ROOFTOP UNIT SCHEDULE

DESCRIPTION				REFRIGERATION DATA						HEATING DATA		FAN DATA						ELECTRICAL DATA							
												NOMINAL CFM				MOTOR / DRIVE					EFFICIENCY				
TAG	SERVICE	MANUFACTURER	MODEL NO.	NOMINAL TONS	TOTAL MBH	SENSIBLE MBH	REFRIGERANT	NO. OF COMP.	CHARGE (LB OZ)	INPUT MBH	OUTPUT MBH	SUPPLY	O.A.	ESP (IN)	FAN RPM	HP	MOTOR (C) / DRIVE (D)	V/PH/HZ	MCA	MOCP	EER	SEER	IEER	WEIGHT (A) (LBS)	REMARKS
RTU-1	OFFICES/ LOUNGE	YORK	KT061N12R2BEPCE1R1	5.0	62	44.9	R454B	1	11-12	80	65	2000	370	1	1069	2.30	- / HS	208/3/60	33.3	45	12.8	15.5	-	1000	1, 2, 3, 4, 5, 7, 8, 9, 11, 12, 13, 14
RTU-2	PROCESSING	YORK	KJ078N12R2BEPCE1R1	6.5	78.4	54.1	R454B	2	5-6 / 4-12	120	97	2600	405	1	927	2.30	- / HS	208/3/60	32.6	40	12.0	-	15.8	1300	1, 2, 3, 4, 5, 7, 8, 9, 11, 12, 13, 14
RTU-3	SALES	YORK	KJ150N18R2DEPCE1R1	12.5	168.1	114.9	R454B	2	10-4 / 8-10	180	146	5000	920	1	1490	5.75	- / HS	208/3/60	82.9	100	12.0	-	15.2	1700	1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14
RTU-4	SALES	YORK	KJ150N18R2DEPCE1R1	12.5	168.1	114.9	R454B	2	10-4 / 8-10	180	146	5000	900	1	1490	5.75	- / HS	208/3/60	82.9	100	12.0	-	15.2	1700	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,11, 12, 13, 14
RTU-5	SALES	YORK	KJ120N18R2DEHCA1R1	10.0	126.8	89.5	R454B	2	7 / 6-12	180	146	4000	900	1	1210	3.45	- / HS	208/3/60	60.3	70	12.2	-	15.0	1400	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,11, 12, 13, 14
RTU-6	SALES	YORK	KJ120N18R2DEHCA1R1	10.0	126.8	89.5	R454B	2	7 / 6-12	180	146	4000	900	1	1210	3.45	- / HS	208/3/60	60.3	70	12.2	-	15.0	1400	1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14
RTU-7	SALES	YORK	KJ120N18R2DEHCA1R1	10.0	126.8	89.5	R454B	2	7 / 6-12	180	146	4000	810	1	1210	3.45	- / HS	208/3/60	60.3	70	12.2	-	15.0	1400	1, 2, 3, 4, 5, 6, 7, 8, 9,10, 11, 12, 13, 14
												TOTAL:	5205												

REMARKS:

1. PROVIDE WITH PREFABRICATED ROOF CURB (14" HIGH, WOOD NAILER, INSULATED DECKS)
2. PROVIDE WITH INTELLISPEED VFD FAN CONTROLLER
3. PROVIDE WITH BURGLAR BARS
4. PROVIDE WITH FACTORY INSTALLED/WIRED DISCONNECT SWITCH; FACTORY INSTALLED POWERED 120v GFCI CONVENIENCE RECEPTACLE COORDINATE THE REQUIREMENTS WITH THE E.C.
5. PROVIDE WITH HAIL GUARD
6. PROVIDE WITH DUAL ENTHALPY CONTROLLED ECONOMIZER WITH POWERED EXHAUST
7. PROVIDE WITH DUAL ENTHALPY CONTROLLED ECONOMIZER WITH BAROMETRIC RELIEF
8. PROVIDE WITH FACTORY INSTALLED SMOKE DETECTOR IN THE RETURN AIR COMPARTMENT
9. PROVIDE WITH 2" PLEATED MERV 8 FILTERS (8)
10. PROVIDE WITH CO2 SENSOR. ECONOMIZER DAMPERS SHALL MODULATE BASED ON DEMAND CONTROL VENTILATION REQUIREMENTS
11. PROVIDE WITH BMS CONTROLS, RTU TO BE CONTROLLED BY BMS CONTROLS. CONTRACTOR SHALL EMPLOY BMSCONTROLS CORPORATION TO INSTALL BMS. REFER TO SECTION 15C.11 IN THE TJX OUTLINE SPECIFICATIONS
12. PROVIDE TEMPORARY THERMOSTAT FOR UNIT OPERATION, REFER TO SECTION 15C.11 IN TJX OUTLINE SPECIFICATIONS 13.
13. FURNISHED WITH MANUFACTURER'S 10 YEAR WARRANTY FOR HEAT EXCHANGERS & COMPRESSORS.
14. PROVIDE WITH HOT GAS REHEAT FOR HUMIDITY CONTROL. (CONTRACTOR SHALL COORDINATE WITH THE MANUFACTURER TO CONFIRM WHETHER THE LISTED UNITS INCLUDE THE HOT GAS REHEAT FEATURE. IF NOT, CONTRACTOR SHALL SELECT UNITS THAT HAVE HOT GAS REHEAT FOR DEHUMIDIFICATION CONTROL.)

NOTES:

A. WEIGHTS INCLUDE BASE UNIT AND INTERNAL ACCESSORIES. ALLOWANCE SHALL BE INCLUDED FOR ROOF CURBS OR CURB ADAPTERS AS NECESSARY
B. CONTRACTOR SHALL INCLUDE TWO FILTER CHANGES - ORIGINAL EQUIPMENT FILTERS ARE TO BE CHANGED WHEN (1) STORE FIXTURING STARTS, AND (2) WHEN STORE IS BEING STOCKED
C. HS = HIGH STATIC MOTOR
STD = STANDARD MOTOR
D. HS = HIGH STATIC DRIVE
STD = STANDARD DRIVE
F = FIELD SUPPLIED DRIVE

AIR DEVICE SCHEDULE

TAG	MANUFACTURER	MODEL NO.	TYPE	FACE SIZE	NECK SIZE	MATERIAL	COLOR	BLADE SPACING	FRAME	REMARKS
A	TUTTLE & BAILEY	RC- SERIES	SUPPLY DIFFUSER	24"X24"	SEE PLAN	STEEL	"WH" WHITE	1-WAY	SURFACE/ LAY-IN	1, 2, 3
B	TUTTLE & BAILEY	S1200	SUPPLY DIFFUSER	24"X24"	SEE PLAN	STEEL	"WH" WHITE	4-WAY	SURFACE/ LAY-IN	1, 2, 3
C	TUTTLE & BAILEY	CRE500	EGGCRATE GRILLE	24"X24"	22"X22"	ALUMINUM	"WH" WHITE	1/2"X1/2"X1/2" CORE	LAY-IN	1, 2, 5
D	TUTTLE & BAILEY	CRE500	EGGCRATE GRILLE	24"X24"	10"X10"	ALUMINUM	"WH" WHITE	1/2"X1/2"X1/2" CORE	SURFACE/ LAY-IN	1, 2, 3, 5
E	TUTTLE & BAILEY	T64	DOUBLE DEFLECTION REGISTER	SEE PLAN	SEE PLAN	STEEL	"WH" WHITE	3/4" ADJ DEFLECTION	DUCT DIRECT	1, 2, 4
F	TUTTLE & BAILEY	T70D	EGGCRATE GRILLE	-	SEE PLAN	ALUMINUM	"WH" WHITE	3/4" 35° DEFLECTION	SURFACE	1

REMARKS:

1. SEE SPECIFICATIONS
2. PROVIDE WITH OPPOSED BLADE DAMPER
3. PROVIDE WITH MOUNTING FRAME FOR USE IN HARD CEILING
4. INSTALL GRILLE 20° DOWNWARD WHEN ON DUCT. ADJUST BLADES FOR EVEN DISTRIBUTION AND TO AVOID DRAFTS
5. PROVIDE WITH ADAPTER/TRANSITION FOR FINAL DUCT-TO-DIFFUSER CONNECTION

ELECTRIC BASEBOARD HEATER SCHEDULE

TAG	MANUF.	MODEL NO.	LENGTH (IN.)	CAPACITY (BTUH)	ELECTRICAL DATA kW	V/PH/HZ	AMPS	REMARKS
BB-1	MARKEL	F2910-048S	48	3,412	1.0	208/1/60	4.8	1, 2, 3, 4, 5

REMARKS:

1. PROVIDE WITH INTEGRAL THERMOSTAT.
2. PROVIDE WITH 24V CONTROL TRANSFORMER.
3. FACTORY DISCONNECR KIT FIELD INSTALLED.
4. INSTALL BOTTOM OF HEATER AT 6" A.F.F.
5. INTERLOCK HEATER WITH BMS CONTROLLER TO ENABLE / DISABLE HEATER.

ZONE DAMPER SCHEDULE

TAG	MANUF.	MODEL NO.	SERVICE	AREA/RTU SERVED	SIZE	CFM	STATIC PRESSURE (IN W.C.)	VELOCITY (FPM)	REMARKS
ZD-1	RUSKIN	ZDR25	ZONE DAMPER	RTU-2	8"	120	0.015	360	1, 2
BD-1	RUSKIN	ZEBD15	BALANCE DAMPER	RTU-2	8"	120	0.1	668	2

REMARKS:

1. STANDALONE CONTROL, PROVIDE WITH Z2000RT WALL T-STAT
2. PROVIDE WITH 24V CONTROL TRANSFORMER.

ELECTRIC HEATER SCHEDULE

TAG	MANUFACTURER	MODEL NO.	KW	BTUH	ELECTRICAL V/PH/HZ	AMPS	CFM	UNIT WEIGHT (LBS)	REMARKS
ECH-1	QMARK	EFF-4004	3	10239	208/1/60	16.7	150	23	1, 2, 3

REMARKS:

1. FURNISH WITH 24"x24" T-BAR FRAME MOUNTING KIT.
2. HEATER TO BE CONTROLLED BY BMS TEMPERATURE SENSORS AND CONTROLS.
3. FURNISH WITH FACTORY DISCONNECT.
4. FURNISH WITH INTEGRAL THERMOSTAT; THERMAL OVERLOAD; SURFACE MOUNTING FRAME

DROPBOX DIFFUSER SCHEDULE

TAG	MANUFACTURER	MODEL NO.	TOTAL CFM	TYPE	S.P.	THROW (FEET)	NECK VELOCITY (FPM)	NOISE LEVEL (NC)	REMARKS
DB-1	AES INDUSTRIES	ADB-1-12-4-CM	5000	4 WAY	0.31	37-64.4	938	36.4	1
DB-2	AES INDUSTRIES	ADB-1-10-4-CM	4000	4 WAY	0.197	33.6-57.5	879	28.3	1

REMARKS:

1. SUPPORT INDENPENDENTLY FROM DUCTWORK

FAN SCHEDULE

DESCRIPTION				FAN DATA					MISCELLANEOUS			
TAG	MANUFACTURER	MODEL NO.	AREA SERVED	CFM	ESP (IN)	RPM	HP	V/PH	FAN DRIVE	SONES	WEIGHT (LBS)	REMARKS
EF-1	PENNBARRY	DX13R	RESTROOMS	600	0.5	1550	1/6	115/1	DIRECT	8.5	36	1, 2, 3, 4, 5, 6
EF-2	PENNBARRY	DX10R	LOUNGE	360	0.5	1550	1/12	115/1	DIRECT	6.8	30	1, 2, 3, 4, 5, 6, 7

REMARKS:

1. PROVIDE WITH FACTORY INSTALLED DISCONNECT
2. PROVIDE WITH FACTORY MOUNTED SPEED CONTROLLER
3. PROVIDE WITH 12" HIGH PREFABRICATED GALVANIZED STEEL ROOF CURB (INCLUDING DAMPER TRAY, WOOD NAILER, 1.5" INSULATION, GASKET)
4. PROVIDE BURGLAR BARS FOR ROOF OPENING
5. REFER TO TJX CRITERIA FOR SWITCHING ON/OFF REQUIREMENTS.
6. ON CONTROLLED CIRCUIT RUN THRU RELAY PANEL - REFER TO ELECTRICAL PLANS
7. FAN TO RUN CONTINUOUSLY DURING BUSINESS HOURS VIA RELAY PANEL
8. PROVIDE BIRD SCREEN.

GAS UNIT HEATER SCHEDULE

TAG	MANUFACTURER	MODEL NO.	MBH INPUT	MBH OUTPUT	FLUE DIA.	TEMP RISE	FAN DATA CFM	RPM	HP	ELECTRICAL DATA V/PH/HZ	FLA	AMPS	OPER. WT. (LBS)	REMARKS
UH-1	STERLING	XF200	200	166	5"ø	47	3200	1140	1/3	120/1/60	8	9.5	200	1, 2, 3, 4, 5, 6, 7

REMARKS:

1. INSTALL PER MANUFACTURER'S SPECIFICATIONS & MAINTAIN ALL SERVICE CLEARANCES.
2. PROVIDE OSHA FAN GUARD; ALUMINIZED STEEL HEAT EXCHANGER; SINGLE STAGE GAS CONTROL
3. PROVIDE TYPE "B" VENT UP THRU ROOF WITH ROOF CURB AND BOOT FOR WATER TIGHT ASSEMBLY. INSTALL VENT PER MANUFACTURER'S INSTRUCTIONS. FLUE TO BE MIN. 10'-0" FROM ALL OUTSIDE AIR INTAKES INTAKES AND BUILD ING OPENINGS
4. PROVIDE THERMOSTAT NEAR DOORS, INCLUDING LOW VOLTAGE WRING; VERIFY LOCATION. UNIT CONTROL PER NOVAR SAVVY CONTROLLER TEMPERATURE SENSORS & CONTROL RELAYS.
5. INSTALL WITH THREADED ROD FROM TOP CHORD OF STRUCTURE AS HIGH AS POSSIBLE.
6. PROVIDE WITH 60° DOWN TURN NOZZLE.
7. THERMOSTAT TO BE SET AT 45°F TO MAINTAIN NON-FREEZING CONDITION DURING WINTER MONTHS.

VENTILATION CALCULATION AS PER 2021 VIRGINIA MECHANICAL CODE

ROOM TAG	AREA	OCCUPANCY AS PER 2021 IMC/1000SQ.FT.	OCCUPANY AS PER 2021 IMC	NO. OF CHAIR	FINAL OCCUPANCY	CFM/PERSON	CFM/SQ.FT	REQUIRED OA CFM	PROVIDED OA CFM	PROVIDED SUPPLY AIR CFM	OA PERCENTAGE (%)	EXHAUST CFM/SQ.FT./FIXTURE	EXHAUST CFM	SELECTED EXHAUST CFM
MGR	252	5	2	4	4	5	0.06	36	370	2000	18.5	-	-	-
CASH HALL	109	0	0	0	0	0	0.06	7				-	-	-
CASH	142	5	1	1	1	5	0.06	14				-	-	-
COAT ROOM	118	0	0	0	0	0	0.12	15				-	-	-
LOUNGE	625	50	32	17	20	7.5	0.06	188				0.5	312.5	360
JAN	121	0	0	0	0	0	0.12	15				8	161	165
HALL AT LOUNGE	225	0	0	0	0	0	0.06	14				-	-	-
MENS RR	183	0	0	0	0	0	0	0				8	244	245
WOMENS RR	182	0	0	0	0	0	0	0				8	243	245
PROCESSING ROOM	2561	2	6	0	6	10	0.12	368	405	2600	15.6	-	-	-
ELECTRIC ROOM	190	0	0	0	0	0	0.12	23				-	-	-
LP	108	5	1	0	1	5	0.06	12				-	-	-
VESTIBULE	248	0	0	0	0	0	0.06	15	4430	22000	20	-	-	-
SALES	18444	15	277	0	277	7.5	0.12	4291				-	-	-
RUG CLOSET	201	0	0	0	0	0	0.12	25				-	-	280
TOTAL	18893	-	-	-	277	-	-	4331	5205			-	-	1295

GENERAL NOTES

A. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
B. COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE DUCT RISES AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.
C. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
D. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK, OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
E. CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATIONS AND SIZES OF ALL UTILITIES, INCLUDING THE DEPTHS OF ALL BELOW GRADE SANITARY SEWERS, PRIOR TO START OF WORK. THIS DRAWING IS NOT INTENDED TO INDICATE ALL EXISTING UTILITIES.
F. CONTRACTOR SHALL BE FAMILIAR WITH LANDLORD'S STANDARDS, RULES AND REGULATIONS. ALL LANDLORD'S CRITERIA SHALL BE COMPLIED WITH AND INCLUDED IN THIS BID.
G. CONTRACTOR SHALL VERIFY AND COORDINATE ALL UTILITY CONNECTION POINTS, INCLUDING SIZES AND INVERTS WITH EXISTING FIELD CONDITION PRIOR TO START OF WORK.
H. MAKE ALL UTILITY CONNECTION AND INSTALLATION IN FULL ACCORDANCE WITH ALL UTILITY REGULATIONS. PROVIDE ALL ADDITIONAL APPURTENANCES AS REQUIRED BY UTILITY COMPANY. THE COMPLETED INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE INDUSTRY STANDARDS OF GOOD PRACTICE AND SAFETY, AND THE MANUFACTURER'S STRICTEST RECOMMENDATIONS FOR EQUIPMENT AND PRODUCT APPLICATION AND INSTALLATION.
I. MAINTAIN ALL MANUFACTURER'S RECOMMENDED SERVICE CLEARANCES FOR ALL FIXTURES AND EQUIPMENT.
J. ALL HORIZONTAL FIRE PROTECTION SPRINKLER PIPING AND ALL ABOVE GRADE EXPOSED SHALL BE INSTALLED AS HIGH AS POSSIBLE. SPRINKLER CONTRACTOR SHALL COORDINATE SPRINKLER SYSTEM WITH DUCTWORK AND LIGHTS. ALL COSTS ASSOCIATED WITH RAISING SPRINKLER PIPING WHERE THE ARCHITECTURAL DESIGN CAN NOT BE ACCOMPLISHED SHALL BE THE RESPONSIBILITY OF THE SPRINKLER CONTRACTOR
K. CONTRACTOR SHALL COORDINATE TIMES TO WORK IN SPECIFIC AREAS OF THE EXISTING BUILDING WITH THE BUILDING MANAGER.
L. SLEEVE AND SEAL ALL PIPE PENETRATIONS OF WALLS AND FLOORS. APPLY INTUMESCENT FIRE SAFING COMPOUND AT PENETRATIONS OF FIRE-RATED WALLS AND FLOORS, MAINTAINING INTEGRITY AND RATING OF FIRE SEPARATION. SLEEVES THROUGH FLOORS SHALL EXTEND 2" ABOVE FLOOR, BE GROUTED INTO PLACE AND WATER PROOFED. PIPING THROUGH EXTERIOR WALLS SHALL BE SLEEVED AND SEALED WEATHER TIGHT WITH SILICONE CAULK.
M. ROOF TOP EQUIPMENT SHALL BE TAGGED WITH 2-1/2" HIGH PERMANENT LETTERS TO IDENTIFY SPACE SERVED.
N. EXHAUST FANS/DUCTS AND ROOF VENTS SHALL TERMINATE A MINIMUM OF 15'-0" FROM OUTSIDE AIR INTAKES.
O. USE OF COMBUSTIBLE MATERIALS IS NOT ALLOWED IN THE RETURN AIR PLENUM. MATERIALS USED IN THE PLENUM SHALL HAVE FLAME SPREAD RATING NOT TO EXCEED 25, AND SMOKE DEVELOPED RATING NOT TO EXCEED 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84. ALL EXPOSED WIRING IN THE PLENUM SHALL BE PLENUM RATED.
P. CONTRACT LANDLORD APPROVED ROOFING CONTRACTOR TO FLASH AND SEAL ROOF CURB TO MAINTAIN ROOFING WARRANTY.
Q. CONTRACTOR TO DETERMINE IF ANY STRUCTURAL ELEMENTS SUCH AS REBAR OR POST TENSION CABLE EXIST IN FLOORS, WALLS OR ROOFS BY INSPECTION COORDINATED WITH THE LANDLORD'S TENANT COORDINATOR OR STRUCTURAL ENGINEER AND BY USE OF X-RAY WHEN REQUIRED PRIOR TO ANY CUTTING OR CORE DRILLING. IF SUCH ELEMENTS EXIST, REPORT THIS IMMEDIATELY TO THE ARCHITECT AND THE LANDLORD'S TENANT COORDINATOR FOR RESOLUTION PRIOR TO CUTTING OR DRILLING.
R. VISIT SITE PRIOR TO BIDDING AND FIELD VERIFY EXISTING CONDITIONS. TAKE INTERFERENCES INTO CONSIDERATION.
S. DUCTWORK SHALL BE INSTALLED TIGHT TO UNDERSIDE OF ROOF STRUCTURE AS HIGH AS POSSIBLE TO AVOID OBSTRUCTIONS.
T. PAINT INTERIOR OF ALL DUCTS VISIBLE THROUGH DIFFUSERS/GRILLES FLAT BLACK.
U. SPRINKLER CONTRACTOR SHALL COORDINATE SPRINKLER SYSTEM WITH DUCT WORK AND LIGHTS.
V. ALL ABANDONED HVAC EQUIPMENT SHALL BE REMOVED AND PROPERLY DISPOSED. CAP AND INSULATE ALL UNUSED ROOF OPENINGS.
W. REPLACE ALL HVAC FILTERS JUST PRIOR TO STORE GRAND OPENING.
X. UPON COMPLETING THE INSTALLATION OF THE EQUIPMENT, THE CONTRACTOR MUST APPLY AN ADDITIONAL LAYER OF ADSIL MICROGUARD AD 35 HVAC/R COIL AND FIN CLEAR PROTECTIVE TREATMENT TO ALL COILS AND THE EXTERIOR SURFACES OF ALL HVAC EQUIPMENT IN THE FIELD.

MECHANICAL REQUIREMENTS

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

DEFINITIONS: FURNISH MEANS TO SUPPLY AND DELIVER TO PROJECT SITE, READY FOR INSTALLATION. INSTALL MEANS TO PLACE IN POSITION AND MAKE CONNECTIONS FOR SERVICE OR USE. PROVIDE MEANS TO FURNISH AND INSTALL, COMPLETE AND READY FOR INTENDED USE. WARRANTY: PROVIDE LABOR AND MATERIALS TO REPAIR OR REPLACE DEFECTIVE PARTS AND MATERIALS AS REQUIRED FOR ONE YEAR AFTER SUBSTANTIAL COMPLETION OR OWNER ACCEPTANCE OF THE COMPLETED PROJECT. PROVIDE A SEPARATE LINE ITEM DEDUCT AMOUNT ON THE PROPOSAL FORM TO DELETE WARRANTY SERVICE, AT THE OWNER'S OPTION. COORDINATION: COORDINATE WITH THE WORK OF OTHER TRADES, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.

DUCT DIMENSIONS: UNLESS OTHERWISE NOTED, DUCT DIMENSIONS ON THE DRAWINGS ARE INSIDE CLEAR DIMENSIONS.

SHEETMETAL DUCTWORK: PROVIDE SHEETMETAL DUCTWORK FABRICATED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS, FOR 1" W.G. PRESSURE CLASS, SEAL CLASS "A". SHEETMETAL SHALL BE GALVANIZED SHEET STEEL OF LOCK FORMING QUALITY, WITH GSO ZINC COATING. SHEET STEEL SHALL COMPLY WITH ASTM A653 STANDARD SPECIFICATION FOR STEEL SHEETMETAL, ZINC COATED (GALVANIZED) OR ZINC-IRON ALLOY-COATED (GALVANNEALED) BY THE HOT DIP PROCESS, AND A924 STANDARD SPECIFICATION FOR GENERAL REQUIREMENTS FOR SHEET, METALLIC-COATED BY THE HOT DIP PROCESS. ALL ANGLE IRON USED FOR SUPPORT SHALL BE GALVANIZED. CONNECTIONS TO WALLS OR FLOOR SHALL BE AIR TIGHT WITH ANGLE IRON AND CAULKING. SEAL ALL DUCT SEAMS, TRANSVERSE AND LONGITUDINAL, AIR TIGHT. PROVIDE TURNING VANES AT ALL 90° ELBOWS.

ROUND SHEETMETAL DUCT: PROVIDE SPIRAL SEAM (ALL SIZES) OR SNAP LOCK (DUCT SIZES UP TO 10" ABOVE CEILINGS) GALVANIZED STEEL COMPLYING WITH SMACNA STANDARDS. SPIRAL SEAM DUCTWORK SHALL HAVE SMACNA SEAM TYPE RL-1.

DUCTWORK FITTING AND ACCESSORIES: ALL FITTINGS AND ACCESSORIES SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST PUBLISHED STANDARDS FROM SMACNA AND ASHRAE.

FLEXIBLE DUCT: PROVIDE FACTORY ASSEMBLED CLASS I AIR DUCT (UL 181) WITH 1" THICK I PCF FIBERGLASS INSULATION AND REINFORCED OUTER PROTECTIVE COVER/VAPOR BARRIER. FLEXIBLE DUCT SHALL MEET NFPA 90A WITH FLAME SPREAD UNDER 25, SMOKE DEVELOPED UNDER 50, AND SHALL BE RATED FOR MINIMUM 2" WG. PRESSURE AND TO 250°F TEMPERATURE. PROVIDE SCREW-OPERATED METAL ADJUSTABLE CLAMPING DEVICES. USE TWIST-LOCK TAP COLLARS AT CONNECTIONS INTO SHEETMETAL DUCT WORK, MAXIMUM EXTENDED LENGTH OF FLEXIBLE DUCT SHALL NOT EXCEED 4 FEET.

EXPOSED DUCTWORK: EXPOSED DUCTWORK SHALL BE CLEANED OF DEBRIS AND OIL, THEN WIPED DOWN WITH VINEGAR OR OTHER SURFACE PREPARING CHEMICAL TO PREPARE DUCT FOR PAINT.

DUCT SEALANT: PROVIDE POLYMERIC RUBBER TYPE SEALANT FOR USE ON BOTH INTERIOR LOCATED DUCTWORK AND DUCTWORK EXPOSED TO OUTDOOR CONDITIONS. SEALER SHALL HAVE HIGH BONDING STRENGTH FOR SURE, FIRST TIME SEALING OF JOINTS IN LOW, MEDIUM, AND HIGH PRESSURE DUCT SYSTEMS. SEALER SHALL BE HIGH IN SOLID CONTENT. PROVIDE A TWO PART TAPE SEALING SYSTEM, CONSISTING OF WOVEN FIBER TAPE IMPREGNATED WITH A GYPSUM MINERAL COMPOUND, AND A MODIFIED ACRYLIC/SILICONE ACTIVATOR THAT REACTS EXOTHERMICALLY WITH THE TAPE. TWO PART TAPE SEALING SYSTEM MUST BE RATED FOR BOTH INDOOR AND OUTDOOR APPLICATION. TAPE SHALL NOT CONTAIN ASBESTOS.

DUCT INSULATION (ALL ROUND SUPPLY DUCT AND ROUND RETURN DUCT ABOVE CEILING): PROVIDE MINIMUM 1-1/2" THICK BLANKET TYPE FIBERGLASS INSULATION COMPLYING WITH ASTM C-553, TYPE II, WITH FACTORY APPLIED KRAFT BONDED TO ALUMINUM FOIL, REINFORCED WITH FIBERGLASS VAPOR BARRIER/JACKET. JACKET SHALL CONFORM TO ASTM C-1136, TYPE II. INSTALLED R VALUE SHALL BE 6 OR HIGHER WITH A 0.75 PCF DENSITY.

DUCT LINER (ALL RECTANGULAR SUPPLY AND RETURN DUCT): PROVIDE MINIMUM 1" THICK, 3 PCF DENSITY, NEOPRENE COATED, LONG TEXTILE FIBER TYPE DUCT LINER, WITH COATING ON THE AIR STREAM SIDE CONFORMING TO NFPA 90A. DUCT LINER ADHESIVE SHALL BE AS RECOMMENDED BY DUCT LINER MANUFACTURER, AND SHALL COMPLY WITH ASTM C-916. DUCT LINER FASTENERS SHALL COMPLY WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS", LATEST EDITION. THERMAL CONDUCTIVITY SHALL BE EQUAL TO OR LESS THAN 026 AT 15°F.

ROUND VOLUME DAMPERS: PROVIDE MINIMUM 20 GAUGE GALVANIZED STEEL FRAME AND BLADES, MINIMUM 3/8" SQUARE STEEL AXLE, MOLDED SYNTHETIC BEARINGS, WITH LOCKING POSITION REGULATOR. REGULATOR SHALL BE POSITIONED WITH SHEETMETAL BRACKET BEYOND DUCT COVERING. WHERE POSITIONING REGULATOR IS NOT ACCESSIBLE, PROVIDE COUPLING AND EXTENSION ROD WITH REGULATOR FOR CEILING OR WALL INSTALLATION, AS REQUIRED.

RECTANGULAR VOLUME DAMPERS: PROVIDE MINIMUM 16 GAUGE GALVANIZED STEEL CHANNEL FRAME, 16 GAUGE GALVANIZED STEEL BLADES, MINIMUM 1/2" HEXAGONAL AXLE, MOLDED SYNTHETIC BEARINGS, WITH 3/8" SQUARE PLATED STEEL CONTROL SHAFT. LINKAGES SHALL BE CONCEALED IN THE FRAME. OPERATING SHAFT SHALL EXTEND BEYOND FRAME AND DUCT TO A LOCKING QUADRANT WITH ADJUSTABLE LEVER MAXIMUM BLADE WIDTH SHALL NOT EXCEED 6".

