

TENANT IMPROVEMENT

HomeGoods

Summit Orchards, Lot 4B
492 NW Chipman Rd
Lee's Summit, MO 64086



Permit/ Construction Set
November 08, 2019

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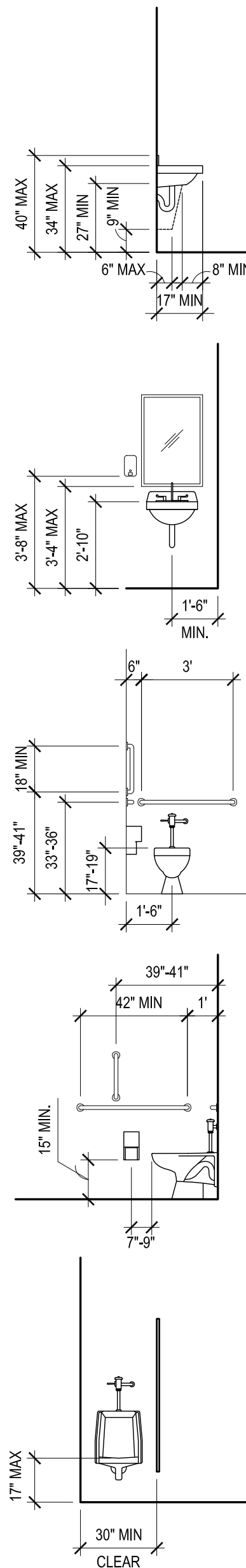
ARCHITECT

SLAGGIE ARCHITECTS, INC.
4600 MADISON AVENUE, SUITE 350
KANSAS CITY, MISSOURI 64112
PHONE: (816) 756-1958
FAX: (816) 756-1795

MEP ENGINEER

SMITH & BOUCHER
25501 WEST VALLEY PARKWAY
OLATHE, KS. 66061
PHONE: (913) 344-0033

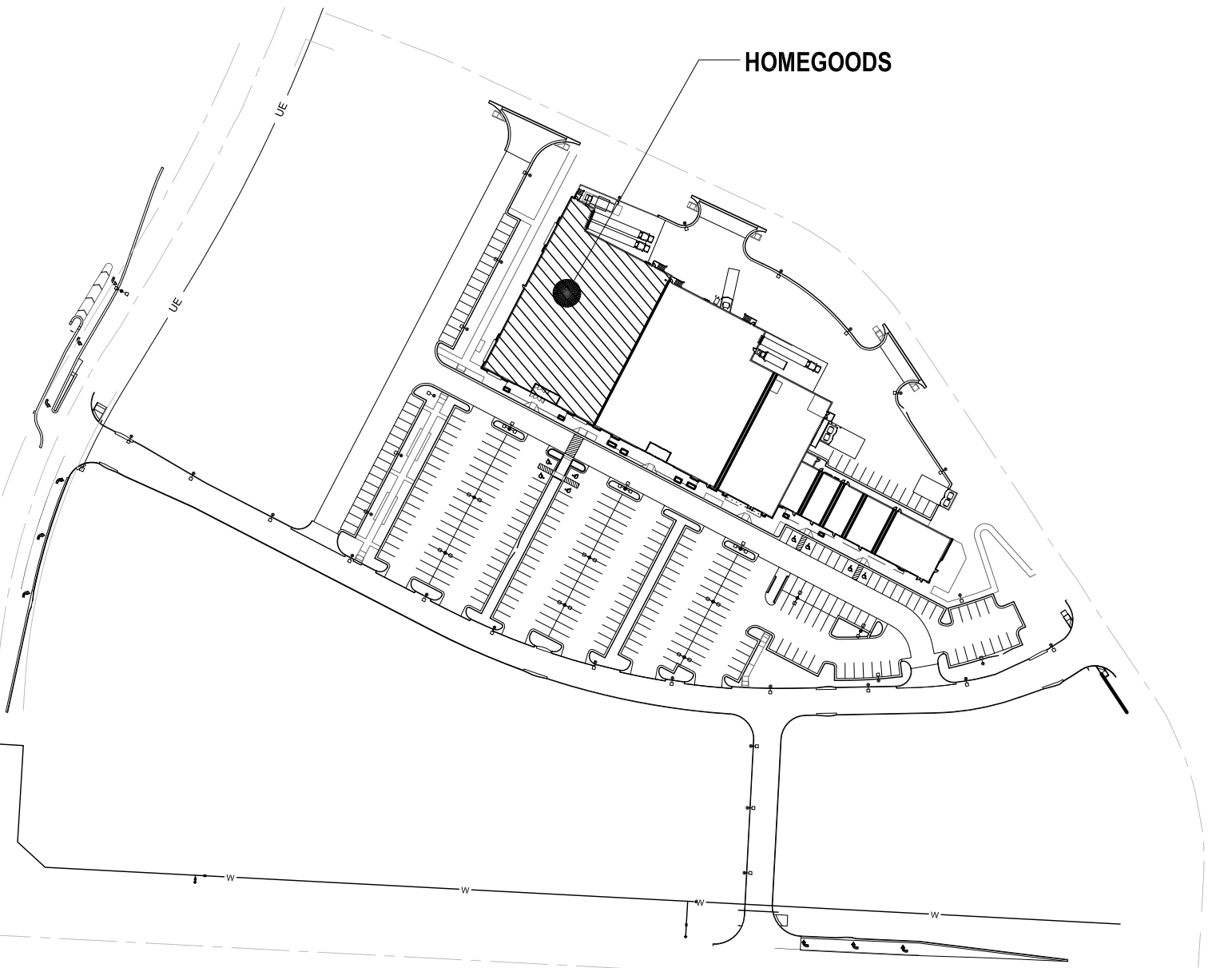
1. THE WORK INCLUDES THE FURNISHING OF ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR AND REASONABLY INCIDENTAL TO THE COMPLETION, IN PART OR IN WHOLE, OF THE WORK AS ILLUSTRATED AND DESCRIBED IN DRAWINGS AND OUTLINE SPECIFICATIONS AS PREPARED BY TXJ. ALL SUCH WORK IS TO BE DONE BY THE GENERAL CONTRACTOR UNLESS OTHERWISE NOTED.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS SHOWN ON DRAWINGS AT THE JOB SITE, AND SHALL NOTIFY TXJ IN WRITING OF ANY OMISSIONS, DISCREPANCIES, AND/OR CONFLICTS PRIOR TO SUBMITTAL OF BID OR BE RESPONSIBLE FOR THE SAME.
3. ALL WORK IS TO CONFORM TO THE REQUIREMENTS OF THE LOCAL AND STATE CODES, COORDINATE WITH THE OUTLINE SPECIFICATIONS.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING ALL REQUIRED BUILDING PERMITS AND FOR INSURING THAT ALL WORK CONFORMS TO APPLICABLE BUILDING CODES.
5. WHERE COLOR AND DESIGN SELECTIONS ARE REQUIRED, THE CONTRACTOR SHALL SUBMIT SAMPLES TO TXJ FOR APPROVAL AND SELECTION.
6. SHOP DRAWINGS SHALL BE SUBMITTED TO TXJ FOR APPROVAL, PRIOR TO FABRICATION OF ANY WORK SPECIFIED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FIELD DIMENSIONS AND PROPER INSTALLATION OF SAID WORK.
7. UNLESS OTHERWISE NOTED, IN THE TXJ OUTLINE SPECIFICATIONS, NO SUBSTITUTIONS.
8. THE GENERAL CONTRACTOR SHALL HAVE DIRECT CONTROL AND MANAGEMENT OF ALL CONTRACTORS AND SUB-CONTRACTORS AND BE RESPONSIBLE FOR THE SATISFACTORY OVERALL PERFORMANCE OF ALL HIS SUPPLIERS AND SUBCONTRACTORS AS WELL AS ALL ASSIGNED CONTRACTORS.
9. THE GENERAL CONTRACTOR IS TO RECEIVE, HANDLE, (STORE IF NECESSARY) AND BE RESPONSIBLE FOR ALL MATERIALS PROVIDED BY OTHERS. ALL MATERIALS SHALL BE ACCOUNTED FOR UPON RECEIPT. ANY MISSING OR DAMAGED PARTS SHALL BE REPORTED TO TXJ IMMEDIATELY.
10. ALL WORK IS TO BE NEW EXCEPT WHERE INDICATED AS EXISTING.
11. ALL WOOD TO BE FIRE RETARDANT.
12. RATINGS TO MEET REQUIREMENTS OF LOCAL, STATE AND FEDERAL CODES.
13. GENERAL CONTRACTOR TO TURN OVER THE PROJECT IN COMPLETE OPERATING CONDITION.
14. THE CONTRACTOR IS RESPONSIBLE FOR TURNING OVER THE PREMISES IN A CLEAN CONDITION READY FOR TXJ TO BEGIN OPERATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, CLEANING ALL WINDOWS (INSIDE AND OUT), MIRRORS, AND REMOVAL OF DUST FROM SURFACES AND FINAL VACUUMING OF CARPETS.
15. THE REFLECTED CEILING PLANK SHALL LOCATE LOCATION OF ALL EQUIPMENT AND LIGHTING. TXJ PROJECTED TO BE TO BE PROVIDED WITH ALL EQUIPMENT AND PROPOSED RESOLUTIONS. TXJ PROJECT MANAGER HAS THE RIGHT TO FINAL APPROVAL OF PROPOSALS.
16. FLOORING CONTRACTORS SHALL BE RESPONSIBLE FOR PROPER PREPARATION AND INSTALLATION OF NEW FLOORING FINISHES. PREPARATION INCLUDES ADEQUATE CURING TIME FOR THE MASTIC TO REACH PROPER THICKNESS TO SET NEW FLOORING FINISHES. REFER TO TXJ SPECIFICATION MANUAL FOR REQUIREMENTS FOR PREPARATION & TESTING.
17. FOR PURPOSES OF CLARITY, REFERENCES TO "C" REFERS TO THE CRITERIA DRAWINGS.



