

ELECTRICAL LEGEND:

SYMB	DESCRIPTION
⊕	20A, 125V, DUPLEX RECEPTACLE (NEMA 5-20R), WALL MTD
⊖	20A, 125V, DUPLEX RECEPTACLE (NEMA 5-20R), WALL MTD ISOLATED GROUND
⊕	20A, 125V, GFCI DUPLEX RECEPTACLE (NEMA 5-20R), WALL MTD
⊖	20A, 125V, SPLIT WIRED DUPLEX RECEPTACLE (NEMA 5-20R), WALL MTD
⊕	20A, 125V, QUADRUPLX RECEPTACLE (NEMA 5-20R), WALL MTD
⊖	20A, 125V, QUADRUPLX RECEPTACLE (NEMA 5-20R), WALL MTD, ISOLATED GROUND
⊕	20A, 125V, GFCI QUADRUPLX RECEPTACLE (NEMA 5-20R), WALL MTD
⊖	20A, 125V, SPLIT WIRED QUADRUPLX RECEPTACLE (NEMA 5-20R), WALL MTD
⊕	20A, 125V, SIMPLEX RECEPTACLE (NEMA 5-20R), WALL MTD
⊖	20A, 125V, SIMPLEX RECEPTACLE (NEMA 5-20R), WALL MTD ISOLATED GROUND
⊕	POWER RECEPTACLE, FLOOR MTD (SEE SPECS OR NOTES)
⊖	20A, 125V, DUPLEX RECEPTACLE (NEMA 5-20R), FLOOR MTD
⊕	20A, 125V, QUADRUPLX RECEPTACLE (NEMA 5-20R), FLOOR MTD
⊖	SPECIAL PURPOSE RECEPTACLE, FLOOR MTD (SEE EQUIPMENT SCHEDULE OR NOTES)
⊕	20A, 125V, DUPLEX RECEPTACLE (NEMA 5-20R), CEILING MTD
⊖	20A, 125V, QUADRUPLX RECEPTACLE (NEMA 5-20R), CEILING MTD
⊕	SPECIAL PURPOSE RECEPTACLE, WALL MTD (SEE EQUIPMENT SCHEDULE OR NOTES)
⊖	125 / 250V, RECEPTACLE (NEMA 14-30R / NEMA 14-50R), WALL MTD SEE EQUIPMENT SCHEDULE OR NOTES)
⊕	DROP CORD (SEE SPECS OR NOTES)
⊖	POWER POLE (SEE SPECS OR NOTES)
⊕	JUNCTION BOX, WALL MTD
⊖	JUNCTION BOX
⊕	DISCONNECT SWITCH NON-FUSED
⊖	DISCONNECT SWITCH FUSED
⊕	ELECTRICAL PANEL / ENCLOSURE AS NOTED ON PLAN DRAWINGS, SURFACE/RECESSED
⊖	ELECTRIC UTILITY METER
⊕	TELEPHONE OUTLET, WALL MTD
⊖	1 TELE OUTLET, U.N.O.
⊕	X = NUMBER OF TELEPHONE PORTS
⊖	DATA OUTLET, WALL MTD
⊕	1 DATA OUTLET, U.N.O.
⊖	Y = NUMBER OF DATA PORTS
⊕	COMBINATION TELE/ DATA OUTLET, WALL MTD
⊖	1 TELE / 2 DATA OUTLETS, U.N.O.
⊕	X = NUMBER OF TELEPHONE PORTS
⊖	Y = NUMBER OF DATA PORTS

ELECTRICAL DRAWING LIST:

SR. NO.	DWG. NO.	DRAWING NAME
01	E0.0	ELECTRICAL GENERAL NOTES AND LEGEND
02	E1.0	ELECTRICAL FLOOR PLAN
03	E2.0	ELECTRICAL RISER & PANEL SCHEDULE
04	E3.0	ELECTRICAL DETAILS
05	E4.0	ELECTRICAL SPECIFICATIONS

STOP AND READ:

THE CONTRACTOR AND SUB-CONTRACTORS **SHALL NOT INITIATE ANY WORK UNTIL EXISTING FIELD CONDITIONS ARE PROPERLY VERIFIED.**

GENERAL NOTES:

- COMPLETE SYSTEM: FURNISH ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, SUPERINTENDENTS AND SERVICES REQUIRED TO CONSTRUCT, INSTALL, AND MODIFY THE ELECTRICAL SYSTEMS AS HEREIN SPECIFIED AND SHOWN ON THESE DRAWINGS FOR A COMPLETE OPERATIONAL SYSTEM. COORDINATE WORK TO BE PERFORMED OR INSTALLED BY OTHERS AFFECTING THE ELECTRICAL WORK AND FURNISH AND INSTALL ALL NECESSARY STEEL SHAPES, BLOCKING, ANCHORS, SLEEVES, HANGERS, ETC. FOR ATTACHING OR CONNECTING ELECTRICAL WORK TO RELATED WORK OF OTHER TRADES. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN, WHICH ARE NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE PROVIDED WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
- REGULATIONS: ALL ELECTRICAL WORK SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE LATEST ADOPTED NATIONAL ELECTRICAL CODE (NEC) AND ALL OTHER APPLICABLE LOCAL BUILDING CODES, RULES, REGULATIONS AND AUTHORITIES HAVING JURISDICTION.
- WORKMANSHIP: ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER SUBJECT TO THE APPROVAL OF THE OWNER OR OWNER'S AUTHORIZED REPRESENTATIVE. RACEWAY, FIXTURES, AND WIRING DEVICES SHALL BE PROPERLY ALIGNED AND SUPPORTED. RACEWAY SHALL BE GROUPED AND INSTALL IN RUNS WHICH ARE PARALLEL AND PERPENDICULAR WITH BUILDING LINES.
- COORDINATION: PRIOR TO COMMENCEMENT OF WORK, EXAMINE ALL CONSTRUCTION DRAWINGS AND SPECIFICATIONS AND COORDINATE WITH ALL OTHER TRADES IN ORDER TO BECOME FAMILIAR WITH ALL ASPECTS OF THE DESIGN AFFECTING THE ELECTRICAL WORK. REFER TO ARCHITECTURAL DRAWINGS AND EQUIPMENT VENDOR CUT SHEETS FOR EQUIPMENT POWER/CONTROL REQUIREMENTS, CONNECTIONS, MOUNTING HEIGHTS, AND LOCATIONS OF ALL NEW ELECTRICAL DEVICES. FIELD VERIFY EXACT NAMEPLATE DATA ON ALL EQUIPMENT FURNISHED UNDER OTHER DIVISIONS AND/OR BY THE OWNER PRIOR TO THE INSTALLATION OF ELECTRICAL WORK AND MAKE ANY ADJUSTMENTS TO OUTLETS, CONDUITS, WIRE, AND/OR CIRCUIT BREAKER RATINGS AS REQUIRED TO MATCH EQUIPMENT ACTUALLY FURNISHED. FINAL LOCATION OF EQUIPMENT AND DEVICES TO BE COORDINATED WITH OWNER.
- EXISTING CONDITIONS: SURVEY SITE OF WORK PRIOR TO SUBMITTING BID TO BECOME FULLY INFORMED OF ALL CONDITIONS THAT EFFECT THE WORK AND COST THEREOF. CONSIDERATIONS WILL NOT BE GRANTED FOR ANY ALLEGED MISUNDERSTANDING OF THE AMOUNT OF WORK TO BE PERFORMED. NOTIFY THE ARCHITECT AND/OR ENGINEER IN ADVANCE OF ANY DISCREPANCIES OR OMISSIONS.
- PERMITS: OBTAIN ALL NECESSARY PERMITS, LICENSES, AND INSPECTIONS AS REQUIRED BY THE MUNICIPALITY AND UTILITY COMPANY. PAY ALL ASSOCIATED FEES FOR PERMITS AND OTHER MUNICIPAL AND GOVERNING REQUIREMENTS.
- UTILITIES: COORDINATE WITH POWER AND TELEPHONE COMPANIES FOR SERVICE REQUIREMENTS. NOTIFY UTILITIES OF COMMENCEMENT OF WORK AND MAKE ALL ARRANGEMENTS FOR TEMPORARY SERVICES. THE COST FOR ALL WORK AND MATERIALS REQUIRED BY UTILITY COMPANIES AND SET-UP OF SERVICE SHALL BE INCLUDED IN BID.
- INTERRUPTION OF ELECTRICAL POWER: COORDINATE ALL WORK REQUIRING INTERRUPTION OF ELECTRICAL POWER WITH THE BUILDING OWNER AND OBTAIN WRITTEN PERMISSION FROM THE BUILDING OWNER PRIOR TO SHUTTING DOWN POWER TO ANY SWITCHBOARD. PROVIDE NOTICE TO ALL OTHER TRADES OF ALL SCHEDULED INTERRUPTIONS OF POWER.
- PRODUCTS: ALL ELECTRICAL MATERIALS SHALL BE NEW EXCEPT WHERE SPECIFICALLY NOTED AS EXISTING TO BE REUSED. MATERIAL AND METHODS OF INSTALLATION SHALL CONFORM TO THE STANDARDS OF UNDERWRITERS LABORATORIES, INC. (UL), ANSI, NFPA, ADA, AND ALL APPLICABLE LOCAL ORDINANCES. DEFECTIVE EQUIPMENT AND/OR EQUIPMENT DAMAGED DURING INSTALLATION AND/OR TESTING SHALL BE REPLACED OR REPAIRED IN A MANNER MEETING THE APPROVAL OF THE ARCHITECT AND THE ENGINEER. PROPOSED EQUIPMENT SHALL BE NRTL LISTED, LABELED, OR APPROVED.
- PENETRATIONS: COORDINATE FLOOR AND WALL PENETRATIONS WITH STRUCTURAL ENGINEER. ALL PENETRATIONS THROUGH FIRE-RATED SLABS AND/OR PARTITIONS SHALL BE FIRE-PROOFED BY AN APPROVED METHOD TO THE SAME OR GREATER RATING THAN THAT OF THE SLAB OR PARTITION. ALL PENETRATION SHALL RECEIVE CAULKING TO SEAL ANY TYPE OF ENERGY LOSS.
- AVAILABLE FAULT CURRENT: VERIFY AVAILABLE FAULT CURRENT WITH POWER COMPANY AND MAKE EQUIPMENT PROVISIONS AS NECESSARY.
- VOLTAGE DROP: INCREASE WIRE SIZES AS REQUIRED TO MAINTAIN VOLTAGE DROPS @ A MAXIMUM OF 3% FOR BRANCH CIRCUITS AND 2% FOR FEEDERS.
- WIRING: ALL CONDUCTORS CARRYING 50 VOLTS OR MORE SHALL BE MINIMUM #12 AWG. CU, UNLESS NOTED OTHERWISE. ALL CONDUCTOR SIZES ARE BASED ON COPPER, UNLESS NOTED OTHERWISE. PROVIDE TYPE THHN OR XHHW TYPE INSULATIONS, COORDINATE INSULATION TYPES WITH ENVIRONMENTAL CONDITIONS, NEC REQUIREMENTS, AND CONDUIT FILL REQUIREMENTS. ALL CONDUCTOR SIZES ARE BASED ON 60 C INSULATION FOR CIRCUITS RATED 100 A OR LESS AND 75 C FOR CIRCUITS RATED MORE THAN 100 A.
- COLOR CODING: FOR EXISTING WIRING SYSTEMS, COLOR CODING SHALL FOLLOW EXISTING SITE REQUIREMENTS. FOR NEW INSTALLATIONS OR WHERE EXISTING INSTALLATIONS DO NOT HAVE A COLOR CODING CONVENTION, THE FOLLOWING SYSTEMS OF COLOR CODING SHALL BE STRICTLY ADHERED TO AND FOLLOWED THROUGHOUT:

CONDUCTOR	480Y/277V	240V OR LESS
PHASE A:	BROWN	BLACK
PHASE B:	ORANGE	RED
PHASE C:	YELLOW	BLUE
NEUTRAL:	GRAY	WHITE
EQUIPMENT GROUND:	GREEN	GREEN
ISOLATED GROUND:	---	GREEN W/ YELLOW STRIPE
- GROUNDING: ALL CIRCUITS SHALL BE RUN WITH AN INSULATED GREEN COPPER GROUND WIRE SIZED PER NEC. USE OF CONDUIT AS A GROUND IS UNACCEPTABLE.
- CONDUIT: ALL WIRING SHALL BE INSTALLED IN CONDUIT, MINIMUM 1/2" FOR INDOOR AND 3/4" FOR OUTDOOR. EMT IS ACCEPTABLE WITH COMPRESSION FITTINGS ONLY. MC IS ACCEPTABLE FOR FIXTURE WHIPS ONLY. ALL CONDUIT AND WIRINGS SHALL BE CONCEALED IN CEILINGS AND/OR WALLS UNLESS SPECIFICALLY NOTED OTHERWISE. CHANNEL EXISTING WALLS WHERE REQUIRED. WHERE CONDUITS ARE UNABLE TO BE CONCEALED, HARD PIPED CONDUIT SHALL BE USED AND PAINTED TO MATCH ADJOINING SURFACE.
- ROUTING: CONDUIT ROUTING SHOWN IS SYMBOLIC AND DIAGRAMMATIC. INSTALL CONDUIT TO FIT ACTUAL FIELD CONDITIONS.
- MODIFICATIONS TO EXISTING PANELBOARDS: PROVIDE NEW CIRCUIT BREAKERS AND/OR FUSED SWITCHES AS REQUIRED. NEW EQUIPMENT SHALL MATCH EXISTING INSTALLED EQUIPMENT AND SHALL BE OF THE SAME MANUFACTURER AND TYPE AS SIMILAR EXISTING EQUIPMENT. INTERRUPTING RATING OF EQUIPMENT SHALL BE THE SAME AS OF THE EXISTING EQUIPMENT.
- IDENTIFICATION: ALL ELECTRICAL DISTRIBUTION EQUIPMENT, TRANSFORMERS, PANELBOARDS, AND OTHER ENCLOSED EQUIPMENT SHALL BE IDENTIFIED AS INDICATED IN THE CONTRACT DOCUMENTS. SAID IDENTIFICATION SHALL CONSIST OF PERMANENTLY ATTACHED ENGRAVED LAMINATED PLASTIC NAMEPLATES. EACH BRANCH CIRCUIT OVER-CURRENT PROTECTION DEVICE SHALL BE IDENTIFIED BY CIRCUIT NUMBER AND SCHEDULED INSIDE PANEL DOOR. EACH BRANCH CIRCUIT SPLICE OR TERMINATION SHALL BE IDENTIFIED BY PANEL AND CIRCUIT DESIGNATION SHOWN ON THE JUNCTION OR OUTLET BOX, OR UPON INDIVIDUAL WIRES IN CASES WHERE MORE THAN ONE OF EACH PHASE CONDUCTOR OCCUR.
- SHOP DRAWINGS AND SUBMITTALS: SUBMIT MANUFACTURERS' STANDARD PRODUCT INFORMATION, PERFORMANCE SPECIFICATIONS, PHYSICAL DIMENSIONS, AND OTHER INFORMATION NECESSARY FOR ENGINEER TO ENSURE COMPLIANCE WITH SPECIFICATIONS. SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO ORDERING AND INSTALLING ANY EQUIPMENT.
- SUBSTITUTION AND ALTERATIONS: THERE SHALL BE NO DEVIATION FROM THE REQUIREMENTS HEREIN WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR ALL COSTS INCURRED RESULTING FROM SUBSTITUTION OF EQUIPMENT AS WELL AS THE PERFORMANCE AND SPACE REQUIREMENTS OF SUCH EQUIPMENT.
- PROJECT RECORD DOCUMENTS: THE ELECTRICAL CONTRACTOR SHALL MAINTAIN AT THE SITE, FOR THE OWNER, ONE COPY OF ALL DRAWINGS, ADDENDA, APPROVED SHOP DRAWINGS, REVISIONS AND OTHER MODIFICATIONS IN GOOD ORDER AND MARKED TO RECORD ALL CHANGES MADE DURING CONSTRUCTION. THE SET OF DRAWINGS AND OTHER INFORMATION SHALL BE DELIVERED TO THE OWNER WITHIN 30 DAYS AFTER THE DATE OF SYSTEM ACCEPTANCE AND ONE COPY GIVEN TO THE ENGINEER UPON COMPLETION OF WORK. DRAWINGS SHALL INCLUDE AT A MINIMUM:
 - SINGLE-LINE DIAGRAM OF THE BUILDING ELECTRICAL DISTRIBUTION SYSTEM AND.
 - FLOOR PLANS INDICATING LOCATION AND AREA SERVED FOR ALL DISTRIBUTION.
- CERTIFICATES OF APPROVAL: ALL CERTIFICATES OF APPROVAL SHALL BE IN TRIPLICATE, DELIVERED TO THE ENGINEER AND BECOME THE PROPERTY OF THE OWNER.
- OPERATIONS AND MAINTENANCE MANUALS: PROVIDE OPERATING AND MAINTENANCE MANUALS TO THE BUILDING OWNER. THE MANUALS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:
 - SUBMITTAL DATA STATING EQUIPMENT RATING AND SELECTED OPTIONS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE.
 - OPERATING MANUALS AND MAINTENANCE MANUALS FOR EACH PIECE OF EQUIPMENT REQUIRING MAINTENANCE. REQUIRED ROUTINE MAINTENANCE ACTIONS SHALL BE CLEARLY IDENTIFIED.
 - NAMES AND ADDRESSES OF AT LEAST ONE QUALIFIED SERVICE AGENCY.
- WARRANTY: THE ENTIRE ELECTRICAL SYSTEM INSTALLED UNDER THIS CONTRACT SHALL BE HANDED OVER IN PROPER WORKING ORDER. ANY WORK OR MATERIALS WHICH DEVELOP DEFECTS, EXCEPT FROM ORDINARY WEAR AND TEAR, WITHIN ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE SHALL BE REPLACED WITHOUT CHARGE. BENEFICIAL USE SHALL NOT BE CONSTRUED AS FINAL ACCEPTANCE. THE ELECTRICAL CONTRACTOR SHALL, DURING THE ONE YEAR GUARANTEE PERIOD, BE RESPONSIBLE FOR THE PROPER REPAIR AND ADJUSTMENTS OF ALL ELECTRICAL SYSTEMS AND EQUIPMENT, APPARATUS, DEVICES, ETC. INSTALLED BY HIM, AND DO ALL WORK NECESSARY TO ENSURE EFFICIENT AND PROPER FUNCTIONING.

ABBREVIATIONS:

A	AMPERE	GRS	GALVANIZED RIGID STEEL	OCPD	OVERCURRENT PROTECTION DEVICE
AFF	ABOVE FINISHED FLOOR	HOA	HAND-OFF-AUTO	OH	OVERHEAD
AFG	ABOVE FINISHED GRADE	IG	ISOLATED GROUND	P	POLE
AHJ	AUTHORITY HAVING JURISDICTION	JB	JUNCTION BOX	PH	PHASE
AFC	AVAILABLE FAULT CURRENT	KVA	KILOVOLT-AMPERE	PNL	PANEL
AIC	AMPERE INTERRUPTING CAPACITY	KW	KILOWATT	PWR	POWER
ATS	AUTOMATIC TRANSFER SWITCH	L.S.I.G.	LONG, SHORT, INSTANTANEOUS, GROUND FAULT	RECEP	RECEPTACLE
BLDG	BUILDING		TRIP	RM	ROOM
BRKR	BREAKER	LTG	LIGHTING	SW	SWITCH
C	CONDUIT	MCA	MINIMUM CIRCUIT AMPS	SWBR	SWITCHBOARD
CKT	CIRCUIT	MCB	MAIN CIRCUIT BREAKER	SWGR	SWITCHGEAR
CLG	CEILING	MCC	MOTOR CONTROL CENTER	TBB	TELECOM BACKBOARD
CT	CURRENT TRANSFORMER	MCCB	MOLDED CASE CIRCUIT BREAKER	TELE	TELEPHONE
CU	COPPER	MCP	MOTOR CIRCUIT PROTECTOR	TYP	TYPICAL
CTR	CENTER	MDP	MAIN DISTRIBUTION PANEL	UG	UNDERGROUND
EA	EACH	MFS	MAXIMUM FUSE SIZE	UNO	UNLESS NOTED OTHERWISE
EGG	EQUIPMENT GROUNDING CONDUCTOR	MLO	MAIN LUG ONLY	UPS	UNINTERRUPTIBLE POWER SUPPLY
EOL	ELECTRONIC OVERLOAD	MCCP	MAXIMUM OVERCURRENT PROTECTION	V	VOLT
FDR	FEEDER	MTD	MOUNTED	VIF	VERIFY IN FIELD
FLA	FULL LOAD AMPS	MTS	MANUAL TRANSFER SWITCH	W	WITH
GEC	GROUNDING ELECTRODE CONDUCTOR	N.C.	NORMALLY CLOSED	W	WIRE
GFI	GROUND FAULT INTERRUPTER	N.O.	NORMALLY OPEN	WP	WEATHER PROOF
GND	GROUND	NTS	NOT TO SCALE	XFMR	TRANSFORMER

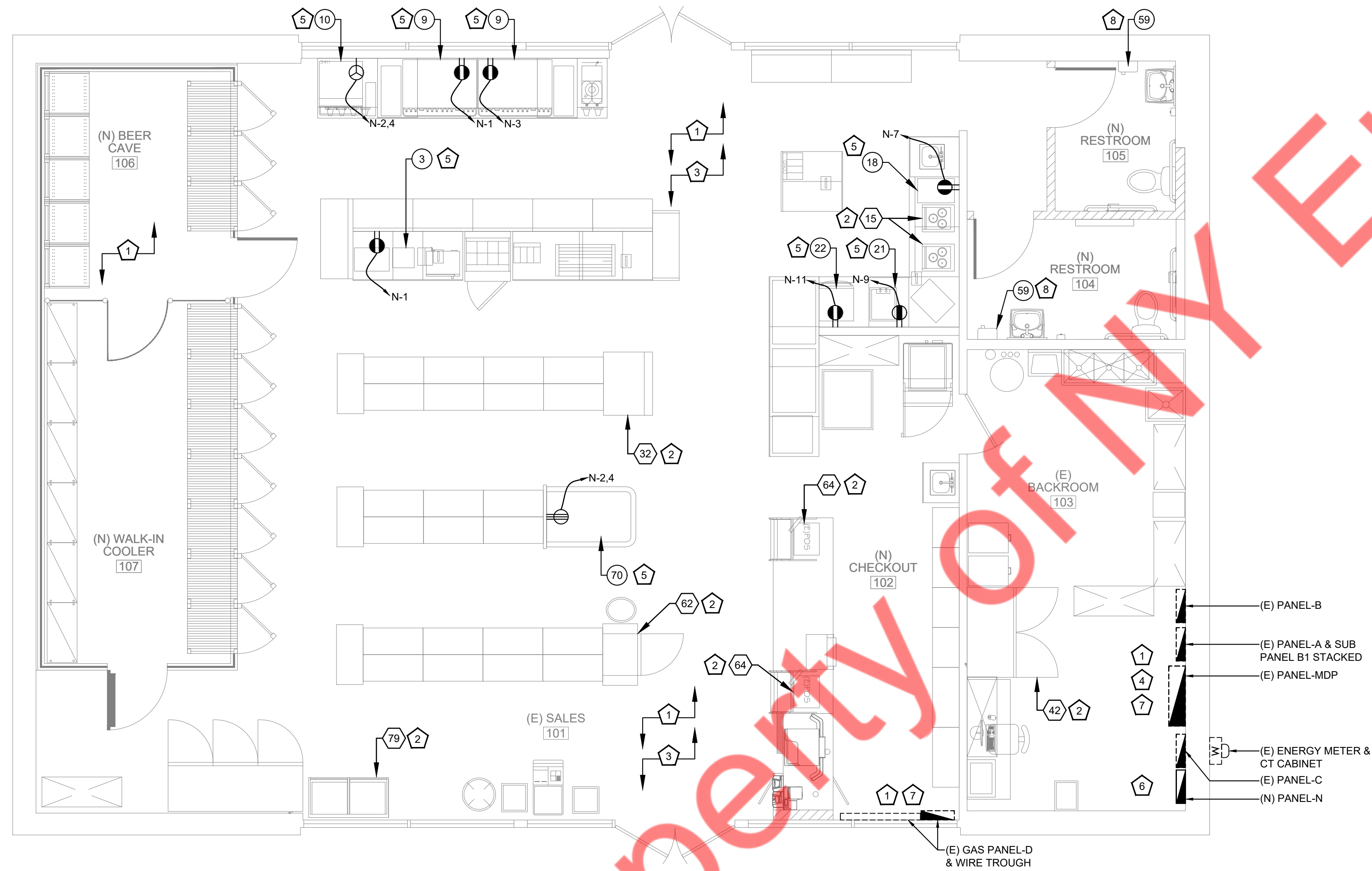


NOTE:
ELECTRICAL CONTRACTOR SHALL VERIFY IN FIELD IF THE EXISTING ELECTRICAL SERVICE HAS ADEQUATE LOAD CAPACITY TO ACCOMMODATE THE NEW LOADS, AND ONLY UPGRADE THE ELECTRICAL SERVICE TO A HIGHER AMP SERVICE IF IT IS NECESSARY.

NOTE:
EXISTING LIGHT FIXTURES AND THEIR CONTROLS TO REMAIN U.N.O. E.C. TO FIELD VERIFY THE OPERABLE CONDITION OF EXISTING CONTROLS, BRANCH CIRCUITS, PROVIDE NEW IF FOUND INOPERABLE. E.C. TO COORDINATE WITH ARCHITECT/OWNER FOR EXACT SCOPE. BASE BID ACCORDINGLY.

NOTE:
ALL RECEPTACLES USED FOR DISPENSING AND FOOD PREP SHALL BE GFCI PROTECTED PER NEC.