DUCT TURNING VANES: PROVIDE FABRICATED TURNING VANES AND VANE RUNNERS, CONSTRUCTED IN ACCORDANCE WITH SMACNA "HVAC DUCT CONSTRUCTION STANDARDS". PROVIDE TURNING VANES CONSTRUCTED OF CURVED BLADES, SUPPORTED WITH BARS PERPENDICULAR TO BLADES, AND SET INTO SIDE STRIPS SUITABLE FOR MOUNTING IN DUCT WORK FOLLOW SMACNA GUIDELINES FOR SPACING SUPPORT, AND CONSTRUCTION. ALL BLADES SHALL BE DOUBLE THICKNESS AIRFOIL TYPE.

FLEXIBLE DUCT CONNECTORS: PROVIDE UL. LABELED 30 OUNCE NEOPRENE COATED FIBERGLASS FABRIC DUCT CONNECTORS AT DUCT CONNECTIONS TO ALL VIBRATING EQUIPMENT.

DUCT ACCESS DOORS: PROVIDE HINGED ACCESS DOORS IN DUCTWORK WHERE REQUIRED FOR ACCESS TO EQUIPMENT. PROVIDE INSULATED ACCESS DOORS FOR INSULATED DUCTWORK. CONSTRUCT OF SAME OR THICKER GAUGE SHEETMETAL AS DUCT IN WHICH IT IS INSTALLED. PROVIDE FLUSH FRAMES FOR UNINSULATED DUCTS, AND EXTENDED FRAMES FOR EXTERNALLY INSULATED DUCTS. PROVIDE CONTINUOUS HINGE ON ONE SIDE, WITH ONE HANDLE-TYPE LATCH FOR ACCESS DOORS 12" HIGH AND SMALLER, AND TWO HANDLE-TYPE LATCHES FOR LARGER ACCESS DOORS.

TESTING AND BALANCING: TEST AND ADJUST ALL MECHANICAL SYSTEMS AND EQUIPMENT TO ASSURE PROPER BALANCE AND OPERATION. PERFORM TESTS IN ACCORDANCE WITH THE MOST CURRENT NEBB OR AABC, AND ASHRAE STANDARDS. ELIMINATE OBJECTIONABLE NOISE AND VIBRATION, AND ASSURE PROPER FUNCTION OF CONTROLS. BALANCING CONTRACTOR SHALL BE AN INDEPENDENT CERTIFIED TEST AND BALANCE CONTRACTOR, WITH NEBB OR AABC CERTIFICATION. SUBMIT COMPLETED AND CERTIFIED TEST AND BALANCE REPORT TO OWNER'S REPRESENTATIVE. BALANCE ALL SYSTEMS TO WITHIN 5% OF AIR FLOWS INDICATED ON THE DRAWINGS, AND REPORT ALL DISCREPANCIES TO HVAC INSTALLER FOR CORRECTION. MARK FINAL BALANCE POSITIONS ON DAMPERS WITH PERMANENT MARKER.

BMS SYSTEM NOTES

BMS INTERFACE SUMMARY (REFER TO TJX SPECIFICATIONS FOR DETAIL INFORMATION.)

1. GENERAL CONTRACTOR
1.1. PROVIDE 4'x8' PLYWOOD BACKBOARD IN ELECTRIC ROOM FOR BMS TO MOUNT THEIR EQUIPMENT. PHONE AND ETHERNET JACKS FOR THE BMS CONTROLLER WILL ALSO BE LOCATED ON THIS BOARD BY SEPARATE TJX VENDOR

2. MECHANICAL CONTRACTOR
CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN A COMPLETE BMS SYSTEM IN ACCORDANCE WITH THE SPECIFICATIONS OUTLINED IN THE TJX "OUTLINE SPECIFICATIONS AND REQUIREMENTS FOR REMODEL /CONVERSION CONSTRUCTION – SECTION 15C", AND TO COMPLY WITH REQUIREMENTS OF LOCAL CODE AND STATE REGULATIONS AND THE UNDERWRITING AGENCY HAVING JURISDICTION.

3. ELECTRICAL CONTRACTOR
3.1. REFER TO ELECTRICAL PLANS FOR REQUIREMENTS AND COORDINATION INFORMATION

BURGLAR BAR NOTES

1. PROVIDE BURGLAR BARS IN ALL ROOF AND EXTERIOR WALL PENETRATIONS, INCLUDING PENETRATIONS REQUIRED FOR ROOF MOUNTED EQUIPMENT LARGER THAN 12"x12" OR 12ø. BARS SHALL BE 1/2" STEEL RODS @6" O.C. WELDED IN PLACE AT ALL INTERSECTIONS AND SIDES OF OPENINGS. BARS SHALL BE SECURELY EMBEDDED IN CONCRETE OR WELDED STEEL FRAMES AS REQUIRED BY CONSTRUCTION OF ROOF AND/OR WALL.
2. G.C. TO PROVIDE AND INSTALL BURGLAR BARS OVER EXISTING RTU CURBS WHERE EQUIPMENT IS TO BE REMOVED, IN ADDITION TO ABOVE NOTED REQUIREMENT. REFER TO DEMOLITION PLAN FOR CAPPED AND SEALED EQUIPMENT CURBS.

NATIONAL ACCOUNTS

TJX GROUP OF COMPANIES HAS A NATIONAL ACCOUNT AGREEMENT WITH YORK. AIR CONDITIONING UNITS ARE OWNER FURNISHED. THE INSTALLING CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND ACCEPTING THE EQUIPMENT, VERIFYING PROPER QUANTITIES, PROVIDING TEMPORARY STORAGE, LABOR, PROPER INSTALLATION, AND ONE-YEAR LABOR WARRANTY.

FOR COMPLETE INFORMATION ON THE OWNER FURNISHED HVAC EQUIPMENT, CONTACT YORK NATIONAL ACCOUNTS: SAUL DIAZ

CONTACT: SAUL DIAZ @ SAUL.OMAR.DIAZ@JCI.COM
CC @ BE-TJX-NATLACCT@JCI.COM
DIRECT OFFICE NUMBER: 405-419-6447
TOLL FREE: 800-484-9738

NOTE: ORDERING PROCEDURES

YORK NATIONAL ACCOUNTS DEPARTMENT WILL ORDER EQUIPMENT AND COORDINATE SHIPMENT WITH THE SUCCESSFUL HVAC CONTRACTOR. THE HVAC CONTRACTOR WILL BE RESPONSIBLE FOR DELIVERY COORDINATION, RECEIVING, AND INSTALLATION AS DESCRIBED IN THE SPECIFICATIONS

STANDARD LEAD-TIME FOR YORK RTU HVAC EQUIPMENT IS FOUR (4) WEEKS MANUFACTURING PLUS ONE (1) WEEK TRANSPORTATION DEPENDING ON THE LOCATION WITHIN THE 48 STATES. ANY NON-STANDARD OPTION MAY ADD TO THE STANDARD MANUFACTURING LEAD-TIME AND WILL BE CONFIRMED AT PLACEMENT OF ORDER.

*HVAC EQUIPMENT WITH THE FACTORY TECHNICOAT COATING OF THE CONDENSER AND EVAPORATOR COILS WILL HAVE AN ELEVEN (11) WEEK LEAD-TIME.

NOTE: EQUIPMENT STARTUP INSTRUCTION
YORK IS RESPONSIBLE FOR STARTUP AND COMMISSIONING OF THE HVAC EQUIPMENT

BMS: TJX APPROVED BUILDING MANAGEMENT SYSTEM (CONTACT TJX PROJECT MANAGERS FOR INFORMATION)

THE FOLLOWING EQUIPMENT FALLS UNDER THE YORK (JOHNSON CONTROLS) NATIONAL ACCOUNT AGREEMENT:
HVAC EQUIPMENT: YORK
GAS UNIT HEATER: STERLING
EXHAUST FANS: PENNBARRY
DIFFUSERS, GRILLES, REGISTERS: TUTTLE & BAILEY and RUSKIN ROOFTOP SYSTEMS

NO SUBSTITUTIONS WILL BE ALLOWED

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HomeGoods

MECHANICAL NOTES & SCH.

Deal Type	
Store Number	
Date	11/19/24
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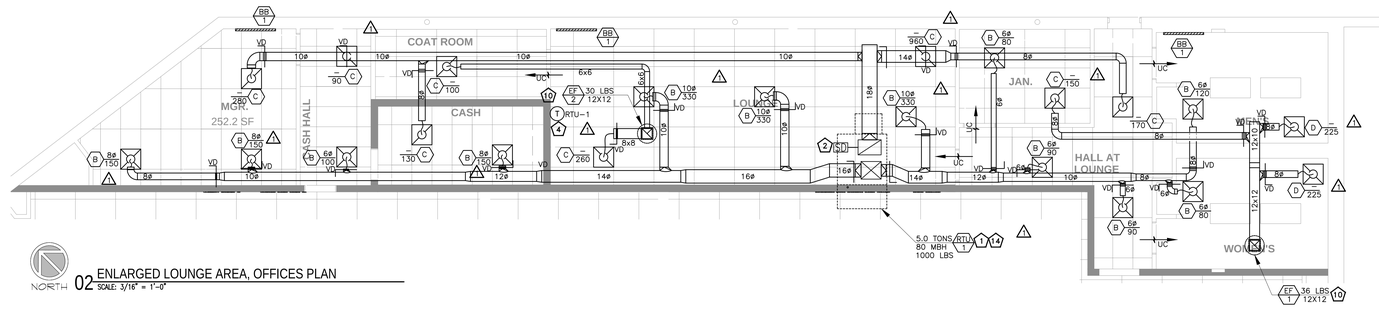
Criteria Set By	NYE
Checked By	NYE

M0

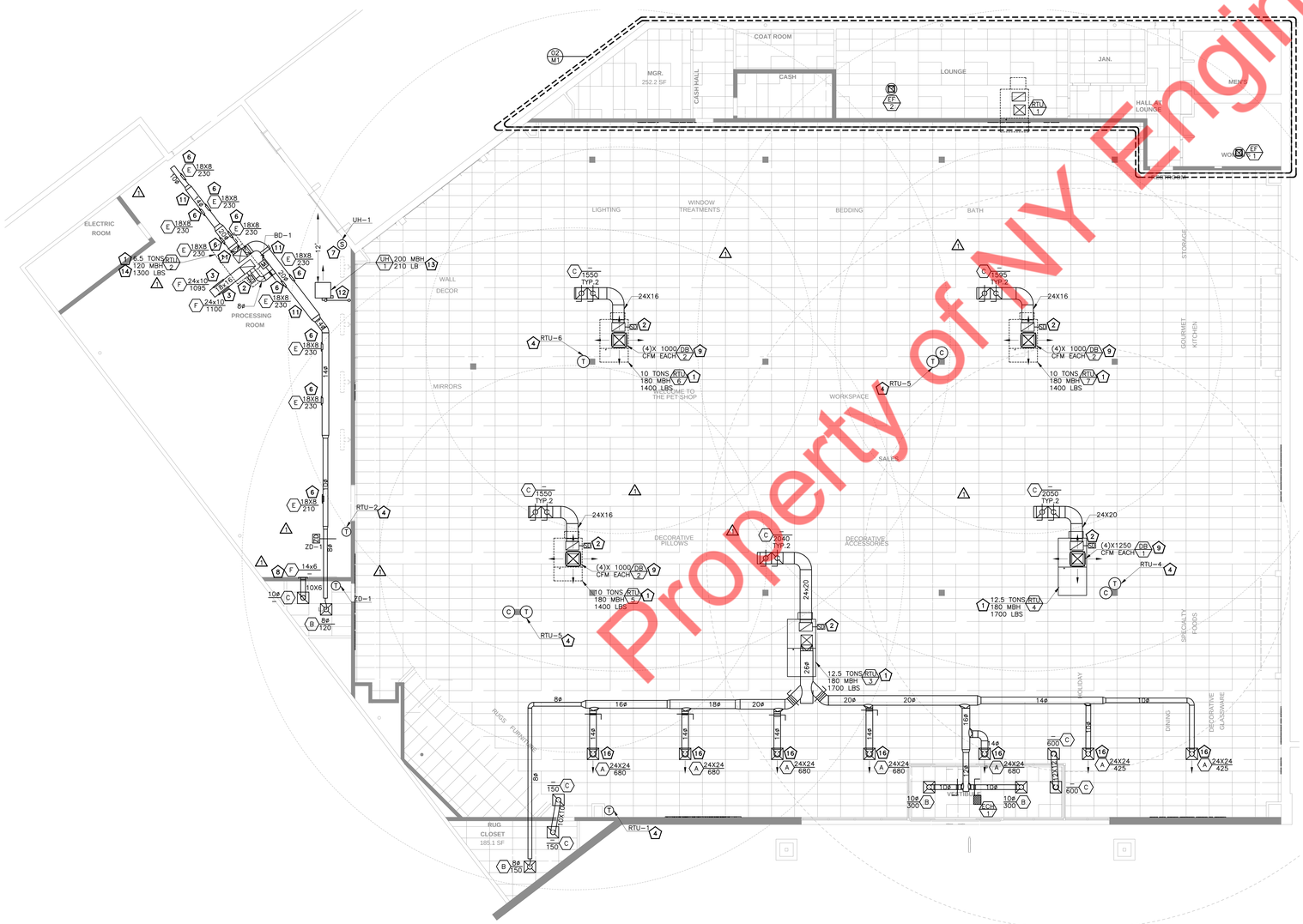
Scale: As indicated

MECHANICAL FLOOR PLAN KEYED NOTES

1. PROVIDE NEW ROOFTOP UNIT AND FULL PERIMETER ROOF CURB. COORDINATE ALL STRUCTURAL FRAMING REQUIREMENTS WITH GENERAL CONTRACTOR. REPAIR ROOF/FLASHING AS NECESSARY, COORDINATE WITH GENERAL CONTRACTOR AND LANDLORD. PROVIDE FULL SIZE DUCT DROPS FROM UNIT DOWN TO DUCT WORK OR DEVICE BELOW. PROVIDE ALL TRANSITIONS AND FINAL CONNECTIONS AS REQUIRED. PROVIDE FLEXIBLE CONNECTIONS IN SUPPLY AND RETURN DUCT WORK. DUCT WORK ABOVE AND BELOW FLEXIBLE CONNECTION SHALL BE SUPPORTED INDEPENDENTLY FROM EACH OTHER.
2. DUCT MOUNTED SMOKE DETECTOR FURNISHED BY FIRE ALARM CONTRACTOR AND INSTALLED IN DUCT BY MECHANICAL CONTRACTOR DOWNSTREAM OF AIR FILTERS AND AHEAD OF ANY BRANCH CONNECTIONS. INTERLOCKING WIRING BETWEEN FIRE ALARM SYSTEM RELAY AND ROOFTOP UNIT SHUTDOWN CONTACT SHALL BE PROVIDED BY MECHANICAL CONTRACTOR ALL OTHER WIRING BY FIRE ALARM CONTRACTOR. UPON DETECTION OF SMOKE, ROOFTOP UNIT SHALL SHUT DOWN UPON AND INITIATE SUPERVISORY SIGNAL AT THE FIRE ALARM PANEL.
3. RETURN AIR DUCT TO BE MOUNTED AT 14'-0" TO BOTTOM OF THE DUCTWORK.
4. FINAL INSTALLATION LOCATION AND HEIGHT SHALL BE COORDINATED WITH BMS CONTROLS.
5. NOT USED.
6. INSTALL SUPPLY REGISTERS AT 20° DOWN FROM HORIZONTAL. ADJUST BLADES FOR EVEN DISTRIBUTION.
7. BMS SAVVY CONTROLLER FOR UH-1. INSULATE EXTERIOR WALL BEHIND SENSOR, CAULK WIRE PENETRATION THRU WALL. INSTALL SENSOR 60" AFF.
8. INSTALL RETURN/TRANSFER GRILLE AS HIGH AS POSSIBLE WITH BLADES DIRECTED AWAY FROM LINE OF SIGHT.
9. DROPBOX ASSEMBLY SHALL BE SUPPORTED INDEPENDENTLY FROM DUCT WORK. ADJUST SUPPLY GRILLES FOR EVEN AIR DISTRIBUTION. PROPOSED CONCENTRIC BOX LOCATION. MOUNTING HEIGHT TO BOTTOM OF DROPBOX DIFFUSER TO BE AT ACT CEILING HEIGHT FINAL HEIGHT TO BE COORDINATED WITH ALL TRADES AND APPROVED BY TJX CONSTRUCTION MANAGER PRIOR TO INSTALLATION.
10. NOT USED.
11. BOTTOM OF LARGEST DUCT AT 13'-6" AFF AND MIN. 6" HIGHER THAN BOTTOM OF LIGHT FIXTURE LEVEL. ALL TRANSITIONS SHALL BE SYMMETRICAL.
12. TRANSITION FROM VENT OUTLET TO 5" DIA. TYPE "B" VENT AND EXTEND UP THRU ROOF. PROVIDE ROOF JACK, STORM COLLAR AND ALL-WEATHER CAP.
13. PROVIDE GAS FIRED UNIT HEATER SUSPEND FROM STRUCTURE ABOVE WITH STEEL CHANNEL AND THREADED ROD. PROVIDE DOUBLE NUT ON ROD ENDS. MOUNT BOTTOM OF HEATER 12'-0" AFF. MAINTAIN MANUFACTURER'S RECOMMENDED CLEARANCES TO COMBUSTIBLES. FINAL UNIT HEATER LOCATION AND HEIGHT TO BE VERIFIED BY TJX CM PRIOR TO INSTALLATION. G.C. TO COORDINATE ALL UTILITIES WITH ASSOCIATED TRADES (GAS & POWER).
14. ONLY DUCTWORK SERVING SALES FLOOR OR VESTIBULE SHALL BE VISIBLE FROM THE SALES FLOOR. ALL OTHER DUCT WORK SHALL BE INSTALLED DIRECTLY ABOVE THE SPACE BEING SERVED.
15. NOT USED
16. DIFFUSERS SHALL BE ONE WAY DIRECTED TOWARDS THE STORE FRONT LINE.



NORTH 02 ENLARGED LOUNGE AREA, OFFICES PLAN
SCALE: 3/16" = 1'-0"



NORTH 01 OVERALL MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"

MECHANICAL SYMBOLS AND ABBREVIATIONS

ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
EC	ELECTRICAL CONTRACTOR
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
ESP	EXTERNAL STATIC PRESSURE
GC	GENERAL CONTRACTOR
HZ	FREQUENCY
LAT	LEAVING AIR TEMPERATURE
MC	MECHANICAL CONTRACTOR
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NC	NOISE CRITERIA
OA	OUTSIDE AIR
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
RA	RETURN AIR
RTU	ROOFTOP UNIT
SA	SUPPLY AIR
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WC	WATER COLUMN
WB	WET BULB

GRILLES/DIFFUSERS:

- SUPPLY DIFFUSER (4-WAY THROW)
- SUPPLY DIFFUSER (3-WAY THROW)
- SUPPLY DIFFUSER (2-WAY THROW)
- SUPPLY DIFFUSER (1-WAY THROW)
- SIDEWALL MOUNTED SUPPLY REGISTER
- RETURN/TRANSFER GRILLE
- EXHAUST GRILLE

GENERAL REFERENCES/NOTATIONS:

- 2/M1 — OR-2/M1 — DETAIL OR SECTION REFERENCE
- CONNECT TO EXISTING
- 1 — TAGGED NOTE DESIGNATION
- 1 — REVISION DESIGNATION
- EF-1 — EQUIPMENT DESIGNATION
- A 30X6 750 — DIFFUSER TAG, NECK SIZE, CFM — GRILLE/REGISTER/DIFFUSER DESIGNATION
- 3/4" — 3/4" DOOR UNDERCUT – COORDINATE WITH GENERAL CONTRACTOR

DOUBLE LINE DUCT SYMBOLS:

- 16x10 — NEW SHEET METAL DUCTWORK & SIZE
- 16ø
- EXISTING DUCTWORK/PIPING TO REMAIN
- EXISTING DUCTWORK/PIPING TO BE REMOVED
- SUPPLY OR OUTSIDE AIR DUCT
- RETURN DUCT
- EXHAUST DUCT
- DUCT TRANSITION
- DUCT TRANSITION – RECTANGULAR TO ROUND
- SUPPLY DUCT ELBOW – UP AND DOWN
- RETURN DUCT ELBOW – UP AND DOWN
- EXHAUST DUCT ELBOW – UP AND DOWN
- FIXED VANE TURNING ELBOW
- FULL RADIUS ELBOW
- SUP / RET/EXH / VD — RECTANGULAR BRANCH WITH VOLUME DAMPER (RECTANGULAR MAIN)
- SUP / RET/EXH / VD — ROUND BRANCH WITH VOLUME DAMPER (RECTANGULAR MAIN)
- SUP / RET/EXH / VD — ROUND BRANCH WITH VOLUME DAMPER (ROUND MAIN)
- FLEXIBLE DUCTWORK

EQUIPMENT:

- ROOF MOUNTED EXHAUST FAN
- PACKAGED ROOFTOP UNIT
- GAS UNIT HEATER
- CEILING HEATER
- T — THERMOSTAT
- TS — REMOTE TEMPERATURE SENSOR
- S — SENSOR / CONTROLLER.
- C — CARBON DIOXIDE SENSOR
- SD — SMOKE DETECTOR

NOTES:
REFER TO PLANS, EQUIPMENT SCHEDULES AND SPECIFICATIONS FOR DETAILED INFORMATION REGARDING ALL EQUIPMENT AND DEVICES. MECHANICAL CONTRACTOR SHALL PROVIDE ALL EQUIPMENT AND DEVICES UNLESS SPECIFICALLY NOTED OTHERWISE.

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MECHANICAL FLOOR PLANS

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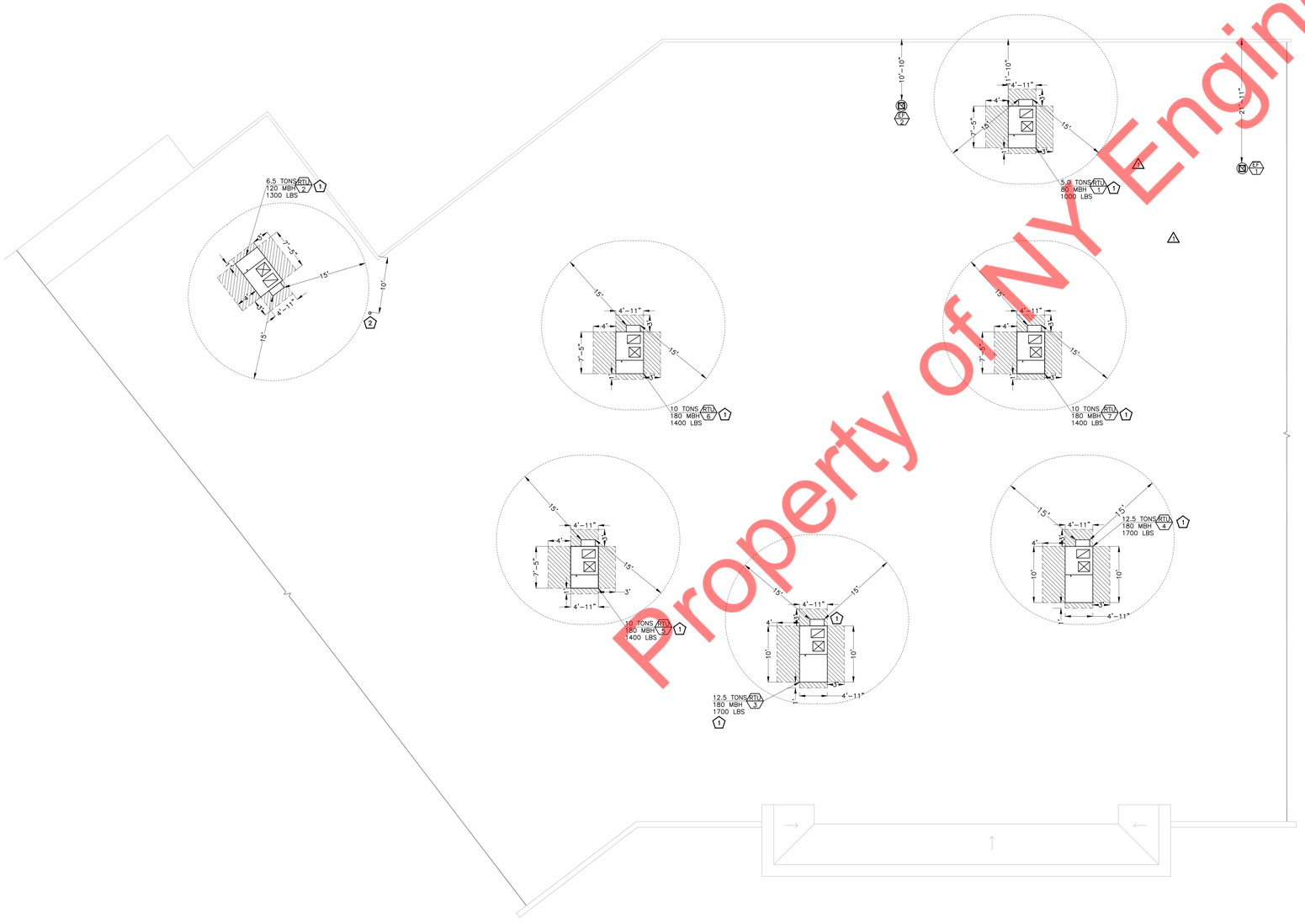
Scale	As indicated

MECHANICAL ROOF PLAN KEY NOTES:

1. PROVIDE NEW ROOFTOP UNIT AND FULL PERIMETER ROOF CURB. COORDINATE ALL STRUCTURAL FRAMING REQUIREMENTS WITH GENERAL CONTRACTOR. REPAIR ROOF/FLASHING AS NECESSARY, COORDINATE WITH GENERAL CONTRACTOR AND LANDLORD. PROVIDE FULL SIZE DUCT DROPS FROM UNIT DOWN TO DUCT WORK OR DEVICE BELOW. PROVIDE ALL TRANSITIONS AND FINAL CONNECTIONS AS REQUIRED. PROVIDE FLEXIBLE CONNECTIONS IN SUPPLY AND RETURN DUCT WORK. DUCT WORK ABOVE AND BELOW FLEXIBLE CONNECTION SHALL BE SUPPORTED INDEPENDENTLY FROM EACH OTHER.
2. UNIT HEATER VENT FROM DOWN. REFER TO FLOOR PLAN.