Location Map

M.F.C. A.F.F. AL	ABOVE FINISHED CEILING ABOVE FINISHED FLOOR ALUMINUM	M MATL MAX MECH MFR MIN MISC MTD MTL	MIRROR MATRIAL MAXIMUM MECHANICAL MANUFACTURER MINIMUM MISCELLANEOUS MOUNTED METAL
B.O. B.B. B.D. BLG B.LK BLKG	BY OTHERS BULLETIN BOARD BOARD BUILDING BLOCK BLOCKING	N.A. N.I.C. N.T.S. NAT.FIN.WD	NOT APPLICABLE NOT IN CONTRACT NOT TO SCALE NATURAL FINISH WOOD
C.H. C.R. CAB CLR COL COLLACQ. CONST CONT CR.PL	CEILING HEIGHT CASH REGISTER CABINET CLEAR COLUMN COLORED LACQUER CONSTRUCTION CONTINUOUS CHROMIUM PLATE	O.C. w/c O.D. OPNG OPP	ON CENTER OUTSIDE DIMENSION OPENING OPPOSITE
DIA DIM DITTO DR DTL DWG DWR	DIAMETER DIMENSION THE SAME-REPEAT DOOR DETAIL DRAWING DRAWER	+/- PART PARTN PLUD POL POL.PL.GL. P.O.S. PT PTD	PLUS OR MINUS PARTIAL PARTITION PLYWOOD POLISHED POLISHED PLATE GLASS POINT OF SALE PAINT PAINTED
ELEC EQ ELEV EWC EXG EXT	ELECTRIC EQUAL ELEVATION ELECTRIC WATER COOLER EXISTING EXTERIOR	R.H. REINF REMOV REQD REV RM	RIGHT HAND REINFORCED REMOVABLE REQUIRED REVISION ROOM
F.N. F.S. FXT FL FR	FULL SIZE FINISH FIXTURE FLOOR FITTING ROOM	S.C. S.F. S.S. SECT SFC SILDR SIP STD STL STL.STL. STRUC SUSP	SHOPPING CENTER SQUARE FEET SERVICE SINK SECTION SEWER SLIDING DOORS SPECIFICATION STANDARD STEEL STAINLESS STEEL STRUCTURAL SUSPENDED
G.C. G.H. GA G.F. GYPS.BD.	GENERAL CONTRACTOR GARMENT HANGER GAUGE GROUND FAULT INTERRUPT GLASS GYPSUM BOARD	T.R. TEL TYP	TIME RECORDER TELEPHONE TYPICAL
H.R. HD HDW HDWD HGT HORIZ	HANGNAIL HEAVY DUTY HARDWARE HARDWOOD HEIGHT HORIZONTAL	VERT	VERTICAL
I.D. IN L.L. LAMD. LAMD.PLAS.	INSIDE DIMENSION INTERIOR LEFT-HAND LANDLORD LAMINATED PLASTIC	W.C.	WALL COVERING WOOD

	DETAIL IDENTIFICATION DRAWING NUMBER
	ROOM NUMBER
	DOOR NUMBER
	ELEVATION NUMBER
	ELEVATION NUMBER
	FINISH NUMBER
	REVISION NUMBER
	BROKEN DIM. LINE
	NOT TO SCALE
	ANGLE
	AT
	CENTERLINE
	NUMBER
	PLATE