- (X) NEW EQUIPMENT
- (X) RELOCATED EQUIPMENT



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

- ELECTRICAL FLOOR PLAN GENERAL NOTES:**
1. REFER TO EQUIPMENT SCHEDULE FOR EQUIPMENT ELECTRICAL AND OTHER REQUIREMENTS.
 2. REFER TO ARCHITECTURAL DRAWINGS FOR ALL WIRING DEVICE LOCATIONS AND MOUNTING HEIGHTS.
 3. BRANCH CIRCUITS RUN ABOVE ACCESSIBLE CEILINGS MAY USE MC CABLE.
 4. COORDINATE ELECTRICAL REQUIREMENTS, WIRING DEVICE TYPE, MOUNTING HEIGHT, MEANS OF ATTACHMENT, AND CONNECTIONS WITH EQUIPMENT SUPPLIERS.
 5. FINAL LOCATION OF ALL EQUIPMENT TO BE COORDINATED WITH OWNER.
 6. VERIFY STUB-UP LOCATIONS FOR ALL UNDER SLAB CONDUITS PRIOR TO ROUGH-IN.
 7. FOR CLARITY, CONDUIT ROUTING IS DIAGRAMMATIC. COORDINATE CONDUIT ROUTING WITH OTHER TRADES AND MAKE FIELD CHANGES AS REQUIRED.
 8. INSTALL OUTLETS ON OPPOSITE SIDES OR PARTITIONS IN SEPARATE STUD CAVITIES. DO NOT INSTALL BACK-TO-BACK.
 9. PROVIDE MATCHING COVER PLATES, RECEPTACLES AND RELATED ITEMS. PROVIDE ONE-PIECE TYPE GANG COVER PLATES, UNLESS NOTED OTHERWISE.
 10. CONNECT TO EXISTING BRANCH CIRCUITS WHERE POSSIBLE TO ACHIEVE ELECTRICAL DESIGN AS SHOWN. VERIFY EXISTING WIRE SIZE, BREAKER RATING, AND PANEL LOAD CAPACITY IS SUFFICIENT FOR INCREASED LOADING. PROVIDE NEW BRANCH CIRCUITS AS REQUIRED.
 11. INTERCONNECT LOADS SUCH THAT THE CURRENT DOES NOT EXCEED 16 AMPS ON EACH 20 AMP CIRCUIT BREAKER AND/OR 12 AMPS ON EACH 15 AMP CIRCUIT BREAKER. VERIFY EXISTING WIRING IS MINIMUM #12 AWG, CU FOR A 20 AMP BREAKER AND #14 AWG, CU FOR A 15 AMP BREAKER. ALL NEW WIRING SHALL BE MINIMUM #12 AWG, CU. ALL NEW WIRING DEVICES SHALL BE RATED MINIMUM 20 AMP.
 12. VERIFY EXISTING PANEL(S) AND UPSTREAM ELECTRICAL DISTRIBUTION SYSTEM HAVE ADEQUATE SPARE LOAD CAPACITY AND EXISTING FEEDER(S) AND CIRCUIT BREAKER(S) ARE OF SUFFICIENT SIZE TO ACCOMMODATE THE ADDITION OF NEW LOADS. NOTIFY ENGINEER IF ANY DISCREPANCIES ARISE.
 13. VERIFY THE AVAILABLE FAULT CURRENT AND SYSTEM CAPACITY W/ THE UTILITY COMPANY AND MAKE EQUIPMENT PROVISIONS AS REQUIRED. NEW CIRCUIT BREAKER INTERRUPTING RATINGS SHALL AT A MINIMUM MATCH EXISTING.
 14. UPDATE ALL PANEL SCHEDULES W/ NEW TYPEWRITTEN DIRECTORY CARD.
 15. CONCEAL ALL CONDUITS IN FLOORS, WALLS, OR CEILING UNLESS NOTED OTHERWISE. WHERE CONDUITS ARE UNABLE TO BE CONCEALED, PAINT TO MATCH ADJOINING SURFACE.
 16. BRANCH CIRCUIT NUMBERS AND ELECTRICAL DEVICE LOCATIONS SHOWN ON THIS DRAWING HAVE BEEN COLLECTED FROM FIELD NOTES, WALK-THRU, SURVEY PHOTOS, EXISTING PANELBOARD DIRECTORY, AS-BUILT DRAWINGS AND/OR RECORD DRAWINGS AT THE TIME OF THE INITIAL DESIGN.
 17. SOME EXISTING CIRCUITS ARE UNABLE TO BE IDENTIFIED WITHOUT FURTHER INVESTIGATION, THEREFORE, ELECTRICAL CONTRACTOR SHALL FIELD VERIFY AND TRACE ALL BRANCH CIRCUITS PRIOR TO START OF WORK AND NOTIFY ENGINEER OF RECORD IN CASE OF ANY DISCREPANCIES.
 18. TO THE GREATEST EXTENT POSSIBLE, EC SHALL REUSE EXISTING BRANCH CIRCUITS SERVING AREA OF WORK AND/OR MODIFY CIRCUIT NUMBERS TO ACCOMMODATE NEW LOAD INTO EXISTING PANEL. MAINTAIN DESIGN INTENT OF PROPOSED BRANCH CIRCUITS FOR NEW ELECTRICAL DEVICES. MAXIMUM LOAD PER BRANCH CIRCUIT TO BE CONNECTED SHALL NOT EXCEED 80% OF THE CIRCUIT BREAKER CAPACITY.
 19. NOT ALL ELECTRICAL DEVICES, RECEPTACLES, JUNCTION BOXES, DATA OUTLETS, SWITCHES, ETC. ARE SHOWN ON THIS DRAWING. ELECTRICAL CONTRACTOR SHALL FIELD VERIFY EXISTING DEVICES AND RELOCATE, REUSE, REMOVE, ETC. AS REQUIRED BY THE NEW SCOPE OF WORK.
 20. CONTACT ENGINEER OF RECORD IN CASE OF ANY DISCREPANCIES WHICH MAY AFFECT THE DESIGN INTENT AND/OR AFFECT LOAD SUBSTANTIALLY.

- ELECTRICAL FLOOR PLAN KEYED NOTES:**
1. EXISTING KITCHEN, HVAC EQUIPMENT AND ASSOCIATED BRANCH CIRCUITS TO REMAIN U.N.O.
 2. EXTEND EXISTING BRANCH CIRCUIT WIRING FROM EXISTING LOCATION AS REQUIRED AND PROVIDE NEW WIRING DEVICE. NEW WIRING SHALL MATCH EXISTING. UPSIZE WIRING AS REQUIRED FOR VOLTAGE DROP.
 3. VERIFY PLACEMENT AND THE LOAD OF EXISTING RECEPTACLES (PROVIDE NEW AS REQUIRED ONLY).
 4. ELECTRICAL CONTRACTOR SHALL VERIFY CAPACITY OF EXISTING PANELS AND UTILIZE EXISTING SPARE/SPACE FOR CONNECTION. IF SPARE IS NOT AVAILABLE E.C. SHALL PROVIDE BREAKER SUFFICIENT TO HANDLE NEW EQUIPMENT AS DEFINED ON SHEET E2.0.
 5. E.C. TO PROVIDE REQUIRED CIRCUITING AND CONNECTIONS. FIELD COORDINATE.
 6. ELECTRICAL CONTRACTOR TO VERIFY ACTUAL SERVICE CONFIGURATION IN THE FIELD, AND ROUTE THE NEW PANEL (120/208V, 1PHASE, 3WIRE, 125AMP (MLO) TO THE EXISTING PANEL 'MDP' AS REQUIRED. SEE SHEET E2.0.
 7. ELECTRICAL CONTRACTOR SHALL TEST PANELS TO ENSURE MAXIMUM LOADING DOES NOT EXCEED 80% OF CAPACITY, AND BALANCE THE PANELS AS REQUIRED.
 8. REUSE EXISTING BRANCH CIRCUIT FOR RESTROOMS LIGHTING & HAND DRYER, PROVIDE NEW WIRING AS REQUIRED.



NEW EQUIPMENT LIST:

Table with columns: ITEM, QTY, DESCRIPTION, MANUFACTURER, MODEL NO., VOLTAGE, PHASE, AMPS, RECEPTACLE, REMARKS. Lists items like Nacho Theater, 12-Head Fountain, 4-Head Froster Machine, etc.

EQUIPMENT GENERAL NOTES:

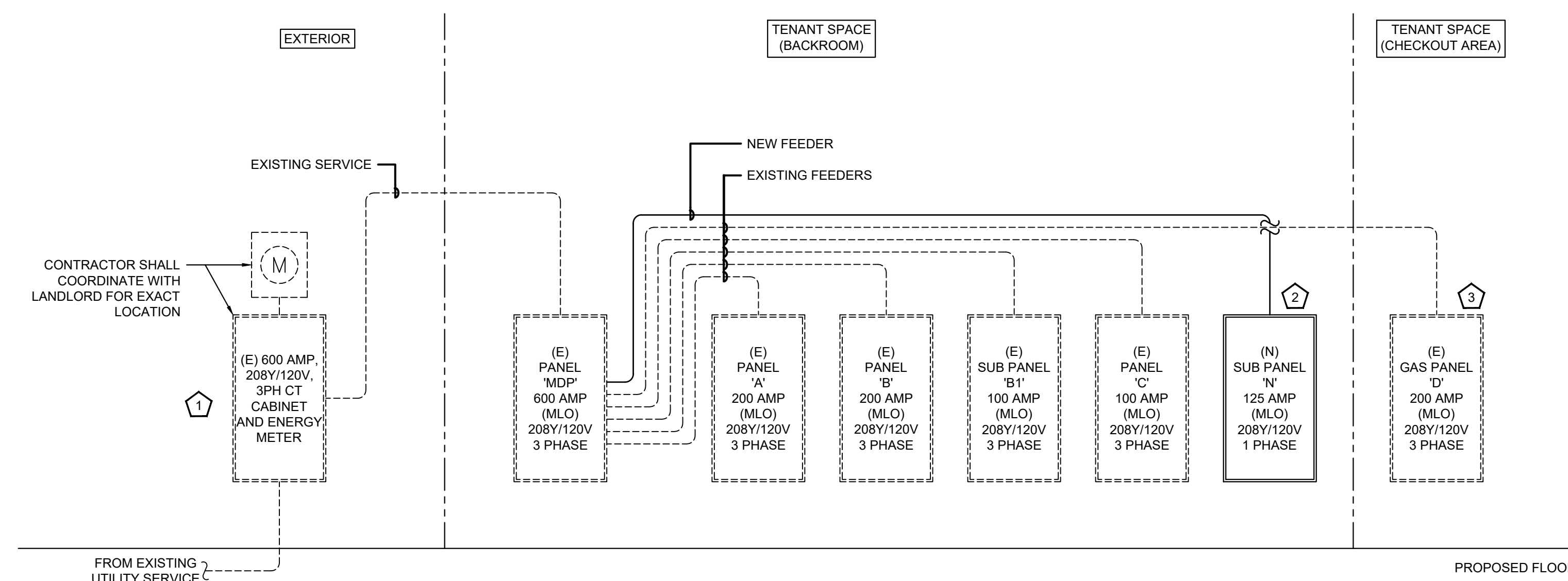
- 1. ELECTRICAL CONTRACTOR SHALL VERIFY EXACT POWER AND CONNECTION REQUIREMENTS WITH THE MANUFACTURER PRIOR TO ROUGH-IN. BASE BID ACCORDINGLY.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE CORD AND PLUG FOR EQUIPMENT, IF ANY, WITH CORD AND PLUG NOT INCLUDED.
3. COORDINATE NEMA RECEPTACLE CONFIGURATION WITH THE EQUIPMENT SUPPLIER.
4. PROVIDE GFCI DEVICES OR CIRCUIT BREAKERS WHERE REQUIRED BY NEC.
5. NEW CIRCUITS SHALL BE CONNECTED TO UNUSED OR MADE SPARE BY DEMOLITION POLES IN EXISTING PANELS.
6. PRIOR TO ADDING NEW CIRCUITS, EACH PANEL EXISTING LOAD MUST BE CAREFULLY DETERMINED BY THE ELECTRICAL CONTRACTOR IN ACCORDANCE WITH NEC 220.87(1), (2), (3). THIS SHALL BE THE BASELINE FOR DETERMINING EACH INDIVIDUAL PANEL CAPACITY. DO NOT ADD LOAD TO 80% OR MORE OF PANEL FEEDER OR MAIN SERVICE ENTRANCE UPSTREAM CIRCUIT BREAKER.
7. DO NOT ADD NEW LOAD TO THE FUEL/GAS PANEL.
8. EXTERIOR EQUIPMENT AND DEVICES SHALL BE NEMA 3R.

Panel B (Existing) Schedule Table. Columns: MCB, NA, TRIP AMPS, DESCRIPTION OF LOAD, LOAD TYPE, LOAD (KVA), MINIMUM BRANCH CIRCUIT, PER PHASE (KVA), MINIMUM BRANCH CIRCUIT, LOAD (KVA), LOAD TYPE, DESCRIPTION OF LOAD, TRIP AMPS, CKT NO.

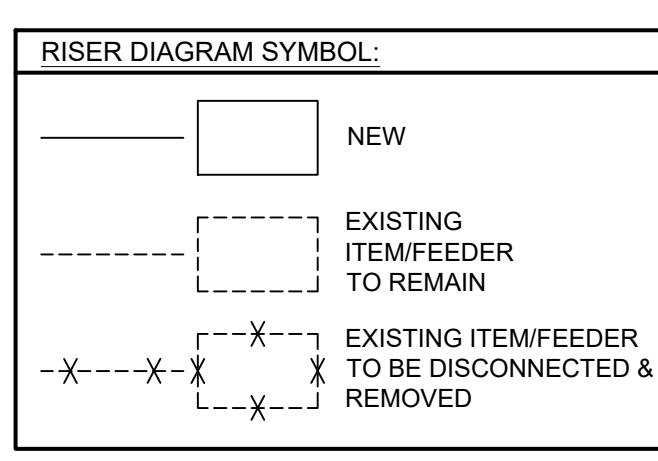
Panel B1 (Existing) Schedule Table. Columns: MCB, NA, TRIP AMPS, DESCRIPTION OF LOAD, LOAD TYPE, LOAD (KVA), MINIMUM BRANCH CIRCUIT, PER PHASE (KVA), MINIMUM BRANCH CIRCUIT, LOAD (KVA), LOAD TYPE, DESCRIPTION OF LOAD, TRIP AMPS, CKT NO.

