GENERAL DESCRIPTION

THE PROPOSED PROJECT CONSISTS OF A 10,988 S.F. INTERIOR FIT-OUT WITH IN A TWO STORY 85,788 S.F. WITH A FOOTPRINT OF 41,775 S.F.STRUCTURE. THIS WILL BE AN ALTERATION LEVEL 2 AS PER THE 2020 EXISTING BUILDING CODE OF NEW YORK STATE.

APPLICABLE BUILDING CODES

2020 BUILDING CODE OF NEW YORK STATE 2020 FIRE CODE OF NEW YORK STATE 2020 ENERGY CODE OF NEW YORK STATE 2020 EXISTING BUILDING CODE OF NEW YORK STATE 2020 MECHANICAL CODE OF NEW YORK STATE 2020 PLUMBING CODE OF NEW YORK STATE 2009 NEW YORK ACCESSIBILITY CODE (A117.1, 2009) 2017 ELECTRICAL CODE OF NEW YORK STATE (NFPA 70, 2017)

IVIIXED	USE; NON-	-SEPARAT	ED
	YPE OF COI	NSTRUCTI	
В	10,988 SF		2A
TOTAL	10,988		2A
GENERAL			
	ABLES 504.4		ONS
EQUIPMENT M			PER 505.3
USE	ALLOW	VABLE	PROVIDE
B (OFFICE)	6 ST	ORY	2 STORY
-	112,5	00 SF	10,988 SI
	SEPARATI	ONS	
	(TABLE 50)8.4)	
NONE REQU	UIRED W/ A	AUTO SPRI	NKLER
	PANCY LOA	-	-
B (OFFICE)	10,988/150) =	74 PEOP
			74 PEOP
N	IEANS OF E	GRESS	/ 11 201
LENGTH OF TRAV	VEL (1017.2	2) W/SPRI	NKLER
	REQU	VIRED	PROVIDE
В	300'		170'-9"
NUMBER	OF EXITS (S	SEC. 1006)	
	REQU	-	PROVIDE
	2	2	2
EGRESS	WIDTH (SE	C. 1005)	
	REQU	VIRED	PROVIDE
В	44	11	44"
			1)
	FING FIXTU		. 1)
101			QUIRED
MENS TOILET	1/25@	50 > 1/50	
MENS LAV	_	250 > 1/80	
		50 > 1/50	
WOMENS TOILET	I/25(0)	-,	
		50 > 1/80	
WOMENS TOILET		50 > 1/80	
WOMENS TOILET WOMENS LAV	1/40@	50 > 1/80	
WOMENS TOILET WOMENS LAV SERVICE SINKS	1 / 40 @) VIDED
WOMENS TOILET WOMENS LAV SERVICE SINKS	1 / 40 @		DVIDED
WOMENS TOILET WOMENS LAV SERVICE SINKS DRINKING FOUNT	1 / 40 @		DVIDED
WOMENS TOILET WOMENS LAV SERVICE SINKS DRINKING FOUNT MENS TOILET	1 / 40 @		DVIDED
WOMENS TOILET WOMENS LAV SERVICE SINKS DRINKING FOUNT MENS TOILET MENS LAVATORIE	1 / 40 @ AIN S		DVIDED
WOMENS TOILET WOMENS LAV SERVICE SINKS DRINKING FOUNT MENS TOILET MENS LAVATORIE WOMENS TOILET	1 / 40 @ AIN S		DVIDED

NOTES:

- 1. ALL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH ALL "APPLICABLE BUILDING CODES AS LISTED ABOVE AND WITH THE RULES AND REGULATIONS OF ALL LOCAL AGENCIES, DEPARTMENTS OR LAWS HAVING JURISDICTION OVER ANY PORTION OR SPECIFIC PHASE OF THE WORK. THE CONTRACTOR SHALL COORDINATE THE WORK WITH PUBLIC UTILITY COMPANIES HAVING JURISDICTION
- 2. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL PERMITS INCLUDING BUILDING PERMIT, APPROVALS, CONTROLLED INSPECTIONS, TESTING AND OTHER INSPECTIONS AS MAY BE REQUIRED BY THE APPLICABLE AGENCIES
- CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DOCUMENTS ON THE CONSTRUCTION SITE DURING ALL PHASES OF CONSTRUCTION FOR USE BY ALL TRADE
- CONTRACTOR SHALL VERIFY IN FIELD ALL DIMENSIONS AND CONDITIONS SHOWN ON DRAWINGS. ELY SO THAT THE DISCREPANCY CAN BE RESOLVED. UNLESS OTHERWI NDICATED I N WRITING BY THE ARCHITECT/ENGINEER, THE MORE CONSERVATIVE INTERPRETATION OF THE CONSTRUCTION DOCUMENTS SHALL APPLY.
- 5. THE SIZE AND LOCATION OF ALL EQUIPMENT PADS AND PENETRATIONS THROUGH THE STRUCTURE SHALL BE VERIFIED BY THE MECHANICAL, ELECTRICAL AND PLUMBING CONTRACTORS. ALL PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ARCHITECT/ENGINEER.
- 6. DO NOT SCALE DRAWINGS WRITTEN DIMENSIONS CONFIRMED BY FIELD CONDITIONS TAKE PRECEDENCE. IF DISCREPANCY ARISES BASED ON FIELD CONDITIONS, CONSULT WITH THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH WORK OR ORDERING MATERIALS. 7. ALL SECTIONS AND DETAILS SHALL BE CONSIDERED TYPICAL AND APPLY FOR THE SAME AND SIMILAR
- CONDITIONS, UNLESS OTHERWISE NOTED.
- 8. ANY ITEM OF WORK NECESSARY FOR PROPER COMPLETION OF CONSTRUCTION, WHICH IS NOT SPECIFICALLY COVERED ON THE DRAWINGS OR IN THE SPECIFICATIONS, SHALL BE CONSIDERED INCLUDED IN THIS WORK AND SHALL BE PERFORMED IN A MANNER DEEMED GOOD PRACTICE OF THE TRADE INVOLVED.
- 9. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE SAFETY OF THE PUBLIC AND PROPERTY DURING CONSTRUCTION OPERATIONS AND UNTIL COMPLETION OF ALL WORK. 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK
- DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, DISTORTION AND MISALIGNMENT. 11. WHERE DUCTS, PIPES OR CABLES PENETRATE FIRE-RATED PARTITIONS, PROVIDE FIRESTOP
- MATERIAL TO INSURE CONTINUITY OF RATING.

С

INTERIOR FIT-OUT FOR: THE PREMIER COLLECTION 251 EAST MAIN STREET ELMSFORD, NY. 10523

F

D

DESIGN / BUILD PROJECT BY:

CLARIS

DESIGN BUILD, INC.

53 CHURCH HILL ROAD NEWTOWN, CONNECTICUT (203) 364-9460 WWW.CLARISDESIGNBUILD.COM

STRUCTURAL ENGINEER: **REUTHER + BOWEN**

ENGINEERING, DESIGN, CONSTRUCTION SERVICES 326 WARD STREET SCRANTON, PA. 18512 (570) 496-7020 WWW.REUTHERBOWEN.COM

ELECTRICAL ENGINEER:

MARCHETTI CONSULTING ENGINEERS

25 HIGH RIDGE ROAD POUND RIDGE, NEW YORK 10576 (914) 764-9012

FIRE SUPRESION ENGINEER:

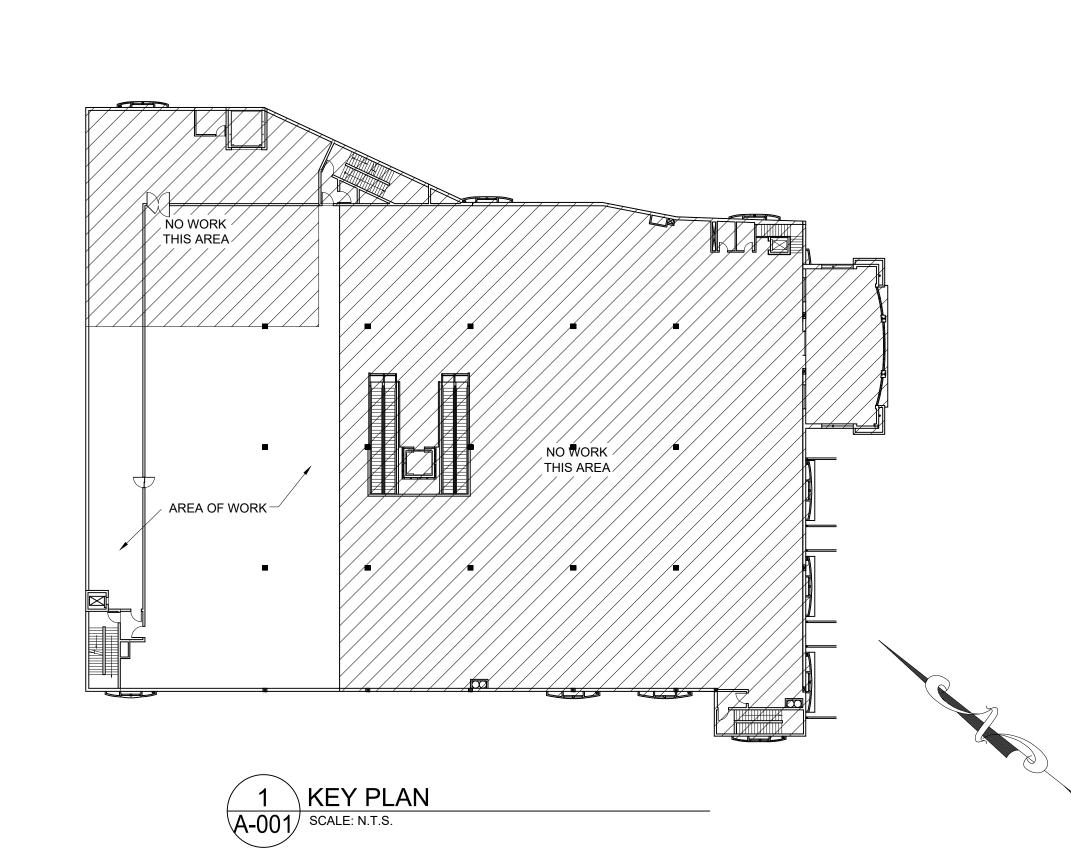
MACK FIRE PROTECTION, LLC

15 INDUSTRIAL PARK PLACE MIDDLETOWN, CT 06457 (860) 632-8053

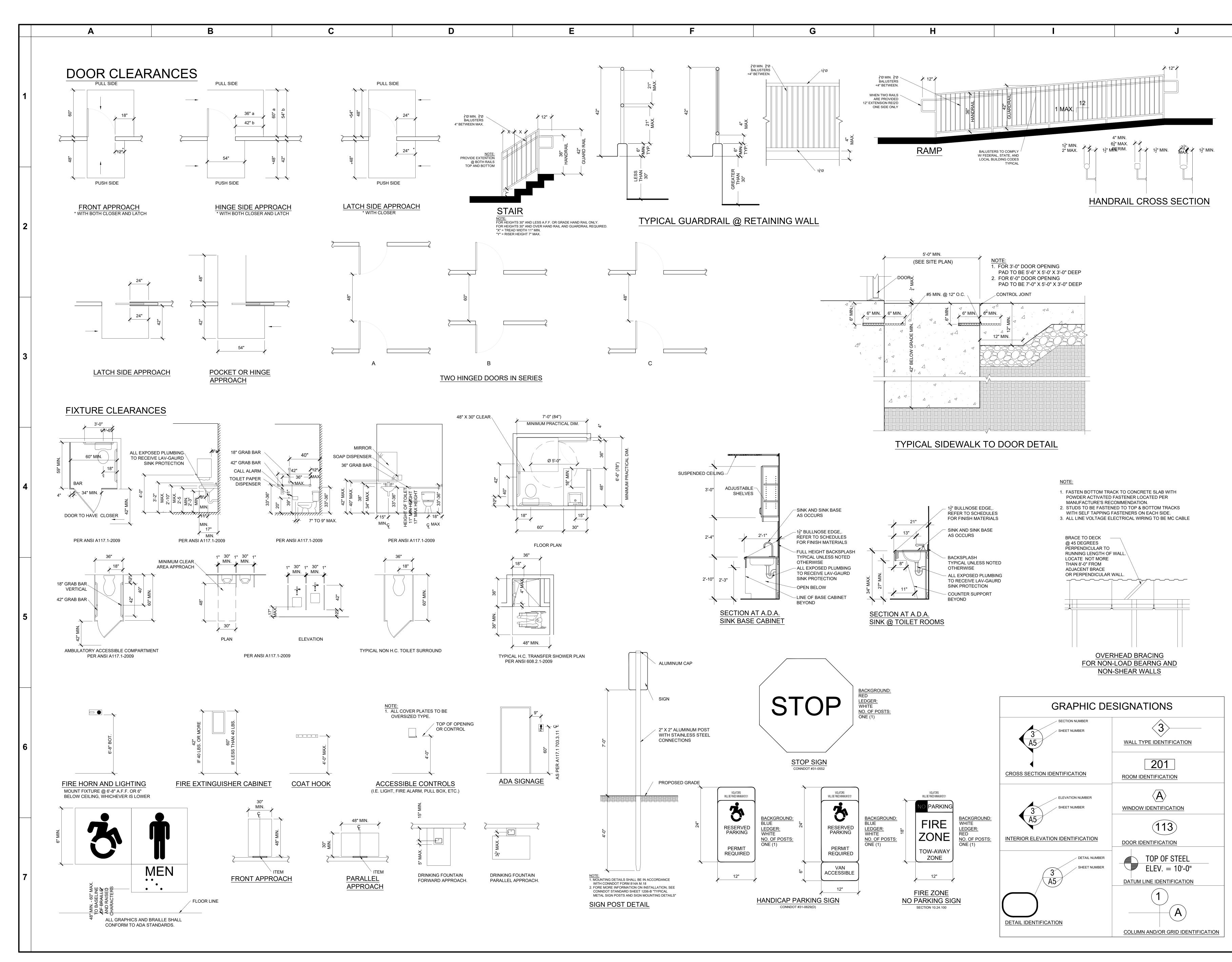
G

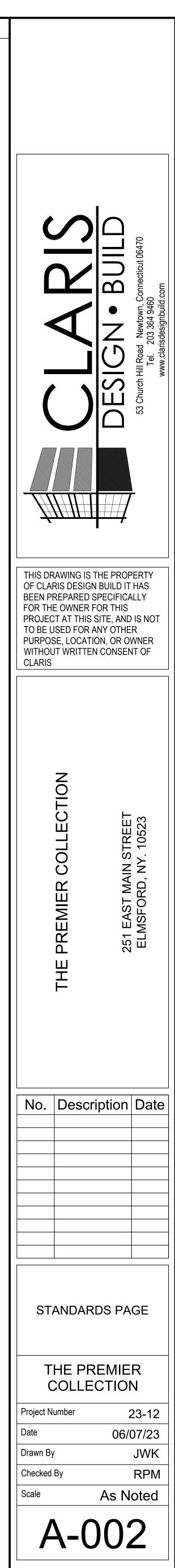
DRAWING INDEX

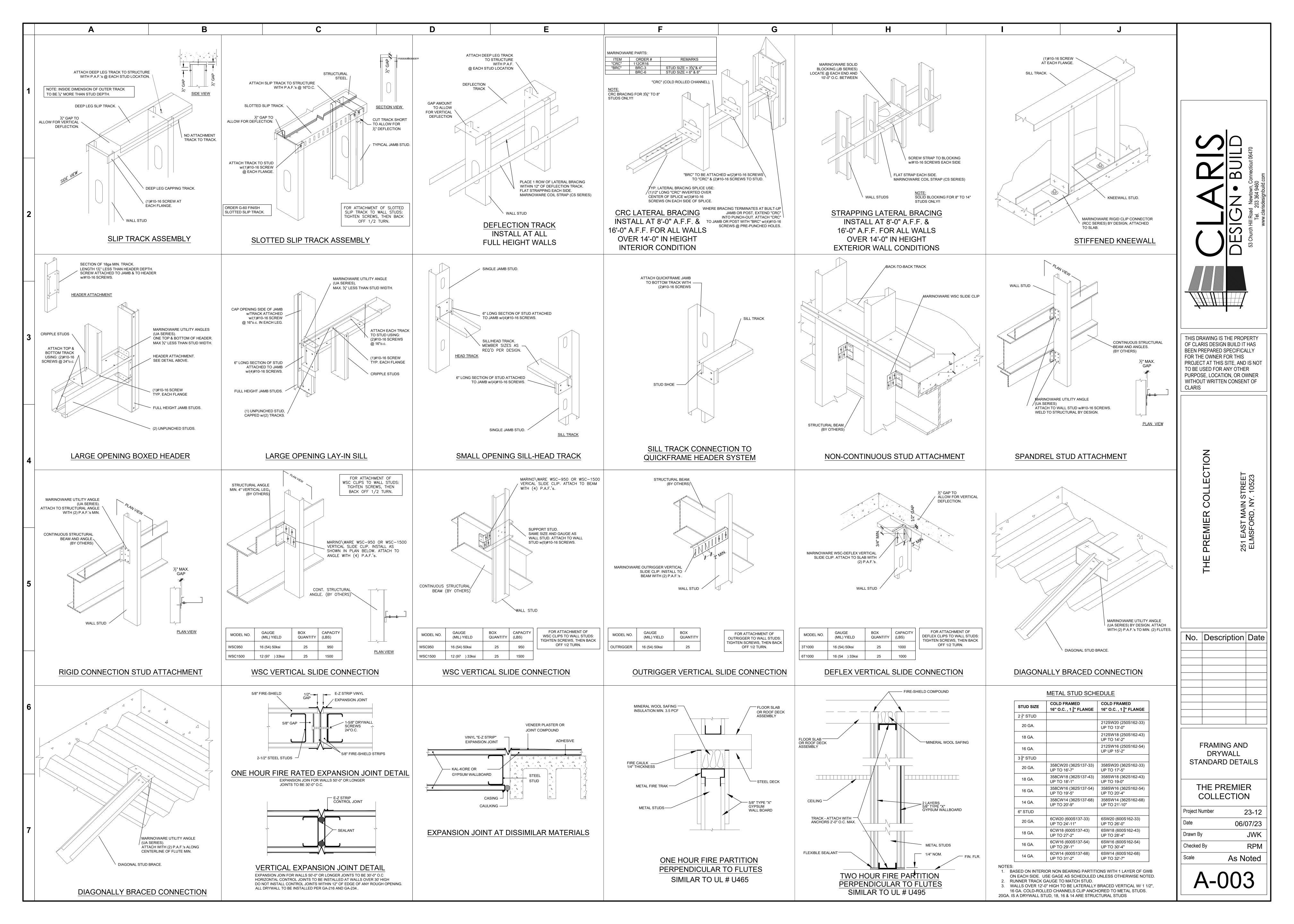
A-001	COVER SHEET
A-002	STANDARDS
A-003	LIGHT GAUGE FRAMING DETAILS
A-004	SUSPENDED CEILING DETAILS
LS-102	PARTIAL SECOND FLOOR EGRESS PLAN
S-001	GENERAL STRUCTURAL NOTES
S-101	PARTIAL EXISTING ROOF FRAMING PLAN
AD-101	DEMOLITION PLAN
A-101	FLOOR PLANS
A-102	ROOF PLAN AND DETAIL
A-111	REFLECTED CEILING PLAN
A-200	ELEVATION
A-600	DOOR AND WINDOW SCHEDULES
A-601	DOOR AND WINDOW DETAILS
P-000	PLUMBING SYMBOLS AND LEGENDS
P-001	PLUMBING SPECIFICATIONS
P-101	PLUMBING FIRST FLOOR PLAN
P-102	PLUMBING SECOND FLOOR PLAN
P-200	PLUMBING PARTIAL PLANS
P-500	PLUMBING DETAILS AND SCHEDULES
M-000	MECHANICAL SYMBOLS AND LEGENDS
M-001	MECHANICAL SPECIFICATIONS
MD-102	MECHANICAL SECOND FLOOR DEMOLITION PLAN
M-102	MECHANICAL SECOND FLOOR PLAN
M-500	MECHANICAL DETAILS AND SCHEDULES
E-101	POWER PLAN AND LEGEND
E-102	LIGHTING PLAN AND LEGEND
E-103	ELECTRICAL SPECIFICATIONS AND PANEL SCHEDULE
FP-1	FIRE PROTECTION LAYOUT

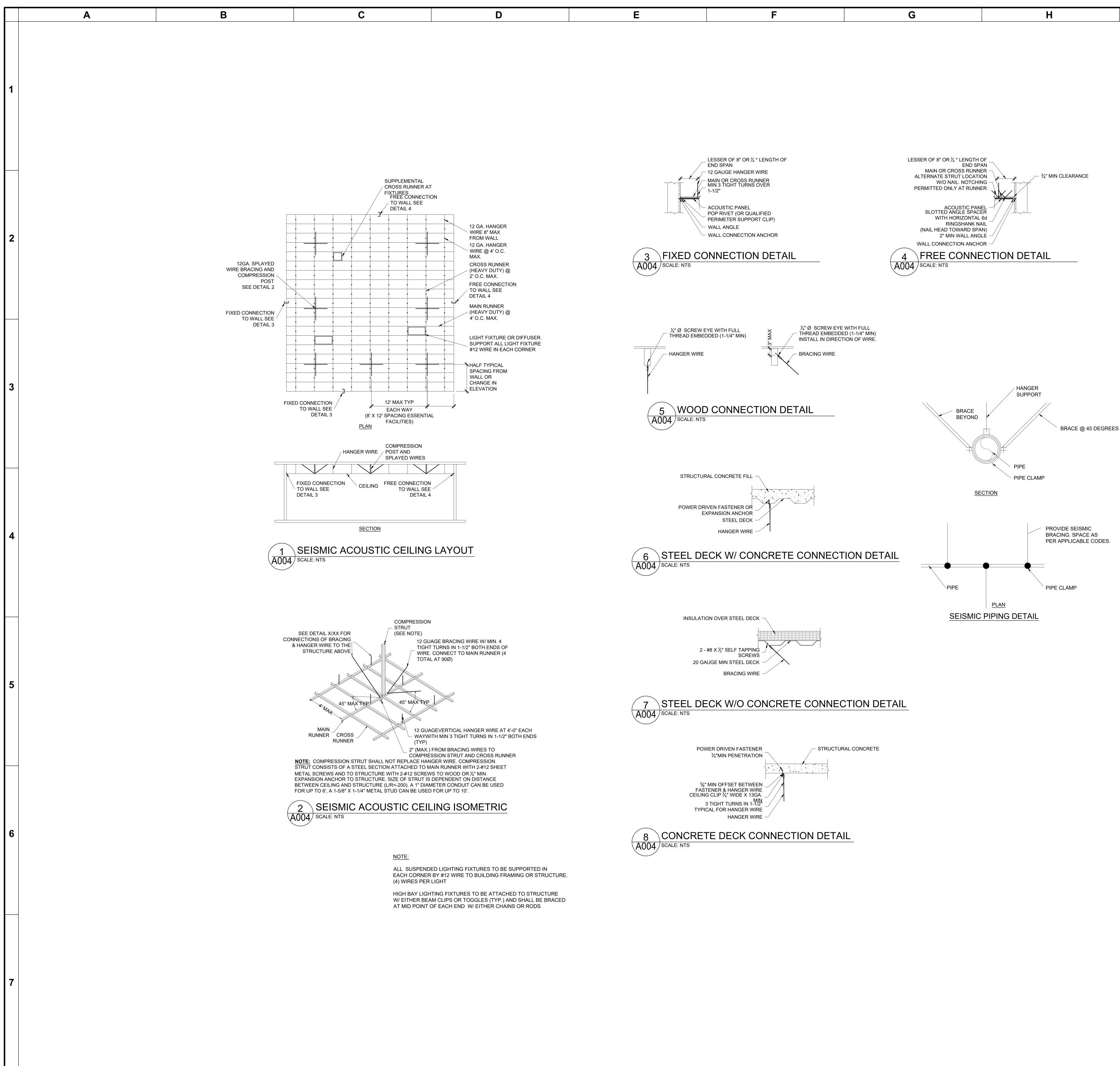






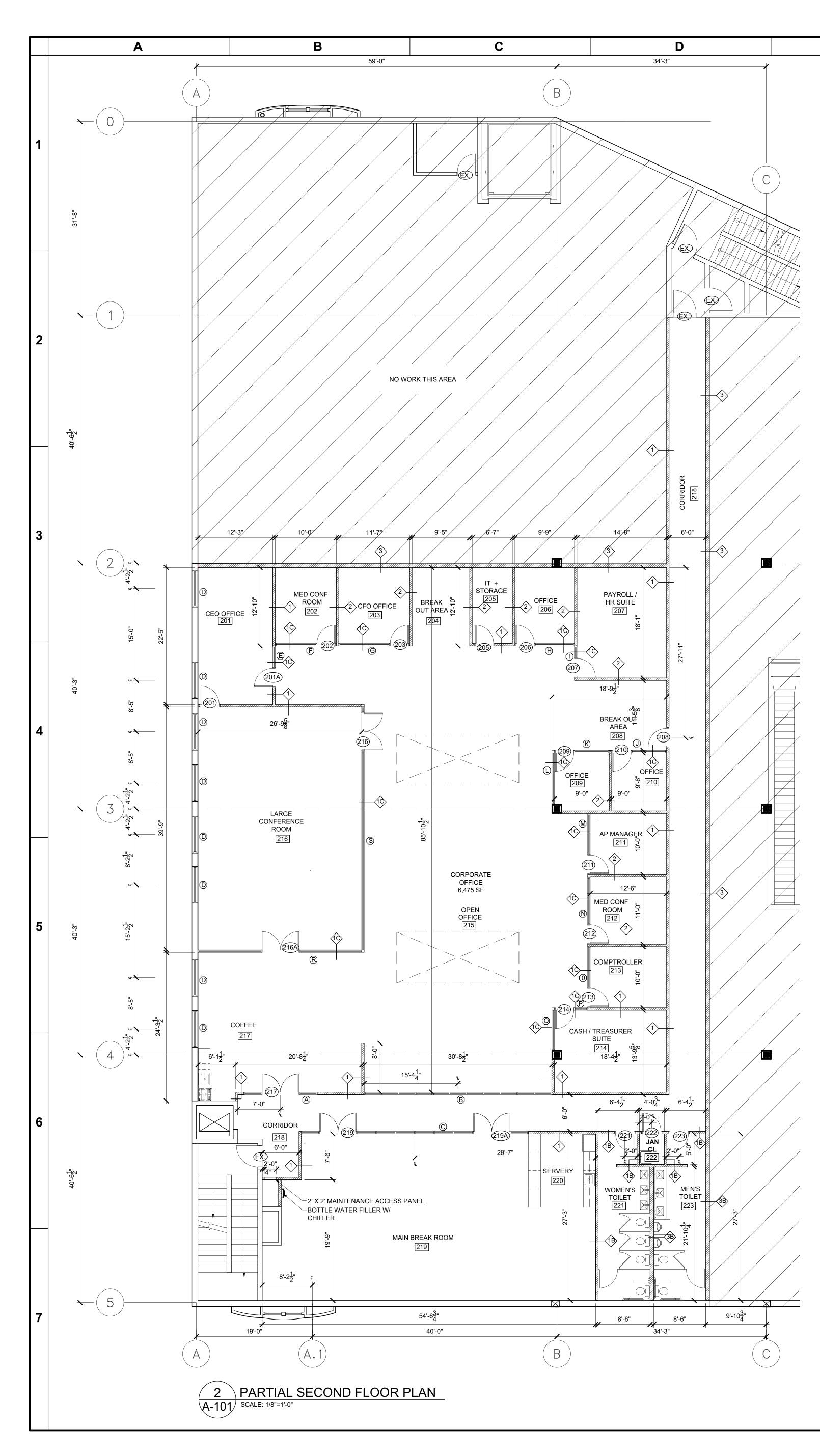


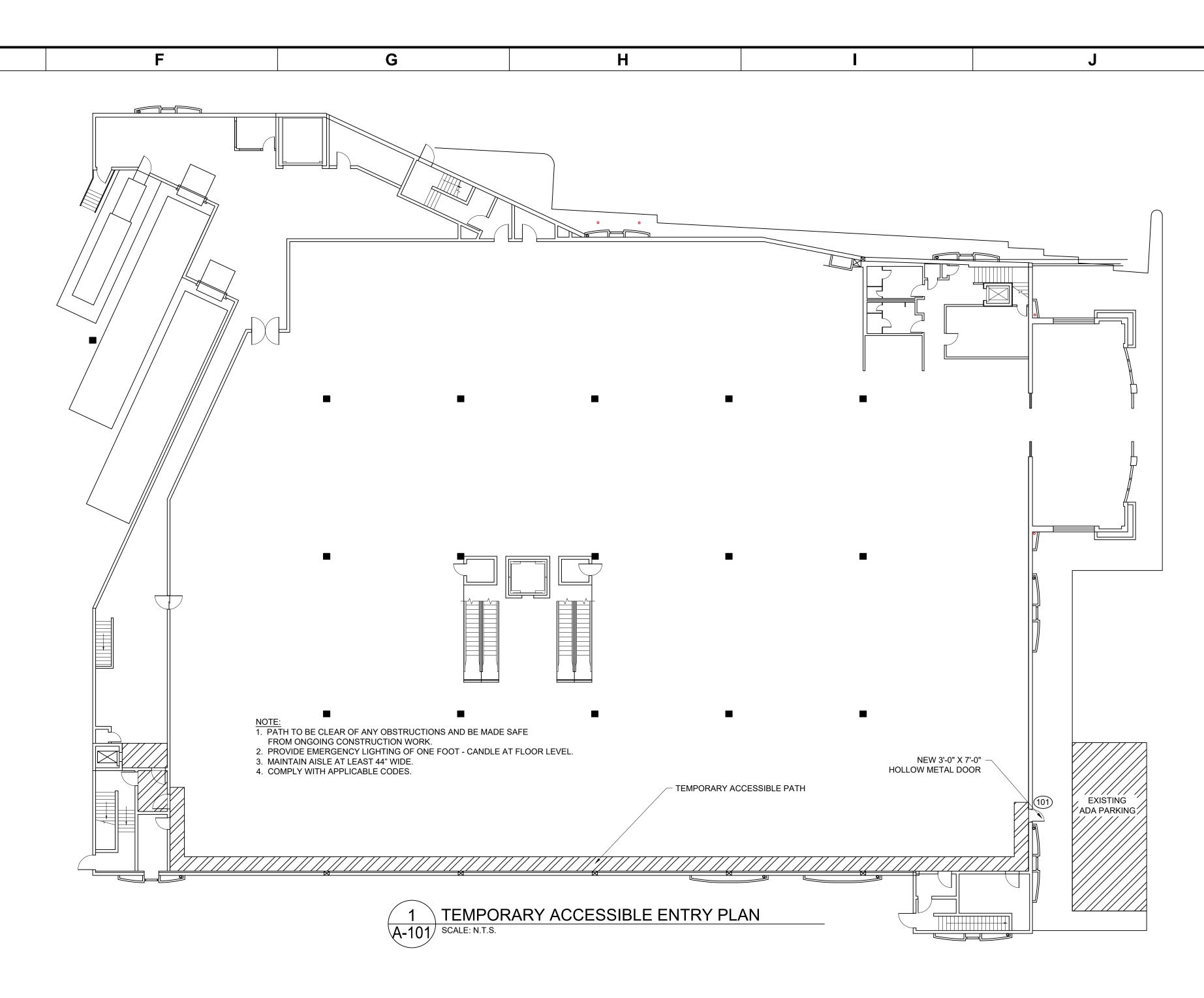


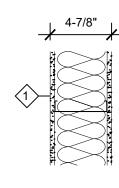


G	Н	J









l. 4-7/8"

+

Ε

NEW INTERIOR WALL

3 5/8" METAL STUDS, 20 GA. 16" O.C. TO UNDERSIDE OF DECK WITH ONE LAYER OF 5/8" GWB BOTH SIDES OF STUDS AND 3-1/2" UNFACED FIBERGLASS INSULATION TO FULL HEIGHT.

1A AS 1 ABOVE WITH - OUT FIBERGLAS INSULATION.

1B AS 1 ABOVE WITH GREEN BOARD. 1C AS 1 ABOVE SOFFIT FROM DECK TO 9-0" A.F.F.

NEW INTERIOR WALL

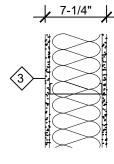
3 5/8" METAL STUDS, 20 GA. 16" O.C., 12" ABOVE SUSPENDED CEILING GRID WITH ONE LAYER OF 5/8" GWB ON EACH SIDE OF METAL STUDS. 3-1/2"

UNFACED FIBERGLASS BATT INSULATION FULL HEIGHT.

2A AS 2 ABOVE WITH - OUT FIBERGLAS INSULATION.

AS WITH GREEN BOARD.

<u>VEW INTERIOR WALL</u>



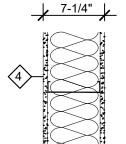
6" METAL STUDS, 20 GA. 16" O.C., TO UNDER SIDE OF DECK WITH ONE LAYER OF 5/8" GWB ON EITHER SIDE OF METAL STUDS. 5-1/2"

UNFACED FIBERGLASS BATT INSULATION To 12" ABOVE FINISHED CEILING.

(3A) AS (3) ABOVE WITH - OUT FIBERGLAS INSULATION.

3BAS WITH GREEN BOARD



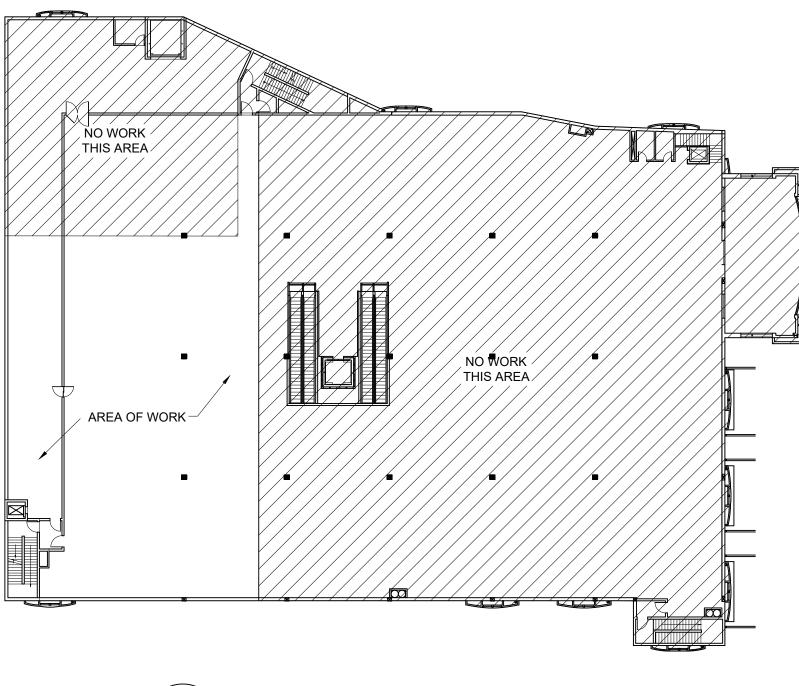


6" METAL STUDS, 20 GA. 16" O.C., 6" ABOVE SUSPENDED CEILING GRID WITH ONE LAYER OF 5/8" GWB ON EITHER SIDE OF METAL STUDS. 5-1/2" UNFACED FIBERGLASS BATT INSULATION FULL HEIGHT.

4A AS 4 ABOVE WITH - OUT FIBERGLAS INSULATION.