Site Plan

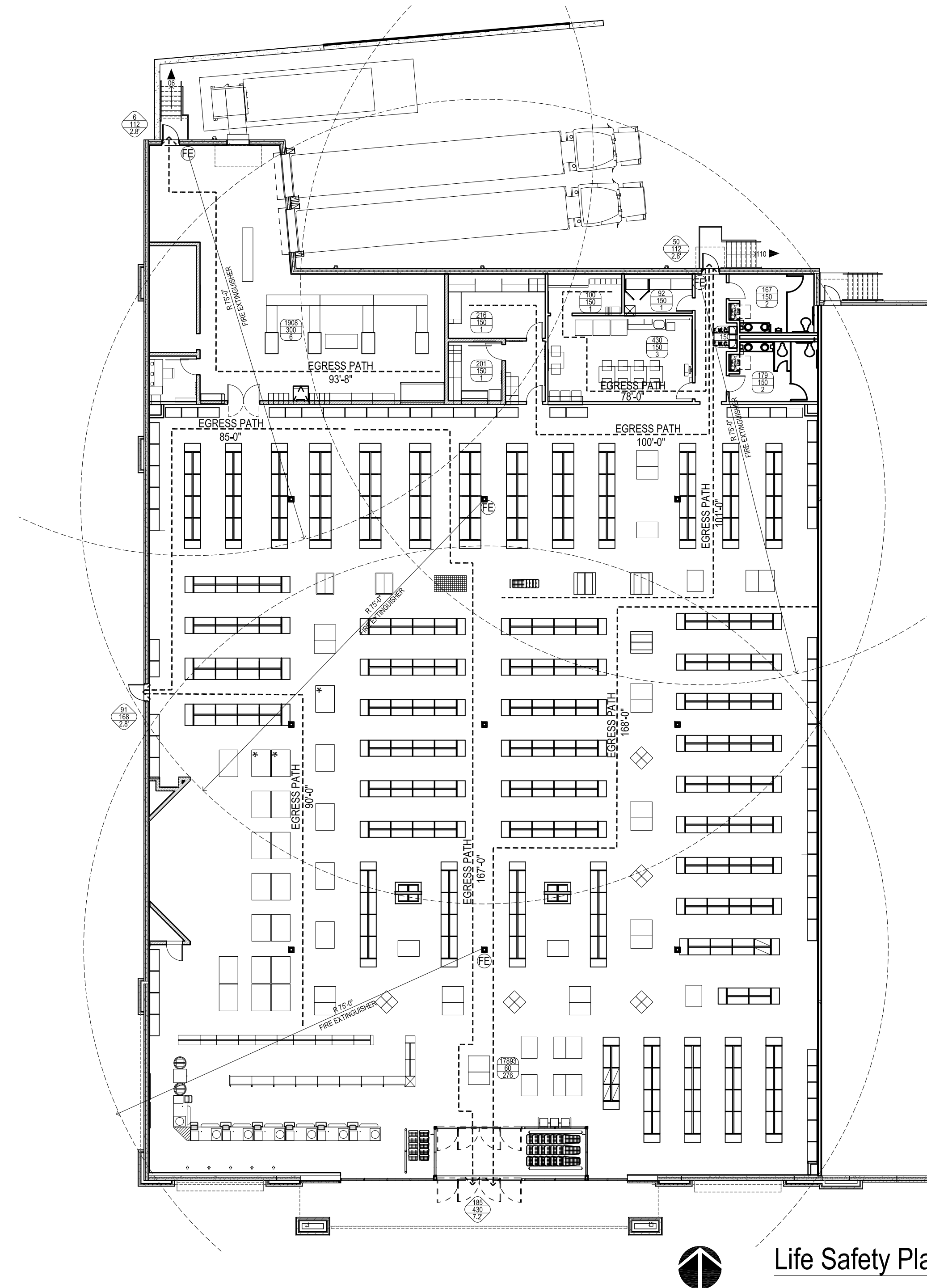
Note: When contacting vendors, please indicate that you are working on a TJX project to ensure national account pricing/supply.

06 - CARPENTRY Shallow Carpet 1205 Retail DGS Retail EK Grove Village, IL 60007 (847) 364-5900 (8 Week Lead Time) Light Vanities/Adding Focal Wall Molding/Focal Wall Molding Mirror Molding 60 Maple Street Mansfield, MA 02048 508-337-2960 (4 Week Lead Time) Corner Guards ATR Sales, Inc. 41 Talbot Road Northboro, MA 01535 508-393-8629	Shallow Column Corner Guard Wild WM Woodwork, Inc. 2020 Babylon Road Sheboygan Fall, WI 53085 800-546-7538 (Sales) 08 - DOORS & GLASS Automatic Door Operators Stanley Automatic Doors 65 Scott Swamp Road Farmington, CT 06032 860-476-6445 (8 Week Lead Time) Door, Door Frames, and Door Hardware DII Piana National Accounts 1001 E. 119th St. KS 66681 Primary Contact: Nancy Taylor - Project Manager 784-631-5565 x102 jtgonzales@piana.com Secondary Contact: Mark Lyons - General Manager 784-631-5551 x510 jtgonzales@piana.com	Impact Doors Elksen Easy Wind Door Division 9220 Shiver Road Kalamazoo, MI 49003 800-623-3655 Jmmy Gaud Omnicore Mfg. Inc. 70 Pratt Junction Road P.O. Box 928 Sterling, MA 01564 978-422-3377 Complete & Security Door PPT Baker & Compco, Co. 227 East Ontario Street Philadelphia, PA 19134 215-533-1001 Colding Service Door Metro Door, Inc. 1201 North Church Street Haddon, PA 18021 Brian Niemeyer 800-699-3667 x553	09 - FINISHES Acoustical Ceiling Systems Armstrong World Industries 2500 Industrial Drive Lancaster, PA 17603 800-442-4212 (OnContract, Serv.) Wood Accent Wall Restroom Floor Tile Architectural Systems Inc. 150 West 22nd Street 8th Floor New York, New York 10001 212-206-1730 Restroom Wall Tile Dabco Wall Tile 1300 East Plano Parkway Kansas, KS 76704 800-486-6724 Walkdowning D.L. Couch Walkdowning 1001 South Memorial Drive P.O. Box 12 New Castle, N 47862 800-433-0700 (4 Week Lead Time)	Support Area Flooring Armstrong World Industries 2500 Industrial Drive Lancaster, PA 17603 800-442-4212 (OnContract, Serv.) Vestibule Mat The Matlayers 1190 Old Baltimore Pike Millersville, MD 20755 410-871-1202 Dock Scales and Bumpers Formroll Dock & Door 405 Hudson Street Winchester, MA 01890 800-243-3302 Hand Carry EXCEL (XLERATOR) 869-894-4126 Conveyors Pelu Systems as distributed by: Delux Systems, Inc. 50 Strabro Drive Avon Industrial Park Avon, MA 02322 508-588-4410 (8 Week Lead Time)	15 - MECHANICAL Procession Transition Strip MAPEI Corp. 114 East Postmaster Center Dr. Deerfield Beach, FL 33442 1-800-426-2734 HVAC Equipment Roof Exhaust Fans Registers/Gilles/Heaters/ Processing Room Fans 41 Hudson Road 5005 York Drive Norman, OK 73069 405-419-6453 (8 Week Lead Time) HVAC Controls Novac Controls 5 Paradise Drive Haysville de Grove, MD 21078 216-826-1620 869-348-1235 (4 Week Lead Time)	16 - ELECTRICAL General Light Fixtures, Plugs/rod, Power Pans, Safety Switches, GE Lighting control panel Canso Mexico, MA 02021 800-244-6480 (8 Week Lead Time) Door Alarm American Sentinel Group 75 Barker Street Pembroke, MA 02359 911-625-0808
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ALL WORK UNDER THIS CONTRACT SHALL COMPLY WITH THE PROVISIONS OF THE SPECIFICATIONS AND DRAWINGS, AND SHALL SATISFY ALL APPLICABLE CODES, ORDINANCES AND REGULATIONS OF ALL GOVERNING BODIES INVOLVED.