Panel N (New) Schedule Table. Columns: MCB, NA, TRIP AMPS, DESCRIPTION OF LOAD, LOAD TYPE, LOAD (KVA), MINIMUM BRANCH CIRCUIT, PER PHASE (KVA), MINIMUM BRANCH CIRCUIT, LOAD (KVA), LOAD TYPE, DESCRIPTION OF LOAD, TRIP AMPS, CKT NO.

Panel C (Existing) Schedule Table. Columns: MCB, NA, TRIP AMPS, DESCRIPTION OF LOAD, LOAD TYPE, LOAD (KVA), MINIMUM BRANCH CIRCUIT, PER PHASE (KVA), MINIMUM BRANCH CIRCUIT, LOAD (KVA), LOAD TYPE, DESCRIPTION OF LOAD, TRIP AMPS, CKT NO.



- ELECTRICAL RISER GENERAL NOTES:
1. PROPER CLEARANCE MUST BE MAINTAINED ABOUT ELECTRICAL EQUIPMENT PER N.E.C. FIELD VERIFY EXACT MOUNTING SPACE AVAILABLE IN ELECTRICAL ROOM/AREA PRIOR TO INSTALLATION OF ELECTRICAL EQUIPMENT.
2. MAKE ALL FINAL ELECTRICAL CONNECTIONS FOR A COMPLETE ELECTRICAL DISTRIBUTION SYSTEM. ALL CONNECTIONS/DISCONNECTIONS TO LANDLORDS/UTILITIES SERVICE EQUIPMENT SHALL BE AS DIRECTED BY LANDLORDS/UTILITIES SITE REPRESENTATIVE. TENANT GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TERMINATION/DETERMINATION EXPENSES.
3. SYSTEM SHALL BE GROUNDED TO THE MAIN BUILDING'S GROUNDING SYSTEM.
4. DISCONNECT SWITCHES AND PANELS SHALL BE INSTALLED ON PLYWOOD BACKBOARDS.
5. TENANT CONTRACTOR MUST VERIFY ELECTRICAL SERVICE, SUB-FEED WIRING AND PANELS PRIOR TO START OF TENANT'S ELECTRICAL WORK. TENANT GENERAL CONTRACTOR SHALL MAKE APPLICATION TO THE LOCAL UTILITY FOR CONTINUED METERED ELECTRIC SERVICE IN THE TENANT'S NAME. TENANT GENERAL CONTRACTOR SHALL CONFIRM ALL LOCAL UTILITY GUIDELINES AND REQUIREMENTS PRIOR TO BID, SHALL INCLUDE THE COSTS OF THESE REQUIREMENTS IN THE BID, AND SHALL COMPLY WITH THEM DURING CONSTRUCTION. AVAILABLE FAULT CURRENT AT SERVICE EQUIPMENT SHALL BE LEGIBLY MARKED IN THE FIELD WITH THE MAXIMUM AVAILABLE FAULT CURRENT PER NATIONAL ELECTRICAL CODE (NEC) OF ARTICLE 110.24.
6. CONTRACTOR SHALL VERIFY INCOMING SERVICE AMPERAGE, WIRE SIZING AND DISTRIBUTION.
7. CONTRACTOR SHALL COORDINATE WITH BASE BUILDING FOR THE EXACT LOCATION OF THE EXISTING SWITCH GEAR AND EXACT POWER DISTRIBUTION.

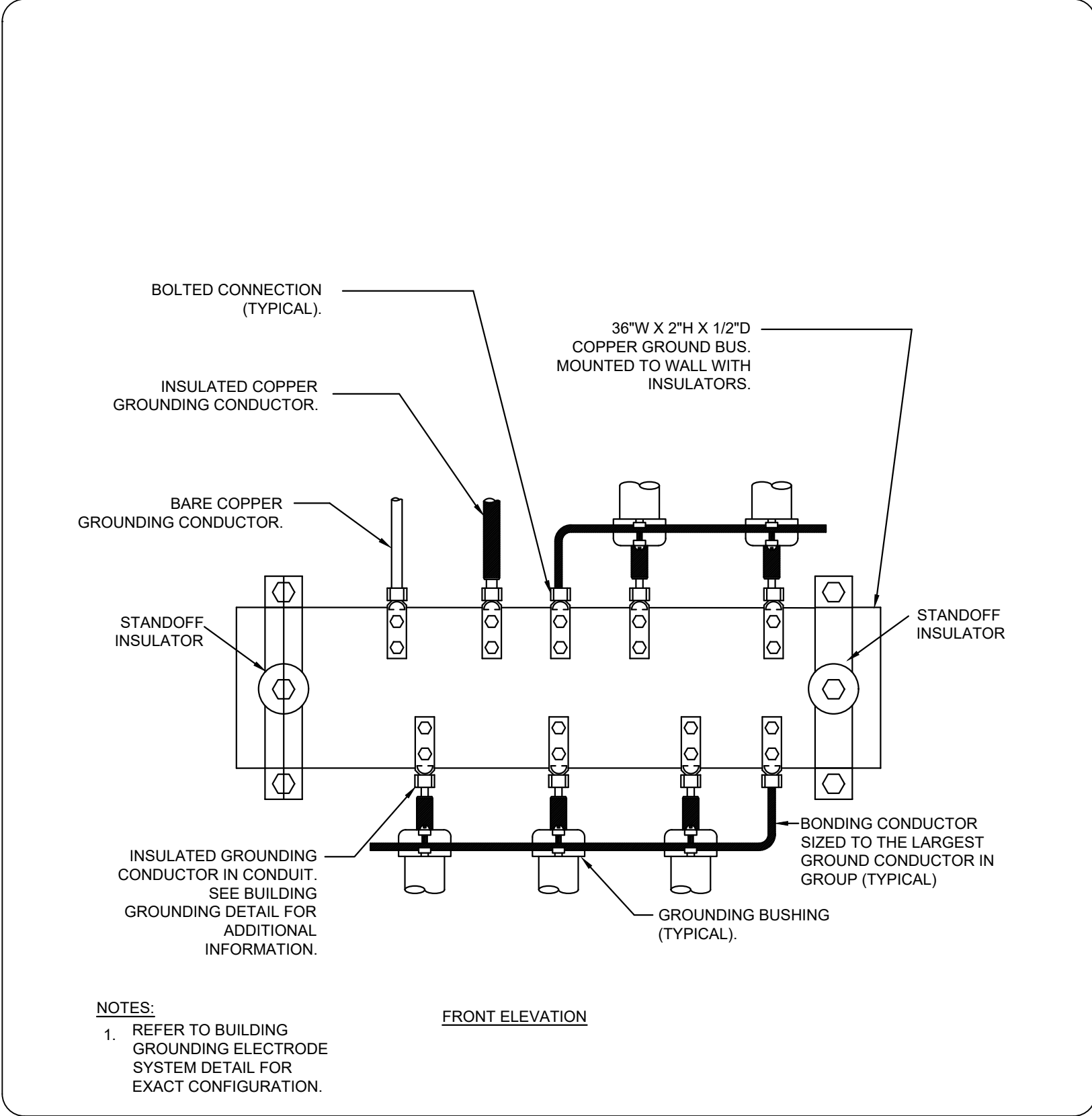


- ELECTRICAL RISER KEYED WORK NOTES:
1. E.C. SHALL COORDINATE WITH BASE BUILDING/LANDLORD/OWNER FOR LOCATION OF ELECTRICAL METER & DISCONNECT SWITCH OF THIS SPACE. PRIOR TO COMMENCING ANY WORK. BASE BID ACCORDINGLY.
2. NEW 125AMP (MLO), 120/208V, 1-PHASE, 3-WIRE ELECTRICAL PANEL "N". E.C. SHALL COORDINATE EXACT LOCATION WITH ARCHITECT/OWNER.
3. E.C. SHALL FIELD VERIFY EXACT ELECTRICAL RATING, SIZE OF EXISTING BRANCH BREAKERS IN FIELD AND DETAILS OF EXISTING LOADS CONNECTED TO THIS PANEL. PRIOR TO COMMENCING ANY WORK. BASE BID ACCORDINGLY.

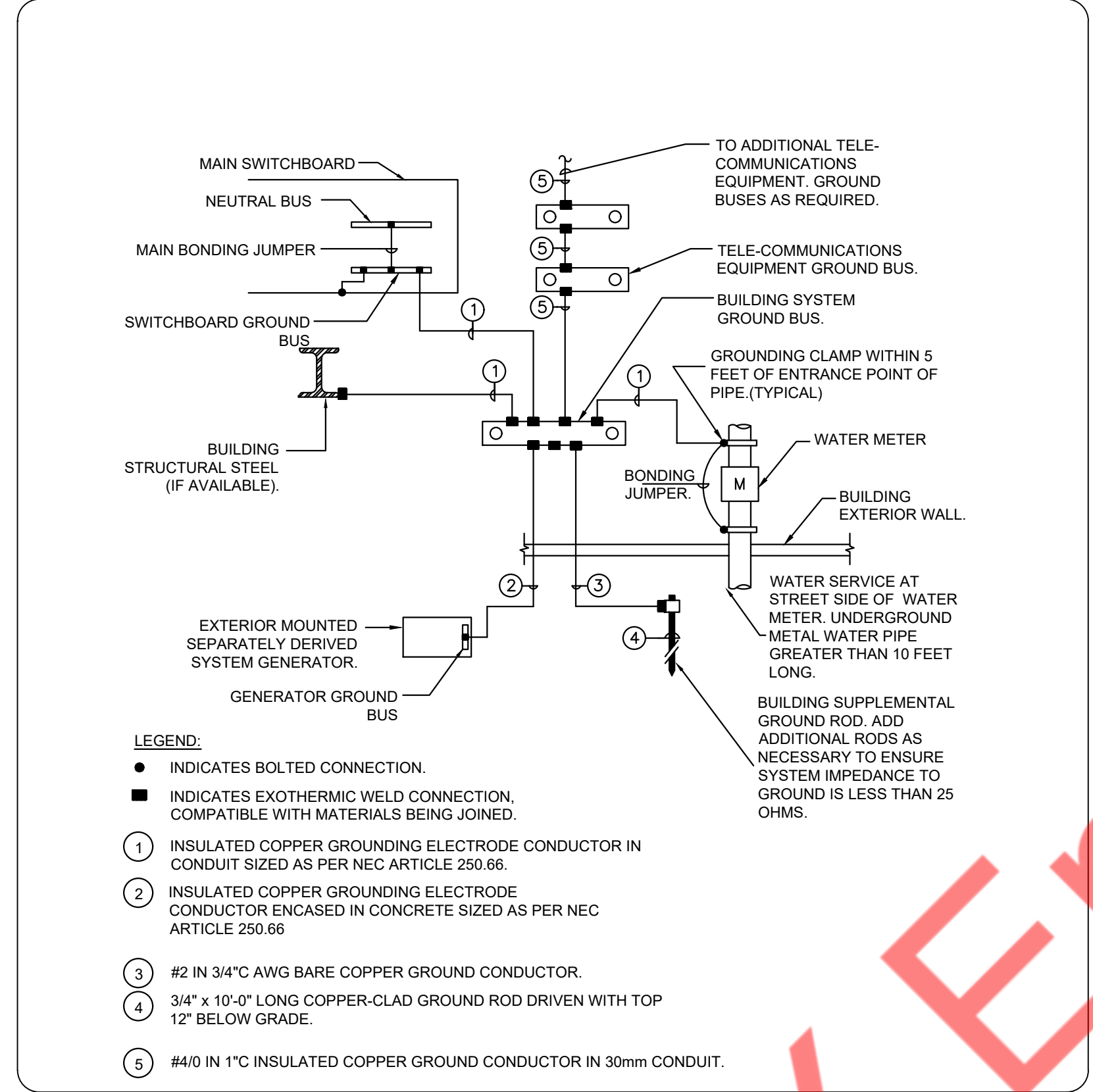
PANEL SCHEDULE:

Panel A (Existing) Schedule Table. Columns: MCB, NA, TRIP AMPS, DESCRIPTION OF LOAD, LOAD TYPE, LOAD (KVA), MINIMUM BRANCH CIRCUIT, PER PHASE (KVA), MINIMUM BRANCH CIRCUIT, LOAD (KVA), LOAD TYPE, DESCRIPTION OF LOAD, TRIP AMPS, CKT NO.