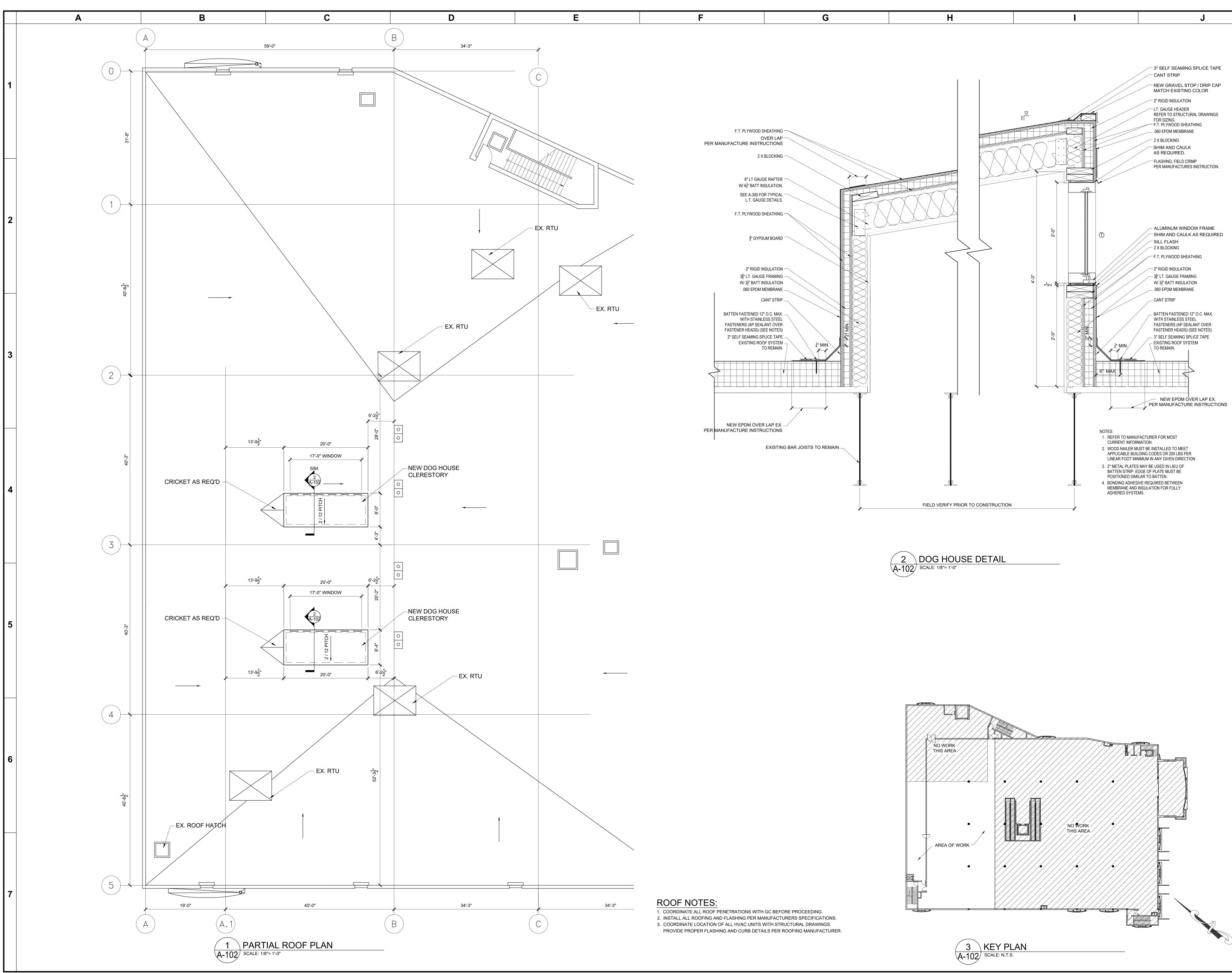
FLOOR PLAN NOTES:

- SEE WALL SECTIONS, DETAILS AND PRODUCT SPECIFICATIONS FOR INSTALLATION OF MATERIALS.
 WALLS ARE DIMENSIONED TO FINISHED FACE. DOORS AND WINDOWS TO CENTERLINE.
- STEEL DIMENSIONS ARE TO FACE OF STEEL OR CENTERLINE OF STEEL AS DENOTED BY STEEL GRID LINES.
 PLUMBING FIXTURE DIMENSIONS ARE FROM CENTERLINE OF FIXTURE TO FINISHED FACE OF PARTITION.
- PLOMBING FIXTORE DIMENSIONS ARE FROM CENTERLINE OF FIXTORE TO FINISHED FACE OF FARTHON.
 PROVIDE IN WALL 2X WOOD BLOCKING FOR ALL MILLWORK, CASEWORK, COUNTERS, BATHROOM ACCESSORIES, RAILINGS AND MECHANICAL EQUIPMENT AS REQUIRED.
- TRADES TO COORDINATE LOCATION OF ALL SUBGRADE UTILITY PENETRATIONS AND SLEEVES PRIOR TO CONTRACTOR POURING FOOTINGS AND FOUNDATION WALLS.
- 7. REFER TO A-002 FOR TYPICAL LIGHT GAUGE FRAMING DETAILS.
- 8. REFER TO FIRE PROTECTION DRAWINGS FOR ALL SPRINKLER HEAD AND PIPING SIZES AND LOCATIONS.
 9. REFER TO PLUMBING DRAWINGS FOR ALL PIPING LAYOUT, SIZES AND FIXTURE SCHEDULE.
 10. REFER TO MECHANICAL DRAWINGS FOR ALL HYAC LOCATIONS AND DETAILS NOTE THIS SYSTEM IS NOT.
- 10. REFER TO MECHANICAL DRAWINGS FOR ALL HVAC LOCATIONS AND DETAILS. NOTE THIS SYSTEM IS NOT PLENUM RETURN.
 11. REFER TO ELECTRICAL DRAWINGS FOR ALL EMERGENCY LIGHTING, POWER, DATA, TELEPHONE OUTLET
- 11.REFER TO ELECTRICAL DRAWINGS FOR ALL EMERGENCY LIGHTING, POWER, DATA, TELEPHONE OUTLET QUANTITIES AND LOCATIONS.



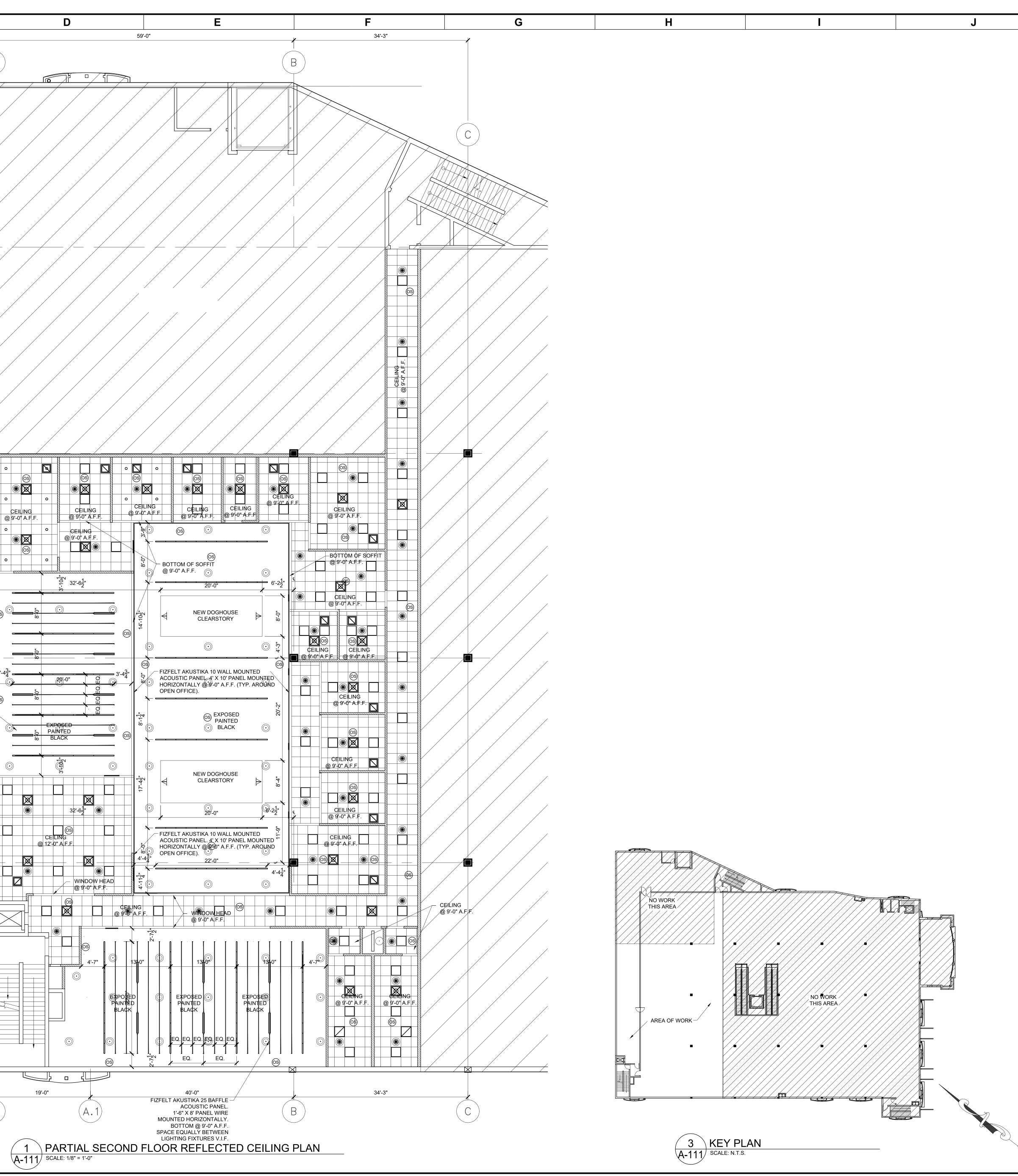








	Α	B	С	
1				
2		SUPPLY DIFFUSER EAR DIFFUSER	31-8-	
3	2' X 2	NEAR LIGHT FIXTURE LED LIGHT FIXTURE SESSED LED CAN FIXTURE GHT	40-9- 2	
4	CEILIN SENS © PEND ► SIDEV	NT MOUNT SPRINKLER HEAD ALL SPRINKLER HEAD INT MOUNTED CONCEALED HEAD	40-3	
5	 SEE LIGHTING PLAN FOR FIXTURE TYPES SEE MECHANICAL PLANS FOR DUCT SIZII SEE FIRE PROTECTION PLAN FOR SPRIN LIGHTING FIXTURES AND HVAC DIFFUSEI CEILING TYPE ACT-1 SHALL BE A 2X2 GR VENT RESTROOM EXHAUST FANS THROUS CEILING HEIGHTS NOTED ARE MINIMUMS POSSIBLE TO MAXIMIZE CEILING HEIGHT CONTRACTOR TO COORDINATE LOCATION SUPPORT LIGHT FIXTURES AND DIFFUSE 	, POWER AND DATA REQUIREMENTS AND DETAILS. AND WIRING DETAILS. IG LOCATIONS AND DETAILS. KLER LOCATIONS AND DETAILS. RS SHOWN ARE FOR REFERENCE ONLY. D. SEE FINISH SCHEDULE.	\sim	NEL. TED LLY. F.F. EEN
6				
7			5	





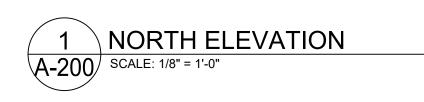


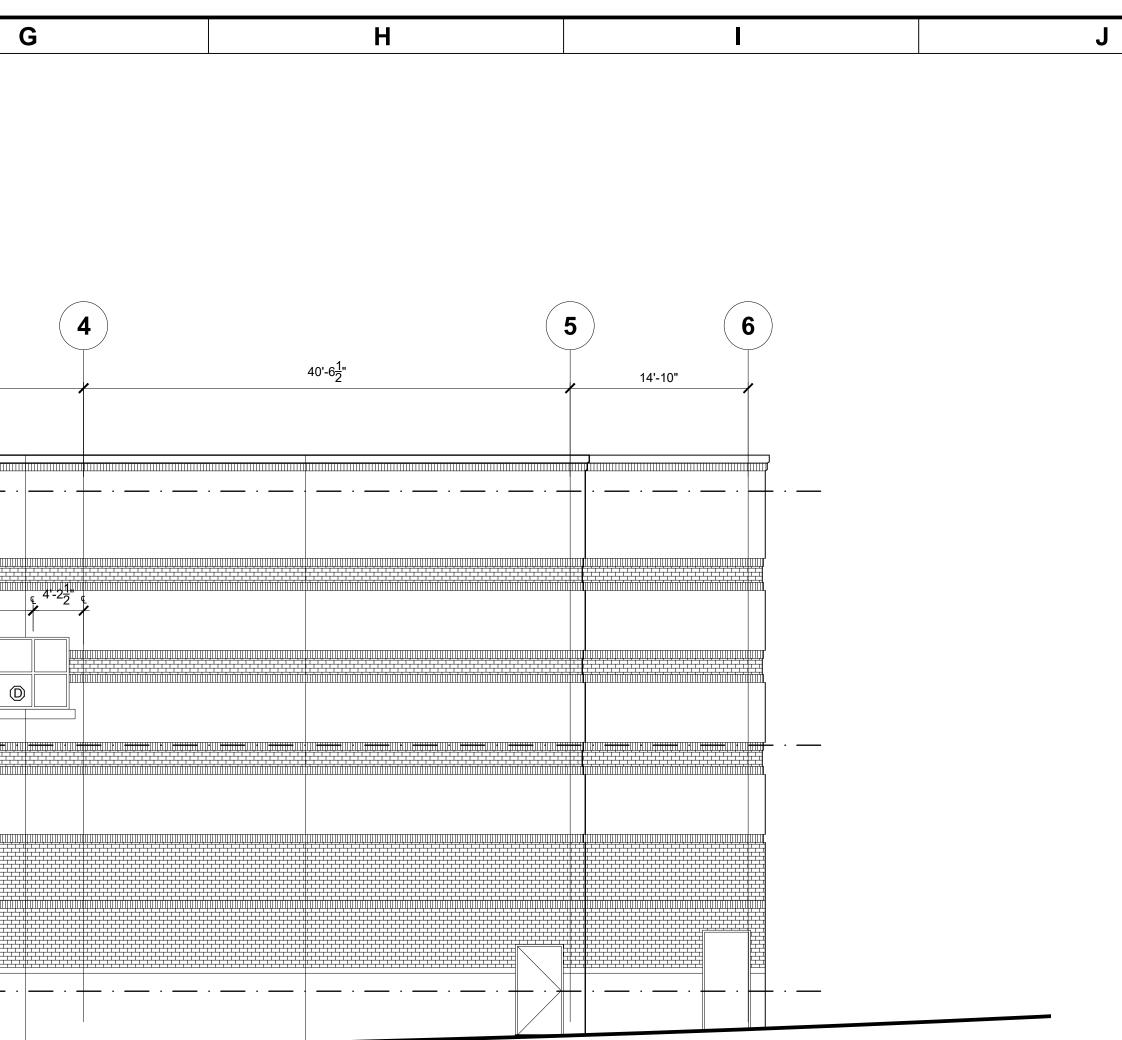
40'-6 <u>1</u> "	2	40'-3"	3	40'-3"

Ε

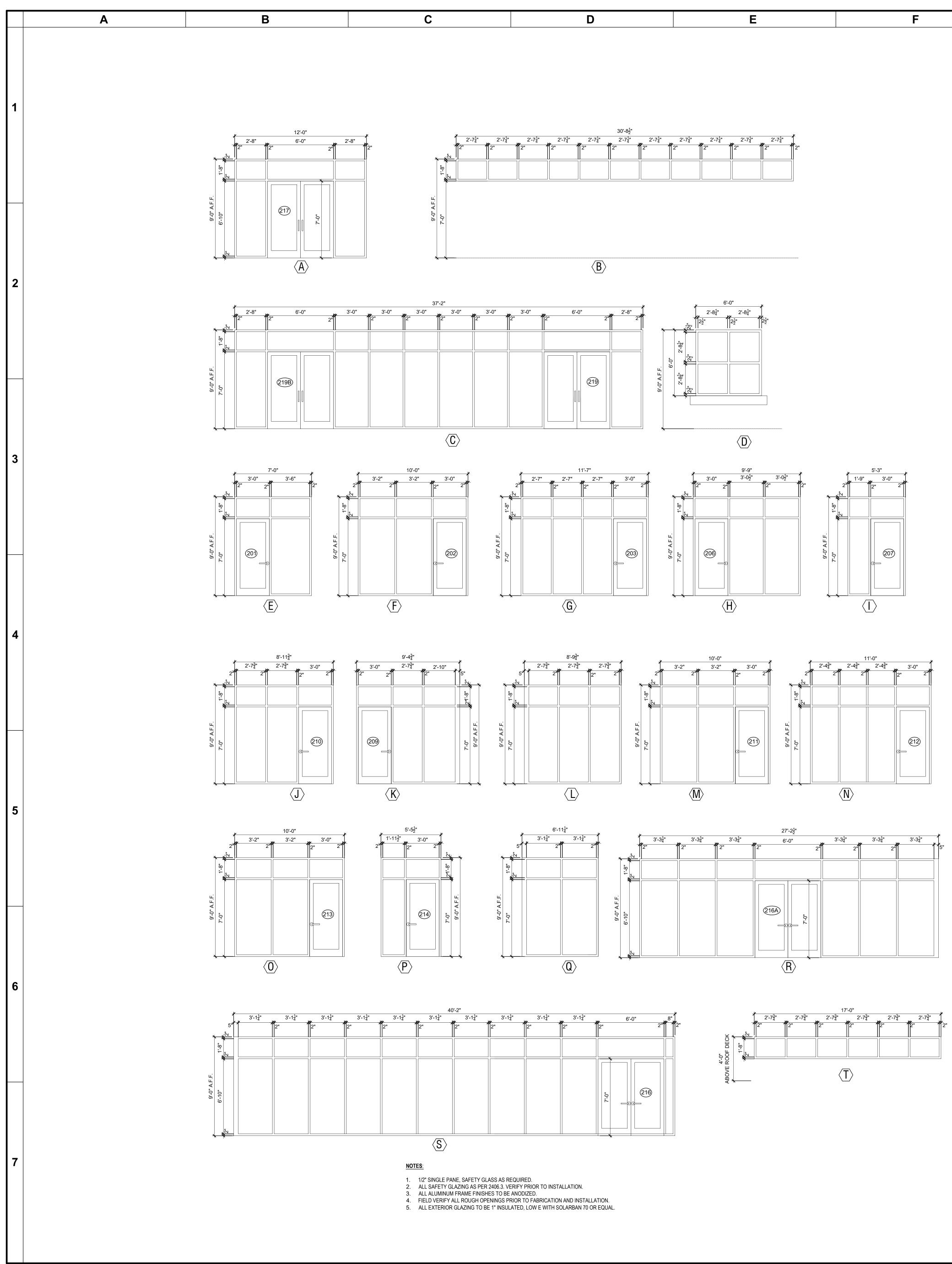
F

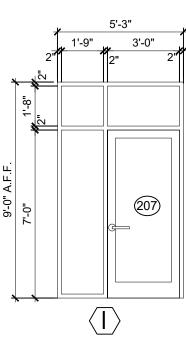
D









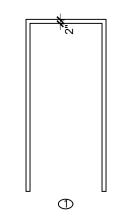


	DOOR SCHEDULE										
						FRAME					
DOOR					FRAME	MATERIA	FRAME				
DESIGNATION	SIZE W X H	ELEV.	MATERIAL	UL	ELEV.	L	TYPE	THROAT	HDWR	REMARKS	
101	3'-0" X 7'-0"	F	НМ	2 HR	1	НМ		V.I.F.	HW-7		
201	3'-0" X 7'-0"	F	WD		1	HM	KD	4-7/8"	HW-2	PRE-FINISHED WHITE BIRCH, FINISH TBD	
201A	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
202	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
203	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
205	3'-0" X 7'-0"	F	WD		1	НМ	KD	4-7/8"	HW-3	PRE-FINISHED WHITE BIRCH, FINISH TBD	
206	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
207	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
208	3'-0" X 7'-0"	F	WD		1	HM	KD	4-7/8"	HW-2	PRE-FINISHED WHITE BIRCH, FINISH TBD	
209	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
210	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
211	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
212	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
213	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
214	3'-0" X 7'-0"	FG	AL		1	AL	-	4-7/8"	HW-5	FULL GLASS ANODIZED ALUMINUM	
216	6'-0" X 7'-0"	2FG	AL		1	AL	-	4-7/8"	HW-6	FULL GLASS ANODIZED ALUMINUM	
216A	6'-0" X 7'-0"	2FG	AL		1	AL	-	4-7/8"	HW-6	FULL GLASS ANODIZED ALUMINUM	
217	6'-0" X 7'-0"	2FG	AL		1	AL	-	4-7/8"	HW-1	FULL GLASS ANODIZED ALUMINUM	
219	6'-0" X 7'-0"	2FG	AL		1	AL	-	4-7/8"	HW-1	FULL GLASS ANODIZED ALUMINUM	
219A	6'-0" X 7'-0"	2FG	AL		1	AL	_	4-7/8"	HW-1	FULL GLASS ANODIZED ALUMINUM	
221	3'-0" X 7'-0"	F	WD		1	НM	KD	4-7/8"	HW-4	PRE-FINISHED WHITE BIRCH, FINISH TBD	
222	3'-0" X 7'-0"	F	WD		1	HM	KD	4-7/8"	HW-3	PRE-FINISHED WHITE BIRCH, FINISH TBD	
223	3'-0" X 7'-0"	F	WD		1	HM	KD	4-7/8"	HW-4	PRE-FINISHED WHITE BIRCH, FINISH TBD	
			1		1			1			

FRAME TYPES

DOOR TYPES

Η



NOTES:

HW-1

6 HINGES

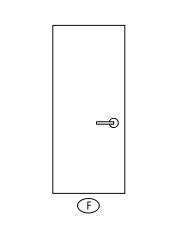
2 CLOSERS

EACH TO HAVE:

LOCKING CYLINDER

1" DIA. ANODIZED ALUM PUSH PULL

1 PADDLE EXIT DEVICE ON ACTIVE SIDE



1. ALL DOORS TO PREFINISHED WHITE BIRCH VENEER UNLESS NOTED OTHERWISE.

3. ALL HARDWARE TO BE HAGER 3500 SERIES WITH SATIN CHROME FINISH (626).

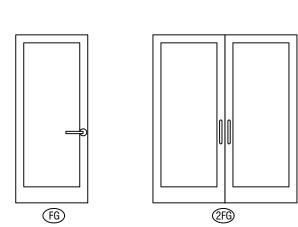
5. EXTERIOR HM DOORS AND INTERIOR HM DOORS EXPOSED TO EXTREME WET

* DOOR IS NOT IN A WALL TYPE WHERE JAMB SURROUNDS WALL. (CMU)

2. ALL DOORS TO HAVE A $\frac{3}{4}$ " UNDERCUT UNLESS NOTED OTHERWISE.

CONDITIONS TO HAVE A60 COATING

7. ALL KNOCK DOWN FRAMES TO HAVE DSA ANCHORS



ABBREVIATIONS & NOMENCLATURES: HM = HOLLOW METAL

ST = STEEL AL = ALUMINUM CL = CHAINLINK WLD = WELDED WD = WOOD GAL = GALVANIZED

KD = KNOCK DOWN FB = FABRIC

J

4. FIRE RATED DOORS SHALL BE EQUIPPED WITH DRAFT STOPS AND SELF CLOSERS 6. ALL HM/WD DOORS SHALL CLOSER REINFORCEMENT UNLESS OTHERWISE NOTED.

HW-4 EACH TO HAVE: 3 HINGES 1 PUSH/PULL 1 CLOSER 1 STOP **3 SILENCERS**

HW-5 EACH TO HAVE:

3 HINGES 1 OFFICE LOCK SET

1 STOP **3 SILENCERS**

3 HINGES 1 OFFICE LOCK SET 1 STOP 3 SILENCERS

HW-2

EACH TO HAVE:



HW-7 EACH TO HAVE:

HW-3

3 HINGES

1 CLOSER

3 SILENCERS

EACH TO HAVE:

1 STORE LOCK SET

3 SS HINGES TAMPER PROOF

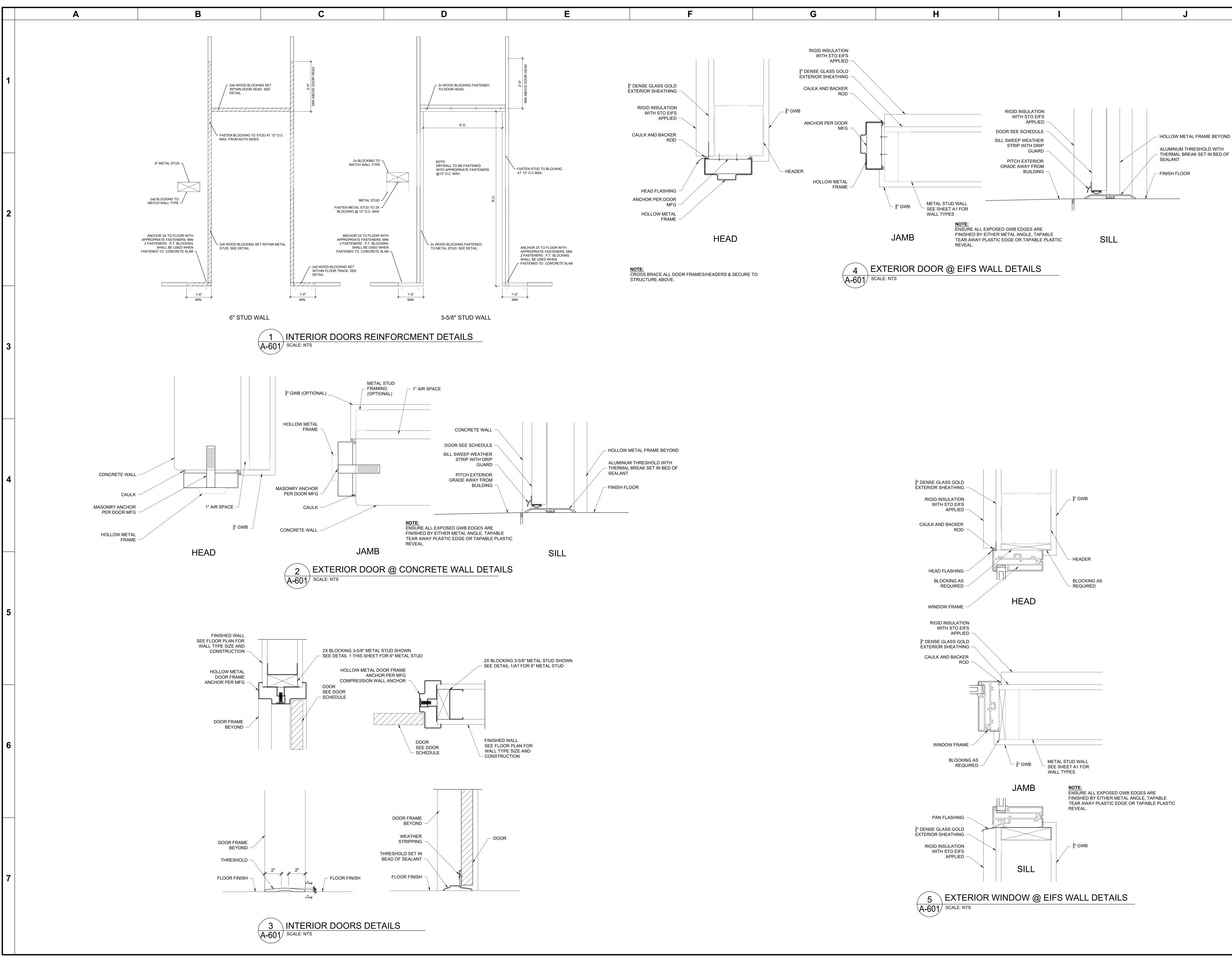
1 STORE LOCK SET

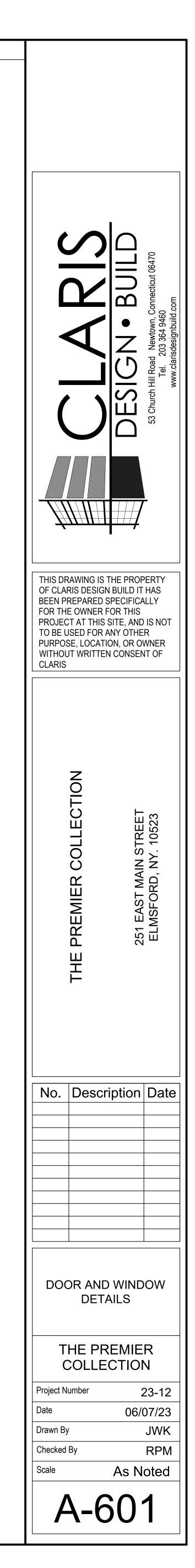
1 CLOSER 1 WEATHER STRIPPING / SWEEP

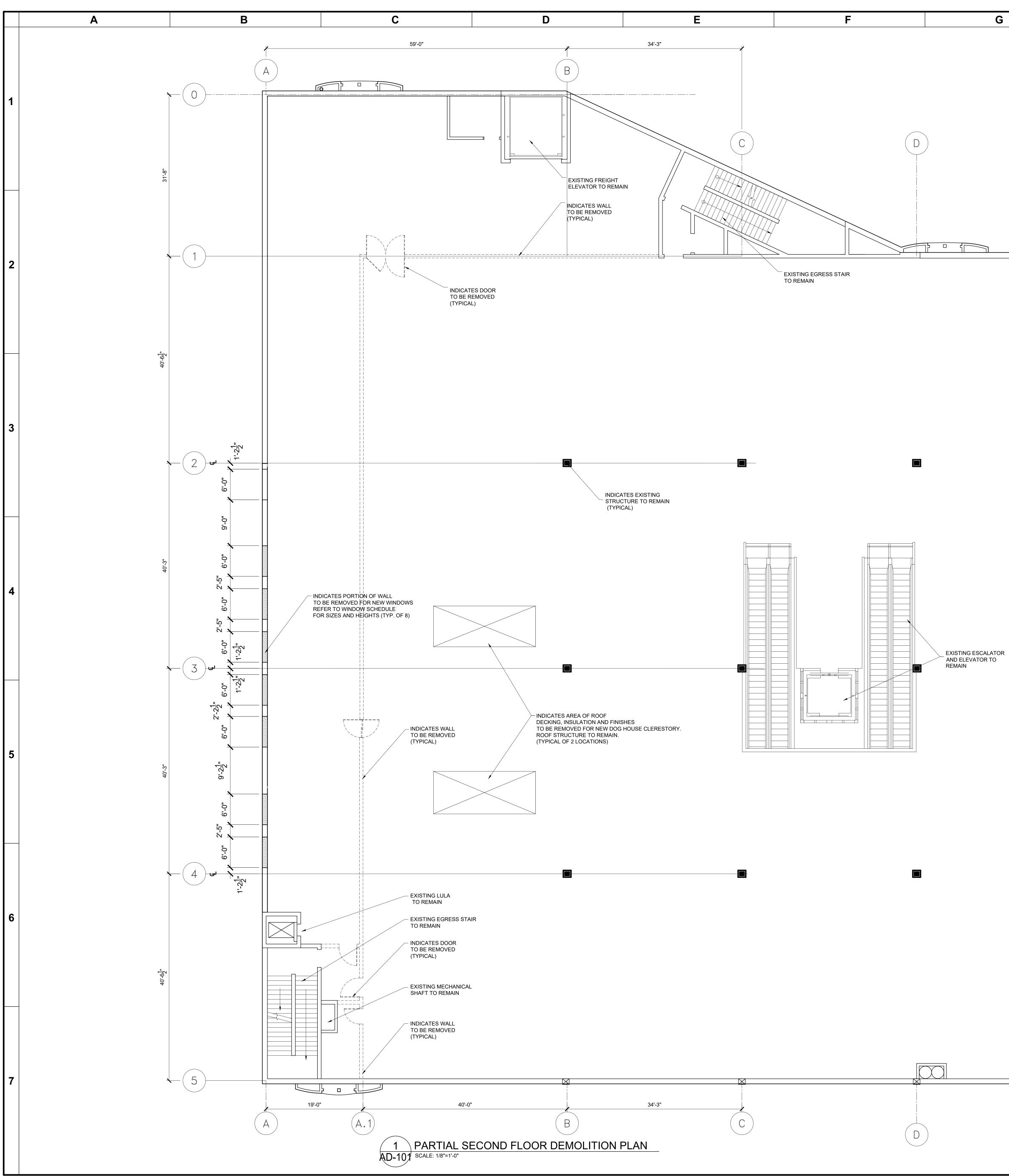
1 THRESHOLD 3 SILENCERS

G





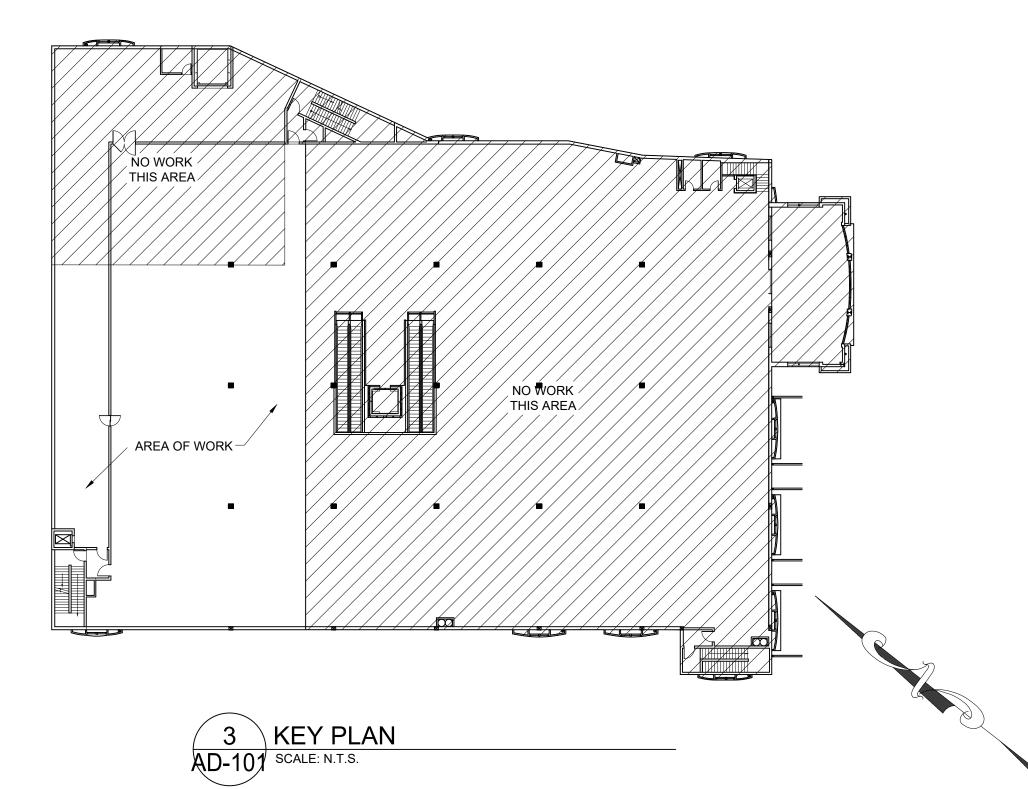




DEMOLITION NOTES:

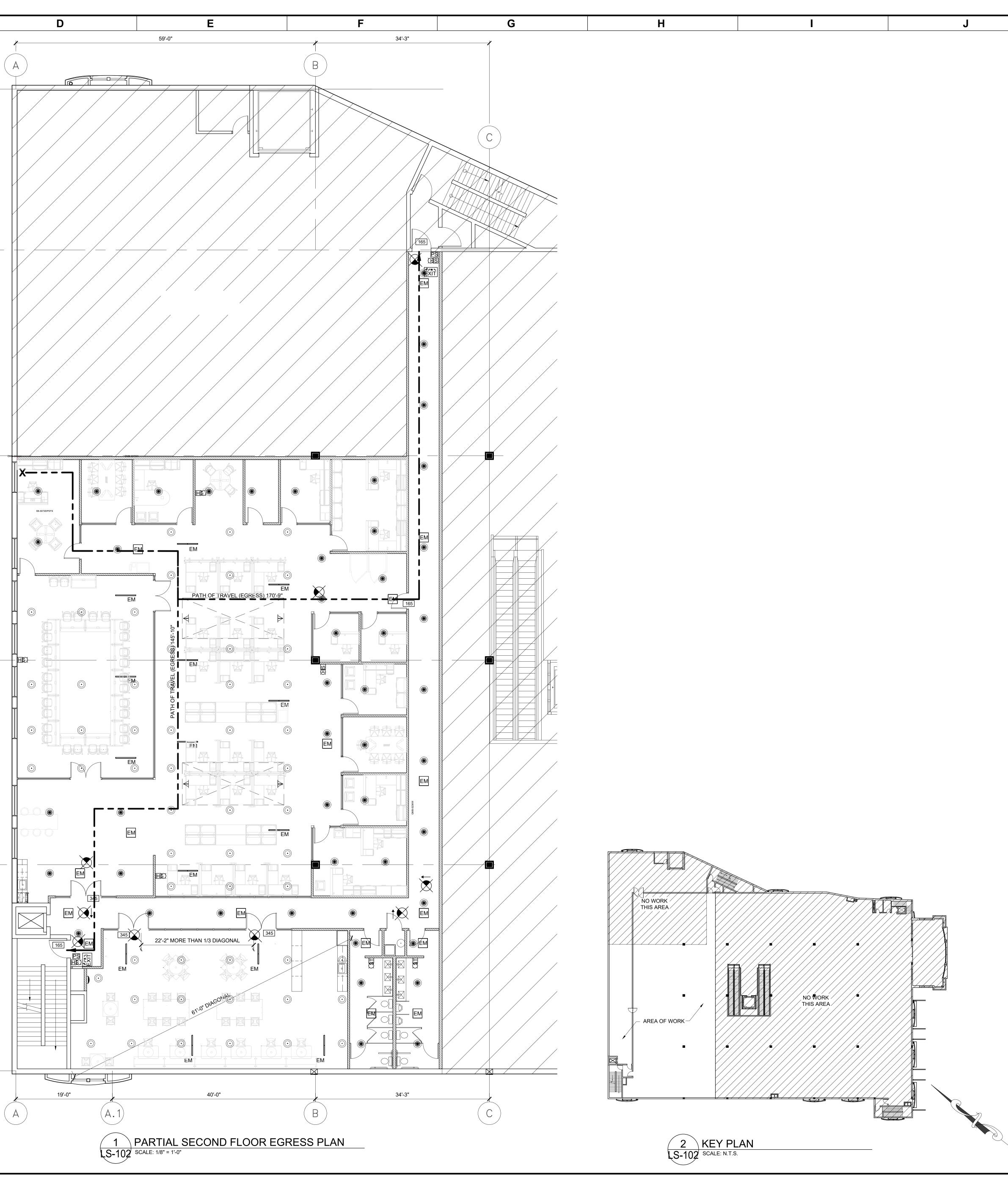
- $\pm \pm \pm \pm \pm$ DENOTES WALLS TO BE DEMOLISHED.
- 1. COMPLY WITH APPLICABLE LOCAL, STATE AND FEDERAL CODES AND REGULATIONS PERTAINING TO SAFETY OF PERSONS, PROPERTY AND ENVIRONMENTAL PROTECTION .
- 2. PROVIDE AND MAINTAIN BARRICADES, LIGHTING, AND GUARDRAILS AS REQUIRED BY BEST PRACTICE STANDARDS, APPLICABLE CODES AND REGULATIONS TO PROTECT OCCUPANTS OF BUILDING AND WORKERS.