NORTH 01 MECHANICAL ROOF PLAN
SCALE: 1/8" = 1'-0"

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Deal Type	
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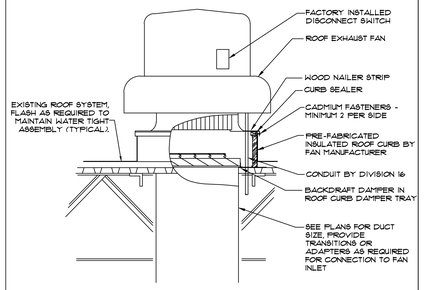
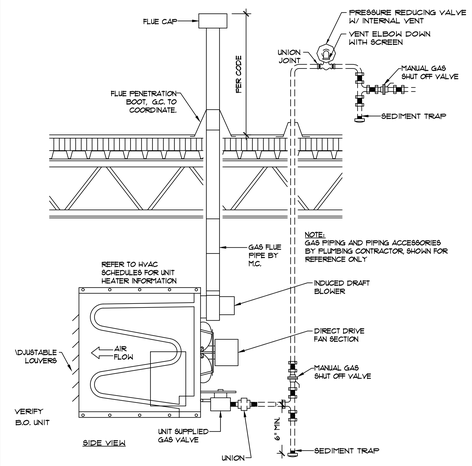
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

M2

Scale	As indicated



13 M3 ROOF MOUNTED EXHAUST FAN DETAIL
N.T.S



12 M3 UNIT HEATER INSTALAATION DETAIL
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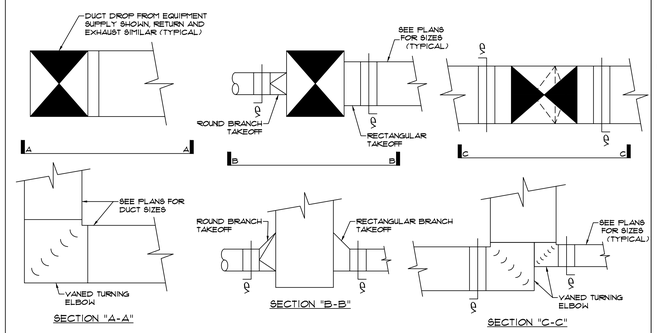

11 M3 EQUIPMENT DUCT DROP DETAIL
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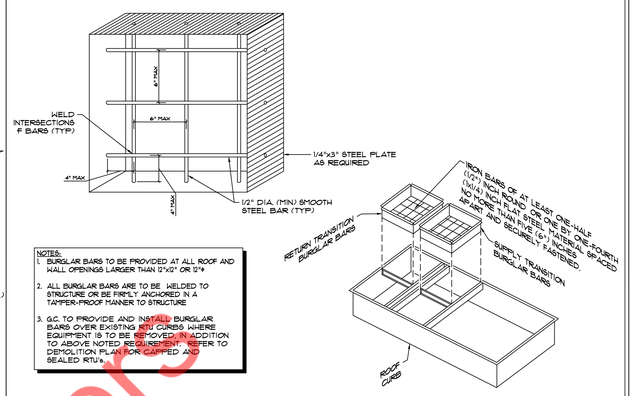
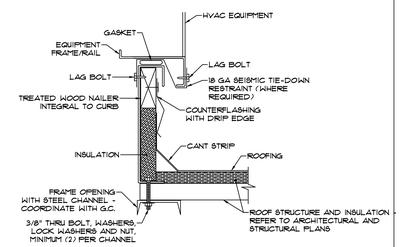


10 M3 BURGLAR BAR DETAILS
N.T.S



09 M3 ROOF TO UNIT CURB DETAIL
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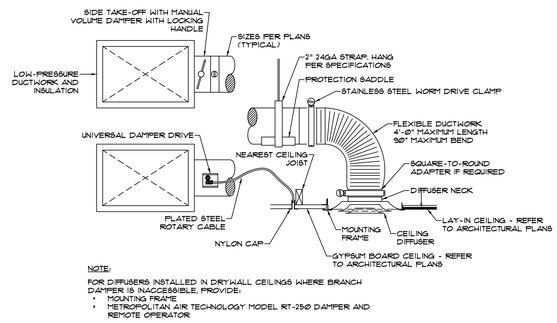

08 M3 CEILING DIFFUSER DETAIL
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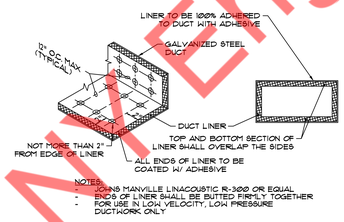

07 M3 ACOUSTIC LINING DETAIL
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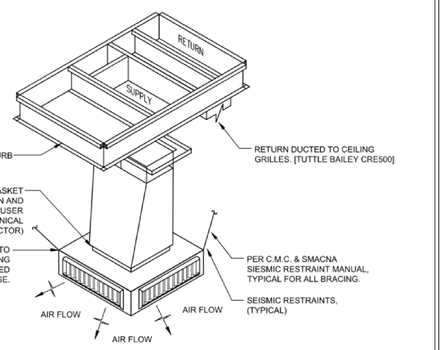

06 M3 DROPBOX DIFFUSER
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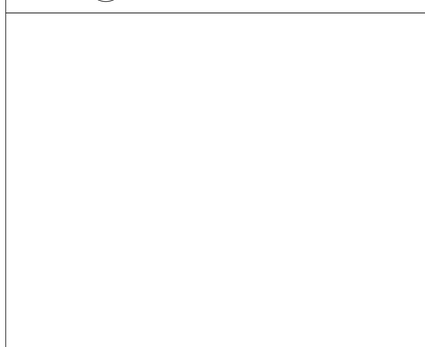

05 M3 NOT USED
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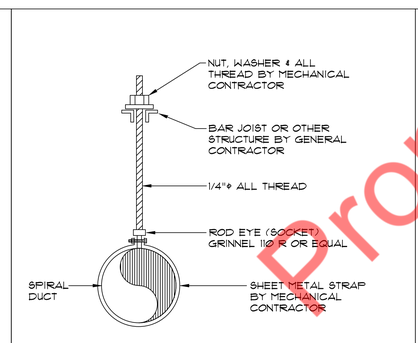
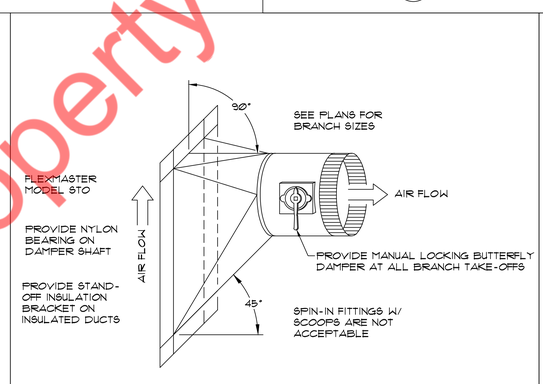
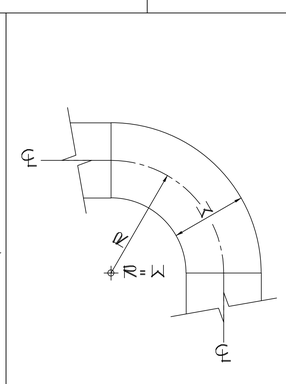


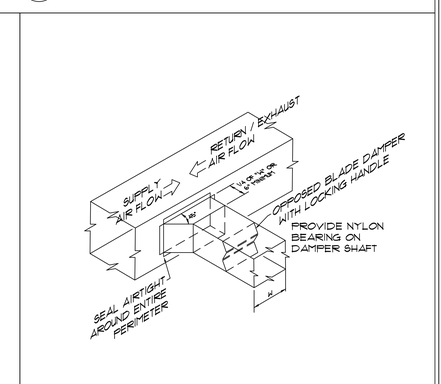
04 M3 SPRIAL DUCT HANGER DETAIL
N.T.S



03 M2 ROUND BRANCH TAKE-OFF
N.T.S



02 M3 RADIUS ELBOW DETAIL
N.T.S



01 M3 RECTANGULAR BRANCH TAKE-OFF
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M3

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LIGHTING FIXTURE SCHEDULE

SYMBOL	COUNT	SIZE	SYSTEM WATTAGE	SYSTEM VOLTAGE	FIXTIRE MOUNTING METHOD	LAMP TYPE	MANUFACTURER	SPECIFICATION NUMBER (ORDERING INFORMATION)	COMMENTS
A	30	2' x 4'	37	MULTI VOLTAGE	RECESSED	LED	ACUITY (LITHONIA)	2ESL4 48L EZ1 LP835	
⚠1 AE	2	2' x 4'	37	MULTI VOLTAGE	RECESSED	LED	ACUITY (LITHONIA)	2ESL4 48L EZ1 LP835 E10WLCP	EMERGENCY LIGHT FIXTURE
A6	57	7.11" x 4.84" x 7.6"	41	120V	TRACK	LED	SPECTRUM	TWY750L35KE1BETWH	SEE AIMING ANGLE TABLE, C5 SHEET.
B	1	DOCKLIGHT	18	120V	WALL MOUNTED	LED	TPI/EIKO	DKL40-VA-A (DOCK SWING ARM)/ LED18WPAR38NFL830U (EIKO #10915)	DOCKLIGHT
D	4	2' x 4'	37	MULTI VOLTAGE	RECESSED	LED	ACUITY (LITHONIA)	2ESL4 F 48L EZ1 LP835	FOR GYPSUM BOARD CEILINGS, AND FLANGE KITS
E	5	EXIT SIGN	4.3	MULTI VOLTAGE	WALL MOUNTED	LED	ACUITY (LITHONIA)	LHQM-LED-R-M6	QUANTUM LHQM EXIT SIGN/EMERGENCY LIGHT COMBO
F3	1	4" x 8"	53.4	MULTI VOLTAGE	SURFACE	LED	LITERONICS	SFCS84640	MOUNTING HARDWARE SUPPLIED BY CONTRACTOR
F4	2	4" x 4"	26.7	MULTI VOLTAGE	SURFACE	LED	LITERONICS	SFCS42540	MOUNTING HARDWARE SUPPLIED BY CONTRACTOR
G3	23	4" x 8"	53.4	MULTI VOLTAGE	PENDANT	LED	LITERONICS	SFCS84640	16' WITH 3; 8' AND 4' WITH 2; HANGING HARDWARE SUPPLIED BY CONTRACTOR
G4	4	4" x 4"	26.7	MULTI VOLTAGE	PENDANT	LED	LITERONICS	SFCS42540	16' WITH 3; 8' AND 4' WITH 2; HANGING HARDWARE SUPPLIED BY CONTRACTOR
K3 ⚠1	3	14.125" x 14.125"	21	120	RECESSED	LED	SPECTRUM	NC12SQLEDOA22L40KE1/FT0112MWFO	USE UNDER CANOPY
K3-EM	3	14.125" x 14.125"	21	120	RECESSED	LED	SPECTRUM	NC12SQLEDOA22L40KE1 EM/FT0112MWFO	USE UNDER CANOPY
L	2	14.21" x 9.33" x 7.75"	45	MULTI VOLTAGE	WALL MOUNTED	LED	ELITE	OWP FC 201 LED 4500L MVOLT 50K BZ O EMG LED COLD WEATHER	MOUNT FIXTURE AT 7'-6" AFF OR PER LOCAL CODE
⚠1 L1	10	14.5" x 9.5" x 7.75"	45	MULTI VOLTAGE	WALL MOUNTED	LED	ELITE	OWP NC 201 LED 4500L MVOLT 50K BZ ⚠1	MOUNT FIXTURE AT 14'-0" AFF OR PER LOCAL CODE
⚠1 R	45	EMERGENCY	1.5	MULTI VOLTAGE	SURFACE	LED	ACUITY (LITHONIA)	ELM6L	CAN USE ELM6-LED, ELM-LT, or other Emergency lights in the Acquity ELM family
T4L	74	2-7/8" x 2-1/16"	15	120V	TRACK	LED	CONTECH/EIKO	CTL603-P (LAMP HOLDER)/LED15WPAR38/FL/830-DIM-G9 (EIKO #10779)	TRACK MOUNTED SPOT LIGHT, 17PAR38/515 3000 DIM AF SO
W	111	2' x 2'	97	120V	RECESSED	LED	SPECTRUM	GC2208LEDGV 150L 35K E1 TJXL GW (120V)	
Y	4	2' x 2'	97	120V	RECESSED	LED	SPECTRUM	GC2208LEDGV 150L 35K E1 TJXL GW (120V)	

LIGHTING NOTES:

1. ⚠1 STORE LIGHTING (SALES & SUPPORT) SHALL INCORPORATE QUANTUM LUMINOTYPE FIXTURES TO ACT AS EMERGENCY LIGHTS. NUMBER OF FIXTURES TO BE DETERMINED BY CODE. ⚠1
2. NL-FIXTURES WILL BE WIRED BEFORE A SWITCH OR CONTACTOR. (FIXTURES WILL RUN 24 HOURS)
3. PROCESSING ROOM LIGHTING TO BE MOUNTED AT 13' AFF. (LIGHTING TO BE COORDINATED WITH HVAC & STRUCTURAL STEEL)
4. SECURE EXCESS CORD WITH TIE STRAP ABOVE LIGHT FIXTURE. COORDINATE WITH TJX PROJECT MANAGER.

NOTE: LIGHTING PATTERN MUST REMAIN AS DRAWN AND : LIGHTING PATTERN MUST REMAIN AS DRAWN AND ADHERE TO THIS PLAN. ALL LIGHT FIXTURES IN SALES AREA WILL BE MOUNTED @ 12'-0" A.F.F. TO THE UNDERSIDE OF THE FIXTURE. (SEE EXCEPTIONS). G.C. MUST COORDINATE ALL M.E.P. TRADES TO ENSURE. PLEASE CONTACT TJX PROJECT MANAGER AND M.O.D. IMMEDIATELY IF THERE ARE ANY FIXTURE SPACING OR MOUNTING HEIGHT CONFLICTS. TJX WILL NOT BE RESPONSIBLE FOR COSTS INCURRED FOR INCORRECT INSTALLATION AND MOUNTING OF LIGHT FIXTURES WITHOUT PRIOR NOTIFICATION TO TJX P.M. OR M.O.D..

LIGHT FIXTURE "L" IS EQUIPPED WITH EMERGENCY LIGHTING FEATURE FOR EMERGENCY EGRESS AT EXTERIOR DOORS. IF LOCAL AUTHORITY REQUIRES SEPARATE EMERGENCY LIGHT EC SHALL CHOOSE FROM ACUITY'S LITHONIA LINE.

LIGHTING SYMBOLS

	4' OR 8' LED STRIP LIGHTING FIXTURE 4" WIDE
	2' X 4' RECESSED LED LIGHTING FIXTURE
	2' X 2' RECESSED LED LIGHTING FIXTURE
EM	EMERGENCY REMOTE LIGHT HEADS AND EXIT SIGN, WALL MOUNTED, SEE SPECS.
	EXTERIOR SIGN JUNCTION BOX.
OCC	CEILING MOUNTED SINGLE OCCUPANCY SENSOR SWITCH (PIR) (REFER TO TJX SPECIFICATIONS FOR PRODUCT INFORMATION.)
	EXTERIOR LUMINAIRE, SEE SPECS. ⚠1
J	JUNCTION BOX, TO HEIGHT INDICATED.
	EXIT SIGN (WALL MOUNTED), SEE SPECS.
$	SINGLE POLE SWITCH, +46" OR AS NOTED.
$OS	SINGLE OCCUPANCY SENSOR SWITCH (PIR) (REFER TO TJX SPECIFICATIONS FOR PRODUCT INFORMATION.) +46" OR AS NOTED.
$3	THREE WAY SWITCH, +46" OR AS NOTED.
	ILLUMINATED DRESSING ROOM MIRROR

LIGHTING PLAN KEY NOTES

1. NOT USED.
2. MOUNT DOCK LIGHT @ 6'-6". SEE POWER PLAN SHEET E2 FOR POWER REQUIREMENTS.

A6 AIMING ANGLE TABLE

MOUNTING HEIGHT (CEILING HEIGHT)	DISTANCE OFF THE WALL	DESIRED ANGLE
10'–0"	3'–6"	41°
11'–0"	3'–6"	35°
12'–0"	3'–6"	30°
13'–0"	3'–6"	27°
14'–0"	3'–6"	24°
15'–0"	3'–6"	21°

LIGHTING LOAD CONTROL SEQUENCE

1. ZONE 'a' – EMPLOYEE LIGHTING = INTERLOCK W/BURGLAR ALARM SYSTEM SUCH THAT WHEN THE SYSTEM IS DISARMED THE EMPLOYEE LIGHTING TURNS ON. WHEN BURGLAR ALARM IS ARMED THE EMPLOYEE LIGHTING SHALL TURN OFF.
   ZONE 'a' SHALL CONTROL THE FOLLOWING LOADS:
   50% OF SALES GENERAL LIGHTING (ALTERNATING ROWS)
   PROCESSING ROOM LIGHTING
   EMPLOYEE SUPPORT AREAS
   UH–1, BB–1, EH–1
   EF–1, EF–2
2. ZONE 'b' – CUSTOMER LIGHTING = CONTROLLED BY THE 'BMS' TIME SCHEDULE & SHALL BE CAPABLE OF MANUALLY REDUCING THE GENERAL SALES LIGHTING BY 50%.
   ZONE 'b' SHALL CONTROL THE FOLLOWING LOADS:
   50% OF SALES GENERAL LIGHTING (ALTERNATING ROWS)
   SALES PERIMETER TRACK LIGHTING
3. ZONE 's'–SIGN & CANOPY LIGHTING = CONTROLLED BY THE 'BMS' PHOTOCELL AND TIME SCHEDULE. ZONE 'S' SHALL CONTROL THE FOLLOWING LOADS:
   STOREFRONT SIGNS
   EXTERIOR FRONT LIGHTING
4. ZONE 'e' – EXTERIOR WALL PACK LIGHTING = CONTROLLED ONLY BY THE 'BMS' PHOTOCELL.
   ZONE 'e' SHALL CONTROL THE FOLLOWING LOADS:
   EXTERIOR REAR WALL PACK LIGHTING

LIGHTING PLAN GENERAL NOTES

A. EXIT SIGNS, EMERGENCY AND NIGHT LIGHTS SHALL BE CONNECTED TO AN UNSWITCHED LIGHTING CIRCUIT, NOT CONTROLLED BY OCCUPANCY SENSORS, SWITCHES, CONTRACTORS, OR RELAY PANEL.

B. REFER TO "RECESSED LIGHTING FIXTURE SUPPORT DETAIL", SHEET EI, FOR INFORMATION ON SUPPORT OF ALL 2' X 4' RECESSED LIGHT FIXTURES.

C. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN AND DETAILS FOR EXACT LOCATION OF ALL LIGHTING FIXTURES AND OTHER EQUIPMENT INSTALLED IN THE CEILING SYSTEM. VERIFY EXACT MOUNTING HEIGHTS AND FINISHES WITH ARCHITECT PRIOR TO ROUGH–IN.

D. REFER TO POWER PLANS FOR LOCATIONS OF ELECTRICAL EQUIPMENT.

E. ELECTRICAL J–BOX FOR ALL OVERHEAD TYPE LIGHTS TO BE WITHIN 4' OF EACH ACTUAL LIGHT FIXTURE.

F. SALES FLOOR LIGHTING SHALL BE CIRCUITED EVER OTHER ROW TO OPERATE WITH BUILDING MANAGEMENT SYSTEM (SEE E4 SHEET).

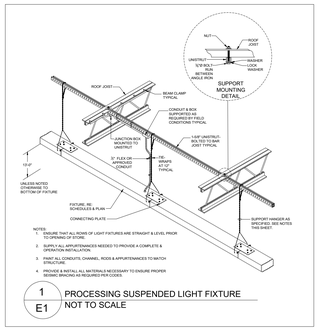
G. SALE FLOOR LIGHTS (NON–EMERGENCY) TO BE MOUNTED AT 12'–0" AFF. (UNLESS NOTED OTHERWISE ON TJX C–SET). MECHANICAL, ELECTRICAL, AND PLUMBING TO BE MOUNTED WITH ADEQUATE CLEARANCE BETWEEN TOP OF LIGHTING FIXTURES AND ROOF DECK.

H. ALL TRACK IS TO BE MOUNTED ON UNISTRUT. ALL UNISTRUT TO BE PAINTED WHITE & HUNG AS REQUIRED FROM STRUCTURE ABOVE. ALL TRACK USED IN THE STORE IS TO BE WIRED FROM 120V PANEL.

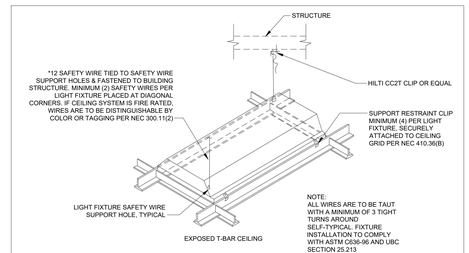
I. INSTALL LIGHT FIXTURES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS & APPLICABLE CODES.

J. LIGHT FIXTURES SHALL BE PURCHASED BY CONTRACTOR THRU TENANT'S NATIONAL ACCOUNT. NO SUBSTITUTIONS ALLOWED. REFER TO APPROVED VENDOR LIST IN TJX CRITERIA SET.

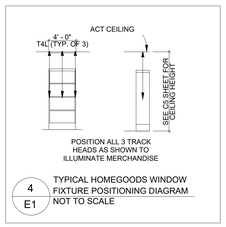
K. WIRING CONNECTIONS TO EXTERIOR WALL MOUNTED FIXTURES SHALL BE WEATHER TIGHT. USE WEATHERPROOF JUNCTION BOXES, FITTINGS, COVER PLATES, ETC. AS REQUIRED TO PREVENT ENTRY OF WATER INTO WIRING BOXES.



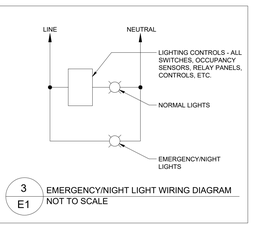
1 / E1 PROCESSING SUSPENDED LIGHT FIXTURE
NOT TO SCALE



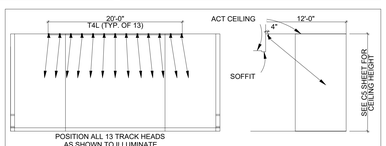
2 / E1 RECESSED LIGHT FIXTURE SUPPORT DETAIL
NOT TO SCALE



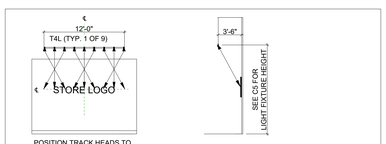
4 / E1 TYPICAL HOMEGOODS WINDOW FIXTURE POSITIONING DIAGRAM
NOT TO SCALE



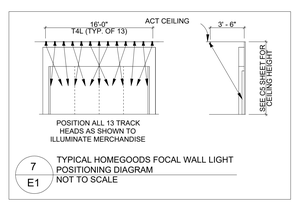
3 / E1 EMERGENCY/NIGHT LIGHT WIRING DIAGRAM
NOT TO SCALE



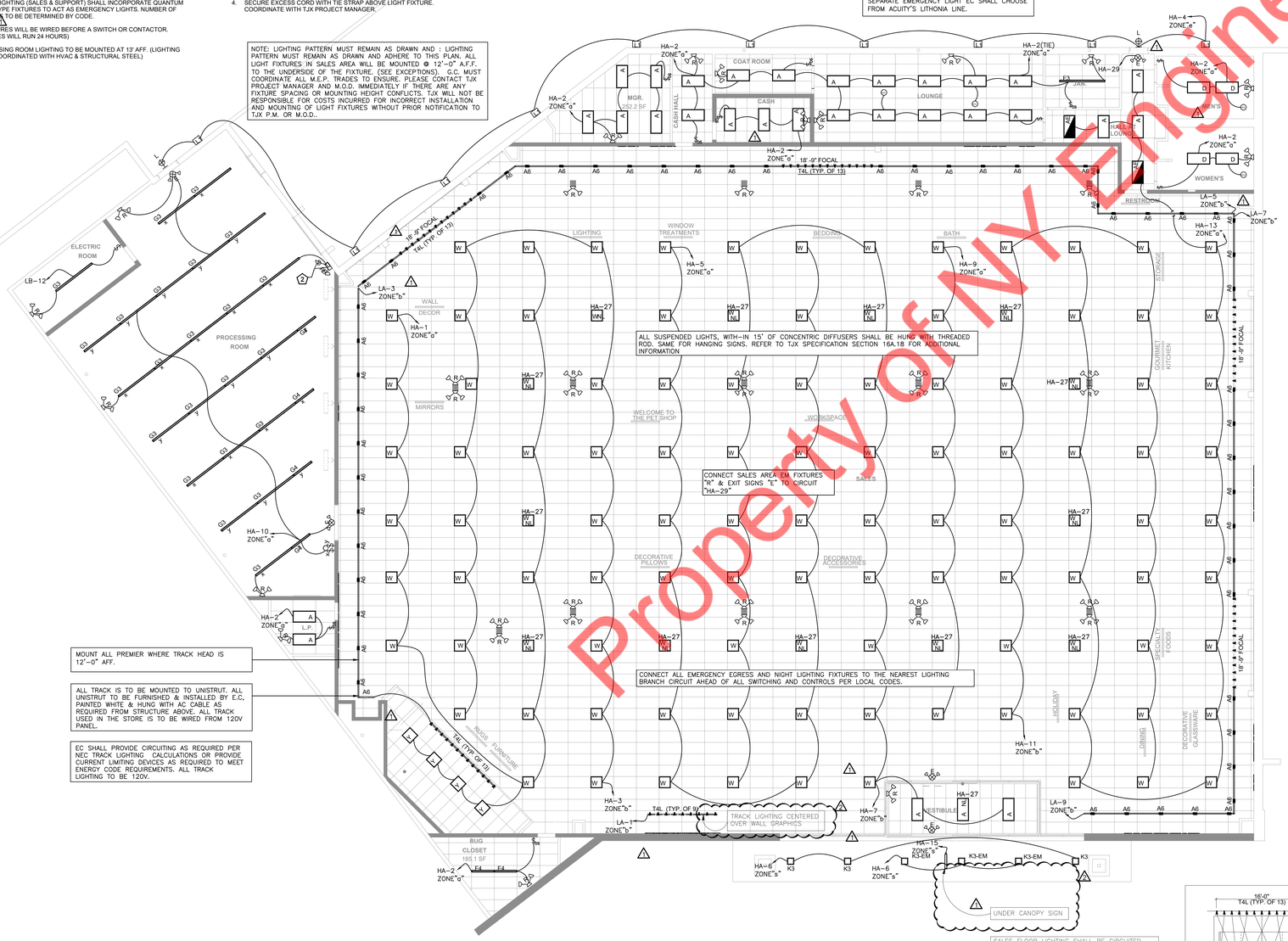
5 / E1 TYPICAL HOMEGOODS RUG RACK LIGHT POSITIONING DIAGRAM
NOT TO SCALE



6 / E1 TYPICAL LOGO WALL LIGHT POSITIONING
NOT TO SCALE



7 / E1 TYPICAL HOMEGOODS FOCAL WALL LIGHT POSITIONING DIAGRAM
NOT TO SCALE



NY ENGINEERS
382 NE 191st ST, SUITE 49674, MIAMI, FL 33179
www.ny-engineers.com

NO.	DESCRIPTION	DATE
0	FOR PERMIT	12.06.24
1	TJX REVIEW COMMENTS ⚠1	02.24.25
2	TJX REVIEW COMMENTS ⚠2	03.18.25

HomeGoods

LIGHTING PLAN

Deal Type	J0
Store Number	J4
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

E1

Scale: As indicated

JUNCTION BOXES TO BE INSTALLED PERPENDICULAR TO THE SLIDING DOOR FRAMES. JUNCTION BOXES (WITH COVERS) TO BE INSTALLED FLUSH WITH THE FINISHED FLOOR. JUNCTION BOXES TO BE INSTALLED AT 24" (2'-0") BACK FROM THE INSIDE SLIDING DOOR EDGE TO THE CENTER OF THE JUNCTION BOX. JUNCTION BOXES TO BE INSTALLED AT 72" (6'-0" CENTER TO CENTER, ALIGNED WITH THE EDGE OF THE DOOR OPENING.

1" CONDUIT INSTALLED BETWEEN JUNCTION BOXES. CONDUIT WILL BE INSTALLED AT 24" (2'-0") BACK FROM THE INSIDE SLIDING DOOR FRAMES TO THE CENTER OF THE CONDUIT.

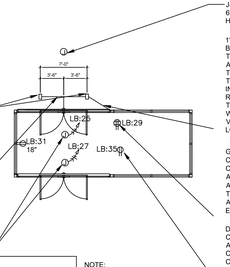
G.C. ELECTRICIAN TO PROVIDE (1) 120 V. 20 AMP DEDICATED CIRCUIT FOR THE INTERIOR SET OF DOORS AND (1) 120 V. 20 AMP DEDICATED CIRCUIT FOR THE EXTERIOR SET OF DOORS. (LOCATE EABOVE FINISHED CEILING) (1) 10 AMP LINE TO EACH DOOR OPERATOR. ELECTRICAL TERMINATIONS BY E.C.

J-BOX FOR CUSTOMER COUNTER. INSTALL 6" ABOVE BOTTOM OF LIGHT FIXTURE HEIGHT

1" CONDUIT INSTALLED FROM JUNCTION BOX TO MULLION. CONDUIT WILL START AT THE JUNCTION BOX AND WILL ROUTE ACROSS THE FLOOR TO THE MULLION IN THE VESTIBULE. CONDUIT WILL TRANSITION FROM THE FLOOR TO THE INSIDE OF THE MULLION. CONDUIT WILL ROUTE UP THE INSIDE OF THE MULLION TO THE VESTIBULE CEILING ABOVE. CONDUIT WILL TERMINATE APROX 6" ABOVE THE VESTIBULE CEILING AT THE AC OUTLET LOCATION.

G.C. / E.C. TO PROVIDE A 110 VAC. CONTINUOUSLY ELECTRIFIED AND NOT CONTROLLED BY A SWITCH. QUAD OUTLET AT THE CONDUIT TERMINATION POINT ABOVE THE VESTIBULE CEILING. G.C. / E.C. TO PROVIDE AN 18" x 18" (MINIMUM) ACCESS PANEL AT THIS LOCATION IN THE EVENT THE VESTIBULE IS A HARD CEILING.

DEDICATED DUPLEX OUTLET FOR FUTURE CART CONTAINMENT SYSTEM. (LOCATE 6" ABOVE VESTIBULE FINISHED CEILING) CENTERED BETWEEN INTERIOR DOORS. CONTINUOUSLY ELECTRIFIED AND NOT CONTROLLED BY A SWITCH.



NOTES:

G.C. RESPONSIBLE TO CONTRACT "STANLEY ACCESS TECHNOLOGIES" TO PROVIDE & INSTALL VESTIBULE DOORS.

G.C. / E.C. RESPONSIBLE FOR ALL FINAL CONNECTIONS TO DOORS.

NOTE:
RIGHT SIDE VESTIBULE SHOWN. LEFT SIDE VESTIBULE MIRROR OF SHOWN. REFER TO SHEET C2 FOR ACTUAL LAYOUT.

1 TYPICAL VESTIBULE DETAIL
E2 / N.T.S

NOTE: GENERAL CONTRACTOR'S ELECTRICAL ENGINEER/ELECTRICIAN RESPONSIBLE FOR ALL HUBBELL PLUGTRAK SYSTEM (WALL AND GONDOLA) CIRCUITRY CALCULATIONS PER THE NATIONAL ELECTRIC CODE. (PLUGTRAK RECEPTACLES 6' ON CENTER.) ALL PLUGTRAK CIRCUITS CONTROLLED BY TJX BMS SYSTEM. (4) FOUR CIRCUITS PER GONDOLA (MIN.) (1) ONE REQUIRED AT EACH SIDE JPLINE & AT BOTH ENDS. ALL PLUGTRACK CIRCUITS CONTROLLED BY BMS, ON CUSTOMER LIGHTING, (4) CIRCUITS.

