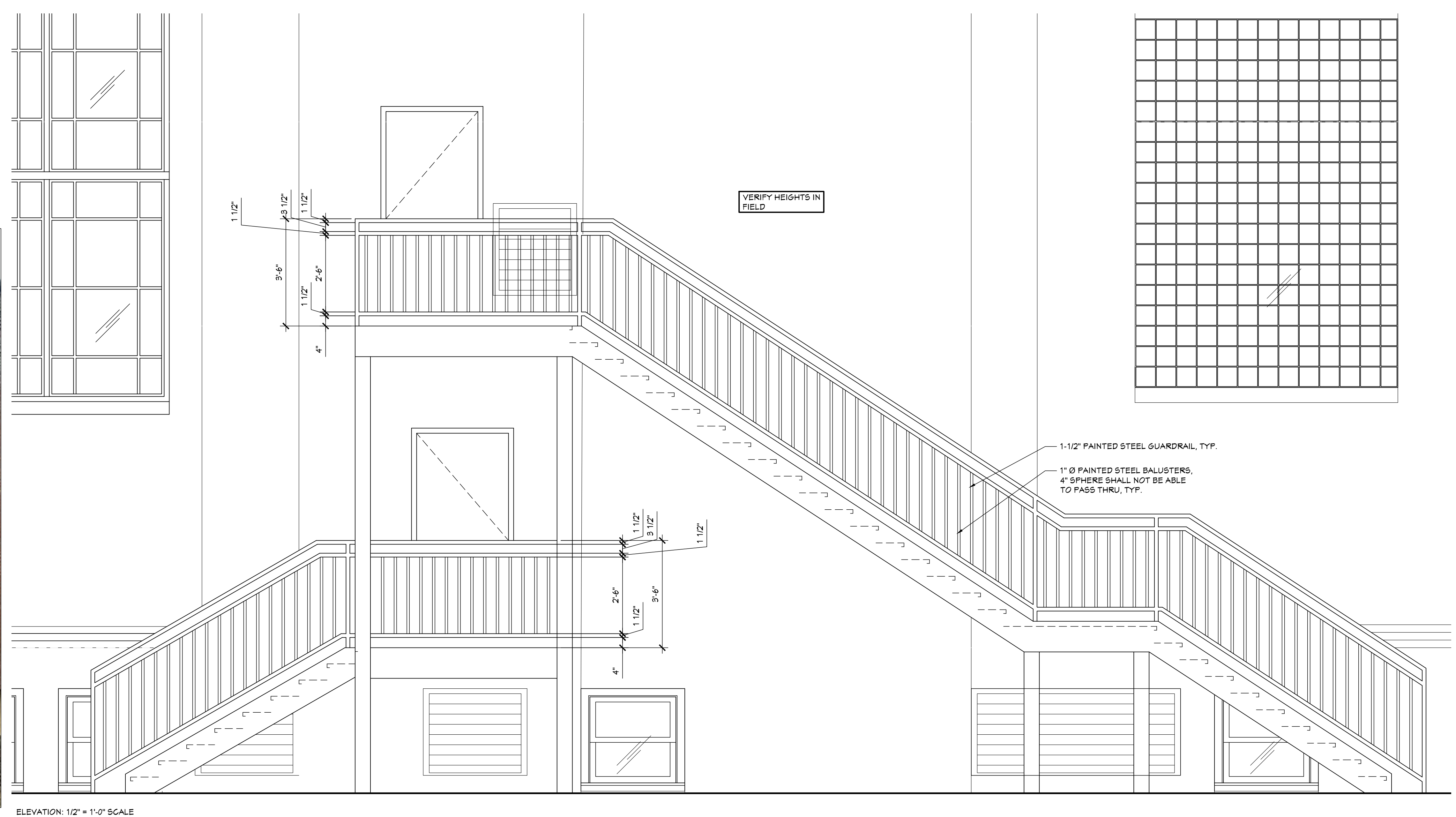
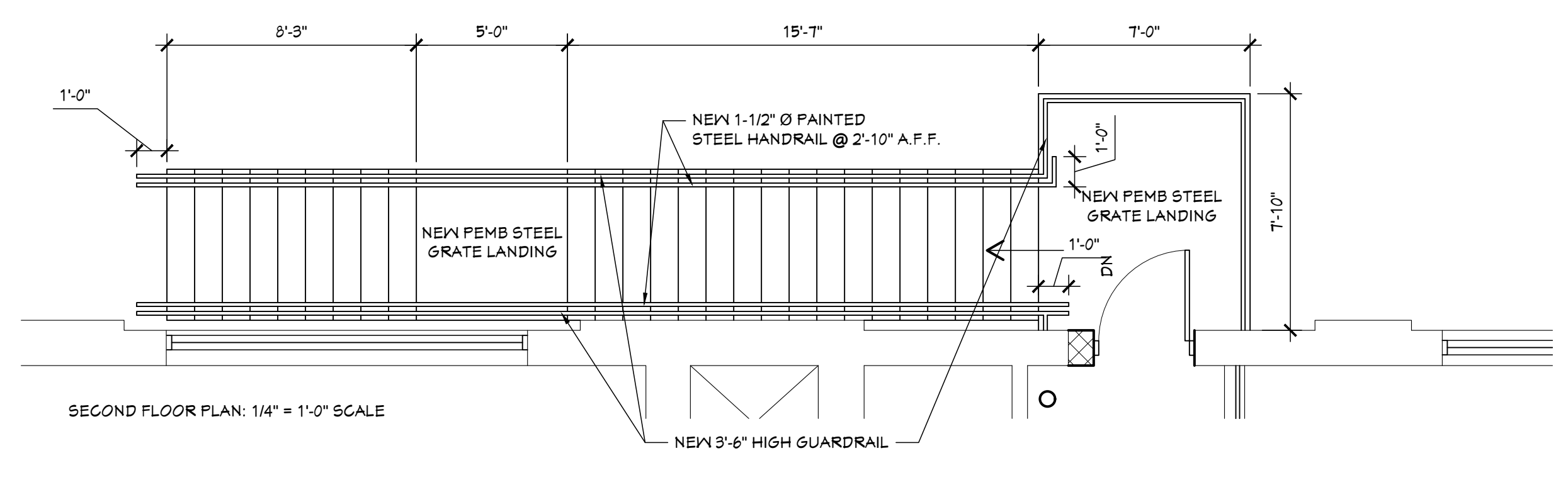
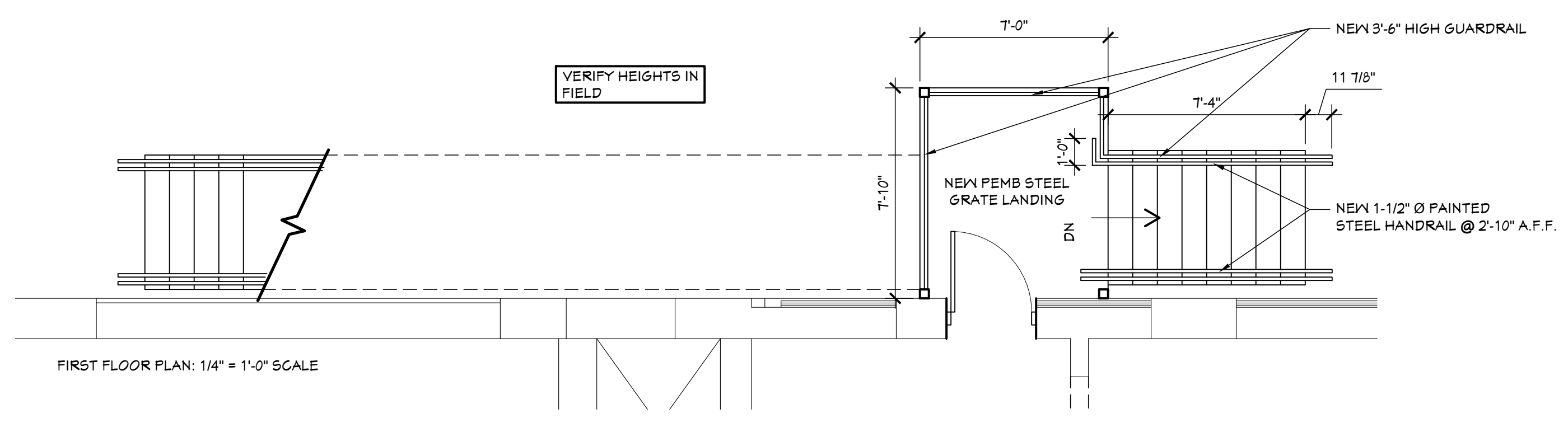
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SHEET TITLE  
**EXTERIOR  
 ELEVATIONS &  
 DETAILS**

SHEET NO.  
**A3.10**



01 EXTERIOR STAIR 1-7  
 A3.10

BUILDING RENOVATIONS FOR  
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PROJECT # 1356-23

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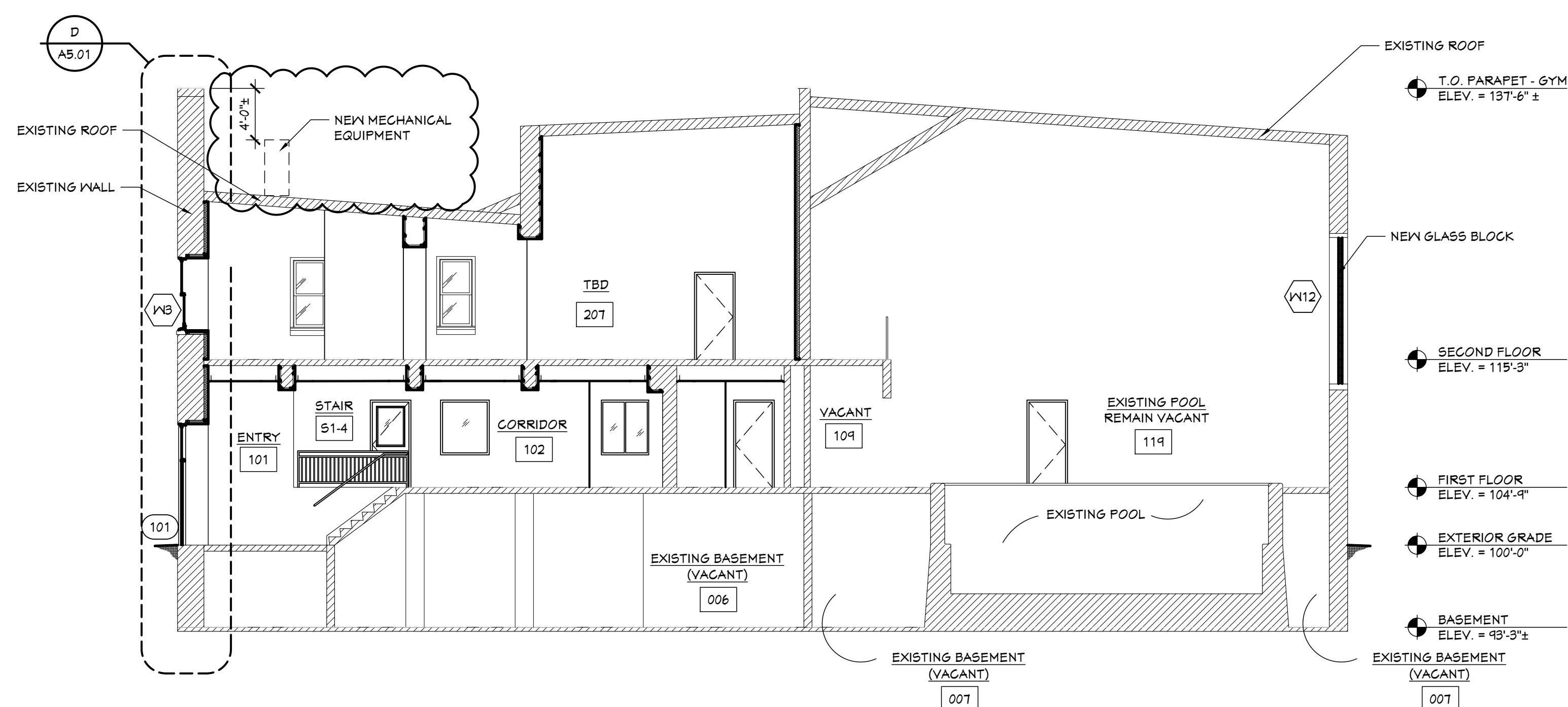
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SHEET TITLE  
**BUILDING  
 SECTIONS**

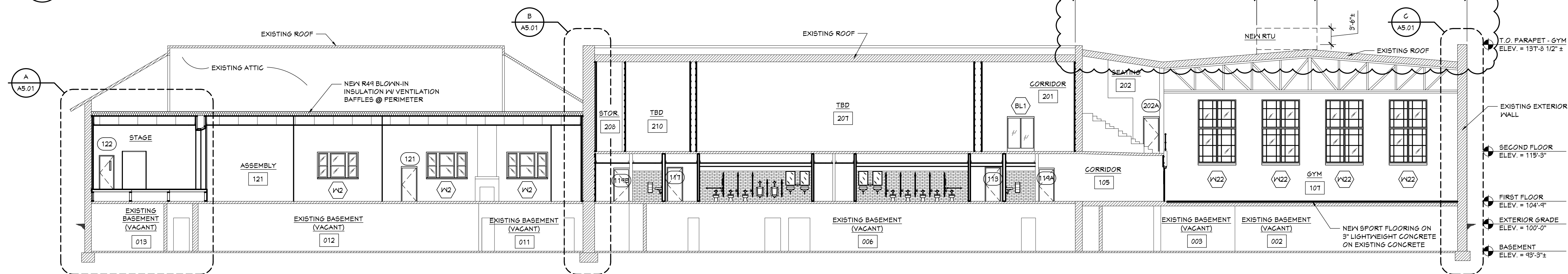
SHEET NO.

**A4.01**



**YY BUILDING SECTION**

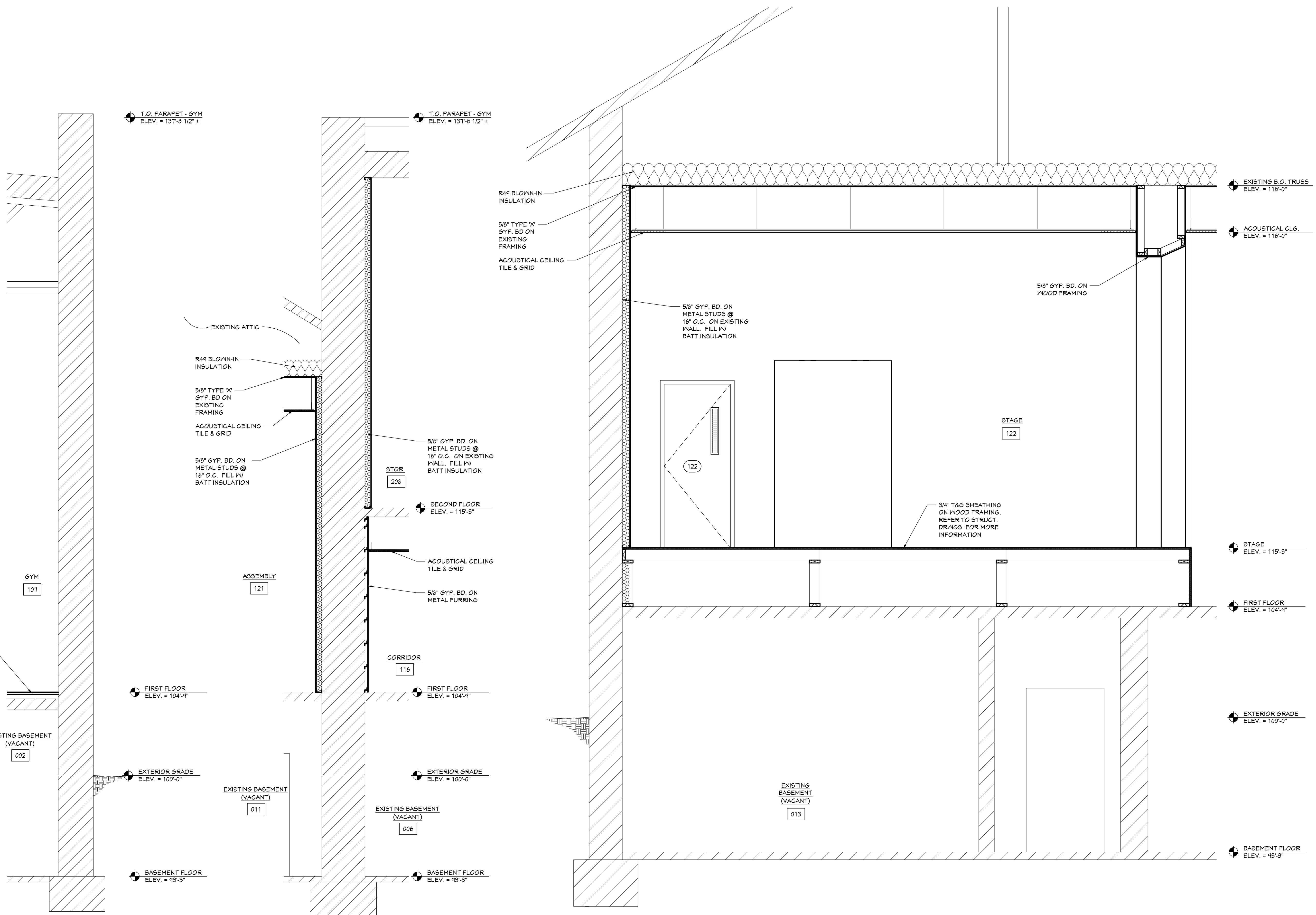
A4.01 SCALE: 1/8" = 1'-0"



**ZZ BUILDING SECTION**

A4.01 SCALE: 3/32" = 1'-0"



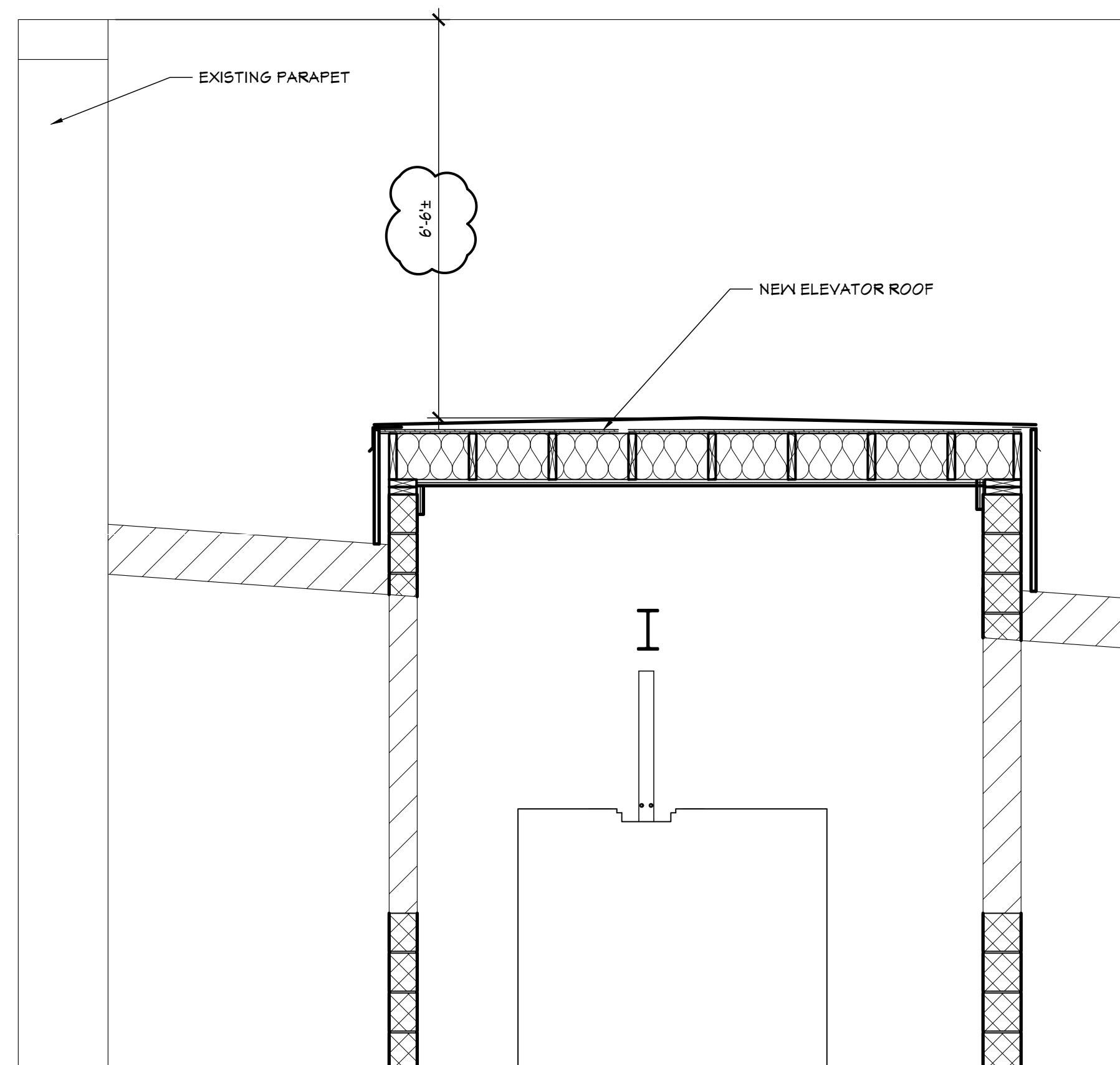


**C WALL SECTION**  
 A5.01 SCALE: 3/8" = 1'-0"

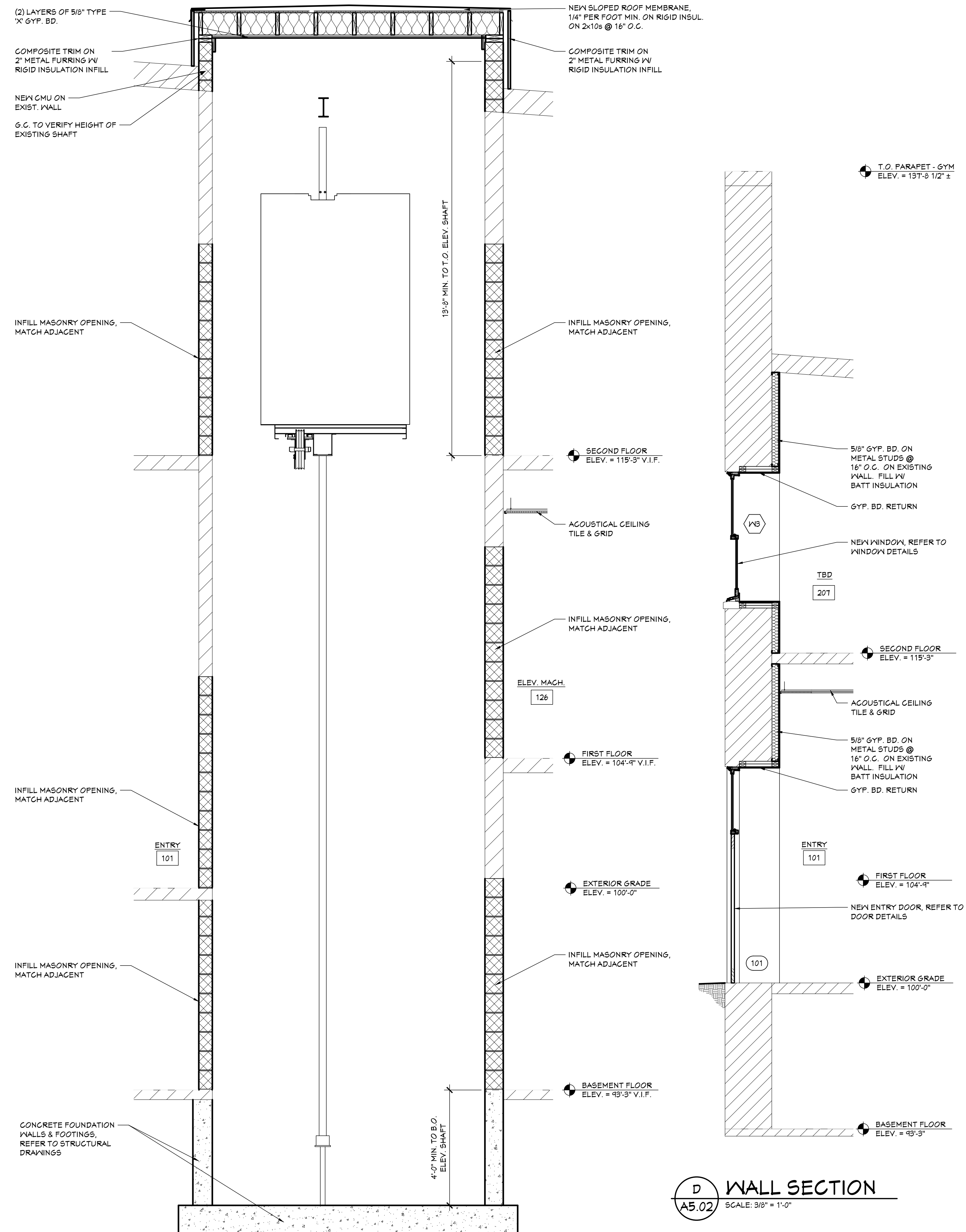
**B WALL SECTION**  
 A5.01 SCALE: 3/8" = 1'-0"

**A WALL SECTION**  
 A5.01 SCALE: 1/2" = 1'-0"

3/5/2024 12:26 PM Z:\PROJ\1356-23 MHT Housing - Brewster Wheeler Recreation Center\3-Drawings\1356-23\A4.01.dwg



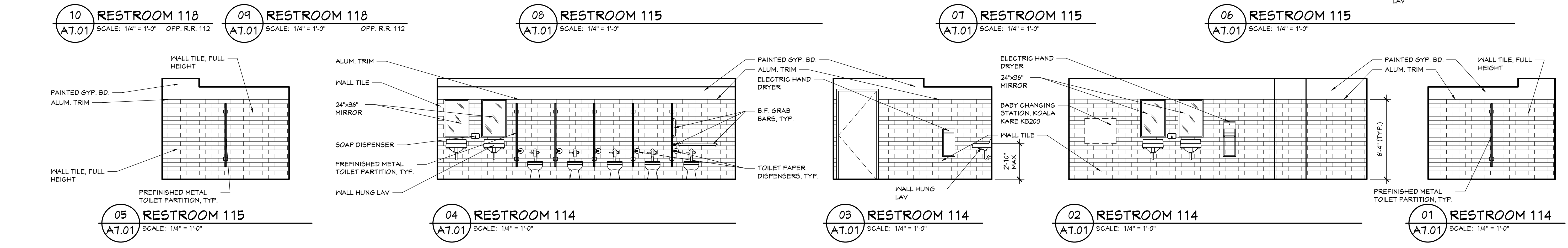
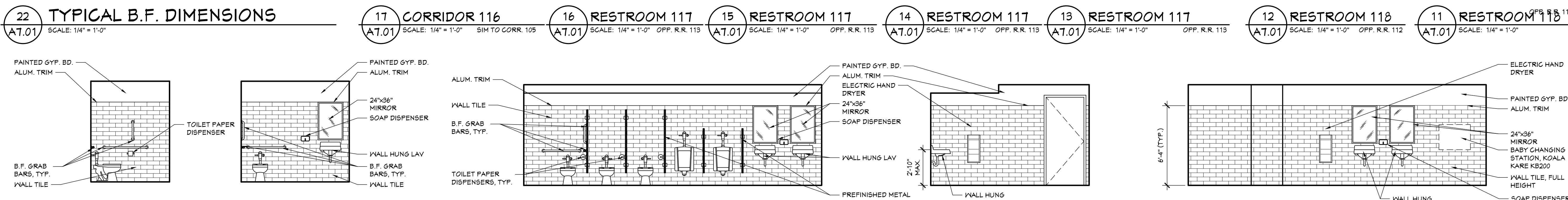
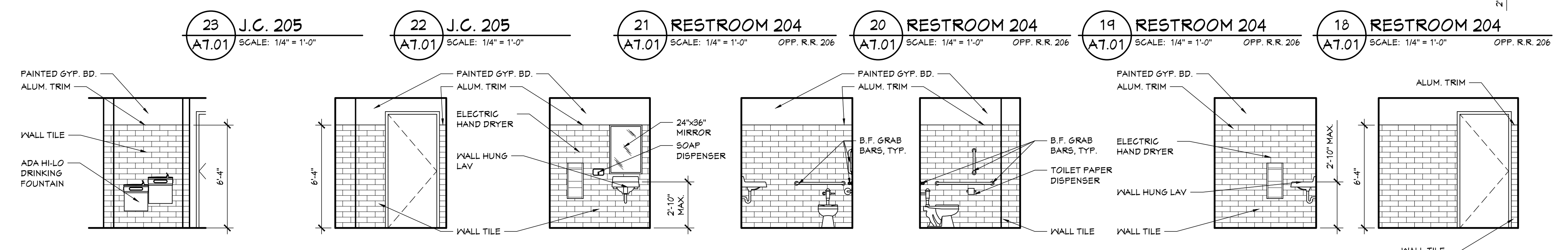
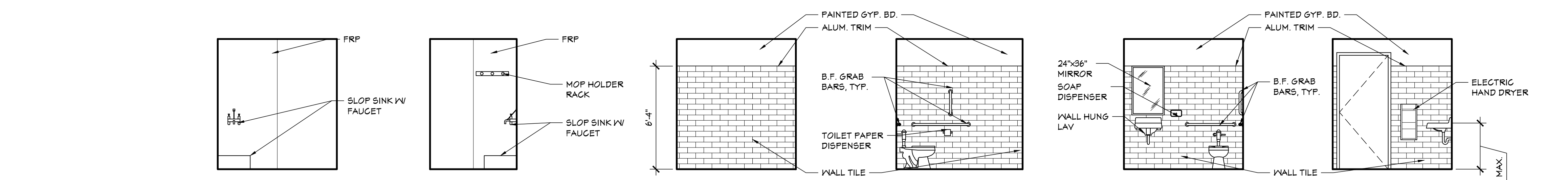
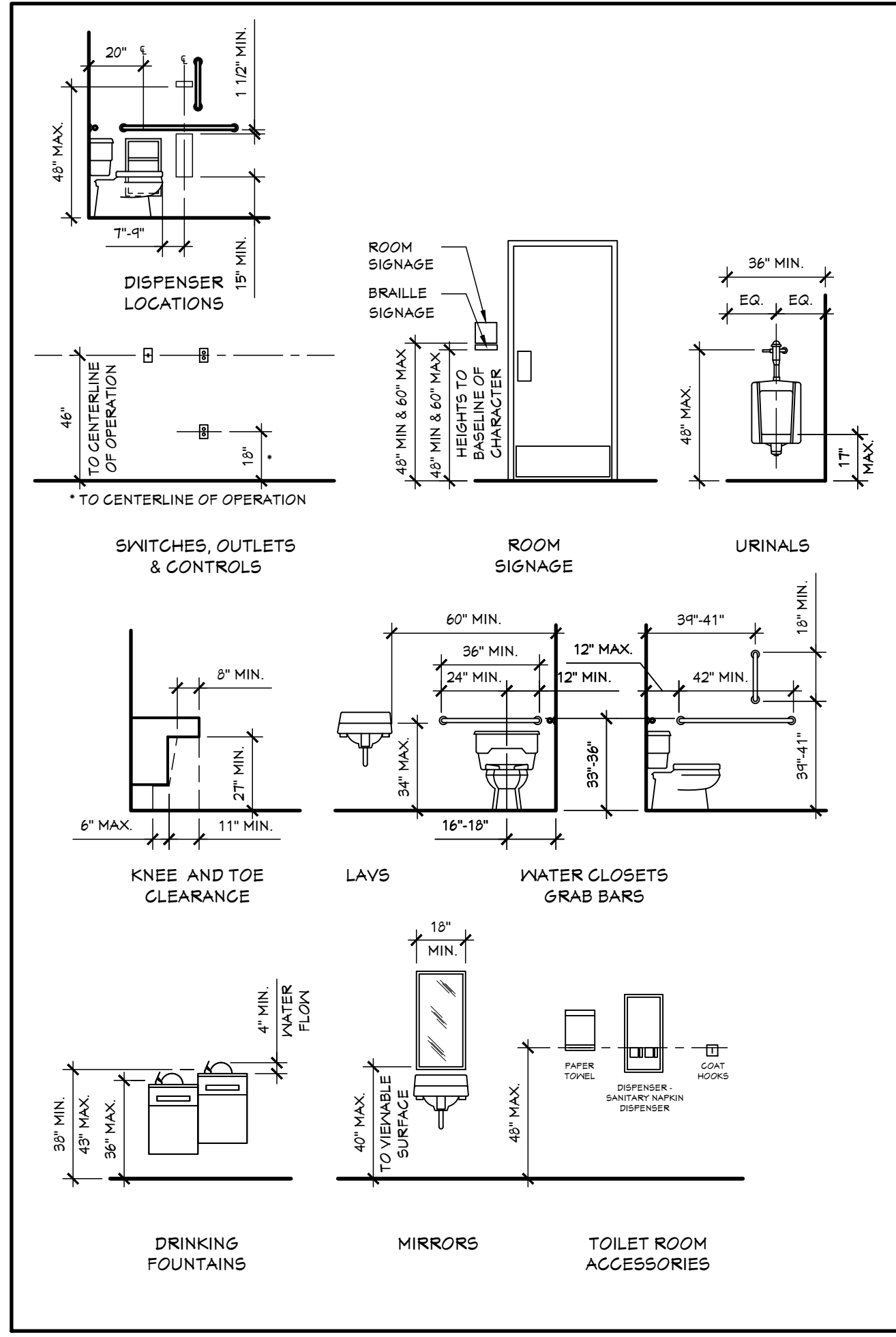
**F**  
**A5.02** ELEVATOR / EXISTING PARAPET DETAIL  
 SCALE: 1/2" = 1'-0"



**E**  
**A5.02** ELEVATOR SECTION  
 SCALE: 1/2" = 1'-0"

**D**  
**A5.02** WALL SECTION  
 SCALE: 3/8" = 1'-0"

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PROJECT #	1356-23
ISSUANCES	
FOR PERMITS	12.24.2023
BULLETIN #1	02.08.2024
BULLETIN #2	03.05.2024

*Kyle Oberhart*  
 01.3.2024  
 BREWSTER REC CENTER

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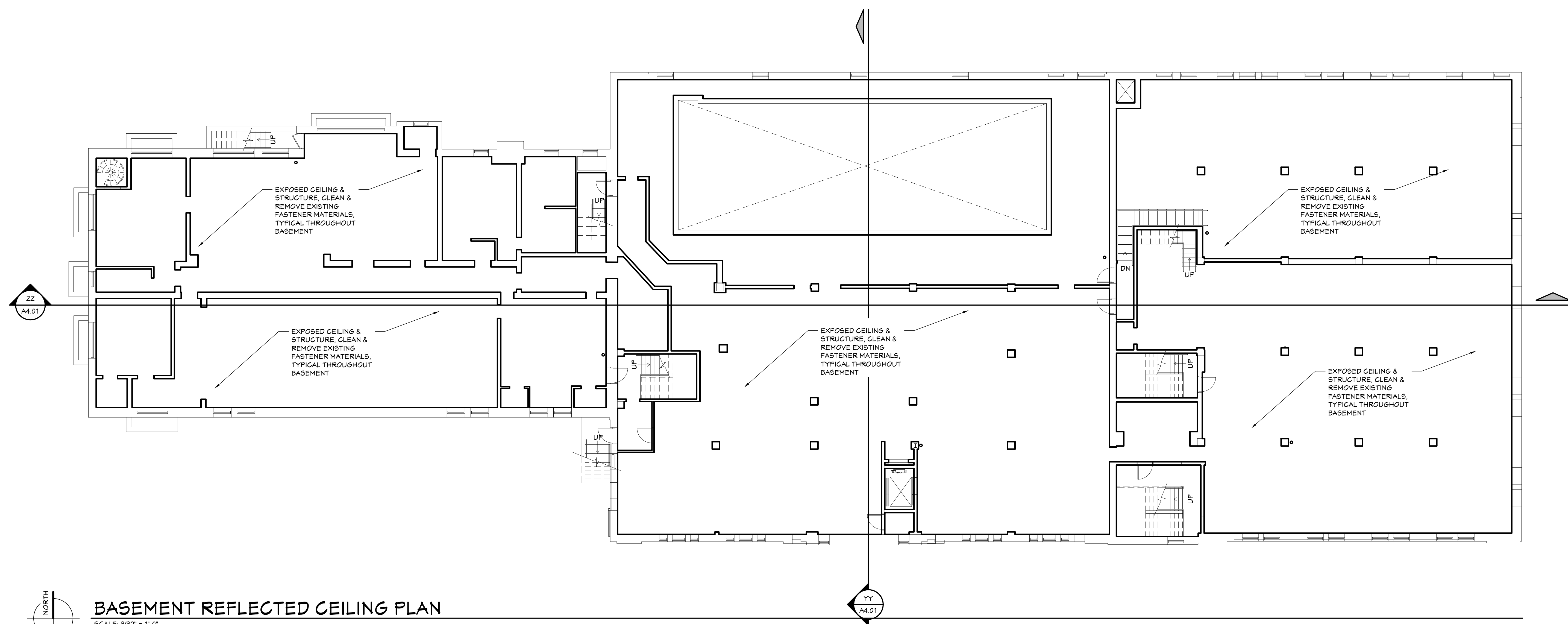
SHEET TITLE  
**BASEMENT REFLECTED CEILING PLAN**

SHEET NO.

**A8.00**

CEILING LEGEND	
○	LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS FOR TYPE
□	LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS FOR TYPE
⊗	WALL MOUNTED EXIT SIGN - SEE ELECTRICAL DRAWINGS
⊞	SUPPLY GRILLE / DIFFUSER
⊟	RETURN GRILLE / DIFFUSER
■	SUSPENDED GYP. BOARD BULKHEAD AND/OR CEILING
⊞	2 X 2 LAY-IN CEILING GRID W/ ACOUSTICAL PANELS

GENERAL CEILING NOTES	
1.	CONTRACTOR SHALL FOLLOW CEILING GRID PATTERN ESTABLISHED ON THE REFLECTED CEILING PLAN. ANY VARIATIONS SHALL BE APPROVED BY THE ARCHITECT.
2.	WIRE CEILINGS FROM THE STRUCTURE ABOVE AND WIRE FOR ADDITIONAL LOAD AT LIGHTS AND CEILING DIFFUSERS.
3.	PROVIDE AN ADDITIONAL CROSS TEE AT EACH SLOT DIFFUSER.
4.	SEE FINISH SCHEDULE FOR CEILING FINISHES AND HEIGHTS, U.N.O.
5.	SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR FIXTURE LAYOUT AND SCHEDULES.

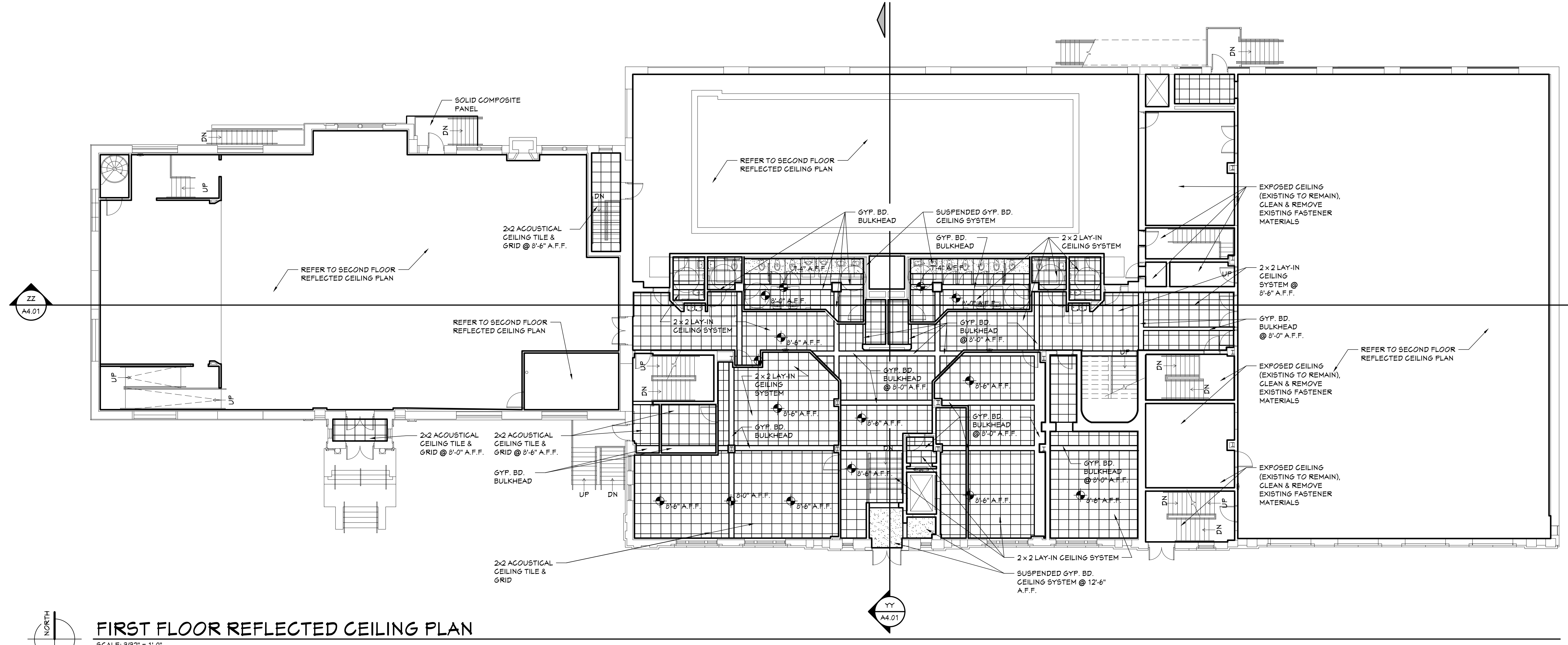


**BASEMENT REFLECTED CEILING PLAN**  
 SCALE: 3/32" = 1'-0"

*Kyle Oberhart*  
 01.3.2024  
 Brewster Rec Center

CEILING LEGEND	
○	LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS FOR TYPE
□	LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS FOR TYPE
⊗	WALL MOUNTED EXIT SIGN - SEE ELECTRICAL DRAWINGS FOR TYPE
⊠	SUPPLY GRILLE / DIFFUSER
⊡	RETURN GRILLE / DIFFUSER
■	SUSPENDED GYP. BOARD BULKHEAD AND/OR CEILING
⊞	2 X 2 LAY-IN CEILING GRID W/ ACOUSTICAL PANELS

- | GENERAL CEILING NOTES |  |
|-----------------------|--|
| 1.                    | CONTRACTOR SHALL FOLLOW CEILING GRID PATTERN ESTABLISHED ON THE REFLECTED CEILING PLAN. ANY VARIATIONS SHALL BE APPROVED BY THE ARCHITECT. |
| 2.                    | WIRE CEILINGS FROM THE STRUCTURE ABOVE AND WIRE FOR ADDITIONAL LOAD AT LIGHTS AND CEILING DIFFUSERS.                                       |
| 3.                    | PROVIDE AN ADDITIONAL CROSS TEE AT EACH SLOT DIFFUSER.   |
| 4.                    | SEE FINISH SCHEDULE FOR CEILING FINISHES AND HEIGHTS, U.N.O.   |
| 5.                    | SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR FIXTURE LAYOUT AND SCHEDULES.   |

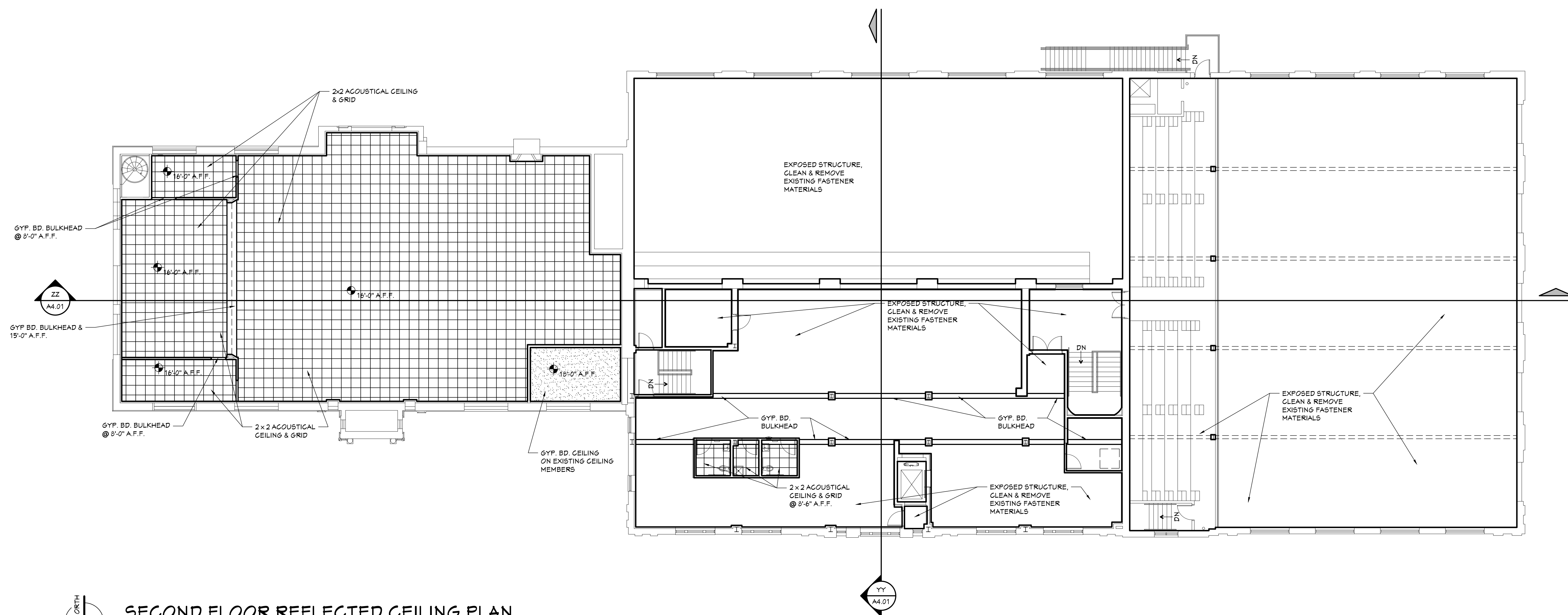


**FIRST FLOOR REFLECTED CEILING PLAN**  
 SCALE: 3/32" = 1'-0"

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CEILING LEGEND	
○	LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS FOR TYPE
□	LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS FOR TYPE
⊗	WALL MOUNTED EXIT SIGN - SEE ELECTRICAL DRAWINGS
⊞	SUPPLY GRILLE / DIFFUSER
⊞	RETURN GRILLE / DIFFUSER
■	SUSPENDED GYP. BOARD BULKHEAD AND/OR CEILING
⊞	2 X 2 LAY-IN CEILING GRID W/ ACOUSTICAL PANELS

GENERAL CEILING NOTES	
1.	CONTRACTOR SHALL FOLLOW CEILING GRID PATTERN ESTABLISHED ON THE REFLECTED CEILING PLAN. ANY VARIATIONS SHALL BE APPROVED BY THE ARCHITECT.
2.	WIRE CEILINGS FROM THE STRUCTURE ABOVE AND WIRE FOR ADDITIONAL LOAD AT LIGHTS AND CEILING DIFFUSERS.
3.	PROVIDE AN ADDITIONAL CROSS TEE AT EACH SLOT DIFFUSER.
4.	SEE FINISH SCHEDULE FOR CEILING FINISHES AND HEIGHTS, U.N.O.
5.	SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR FIXTURE LAYOUT AND SCHEDULES.