- 3. ERECT AND MAINTAIN DUSTPROOF PARTITIONS AS REQUIRED TO PREVENT SPREAD OF DUST, FUMES, AND SMOKE, ETC. TO OTHER PARTS OF THE BUILDING.
- 4. IF DEMOLITION IS PERFORMED IN EXCESS OF THAT REQUIRED, RESTORE AFFECTED AREAS AT NO COST TO THE OWNER.
- 5. THE DEMOLITION CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, AND EQUIPMENT AS REQUIRED TO COMPLETE DEMOLITION. .
- 6. REMOVE FROM SITE DAILY AND LEGALLY DISPOSE OF REFUSE, DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM DEMOLITION OPERATIONS. EXCEPT THOSE ITEMS TO BE REUSED, RETURNED TO OWNER, OR OTHERWISE DIRECTED
- 7. REMOVE DESIGNATED PARTITIONS, COMPONENTS, BUILDING EQUIPMENT, AND FIXTURES AS REQUIRED FOR NEW WORK.
- 8. REMOVE ABANDONED HVAC EQUIPMENT, INCLUDING DUCT WORK.
- 9. REMOVE ABANDONED ELECTRICAL, TELEPHONE AND DATA CABLING AND DEVICES, UNLESS OTHERWISE NOTED. ALL EXISTING LIGHTING AND ELECTRICAL DEVICES SLATED FOR DEMOLITION TO BE DISCONNECTED AND MADE SAFE PRIOR TO REMOVAL. IF LIGHTING DEVICES, BULBS OR BALLASTS ARE REQUIRED TO BE REMOVED AS HAZARDOUS MATERIAL, IT IS THE RESPONSIBILITY OF THE DEMOLITION CONTRACTOR.
- 10. REMOVE EXISTING FLOOR FINISHES AND PREPARE SUBFLOOR AS REQUIRED BY G.C. FOR NEW FLOOR FINISHES.
- 11. REMOVE EXISTING WALL/COLUMN (SUCH AS WALL COVERING, SPRAYED ON FINISHES, ADHESIVE BACKED APPLIED MATERIAL, TILE, AND/OR MILLWORK, ETC.) AS REQUIRED TO PREPARE SURFACE FOR NEW FINISHES U.O.N.
- 12. REMOVE EXISTING INTERIOR AND EXTERIOR DOORS AS NOTED FOR NEW CONSTRUCTION. MATCH AND PATCH EXTERIOR AND INTERIOR FINISHES AS REQUIRED.
- 13. REMOVE ALL EXISTING INTERIOR WALLS AS SHOWN. PREPARE ALL REMAINING WALLS FOR NEW FINISHES. REMOVE ALL NAILS, SCREWS, MATCH AND PATCH GYPSUM BOARD AS REQUIRED FOR NEW FINISHES.

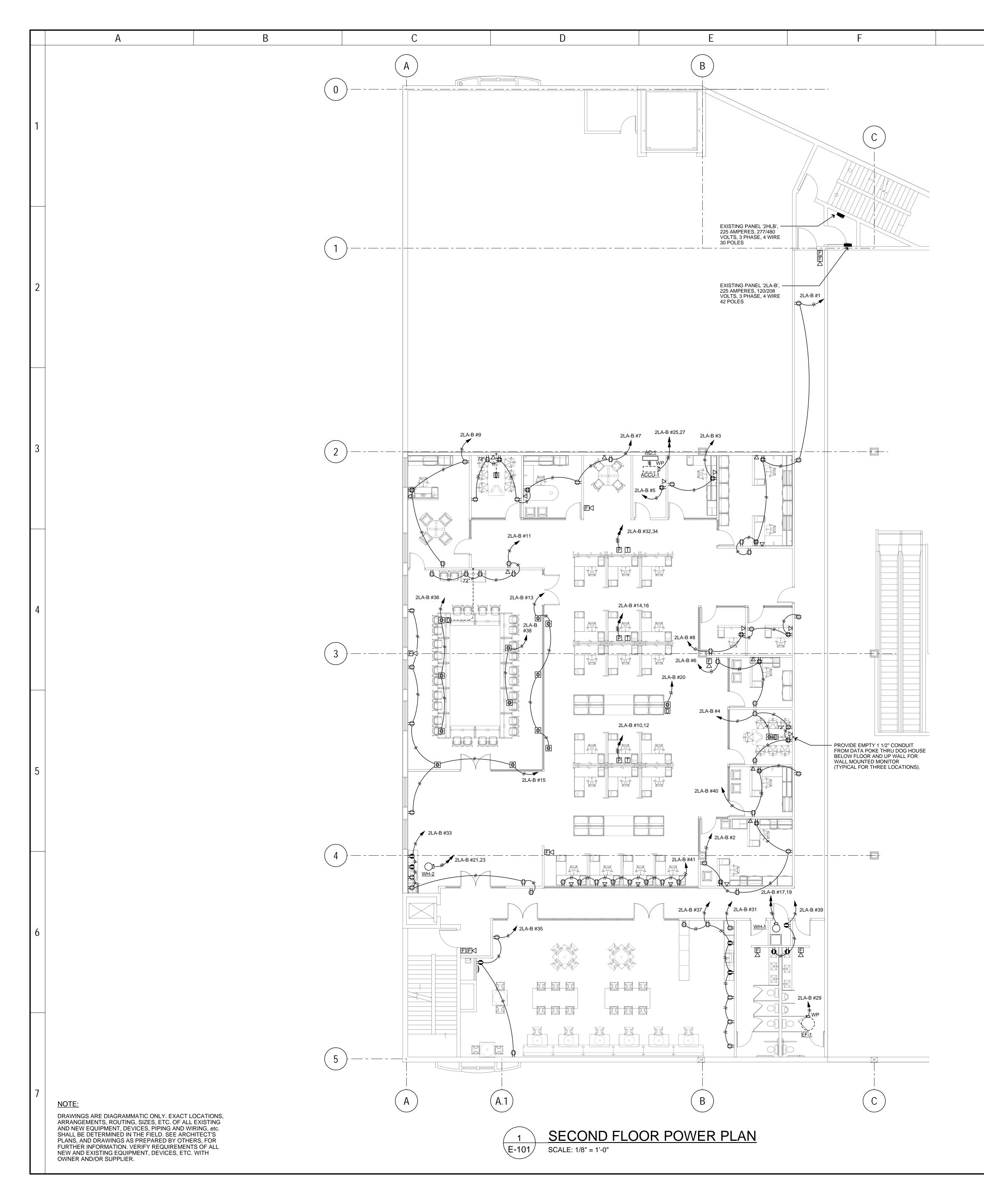




	A B	C	
1	LEGEND BATTERY BACK-UP EMERGENCY LIGHT Image: Second stress in the second stress in	31-8"	
2	HORN STROBE ALARM STO STOBE ALARM PS FIRE ALARM PULL STATION EM LIGHT WITH EMERGENCY BALLAST 165 DOOR OCCUPANCY CAPACITY EXT BRAILLE EXIT SIGN X PATH OF TRAVEL SYMBOLS PATH OF TRAVEL (EGRESS) xxx'-x" INOTE: FIRE PROTECTION SYSTEM TO BE DESIGNED IN ACCORDANCE WITH NFPA-13 REGULATIONS SPRINKLER CONTRACTOR TO PROVIDE ENGINEERED	40-62 ¹ "	
3	 SHOP DRAWINGS TO THE VILLAGE OF ELMSFORD FIRE MARSHALL FOR APPROVAL. FIRE DEPARTMENT NOTES: 1. PROVIDE EXIT SIGN WITH 6" LETTERS OVER REQUIRED EXITS, WHERE SHOWN ON DRAWINGS, AND ADDITIONAL SIGNS AS REQUIRED BY BUILDING DEPARTMENT INSPECTOR OR FIRE DEPARTMENT FIELD INSPECTOR. CONNECT EXIT SIGNS TO EMERGENCY POWER CIRCUITS OR BATTERY BACKUP, COMPLY WITH BUILDING CODES. 2. PROVIDE EMERGENCY LIGHTING OF ONE FOOT - CANDLE AT FLOOR LEVEL. COMPLY WITH BUILDING CODES. 3. MAINTAIN AISLES AT LEAST 44" WIDE AT PUBLIC AREAS. 4. EVERY EXIT DOOR SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. SPECIAL LOCKING DEVICES SHALL BE OF AN APPROVED TYPE. ALL NEW DOORS SHALL HAVE APPROVED LEVER HANDLES. 5. DOORS OPENING INTO REQUIRED 1-HOUR, FIRE-RESISTIVE CORRIDORS SHALL BE PROTECTED WITH A SMOKE OR DRAFT STOP ASSEMBLY HAVING A 20-MINUTE RATING AND SHALL BE SELF-CLOSING. 	4	
4	 EXIT DOORS SHALL SWING IN THE DIRECTION OF TRAVEL WHEN SERVING 50 OR MORE PERSONS AND IN ANY HAZARDOUS AREA. INTERIOR WALL AND CEILING FINISHES FOR EXIT CORRIDOR SHALL NOT EXCEED AN END POINT FLAME SPREAD RATING: CLASS I, FLAME SPREAD 26-75, SMOKE DENSITY 150, FOR MATERIALS INSTALLED IN VERTICAL EXITS. CLASS III, FLAME SPREAD 26-75, SMOKE DENSITY 300, FOR MATERIALS INSTALLED IN HORIZONTAL EXITS. CLASS III, FLAME SPREAD 76-200, SMOKE DENSITY 350, FOR MATERIALS INSTALLED IN HORIZONTAL EXITS. CLASS III, FLAME SPREAD 76-200, SMOKE DENSITY 450, FOR MATERIALS INSTALLED IN ANY OTHER LOCATION. DECORATIONS (CURTAINS, DRAPES, SHADES, HANGINGS, ETC.) SHALL BE NON-COMBUSTIBLE OR BE FLAME PROOFED IN AN APPROVED MANNER. PROVIDE FIRE DAMPERS OR DOORS WHERE AIR DUCTS PENETRATE FIRE-RATED WALLS OR CEILINGS. STORAGE, DISPENSING OR USE OF ANY FLAMMABLE OR COMBUSTIBLE LIQUIDS, FLAMMABLE GAS AND HAZARDOUS SUBSTANCES SHALL COMPLY WITH UNIFORM FIRE CODE REGULATIONS. WOOD BLOCKING SHALL BE FIRE TREATED IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS. EXTEND OR MODIFY EXISTING FIRE/LIFE SAFETY SYSTEM AS REQUIRED TO PROVIDE AN APPROVED FIRE/LIFE SAFETY SYSTEM. SUBMIT PLANS TO FIRE DEPARTMENT WITH COMPLETE DESCRIPTION OF SEQUENCE OF OPERATION, AND OBTAIN APPROVAL PRIOR TO INSTALLATION. LOCATE THE CENTER OF FIRE ALARM INITIATING DEVICES 48" ABOVE THE LEVEL OF THE FLOOR, WORKING PLATFORM, GROUND SURFACE OR SIDEWALK. EMERGENCY WARNING SYSTEMS SHALL ACTIVATE A MEANS OF WARNING THE HEARING IMPAIRED. FLASHING VISUAL 	403	
5	 WARNING SHALL HAVE A FREQUENCY OF NOT MORE THAN 60 FLASHES PER MINUTE. 15. EXTEND OR MODIFY EXISTING AUTOMATIC FIRE EXTINGUISHING SYSTEM AS REQUIRED TO PROVIDE AN APPROVED AUTOMATIC FIRE EXTINGUISHING SYSTEM. SUBMIT PLANS TO FIRE DEPARTMENT AND OBTAIN APPROVAL PRIOR TO INSTALLATION. 16. AUTOMATIC SPRINKLER SYSTEMS SHALL BE SUPERVISED BY AN APPROVED CENTRAL, PROPRIETARY OR REMOTE STATION SERVICE OR A LOCAL ALARM WHICH WILL GIVE AN AUDIBLE SIGNAL AT A CONSTANTLY ATTENDED LOCATION. NOTE: FOR SPRINKLER SYSTEM LAYOUT AND DESIGN SEE FIRE PROTECTION PLAN. SEE ELECTRICAL DRAWINGS FOR COMPLETE LIGHTING AND EMERGENCY FIXTURE LAYOUT. SEE HVAC DRAWINGS FOR DESIGN, LOCATION AND SIZE OF SYSTEM. ALL BUILDING STEEL TO BE PROPERLY BONDED AND GROUNDED. 	40'-3"	
6		40-6 ¹	
7		5	



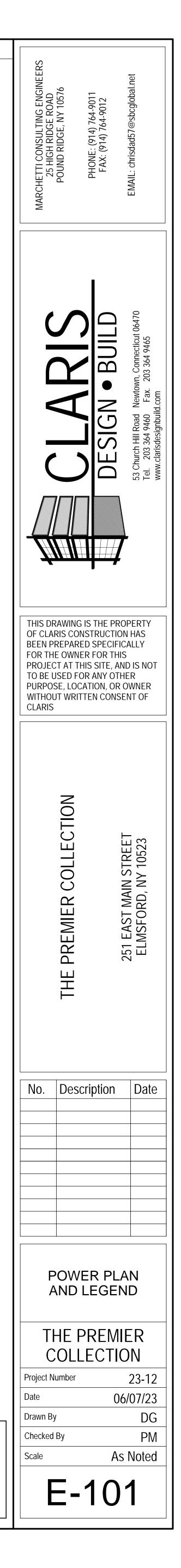


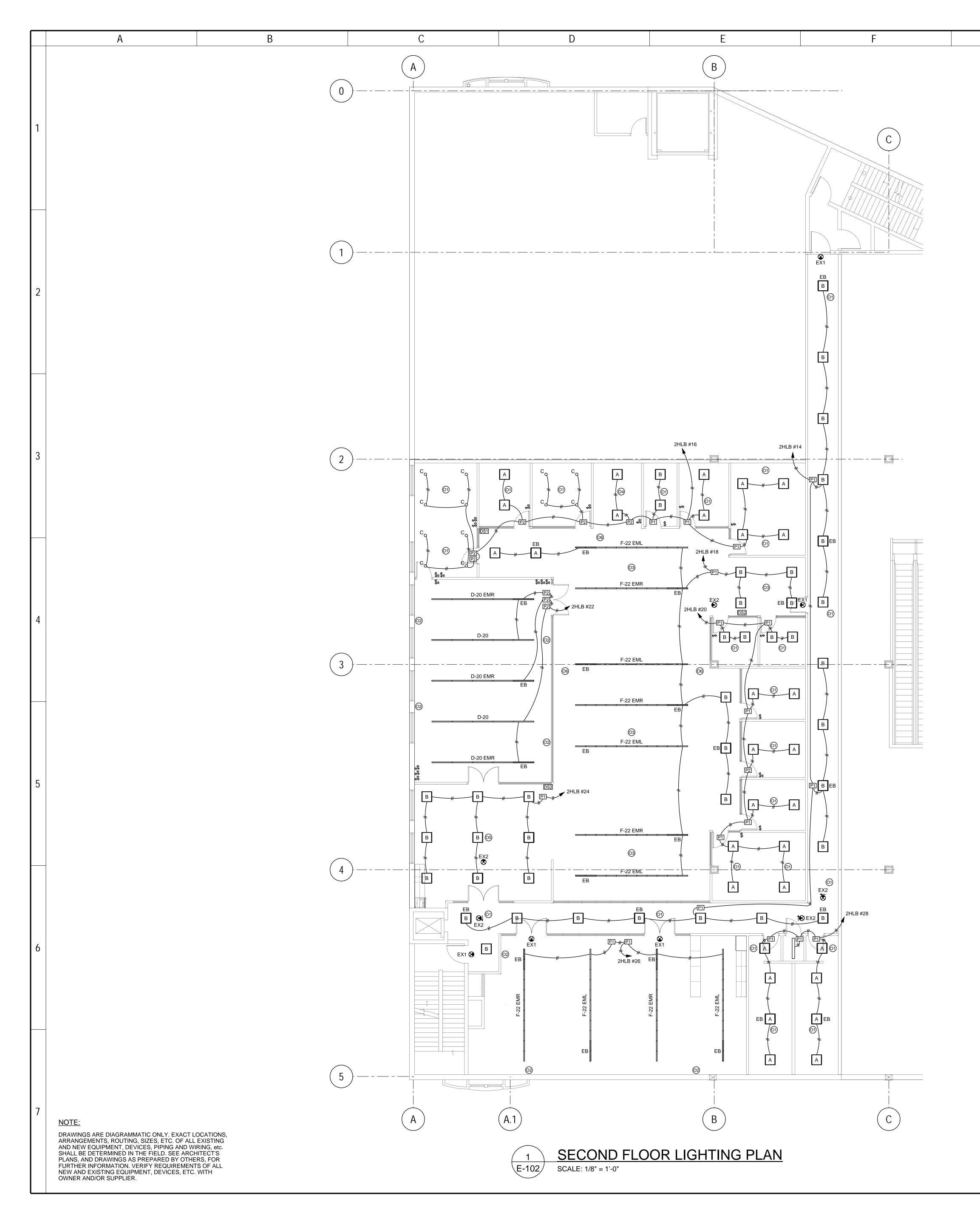


G	Н	I	J

POWER LEGEND

φ	WALL MOUNTED DUPLEX RECEPTACLE - MTD. 18" A.F.F. UNLESS OTHERWISE NOTED
Þ	WALL MOUNTED G.F.I. DUPLEX RECEPTACLE - MTD. 6" ABOVE SINK RIM OR COUNTER TOP
₽	WALL MOUNTED QUADRUPLEX RECEPTACLE - MTD. 18" ABOVE FINISHED FLOOR
∇	WALL MOUNTED TELE/DATA OUTLET LOCATION W/2x4 BOX AND 1" C.
P	POKE THROUGH POWER DOGHOUSE FOR WHIP CONNECTION TO PARTITION FURNITURE SYSTEM
	POKE THROUGH TELE/DATA DOGHOUSE FOR WHIF CONNECTION TO PARTITION FURNITURE SYSTEM
Φ	FLOOR MOUNTED FLUSH POKE THROUGH DUPLEX RECEPTACLE WITH COVER
D	FLOOR MOUNTED FLUSH POKE THROUGH DATA CONNECTION BOX WITH COVER
\bigotimes	MOTOR AS SUPPLIED AND INSTALLED BY OTHERS
\$	SINGLE POLE SWITCH
\$ _T	THERMALLY PROTECTED SWITCH
	DISTRIBUTION PANEL
۱ <u>ــــ</u>	FUSED DISCONNECT SWITCH
WP	DENOTES WEATHERPROOF
E	MANUAL FIRE ALARM PULL STATION
ÞE	HORN/STROBE FIRE ALARM UNIT MOUNTED 80" A.F.F.

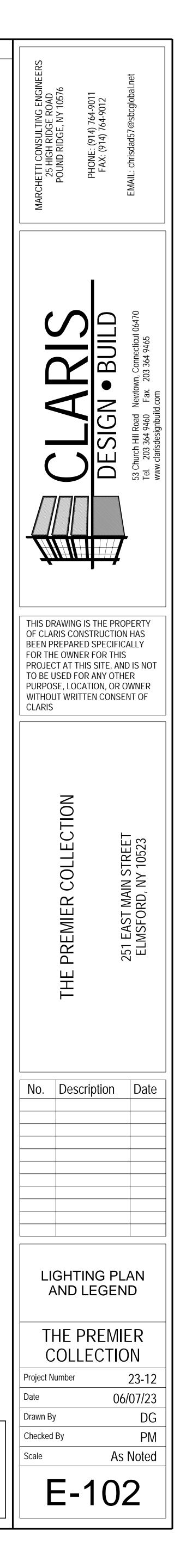




LIGH	TING LEGEND AND NOTES
A	L.E.D. PANEL 2' x 2' FIXTURE, LITHONIA MODEL #CPX 2X2 AL07 (HIGH) SWW7 (35K) SWL MVOLT, 35 WATTS, 4321 LUMENS
АЕВ	L.E.D. PANEL 2' x 2' FIXTURE, LITHONIA MODEL #CPX 2X2 AL07 (HIGH) SWW7 (35K) SWL MVOLT + E10WLCP, 35 WATTS, 4321 LUMENS WITH 90 MINUTE BATTERY PACK
В	L.E.D. PANEL 2' x 2' FIXTURE, LITHONIA MODEL #CPX 2X2 AL07 (MID) SWW7 (35K) SWL MVOLT, 28 WATTS, 3432 LUMENS
ВЕВ	L.E.D. PANEL 2' × 2' FIXTURE, LITHONIA MODEL #CPX 2X2 AL07 (MID) SWW7 (35K) SWL MVOLT + E10WLCP, 28 WATTS, 3432 LUMENS WITH 90 MINUTE BATTERY PACK
с _о	6" ROUND L.E.D. RETROFIT DOWNLIGHT, LITHONIA MODEL #LBR6 NCH ALO2 (1500LM) SWW1 (3500K) WR, TRW MWD- MVOLT UGZ1, 20 WATTS, 1500 LUMENS
	PENDANT MOUNTED L.E.D. FIXTURE, SELUX CORPORATION MODEL #L60-1C35-35-BW-MOUNTING-20-FINISH-UNV-DRIVER OPTIONS, 9 WATTS PER FOOT, 14030 TOTAL LUMENS
D-20 EMR	PENDANT MOUNTED L.E.D. FIXTURE, SELUX CORPORATION MODEL #L60-1C35-35-BW-MOUNTING-20-FINISH-UNV-DRIVER OPTIONS, 9 WATTS PER FOOT, 14030 TOTAL LUMENS WITH 90 MINUTE BATTERY PACK IN RIGHT HAND 4 FT SECTION
EX1 📎	WALL MOUNTED SINGLE FACE L.E.D. EXIT SIGN, LITHONIA MODEL #EDG W G EL WM, 3.1 WATTS, 311 LUMENS, WITH 90 MINUTE EMERGENCY BATTERY
EX2 🕰	PENDANT MOUNTED SINGLE FACE L.E.D. EXIT SIGN, LITHONIA MODEL #EDG W G EL W/PENDANT, 3.1 WATTS, 311 LUMENS, WITH 90 MINUTE EMERGENCY BATTERY
F-22	PENDANT MOUNTED L.E.D. FIXTURE, SELUX CORPORATION MODEL #L60-1C40-35-BW-MOUNTING-22-FINISH-UNV-DRIVER OPTIONS, 10 WATTS PER FOOT, 17645 TOTAL LUMENS
F-22 EMR	PENDANT MOUNTED L.E.D. FIXTURE, SELUX CORPORATION MODEL #L60-1C40-35-BW-MOUNTING-22-FINISH-UNV-DRIVER OPTIONS, 10 WATTS PER FOOT, 17645 TOTAL LUMENS WITH 90 MINUTE BATTERY PACK IN RIGHT HAND 4 FT SECTION
F-22 EML	PENDANT MOUNTED L.E.D. FIXTURE, SELUX CORPORATION MODEL #L60-1C40-35-BW-MOUNTING-22-FINISH-UNV-DRIVER OPTIONS, 10 WATTS PER FOOT, 17645 TOTAL LUMENS WITH 90 MINUTE BATTERY PACK IN LEFT HAND 4 FT SECTION
\$	WIRELESS SINGLE POLE SWITCH
\$D	WIRELESS DIMMER SWITCH
01	CEILING MOUNTED WIRELESS OCCUPANCY SENSOR - STEINEL OR APPROVED MANUFACTURER PROVIDE LOCAL OVER-RIDES AS REQUIRED
02	WALL MOUNTED WIRELESS OCCUPANCY SENSOR - STEINEL OR APPROVED MANUFACTURER PROVIDE LOCAL OVER-RIDES AS REQUIRED
03	CEILING MOUNTED WIRELESS OCCUPANCY SENSOR - STEINEL MODEL #DT QUATTRO DCS PROVIDE LOCAL OVER-RIDES AS REQUIRED
04	CEILING MOUNTED WIRELESS OCCUPANCY SENSOR - STEINEL MODEL #IR QUATTRO COM1-24 PROVIDE LOCAL OVER-RIDES AS REQUIRED
05	CEILING MOUNTED WIRELESS OCCUPANCY SENSOR - STEINEL MODEL #IR QUATTRO HD DCS PROVIDE LOCAL OVER-RIDES AS REQUIRED
06	CEILING MOUNTED WIRELESS OCCUPANCY SENSOR - STEINEL MODEL #US HALLWAY DCS PROVIDE LOCAL OVER-RIDES AS REQUIRED
DS1	1-BUTTON DIGITAL CONTROL STATION STEINEL MODEL #DS1 DCS
DS2	2-BUTTON DIGITAL CONTROL STATION STEINEL MODEL #DS2 DCS
P1	SWITCHING POWER PACK AS MANUFACTURED BY STEINEL OR APPROVED EQUIVALENT
P2	DIMMING POWER PACK AS MANUFACTURED BY STEINEL OR APPROVED EQUIVALENT
EB	DENOTES THAT FIXTURE IS TO BE SUPPLIED AND INSTALLED WITH 90 EMERGENCY BATTERY
	S SHALL BE AS SPECIFIED ON THE DRAWINGS OR ARCHITECT SUBSTITUTION(S).

Η

 FIXTURES SHALL BE AS SPECIFIED ON THE DRAWINGS OR ARCHITECT APPROVED SUBSTITUTION(S).
 COORDINATE ALL LOCATIONS AND MOUNTING HEIGHTS OF FIXTURES WITH ARCHITECTURAL DRAWINGS.
 ALL FIXTURES TO BE PROVIDED WITH HARDWARE AND APPURTANANCES AS REQUIRED FOR COMPLETE SYSTEM.
 POSITION AND AIM OCCUPANCY SENSORS AS REQUIRED FOR PROPER OPERATION OF SWITCHED LIGHTS.
 PROVIDE LOW VOLTAGE WIRING AS REQUIRED BETWEEN OCCUPANCY SENSORS AND POWER PACKS.
 TIE ALL EXIT SIGNS AND SELF CONTAINED EMERGENCY LIGHTS TO UNSWITCHED SIDE OF ASSOCIATED CIRCUIT.
 PROVIDE SWITCH PLATES IN A FINISH AND COLOR AS SELECTED BY ARCHITECT.
 ALL SITE LIGHTING FIXTURES (IF APPLICABLE) CONTROLLED BY TIME CLOCK AND PHOTOCELL UNLESS NOTED.



GENERAL CONDITIONS FOR ELECTRICAL WORK

1. Applicable requirements of the Conditions of the Contract are included in this Section and apply to all work and material included under other specification sections and/or divisions of the Specifications. 2. It is the intent of the Contract and of the Drawings and Specifications to call for finished work, tested, functional, code compliant and ready to use. All work under this section to be in conformance with the National Electrical Code, 2020 Edition and State of New York Supplements and all other codes and ordinances which may apply.

3. Include the following in the Work, and in the Contract price: * Any incidental apparatus, appliance, material, labor or service necessary to make the work complete in all respects and fully ready for trouble-free operation, even if not particularly shown or specified. * Small details not usually shown or specified, but which are necessary for the proper and complete installation and operation of

the work. * All tests, permits, inspections, approvals, and Certificates of Occupancy, required by City and State Authorities. * Included are all items as detailed on Architectural Drawings and Subaru Design Intention Documents.

4. Provide materials, labor, equipment and services necessary to provide all work of the Electrical Division as shown on the drawings, as specified, and as required by job conditions including but not limited to the following: * New circuit breakers, etc. * Safety switches

* General and Emergency lighting and switching * Power and branch circuitry

* Power feeders to equipment as installed by others

* Convenience and Special receptacles * Data and Communication outlets

* Grounding in accordance with the NEC and as required by job conditions * Control wiring as required under the Mechanical and Plumbing Sections

5. Work not included in this section: * Setting of access doors * Cutting and patching

* Finish painting 6. Visit and examine those portions of the site affected by this work so as to become familiar with existing conditions and difficulties that will attend the execution of the work. Submission of a bid will be construed as evidence that such examination been made and later claims for labor, equipment, or materials required because of difficulties encountered which could have been foreseen had such examination been made, will not be recognized. Coordinate phasing with Architect and Owner. 7. All materials furnished and all work installed shall comply with all applicable requirements of local Utility Companies, Fire Department, State and Local Codes, and all requirements of other authorities having jurisdiction.

8. Where conflict occurs between the requirements of the Specifications and/or the Contract Drawings and any such applicable laws, ordinances, rules and regulations, including requirements for additional materials or apparatus, the more stringent require ments shall govern all work and shall be installed without extra cost to the Owner. 9. The Contractor shall give all notices, obtain all required permits, perform all tests, and pay for all local, state and federal taxes, fees, royalties and other costs; file all necessary Drawings and obtain all approvals of all municipal and state aut horities having jurisdiction; obtain all required Certificates of Inspection; furnish the Owner with final certificates before final

payment of the Contract. 10. All local and state laws and regulations, the American With Disabilities Act, O.S.H.A., and National Fire Protection Association. Standards governing or relating to any portion of this work are hereby made a part of these specifications. Responsibility for compliance to their provisions is included. 11. Inform the Architect of any work or materials which violate any of the applicable laws and regulations before proceeding with

the work. 12. Materials specified by reference to a specific standard such as the Underwriter's Laboratories, American National Standards Institute, Federal Specifications, a trade association standard, or other similar standard shall comply with the requirements in the latest revision thereof in effect at the time of bidding, except as limited by type, class or grade, or modified in such reference 13. All materials, equipment and apparatus shall be Underwriters Listed or Labeled for all items where such listing or labeling are

available. 14. All equipment and materials shall be new and of first quality, suitable for the purpose intended and conditions encountered. 15. All materials shall be applied in accordance with the recommendations of the accepted manufacturers. 16. All materials used or installed shall be free of any asbestos or lead content.

17. The drawings are based on the equipment and materials specifically designated as the standard. If it is elected to install materials and equipment included under other acceptable manufacturers, the Architect will be the sole judge of whether the proposed substitution is equal to or better than the standard. Submit drawings for review showing any changes required by this equipment or materials; and be responsible for its installation in the allotted space with proper clearance for servicing and repairing said equipment, plus any additional materials and equipment necessary for its installation

18. Where such acceptable deviation requires different quantity or arrangement of foundations, support, piping, wiring, conduit, and any other equipment or accessories normal to this equipment, furnish said changes and additions at no increase in contract price. Deviations mean the use of any listed acceptable manufacturer other than those on which the drawings are based. 19. All work shall be performed in a neat and workmanlike manner, with due regard for good practice and best finished appearance. 20. Locate all equipment which must be serviced, operated or maintained in fully accessible positions. This shall include but not

be limited to motors, controllers, junction boxes, switches, etc. 21. Drawings are diagrammatic and indicate the general arrangement of systems and work required. Do not scale the drawings. Consult the Architectural Drawings and details, and the drawings of other trades, for exact location of equipment. 22. If instructed by the Architect, make minor modifications in the layout as needed to prevent conflict with work of other trades or for proper execution of the work.

23. Chases, openings in walls and patches will be provided under the work of other Sections. Furnish exact dimensions and locations of these openings to suit the apparatus to be used before such walls are built. 24. As work progresses, record on one set of drawings all changes from the installations originally indicated. The record of the progress drawings shall be the responsibility of each Contractor. Record all changes in waterproof ink. 25. At completion, submit above required information to the Architect for approval. Drawings shall be the same size and scale as

the contract drawings, except that larger scale drawings may be required where clearances are close. 26. Include in the Bid all costs of transparencies and the preparation of the "as-built" drawings. 27. Make all tests as required by Code or Ordinance and as herein specified. File with the Architect written reports in

triplicate for all such tests. 28. Upon completion of all work and all tests, Contractor shall furnish the necessary skilled labor and helpers for operating his system and equipment. 29. During this period, instruct the Owner or his representative fully in the operation, adjustment and maintenance of all

equipment furnished. 30. Operating instructions may not begin until the equipment has been made fully operational as determined by the Architect. 31. Contractor shall furnish to the Architect three (3) complete bound sets of typewritten or blueprinted instructions for operating and maintaining all systems included in this contract. All manuals shall be submitted in draft, for approval, prior to final issue. Manufacturing advertising literature will not be acceptable; only technical bulletins will be considered for the maintenance manual.

NOTE:

OWNER AND/OR SUPPLIER.

DRAWINGS ARE DIAGRAMMATIC ONLY. EXACT LOCATIONS. ARRANGEMENTS, ROUTING, SIZES, ETC. OF ALL EXISTING AND NEW EQUIPMENT, DEVICES, PIPING AND WIRING, etc. SHALL BE DETERMINED IN THE FIELD. SEE ARCHITECT'S PLANS, AND DRAWINGS AS PREPARED BY OTHERS, FOR FURTHER INFORMATION. VERIFY REQUIREMENTS OF ALL NEW AND EXISTING EQUIPMENT, DEVICES, ETC. WITH

and lighting throughout the construction period

galvanized steel.