GONDOLA PLUGTRAK = POWER POLE LOCATED AT THE REAR OF THE GONDOLA TO WIRE GONDOLA PLUGTRAK TWO ROWS OF PLUGTRAK. CENTERLINE OF PLUGTRAK SET @ 8" AND 39" FROM THE TOP OF THE GONDOLA BASE DECK (14" AND 43 1/2" A.F.F.). (SEE PROFILE IN THE HOMEGOODS FIXTURE INSTALLATION MANUAL) .

WALL"LAMPS" PLUGTRAK= INSTALL WIRE PLUGTRAK WHERE LAMPS INDICATED ON THE WALL "LAMPS" PLUGTRAK WALL. CENTERLINE OF PLUGTRAK SET @ 5" AND 39" ABOVE THE BASE DECK (14" AND 43 1/2" A.F.F.).

G.C. SHALL PROVIDE A DISCONNECT SWITCH WITH THE REQUIRED AMPERAGE* BASED ON THE EXISTING ELECTRICAL SERVICE TO THE BUILDING. G.C. TO FIELD DETERMINE EXACT LOCATION OF DISCONNECT SWITCH. (SEE BALER MFR. SPECIFICATIONS FOR EXACT AMPERAGE AND SERVICE REQUIREMENTS.)

NOTE:

IF 200V - 230V, USE 60 DISCONNECT
IF 440V - 575V, USE 30 DISCONNECT

Box - B2432
Cover - S3825 (x2)

20 DOUBLE HUBBELL FLOOR BOX ASSEMBLY DETAIL
E2 / N.T.S

NOTE:
ALL CIRCUITS CONTROLLED BY BUILDING MANAGEMENT SYSTEM CUSTOMER LIGHTING CONTROL, ON CUSTOMER LIGHTING.

RESTROOM, LOUNGE, JANITOR, & DRESSING ROOM (WHEN APPLICABLE) EXHAUST FANS, WILL BE A CONTROLLED/SWITCHED CIRCUIT, RUN THROUGH THE GE LIGHTING RELAY PANEL ON THE "EMPLOYEE" CIRCUIT.

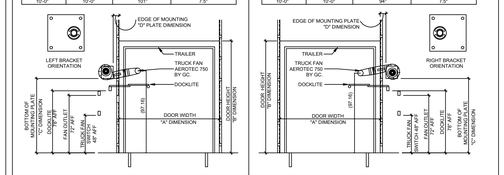
WHEN REQUIRED, ELECTRIC ROOM AND/OR SYSTEMS ROOM EXHAUST FANS WILL BE A 24 HOUR LIVE CIRCUIT. CONTROLLED BY IN LINE THERMOSTAT SET AT 80° DEGREES. SEE SPEC. BOOK FOR ADDITIONAL INFORMATION.

LEFT SIDE MOUNTING CHART

DOOR WIDTH "A" DIM	DOOR HEIGHT "B" DIM	HEIGHT FROM FLOOR "C" DIM	DISTANCE FROM JAMB "D" DIM
6'-0"	9'-0"	101"	7.5"
6'-0"	9'-0"	101"	7.5"
8'-0"	10'-0"	101"	7.5"
8'-6"	9'-0"	101"	7.5"
8'-6"	9'-0"	101"	7.5"
9'-0"	9'-0"	101"	7.5"
9'-0"	10'-0"	101"	7.5"
10'-0"	8'-0"	101"	7.5"
10'-0"	9'-0"	101"	7.5"
10'-0"	10'-0"	101"	7.5"

RIGHT SIDE MOUNTING CHART

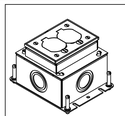
DOOR WIDTH "A" DIM	DOOR HEIGHT "B" DIM	HEIGHT FROM FLOOR "C" DIM	DISTANCE FROM JAMB "D" DIM
6'-0"	9'-0"	94"	7.5"
6'-0"	9'-0"	94"	7.5"
8'-0"	10'-0"	94"	7.5"
8'-6"	9'-0"	94"	7.5"
8'-6"	9'-0"	94"	7.5"
9'-0"	9'-0"	94"	7.5"
9'-0"	10'-0"	94"	7.5"
10'-0"	8'-0"	94"	7.5"
10'-0"	9'-0"	94"	7.5"
10'-0"	10'-0"	94"	7.5"



2 LOADING DOCK EQUIPMENT ELEVATION
E2 / N.T.S

ELECTRICAL ABBREVIATION

AFF/AFG	ABOVE FINISHED FLOOR/GRADE
AHJ	AUTHORITY HAVING JURISDICTION
BMS	BUILDING MANAGEMENT SYSTEM
NEC	NATIONAL ELECTRIC CODE
NL	NIGHT LIGHT
WP	WEATHERPROOF
GFI	GROUND FAULT INTERRUPTER
PM	PLUGMOLD
RC	RECEPTACLE



Box - B2431
Cover - S3825

28 SINGLE HUBBELL FLOOR BOX ASSEMBLY DETAIL
E2 / N.T.S

NOTE:
ALL CIRCUITS CONTROLLED BY BUILDING MANAGEMENT SYSTEM CUSTOMER LIGHTING CONTROL, ON CUSTOMER LIGHTING.

NOTE:
VERIFY THE ELECTRICAL REQUIREMENTS FOR THE MECHANICAL EQUIPMENT WITH THE MECHANICAL REVIEW. UPDATE ELECTRICAL INFORMATION AS REQUIRED.

COMMUNICATION GENERAL NOTES

1. CONDUIT ENDS SHALL BE PROVIDED WITH NYLON BUSHINGS TO PROTECT CABLE CONDUIT ENDS SHALL BE PROVIDED WITH NYLON BUSHINGS TO PROTECT CABLE FROM DAMAGE. BUSHINGS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR.
2. AT TELEPHONE OUTLETS, PROVIDE 2 " DEEP, SINGLE GANG WALL BOX & " AT TELEPHONE OUTLETS, PROVIDE 2 " DEEP, SINGLE GANG WALL BOX & " 12" DEEP, SINGLE GANG WALL BOX & " 12" CONDUIT WITH PULL STRING STUBBED OUT TO ABOVE ACCESSIBLE CEILING.
3. AT DATA & CABLE OUTLETS, PROVIDE 2 " DEEP, SINGLE GANG WALL BOX & " AT DATA & CABLE OUTLETS, PROVIDE 2 " DEEP, SINGLE GANG WALL BOX & - 12" DEEP, SINGLE GANG WALL BOX & " 34" CONDUIT WITH PULL STRING STUBBED OUT TO ABOVE ACCESSIBLE CEILING.
4. AT TELEPHONE/DATA & TECHNOLOGY OUTLETS, PROVIDE 3" DEEP, 2-GANG WALL AT TELEPHONE/DATA & TECHNOLOGY OUTLETS, PROVIDE 3" DEEP, 2-GANG WALL BOX WITH 2-GANG PLASTIC RING & 1" CONDUIT WITH PULL STRING STUBBED OUT TO ABOVE ACCESSIBLE CEILING.
5. PUBLIC ADDRESS & CLOCK SYSTEM WIRING SHALL BE INSTALLED IN CONDUIT. PUBLIC ADDRESS & CLOCK SYSTEM WIRING SHALL BE INSTALLED IN CONDUIT.
6. ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL WIREMOLD EXTENSION ELECTRICAL CONTRACTOR TO PROVIDE & INSTALL WIREMOLD EXTENSION ADAPTERS #5751 FLUSH TYPE FOR COLUMN MOUNTED PHONES (PHONES BY TENANT).

FIRE ALARM GENERAL NOTES

1. .FIRE ALARM CABLING SHALL BE INSTALLED IN CONDUIT. FIRE ALARM CABLING SHALL BE INSTALLED IN CONDUIT.
2. DUCT TYPE SMOKE DETECTORS SHALL BE FURNISHED, INSTALLED & WIRED BY DUCT TYPE SMOKE DETECTORS SHALL BE FURNISHED, INSTALLED & WIRED BY MECHANICAL CONTRACTOR. SEE DETAIL THIS DRAWING.
3. FIRE ALARM SYSTEM HVAC SHUT DOWN RELAYS SHALL BE PROVIDED & WIRED FIRE ALARM SYSTEM HVAC SHUT DOWN RELAYS SHALL BE PROVIDED & WIRED TO FIRE ALARM CONTROL PANEL BY FIRE ALARM CONTRACTOR. E.C. SHALL PROVIDE CONDUIT WITH PULL STRING FROM RELAY TO HVAC UNIT. UNIT SHUT DOWN CONTROL WIRING SHALL BE PROVIDED BY MECHANICAL CONTRACTOR.

HVAC POWER GENERAL NOTES

1. VERIFY EXACT LOCATIONS OF HVAC EQUIPMENT, CONDUIT STUB-UPS & POWER VERIFY EXACT LOCATIONS OF HVAC EQUIPMENT, CONDUIT STUB-UPS & POWER CONNECTIONS PRIOR TO ROUGH-IN.
2. VERIFY EXACT LOCATION, MOUNTING HEIGHTS & CONDUIT ROUTING FOR ALL VERIFY EXACT LOCATION, MOUNTING HEIGHTS & CONDUIT ROUTING FOR ALL THERMOSTATS, TEMPERATURE SENSORS, HUMIDISTATS & CO2 SENSORS WITH TEMPERATURE CONTROLS CONTRACTOR PRIOR TO ROUGH-IN.
3. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL ELECTRICAL REQUIREMENTS. COORDINATE PROVISIONS FOR ALL CONTROL CONDUIT & WIRING AS REQUIRED FOR INTERLOCKING OF FANS, MOTORS, ETC. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
4. ALL DEVICES INSTALLED ON HVAC EQUIPMENT SHALL BE MOUNTED ON A ALL DEVICES INSTALLED ON HVAC EQUIPMENT SHALL BE MOUNTED ON A NON-REMOVABLE PANEL OF THE EQUIPMENT. THIS LOCATION SHALL BE COORDINATED WITH THE MECHANICAL AND/OR PLUMBING CONTRACTOR PRIOR TO COMMENCING ANY ROUGH-IN WORK.

CONTRACTOR'S NOTE:
THERMOSTAT'S INTENTIONALLY OMITTED. FINAL TO BE DETERMINED BY THE BUILDING MANAGEMENT SYSTEM "BMS". REFER TO SITE SPECIFIC "BMS" PACKAGE FOR THERMOSTAT LOCATIONS, AS WELL AS ALL CONTRACTOR'S REQUIREMENTS. CONTACT TJX FOR "BMS" SHOP DRAWINGS PRIOR TO PROCEEDING WITH ALL RELATED WORK.

ELECTRICAL SYMBOL LENGEND

- HA-X — HOME RUN TO PANEL, CIRCUIT NUMBERS, PHASE, NEUTRAL & GROUND CONDUCTORS INDICATED ALONG WITH ISOLATED GROUND CONDUCTOR IF APPLICABLE.
- CONDUIT INSTALLED CONCEALED ABOVE CEILING OR IN WALL OR AT ROOF STRUCTURE, PAINT TO MATCH STRUCTURE AS APPLICABLE.
- CONDUIT INSTALLED CONCEALED BELOW FLOOR SLAB OR UNDERGROUND.
- AC OR DC CONTROL VOLTAGE WIRING.
- A — SIMPLEX RECEPTACLE, +18" OR AS NOTED
- DUPLEX RECEPTACLE, +18" OR AS NOTED
- IG — ISOLATED GROUND DUPLEX RECEPTACLE, +18" OR AS NOTED, ORANGE COLOR
- QUADRUPLEX RECEPTACLE, +18" OR AS NOTED
- IG — ISOLATED GROUND QUADRUPLEX RECEPTACLE, +18" OR AS NOTED, ORANGE COLOR
- MULTI-RECEPTACLE SYSTEM (PLUGMOLD), INSTALL AS NOTED.
- PP — POWER POLE
- J — JUNCTION BOX
- B — JUNCTION BOX WITH BLANK COVER PLATE (FOR FUTURE USE) & " CONDUIT WITH PULL STRING STUBBED 34" CONDUIT WITH PULL STRING STUBBED ABOVE CEILING (OR AS INDICATED BY TJX PROJECT MANAGER FOR AREAS WITH OPEN STRUCTURE ABOVE), +18" OR AS NOTED
- DISCONNECT SWITCH, MOUNT AS NOTED, VERIFY REQUIREMENTS WITH EQUIPMENT SERVED
- EF — EXHAUST FAN MOTOR CONNECTION, COORDINATE WITH MECHANICAL CONTRACTOR
- PB — PUSH BUTTON, MOUNT AS NOTED
- DB — DOOR BELL CHIME OR BUZZER, MOUNT AS NOTED
- TR — CONTROL TRANSFORMER, INSTALL AS NOTED
- HVAC SENSING DEVICE @ +60", VERIFY LOCATIONS W/NOVAR, PROVIDE BACK-BOX & " CONDUIT TO UNIT 34" CONDUIT TO UNIT INDICATED
- TELEPHONE BOX-WALL HUNG, INSTALL AS NOTED WITH " CONDUIT WITH PULL STRING STUBBED ABOVE 34" CONDUIT WITH PULL STRING STUBBED ABOVE CEILING (OR AS INDICATED BY TJX PROJECT MANAGER FOR AREAS WITH OPEN STRUCTURE ABOVE)
- TELEPHONE BOX-DESK SET, INSTALL AS NOTED WITH " CONDUIT WITH PULL STRING STUBBED ABOVE 34" CONDUIT WITH PULL STRING STUBBED ABOVE CEILING (OR AS INDICATED BY TJX PROJECT MANAGER FOR AREAS WITH OPEN STRUCTURE ABOVE)
- TELEPHONE/DATA BOX, INSTALL AS NOTED WITH 1" CONDUIT WITH PULL STRING STUBBED ABOVE CEILING (OR AS INDICATED BY TJX PROJECT MANAGER FOR AREAS WITH OPEN STRUCTURE ABOVE)
- R — WIREMOLD ALA4800B SURFACE MOUNTED RACEWAY
- ELECTRIC DOOR STRIKE, SEE SPECS.
- LOW VOLTAGE WIRING CONDUIT & JUNCTION BOX BY G.C. W/PULL WIRE. (WIRING BY OTHERS)
- CL — CEILING MOUNTED DUPLEX RECEPTACLE.

NOTES:

REFER TO LIGHT FIXTURE SCHEDULE & SYMBOL LIST FOR SPECIFICATION & INFORMATION ON ALL LUMINAIRES.

REFER TO SPECIFICATIONS & PLAN NOTES FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN IN THIS SCHEDULE, PROVIDED BY THIS CONTRACTOR.

MOUNTING HEIGHTS INDICATED ARE MEASURED FROM FINISHED FLOOR TO THE CENTERLINE OF THE DEVICE UNLESS NOTED OTHERWISE.

POWER PLAN NOTES:

1. COORDINATE WALL MOUNTED ELECTRICAL WITH CASH CABINET LOCATION. IF STOREFRONT GLASS EXISTS BEHIND CABINET, FIELD VERIFY MOUNTING HEIGHT OF ELECTRICAL WITH TJX PROJECT MANAGER.
2. MOUNT FIRE ALARM ANNUNCIATOR PANEL IN A VISIBLE LOCATION BEHIND CASHWRAP OR AS DIRECTED BY AUTHORITY HAVING JURISDICTION. COORDINATE W/TJX CONSTRUCTION MANAGER.
3. DUPLEX RECEPTACLES FOR "EAS" SECURITY SHALL BE CONNECTED TO THE SAME CIRCUIT THROUGHOUT CASH REGISTER AREA.
4. MOUNT HORIZONTALLY AT 49" AFF.
5. DEDICATED SIMPLEX RECETACLE TO BE MOUNTED TO END CHECKOUT UNIT. SEE DETAIL SHEET E5 FOR ADDITIONAL INFORMATION.
6. (3) 21/2" CONDUITS TO BE CONCEALED IN FLOOR & WALL ON SALES AREA SIDE.
7. CONDUIT TERMINATION POINT LOCATED UNDER CASH REGISTER COUNTER FIELD VERIFY AND COORDINATE EXACT LOCATION.
8. NOT USED
9. FOR EACH EXTERIOR SIGN, ELECT. CONTRACTOR SHALL PROVIDE (3) 20A, 120V CIRCUITS TO (3) 3-GANG JUNCTION BOXES. MIDDLE JUNCTION BOX SHALL BE CENTERED ON SIGN FIELD, REMAINING JUNCTION BOXES 10"-" TO CENTERLINE, EITHER SIDE. CONTACTOR COORDINATE EXACT LOCATION OF CIRCUITS WITH TJX SIGN VENDOR + TJX PROJECT MANAGER SEE SPEC. 16A.
10. PROVIDE 60A, 3P, 208V, NEMA 3R, FUSED DISCONNECT SWITCH MOUNTED ON THE EXTERIOR WALL FOR TRASH COMPACTOR. DISCONNECT SWITCH SHALL BE WITHIN SIGHT OF COMPACTOR. COORDINATE REQUIREMENTS WITH COMPACTOR INSTALLER & PROVIDE FINAL CONNECTION, INCLUDING COMPACTOR CONTROL PANEL (3) #4 & (1) #10 GROUND IN 3/4" CONDUIT.
11. NOT USED
12. PROVIDE (1) PLUGMOLD AT LP DESK SEE DETAIL SHEET E5 FOR ADDITIONAL INFORMATION. VERIFY EXACT LOCATION WITH TJX PROJECT MANAGER.
13. PROVIDE QUADRUPLEX RECEPTACLE ABOVE CEILING FOR LOSS PREVENTION EQUIPMENT& TRANSFORMERS. VERIFY EXACT LOCATION WITH TJX PROJECT MANAGER.
14. PROVIDE 2" CONDUIT SLEEVE AND GOOSENECK THROUGH ROOF FOR SATELLITE CABLES. ID RMC CONDUIT WITH RMC WEATHER-HEAD REQUIRED FOR CABLE ACCESS TO ANTENNA. CONDUIT TO BE LOCATED AT ROOF DECK OVER ELECTRICAL ROOM OR SYSTEMS ROOM. THE MAST IS TO BE LOCATED IN AN AREA OF THE ROOF THAT HAS NO OBSTRUCTION WITHIN A RADIUS OF 8-FEET FROM THE MAST. TYPICAL OBSTRUCTION TO BE CONSIDERED ARE ROOFTOP UNITS, TALL VENTS AND PARAPETS. CONFIRM EXACT MOUNTING LOCATION WITH TJX PROJECT CONSTRUCTION MANAGER. CONDUIT TO PENETRATE ROOF DECK APPROXIMATELY 30" DOWN INTO BUILDING AND BE SECURELY FASTENED TO INTERIOR SIDE OF AN EXTERIOR WALL, INTERIOR FRAMED WALL, INTERIOR ROOF STRUCTURE OR UNISTRUT THAT IS SECURELY FASTENED TO EITHER. RMC CONDUIT TO EXTEND 42" ABOVE ROOF DECK, AND HAVE WEATHER-HEAD SECURELY ATTACHED. CONDUIT SHOULD BE CLEAR OF ROOF OBSTRUCTIONS. CONDUIT TO BE VOID OF SHARP EDGES..
15. FURNISH & INSTALL REAR DOOR ALARM CONTROL SYSTEM AT THE STOCKROOM MAN DOOR. PROVIDE 120 VOLT CIRCUIT (UNSWITCHED) AND A LOW VOLTAGE TRANSFORMER (24V/50 VA) U.L. APPROVED (AS REQUIRED). ABOVE THE HEAD OF THE DOOR (WITHIN 10"-0"). ALARM SHALL BE ACTIVATED BY DOOR CONTACTORS WHEN DOOR IS OPEN POSITION AND SHALL PRODUCE A CONTINUOUS CHIME TONE. WHEELOCK 38GV29 FROM GRAINGER MODEL #CH121092 & REQUIRED ACCESSORIES. VERIFY W/TJX P.M. PRIOR TO INSTALLATION.
16. NOT USED
17. PROVIDE REQUIRED SIZED CONDUIT & (2) JUNCTION BOXES WITH BLANK PLATES AT LOCATION OF FIRE ALARM PANEL. VERIFY EXACT LOCATION WITH TJX PROJECT MANAGER & LOCAL AUTHORITY HAVING JURISDICTION PRIOR TO INSTALLATION. COORDINATE ALL INTEGRATION WITH EXISTING FIRE ALARM SYSTEM AS REQUIRED.
18. PROVIDE 30A, 2P TOGGLE SWITCH WITH (2) #10 & (1) #10 GROUND FOR WATER HEATER. COORDINATE REQUIREMENTS WITH PLUMBING CONTRACTOR.
19. NOT USED
20. MOUNT DUPLEX RECEPTACLE FOR STORE SECURITY SYSTEM ABOVE CEILING, NEAR DOOR. VERIFY EXACT LOCATION WITH TJX PROJECT MANAGER PRIOR TO INSTALLATION.
21. NOT USED
22. NOT USED
23. NOT USED
24. VIBRATING BELL & WEATHERPROOF PUSH BUTTON. PROVIDE 120V CIRCUIT (UNSWITCHED). VERIFY W/TJX P.M. PRIOR TO INSTALLATION.
25. NOT USED
26. LOCATE FOR EMPLOYEE TIME CLOCK. MOUNT AT 54" A.F.F.
27. COORDINATE EXACT LOCATION OF MANAGER'S OFFICE DEVICES W/TJX PROJECT MANAGER PRIOR TO ROUGH-IN.
28. MOUNT DEVICES IN THIS ROOM @ 41" A.F.F. UNLESS NOTED OTHERWISE.
29. PROVIDE POWER POLE FOR POP COOLER RECEPTACLE. VERIFY EXACT LOCATION WITH TJX PROJECT MANAGER. PROVIDE MATCHING RECEPTACLE.
30. NOT USED
31. E.C SHALL COORDINATE WITH MECHANICAL DRAWINGS AND MECHANICAL CONTRACTOR FOR EXACT INTERLOCK FOR MOTORIZED DAMPERS AT FIELD. REPORT TO ENGINEER FOR ANY DISCREPANCY. BASE BID ACCORDINGLY.
32. PROVIDE A DUPLEX RECEPTACLE AT EACH CIRCULATING WALL FAN LOCATION. FANS TO BE CONTROLLED VIA TIMER SWITCHBANK WITH (4) TORK A506H 6-HOUR SPRING WOUND WALL MOUNTED TIMER SWITCHES, AND CONTROLLING ZONE "A". SEE DETAIL #3/E2. FIELD VERIFY AND COORDINATE EXACT MOUNTING LOCATION OF FANS, AND SWITCHBANK WITH TJX PROJECT CONSTRUCTION MANAGER PRIOR TO ROUGH-IN. BASE BID ACCORDINGLY..
33. MOUNT DUPLEX RECEPTACLE AND TIMER SWITCH FOR AEROTECK 'AT750' DELIVERY TRUCK WALL FAN. FAN TO BE CONTROLLED VIA TORK A506H (OR EQUAL) 6-HOUR SPRING WOUND WALL MOUNTED TIMER. 6-HOUR SPRING WOUND TIME SWITCH TO BE PROVIDED BY G.C. FIELD VERIFY AND COORDINATE EXACT MOUNTING LOCATION REQUIREMENTS WITH TJX PROJECT MANAGER PRIOR TO ROUGH-IN. REFER TO DETAIL #4 THIS DRAWING.

NORTH 01 POWER PLAN
SCALE: 1/8" = 1'-0"

NY ENGINEERS
382 NE 191st ST, SUITE 49674, MIAMI, FL 33179
www.ny-engineers.com

NO.	DESCRIPTION	DATE
0	FOR PERMIT	12.06.24
1	TJX REVIEW COMMENTS A	02.24.25
2	TJX REVIEW COMMENTS A	03.18.25

HomeGoods

POWER PLAN

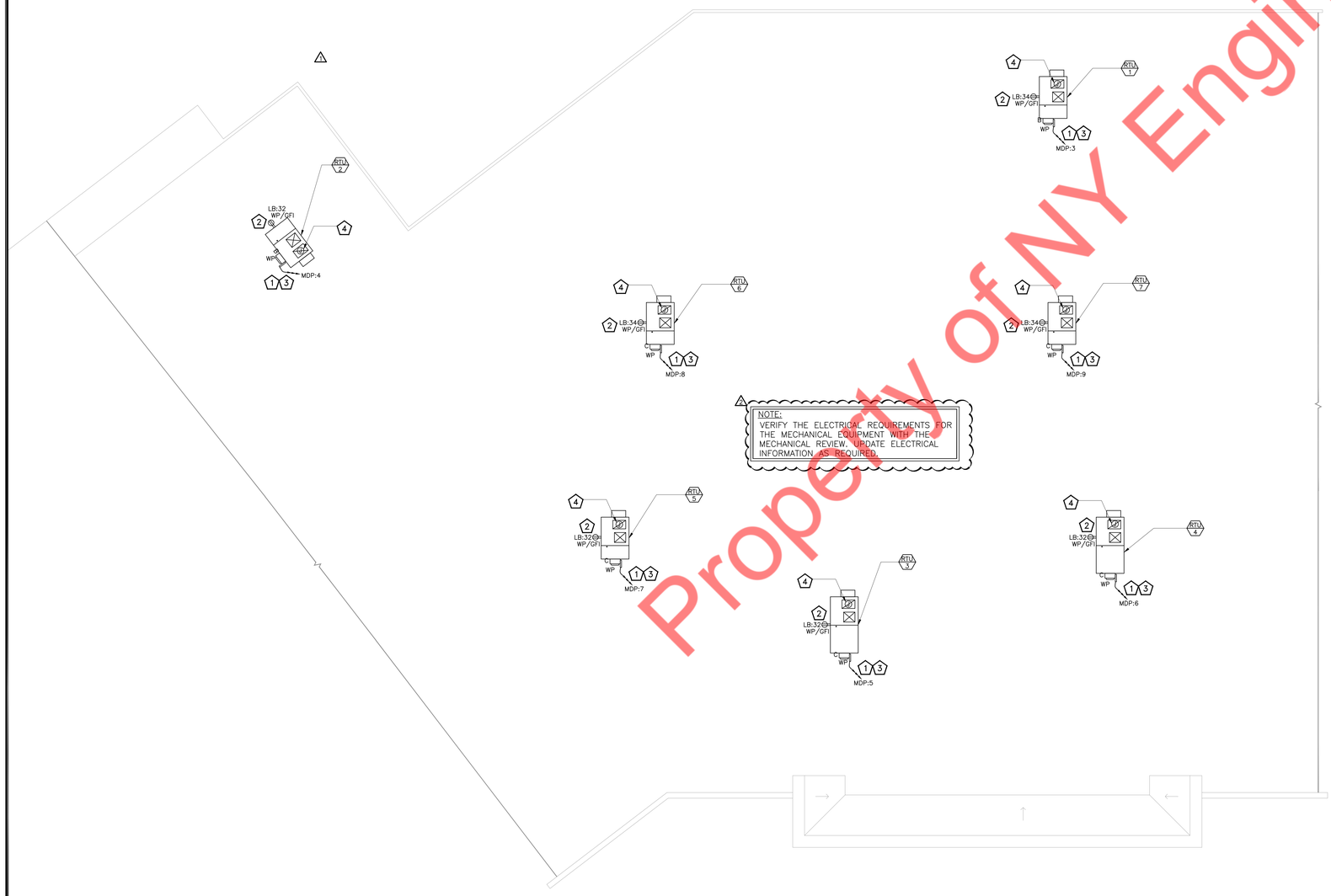
Deal Type	J0
Store Number	J4
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

E2

Scale: As indicated

ELECTRICAL RISER DIAGRAM KEYED WORK NOTES:

1. ELECTRICAL CONTRACTOR SHALL COORDINATE DISCONNECT AND FUSE REQUIREMENT FOR ROOF-TOP UNIT WITH MECHANICAL CONTRACTOR AND EQUIPMENT MANUFACTURER PRIOR TO ROUGH-IN AND PROVIDE AS REQUIRED TO MAINTAIN NEC CLEARANCES.
2. WEATHER PROOF GFCI RECEPTACLE SHIPPED LOOSE W/ROOF TOP UNIT. FINAL INSTALLATION & CONNECTION BY ELECTRICAL CONTRACTOR.
3. E.C SHALL COORDINATE FOR EXACT LOCATION OF MECHANICAL EQUIPMENT WITH MECHANICAL DRAWINGS.
4. ROOFTOP UNIT SMOKE DETECTOR. PROVIDE REMOTE TEST MOUNTED IN LOCATION DICTATED BY LOCAL FIRE AUTHORITY. IF MOUNTED TO NEAREST COLUMN, PLACE ON TELEPHONE SIDE OF COLUMN AND HIGHER THAN SLAT WALL FINISH(TYPICAL FOR ALL ROOF TOP UNITS). COORDINATE WITH GENERAL CONTRACTOR.