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
 RECREATION CENTER**  
 637 BREWSTER STREET, DETROIT, MICHIGAN

PROJECT #	1356-23
ISSUANCES	
FOR PERMITS	12.24.2023
BULLETIN #1	02.08.2024
BULLETIN #2	03.05.2024

*K. OSEBART*  
 01.3.2024  
 BREWSTER REC. CENTER

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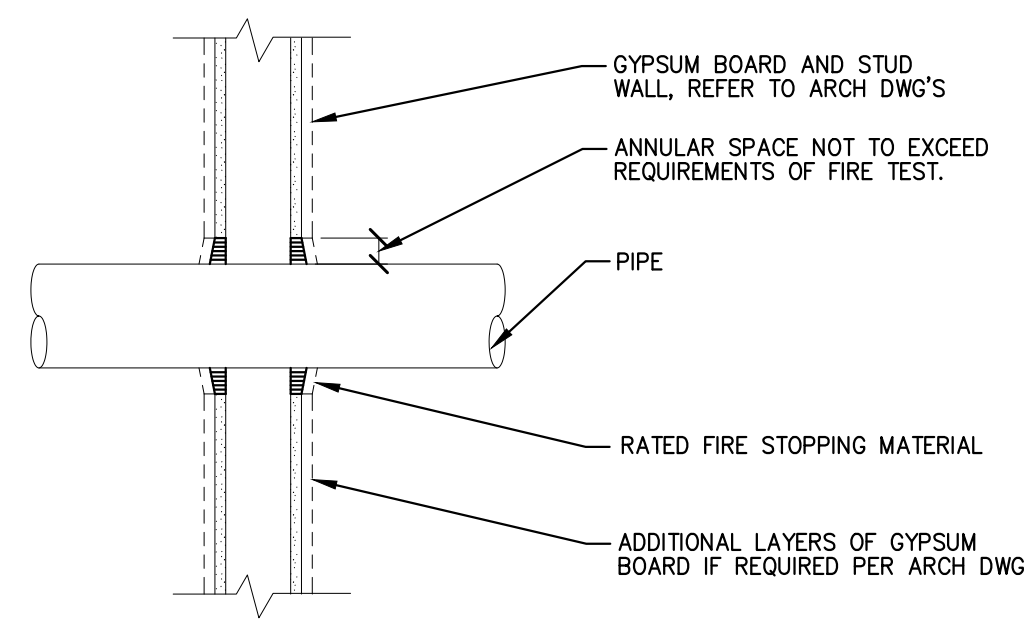
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SHEET NO.

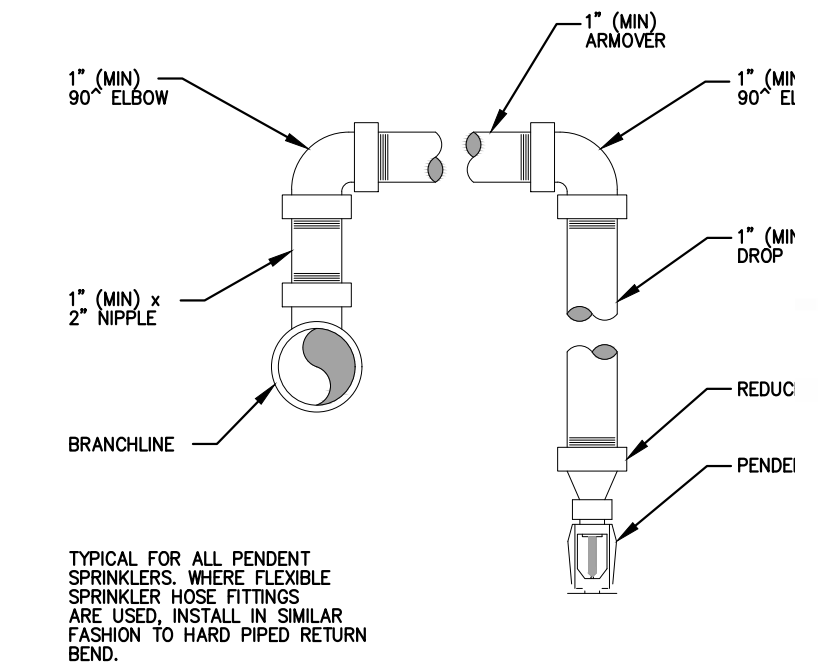
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**SECOND FLOOR REFLECTED CEILING PLAN**  
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11/14/2024

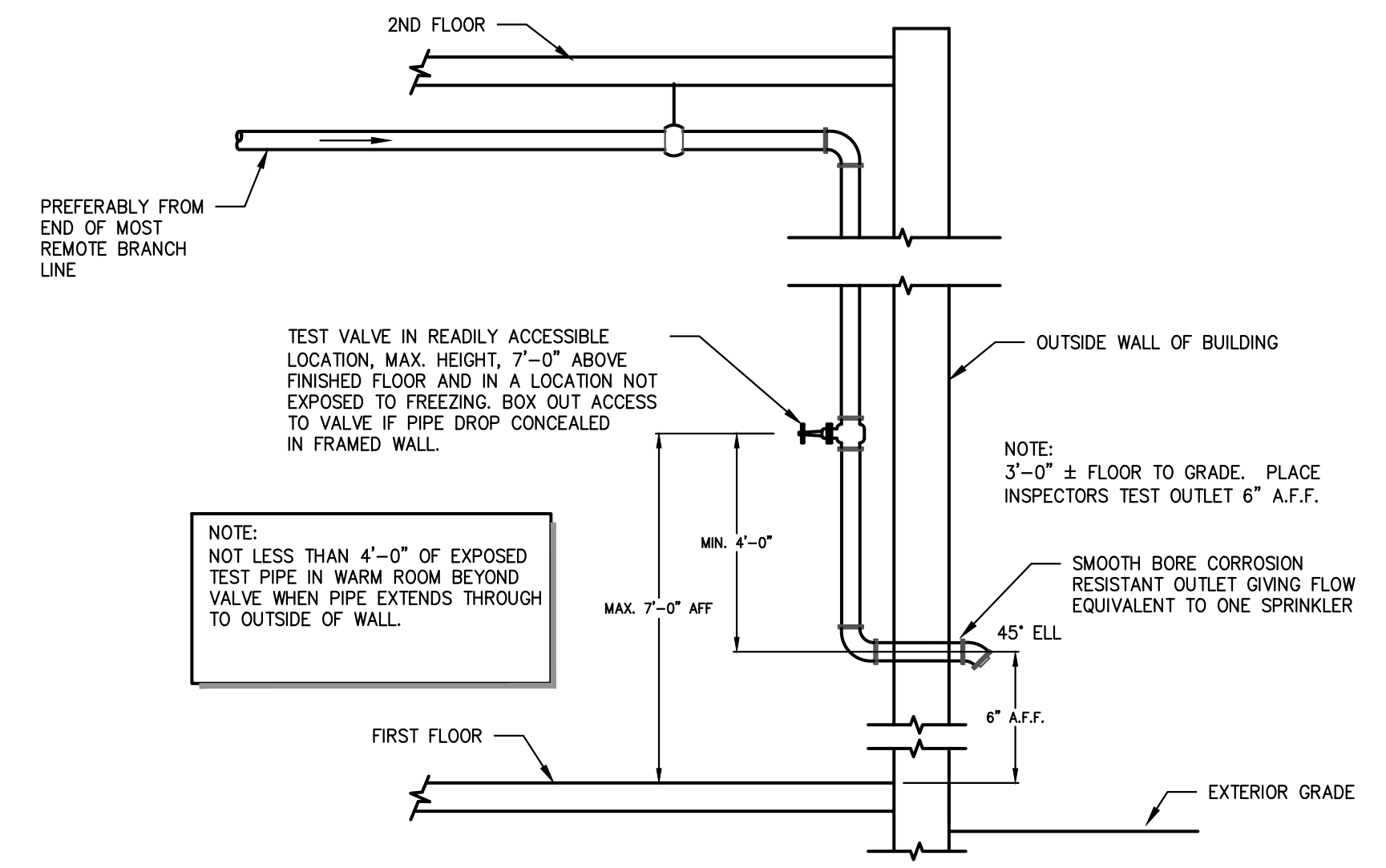


**SPRINKLER PIPING FIRESTOPPING STUD WALL PENETRATIONS**  
NOT TO SCALE

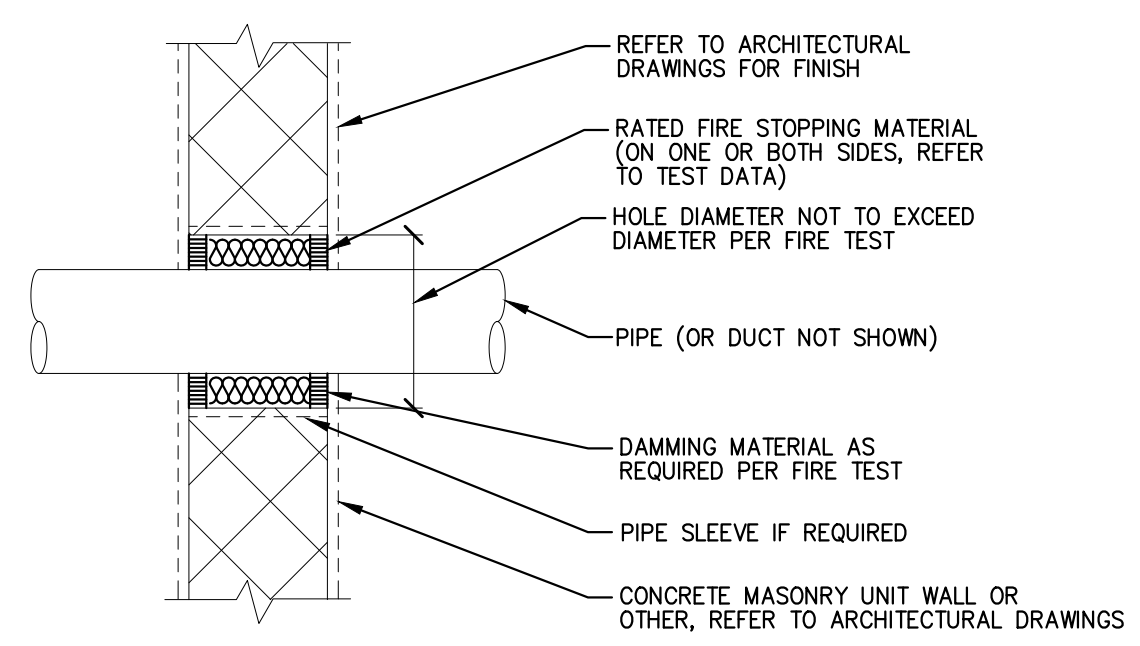


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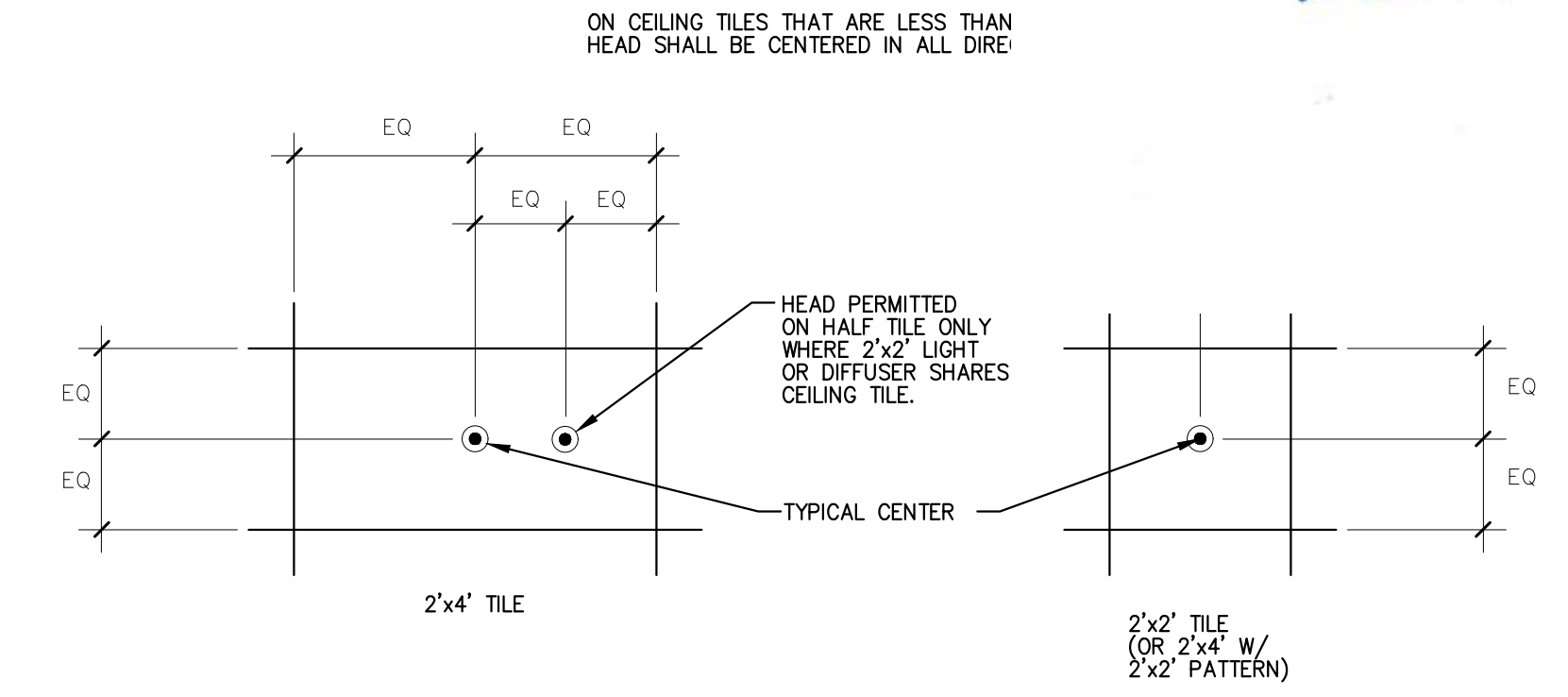
CHRISTOPHER NOLAN  
ENGINEER  
No. 432963  
1-4-2024



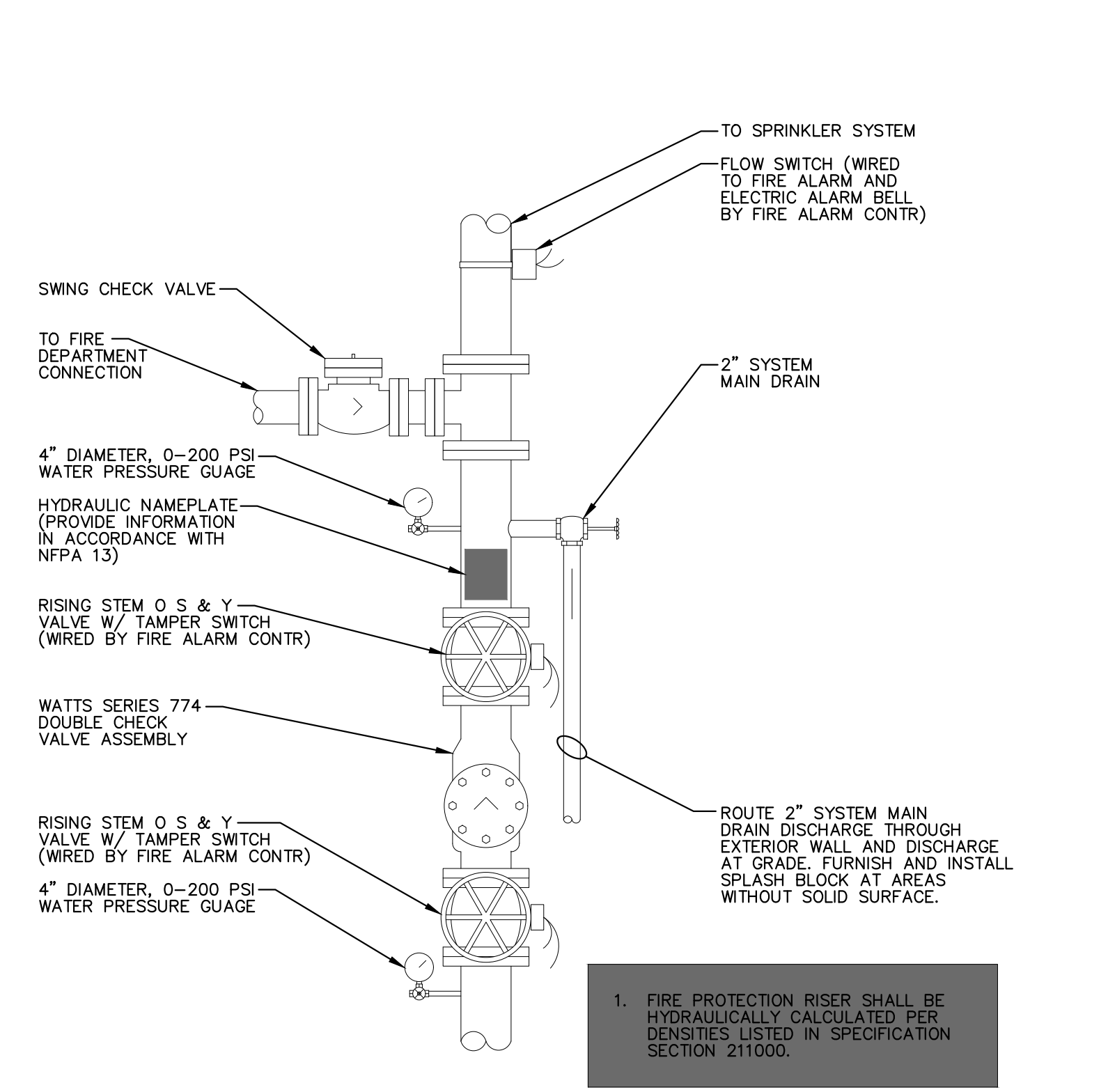
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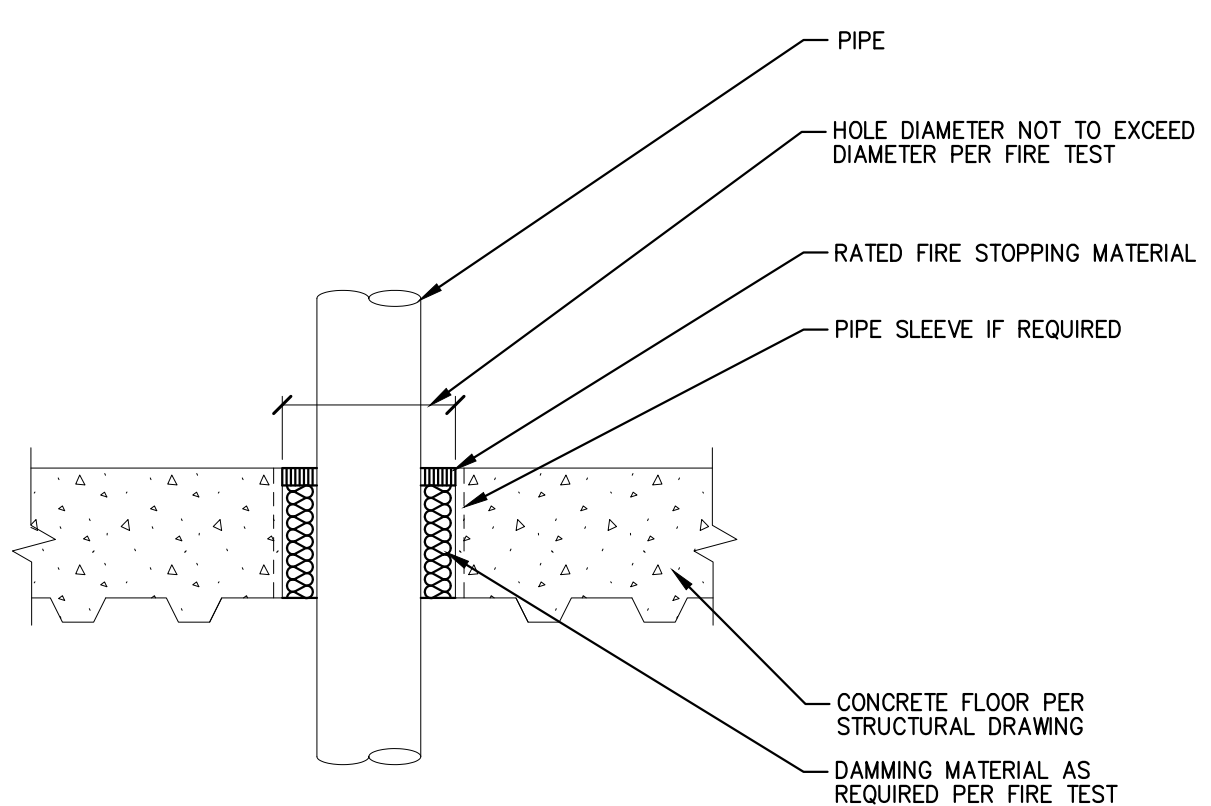
**SPRINKLER PIPING FIRESTOPPING WALL PENETRATIONS**  
NOT TO SCALE



**CEILING TILE DETAIL**  
NOT TO SCALE



**FIRE PROTECTION RISER DETAIL**  
NOT TO SCALE



**SPRINKLER PIPING FIRESTOPPING AT FLOOR PENETRATIONS**  
NOT TO SCALE

1. INSTALL COMPLETE ASSEMBLY AS REQUIRED PER FIRESTOPPING FIRE TEST (SUBMIT TEST NUMBER PER SPECIFICATION SECTION 07841).
2. PROVIDE AT ALL FIRE RATED FLOORS. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATING HOURS.
3. REFER TO SPECIFICATION SECTION 07841.
4. MULTIPLE PIPES CAN BE USED IF IN COMPLIANCE WITH FIRE TEST.
5. THESE ARE GENERIC DETAILS; OTHER FIRESTOPPING SYSTEMS CAN BE USED IF THEY ARE IN COMPLIANCE WITH FIRE TEST REQUIREMENTS.
6. IF FIRE TESTS ARE NOT AVAILABLE FOR T-RATINGS PROVIDE HIGHEST AVAILABLE T-RATING BUT NOT TO EXCEED F-RATING OF FIRE ASSEMBLY.

FIRE PROTECTION ABBREVIATIONS			
AFF	ABOVE FINISH FLOOR	FF	FINISH FLOOR
APPROX	APPROXIMATELY	FLR	FLOOR
CLG	CEILING	FP	FIRE PROTECTION
CONN	CONNECTION	HSS	HOUSE STRUCTURAL STEEL
CONT	CONTRACTOR	LOC	LOCATION
DN	DOWN	MC	MECHANICAL CONTRACTOR
DWG	DRAWING	O S & Y	OUTSIDE STEM AND YOLK
EA	EACH	SPKLR	SPRINKLER
FDC	FIRE DEPARTMENT CONNECTION	SQ FT	SQUARE FOOT
		TYP	TYPICAL

FIRE PROTECTION LEGEND			
○	STANDARD PENDENT SPRINKLER	○175°	INTERMEDIATE TEMPERATURE UPRIGHT SPRINKLER
●	RECESSED PENDENT SPRINKLER WITH MATCHING 2-PIECE ESCUTCHEON	○200°	INTERMEDIATE TEMPERATURE HORIZONTAL SIDEWALL SPRINKLER
●	CONCEALED PENDENT SPRINKLER	○286°	HIGH TEMPERATURE PENDENT SPRINKLER
○	STANDARD UPRIGHT SPRINKLER	○386°	HIGH TEMPERATURE RECESSED PENDENT SPRINKLER WITH MATCHING 2-PIECE ESCUTCHEON
△	HORIZONTAL SIDEWALL SPRINKLER	○286°	HIGH TEMPERATURE UPRIGHT SPRINKLER
△	EXTENDED COVERAGE PENDENT SPRINKLER	△286°	HIGH TEMPERATURE HORIZONTAL SIDEWALL SPRINKLER
△	EXTENDED COVERAGE RECESSED PENDENT SPRINKLER WITH MATCHING 2-PIECE ESCUTCHEON	OR	CONTROL VALVE (LISTED INDICATING VALVE)
△	EXTENDED COVERAGE CONCEALED SPRINKLER	—	PIPE ELBOW
△	EXTENDED COVERAGE UPRIGHT SPRINKLER	—	RISER UP
△	EXTENDED COVERAGE HORIZONTAL SIDEWALL SPRINKLER	—	RISER DOWN
△	DRY HORIZONTAL SIDEWALL SPRINKLER	—	BRANCH UP
○	DRY PENDENT SPRINKLER	—	BRANCH DOWN
○175°	INTERMEDIATE TEMPERATURE STANDARD PENDENT SPRINKLER	—	BLIND FLANGE
○175°	INTERMEDIATE TEMPERATURE RECESSED PENDENT SPRINKLER WITH MATCHING 2-PIECE ESCUTCHEON	—	CONNECTION OF NEW ONTO EXISTING
○175°	INTERMEDIATE TEMPERATURE CONCEALED PENDENT SPRINKLER	×	SPRINKLER HEAD GUARD

THE FIRE PROTECTION CONTRACTOR SHALL USE THE SYMBOLS IN THIS LEGEND TO INDICATE THE TYPE AND LOCATION OF SPRINKLERS ON HIS "WORKING PLANS".

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

DRAWN BY CAS

SHEET TITLE  
**GENERAL FIRE PROTECTION INFORMATION**

SHEET NO.

**FP0.01**

1/9/2024 2:48 PM 1142.166.153.200\Documents\FET\PROJECTS\FET-NE\NCO - 2023\projects\231012\_CDS-Brewster Rec Center-Detroit\DRAWINGS\231012\_FF-sheets.dwg

1/14/2024

**SPRINKLER HEAD LAYOUT NOTES:**

- FURNISH AND INSTALL RECESSED PENDANT SPRINKLER HEADS IN ALL ROOMS WITH HARD LID CEILING (APARTMENT BATHROOMS AND CLOSETS)
- FURNISH AND INSTALL UPRIGHT SPRINKLER HEADS WITH EXPOSED SPRINKLER PIPING IN ALL ROOMS WITHOUT CEILINGS (APARTMENT LIVING, KITCHEN AND BEDROOM AREAS, BUILDING CORRIDORS, BUILDING STAIR TOWERS, BUILDING ATRIA, AND WHITE-BOX TENANT SPACES). PROVIDE SPRINKLER HEAD GUARDS IN ROOMS SUBJECT TO PHYSICAL ABUSE INCLUDING MECHANICAL ROOMS AND TENANT STORAGE ROOMS.
- REFER TO SPECIFICATION SECTION 211000 FOR SPRINKLER HEAD MANUFACTURER, TYPE, AND FINISH REQUIREMENTS.
- CONTRACTOR SHALL LOCATE SPRINKLER HEADS IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 13. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING SPRINKLER HEAD LOCATIONS WITH ALL CEILING MOUNTED EQUIPMENT INCLUDING BUT NOT LIMITED TO THE FOLLOWING: LIGHTS, DIFFUSERS, GRILLES, SPEAKERS, SMOKE DETECTORS, AND EXIT SIGNS.
- CONTRACTOR RESPONSIBLE FOR COORDINATION OF SPRINKLER MAINS AND BRANCH MAINS WITH ALL OTHER TRADES. DO NOT LOCATE SPRINKLER PIPING TO PREVENT SERVICE OR ACCESS TO MECHANICAL EQUIPMENT.
- CONTRACTOR SHALL USE SYMBOLS FOR SPRINKLER HEAD TYPES SHOWN IN LEGEND, OR CLEARLY INDICATE ON THEIR WORKING PLANS WHICH SYMBOLS REPRESENT WHICH SPRINKLER TYPES.

**KEYED FIRE PROTECTION SCOPE NOTES:**

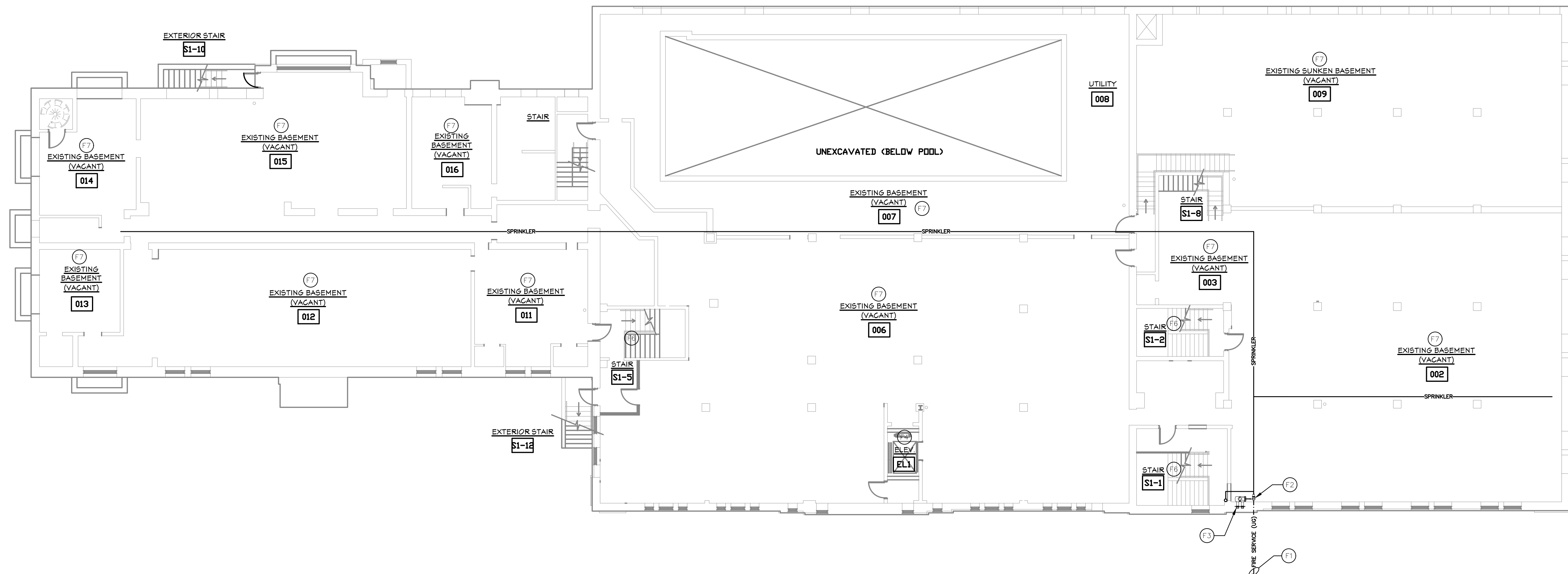
- (F1) NEW FIRE PROTECTION 6" SERVICE PIPE TO EXTEND INTO BUILDING (BY OTHERS); ROUTE FIRE SERVICE BELOW GROUND TO NEW FIRE RISER. COORDINATE FLOOR CUTTING WITH CM
- (F2) PROVIDE NEW VERTICAL WET PIPE FIRE PROTECTION RISER AT 1ST FLOOR (LOCATION AS SHOWN) TO SERVE FULLY SPRINKLED BUILDING.
- (F3) PROVIDE FIRE DEPARTMENT CONNECTION WITH PIPING BACK TO FIRE PROTECTION RISER - CONFIRM FDC LOCATION WITH LOCAL FIRE DEPARTMENT
- (F4) SIDEWALL SPRINKLER AT BASE OF ELEVATOR SHAFT WITHIN 2'-0" OF HOISTWAY FLOOR SHALL NOT BE REQUIRED; ELEVATOR IS TRACTION TYPE WITH NO COMBUSTIBLE HYDRAULIC FLUID AND ELEVATOR SHAFT IS ON NON-COMBUSTIBLE CONSTRUCTION.
- (F5) UPRIGHT SPRINKLER AT TOP OF ELEVATOR HOISTWAY SHALL NOT BE REQUIRED; ELEVATOR IS TRACTION TYPE (NOT HYDRAULIC). HOISTWAY IS OF NON-COMBUSTIBLE CONSTRUCTION AND ELEVATOR CAR MATERIALS MEET THE REQUIREMENTS OF ASME A17.1.
- (F6) EGRESS STAIR TOWER IS NON-COMBUSTIBLE CONSTRUCTION; PROVIDE SPRINKLERS AT TOP OF STAIR TOWER AND AT GROUND FLOOR AS ALLOWED BY NFPA 13.
- (F7) PROVIDE UPRIGHT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING IN VACANT BASEMENT AREAS
- (F8) PROVIDE UPRIGHT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING IN GYM AND OTHER AREAS WITH OUT CEILINGS.
- (F9) PROVIDE UPRIGHT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING IN OFFICE AREAS
- (F10) PROVIDE SEMI-RECESSED PENDANT SPRINKLER HEADS AND CONCEALED SPRINKLER PIPING IN AREAS WITH LAY-IN CEILING
- (F11) PROVIDE WAX COATED UPRIGHT PENDANT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING (TO BE PAINTED IN THE FUTURE IF POOL IS TO BE REUSED) IN POOL AREA.

**GENERAL FIRE PROTECTION NOTES:**

- THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE; SPRINKLER MAIN ROUTING ON P INTENDED AS RECOMMENDATION ONLY TO ILLUSTRATE THE PERFORMANCE REQUIRE WORK SCOPE FOR PROJECT BIDDING. THE FIRE PROTECTION CONTRACTOR (FPC) IS THAT THEY ARE RESPONSIBLE FOR THE FINAL DESIGN OF THE SYSTEM, INCLUDING AND LOCATION. THE CONTRACTOR IS FURTHER EXPECTED TO VISIT THE SITE TO VE CONDITIONS UNDER WHICH THE WORK SHALL BE PERFORMED.
- FPC SHALL BE RESPONSIBLE FOR THE COORDINATION OF HIS WORK WITH ALL OTH
- FPC SHALL BE PERMITTED TO UTILIZE EXTENDED COVERAGE SPRINKLER HEADS WHI BY THE AUTHORITY HAVING JURISDICTION AND INSTALLED IN ACCORDANCE WITH NI CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF SPRINKLER HEAT WITH ALL OTHER TRADES.
- ALL WORK SHALL COMPLY WITH LOCAL, MUNICIPAL, AND STATE BUILDING AND FIRE WITH THE LATEST EDITION OF NFPA 13
- FPC SHALL PERFORM HYDRAULIC CALCULATIONS AND WORKING PLANS, AND SHALL AUTHORITY HAVING JURISDICTION (AHJ) FOR PERMITS AND APPROVAL.
- COORDINATE LOCATION OF FIRE DEPARTMENT SERVICE WITH OTHER UTILITIES, REFE AND SITE UTILITIES PLANS.
- COORDINATE F.P. HEAD LOCATIONS WITH LIGHTS AND EXPOSED DUCTWORK. BUILDING CORRIDORS, ATRIA, AND APARTMENT AREAS (WITH THE EXCEPTION OF AI BATHROOM AND CLOSETS) WILL BE EXPOSED CEILING; INTENT IS FOR EXPOSED SP PIPING WITH UPRIGHT PENDANT HEADS FOR ALL EXPOSED AREAS
- BEFORE SUBMITTING WORKING PLANS TO AHJ, PROVIDE COMPLETE COORDINATION ( HEAD AND PIPING LAYOUT TO ARCHITECT AND ENGINEER FOR APPROVAL BEFORE INSTALLED. COORDINATION DRAWINGS NEED TO BE PROVIDED WITH ACCURATE DIM PIPE RUNS.

**FIRE PROTECTION SYSTEM DESIGN GUIDELINES:**

- PUBLIC SPACES ON FIRST FLOOR (INCLUDING OFFICE SPACES, GYMNASIUM, ASSEMBLY CORRIDORS) SHALL BE CONSIDERED LIGHT HAZARD OCCUPANCY AND DESIGNED FOR DENSITY OF 0.10 GPM/SF FOR MOST REMOTE 1500 SF WITH 100 GPM HOSE STREAM ALLOWANCE.
- STORAGE AREAS, MECHANICAL ROOMS AND MAINTENANCE ROOMS SHALL BE CONSIDERED ORDINARY HAZARD (GROUP 1) OCCUPANCY AND DESIGNED FOR SPRINKLER DENSITY GPM/SF FOR MOST REMOTE 1500 SF WITH 250 GPM HOSE STREAM ALLOWANCE.



**BASEMENT FIRE PROTECTION PLAN**  
 SCALE: 3/32" = 1'-0"

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
 RECREATION CENTER**  
 2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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SHEET TITLE  
**PARTIAL  
 BASEMENT  
 PLUMBING  
 PLAN**

SHEET NO.

**FP1.00**



1/4/2024

CHRISTOPHER  
MCLEAN  
ENGINEER  
No. 43863  
1-4-2024

**SPRINKLER HEAD LAYOUT NOTES:**

- FURNISH AND INSTALL RECESSED PENDANT SPRINKLER HEADS IN ALL ROOMS WITH HARD LID CEILING (APARTMENT BATHROOMS AND CLOSETS)
- FURNISH AND INSTALL UPRIGHT SPRINKLER HEADS WITH EXPOSED SPRINKLER PIPING IN ALL ROOMS WITHOUT CEILINGS (APARTMENT LIVING, KITCHEN AND BEDROOM AREAS, BUILDING CORRIDORS, BUILDING STAIR TOWERS, BUILDING ATRIA, AND WHITE-BOX TENANT SPACES). PROVIDE SPRINKLER HEAD GUARDS IN ROOMS SUBJECT TO PHYSICAL ABUSE INCLUDING MECHANICAL ROOMS AND TENANT STORAGE ROOMS.
- REFER TO SPECIFICATION SECTION 211000 FOR SPRINKLER HEAD MANUFACTURER, TYPE, AND FINISH REQUIREMENTS.
- CONTRACTOR SHALL LOCATE SPRINKLER HEADS IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 13. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING SPRINKLER HEAD LOCATIONS WITH ALL CEILING MOUNTED EQUIPMENT INCLUDING BUT NOT LIMITED TO THE FOLLOWING: LIGHTS, DIFFUSERS, GRILLES, SPEAKERS, SMOKE DETECTORS, AND EXIT SIGNS.
- CONTRACTOR RESPONSIBLE FOR COORDINATION OF SPRINKLER MAINS AND BRANCH MAINS WITH ALL OTHER TRADES. DO NOT LOCATE SPRINKLER PIPING TO PREVENT SERVICE OR ACCESS TO MECHANICAL EQUIPMENT.
- CONTRACTOR SHALL USE SYMBOLS FOR SPRINKLER HEAD TYPES SHOWN IN LEGEND, OR CLEARLY INDICATE ON THEIR WORKING PLANS WHICH SYMBOLS REPRESENT WHICH SPRINKLER TYPES.

**KEYED FIRE PROTECTION SCOPE NOTES:**

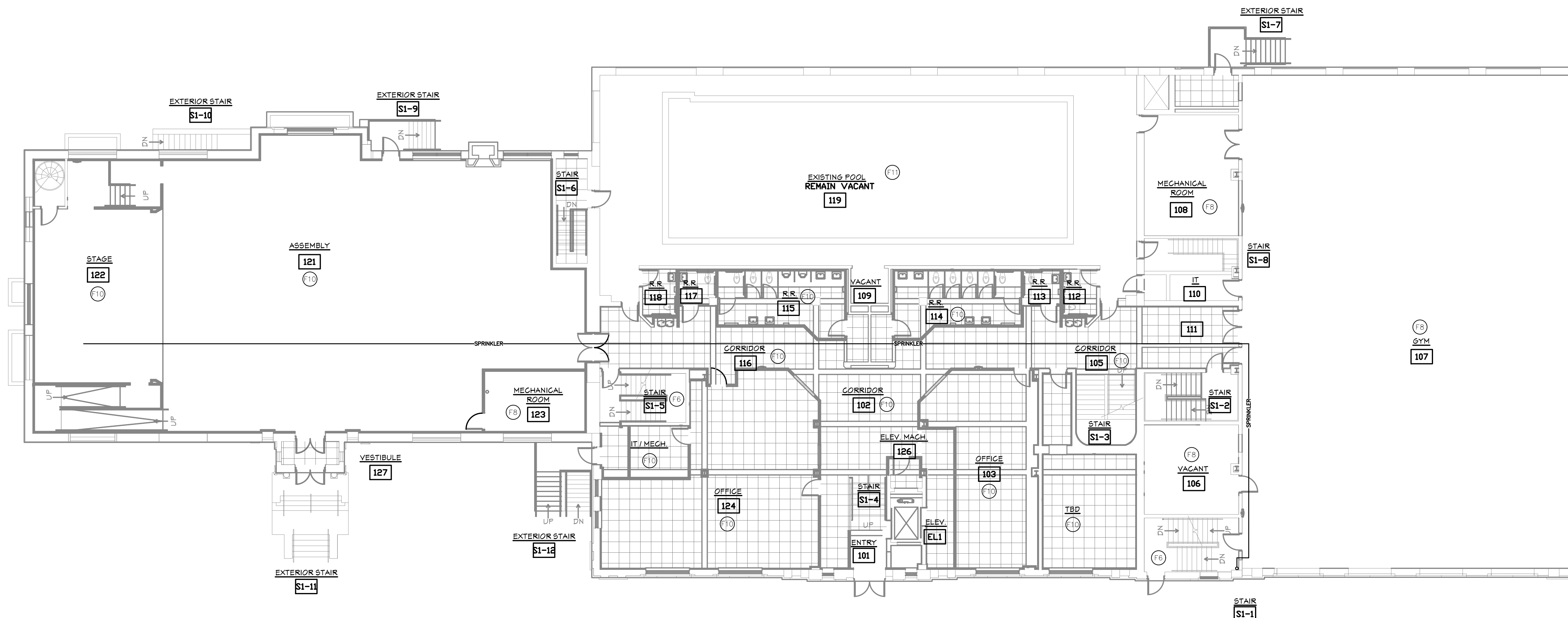
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- (F4) SIDEWALL SPRINKLER AT BASE OF ELEVATOR SHAFT WITHIN 2'-0" OF HOISTWAY FLOOR SHALL NOT BE REQUIRED; ELEVATOR IS TRACTION TYPE WITH NO COMBUSTIBLE HYDRAULIC FLUID AND ELEVATOR SHAFT IS ON NON-COMBUSTIBLE CONSTRUCTION.
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- (F8) PROVIDE UPRIGHT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING IN GYM AND OTHER AREAS WITH OUT CEILINGS.
- (F9) PROVIDE UPRIGHT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING IN OFFICE AREAS
- (F10) PROVIDE SEMI-RECESSED PENDANT SPRINKLER HEADS AND CONCEALED SPRINKLER PIPING IN AREAS WITH LAY-IN CEILING
- (F11) PROVIDE WAX COATED UPRIGHT PENDANT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING (TO BE PAINTED IN THE FUTURE IF POOL IS TO BE REUSED) IN POOL AREA.