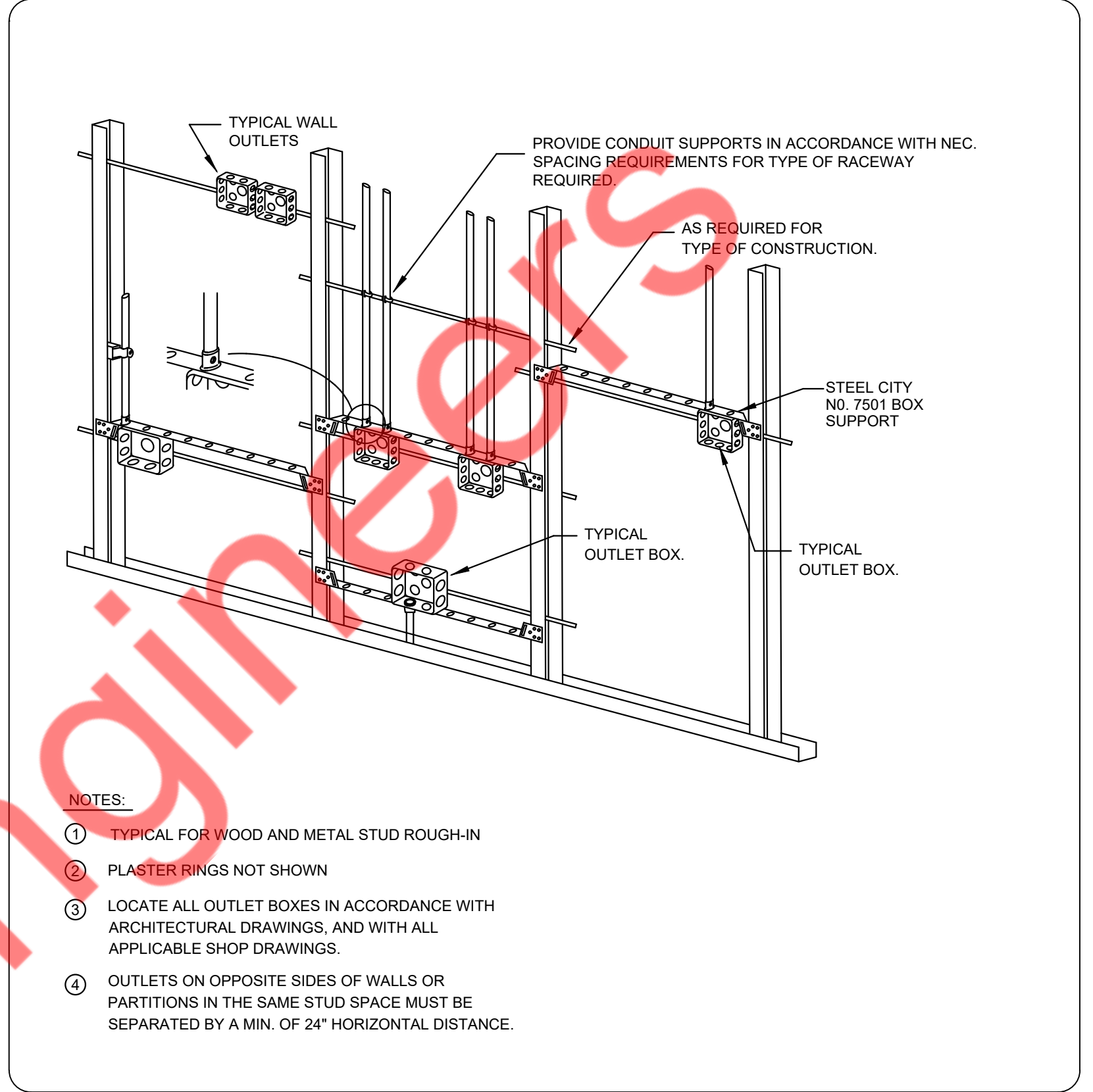
- PANEL SCHEDULE GENERAL NOTES:
1. ELECTRICAL CONTRACTOR TO VERIFY THE EXACT PANEL SIZES AND INCOMING FEEDER SIZE.
2. ELECTRICAL CONTRACTOR TO COORDINATE WITH THE MANUFACTURER OF EQUIPMENT FOR THE WIRE SIZE & RATING OF MOCB BEFORE THE COMMENCEMENT OF WORK.
3. ELECTRICAL CONTRACTOR TO COORDINATE EXACT LOCATION AND ELECTRICAL REQUIREMENT OF PLUMBING/MECHANICAL EQUIPMENTS WITH RESPECTIVE SYSTEM CONTRACTOR/OWNER/ARCHITECT.
4. EXISTING BRANCH CIRCUITS WIRE SIZE ARE SHOWN FOR REFERENCE ONLY. ELECTRICAL CONTRACTOR TO FIELD VERIFY EXISTING WIRE SIZE, PROVIDE NEW BRANCH CIRCUITS AS REQUIRED.