33. The Contractor shall provide and maintain lights and power to prevent damage or injury and shall illuminate all hazardous area for the duration of the project. 34. Whenever the work under the Electrical sections and the Mechanical sections interconnect, the Electrical Contractor shall coordinate the work and insure that all interconnections are properly provided. It shall be the responsibility of the Mechanical Contractor to provide the Electrical Contractor with wiring diagrams for all equipment, systems, and apparatus requiring

32. Contractor shall provide temporary light and power as required for construction. The temporary service shall provide power

electrical connections. 35. Each Contractor shall furnish detailed advance information regarding all his requirements related to work under other Divisions and/or Sections. He shall furnish sizes, accurate data, and locations of any and all pads, pits, chases, sleeves, and slo ts through floor slabs, walls, foundations ceilings, roof, and other special openings required for which he shall be responsible. 36. The Contractor shall clean all equipment, fixtures, and accessories installed by him, removing all dust, plaster, cement, paint, markings, stickers, rust stains and other foreign matter or discolorations. He shall also clean such dust, etc., from the work of others or the property of the Owner when caused by his employees. 37. Sleeves shall be installed around piping and conduits passing through partitions, ceilings or other building construction. Sleeves shall be installed with approved packing between sleeves and elements to provide for tight closure. Sleeves shall be of

38. Provide all temperature control wiring and starter interlock wiring. 39. Mount and connect starters, except where specified to be factory wired and mounted on the equipment. 40. All new electrical conduits for the following systems (including conduit above hung ceilings) shall be identified with semirigid identification markers equal to "Setmark" electrical markers as manufactured by Seton Name Plate Company. Feeders

* Fire Alarm * Security

* Emergency Lighting 41. Each marker background is to be color-coded with a clearly printed legend to identify the conductor. Size of markers and size of lettering to generally conform with the "Scheme for Identification of Piping Systems" (ANSI A13,1). 42. Locations for electrical markers to be as follows: * Panelboards

* On all horizontal runs marked 50 feet apart maximum 43. Attachment of hangers to building structure may be accomplished by the following methods:

* Beam clamps attached to building structural members. * Supplementary rolled steel members attached to building structural members with beam clamps. Such supplementary steel shall be provided under this Work.

* Concrete inserts in areas of solid concrete slab without metal deck. * Strap iron, baling wire, and similar supports are unacceptable.

44. Maintain all equipment and systems installed until final acceptance by the Owner, and take such measures as necessary to insure adequate protection of all equipment and materials during delivery, storage, installation and shut-down conditions. This responsibility shall include all provisions required to meet the conditions incidental to the delays pending final tests of system equipment. After installation of systems has been completed, operate them to determine the capability of the equipment and control conform to the requirements of the drawings and specifications prior to performance testing. 45. Each manufacturer of equipment shall provide qualified personnel to inspect and approve equipment and to supervise the start-up and operating tests of the equipment.

46. Notify the Architect in advance of commencing operation. 47. Perform an operating test of each complete system for twenty-four (24) hours continuous operation as a minimum, or as long as required to prove coordination and proper functioning of all related controls and components. Certify to the Owner in writing that all equipment is functioning properly. Should the apparatus fail to meet the contract requirements, adjust, repair, or repl ace all defective or inoperative parts and again conduct the complete performance tests. 48. Guarantees and warranties shall be provided in accordance with the General Conditions governing all Contracts. 49. All workmanship, installation, materials and equipment shall be maintained and serviced for the guarantee period at no

additional cost to the Owner. 50. Leave entire system installed under this Contract in perfect working order, and, without additional charge, replace any work or material which develops defects within one year from the date of acceptance. 51. Final payment will be approved only after completion of all tests, after receipt of all the required certificates and document and after completion of all contract requirements.

BASIC MATERIALS & METHODS

1. All conductors shall be copper (or aluminum where indicated) and shall be UL rated for operation at 600 VAC. 2. All building feeders shall be Type THW or THHN.

3. All branch circuit power wiring shall be Type TW or THHN at the Contractor's option. 4. In high ambient temperature locations, Type THHN shall be used.

5. Fixture wire shall be Type TFF. 6. Color identification shall be uniform and continuous throughout.

7. No wire smaller than #12 AWG shall be used for any power or lighting wiring. Where circuit length to first outlet exceeds 75 feet, #10 AWG shall be used. #14 shall be used for control wiring. 8. Wires #8 B. & S. gauge and larger shall be stranded; smaller wire sizes shall be solid. 9. All wire shall have size, grade of insulation, voltage, and manufacturer's name permanently marked on outer covering at regular

intervals. 10. All wire delivered in complete coils or reels with identifying size and insulation tags. 11. Rigid Galvanized Steel Conduit shall be used for all services not concealed by construction. Make all connections with thread couplings. Provide fiber bushings with double lock nuts at exposed end connections. 12. Electric Metallic Tubing (EMT), threadless thin wall conduit, with compression fittings, UL labeled, ANSI C 80.3, galvanized

may be used for branch circuits in masonry partitions, furred ceilings, and exposed dry locations, feeders above grade. Telephone system conduits in finished areas shall be E.M.T. 13. Metal Clad Cable (ACT), single strip style, galvanized may be used for branch circuits in hollow partitions, and in furred ceiling where permissible by N.E.C. and local regulations.

14. "Sealtight" Cable shall be used for final connections to motors, conduit not over 18" long. Provide a separate ground conductor from panelboard when using sealtight conduit. 15. All conduits shall be installed concealed in walls or in the suspended ceilings where construction conditions permit. 16. Exposed conduit shall be run parallel or normal to outside walls and exposed structural system in a workmanlike manner.

17. Raceways shall be run straight and true with uniform offsets and symmetrical to other paralleled conduits. 18. During construction, all unfinished runs of conduits shall be capped until ready for installation of conductors. 19. Furnish #14 fish wire in each empty raceway in which permanent wiring is not installed under these specifications.

20. Securely fasten to place all hangers on not more than 5' centers. 21. Support horizontal and vertical runs with one hole malleable straps, clampbacks, inserts or other suitable devices with suitable bolts, expansion shields, beam clamps or special brackets for mounting to building structure.

PANEL '2HLB' TYPE SURF. MAINS 225 AMPERES VOLTAGE AMPERES VOLTAGE 277/480 VOLTS FEEDER EXISTING CONNECTED LOAD 6,700+												
CIRCUIT	POLES	TRIP	ASSIGNMENT	WIRING	LOAD (WATTS)	PHASE	LOAD (WATTS)	WIRING	ASSIGNMENT	TRIP	POLES	CIRCUIT
1	1	20	EXISTING	EXISTING		Α		EXISTING	EXISTING	20	1	2
3	1	20	EXISTING	EXISTING		В		EXISTING	EXISTING	20	1	4
5	1	20	EXISTING	EXISTING		С		EXISTING	EXISTING	20	1	6
7	1	20	EXISTING	EXISTING		Α		EXISTING	EXISTING	20	1	8
9	1	20	EXISTING	EXISTING		В		EXISTING	EXISTING	20	1	10
11	1	20	EXISTING	EXISTING		С		EXISTING	EXISTING	20	1	12
13	1	20	EXISTING	EXISTING		Α	600	3 #12W 3/4" C.	LIGHTING	20	1	14
15	1		SPACE			В	800	3 #12W 3/4" C.	LIGHTING	20	1	16
17	1		SPACE			С	1900	3 #12W 3/4" C.	LIGHTING	20	1	18
19	1		SPACE			Α	600	3 #12W 3/4" C.	LIGHTING	20	1	20
21	1		SPACE			В	900	3 #12W 3/4" C.	LIGHTING	20	1	22
23	1		SPACE			С	400	3 #12W 3/4" C.	LIGHTING	20	1	24
25	1		SPACE			Α	900	3 #12W 3/4" C.	LIGHTING	20	1	26
27	1		SPACE			В	400	3 #12W 3/4" C.	LIGHTING	20	1	28
29	1		SPACE			С			SPACE		1	30

	PANEL '2LA-B'								
CIRCUIT	POLES	TRIP	ASSIGNMENT	WIRING	LOAD (WATTS)				
1	1	20	CONV. RECEPT.	3 #12W 3/4" C.	1200				
3	1	20	CONV. RECEPT.	3 #12W 3/4" C.	600				
5	1	20	CONV. RECEPT.	3 #12W 3/4" C.	400				
7	1	20	CONV. RECEPT.	3 #12W 3/4" C.	1800				
9	1	20	CONV. RECEPT.	3 #12W 3/4" C.	800				
11	1	20	CONV. RECEPT.	3 #12W 3/4" C.	1000				
13	1	20	CONV. RECEPT.	3 #12W 3/4" C.	1000				
15	1	20	CONV. RECEPT.	3 #12W 3/4" C.	1200				
17	2	30	WATER HEATER	3 #10W 3/4" C.	2250				
19					2250				
21	2	30	WATER HEATER	3 #10W 3/4" C.	2250				
23					2250				
25	2	15	'ACCU-1'	3 #12W 3/4" C.	500				
27					500				
29	1	20	'EF-1' VIA T.C.	3 #12W 3/4" C.	100				
31	1	20	REFRIGERATOR	3 #12W 3/4" C.	1500				
33	1	20	CONV. RECEPT.	3 #12W 3/4" C.	1400				
35	1	20	CONV. RECEPT.	3 #12W 3/4" C.	600				
37	1	20	CONV. RECEPT.	3 #12W 3/4" C.	1400				
39	1	20	CONV. RECEPT.	3 #12W 3/4" C.	600				
41	1	20	CONV. RECEPT.	3 #12W 3/4" C.	1600				

Н

G

22. Hangers shall be of durable materials suitable for the application. All parts shall be painted two coats oil paint, unless galvanized. Perforated straps for support of conduits will not be permitted. 23. Conductors shall not be drawn into conduits until all work which may cause cable damage is complete. 24. Provide sufficient slack at terminations to make proper connections. Use only approved cable lubricants and only where

necessarv 25. Feeder cables shall be continuous from origin to panel termination without running splices in intermediate pull boxes or splice chambers as far as practicable. 26. Where feeders consisting of more than one conductor per phase leg pass through pull boxes or panels, each conductor on one

phase shall be grouped together with conductors of other two phases to reduce reactance effect. 27. Use solderless, pressure type connections for all control wiring terminations of wire to devices. For power and lighting wiring terminations to fixture leads, circuiting shall be with connections made by solderless, screw type connectors. 28. All other connection shall be made by solderless, bolted pressure type connectors including wire sizes larger than #8.

29. Outlet boxes shall be 4" trade size, at least 1 1/2" deep and of sufficient size and depth to accommodate the devices noted. boxes shall be of galvanized steel. 30. Boxes shall be firmly secured to walls, beams, studs, and in no case shall be dependent on the conduit for support. 31. All unused knockouts shall remain closed.

32. Boxes shall have plaster rings to bring box openings flush with finish wall. Provide 3/16" oversize covers in a style and color as selected by the Architect 33. Furnish and install all junction or pull boxes as required to suit building conditions.

34. All circuits shall be tested for short circuits, open circuits, and grounds. Megger tests shall be made on all circuits and readings shall be not less than recommended by the National Electric Code. 35. Circuits shall be so connected to the panelboards that the total load is distributed as nearly as possible, equally between each line and neutral. 10% shall be considered as a reasonable and allowable unbalance. Branch circuits shall be balanced on the panelboards, and feeder loads in turn, balanced on the main distribution panel. Reasonable load tests shall be arranged to verify load balance if requested by the Owner. Submit balance test data with as-built drawings.

36. All safety switches, starters, circuit breakers, panelboards, and other electrical apparatus shall be permanently and neatly identified and clearly legible. All characters shall be in a sharply contrasting color to the background surface. All pertinent equipment shall have Arc Flash labeling in accordance with N.E.C., Article 110.16. 37. Panel directories shall be typewritten and placed behind clear plastic as provided on inside of panel doors.

38. All branch circuit wires and all feeders shall be permanently tagged at the panel connections with "Brady" markers as approved 39. All switches, outlet receptacles, and other wiring devices used on this project shall be Decora specification grade devices unless otherwise noted. All devices throughout the project shall be 20 ampere rating. All outlets shall have an extra grounding terminal solidly grounded to the raceway system. All wiring devices shall be submitted for approval. 40. Approved Manufacturers: Wiring devices, switches and pilot lights: General Electric, Arrow Hart, Bryant, Pass & Seymour,

Harvey Hubbell, Leviton. 41. Disconnect switches shall be standard duty voltage as required, Square D, General Electric, Westinghouse. In addition to the disconnect switch at control location, each motor out of sight of control location shall be provided with a disconnect switch located

adjacent to the motor. 42. All electrical systems and equipment shall be grounded as herein specified, as shown on the Drawings, and in accordance with N.E.C. Article 250.

43. All motor power branch circuits shall contain a separate, colored equipment ground wire connected to the equipment ground terminal or enclosure and to the panelboard or motor controller equipment ground bus. The drawings do not necessarily indicate a ground wire in the plan designation. 44. All conduits entering a switchgear, panelboard, motor starter, circuit breaker, or disconnect enclosure shall be provided with

a grounding type bushing or locknut, with a #12 AWG wire running to each from the equipment ground bus or enclosure. 45. All clamps, connectors, etc., used for grounding shall be approved for their use. 46. Connect system components mechanically and electrically to provide an independent return path to the grounding electrode

47. Approved manufacturers of equipment, circuit breakers, etc. are: Square D, General Electric, Westinghouse. 48. Short-circuit interrupting capacity shall conform with Utility established AIC and be the same as specified for panelboard circuit breakers.

49. Breakers shall be by the same manufacturer as the panelboards. 50. All fuses shall be of the same manufacturer, and shall be furnished and installed by the Electrical Contractor in all cutouts, panels, switches, and where shown on the Contract Drawings. Fuses shall be manufactured by Bussman or Chase-Shawmut. 51. All circuits between 150 and 400 amperes, except where otherwise shown on the drawings, shall be protected by current limiting fuses with fault current capability up to 100,000 amperes symmetrical. Fuses shall be Bussman Limitron, Type KTN-R. 52. All circuits, 125 amperes or less, except where otherwise shown on the drawings, shall be protected by dual-element current limiting fuses, listed by Underwriters Laboratories, to interrupt fault currents of up to 100,000 amperes symmetrical. In addition, these fuses must hold 500% of rated current for a minimum of ten (10) seconds, and provide thermal protection against poor contact conditions. Fuses shall be Bussman Low-Peak fuses, Type LPN-R.

53. Furnish and install all lighting fixtures shown. Install each fixture properly and safely. Furnish and erect hangers, rods, mounting brackets, supports, frames and other equipment required. Provide hanging chains, hold-down clips, fixture "tents" and other necessities as may be required by the local authorities 54. Furnish lighting fixtures complete with auxiliary hangers required for the proper, safe and distortion-free installation in the various ceiling constructions in which they appear. Determine ceiling types from Architectural Drawings.

55. Install surface mounted lighting fixtures plumb and at a height from the floor as specified on the drawings. In cases where conditions make this impractical, refer to the Architect for a decision. 56. Provide empty conduit with drag line from all telephone/data/television outlets to termination area(s) as determined by the Building Architect and Owner. 57. The Contractor shall furnish and install components as described herein and as indicated on the drawings, to conform to all

state and local codes 58. The Contractor shall provide and install Fire Alarm Components as described on the plans, as required by all applicable codes, and as approved by the Elmsford Fire Marshall. Approved manufacturers are Bosch, F.A.S.T., F.C.I., and Gamewell. 59. The complete installation shall be made in accordance with the applicable requirements of the latest edition of the N.F.P.A. #72 and the IBC and IFC for remote station fire alarm systems. System shall conform to the requirements of the Local Fire Marshall in all respects.

60. The Contractor shall submit a complete point-to-point wiring diagram showing each piece of equipment and connections. The Contractor shall submit this wiring diagram with the shop drawing submittals for approval. Submittals forwarded without this wiring diagram will not be accepted. 61. Fire Alarm System shall include, but not be limited to:

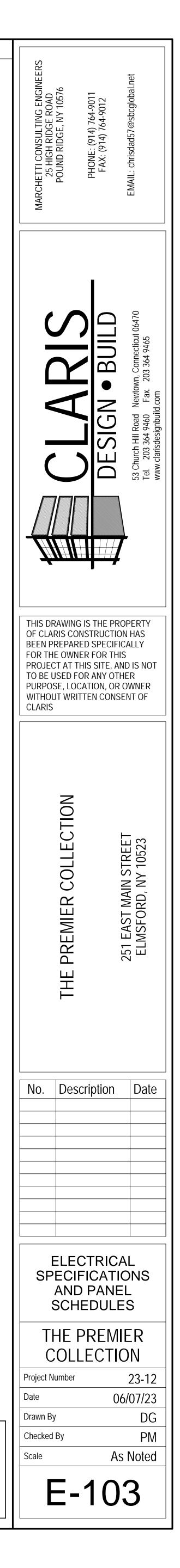
Installation of new devices, wiring etc. as required. * Manual Pull Stations

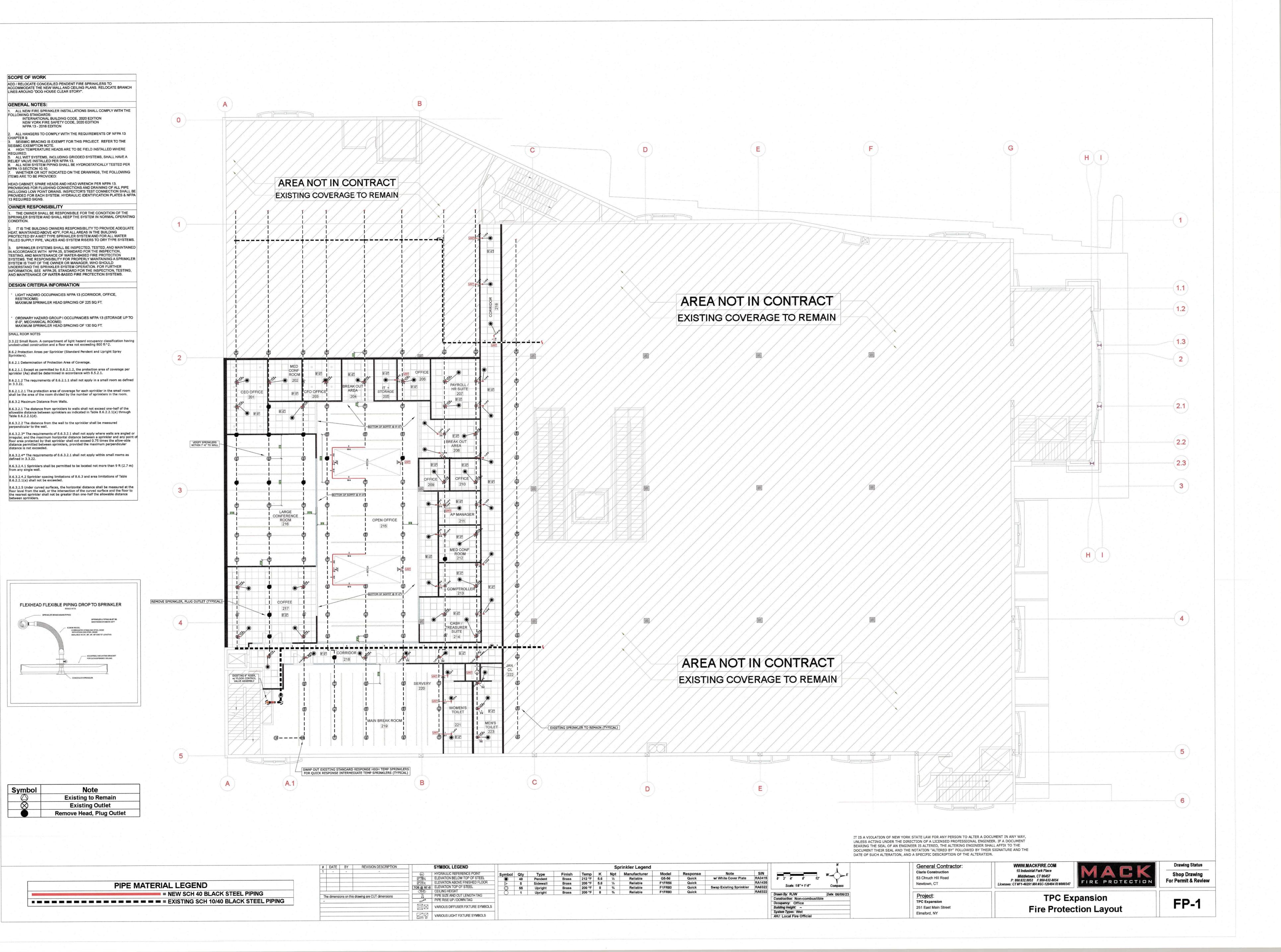
* Horn/Strobe and Strobe Only Signal Devices

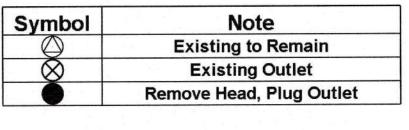
Heat and Smoke Detectors where required Additional Communication (if required by the Fire Marshal)

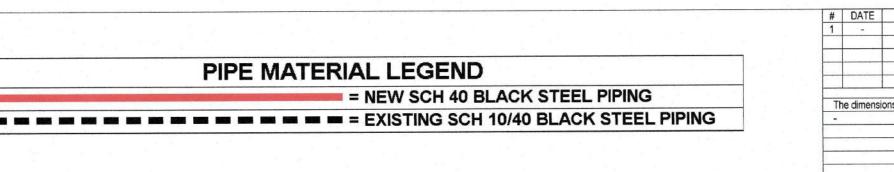
TYPE <u>SURF.</u> MAINS <u>225</u> AMPERES MAIN C.B. _____ AMPERES VOLTAGE ________ 120/208 VOLTS_____ FEEDER <u>EXISTING</u> CONNECTED LOAD _______ WATTS LOAD WIRING ASSIGNMENT (WATTS) 1600 3 #12W. - 3/4" C. CONV. RECEPT CONV. RECEPT B 1200 3 #12W. - 3/4" C. 800 3 #12W. - 3/4" C. CONV. RECEPT. 1200 3 #12W. - 3/4" C. CONV. RECEPT. B 1200 3 #12W. - 3/4" C. CONV. RECEPT 1200 3 #12W. - 3/4" C CONV. RECEPT CONV. RECEPT. 1200 3 #12W. - 3/4" C. B 1200 3 #12W. - 3/4" C. CONV. RECEPT. EXISTING EXISTING ---1000 3 #12W. - 3/4" C PRINTER EXISTING EXISTING EXISTING EXISTING EXISTING EXISTING EXISTING EXISTING B 20 EXISTING EXISTING 1200 3 #12W. - 3/4" C. CONV. RECEPT. B 1200 3 #12W. - 3/4" C. CONV. RECEPT. 600 3 #12W. - 3/4" C. CONV. RECEPT. A 400 3 #12W. - 3/4" C. CONV. RECEPT. B 600 3 #12W. - 3/4" C. CONV. RECEPT. C --- --- SPARE

> **ISSUED FOR** BUILDING PERMIT 06/07/23









BY REVISION DESCRIPTION		SYMBOL LEGEND							Sp	rinkler Legend			
	(101)	HYDRAULIC REFERENCE POINT	Symbol	Qty	Туре	Finish	Temp	ĸ	Npt	Manufacturer	Model	Response	Note
	<i>0* 78</i> €	ELEVATION BELOW TOP OF STEEL		48	Pendent	Brass	212 °F	5.6	1/2	Reliable	G5-56	Quick	w/ White Cove
	0" FF ¢	ELEVATION ABOVE FINISHED FLOOR		5	Sidewall	Brass	200 °F	5.6	1/2	Reliable	F1FR56	Quick	
	TOS @ 10'-0	ELEVATION TOP OF STEEL		55	Upright	Brass	200 °F	8	3/4	Reliable	F1FR80	Quick	Swap Existing S
	(10-0)	CEILING HEIGHT		1	Upright	Brass	200 °F	8	3/4	Reliable	F1FR80	Quick	
ions on this drawing are CUT dimensions	1%	PIPE SIZE AND CUT LENGTH TAG			-1, 3							-	
	1%XES	PIPE RISE UP / DOWN TAG											
		VARIOUS DIFFUSER FIXTURE SYMBOLS											
		VARIOUS LIGHT FIXTURE SYMBOLS	1										

	Α	B	С
1			
2			
3			
4			
5			
6			
7			

	AB
ABBREVIATION	DESCRIPTION
AC ACCU AD AFF AH AHJ AHU APD AS AWT B BF BHP BMS BTUH CAP CBCS CFM CU CUH DCU DX EAT EDB EER EF ESP ET EWB EWT FF FD FT FT WG FLA	AIR CONDITIONER AIR CONDITIONER CONDENSING UNIT ACCESS DOOR ABOVE FINISHED FLOOR AIR HANDLER AUTHORITY HAVING JURISDICTION AIR HANDLING UNIT AIR PRESSURE DROP AIR SEPARATOR AVERAGE WATER TEMPERATURE BOILER BYPASS FEEDER BREAK HORSEPOWER BUILDING MANAGEMENT SYSTEM BTU / HOUR CAPACITY CHILLED BEAM CHILLED WATER SUPPLY CUBIC FEET PER MINUTE CONDENSING UNIT CABINET UNIT HEATER DUCTLESS CONDENSING UNIT DIRECT EXPANSION ENTERING AIR TEMPERATURE (DRY BULB ENTERING DRY BULB ENERGY EFFICIENCY RATIO EXHAUST FAN EXTERNAL STATIC PRESSURE EXPANSION TANK ENTERING WATER TEMPERATURE DEGREES FAHRENHEIT FIRE DAMPER FEET OR FIN TUBE FEET WATER GAUGE FULL LOAD AMPS

D

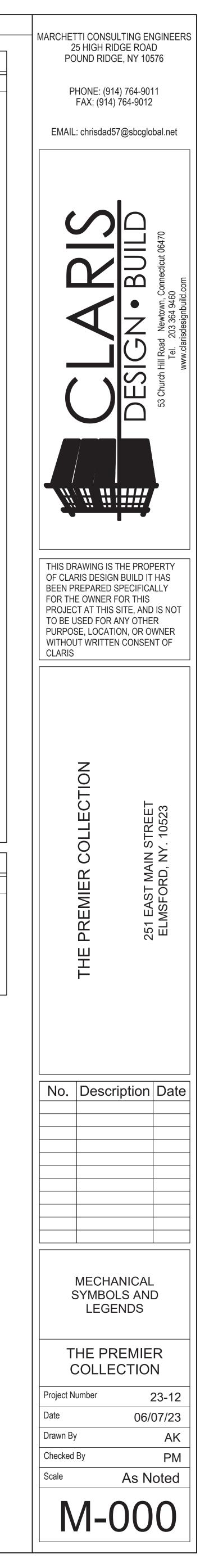
Е

J

ETR RL NL

EXISTING TO REMAIN RELOCATE NEW LOCATION

CONNECTION TO EXISTING



	Α	B	С
1			
2			
3			
4			
5			
6			
7			

D

Ε

<u>GENERAL PROCEDURES</u> 1. THESE SPECIFICATIONS ARE APPLICABLE TO ALL DRAWINGS UNLESS NOTED OTHERWISE. 2. DESCRIPTION

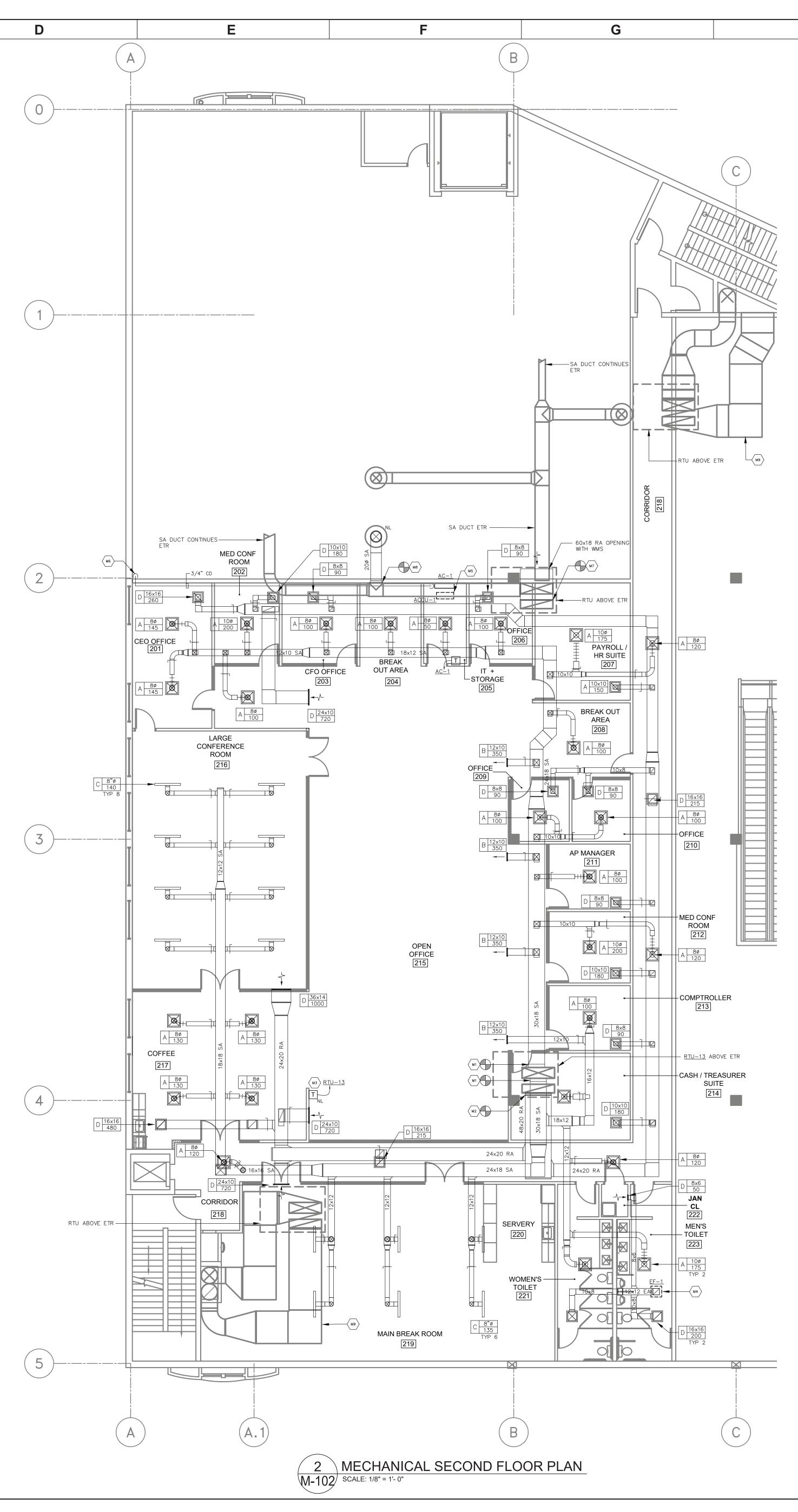
- A. THIS PROJECT COMPRISES ALTERATIONS AND EXISTING BUILDING. THE EXISTING BUILDING UNOCCUPIED.
- B. SCOPE OF WORK CONSISTS OF INSTALLATION BE FURNISHED UNDER THE CONTRACT DOCU LIMITING GENERALITY THEREOF CONSISTS OF MATERIALS, EQUIPMENT, HOISTING, PLANT, 1 RIGGING. STAGING. APPURTENANCES. AND SE AND/OR INCIDENTAL TO PROPERLY COMPLET SHOWN ON THE DRAWINGS AND AS DESCRIB
- SCOPE OF WORK SHALL INCLUDE BUT NOT B.A. DEMOLITION AND REMOVAL OF ITEMS AS B.B. DUCTWORK AND DUCTWORK ACCESSORIES
- B.C. INSULATION OF PIPING, EQUIPMENT AND B.D. TESTING AND BALANCING B.E. CUTTING AND PATCHING
- B.F. SHOP DRAWINGS. B.G. AS-BUILT DRAWINGS
- B.H. OPERATING AND MAINTENANCE MANUALS. B.I. FULL COORDINATION WITH OTHER TRADES
- B.J. WARRANTY AND GUARANTY B.K. PHASING AS REQUIRED BY OWNER, CONS GENERAL CONTRACTOR OR BUILDING MAN B.L. PREMIUM TIME FOR WORK TO BE PERFOR
- AS REQUIRED BY BUILDING MANAGEMENT B.M. FILING, PERMITS, CONTROLLED INSPECTION B.N. FULL TESTING AND STARTUP OF ALL SYS
- 3. DEFINITIONS: THE FOLLOWING DEFINITIONS APPLY A. FURNISH: THE TERM "FURNISH" MEANS TO DELIVER TO THE PROJECT SITE, READY FOR UNPACKING, ASSEMBLY, INSTALLATION, AND
- B. INSTALL: THE TERM "INSTALL" IS USED TO AT PROJECT SITE INCLUDING THE ACTUAL UNPACKING, ASSEMBLY, ERECTION, PLACING, APPLYING, WORKING TO DIMENSION, FINISHING PROTECTING, CLEANING, AND SIMILAR OPERAT
- C. PROVIDE: THE TERM "PROVIDE" MEANS "TO INSTALL, COMPLETE AND READY FOR THE INT
- D. NEW: THE TERM "NEW" MEANS MANUFACTUF TWO YEARS AND NEVER BEFORE USED. E. REMOVE: THE TERM REMOVE MEANS TO DIS
- PRESENT POSITION, REMOVE FROM THE PREI DISPOSE OF IN A LEGAL MANNER." F. RELOCATE: THE TERM "RELOCATE" MEANS EQUIPMENT AND ALL ACCESSORIES AS REQU
- WITHOUT DAMAGE, STORING AS NECESSARY AND NEW CONSTRUCTION PHASES. G. SUBSTITUTIONS: "SUBSTITUTIONS" ARE REQU
- IN PRODUCTS, MATERIALS AND METHODS OF PROPOSED BY THE CONTRACTOR AFTER AWA 4. CONTRACT DOCUMENTS: DRAWINGS A. PRIOR TO SUBMISSION OF A FORMAL BID,
- SHALL REVIEW ALL DRAWINGS OF THE ENTIRI GENERAL CONSTRUCTION, DEMOLITION, ARCHIT MECHANICAL, ELECTRICAL, PLUMBING, AND SI INCLUDE ANY WORK REQUIRED IN THE BID OR IMPLIED TO BE PERFORMED BY THIS TRA SECTIONS OF THE WORK.
- B. PROVIDE ALL MATERIALS, EQUIPMENT AND LA COMPLETE THE WORK OUTLINED ON THESE DOCUMENTS. THE CONTRACTOR IS TO NOTE DOCUMENTS ARE DIAGRAMMATIC ONLY AND OF EQUIPMENT OR DEVICES IN THE FIELD M CORRESPOND TO THAT WHICH IS SHOWN ON A CONFLICT IN POSITIONING OCCURS THE C NOTIFY THE ENGINEER IMMEDIATELY TO ASCE INTENT WAS BY THE DESIGN PROFESSIONAL COORDINATED WITH OTHER TRADES TO AVOID CONFLICT OCCURS IN THE SPECIFICATIONS THE MORE STRINGENT SITUATION SHALL APPL
- 5. SURVEY AND MEASUREMENTS: A. PRIOR TO SUBMITTING BID, VISIT SITE AND
- CONDITIONS AND DIFFICULTIES THAT WILL AFI PERFORMED. NO COMPENSATION WILL BE ADDITIONAL WORK CAUSED BY UNFAMILIARIT CONDITIONS THAT ARE VISIBLE OR READILY EXPERIENCED OBSERVERS. INCLUDE IN THE WORK REQUIRED.
- B. DO NOT SCALE DRAWINGS. SCALE INDICATED FOR ESTABLISHING REFERENCE POINTS ONL CONDITIONS SHALL GOVERN ALL DIMENSIONS
- C. PRIOR TO ORDERING ANY MATERIALS AND E THOROUGHLY REVIEW THE SITE CONDITIONS ADEQUATE CLEARANCES AND ACCESS IS ALL COMPONENTS. ORDER EQUIPMENT BROKEN TO ALLOW FOR PROPER RIGGING THROUGH PROVIDE ALL NECESSARY ALTERATIONS TO T THE BUILDING AS NECESSARY TO RIG THE D. ARRANGE INSTALLATION TO PROVIDE ACCESS
- EASY MAINTENANCE AND REPAIR. 6. CODES AND STANDARDS: ALL WORK SHALL BE ACCORDANCE WITH THE LATEST STATE OF NEW VERSION OF THE FOLLOWING CODES. CONTRACTO ENGINEER OF ANY EXISTING WORK OR MATERIAL OF THE LAWS AND REGULATIONS LISTED BELOW. THE CONTRACTOR CAUSING SUCH VIOLATION S
- AT THE EXPENSE BY THIS CONTRACTOR AND AT OWNER.
- A. INTERNATIONAL RESIDENTIAL CODE B. INTERNATIONAL BUILDING CODE
- C. INTERNATIONAL PLUMBING CODE
- D. INTERNATIONAL MECHANICAL CODE E. NATIONAL ELECTRIC CODE (NFPA 70)
- F. THE LIFE SAFETY CODE (NFPA 101)
- 7. PERMITS AND FEES: THE CONTRACTOR SHALL G NOTICES, OBTAIN ALL PERMITS; AND PAY ALL G STATE SALES TAXES AND FEES WHERE APPLICAE COSTS, INCLUDING UTILITY CONNECTIONS OR EXT CONNECTION WITH THE WORK, FILE ALL NECESS PREPARE ALL DOCUMENTS AND OBTAIN ALL NEC OF ALL GOVERNMENTAL AND STATE DEPARTMENT JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATI FOR HIS WORK, AND DELIVER A COPY TO THE AT JOB COMPLETION.
- 8. SHOP DRAWINGS:
- A. SUBMIT NEWLY PREPARED INFORMATION, DRA SCALE OF 1/4"=1'0". HIGHLIGHT, ENCIRCLE INDICATE DEVIATIONS FROM THE CONTRACT REPRODUCE CONTRACT DOCUMENTS OR COP INFORMATION AS THE BASIS OF SHOP DRAWI INFORMATION PREPARED WITHOUT SPECIFIC PROJECT IS NOT CONSIDERED SHOP DRAWIN
- B. SHOP DRAWINGS INCLUDE EQUIPMENT SUBMITTALS, FABRICATION AND INSTALLATION DRAWINGS, SETTING DIAGRAMS, SCHEDULES, PATTERNS, TEMPLATES AND SIMILAR DRAWINGS. INCLUDE THE FOLLOWING INFORMATION:
- a. DIMENSIONS. b. IDENTIFICATION OF PRODUCTS AND MATERIALS INCLUDED.
- c. COMPLIANCE WITH SPECIFIED STANDARDS AND PERFORMANCE DATA AS INDICATED. d. NOTATION OF COORDINATION REQUIREMENTS.
- e. NOTATION OF DIMENSIONS ESTABLISHED BY FIELD MEASUREMENT.
- f. SUBMIT 3 BLACK-LINE PRINTS AND 2 ADDITIONAL PRINTS WHERE REQUIRED FOR MAINTENANCE MANUALS, PLUS THE NUMBER OF PRINTS NEEDED BY THE ENGINEER FOR DISTRIBUTION. ONE PRINT WILL BE RETAINED; THE REMAINDER RETURNED. ONE OF THE PRINTS RETURNED SHALL BE MARKED-UP AND MAINTAINED AS A "RECORD DOCUMENT".
- g. DO NOT USE SHOP DRAWINGS WITHOUT AN APPROPRIATE FINAL STAMP INDICATING ACTION TAKEN IN CONNECTION WITH
- CONSTRUCTION.
- h. DO NOT ORDER ANY MATERIALS OR EQUIPMENT PRIOR TO RECEIVING FINAL APPROVED SHOP DRAWINGS.
- i. PROVIDE SUBMITTALS AS INDICATED IN SPECIFIC SPECIFICATION SECTIONS.
- 9. USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER
- PERFORMANCE OF THE WORK. 10. THE CONTRACTOR SHALL COORDINATE ALL INTERRUPTIONS OF SERVICES AND LIMITATIONS OF ACCESS WITH THE OWNER NO LESS