**GENERAL FIRE PROTECTION NOTES:**

- THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE; SPRINKLER MAIN ROUTING ON PL INTENDED AS RECOMMENDATION ONLY TO ILLUSTRATE THE PERFORMANCE REQUIREMENT WORK SCOPE FOR PROJECT BIDDING. THE FIRE PROTECTION CONTRACTOR (FPC) IS RESPONSIBLE FOR THE FINAL DESIGN OF THE SYSTEM, INCLUDING AND LOCATION. THE CONTRACTOR IS FURTHER EXPECTED TO VISIT THE SITE TO VERIFY CONDITIONS UNDER WHICH THE WORK SHALL BE PERFORMED.
- FPC SHALL BE RESPONSIBLE FOR THE COORDINATION OF HIS WORK WITH ALL OTHER TRADES.
- FPC SHALL BE PERMITTED TO UTILIZE EXTENDED COVERAGE SPRINKLER HEADS WHERE AUTHORITY HAVING JURISDICTION AND INSTALLED IN ACCORDANCE WITH NFPA 13. CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF SPRINKLER HEAD WITH ALL OTHER TRADES.
- ALL WORK SHALL COMPLY WITH LOCAL, MUNICIPAL, AND STATE BUILDING AND FIRE WITH THE LATEST EDITION OF NFPA 13
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- COORDINATE F.P. HEAD LOCATIONS WITH LIGHTS AND EXPOSED DUCTWORK, BUILDING CORRIDORS, ATRIA, AND APARTMENT AREAS (WITH THE EXCEPTION OF APARTMENT BATHROOM AND CLOSETS) WILL BE EXPOSED CEILING; INTENT IS FOR EXPOSED SPRINKLER PIPING WITH UPRIGHT PENDANT HEADS FOR ALL EXPOSED AREAS
- BEFORE SUBMITTING WORKING PLANS TO AHJ, PROVIDE COMPLETE COORDINATION DRAWING OF HEAD AND PIPING LAYOUT TO ARCHITECT AND ENGINEER FOR APPROVAL BEFORE AHEAD IS INSTALLED. COORDINATION DRAWINGS NEED TO BE PROVIDED WITH ACCURATE DIMENSIONS.

**FIRE PROTECTION SYSTEM DESIGN GUIDELINES:**

- PUBLIC SPACES ON FIRST FLOOR (INCLUDING OFFICE SPACES, GYMNASIUM, ASSEMBLY CORRIDORS) SHALL BE CONSIDERED LIGHT HAZARD OCCUPANCY AND DESIGNED FOR DENSITY OF 0.10 GPM/SF FOR MOST REMOTE 1500 SF WITH 100 GPM HOSE STREAM ALLOWANCE.
- STORAGE AREAS, MECHANICAL ROOMS AND MAINTENANCE ROOMS SHALL BE CONSIDERED ORDINARY HAZARD (GROUP 1) OCCUPANCY AND DESIGNED FOR SPRINKLER DENSITY GPM/SF FOR MOST REMOTE 1500 SF WITH 250 GPM HOSE STREAM ALLOWANCE.



**FIRST FLOOR FIRE PROTECTION PLAN**  
SCALE: 3/32" = 1'-0"

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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SHEET TITLE  
**FIRST FLOOR FIRE PROTECTION PLAN**

SHEET NO.

**P1.01**

*Handwritten signature and date: 1/4/2024*

**SPRINKLER HEAD LAYOUT NOTES:**

- FURNISH AND INSTALL RECESSED PENDANT SPRINKLER HEADS IN ALL ROOMS WITH HARD LID CEILING (APARTMENT BATHROOMS AND CLOSETS)
- FURNISH AND INSTALL UPRIGHT SPRINKLER HEADS WITH EXPOSED SPRINKLER PIPING IN ALL ROOMS WITHOUT CEILINGS (APARTMENT LIVING, KITCHEN AND BEDROOM AREAS, BUILDING CORRIDORS, BUILDING STAIR TOWERS, BUILDING ATRIA, AND WHITE-BOX TENANT SPACES). PROVIDE SPRINKLER HEAD GUARDS IN ROOMS SUBJECT TO PHYSICAL ABUSE INCLUDING MECHANICAL ROOMS AND TENANT STORAGE ROOMS.
- REFER TO SPECIFICATION SECTION 211000 FOR SPRINKLER HEAD MANUFACTURER, TYPE, AND FINISH REQUIREMENTS.
- CONTRACTOR SHALL LOCATE SPRINKLER HEADS IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 13. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING SPRINKLER HEAD LOCATIONS WITH ALL CEILING MOUNTED EQUIPMENT INCLUDING BUT NOT LIMITED TO THE FOLLOWING: LIGHTS, DIFFUSERS, GRILLES, SPEAKERS, SMOKE DETECTORS, AND EXIT SIGNS.
- CONTRACTOR RESPONSIBLE FOR COORDINATION OF SPRINKLER MAINS AND BRANCH MAINS WITH ALL OTHER TRADES. DO NOT LOCATE SPRINKLER PIPING TO PREVENT SERVICE OR ACCESS TO MECHANICAL EQUIPMENT.
- CONTRACTOR SHALL USE SYMBOLS FOR SPRINKLER HEAD TYPES SHOWN IN LEGEND, OR CLEARLY INDICATE ON THEIR WORKING PLANS WHICH SYMBOLS REPRESENT WHICH SPRINKLER TYPES.

**KEYED FIRE PROTECTION SCOPE NOTES:**

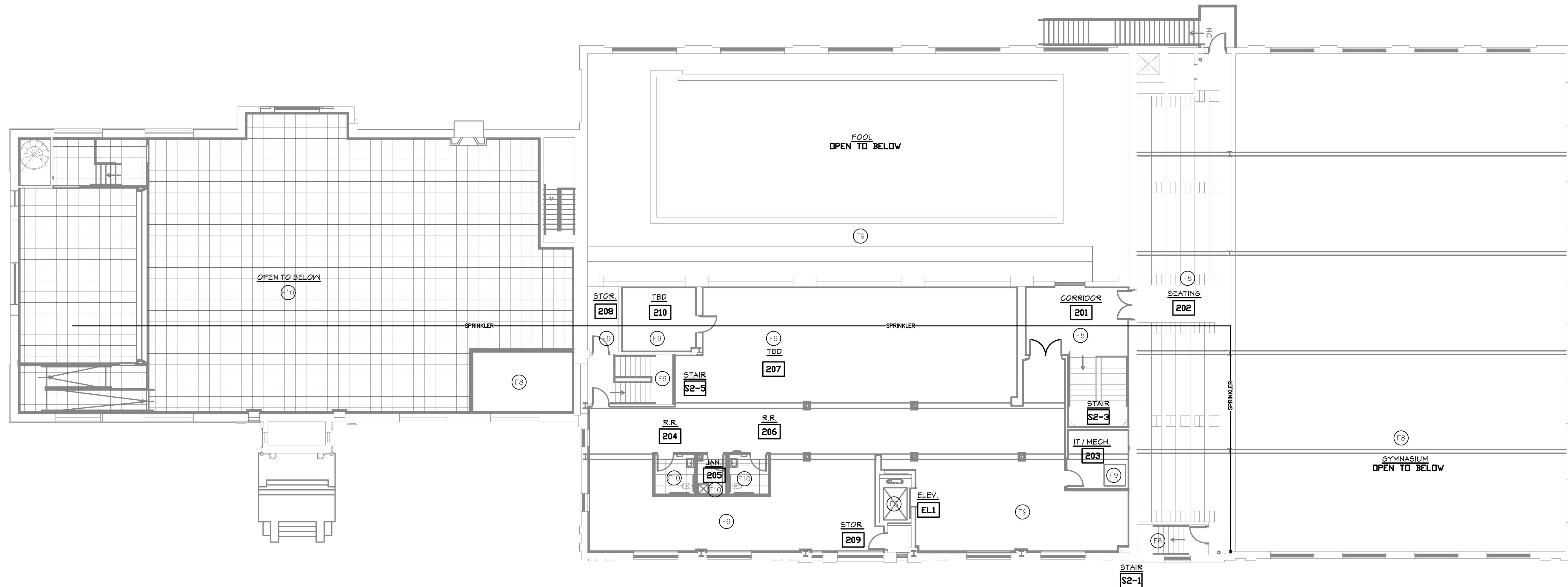
- F1 NEW FIRE PROTECTION 6" SERVICE PIPE TO EXTEND INTO BUILDING (BY OTHERS); ROUTE FIRE SERVICE BELOW GROUND TO NEW FIRE RISER. COORDINATE FLOOR CUTTING WITH CM
- F2 PROVIDE NEW VERTICAL WET PIPE FIRE PROTECTION RISER AT 1ST FLOOR (LOCATION AS SHOWN) TO SERVE FULLY SPRINKLED BUILDING.
- F3 PROVIDE FIRE DEPARTMENT CONNECTION WITH PIPING BACK TO FIRE PROTECTION RISER - CONFIRM FDC LOCATION WITH LOCAL FIRE DEPARTMENT
- F4 SIDEWALL SPRINKLER AT BASE OF ELEVATOR SHAFT WITHIN 2'-0" OF HOISTWAY FLOOR SHALL NOT BE REQUIRED; ELEVATOR IS TRACTION TYPE WITH NO COMBUSTIBLE HYDRAULIC FLUID AND ELEVATOR SHAFT IS ON NON-COMBUSTIBLE CONSTRUCTION.
- F5 UPRIGHT SPRINKLER AT TOP OF ELEVATOR HOISTWAY SHALL NOT BE REQUIRED; ELEVATOR IS TRACTION TYPE (NOT HYDRAULIC), HOISTWAY IS OF NON-COMBUSTIBLE CONSTRUCTION AND ELEVATOR CAR MATERIALS MEET THE REQUIREMENTS OF ASME A17.1.
- F6 EGRESS STAIR TOWER IS NON-COMBUSTIBLE CONSTRUCTION; PROVIDE SPRINKLERS AT TOP OF STAIR TOWER AND AT GROUND FLOOR AS ALLOWED BY NFPA 13.
- F7 PROVIDE UPRIGHT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING IN VACANT BASEMENT AREAS
- F8 PROVIDE UPRIGHT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING IN GYM AND OTHER AREAS WITH OUT CEILINGS.
- F9 PROVIDE UPRIGHT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING IN OFFICE AREAS
- F10 PROVIDE SEMI-RECESSED PENDANT SPRINKLER HEADS AND CONCEALED SPRINKLER PIPING IN AREAS WITH LAY-IN CEILING
- F11 PROVIDE WAX COATED UPRIGHT PENDANT SPRINKLER HEADS AND EXPOSED SPRINKLER PIPING (TO BE PAINTED IN THE FUTURE IF POOL IS TO BE REUSED) IN POOL AREA.

**GENERAL FIRE PROTECTION NOTES:**

- THESE DRAWINGS ARE DIAGRAMMATIC IN NATURE; SPRINKLER MAIN ROUTING ON P INTENDED AS RECOMMENDATION ONLY TO ILLUSTRATE THE PERFORMANCE REQUIRE WORK SCOPE FOR PROJECT BIDDING. THE FIRE PROTECTION CONTRACTOR (FPC) IS THAT THEY ARE RESPONSIBLE FOR THE FINAL DESIGN OF THE SYSTEM, INCLUDING AND LOCATION. THE CONTRACTOR IS FURTHER EXPECTED TO VISIT THE SITE TO VI CONDITIONS UNDER WHICH THE WORK SHALL BE PERFORMED.
- FPC SHALL BE RESPONSIBLE FOR THE COORDINATION OF HIS WORK WITH ALL OTH
- FPC SHALL BE PERMITTED TO UTILIZE EXTENDED COVERAGE SPRINKLER HEADS WH BY THE AUTHORITY HAVING JURISDICTION AND INSTALLED IN ACCORDANCE WITH N CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF SPRINKLER HEA WITH ALL OTHER TRADES.
- ALL WORK SHALL COMPLY WITH LOCAL, MUNICIPAL, AND STATE BUILDING AND FIRI WITH THE LATEST EDITION OF NFPA 13
- FPC SHALL PERFORM HYDRAULIC CALCULATIONS AND WORKING PLANS, AND SHALL AUTHORITY HAVING JURISDICTION (AHJ) FOR PERMITS AND APPROVAL.
- COORDINATE LOCATION OF FIRE DEPARTMENT SERVICE WITH OTHER UTILITIES, REFE AND SITE UTILITIES PLANS.
- COORDINATE F.P. HEAD LOCATIONS WITH LIGHTS AND EXPOSED DUCTWORK. BUILDING CORRIDORS, ATRIA, AND APARTMENT AREAS (WITH THE EXCEPTION OF A BATHROOM AND CLOSETS) WILL BE EXPOSED CEILING; INTENT IS FOR EXPOSED SP PIPING WITH UPRIGHT PENDANT HEADS FOR ALL EXPOSED AREAS
- BEFORE SUBMITTING WORKING PLANS TO AHJ, PROVIDE COMPLETE COORDINATION I HEAD AND PIPING LAYOUT TO ARCHITECT AND ENGINEER FOR APPROVAL BEFORE INSTALLED. COORDINATION DRAWINGS NEED TO BE PROVIDED WITH ACCURATE DIM PIPE RUNS.

**FIRE PROTECTION SYSTEM DESIGN GUIDELINES:**

- PUBLIC SPACES ON FIRST FLOOR (INCLUDING OFFICE SPACES, GYMNASIUM, ASSEMBLY CORRIDORS) SHALL BE CONSIDERED LIGHT HAZARD OCCUPANCY AND DESIGNED FOR DENSITY OF 0.10 GPM/SF FOR MOST REMOTE 1500 SF WITH 100 GPM HOSE STREAM ALLOWANCE.
- STORAGE AREAS, MECHANICAL ROOMS AND MAINTENANCE ROOMS SHALL BE CONSIDERED ORDINARY HAZARD (GROUP 1) OCCUPANCY AND DESIGNED FOR SPRINKLER DENSITY GPM/SF FOR MOST REMOTE 1500 SF WITH 250 GPM HOSE STREAM ALLOWANCE.



**SECOND FLOOR FIRE PROTECTION PLAN**  
SCALE: 3/32" = 1'-0"

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER**  
**RECREATION CENTER**  
 2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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SHEET TITLE  
**SECOND FLOOR  
 FIRE PROTECTION  
 PLAN**

SHEET NO.  
**FP1.02**

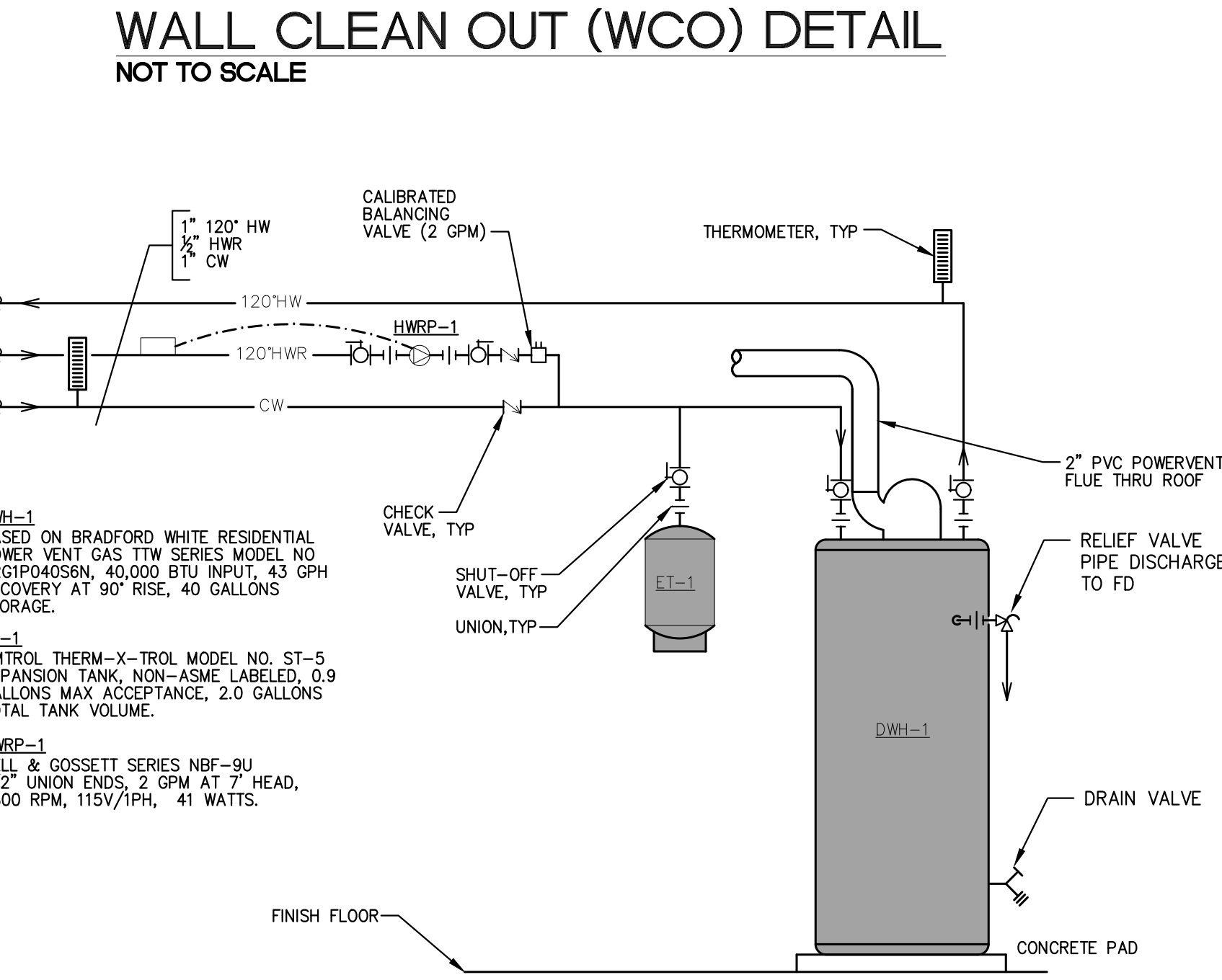
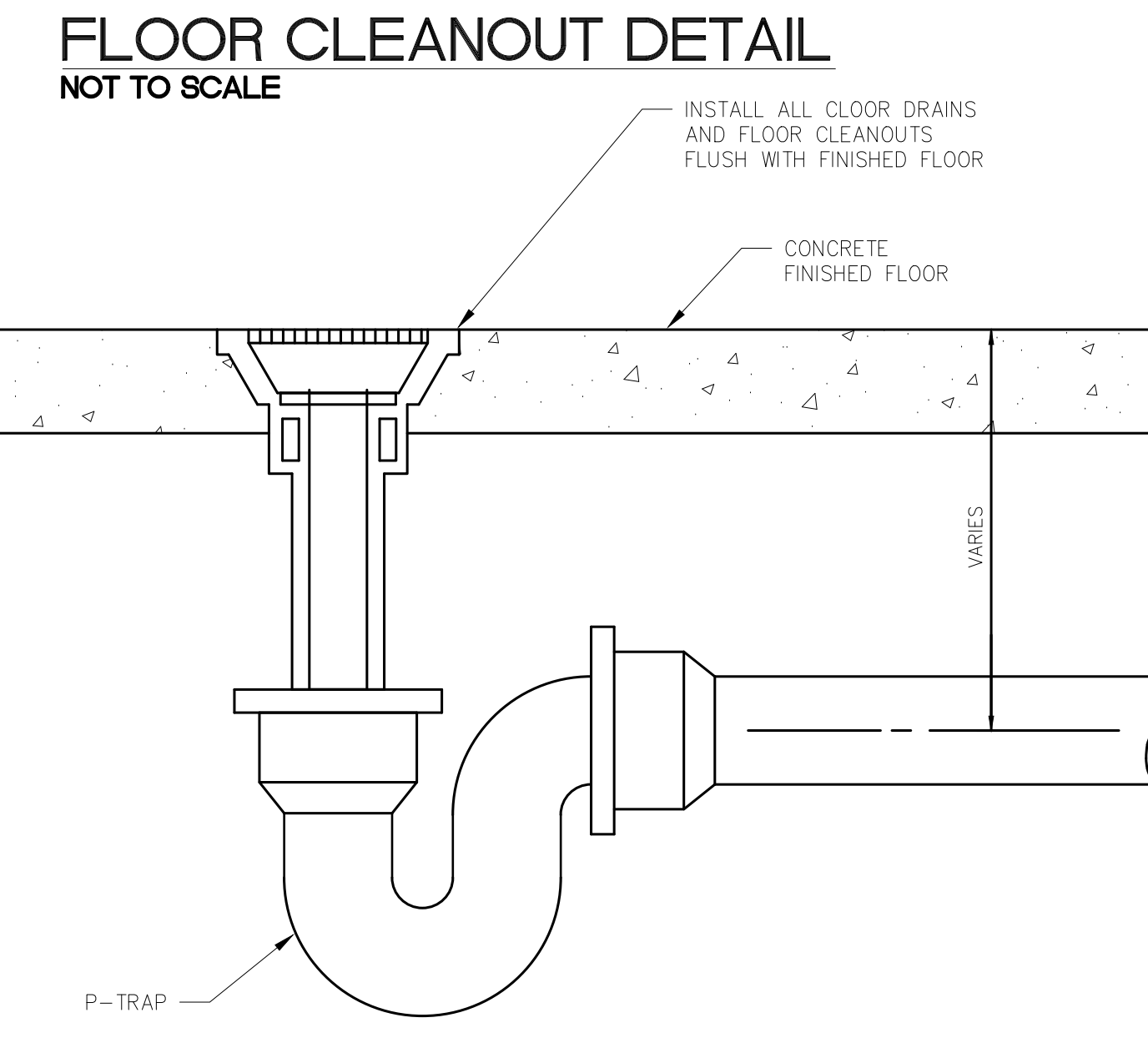
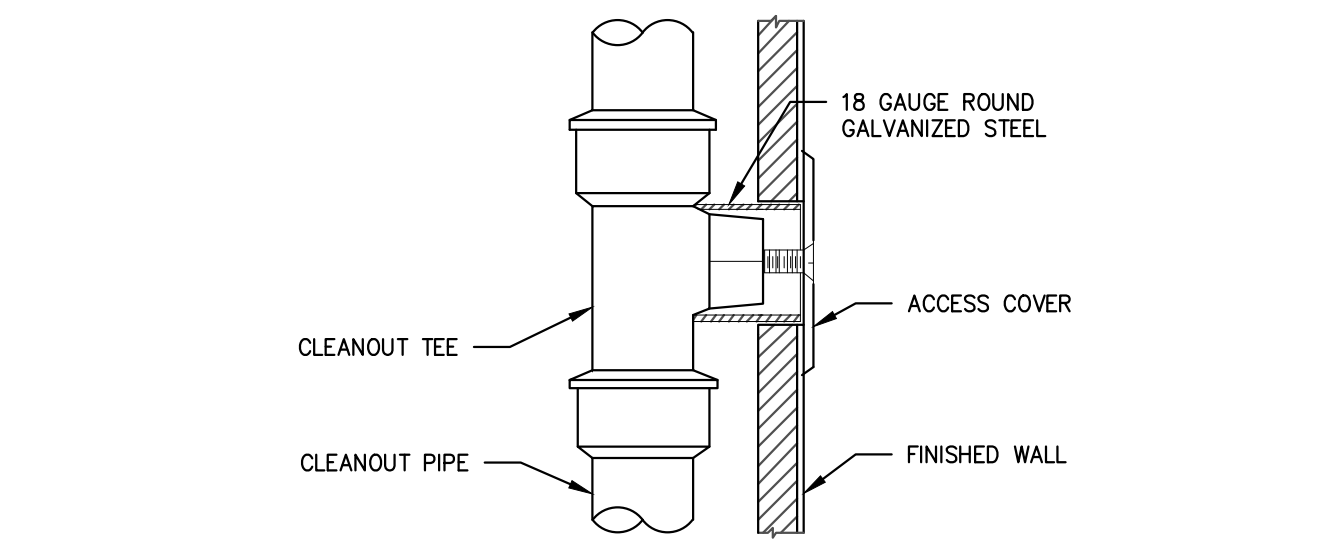
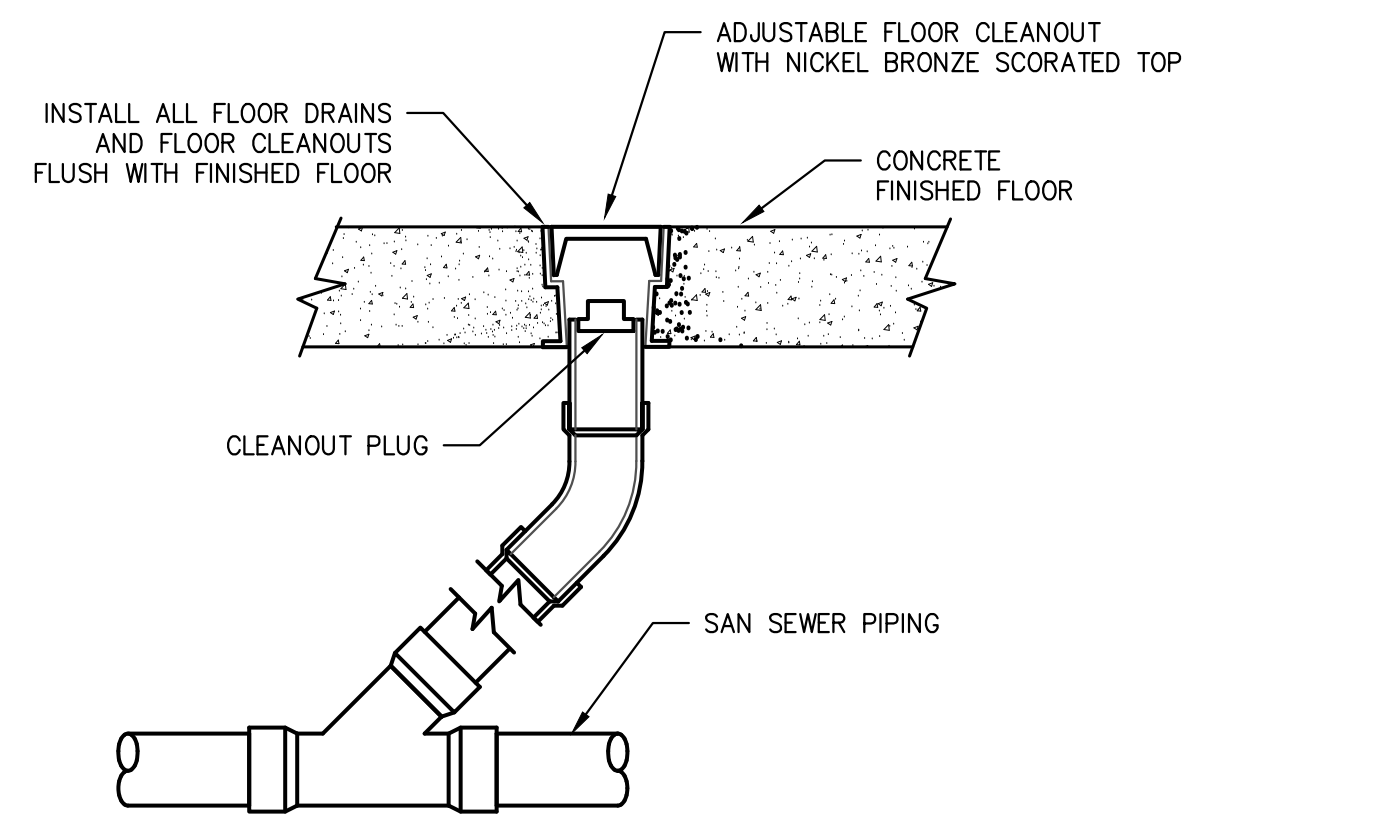
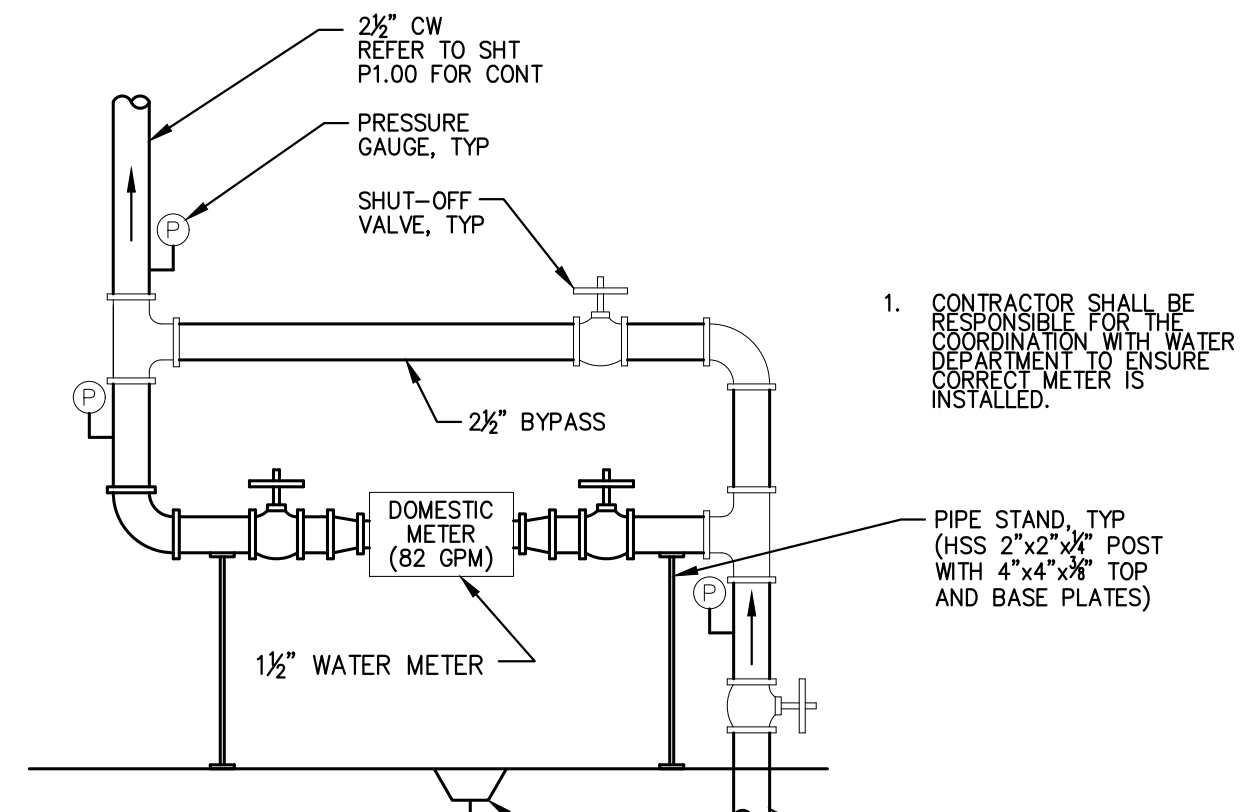
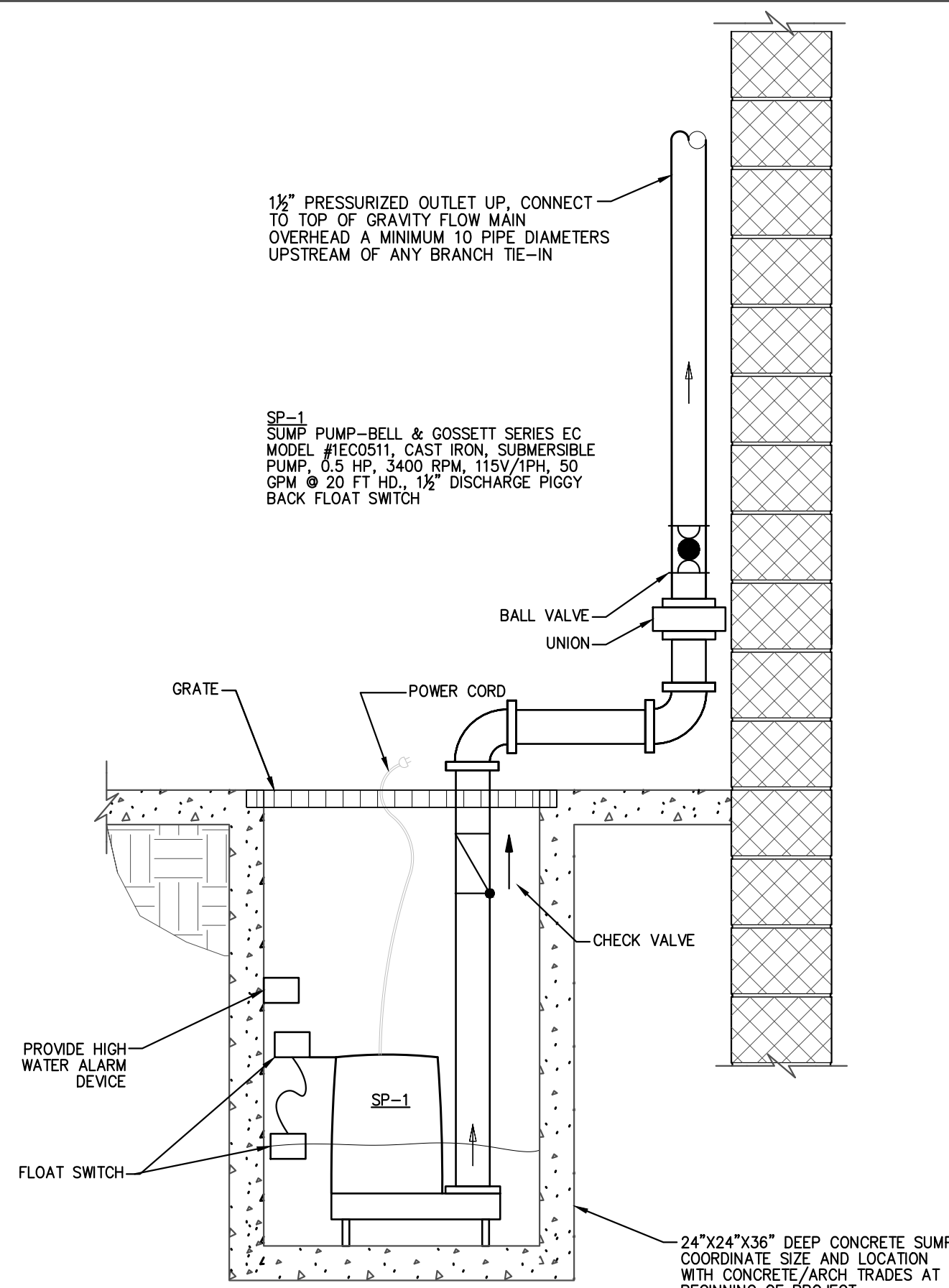
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### PLUMBING ABBREVIATIONS

AFF	ABOVE FINISH FLOOR	HWFU	HOT WATER FIXTURE UNITS
BFP	BACKFLOW PREVENTER	HWR	DOMESTIC HOT WATER RETURN
CBV	CALIBRATED BALANCING VALVE	HWRP	HOT WATER RECIRCULATION PUMP
CLG	CEILING	IE	INVERT ELEVATION
CN	CONDUCTOR NOZZLE	LAV	LAVATORY
CO	CLEANOUT	MFR	MANUFACTURER
CONN	CONNECTION	MSB	MOP SERVICE BASIN
CONT	CONTINUATION	OD	OVERFLOW ROOF DRAIN
COORD	COORDINATE	PSI	POUNDS PER SQUARE INCH
CW	DOMESTIC COLD WATER	RD	ROOF DRAIN
CWFU	COLD WATER FIXTURE UNITS	RH	ROOF HYDRANT
DFU	DRAINAGE FIXTURE UNITS	RPZBFP	REDUCED PRESSURE ZONE BACKFLOW PREVENTER
DN	DOWN	SAN	SANITARY DRAIN
DWG	DRAWING	ST	STORM DRAIN
DWH	DOMESTIC WATER HEATER	TYP	TYPICAL
ECO	EXTERIOR CLEANOUT	UR	URINAL
ET	EXPANSION TANK	V	VENT
EW	ELECTRIC WATER COOLER	YR	VENT THROUGH ROOF
EXIST	EXISTING	W	WASTE
FCO	FLOOR CLEAN OUT	WC	WATER CLOSET
FD	FLOOR DRAIN	WCO	WALL CLEAN OUT
FF	FINISH FLOOR	WH	WALL HYDRANT
FLR	FLOOR	WOB	WALL OUTLET BOX
G	NATURAL GAS	WSFU	WATER SUPPLY FIXTURE UNITS
HW	DOMESTIC HOT WATER		

### PLUMBING LEGEND

	CALIBRATED BALANCING VALVE		CAP
	CHECK VALVE		STRAINER
	SHUT OFF VALVE		SANITARY DRAIN
	HOSE BIBB/WALL HYDRANT		STORM DRAIN
	PIPE ELBOW		DOMESTIC COLD WATER
	RISER UP		DOMESTIC HOT WATER
	RISER DOWN		DOMESTIC HOT WATER RETURN
	BRANCH UP		PLUMBING VENT
	UNION		DIRECTION OF FLOW



#### PLUMBING FIXTURE LIST

REFER TO SPEC SECTION 224000

WC-1	WATER CLOSET (ADA) RIGHT HEIGHT, FLUSHOMETER TYPE WATER CLOSET, FLOOR MOUNTED, VITREOUS CHINA, ELONGATED FRONT, 1.28 GPF, 12" ROUGH-IN, STANDARD WHITE COLOR, WITH OPEN FRONT TOILET SEAT & FLUSH VALVE FV-1.
UR-1	URINAL (ADA)-WALL HUNG FLUSH VALVE SIPHON JET URINAL, VITREOUS CHINA, ADA ACCESSIBLE, STANDARD WHITE COLOR W/ FV-2 FLUSH VALVE AND STEEL WALL HANGER
FV-1	WATER CLOSET SLOAN UPPERCUT DUAL FLUSH, 1.6 GPF/1.1 GPF
FV-2	URINAL SLOAN REGAL MANUAL 1.0 GPF
L-1	LAVATORY-WALL HUNG LAVATORY, VITREOUS CHINA, STANDARD WHITE COLOR, 3-HOLE W/ 4" CENTERS, FAUCET, ASSE 1070 MIXING VALVE, UNDERSINK PIPE COVERS, AND CHROME DRAIN ASSEMBLY (LF-1)
LF-1	LAVATORY FAUCET- DECK MOUNTED FAUCET, 4" CENTERS, STANDARD 0.5 GPM PEAK FLOW W/ ASSE 1016 TEMPERATURE AND PRESSURE REGULATING DEVICE
MSB-1	MOP SERVICE BASIN- MOLDED-STONE MODEL 24x24x10 HIGH, SS DRAIN W/ COMBINATION DOME STRAINER AND LINT BASKET, HOSE, HOSE BRACKET AND MOP HANGER. PAIRED W/ WALL MOUNTED MOP SINK FAUCET MSF-1.
MSF-1	WALL MOUNTED 8" WIDESPREAD FAUCET, SOLID BRASS BODY, 3/4" HOSE THREAD OUTLET, VACUUM BREAKER SPOUT WITH PAIL HOOK AND WALL BRACE, 2 3/8" LEVEL HANDLES W/ MOUNTING HARDWARE.
EW-1	BI-LEVEL BARRIER FREE SELF-CONTAINED COOLER W/ SATIN FINISH AND BOTTLE FILLING STATION.
WH-1	WALL HYDRANT, KEY OPERABLE, FREEZELESS, FLUSH MOUNT, COLD WATER ONLY CONNECTION.
FD-1	FLOOR DRAIN - 5" ROUND, LIGHT DUTY, NICKEL BRONZE FINISH (BASED ON JAY R. SMITH MODEL #2005-ASNB)
WOB-1	WALL OUTLET BOX, RECESSED PLASTIC BOX WITH 2" WASTE CONNECTION (BASED ON SIOUX CHIEF OX BOX).

#### PLUMBING CODE COMPLIANCE NOTES:

- COMPLETED INSTALLATIONS SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE, AND FEDERAL CODES AND ORDINANCES INCLUDING, BUT NOT LIMITED TO THE LATEST EDITIONS OF THE FOLLOWING: 2018 MICHIGAN PLUMBING CODE.
- PROTECT ALL PUBLIC LAVATORY SINK FAUCETS WITH ASSE 1070 WATER TEMPERATURE LIMITING DEVICE PER 2018 MPC 607.1
- VENT ALL DRAIN FIXTURES IN ONE OF THE METHODS ALLOWED BY 2018 MPC CHAPTER 9. EXTEND EVERY VENT, VENT STACK OR WASTE STACK VENT THROUGH ROOF WITH 3" MINIMUM SIZE.
- CONTRACTOR SHALL PERFORM ALL REQUIRED TESTS OF SANITARY WASTE AND VENT SYSTEM AND DOMESTIC WATER SYSTEM AS IDENTIFIED IN SECTION 312 OF 2018 MPC.
- ALL STORM, WASTE, AND VENT PIPING IN PLENUM SPACES TO BE PLENUM RATED. PVC PIPING WITH FIBERGLASS INSULATION AND ASJ JACKET OR CAST IRON PIPING.

#### PLUMBING (DIVISION 22) SPECIFICATION:

PROVIDE EQUIPMENT INDICATED ON THE DRAWINGS, AND AS REQUIRED FOR A COMPLETE FUNCTIONING SYSTEM.

DEFINITIONS: FURNISH MEANS TO SUPPLY AND DELIVER TO PROJECT SITE, READY FOR INSTALLATION. INSTALL MEANS TO PLACE IN POSITION AND MAKE CONNECTIONS FOR SERVICE OR USE. PROVIDE MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR INTENDED USE.

COORDINATION: COORDINATE WITH THE WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.

ALL PUBLIC LAVATORIES SHALL BE PROVIDED WITH APPROVED WATER TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070.

ALL FLOOR DRAIN SHALL BE EQUIPPED WITH ASSE 1072 BARRIER STYLE TRAP SEAL; RECTORSEAL SURESEAL OR EQUAL.

DOMESTIC HOT AND COLD WATER PIPE TO BE TYPE L HARD COPPER TUBE WITH LEAD FREE SOLDERED OR PRESS-FIT JOINTS AND FITTINGS, OR SHALL BE PEX-A PLASTIC TUBE WITH BARB STYLE FITTINGS

DOMESTIC HOT WATER PIPE AND HOT WATER RETURN PIPE SHALL BE INSULATED WITH 1" THICKNESS OF PRE-FORMED FIBERGLASS PIPE INSULATION WITH FACTORY ASJ AND PVC ELBOW JACKETS. PIPE SUPPORTS SHALL BE ALLOWED TO CONNECT DIRECTLY TO THE PIPE AND PIPE INSULATION IS NOT REQUIRED TO BE CONTINUOUS AT SUPPORTS. FLEXIBLE ELASTOMERIC INSULATION (AP ARMAFLEX BLACK LAPSEAL OR EQUAL) SHALL BE APPROVED ALTERNATE TO FIBERGLASS PIPE INSULATION

PROVIDE STOP VALVES AT ALL WATER FIXTURE CONNECTIONS. PROVIDE BRONZE BODY BALL STOP/WASTE SHUT-OFF VALVES ON SUPPLY LINE TO ALL HOSE BIBBS AND WALL HYDRANTS. PROVIDE BRONZE BODY BALL SHUT-OFF VALVES ON COLD AND HOT CONNECTIONS TO WATER HEATER.

PROVIDE FULL OPEN GATE VALVE AT WATER SUPPLY ENTRANCE TO BUILDING FROM MUNICIPAL WATER SUPPLY; COORDINATE WITH WATER PURVEYOR FOR ADDITIONAL WATER METER REQUIREMENTS.

HOT WATER RECIRCULATION BALANCING VALVE BASED ON CIRCUITSOLVER SELF-ACTING THERMOSTATIC RECIRCULATION VALVE.

PURGE AND DISINFECT ALL NEW POTABLE WATER PIPING PER REQUIREMENTS OF AWWA C651 OR C652, OR AS REQUIRED BY LOCAL HEALTH DEPARTMENT.

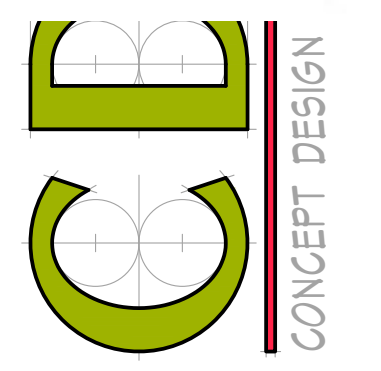
STORM WATER AND SANITARY WASTE AND VENT PIPING SYSTEMS: SCH 40 SOLID CORE PVC WITH SOLVENT WELDED JOINTS & FITTINGS FOR BOTH BELOW GROUND AND ABOVE GROUND. SUPPORT ALL ABOVE GROUND WASTE AND VENT PIPING FROM STRUCTURE AT NOT MORE THAN CODE MAXIMUM SPACING FOR PIPE MATERIAL AND SIZE. INSTALL WITH NO SAGS OR DIPS IN HORIZONTAL PIPE GROUP VENTS TO COMMON POINT FOR VENT THROUGH ROOF. ALL HORIZONTAL INDOOR PRIMARY STORM PIPE OR ALL PVC PIPE IN A PLENUM SHALL BE INSULATED WITH 1" THICKNESS, OF PRE-FORMED FIBERGLASS PIPE INSULATION WITH FACTORY ASJ JACKETS.

PROVIDE CLEANOUTS FOR WASTE LINES AS SHOWN ON DRAWINGS, AND OF TYPE APPROVED BY LOCAL CODES.

VENT PIPE(S) THRU THE ROOF SHALL BE 3" MINIMUM AND EXTEND AT LEAST 1 FT ABOVE THE ROOF; PROVIDE ROOF JACK VENT PIPE FLASHING EACH PENETRATION WITH ALUMINUM BASE AND RUBBERIZED BOOT. CAULK JOINT BETWEEN VENT PIPE AND BOOT TO MAKE WEATHER TIGHT.