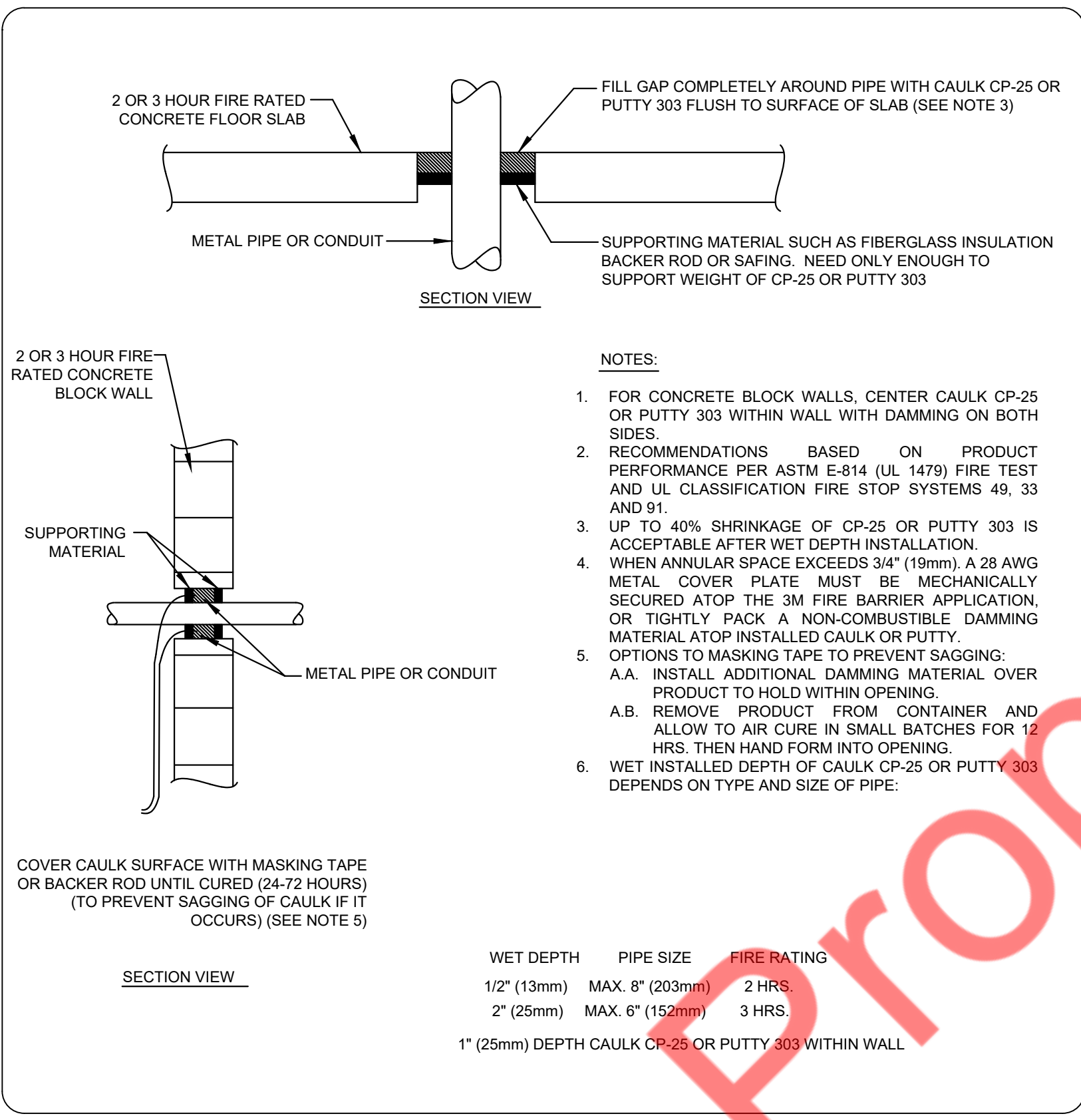
1 — BUILDING ELECTRICAL SYSTEMS GROUND BUS
SCALE: NOT TO SCALE



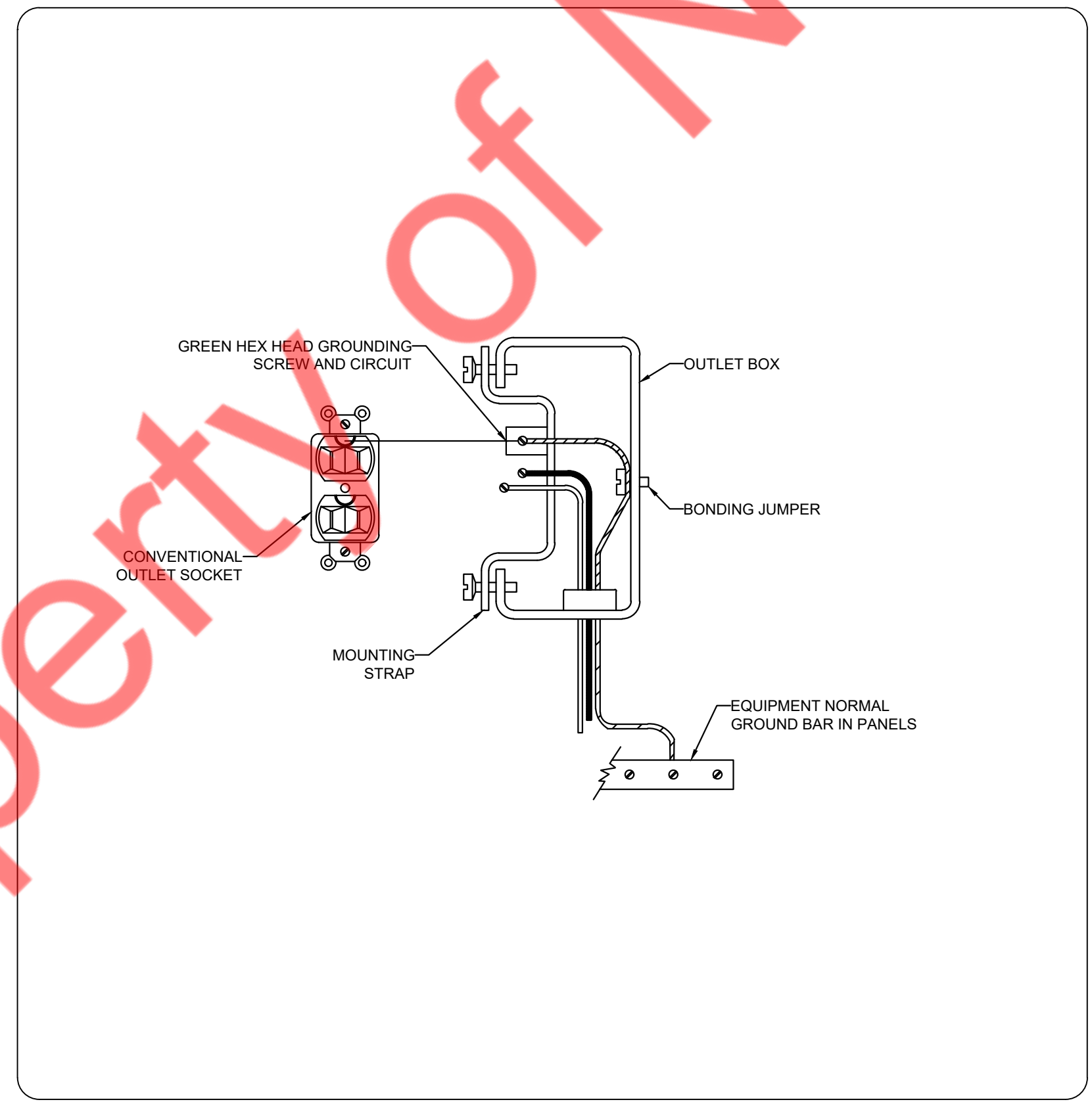
2 — BUILDING GROUNDING ELECTRODE SYSTEM
SCALE: NOT TO SCALE



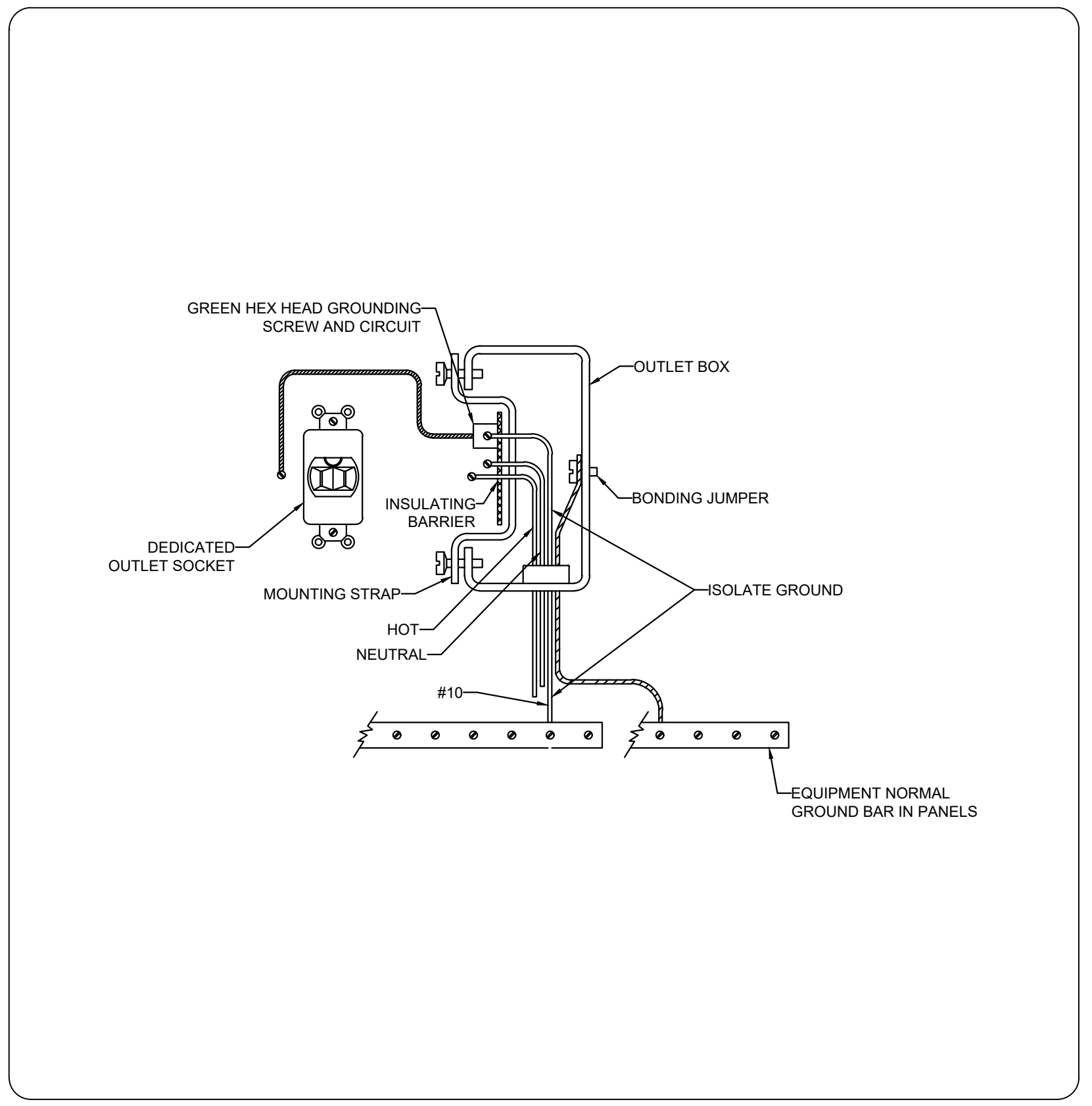
3 — TYPICAL ROUGH-IN REQUIREMENTS
SCALE: NOT TO SCALE



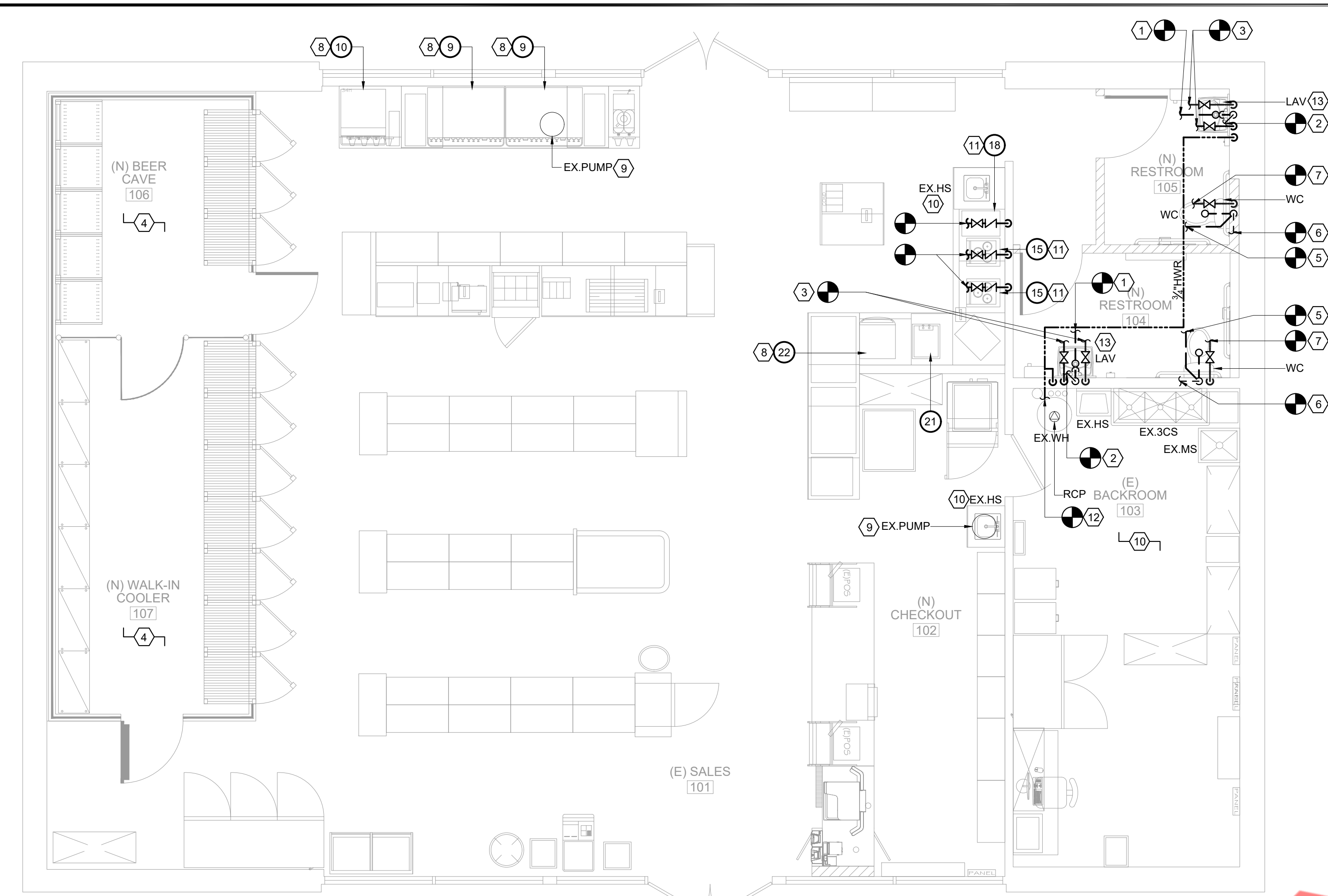
4 — FIRE STOP DETAIL
SCALE: NOT TO SCALE



5 — CONVENTIONAL OUTLET
SCALE: NOT TO SCALE



6 — ISOLATED GROUND OUTLET
SCALE: NOT TO SCALE



1 SANITARY & WATER SUPPLY PLAN
SCALE: 1/4" = 1'-0"

PLUMBING SYMBOLS LIST			
PLUMBING LEGENDS		PLUMBING ABBREVIATIONS	
--- SAN ---	SANITARY SEWER	CW	COLD WATER
----	VENT PIPING	HW	HOT WATER
----	COLD WATER	HWR	HOT WATER RETURN
----	FILTERED COLD WATER	SAN	SANITARY
----	HOT WATER	V	VENT
----	RECIRCULATING HOT WATER	BFP	BACKFLOW PREVENTER
----	SECONDARY BFP	EX. / E	EXISTING
----	BALANCING VALVE	GC	GENERAL CONTRACTOR
----	PIPE UP OR DOWN	HS	HAND SINK
----	PIPE UP	MS	MOP SINK
----	UNION	3CS	3-COMPARTMENT SINK
----	ISOLATION VALVE	WC	WATER CLOSET
----	CLEANOUT	LAV	LAVATORY
----	POINT OFF CONNECTION	RCP	RE-CIRCULATION PUMP
WH	WATER HEATER	FCW	FILTER COLD WATER LINE

PLUMBING KEY NOTES

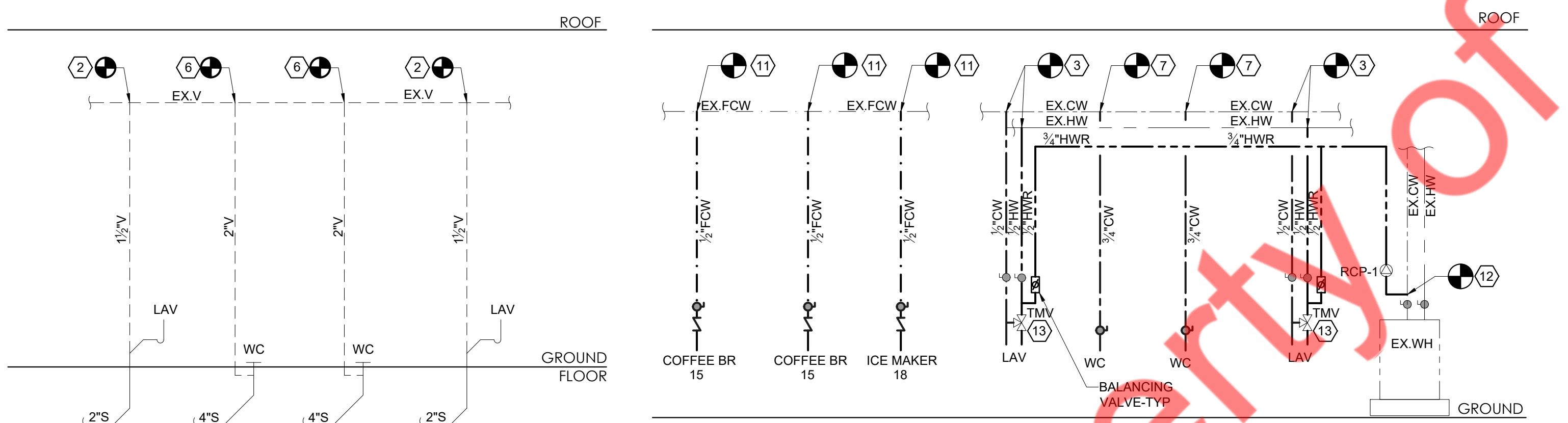
NO.	ITEM DESCRIPTION #	NO.	ITEM DESCRIPTION
1	EXTEND AND CONNECT NEW 2" SANITARY PIPING TO EXISTING SANITARY MAIN LINE IN THE SPACE. CONTRACTOR SHALL VERIFY THE EXISTING SANITARY SIZE, ROUTING, INVERT & TIE-IN CONNECTION PRIOR TO BID.	8	EXISTING BEVERAGE EQUIPMENTS TO BE REPLACED WITH NEW EQUIPMENTS IN THE EXISTING LOCATIONS WITH THE EXISTING SANITARY AND WATER SUPPLY CONNECTIONS, ASSOCIATED ACCESSORIES AND FITTINGS TO REMAIN. CONTRACTOR TO FILED VERIFY THE EXISTING PLUMBING CONNECTION LOCATIONS AND SAME AS TO BE WORKING CONDITIONS. NOTIFY THE ENGINEER IF ANY DISCREPANCIES IN THE FIELD.
2	EXTEND AND CONNECT NEW 1-1/2" VENT PIPING TO THE EXISTING VENT LINE IN THE SPACE. CONTRACTOR SHALL VERIFY SIZE, ROUTING, LOCATION AND WORKING CONDITION OF EXISTING VENT PIPE / VTR.	9	EXISTING EJECTOR PUMP WITH THE EXISTING SANITARY, VENT CONNECTIONS AND ASSOCIATED ACCESSORIES AND FITTINGS TO BE REMAIN. CONTRACTOR TO FILED VERIFY CONDITION OF EXISTING EJECTOR PUMP PRIOR TO BID.
3	EXTEND AND CONNECT NEW 1/2" CW & HW PIPING TO THE EXISTING COLD & HOT WATER MAIN LINES IN THE SPACE. CONTRACTOR SHALL VERIFY THE EXISTING PIPE SIZE AND ROUTING PRIOR TO BID.	10	EXISTING PLUMBING FIXTURES WITH EXISTING SANITARY, VENT AND WATER SUPPLY CONNECTION AND ASSOCIATED ACCESSORIES TO BE REMAIN.
4	CONTRACTOR SHALL CONNECT NEW CONDENSATE DRAIN LINE TO THE EXISTING FLOOR DRAIN IN THE SPACE WITH APPROVED AIR GAS AS REQUIRED BY CODE. FIELD VERIFY THE EXISTING DRAIN LOCATIONS PRIOR TO BID.	11	EXTEND AND CONNECT NEW 1/2" FCW PIPING WITH WATTS SD-3 BACKFLOW PREVENTER TO THE EXISTING FILTER COLD WATER MAIN LINE IN THE SPACE. CONTRACTOR TO VERIFY IN THE FILED TO EXTEND DRAIN LINE AND TIE INTO EXISTING SANITARY LINE OR ADJACENT FLOOR DRAIN / FLOOR SINKS WITH APPROVED AIR GAP REQUIRED BY CODE.
5	EXTEND AND CONNECT NEW 4" SANITARY PIPING TO EXISTING SANITARY MAIN LINE IN THE SPACE. CONTRACTOR SHALL VERIFY THE EXISTING SANITARY SIZE, ROUTING, INVERT & TIE-IN CONNECTION PRIOR TO BID.	12	CONTRACTOR SHALL CONNECT NEW 3/4" HWR LINE TO THE PUBLIC LAVATORIES WITH BALANCING VALVES. CONTRACTOR TO VERIFY IN THE FILED PRIOR TO BID.
6	EXTEND AND CONNECT NEW 2" VENT PIPING TO THE EXISTING VENT LINE IN THE SPACE. CONTRACTOR SHALL VERIFY SIZE, ROUTING, LOCATION AND WORKING CONDITION OF EXISTING VENT PIPE / VTR.	13	PROVIDE THERMOSTATIC MIXING VALVE SET TO 105°F/110°F FOR LAVATORY AS PER PLUMBING CODE REQUIREMENT.
7	EXTEND AND CONNECT NEW 3/4" CW PIPING TO THE EXISTING COLD WATER MAIN LINE IN THE SPACE. CONTRACTOR SHALL VERIFY THE EXISTING PIPE SIZE AND ROUTING PRIOR TO BID.	14	