G	Н	I		J
L MECHANICAL	THAN 2 DAYS PRIOR TO THE INTERRUPTION. 11. OPERATION AND MAINTENANCE	4. WALL PEI	NETRATIONS:	
ND RENOVATIONS TO THE IG IS CURRENTLY	A. UPON COMPLETION OF ALL WORK AND TESTS, THE CONTE SHALL INSTRUCT THE OWNER OR THE OWNER'S REPRESEI IN THE OPERATION, ADJUSTMENT AND MAINTENANCE OF A EQUIPMENT FURNISHED. THE CONTRACTOR SHALL GIVE A	RACTOR WOOL NTATIVE PENE ILL	OPENINGS AROUND DUCTS THRO OR OTHER NON-COMBUSTIBLE TRATIONS THROUGH WALLS AIRTIO	MATERIAL. SEAL ALL DUCT
ON OF MATERIALS TO	SEVEN (7) DAYS NOTICE TO THE OWNER AND THE ENGIN ADVANCE OF THIS PERIOD.	EER IN 5. PIPING A		
CUMENTS AND WITHOUT CUMENTS AND WITHOUT F FURNISHING LABOR, TRANSPORTATION, SERVICES NECESSARY ETE ALL WORK AS IBED HEREIN. THE I BE LIMITED TO:	B. THE CONTRACTOR SHALL PREPARE THREE (3) COPIES OF COMPLETE OPERATION AND MAINTENANCE MANUAL, BOUND BOOKLET FORM. ORGANIZE OPERATING AND MAINTENANCE INTO SUITABLE SETS OF MANAGEABLE SIZE. BIND PROPE INDEXED DATA IN INDIVIDUAL HEAVY-DUTY 3-RING VINYL-COVERED BINDERS, WITH POCKET FOLDERS FOR FO SHEET INFORMATION AND DESIGNATION PARTITIONS WITH	A SOLVE D IN TIN-A E DATA ERLY 6. INSULATIO	DENSATE DRAIN : SHALL BE SCHE ENT WELD FITTINGS OR TYPE L (ANTIMONY SOLDER FILLER METALS DN: .ATION THICKNESS SHALL BE IN A	COPPER TUBING WITH 95-5 S.
S REQUIRED. ES.	IDENTIFICATION TABS. MARK APPROPRIATE IDENTIFICATION FRONT AND SPINE OF EACH BINDER.	ON EDITIC LESS	ON OF THE IECC EXCEPT THAT PIF THAN 1" THICK AND, FLEXIBLE DU BE LESS THAN 1–1/2" THICK. AU	PE INSULATION SHALL NOT BE
DUCTWORK.	C. OPERATION AND MAINTENANCE MANUAL SHALL INCLUDE TH FOLLOWING: a. MANUFACTURER'S PRINTED OPERATING AND MAINTENA PROCEDURES.	HL ADHE: SPRE/ ANCE OF 50 ANCE ALL II	SIVES, COATINGS, AND OTHER ACC AD RATINGS OF 25 OR LESS, AND O OR LESS AS TESTED BY ASTM F NSULATION MATERIALS SHALL BE THE MANUFACTURERS RECOMMENT	CESSORIES SHALL HAVE FLAME SMOKE DEVELOPED RATINGS E-84 (NFPA 255) METHOD. INSTALLED IN ACCORDANCE
S. ES.	 MAINTENANCE PROCEDURES FOR ROUTINE PREVENTAT MAINTENANCE AND TROUBLESHOOTING. 	TIVE WITH	THE LATEST EDITION OF SMACNA INSULATION SHALL BE FIBERGLASS	AND ASHRAE STANDARDS.
NSTRUCTION MANAGER,	c. COPIES OF WARRANTIES. d. APPROVED SHOP DRAWINGS AND PRODUCT DATA.		ET. PROVIDE INSULATION FOR THE	SHALL BE FLEXIBLE
ANAGEMENT FORMED AFTER-HOURS NT AND/OR OWNER. IONS. YSTEMS. LY TO THIS CONTRACT	e. BALANCE REPORTS. f. INCLUDE IN THE MANUAL, A TABULATED EQUIPMENT SCHEDULE FOR ALL EQUIPMENT. SCHEDULE SHALL PERTINENT DATA SUCH AS: MAKE, MODEL NUMBER, S	JACKE SPACI SHALI INCLUDE SMOO SERIAL FOLLO	GLASS DUCTWORK INSI ET. DUCT INSULATION INSTALLED ES SHALL BE MINIMUM R-6. DUC L BE CELLULAR GLASS WITH FACE TH DAMAGE RESISTANT FINISH. F DWING DUCTWORK SYSTEMS:	CTWORK ACOUSTIC LINING BONDED TO PROVIDE A
O "PURCHASE AND R UNLOADING, SIMILAR OPERATIONS."	NUMBER, VOLTAGE, NORMAL OPERATING CURRENT, BE FILTER QUANTITIES AND SIZES, BEARING NUMBER, ET SCHEDULE SHALL INCLUDE MAINTENANCE TO BE DON FREQUENCY.	C. a. 1 NE AND b. 1	SUPPLY AIR DUCTWORK RETURN AIR DUCTWORK IN UNCON SPACE TEMPERATURE IS MORE TH FROM DUCT TEMPERATURE)	
O DESCRIBE OPERATIONS "UNLOADING, G, ANCHORING, HING, CURING, RATIONS."	g. MAINTENANCE AND INSTRUCTION MANUALS SHALL BE SUBMITTED TO THE OWNER AT THE SAME TIME AS TI SEVEN (7) DAY NOTICE IS GIVEN PRIOR TO THE INS PERIOD.	HE TRUCTION C. 1	OUTSIDE AIR INTAKE DUCTWORK OUTSIDE AIR AND EXHAUST PLENU	JMS AT LOUVER CONNECTIONS
TO FURNISH AND INTENDED USE."	12. AS-BUILT DRAWINGS A. PREPARE AS-BUILT DRAWINGS TO A SCALE OF 1/4"=1'-	O" OD	COMBUSTION AIR DUCTWORK RIOR DUCTWORK INSULATION MATE	RIALS SHALL BE 3" RIGID
TURED WITHIN THE PAST DISCONNECT FROM ITS REMISES AND TO	LARGER; DETAILING THE ACTUAL INSTALLATION OF MAJOR ELEMENTS, COMPONENTS, AND SYSTEMS OF MECHANICAL EQUIPMENT AND MATERIALS. WHERE SHOP DRAWINGS AR RECORD A CROSS-REFERENCE AT THE CORRESPONDING I ON THE AS-BUILT DRAWINGS. GIVE PARTICULAR ATTENTIC CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO ME	POLYS TIGHT LOCATION a. 1 ON TO	STYRENE (R-12 MINIMUM) WITH P C DUCTWORK INSULATION SHALL SUPPLY AIR DUCTWORK RETURN AIR DUCTWORK	VC JACKETING SEALED WATER
TO MOVE EXISTING QUIRED SAFELY AND BETWEEN DEMOLITION	AND RECORD AT A LATER DATE. B. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWN WAS NOT SHOWN ON CONTRACT DRAWINGS OR SHOP DRA	NER, BUT AWINGS. d. (OUTSIDE AIR INTAKE DUCTWORK OUTSIDE AIR AND EXHAUST PLENU	JMS AT LOUVER CONNECTIONS
QUESTS FOR CHANGES OF CONSTRUCTION AS VARD OF THE CONTRACT.	C. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICA D. ORGANIZE AS-BUILT DRAWINGS INTO MANAGEABLE SETS, H WITH DURABLE PAPER COVER SHEETS, AND PRINT SUITAB TITLES, DATES AND OTHER IDENTIFICATION ON THE COVER	BIND 7. PIPING IN BLE A. INSTA	COMBUSTION AIR DUCTWORK ISTALLATIONS ILL PIPING IN ACCORDANCE WITH GOOD PRACTICES.	ALL APPLICABLE CODES
THIS CONTRACTOR IRE PROJECT INCLUDING	EACH SET. 13. OBTAIN IN OWNER'S NAME WRITTEN EQUIPMENT AND MATERIAL WARRANTIES OFFERED IN MANUFACTURER'S PUBLISHED PRODU WITHOUT EXCLUSION OR LIMITATION.	L B. INSTA	LL UNIONS OR FLANGES IN PIPE E, CONTROL DEVICE AND AT FINA QUIPMENT.	
RECTURAL, SPRINKLER AND SHALL WHICH IS INDICATED RADE IN OTHER	14. GUARANTEE WORK OF THESE CONTRACT DOCUMENTS IN WRITI NOT LESS THAN ONE (1) YEAR FROM DATE OF FINAL NOTICE ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP	E OF D. INSTA	LL DIELECTRIC UNIONS TO JOIN LL AND ANCHOR PIPING TO ENS CONTRACTION.	
LABOR NECESSARY TO E CONTRACT	THIS PERIOD, PROMPT AND TO OWNER'S SATISFACTION AND O DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLA UNDER GUARANTEE WITHIN CONTRACT PRICE.	OF VENTO	IDE MANUAL AIR VENTS AT ALL I ES AT ALL LOW POINTS.	HIGH POINTS AND DRAIN
TE THAT THESE THAT FINAL PLACEMENT MAY NOT DIRECTLY DN THE DRAWINGS. IF	15. THIS CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE A OPERATION OF ALL SYSTEMS UNTIL THE FINAL ACCEPTANCE (WORK.	AND AND OF THE	IOR PIPING TO ENSURE PROPER CONTRACTION. ORT PIPING TO PREVENT VIBRATIO	
CONTRACTOR IS TO CERTAIN WHAT THE L. ALL WORK SHALL BE	16. ALL AIR CONDITIONING UNIT COMPRESSORS AND REFRIGERATION COMPONENTS SHALL HAVE A 5-YEAR WARRANTY.	ON CODES	ER SPACING ACCORDING TO DISTA S AND REGULATIONS.	
DID CONFLICT. IF AND/OR ON DRAWINGS, PPLY.	 17. SUBMIT TO THE OWNER AN OFFICIAL CERTIFICATE OF INSURAL THEIR RECORDS. <u>MEANS AND METHODS ALL TRADES</u> 1. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WIT 	A. THE AN IN	, ADJUSTING AND BALANCING MECHANICAL CONTRACTOR SHALL NDEPENDENT TESTING, ADJUSTING	, AND BALANCING (TAB)
IDENTIFY EXISTING AFFECT WORK TO BE GRANTED FOR	MANUFACTURER'S RECOMMENDATIONS 2. DO NOT BURN WASTE MATERIALS. DO NOT BURY DEBRIS OF	R EXCESS	CY TO PROVIDE TAB SERVICES F EMS. THE TAB AGENCY SHALL E CONMENTAL BALANCING BUREAU (BALANCE COUNCIL (AABC) IN THO	BE CERTIFIED BY NATIONAL (NEBB) OR THE ASSOCIATED
TY WITH SITE ' IDENTIFIED BY HE BID ALL DEMOLITION TED ON DRAWINGS IS	MATERIALS ON THE OWNER'S PROPERTY. DO NOT DISCHARGI VOLATILE, HARMFUL OR DANGEROUS MATERIALS INTO DRAINAG SYSTEMS. REMOVE AND DISPOSE OF ALL WASTE MATERIALS, PACKAGING MATERIAL, SKIDS ETC. FROM THE SITE AND DISPO IN A LAWFUL MANNER IN ACCORDANCE WITH MUNICIPAL, STAT FEDERAL REGULATIONS.	GE DISCH SHALL DSE OF IN TH	PLINES REQUIRED FOR THIS PRO L HAVE AT LEAST ONE PROFESSI IE STATE IN WHICH THE SERVICE CERTIFIED BY NEBB OR AABC AS NEER.	IONAL ENGINEER REGISTERED
LY. ACTUAL FIELD NS. EQUIPMENT,	3. MATERIALS AND EQUIPMENT SHALL BE UL LISTED WHERE STA HAS BEEN ESTABLISHED.	INDARD CONT INSTA	R TO TESTING, ADJUSTING, AND E RACTOR SHALL VERIFY THAT THE LLED AND ARE OPERATING AS S 'INGS, AS BUILT DRAWINGS, AND	SYSTEMS HAVE BEEN PECIFIED. APPROVED SHOP
S TO DETERMINE IF LLOWED TO INSTALL THE N DOWN AS NECESSARY I THE PROJECT AREA. THE STRUCTURE OF	 CAREFULLY INSPECT ALL BUILDING ELEMENTS PRIOR TO CUTT DRILLING INTO WALL, FLOORS OR CEILINGS. PATCH AND PAIL SURFACES DISTURBED BY WORK UNDER THIS CONTRACT AS F TO RESTORE THEM TO THEIR ORIGINAL CONDITION. SCAFFOLDING, RIGGING, HOISTING: THE CONTRACTOR SHALL FUNCTION 	NT FOR REQUIRED MADE EFFOI EQUIF URNISH DAMA	EACH SYSTEM AND/OR COMPONE AVAILABLE AT THE JOB SITE DU RT. THE OWNER SHALL BE NOTIF PMENT, COMPONENTS, OR BALANG GED, INCORRECTLY INSTALLED, O	ENT TO BE TESTED SHALL BE JRING THE ENTIRE TAB FIED IN WRITING OF ALL CING DEVICES, THAT ARE DR MISSING, AS WELL AS ANY
EQUIPMENT IN PLACE.	ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESS. ERECTION AND DELIVERY INTO THE PREMISES ANY EQUIPMENT APPARATUS FURNISHED UNDER THIS DIVISION. REMOVE SAMI PREMISES WHEN NO LONGER REQUIRED.	T AND ADJUS	GN DEFICIENCIES THAT WILL PREV STING, AND BALANCING. TESTING NCING SHALL NOT COMMENCE UN FR.	G, ADJUSTING, AND
COMPLETED IN V YORK ACCEPTED CTOR IS TO INFORM ALS WHICH VIOLATE ANY W. ANY WORK DONE BY	6. EXCAVATION AND BACKFILLING: IT IS THE RESPONSIBILITY OF CONTRACTOR TO COORDINATE SIZES, DEPTHS, FILL AND BEDE REQUIREMENTS AND ANY OTHER EXCAVATION WORK REQUIRED THESE SPECIFICATIONS	DING SYSTE DINDER PROC STANI ENVIR	ORM TESTING AND BALANCING PF EM IDENTIFIED, IN ACCORDANCE EDURES OUTLINED IN EITHER NE DARDS FOR TESTING, ADJUSTING, RONMENTAL SYSTEMS" OR AABC:	WITH THE DETAILED EBB: "PROCEDURAL AND BALANCING OF
SHALL BE CORRECTED AT NO EXPENSE TO THE	7. WATERPROOFING: WHERE ANY WORK PIERCES WATERPROOFING INCLUDING WATERPROOF CONCRETE, ROOFS, EXTERIOR WALL FLOORS IN WET AREAS, THE METHOD OF INSTALLATION SHALL REVIEWED BY THE ENGINEER BEFORE WORK IS DONE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY SLEEVES, CAUL AND FLASHING REQUIRED TO MAKE OPENINGS ABSOLUTELY	AND AND BE a.	_ SYSTEM BALANCE." THE TAB , BALANCE THE FOLLOWING MECHA ALL AIR HANDLING EQUIPMENT ALL SUPPLY AIR SYSTEMS	
	WATERTIGHT. 8. PROVIDE FIRESTOPPING AROUND ALL FIRE PROTECTION, PLUM	c IBING,	ALL RETURN AIR SYSTEMS VERIFY OPERATION OF ALL TEMP	PERATURE CONTROL SYSTEMS
	MECHANICAL AND ELECTRICAL PENETRATIONS THROUGH FIRE F PARTITIONS. PROVIDE ASBESTOS FREE FIRESTOPPING SYSTEM CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FL/ GASES. SYSTEM SHALL BE UL LISTED AND COMPLY WITH AS 814.	AME AND STM E D. SUBM THE S	TEST SYSTEMS FOR PROPER SOU IIT TESTING, ADJUSTING, AND BAU SEAL AND SIGNATURE OF THE TA	UND AND VIBRATION LEVELS LANCING REPORTS BEARING AB PROFESSIONAL ENGINEER.
GIVE ALL NECESSARY GOVERNMENT AND ABLE, AND OTHER EXTENSIONS IN SSARY DRAWINGS,	 ACCESS DOORS SHALL BE PROVIDED IN CEILINGS, WALLS AND FLOORS AT ALL DAMPERS, VALVES, CONTROL DEVICES, AND C APPARATUS AND EQUIPMENT REQUIRING PERIODIC SERVICE AN INSPECTION. COORDINATE TYPE AND LOCATION WITH ARCHITE PLANS. 	D UNSA OTHER CANN ND ECTURAL E. PROV	ARE A REPORT OF RECOMMENDA TISFACTORY MECHANICAL PERFOR OT BE SUCCESSFULLY BALANCED IDE ALL NECESSARY CONTROL DI RIALS, LABOR, WIRE AND CONDU	RMANCES WHEN A SYSTEM). EVICES, EQUIPMENT,
ECESSARY APPROVALS NTS HAVING ATES OF INSPECTION COWNER AND ENGINEER	10. SEISMIC RESTRAINTS SHALL BE INSTALLED AS REQUIRED PER BUILDING CODE AND FIRE SAFETY CODE. RESTRAINTS SHALL INSTALLED IN ACCORDANCE WITH NFPA 13 AND SMACNA STAN SUBMIT SHOP DRAWINGS INCLUDING SEISMIC CALCULATIONS W PROFESSIONAL ENGINEER'S SEAL FOR REVIEW BY ENGINEER.	. BE CONT NDARDS. TEFL	ENCES OF OPERATION AS INDICA L BE INSTALLED IN ACCORDANCE ROL WIRING INSTALLED WITHIN A ON COATED RATED FOR PLENUM	ATED. WIRING AND CONDUIT WITH DIVISION 16. ALL IR PLENUM SPACES TO BE
RAWN TO ACCURATE LE, OR OTHERWISE	HVAC SPECIFICATIONS 1. DUCTWORK AND ACCESSORIES			
DOCUMENTS. DO NOT DPY STANDARD WINGS. STANDARD REFERENCE TO THE 'INGS.	A. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS. THE MORE STRINGENT REQUIREMENT OF ANY SHALL APPLY.			
MINGS. MITTALS, FABRICATION GRAMS, SCHEDULES,	B. ALL DUCTWORK AND ACCESSORIES AS ITEMIZED HERE-IN BE HOT-DIPPED GALVANIZED SHEETMETAL CONSTRUCTION	WITH 60		

- BE HOT-DIPPED GALVANIZED SHEETMETAL CONSTRUCTION WITH 60 COMMERCIALCOATING ACCORDING TO ASTM 653 AND A924, INCLUDING ALL FITTINGS AND FASTENERS AND SHALL COMPLY WITH THE LATEST EDITION OF SMACNA STANDARDS FOR 2" PRESSURE CLASS. ALL DUCTWORK DIMENSIONS SHOWN ARE INSIDE CLEAR DIMENSIONS. ALL SQUARE DUCT ELBOWS ARE TO BE INSTALLED WITH TURNING VANES. ALL RADIUS DUCT ELBOWS SHALL HAVE MINIMUM CENTER LINE RADIUS EQUAL TO 1-1/2TIMES THE DUCT WIDTH. C. FLEXIBLE DUCT RUNOUTS SHALL NOT EXCEED 8 FEET IN LENGTH.
- SHALL BE PREINSULATED WITH VAPOR BARRIER, CPE INNER LINER, FACTORY FABRICATED, AND SHALL COMPLY WITH NFPA 90A AND UL 181. THE INSULATION MATERIAL SURFACE SHALL NOT BE EXPOSED TO THE AIR STREAM. FLEXIBLE DUCT RUNOUTS SHALL BE INSTALLED FULLY EXTENDED AND SUPPORTED TO MINIMIZE BENDS. FLEXIBLE DUCT SHALL BE AS MANUFACTURERD BY THERMAFLEX, TUTTLE AND BAILEY OR APPROVED EQUAL. FLEXIBLE DUCT CONNECTORS APPROXIMATELY 6 INCHES IN LENGTH SHALL BE PROVIDED WHERE SHEET METAL CONNECTIONS ARE MADE TO AIR HANDLING EQUIPMENT.
- 2. DUCT ACCESS DOORS SHALL BE PROVIDED IN DUCTWORK AT ALL: A. AUTOMATIC DAMPERS, COILS, CONTROL DEVICES, AND OTHER
- APPARATUS REQUIRING SERVICE AND INSPECTION. B. MANUAL BALANCING DAMPERS SHALL BE PROVIDED FOR EACH
- DIFFUSER, GRILLE AND REGISTER, EACH BRANCH OF THE MAIN TRUNK DUCT AND AS INDICATED ON THE DRAWINGS. C. INSTALLATION OF DIFFUSERS GRILLES AND REGISTERS SHALL BE
- COORDINATED WITH AND SUITABLE FOR INSTALLATION IN, ON, OR FROM CEILING, WALL OR FLOORS SPECIFIED ON THE ARCHITECTURAL PLANS. THE CONTRACTOR MUST VERIFY THE CEILING OR WALL TYPES PRIOR TO ORDERING. 3. VOLUME DAMPERS:
- A. DAMPERS SHALL BE GALVANIZED STEEL OR SAME AS DUCT CONSTRUCTION. CONFORM TO SMACNA HVAC DUCT CONSTRUCTION STANDARDS. INSTALL WITH LEVERS ACCESSIBLE THROUGH INSULATION. SPLITTER DAMPER OR AIR EXTRACTORS ARE PROHIBITED.



	Α	B	С
1			
2			
3			
4			
5			
6			
7			







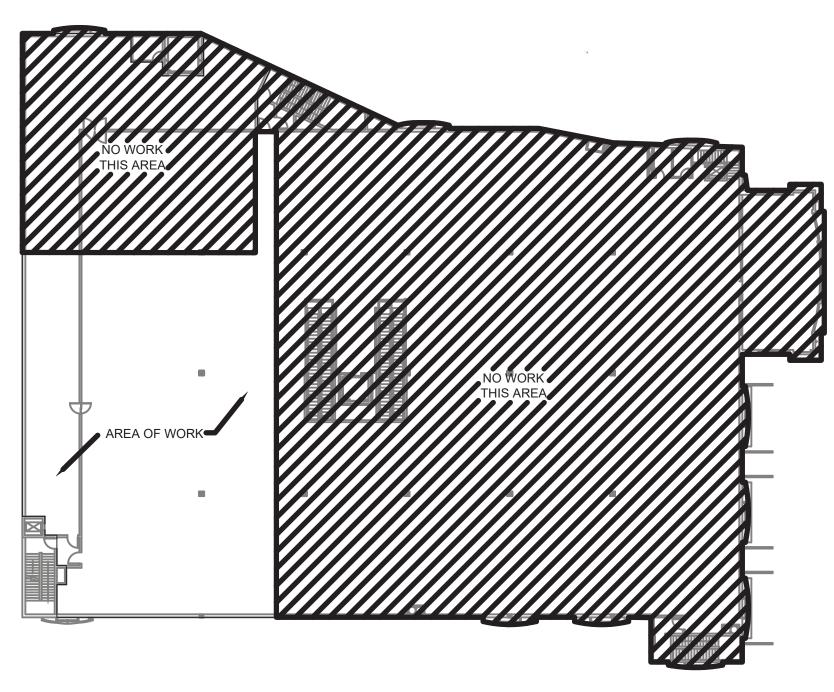


- ELBOWS IN DUCT SYSTEMS SHALL BE FULL RADIUS WHERE SPACE PERMITS. WHERE LIMITED CLEARANCE OCCURS. PROVIDE SHORT RADIUS ELBOW WITH FULL LENGTH SPLITTER VANES PER SMACNA, OR MITERED ELBOW WITH TURNING VANES PER SMACNA. FULL RADIUS DEFINED AS CENTERLINE = 1.5 DUCT WIDTH.
 DIFFUSER SIZES SHOWN ARE NECK SIZES; REGISTER AND GRILLE SIZE ARE NORMAL. ALL ROUND RUN OUTS TO DIFFUSERS SHALL BE FULL NOMINAL SIZE AS TAGGED NECK SIZE UNLESS NOTED AS LARGER. DUCT TRANSITIONS SHALL BE PROVIDED AS NECESSARY AT INLET TO DIFFUSER.
 NOT ALL MANUAL DAMPERS ARE SHOWN ON DRAWINGS IN ORDER TO MAINTAIN DRAWING CLARITY. PROVIDE MANUAL ADJUSTABLE DAMPERS ON EACH LOW PRESSURE SUPPLY, RETURN, AND EXHAUST DUCT TAKE-OFF TO REGISTERS, GRILLES, DIFFUSERS AND OPEN ENDED DUCTWORK AS REQUIRED FOR PROPER BALANCE OF SYSTEM. PROVIDE CABLE OPERATED DAMPERS WHERE MANUAL DAMPER IS NOT ACCESSIBLE.
 PIPE CONDENSATE DRAIN LINES FULL SIZE OF THE UNIT DRAIN OUTLET WITH "P" TRAP.
 REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DIFFUSERS, GRILLES, AND REGISTERS.

MECHANICAL KEY NOTES

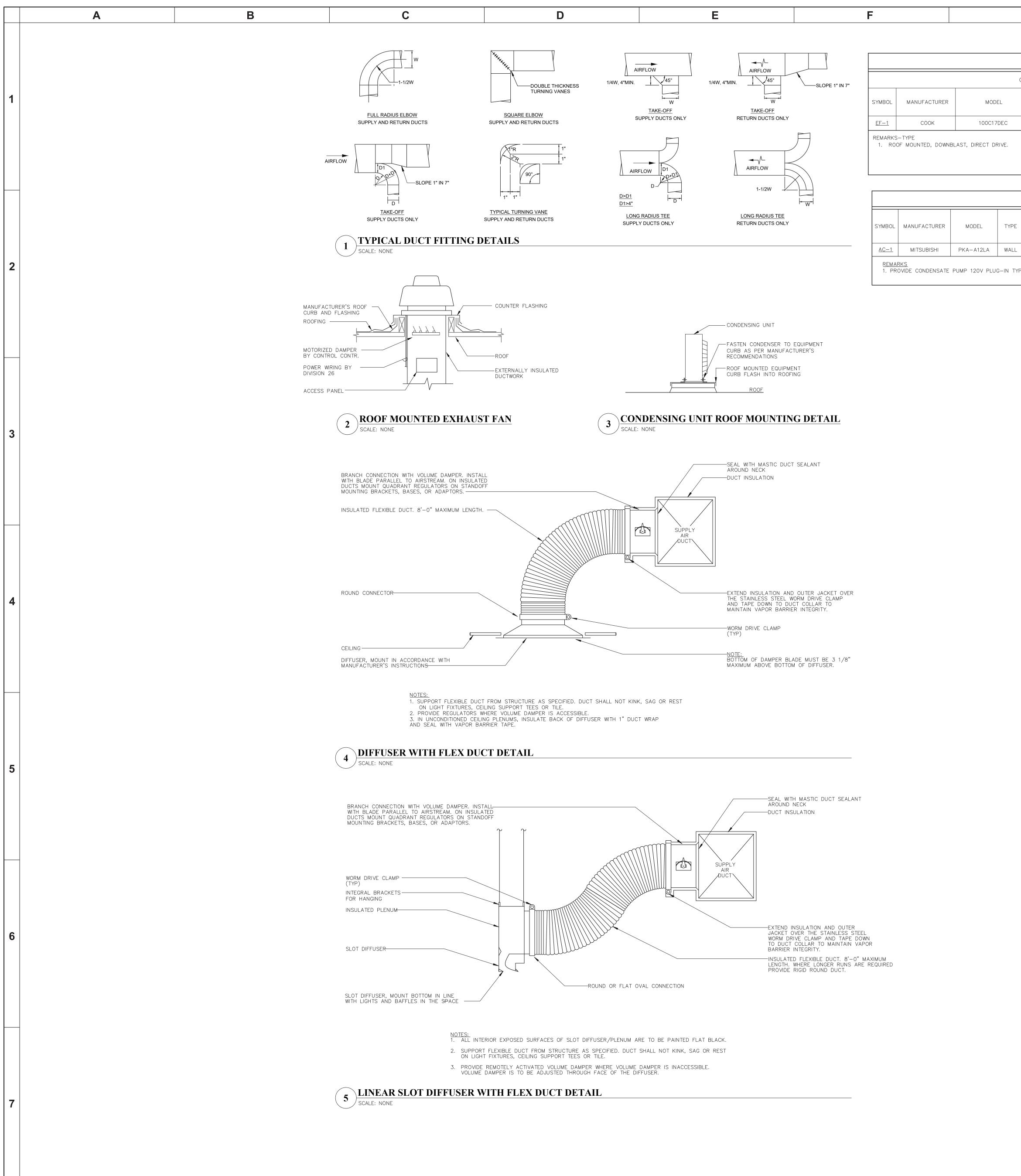
	\frown		NEW 30x18 SA DUCT CONNECTION TO EXISTING SA DUCT THROUGH ROOF TO RTU-13. EXTEND EXISTING DUCTWORK	
<	M1	\rangle	AS NECESSARY FOR NEW CONNECTIONS AND CAP OPEN END.	