#### GENERAL PLUMBING NOTES:

- CONTRACTOR RESPONSIBLE FOR ALL REQUIRED PERMITS AND FEES RELATIVE TO THEIR WORK SCOPE.
- THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL OTHER TRADES AND WITH INSTALLATION OF ALL PLUMBING SYSTEMS IN COMPLIANCE WITH THE 2018 MICHIGAN PLUMBING CODE AND ALL OTHER APPLICABLE STATE AND LOCAL CODES.
- ROUTE ALL SANITARY & WASTE PIPING 2-1/2" AND LARGER AT 1/8" FALL PER FOOT UNLESS OTHERWISE NOTED; ROUTE ALL SANITARY & WASTE PIPING 2" AND SMALLER AT 1/4" FALL PER FOOT UNLESS OTHERWISE NOTED.
- DRAIN AND VENT SIZES IDENTIFIED ON PLANS SUPERCEDE SIZES IDENTIFIED ON MINIMUM SIZE CONNECTION TABLE.
- ROUTE ALL STORM PIPING AT 1/8" FALL PER FOOT UNLESS OTHERWISE NOTED.
- MAINTAIN AS-BUILT DRAWINGS IN THE FIELD; AS-BUILTS SHALL BE PROVIDED TO THE OWNER AS RECORD DRAWINGS WITH PROJECT CLOSE-OUT DOCUMENTS.
- CONTRACTOR SHALL GUARANTEE WORK INSTALLED UNDER THEIR CONTRACT TO BE FREE FROM DEFECTIVE WORKMANSHIP OR MATERIALS FOR A PERIOD OF ONE (1) YEAR AFTER SUBSTANTIAL COMPLETION, AND SHALL REPAIR AND/OR REPLACE DEFECTIVE ITEMS AND DAMAGE RESULTING FROM FAILURE OF THESE ITEMS AT NO EXPENSE TO THE OWNER.
- INSTALL WATER HAMMER ARRESTOR AT LOCATIONS SHOWN ON PLANS AND AT ALL QUICK CLOSING FIXTURES.



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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SHEET TITLE  
**GENERAL PLUMBING INFORMATION**

SHEET NO.  
**P0.01**

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No. 43663  
1/4/2024

No. 43663  
1/4/2024

### WATER HAMMER ARRESTOR LEGEND

SYMBOL	PDI RATING	FIXTURE UNIT CAP
Ⓐ	A	1-11
Ⓑ	B	12-32
Ⓒ	C	33-60

**NOTES:**  
1. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PLACEMENT OF WATER HAMMER ARRESTORS. REFER TO MANUFACTURER'S RECOMMENDATIONS.

### FIXTURE UNIT VALUES

FIXTURE	DRAINAGE <sup>a</sup>		SUPPLY <sup>b</sup>	
	DFU	HW	CW	TOTAL
WATER CLOSET (FLUSH VALVE)	4	—	10	10
URINAL (FLUSH VALVE)	2	—	5	5
LAVATORY (PUBLIC)	1	1.5	1.5	2
MOP SERVICE BASIN	2	2.25	2.25	3
EW/DRINKING FOUNTAIN	0.5	—	0.25	0.25
HOSE BIBB/WALL HYDRANT	—	—	3	3
FLOOR DRAIN (3" TRAP)	5	—	—	—

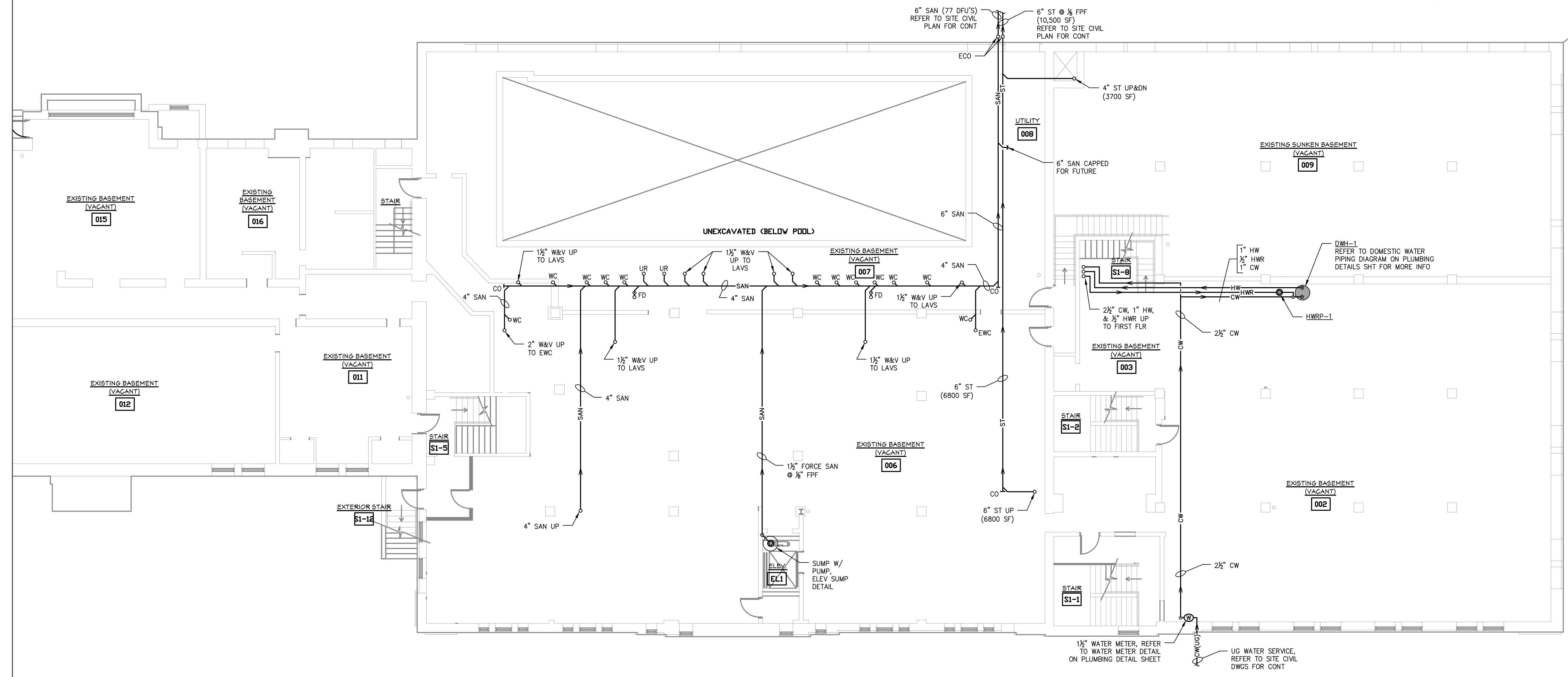
a. DRAINAGE FIXTURE UNIT VALUES (DFU) TAKEN FROM Michigan Plumbing Code/2018, CHAPTER 7, TABLE 709.1.  
b. SUPPLY FIXTURE UNIT VALUES TAKEN FROM Michigan Plumbing Code/2018, APPENDIX E, TABLE E103.3(2).

### MINIMUM SIZE CC

FIXTURE	SAN	H
WATER CLOSET (FLUSH VALVE)	4"	—
URINAL (FLUSH VALVE)	2"	—
LAVATORY	1 1/4"	1/2"
MOP SERVICE BASIN	3"	3/4"
WALL HYDRANT	—	—
WASHING MACHINE BOX	2" TRAP	3" RISER
HOSE BIBB	—	—
ELECTRIC WATER COOLER	1 1/4"	—
FLOOR DRAIN	3"	—

STATE OF MICHIGAN  
CHRISTOPHER NOLAN  
ENGINEER  
No. 43663  
1-4-2024

STATE OF MICHIGAN  
CHRIS NO...  
ENGR...  
No. 43663  
1-4-2024



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER**  
**RECREATION CENTER**  
 2900 ST. ANTOINE STREET, DETROIT, MICHIGA

PROJECT #	1356-23
ISSUANCES	
FOR PERMIT	12.24.2023
REVISIONS	
DRAWN BY	CAS

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SHEET TITLE  
**PARTIAL BASEMENT PLUMBING PLAN**

SHEET NO.  
**P1.00**

**PARTIAL BASEMENT PLUMBING PLAN**  
 SCALE: 1/8" = 1'-0"

**KEY PLAN**  
 SCALE: NONE

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ENGINEER  
No. 43663  
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ENGINEER  
No. 43663  
1/4/2024

STATE OF MICHIGAN  
CHRISTOPHER NOLAN  
ENGINEER  
No. 43663  
1-4-2024

STATE OF MICHIGAN  
CHRISTOPHER NOLAN  
ENGINEER  
No. 43663  
1-4-2024

### WATER HAMMER ARRESTOR LEGEND

SYMBOL	PDI RATING	FIXTURE UNIT CAP
Ⓐ	A	1-11
Ⓑ	B	12-32
Ⓒ	C	33-60

NOTES:  
1. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PLACEMENT OF WATER HAMMER ARRESTORS. REFER TO MANUFACTURER'S RECOMMENDATIONS.

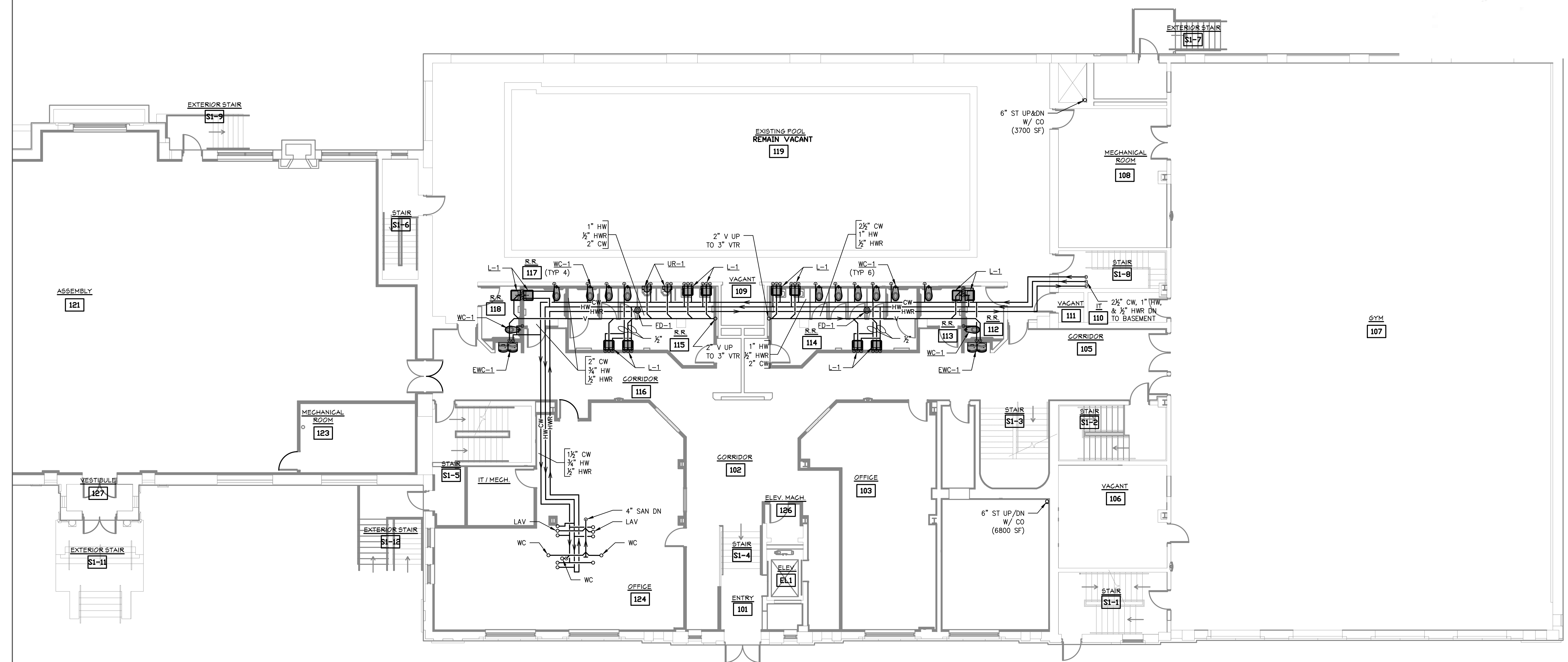
### FIXTURE UNIT VALUES

FIXTURE	DRAINAGE <sup>a</sup>		SUPPLY <sup>b</sup>	
	DFU	HW	CW	TOTAL
WATER CLOSET (FLUSH VALVE)	4	—	10	10
URINAL	2	—	5	5
LAVATORY (PUBLIC)	1	1.5	1.5	2
MOP SERVICE BASIN	2	2.25	2.25	3
EW/DRINKING FOUNTAIN	0.5	—	0.25	0.25
HOSE BIBB/WALL HYDRANT	—	—	3	3
FLOOR DRAIN (3" TRAP)	5	—	—	—

a. DRAINAGE FIXTURE UNIT VALUES (DFU) TAKEN FROM Michigan Plumbing Code/2018, CHAPTER 7, TABLE 709.1.  
b. SUPPLY FIXTURE UNIT VALUES TAKEN FROM Michigan Plumbing Code/2018, APPENDIX E, TABLE E103.3(2).

### MINIMUM SIZE CON

FIXTURE	SAN	HW
WATER CLOSET (FLUSH VALVE)	4"	—
URINAL (FLUSH VALVE)	2"	—
LAVATORY	1 1/4"	1/2"
MOP SERVICE BASIN	3"	3/4"
WALL HYDRANT	—	—
WASHING MACHINE BOX	2" TRAP 3" RISER	—
HOSE BIBB	—	—
ELECTRIC WATER COOLER	1 1/4"	—
FLOOR DRAIN	3"	—



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
 RECREATION CENTER**  
 2900 ST. ANTOINE STREET, DETROIT, MICHIG

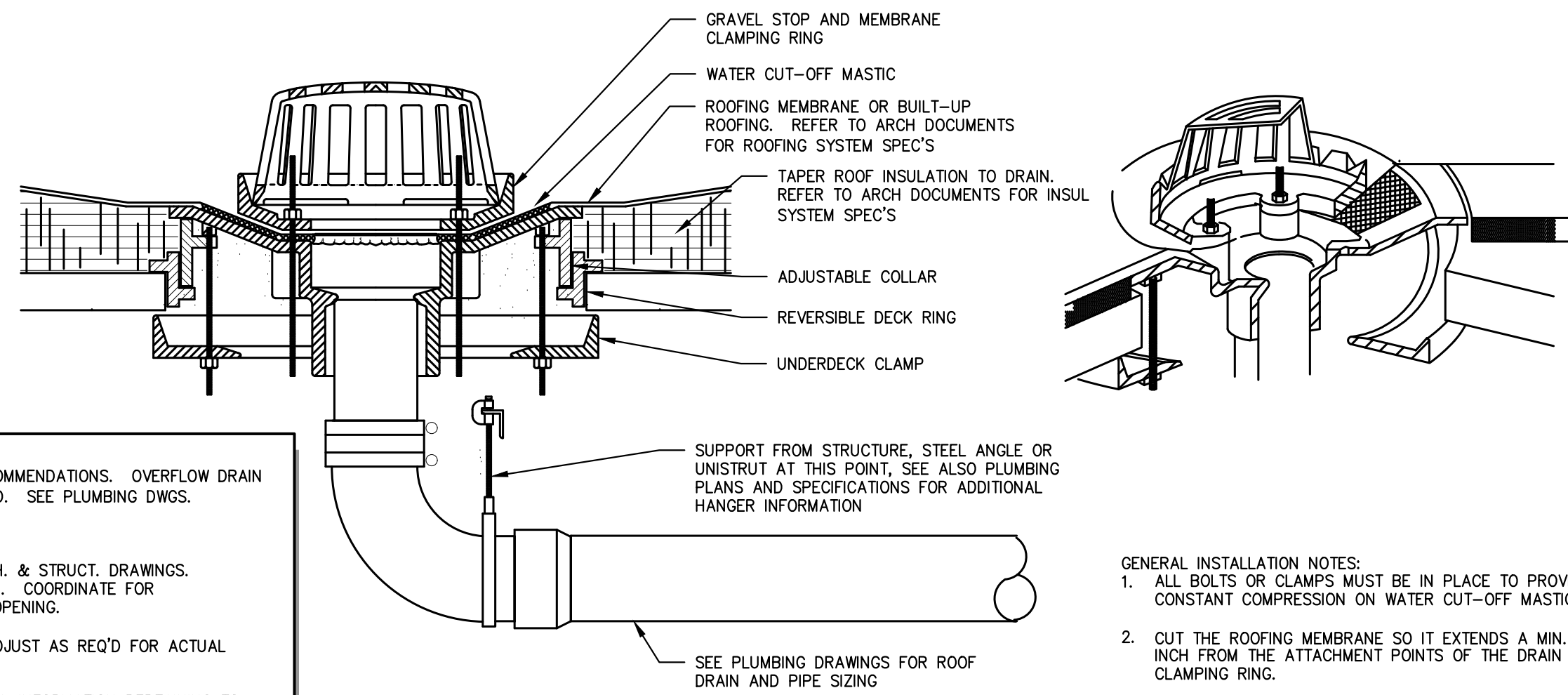
PROJECT #	1356-23
ISSUANCES	
FOR PERMIT	12.24.2023
REVISIONS	
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SHEET TITLE  
**PARTIAL FIRST  
 FLOOR PLUMBING  
 PLAN**  
 SHEET NO.  
**P1.01**

**PARTIAL FIRST FLOOR PLUMBING PLAN**  
 SCALE: 1/8" = 1'-0"

**KEY PLAN**  
 SCALE: NONE

1/9/2024 12:12 PM (1/9/2024 16:15:20) Document Path: P:\Projects\Brewster Wheeler Rec Center\Drawings\231012-CP5-Brewster Rec Center-Detroit\DWG\Drawings\231012-P\_sheets.dwg



- NOTES:
- INSTALL ROOF DRAINS PER MFG'S RECOMMENDATIONS. OVERFLOW DRAIN SAME SIZE AS ROOF DRAIN, WHEN REQ'D. SEE PLUMBING DWGS.
  - INSULATE DRAIN BODIES AND PIPING.
  - LOCATE DRAINS WHERE SHOWN ON ARCH. & STRUCT. DRAWINGS. COORDINATE WITH ROOFING CONTRACTOR. COORDINATE FOR SUPPLEMENTARY STEEL AROUND ROOF OPENING.
  - ARRANGEMENT SHOWN IS SCHEMATIC, ADJUST AS REQ'D FOR ACTUAL CONDITIONS.
  - SEE ALSO SPECIFICATION FOR ADDITIONAL INFORMATION PERTAINING TO PIPING, INSULATION, HANGERS, AND ACCEPTED MFGS.
  - REFER TO SPECIFICATIONS FOR ACCEPTED PIPING MATERIALS AND JOINING METHODS.

**ROOF DRAIN DETAIL**  
NOT TO SCALE

- GENERAL INSTALLATION NOTES:
- ALL BOLTS OR CLAMPS MUST BE IN PLACE TO PROVIDE CONSTANT COMPRESSION ON WATER CUT-OFF MASTIC.
  - CUT THE ROOFING MEMBRANE SO IT EXTENDS A MIN. OF 1/2 INCH FROM THE ATTACHMENT POINTS OF THE DRAIN CLAMPING RING.
  - HOLE IN MEMBRANE MUST EXCEED SIZE OF DRAIN PIPE.

**WATER HAMMER ARRESTOR LEGEND**

SYMBOL	PDI RATING	FIXTURE UNIT CAP
Ⓐ	A	1-11
Ⓑ	B	12-32
Ⓒ	C	33-60

NOTES:  
1. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PLACEMENT OF WATER HAMMER ARRESTORS. REFER TO MANUFACTURER'S RECOMMENDATIONS.

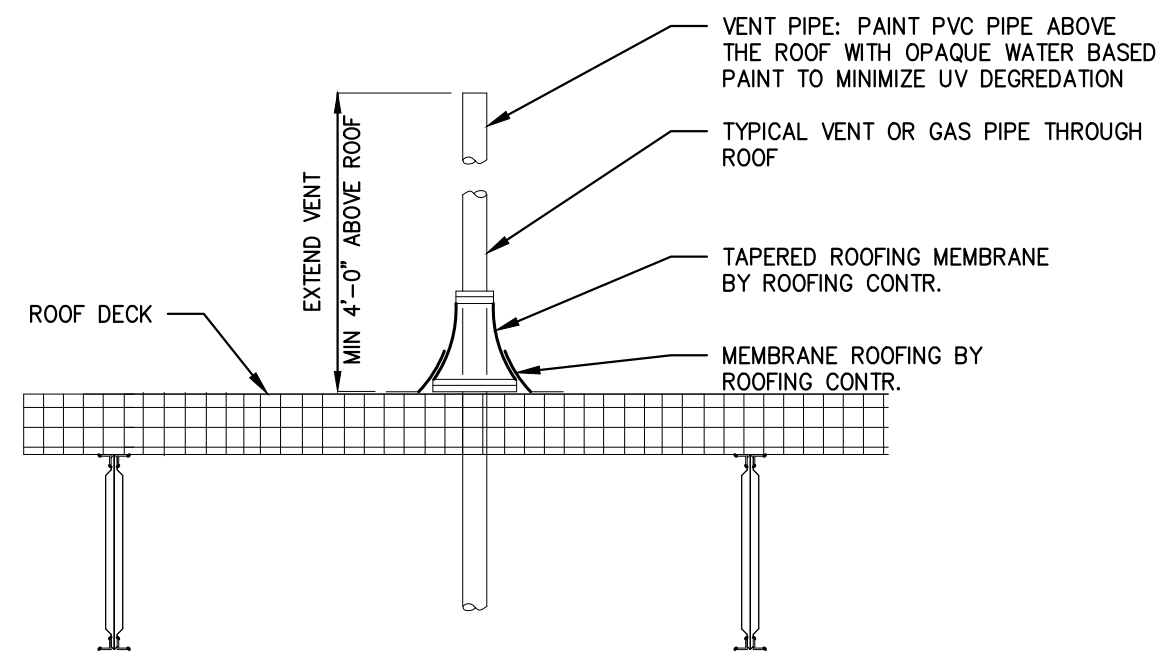
**FIXTURE UNIT VALUES**

FIXTURE	DRAINAGE <sup>a</sup>		SUPPLY <sup>b</sup>	
	DFU	HW	CW	TOTAL
WATER CLOSET (FLUSH VALVE)	4	—	10	10
URINAL	2	—	5	5
LAVATORY (PUBLIC)	1	1.5	1.5	2
MOP SERVICE BASIN	2	2.25	2.25	3
EW/DRINKING FOUNTAIN	0.5	—	0.25	0.25
HOSE BIBB/WALL HYDRANT	—	—	3	3
FLOOR DRAIN (3" TRAP)	5	—	—	—

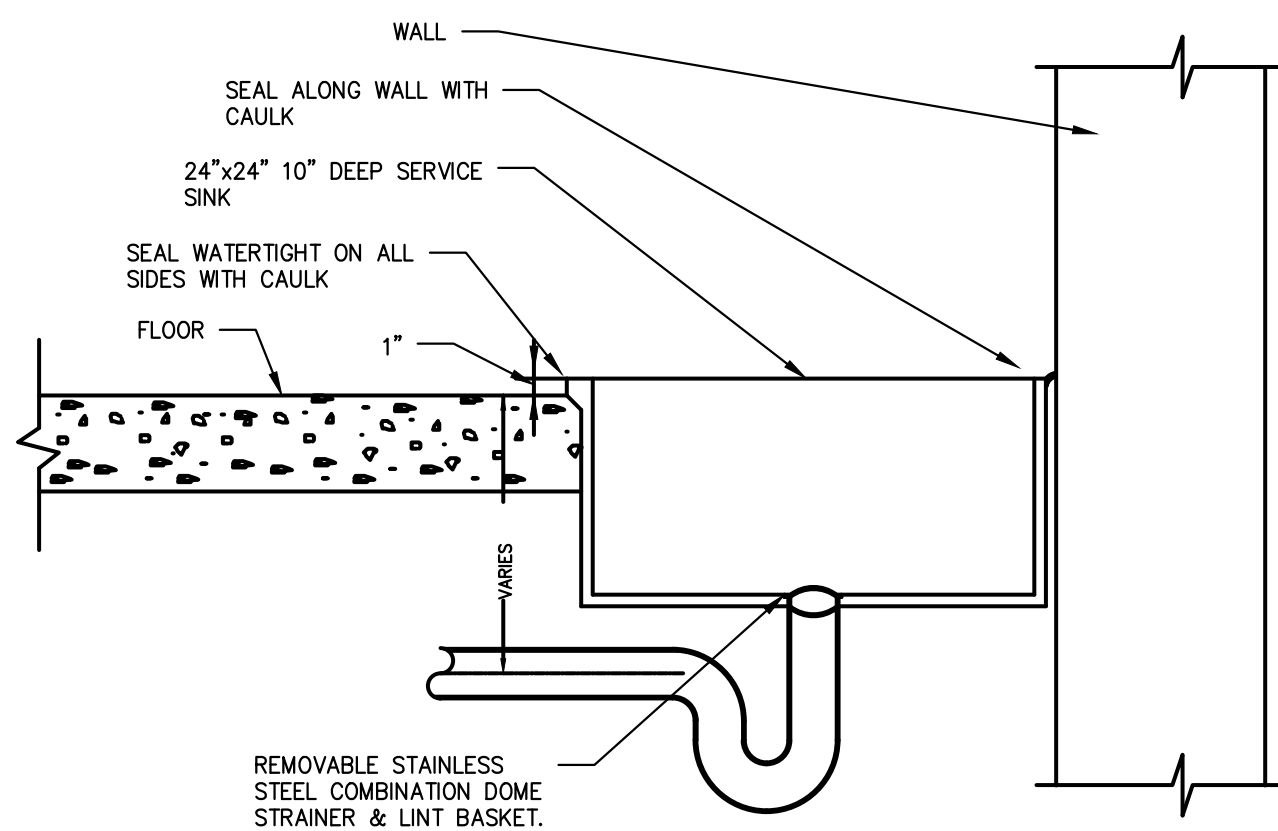
- a. DRAINAGE FIXTURE UNIT VALUES (DFU) TAKEN FROM Michigan Plumbing Code/2018, CHAPTER 7, TABLE 709.1.  
b. SUPPLY FIXTURE UNIT VALUES TAKEN FROM Michigan Plumbing Code/2018, APPENDIX E, TABLE E103.3(2).

**MINIMUM SIZE CO**

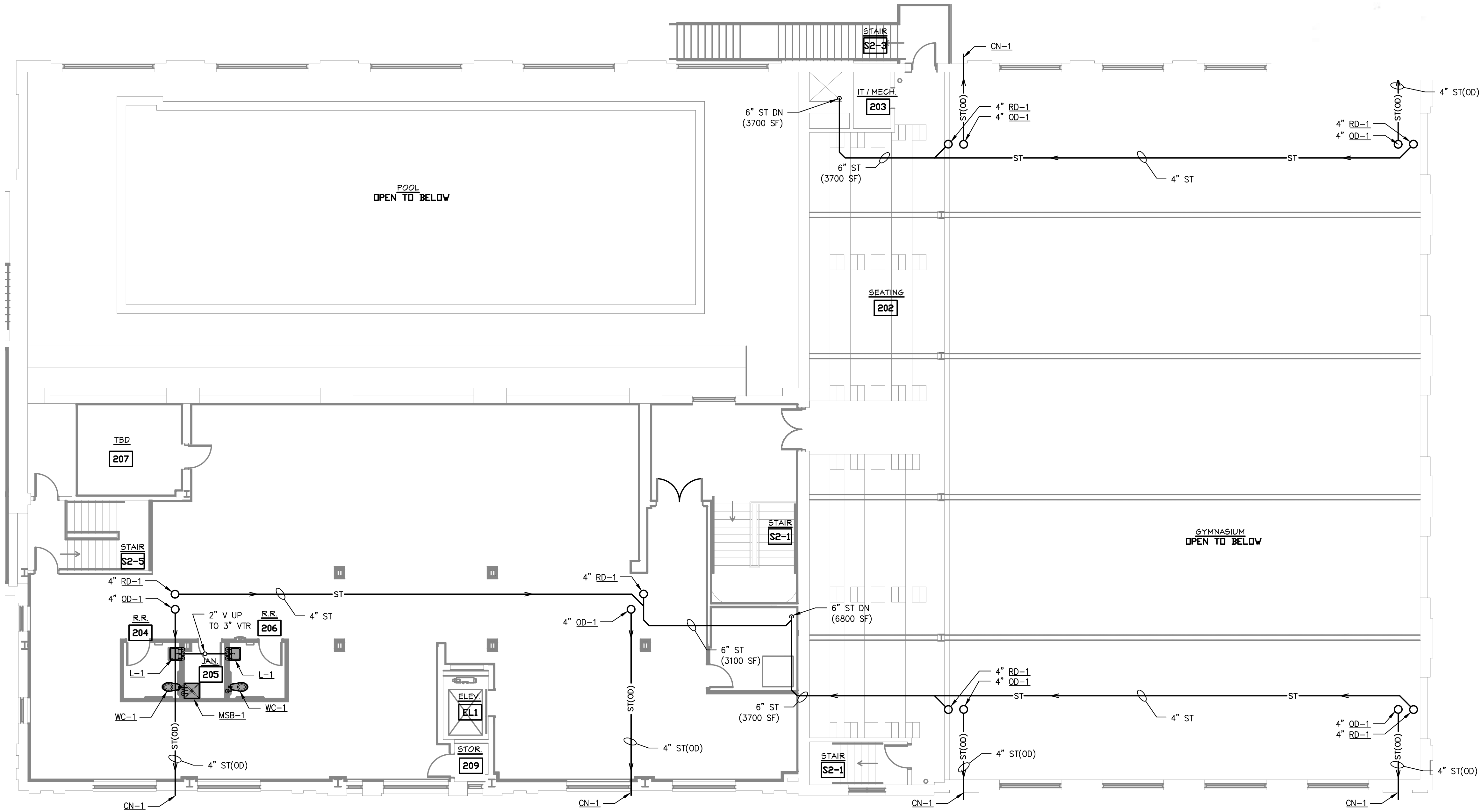
FIXTURE	SAN	HW
WATER CLOSET (FLUSH VALVE)	4"	—
URINAL (FLUSH VALVE)	2"	—
LAVATORY	1 1/4"	1/2"
MOP SERVICE BASIN	3"	3/4"
WALL HYDRANT	—	—
WASHING MACHINE BOX	2" TRAP 3" RISER	—
HOSE BIBB	—	—
ELECTRIC WATER COOLER	1 1/4"	—
FLOOR DRAIN	3"	—



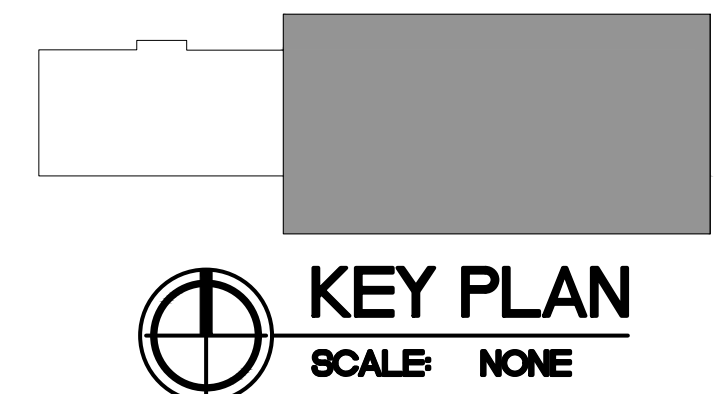
**TYPICAL PIPE THRU ROOF DETAIL**  
NOT TO SCALE



**SERVICE SINK DETAIL**  
NOT TO SCALE



**SECOND FLOOR PLUMBING PLAN**  
SCALE: 1/8" = 1'-0"



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

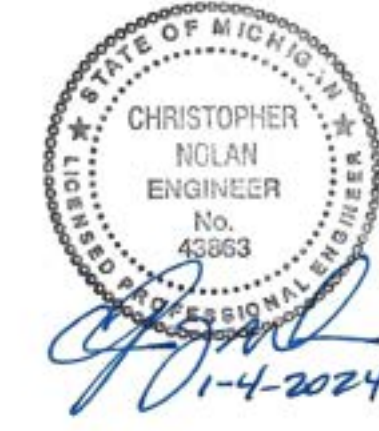
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SHEET TITLE  
**PARTIAL SECOND FLOOR PLUMBING PLAN**

SHEET NO.  
**P1.02**





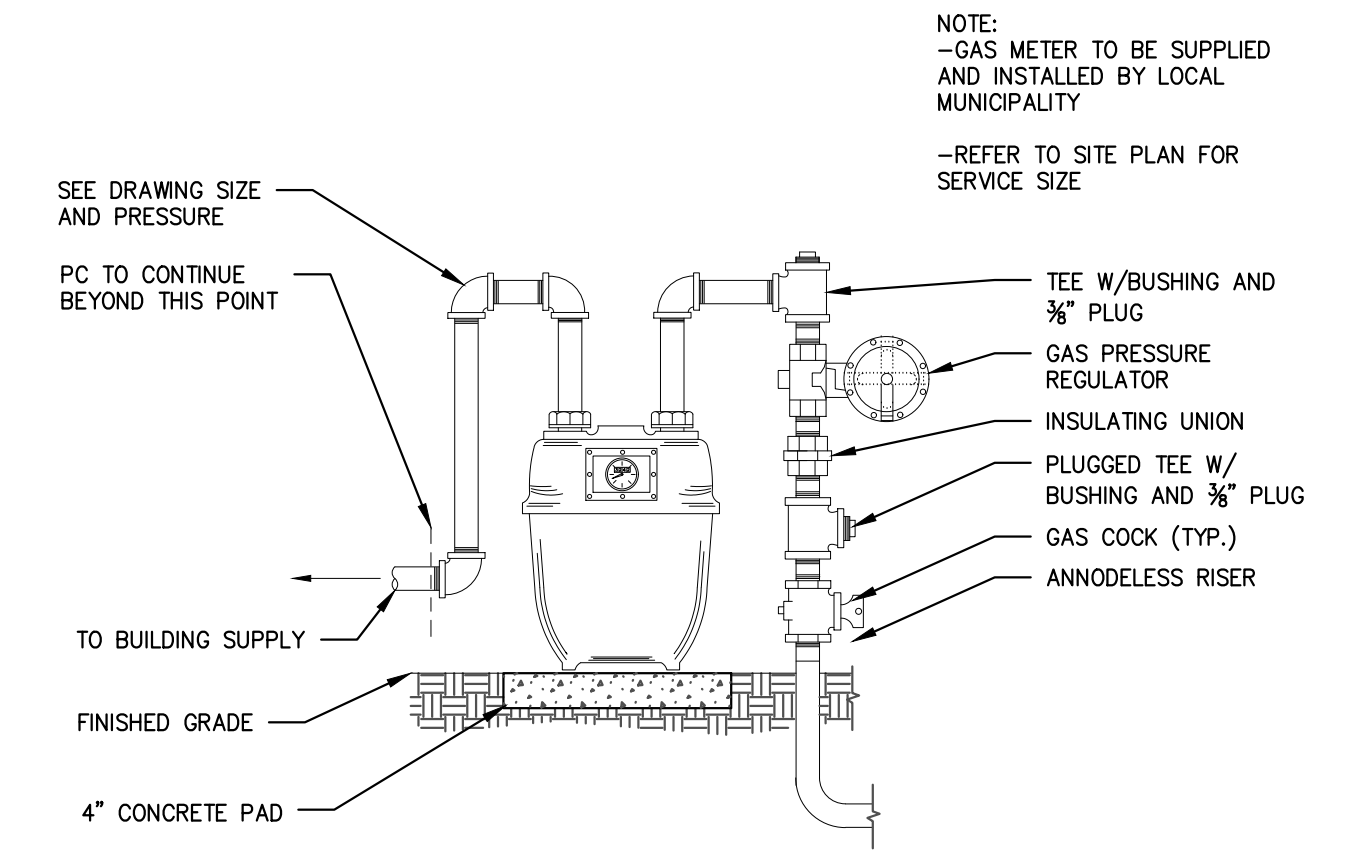


**GENERAL HVAC NOTES:**

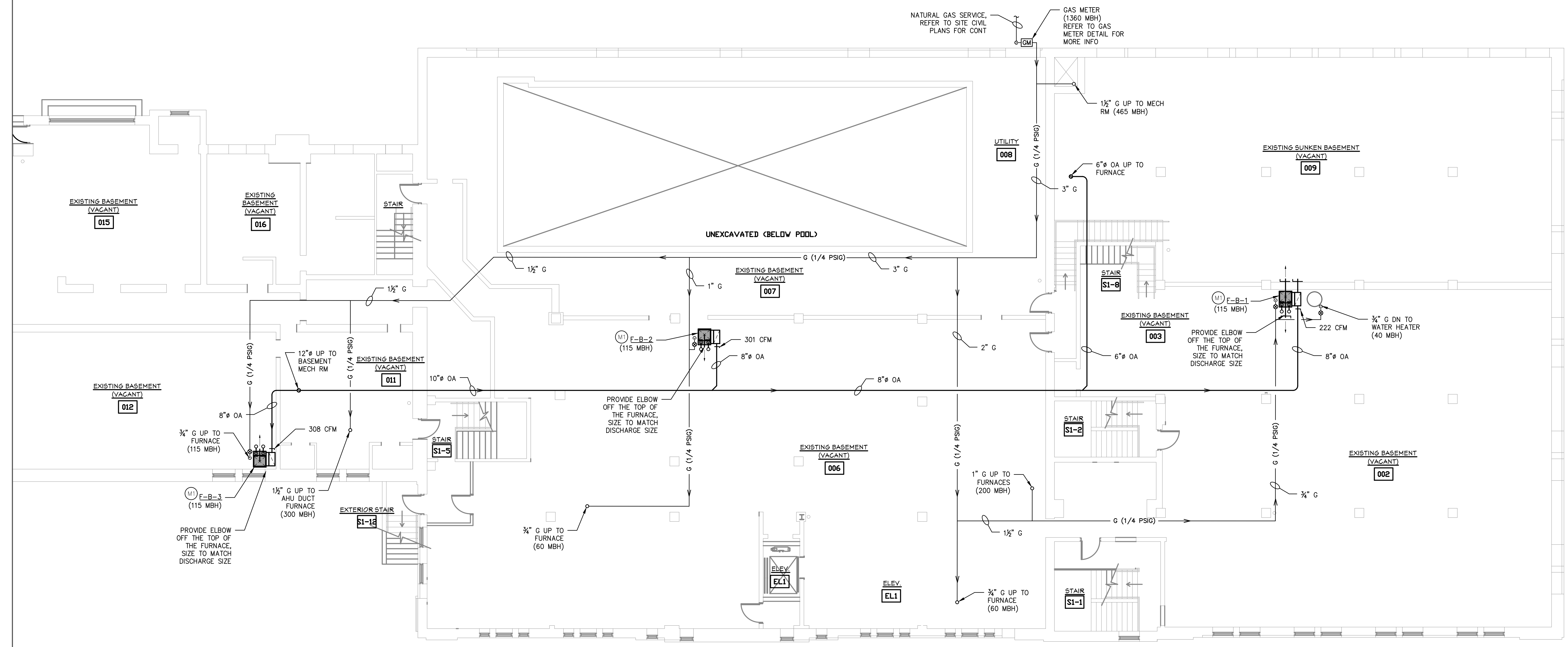
1. PROVIDE TURNING VANES IN ALL 90° MITERED ELBOWS.
2. DUCT RUNOUT SIZES TO MATCH DIFFUSER OR GRILLE NECK SIZE UNLESS SHOWN OTHERWISE.
3. ALL SUPPLY DIFFUSER RUNOUT DUCT TO HAVE BD AS FAR AS POSSIBLE FROM DIFFUSER.
4. FLEX CONNECTORS TO CD'S TO BE THE SAME SIZE AS THE CD COLLAR, MAX 5 FT LONG.
5. ALL RECTANGULAR DUCT TAKE-OFFS TO HAVE 45° LEADING EDGE OR CONICAL SPIN IN FITTINGS.
6. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES AND PROPER INSTALLATION OF ALL MECHANICAL SYSTEMS.
7. SPIRAL ROUND AND FLAT OVAL DUCT UPSTREAM OF TERMINAL UNITS TO HAVE LO-LOSS FITTINGS FOR ALL TAKE-OFFS.
8. DUCT DIMENSIONS SHOWN REPRESENT FREE AREA REQUIRED. INCREASE FOR INTERNAL DUCT ACOUSTIC LINING AS REQUIRED.
9. LOCATE THERMOSTATS/SENSORS AT 48" AFF
10. LOCATE THERMOSTATS AND/OR ROOM TEMP SENSORS TO BEST REPRESENT OCCUPANT ROOM COMFORT - TCC RESPONSIBLE FOR FINAL LOC BASED ON RELATIVE LOC TO SUPPLY AND RETURN AIR GRILLES, OUTSIDE WINDOW, ROOM FURNITURE LAYOUT AND OWNER COORDINATION.
11. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT, WHERE PIPING PASSES OVER ELECTRICAL BUS DUCTS OR PANELS, PROVIDE DRIP PAN SHIELD.

**KEYED M**

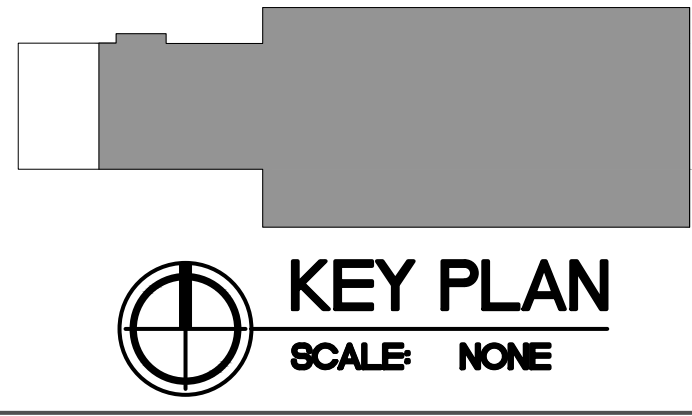
- (M1) UPFLC SCHEI APPROVED UNIT OR EQUIPMENT
- (M2) GAS FIRED DUCT FURNACE. ROUTE 6" FLUE UP THRU ROOF. DRAW COMBUSTION AIR FROM MECHANICAL ROOM; PROVIDE 12X12 TRANSFER OPENING WITH GRILLE BETWEEN MECHANICAL ROOM AND ASSEMBLY 121.
- (M3) CEILING MOUNTED HEAT PUMP CASSETTE. ROUTE PUMPED CONDENSATE TO APPROVED DISCHARGE LOCATION. ROUTE REFRIGERATION PIPING TO OUTDOOR HEAT PUMP UNIT ON ROOF, SIZE PER MFR'S RECOMMENDATION.
- (M4) CEILING MOUNTED EXHAUST FAN. ROUTE 6" EXH UP THRU ROOF AND TERMINATE WITH ROOF HOOD.



**TYPICAL GAS SERVICE CONNECTION DETAIL**  
NOT TO SCALE



**PARTIAL BASEMENT MECHANICAL PLAN**  
SCALE: 1/8" = 1'-0"



**KEY PLAN**  
SCALE: NONE

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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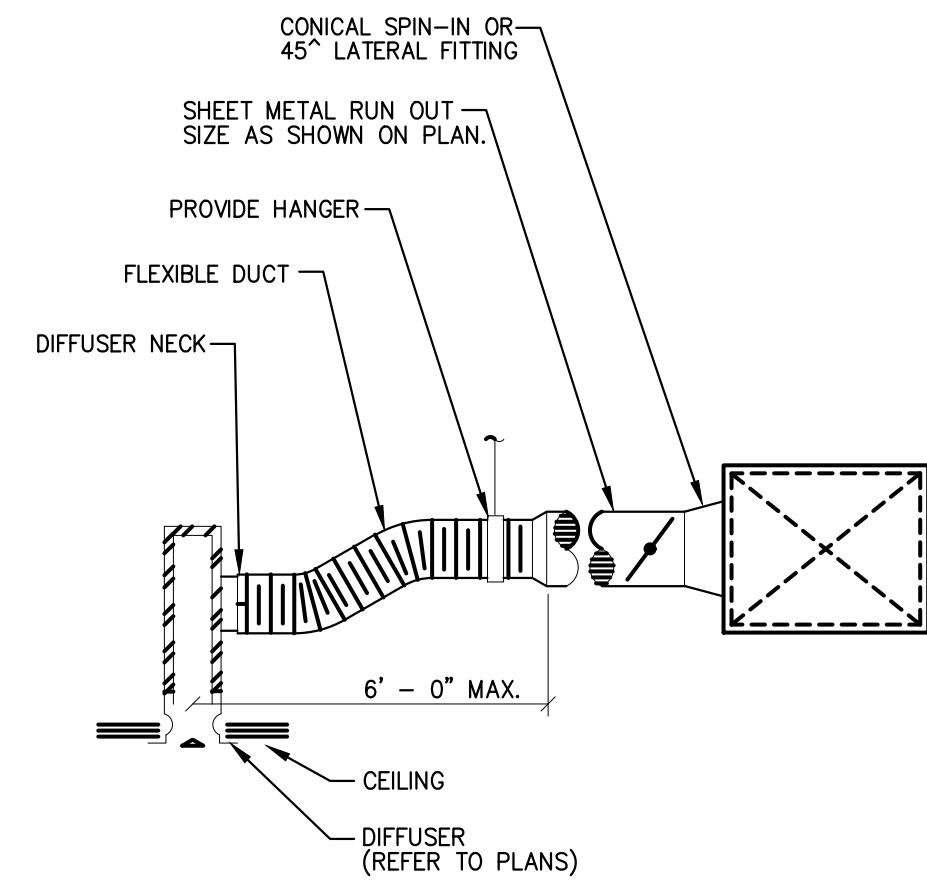
SHEET TITLE  
**PARTIAL BASEMENT MECHANICAL PLAN**

SHEET NO.