GENERAL NOTES

- A. PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERABLE PLUMBING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- B. RUN ALL SOIL WASTE AND VENT PIPING WITH 2% MINIMUM GRADE UNLESS OTHERWISE NOTED. HORIZONTAL VENT PIPING SHALL BE GRADED TO DRIP BACK TO THE SOIL OR WASTE PIPE BY GRAVITY.
- C. ADJUST SEWER INVERTS TO KEEP TOPS OF PIPE IN LINE WHERE PIPE SIZE CHANGES.
- D. MAINTAIN A MINIMUM OF 5'-0" OF GROUND COVER OVER ALL UNDERGROUND WATER MAINS AND A MINIMUM OF 3'-0" OF GROUND COVER OVER ALL UNDERGROUND SEWERS AND DRAINS.
- E. PROVIDE SHUTOFF VALVES IN ALL DOMESTIC WATER PIPING SYSTEM BRANCHES IN WHICH BRANCH PIPING SERVES TWO OR MORE FIXTURES.
- F. UNLESS OTHERWISE NOTED, ALL DOMESTIC COLD AND HOT WATER PIPING SHALL BE 1/2" SIZE. UNLESS OTHERWISE NOTED, ALL PIPING IS OVERHEAD, TIGHT TO UNDERSIDE OF SLAB, WITH SPACE FOR INSULATION IF REQUIRED.
- G. INSTALL PIPING SO THAT ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES, AND OTHER APPURTENANCES REQUIRING ACCESS ARE ACCESSIBLE.
- H. WHERE DOMESTIC COLD AND HOT WATER PIPING DROPS INTO A PIPE CHASE, THE SIZE SHOWN FOR THE PIPE DROPS SHALL BE USED TO THE LAST FIXTURE.
- I. INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING.
- J. ALL PIPING SHALL CLEAR DOORS AND WINDOWS.
- K. ALL PIPING SHALL GRADE TO LOW POINTS. PROVIDE HOSE END DRAIN VALVES AT THE BOTTOM OF ALL RISERS AND LOW POINTS.
- L. UNIONS AND/OR FLANGES SHALL BE INSTALLED AT EACH PIECE OF EQUIPMENT, IN BYPASSES, AND IN LONG PIPING RUNS (100 FEET OR MORE) TO PERMIT DISASSEMBLY FOR ALTERATION AND REPAIRS.
- M. ALL VALVES SHALL BE ADJUSTED FOR SMOOTH AND EASY OPERATION.
- N. ALL VALVES (EXCEPT CONTROL VALVES) AND STRAINERS SHALL BE FULL SIZE OF PIPE BEFORE REDUCING SIZE TO MAKE CONNECTIONS TO EQUIPMENT AND CONTROLS.
- O. PROVIDE CHAINWHEEL OPERATORS FOR ALL VALVES IN EQUIPMENT ROOMS MOUNTED GREATER THAN 7'-0" ABOVE FLOOR LEVEL; CHAIN SHALL EXTEND TO 7'-0" ABOVE FLOOR LEVEL.
- P. PROVIDE ALL PLUMBING FIXTURES AND EQUIPMENT WITH ACCESSIBLE STOPS.
- Q. UNLESS OTHERWISE NOTED, DRAINS SHALL BE INSTALLED AT THE LOW POINT OF ROOFS, AREAWAYS, FLOORS, ETC.
- R. ALL BALANCING VALVES AND BUTTERFLY VALVES SHALL BE PROVIDED WITH POSITION INDICATORS AND MAXIMUM ADJUSTABLE STOPS (MEMORY STOPS).
- S. ALL VALVES SHALL BE INSTALLED SO THAT VALVE REMAINS IN SERVICE WHEN EQUIPMENT OR PIPING ON EQUIPMENT SIDE OF VALVE IS REMOVED.
- T. ALL PIPING WORK SHALL BE COORDINATED WITH ALL TRADES INVOLVED. OFFSETS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- U. PROVIDE FLEXIBLE CONNECTIONS IN ALL PIPING SYSTEMS CONNECTED TO PUMPS AND OTHER EQUIPMENT WHICH REQUIRE VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AS CLOSE TO THE EQUIPMENT AS POSSIBLE OR AS INDICATED ON THE DRAWINGS.

NOTES

- A. THE CONTRACTOR IS RESPONSIBLE FOR INVESTIGATING AS-BUILT CONDITIONS PRIOR TO ANY DEMOLITION. SHOULD THERE BE ANY DISCREPANCIES BETWEEN THE EXISTING CONDITIONS AND THE DESIGN INTENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM ARCHITECT/ENGINEER.
- B. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL, PRESERVATION, STORAGE, AND PROTECTION OF ALL EQUIPMENT AND DEVICES DESIGNATED TO BE REMOVED AND RE-INSTALLED. ALL EXISTING AND LIFE SAFETY SYSTEMS THAT EXTEND INTO OCCUPIED AREAS SHALL REMAIN OPERATIONAL.
- C. CONTRACTOR SHALL COORDINATE ALL OUTAGES MINIMUM OF SEVEN (7) DAYS PRIOR TO OUTAGE. CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE PERSONNEL FOR FIRE AND SECURITY WATCH DURING OUTAGES TO FIRE AND SECURITY SYSTEMS.
- D. WATER PIPE SIZES SHOWN ARE MINIMUM BASED ON PLUMBING FIXTURES AND THEIR ASSOCIATED FIXTURE UNITS. DOMESTIC WATER PIPE SIZES ARE BASED OFF OF 5 FT/SEC FLOW VELOCITY FLOWING THROUGH COPPER PIPE.
- E. PLUMBING CONTRACTOR TO FIELD-VERIFY LOCATION, SIZE, TYPE, AND CONDITION OF EXISTING PIPING.



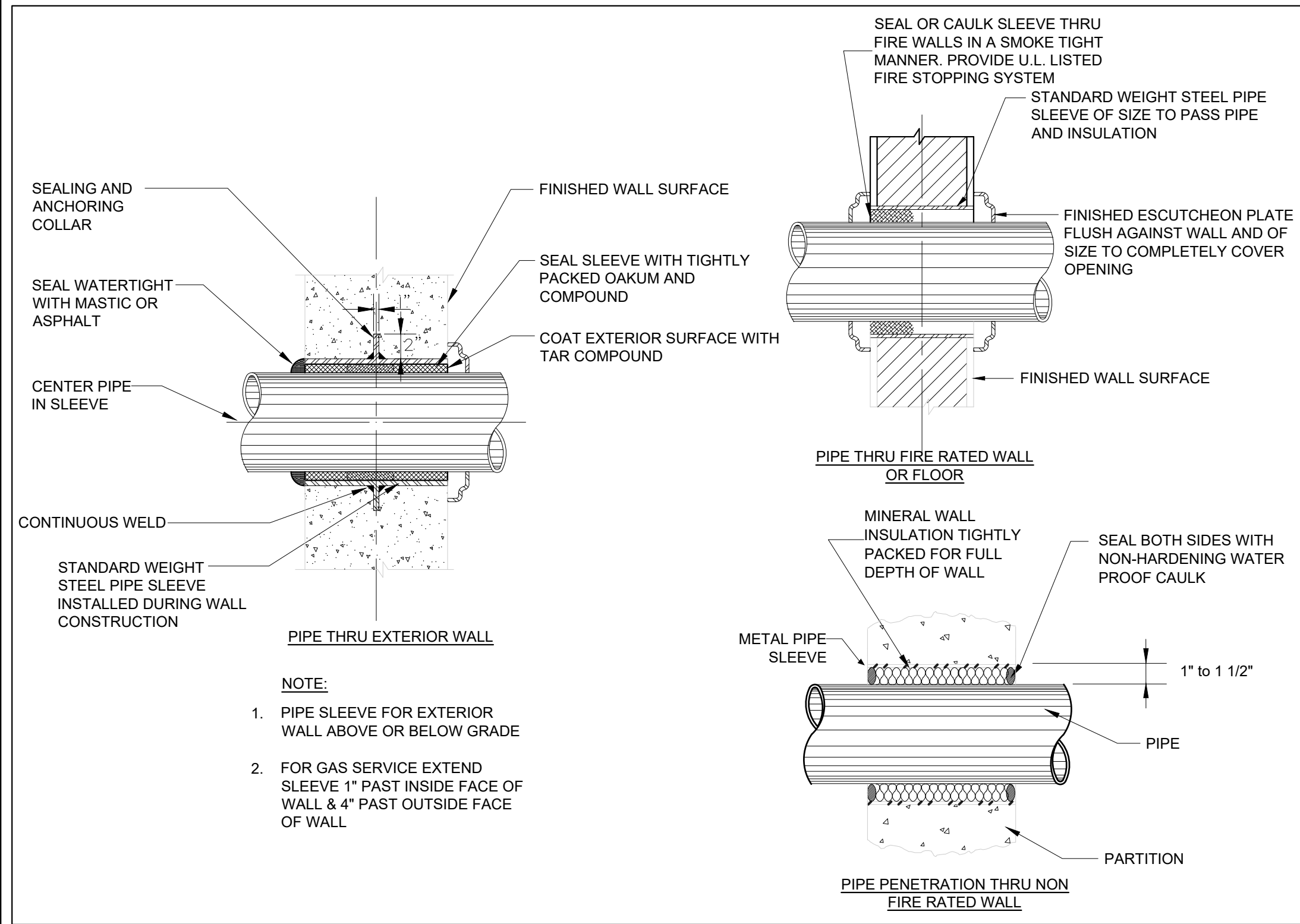
2 SANITARY RISER DIAGRAM
SCALE: N.T.S.

3 WATER SUPPLY RISER DIAGRAM
SCALE: N.T.S.

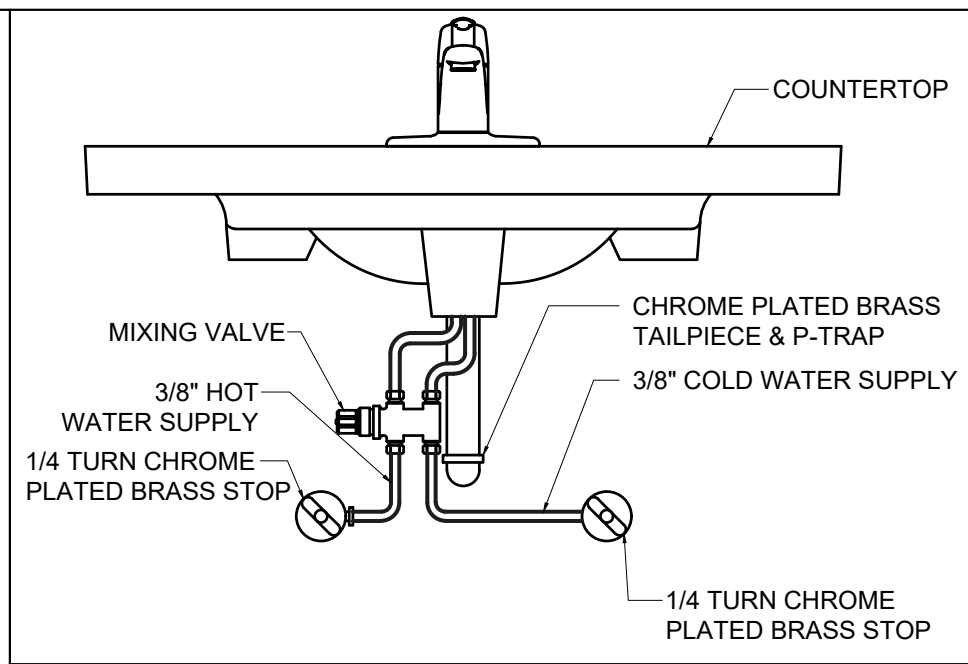
PLUMBING FIXTURE / EQUIPMENT SCHEDULE						
ITEM #	QTY	ITEM DESCRIPTION	COLD WATER	HOT WATER	FILTER WATER	DRAIN
WC	1	WATER CLOSET	3/4"	-	-	4" D
LAV	1	LAVATORY	1/2"	1/2"	-	2" D
9	2	12 HEAD POST MIX DISPENSER	-	-	1/2"	1" IND
10	1	4 FLAVOR FROZEN DISPENSER	-	-	1/2"	1" IND
15	2	RELOCATED COFFEE BREWER	-	-	1/2"	IND
18	1	ICE MACHINE	-	-	1/4"	IND
22	1	5 HEAD CAPPUCCINO MACHINE	-	-	1/2"	IND