01 POWER PLAN-ROOF
SCALE: 1/8" = 1'-0"

NY ENGINEERS
382 NE 191st ST, SUITE
49674, MIAMI, FL 33179
www.ny-engineers.com

NO.	DESCRIPTION	DATE
0	FOR PERMIT	12.06.24
1	TJX REVIEW COMMENTS 1	02.24.25
2	TJX REVIEW COMMENTS 2	03.18.25

HomeGoods

POWER PLAN-ROOF

Deal Type	J0
Store Number	J4
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

E3

Scale	As indicated

PANEL SCHEDULE:

PANEL: MDP (N) — MOUNTING: SURFACE

208Y/120 | VOLTS, 3 | PHASE, 4 | WIRE — LOCATION: ELECTRICAL ROOM

MAIN CB: 1200A | MLO: NA | BUS: 1200A | MIN, — FED FROM: ELECTRICAL METER/CT CABINET

NOTE: L : LIGHTING, H : HVAC LOAD, E: EQUIPMENT, M : MOTOR LOAD, R : RECEPTACLES, O : OTHER/MISC. (TYPICAL)

CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	NOTE	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA) A	B	C	MINIMUM BRANCH CIRCUIT	NOTE	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	100-3P	PANEL "HA"	O	11.06		4#3, #8G, 1 1/4"C	36.48	36.48		4#4/0, #4G, 2 1/2"C		25.42	O	PANEL "LA"	225-3P	2
			O	11.06					36.48			25.42	O			
3	45-3P	RTU-1(N)	H	4.00	HACR	3#8, #10G, 3/4"C	7.91			3#8, #10G, 3/4"C	HACR	3.91	H	RTU-2(N)	40-3P	4
			H	4.00				7.91				3.91	H			
			H	4.00					7.91			3.91	H			
5	100-3P	RTU-3(N)	H	9.96	HACR	3#3, #8G, 1 "C	19.91			3#3, #8G, 1 "C	HACR	9.96	H	RTU-4(N)	100-3P	6
			H	9.96				19.91				9.96	H			
			H	9.96					19.91			9.96	H			
7	70-3P	RTU-5(N)	H	7.24	HACR	3#4, #8G, 1 "C	14.48			3#4, #8G, 1 "C	HACR	7.24	H	RTU-6(N)	70-3P	8
			H	7.24				14.48				7.24	H			
			H	7.24					14.48			7.24	H			
9	70-3P	RTU-7(N)	H	7.24	HACR	3#4, #8G, 1 "C	7.44			3#12, #12G, 3/4"C	updatedatal ink	0.20	O	BMS WATTS TRANSDUSER	20-3P	10
			H	7.24				7.44				0.20	O			
			H	7.24					7.44			0.20	O			
11	60-3P	TRASH COMPACTOR	O	5.80		3#6, #10G, 3/4"C	5.80							SPACE		12
			O	5.80				5.80								
			O	5.80					5.80							
13		SPACE					0.00							SPACE		14
								0.00								
									0.00							
TOTAL CONNECTED LOAD (KVA)							**92.03**	**92.03**	**92.03**							

PANEL: HA (N) — MOUNTING: SURFACE

208Y/120 | VOLTS, 3 | PHASE, 4 | WIRE — LOCATION: ELECTRICAL ROOM

MAIN CB: NA | MLO: 100A | BUS: 125A | MIN, — FED FROM: PANEL "MDP"

NOTE: L : LIGHTING, H : HVAC LOAD, E: EQUIPMENT, M : MOTOR LOAD, R : RECEPTACLES, O : OTHER/MISC. (TYPICAL)

CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	NOTE	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA) A	B	C	MINIMUM BRANCH CIRCUIT	NOTE	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	20	LIGHTING - SALES GENERAL	L	2.00	a	2#12, #12G, 3/4"C	3.01			2#12, #12G, 3/4"C	a	1.01	L	LIGHTING - EMPLOYEE AREAS	20	2
3	20	LIGHTING - SALES GENERAL	L	1.67	b	2#12, #12G, 3/4"C		2.07		2#12, #12G, 3/4"C	e	0.41	L	LIGHTING - WALL PACKS	20	4
5	20	LIGHTING - SALES GENERAL	L	1.00	a	2#12, #12G, 3/4"C			1.21	2#12, #12G, 3/4"C	s	0.21	L	LIGHTING - CANOPY	20	6
7	20	LIGHTING - SALES GENERAL	L	1.63	b	2#12, #12G, 3/4"C	1.63							SPARE	20	8
9	20	LIGHTING - SALES GENERAL	L	1.55	a	2#12, #12G, 3/4"C		2.35		2#12, #12G, 3/4"C	a	0.80	L	LIGHTING PROCESSING ROOM	20	10
11	20	LIGHTING - SALES GENERAL	L	1.07	b	2#12, #12G, 3/4"C			1.57	2#12, #12G, 3/4"C	a	0.50	H	BB-1 - MEN'S TOILET ROOM	20-2P	12
13	20	LIGHTING - SALES GENERAL	L	1.70	a	2#12, #12G, 3/4"C	2.20					0.50	H			14
15	20	UNDER CANOPY BLADE SIGN	L	1.00	s	2#12, #12G, 3/4"C		1.50		2#12, #12G, 3/4"C	a	0.50	H	BB-1 - EMPLOYEE'S LOUNGE	20-2P	16
17	20	DIGITAL CLOCK	O	0.50		2#12, #12G, 3/4"C			1.00			0.50	H			18
19	20	MOTORISED DAMPER	M	0.20	a	2#12, #12G, 3/4"C	0.70			2#12, #12G, 3/4"C	a	0.50	H	BB-1 - MANAGER'S OFFICE	20-2P	20
21	20	RECEPTACLE - PROCESSING ROOM	R	0.36				0.86				0.50	H			22
23	20-2P	ECH-1 ENTERANCE HEATER	H	1.74	a	2#12, #12G, 3/4"C			3.54	2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	24
25			H	1.74			3.54			2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	26
27	20	LIGHTING - SALES NL	L	1.44	L	2#12, #12G, 3/4"C		1.44						SPARE	20	28
29	20	LIGHTING - SALES EM	L	0.65	L	2#12, #12G, 3/4"C			0.65					SPARE	20	30
31	20	BUILDING SIGNAGE	L	0.50	s	2#12, #12G, 3/4"C	0.50							SPARE	20	32
33	20	BUILDING SIGNAGE	L	0.50	s	2#12, #12G, 3/4"C		0.50						SPARE	20	34
35	20	BUILDING SIGNAGE	L	0.50	s	2#12, #12G, 3/4"C			0.50					SPARE	20	36
37	20	SPARE					0.00							SPARE	20	38
39	20	SPARE						0.00						SPARE	20	40
41	20	SPARE							0.00					SPARE	20	42
TOTAL CONNECTED LOAD (KVA)							**11.58**	**8.73**	**8.47**							

PANEL: LA (N) — MOUNTING: SURFACE

208Y/120 | VOLTS, 3 | PHASE, 4 | WIRE — LOCATION: ELECTRICAL ROOM

MAIN CB: 225A | MLO: NA | BUS: 225A | MIN, — FED FROM: PANEL "MDP"

NOTE: L : LIGHTING, H : HVAC LOAD, E: EQUIPMENT, M : MOTOR LOAD, R : RECEPTACLES, O : OTHER/MISC. (TYPICAL)

CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	NOTE	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA) A	B	C	MINIMUM BRANCH CIRCUIT	NOTE	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	20	LIGHTING - SALES TRACK	L	0.51	b	2#12, #12G, 3/4"C	1.95			2#12, #12G, 3/4"C		1.44	R	RECEPTACLE - CASHW RAP EAS	20	2
3	20	LIGHTING - SALES TRACK	L	1.50	b	2#12, #12G, 3/4"C		1.86		2#12, #12G, 3/4"C		0.36	R	RECEPTACLE - CASHW RAP	20	4
5	20	LIGHTING - SALES TRACK	L	1.50	b	2#12, #12G, 3/4"C			3.30	2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	6
7	20	LIGHTING - SALES TRACK	L	1.50	b	2#12, #12G, 3/4"C	1.59			2#12, #12G, 3/4"C		0.09	R	RECEPTACLE - CASHW RAP END	20	8
9	20	LIGHTING - SALES TRACK	L	0.20	b	2#12, #12G, 3/4"C		0.70		2#12, #12G, 3/4"C		0.50	R	RECEPTACLE - BEVERAGE COOLER	20	10
11	20	PLUG TRACK	R	1.80	b	2#12, #12G, 3/4"C			1.98	2#12, #12G, 3/4"C		0.18	R	RECEPTACLE - CASH STORAGE	20	12
13	20	PLUG TRACK	R	1.80	b	2#12, #12G, 3/4"C	2.88			2#12, #12G, 3/4"C		1.08	R	RECEPTACLE - SALES	20	14
15	20	PLUG TRACK	R	1.80	b	2#12, #12G, 3/4"C		3.24		2#12, #12G, 3/4"C		1.44	R	RECEPTACLE - SALES	20	16
17	20	EF-1(N) - RESTROOMS	M	0.12	a	2#12, #12G, 3/4"C			1.92	2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	18
19	20	EF-2(N) - LOUNGE	M	0.06	a	2#12, #12G, 3/4"C	1.06			2#12, #12G, 3/4"C	a	1.00	R	CIRCULATING FAN-PROCESSING ROOM	20	20
21	20	RECEPTACLE - LOUNGE	R	0.18		2#12, #12G, 3/4"C		1.18		2#12, #12G, 3/4"C	G	1.00	R	RECEPTACLE - LOUNGE REFRIGERATOR	20	22
23	20	SPARE							1.00	2#12, #12G, 3/4"C	G	1.00	R	RECEPTACLE - LOUNGE VENDING M/C	20	24
25	20	UH-1(N)	H	1.14	a	2#12, #12G, 3/4"C	2.14			2#12, #12G, 3/4"C	G	1.00	R	RECEPTACLE - LOUNGE VENDING M/C	20	26
27	20	PLUG TRACK	R	1.80	b	2#12, #12G, 3/4"C		2.52		2#12, #12G, 3/4"C		0.72	R	RECEPTACLE - LOUNGE	20	28
29	20	RECEPTACLE FLOOR BOX	R	1.80	b	2#12, #12G, 3/4"C			2.30	2#12, #12G, 3/4"C		0.50	R	RECEPTACLE - TIME CLOCK	20	30
31	20	RECEPTACLE FLOOR BOX	R	1.80	b	2#12, #12G, 3/4"C	1.98			2#12, #12G, 3/4"C		0.18	E	RECEPTACLE - DRINKING FOUNTAIN	20	32
33	20	RECEPTACLE FLOOR BOX	R	1.80	b	2#12, #12G, 3/4"C		1.98		2#12, #12G, 3/4"C		0.18	R	RECEPTACLE - LOUNGE KITCHEN	20	34
35	20	RECEPTACLE FLOOR BOX	R	1.80	b	2#12, #12G, 3/4"C			2.80	2#12, #12G, 3/4"C	G	1.00	E	RECEPTACLE - MICROWAVE#1	20	36
37			O	11.58			12.58			2#12, #12G, 3/4"C	G	1.00	E	RECEPTACLE - MICROWAVE#2	20	38
39	100-3P	PANEL "LB"	O	11.58		3#3, #8G, 1"C		13.38		2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	40
41			O	11.58					13.38	2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	42
TOTAL CONNECTED LOAD (KVA)							**24.18**	**24.86**	**26.68**							

PANEL: LB (N) — MOUNTING: SURFACE

208Y/120 | VOLTS, 3 | PHASE, 4 | WIRE — LOCATION: ELECTRICAL ROOM

MAIN CB: NA | MLO: 100A | BUS: 125A | MIN, — FED FROM: PANEL "LA"

NOTE: L : LIGHTING, H : HVAC LOAD, E: EQUIPMENT, M : MOTOR LOAD, R : RECEPTACLES, O : OTHER/MISC. (TYPICAL)

CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	NOTE	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA) A	B	C	MINIMUM BRANCH CIRCUIT	NOTE	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	20	RECEPTACLE - CASH ROOM	R	0.72		2#12, #12G, 3/4"C	0.90			2#12, #12G, 3/4"C		0.18	R	REAR DOOR ALARM / BELL	20	2
3	20	RECEPTACLE - CASH ROOM	R	0.36		2#12, #12G, 3/4"C		0.54		2#12, #12G, 3/4"C		0.18	R	CASHROOM MANTRAP	20	4
5	20	RECEPTACLE - CASH HALL	R	0.36	L	2#12, #12G, 3/4"C			1.56	2#12, #12G, 3/4"C		1.20	R	RECEPTACLE - CENT. VAC SYSTEM	20	6
7	20	CASH HALL- PLUG MOLD	R	0.50	L	2#12, #12G, 3/4"C	1.40			2#12, #12G, 3/4"C		0.90	R	RECEPTACLE -MGR . OFFICE	20	8
9	20	CASH HALL-PLUG MOLD	R	0.50	L	2#12, #12G, 3/4"C		0.68		2#12, #12G, 3/4"C	L	0.18	R	RECEPTACLE - MGR . OFFICE SECURITY SYSTEM	20	10
11	20	RECEPTACLE - MGR. OFFICE	R	1.08		2#12, #12G, 3/4"C			1.26	2#12, #12G, 3/4"C		0.18	R	RECEPTACLE/LTG - ELECTRICAL ROOM	20	12
13	20	RECEPTACLE - MGR. OFFICE	R	0.72		2#12, #12G, 3/4"C	1.73			2#12, #12G, 3/4"C		1.01	O	TRUCK FAN	20	14
15	20	RECEPTACLE - DOCK LIGHTING	R	0.18		2#12, #12G, 3/4"C		0.48		2#12, #12G, 3/4"C	L	0.30	O	FIRE ALARM PANEL	20	16
17	20	RECEPTACLE LOUNGE	R	0.18		2#12, #12G, 3/4"C			0.78	2#12, #12G, 3/4"C		0.60	R	RECEPTACLE - LP PLUG MOLD	20	18
19	20	RECEPTACLE - PHONE BOARD	R	0.36		2#12, #12G, 3/4"C	2.16			2#12, #12G, 3/4"C	b	1.80	R	RECEPTACLE FLOOR BOX	20	20
21	20	PLUG TRACK	R	1.80	b	2#12, #12G, 3/4"C		1.98		2#12, #12G, 3/4"C		0.18	R	EPIK KIT(S) 120V OUTLET	20	22
23	20	PLUG TRACK	R	1.80	b	2#12, #12G, 3/4"C			1.80					SPARE	20	24
25	20	AUTOMATIC DOORS	M	0.50		2#12, #12G, 3/4"C	0.60			2#12, #12G, 3/4"C		0.10	O	RCP-1	20	26
27	20	AUTOMATIC DOORS	M	0.50		2#12, #12G, 3/4"C		2.75		2#10, #10G, 3/4"C		2.25	O	WH-1(N)	30-2P	28
29	20	RECEPTACLE - EAS SENSORMATIC	R	0.18		2#12, #12G, 3/4"C			2.43			2.25	O			30
31	20	RECEPTACLE - VESTIBULE	R	0.18		2#12, #12G, 3/4"C	0.90			2#12, #12G, 3/4"C		0.72	R	RECEPTACLE - ROOFTOP UNITS	20	32
33	20	RECEPTACLE - JANITOR	R	0.18		2#12, #12G, 3/4"C		0.90		2#12, #12G, 3/4"C		0.72	R	RECEPTACLE - ROOFTOP UNITS	20	34
35	20	RECEPTACLE - CART CONTAINMENT	R	0.18		2#12, #12G, 3/4"C			1.98	2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	36
37	30-2P	PANEL "CP" SUB FEED	O	2.07		2#10, #10G, 3/4"C	3.87			2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	38
39			O	2.07				3.87		2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	40
41	20	RECEPTACLE - L.P SECURITY SYSTEM	R	0.36	L	2#12, #12G, 3/4"C			2.16	2#12, #12G, 3/4"C	b	1.80	R	PLUG TRACK	20	42
TOTAL CONNECTED LOAD (KVA)							**11.56**	**11.20**	**11.97**							

PANEL SCHEDULE NOTES:

GENERAL NOTES:	
	BALANCE PANELS WITHIN 10% PHASE TO PHASE.
CIRCUIT KEY NOTES:	
a,b,e,s	CIRCUIT SHALL BE CONTROLLED BY THE BUILDING MANAGEMENT SYSTEM LIGHTING CONTROL ZONE INDICATED.
BMS	EB POWER FEEDS FOR BUILDING MANAGEMENT SYSTEM MUST BE FED FROM THE SAME PANELBOARD AND PHASE.
G	GROUND FAULT CIRCUIT INTERRUPTING BREAKER
L	HANDLE LOCK "ON" CLAMP DEVICE
HACR	PROVIDE "HACR" TYPE BREAKER FOR ROOF TOP EQUIPMENT

ELECTRICAL SERVICE LOAD SUMMARY

LOAD CLASSIFICATION		CONNECTED LOAD (KVA)	DEMAND FACTOR	DEMAND LOAD (KVA)
TOTAL LIGHTING	L	30.05	125%	37.57
TOTAL RECEPTACLE UPTO 10KVA	R	10.00	100%	10.00
TOTAL RECEPTACLE ABOVE 10KVA	R	46.13	50%	23.07
TOTAL HVAC	H	154.92	100%	154.92
TOTAL MOTOR	M	1.39	100%	1.39
TOTAL KITCHEN/EQUIPMENTS	E	2.18	65%	1.42
TOTAL OTHER/MISCILLANEOUS	O	61.09	100%	61.09

PANEL TOTAL LOAD		
TOTAL CONNECTED LOAD	305.76	KVA
TOTAL DEMAND LOAD	289.45	KVA
TOTAL CONNECTED CURRENT	849.71	AMP
TOTAL DEMAND CURRENT	804.37	AMP
SYSTEM VOLTAGE	120/208 Wye	

NOTE:
VERIFY THE ELECTRICAL REQUIREMENTS FOR THE MECHANICAL EQUIPMENT WITH THE MECHANICAL REVIEW. UPDATE ELECTRICAL INFORMATION AS REQUIRED.

NOTE:
REFER TO TJX SPECIFICATIONS AND SINGLE LINE DIAGRAM FOR ALL "BMS" BUILDING MANAGEMENT SYSTEM EQUIPMENT AND INSTALLATIONS. COMPLETE "BMS" SYSTEM TO BE FURNISHED AND INSTALLED BY OWNER'S CONTRACTOR, UNLESS OTHERWISE NOTED ON ELECTRICAL PLANS. FIELD VERIFY AND COORDINATE ALL WORK WITH TJX PROJECT CONSTRUCTION MANAGER PRIOR TO PROCEEDING WITH ALL RELATED WORK.

PANEL: CP (N) — MOUNTING: SURFACE

208Y/120 | VOLTS, 1 | PHASE, 3 | WIRE — LOCATION: ELECTRICAL ROOM

MAIN CB: 30A | MLO: NA | BUS: 125A | MIN, — FED FROM: PANEL "LB"

NOTE: L : LIGHTING, H : HVAC LOAD, E: EQUIPMENT, M : MOTOR LOAD, R : RECEPTACLES, O : OTHER/MISC. (TYPICAL)

CKT NO.	TRIP AMPS	DESCRIPTION OF LOAD	LOAD TYPE	LOAD (KVA)	NOTE	MINIMUM BRANCH CIRCUIT	PER PHASE (KVA) A	B	MINIMUM BRANCH CIRCUIT	NOTE	LOAD (KVA)	LOAD TYPE	DESCRIPTION OF LOAD	TRIP AMPS	CKT NO.
1	20	RECEPTACLE - BLADE CTR	R	0.36		2#12, #12G, 3/4"C	1.08		2#12, #12G, 3/4"C		0.72	R	RECEPTACLE - CASH REGISTER	20	2
3	20	RECEPTACLE - BLADE CTR	R	0.36		2#12, #12G, 3/4"C		1.08	2#12, #12G, 3/4"C		0.72	R	RECEPTACLE - CASH REGISTER	20	4
5	20	SPARE					0.72		2#12, #12G, 3/4"C		0.72	R	RECEPTACLE - CASH REGISTER	20	6
7	20	BMS-1	O	0.18	L,BMS	2#12, #12G, 3/4"C		0.54	2#12, #12G, 3/4"C		0.36	R	RECEPTACLE - CASH REGISTER	20	8
9	20	SPARE					0.36		2#12, #12G, 3/4"C		0.36	R	RECEPTACLE - CASH REGISTER	20	10
11	20	BMS-2	O	0.18	L,BMS	2#12, #12G, 3/4"C		0.18					SPARE	20	12
13	20	SPARE					0.00						SPARE	20	14
15	20	BMS-3	O	0.18	L,BMS	2#12, #12G, 3/4"C		0.18					SPARE	20	16
17	20	SPARE						0.00					SPARE	20	18
19	20	SPARE					0.00						SPARE	20	20
21	20	SPARE						0.00					SPARE	20	22
23	20	SPARE					0.00						SPARE	20	24
TOTAL CONNECTED LOAD (KVA)							**2.16**	**1.98**							

NOTE: NEW COMMERCIAL GRADE PANELBOARD WITH BOLT-ON CIRCUIT BREAKERS. SEE SPECIFICATIONS. PANEL WITH GROUND BUS AND ISOLATED GROUND BUS. PANEL SHALL BE FULLY RATED FOR 22,000 AIC. POWER FEED CIRCUIT BREAKERS FOR BUILDING MANAGEMENT SYSTEM "BMS" MUST BE FED FROM SAME PANELBOARD AND PHASE.

PANEL: LCP-1(N) — LOCATION: ELECTRICAL ROOM — MOUNTING: SURFACE

RELAY NO.	CKT NO.	DESCRIPTION OF LOAD	CONTROL ZONE	CONTROL ZONE	DESCRIPTION OF LOAD	CKT NO.	RELAY NO.
1	HA-1	LIGHTING - SALES GENERAL	a	b	LIGHTING - SALES GENERAL	HA-3	2
3	HA-5	LIGHTING - SALES GENERAL	a	b	LIGHTING - SALES GENERAL	HA-7	4
5	HA-9	LIGHTING - SALES GENERAL	a	b	LIGHTING - SALES GENERAL	HA-11	6
7	HA-13	LIGHTING - SALES GENERAL	a	b	LIGHTING - SALES TRACK	LA-9	8
9	HA-2	LIGHTING - EMPLOYEE AREAS	a	b	LIGHTING - SALES TRACK	LA-1	10
11	HA-10	LIGHTING - PROCESSING	a	b	LIGHTING - SALES TRACK	LA-3	12
13	HA-15	BLADE SIGN	s	b	LIGHTING - SALES TRACK	LA-5	14
15	HA-23,25	ECH-1 - ENTRY VESTIBULE	a	b	LIGHTING - SALES TRACK	LA-7	16
17					SPARE		18
19	HA-12,14	BB-1 - MEN'S TOILET ROOM	a		SPARE		20
21					SPARE		22
23	HA-16,18	BB-1 - EMPLOYEE'S LOUNGE	a		SPARE		24
25					SPARE		26
27	HA-20,22	BB-1 - MANAGER'S OFFIVE	a		SPARE		28
29					SPARE		30
31	LA-17	EF-1 - REST ROOM/JANITOR'S ROOM	a		SPARE		32
33	LA-19	EF-2 - EMPLOYEE'S LOUNGE	a		SPARE		34
35	LA-25	UH-1 - RECEVING AREA(PROCESSING ROOM)	a		SPARE		36
37		SPARE			SPARE		38
39	HA-4	LIGHTING - WALL PACKS	e		SPARE		40
41	HA-6	LIGHTING - CANOPY	s		SPARE		42
43	HA-31	BUILDING SIGNAGE	s		SPARE		44
45	HA-33	BUILDING SIGNAGE	s		SPARE		46
47	HA-35	BUILDING SIGNAGE	s		SPARE		48

COMMENTS:
1. ALL ZONES SHALL BE CONTROLLED BY BUILDING MANAGEMENT SYSTEM.

PANEL: LCP-2(N) — LOCATION: ELECTRICAL ROOM — MOUNTING: SURFACE

RELAY NO.	CKT NO.	DESCRIPTION OF LOAD	CONTROL ZONE	CONTROL ZONE	DESCRIPTION OF LOAD	CKT NO.	RELAY NO.
1	LA:10	RECEPTACLE - SALES GENERAL	b	b	PLUG TRACK	HA:24	2
3	LA:14	RECEPTACLE - SALES GENERAL	b	b	PLUG TRACK	HA:26	4
5	LA:16	RECEPTACLE - SALES GENERAL	b	b	PLUG TRACK	LA:6	6
7	LA-31	RECEPTACLE FLOOR BOX	b	b	PLUG TRACK	LA:18	8
9	LA-33	RECEPTACLE FLOOR BOX	b	b	PLUG TRACK	LA:15	10
11	LA-35	RECEPTACLE FLOOR BOX	b	b	PLUG TRACK	LA:27	12
13	LA-40	PLUG TRACK	b		SPARE		14
15	LA-42	PLUG TRACK	b		SPARE		16
17	LB-21	PLUG TRACK	b	b	RECEPTACLE FLOOR BOX	LA:29	18
19	LB-22	PLUG TRACK	b	b	RECEPTACLE FLOOR BOX	LB:20	20
21	LB-36	PLUG TRACK	b		SPARE		22
23	LB-38	PLUG TRACK	b		SPARE		24
25	LB-40	PLUG TRACK	b		SPARE		26
27	LB-42	PLUG TRACK	b		SPARE		28
29	LA:11	PLUG TRACK	b		SPARE		30
31	LA:13	PLUG TRACK	b		SPARE		32
33		SPARE			SPARE		34
35		SPARE			SPARE		36
37		SPARE			SPARE		38
39		SPARE			SPARE		40
41		SPARE			SPARE		42
43		SPARE			SPARE		44
45		SPARE			SPARE		46
47		SPARE			SPARE		48

COMMENTS:
1. ALL ZONES SHALL BE CONTROLLED BY BUILDING MANAGEMENT SYSTEM.

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NO.	DESCRIPTION	DATE
0	FOR PERMIT	12.06.24
1	TJX REVIEW COMMENTS	02.24.25
2	TJX REVIEW COMMENTS	03.18.25

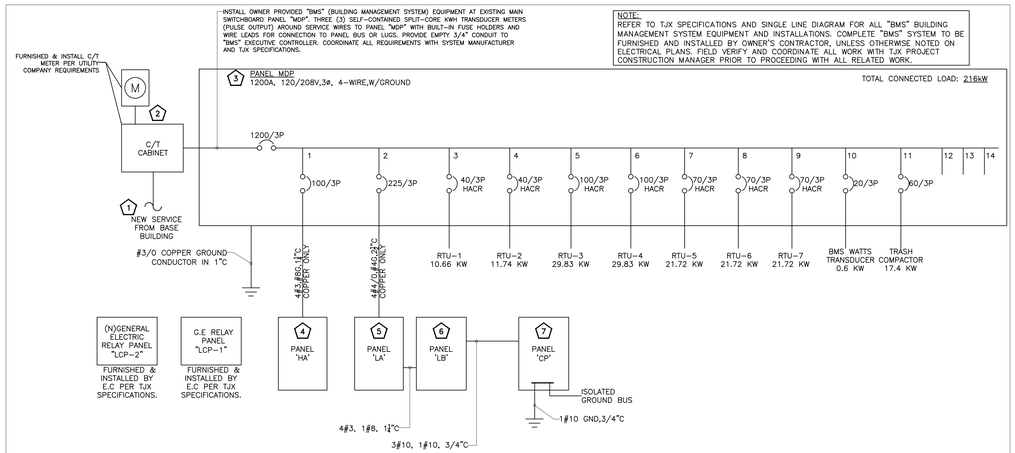
HomeGoods

PANEL SCHEDULE

Deal Type	J0
Store Number	J4
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

E4

Scale: As indicated



ELECTRICAL RISER KEYED NOTES:

1. NEW 1200A, 120/208V, 3-PHASE ELECTRICAL SERVICE FOR THE PROJECT SPACE FROM THE BASE BUILDING. E.C SHALL COORDINATE WITH OWNER/BASE BUILDING/LAND LORD FOR EXACT DETAILS ABOUT THE PROVISION OF SERVICE.
2. PROVIDE NEW 1200A, 120/208V, 3-PHASE, 4-WIRE ELECTRICAL METER & CT CABINET AND DISCONNECT SWITCH FOR THE PROJECT SPACE. E.C. SHALL COORDINATE WITH BASE BUILDING/LANDLORD/OWNER FOR THE EXACT SCOPE OF WORK/LIABILITIES.
3. PROVIDE NEW 1200A(M.C.B), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "MDP" FOR THE PROJECT. E.C SHALL COORDINATE THE EXACT LOCATION WITH ARCHITECT/OWNER.
4. PROVIDE NEW 100A(M.C.B), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "HA" FOR THE PROJECT. E.C SHALL COORDINATE THE EXACT LOCATION WITH ARCHITECT/OWNER.
5. PROVIDE NEW 225A(M.C.B), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "LA" FOR THE PROJECT. E.C SHALL COORDINATE THE EXACT LOCATION WITH ARCHITECT/OWNER.
6. PROVIDE NEW 100A(M.L.O), 120/208V, 3-PHASE, 4-WIRE ELECTRICAL PANEL "LB" FOR THE PROJECT. E.C SHALL COORDINATE THE EXACT LOCATION WITH ARCHITECT/OWNER.
7. PROVIDE NEW 30A(M.C.B), 120/208V, 1-PHASE, 3-WIRE ELECTRICAL PANEL "CP" FOR THE PROJECT. E.C SHALL COORDINATE THE EXACT LOCATION WITH ARCHITECT/OWNER.

ELECTRICAL GENERAL NOTE:

A. ABOVE RISER DIAGRAM IS FOR REFERENCE PURPOSES ONLY. E.C. SHALL VERIFY EXACT POWER DISTRIBUTION IN FIELD AND INFORM ENGINEER ON RECORD FOR ANY DISCREPANCY.