**M1.00**

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SECTION VIEW

1. APPLICABLE FOR DIFFUSERS SERVED BY ROUND DUCTS AND FLAT OVAL.
2. STRETCH FLEXIBLE DUCT TIGHT SO NO SOUND OCCURS.
3. DRAW BANDS AT FLEX DUCT UPSTREAM OF T.J. SHALL BE METAL REMOVABLE TYPE. SCREW THRU DRAW BAND INTO DUCT.

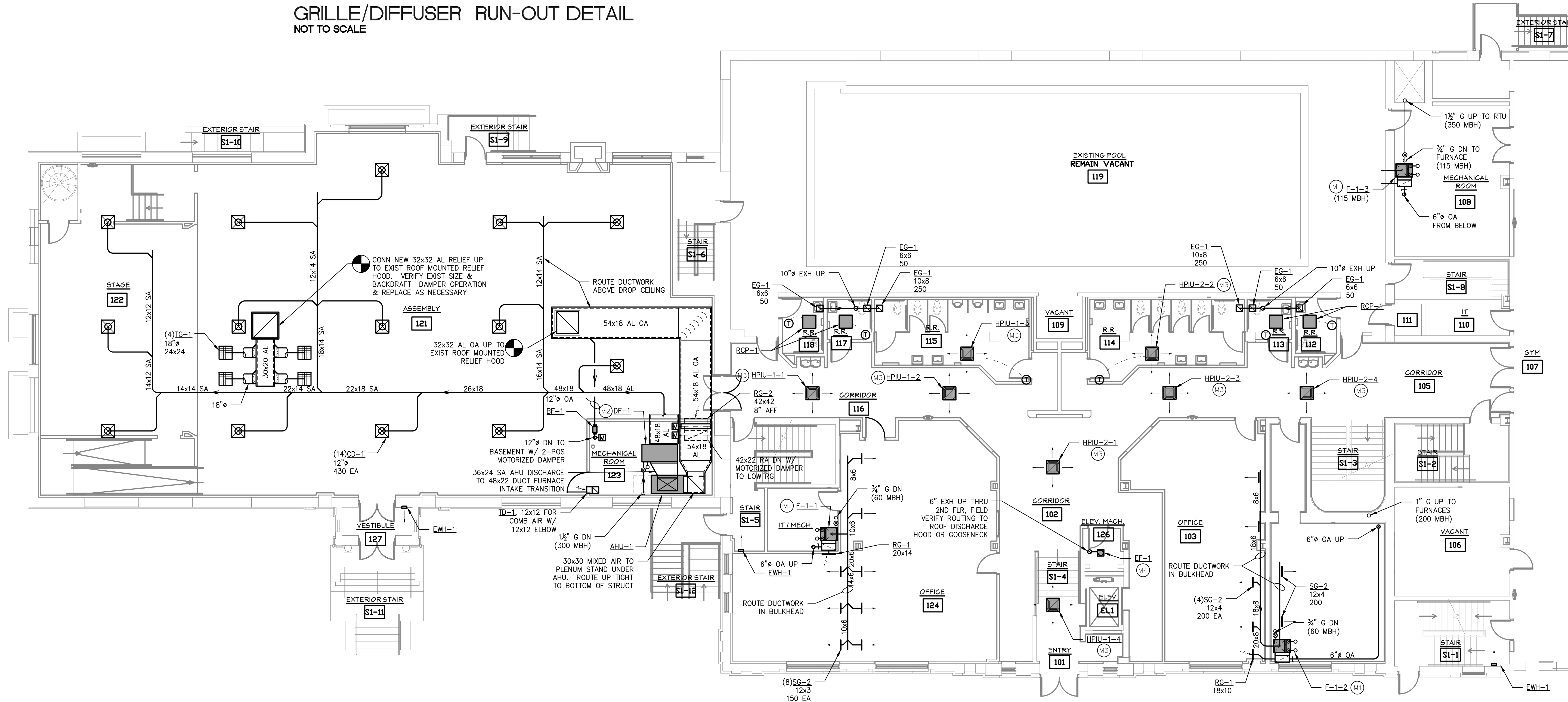
GENERAL HVAC NOTES:

1. PROVIDE TURNING VANES IN ALL 90° MITERED ELBOWS.
2. DUCT RUNOUT SIZES TO MATCH DIFFUSER OR GRILLE NECK SIZE UNLESS SHOWN OTHERWISE.
3. ALL SUPPLY DIFFUSER RUNOUT DUCT TO HAVE BD AS FAR AS POSSIBLE FROM DIFFUSER.
4. FLEX CONNECTORS TO CD'S TO BE THE SAME SIZE AS THE CD COLLAR, MAX 5 FT LONG.
5. ALL RECTANGULAR DUCT TAKE-OFFS TO HAVE 45° LEADING EDGE OR CONICAL SPIN IN FITTINGS.
6. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL EXTENT OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION OF ALL TRADES AND PROPER INSTALLATION OF ALL MECHANICAL SYSTEM.
7. SPIRAL ROUND AND FLAT OVAL DUCT UPSTREAM OF TERMINAL UNITS TO HAVE LO-LOSS FITTINGS FOR ALL TAKE-OFFS.
8. DUCT DIMENSIONS SHOWN REPRESENT FREE AREA REQUIRED. INCREASE FOR INTERNAL DUCT ACOUSTIC LINING AS REQUIRED.
9. LOCATE THERMOSTATS/SENSORS AT 48" AFF
10. LOCATE THERMOSTATS AND/OR ROOM TEMP SENSORS TO BEST REPRESENT OCCUPANT ROOM COMFORT - TCC RESPONSIBLE FOR FINAL LOC BASED ON RELATIVE LOC TO SUPPLY AND RETURN AIR GRILLES, OUTSIDE WINDOW, ROOM FURNITURE LAYOUT AND OWNER COORDINATION.
11. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. WHERE PIPING PASSES OVER ELECTRICAL BUS DUCTS OR PANELS, PROVIDE DRIP PAN SHEILD.

KEYED M

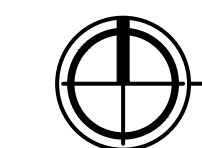
- (M1) UPFLOW GAS FIRED FURNACE, ROUTE FLUE AND COMB AIR UP THRU ROOF. REFER TO SCHEDULE ON SCHEDULE SHEET M4.01. PROVIDE CONDENSATE PUMP AND ROUTE TO APPROVED POINT OF DISCHARGE.
- (M2) GAS FIRED DUCT FURNACE, ROUTE 6" FLUE UP THRU ROOF. DRAW COMBUSTION AIR FROM MECHANICAL ROOM; PROVIDE 12x12 TRANSFER OPENING WITH GRILLE BETWEEN MECHANICAL ROOM AND ASSEMBLY 121.
- (M3) CEILING MOUNTED HEAT PUMP CASSETTE. ROUTE PUMPED CONDENSATE TO APPROVED DISCHARGE LOCATION. ROUTE REFRIGERATION PIPING TO OUTDOOR HEAT PUMP UNIT ON ROOF, SIZE PER MFR'S RECOMMENDATION.
- (M4) CEILING MOUNTED EXHAUST FAN. ROUTE 6" EXH UP THRU ROOF AND TERMINATE WITH ROOF HOOD.

GRILLE/DIFFUSER RUN-OUT DETAIL  
NOT TO SCALE

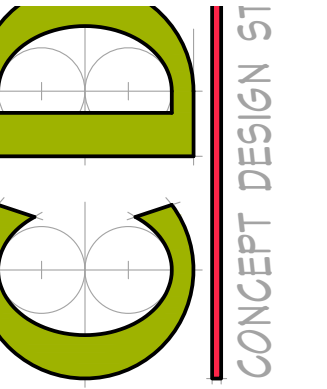


PARTIAL FIRST FLOOR MECHANICAL PLAN

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



KEY PLAN  
SCALE: NONE



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

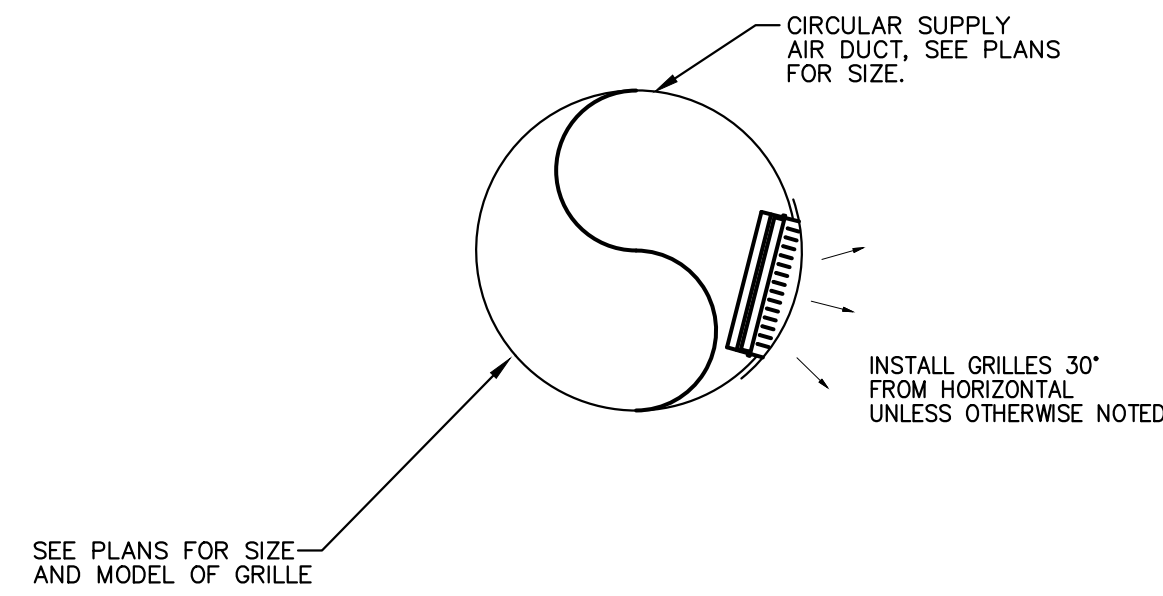
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SHEET TITLE  
PARTIAL FIRST  
FLOOR  
MECHANICAL  
PLAN

SHEET NO.

**M1.01**



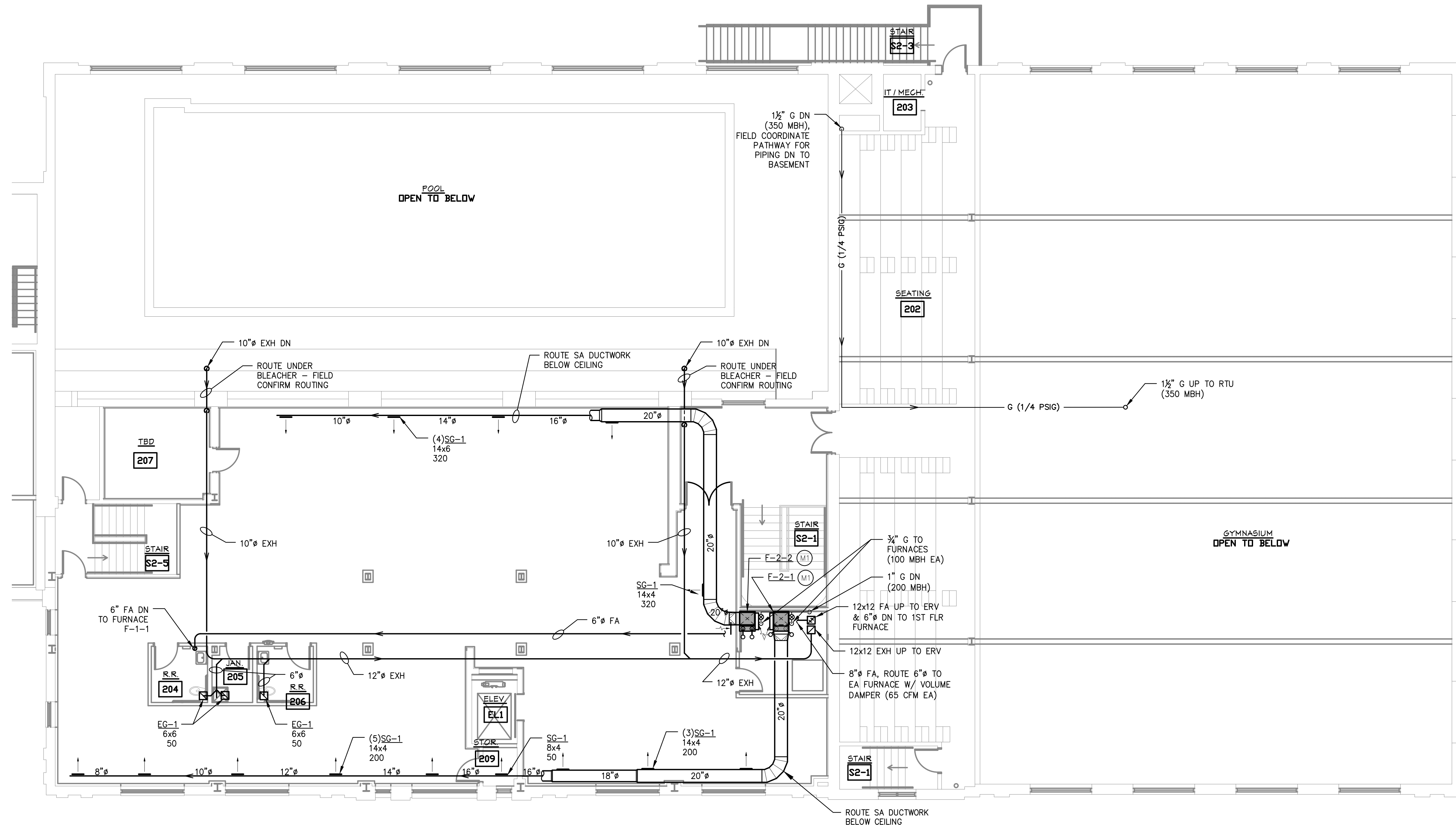
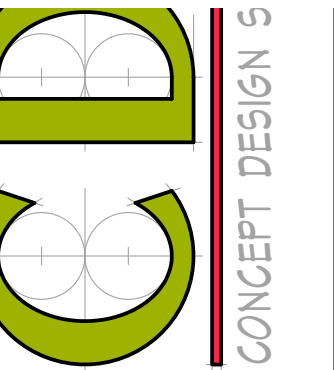
**SPIRAL DUCT DIFFUSER DETAIL**  
NOT TO SCALE

**GENERAL HVAC NOTES:**

1. PROVIDE TURNING VANES IN ALL 90° MITERED ELBOWS.
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11. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EQUIPMENT. WHERE PIPING PASSES OVER ELECTRICAL BUS DUCTS OR PANELS, PROVIDE DRIP PAN SHIELD.

**KEYED ME**

- (M1) UP FLOI SCHEDULE ON SCHEDULE SHEET M4.01. PROVIDE CONDENSATE PUMP AND ROUTE TO APPROVED POINT OF DISCHARGE.
- (M2) GAS FIRED DUCT FURNACE. ROUTE 6" FLUE UP THRU ROOF. DRAW COMBUSTION AIR FROM MECHANICAL ROOM; PROVIDE 12x12 TRANSFER OPENING WITH GRILLE BETWEEN MECHANICAL ROOM AND ASSEMBLY 121.
- (M3) CEILING MOUNTED HEAT PUMP CASSETTE. ROUTE PUMPED CONDENSATE TO APPROVED DISCHARGE LOCATION. ROUTE REFRIGERATION PIPING TO OUTDOOR HEAT PUMP UNIT ON ROOF, SIZE PER MFR'S RECOMMENDATION.
- (M4) CEILING MOUNTED EXHAUST FAN. ROUTE 6" EXH UP THRU ROOF AND TERMINATE WITH ROOF HOOD.



**SECOND FLOOR MECHANICAL PLAN**  
SCALE: 1/8" = 1'-0"



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

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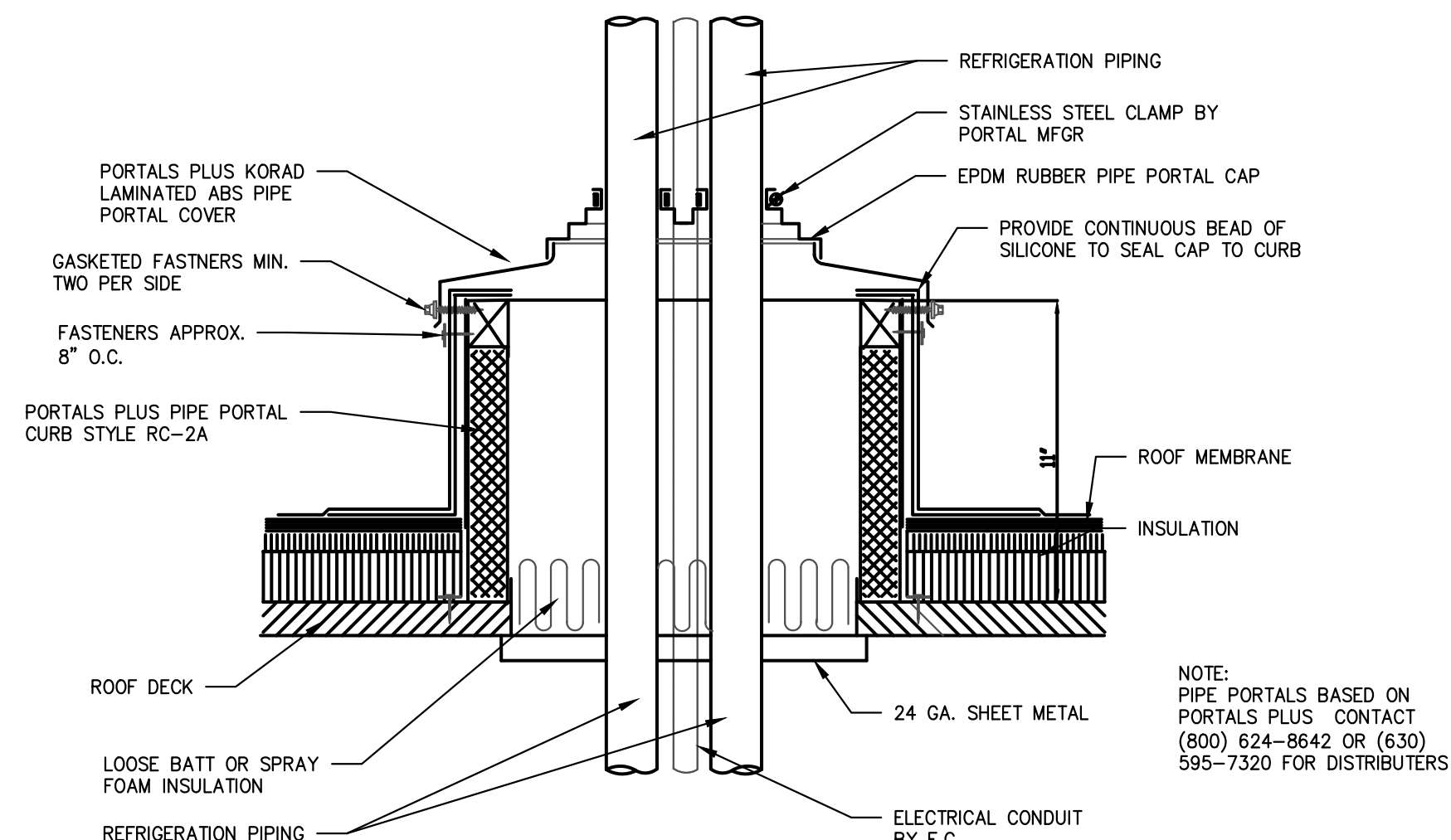
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SHEET TITLE  
**PARTIAL SECOND  
FLOOR  
MECHANICAL  
PLAN**

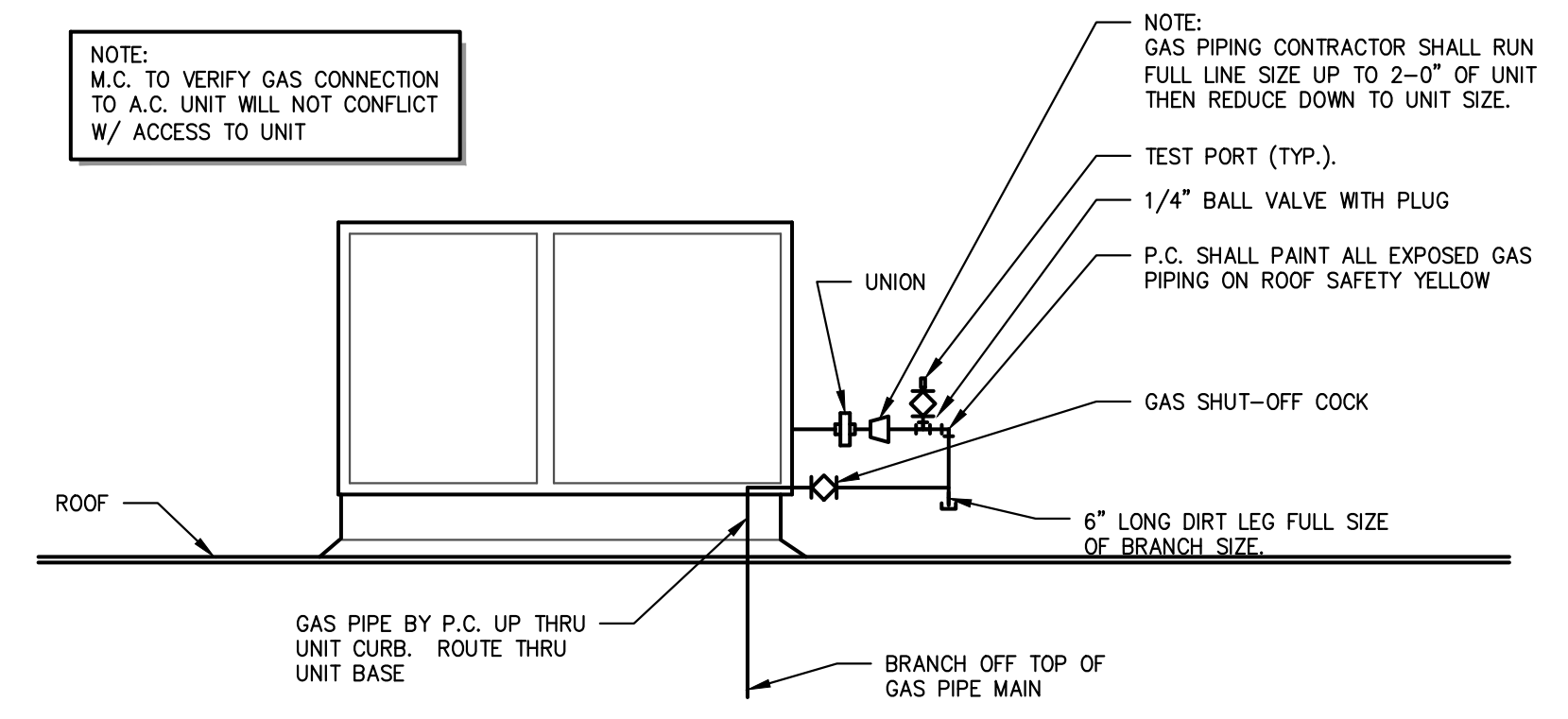
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1/4-2024

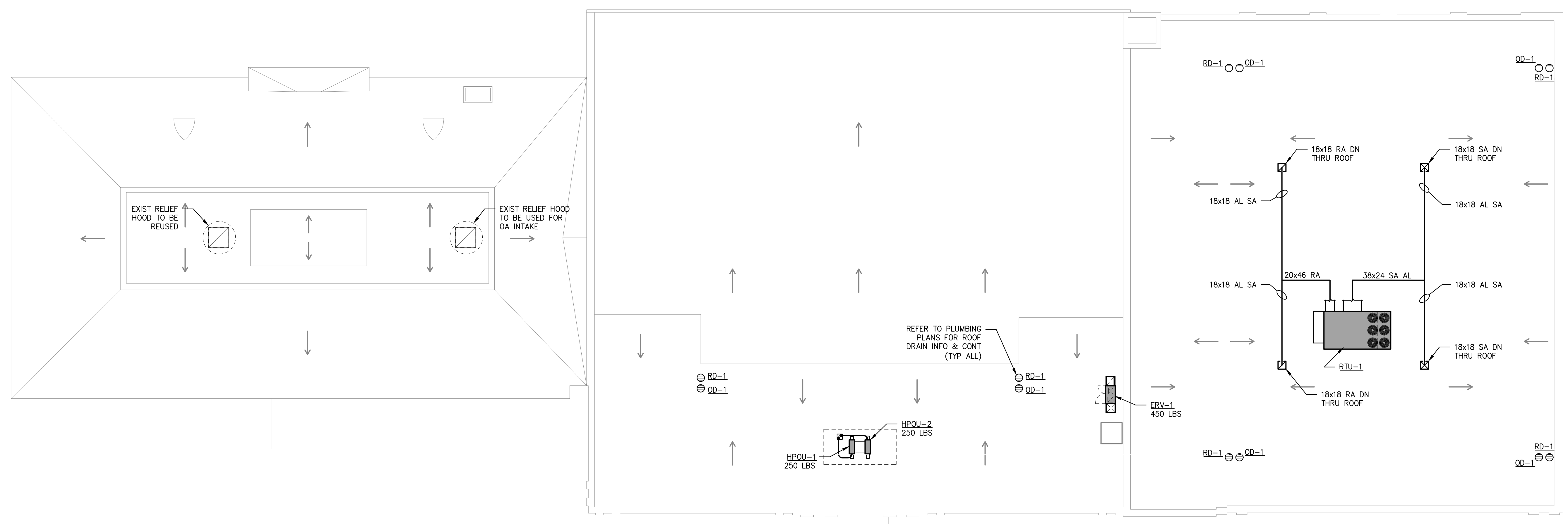


**TYP. PIPE PORTAL DETAIL FOR ROOF PENETRATION**  
NOT TO SCALE

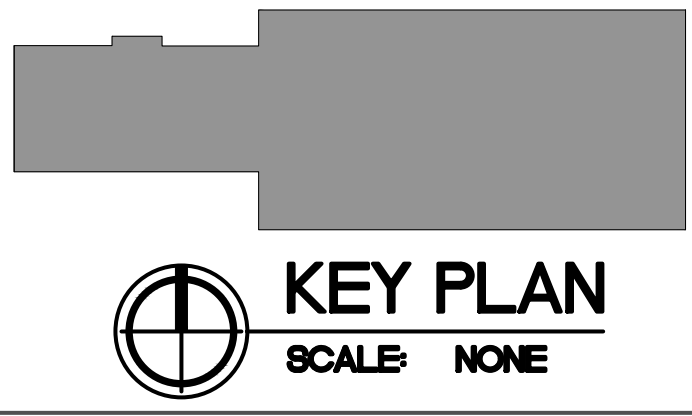


**ROOF TOP UNIT GAS CONNECTION DETAIL**  
NOT TO SCALE

- GENERAL HVAC NOTES:**
1. PROVIDE TURNING VANES IN ALL 90° MITERED ELBOWS.
  2. DUCT RUNOUT SIZES TO MATCH DIFFUSER OR GRILLE NECK SI SHOWN OTHERWISE.
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  4. FLEX CONNECTORS TO CD'S TO BE THE SAME SIZE AS THE C 5 FT LONG.
  5. ALL RECTANGULAR DUCT TAKE-OFFS TO HAVE 45° LEADING E CONICAL SPIN IN FITTINGS.
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  7. SPIRAL ROUND AND FLAT OVAL DUCT UPSTREAM OF TERMINA HAVE LO-LOSS FITTINGS FOR ALL TAKE-OFFS.
  8. DUCT DIMENSIONS SHOWN REPRESENT FREE AREA REQUIRED. INTERNAL DUCT ACOUSTIC LINING AS REQUIRED.
  9. LOCATE THERMOSTATS/SENSORS AT 48" AFF
  10. LOCATE THERMOSTATS AND/OR ROOM TEMP SENSORS TO BES OCCUPANT ROOM COMFORT - TCC RESPONSIBLE FOR FINAL L RELATIVE LOC TO SUPPLY AND RETURN AIR GRILLES, OUTSIDE FURNITURE LAYOUT AND OWNER COORDINATION.
  11. PROVIDE REQUIRED CLEARANCE IN FRONT OF ELECTRICAL EOU WHERE PIPING PASSES OVER ELECTRICAL BUS DUCTS OR PAN DRIP PAN SHIELD.



**ROOF MECHANICAL PLAN**  
SCALE: 3/32" = 1'-0"



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

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SHEET TITLE  
**ROOF MECHANICAL PLAN**

SHEET NO.

**M1.03**

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### AIR HANDLING UNIT SCHEDULE

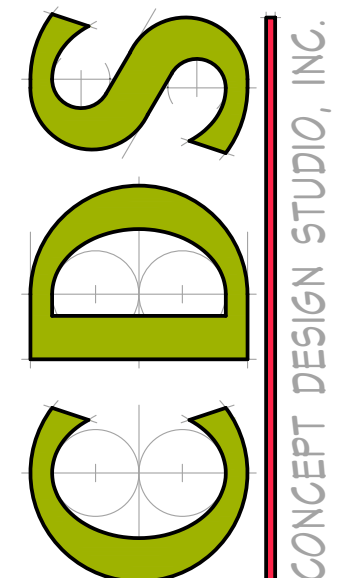
MARK	LOCATION AND SERVICE	MODEL	ARRANGE.	SUPPLY FAN						COOLING COIL							FILTERS	ELECTRICAL				CONTROL MEANS		DISCONNECT		REMARKS		
				DESIGN CFM	FRESH AIR MIN%	FRESH AIR CFM	ESP	HP	TYPE	SENS MBH	TOTAL MBH	EDB (°F)	EWB (°F)	LDB (°F)	LWB (°F)	SQ FT COIL		ROWS	MAX FINS/FT	VOLT	HP	MCA	MOCP	TYPE	BY		TYPE	BY
AHU-1	ASSEMBLY	RHGL-180ZK	NOTE 2.	6,000	30	1810	0.8	3	DX	141	192	80	67	58.2	56.4	16.5	3	15	NOTE 5.	280-230V/3PH	3	15	15	NOTE 4.	DIV 23	NFDS	DIV 26	1., 3.

- BASED ON RHEEM COMMERCIAL INDOOR AIR HANDLER.
- UNIT CONFIGURATION: VERTICAL UNIT ON FIELD FABRICATED PLENUM STAND, MEDIA FILTER MODULE W/ DOOR, COOLING COIL MODULE, AND TOP DISCHARGE SUPPLY FAN MODULE W/ DOOR, RIGHT HAND CONNECTIONS/ACCESS (WHEN UNIT IS STANDING UP AGAINST A WALL)
- PROVIDE WITH TUBULAR DUCT FURNACE, BASED STERLING TD SERIES, 115V/1PH, 300 MBH INPUT, 246 MBH OUTPUT, 6" FLUE AND COMB AIR SIZE.
- 7-DAY PROGRAMMABLE THERMOSTAT.
- MERV 8 2" PLEATED DISPOSABLE FILTERS.



5210 West River Dr. NE Suite C  
Comstock Park, MI 49321  
616-232-5817

**ABILITY ENGINEERING**  
ENGINEERING - DESIGN - CONSULTING



BUILDING RENOVATIONS FOR  
**3RENWSTER WHEELER  
RECREATION CENTER**  
70 ST. ANTOINE STREET, DETROIT, MICHIGAN

CONCEPT DESIGN STUDIO, INC.  
800 E. ELLIS ROAD, SUITE 508  
NORFOLK SHORES, MI 48441  
PH. (231) 744-4933  
FAX (231) 744-4937

### ROOF TOP UNIT SCHEDULE

MARK	LOCATION AND SERVICE	MODEL	SUPPLY FAN				COMPRESSOR		COOLING COIL			HEATING MODULE			EER @ ARI COND	ELECTRICAL			CONTROL MEANS		DISCONNECT		REMARKS						
			DESIGN CFM	FRESH AIR MIN%	FRESH AIR CFM	ESP	RPM	HP	UNIT NOM TONS	NO OF COMP	TYPE	SQ FT COIL	SENSIBLE MBH	TOTAL MBH		FUEL	MBH INPUT	MBH OUTPUT	EAT	LAT	STAGING	VOLT		MCA	MOCP	TYPE	BY	TYPE	BY
RTU-1	ROOF D-WING	RKNL-C180CL3SE	6000	0.3	1800	1	1725	3	15	2	DX	26.7	125.7	172	NG	250	202.5	45	105	MODULATE	10.8	208V/3PH	81	100	NOTE 4.	DIV 23	VFD	DIV 23	1., 2., 3., 2000 LBS

- BASED ON RUUD COMMERCIAL ACHIEVER SERIES PACKAGE GAS ELECTRIC UNIT, DDC SINGLE ENTHALPY ECONOMIZER W/ BAROMETRIC RELIEF AND SMOKE DETECTOR, 2" FILTER RACK, 14" CURB, AND DUCT MOUNTED CO2 SENSOR KIT.
- PROVIDE WITH NON-POWERED CONVENIENCE OUTLET.
- HORIZONTAL SUPPLY/RETURN ON UNIT.
- 7-DAY PROGRAMMABLE THERMOSTAT.

### DIFFUSER, REGISTER & GRILLE SCHEDULE

MARK	SERVICE	MODEL	VOLUME CONTROL DAMPER	FINISH	REMARKS
SG-1	SPIRAL DUCT SUPPLY GRILLE	S300FS	YES	MILLED ALUMINUM FINISH	1. 3/4" SPACING, 2-WAY DEFLECTION AIR SCOOP DAMPER OPTION
SG-2	SIDEWALL SUPPLY DIFFUSER	300RL	YES	STANDARD WHITE	1. 3/4" SPACING, 35° FIXED, SURF
CD-1	CEILING SUPPLY DIFFUSER	TMS	NO	STANDARD WHITE	1. ROUND NECK, 24x24 LAY-IN UNLESS NOTED OTHERWISE
EG-1	EXHAUST GRILLE	350RL	YES	STANDARD WHITE BAKED ENAMEL	1. 3/4" SPACING, 45° FIXED, SURF
RG-1	RETURN GRILLE	350RL	YES	STANDARD WHITE BAKED ENAMEL	1. 3/4" SPACING, 45° FIXED, SURF
RG-2	HEAVY DUTY RETURN GRILLE	33RL	YES	STANDARD WHITE BAKED ENAMEL	1. 1/2" SPACING, 38° FIXED, SURF
TG-1	EGGCRATE GRILLE	50F	NO	STANDARD WHITE BAKED ENAMEL	1. 1/2" x 1/2" x 1/2" 24"x24" LAY-IN UNLESS NOTED OTHERWISE

- BASED ON TITUS.

### HEAT PUMP OUTDOOR UNIT SCHEDULE

MARK	SERVICE	MODEL	TYPE	DX REFRIG TYPE	CLG MBH	HTG MBH	CLG COP @ 95°F	HTG COP @ 47°F	ELECTRICAL			CONTROLS		DISCONNECT		REMARKS
									VOLT	MCA	MOCP	TYPE	BY	TYPE	BY	
HPOU-1	HPIU-1-1,2,3,4	LMU480HV	MULTI ZONE	R-410A	58	59	3.84	3.62	208-230V/1PH	32.7	40	NOTE 2.	DIV 23	NFDS WP	DIV 26	1.
HPOU-2	HPIU-2-1,2,3,4	LMU480HV	MULTI ZONE	R-410A	58	59	3.84	3.62	208-230V/1PH	32.7	40	NOTE 2.	DIV 23	NFDS WP	DIV 26	1.

- BASED ON LG AIR-COOLED HEAT PUMP, INVERTER DRIVE SCROLL COMPRESSOR, HEATING OPERATION TO -13°F OAT @ 68% CAPACITY.
- SELF CONTAINED CONTROLS; WIRED PROGRAMMABLE THERMOSTAT FOR EACH SYSTEM AS IDENTIFIED IN CONTROL SEQUENCES

### HEAT PUMP INDOOR UNIT SCHEDULE

MARK	LOCATION	MODEL	NOM TONS	AIRFLOW CFM	ELECTRICAL			REFRIG TYPE	CLG CAP MBH	HTG CAP MBH	SEER	EER	HSPF	CONTROLS		DISCONNECT		REMARKS
					VOLT	MCA	MOCP							TYPE	BY	TYPE	BY	
HPIU-1-1	CORRIDOR	LC128HV4	1	335	208-230V/1PH	12.3	15	R410A	12.4	16	19.4	12.6	10.35	NOTE 3.	DIV 23	NOTE 4.	DIV 26	1., 2.
HPIU-1-2	CORRIDOR	LC128HV4	1	335	208-230V/1PH	12.3	15	R410A	12.4	16	19.4	12.6	10.35	NOTE 3.	DIV 23	NOTE 4.	DIV 26	1., 2.
HPIU-1-3	MEN'S RR	LC128HV4	1	335	208-230V/1PH	12.3	15	R410A	12.4	16	19.4	12.6	10.35	NOTE 3.	DIV 23	NOTE 4.	DIV 26	1., 2.
HPIU-1-4	CORRIDOR	LC128HV4	1	335	208-230V/1PH	12.3	15	R410A	12.4	16	19.4	12.6	10.35	NOTE 3.	DIV 23	NOTE 4.	DIV 26	1., 2.
HPIU-2-1	CORRIDOR	LC128HV4	1	335	208-230V/1PH	12.3	15	R410A	12.4	16	19.4	12.6	10.35	NOTE 3.	DIV 23	NOTE 4.	DIV 26	1., 2.
HPIU-2-2	WOMEN'S RR	LC128HV4	1	335	208-230V/1PH	12.3	15	R410A	12.4	16	19.4	12.6	10.35	NOTE 3.	DIV 23			
HPIU-2-3	CORRIDOR	LC128HV4	1	335	208-230V/1PH	12.3	15	R410A	12.4	16	19.4	12.6	10.35	NOTE 3.	DIV 23			
HPIU-2-4	CORRIDOR	LC128HV4	1	335	208-230V/1PH	12.3	15	R410A	12.4	16	19.4	12.6	10.35	NOTE 3.	DIV 23			

- INDOOR UNIT BASED ON LG CEILING CASSETT, MULTI ZONE, AIR-COOLED HEAT PUMP WITH STANDARD MAX HEAT, SUPPLEMENTAL ELECTRIC HEAT KIT, INVERTER DRIVE SCROLL COMPRESSOR; COOLING
- CEILING CASSETTE PROVIDED WITH STANDARD INDOOR WASHABLE UNIT FILTER; NO EXTERNAL FILTER OR FILTER RACK REQUIRED.
- SELF CONTAINED CONTROLS; WIRED PROGRAMMABLE THERMOSTAT FOR EACH SYSTEM, NO INTERFACE TO BMCS REQUIRED
- INDOOR UNIT TO BE POWERED OFF OF SEPARATE CIRCUIT FROM OUTDOOR UNIT, DIV 26 TO PROVIDE LOCAL DISCONNECT AS REQUIRED BY NEC.

### ELECTRIC WALL HEATER SCHEDULE

MARK	LOCATION	QTY	MODEL NO	KW	BTU'S	ELECTRICAL		CONTROL MEANS		DISCONNECT		REMARKS
						VOLT	AMPS	TYPE	BY	TYPE	BY	
EWH-1	SEE DRAWINGS	3	F3423T	3.0	10239	208V/1PH	14.4	INTERNAL	MFR	NFDS	DIV 26	1.

- BASED ON Q-MARK SERIES 3420 HEAVY-DUTY COMMERCIAL FAN FORCED HEATER W/ INTERNAL ELECTRICAL DISCONNECT.

### RADIANT CEILING PANEL SCHEDULE

MARK	LOCATION	QTY	SERIES	BTU/HR	WATTS	SIZE	ELECTRICAL		CONTROL MEANS		DISCONNECT		REMARKS
							VOLT	AMPS	TYPE	BY	TYPE	BY	
RCP-1	SINGLE BATHROOMS	4	CP123	1280	375.0	2'x2'	120V/1PH	3.1	NOTE 2.	DIV 23	NFDS	DIV 26	1.

- BASED ON MARKEL CP SERIES ELECTRIC RADIANT CEILING PANEL
- PROVIDE SINGLE POLE HEATING ONLY THERMOSTAT WITH LOCAL ADJUSTMENT AND DISPLAY TO CYCLE UNIT HEAT.

### FAN SCHEDULE

MARK	LOCATION OR SERVICE	MODEL	CFM	ESP	DUCT DIA	ELECTRICAL				CONTROLS		DISCONNECT		REMARKS
						VOLT	AMPS	WATTS	MOCP	TYPE	BY	TYPE	BY	
BF-1	ASSEMBLY MECH RM BASEMENT GA	TD-315	830	0.45"	12"	115V/1PH	2.3	335	15	NOTE 4.	DIV 23	NFDS	DIV 26	1.
EF-1	ELEV MACHINE RM	QTXE-080	60	60	60	115V/1PH			15	NOTE 3.	DIV 23	NFDS	DIV 26	2.

- BASED ON S&P IN-LINE MIXED FLOW DUCT FAN
- BASED ON BROAN CEILING MOUNTED BATHROOM EXHAUST FAN WITH PLASTIC GRILLE, INTEGRAL BACKDRAFT DAMPER AND NO LIGHT
- REVERSE ACTING THERMOSTAT TO OPERATE FAN.
- FAN TO RUN WITH OCCUPANCY ON AUTOMATIC TIME CLOCK.

### ENERGY RECOVERY VENTILATOR SCHEDULE

MARK	LOCATION AND SERVICE	MODEL	CFM	ESP	NO OF MOTORS	ELECTRICAL			CONTROL MEANS		DISCONNECT		REMARKS		
						VOLT	WATTS PER MOTOR	FLA PER MOTOR	MCA	MOCP	TYPE	BY		TYPE	BY
ERV-1	ROOF FURNACE FA	HE10RT	850	1"	2	208-230V/1PH	370	1.73	3.9	20	ATC	DIV 23	NFDS	DIV 26	1., 400 LBS

- BASED ON RENEWAIRE OUTDOOR UNIT, STANDARD EC MOTORS, 2" PLEATED MERV 8 FILTERS.