- $\begin{array}{|c|c|c|c|c|c|} \hline M2 \end{array} & \begin{array}{|c|c|c|c|c|c|} & \text{New 48x20 RA DUCT CONNECTION TO EXISTING RA DUCT THROUGH ROOF TO RTU-13. RUN DUCT MAIN HIGH, ABOVE NEW SA DUCTWORK. VERIFY ELEVATIONS IN FIELD. \end{array}$ (M2)
- NEW LOCATION OF EXISTING TEMPERATURE SENSOR. EXTEND WIRING TO RTU-13. (мз)
- M4 12x12 EA UP TO NEW <u>EF-1</u> ON ROOF. <u>EF-1</u> SHALL BE LOCATED MINIMUM 10' FROM ROOF EDGE AND MINIMUM 10' FROM ANY OUTSIDE AIR INTAKE. ACCU-1 LOCATED ON ROOF ABOVE. REFER TO SCHEDULES AND DETAILS FOR INSTALLATION INFORMATION. (м5)
- M6 3/4" CONDENSATE PIPING DOWN TO FLOOR BELOW. EXTEND PIPING DOWN TO 3' ABOVE EXTERIOR GRADE, PENETRATE THROUGH EXTERIOR WALL AND SPILL TO GRADE. COORDINATE LOCATIONS OF PIPE DROPS AND PENETRATIONS IN FIELD.
- мб M7 NEW 60x16 RA DUCT CONNECTION TO EXISTING RA DUCT THROUGH ROOF. EXTEND EXISTING RA DUCTWORK AS NECESSARY TO CONNECT NEW BRANCH BELOW THE EXISTING SA DUCTWORK. PROVIDE WIRE MESH SCREEN AT DUCT OPENING.
- M8 CONNECT NEW 20"Ø SA DUCT TO EXISTING SA DUCT MAIN WITH NEW TAP FITTING. CONNECT TO RELOCATED ROUND DIFFUSER. VERIFY LOCATIONS IN FIELD.
- RTU AND DUCTWORK SERVING FIRST FLOOR EXISTING TO REMAIN. (м9)









G	Н	J

		FAN S	SCHI	EDULE											
GENERAL			PHYS	5.	PE	ERFORMAN	CE			ELECTRICAI	L		REM	ARKS	
	LOCATION	SERVICE	WEIGH (LBS)		SP (IN WG)	RPM	SONES	BHP	HP	VOLTS	PHASE	TYPE	RATINGS	FEATURES	INSTALL
	ROOF	BATHROOMS & JANITOR CLOSET	24	450	0.5	1,725	7.6	92 WATTS	1/4	120	1	1	ALL	ALL	ALL
	REMARKS-RATINGS 1. AIR PERFORMAN ACCORDANCE T 2. SOUND PERFOR ACCORDANCE T 3. UL LISTED	O AMCA 210 MANCE CERTIFIED IN		REMARKS-FE 1. UNIT M		PEED CON	TROLLER	· · · ·		1.	RKS-INSTA FAN CONTI OPERATE (OCCUPANC PROVIDE F	ROLLED BY CONTINUOU Y SCHEDU	JSLY ON B ILE.		HALL

SPLIT SYSTEM AC UNIT - INDOOR AIR HANDLER SCHEDULE

		FAN	CAPA	CITIES	REFRIGERANT	PIPING FROM	_			COLIND	
LOCATION	NOM. TONS	CFM	COOLING	HEATING	CONTROLLER TO	D AIR HANDLER	E	ELECTRICA	L	SOUND (dBA)	REMARKS
		(LOW-HIGH)	(BTUH)	(BTUH)	LIQUID	GAS	МСА	VOLTS	PHASE		
IT CLOSET	1.0	260-400	12,000	—	1/4"	1/2"	1.0	208	1	34-48	ALL
		· · · · · · · · · · · · · · · · · · ·									

1. PROVIDE CONDENSATE PUMP 120V PLUG-IN TYPE AS MANUFACTURED BY SAUERMAN OR APPROVED EQUAL.

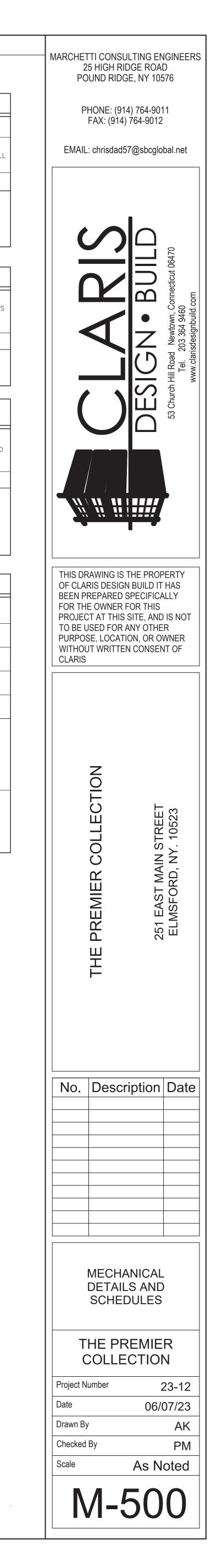
					САРА	CITIES		ELECTRICA	L				
SYMBOL	MANUFACTURER	MODEL	LOCATION	NOMINAL TONS	COOLING (BTUH)	HEATING (BTUH)	МСА	VOLTS	PHASE	SOUND (dBA)	WEIGHT (LBS)	REMARKS	UNITS SERVED
ACCU-1	MITSUBISHI	PUY-A12NKA7	ROOF	1.0	12,000	_	28	208	1	44	92	ALL	<u>AC-1</u>

SYMBOL	MANUFACTURER/	DUTY	TYPE	BORDER	CONSTRUCTION		REMARKS
STMBUL	MODEL NUMBER	DOTT	TIPE	TYPE	FRAME	BLADES	REMARKS
А	PRICE SPD SERIES	SUPPLY	DD	LAY-IN	STEEL	STEEL	1,5
В	PRICE 520 SERIES	SUPPLY	LF	SURFACE	STEEL	STEEL	2,5
С	PRICE SDS SERIES	SUPPLY	LS	_	ALUMINUM	ALUMINUM	3,4,5
D	PRICE 530 SERIES	RETURN/ EXHAUST	LF	SURFACE	STEEL	STEEL	2,5
LF – L	DIRECTIONAL DIFFUSEF OUVERED FACE INEAR SLOT	2	REGIS	TER/GRILLE— TYPE TAG		12×12 350	INDICATES NECK SIZE INDICATES DESIGN CFM

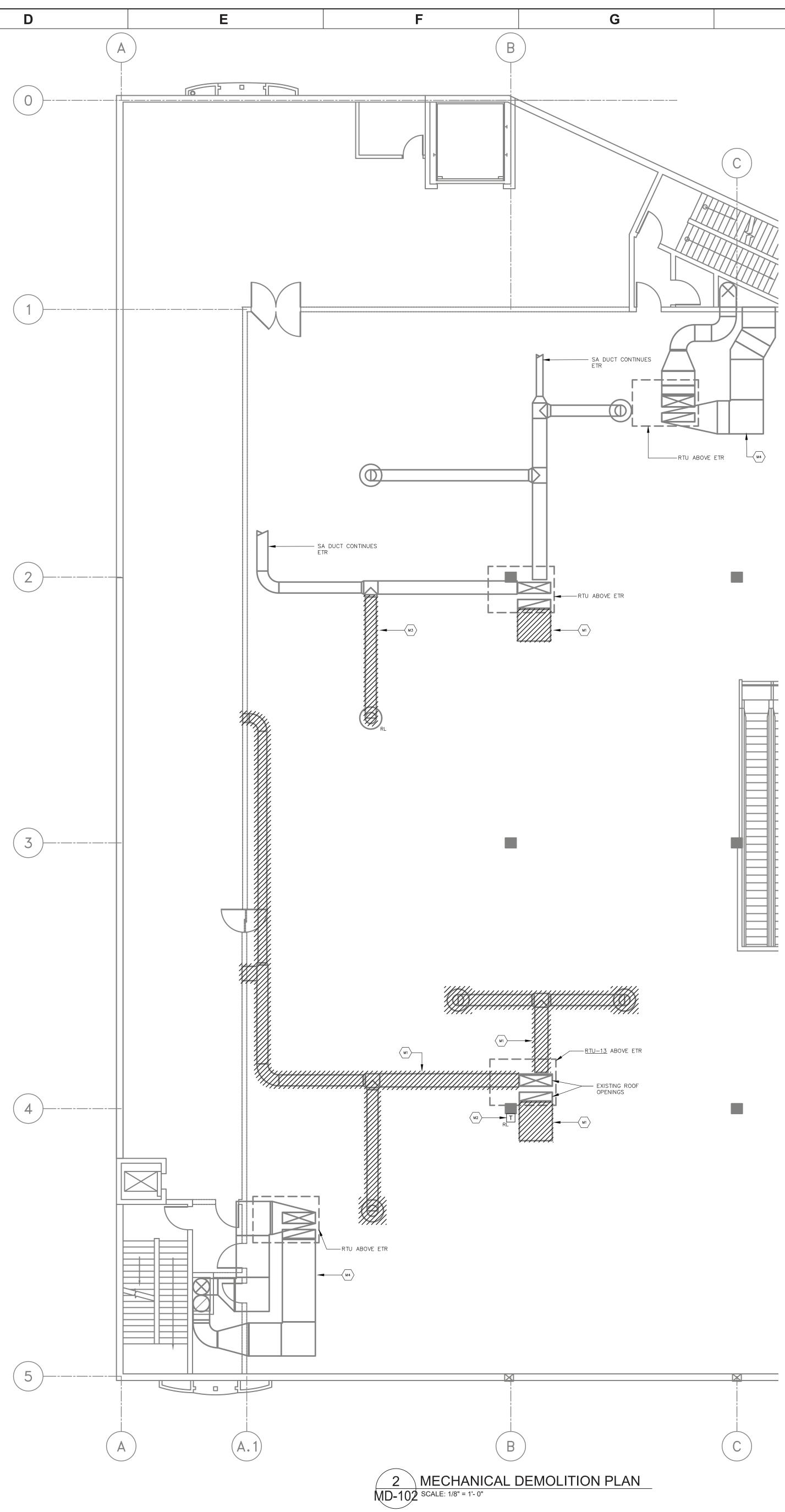
<u>REMARKS:</u> . 24x24 LAY IN PANEL

2. SURFACE MOUNTED WITH SCREWED FLANGE 3. SUSPEND DIFFUSER FROM BUILDING STRUCTURE WITH INTEGRAL BRACKETS. MANUFACTURER'S "TYPE 9" MOUNTING. 4. (2) 3/4" slots; 4'-0" length and manufacturer's SDB engineered plenum

5. COLOR SHALL BE WHITE UNLESS SPECIFIED BY ARCHITECT.

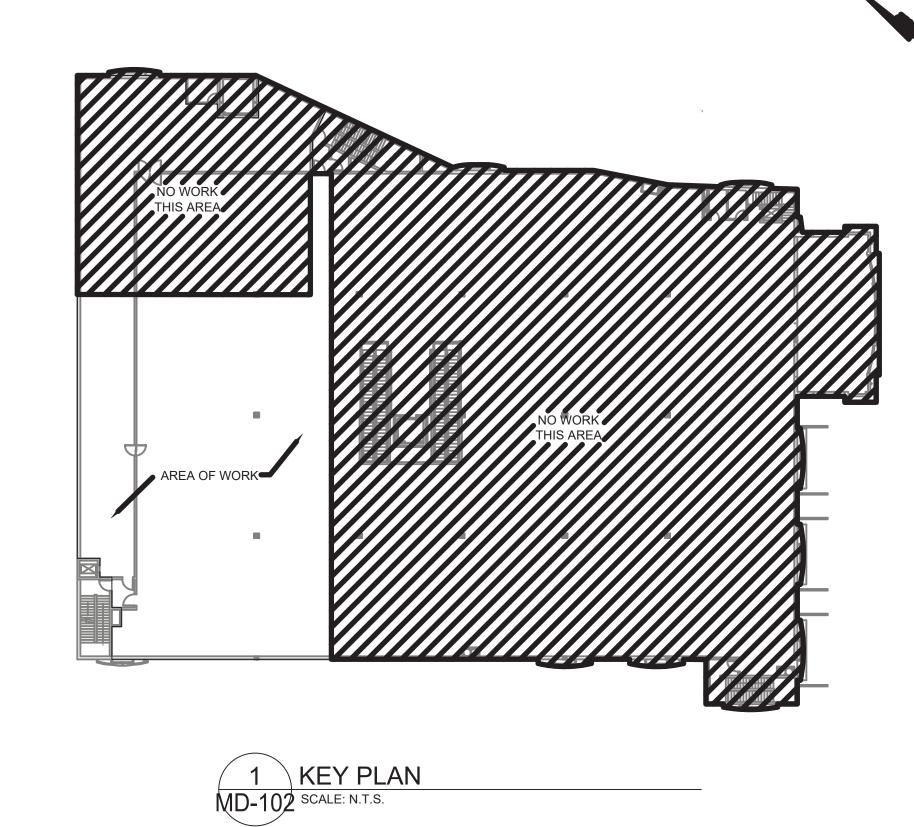


	Α	B	С
1			
2			
3			
4			
5			
6			
7			



Н	J

	MECHANICAL KEY NOTES
M1	DEMOLISH ALL DUCTWORK, FITTINGS, AND ACCESSORIES BACK TO THRU ROOF PENETRATION.
M2	EXISTING TEMPERATURE SENSOR TO BE RELOCATED AND REUSED IN NEW CONSTRUCTION.
M3	DEMOLISH BRANCH DUCTWORK BACK TO MAIN AND PATCH. DIFFUSER TO BE RELOCATED AND REUSED IN NEW CONSTRUCTION.
M4	RTU AND DUCTWORK SERVING FIRST FLOOR EXISTING TO REMAIN.





Γ		Α	В	С	
	1				
	2				
	2				
	3				
╞					
	4				
	-				
	5				
	6				
╞					
	7				
1	1				

D	E	F	

PLUMBING ABBREVIATIONS				
ABBREVIATION	DESCRIPTION			
AD AFF	ACCESS DOOR ABOVE FINISHED FLOOR			
AHU	ABOVE FINISHED FLOOR			
BFP	BACKFLOW PREVENTER			
BTU	BRITISH THERMAL UNIT			
CD	CONDENSATE DRAIN			
CFH	CUBIC FEET PER HOUR			
CI	CAST IRON			
CLG	CEILING			
CO	CLEANOUT			
CW	COLD WATER			
DF	DRINKING FOUNTAIN			
DN	DOWN			
DSN	DOWN SPOUT NOZZLE			
ET	EXPANSION TANK			
EWC	ELECTRIC WATER COOLER			
EWH	ELECTRIC WATER HEATER			
FCO	FLOOR CLEANOUT			
FCU	FAN COIL UNIT			
FLD	FLOOR DRAIN			
FLS	FLOOR SINK			
FFE	FINISHED FLOOR ELEVATION			
FGCO	FINISHED GRADE CLEANOUT			
FM	FORCED MAIN			
G	GAS (OR (NG) NATURAL GAS)			
-				
GPM	GALLONS PER MINUTE			
GSV	GAS SOLENOID VALVE			
HB	HOSE BIBB			
HW	HOT WATER			
HWR	HOT WATER RECIRCULATION			
INT	INTERCEPTOR			
INV ELEV	INVERT ELEVATION			
IW	INDIRECT WASTE			
LAV	LAVATORY			
MBH	THOUSAND BTU PER HOUR			
NG	NATURAL GAS (OR (G) GAS)			
OD	OVERFLOW DRAIN			
PCD	PUMPED CONDENSATE DRAIN			
PRV	PRESSURE REDUCING VALVE			
RD	ROOF DRAIN			
RTU	ROOF TOP UNIT			
S	SINK			
SW	SANITARY WASTE			
ST	STORM			
SST	SECONDARY STORM			
SAN	SANITARY			
TD	TRENCH DRAIN			
TMV	THERMOSTATIC MIXING VALVE			
TP	TRAP PRIMER			
TP TYP	TYPICAL			
U				
V	VENT			
VS	VENT STACK			
VTR	VENT THRU ROOF			
W	WASTE			
WC	WATER CLOSET			
WCO	WALL CLEANOUT			
WHA	WATER HAMMER ARRESTOR			
WS	WASTE STACK			
W&V	WASTE AND VENT			

WASTE AND VENT

V&W

PLUMBING PIPING LEGEND	

J

PLUMBIN	PLUMBING PIPING LEGEND					
SYMBOL						
CW HWR HWR SW IW RCD RCD ST ST GC ST ST	COLD WATER EXISTING COLD WATER HOT WATER (110°F) HOT WATER RECIRCULATION (110°F) HOT WATER RECIRCULATION (110°F) SANITARY WASTE VENT INDIRECT WASTE CONDENSATE DRAIN ABOVE FLOOR PUMPED CONDENSATE DRAIN ABOVE FLOOR STORM ABOVE FLOOR (PRIMARY) STORM BURIED (PRIMARY) STORM BURIED (PRIMARY) STORM ABOVE FLOOR (SECONDARY) NATURAL GAS ABOVE FLOOR NATURAL GAS BURIED 90° ELBOW DOWN 90° ELBOW UP TEE UP TEE DOWN DROP AND RUN TEE OFF TOP OF PIPE TEE OFF BOTTOM OF PIPE TEE OFF BOTTOM OF PIPE CONCENTRIC REDUCER					
	UNION					
	FLANGE					
]	END CAP					
	CLEANOUT					
©	FLOOR CLEANOUT					
+ ^T	HOSE BIBB					
I	WALL HYDRANT					
	PIPE GUIDES					
×	PIPE ANCHORS					
│ ────────────────────────────────────	DIRECTION OF FLOW					
	FLOOR DRAIN/FLOOR SINK/AREA DRAIN WITH PIPE TRAP					

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
\mathbf{M}	CHECK VALVE
ц.	BALL VALVE
${}^{\bigtriangledown}$	BALANCING VALVE
₩.	THERMOSTATIC MIXING VALVE
$\overline{\mathbf{A}}$	GLOBE VALVE
بطر بر	BUTTERFLY VALVE
ιΦι	PLUG VALVE
J L L L L L L L L L L L L L L L L L L L	RELIEF VALVE
Γ ,	STRAINER
$(\bigcirc + -)$	FLOOR DRAIN WITH PIPE TRAP
\bigcirc	PUMP
<u>L-1</u>	FIXTURE TAG
	THERMOMETER
	PRESSURE GAUGE
X	PRESSURE REGULATOR
	GATE VALVE ON RISE
	PIPE TRAP

PLUMBING GENERAL NOTES

- 1. THESE GENERAL NOTES ARE APPLICABLE TO ALL PLUMBING DRAWINGS.
- 2. DRAWINGS ARE DIAGRAMMATIC AND SHOW GENERAL INTENT OF WORK, SEE DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- 3. PLUMBING CONTRACTOR MUST REVIEW DRAWINGS OF THE OTHER TRADES AS PART OF THIS CONTRACT FOR ADDITIONAL WORK REQUIRED AND OR COORDINATION OF HIS WORK FOR OPERATIONS OR CONNECTIONS TO OTHER SYSTEM.
- 4. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR PROVIDING & INSTALLING ALL SERVICES TO HVAC EQUIPMENT INCLUDING BUT NOT LIMITED TO: GAS SUPPLY PIPING CONDENSATE PIPING, COLD WATER MAKE—UP PIPING DRAINS, & CONNECTIONS TO AIR HANDLING UNITS, FAN COIL UNITS, UNIT HEATERS, BOILERS, CHILLERS, ETC. ALSO, DEVICES REQUIRED INCLUDE BACKFLOW PREVENTERS, REGULATORS, UNIONS, TRAPS, & SHUT—OFF VALVES REQUIRED FOR THIS EQUIPMENT. REFER TO HVAC DWGS. FOR ADDITIONAL INFORMATION AND COORDINATION.
- 5. THE PLUMBING CONTRACTOR SHALL PROVIDE PIPE EXPANSION JOINTS ON PIPING PASSING THRU ALL BUILDING EXPANSION JOINT LOCATIONS AS REQUIRED PER BUILDING CODES WHETHER OR NOT SHOWN ON DRAWINGS. REVIEW ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXACT BUILDING EXPANSION JOINT LOCATIONS AND EXPANSION DIMENSIONS.
- 6. THE PLUMBING CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL PIPING UP TO 5'0" OUTSIDE OF BUILDING.
- 7. LAVATORY FAUCETS SHALL BE LOCATED WITHIN 13 INCHES FROM THE LEADING EDGE OF LAVATORIES IN ACCORDANCE WITH FEDERAL REGISTER RULES AND REGULATIONS.



	Α	B	С
1			
2			
3			
4			
5			
6			
7			

- UNLESS NOTED OTHERWISE. 2. DESCRIPTION
- A. THIS PROJECT COMPRISES ALTERATIONS AND RENOVATIONS TO THE EXISTING BUILDING. THE EXISTING BUILDING IS CURRENTLY UNOCCUPIED.

G

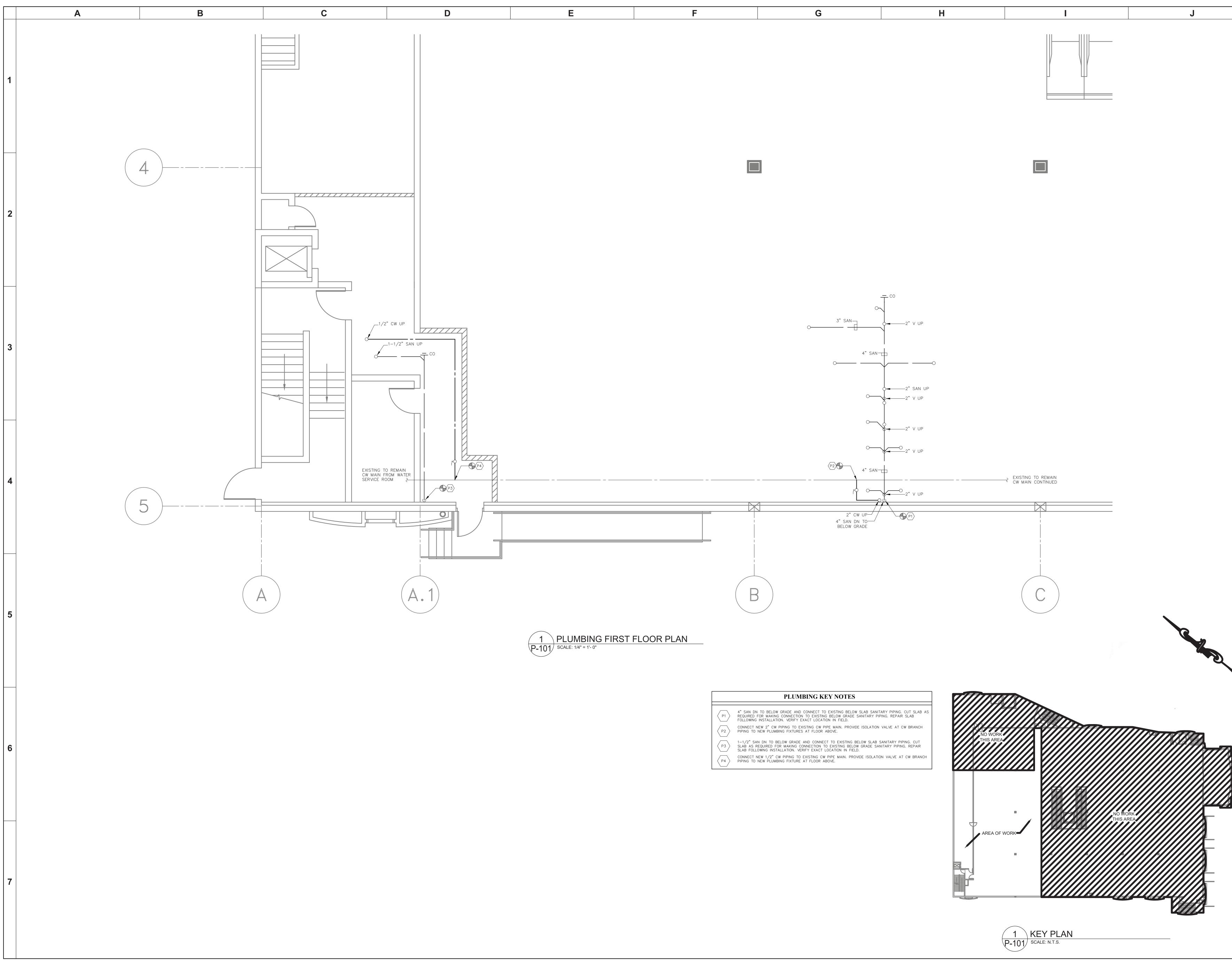
- B. SCOPE OF WORK CONSISTS OF INSTALLATION OF MATERIALS TO BE FURNISHED UNDER THE CONTRACT DOCUMENTS AND WITHOUT LIMITING GENERALITY THEREOF CONSISTS OF FURNISHING LABOR, MATERIALS, EQUIPMENT, HOISTING, PLANT, TRANSPORTATION, RIGGING, STAGING, APPURTENANCES, AND SERVICES NECESSARY AND/OR INCIDENTAL TO PROPERLY COMPLETE ALL WORK AS SHOWN ON THE DRAWINGS AND AS DESCRIBED HEREIN. THE
- SCOPE OF WORK SHALL INCLUDE BUT NOT BE LIMITED TO: B.A. DEMOLITION AND REMOVAL OF ITEMS AS REQUIRED.
- B.B. PIPING AND PIPING ACCESSORIES.B.C. INSULATION OF PIPING, EQUIPMENT, AND MISCELLANEOUS
- PLUMBING ITEMS. B.D. CUTTING AND PATCHING
- B.E. SHOP DRAWINGS. B.F. AS-BUILT DRAWINGS
- B.G. FULL COORDINATION WITH OTHER TRADES.B.H. WARRANTY AND GUARANTY
- B.I. PHASING AS REQUIRED BY OWNER, CONSTRUCTION MANAGER, GENERAL CONTRACTOR OR BUILDING MANAGEMENTB.J. PREMIUM TIME FOR WORK TO BE PERFORMED AFTER-HOURS
- AS REQUIRED BY BUILDING MANAGEMENT AND/OR OWNER. B.K. FILING, PERMITS, CONTROLLED INSPECTIONS. B.L. FULL TESTING AND STARTUP OF ALL SYSTEMS.
- DEFINITIONS: THE FOLLOWING DEFINITIONS APPLY TO THIS CONTRACT
 A. FURNISH: THE TERM "FURNISH" MEANS TO "PURCHASE AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING,
- UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."
 B. INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."
- C. PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."
- D. NEW: THE TERM "NEW" MEANS MANUFACTURED WITHIN THE PAST TWO YEARS AND NEVER BEFORE USED.
- E. REMOVE: THE TERM REMOVE MEANS TO DISCONNECT FROM ITS PRESENT POSITION, REMOVE FROM THE PREMISES AND TO DISPOSE OF IN A LEGAL MANNER."
- F. RELOCATE: THE TERM "RELOCATE" MEANS TO MOVE EXISTING EQUIPMENT AND ALL ACCESSORIES AS REQUIRED SAFELY AND WITHOUT DAMAGE, STORING AS NECESSARY BETWEEN DEMOLITION AND NEW CONSTRUCTION PHASES.
- G. SUBSTITUTIONS: "SUBSTITUTIONS" ARE REQUESTS FOR CHANGES IN PRODUCTS, MATERIALS AND METHODS OF CONSTRUCTION AS PROPOSED BY THE CONTRACTOR AFTER AWARD OF THE CONTRACT.
 4. CONTRACT DOCUMENTS: DRAWINGS
- A. PRIOR TO SUBMISSION OF A FORMAL BID, THIS CONTRACTOR SHALL REVIEW ALL DRAWINGS OF THE ENTIRE PROJECT INCLUDING GENERAL CONSTRUCTION, DEMOLITION, ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SPRINKLER AND SHALL INCLUDE ANY WORK REQUIRED IN THE BID WHICH IS INDICATED OR IMPLIED TO BE PERFORMED BY THIS TRADE IN OTHER SECTIONS OF THE WORK.
- B. PROVIDE ALL MATERIALS, EQUIPMENT AND LABOR NECESSARY TO COMPLETE THE WORK OUTLINED ON THESE CONTRACT DOCUMENTS. THE CONTRACTOR IS TO NOTE THAT THESE DOCUMENTS ARE DIAGRAMMATIC ONLY AND THAT FINAL PLACEMENT OF EQUIPMENT OR DEVICES IN THE FIELD MAY NOT DIRECTLY CORRESPOND TO THAT WHICH IS SHOWN ON THE DRAWINGS. IF A CONFLICT IN POSITIONING OCCURS THE CONTRACTOR IS TO NOTIFY THE ENGINEER IMMEDIATELY TO ASCERTAIN WHAT THE INTENT WAS BY THE DESIGN PROFESSIONAL. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID CONFLICT. IF CONFLICT OCCURS IN THE SPECIFICATIONS AND/OR ON DRAWINGS, THE MORE STRINGENT SITUATION SHALL APPLY.
- 5. SURVEY AND MEASUREMENTS:
- A. PRIOR TO SUBMITTING BID, VISIT SITE AND IDENTIFY EXISTING CONDITIONS AND DIFFICULTIES THAT WILL AFFECT WORK TO BE PERFORMED. NO COMPENSATION WILL BE GRANTED FOR ADDITIONAL WORK CAUSED BY UNFAMILIARITY WITH SITE CONDITIONS THAT ARE VISIBLE OR READILY IDENTIFIED BY EXPERIENCED OBSERVERS. INCLUDE IN THE BID ALL DEMOLITION WORK REQUIRED.
- B. DO NOT SCALE DRAWINGS. SCALE INDICATED ON DRAWINGS IS FOR ESTABLISHING REFERENCE POINTS ONLY. ACTUAL FIELD CONDITIONS SHALL GOVERN ALL DIMENSIONS.C. PRIOR TO ORDERING ANY MATERIALS AND EQUIPMENT,
- THOROUGHLY REVIEW THE SITE CONDITIONS TO DETERMINE IF ADEQUATE CLEARANCES AND ACCESS IS ALLOWED TO INSTALL THE COMPONENTS. ORDER EQUIPMENT BROKEN DOWN AS NECESSARY TO ALLOW FOR PROPER RIGGING THROUGH THE PROJECT AREA. PROVIDE ALL NECESSARY ALTERATIONS TO THE STRUCTURE OF THE BUILDING AS NECESSARY TO RIG THE EQUIPMENT IN PLACE.
- D. ARRANGE INSTALLATION TO PROVIDE ACCESS TO EQUIPMENT FOR EASY MAINTENANCE AND REPAIR.
 6. CODES AND STANDARDS: ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE LATEST STATE OF NEW YORK ACCEPTED VERSION OF THE FOLLOWING CODES. CONTRACTOR IS TO INFORM ENGINEER OF ANY EXISTING WORK OR MATERIALS WHICH VIOLATE ANY OF THE LAWS AND REGULATIONS LISTED BELOW. ANY WORK DONE BY THE CONTRACTOR CAUSING SUCH VIOLATION SHALL BE CORRECTED
- AT THE EXPENSE BY THIS CONTRACTOR AND AT NO EXPENSE TO THE OWNER.
- A. INTERNATIONAL RESIDENTIAL CODE
- B. INTERNATIONAL BUILDING CODEC. INTERNATIONAL PLUMBING CODE
- D. INTERNATIONAL MECHANICAL CODE
- E. NATIONAL ELECTRIC CODE (NFPA 70)
- F. THE LIFE SAFETY CODE (NFPA 101)
 7. PERMITS AND FEES: THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS; AND PAY ALL GOVERNMENT AND STATE SALES TAXES AND FEES WHERE APPLICABLE, AND OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS IN CONNECTION WITH THE WORK, FILE ALL NECESSARY DRAWINGS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL AND STATE DEPARTMENTS HAVING JURISDICTION, OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION FOR HIS WORK, AND DELIVER A COPY TO THE OWNER AND ENGINEER AT JOB COMPLETION.
- 8. SHOP DRAWINGS:
- A. SUBMIT NEWLY PREPARED INFORMATION, DRAWN TO ACCURATE SCALE OF 1/4"=1'0". HIGHLIGHT, ENCIRCLE, OR OTHERWISE INDICATE DEVIATIONS FROM THE CONTRACT DOCUMENTS. DO NOT REPRODUCE CONTRACT DOCUMENTS OR COPY STANDARD INFORMATION AS THE BASIS OF SHOP DRAWINGS. STANDARD INFORMATION PREPARED WITHOUT SPECIFIC REFERENCE TO THE PROJECT IS NOT CONSIDERED SHOP DRAWINGS.
- B. SHOP DRAWINGS INCLUDE EQUIPMENT SUBMITTALS, FABRICATION AND INSTALLATION DRAWINGS, SETTING DIAGRAMS, SCHEDULES, PATTERNS, TEMPLATES AND SIMILAR DRAWINGS. INCLUDE THE FOLLOWING INFORMATION:
- a. DIMENSIONS.
- b. IDENTIFICATION OF PRODUCTS AND MATERIALS INCLUDED.c. COMPLIANCE WITH SPECIFIED STANDARDS AND PERFORMANCE
- DATA AS INDICATED.
- d. NOTATION OF COORDINATION REQUIREMENTS.

Н	

- e. NOTATION OF DIMENSIONS ESTABLISHED BY FIELD MEASUREMENT.
- f. SUBMIT 3 BLACK-LINE PRINTS AND 2 ADDITIONAL PRINTS WHERE REQUIRED FOR MAINTENANCE MANUALS, PLUS THE NUMBER OF PRINTS NEEDED BY THE ENGINEER FOR DISTRIBUTION. ONE PRINT WILL BE RETAINED; THE REMAINDER RETURNED. ONE OF THE PRINTS RETURNED SHALL BE MARKED-UP AND MAINTAINED AS A "RECORD DOCUMENT".
- g. DO NOT USE SHOP DRAWINGS WITHOUT AN APPROPRIATE FINAL STAMP INDICATING ACTION TAKEN IN CONNECTION WITH CONSTRUCTION.
- h. DO NOT ORDER ANY MATERIALS OR EQUIPMENT PRIOR TO RECEIVING FINAL APPROVED SHOP DRAWINGS.
- i. PROVIDE SUBMITTALS PRIOR TO FABRICATION FOR PLUMBING ITEMS WITHIN THE SCOPE OF WORK INCLUDING BUT NOT LIMITED TO PLUMBING FIXTURES, SUPPORTS AND TRIM, PIPE MATERIAL, FITTINGS, HANGERS, INSULATION, VALVES, ELECTRIC WATER HEATERS, PUMPS, FLOOR DRAINS, VALVE TAGS AND CHARTS.
- 9. USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND THE METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.
- THE CONTRACTOR SHALL COORDINATE ALL INTERRUPTIONS OF SERVICES AND LIMITATIONS OF ACCESS WITH THE OWNER NO LESS THAN 2 DAYS PRIOR TO THE INTERRUPTION.
 OPERATION AND MAINTENANCE
- A. OPERATION AND MAINTENANCE MANUAL SHALL INCLUDE THE FOLLOWING:
- a. MANUFACTURER'S PRINTED OPERATING AND MAINTENANCE PROCEDURES.
- b. MAINTENANCE PROCEDURES FOR ROUTINE PREVENTATIVE MAINTENANCE AND TROUBLESHOOTING.
- c. COPIES OF WARRANTIES.
- d. APPROVED SHOP DRAWINGS AND PRODUCT DATA.
- e. INCLUDE IN THE MANUAL, A TABULATED EQUIPMENT SCHEDULE FOR ALL EQUIPMENT. SCHEDULE SHALL INCLUDE PERTINENT DATA SUCH AS: MAKE, MODEL NUMBER, SERIAL NUMBER, VOLTAGE, NORMAL OPERATING CURRENT, BELT SIZE, FILTER QUANTITIES AND SIZES, BEARING NUMBER, ETC. SCHEDULE SHALL INCLUDE MAINTENANCE TO BE DONE AND FREQUENCY.
 f. MAINTENANCE AND INSTRUCTION MANUALS SHALL BE
- SUBMITTED TO THE OWNER AT THE SAME TIME AS THE SEVEN (7) DAY NOTICE IS GIVEN PRIOR TO THE INSTRUCTION PERIOD. 12. AS-BUILT DRAWINGS
- A. PREPARE AS-BUILT DRAWINGS TO A SCALE OF 1/4"=1'-0" OR LARGER; DETAILING THE ACTUAL INSTALLATION OF MAJOR ELEMENTS, COMPONENTS, AND SYSTEMS OF MECHANICAL EQUIPMENT AND MATERIALS. WHERE SHOP DRAWINGS ARE USED, RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE AS-BUILT DRAWINGS. GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE.
- B. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER, BUT WAS NOT SHOWN ON CONTRACT DRAWINGS OR SHOP DRAWINGS.
- C. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE. D. ORGANIZE AS-BUILT DRAWINGS INTO MANAGEABLE SETS, BIND
- WITH DURABLE PAPER COVER SHEETS, AND PRINT SUITABLE TITLES, DATES AND OTHER IDENTIFICATION ON THE COVER OF EACH SET. 13. OBTAIN IN OWNER'S NAME WRITTEN EQUIPMENT AND MATERIAL
- WARRANTIES OFFERED IN MANUFACTURER'S PUBLISHED PRODUCT DATA WITHOUT EXCLUSION OR LIMITATION.
- 14. GUARANTEE WORK OF THESE CONTRACT DOCUMENTS IN WRITING FOR NOT LESS THAN ONE (1) YEAR FROM DATE OF FINAL NOTICE OF ACCEPTANCE. REPAIR OR REPLACE DEFECTIVE MATERIALS, EQUIPMENT, WORKMANSHIP AND INSTALLATION THAT DEVELOP WITHIN THIS PERIOD, PROMPT AND TO OWNER'S SATISFACTION AND CORRECT DAMAGE CAUSED IN MAKING NECESSARY REPAIRS AND REPLACEMENTS UNDER GUARANTEE WITHIN CONTRACT PRICE.
- 15. THIS CONTRACTOR IS RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF ALL SYSTEMS UNTIL THE FINAL ACCEPTANCE OF THE WORK.16. SUBMIT TO THE OWNER AN OFFICIAL CERTIFICATE OF INSURANCE FOR
- THEIR RECORDS. <u>MEANS AND METHODS ALL TRADES</u> 1. INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH
- MANUFACTURER'S RECOMMENDATIONS 2. DO NOT BURN WASTE MATERIALS. DO NOT BURY DEBRIS OR EXCESS MATERIALS ON THE OWNER'S PROPERTY. DO NOT DISCHARGE VOLATILE, HARMFUL OR DANGEROUS MATERIALS INTO DRAINAGE SYSTEMS. REMOVE AND DISPOSE OF ALL WASTE MATERIALS, PACKAGING MATERIAL, SKIDS ETC. FROM THE SITE AND DISPOSE OF IN A LAWFUL MANNER IN ACCORDANCE WITH MUNICIPAL, STATE AND FEDERAL REGULATIONS.
- MATERIALS AND EQUIPMENT SHALL BE UL LISTED WHERE STANDARD HAS BEEN ESTABLISHED.
 CAREFULLY INSPECT ALL BUILDING ELEMENTS PRIOR TO CUTTING OR
- DRILLING INTO WALL, FLOORS OR CEILINGS. PATCH AND PAINT SURFACES DISTURBED BY WORK UNDER THIS CONTRACT AS REQUIRED TO RESTORE THEM TO THEIR ORIGINAL CONDITION.
- 5. SCAFFOLDING, RIGGING, HOISTING: THE CONTRACTOR SHALL FURNISH ALL SCAFFOLDING, RIGGING, HOISTING AND SERVICES NECESSARY FOR ERECTION AND DELIVERY INTO THE PREMISES ANY EQUIPMENT AND APPARATUS FURNISHED UNDER THIS DIVISION. REMOVE SAME FROM PREMISES WHEN NO LONGER REQUIRED.
- 6. EXCAVATION AND BACKFILLING: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE SIZES, DEPTHS, FILL AND BEDDING REQUIREMENTS AND ANY OTHER EXCAVATION WORK REQUIRED UNDER THESE SPECIFICATIONS
- 7. WATERPROOFING: WHERE ANY WORK PIERCES WATERPROOFING, INCLUDING WATERPROOF CONCRETE, ROOFS, EXTERIOR WALL AND FLOORS IN WET AREAS, THE METHOD OF INSTALLATION SHALL BE REVIEWED BY THE ENGINEER BEFORE WORK IS DONE. THE CONTRACTOR SHALL FURNISH ALL NECESSARY SLEEVES, CAULKING AND FLASHING REQUIRED TO MAKE OPENINGS ABSOLUTELY WATERTIGHT.
- 8. PROVIDE FIRESTOPPING AROUND ALL FIRE PROTECTION, PLUMBING, MECHANICAL AND ELECTRICAL PENETRATIONS THROUGH FIRE RATED PARTITIONS. PROVIDE ASBESTOS FREE FIRESTOPPING SYSTEM CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME AND GASES. SYSTEM SHALL BE UL LISTED AND COMPLY WITH ASTM E 814.
- 9. ACCESS DOORS SHALL BE PROVIDED IN CEILINGS, WALLS AND FLOORS AT ALL VALVES, CONTROL DEVICES, AND OTHER APPARATUS AND EQUIPMENT REQUIRING PERIODIC SERVICE AND INSPECTION. COORDINATE TYPE AND LOCATION WITH ARCHITECTURAL PLANS.
- 10. SEISMIC RESTRAINTS SHALL BE INSTALLED AS REQUIRED PER BUILDING CODE AND FIRE SAFETY CODE. RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 AND SMACNA STANDARDS. SUBMIT SHOP DRAWINGS INCLUDING SEISMIC CALCULATIONS WITH PROFESSIONAL ENGINEER'S SEAL FOR REVIEW BY ENGINEER. <u>PLUMBING</u>
- 1. PIPING:
- A. DOMESTIC WATER PIPING SHALL BE COPPER TUBING TYPE L. SOLDER FILLER METALS SHALL BE 95-5 TIN-ANTIMONY SOLDER JOINTS.
- B. VENT PIPING SHALL BE PVC, TYPE DWV PIPE AND FITTINGS WITH SOLVENT CEMENTED JOINTS.