PROJECT INFORMATION SUMMARY :			FLOOR AREA ALLOWANCES PER OCCUPANT (TABLE 1094.5) :		
BUILDING OCCUPANCY: NON-SEPARATED OCCUPANCIES:	GROUP M - MERCANTILE GROUP B - BUSINESS GROUP S-1 - (MODERATE HAZARD STORAGE)		NAME	AREA	OCCUPANT LOAD
			MERCANTILE SALES FLOOR	17,893 S.F.	60 SF / OCC
BUILDING CONSTRUCTION CLASS:	TYPE IIB		BUSINESS	3,375 S.F.	150 SF / OCC
BUILDING PROTECTED BY AUTOMATIC SPRINKLER SYSTEM:	YES		S1 MODERATE HAZARD STORAGE	1,908 S.F.	300 SF / OCC
BUILDING IS PROTECTED BY AUTOMATIC FIRE ALARM SYSTEM (NFPA 70 AND NFPA 72):	YES		LOCKER ROOM	100 S.F.	50 SF / OCC
APPLICABLE CODES :			TOTAL OCCUPANT LOAD		332
BUILDING CODE:	INTERNATIONAL BUILDING CODE	2018 EDITION	EGRESS WIDTH REQUIREMENTS (SECTION 1005) :		
MECHANICAL CODE:	INTERNATIONAL MECHANICAL CODE	2018 EDITION			
PLUMBING CODE:	INTERNATIONAL PLUMBING CODE	2018 EDITION	STAIRS: 0.3 INCH PER OCCUPANT (0.3) X 116 (OCC) = 34.8"		
ELECTRICAL CODE:	NATIONAL ELECTRICAL CODE	2017 EDITION	OTHER MEANS OF EGRESS: (0.2) INCH PER OCCUPANT (0.2) X 216 (OCC) = 43"		
FIRE CODE:	INTERNATIONAL FIRE CODE	2018 EDITION	EGRESS WIDTH PROVIDED WITH STAIRS = 67.2" > 34.8" REQUIRED		
GAS CODE:	INTERNATIONAL FUEL GAS CODE	2018 EDITION	EGRESS WIDTH PROVIDED AT EXIT DOORS = 119.6" > 43" REQUIRED		
ANSI A117.1:	ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES	2017 EDITION			
FIRE-RESISTANCE - BUILDING ELEMENTS (TABLE 801) :			NUMBER OF EXITS PER SPACE (SECTION 1006.3.2) :		
FOR TYPE IIB CONSTRUCTION -			EXITS REQUIRED: 1 TO 500 OCCUPANTS 2 EXITS REQUIRED		
PRIMARY STRUCTURAL FRAME:	0 HRS				
BEARING WALLS (EXTERIOR AND INTERIOR):	0 HRS				
NONBEARING WALLS - EXTERIOR:	PER TABLE 602		ACTUAL EXITS PROVIDED		
NONBEARING WALLS - INTERIOR:	0 HRS		4 EXITS		
FLOOR CONSTRUCTION:	0 HRS		OCCUPANT LOAD (FOR EXITING)		
ROOF CONSTRUCTION:	0 HRS		332 OCCUPANTS		

EXIT ACCESS TRAVEL DISTANCE (TABLE 1017.2) :		LAVATORIES:	
OCCUPANCY 1 MAX. DISTANCE ALLOWED (WITH SPRINKLER SYSTEM):		OCCUPANCY TYPE MERCANTILE:	
OCCUPANCY 8 MAX. DISTANCE ALLOWED (WITH SPRINKLER SYSTEM):		1 PER 150	
OCCUPANCY 51 MAX. DISTANCE ALLOWED (WITH SPRINKLER SYSTEM):		TOTAL:332 OCC.	
	250'-0"	MALE: 149 OCC.	REQUIRED: 149 / 150 = .98
	300'-0"	FEMALE: 149 OCC.	REQUIRED: 149 / 150 = .98
MAX. TRAVEL DISTANCE PROVIDED:		OCCUPANCY TYPE BUSINESS:	
	168'-0"	1 PER 40 FOR THE FIRST 80 AND 1 PER 80 FOR THE REMAINDER	
PLUMBING FIXTURES (TABLE 2002.2) :		TOTAL:28 OCC.	
WATER CLOSETS:		MALE: 14 OCC.	REQUIRED: 14 / 40 = .35
OCCUPANCY TYPE MERCANTILE:		FEMALE: 14 OCC.	REQUIRED: 14 / 40 = .35
1 PER 332 OCC.		OCCUPANCY TYPE STORAGE:	
MALE: 149 OCC.	REQUIRED: 149 / 500 = .298	1 PER 100	
FEMALE: 149 OCC.	REQUIRED: 149 / 500 = .298	TOTAL:6	
OCCUPANCY TYPE BUSINESS:		MALE: 3 OCC.	REQUIRED: 3 / 100 = .03
1 PER 2/ FOR THE FIRST 80 AND 1 PER 80 FOR THE REMAINDER		FEMALE: 3 OCC.	REQUIRED: 3 / 100 = .03
TOTAL:28 OCC.		TOTAL REQUIRED:	
MALE: 14 OCC.	REQUIRED: 14 / 25 = .56	MALE: .58 (1)	
FEMALE: 14 OCC.	REQUIRED: 14 / 25 = .56	FEMALE: .58 (1)	
OCCUPANCY TYPE STORAGE:		PROVIDED:	
1 PER 100		MALE: 2	
TOTAL:6		FEMALE: 2	
MALE: 3 OCC.	REQUIRED: 3 / 100 = .03	DRINKING FOUNTAINS:	
FEMALE: 3 OCC.	REQUIRED: 3 / 100 = .03	MERCANTILE / SALES:	
TOTAL REQUIRED:		OFFICE, CUSTOMER SERVICE:	
MALE: .88 (1)		28 / 100 = .28	
FEMALE: .88 (1)		RECEIVING STOCK / STORAGE:	
PROVIDED:		6 / 1000 = .006	
MALE: 2		TOTAL REQUIRED:	
FEMALE: 2		.816 (1)	
		TOTAL PROVIDED:	
		2	
		REQUIRED SERVICE SINK:	
		REQUIRED: 1	
		PROVIDED: 1	



Life Safety Plan

HomeGoods - Landlord Build-to-Sui
(Outline Specifications #180)

1. Floor Mounted Carriage Bumper
2. Wall Bumper
3. Cup Dispenser
4. Sanitary Napkin Dispenser
5. Sanitary Napkin Disposal
6. Toilet Paper Dispenser
7. Paper Towel Dispenser
8. Deodorant Holder
9. Soap Dispenser
10. Toilet Seat Cover Dispenser
11. Restroom Trash Receptacle
12. Permanent Chrome Rail
13. Plugmod for Lamp Gondolas and Sales Floor Walls
14. Power Poles
15. LP Bench
16. Pin Lock Box
17. Baby Changing Table

The diagram shows a fire extinguisher symbol with various parts labeled. At the top, a horizontal line with an arrow pointing right is labeled 'MAXIMUM TRAVEL DISTANCE'. Below this, a dashed line with an arrow pointing right is also labeled 'MAXIMUM TRAVEL DISTANCE'. To the left of the main symbol, a small arrow points left, labeled 'DIRECTION OF OCCUPANT FLOW THROUGH ELEMENT'. Inside the main symbol, the text 'XX' is present, labeled 'NUMBER OF OCCUPANTS ADVANCING'. To the left of the symbol, the text 'AREA TAG' is shown above a vertical stack of three circles, each containing '0.00', labeled 'ROOM / SPACE AREA (SQ FT)'. To the right of the symbol, the text 'OCCUPANT LOAD FACTOR (SQ FT / PERSON)' is shown above a vertical stack of three circles, each containing '0.00', labeled 'NUMBER OF CALCULATED OCCUPANT'. Below the symbol, the text 'EXIT TAG' is shown above a vertical stack of three circles, each containing '0.00', labeled 'TOTAL NUMBER OF OCCUPANTS EXITING'. To the right of the symbol, the text 'CAPACITY OF EXIT ELEMENT' is shown above a vertical stack of three circles, each containing '0.00', labeled 'EXIT WIDTH (DECIMAL FEET)'. At the bottom left, the text 'FE' is shown next to a circle containing '10', labeled '10 POUND, A.B.C. FIRE EXTINGUISHER'.