B. E.C. SHALL VERIFY INCOMING SERVICE AMPERAGE, WIRE SIZING AND DISTRIBUTION.

C. ELECTRICAL CONTRACTOR TO COORDINATE FAULT CURRENT (Isc) RATING WITH UTILITY COMPANY AND AHJ PRIOR TO COMMENCING ANY WORK.

ELECTRICAL RISER SYMBOLS
- NEW
- EXISTING ITEM/FEEDER TO REMAIN
- EXISTING ITEM/FEEDER TO BE DISCONNECTED & REMOVED

ELECTRICAL REQUIREMENTS:

THE WORK INCLUDES PROVIDING NEW MATERIALS, FIXTURES, DEVICES AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING ELECTRICAL SYSTEM. THE WORK ALSO INCLUDES FINAL CONNECTIONS TO MECHANICAL EQUIPMENT ITEMS PROVIDED BY OTHERS. ALL WORK SHALL BE IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, OR ORDINANCES AND SUBJECT TO INSPECTION.

THE WORK INCLUDES PROVIDING NEW MATERIALS, FIXTURES, DEVICES AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING ELECTRICAL SYSTEM. THE WORK ALSO INCLUDES FINAL CONNECTIONS TO MECHANICAL EQUIPMENT ITEMS PROVIDED BY OTHERS. ALL WORK SHALL BE IN ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, OR ORDINANCES AND SUBJECT TO INSPECTION.

COORDINATE WITH WORK OF OTHER SECTIONS, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. VERIFY EXISTING CONDITIONS BEFORE BIDDING. REFER TO ARCHITECTURAL/EQUIPMENT DRAWINGS FOR ADDITIONAL INFORMATION REGARDING EQUIPMENT AND CASEWORK, AND ELECTRICAL CONNECTIONS REQUIRED.

COMPLY WITH ALL LAWS APPLYING TO ELECTRICAL INSTALLATIONS IN EFFECT, AND WITH THE MOST RECENT EDITION OF THE ADOPTED ELECTRICAL CODE. ALL MATERIALS USED SHALL BE NEW AND SHALL CONFIRM TO THE STANDARDS ESTABLISHED BY UNDERWRITERS LABORATORIES INC.

VERIFY SIZE OF ELECTRICAL SYSTEM BREAKERS, CONDUIT ETC. FOR EQUIPMENT CONNECTIONS.

PANEL BOARDS SHALL BE AS MANUFACTURED BY GENERAL ELECTRIC, MEETING UL STANDARDS 50 AND 67 WITH UL LABEL.

ALL PANELBOARDS, SWITCHBOARDS, AND LINE VOLTAGE CONTROL EQUIPMENT SHALL BE FIELD MARKED TO WARN QUALIFIED PERSONS OF POTENTIAL ELECTRIC ARC FLASH HAZARDS. MARKING SHALL BE LOCATED SO AS TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTING, SERVICING OR MAINTENANCE OF EQUIPMENT. MARKING SHALL BE SELF ADHESIVE, COMMERCIAL LABEL CONFORMING TO NEC 110.16 AND ANSI Z535.4 AS MANUFACTURED BY IDEAL OR APPROVED EQUAL.

BREAKERS: THERMAL MAGNETIC TYPE, QUICK-MAKE, QUICK-BREAK, BOLT-IN TYPE OF SINGLE UNIT CONSTRUCTION. TWO AND THREE POLE BREAKERS SHALL BE SINGLE UNIT COMMON TRIP TYPE. BREAKERS USED AS SWITCHES FOR 120V LIGHTING CIRCUITS SHALL BE APPROVED FOR THAT USE AND MARKED "SWD". WHEN NEW BREAKERS ARE INSTALLED INTO EXISTING PANELS, NEW BREAKERS SHALL BE OF SAME MANUFACTURER AS EXISTING PANEL AND BE OF EQUAL OR GREATER AIC RATING AS EXISTING PANEL.

CABINETS SHALL BE ONE PIECE CODE GAGE GALVANIZED STEEL WITH MOUNTING STUDS, WIRING GUTTERS OF AMPLE SIZE AND KNOCKOUTS FOR CONDUIT CONNECTIONS AS REQUIRED. BUS BARS SHALL BE THW, THHN, THWN COPPER. BRANCH CIRCUIT WIRING SHALL BE TYPE TW COPPER. FRONTS SHALL BE ONE PIECE CODE GAGE FURNITURE STEEL WITH ADJUSTABLE FASTENERS. PROVIDE SURFACE MOUNT UNITS UNLESS OTHERWISE INDICATED. PROVIDE PLASTIC COVERED TYPEWRITTEN SCHEDULE IDENTIFYING ALL BRANCH CIRCUITS INSIDE EACH CABINET.

PROVIDE DRY-TYPE ENERGY EFFICIENT TRANSFORMER WHICH SHALL BE NEMA TP-1 TYPE, ENCLOSED AND VENTILATED WITH KVA AND VOLTAGE RATINGS AS CALLED FOR ON THE DRAWINGS, WITH (150) DEGREE CLASS "H" INSULATION AND MINIMUM OF SIX 2-1/2% TAPS. SOUND LEVEL SHALL BE LOW AND INSTALLATION SHALL INCLUDE KORFUND OR EQUAL VIBRATION DAMPENING MOUNTS AND FLEXIBLE STEEL CONDUIT FOR PRIMARY AND SECONDARY CONNECTIONS TO MINIMIZE SOUND TRANSMISSION.

GROUNDING SYSTEM: PERMANENTLY AND EFFECTIVELY GROUND ALL METALLIC CONDUIT, SUPPORTS, CABINETS, PANEL BOARDS AND SYSTEM NEUTRAL CONDUCTORS. MAINTAIN CONTINUITY OF EQUIPMENT GROUND THROUGHOUT THE SYSTEM. GROUND CLAMPS SHALL BE APPROVED TYPE, SPECIFICALLY DESIGNED FOR GROUNDING. WHERE GROUNDING CONDUCTORS ARE ENCLOSED IN CONDUIT, GROUND CLAMP SHALL BE OF TYPE WHICH GROUNDS BOTH CONDUCTOR AND CONDUIT. ALL CIRCUITS IN FLEXIBLE METAL CONDUIT (6'-0" MAXIMUM LENGTH) SHALL INCLUDE A GROUND WIRE SIZED IN ACCORDANCE WITH NEC TABLE 250-95.

SIZE CONDUIT TO COMPLY WITH ELECTRICAL CODE FOR NUMBER AND SIZE OF CONDUCTORS INSTALLED, MINIMUM 1/2" ABOVE GRADE. ALL CONDUIT INSTALLED HORIZONTALLY ABOVE CEILING SHALL BE SUPPORTED FROM BUILDING STRUCTURE. NO CONDUIT SHALL BE SUPPORTS FROM CEILING GRID OR GRID WIRES. PROVIDE RIGID STEEL CONDUIT OR PVC BELOW GRADE, MINIMUM 3/4". PROVIDE ELECTRICAL METAL TUBING (EMT) 3/4". PROVIDE ELECTRICAL METAL TUBING (EMT) OR "MC" CABLE FOR INTERIOR LOCATIONS. INTERIOR CONNECTORS AND COUPLINGS SHALL BE SET-SCREW TYPE. CLAMP CONDUIT TO BOXES WITH BUSHING INSIDE AND LOCKNUT OUTSIDE. FLEXIBLE METAL CONDUIT MAY BE USED IN LENGTHS 6' OR LESS.

CONDUCTORS: INSULATED SOFT ANNEALED 98% PURE COPPER WITH COLOR CODING, B AND S GAGE, #10 AND SMALLER TO BE SOLID, #8 AND LARGER TO BE STRANDED, MINIMUM #12 UNLESS OTHERWISE INDICATED.

CONCEAL WIRING SYSTEM ABOVE SUSPENDED CEILINGS OR IN WALL WHERE POSSIBLE. INSTALL CONDUIT AND MC CABLE PARALLEL TO BUILDING LINES, AND TO CLEAR ALL OPENING, DEPRESSIONS, PIPES, DUCTS, STRUCTURE, ETC. SUPPORT PER NEC.

INSTALL CONDUIT CONTINUOUS BETWEEN BOXES AND CABINETS WITH NO MORE THAN FOUR (4) 90 DEGREE BENDS. SECURELY FASTEN IN PLACE WITH STRAPS, HANGERS AND STEEL SUPPORTS AS REQUIRED. REAM CONDUIT ENDS BEFORE INSTALLATION AND THOROUGHLY CLEAN BEFORE INSTALLATION. OPENINGS SHALL BE PLUGGED OR COVERED TO KEEP CONDUIT CLEAN. TERMINALS ON SWITCHES AND OUTLETS SHALL NOT BE USED TO "FEED THRU" TO THE NEXT SWITCH OR OUTLET. THE DISCONNECTION OR REMOVAL OF A RECEPTACLE, FIXTURE, OR OTHER DEVICE FED FROM A BOX SHALL NOT INTERFERE WITH OR INTERRUPT THE CONDUCTOR CONTINUITY.

ADJUSTING AND TESTING: ALL ELECTRICAL EQUIPMENT SHALL BE ADJUSTED AND TESTED FOR PROPER OPERATION. COMPLETED WIRING SYSTEM SHALL BE FREE FROM SHORT CIRCUITS.

TOUCHUP AND CLEANING: TOUCHUP OR REFINISH DAMAGED SURFACES OF FIXTURES AND EQUIPMENT EXPOSED TO VIEW. CLEAN FIXTURES, GLASSWARE AND LAMPS BY APPROVED METHODS, READY FOR USE.

ALL BUSSING SHALL BE COPPER.

LAYOUT BRANCH CIRCUIT WIRING AND ARRANGEMENT OF HOME RUNS FOR MAXIMUM ECONOMY AND EFFICIENCY. INCREASE WIRE SIZE IF VOLTAGE DROP EXCEEDS 3% OR CIRCUIT LENGTH EXCEEDS 100 FEET.

DEVICES SHALL BE MANUFACTURED BY LEVITON OR EQUAL. ALL DEVICES SHALL BE WHITE COLOR WITH BRUSHED ALUMINUM COVER PLATES. STANDARD DUPLEX RECEPTACLES SHALL BE GROUNDING TYPE, 20A, NEMA WD-2 STANDARD 5-20R, BACK AND SIDE WIRED. ISOLATED GROUND RECEPTACLES SHALL BE LEVITON 5262-IG AND ORANGE IN COLOR. OTHER DEVICES SHALL BE INDICATED ON THE DRAWINGS, OR AS REQUIRED BY THE EQUIPMENT ITEM INTENDED TO BE SERVED. WHERE SWITCHES ARE GROUPED, PROVIDE GANGPLATES. NO RESIDENTIAL GRADE DEVICES ALLOWED.

COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code:
Project Title:
Project Type:

Construction Site: Owner/Agent: Designer/Contractor:

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-Retail	24828	0.84	20856
		Total Allowed Watts =	20856

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
Retail (24828 sq.ft.)				
LED: A: 2 X 4 RECESSED LE: Other:	1	32	37	1184
LED: A6: TRACK LIGHT: Other:	1	57	41	2337
LED: D: 2 X 4 RECESSED LED: Other:	1	4	37	148
LED: F3: SURFSCE MOUNTED LED: Other:	1	1	53	53
LED: F4: SURFSCE MOUNTED LED: Other:	1	2	27	54
LED: G3: PENDANT LED: Other:	1	23	53	1228
LED: G4: PENDANT LED: Other:	1	4	27	107
LED: TL4: TRACK LED: Other:	1	74	15	1110
LED: W: 2 X 2 RECESSED LED: Other:	1	111	97	10767
LED: Y: 2 X 2 RECESSED LED: Other:	1	4	97	388
LED: B: DOCK LIGHT: Other:	1	1	18	18
		Total Proposed Watts =		17394

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2021 IECC requirements in *COMcheck* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

MICHAEL TOBIAS — Name - Title
Signature
11/18/24 — Date

Project Title: HOMEGOODS
Report date: 11/18/24
Page 1 of 6

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NO.	DESCRIPTION	DATE
0	FOR PERMIT	12.06.24
1	TJX REVIEW COMMENTS	02.24.25
2	TJX REVIEW COMMENTS	03.18.25

HomeGoods

ONE LINE DIG. & ENERGY ANALYSIS SHEET

Deal Type	J0
Store Number	J4
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

E4.1

Scale: As indicated

BMS INTERFACE SUMMARY (REFER TO TJX SPECIFICATIONS FOR DETAIL INFORMATION)

1. GENERAL CONTRACTOR

A. PROVIDE AND INSTALL A 4'X8' PLYWOOD BACKBOARD IN THE ELECTRIC ROOM FOR BMS VENDOR TO MOUNT THEIR EQUIPMENT. PHONE AND ETHERNET JACKS FOR THE BMS CONTROLLER WILL ALSO BE LOCATED ON THIS BOARD BY A SEPARATE TJX VENDOR.

2. ELECTRICAL CONTRACTOR

A. COORDINATE MOUNTING A 2X4 J-BOX WITH CONDUIT (WIREMOLD IF EXPOSED IN FINISHED AREAS) AT THE LOCATIONS DESIGNATED ON THE BMS CONTROLS SITE SPECIFIC PLANS. THE J-BOXES ARE TO BE MOUNTED AT 60" A.F.F. EXCEPT IN FITTING ROOM LOCATIONS WHERE THE J-BOXES ARE TO BE MOUNTED AT 84" A.F.F.. ON THE SALES FLOOR, THE J-BOXES ARE TO BE MOUNTED ON BACK SIDE OF THE COLUMNS WHEN VIEWED FROM FRONT OF STORE.

B. PROVIDE AND INSTALL A PERMANENT STRANDED 18/8 AWG NON SHIELDED CABLE TO EACH SENSOR LOCATION. COORDINATE WITH THE BMS INSTALLER.

C. THERMOSTATS ARE TO BE INSTALLED AT THE SENSOR LOCATIONS AND THE ROOFTOP UNITS STARTED.

D. HVAC EQUIPMENT ARE TO HAVE HAD A MANUFACTURER'S STARTUP PROCEDURE PERFORMED AND BE OPERATIONAL IN ALL MODES BEFORE THE ARRIVAL OF THE BMS CONTROLS REPRESENTATIVE FOR THE FINAL INSTALLATION.

E. PROVIDE AND INSTALL A THREE PHASE CIRCUIT BREAKER (20 AMPS) FOR THE PHASE MONITOR. THIS BREAKER MAY BE INSTALLED IN A LIGHTING DISTRIBUTION PANEL IF THE PANEL IS OF THE SAME VOLTAGE AS THE MAIN DISTRIBUTION PANEL.

F. INSTALL THE BMS PROVIDED CURRENT TRANSFORMERS (CTS).

G. CONNECT ALL CT WIRING TO THE PHASE MONITOR.

H. MOUNT AND POWER THE PHASE MONITOR.

I. PROVIDE AND INSTALL BMS#1 (20 AMP, 1 POLE BREAKER), BMS#2 (20 AMP, 1 POLE BREAKER), AND BMS #3 (20 AMP, 1 POLE BREAKER) POWER SUPPLY. THESE BREAKERS MUST ORIGINATE FROM THE SAME PHASE.

J. THE INSTALLATION, PROGRAMMING, AND LABELING OF THE GE SOFTWIRE PANEL IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

LIGHTING SUMMARY (REFER TO TJX SPECIFICATIONS FOR DETAIL INFORMATION

1. NIGHT LIGHTING:

A) NIGHT LIGHTS ARE TO BE ON 24 HOURS A DAY AND ONLY IN THE SALES AREA.

a) THE CIRCUIT FOR NIGHT LIGHTING IS NOT TO BE CONNECTED TO THE GE RELAY PANEL, OR EMERGENCY LIGHTING. THE NL SHOULD BE ONLY (1) CIRCUIT IN MOST SITUATIONS.

b) NIGHT LIGHTING "RULE OF THUMB" IS (1) NIGHT LIGHT FOR EVERY 3,500 SQUARE FEET OF SALES AREA (ROUND UP), AND SHOULD BE EVENLY DISTRIBUTED. (REFER TO TJX CRITERIA PLAN SHEET (C5) FOR EXACT QUANTITIES & LOCATIONS).

2. EMERGENCY LIGHTING:

A) EMERGENCY LIGHTING IS TO BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND AT THE DIRECTION OF THE GOVERNING AUTHORITIES.

B) AT A MINIMUM, THE EMERGENCY LIGHTING IS TO BE AS FOLLOWS:

i) ALL ROOMS AND SPACES ARE TO HAVE AT LEAST (1) EMERGENCY LIGHT.
ii) THE SALES AREA IS TO HAVE (1) EMERGENCY LIGHT PER 2,000 SQUARE FEET OF FLOOR AREA, AND SHOULD BE EVENLY DISTRIBUTED THROUGHOUT THE SPACE. PATHS OF EGRESS SHOULD BE OF PRIMARY COVERAGE.
iii) THE STOCK ROOM SHOULD HAVE A MINIMUM OF (4) EMERGENCY LIGHTS.

C) THE EMERGENCY LIGHTING SYSTEM AND CIRCUITS ARE NOT TO BE CONNECTED TO THE GE RELAY PANEL AND THE CIRCUITS ARE TO BE DEDICATED WITH BREAKER LOCKS INSTALLED AT THE PANEL.

D) THE EMERGENCY LIGHTS ARE TO BE LITHONIA LIGHTING, MODEL "ELM6L" SELF CONTAINED BATTERY UNITS.

3. SECURITY LIGHTING:

A) EXTERIOR SECURITY LIGHTING INCLUDES EXTERIOR WALL LIGHT PACKS ATTACHED TO THE BUILDING AS NOTED ON THE PLANS. THESE ARE GENERALLY MOUNTED ABOVE ALL EGRESS DOORS FROM THE STORE.

B) THE CIRCUITING FOR THIS IS THROUGH THE GE RELAY PANEL.

C) NOVAR WILL CONTROL THIS LIGHTING BY A SEPARATE CHANNEL IN THE RELAY PANEL. THIS LIGHTING IS OVERRIDDEN BY A LIGHT SENSOR SUPPLIED AND INSTALLED BY NOVAR.

4. SIGNS AND CANOPY LIGHTS:

A) THIS INCLUDES THE BUILDING, MALL, LIGHTED UNDER CANOPY, ETC. SIGNS AS WELL AS ANY CANOPY LIGHTS (IF NOT BEING CONTROLLED BY THE LANDLORD'S HOUSE PANEL).

B) THESE CIRCUITS ARE TO BE RUN THROUGH THE GE RELAY PANEL.

C) NOVAR WILL CONTROL THESE CIRCUITS BY A SEPARATE CHANNEL IN THE RELAY PANEL.

5. CUSTOMER LIGHTING:

A) SALES AREA:

i) ONE HALF OF THE SALES AREA CEILING LIGHTS (ALTERNATE ROWS).
ii) ALL PERIMETER LIGHTING.
iii) ALL PENDANT LIGHTING.
iv) JEWELRY COUNTER LIGHTING.
v) LAMP DEPARTMENT PLUGMOLD (ON WALLS AND FLOOR GONDOLAS).
vi) FLOOR OUTLETS FOR LAMP DEPARTMENT.
vii) CEILING MOUNTED CHANDELIER FIXTURE OUTLETS.
viii) ANY SPECIALTY LIGHTING (I.E. WALL SCONCES, ETC.).

B) OFF SALES AREA:

i) PENDANT LIGHTS IN THE FITTING ROOM.
ii) LIGHTED MIRRORS IN THE FITTING ROOM.

C) THESE CIRCUITS ARE TO BE RUN THROUGH THE GE RELAY PANEL.

6. EMPLOYEE LIGHTING:

A) EMPLOYEE LIGHTING IS TO INCLUDE ALL (EXCEPT AS EXCLUDED BELOW) INTERIOR STORE LIGHTING AND BE RUN THROUGH THE GE RELAY PANEL. THE SALES AREA CEILING LIGHTS IS TO BE ALTERNATE ROWS.

B) ITEMS NOT INCLUDED IN "EMPLOYEE LIGHTING" ARE NIGHT LIGHTING, EMERGENCY LIGHTING, EXIT LIGHTING, DOCK LIGHTS, "SECURITY LIGHTING", "SIGNS AND CANOPY LIGHTS", AND "CUSTOMER LIGHTING" AS DESCRIBED ABOVE.

C) EMPLOYEE LIGHTING IS TO INCLUDE ALL EXHAUST FANS EXCEPT THE ELECTRICAL ROOM EXHAUST FAN THAT IS TO BE CONTROLLED BY A STAND-ALONE LINE VOLTAGE THERMOSTAT (SET AT 80° F). THESE CIRCUITS ARE TO BE RUN THROUGH THE GE RELAY PANEL.

7. G.E. SOFTWIRE RELAY PANEL PROGRAMMING:

A) SOFTWIRING LIGHTING GROUPS

i) THE SCM SHALL ALLOW ANY GROUP OF RELAYS WITHIN THE PANEL TO BE ASSOCIATED ("SOFTWIRED") TO A CHANNEL USING THE FOLLOWING PROCEDURE:

a) PRESS AND HOLD THE CHANNEL PUSH BUTTON FOR SEVERAL SECONDS. THE CHANNEL LED AND THE LEDS FOR RELAYS CURRENTLY CONTROLLED BY THAT INPUT WILL BEGIN TO FLASH.

b) SELECT THE RELAYS TO BE CONTROLLED. THE LED FOR EACH RELAY "SOFTWIRED" TO THE CHANNEL SELECTED WILL BE FLASHING ON/OFF. PRESS THE ASSOCIATED RELAY CONTROL BUTTON TO ADD/DELETE THAT RELAY TO/FROM GROUP.

c) PRESS THE CHANNEL PUSH BUTTON AGAIN. THE LEDS WILL STOP FLASHING AND THE CHANNEL PUSH BUTTON AND ASSOCIATED SWITCH INPUTS WILL NOW CONTROL THE RELAYS SELECTED.

ii) TURNING A CHANNEL ON/OFF WILL SEQUENCE ALL OF THE RELAYS WITHIN THAT GROUP ON/OFF INDIVIDUALLY.

B) CONTROLLING A SOFTWIRE GROUP

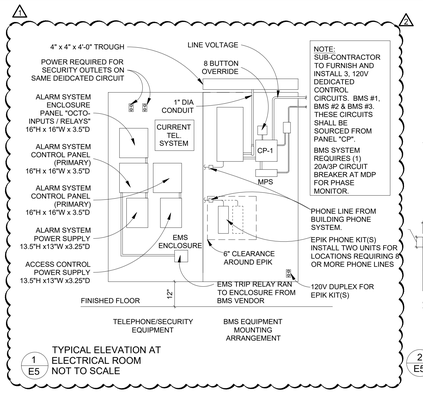
i) EACH CHANNEL SHALL HAVE AN ASSOCIATED PUSH-BUTTON WITHIN THE PANEL TO TOGGLE THE CHANNEL ON/OFF.
ii) EACH CHANNEL SHALL ALSO HAVE TWO SEPARATE SWITCH OR DRY CONTACT INPUTS THAT WILL ALLOW THE CHANNEL TO BE CONTROLLED REMOTELY.
iii) THE CHANNEL SHALL RESPOND TO THE LAST INPUT.
iv) THE UNIT SHALL ALLOW A "MASTER CHANNEL" TO BE CONFIGURED TO CONTROL SEVERAL OF THE ABOVE CHANNELS BY SIMPLY INCLUDING ALL OF THE RELAYS OF THESE "SUB CHANNELS" WITHIN THE MASTER.

C) GROUP STATUS

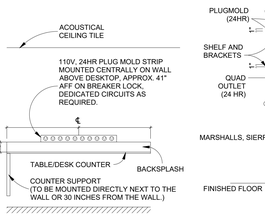
i) EACH CHANNEL PUSH-BUTTON SHALL INCLUDE A LED STATUS INDICATION. THE LED WILL BE ON WHENEVER ALL OF THE RELAYS WITHIN THE CHANNEL GROUP ARE ON; AND SHALL GO OFF WHEN ALL OF THE RELAYS WITHIN THE GROUP GO OFF.
ii) EACH CHANNEL SHALL ALSO HAVE AN ASSOCIATE DRY CONTACT CLOSURE OF PILOT CONTACT WHICH TRACKS THE LED OPERATION DESCRIBED ABOVE.

D) CONTROLLING AN INDIVIDUAL RELAY

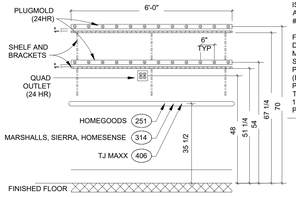
i) EACH RELAY SHALL HAVE AN ASSOCIATED CONTROL BUTTON WITH LED STATUS INDICATION MOUNTED WITHIN THE LOW VOLTAGE SECTION OF THE PANEL.



1 E5 TYPICAL ELEVATION AT ELECTRICAL ROOM NOT TO SCALE



2 E5 TYPICAL DETAIL @ L.P. OFFICE NOT TO SCALE

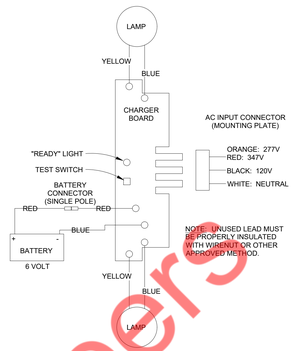


3 E5 TYPICAL DETAIL @ ASSISTANT MANAGER OFFICE NOT TO SCALE

REAR DOOR ALARM CONTROL

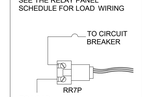
FURNISH AND INSTALL A REAR DOOR ALARM CONTROL SYSTEM AT THE STOCK ROOM DOOR TO THE EXTERIOR (3'-0" X 6'-8"). PROVIDE 120 VOLT CIRCUIT (UNSWITCHED) AND A LOW VOLTAGE TRANSFORMER (24V/50 VA) U.L. APPROVED, ABOVE THE HEAD OF THE DOOR (WITHIN 10'-0"). ALARM SHALL BE ACTIVATED BY DOOR CONTACTORS WHEN DOOR IS IN THE OPEN POSITION AND SHALL PRODUCE A CONTINUOUS CHIME TONE. DOOR ALARM SYSTEM SHALL BE WHEELOCK 38GV29 FROM GRAINGER INDUSTRIES MODEL #CH121092.

FURNISH AND INSTALL A PUSHBUTTON AND BELL FOR THE PROCESSING ROOM MAN DOOR. BELL TO BE EDWARDS SIGNALING 340 SERIES ADAPTABEL AC VIBRATING BELL MOUNTED ABOVE THE PROCESSING ROOM OVERHEAD ROLL UP DOOR, CLOSE TO ROOF STRUCTURE. INTERIOR SIDE OF PROCESSING ROOM. PUSHBUTTON TO BE NUTONE PB67AB ROUND DOMED PUSHBUTTON. PUSHBUTTON LOCATED ON THE EXTERIOR (ENTRANCE) SIDE OF PROCESSING ROOM MOUNTED NEXT TO THE MAN DOOR ON THE PULL SIDE OF DOOR. PROVIDE 120 VOLT CIRCUIT (UNSWITCHED) AND A LOW VOLTAGE TRANSFORMER (24V/50 VA) U.L. APPROVED, ABOVE THE HEAD OF THE DOOR (WITHIN 10'-0"). DOOR BELL SHALL BE ACTIVATED WHEN PUSHBUTTON IS DEPRESSED AND SHALL PRODUCE A SINGLE RING.

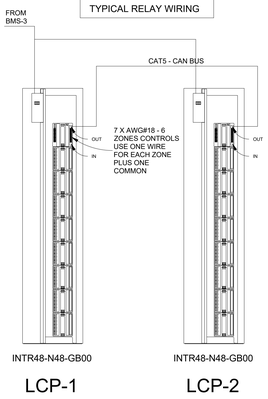


EMERGENCY LIGHTS WIRING DIAGRAM

NOTES:
SEE THE RELAY PANEL SCHEDULE FOR LOAD WIRING

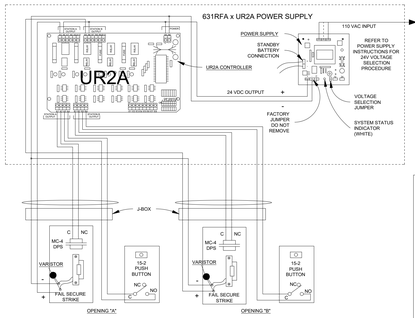


TYPICAL RELAY WIRING

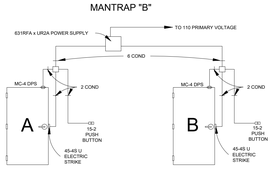


LCP-1 LCP-2

6 E5 ELECTRICAL REQUIREMENTS FOR CASH OFFICE DOORS NOT TO SCALE



5 E5 ELECTRICAL REQUIREMENTS FOR CASH OFFICE DOORS NOT TO SCALE

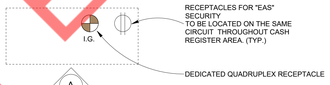


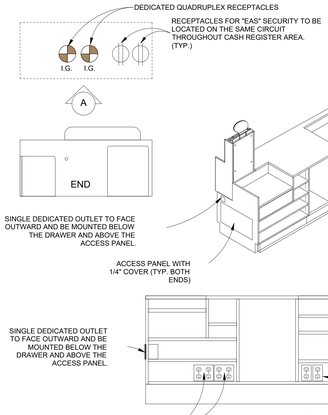
NOTES: (1) ALL LOW VOLTAGE SIGNAL WIRING SHALL BE 20-GAUGE MINIMUM. THE MINIMUM INDUCTIVE LOAD (LOCK) POWER WIRE GAUGE SHALL BE DETERMINED PER THE SDC WIRE GAUGE CHART. ALL WIRING (SINGLE OR MULTI-CONDUCTOR) SHALL BE COLOR CODED WITHOUT SPLICES. A MINIMUM OF TWO SPARE CONDUCTORS IS RECOMMENDED. (2) SPECIFY VOLTAGE WHEN ORDERING PRODUCTS. VOLTAGE IS NOT SPECIFIED ON THIS WIRE DIAGRAM. BE SURE ALL PRODUCTS ARE VOLTAGE COMPATIBLE. (3) ALL WIRING MUST CONFORM TO NATIONAL, STATE AND LOCAL CODES. (4) ALWAYS CONSULT WITH THE AUTHORITY HAVING JURISDICTION (AHJ) BEFORE INSTALLATION. (5) WHERE REQUIRED BY CODE.