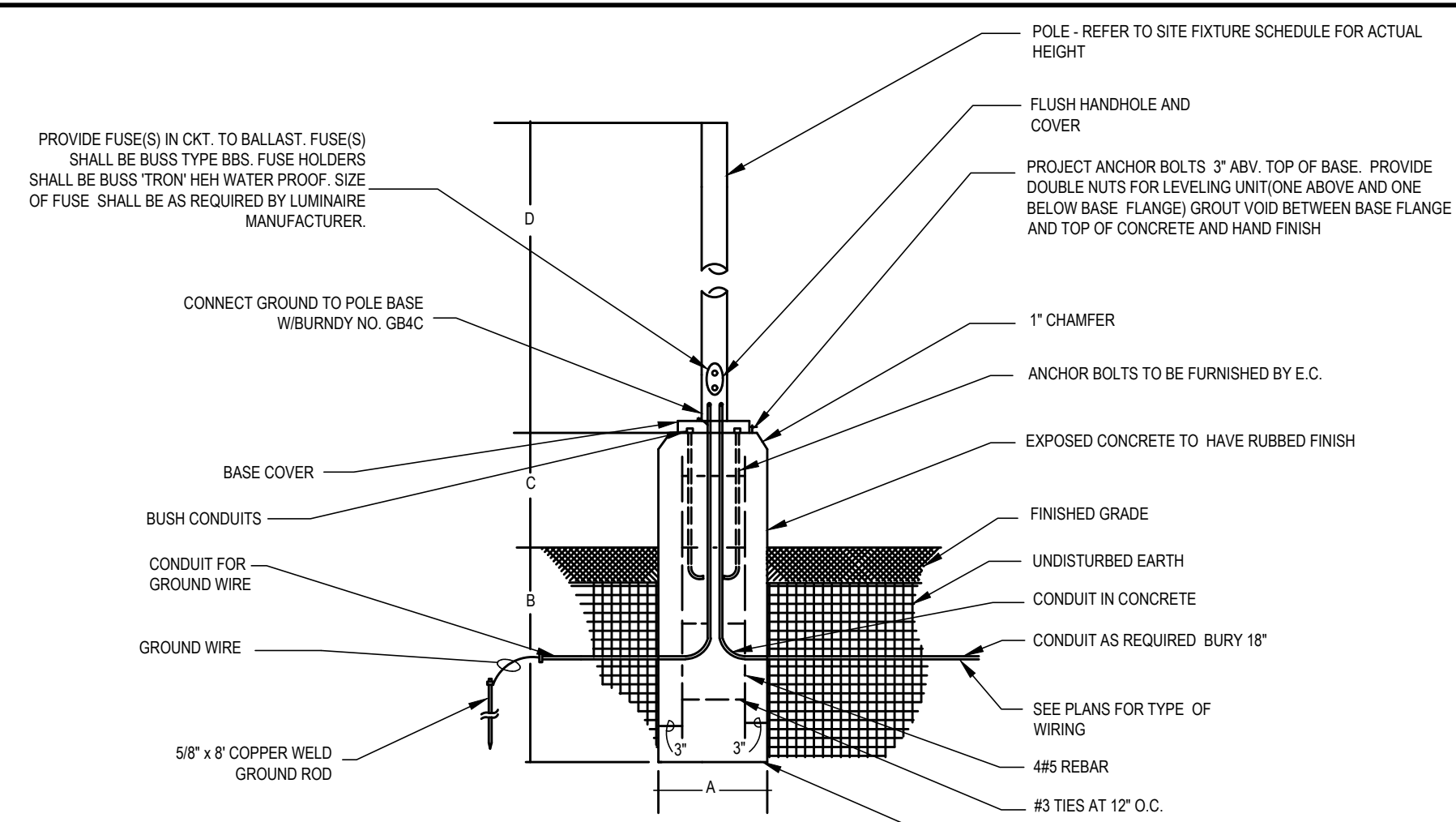
### GAS FIRED FURNACE SCHEDULE

MARK	LOCATION	MODEL NO	CFM	MBH INPUT (AGA)	MBH OUTPUT (AGA)	ESP IN. WC	DELTA (F)	ELECTRICAL				CONTROL MEANS		DISCONNECT
								VOLT	HP	MCA	MOCP	TYPE	BY	
F-B-1	BASEMENT	R951T-1155A24M4SNAS	1600	112	106.4	0.4	75	120V/1PH	1	14	20	NOTE 4.	DIV 23	NFD
F-B-2	BASEMENT	R951T-1155A24M4SNAS	1600	112	106.4	0.4	75	120V/1PH	1	14	20	NOTE 4.	DIV 23	NFD
F-B-3	BASEMENT	R951T-1155A24M4SNAS	1600	112	106.4	0.4	75	120V/1PH	1	14	20	NOTE 4.	DIV 23	NFD
F-1-1	FIRST FLR OFFICE	R951T-0603A17M4SNAS	1200	56	53.2	0.5	70	120V/1PH	0.5	10	15	NOTE 4.	DIV 23	NFD
F-1-2	FIRST FLR OFFICE	R951T-0603A17M4SNAS	1200	56	53.2	0.5	70	120V/1PH	0.5	10	15	NOTE 4.	DIV 23	NFD
F-1-3	FIRST FLR POOL	R951T-1155A24M4SNAS	1600	112	106.4	0.4	75	120V/1PH	1	14	20	NOTE 4.	DIV 23	NFD
F-2-1	SECOND FLR OFFICE	R951T-1005A21M4SNAS	1600	98	93.1	0.5	55	120V/1PH	1	15	20	NOTE 4.	DIV 23	NFD
F-2-2	SECOND FLR OFFICE	R951T-1005A21M4SNAS	1600	98	93.1	0.5	55	120V/1PH	1	15	20	NOTE 4.	DIV 23	NFD

- BASED ON RHEEM 95% AFUE ENDEAVOR MODELS, SINGLE STATE HEATING GAS FURNACE.
- LAT BASED ON 60°F ENTERING AIR TEMP
- PROVIDE MATCHED DX REFRIGERANT COOLING CASE COIL SIZED FOR FURNACE AIRFLOW AND ACCU COOLING CAPACITY
- FURNACE CONTROL BY DIGITAL PROGRAMMABLE THERMOSTAT



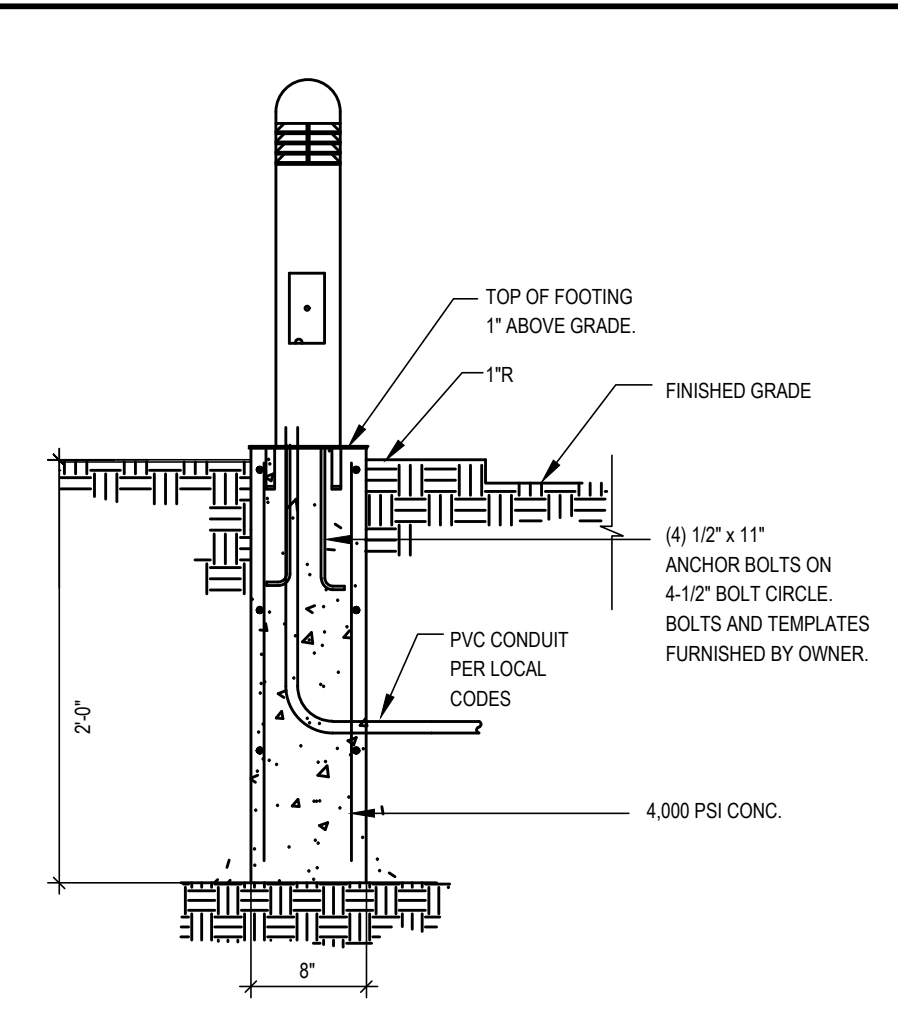
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POLE AND BASE DIMENSIONS

LOCATION	A	B	C	D
IN PARKING LOT	24"	60"	30"	0-20"
IN GREEN SPACE	24"	60"	6"	0-20"

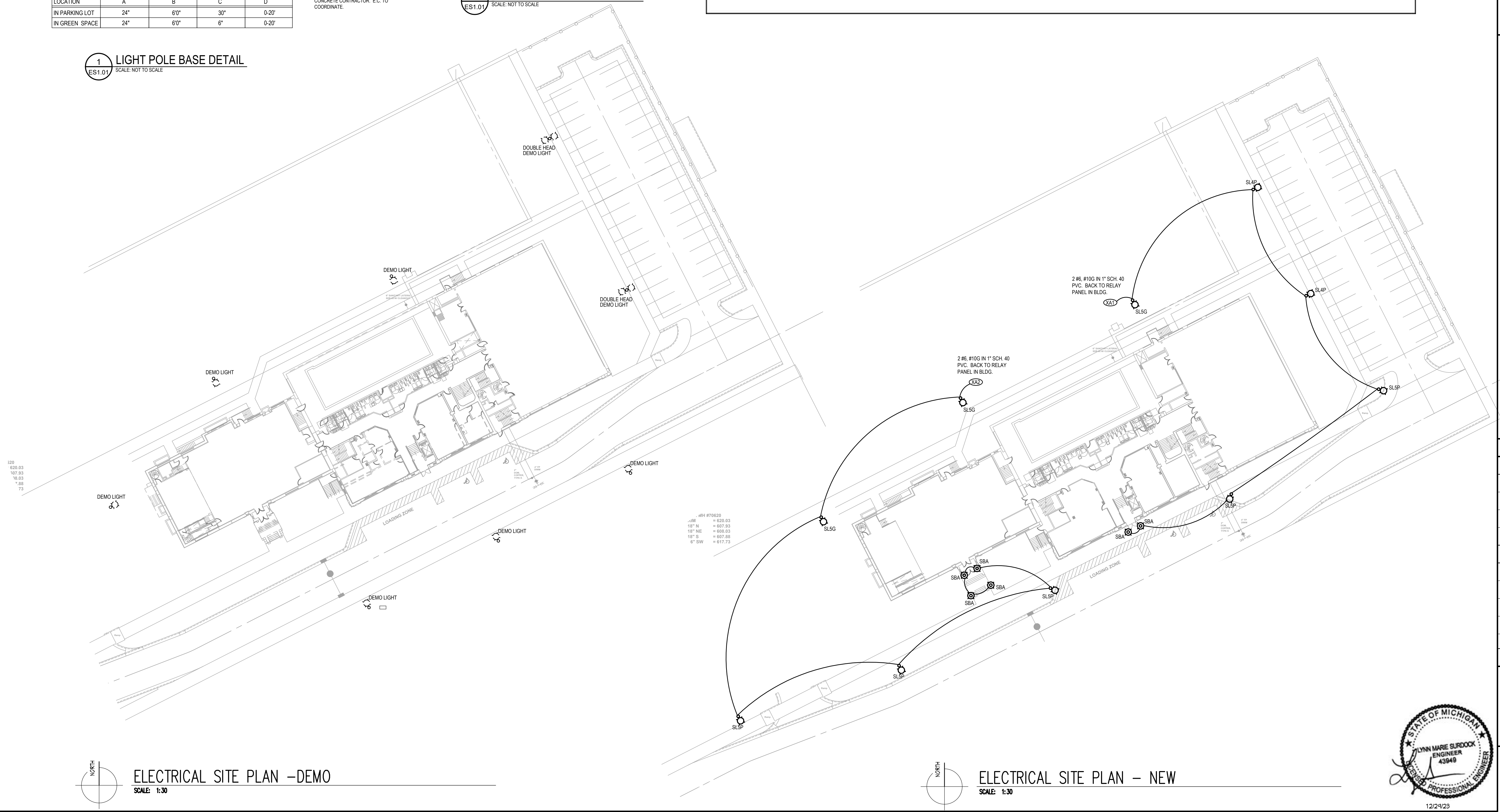
**1 LIGHT POLE BASE DETAIL**  
SCALE: NOT TO SCALE



**2 BOLLARD LIGHT BASE DETAIL**  
SCALE: NOT TO SCALE

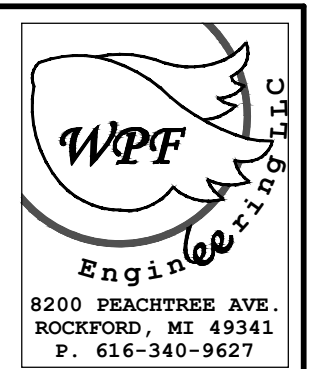
SITE LIGHTING FIXTURE LEGEND							
FIXTURE TYPE	DESCRIPTION	MANU.	CATALOG PART#	VOLTAGE	LAMP	WATTAGE	REMARKS
SL4P	PATHWAY LIGHTING TYPE 3 ROUND AL POLE 20' POLE 2.5' CONCRETE BASE	LUMARK LITHONIA HUBBELL LSI INDUSTRIES	PRV DSX1 LED P2 40K 80CRI TFTM MVOLT RPA COLOR DDBXD ASL1- MRM-LED-	120/277	LED 4000K 70 CRI	68	PROVIDE MOTION SENSOR. 50% ON DUSK TO DAWN AND BRING TO FULL WHEN MOTION IS SENSED.
SL5P	PATHWAY LIGHTING TYPE 3 ROUND AL POLE 20' POLE 2.5' CONCRETE BASE	LUMARK LITHONIA HUBBELL LSI INDUSTRIES	PRV DSX1 LED P2 40K 80CRI T5W MVOLT RPA COLOR DDBXD ASL1- MRM-LED-	120/277	LED 4000K 70 CRI	68	PROVIDE MOTION SENSOR. 50% ON DUSK TO DAWN AND BRING TO FULL WHEN MOTION IS SENSED.
SL5G	PARKING LOT LIGHTING ROUND AL POLE 20' POLE 6\"/>						

NOTES: 1. E.C. SHALL PROVIDE ALL MATERIALS AND LABOR NECESSARY FOR A COMPLETE INSTALLATION.

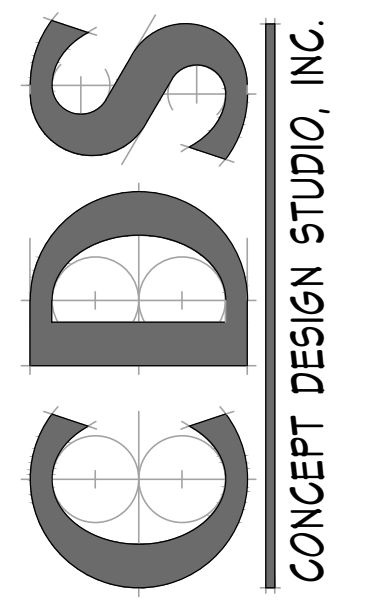


**ELECTRICAL SITE PLAN - DEMO**  
SCALE: 1:30

**ELECTRICAL SITE PLAN - NEW**  
SCALE: 1:30



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BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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SHEET TITLE  
**ELECTRICAL SITE PLANS - DEMO & NEW**

SHEET NO.

**ES1.01**

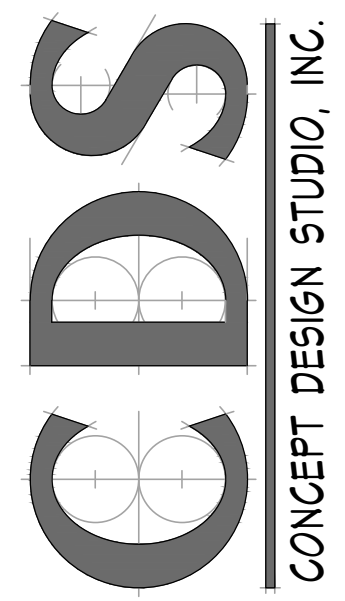


12/24/23

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SHEET TITLE  
**ELECTRICAL SITE  
LIGHTING  
CALCULATIONS**

SHEET NO.

**ES1.02**



Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
DRIVE	+	0.6 fc	1.7 fc	0.2 fc	8.5:1	3.0:1
east grass by parking lot	+	0.7 fc	1.8 fc	0.4 fc	4.5:1	1.8:1
PARKING	+	1.0 fc	2.2 fc	0.3 fc	7.3:1	3.3:1
SIDEWALK	+	0.8 fc	2.0 fc	0.2 fc	10.0:1	4.0:1
sidewalk along chrysler drive	+	0.3 fc	0.4 fc	0.1 fc	4.0:1	3.0:1
sidewalk along St. Antoine	+	0.1 fc	0.1 fc	0.0 fc	N/A	N/A
sidewalk along the road wilkins street	+	0.0 fc	0.2 fc	0.0 fc	N/A	N/A
west grass at antoine street	+	0.6 fc	0.9 fc	0.0 fc	N/A	N/A
Wilkins street side grass area	+	0.3 fc	1.3 fc	0.0 fc	N/A	N/A
ASSEMBLY EXIT STAIRS	+	3.5 fc	4.5 fc	2.6 fc	1.7:1	1.3:1

Symbol	Description	Area (sq ft)	Height (ft)	Area x Height (sq ft ft)	Area x Height x 0.7 (sq ft ft)	Area x Height x 0.5 (sq ft ft)	Area x Height x 0.3 (sq ft ft)
SLS	Site Lighting System	1000	10	10000	7000	5000	3000
SBA	Site Boundary Area	500	10	5000	3500	2500	1500
SI	Site Illumination	200	10	2000	1400	1000	600
SIW1	Site Illumination Walkway 1	100	10	1000	700	500	300
SIW2	Site Illumination Walkway 2	100	10	1000	700	500	300

**SITE LIGHTING CALCULATIONS**  
SCALE: 1" = 25'-0"



LIGHTING CONTROL SCHEDULE - RP1										
LOAD NUMBER	LOCATION	FIXTURE TYPE	CIRCUIT	DIMMER TYPE	FUNCTION	VOLT	QTY	FIXTURE WATTAGE	TOTAL WATTAGE	REMARKS
XA1	EXTERIOR PARKING LOT	SL4 SL5, SBA	9-32	NA	DUSK TO DAWN	120	6	68	408	DUSK TO 1 HOUR AFTER CLOSING
XA2	EXTERIOR PARKING LOT	??	9-30	NA	DUSK TO DAWN	120	6	68	408	DUSK TO 1 HOUR AFTER CLOSING
101	CORRIDOR 1ST & 2ND FLOOR	A5	9-30	0-10V	SEE REMARKS	120	26	41	1066	OCC SENSOR AUTO TO 50% DURING UNOPEN HOURS. ON FULL PER SCHEDULE
102	OFFICE 103	A5	9-32	0-10V	SEE REMARKS	120	8	41	328	CONTROL STATION ON, OFF, DIM
103	OFFICE 124	A5	9-32	0-10V	SEE REMARKS	120	16	41	656	CONTROL STATION ON, OFF, DIM
104	ASSEMBLY	A5	9-34	0-10V	SEE REMARKS	120	40	41	1640	CONTROL STATION: 6 BUTTON - ON (104,105) PRESET 1 (104,105) PRESET 2 (104,105)
105	ASSEMBLY STAGE	A5	9-36	0-10V	SEE REMARKS	120	10	41	410	DIM MAIN (104), DIM STAGE (105) OFF (104,105)
201	2ND FLOOR 202	A5	9-36	0-10V	SEE REMARKS	120	16	60	960	CONTROL STATION: 6 BUTTON - ON (201,202) PRESET 1 (201,202) PRESET 2 (201,202)
202	2ND FLOOR 202	A5	9-38	0-10V	SEE REMARKS	120	8	41	328	DIM MAIN (201), DIM STAGE (202) OFF (201,202)
203	GYM SEATING	A5	9-38	0-10V	SEE REMARKS	120	16	30	480	CONTROL STATION: 2 BUTTON - ON (203) DIM (203)
204	GYM	A5	9-40	0-10V	SEE REMARKS	120	10	132	1320	CONTROL STATION: 6 BUTTON - ON (204,205) PRESET 1 (204,205) PRESET 2 (204,205)
205	GYM	A5	9-42	0-10V	SEE REMARKS	120	10	132	1320	PRESET 3 (203, 204, 205) DIM (204,205) OFF (203,204,205)
TOTAL WATTAGE									9324	

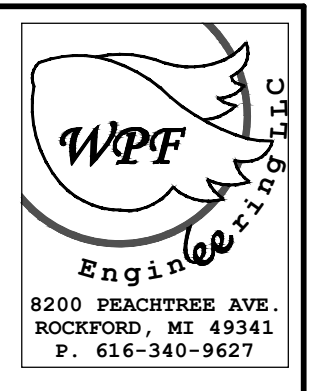
LIGHTING CONTROL NOTES:  
 1. LIGHTING CONTROL SYSTEM TO MEET MICHIGAN 2015 ENERGY CODE. PROVIDE SYSTEM AS NOTED.

**GENERAL LIGHTING NOTES**

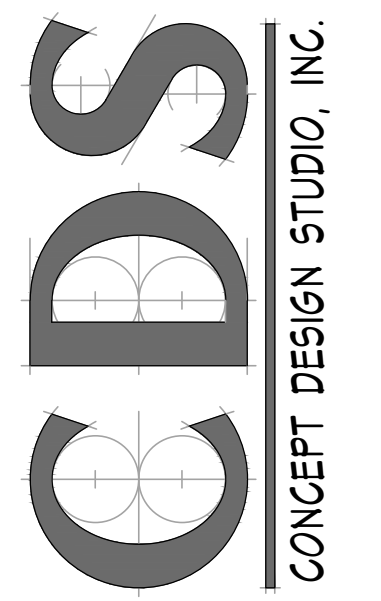
A. REFER TO ARCHITECTURAL AND ELECTRICAL PLANS, ELEVATIONS AND DETAILS FOR LIGHT FIXTURE MOUNTING HEIGHTS AND LOCATIONS.

B. E.C. SHALL CONNECT EXIT SIGNS AND EMERGENCY BALLAST BATTERIES TO UN-SWITCHED LOCAL LIGHTING CIRCUIT.

C. E.C. SHALL BE RESPONSIBLE FOR PROVIDING FUNCTIONAL TESTING OF LIGHTING CONTROL SYSTEM PER ASHRAE 90.1-2013 SECTION 9.4.3

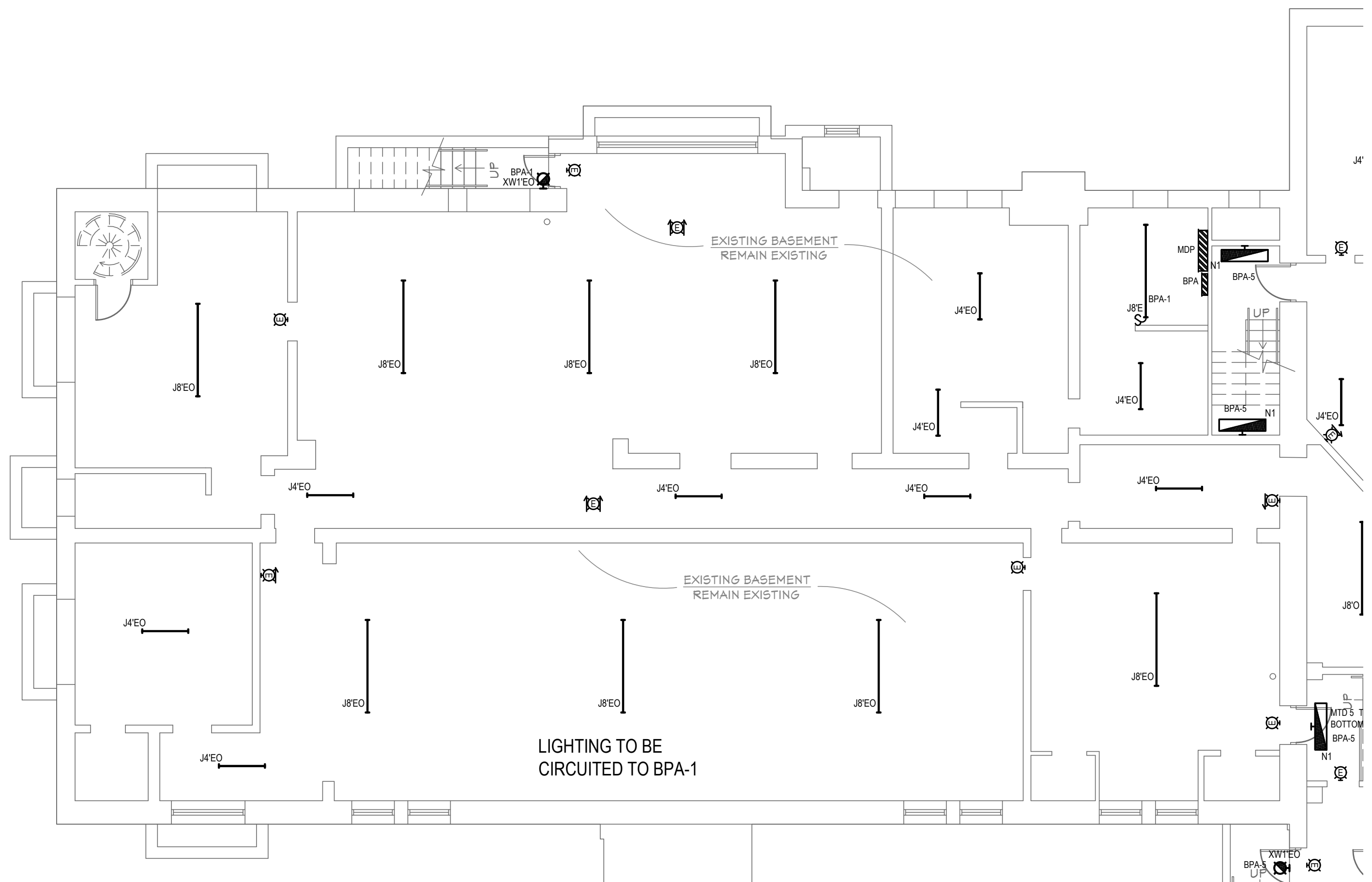


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LIGHT FIXTURE LEGEND									
FIXTURE TYPE	DESCRIPTION	MANU.	CATALOG PART#	FINISH	VOLTAGE	LAMPS	Wattage	REMARKS	
A5	2X2 LED FLAT PANEL DIMMABLE 4000 LUMENS	METALUX LITHONIA COLUMBIA LSI	CPX 2X2 AL07 SSW7 M4 CBT 22-LS35 OPT 22 LED FS1 UNV DIM	WHITE	120/277	LED 3500K	41	10W BATTERY PACK WHERE NOTED SELF DIAGNOSTICS	
C4	4' LED LINEAR SUSPEND AT 9'-6" TO BOTTOM OF FIXTURE 813 LM/FT	FINELITE CORELITE LEDALITE LITECONTROL	HP4PD 4FT H 835 F SSA 120 SC FC-10% FA100 C4 FE SW QSSQ4F OU-100D-835-1-D UNV STD W AC120 UM 4 2901L935-40-QN-4-D-E-1-N-NN-WA1-XX 4LPD-4-04-SOF-C1-35K9-D813-1C-UNV-FA3	WHITE	120/277	LED 3500K	30W		
C8	8' LED LINEAR SUSPEND AT 9'-6" TO BOTTOM OF FIXTURE 721 LM/FT	FINELITE CORELITE LEDALITE LITECONTROL	HP4PD 8FT H 835 F SSA 120 SC FC-10% FA100 C4 FE SW QSSQ4F OU-100D-835-1-D UNV STD W AC120 UM 8 2901L935-40-QN-8-D-E-1-N-NN-WA1-XX 4LPD-8-08-SOF-C1-35K9-D725-1C-UNV-FA3	WHITE	120/277	LED 3500K	60W		
E	POLYCARBONATE EXIT WITH BATTERY	SURE-LITE LSI LITHONIA COMPASS	#LPX-70-RWH EMS-R-WB-WH LQMSW3R120/277-ELN-SD CER	WHITE	120/277	LED RED	N/A	SELF DIAGNOSTICS BATTERY PROVIDE WIRE GUARD IN GYM	
E1	POLYCARBONATE EXIT WITH REMOTE HEAD RED/WHITE	LITHONIA DUAL LITE CHLORIDE SURE-LITE	LHQM LED R HORO SD EVCURW-0 VLL2RGO/MLCG2R LPX-70-RWH-SD	WHITE	120/277	LED RED	N/A	SELF DIAGNOSTICS BATTERY	
EM1	LED REMOTE HEAD WEATHERPROOF TWO (DUAL) HEADS	LITHONIA DUAL LITE CHLORIDE SURE-LITE	ELAT SD QWP L0309 M12 EVODW VLL2RGO LPX-R5-SD	GREY	120/277	LED NA	NA	MOUNT UP HIGH IN CORNER AS SHOWN	
EM6	EMERGENCY LIGHT WITH BATTERY	LITHONIA CHLORIDE DUAL-LITE ISOLITE	ELM6L-WJ-VOLT-LTP-SDRT TPU-DN-LM7-W-IC EVHC121 BUG-6-WH-SD	WHITE	120/277	LED NA	NA	MOUNT 8' AFF. SELF DIAGNOSTICS	
G3	GYM LIGHT DAY-BRITE COLUMBIA	LITHONIA R8X15L840-UNV-WT AT LANTIC LTG COLUMBIA	JCBL 18000LM DALR MVOLT GZ10 40K 80CRI WG SCF240 RBX15L840-UNV-WT-A22R-WGA22 LHB22 VR165 4K WH XX 22ALWH WG22 UTB2-8035MMEDU AL16 N WH DLR XX UTBFWD	WHITE	120/277	LED 4000K	132	SUSPEND BELOW MECHANICAL DUCTWORK. VERIFY MOUNTING HEIGHT WITH ARCHITECT WIRE GUARD ON BOTTOM	
J6	4' LED INDUSTRIAL GYM SEATING 3,000 LUMENS	LITHONIA COLUMBIA DAY-BRITE METALUX	ZL1F L48 3000LM MDD MVOLT 35K 80CRI LCL-8-40-ML-ED-U FSS880L840-UNV-DIM L8'O ADD LSXR10 8SLSTP5L-C-UNV	WHITE	120/277	LED 4000K	30W	PROVIDE 10W EMERGENCY BATTERY PACK WHERE NOTED	
J4	4' LED STRIP WITH LENS 4000 LUMENS	LITHONIA COLUMBIA DAY-BRITE METALUX	CSS L48 AL03 MVOLT SSW3 80CRI HC36 M12 LCL4-40-ML-ED-U FSS440L840-UNV-DIM J4'O ADD LSXR10 4SLSTP	WHITE	120	LED 4000K	36W	O SUFFIX - OCCUPANCY SENSOR ON FIXTURE - ON/OFF CHAIN HANG HIGH BUT BELOW DUCTWORK.	
J8	8' LED STRIP WITH LENS 8000 LUMENS	LITHONIA COLUMBIA DAY-BRITE METALUX	CSS L96 AL04 MVOLT SSW3 80CRI HC36 M12 LCL-8-40-ML-ED-U FSS880L840-UNV-DIM L8'O ADD LSXR10 8SLSTP	WHITE	120	LED 4000K	72W	O SUFFIX - OCCUPANCY SENSOR ON FIXTURE - ON/OFF CHAIN HANG HIGH BUT BELOW DUCTWORK.	
N1	LED STAIRWELL WALL MOUNTED 4000 LUMENS 10W BATTERY PACK	COLUMBIA LITHONIA DAY-BRITE METALUX	ESL4-40LW-FAW-ED-U-NXOS BLWP4-40L-ADSM-MVOLT-EZ1-LP835-N100-NESPDT7- FSS440L835-UNV-DIM LSXR10 4SWLED40SL-LW-UNV-L835-CD1-SVPD3-EL14W-U	WHITE	120/277	LED 3500K 80 CRI	35	WALL MOUNTED 7.5' AFF ON BOARD OCCUPANCY SENSOR 20% LIGHT ON ALL TIME	
O	LED STRIP WET LOCATION ELEV PIT/SHAFT	MOBERN LITHONIA BEGHELLI METALUX	W4-LED-48-DMV-RC-50-EM XWML-L48 5000LM MVOLT 50K 80CRI BS100LED-4-HT-LQ-WT-50-120-277V-SM 4VT2-LD4-6-DR-UNV-L850-EL14W-CD-U	WHITE	120	LED 5000K	NA	WALL MOUNT IN ELEV PIT TOP OF ELEV SHAFT. COORDINATE LOCATION WITH SUPPLIER/INSTALLER. PROVIDE 10W EMERGENCY BATTERY	
S1	SURFACE MOUNT LED CORRIDOR	HALO JUNO AFX RP LTG	SMD6R12-935 JSF 7IN10LM 35K 90CRI 120FRPC WH EGRF0811L35D1WH 8536 1 WH 80 35K	WHITE	120	LED 3500K	15W		
XW1	LED EXTERIOR WALL MOUNT TYPE 4	INVUE BEACON GARDCO LITHONIA	CCW-SA-840-1A-U-SL4-BPC TRP2-36L-25-4K8-4-UNV-DBS-PC-NXWS-12F GWS A02 840 T4M UNV PCB WDGE2 LED P2 40K 80CRI T4 PE	DARK BRONZE	120/277	LED 4000K 80CRI	19	WALL MTD PER PLANS. VERIFY HEIGHT PHOTOCELL. O ADD MOTION SENSOR PROVIDE COLD WEATHER BATTERY PACK WHERE NOTED.	
XW2	LED EXTERIOR WALL MOUNT TYPE 2	INVUE BEACON GARDCO LITHONIA	CCW-SA-840-1A-U-SL2-BPC TRP2-36L-25-4K8-2-UNV-DBS-PC-NXWS-12F GWS A02 840 T2M UNV PCB WDGE2 LED P2 40K 80CRI T2 PE	DARK BRONZE	120/277	LED 4000K 80CRI	19	WALL MTD PER PLANS. VERIFY HEIGHT PHOTOCELL. O ADD MOTION SENSOR PROVIDE COLD WEATHER BATTERY PACK WHERE NOTED.	

LIGHT FIXTURE SCHEDULE NOTES:  
 1. ALL FIXTURES SHOWN HALF SHADED OR WITH "E" SUFFIX ARE TO BE PROVIDED WITH AN EMERGENCY BATTERY PACK AS SPECIFIED ABOVE.



**BASEMENT LIGHTING PLAN AREA A**  
 SCALE: 1/8" = 1'-0"



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
 RECREATION CENTER**  
 2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

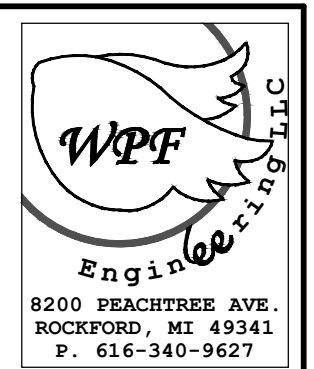
PROJECT #	1356-23
ISSUANCES	
FOR PERMIT	12.24.2023
REVISIONS	
DRAWN BY	LMS
SHEET TITLE	BASEMENT LIGHTING PLAN AREA A

SHEET NO.  
**EL1.00A**

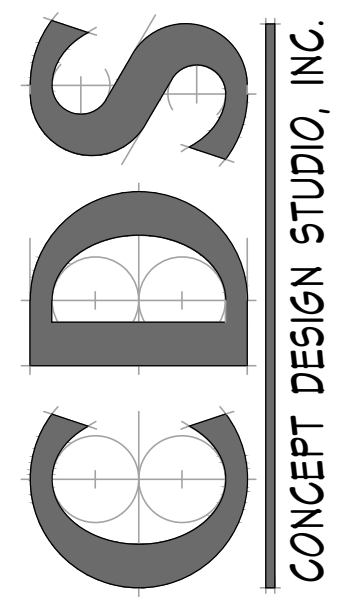
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**GENERAL LIGHTING NOTES**

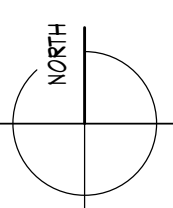
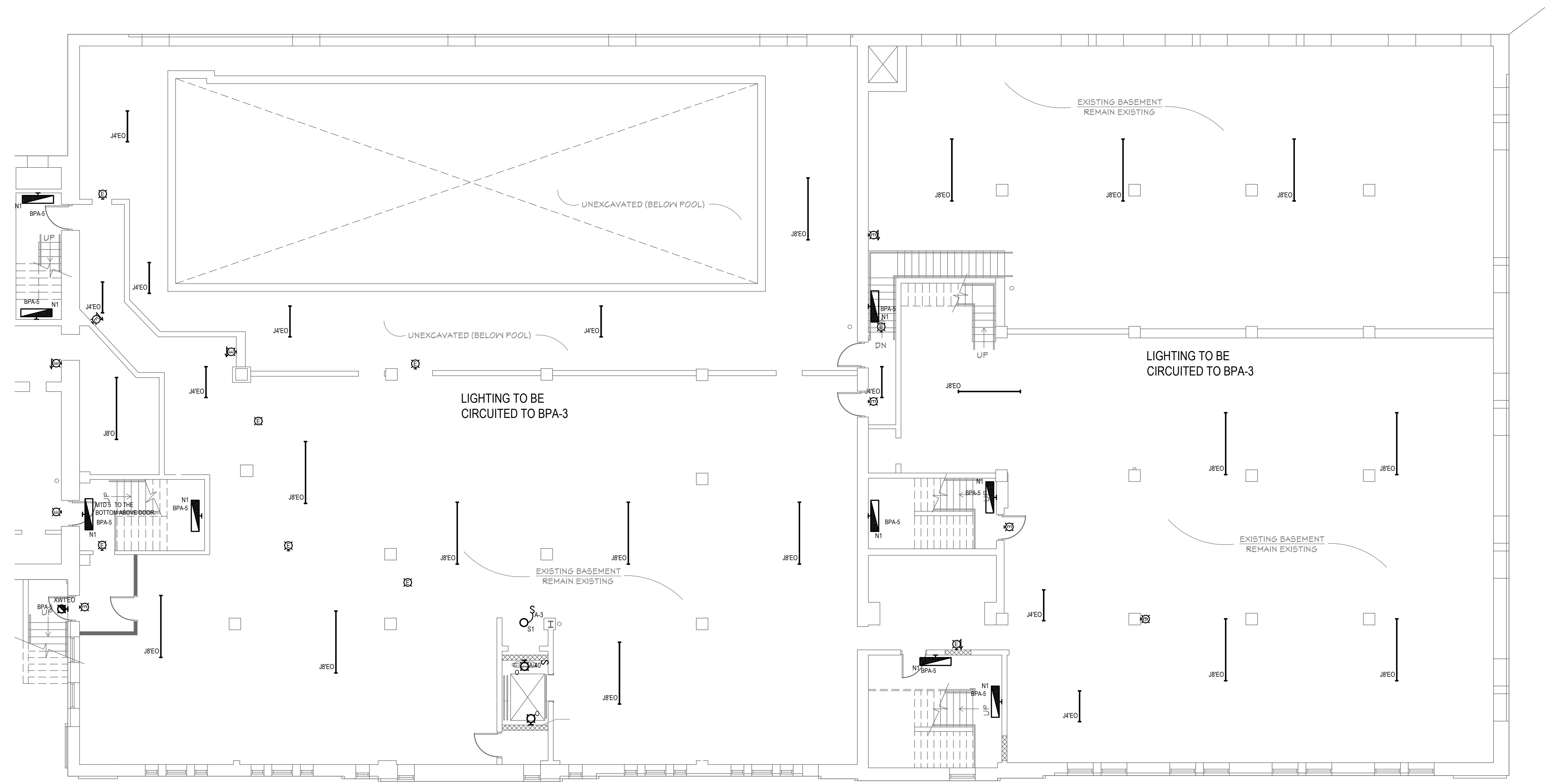
- A. REFER TO ARCHITECTURAL AND ELECTRICAL PLANS, ELEVATIONS AND DETAILS FOR LIGHT FIXTURE MOUNTING HEIGHTS AND LOCATIONS.
- B. E.C. SHALL CONNECT EXIT SIGNS AND EMERGENCY BALLAST/BATTERIES TO UN-SWITCHED LOCAL LIGHTING CIRCUIT.
- C. E.C. SHALL BE RESPONSIBLE FOR PROVIDING FUNCTIONAL TESTING OF LIGHTING CONTROL SYSTEM PER ASHRAE 90.1-2013 SECTION 9.4.3



CONCEPT DESIGN STUDIO, INC.  
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BUILDING RENOVATIONS FOR  
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**BASEMENT LIGHTING PLAN AREA B**  
SCALE: 1/8" = 1'-0"



PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

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SHEET TITLE  
**BASEMENT LIGHTING  
PLAN  
AREA B**

SHEET NO.

**EL1.00B**

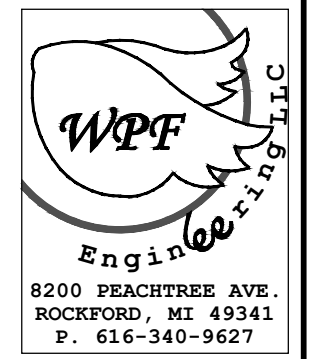
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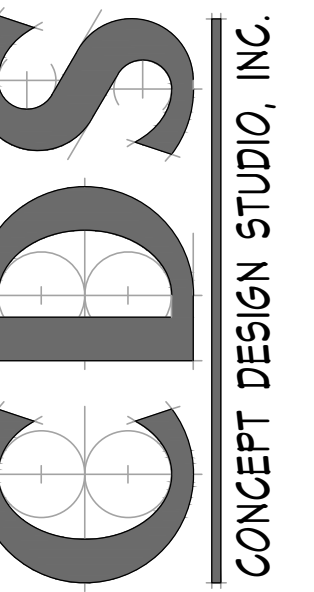


**GENERAL LIGHTING NOTES**

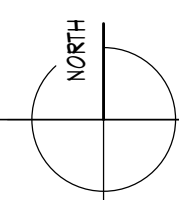
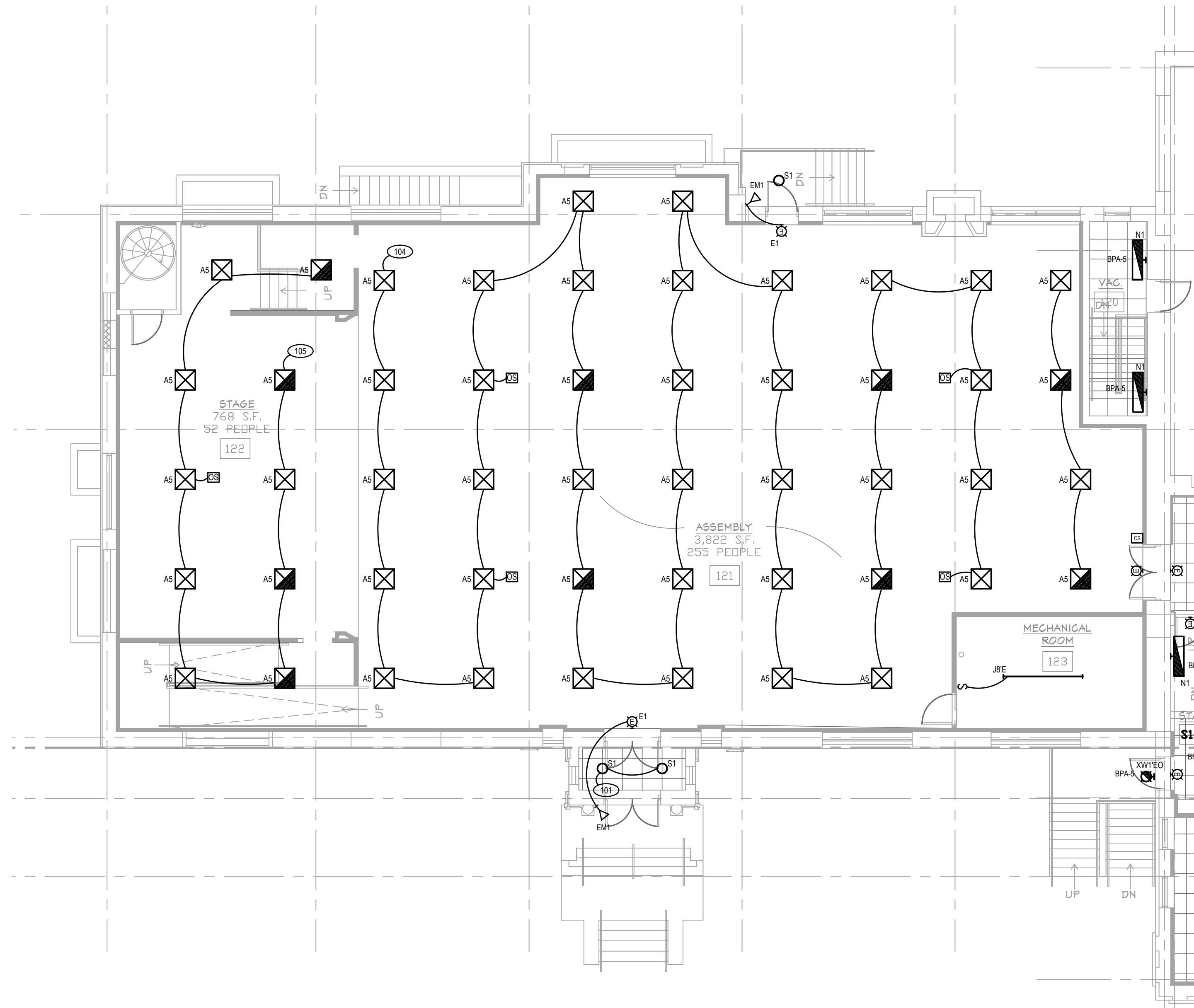
- A. REFER TO ARCHITECTURAL AND ELECTRICAL PLANS, ELEVATIONS AND DETAILS FOR LIGHT FIXTURE MOUNTING HEIGHTS AND LOCATIONS.
- B. E.C. SHALL CONNECT EXIT SIGNS AND EMERGENCY BALLAST/BATTERIES TO UN-SWITCHED LOCAL LIGHTING CIRCUIT.
- C. E.C. SHALL BE RESPONSIBLE FOR PROVIDING FUNCTIONAL TESTING OF LIGHTING CONTROL SYSTEM PER ASHRAE 90.1-2013 SECTION 9.4.3



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BUILDING RENOVATIONS FOR  
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FIRST FLOOR LIGHTING PLAN AREA A  
SCALE: 1/8" = 1'-0"



PROJECT # 1356-23

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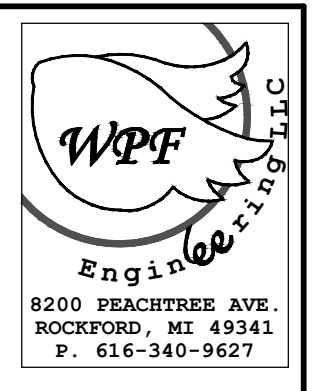
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FIRST FLOOR LIGHTING  
PLAN  
AREA A

SHEET NO.