**RELEASE FOR
CONSTRUCTION**
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
(EAST-SPRINGFIELD, MISSOURI)
02/04/2021

SLAGGIE



ARCHITECTS

SLAGGIE ARCHITECTS, INC. ©2018

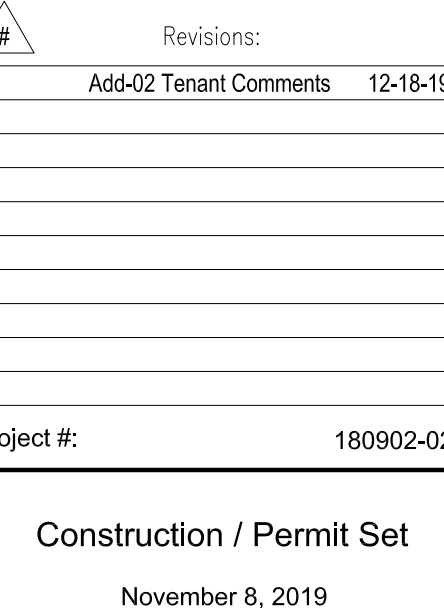
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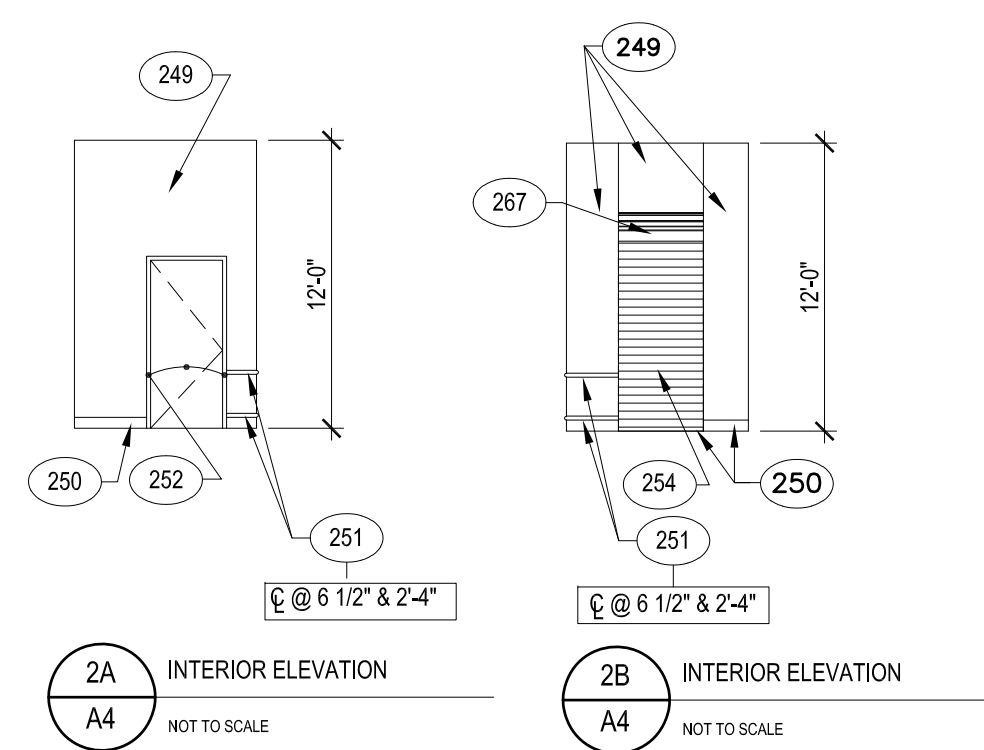
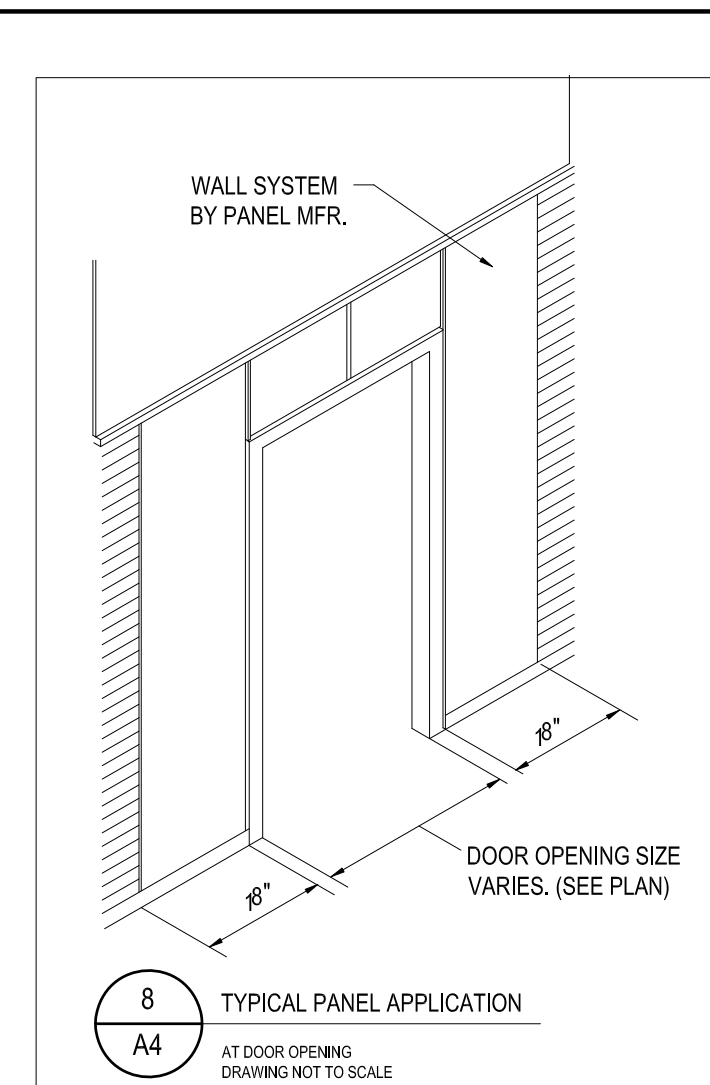
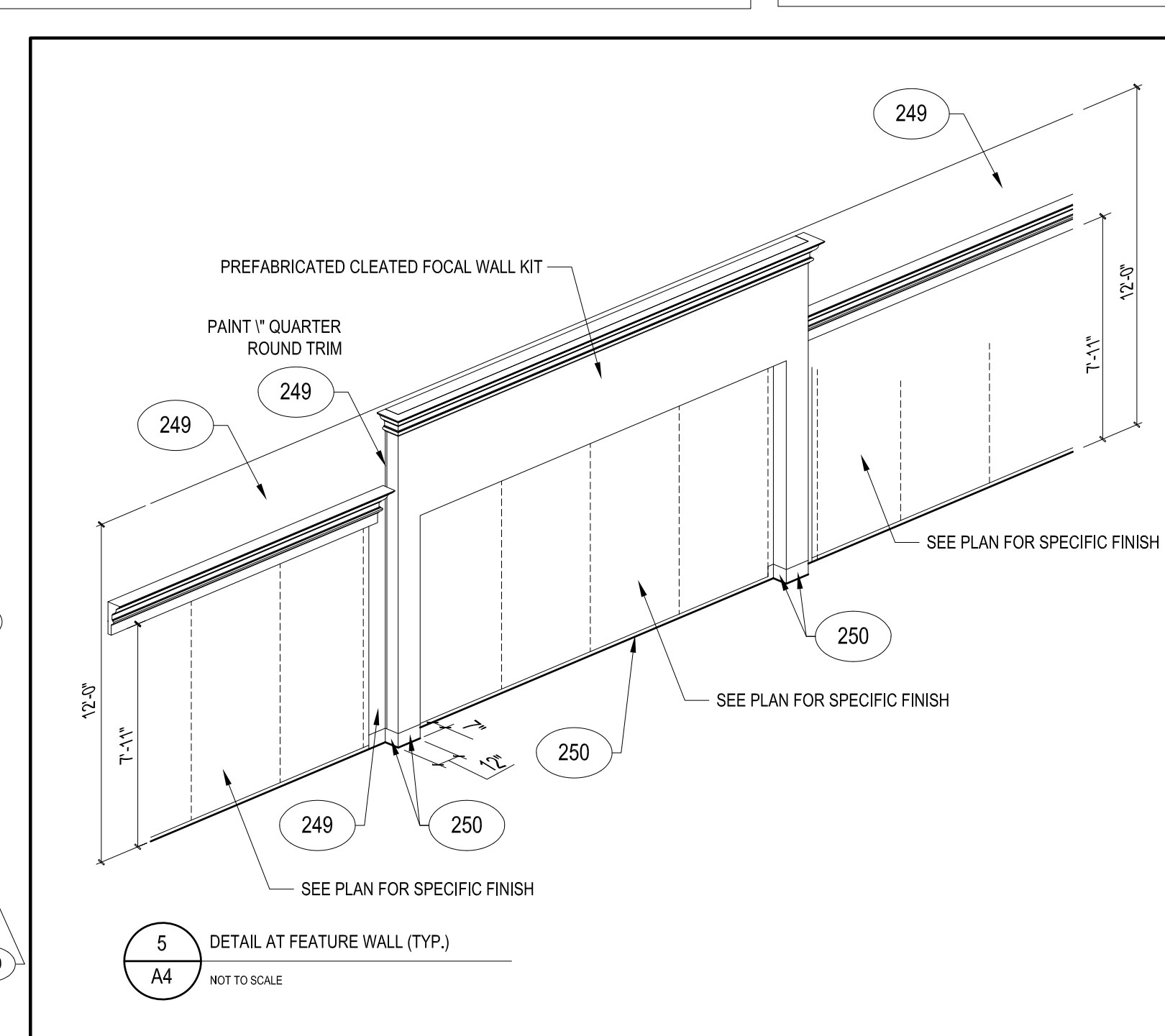