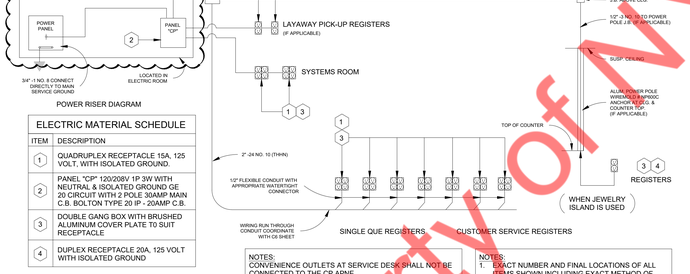
COMPONENTS:

QTY	DESCRIPTION	PART NUMBER	MANUFACTURER
2	ELECTRIC STRIKE	45-405 U	SDC
1	POWER SUPPLY W/DUAL INTERLOCK CIRCUIT BOARD	631RFA X UR2A	SDC
2	MOMENTARY SPDT - PUSH BUTTON SWITCHES	15-2 X SPDT X MOM	SDC
2	MAGNETIC DPS SWITCHES	MC-4	SDC

METHOD OF OPERATION
THE ABOVE LAYOUT IS IDENTIFIED AS A MANTRAP "B". BOTH OPENINGS HAVE MECHANICAL LOCKS THAT ARE LATCHED & UNLATCHED BY ELECTRIC STRIKES.
ACCESS / EGRESS:
ENTERING IS ACCOMPLISHED BY EITHER MECHANICAL KEY OR PUSH BUTTON CONTROL FROM INSIDE A CASH ROOM.
EGRESS IS FREE AT ALL TIMES.







POWER RISER DIAGRAM

ELECTRIC MATERIAL SCHEDULE

ITEM	DESCRIPTION
1	QUADRUPLEX RECEPTACLE 15A, 125 VOLT, WITH ISOLATED GROUND.
2	PANEL "CP" 120/208V 1P 3W WITH NEUTRAL & ISOLATED GROUND GE 20 CIRCUIT WITH 2 POLE 30AMP MAIN C.B. BOLTON TYPE 20 IP - 20AMP C.B.
3	DOUBLE GANG BOX WITH BRUSHED ALUMINUM COVER PLATE TO SUIT RECEPTACLE
4	DUPLEX RECEPTACLE 20A, 125 VOLT WITH ISOLATED GROUND

NOTES:
1. TJX SHALL BRING IN AN OUTSIDE CONTRACTOR TO SUPPLY, RUN AND TERMINATE THE LOW VOLTAGE COMMUNICATION WIRING. THIS INCLUDES THE LOW VOLTAGE WIRING FOR REGISTERS POS AS WELL AS THE CABLE FOR THE TIME CLOCK, ACS AND MANAGERS OFFICE TO LAYAWAY CABLES.
2. CABLES TO BE RUN IN ONE PIECE FROM REGISTER TO REGISTER
3. ALL LOW VOLTAGE WIRING TO BE INSTALLED ABOVE HUNG CLG. AND SHALL BE KEPT A MINIMUM OF 5'-0" FROM FLUORESCENT LIGHTING FIXTURES
4. CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND PULL STRINGS.

SINGLE QUE REGISTERS

NOTES:
CONVENIENCE OUTLETS AT SERVICE DESK SHALL NOT BE CONNECTED TO THE CP APNE.

P.O.S. A.C. WIRING TEST FOR INSULATED/ISOLATED GROUND

TO TEST DISCONNECT I.G. GROUND AT MAIN ENTRANCE AND CHECK ALL OUTLETS FROM:

GROUND TO BOX ---------- NO CONTINUITY
GROUND TO NEUTRAL ------ NO CONTINUITY- NO VOLTAGE
GROUND TO HOT ---------- NO VOLTAGE

WITH I.G. GROUND HOOKED BACK UP AT MAIN PANEL I.G. GROUND TO BE TAGGED OR LABELED AT MAIN ENTRANCE.

GROUND TO BOX ---------- NO CONTINUITY
GROUND TO NEUTRAL ------ NO CONTINUITY- NO VOLTAGE
GROUND TO HOT ---------- 120 VOLTS

CUSTOMER SERVICE REGISTERS

NOTES:
1. EXACT NUMBER AND FINAL LOCATIONS OF ALL ITEMS SHOWN INCLUDING EXACT METHOD OF INSTALLING CONDUIT & WIRE SHALL BE DETERMINED IN THE FIELD WITH TJX REPRESENTATIVE.
2. ALL WIRING SHALL BE TYPE "THW" OR "THHN" COPPER RUN IN CONDUIT.
3. PROVIDE A SEPARATE NEUTRAL AND GROUND CONDUCTOR FOR EACH 120 VOLT CIRCUIT PROVIDED FROM PANEL "CP" PANEL "CP" SHALL BE USED TO SUPPLY ONLY REGISTER EQUIP
4. ALL GROUND CONNECTORS SHALL BE ISOLATED (PURE-GROUND ONLY) AND SHALL NOT BE GROUNDED TO ANY METAL ENCLOSURES.
5. THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS, RECEPTACLES, SWITCHES, ETC., TO IDENTIFY VOLTAGES AND FUNCTION.
6. PROVIDE RED NAMEPLATE STENCIL AS FOLLOWS: "FOR COMPUTER EQUIPMENT ONLY - NOT FOR GENERAL USE"

P.O.S. CASH REGISTER 120 VOLT WIRING

NOT TO SCALE

NY ENGINEERS
382 NE 191st ST, SUITE
49674, MIAMI, FL 33179
www.ny-engineers.com

NO.	DESCRIPTION	DATE
0	FOR PERMIT	12.06.24
1	TJX REVIEW COMMENTS 1	02.24.25
2	TJX REVIEW COMMENTS 2	03.18.25

HomeGoods

ELECTRICAL DETAILS

Deal Type	J0
Store Number	J4
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

E5

Scale: As indicated

PLUMBING REQUIREMENTS

THE WORK INCLUDES MODIFICATION TO THE EXISTING PLUMBING SYSTEM AND PROVIDING NEW MATERIALS, FITTINGS AND ACCESSORIES NECESSARY FOR A COMPLETE FUNCTIONING PLUMBING SYSTEM. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND/OR ORDINANCES AND IS SUBJECT TO INSPECTION.

HOOK-UP CHARGES, PERMITS AND ALL OTHER EXPENSES RELATED TO A COMPLETE AND FUNCTIONING PLUMBING SYSTEM ARE INCLUDED AS A PART OF THIS SECTION.

THE INTENT OF THE DRAWINGS IS TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS FOR PLUMBING WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, FIXTURES AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURER'S STANDARD ROUGH-IN DRAWINGS FOR PLUMBING FIXTURE INSTALLATION REQUIREMENTS. COMPLY WITH ALL APPLICABLE ADA INSTALLATION REQUIREMENTS.

COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE.

PIPING SYSTEMS – GENERAL: ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES AND SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK SUCH AS DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC UNION. ALL HANGERS SHALL BE COMPATIBLE WITH PIPING MATERIAL TO PREVENT CORROSION.

PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PLUMBING SYSTEM'S FUNCTIONING AS INDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED.

FIXTURES/EQUIPMENT FURNISHED BY OTHERS: PLUMBING CONTRACTOR SHALL PROVIDE UTILITY CONNECTIONS REQUIRED SUCH AS WATER, GAS, SUPPLIES, WASTE OUTLET, TRAPS, ETCETERAS AT ALL PLUMBING TYPE FIXTURES OR EQUIPMENT FURNISHED BY OWNER, GENERAL CONTRACTOR, EQUIPMENT SUPPLIER, ETCETERA, INCLUDED ARE STOP VALVES, ESCUTCHEONS, AND CHROME PLATED BRASS TUBING WITH COMPRESSION FITTINGS.

SANITARY SEWER PIPING: PROVIDE ALL DRAINS AND PIPING WITHIN THE PROJECT SPACE WITH CONNECTION TO THE EXISTING DRAINAGE SYSTEMS ON-SITE. SANITARY DRAINAGE PIPING ABOVE FLOOR SHALL BE ABS/PVC PLASTIC PIPE, WITH SOLVENT WELD FITTINGS, OR HUBLESS CAST-IRON PIPE AND FITTINGS AND CONNECTIONS. SANITARY DRAINAGE PIPING BELOW GRADE SHALL BE ABS/PVC PLASTIC PIPE WITH SOLVENT WELD FITTINGS, OR SERVICE-WEIGHT HUB AND SPIGOT TYPE CAST-IRON WITH NEOPRENE GASKET JOINT SYSTEM. NO ABS/PVC PLASTIC PIPING IS ALLOWED WITHIN THE CEILING VOIDS IF USED FOR NON-DUCTED RETURN AIR PLENUM. ALL DRAINAGE PIPING SHALL BE UNIFORMLY PITCHED AT 1/4" PER FOOT FOR PIPE SIZES 2" AND SMALLER, 1/8" PER FOOT FOR PIPE SIZES 3" TO 6" AND 1/16" PER FOOT FOR PIPE SIZES 8" OR LARGER, UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS, OR INDICATED ON THE DRAWINGS.

SANITARY VENT PIPING: PROVIDE A COMPLETE SYSTEM OF ABS/PVC PLASTIC PIPE, WITH SOLVENT WELD FITTINGS, OR STANDARD WEIGHT CAST IRON NO-HUB PIPE AND FITTINGS. NO ABS/PVC PIPING IS ALLOWED WITHIN THE CEILING VOIDS IF USED FOR NON-DUCTED RETURN AIR PLENUMS. THE VENT SYSTEM SHALL BE CARRIED THROUGH THE ROOF WITH APPROPRIATE FLASHING.

CONDENSATE AND INDIRECT DRAIN PIPING: TYPE M COPPER TUBING UP TO 1" ID, TYPE DWV COPPER TUBING AND FITTINGS FOR 1-1/4" AND LARGER SIZES.

STORM WATER PIPING: PROVIDE ALL STORM DRAINS AND PIPING WITHIN THE PROJECT SPACE WITH CONNECTION TO THE EXISTING STORM SYSTEMS ON-SITE. STORM PIPING ABOVE FLOOR SHALL BE ABS/PVC PLASTIC PIPE, WITH SOLVENT WELD FITTINGS, OR HUBLESS CAST-IRON PIPE AND FITTINGS AND CONNECTIONS. STORM PIPING BELOW GRADE SHALL BE ABS/PVC PLASTIC PIPE, WITH SOLVENT WELD FITTINGS, OR SERVICE-WEIGHT HUB AND SPIGOT TYPE CAST-IRON WITH NEOPRENE GASKET JOINT SYSTEM. NO ABS/PVC PLASTIC PIPING IS ALLOWED WITHIN THE CEILING VOIDS IF USED FOR NON-DUCTED RETURN AIR PLENUMS. ALL STORM PIPING SHALL BE UNIFORMLY PITCHED AT A MINIMUM OF 1/8" PER FOOT UNLESS OTHERWISE REQUIRED BY EXISTING CONDITIONS, OR INDICATED ON THE DRAWINGS.

CLEANOUTS: PROVIDE CLEANOUTS AT THE END OF EACH HORIZONTAL RUN, AND AT THE BASE OF ALL VERTICAL STORM, WASTE AND DRAIN PIPES. CLEANOUTS SHALL BE OF THE SAME SIZE AS THE PIPES THEY SERVE, CONFORMING TO CODE REQUIREMENTS. PROVIDE SUITABLE WALL OR FLOOR CLEANOUTS WITH ACCESSORIES TO OBSCURE FROM VIEW.

WATER DISTRIBUTION PIPING: LAYOUT WATER PIPING SO THAT THE ENTIRE SYSTEM CAN BE DRAINED. ABOVE GRADE HOT AND COLD WATER PIPING SHALL BE 1/2" MINIMUM TYPE L COPPER TUBING WITH WROUGHT COPPER FITTINGS AND SWEAT CONNECTIONS. BELOW GRADE HOT AND COLD WATER PIPING SHALL BE 1/2" MINIMUM TYPE K COPPER TUBING WITH WROUGHT COPPER FITTINGS, AND SWEAT CONNECTIONS. PROVIDE WATER HAMMER ARRESTERS AT EACH FIXTURE OR GROUP OF FIXTURES AS REQUIRED. INSTALL CHROME PLATED BRASS ESCUTCHEON PLATES AT ALL PENETRATIONS THROUGH FINISHED SURFACES (INCLUDING CABINET INTERIORS). USE LEAD FREE OR TIN-ANTIMONY SOLDER, 95/5 FOR ALL SWEAT FITTINGS OF COPPER PIPING.

PIPE INSULATION: RIDGE ONE-PIECE FIBERGLASS PIPE INSULATION WITH REQUIREMENTS COMPLYING WITH ASTM C 547, SELF-SEALING ADHESIVE LAP LONGITUDINAL JOINTS AND BUTT STRIPS FOR TRANSVERSE JOINTS. JACKETING SHALL CONFORM TO ASTM C 1136, TYPE I, MAXIMUM VAPOR TRANSMISSION RATING OF 0.02 PERM WHEN TESTED ACCORDING TO ASTM E 96, PROCEDURE A. (K VALVE) 0.25 BTU/IN/HR FT2 °F AT 75°F MEAN TEMPERATURE WITH A MINIMUM R-VALVE OF R4.

PROVIDE INSULATION THICKNESS AS INDICATED:
DOMESTIC COLD WATER PIPING 1" AND SMALLER: 1/2" THICKNESS.
DOMESTIC COLD WATER PIPING 1-1/4" – 2": 3/4" THICKNESS.
PLUMBING VENT PIPING WITHIN 6 FEET OF ROOF OUTLET: 1" THICKNESS.
STORM WATER PIPING: 1" THICKNESS.
OVERFLOW STORM WATER PIPING: 1" THICKNESS.
CONDENSATE PIPING: 1/2" THICKNESS.
DOMESTIC HOT WATER PIPING 2" AND SMALLER: 1" THICKNESS.
WATER AND WASTE PIPING BELOW HANDICAP LAVATORIES/SINKS.

PIPE INSULATION: FLEXIBLE, ONE PIECE, EXPANDED CLOSED-CELL ELASTOMERIC PIPE INSULATION WITH REQUIREMENTS COMPLYING WITH ASTM C 518, SELF-SEALING, WITH A MAXIMUM VAPOR TRANSMISSION RATING OF 0.20 PERM WHEN TESTED ACCORDING TO ASTM E 96. THERMAL CONDUCTIVITY (K VALVE) SHALL NOT EXCEED 0.27 BTU/IN/HR FT2 °F AT 75°F MEAN TEMPERATURE WITH A MINIMUM R-VALUE OF R3.7, AND INSULATION AND JACKET SHALL BE RATED FOR OPERATING TEMPERATURES FROM 40°F TO 180°F.

PROVIDE INSULATION THICKNESS AS INDICATED:
DOMESTIC COLD WATER PIPING 2" AND SMALLER: 1/2" THICKNESS.
DOMESTIC HOT WATER PIPING 2" AND SMALLER: 1/2" THICKNESS.
SANITARY PIPING 2" AND SMALLER: 1/2" THICKNESS.
CONDENSATE PIPING: 1/2" THICKNESS.

SHUTOFF VALVES WITH UNIONS SHALL BE PROVIDED FOR SERVICE TO EACH PLUMBING FIXTURE OR OTHER EQUIPMENT ITEM, TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT. PIPE LINE VALVES SHALL BE EQUAL TO CRANE SERIES "9200, QUARTER TURN BALL VALVE. CONSTRUCTION – TWO PIECE, BRONZE BODY, FULL PORTED, CHROME PLATED BRASS BALL, REPLACEABLE "TEFLON OR TFE" SEATS AND SEALS. RATING 150 PSI WSP, 600 PSI WOG. CONNECTIONS – SOLDER OR THREADED ENDS TO MATCH PIPING. STANDARDS COMPLIANCE – BRONZE OR BRASS VALVES: MSS-SP-110. WHEN SHUTOFF VALVE ARE PLACE IN THE CEILING THE VALVES WILL BE LOCATED AT A MAXIMUM OF 12" ABOVE THE CEILING, AND NOTHING SHALL BE PLACE BETWEEN THE CEILING ACCESS AND THE VALVES.

ACCESS PANELS SHALL BE PROVIDED WHERE CONCEALED CONTROL DEVICES, VALVES, ETCETERA ARE CONCEALED WITHIN WALLS. WHERE ACCESS FOR ADJUSTMENT AND MAINTENANCE IS POSSIBLE THROUGH LAY-IN SUSPENDED CEILINGS, ACCESS PANELS ARE NOT REQUIRED.

INSTALLATION: THOROUGHLY CLEAN ITEMS BEFORE INSTALLATION. CAP PIPE OPENINGS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION WILL PERMIT. SET FIXTURES LEVEL AND IN PROPER ALIGNMENT. INSTALL SUPPLIES IN PROPER ALIGNMENT WITH FIXTURES. INSTALL SILICONE SEALANT BETWEEN FIXTURES AND ADJACENT MATERIAL, FOR SANITARY JOINT, AND OMIT ESCUTCHEONS.

REPAIR EXISTING PLUMBING SYSTEM COMPONENTS DAMAGED BY CONSTRUCTION OPERATIONS AND RESTORE TO ORIGINAL CONDITIONS.

TEST WATER SYSTEM UNDER 150 PSIG HYDROSTATIC PRESSURE, FOR FOUR (4) HOURS MINIMUM. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.

TEST SANITARY DRAINAGE AND VENT SYSTEM BY FILLING WITH WATER, WITH ALL POINTS IN THE SYSTEM BEING SUBJECT TO PRESSURE OF AT LEAST 10' OF WATER. WATER LEVEL SHALL REMAIN STATIONARY FOR A PERIOD OF ONE HOUR, WITHOUT ANY PIPE OR JOINT LEAKAGE. IF TESTING INDICATES DEFICIENT REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED.

PROVIDE A COMPLETE GAS PIPING SYSTEM TO SERVE GAS FIRED HVAC EQUIPMENT AS NOTED ON THE DRAWINGS. PROVIDE EITHER THREADED STEEL OR MALLEABLE IRON PIPE WITH MALLEABLE FITTINGS OR WELDED STEEL. PROVIDE ALL UNIONS, SHUT-OFF VALVES AND DIRT LEGS REQUIRED BY NFPA-54 AND GOVERNING LOCAL CODES AND AT EACH GAS APPLIANCE CONNECTION. PROVIDE ALL TESTS, METERS, INSPECTIONS, HANGERS AND EQUIPMENT CONNECTIONS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.

PLUMBING FIXTURE SCHEDULE

TAG	DESCRIPTION	MANUF.	MODEL	COLOR	FITTINGS				CONNECTIONS		CONNECTIONS		MAX. WATER CONSUMPTION	REMARKS
					TYPE	MANUF.	MODEL	FINISH	WASTE	VENT	HOT	COLD		
WC-1	WATER CLOSET (ADA)	AMERICAN STANDARD	AFWALL 2257.101	WHITE	FLUSH VALVE	SLOAN	SINGLE FLUSH G2 8111-1.6	CHROME	4"	2"	–	1"	1.6 GPF	WALL CARRIER, SENSOR OPERATED FLUSH VALVE; OLSONITE MODEL 95SSCT OPEN FRONT SEAT LESS COVER; ADA HEIGHT
WC-2	WATER CLOSET	AMERICAN STANDARD	AFWALL 2257.101	WHITE	FLUSH VALVE	SLOAN	SINGLE FLUSH G2 8111-1.6	CHROME	4"	2"	–	1"	1.6 GPF	WALL CARRIER, SENSOR OPERATED FLUSH VALVE; OLSONITE MODEL 95SSCT OPEN FRONT SEAT LESS COVER.
UR-1	URINAL (ADA)	AMERICAN STANDARD	WASHBROOK 6590.001	WHITE	FLUSH VALVE	SLOAN	OPTIMA 62-8186-0.5	CHROME	2"	1-1/2"	–	3/4"	0.5 GPF	WALL CARRIER, SENSOR OPERATED FLUSH VALVE; ADA HEIGHT, 17" MAX
LAV-1	COUNTER LAVATORY	AMERICAN STANDARD	AQUALYN 0476.028	WHITE	FAUCET	SLOAN	OPTIMA EBF-650	CHROME	1-1/2"	1-1/2"	3/8"	3/8"	0.5 GPM	SENSOR OPERATED FAUCET
KS-1	SINK	ELKAY	LUSTERTONE LRAD172055	STAINLESS STEEL	FAUCET	KOHLER	K-30613	CHROME	1-1/2"	1-1/2"	3/8"	3/8"	1.5 GPM	PROVIDE WITH 1.5 GPM AERATOR
MB-1	MOP BASIN	MUSTEE	63M	MOLDED FIBERGLASS	FAUCET	MUSTEE	63.600A	CHROME	3"	1-1/2"	1/2"	1/2"	1.5 GPM	WALL MOUNTED FAUCET WITH VACUUM BREAKER, WALL BRACE AND PAIL HOOK, 65.700 BRACKET, 65.600 MOP HANGER.
EWC-1	ELECTRIC WATER COOLER	OASIS	PG8EBFSL	–	–	–	–	–	1-1/2"	1-1/2"	–	3/8"	8.0 GPH	HI/LOW ADA COMPLIANT 1/4 HP, 120V
EW-1	EYE WASH	GUARDIAN	G1814	–	–	–	–	–	1-1/2"	1-1/2"	–	–	1.8 GPM	STAINLESS STEEL BOWL, PROVIDED WITH GUARDIAN G6020 THERMOSTATIC MIXING VALVE, FACTORY SET TO 90°F (re:SPECS)
FD-1	FLOOR DRAIN	JAY R. SMITH	2005	–	–	–	–	–	3"	1-1/2"	–	–	–	CAST IRON BODY; 6" ADJUSTABLE STRAINER; BRASS FINISH; 1/2" TRAP PRIMER CONNECTION
FCO	FLOOR CLEANOUT	JAY R. SMITH	4020 SERIES	–	–	–	–	–	SEE PLAN	–	–	–	–	CAST IRON BODY; ADJUSTABLE ROUND BRASS FINISH TOP; GASKET SEAL
WCO	WALL CLEANOUT	JAY R. SMITH	4402 SERIES	–	–	–	–	–	SEE PLAN	–	–	–	–	CAST IRON BODY WITH ROUND CHROME PLATED COVER
TMV-1	THERMOSTATIC MIXING VALVE	SYMMONS	7-225-CK-MS	–	–	–	–	–	–	–	1/2"	1/2"	–	WALL CABINET; MOUNT IN ACCESSIBLE LOCATION BELOW SINK; SET AT 105°F; ASSE 1070
TPV-1	TRAP PRIMER VALVE	PRECISION PLUMBING PRODUCTS	P1-500	–	–	–	–	–	–	–	–	1/2"	–	DU-U DISTRIBUTION UNIT
TPV-2	TRAP PRIMER VALVE	PRECISION PLUMBING PRODUCTS	P2-500	–	–	–	–	–	–	–	–	1/2"	–	
FPWH-1	FREEZEPROOF WALL HYDRANT	JAY R. SMITH	5509QT	–	–	–	–	–	–	–	–	3/4"	–	NON-FREEZE; VACUUM BREAKER; 1/4-TURN KEY HANDLE; STAINLESS STEEL BOX; NICKEL BRONZE COVER

WATER HEATER SCHEDULE

TAG	DESCRIPTION	MANUF.	MODEL	CAPACITY (GAL.)	RECOVERY (GPH) 80°F RISE	ELECTRICAL		REMARKS
						KW	V/PH	
WH-1	ELECTRIC WATER HEATER	STATE	PATRIOT PCE 20 10MSA	20	23	4.5	208/1	1,2

REMARKS:
1. PROVIDE WITH TEMPERATURE/PRESSURE RELIEF VALVE
2. PROVIDE WITH ARMTROL ST-5 EXPANSION TANK

RECIRCULATING PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	GPM	TOTAL HEAD FT.	QUANTITY	VOLTAGE	PHASE	WATTS	AMPS	NOTES
RCP-1	GRUNDFOS	UP-18 B5	2	13	1	115	1	85	0.74A	1

NOTES: 1. RECIRCULATING PUMP: BRONZE BODY RECIRCULATING PUMP WITH AUTO ADAPT VARIABLE SPEED MOTOR. INSTALL NEAR WATER HEATER PER MANUFACTURERS INSTRUCTIONS. PROVIDE WIT ALPHA 3 PRONG PLUG AND COORDINATE WITH ELECTRICAL CONTRACTOR. PROVIDE WITH HONEYWELL L6006C SURFACE MOUNT AQUASTAT SET TO 5F BELOW WATER OPERATING TEMPERATURE

WSFU CALCULATION

VIRGINIA PLUMBING CODE

FIXTURE	DESCRIPTION	HOT	QUAN	TOTAL – HOT	COLD	QUAN	TOTAL – COLD
WC-1/2	FLUSH VALVE TOILET	–	–	–	10	3	30
UR-1	URINAL	–	–	–	5	1	5
EWC-1	ELECTRIC WATER COOLER	–	–	–	0.25	1	0.25
FPWH-1	WALL HYDRANT	–	–	–	1	2	2
MB-1	MOP BASIN	2.25	1	2.25	2.25	1	2.25
LAV-1	LAVATORY	1.5	4	6	1.5	4	6
KS-1	KITCHEN SINK	1	1	1	1	1	1
EW-1	EYE WASH	1	1	1	1	1	1
TOTALS			7	10.25 WSFU 15.4 GPM 1" HW		12	47.5 WSFU 50 GPM (FLUSH VALVE) 2" CW

DFU CALCULATION– SANITARY

VIRGINIA PLUMBING CODE

FIXTURE	DESCRIPTION	DFU	QUAN	TOTAL
EWC-1	ELECTRIC WATER COOLER	0.5	1	0.5
MB-1	MOP BASIN (3")	5	1	5
WC-1/2	WATER CLOSET	4	3	12
UR-1	URINAL	4	1	4
LAV-1	LAVATORY	1	4	4
KS-1	KITCHEN SINK	2	1	2
EW-1	EYE WASH	3	1	3
FD-1	FLOOR DRAIN (3")	5	3	15
TOTAL				45.5 DFU 4" SAN.