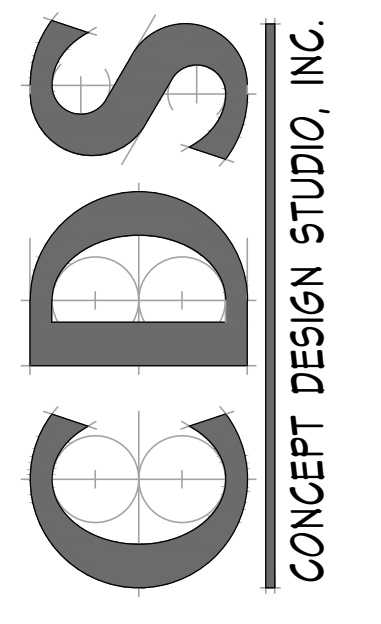
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**GENERAL LIGHTING NOTES**

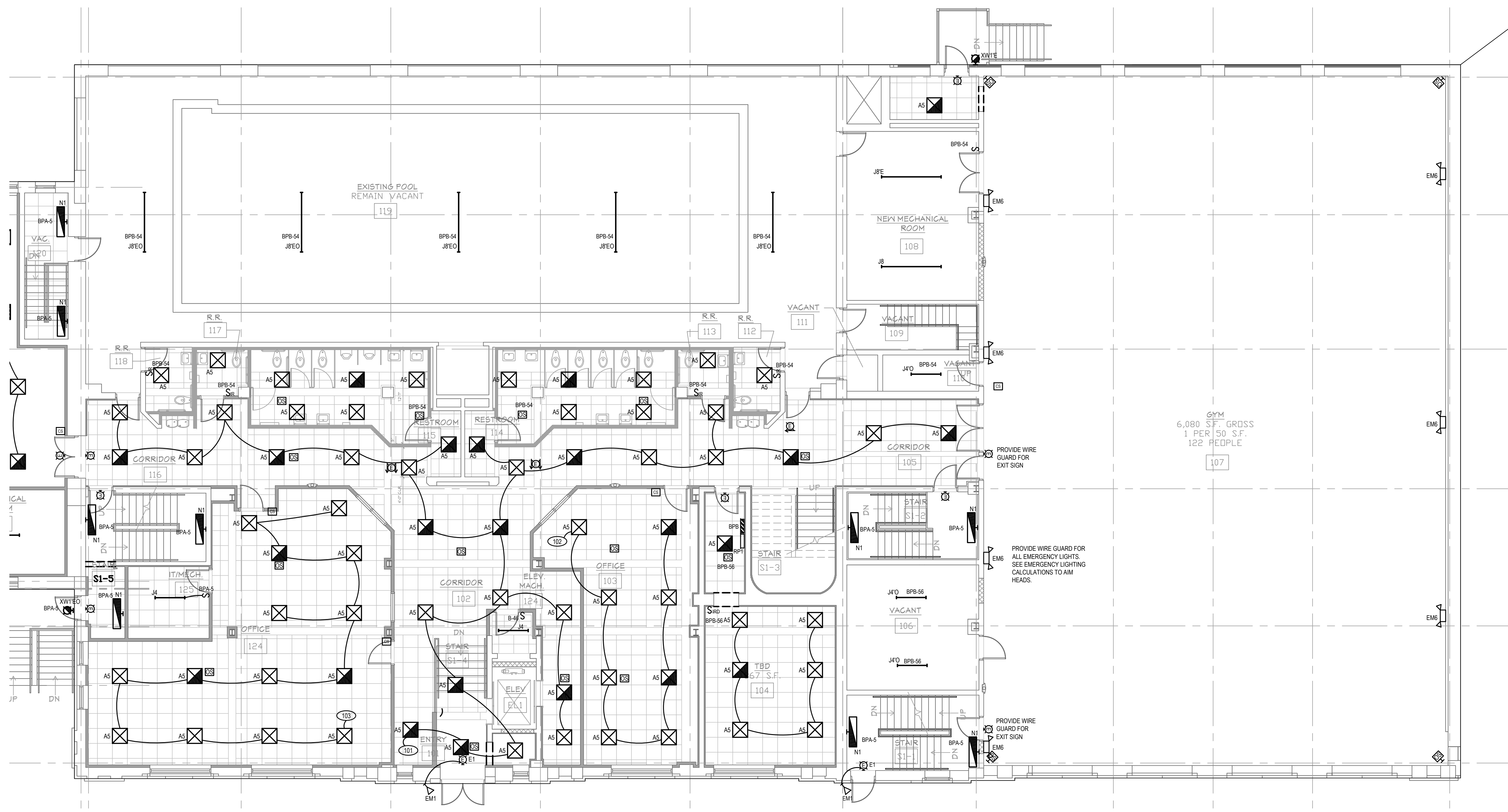
- A. REFER TO ARCHITECTURAL AND ELECTRICAL PLANS, ELEVATIONS AND DETAILS FOR LIGHT FIXTURE MOUNTING HEIGHTS AND LOCATIONS.
- B. E.C. SHALL CONNECT EXIT SIGNS AND EMERGENCY BALLAST/BATTERIES TO UN-SWITCHED LOCAL LIGHTING CIRCUIT.
- C. E.C. SHALL BE RESPONSIBLE FOR PROVIDING FUNCTIONAL TESTING OF LIGHTING CONTROL SYSTEM PER ASHRAE 90.1-2013 SECTION 8.4.3



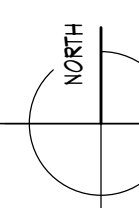
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BUILDING RENOVATIONS FOR  
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FIRST FLOOR LIGHTING PLAN AREA B  
SCALE: 1/8" = 1'-0"



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SHEET TITLE  
FIRST FLOOR LIGHTING PLAN AREA B

SHEET NO.

EL1.01B

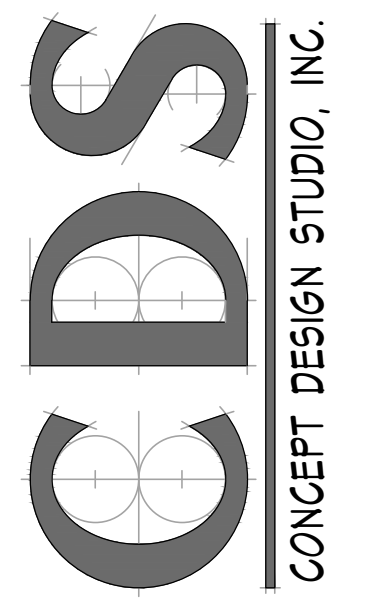
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- A. REFER TO ARCHITECTURAL AND ELECTRICAL PLANS, ELEVATIONS AND DETAILS FOR LIGHT FIXTURE MOUNTING HEIGHTS AND LOCATIONS.
- B. E.C. SHALL CONNECT EXIT SIGNS AND EMERGENCY BALLAST/BATTERIES TO UN-SWITCHED LOCAL LIGHTING CIRCUIT.
- C. E.C. SHALL BE RESPONSIBLE FOR PROVIDING FUNCTIONAL TESTING OF LIGHTING CONTROL SYSTEM PER ASHRAE 90.1-2013 SECTION 9.4.3



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BUILDING RENOVATIONS FOR  
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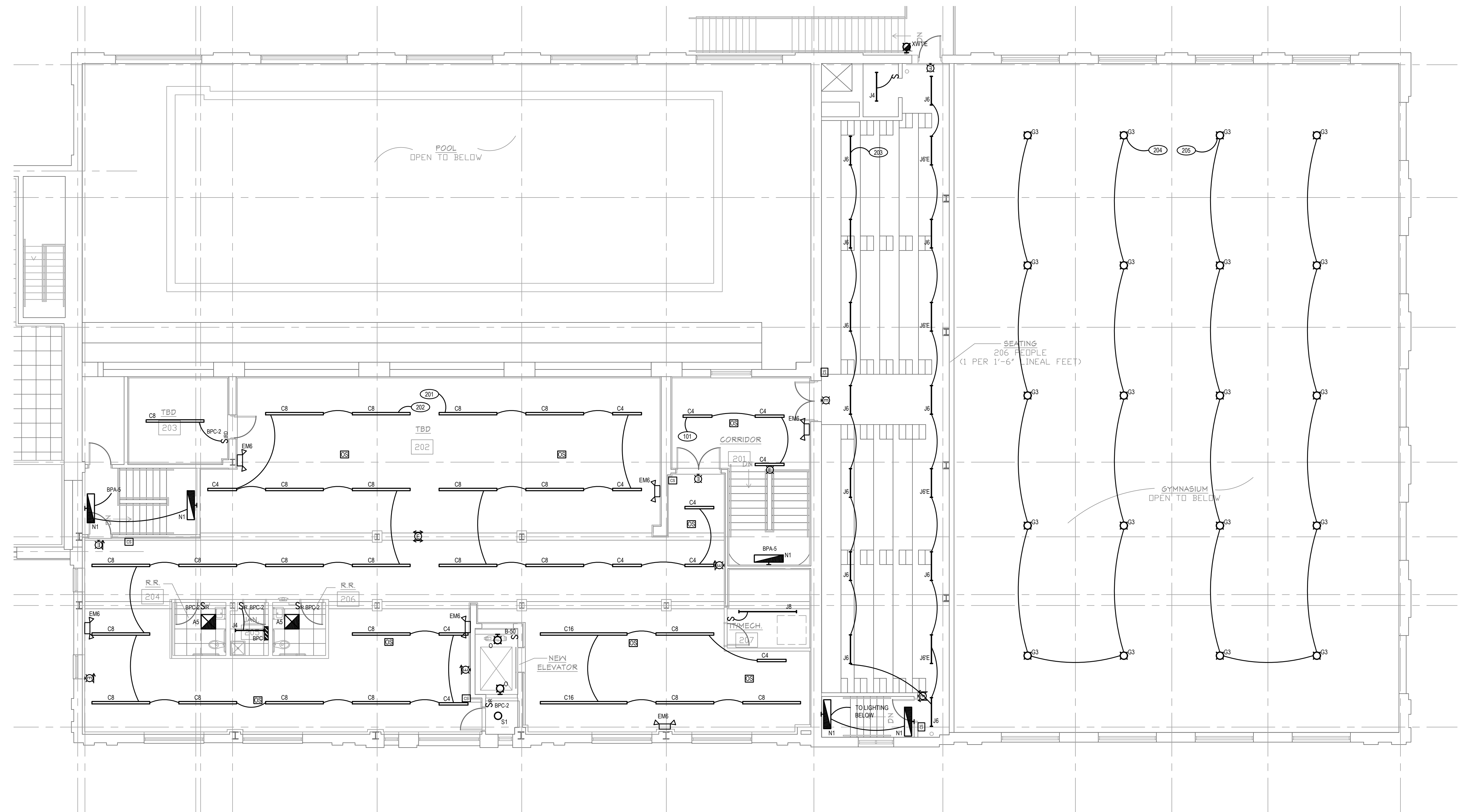
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SHEET TITLE  
SECOND FLOOR  
LIGHTING PLAN  
AREA B

SHEET NO.

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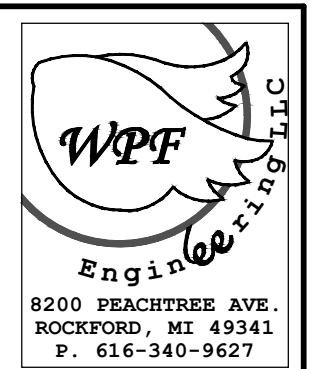


**SECOND FLOOR LIGHTING PLAN AREA B**  
SCALE 3/32" = 1'-0"

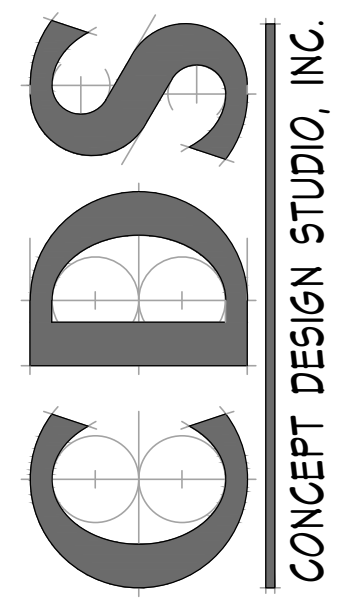


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BUILDING RENOVATIONS FOR  
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PROJECT # 1356-23

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SHEET TITLE  
BASEMENT  
EMERGENCY LIGHTING  
CALCULATIONS

SHEET NO.

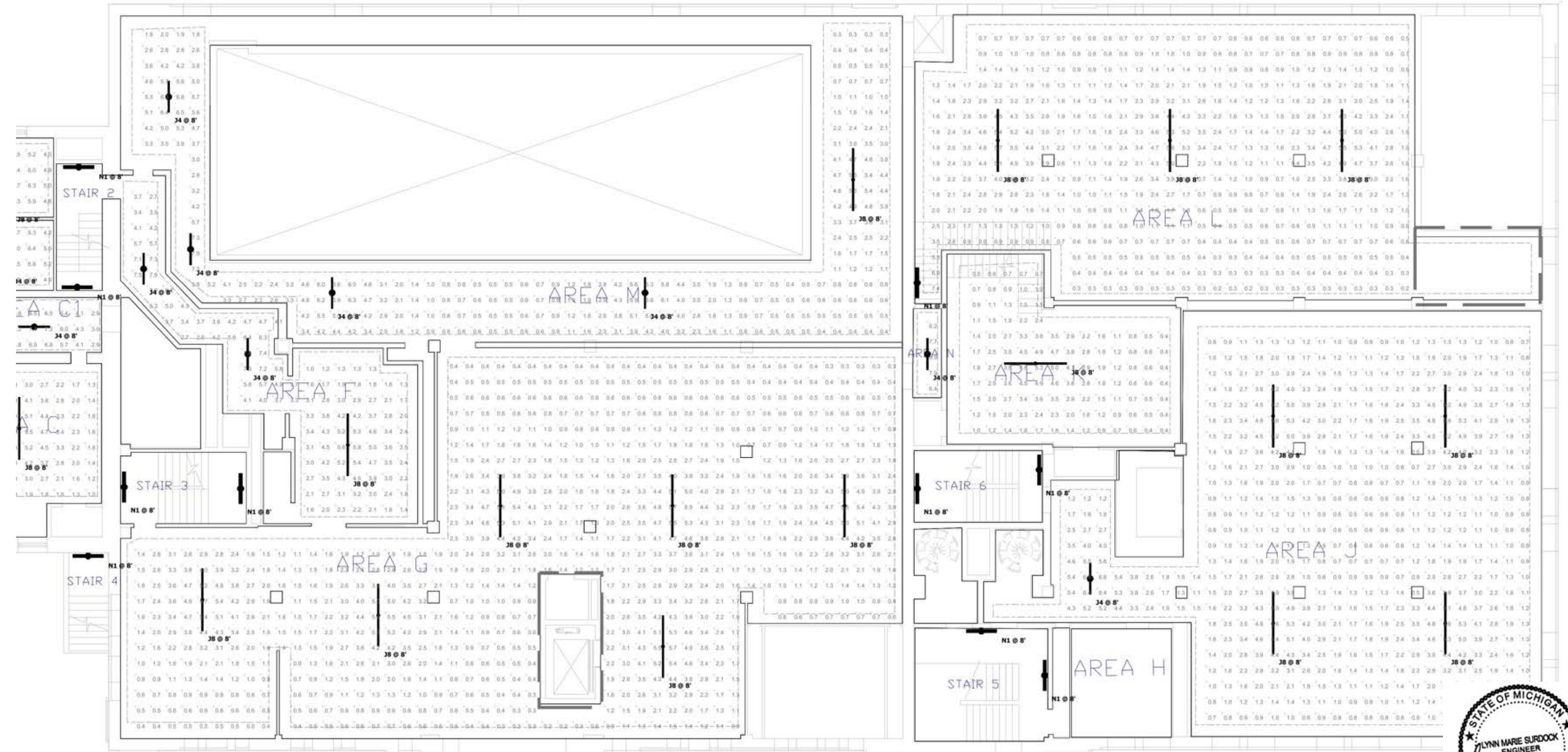
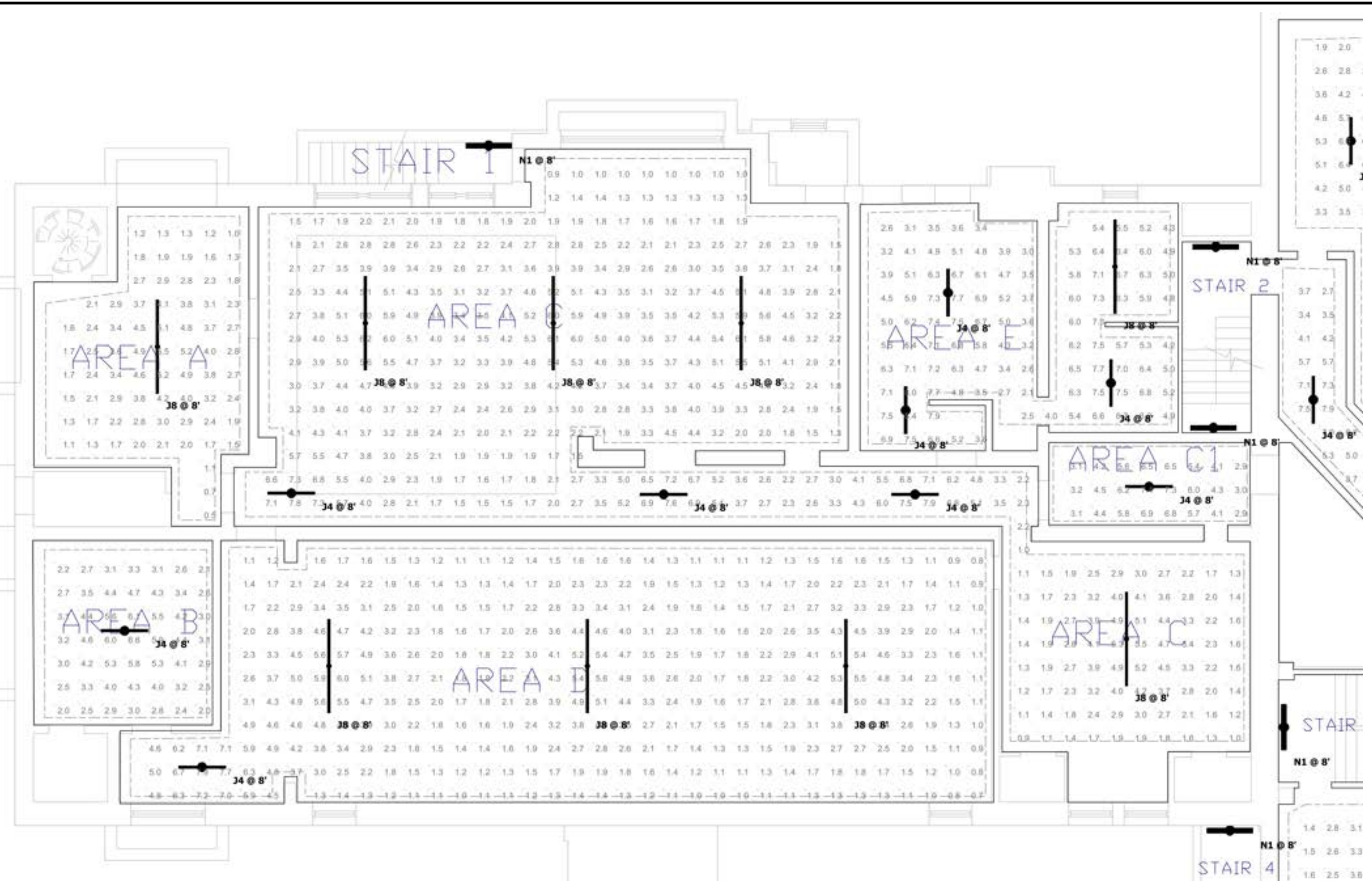
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Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Plot
J4			17	Lithonia Lighting	CSS L48 4000LM MVOLT 35K 80CRI [All options]	CSS 48in, 4000 Lumens, Multi Volt, 3500 Kelvin, 80 Color rendering, All options	1	4197	0.28	34.2	
J8			25	Lithonia Lighting	CSS L96 AL04 MVOLT SWW3 80CRI (8000LM 3500K)	Contractor LED Single Strip Light, 96", Switchable lumens (5000LM / 8000LM / 10000LM), 120-277V, Switchable White (3500K, 4000K, 5000K), 80 CRI, Set to 8000LM 3500K.	1	8175	0.14	68.4	
N1			11	Lithonia Lighting	BLWP4 40L ADSM LP835	BLWP4-40 4000 Nominal Lumens, Curved Smooth lens, 3500K CCT, 80CRI	1	4040	0.28	34.54	

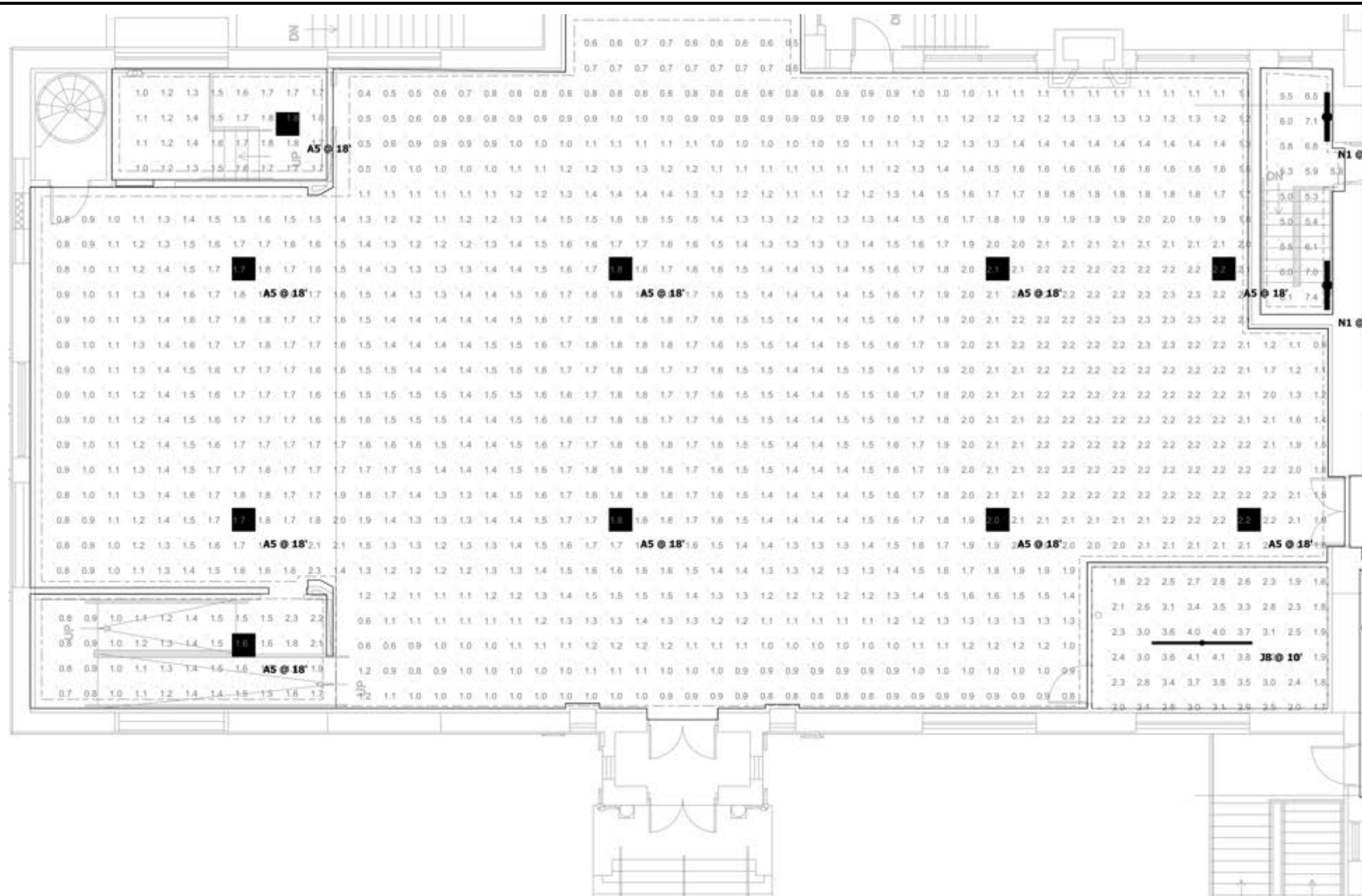
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AREA C	+	3.3 fc	7.9 fc	0.9 fc	8.8:1	3.7:1
AREA C1	+	5.0 fc	7.4 fc	2.9 fc	2.6:1	1.7:1
AREA D	+	2.6 fc	7.9 fc	0.7 fc	11.3:1	3.7:1
AREA E	+	5.6 fc	8.4 fc	2.1 fc	4.0:1	2.7:1
AREA F	+	3.8 fc	7.9 fc	1.0 fc	7.9:1	3.8:1
AREA G	+	1.9 fc	5.7 fc	0.2 fc	28.5:1	9.5:1
AREA J	+	2.1 fc	6.6 fc	0.5 fc	13.2:1	4.2:1
AREA K	+	1.9 fc	5.3 fc	0.4 fc	13.3:1	4.8:1
AREA L	+	1.7 fc	7.4 fc	0.2 fc	37.0:1	8.5:1
AREA H	+	2.6 fc	7.9 fc	0.3 fc	26.3:1	8.7:1
AREA N	+	7.3 fc	8.5 fc	6.2 fc	1.4:1	1.2:1
AREA A	+	2.7 fc	5.5 fc	0.5 fc	11.0:1	5.4:1

Plan View  
Scale - 1" = 8ft



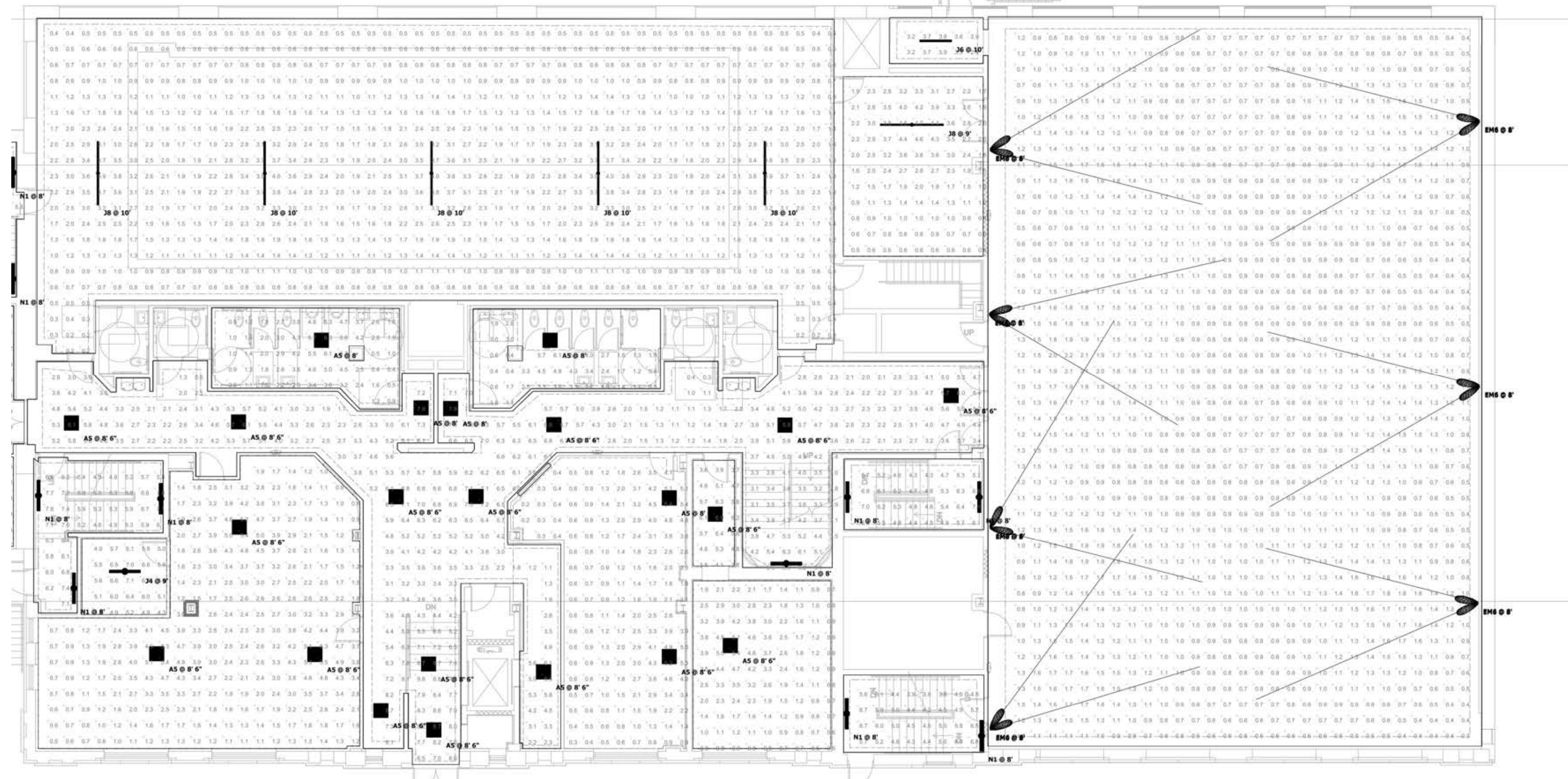
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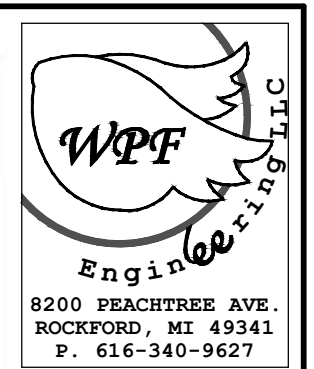


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104 - Hallway	+	5.1 fc	3.6 fc	1.9:1	1.4:1	6.9 fc
104 - TBD	+	2.0 fc	0.5 fc	10.8:1	4.0:1	5.4 fc
108 New Mech	+	2.1 fc	0.5 fc	9.4:1	4.2:1	4.7 fc
115 Assembly	+	1.5 fc	0.4 fc	5.8:1	3.8:1	2.3 fc
122 Ramp	+	1.3 fc	0.7 fc	3.3:1	1.9:1	2.3 fc
123 Mech	+	2.8 fc	1.6 fc	2.6:1	1.8:1	4.1 fc
124 Office	+	2.5 fc	0.5 fc	11.0:1	5.0:1	5.5 fc
125 Mech	+	5.7 fc	4.3 fc	1.7:1	1.3:1	7.1 fc
future work space	+	1.6 fc	0.2 fc	20.0:1	8.0:1	4.0 fc
Stage stairs	+	1.5 fc	1.0 fc	1.8:1	1.5:1	1.8 fc
stair	+	6.0 fc	5.0 fc	1.5:1	1.2:1	7.4 fc
stair	+	5.0 fc	3.8 fc	1.8:1	1.3:1	6.8 fc
stair	+	5.5 fc	4.3 fc	1.7:1	1.3:1	7.1 fc
Stair/exit	+	6.1 fc	4.8 fc	1.6:1	1.3:1	7.8 fc
O1 - Gym	+	1.0 fc	0.3 fc	7.3:1	3.3:1	2.2 fc
O1 GYM EXIT	+	3.4 fc	2.9 fc	1.3:1	1.2:1	3.9 fc
102 Corridor	+	4.5 fc	0.3 fc	32.7:1	15.0:1	9.8 fc
114 RR	+	2.4 fc	0.4 fc	15.3:1	6.0:1	6.1 fc
115 RR	+	2.8 fc	0.4 fc	15.8:1	7.0:1	6.3 fc

Schedule											
Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Plot
A5			32	Lithonia Lighting	CPX 2X2 ALO7 (High) SWW7 (35K) SWL MVOLT	LED Panel 2X2ft, Switchable Lumens-4000LM, 80CRI, Switchable White 35K, Satin White, 120-277V.	1	4321	0.24	34.94	
EM6			14	Lithonia Lighting	ELM6L	ELM6L SP1100L	1	564	1	4.2	
J4			1	Lithonia Lighting	CSS L48 4000LM MVOLT 40K 80CRI	LED STRIP LIGHT, 4FT, SINGLE LENS, 4000 LUMEN, 120-277V, 4000K CCT, 80CRI	1	4795	0.28	35.25	
J8			7	Lithonia Lighting	CSS L96 ALO4 MVOLT SWW3 80CRI (8000LM 3500K)	Contractor LED Single Strip Light, 96", Switchable Lumens (6000LM / 8000LM / 10000LM), 120-277V, Switchable White (3500K, 4000K, 5000K), 80 CRI, Set to 8000LM 3500K	1	8175	0.14	68.4	
N1			10	Lithonia Lighting	BLWP4 40L AD5M LP835	BLWP 4R 4000 Nominal Lumens, Curved Smooth lens, 3500K CCT, 80CRI	1	4040	0.27	34.54	
			1	Lithonia Lighting	ZL1F L48 3000LM MDD MVOLT 40K 80 CRI	ZL1F 48" 3,000 Lumens , Medium Diffuse, MVOLT, 4,000K, 80CRI	1	2730	0.3	30.08	

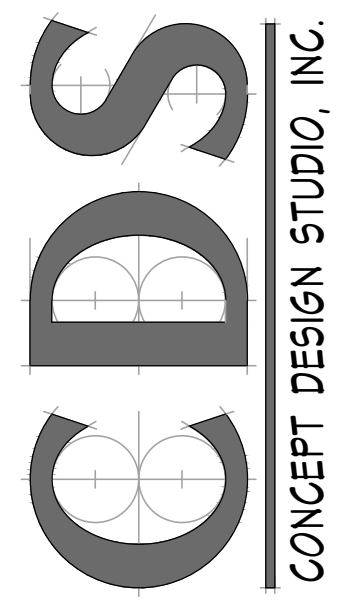


Plan View  
Scale: 1" = 8ft



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BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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SHEET TITLE  
FIRST FLOOR  
EMERGENCY LIGHTING  
CALCULATIONS

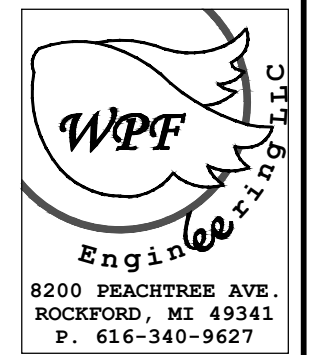
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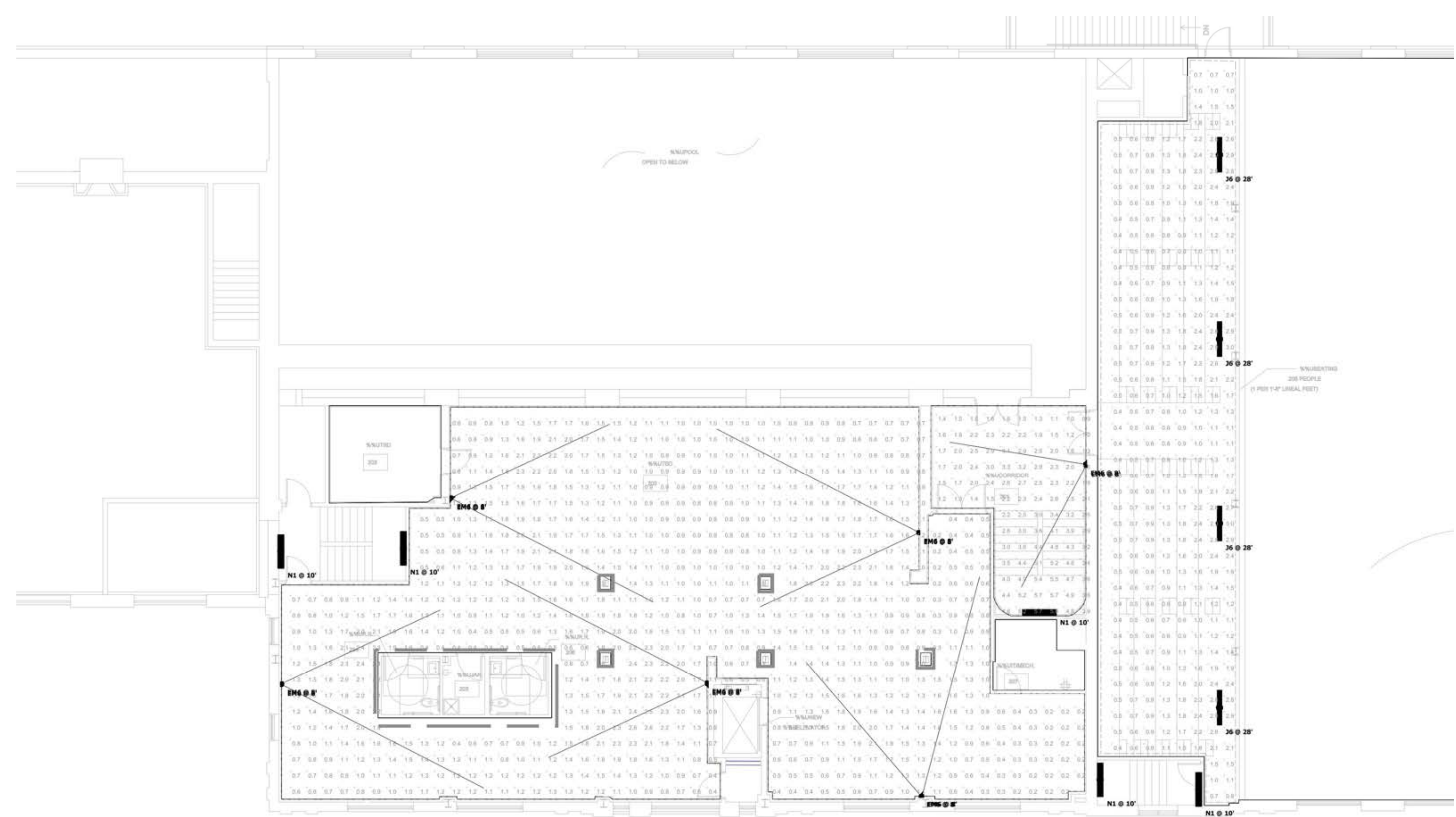
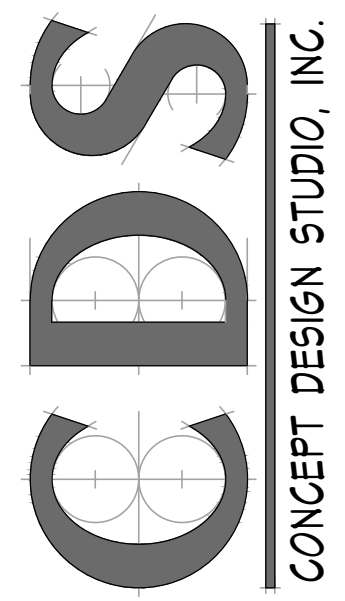


Statistics						
Description	Symbol	Avg	Max	Min	Avg/Min	Max/Min
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open area	+	1.2 fc	2.6 fc	0.2 fc	6.0:1	13.0:1
02 - Gym Stands	+	1.2 fc	3.0 fc	0.4 fc	3.0:1	7.5:1

Schedule											
Symbol	Label	Image	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Wattage	Plot
□	A5		0	Lithonia Lighting	CPANL 2x2 24/33/44LM 35K - 44LM	CPANL Switchable Lumen LED Flat Panel, 2x2, 24/33/44LM, 3500 K CCT, - 44LM	1	4357	0.24	38.96	
	J6		4	Lithonia Lighting	ZL1F 48" 3000LM MDD MVOLT 40K 80 CRI	ZL1F 48" 3,000 Lumens, Medium Diffuse, MVOLT, 4,000K, 80CRI	1	2730	0.3	30.08	
	N1		5	Lithonia Lighting	BLWP4 40L AD5M LP835	BLWP 4ft 4000 Nominal Lumens, Curved Smooth lens, 3500K CCT, 80CRI	1	4040	0.27	34.54	
○	EM6		12	Lithonia Lighting	ELM6L	ELM6L SP1100L	1	564	1	4.2	



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Plan View  
Scale - 1" = 8ft

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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SHEET TITLE  
SECOND FLOOR  
EMERGENCY LIGHTING  
CALCULATIONS

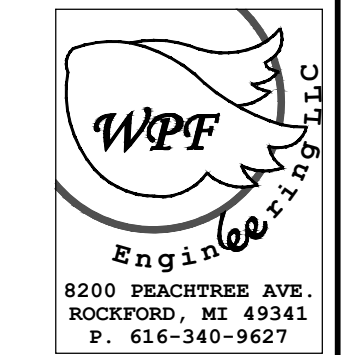
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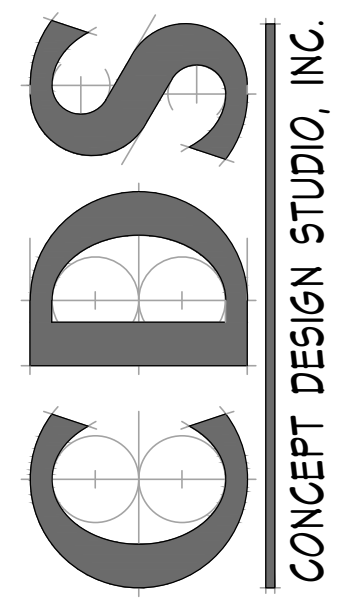


**GENERAL POWER NOTES**

- A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF TV AND MONITORS PRIOR TO INSTALLATION.
- B. ALL 15A & 20A 120V NON-LOCKING RECEPTACLES WITHIN PUBLIC SPACE SHALL BE LISTED TAMPER RESISTANT PER NEC 408.14.
- C. MOUNT PANELS, TRANSFORMERS, DISCONNECT SWITCHES, AND COMBINATION MOTOR STARTERS WITH ADEQUATE CLEARANCES IN ACCORDANCE WITH NEC 110.
- D. VERIFY ALL KITCHEN EQUIPMENT REQUIREMENTS, CONNECTION TYPES, AND LOCATIONS WITH KITCHEN EQUIPMENT SUPPLIER AND NAMEPLATES PRIOR TO ROUGH-IN.

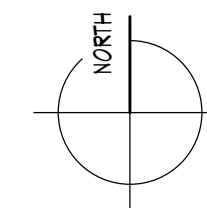
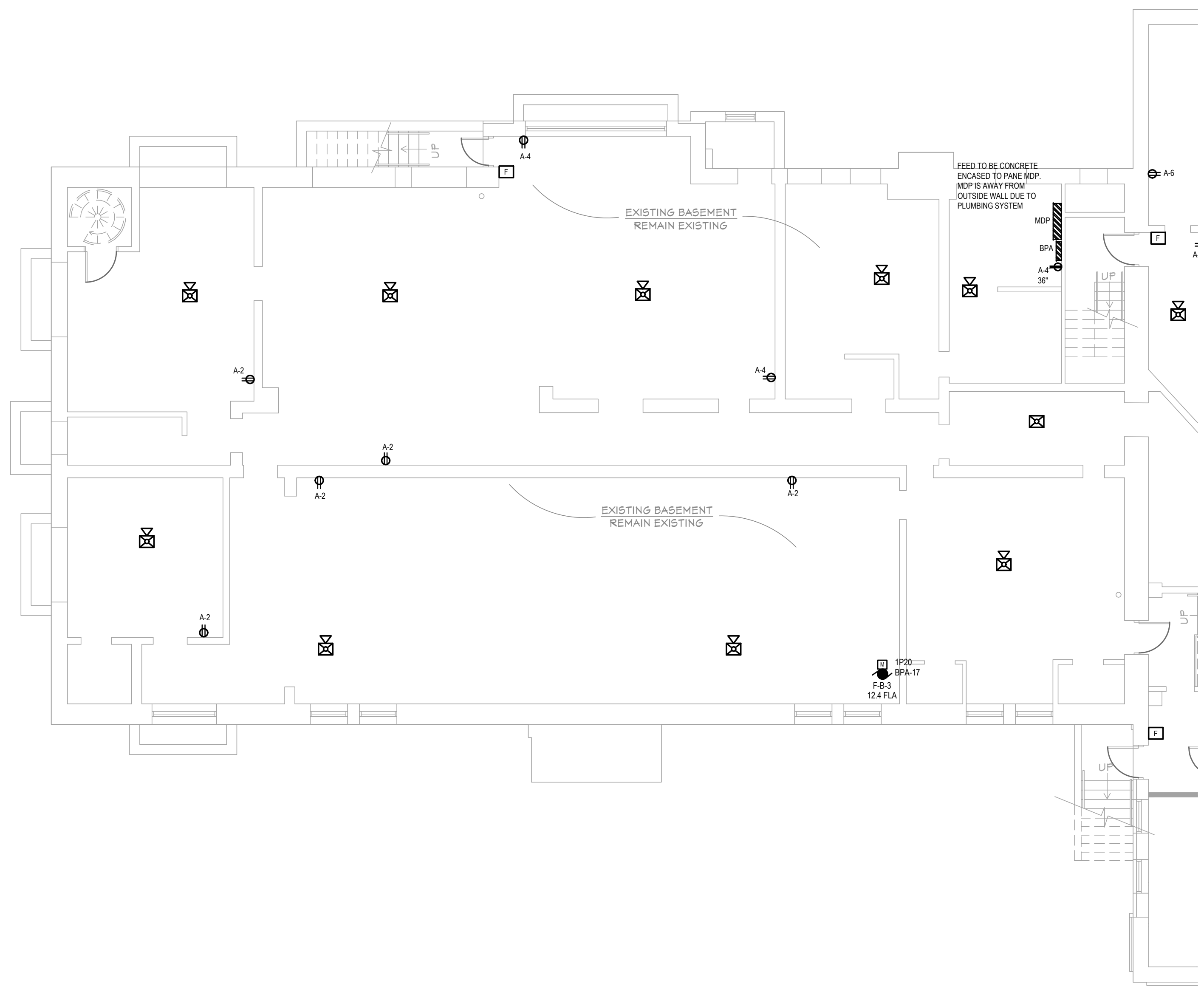


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**POWER PLAN LEGEND**

- LEGEND SYMBOL INDICATOR**
- P01 PROVIDE (2) 4" CONDUITS FOR LOW VOLTAGE SERVICES TO BUILDING. BUSH ENDS AND PROVIDE PULL WIRE. COORDINATE ROUTING WITH SITE.
  - P02 PROVIDE 4x8 PLYWOOD BOARD TREATED WITH FIRE RETARDANT PAINT. PROVIDE #6 GROUND BAR.
  - P03 PROVIDE (2) 4" CONDUITS STUBBED UP THRU FLOOR BETWEEN MDF & IDF. BUSH ENDS.
  - P04 PROVIDE 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE AND SINGLE GANG BOX FOR ALL MECHANICAL WALL MOUNTED TEMPERATURE SENSORS. SEE MECHANICAL PLANS FOR LOCATIONS.
  - P05 NOT USED.
  - P06 NOT USED.
  - P07 NOT USED.
  - P08 WEATHERPROOF HORN STROBE. TO BE LOCATED ON EXTERIOR OF BUILDING AT 8'-0" AT FIRE SUPPRESSION CONNECTION. STROBE TO ACTIVATED BY FIRE PROTECTION FLOW SWITCHES.
  - P09 COORDINATE LOCATIONS OF ALL EQUIPMENT IN ELEVATOR EQUIPMENT ROOM/STAIR ROOM AND PIT WITH ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN. CONNECT EMERGENCY SHUT-DOWN OF ELEVATOR AS REQUIRED. SEQUENCE EQUIPMENT TO SHUT-DOWN THE ELEVATOR BY SMOKE DETECTORS WHEN REQUIRED. ELECTRICAL CONTRACTOR SHALL REFERENCE ELEVATOR SPECIFICATIONS AND COORDINATE ALL REQUIREMENTS WITH ELEVATOR MANUFACTURER FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO ROUGH-IN.
  - P10 ELEV. CAB LIGHT DISC. (1) 1P20A CKT BREAKER MTD IN NEMA-1 ENCLOSURE WITH HANDLE PADLOCK ATTACHMENT CAPABLE OF LOCKING BREAKER IN OPEN POSITION. PROVIDE NAMEPLATE ON DISC. INDICATING PANEL NAME AND CIRCUIT NUMBER.
  - P11 ELEV. SLUMP PUMP. 12HP PROVIDE 120V, 1P20A POWER TO CONTROL PANEL. CONTROL PANEL PROVIDED WITH UNIT. COORDINATE LOCATION WITH PLUMBING PLANS.
  - P12 VERIFY WITH STATE CODE TO PROVIDE SMOKE DETECTION FOR ELEVATOR. PROVIDE AND INSTALLED BY E.C. CONNECT TO FIRE ALARM SYSTEM UNLESS NOT ALLOWED BY STATE CODE.
  - P13 TWO-WAY COMMUNICATION - PROVIDE ALPHA IX-MV MASTER STATION AND DXV-PBX AND ALPHA IX-CCU CENTRAL CONTROL UNIT ON LEVEL 1 AND ALPHA IX-SS-RA-RL CALL STATION ON LEVELS BASEMENT, 1 AND 2.