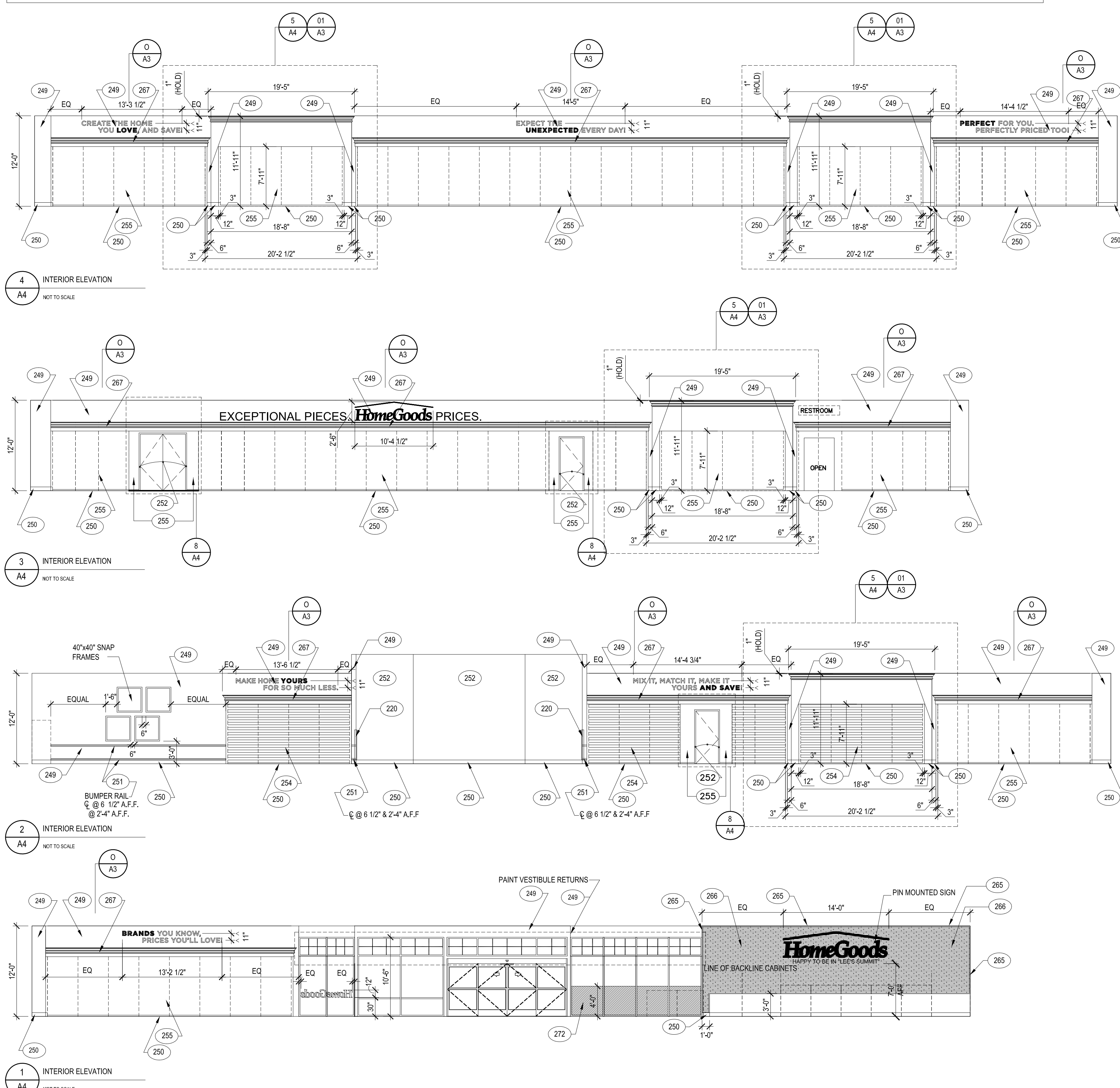


HomeGoods

Tenant Improvements

Summit Orchards Lot 4B
492 NW Chipman Rd
Lee's Summit MO 64086





CORNER GUARDS (TYP) @ ALL 90° CORNERS SHALL RECEIVE PAWLING CLEAR LEXAN STYLE #CG-17, 1/8" X 1 3/8" X 4'-0" LENGTH (EXCEPT BOXED COLUMNS A 5'-0" A.F.F.), NO SUBSTITUTIONS. ALL CORNER GUARDS TO BE FASTENED TO WALL WITH SCREWS NO ADHESIVES.