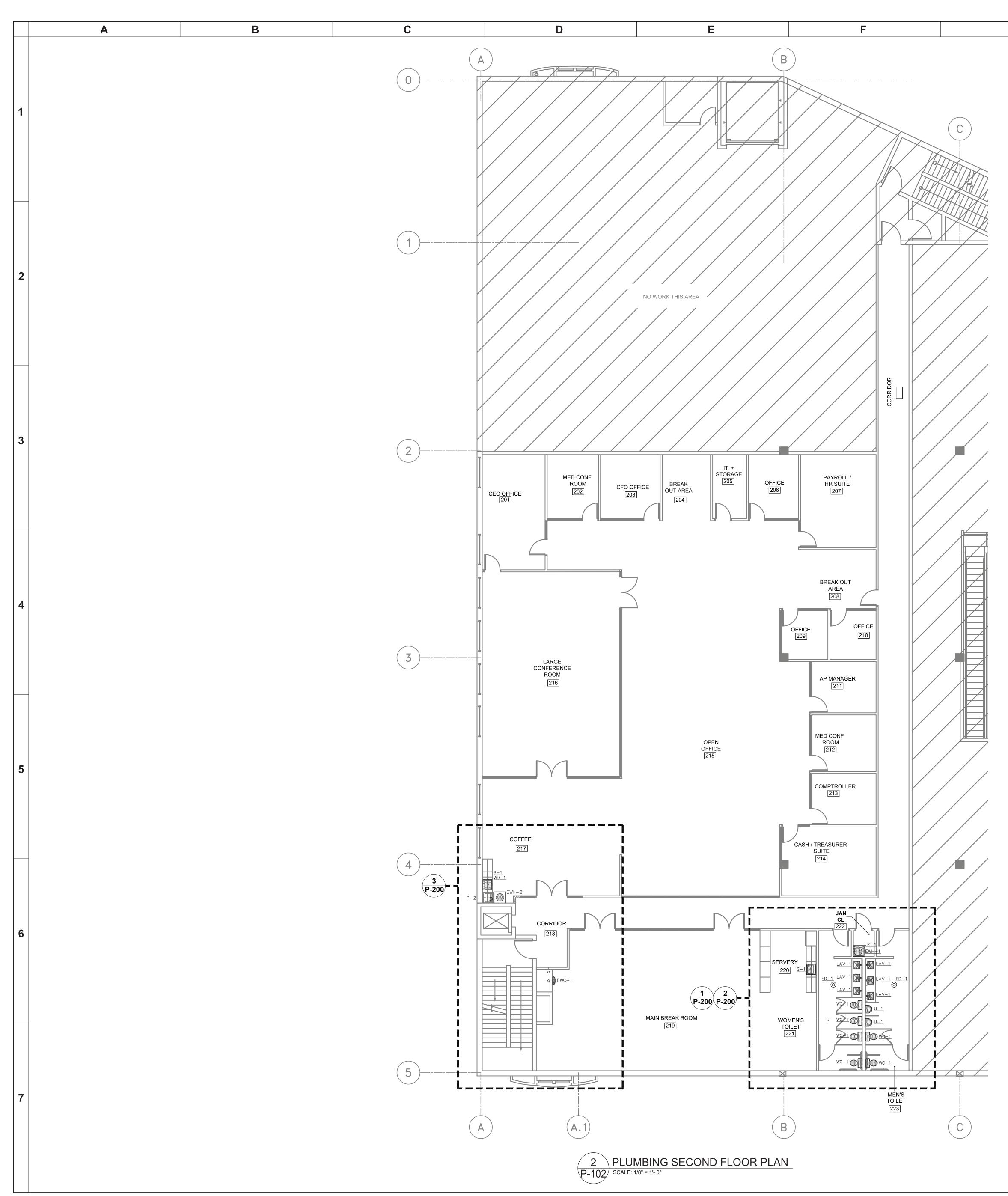
- C. SANITARY WASTE PIPING SHALL BE HUBLESS, SERVICE WEIGHT, CAST- IRON SOIL PIPE AND FITTINGS, WITH NEOPRENE GASKETS. BURIED PIPING SHALL BE HUB AND SPIGOT FITTINGS.
- D. CONDENSATE PIPING SHALL BE SCHEDULE 40 PVC PIPE AND FITTINGS.
- 2. INSULATION:
- A. INSULATION SHALL BE IN ACCORDANCE WITH LATEST EDITION OF THE IECC EXCEPT THAT PIPE INSULATION SHALL NOT BE LESS THAN 1" THICK. ALL INSULATION MATERIALS, ADHESIVES, COATINGS, AND OTHER ACCESSORIES SHALL HAVE FLAME SPREAD RATINGS OF 25 OR LESS, AND SMOKE DEVELOPED RATINGS OF 50 OR LESS AS TESTED BY ASTM E 84 (NFPA 255) METHOD. ALL INSULATION MATERIALS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS AND IN ACCORDANCE WITH THE LATEST EDITION OF SMACNA AND ASHRAE STANDARDS.
- B. PIPE INSULATION FOR DOMESTIC COLD WATER, HOT WATER, AND HOT WATER RETURN SHALL BE JOHN MANVILLE MICROLOK HP OR APPROVED EQUAL. PROVIDE PVC COVERS ON ALL EXPOSED PIPING. INSULATION THICKNESS SHALL BE PROVIDED AS FOLLOWS:
- a. DOMESTIC COLD WATER PIPING LESS THAN 1-1/4" SHALL HAVE MINIMUM 1" INSULATION THICKNESS
- b. DOMESTIC COLD WATER PIPING BETWEEN 1-1/2" TO 4" SHALL HAVE MINIMUM 1-1/2" INSULATION THICKNESS
- c. DOMESTIC HOT WATER PIPING LESS THAN 1-1/4" SHALL HAVE MINIMUM $\frac{1}{2}$ " INSULATION THICKNESS
- d. DOMESTIC HOT WATER PIPING BETWEEN 1-1/2" TO 4" SHALL HAVE MINIMUM 1" INSULATION THICKNESS.
- C. ALL EXPOSED DOMESTIC WATER PIPE SHALL BE WRAPPED WITH A PVC VAPOR BARRIER JACKET AS MANUFACTURED BY ZESTON OR APPROVED EQUAL. PVC JACKETING SHALL BE FINISHED TO BE WATER TIGHT.
- D. PIPE INSULATION FOR EXPOSED SANITARY, HOT WATER, AND COLD WATER PIPING LOCATED BELOW LAVATORIES, SINKS, AND OTHER PLUMBING FIXTURES SHALL BE PROVIDED WITH THRUBRO LAVGUARD2 AND RESILIENT MOLDED VINYL INSULATION.
- 3. PIPING INSTALLATION:A. INSTALL PIPING IN ACCORDANCE WITH ALL APPLICABLE CODES
- AND GOOD PRACTICES. B. INSTALL UNIONS OR FLANGES IN PIPES ADJACENT TO EACH VALVE, CONTROL DEVICE AND AT FINAL CONNECTIONS EACH PIECE OF EQUIPMENT.
- C. INSTALL DIELECTRIC UNIONS TO JOIN DISSIMILAR METALS. D. INSTALL AND ANCHOR PIPING TO ENSURE PROPER EXPANSION
- AND CONTRACTION.
- E. ANCHOR PIPING TO ENSURE PROPER DIRECTION OF EXPANSION AND CONTRACTION.
 F. SUPPORT PIPING TO PREVENT VIBRATION OR SAGGING. PROVIDE HANGER SPACING ACCORDING TO DISTANCES LISTED IN APPLICABLE CODES AND REGULATIONS. SUPPORTS SHALL BE INSTALLED IN A MANNER APPROVED BY THE ARCHITECT AND SHALL NOT HANG EROM DUCTWORK OF OTHER PROPERTY.
- FROM DUCTWORK OR OTHER PIPING. G. HANGERS SHALL NOT PENETRATE PIPING INSULATION.
- H. CAST IRON PIPE SHALL BE SUPPORTED AT INTERVALS OF 5'.
- I. COPPER TUBING SHALL BE SUPPORTED AT INTERVALS OF 6'.
 J. WALL PENETRATIONS: SLEEVES SHALL BE PROVIDED FOR ALL PIPES PASSING THROUGH FLOORS, WALLS, AND PARTITIONS.
- 4. PLUMBING IDENTIFICATION
- A. PLUMBING IDENTIFICATION WORK SHALL COMPLY WITH ANSI A13.1. NAMES, ABBREVIATIONS AND OTHER DESIGNATIONS USED IN MECHANICAL IDENTIFICATION WORK, SHALL CORRESPOND WITH DESIGNATIONS SHOWN. SPECIFIED OR SCHEDULED.
- B. VALVE TAGS SHALL BE 1-1/2' DIAMETER, 19-GAGE POLISHED BRASS WITH STAMP-ENGRAVED LETTERING. ATTACH VALVES IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 C. PROVIDE VALVE TAG ON EVERY VALVE, EXCLUDING DRAIN VALVES.
- D. PIPE IDENTIFICATION, PLASTIC PIPE MARKERS, FACTORY FABRICATED, FLEXIBLE, SEMI-RIGID PLASTIC. PERFORMED TO FIT AROUND PIPE OR PIPE COVERING, MINIMUM INFORMATION INDICATING FLOW DIRECTION ARROW AND IDENTIFICATION OF FLUID BEING CONVEYED.
- HANGERS AND SUPPORTS
 FACTORY FABRICATED HANGERS, CLAMPS, RODS, BUILDING ATTACHMENTS, SADDLES, AND SHIELDS COMPLYING WITH ANSI MSS-SP-58 SHALL BE PROVIDED.
- PLUMBING FIXTURES
 A. FURNISH AND INSTALL NEW PLUMBING FIXTURES AND TRIM AS
- SCHEDULED ON P-500 AND AS SHOWN ON FLOORPLANS.
- B. FIXTURES SHALL BE INSTALLED IN A PROFESSIONAL AND CLEAN MANNER, SET LEVEL AND SQUARE WITH RELATION TO FINISHED FLOOR AND WALL LINES.
- C. EACH FIXTURE SUPPLY CONNECTION SHALL BE PROVIDED WITH INDIVIDUAL SHUT-OFF VALVES.
- D. PROVIDE APPROPRIATE CARRIERS, BRACKETS, PLATES, CLEATS, BOLTS ETC. FOR SECURING FIXTURES RIGIDLY IN PLACE.
- E. WATERPROOF SEALANT SHALL BE PROVIDED AT SPACES BETWEEN NEW FIXTURES AND FLOORS, WALLS, OR COUNTERS.
- TESTING AND. ADJUSTING
 A. ALL WATER PIPING SHAL
- A. ALL WATER PIPING SHALL BE TESTED IN ACCORDANCE WITH THE INTERNATIONAL PLUMBING CODE. THE SYSTEM SHALL BE PROVED TIGHT UNDER WATER PRESSURE OF 100 PSIG. THE PRESSURE SHALL BE APPLIED GRADUALLY AND THEN HELD FOR A MINIMUM OF TWO HOURS.
 B. ALL WASTE PIPING SHALL BE TESTED IN ACCORDANCE WITH THE
- INTERNATIONAL PLUMBING CODE. THE SYSTEM SHALL BE FILLED WITH WATER TO A HEAD OF NOT LESS THAN 10 FEET. THE WATER LEVEL AT THE TOP OF THE TEST HEAD OF WATER SHALL NOT DROP FOR AT LEAST 15 MINUTES.
- C. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY EQUIPMENT FOR ALL TESTING.





	PLUMBING
P1	4" SAN DN TO BELOW GRADE AND CONNEC REQUIRED FOR MAKING CONNECTION TO EXIS FOLLOWING INSTALLATION. VERIFY EXACT LO
P2	CONNECT NEW 2" CW PIPING TO EXISTING C PIPING TO NEW PLUMBING FIXTURES AT FLO
P3	1–1/2" SAN DN TO BELOW GRADE AND CON SLAB AS REQUIRED FOR MAKING CONNECTIO SLAB FOLLOWING INSTALLATION. VERIFY EXA
P4	CONNECT NEW 1/2" CW PIPING TO EXISTING PIPING TO NEW PLUMBING FIXTURE AT FLOO

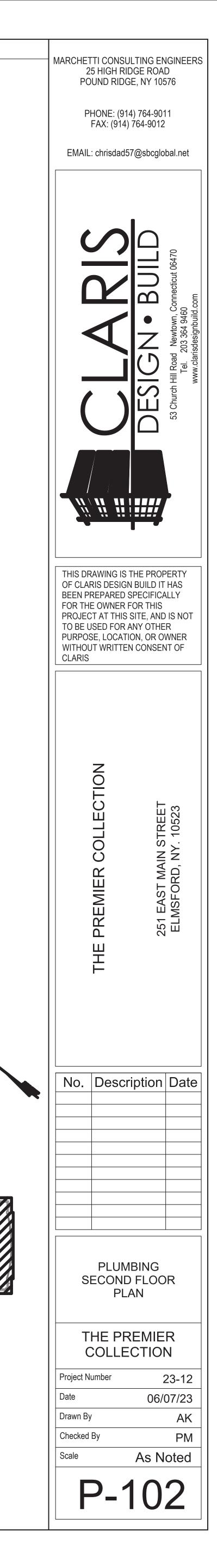




G	H		l		J
	No WO THIS AF				
		OF WORK		NO WORK THIS AREA	



AREA OF WORK

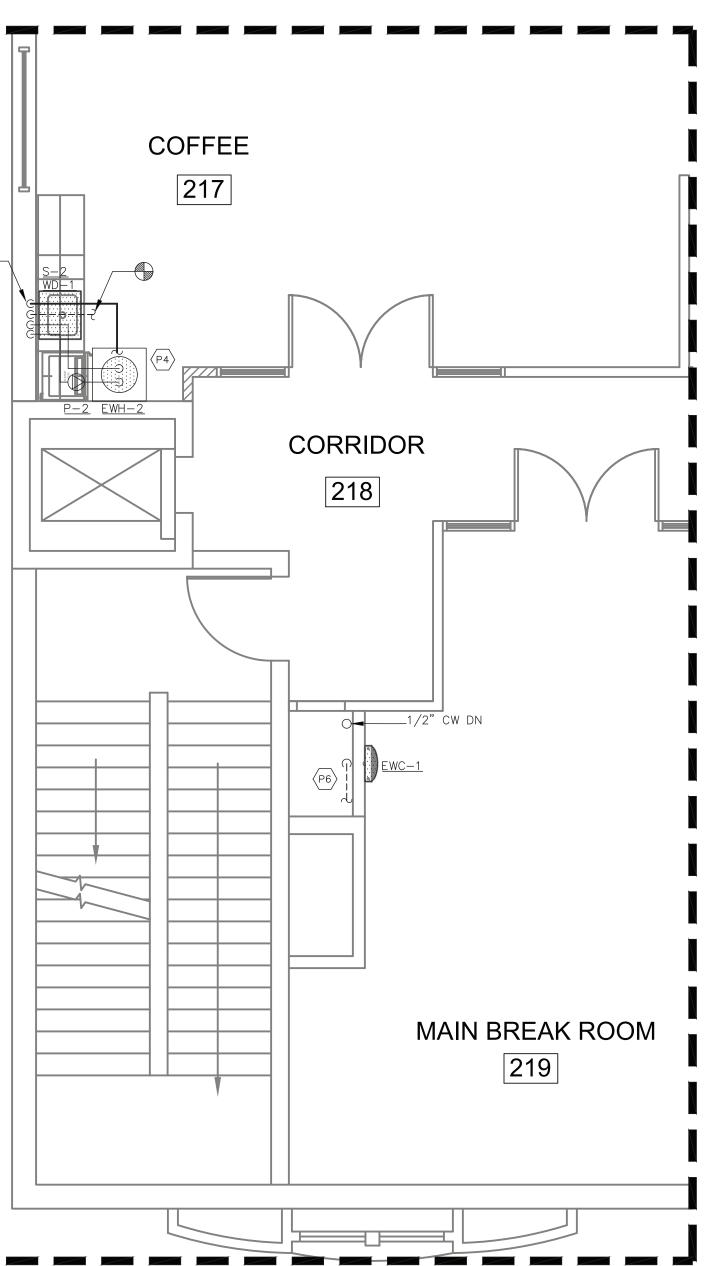


	Α	В	С	
1				
2				
3				
4				P3
5				
6				
7			3 P-200	SCA

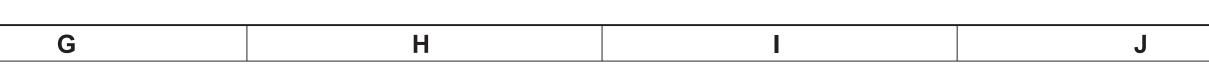
	PLUMBING KEY NOTES										
P1	MOUNT <u>EWH-1</u> DIRECTLY ABOVE JS-1. PROVIDE WITH NEW HOLDRITE WALL MOUNT WITH INTEGRAL DRAIN PAN. PROVIDE DISCHARGE PIPING FROM PAN TO DRAIN INDIRECTLY INTO JS-1.										
P2	NEW VENT THROUGH ROOF PENETRATION. VENT SHALL TERMINATE NO LESS THAN 10' AWAY FROM AN OUTSIDE AIR INTAKE. VERIFY EXACT LOCATION IN FIELD.										
P3	CONNECT NEW 3/4" CW AND 1-1/2" SAN SERVING <u>S-1</u> TO EXISTING PIPING SERVING BATHROOM AT MEZZANINE LEVEL DIRECTLY BELOW. CONNECT NEW 1-1/2" VENT PIPING ABOVE CEILING TO EXISTING VENT THROUGH ROOF. VERIFY EXACT LOCATIONS IN FIELD. NEW 1/2"HW AND 1/2"HWR TO <u>S-1</u> . REFER TO DETAIL $-/P-500$ FOR INSTALLATION.										
P4	INSTALL EWH-2 AND P-2 ABOVE CEILING. REFER TO DETAIL $3/P-500$ FOR INSTALLATION.										
P5	HOT WATER HEATING AND FILTRATION ACCESSORIES SERVING $\underline{WD-1}$ LOCATED BELOW COUNTER. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.										
P6	1-1/2" SAN FROM <u>EWC-1</u> DN TO FLOOR BELOW. CONNECT NEW $1-1/4$ " V PIPING TO EXISTING VENT THROUGH ROOF RISER NEARBY. VERIFY EXACT LOCATION IN FIELD.										

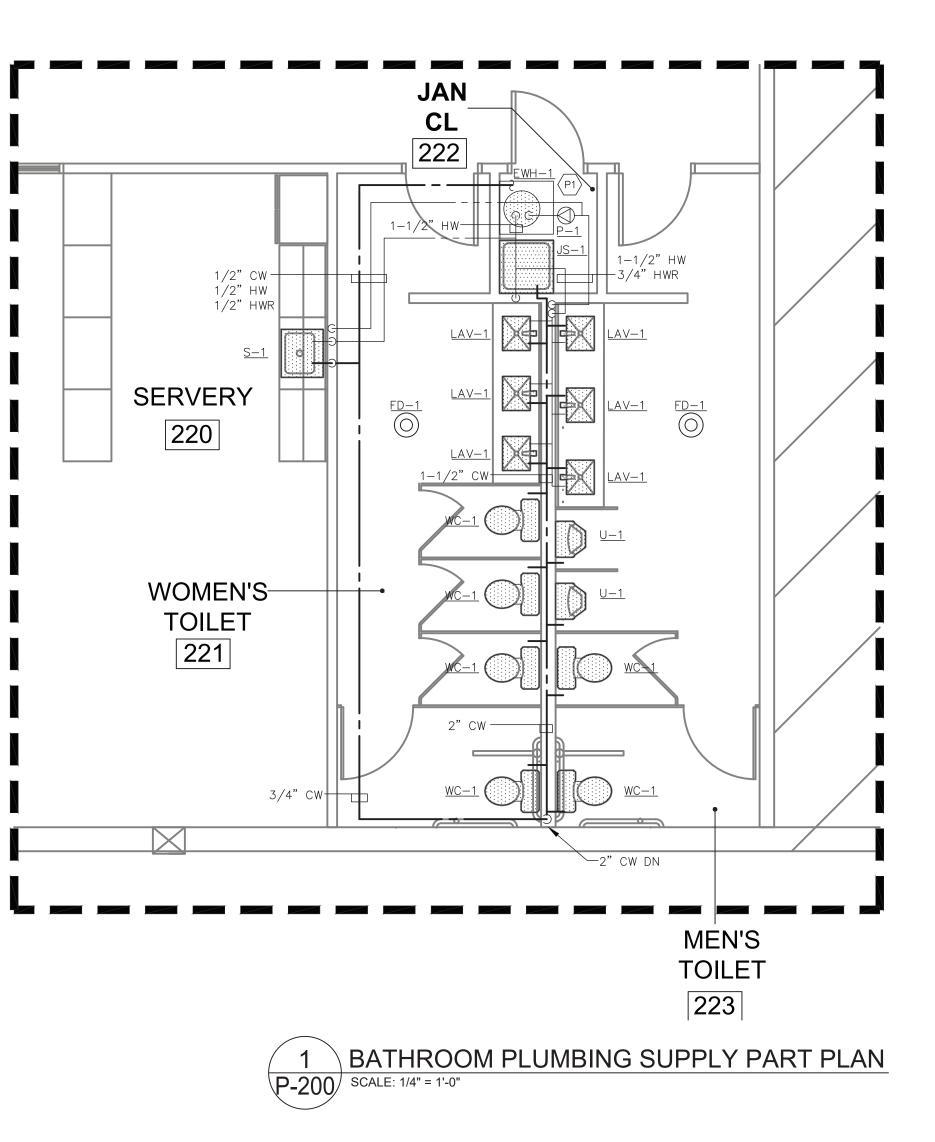
Ε

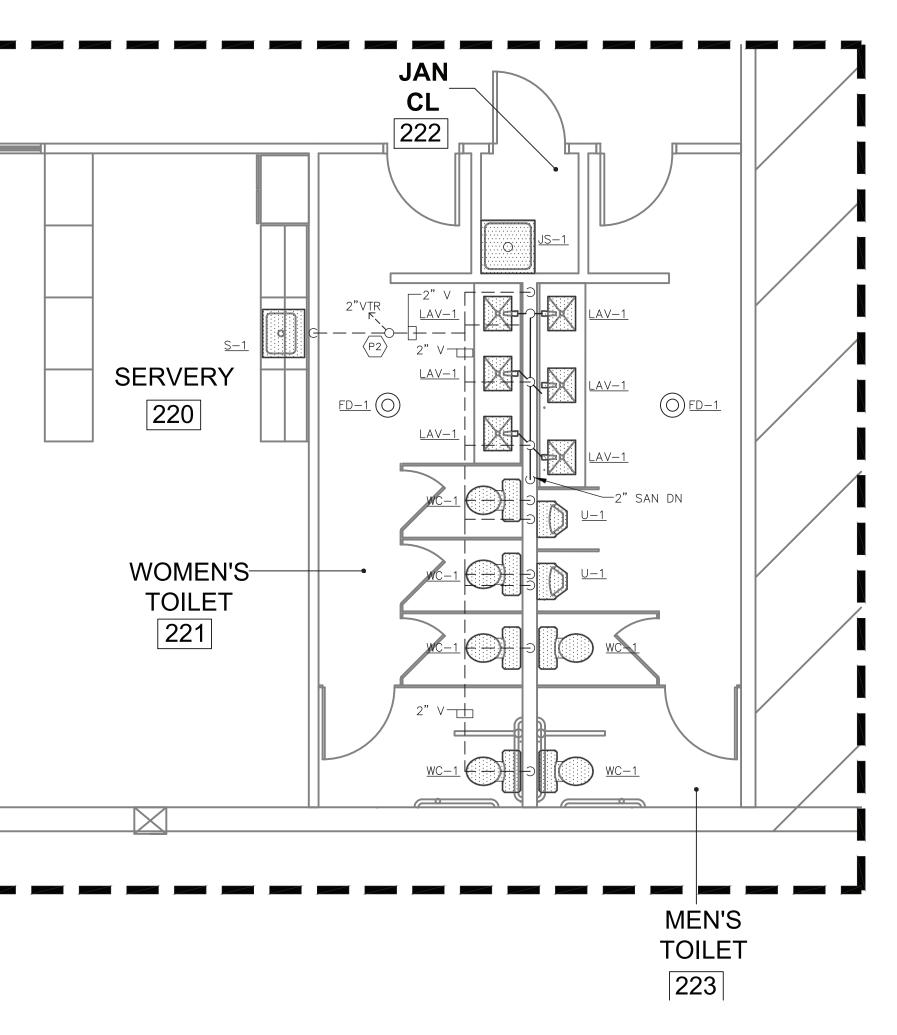
D



COFFEE STATION AND BREAK ROOM PLUMBING PART PLAN SCALE: 1/4" = 1'-0"



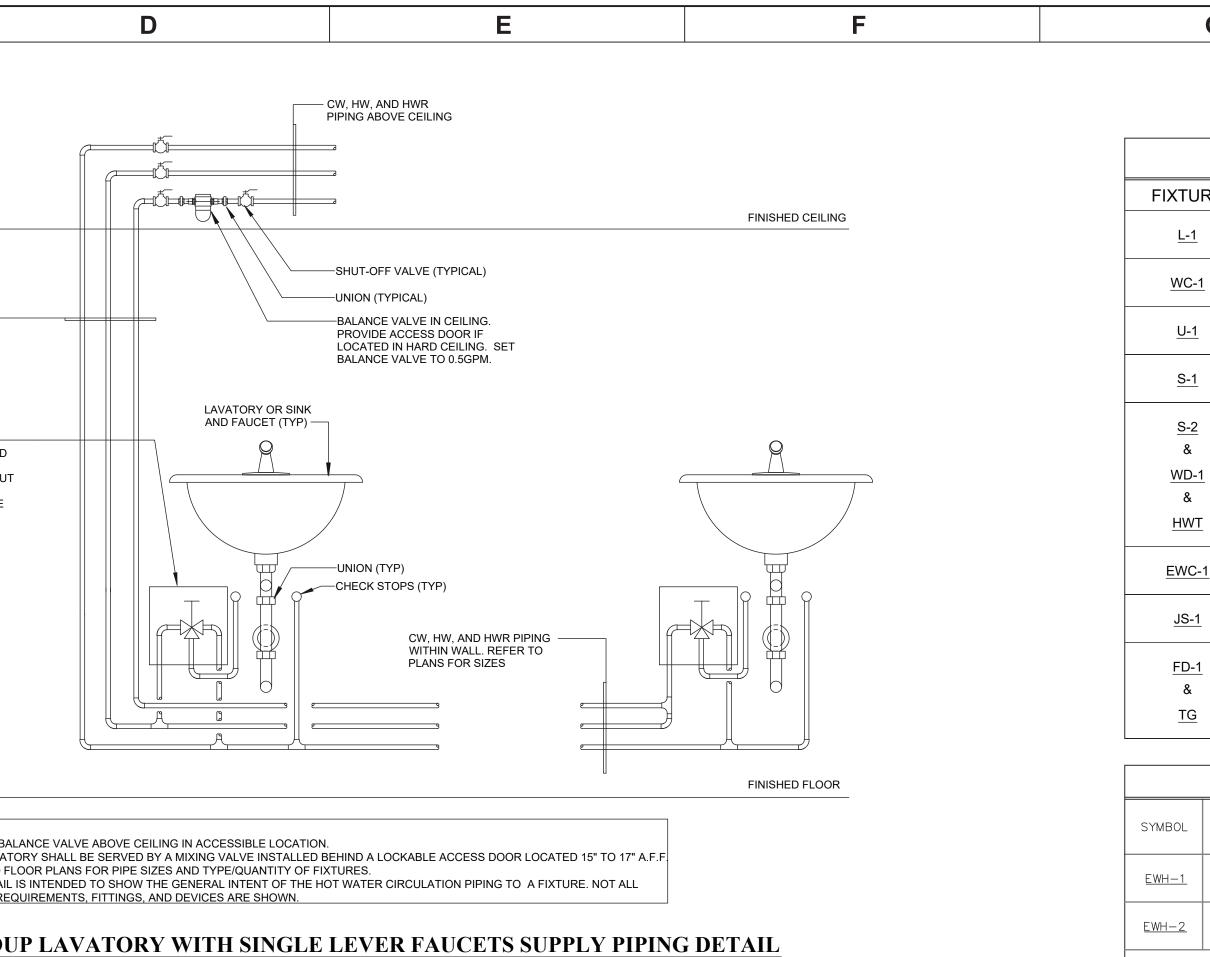




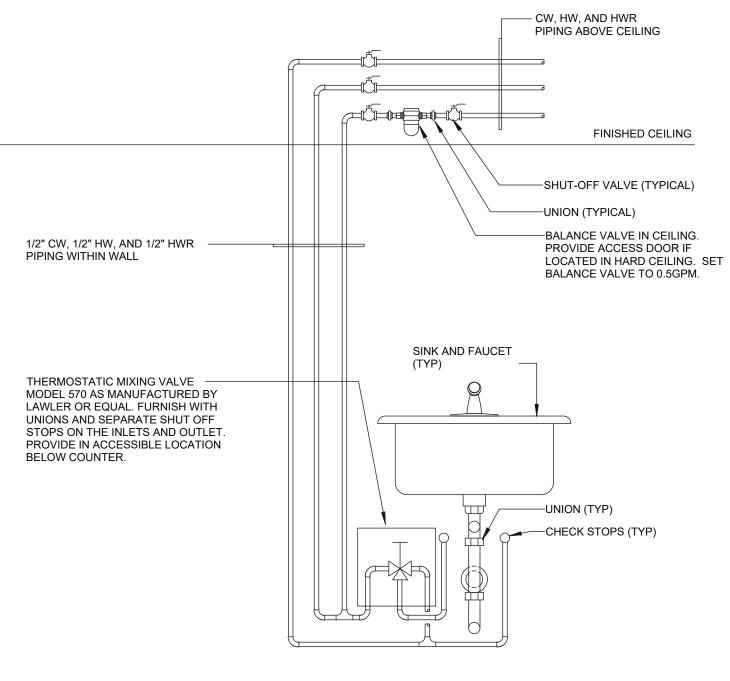
2 BATHROOM SANITARY WASTE PART PLAN P-200 SCALE: 1/4" = 1'-0"



	Α	В	()	
1					
				CW, HW, AND HW WITHIN WALL. RE PLANS FOR SIZES	IFER TO S
2				MODEL 570 AS M BY LAWLER OR E	ANUFACTURERED QUAL. FURNISH D SEPARATE SHUT HE INLETS AND E IN ACCESSIBLE
3					NOTES: 1. PROVIDE BALANCE 2. EACH LAVATORY SI 3. REFER TO FLOOR F 4. THIS DETAIL IS INTE FIXTURE REQUIREN GROUP L SCALE: NONE
4					1/2" PIPI
					THE MOI LAW UNI STO PRO BEL
5					NOTES:
5					NOTES: 1. PROVIDE BALAN 2. EACH SINK SHA 3. REFER TO FLOO 4. THIS DETAIL IS II FIXTURE REQUIF SINK SCALE: NO
6					
7					

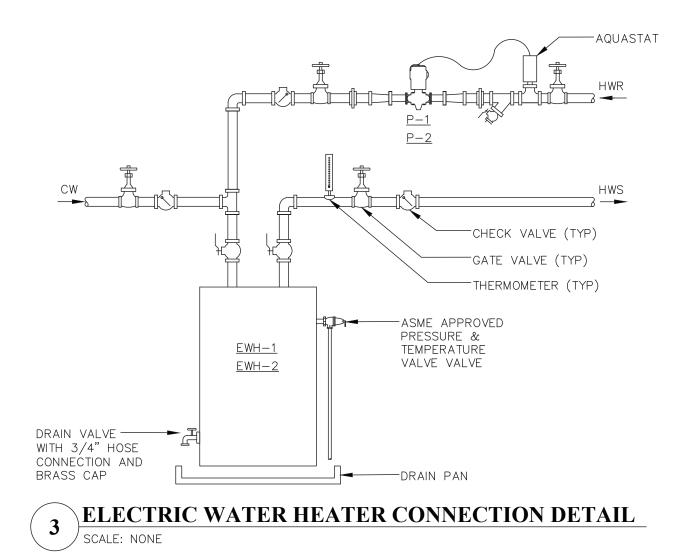


FINISHED FLOOR



DE BALANCE VALVE ABOVE CEILING IN ACCESSIBLE LOCATION. SINK SHALL BE SERVED BY A MIXING VALVE INSTALLED IN CABINET BELOW. TO FLOOR PLANS FOR PIPE SIZES AND TYPE/QUANTITY OF FIXTURES. TAIL IS INTENDED TO SHOW THE GENERAL INTENT OF THE HOT WATER CIRCULATION PIPING TO A FIXTURE. NOT ALL E REQUIREMENTS, FITTINGS, AND DEVICES ARE SHOWN.