**BASEMENT POWER PLAN AREA A**  
SCALE: 1/8" = 1'-0"



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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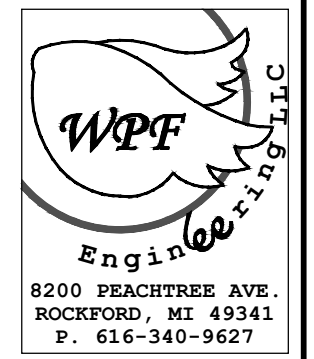
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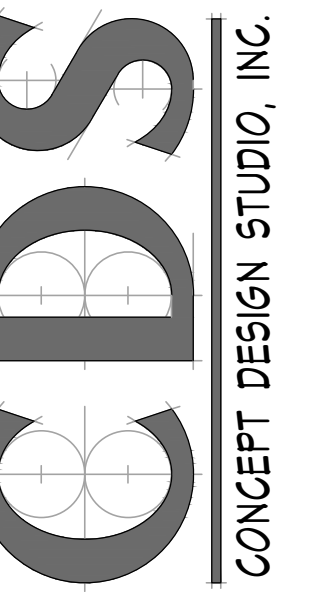
**EP1.00A**

**GENERAL POWER NOTES**

- A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF TV AND MONITORS PRIOR TO INSTALLATION.
- B. ALL 15A & 20A 120V NON-LOCKING RECEPTACLES WITHIN PUBLIC SPACE SHALL BE LISTED TAMPER RESISTANT PER NEC 408.14.
- C. MOUNT PANELS, TRANSFORMERS, DISCONNECT SWITCHES, AND COMBINATION MOTOR STARTERS WITH ADEQUATE CLEARANCES IN ACCORDANCE WITH NEC 110.
- D. VERIFY ALL KITCHEN EQUIPMENT REQUIREMENTS, CONNECTION TYPES, AND LOCATIONS WITH KITCHEN EQUIPMENT SUPPLIER AND NAMEPLATES PRIOR TO ROUGH-IN.



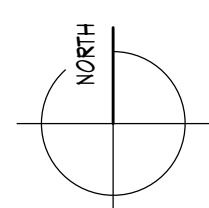
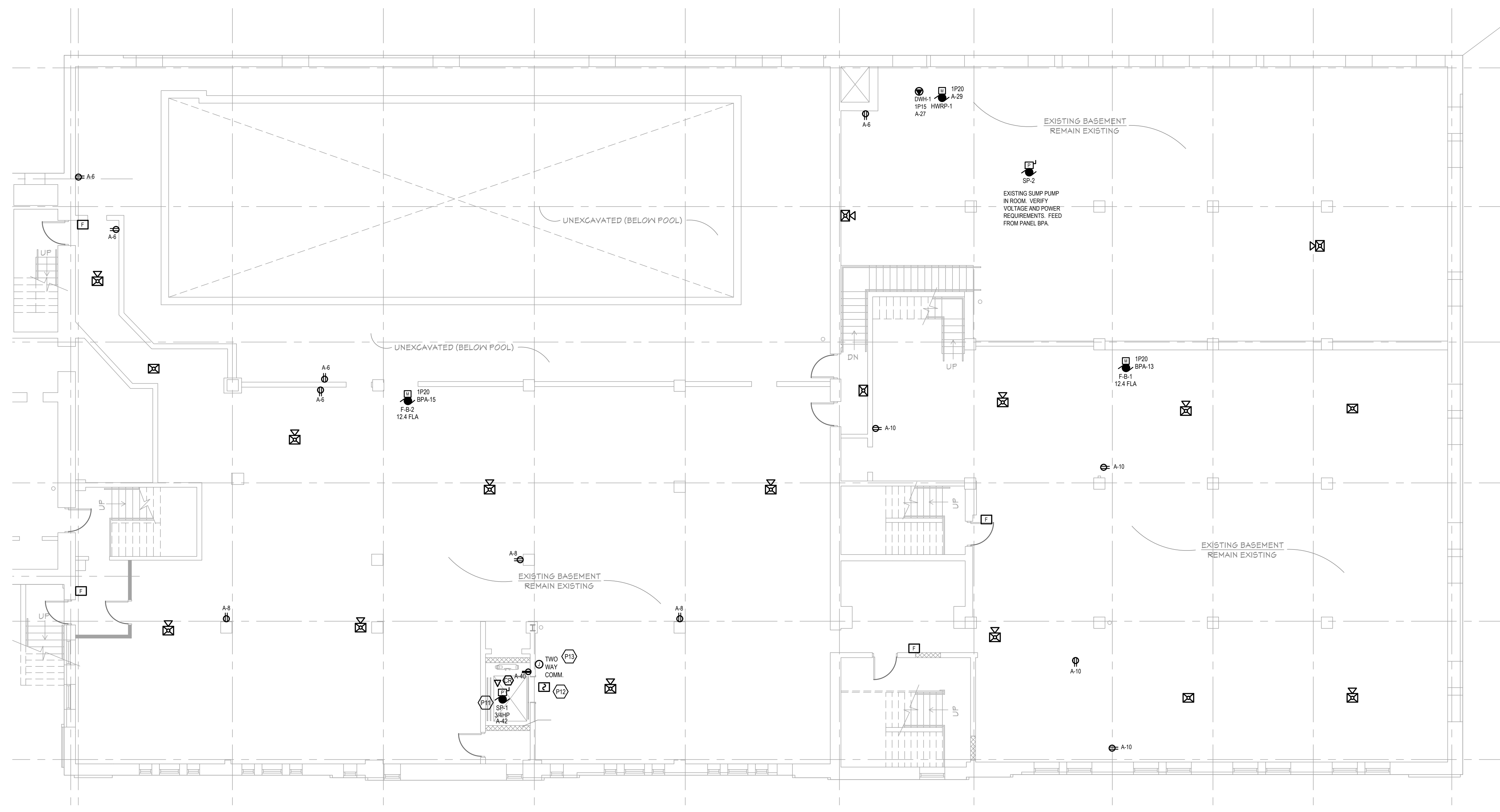
CONCEPT DESIGN STUDIO, INC.  
800 E. ELLIS ROAD, SUITE 508  
NORTON SHORES, MI 49441  
PH. (231) 799-4836  
FAX (231) 799-4837



**POWER PLAN LEGEND**

**LEGEND SYMBOL INDICATOR**

- P01 PROVIDE (2) 4" CONDUITS FOR LOW VOLTAGE SERVICES TO BUILDING BUSH ENDS AND PROVIDE PULL WIRE. COORDINATE ROUTING WITH SITE.
- P02 PROVIDE 4x8 PLYWOOD BOARD TREATED WITH FIRE RETARDANT PAINT. PROVIDE 36 GROUND BAR.
- P03 PROVIDE (2) 4" CONDUITS STUBBED UP THRU FLOOR BETWEEN MDF & IDF. BUSH ENDS.
- P04 PROVIDE 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE AND SINGLE GANG BOX FOR ALL MECHANICAL WALL MOUNTED TEMPERATURE SENSORS. SEE MECHANICAL PLANS FOR LOCATIONS.
- P05 NOT USED.
- P06 NOT USED.
- P07 NOT USED.
- P08 WEATHERPROOF HORN STROBE TO BE LOCATED ON EXTERIOR OF BUILDING AT 8'-0" AT FIRE SUPPRESSION CONNECTION. STROBE TO BE ACTIVATED BY FIRE PROTECTION FLOW SWITCHES.
- P09 COORDINATE LOCATIONS OF ALL EQUIPMENT IN ELEVATOR EQUIPMENT ROOMS WITH ROOM AND PIT WITH ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN. CONNECT EMERGENCY SHUT-DOWN OF ELEVATOR AS REQUIRED. SEQUENCE EQUIPMENT TO SHUT-DOWN THE ELEVATOR BY SMOKE DETECTORS WHEN REQUIRED. ELECTRICAL CONTRACTOR SHALL REFERENCE ELEVATOR SPECIFICATIONS AND COORDINATE ALL REQUIREMENTS WITH ELEVATOR MANUFACTURER FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO ROUGH-IN.
- P10 ELEV. CAB LIGHT DISC. (1) 1P20A CKT BREAKER MTD IN NEMA-1 ENCLOSURE WITH HANDLE PADLOCK ATTACHMENT CAPABLE OF LOCKING BREAKER IN OPEN POSITION. PROVIDE NAMEPLATE ON DISC. INDICATING PANEL NAME AND CIRCUIT NUMBER.
- P11 ELEV. SUMP PUMP - 1/2HP PROVIDE 120V, 1P20A POWER TO CONTROL PANEL. CONTROL PANEL PROVIDED WITH UNIT. COORDINATE LOCATION WITH PLUMBING PLANS.
- P12 VERIFY WITH STATE CODE TO PROVIDE SMOKE DETECTION FOR ELEVATOR. PROVIDE AND INSTALL BY E.C. CONNECT TO FIRE ALARM SYSTEM UNLESS NOT ALLOWED BY STATE CODE.
- P13 TWO-WAY COMMUNICATION - PROVIDE ALPHONE IX-MV MASTER STATION AND DXW-PBX AND ALPHONE IX-CCU CENTRAL CONTROL UNIT ON LEVEL 1 AND ALPHONE IX-SS-RA-RL CALL STATION ON LEVELS BASEMENT, 1 AND 2.



**BASEMENT POWER PLAN AREA B**  
SCALE: 1/8" = 1'-0"

BUILDING RENOVATIONS FOR  
**BREWNSTER WHEELER RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

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SHEET TITLE  
**BASEMENT POWER PLAN AREA B**

SHEET NO.

**EP1.00B**





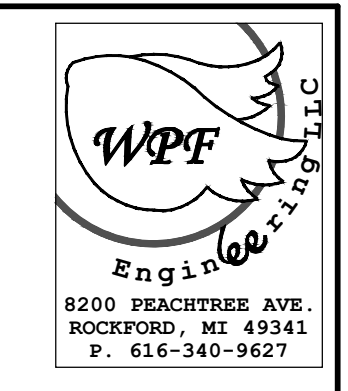
**GENERAL POWER NOTES**

A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF TV AND MONITORS PRIOR TO INSTALLATION.

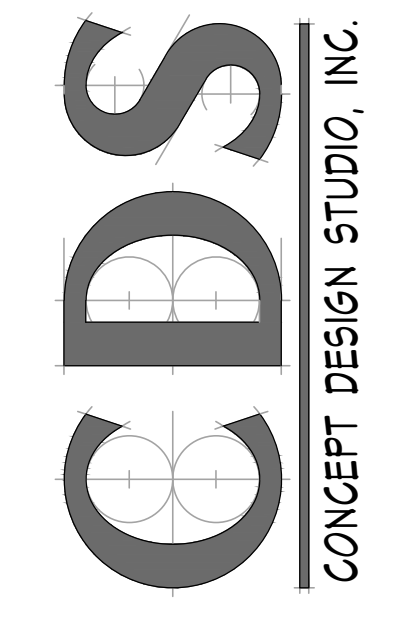
B. ALL 15A & 20A 120V NON-LOCKING RECEPTACLES WITHIN PUBLIC SPACE SHALL BE LISTED TAMPER RESISTANT PER NEC 406.14.

C. MOUNT PANELS, TRANSFORMERS, DISCONNECT SWITCHES, AND COMBINATION MOTOR STARTERS WITH ADEQUATE CLEARANCES IN ACCORDANCE WITH NEC 110.

D. VERIFY ALL KITCHEN EQUIPMENT REQUIREMENTS, CONNECTION TYPES, AND LOCATIONS WITH KITCHEN EQUIPMENT SUPPLIER AND NAMEPLATES PRIOR TO ROUGH-IN.



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**POWER PLAN LEGEND**

**LEGEND SYMBOL INDICATOR**

P01 PROVIDE (2) 4" CONDUITS FOR LOW VOLTAGE SERVICES TO BUILDING. BUSH ENDS AND PROVIDE PULL WIRE. COORDINATE ROUTING WITH SITE.

P02 PROVIDE 4x8' PLYWOOD BOARD TREATED WITH FIRE RETARDANT PAINT. PROVIDE #8 GROUND BAR.

P03 PROVIDE (2) 4" CONDUITS STUBBED UP THRU FLOOR BETWEEN MDF & IDF. BUSH ENDS.

P04 PROVIDE 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE AND SINGLE GANG BOX FOR ALL MECHANICAL WALL MOUNTED TEMPERATURE SENSORS. SEE MECHANICAL PLANS FOR LOCATIONS.

P05 NOT USED.

P06 NOT USED.

P07 NOT USED.

P08 WEATHERPROOF HORN STROBE TO BE LOCATED ON EXTERIOR OF BUILDING AT R/F AT FIRE SUPPRESSION CONNECTION. STROBE TO BE ACTIVATED BY FIRE PROTECTION FLOW SWITCHES.

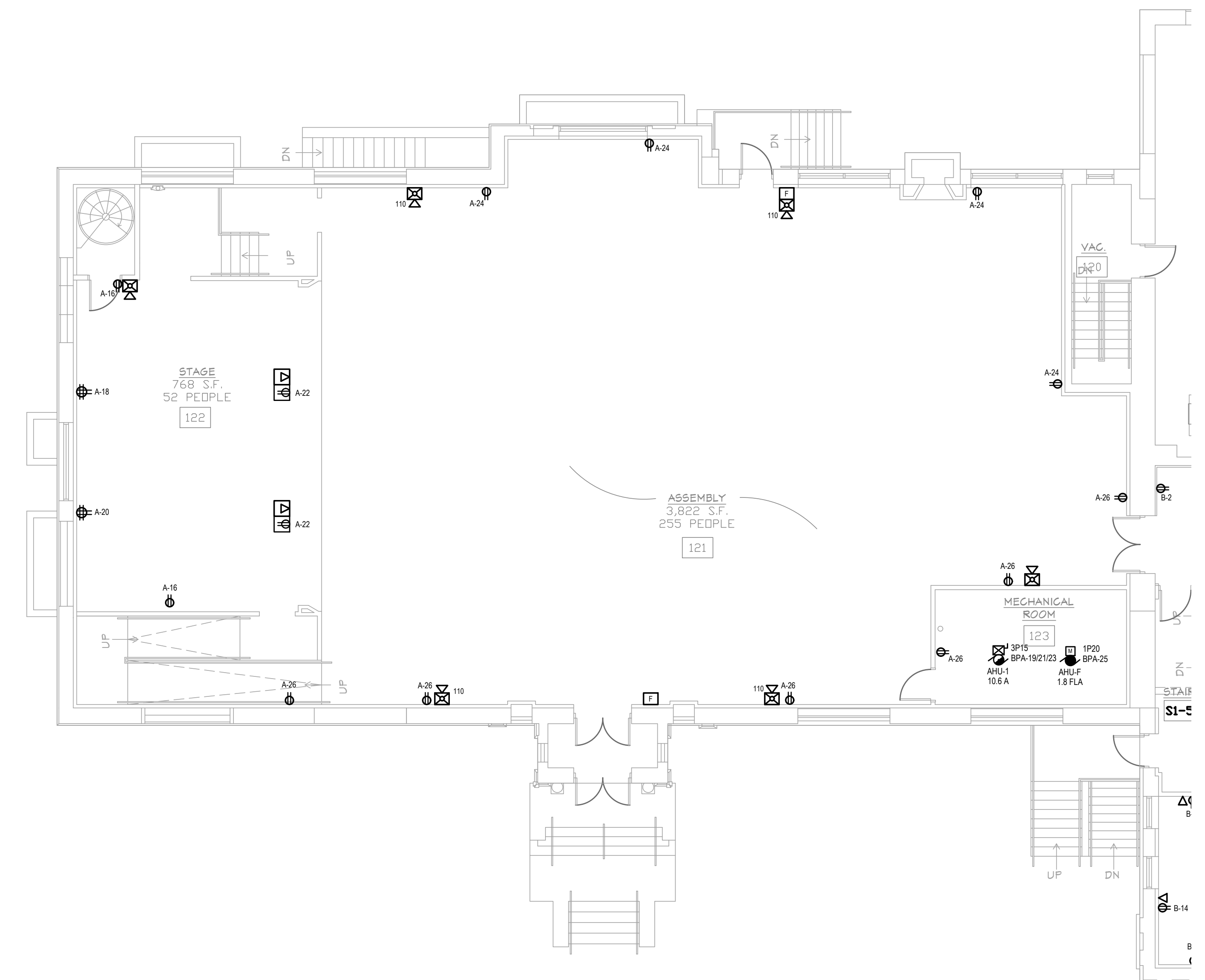
P09 COORDINATE LOCATIONS OF ALL EQUIPMENT IN ELEVATOR EQUIPMENT ROOM/HOIST ROOM AND PIT WITH ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN. CONNECT EMERGENCY SHUT-DOWN OF ELEVATOR AS REQUIRED. SEQUENCE EQUIPMENT TO SHUT-DOWN THE ELEVATOR BY SMOKE DETECTORS WHEN REQUIRED. ELECTRICAL CONTRACTOR SHALL REFERENCE ELEVATOR SPECIFICATIONS AND COORDINATE ALL REQUIREMENTS WITH ELEVATOR MANUFACTURER FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO ROUGH-IN.

P10 ELEV. CAB LIGHT DISC. (1) 1P20A CKT BREAKER MTD IN NEMA-1 ENCLOSURE WITH HANDLE PADLOCK ATTACHMENT CAPABLE OF LOCKING BREAKER IN OPEN POSITION. PROVIDE NAMEPLATE ON DISC. INDICATING PANEL NAME AND CIRCUIT NUMBER.

P11 ELEV. SUMP PUMP- 1/2HP PROVIDE 120V, 1P20A POWER TO CONTROL PANEL. CONTROL PANEL PROVIDED WITH UNIT. COORDINATE LOCATION WITH PLUMBING PLANS.

P12 VERIFY WITH STATE CODE TO PROVIDE SMOKE DETECTION FOR ELEVATOR. PROVIDE AND INSTALLED BY E.C. CONNECT TO FIRE ALARM SYSTEM UNLESS NOT ALLOWED BY STATE CODE.

P13 TWO-WAY COMMUNICATION- PROVIDE AIPHONE IX-MW MASTER STATION AND IX-W-RXV AND AIPHONE IX-SS-RA-RL CENTRAL CONTROL UNIT ON LEVEL 1 AND AIPHONE IX-SS-RA-RL CALL STATION ON LEVELS BASEMENT, 1 AND 2.



**FIRST FLOOR POWER PLAN AREA A**  
 SCALE: 1/8" = 1'-0"



BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
 RECREATION CENTER**  
 2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT #	1356-23
ISSUANCES	
FOR PERMIT	12.24.2023
REVISIONS	
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SHEET TITLE	FIRST FLOOR POWER PLAN AREA A
SHEET NO.	EP1.01A

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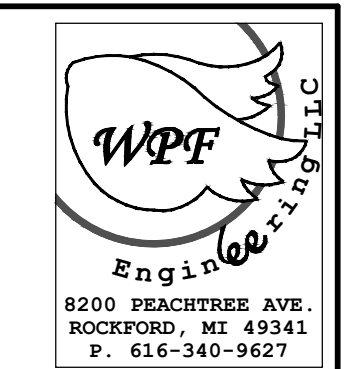
**GENERAL POWER NOTES**

A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF TV AND MONITORS PRIOR TO INSTALLATION.

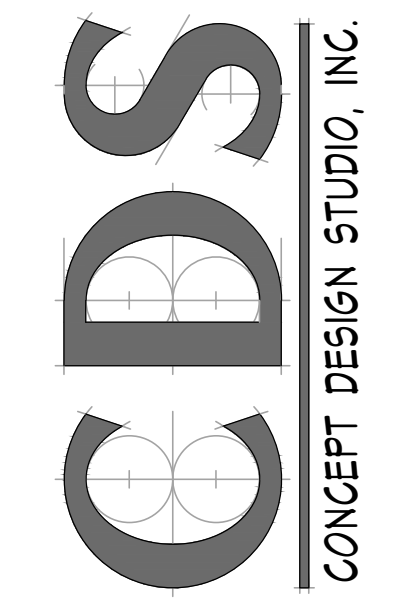
B. ALL 15A & 20A 120V NON-LOCKING RECEPTACLES WITHIN PUBLIC SPACE SHALL BE LISTED TAMPER RESISTANT PER NEC 406.14.

C. MOUNT PANELS, TRANSFORMERS, DISCONNECT SWITCHES, AND COMBINATION MOTOR STARTERS WITH ADEQUATE CLEARANCES IN ACCORDANCE WITH NEC 110.

D. VERIFY ALL KITCHEN EQUIPMENT REQUIREMENTS, CONNECTION TYPES, AND LOCATIONS WITH KITCHEN EQUIPMENT SUPPLIER AND NAMEPLATES PRIOR TO ROUGH-IN.



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800 E. ELLIS ROAD SUITE 508  
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FAX (231) 799-4937



**POWER PLAN LEGEND**

**LEGEND SYMBOL INDICATOR**

P01 PROVIDE (2) 4" CONDUITS FOR LOW VOLTAGE SERVICES TO BUILDING. BUSH ENDS AND PROVIDE FULL WIRE. COORDINATE ROUTING WITH SITE.

P02 PROVIDE 4x8' PLYWOOD BOARD TREATED WITH FIRE RETARDANT PAINT. PROVIDE #8 GROUND BAR.

P03 PROVIDE (2) 4" CONDUITS STUBBED UP THRU FLOOR BETWEEN MDF & IDF. BUSH ENDS.

P04 PROVIDE 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE AND SINGLE GANG BOX FOR ALL MECHANICAL WALL MOUNTED TEMPERATURE SENSORS. SEE MECHANICAL PLANS FOR LOCATIONS.

P05 REVERSE ACTING THERMOSTAT TO OPERATE FAN.

P06 NOT USED.

P07 NOT USED.

P08 WEATHERPROOF HORN STROBE TO BE LOCATED ON EXTERIOR OF BUILDING AT R/F AT FIRE SUPPRESSION CONNECTION. STROBE TO BE ACTIVATED BY FIRE PROTECTION FLOW SWITCHES.

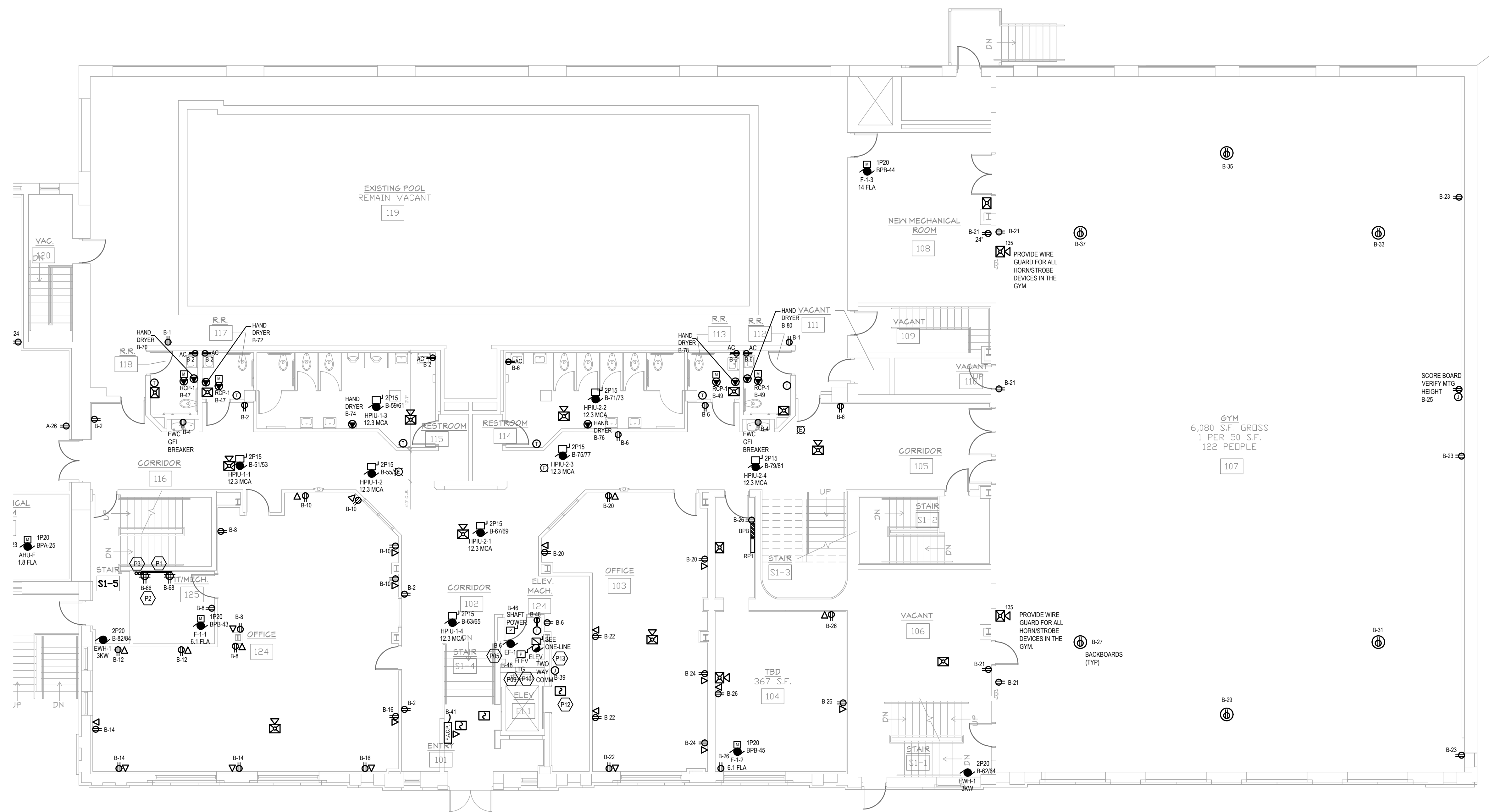
P09 COORDINATE LOCATIONS OF ALL EQUIPMENT IN ELEVATOR EQUIPMENT ROOM/HOIST ROOM AND PIT WITH ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN. CONNECT EMERGENCY SHUT-DOWN OF ELEVATOR AS REQUIRED. SEQUENCE EQUIPMENT TO SHUT-DOWN THE ELEVATOR BY SMOKE DETECTORS WHEN REQUIRED. ELECTRICAL CONTRACTOR SHALL REFERENCE ELEVATOR SPECIFICATIONS AND COORDINATE ALL REQUIREMENTS WITH ELEVATOR MANUFACTURER FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO ROUGH-IN.

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P12 VERIFY WITH STATE CODE TO PROVIDE SMOKE DETECTION FOR ELEVATOR. PROVIDE AND INSTALLED BY E.C. CONNECT TO FIRE ALARM SYSTEM UNLESS NOT ALLOWED BY STATE CODE.

P13 TWO-WAY COMMUNICATION- PROVIDE AIPHONE (XMM) MASTER STATION AND IXXW-PBX AND AIPHONE (X-CCU) CENTRAL CONTROL UNIT ON LEVEL 1 AND AIPHONE (X-SS-RA-RL) CALL STATION ON LEVELS BASEMENT, 1 AND 2.



**FIRST FLOOR POWER PLAN AREA B**  
SCALE: 1/8" = 1'-0"

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT #	1356-23
ISSUANCES	
FOR PERMIT	12.24.2023
REVISIONS	
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SHEET TITLE	FIRST FLOOR POWER PLAN AREA B
SHEET NO.	EP1.01B



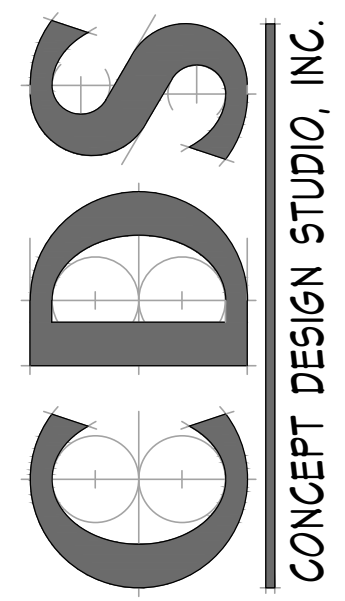
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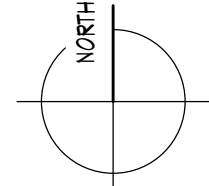
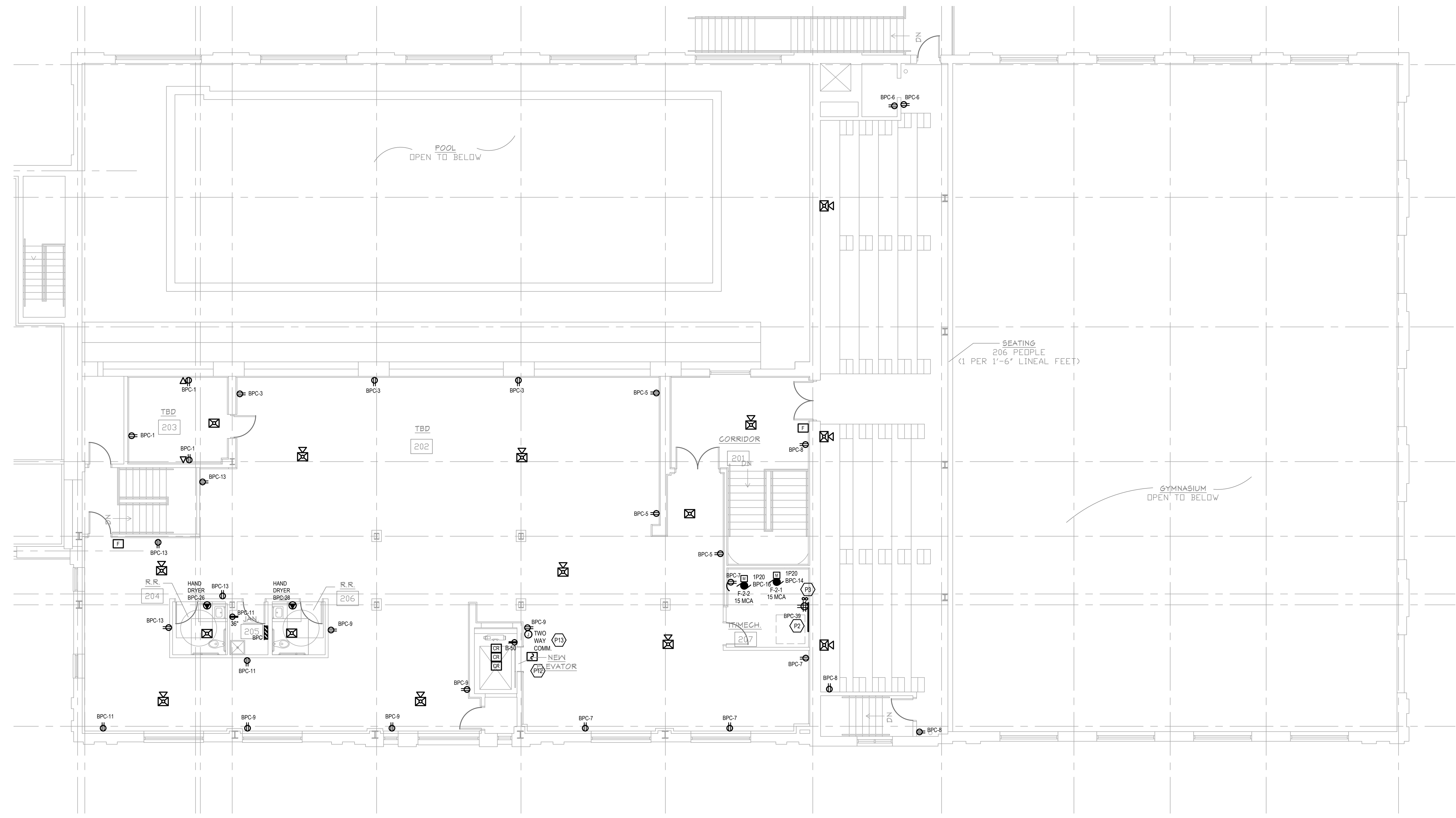
BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

**GENERAL POWER NOTES**

- A. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF TV AND MONITORS PRIOR TO INSTALLATION.
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- C. MOUNT PANELS, TRANSFORMERS, DISCONNECT SWITCHES, AND COMBINATION MOTOR STARTERS WITH ADEQUATE CLEARANCES IN ACCORDANCE WITH NEC 110.
- D. VERIFY ALL KITCHEN EQUIPMENT REQUIREMENTS, CONNECTION TYPES, AND LOCATIONS WITH KITCHEN EQUIPMENT SUPPLIER AND NAMEPLATES PRIOR TO ROUGH-IN.

**POWER PLAN LEGEND**

- LEGEND SYMBOL INDICATOR**
- P01 PROVIDE (3) 4" CONDUITS FOR LOW VOLTAGE SERVICES TO BUILDING BUSH ENDS AND PROVIDE PULL WIRE. COORDINATE ROUTING WITH SITE.
  - P02 PROVIDE 4x8 PLYWOOD BOARD TREATED WITH FIRE RETARDANT PAINT. PROVIDE #8 GROUND BAR.
  - P03 PROVIDE (2) 4" CONDUITS STUBBED UP THRU FLOOR BETWEEN MDF & IDF. BUSH ENDS.
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  - P05 NOT USED.
  - P06 NOT USED.
  - P07 NOT USED.
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**SECOND FLOOR POWER PLAN AREA B**  
SCALE: 3/32" = 1'-0"

PROJECT # 1356-23

ISSUANCES

FOR PERMIT 12.24.2023

REVISIONS

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SHEET TITLE  
SECOND FLOOR POWER PLAN AREA B

SHEET NO.

**EP1.02B**

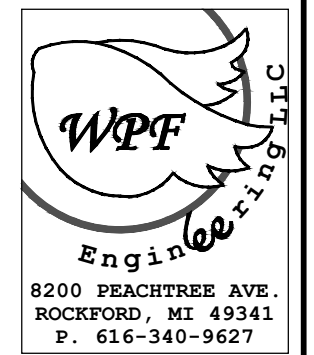


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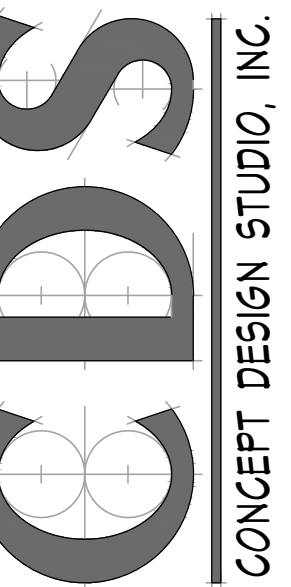
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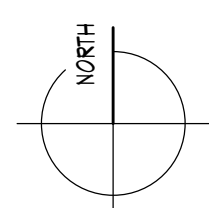
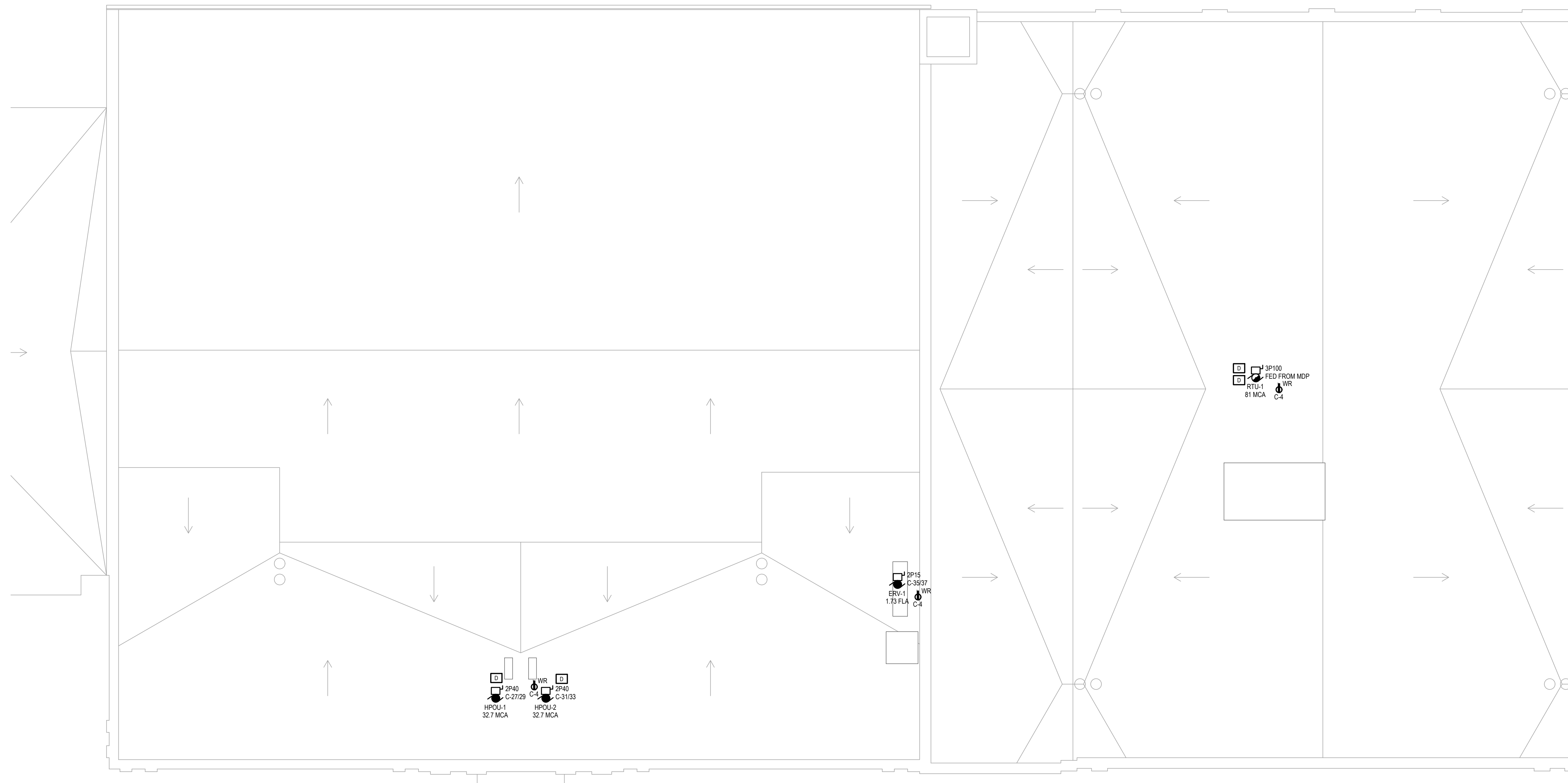
CONCEPT DESIGN STUDIO, INC.  
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NORTON SHORES, MI 49441  
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**POWER PLAN LEGEND**

**LEGEND SYMBOL INDICATOR**

- P01 PROVIDE (2) 4" CONDUITS FOR LOW VOLTAGE SERVICES TO BUILDING BUSH ENDS AND PROVIDE PULL WIRE. COORDINATE ROUTING WITH SITE.
- P02 PROVIDE 4x8 PLYWOOD BOARD TREATED WITH FIRE RETARDANT PAINT. PROVIDE #8 GROUND BAR.
- P03 PROVIDE (2) 4" CONDUITS STUBBED UP THRU FLOOR BETWEEN MDF & IDF, BUSH ENDS.
- P04 PROVIDE 1/2" CONDUIT TO ACCESSIBLE CEILING SPACE AND SINGLE GANG BOX FOR ALL MECHANICAL WALL MOUNTED TEMPERATURE SENSORS. SEE MECHANICAL PLANS FOR LOCATIONS.
- P05 NOT USED.
- P06 NOT USED.
- P07 NOT USED.
- P08 WEATHERPROOF HORN STROBE TO BE LOCATED ON EXTERIOR OF BUILDING AT 8'-0" AT FIRE SUPPRESSION CONNECTION. STROBE TO BE ACTIVATED BY FIRE PROTECTION FLOW SWITCHES.
- P09 COORDINATE LOCATIONS OF ALL EQUIPMENT IN ELEVATOR EQUIPMENT ROOM/BOIST ROOM AND PIT WITH ELEVATOR SHOP DRAWINGS PRIOR TO ROUGH-IN. CONNECT EMERGENCY SHUT-DOWN OF ELEVATOR AS REQUIRED. SEQUENCE EQUIPMENT TO SHUT-DOWN THE ELEVATOR BY SMOKE DETECTORS WHEN REQUIRED. ELECTRICAL CONTRACTOR SHALL REFERENCE ELEVATOR SPECIFICATIONS AND COORDINATE ALL REQUIREMENTS WITH ELEVATOR MANUFACTURER FOR ALL ELECTRICAL REQUIREMENTS PRIOR TO ROUGH-IN.
- P10 ELEV. CAB LIGHT DISC. (1) 1P20A CKT BREAKER W/ID IN NEMA-1 ENCLOSURE WITH HANDLE PADLOCK ATTACHMENT CAPABLE OF LOCKING BREAKER IN OPEN POSITION. PROVIDE NAMEPLATE ON DISC. INDICATING PANEL NAME AND CIRCUIT NUMBER.
- P11 ELEV. SUMP PUMP. 1/2HP PROVIDE 120V, 1P20A POWER TO CONTROL PANEL. CONTROL PANEL PROVIDED WITH UNIT. COORDINATE LOCATION W/PLUMBING PLANS.
- P12 VERIFY WITH STATE CODE TO PROVIDE SMOKE DETECTION FOR ELEVATOR. PROVIDE AND INSTALLED BY E.C. CONNECT TO FIRE ALARM SYSTEM UNLESS NOT ALLOWED BY STATE CODE.
- P13 TWO-WAY COMMUNICATION - PROVIDE AIPHONE IX-MV MASTER STATION AND IXX-PBX AND AIPHONE IX-CCU CENTRAL CONTROL UNIT ON LEVEL 1 AND AIPHONE IX-SS-RA-RL CALL STATION ON LEVELS BASEMENT, 1 AND 2.



**ROOF ELECTRICAL PLAN**  
SCALE: 1/8" = 1'-0"

BUILDING RENOVATIONS FOR  
**BREWSTER WHEELER  
RECREATION CENTER**  
2900 ST. ANTOINE STREET, DETROIT, MICHIGAN

PROJECT # 1356-23

ISSUANCES

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REVISIONS

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SHEET TITLE  
**ROOF ELECTRICAL  
PLAN**

SHEET NO.

**EP1.03**