SLATWALL PANEL SYSTEMS:

REFER TO SECTION 6A OF THE OUTLINE SPECIFICATION FOR WORK RESPONSIBILITY REGARDING SLATWALL PANEL SYSTEM.

INSTALLATION INSTRUCTIONS FOR PREFABRICATED WALL PANEL (SLATWALL) AND METAL SLATWALL COMPONENTS ARE INCLUDED AS A PART OF THE PACKAGE. IT IS THE RESPONSIBILITY OF THIS CONTRACTOR TO BECOME FAMILIAR WITH THESE INSTRUCTIONS PRIOR TO PROVIDING A PRICE OF COMMENCEMENT OF WORK.

HOMEGOODS FINISH SCHEDULE			
FINISH NO.	MATERIAL	MANUFACTURER	SPECIFICATION
112	PAINT	BENJAMIN MOORE	#P22 SUPER SPEC URETHANE ALKOY GLOSS ENAMEL BASE: 3B / COLOR: DECK GRAY WITH SAND ADDED FOR NON-SLIP FINISH
113	PAINT	BENJAMIN MOORE	REGAL #968 "DUNE WHITE" (SEMI-GLOSS 333)
115	ENTRANCE GRID MATTING	MATWORKS	AMBASSADOR - TF - CHARCOAL WITH TF TAPE
119	PAINT	BENJAMIN MOORE	#2142-70 "ICICLE" (SEMI-GLOSS)
118	FRP	MARLITE	#P-140 IVORY 4"-0" HIGH WAINSCOTING ON ALL WALLS (8'-0" HIGH WAINSCOTING ABOVE MOP SINK AREA ONLY)
126	WALL COVERING	DL COUCH	#NA-51-TJM02 "AURA PEARL"
127	VINYL COMPOSITION TILE	ARMSTRONG	RAVE - WHITE OUT #57518
128	VINYL COMPOSITION TILE	ARMSTRONG	IMPERIAL TEXTURE - SOFT WARMA GRAY #51861
130	COVE BASE	SCHLUTER SYSTEMS	DILEX-AHK (AHS1S100AE). MATERIAL: SATIN ANOIZED ALUMINUM. SIZE: 100 (38 - 10 MM), OUTSIDE CORNERS 90 DEGREES - EQ0AKH1S100AE STAIN ALUMINUM. CUSTOMER SERVICE 800-472-4588
138	PAINT	BENJAMIN MOORE	#967 "CLOUD WHITE" • CEILING (FLAT) • EXTERIOR (EGGSHELL)
201	PAINT	BENJAMIN MOORE	#879 "WHITE OPULENCE" (SEMI-GLOSS)
203	PAINT	BENJAMIN MOORE	#P22-82 SUPER SPEC URETHANE ALKOY GLOSS ENAMEL BASE: 4B / COLOR: SAFETY BLACK
210	VINYL COMPOSITION TILE	ARMSTRONG	IMPERIAL TEXTURE #51838 SHELTER WHITE
211	NON-SLIP VINYL COMPOSITION	ARMSTRONG	SLIP RETARDANT #57035 STONE BEIGE TILE
213	VINYL COVE BASE	ARMSTRONG	#71 MID GRAY, 6"
218	CORNER GUARD	PAWLING	CLEAR LEXAN STYLE. CG-17 1 1/8" X 1 1/8" X 4'-0" LENGTH. NO SUBSTITUTIONS. ALL CORNER GUARDS TO BE FASTENED TO WALL WITH SCREWS. NO ADHESIVES.
219	CORNER GUARD	WINDMILL	INSIDE/OUTSIDE CORNER Moulding #3852 COLOR: WHITE. NO SUBSTITUTIONS.
220	CORNER GUARD	TRI-GUARD	4212/135 CLEAR W/ HOLES AND SCREWS
221	SINTRA	DGS RETAIL INC.	WHITE (VALANCE WITH CROWN Moulding)
223	VINYL BUMPER RAIL	MCUE	#111 SILVER. NOTE: ALL BUMPERS ARE 2" IN DIAMETER
224	SPANDREL GLASS	SQUAL SEAL	1" CLEAR/CLEAR WITH SPANDREL, 1/4" CLEAR WITH 0-0186 LITE WHITE (2), 1/2" AIR SPACER, 1/2" CLEAR.
231	CERAMIC TILE	DALTILE	SUBWAY TILE. SEMI-GLOSS ALMOND (2) K165 - 3" H X 6" L PROFILE. FOR TOP ROW USE SEMI-GLOSS ALMOND (2) S-4089 (BULLNOSED ON 6" SIDE) GROUT TO BE LACTOCRETE "ANTIQUE WHITE" (#23 (3/16"). (WALL TILE).
232	CERAMIC TILE	DALTILE	STONE COLLAGE: RADANCE, #SA-60 BUTTERNUT 3" H X 6" L (RANDOM PATTERN) GROUT TO BE LACTOCRETE "ANTIQUE WHITE" (#23 (3/16") (WALL ACCENT TILE)
233	PAINT	BENJAMIN MOORE	#AC-5 "SPRINGFIELD TAN" • RESTROOM (SEMI-GLOSS) • EXTERIOR (EGGSHELL)
238	LAMINATE	FORMICA	#6692-58 "HARDROCK MAPLE". NO DRIP EDGE.
249	PAINT	BENJAMIN MOORE	#0C-149 "DECORATORS WHITE" • HALL/OFFICES & COLUMNS (SEMI-GLOSS) • SALES FLOOR (EGGSHELL)
250	VINYL COVE BASE	JOHNSONITE	#80 "FAVIN", 6"
251	VINYL BUMPER RAIL	MCUE	#609 "DARK PUTTY", 2" IN DIAMETER
252	PAINT	BENJAMIN MOORE	ALEXANDRIA BEIGE #HC-77 • DOORS (HIGH-GLOSS) • SALES FLOOR (EGGSHELL)
253	PAINT	BENJAMIN MOORE	#0C-50 "NOVEMBER RAIN" (SEMI-GLOSS)
254	DOUBLE SLOTTED SLATWALL	DGS RETAIL	#797TK-12 "WHITE BARN" WITH TYPICAL 4" SLATS
255	WALL PANELS	DGS RETAIL	#797TK-12 "WHITE BARN" SOLID PANEL
256	NOT USED		
257	PAINT	BENJAMIN MOORE	#2143-60 "MOONLIGHT WHITE" (EGGSHELL)
258	NOT USED		
259	NOT USED		
260	PAINT	BENJAMIN MOORE	#977 "BRANDON BEIGE" (EGGSHELL)
261	VINYL STRIPWOOD	PARTERRE	VERTU "SUNLIGHT WALNUT" #11634 (SALES FLOOR AISLE) 6" X 36" X 1/8" THICK, 40 MIL. WEAR LAYER
262	VINYL STRIPWOOD	PARTERRE	VERTU "HARVEST OAK" #11610 (SALES FLOOR PAD) 6" X 36" X 1/8" THICK, 40 MIL. WEAR LAYER
263	CERAMIC TILE	ASI FLOORING	PORCELAIN WOOD GRAINS RFL SR397/0624032 6" x 24" MATTE GROUT TO BE LACTOCRETE. SPECTRALOCK-PRO PREMIUM GROUT, #67 "HOT COCK" (3/16").
264	OUTLET FRAME	ARCHITECTURAL SYSTEMS	INTERVIEW ECO-PANELS MAPLE PREFINISHED ELECTRIC OUTLET FRAME 2 3/4" X 4 1/2" X 12 MM
265	CONTOUR MOLDING	ARCHITECTURAL SYSTEMS	INTERVIEW ECO-PANELS MAPLE PREFINISHED CONTOUR MOLDING 1 1/4" X 90" X 14 MM
266	WOOD ACCENT WALL PANELS	ARCHITECTURAL SYSTEMS	INTERVIEW ECO-PANELS MAPLE PREFINISHED WALL PANEL, 13.5" X 53.5" X 9 MM NOMINAL, 30 SF/BOX
267	SINTRA	DGS RETAIL INC.	WHITE (WALL MOUNTED CROWN Moulding)
268	WALL COVERING	DL COUCH	SOURCE ONE EXCLUSIVE #2VCA-03 "CATALPA" BEACH
269	LAMINATE	NEVMAR	NEVMAR, CLASSIC ROCK #RK2001T, NO DRIP EDGE.
270	PLASTIC LAMINATE	NEVMAR	POSTFORM SURFACE, NEVMAR, CLASSIC ROCK #RK2001T NO DRIP EDGE. P-2 LAVATORIES SHALL BE MOUNTED SELF-RIMMING VITREOUS CHINA WITH 8" CENTER SET SUPPLY WITH AERATOR AND A FLAT PERFORATED STRAINER (LAVATORY WASTE DRAIN.
271	STOREFRONT SYSTEM	KAWNEER	 BONE WHITE #UC106800 STANDARD PERMAFLUOR COLOR (INTERIOR & EXTERIOR)
272	FROSTED VINYL	DGS RETAIL INC.	FROSTED SPARKLE VINYL FILM, AVERY 55892-S, TOP OF VINYL TO BE AT 48" AFF. TWO (2) LAYERS TO BE APPLIED ON INTERIOR SIDE OF FRONT LINE WINDOWS.
273	METAL AWNING	ATAS	"BRITE RED"
274	PAINT	BENJAMIN MOORE	#2086-10 "EXOTIC RED" (EGGSHELL)
303	PAINT	BENJAMIN MOORE	#0C-65 "CHANTILLY LACE" (EGGSHELL)