PUMP SCHEDULE					
ID	DESCRIPTION	MANUFACTURER	MODEL NO.	VOLT	PH
RCP	RECIRCULATION PUMP	GRUNDFOS	UP 15-18 B5	115 V	1

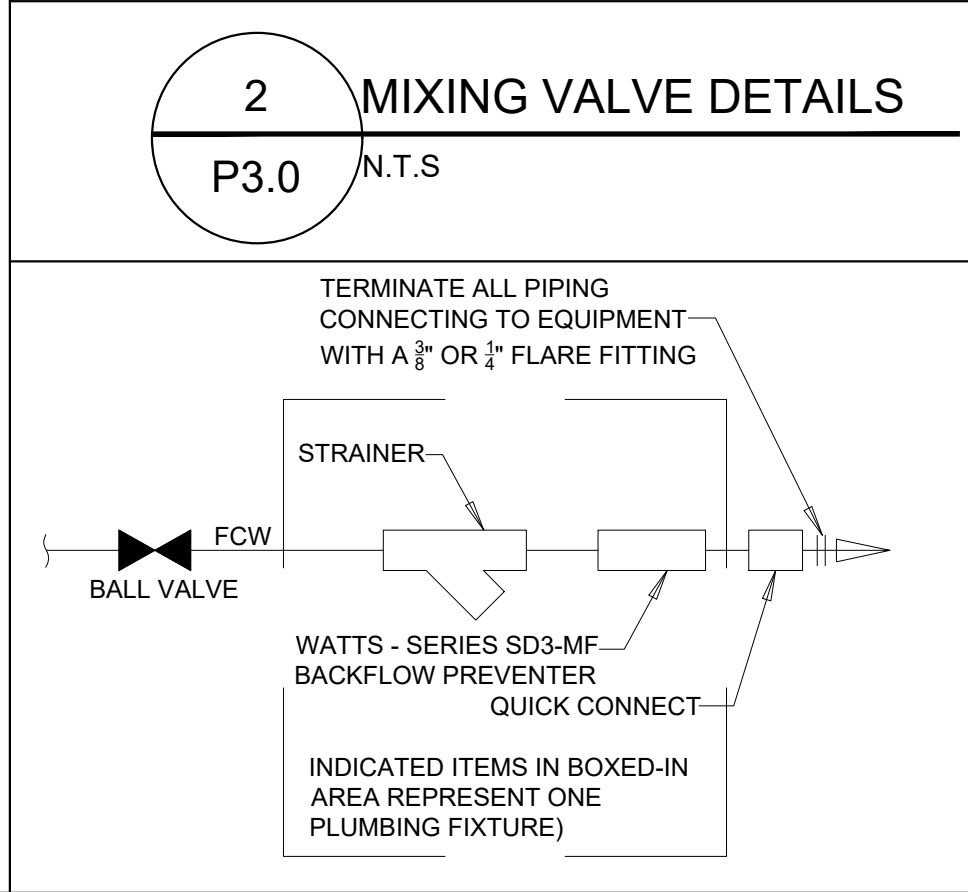
TRIM AND REMARKS
2 GPM @ 10 FT. HEAD. INSTALL NEAR WATER HEATER PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE AQUASTAT WITH TIMER KIT



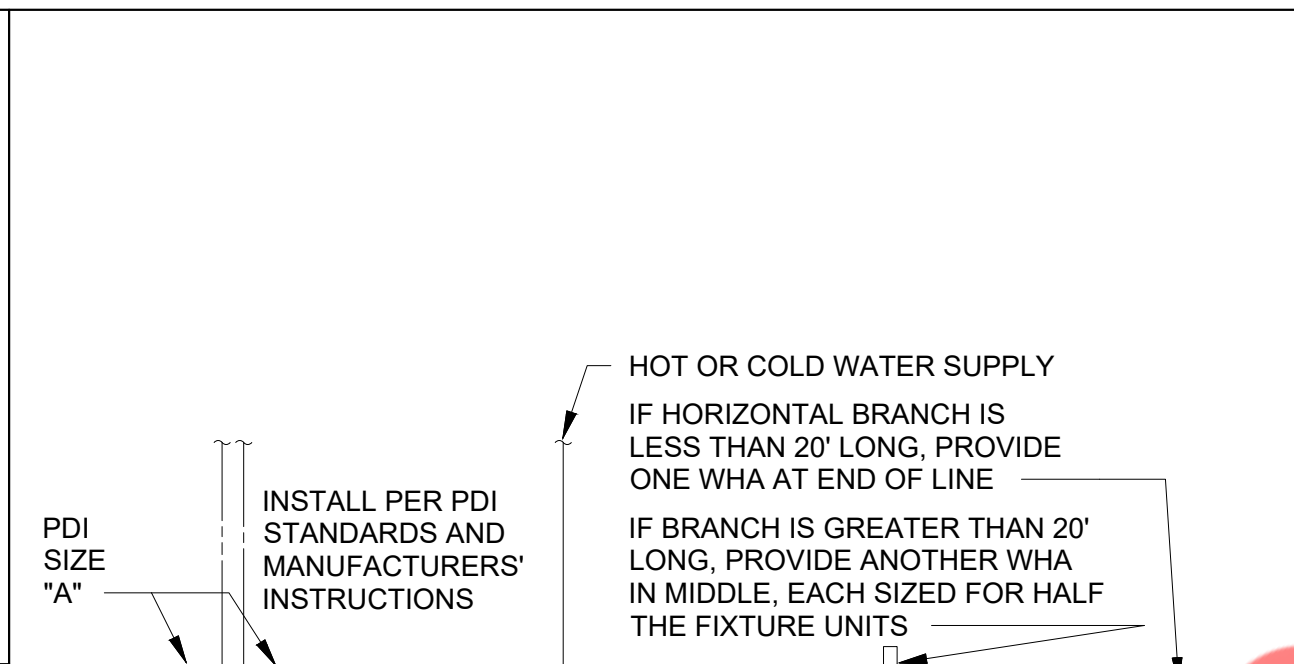
1 PIPE SLEEVE THRU WALL SECTION
P3.0 N.T.S



2 MIXING VALVE DETAILS
P3.0 N.T.S



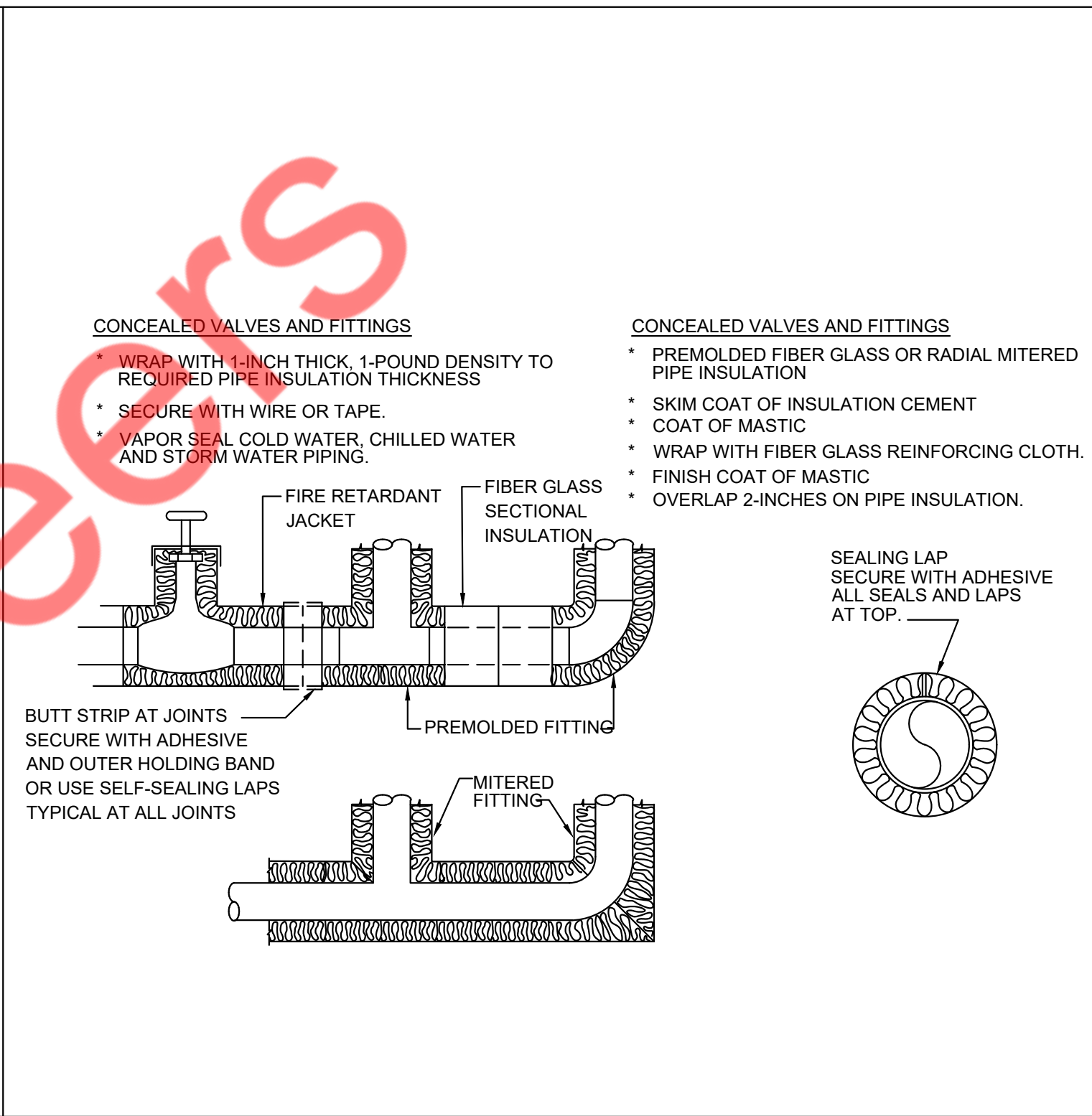
3 FCW CONNETION DETAIL
P3.0 N.T.S



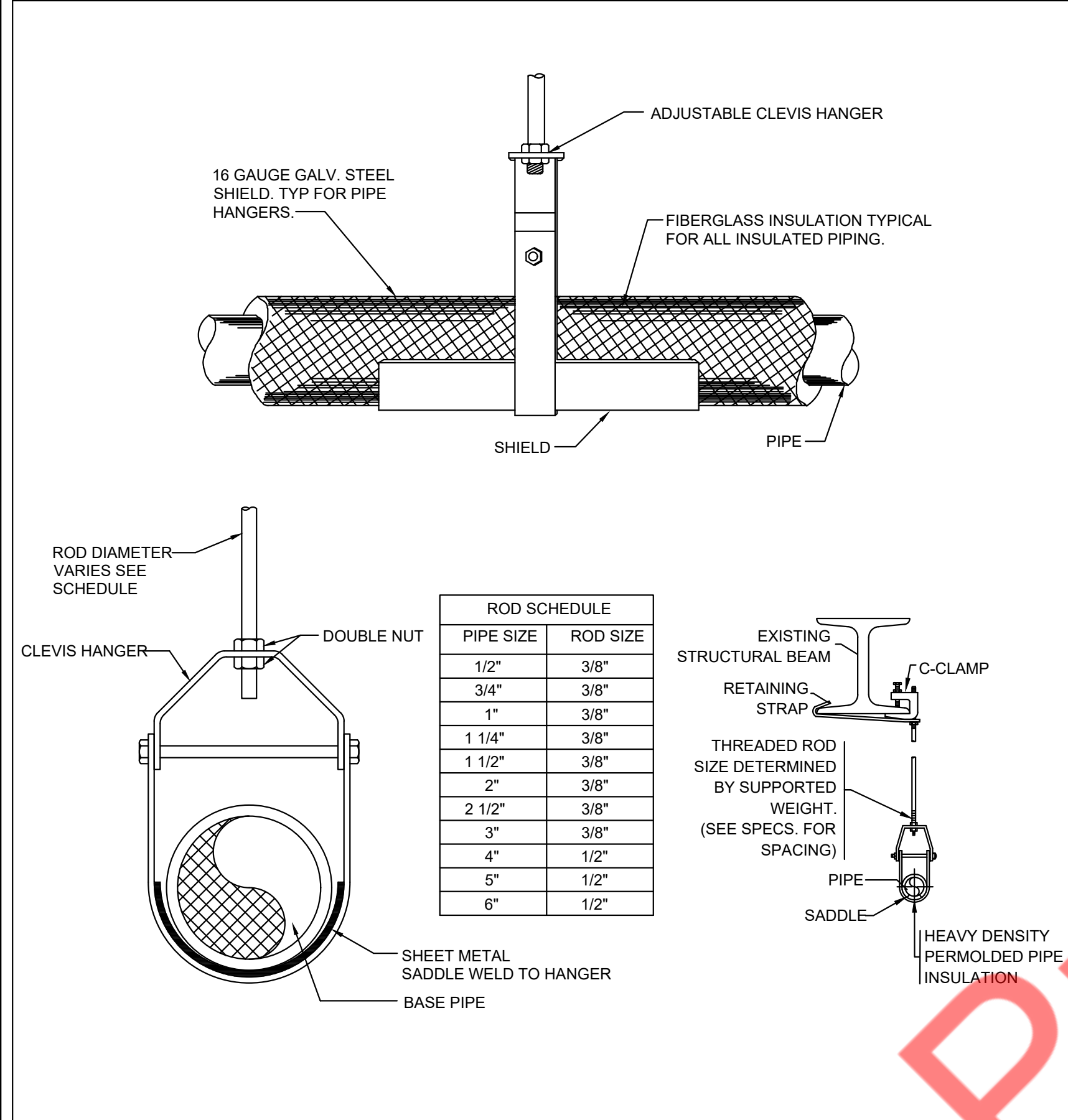
SINGLE FIXTURE			MULTIPLE FIXTURES		
PDI SIZE	PIPE SIZE	FIXTURE UNIT LOAD	FIXTURE UNIT TABULATION		
			FIXTURE	COLD	HOT
A	1/2"	1-11	VALVE WATER CLOSET	5	--
B	3/4"	12-32	URINAL	5	--
C	1"	33-60	COUNTER SINK	1.5	1.5
D	1-1/4"	61-113	LAVATORY	1.5	1.5
E	1-1/2"	114-154	MOP BASIN	2.25	2.25
F	2"	155-330	WATER COOLER	.25	--

PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUAL WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI #WH-201, ASSE #1010 AND ANSI #A12.26-1M CERTIFICATION. INSTALL IN HORIZONTAL OR VERTICAL POSITION, BUT NEVER UPSIDE DOWN. INSTALL IN LINE WITH WATER FLOW DIRECTION IF POSSIBLE. SIZE UNITS PER TABLES ABOVE.

4 WATER HAMMER ARRESTOR
P3.0 N.T.S



5 PIPE INSULATION DETAIL
P3.0 N.T.S



6 HANGER DETAIL
P3.0 N.T.S