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0	FOR PERMIT	12.06.24
1	TJX REVIEW COMMENTS	02.24.25
2	TJX REVIEW COMMENTS	03.18.25

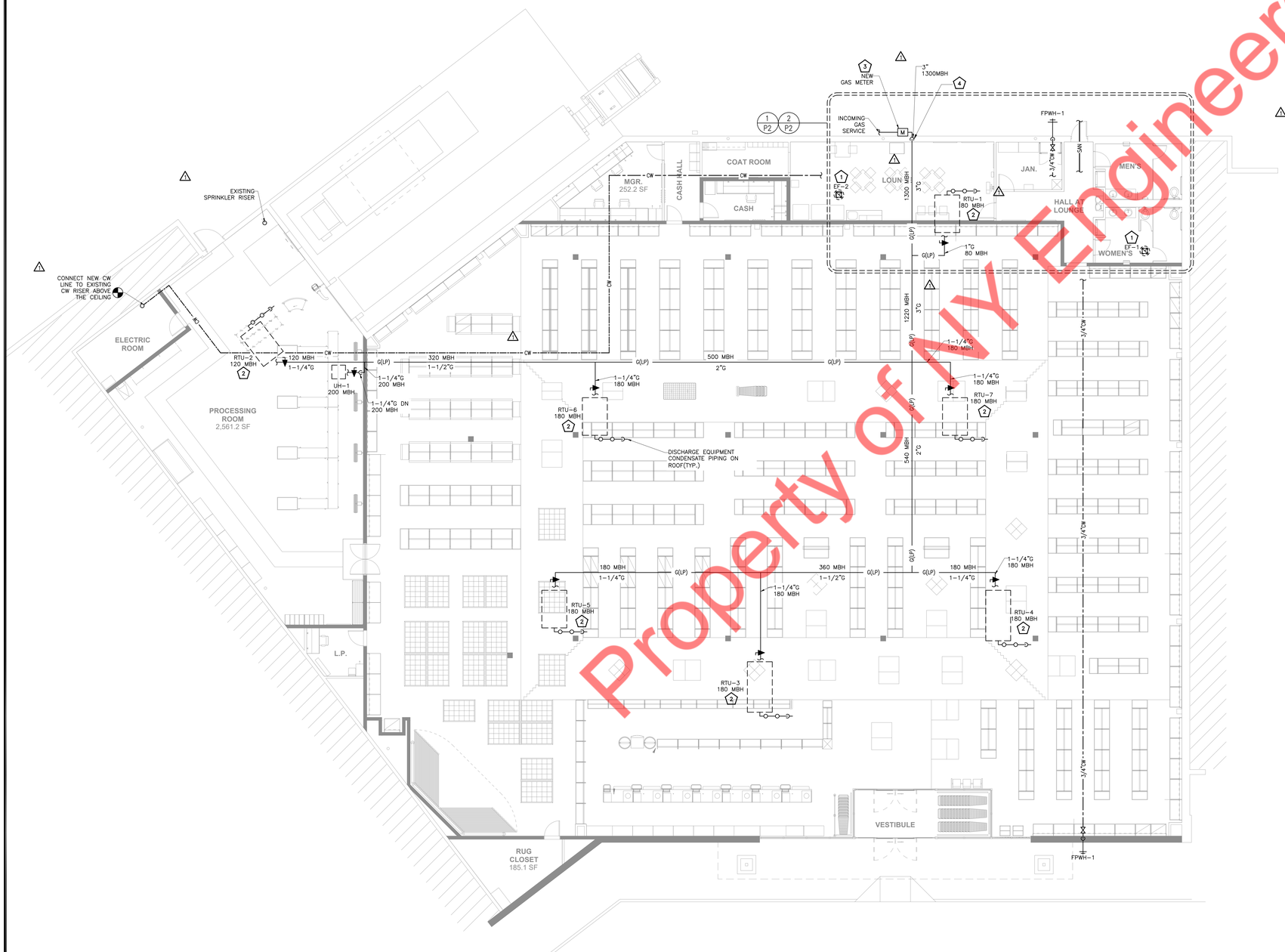
HomeGoods

PLUMBING NOTES & SCHEDULES

Deal Type	
Store Number	
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

P0

Scale: As indicated



PLAN KEYED NOTES

1. MECHANICAL EQUIPMENT FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR SHOWN FOR REFERENCE ONLY.
2. MECHANICAL EQUIPMENT FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR. PROVIDE ALL FINAL PIPING CONNECTIONS, REFER TO DETAILS SHEET P.3.
3. NEW GAS METER/REGULATOR SET BY UTILITY COMPANY. COORDINATE ALL REQUIREMENTS WITH UTILITY COMPANY. UNDERGROUND GAS SERVICE BY UTILITY COMPANY. MAKE FINAL CONNECTION OF CUSTOMER GAS PIPING TO GAS METER, VERIFY EXACT LOCATION.
4. GAS PIPING UP WALL AND OVER PARAPET (IF PRESENT). SECURELY FASTEN PIPING TO WALL, PAINT TO MATCH.

PLUMBING SYMBOLS AND LEGEND

ABBREVIATIONS:

AFF/AFG	ABOVE FINISHED FLOOR/GRADE
BFP	BACK FLOW PREVENTER
FCO	FLOOR CLEANOUT
FFCO/FGCO	FLUSH FLOOR/GRADE CLEANOUT
FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR
IW	INDIRECT WASTE
PC	PLUMBING CONTRACTOR
RI	ROUGH-IN
TYP	TYPICAL
UNO	UNLESS NOTES OTHERWISE
VTR	VENT THRU ROOF
WCO	WALL CLEANOUT
(E)	EXISTING

GENERAL REFERENCE/NOTATIONS:

	CONNECT TO EXISTING
3	TAGGED NOTE DESIGNATION
2	REVISION DESIGNATION
WH-1	EQUIPMENT DESIGNATION
1/P3	OR 2/P3 DETAIL OR SECTION REFERENCE

LINETYPES:

CW	COLD WATER(CW)
HW	HOT WATER(HW)
HWR	HOT WATER RETURN(HWR)
G(LP)	LOW PRESSURE(LESS THAN 2PSIG) GAS
V	PLUMBING VENT (V)
SAN	SANITARY WASTE (SAN)-BELOW SLAB/GRADE

PIPE SYMBOLS:

	PIPE TURNING UP
	PIPE TURNING DOWN
	TEE TURNING UP
	TEE TURNING DOWN
	SHUTOFF VALVE(BALL TYPE)
	GAS SHUTOFF COCK

NOTES:

1. REFER TO PLANS, EQUIPMENT SCHEDULES AND SPECIFICATIONS FOR DETAILED INFORMATION REGARDING ALL EQUIPMENT AND DEVICES.
2. PLUMBING CONTRACTOR SHALL PROVIDE ALL EQUIPMENT AND DEVICES UNLESS SPECIFICALLY NOTES OTHERWISE.

GAS USAGE SCHEDULE

ITEM	CAPACITY
RTU-1	80,000 BTUH
RTU-2	120,000 BTUH
RTU-3	180,000 BTUH
RTU-4	180,000 BTUH
RTU-5	180,000 BTUH
RTU-6	180,000 BTUH
RTU-7	180,000 BTUH
UH-1	200,000 BTUH
TOTAL LOAD	1,300,000 BTUH

NOTES:

1. GAS PIPING SIZED AS PER 2021 VIRGINIA FUEL GAS CODE
2. LESS THAN 2PSIG DELIVERY PRESSURE
3. 0.5" W.C. PRESSURE DROP
4. TOTAL EQUIVALENT LENGTH = 250'

01 OVERALL PLUMBING PLAN
SCALE: 1/8" = 1'-0"

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2	TJX REVIEW COMMENTS	03.18.25

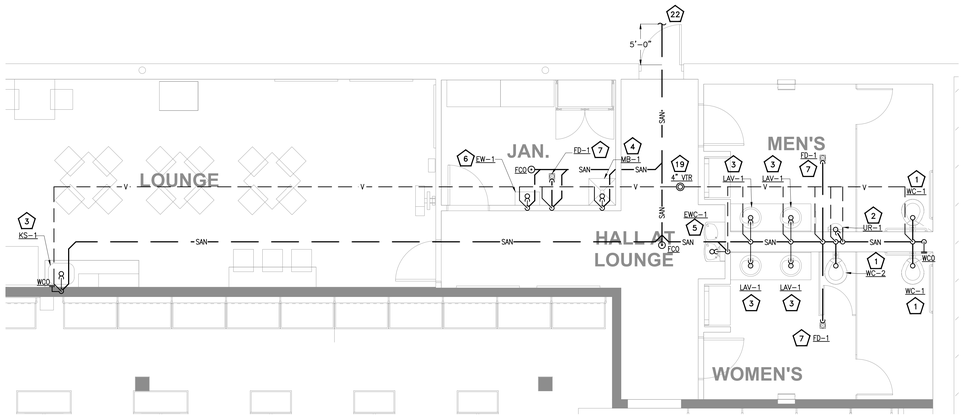
HomeGoods

OVERALL PLUMBING PLAN

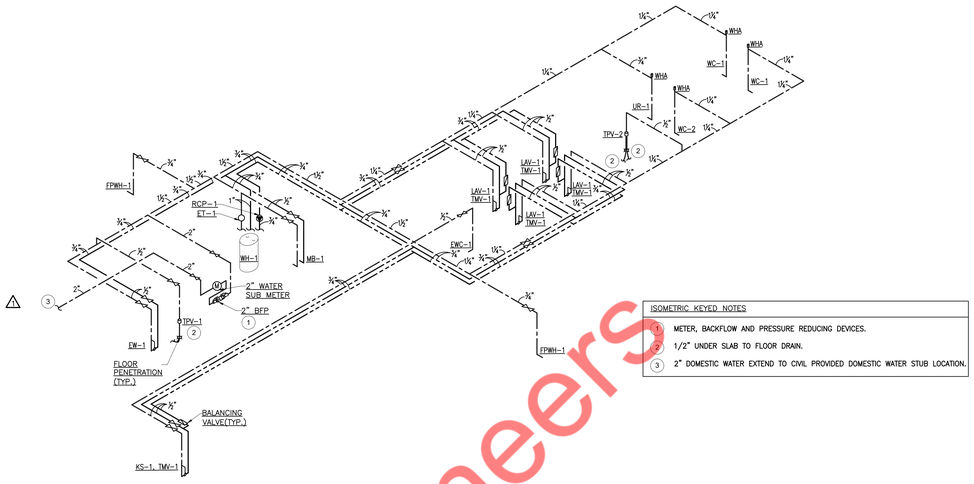
Deal Type	
Store Number	
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

P1

Scale	As indicated



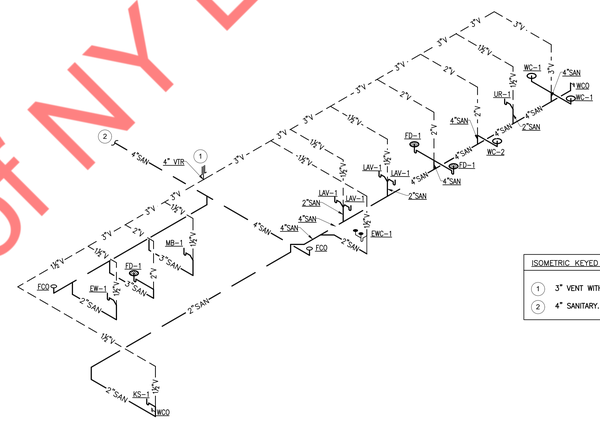
02 ENLARGED WASTE/VENT PLAN
SCALE: 1/4" = 1'-0"



ISOMETRIC KEYED NOTES

1. METER, BACKFLOW AND PRESSURE REDUCING DEVICES.
2. 1/2" UNDER SLAB TO FLOOR DRAIN.
3. 2" DOMESTIC WATER EXTEND TO CIVIL PROVIDED DOMESTIC WATER STUB LOCATION.

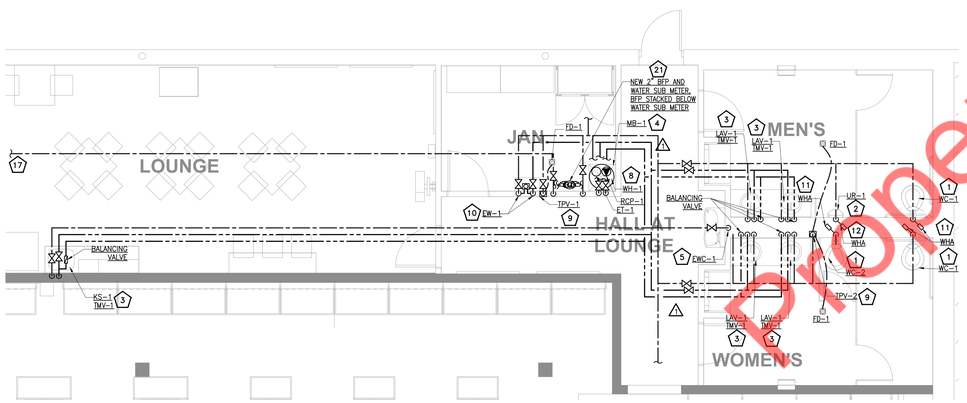
04 DOMESTIC WATER ISOMETRIC DIAGRAM
SCALE: NONE



ISOMETRIC KEYED NOTES

1. 3" VENT WITH INCREASER TO 4" VENT THRU ROOF
2. 4" SANITARY. EXTEND TO CIVIL PROVIDED SANITARY STUB LOCATION

03 WASTE AND VENT ISOMETRIC DIAGRAM
SCALE: NONE



01 ENLARGED WATER PLAN
SCALE: 1/4" = 1'-0"

PLAN KEYED NOTES

1. 4" WASTE, 2" VENT, 1-1/4" CW TO WATER CLOSET.
2. 2" WASTE, 1-1/2" VENT, 3/4" CW TO URINAL.
3. 2" WASTE, 1-1/2" VENT, 1/2" CW, 1/2" HW TO LAVATORY, SINK.
4. 3" WASTE, 1-1/2" VENT, 1/2" CW, 1/2" HW TO MOP BASIN.
5. 2" WASTE, 1-1/2" VENT, 1/2" CW, TO ELECTRIC WATER COOLER.
6. 2" WASTE, 1-1/2" VENT TO EYE WASH.
7. 3" WASTE, 2" VENT TO FLOOR DRAIN.
8. 1" CW, 1" HW TO WATER HEATER. PROVIDE PRESSURE RELIEF AND DRAIN LINES AS REQUIRED FROM WATER HEATER INTO MOP BASIN.
9. 1/2" CW TO TPV, AND DOWN TO FLOOR DRAIN(S).
10. STUB 1/2" CW & HW OUT OF WALL AND ELBOW UP WITH SHUT-OFF VALVE AND CONNECT TO EMERGENCY EYEWASH THERMOSTATIC MIXING VALVE INLETS. PROVIDE 1/2" STAINLESS STEEL BRAIDED HOSE TO CONNECT THERMOSTATIC MIXING VALVE OUTLET TO EMERGENCY EYEWASH SUPPLY CONNECTION. FIELD VERIFY THE EXACT LENGTH OF BRAIDED HOSE REQUIRED. MOUNT EMERGENCY EYEWASH BRACKET AND MIXING VALVE ON WALL PER MANUFACTURER'S RECOMMENDATIONS AND IN ACCORDANCE WITH APPLICABLE CODES.
11. PROVIDE BRANCH LINE WITH WATER HAMMER ARRESTOR AT DROP TO FIXTURE – 10 FIXTURE UNITS – REFER TO DETAIL.
12. PROVIDE BRANCH LINE WITH WATER HAMMER ARRESTOR AT DROP TO FIXTURE – 5 FIXTURE UNITS – REFER TO DETAIL.
13. NOT USED.
14. NOT USED.
15. NOT USED.
16. NOT USED.
17. CONNECT NEW 2" CW PIPING TO EXISTING WATER SERVICE LINE. FIELD VERIFY EXACT LOCATION OR COORDINATE WITH SITE PLAN.
18. NOT USED.
19. 4" VENT THRU ROOF WITH INCREASER.
20. NOT USED.
21. PROVIDE WATER METER, BACKFLOW PREVENTION AND PRESSURE REDUCTION TO COMPLY WITH ALL CODES AND UTILITY REGULATIONS. REFER TO DETAIL 10/P3.
22. EXTEND SANITARY LINE TO 5'-0" OUTSIDE BUILDING, CONNECT TO EXISTING SANITARY LINE. FIELD VERIFY EXACT LOCATION OR COORDINATE WITH SITE PLANS.

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2	TJX REVIEW COMMENTS	03.18.25

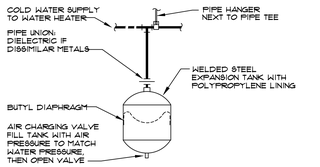
HomeGoods

ENLARGED PLANS & RISERS

Deal Type	
Store Number	
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

P2

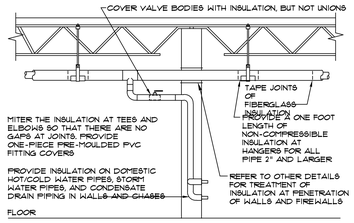
Scale	As indicated



PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. MAKE PIPE SAME SIZE AS TANK FITTING. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION PROCEDURE. VERIFY PROPER OPERATION WHEN INSTALLED.

EXPANSION TANK INSTALLATION SHALL OCCUR ONLY WHEN THERE IS A BACKFLOW PREVENTION DEVICE INSTALLED WITHIN THE TENANT SPACE WATER SYSTEM OR BUILDING WATER SYSTEM.

12 P3 EXPANSION TANK (ET-1)
N.T.S

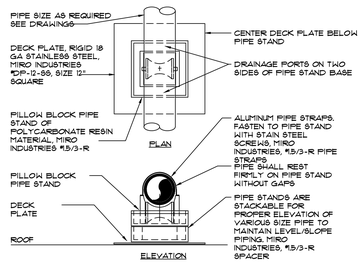


MITER THE INSULATION AT TEES AND ELBOWS SO THAT THERE ARE NO GAPS AT JOINTS. PROVIDE ONE-PIECE PRE-MOLDED PVC FITTING COVERS

PROVIDE INSULATION ON DOMESTIC HOT/COLD WATER PIPES, STORM WATER PIPES, AND CONDENSATE DRAIN PIPING IN WALLS AND CHASES

PROVIDE FIBERGLASS INSULATION WITH ALL-SERVICE JACKET WITH VAPOR BARRIER ON ALL COLD/HOT WATER PIPING AND CONDENSATE DRAIN PIPE. REFER TO SPECIFICATIONS FOR FURTHER INFORMATION REGARDING INSULATION. INSTALL ALL ITEMS PER SPECIFICATIONS AND MANUFACTURERS INSTRUCTIONS. MAINTAIN VAPOR BARRIER ON COLD PIPING BY MEANS OF SEALANT AND TAPE. FLAME-SPREAD AND SMOKE-DEVELOPED INDEXES SHALL NOT EXCEED 25/50. SEAL EXPOSED ENDS OF FIBERGLASS INSULATION WITH ADHESIVE MASTIC.

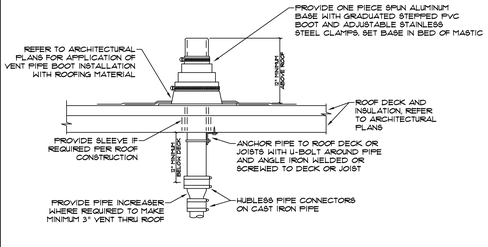
13 P3 PIPE INSULATION
N.T.S



PIPE STAND GOOD FOR 1/2" TO 3-1/2" STEEL PIPE SIZES ONLY.

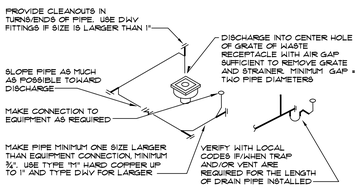
SUPPORT SPACING FOR PIPE SIZE: 1/2"=6'-0" ± 3/4" = 1"=8'-0" ± 1-1/4" AND LARGER=10'-0". PLACE DECK PLATES ON ROOFING. SET PIPE STAND TREE ON DECK PLATES. STACK PIPE STAND WITH SPACERS, WHERE REQUIRED TO ELEVATE PIPING. INSTALL GAS PIPE TO ALLOW FOR EXPANSION AND CONTRACTION. PRIMER COAT AND PAINT EXTERIOR GAS PIPE LIGHT GREEN COLOR.

14 P3 ROOF BLOCKING PIPE SUPPORT
N.T.S



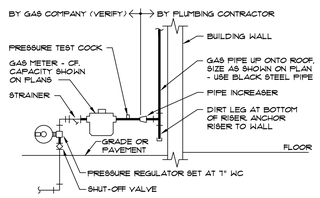
REFER TO PLANS FOR VTR PIPE SIZES AND LOCATIONS. LOCATE VTR A MINIMUM OF 20 FEET HORIZONTAL (UNLESS APPROVED BY ENGINEER PRIOR TO INSTALLATION) OR THREE FEET VERTICAL ABOVE ANY BUILDING OPENING OR FRESH AIR INTAKE, AND ONE FOOT FROM ANY VERTICAL SURFACE. PROVIDE 1" FIBERGLASS INSULATION WITH ALL-SERVICE JACKET ON VENT PIPE INSIDE BUILDING WITHIN SIX FEET OF VENT THRU ROOF LOCATION. VERIFY FLASHING AND COUNTERFLASHING WITH ROOFING CONTRACTOR.

15 P3 VENT THRU ROOF (VTR)
N.T.S



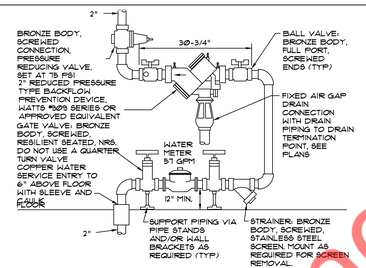
ROUTE PIPE INCONSPICUOUSLY AND UNOBTRUSIVELY. HANG PIPE AS REQUIRED. DO NOT INSULATE INDIRECT DRAIN PIPE WHEN INSTALLED EXPOSED IN FOOD SERVICE FACILITY. REFER TO LOCAL CODES FOR FURTHER INFORMATION.

8 P3 INDIRECT DRAIN
N.T.S



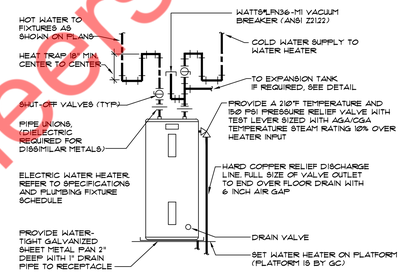
VERIFY REQUIREMENTS FOR METERING AND PIPING WITH GAS COMPANY. CONTRACTOR SHALL PAY ALL GAS COMPANY FEES FOR INSTALLATION. USE WELDED OR SCREWED PIPE AND FITTINGS PER PLUMBING SPECS.

9 P3 GAS SERVICE
N.T.S



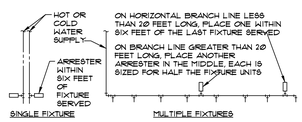
DETAIL SHOWS GENERAL SCHEMATIC REQUIREMENTS. INSTALL ITEMS FURNISHED BY WATER COMPANY, PAY ANY FEES REQUIRED BY WATER COMPANY. FURNISH AND INSTALL ITEMS NOT PROVIDED BY THE WATER COMPANY. PROVIDE BACKFLOW PREVENTER OF TYPE AND MANUFACTURER APPROVED BY LOCAL AUTHORITIES. PROVIDE PRESSURE REDUCING VALVE ONLY IF PRESSURE EXCEEDS 80 PSI - VERIFY. STRAINER AND REDUCING VALVE MAY BE INSTALLED IN VERTICAL PIPE IF SPACE LIMITATIONS REQUIRE IT. CLEAN STRAINER BEFORE TURNING BUILDING OVER TO OWNER. PROVIDE ANY REQUIRED CERTIFICATION OF TESTING OF THE BACKFLOW PREVENTER TO LOCAL AUTHORITIES.

10 P3 DOMESTIC WATER SERVICE ENTER
N.T.S



PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST TO SUIT FIELD CONDITIONS. REFER TO FLOOR PLAN FOR PIPE SIZES. SET WATER HEATER THERMOSTAT AT 120° F. PROVIDE SEISMIC STRAP OR BRACING AND FLEXIBLE CONNECTORS TO WATER CONNECTIONS IF/AS REQUIRED BY LOCAL AUTHORITIES.

11 P3 WATER HEATER DETAIL (WH-1)
N.T.S

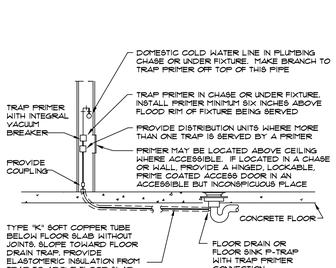


PDI SIZE	FIXTURE UNIT LOAD
AA	1-3
A	4-11
B	12-32
C	33-60
D	61-113
E	114-154

FIXTURE UNIT TABULATION		
FIXTURE	COLD	HOT
VALVE WATER CLOSET	10	-
URINAL	5	-
LAVATORY	1.5	1.5
SINK	2	2
MOP BASIN	3	3
DRINKING FOUNTAIN	Ø.5	-

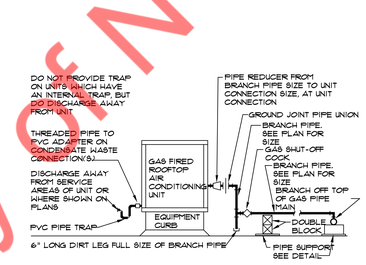
PC TO PROVIDE WATER HAMMER ARRESTERS BY SIOUX CHIEF, PRECISION PLUMBING PRODUCTS, WATTS OR APPROVED EQUIVALENT WITH PISTON AND O-RING CONSTRUCTION, HAVING PDI "WH-201, ASSE "1010 OR ANSI "A112.26.1M CERTIFICATION SIZE AND INSTALL PER PDI "WH-201 STANDARD OR MANUFACTURER'S INSTRUCTION. THE TABLES ABOVE ARE BASED ON THE SIOUX CHIEF PRODUCT LINE. IF PRESSURE IS IN EXCESS OF 65 PSIG THEN UPSIZE THE ARRESTER BY ONE (EXAMPLE: AN 'A' ARRESTER WOULD BECOME A 'B' ARRESTER.)

4 P3 WATER HAMMER ARRESTERS
N.T.S



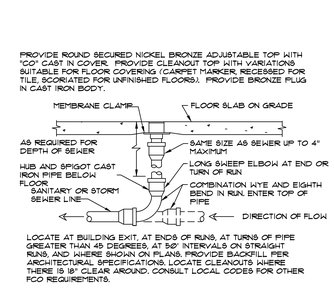
TRAP PRIMER MAY BE LOCATED ABOVE CEILING WHERE ACCESSIBLE.

5 P3 TRAP PRIMER
N.T.S



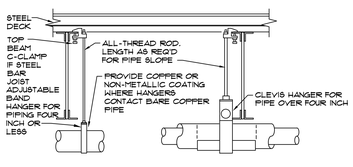
PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED.

6 P3 ROOFTOP UNIT CONNECTIONS
N.T.S



LOCATE AT BUILDING EXIT, AT ENDS OF RUNS, AT TURNS OF PIPE GREATER THAN 45 DEGREES, AT 50' INTERVALS ON STRAIGHT RUNS, AND WHERE SHOWN ON PLANS. PROVIDE BACKFILL PER ARCHITECTURAL SPECIFICATIONS. LOCATE CLEANOUTS WHERE THERE IS 18" CLEAR AROUND. CONSULT LOCAL CODES FOR OTHER FCO REQUIREMENTS.

7 P3 FLOOR CLEANOUT
N.T.S



DO NOT HANG PIPE FROM BOTTOM CHORD OF JOISTS.

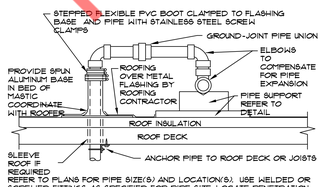
PROVIDE GALVANIZED STEEL SADDLE FOR ALL INSULATED PIPE LARGER THAN 3/4". VERIFY INSULATION THICKNESS WHEN SIZING HANGERS.

PROVIDE UPPER ATTACHMENT AS REQUIRED FOR CASES NOT SHOWN HERE. DO NOT INSTALL HANGER INSIDE INSULATION OR OTHERWISE PENETRATE VAPOR BARRIER. DO NOT HANG ONE PIPE FROM ANOTHER EXCEPT IN CHASES. TRAPEZE HANGERS MAY BE USED FOR MULTIPLE PARALLEL PIPES.
HANGER SPACING FOR PIPE SIZE:

COPPER:	4": 12'-Ø"	3": 11'-Ø"	2½": 10'-Ø"
	2": 9'-Ø"	1-1/2": 8'-Ø"	1-1/4": 7'-Ø"
	1": 6'-Ø"	¾": 6'-Ø"	½": 5'-Ø"
CAST IRON:	10'-Ø" AND ONE NEAR ALL JOINTS.		
STEEL:	4": 14'-Ø"	3": 2'-Ø"	2-1/2": 11'-Ø"
	2": 10'-Ø"	1-1/2": 9'-Ø"	1": 7'-Ø"
	¾": 6'-Ø"	½"=5'-Ø".	

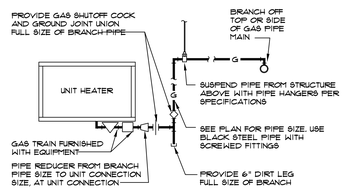
LOCATE HANGERS AS CLOSE AS POSSIBLE TO TURNS AND TEES OF PIPE. PROVIDE SUPPLEMENTARY STEEL STRUTS BETWEEN JOISTS IF REQUIRED. LOCATE HANGERS TO TAKE LOAD OFF OF EQUIPMENT CONNECTIONS. ANCHOR WATER PIPE AGAINST SWAYING DUE TO CHANGES IN WATER VELOCITY. PROVIDE SEISMIC BRACING IF/AS REQUIRED BY LOCAL AUTHORITIES. CHAINS OR PERFORATED STRAP IRON OR STEEL IS NOT ACCEPTABLE. REFER TO CODES FOR FURTHER INFORMATION.

1 P3 PIPE HANGERS
N.T.S



REFER TO PLANS FOR PIPE SIZE(S) AND LOCATION(S). USE WELDED OR SCREWED FITTINGS AS SPECIFIED FOR PIPE SIZE. LOCATE PENETRATION MINIMUM 18" FROM ADJACENT WALLS.

2 P3 ROOF PENETRATION
N.T.S



FOLLOW MANUFACTURER'S RECOMMENDATIONS FROM EQUIPMENT INSTALLATION MANUAL. HANGER SPACING FOR PIPE SIZE: 4"=13'-3" 3"=12'-5" 2½"=11'-2" 2"=10'-2" 1½"=9'-2" 1¼"=8'-1" 1"=11'-3" ¾"=6'. PROVIDE WELDED PIPE AND FITTINGS ON CONCEALED PIPE. PIPING ARRANGEMENT SHOWN IS SCHEMATIC. ADJUST AS REQUIRED TO SUIT ACTUAL INSTALLATION CONDITIONS.

3 P3 UNIT HEATER CONNECTION
N.T.S

NY ENGINEERS
382 NE 191st ST, SUITE
49674, MIAMI, FL 33179
www.ny-engineers.com

NO.	DESCRIPTION	DATE
0	FOR PERMIT	12.06.24
1	TJX REVIEW COMMENTS	02.24.25
2	TJX REVIEW COMMENTS	03.18.25

HomeGoods

PLUMBING GENERAL DETAILS

Deal Type	
Store Number	
Date	11/19/24
Planned By	NYE
Criteria Set By	NYE
Checked By	NYE

P3

Scale: As indicated