SINK WITH SINGLE LEVER FAUCET SUPPLY PIPING DETAIL CALE: NONE



G	Н	I	J

	PLUMBING FIXTURE SCHEDULE												
URE	MANUFACTURER	MODEL	WASTE	VENT	C.W.	H.W.	GAS	REMARKS					
<u>1</u>	KOHLER	K-2196-1-0	1 1/2"	1-1/4"	1/2"	1/2"		LAVATORY: DROP-IN SINK WITH KOHLER #K-7515-CP FITTINGS, JONES #D70-100 GRID DRAIN AND TRUEBRO #102-EZ COVERS					
<u>-1</u>	KOHLER	K-3519-0	3"	2"	1/2"			WATER CLOSET: FLOOR MOUNTED, VITREOUS CHINA WITH KOHLER #K-4731-C-0 SEAT					
<u>1</u>	KOHLER	K-5016-ET-0	2"	1 1/2"	3/4"			URINAL: WALL HUNG WITH CARRIER AND SLOAN #G2 8186-0.5 FLUSH VALVE					
· <u>1</u>	STERLING	14631-3-NA	1 1/2"	1 1/4"	1/2"	1/2"		SINK: DROP-IN STAINLESS STEEL, 3 HOLE WITH KOHLER #K-10433-CP FAUCET AND #SS-112 STRAINER					
2	STERLING	14631-4-NA	1 1/2"	1 1/4"	1/2"	1/2"		SINK: DROP-IN STAINLESS STEEL, 4 HOLE WITH KOHLER #K-10433-CP FAUCET AND #SS-112 STRAINER					
)-1	INSINKERATOR	F-HC1100			1/4"	1/4"		HOT & COOL WATER DISPENSER: MOUNT ON S-2. EQUIP WITH SPECIFIED HWT, ADJUSTABLE TEMPERATURE FROM 160F TO 210F AND INSTANT SELF-CLOSING HOT VALVE.					
VT	INSINKERATOR	HWT-F1000S			1/2"	1/2"		ELECTRIC WATER HEATER: 2/3 GALLON, 115V AND FILTRATION SYSTEM FOR USE WITH WD-1. MOUNT BELOW COUNTER.					
<u>C-1</u>	ELKAY	EZWSM8K	1-1/2"	1-1/4	1/2"			BOTTLE FILLING STATION: IN-WALL MOUNT, 115V ELECTRIC, REFRIGERATED CHILLING CAPACITY OF 8.0GPH.					
<u>-1</u>	FIAT	MSB-2424	3"	2"	1/2"	1/2"		JANITOR SINK: 24"x24" MOLDED STONE BASIN WITH T&S #B-0665-BSTR FITTINGS, DOME STRAINER, P-TRAP AND VACUUM BREAKER					
<u>-1</u>	JOSAM	30000 - A SERIES	4"	2"				$\frac{\text{FLOOR}\ \text{DRAIN:}\ \text{PROVIDE}\ \text{FIXTURE}\ \text{OR}\ \text{CIRCUIT}\ \text{VENTING}\ \text{AS}\ \text{REQUIRED.}}{\text{PROVIDE}\ \text{WITH}\ \text{SPECIFIED}\ \underline{\text{TG}}.}$					
G	PROVENT SYSTEMS	TRAPGUARD TG34IP						TRAP GUARD: 3", PVC MATERIAL OPEN ON TOP WITH CURL CLOSURE AT BOTTOM CLOSES & RETURNS TO MOLDED SHAPE AFTER WASTE WATER DISCHARGE					

ELECTRIC WATER HEATER SCHEDULE													
		WATER	DEGREE RISE	1ST HOUR	CONTINUOUS		ELECTRICAL		REMARKS				
MANUFACTURER/ MODEL NUMBER	LOCATION	VOLUME (GAL)	(°F)	(GPH)	(GPH)	КW	VOLTAGE	PH					
AO SMITH / DEL-10	JANITOR CLOSET	10	90	27	20	4.5	208	1	1,2,3				
AO SMITH / DEL-10	COFFEE STATION	10	90	27	20	4.5	208	1	1,2,3				

I. PROVIDE WITH SINGLE POINT ELECTRICAL CONNECTION . PROVIDE MODEL FLOODSAFE LFWDS LEAK DETECTION SHUT-OFF VALVES AS MANUFACTURED BY WATTS. 5. WATER HEATER TO SUPPLY WATER AT 110°F

	PUMP SCHEDULE											
								ELECT	RICAL			
SYMBOL	MANUFACTURER/MODEL	LOCATION	SERVICE	TYPE	GPM	HEAD	HP	PH	VOLT	RPM	REMARKS	
						(FT)						
<u>P-1</u>	TACO/006 BC4	JANITOR CLOSET	110 °F DOMESTIC HOT WATER RECIRC.	INLINE	3.0	10.0	1/40	1	120	3250	1	
<u>P-2</u>	TACO/006 BC4	COFFEE STATION	110 °F DOMESTIC HOT WATER RECIRC.	INLINE	3.0	10.0	1/40	1	120	3250	1	
			THE T DOMESTIC HOT WATER RECIRC.		0.0	10.0	17 +0		120	0200		

GENERAL NOTES 1. PUMP TO BE CONTROLLED BY AQUASTAT ON HW SUPPLY. REFER TO PUMP DETAIL.

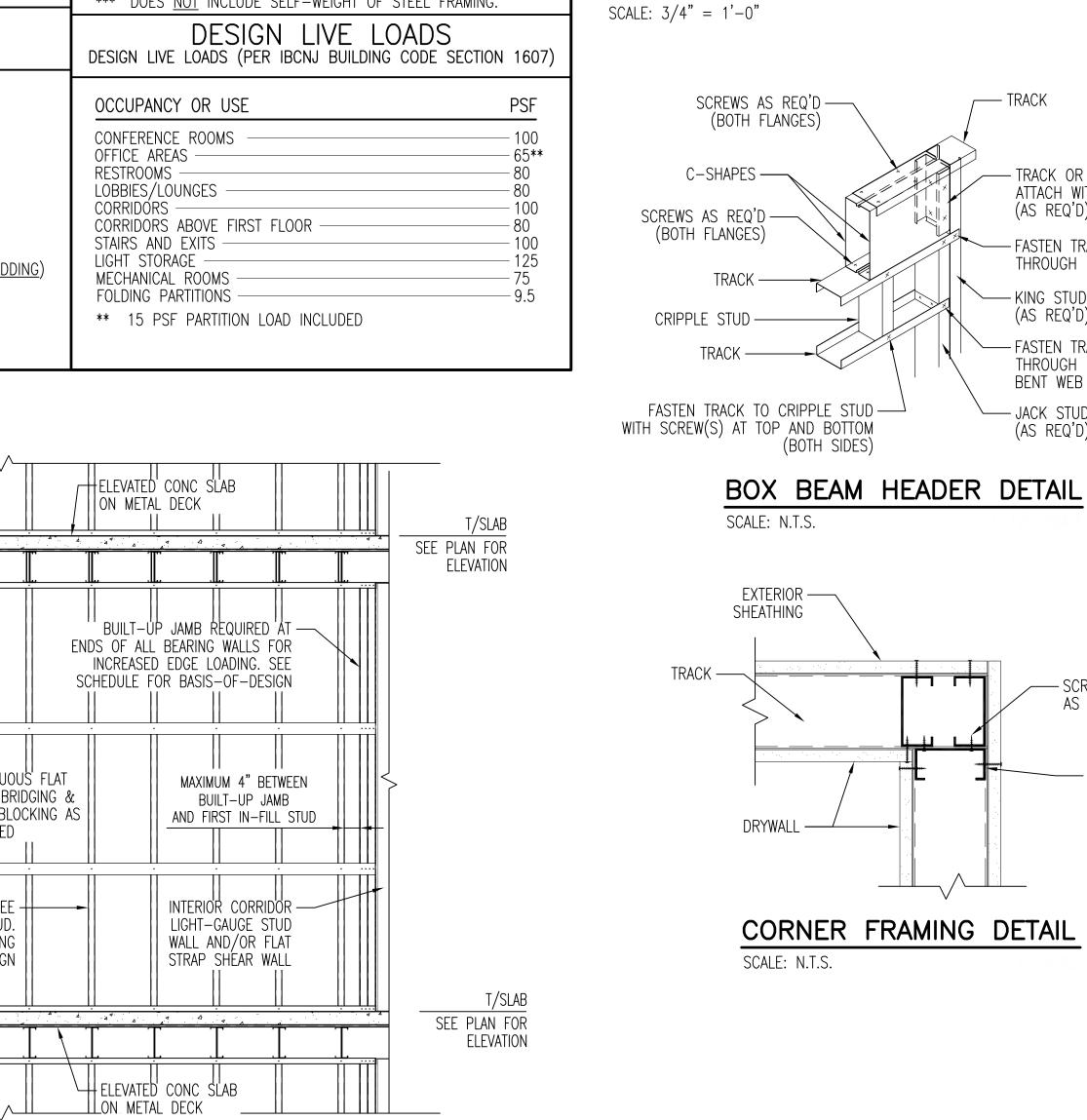
REMARKS:



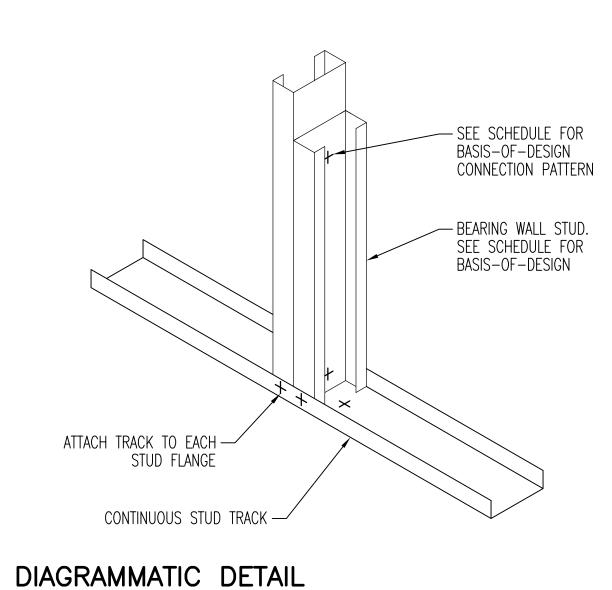
	Α		В		С	D	E	F	G
	GENERAL INFORMATION					TRUCTURAL STEEL GENERAL NOTES			
	(UNLESS OTHERWISE NOTED OR SHOWN ON 1. "LOADS" INDICATED IN THE DESIGN LOAD (CRITERIA TABLE ARE THO	DSE USED IN DESIGN OF T		•	INLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF S CONSTRUCTION MANUAL AND THE SPECIFICATION FOR STRUCTURAL ST	•		DESIGN INFO
	2. DESIGN LOADS AND CRITERIA USED IN THE COLD-FORMED METAL FRAMING, ARCHITECT THIRD PARTY ENGINEER CONTRACTED BY T	FURAL PRECAST CONCRET THE SPECIALTY STRUCTUR	TE, METAL PANELS, ETC.) RAL SYSTEM MANUFACTURE	ARE TO BE DETERMINED BY A ER IN ACCORDANCE WITH CODE		UNLESS OTHERWISE NOTED, ALL MATERIALS SHALL BE IN ACCORDANCI MEMBER ASTM MINIMUM ST	E WITH THE FOLLOWING SPECIFICATIONS:	2020	BUILDING CODE C
	REQUIREMENTS OF THE GOVERNING JURISD CONNECTIONS OF THESE SYSTEMS TO THE AND INSTALLATION. IF ALTERATION TO THE	E SUPERSTRUCTURE, INCL E SUPERSTRUCTURE IS F	LUDING, BUT NOT LIMITED REQUIRED AS DETERMINED	TO, ENGINEERING, DETAILING, BY THE E.O.R. TO REINFORCE		ROLLED SHAPES A992 50 KSI OTHER ROLLED PLATES A36 36 KSI		SEISMIC DES	SIGN DATA
	FOR HIGH CONCENTRATED FORCES APPLIE BE BORNE BY THE SPECIALTY SUBCONTRA 3. ALL DETAILS MARKED "TYPICAL" IN THE SE	CTOR AND SHALL BE CC	ONSIDERED A PART OF THE	E SPECIALTY CONNECTION.		STRUCTURAL TUBINGA500 (GRADE B)46 KSISTEEL PIPEA500 (GRADE B)42 KSICONNECTION BOLTSA32592 KSIANCHOR BOLTSF1554		 SEISMIC DESIGN (PER ASCE 7 IBC OCCUPANCY CATEGORY = II 	7—16 Chapters 11 — 17)
	REQUIRED TO SATISFY THE REQUIREMENTS REQUIREMENTS FOR QUANTITY AND LOCATION 4. FAILURE ON THE PART OF THE CONTRACTOR	OF THE CONSTRUCTION ON WHERE THE "TYPICAL	DOCUMENTS. THE CONTE "DETAILS APPLY.	RACTOR SHALL COORDINATE	7	THREADED RODSA3636 KSINON-SHRINK GROUTC11078,000 PSICONNECTIONS SHALL BE SHEAR TYPE CONNECTIONS AND DESIGNED B	Y THE FARDICATOR FOR THE SHEAR FORCES	 SEISMIC IMPORTANCE FACTOR (IE) = ANALYSIS PROCEDURE = EQUIVALENT 	= 1.00
	MECHANICAL, ELECTRICAL, PLUMBING, ETC. RELIEVE THEM OF THE RESPONSIBILITY TO) TOGETHER WITH THE F FURNISH AND INSTALL	FULL EXTENT OF THE PROU ITEMS THAT ARE PART OF	JECT SPECIFICATIONS DOES NOT THEIR WORK AS INDICATED BY	J.	INDICATED ON PLAN IN ACCORDANCE WITH THE AISC FOURTEENTH EDI SHALL BE 3/4" UNLESS OTHERWISE NOTED. BOLTS SHALL BE SHEAR, STEEL BEAM CONNECTIONS SHALL BE DESIGNED TO SUPPORT A MININ	TION SPECIFICATIONS. MINIMUM BOLT DIAMETER /BEARING TYPE BOLTS AND BE "SNUG-TIGHT".	 SITE CLASS = D (ASSUMED IN THE A PLAN STRUCTURAL IRREGULARITIES 	ABSENCE OF A SOILS REPORT)
	THE DRAWINGS AND SPECIFICATIONS OF O PROHIBITED FROM EXCLUDING STRUCTURAL 5. THE STRUCTURAL DRAWINGS FOR THIS PRO	. WORK FROM THEIR COI OJECT ARE NOT ISSUED	NTRACT NOT SHOWN IN TH FOR BID OR CONSTRUCTIO	HE STRUCTURAL DRAWINGS.		UNIFORM LOAD FOR PARTICULAR BEAM AND SPAN CONDITION AS DEFI CONSTRUCTION (FOR COMPOSITE BEAMS, MULTIPLY BY 1.33).	NED BY THE AISC MANUAL OF STEEL	 VERTICAL STRUCTURAL IRREGULARIT RESPONSE MODIFICATION FACTOR (F 	
	 SHEETS ARE IDENTIFIED AS "ISSUED FOR I THESE DRAWINGS DO NOT INCLUDE INFORI SUBSURFACE WATER, INTERIOR SURFACES, 	MATION PERTAINING TO V	WEATHERPROOFING OR DRA			METAL DECK SHALL BE ATTACHED ACCORDING TO METAL DECK MANUF STANDARDS. WELDING SHALL BE IN ACCORDANCE WITH AMERICAN WELDING SOCIETY		 TYPE OF LATERAL SYSTEM: ORDINARY REINFORCED MASONRY 0.2 SPECTRAL RESPONSE ACCELER/ 	
	KIND. ALL TREATMENTS OF SURFACES INCL FLUIDS AWAY FROM THE STRUCTURE IS IN BALCONIES, PITS, STAIRS ROOFS, WALLS, A	LUDING PITCH, SLOPE, FI DICATED ELSEWHERE IN	INISHES, WATERPROOFING, THE CONTRACT DOCUMENT	ETC. AND CONVEYANCE OF ANY IS. STRUCTURAL SLABS,		ELECTRODES. UNLESS OTHERWISE NOTED, PROVIDE CONTINUOUS MININ REQUIREMENTS. FILLER MATERIALS SHALL HAVE A MINIMUM YIELD STR	IUM SIŽED FILLET WELDS PER AISC ENGTH OF 58 KSI.	1.0 SPECTRAL RESPONSE ACCELER/DAMPED DESIGN SPECTRAL RESPONSE	ATION $(S_1) = 0.061$ $(S_{DS}) = 0.307$
2	THE SOLE PURPOSE OF COMMUNICATING S HOW FLUIDS FLOW AROUND AND AWAY FRO RELATED TO SYSTEMS THAT CONTROL FLUI	STRUCTURAL INFORMATION OM THE STRUCTURE. AN	N AND MAY NOT BE ACCU IY INFORMATION SHOWN ON	RATE REGARDING THE INTENT OF N THE STRUCTURAL DRAWINGS	0.	PROVIDE 1/8" CAP PLATE FOR ALL OPEN ENDS OF HSS MEMBERS. I ANY LOCATIONS WHERE FRAMING BEARS ON THE COLUMN CAP. ANY V FOR WELDING SHOULD BE PLACED IN NON—VISIBLE LOCATIONS FOR E	XPOSED MEMBERS IF POSSIBLE.	 ACCELERATION (SHORT PERIOD) DAMPED DESIGN SPECTRAL RESPON ACCELERATION (1-second PERIO 	$ISE (S_{D1}) = 0.098$
	CONFIRMED WITH THE FULL REQUIREMENTS					HOLES IN STEEL BEAMS SHALL BE DRILLED OR PUNCHED. ALL SLOTT EDGES. BURNING OF HOLES AND TORCH CUTTING AT THE SITE IS NO THE STRUCTURAL STEEL ERECTOR SHALL PROVIDE TEMPORARY GUYING	T PERMITTED.	• SEISMIC DESIGN CATEGORY = B	· 2 *
	ABBREVIATIONS				-	ANCHOR BOLTS, BASE PLATES, ETC. HAVE BEEN DESIGNED FOR THE BEEN INVESTIGATED FOR POTENTIAL LOADINGS ENCOUNTERED DURING INVESTIGATION OF THE COLUMNS, ANCHOR BOLTS, FRAMING, ETC. FOR	FINAL COMPLETE CONDITION, AND HAVE NOT STEEL ERECTION AND CONSTRUCTION. ANY	WIND WIND DESIGN (PER ASCI	
	(UNLESS OTHERWISE NOTED OR SHOWN ON ADJ. ADJUSTMENT ALT. ALTERNATIVE	E.W. E	G NOTES SHALL APPLY) EACH WAY O. EXPANSION R	C. ON-CENTER PLATE	9.	CONSTRUCTION PROCESS IS THE SOLE RESPONSIBILITY OF THE CONTR STEEL FABRICATORS SHALL BE AN AISC CERTIFIED SHOP FOR CATEGO DETAILED QUALITY CONTROL PROCEDURES AS REQUIRED TO SATISFY T	RACTOR. IRY I STEEL STRUCTURES AND MAINTAIN	 BASIC WIND SPEED (V3s) = 115 M IMPORTANCE FACTOR (Iw) = 1.00 	PH C
	ATTACH. ATTACHMENT BOTT. BOTTOM	E.J. EXPANSI	ION JOINT PS EXTENSION PS FINISH R./	SF POUNDS PER SQUARE FOOT SI POUNDS PER SQUARE INCH A. ROOF DRAIN		THE LATEST BUILDING CODE HAVING JURISDICTION.THIS REQUIREMENT PROVIDED THAT NECESSARY SHOP INSPECTIONS ARE PROVIDED. SEE S INFORMATION.	MAY BE WAIVED AT THE OWNER'S DISCRETION	 EXPOSURE CATEGORY = B GUST EFFECTIVE FACTOR (G) = 0.8 INTERNAL DEFECTIVE CONFERENCE 	
	BM. BEAM CANT. CANTILEVER € CENTERLINE		FOOT/FEET RE	EINF. REINFORCING EQ'D REQUIRED C. SLIP CONNECTION	10). UNLESS OTHERWISE NOTED, STRUCTURAL STEEL PERMANENTLY EXPOSE SHELF ANGLES, SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH	H ASTM A123. PROTECTIVE COATING DAMAGED	 INTERNAL PRESSURE COEFFICIENT (VERTICAL SURFACE WIND PRESSURE INTERIOR ZONE (ZONE C): 	ES (<u>STRUCTURAL FRAME</u>)
	CLR. CLEAR CA; C.A. COLUMN ABOVE		IGH POINT S.(DRIZONTAL SF	0.G. SLAB-ON-GRADE PL. SPLICE	11	DURING THE TRANSPORT, ERECTING AND FIELD WELDING PROCESS SHARESHOP APPLIED COATING. . THE OWNER WILL HIRE AN INDEPENDENT TESTING AGENCY TO PROVIDE		EXTERIOR ZONE (ZONE Á): • VERTICAL SURFACE WIND PRESSURE	± 24 PSF ES (<u>COMPONENTS & CLADDING</u>)
3	COL. COLUMN CONC. CONCRETE	•	H, INCHES SC JOINT SY	Q. SQUARE (M. SYMMETRY & B TOP AND BOTTOM	12	WELDING, AND OTHER ITEMS IN ACCORDANCE WITH THE LATEST BUILD 2. PROVIDE ANGLE FRAMES AT ALL ROOF OPENINGS AND MECHANICAL RODETAIL.		EFFECTIVE WIND AREA = 5 INTERIOR ZONE (ZONE 4): EXTERIOR ZONE (ZONE 5):	+ 24 PSF/ -26 PSF
	DIA.; DIAMETER DWG. DRAWING		VERTICAL T.C. .OW POINT T.C	IK.THICKNESS0.J.TOP OF JOIST0.S.TOP OF STEEL	13	5. STEEL FABRICATOR TO SUPPLY 16 GAGE CLOSURE ANGLES AROUND A BUILDING WHERE THE SLAB EDGE IS LESS THAN 6" IN LENGTH FROM OVERHANG GREATER THAN 6" FROM THE BEAM CENTERLINE REFER TO	THE BEAM CENTERLINE. FOR SLAB		
	E.F. EACH FACE EL.; ELEV. ELEVATION	MAX. MID.	MIDDLE VE	P. TYPICAL O.N. UNLESS OTHERWISE NOTED ERT. VERTICAL	14	. SEE ARCHITECTURAL DETAILS FOR ROOF DRAINS, MISCELLANEOUS ROOF OF REQUIRED MISCELLANEOUS ANGLE IRON AT THE OPENING LOCATIONS. MISC	PENINGS, AND FOR ROOF CURBS AND THE CELLANEOUS IRON CONTRACTOR TO PROVIDE	COLD-FO JOISTS, WALL ST	ALIGN WITH
	E.O.S. EDGE OF SLAB	MIN. NO. N.T.S. NOT	MINIMUM W. NUMBER TO SCALE	.W.F. WELDED WIRE FABRIC	15	MISCELLANEOUS STEEL SHOWN ON ARCHITECTURAL DRAWINGS THAT IS NOT AND/OR ROOF OVERHANGS GREATER THAN 6" REFER TO THE TYPICAL SLA AT LOCATIONS ON THE ARCHITECTURAL DRAWINGS OR OTHER TRADES	B EDGE DETAILS.		OLD-FORMED JOISTS
			OTEO			DIAGRAMMATICALLY AND REFERENCE IS MADE TO THE STRUCTURAL DR THICKNESS OF 3/8" MATERIAL AND PLATE WIDTH OR ANGLE SIZE AS PLATE OR ANGLE TO THE EXTENT REQUIRED TO ACCOMPLISH A COMP	SCALED FOR THE DRAWINGS. INSTALL THE		
	EXISTING CONDITIONS (UNLESS OTHERWISE NOTED OR SHOWN ON	PLAN, THE FOLLOWING	NOTES SHALL APPLY)		_ 16	5. WHEN NO MEMBER SIZE IS GIVEN IN PLAN AND/OR SECTION, AND TH GRAPHICALLY, THE MINIMUM SIZE ASSUMED FOR BIDDING SHALL BE A CHANNELS	HE SIZE CANNOT BE DETERMINED S FOLLOWS: 		<u>. I. I. I. I. I.</u>
	1. DIMENSIONS AND ELEVATIONS OF EXISTING AVAILABLE INFORMATION CONTAINED IN EITH ACTUAL FIELD CONDITIONS NEED TO BE C	HER VARIOUS ORIGINAL [DESIGN AND CONSTRUCTION	N DOCUMENTS OR FIELD SURVEY	•	W-SHAPES ANGLES TUBES/HOLLOW SECTIONS		BUILT-UP JAMB REQU ENDS OF ALL BEARING INCREASED EDGE LOAD	G WALLS FOR THE ENDS
4	2. THE CONTRACTOR SHALL VERIFY ALL EXIST WORK, AND WHEN FEASIBLE, PRIOR TO SH THE ATTENTION OF THE ARCHITECT. IT SHA	HOP DRAWING SUBMITTAL	S. ANY AND ALL DISCREPA LITY OF THE GENERAL CON	ANCIES SHALL BE BROUGHT TO		PIPES/HOLLOW SECTIONS WT (TEE's)	. 6"X—STRONG WT8x25	SCHEDULE FOR BASIS-	-OF-DESIGN
	 DISCREPANCIES WITH ALL SUBCONTRACTOR 3. DURING CONSTRUCTION THE CONTRACTOR VARIANCE WITH THE PROJECT DOCUMENTS. 	MAY ENCOUNTER EXISTIN	NG CONDITIONS WHICH ARE			UNLESS OTHERWISE NOTED ALL MEMBERS INDICATED ON PLAN ARE W BY ENGINEER VIA A REQUEST FOR INFORMATION (RFI) DURING THE BI PHASE. CONTRACTOR SHALL NOT BE ENTITLED TO COSTS FOR REVISIO	D PERIOD OR DURING THE SHOP DRAWING DNS TO THE MEMBER SIZE IF AN RFI IS NOT		
	DEVIATING CONDITIONS INCLUDING, BUT NO DETERIORATION TO MATERIALS AND COMPO	NT LIMITED TO: SIZES OR NENTS AND CONDITIONS	R DIMENSIONS OTHER THAN OF INSTABILITY OR LACK	N THOSE SHOWN, DAMAGE OR OF SUPPORT.	17	SUBMITTED IN A TIMELY MANNER. STRUCTURAL STEEL SHALL BE PAIR STRUCTURAL STEEL FABRICATOR AND INSTALLER SHALL BE RESPONSIE OPENINGS IN FRAMED FLOORS AND ROOF WITH APPROVED EQUIPMENT	BLE FOR THE COORDINATION OF ALL FRAMED MANUFACTURER(S). OPENINGS SHALL INCLUDE,	MAXIMUM 4" BÉTWEEN BUILT-UP JAMB AND FIRST IN-FILL STUD	CONTINUOUS FLAT STRAP BRIDGING & SOLID BLOCKING AS
	4. THE CONTRACTOR SHALL PROVIDE TEMPOR CONSTRUCTION AND/OR ADJACENT PROPER BRACING SHALL BE PERFORMED AND OVER	RTY AS PROJECT CONDIT RSEEN BY A LICENSED E	TIONS REQUIRE. DESIGN OF ENGINEER EMPLOYED BY TH	F TEMPORARY SHORING AND HE CONTRACTOR.	18	BUT ARE NOT LIMITED TO: MECHANICAL UNITS, EXHAUST FANS, CURB SKYLIGHTS, STAIRS, SMOKE HATCHES, DUCT PENETRATIONS, EXPANSION B. THE CONTRACTOR IS REQUIRED TO PROVIDE AN AFFIDAVIT, AT THE CO	N JOINTS, ETC.		Image: Required field fie
	5. WHERE NEW CONSTRUCTION IS REQUIRED TO ENSURE ALL EXISTING FRAMING IS SHO SYSTEM.	TO SUPPORT THE EXIST DRED AND BRACED PRIO	ING FRAMING AND/OR CON IR TO INSTALLATION OF TH	ISTRUCTION THE CONTRACTOR IS IE NEW STRUCTURAL SUPPORT		THE STRUCTURAL STEEL FRAME IS PLUMB AND LEVEL WITHIN THE NO AND/OR PROJECT SPECIFICATIONS. . THE CONTRACTOR SHALL PROVIDE A CERTIFIED SURVEY SHOWING THE		ARCHITECTURAL EXTERIOR WALL	TYPICAL BEARING SEE
	COLD-FORMED STEEL	FRAMING NO	OTES		_	COLUMNS AT THE TOP MOST LEVEL, EXACTLY AS INSTALLED. THIS IN "AS BUILT" DRAWINGS.		COLD-FORMED JO	SIZE, GAUGE & SPACING BASIS-OF-DESIGN ISTS
E	(UNLESS OTHERWISE NOTED OR SHOWN ON 1. PER THE PERFORMANCE REQUIREMENTS OF COLD-FORMED ELEMENTS, INCLUDING STUE	F THE COLD-FORMED MI	IETAL FRAMING SPECIFICATION						
5	REGISTERED ENGINEER EMPLOYED BY THE WIDTH, GAGE, SPACING AND DEFLECTION C	CONTRACTOR. SEE THE CRITERIA.	PROJECTS SPECIFICATIONS	5 FOR MINIMUM STUD DEPTH,	¢	HORING AND BRACING NOTES			L L L L L
	2. ALL COLD FORMED STEEL FRAMING MEMBE "SPECIFICATION FOR THE DESIGN OF COLD INSTITUTE (AISI) 2016 EDITION.	-FORMED STEEL STRUCT	TURAL MEMBERS" OF THE	AMERICAN IRON AND STEEL	(l 1	JNLESS OTHERWISE NOTED OR SHOWN ON PLAN, THE FOLLOWING NOTES SHORING AND BRACING SHALL COMPLY WITH THE LOCAL BUILDING CODE A	,		OISTS, ALIGN WITH
	 3. ALL FRAMING MEMBERS SHALL BE FORMED FOLLOWS: 12, 14, & 16 GAUGE MEMBERS: FY 		ning 10 ASTM A446 WITH	A MINIMUM YIELD STRENGTH AS		AUTHORITIES. INSPECTION FOR STRUCTURAL STABILITY SHALL BE PROVIDED BY AN APPRI			-FORM STUD BEARIN
	• 18 & 20 GAUGE MEMBERS: FY = 33 4. ALL FRAMING MEMBERS SHALL BE GALVAN	3 KSI (GRADE A) IZED WITH A G-60 COAT				CONTRACTOR, AS REQUIRED BY LOCAL GOVERNING AUTHORITIES. BRACING SHALL BE LOCATED TO CLEAR NEW CONSTRUCTION AND OTHER F MAINTAIN SHORING AND BRACING UNTIL STRUCTURAL ELEMENTS ARE REBR/		NOT TO SCALE	
	5. MEMBERS SHALL BE THE MANUFACTURERS AND SATISFY THE MINIMUM PROPERTIES AS THIS SHEET.	STANDARD "C" SHAPED S PER "MARINO/ WARE"	STUDS/JOISTS, HAVE A F (OR EQUAL) PER MINIMUN	LANGE LIP RETURN OF 1/2" M REQUIREMENTS AND NOTES ON		MAINTAIN SHORING AND BRACING UNTIL STRUCTURAL ELEMENTS ARE REBR/ CONSTRUCTION IS IN PLACE.	ים ששט טוובוע טואטוש טת UNIIL PERMANENT		
	 THE GAUGE OF ALL TRACKS SHALL BE NO INDICATED, CONNECT TRACKS TO CONCRET 16" ON-CENTER. 				-	TATEMENT OF			
6	7. ALL WELDING SHALL BE IN CONFORMANCE BE TOUCHED UP WITH ZINC RICH PAINT. AND TO THE SUPPORTING BACK-UP FRAM	WITH AMERICAN WELDIN ALL STRUCTURAL MEMBI	IG SOCIETY (AWS) SPECIFIC BERS SHALL BE PROPERLY BE MADE WITH SELF TAPE	CATION D1.3. ALL WELDS SHALL CONNECTED TO EACH OTHER PING SCREWS OR WELDS OF	(L	ESTING AND SPECIAL INSPECTION RE	SHALL APPLY)		
	SUFFICIENT SIZE TO INSURE THE CONNECT THE FOLLOWING LOADS: • EXTERIOR VERTICAL STUDS – DEAD I	TION STRENGTH. UNLESS	OTHERWISE NOTED CONI		FC	STING: <u>OWNER</u> SHALL ENGAGE A QUALIFIED INDEPENDENT TESTING AND DLLOWING SERVICES: INSPECTION AND TESTING OF ALL STRUCTURAL FILL WITH REPORTS SU			
	"DESIGN INFORMATION LOADS" 8. PROVIDE BRIDGING FOR STUDS, JOISTS AN	ID RAFTERS AT MID-SPA	N AND AT A MAXIMUM SP.		2.	COMPLIANCE OR NONCOMPLIANCE WITH PERCENT COMPACTION REQUIR STRUCTURAL STEEL: STRUCTURAL STEEL MEMBERS AND CONNECTIONS OF IBC (NYC ED.) SECTION 1704.3 AND TABLE 1704.3.			
	ALL BRIDGING SHALL BE INSTALLED PRIOR WELDING, CLIP ANGLES OR OTHER METHOE 9. PROVIDE WEB STIFFENERS AT ALL LOCATIO	D PER THE MANUFACTUR	RERS REQUIREMENTS			2.1. STEEL FABRICATOR INSPECTION: THE FABRICATOR SHALL BE AN STRUCTURES AND MAINTAIN DETAILED QUALITY CONTROL PROCEDU	URES AS REQUIRED TO SATISFY THE SPECIAL		
	REQUIREMENTS 10. ALL AXIALLY LOADED STUDS SHALL HAVE I ALIGNMENT. SPLICES IN AXIALLY LOADED S	FULL BEARING AGAINST 1	THE INSIDE TRACK WEB, P		3.	INSPECTION REQUIREMENTS OF IBC (NYC ED.) SECTION 1704.2.1 COLD-FORMED STEEL: SPECIAL INSPECTIONS FOR PREFABRICATED AND LIGHT-FRAME CONSTRUCTION AND ASSEMBLIES SHALL BE AS REQUIRE) SITE BUILT COLD-FORMED STEEL		
	11. PROVIDE THE MANUFACTURERS STANDARD AS RECOMMENDED BY MANUFACTURER FOF	TRACK, CLIP ANGLES, BF R THE APPLICATION INDIC	RACING, REINFORCEMENTS, CATED AS NEEDED TO PRO	OVIDE A COMPLETE FRAMING	4.	TABLE 1704.3.4 SPECIAL INSPECTION FOR STRUCTURAL STABILITY SHALL BE REQUIRED IBC (NYC ED.) SECTION 1704.20.	FOR CONSTRUCTION WORK AS SPECIFIED BY		
	SYSTEM. UNLESS OTHERWISE NOTED, INSTA WRITTEN INSTRUCTIONS AND RECOMMENDAT 12. THE CONTRACTOR SHALL SUBMIT THE FOLI	TIONS.		WITT THE MANUFAUTUKEKS		INSTALLATION OF POST-INSTALLED MECHANICAL ANCHORS, ADHESIVE A COMPLY WITH IBC (NYC ED.) SECTION 1704.32 AND TABLE 1704.32. WRITTEN REPORTS SHALL BE SUBMITTED TO THE ARCHITECT STATING			
7	A. MANUFACTURERS PRODUCT DATA AND B. ERECTION DRAWINGS SHOWING THE N CONNECTIONS AND ATTACHMENTS SH/	NUMBER, TYPE, LOCATION	N, AND SPACING OF ALL M	IEMBERS. ALL		DESIGN DOCUMENTS. ALL REPORTS SHALL BE SIGNED AND SEALED F NEW YORK.	BY A LICENSED ENGINEER FROM THE STATE OF		
	C. THE PROPERTIES OF ALL FRAMING M DEMONSTRATING CONFORMANCE WITH	IEMBERS THAT ARE USED THE MINIMUM ACCEPTAE	D IN LOAD-BEARING APPLI BLE PROPERTIES NOTED HI	EREIN.		FAILURE TO RETAIN A TESTING AGENCY TO PERFORM THE REQUIRED S SUBMIT SIGNED AND SEALED REPORTS, INDICATES NONCOMPLIANCE WI SEE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING CONST	TH THE CONTRACT DOCUMÉNTS.		
	D. STRUCTURAL CALCULATIONS FOR ALL	CONNECTIONS NOT OTH	IERWISE DETAILED ON THE	DRAWINGS.		NON-STRUCTURAL SPECIAL INSPECTION ITEMS.			

J INI	FORMATION	
	OF NEW YORK STATE	
JUDL		
7)	SNOW LOAD SNOW DESIGN (PER ASCE 7-16 Chapters 7)	
CEDURE RT)	• GROUND SNOW LOAD (PG) = 30 PSF • FLAT ROOF SNOW LOAD (PF) = 20 PSF • SNOW EXPOSURE FACTOR (CE) = 0.9 SNOW IMPORTANCE FACTOR (IS) = 1.00 SNOW THERMAL FACTOR (Ct) = 1.0	
0	DESIGN DEAD LOADS (INCLUDES SLAB/FLOOR/ROOF CONSTRUCTION SELF-WEIG	GHTS)
	3 PSF – 1–1/2" METAL ROOF DECK 6 PSF – ROOFING & INSULATION 4 PSF – MECHANICAL/ELECTRICAL 2 PSF – CEILING 5 PSF – MISCELLANEOUS 20 PSF – TOTAL *** *** DOES <u>NOT</u> INCLUDE SELF-WEIGHT OF STEEL FRAMING.	
	DESIGN LIVE LOADS DESIGN LIVE LOADS (PER IBCNJ BUILDING CODE SECTION	1607)
<u>DDING</u>)	OCCUPANCY OR USE CONFERENCE ROOMS OFFICE AREAS RESTROOMS LOBBIES/LOUNGES CORRIDORS CORRIDORS ABOVE FIRST FLOOR STAIRS AND EXITS LIGHT STORAGE MECHANICAL ROOMS FOLDING PARTITIONS ** 15 PSF PARTITION LOAD INCLUDED	- 80 - 100 - 80 - 100 - 125

Н



BEARING WALL ELEVATION



BACK-TO-BACK LOADING BEARING STUDS

/ TRACK

— TRACK OR C-SHAPE. ATTACH WITH SCREWS

– FASTEN TRACK TO STUD

THROUGH FLANGES OR

– SCREWS AS REQ'D

— STUD

(AS REQ'D)

— ĶING STUD(S)

(AS REQ'D)

BENT WEB

– JACK STUD(S) (AS REQ'D)

J