NOTE: ALL DOORS AND FRAMES NOT SHOWN ON THE ELEVATION SHEET (A4) TO BE PAINTED SAME COLOR AS SALES FLOOR DOORS AND FRAMES

SPECIFICATIONS FOR V.W.C. INSTALLATION

NEW CONSTRUCTION: THE G.C. SHALL SEE THAT SURFACES PRESENT A TRUE SMOOTH, LEVEL FINISH FREE FROM CRACKS, DIRT, DUST, IRREGULARITIES, ROUGH SPOTS AND INDENTATIONS. A GOOD QUALITY NAMED BRAND WHITE OIL BASED PRIMER SHALL BE USED ON ALL NEW DRYWALL TO EASE APPLICATION AND FUTURE REMOVAL.

RENOVATIONS: OLD WALLCOVERING SHALL BE REMOVED AND WALLS ARE TO BE WASHED AND SANDED TO REMOVE ANY OLD ADHESIVE. IF NECESSARY THEY SHALL BE RE-PRIMED WITH AN OIL BASED WHITE PRIMER.

ADHESIVE: GUARD FC-100 OR ANY OTHER GOOD QUALITY HEAVY DUTY ADHESIVE IS RECOMMENDED

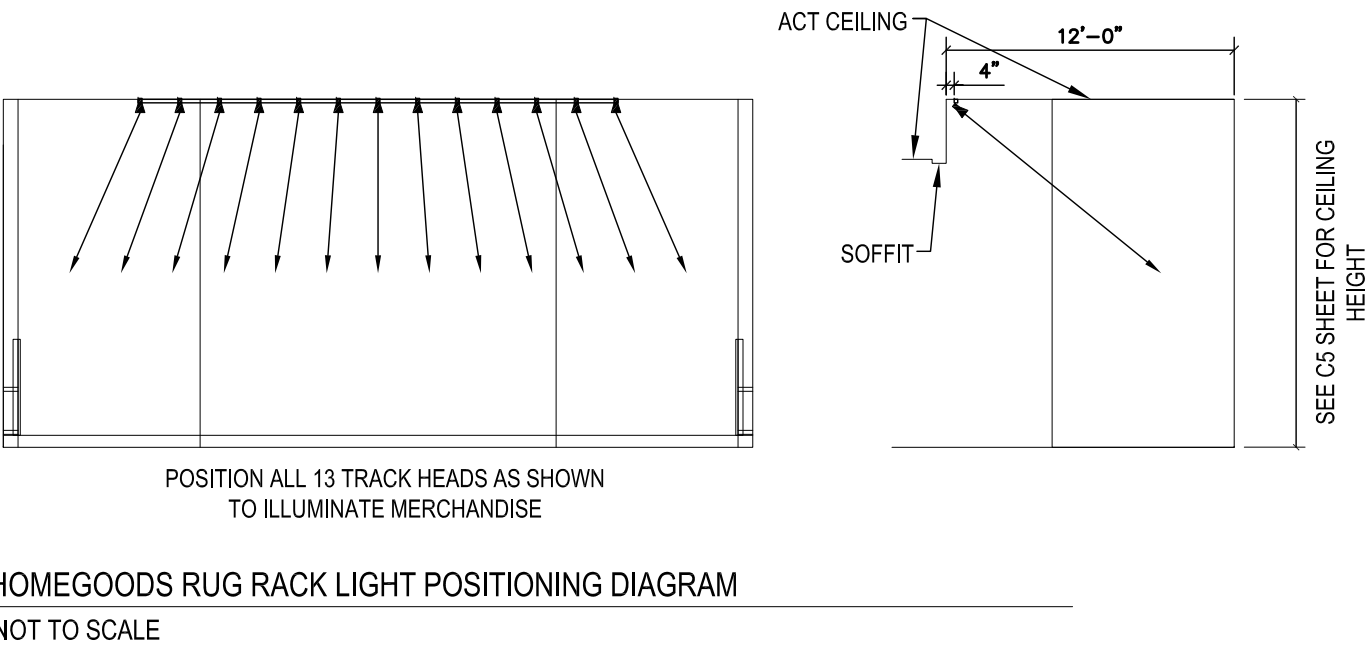
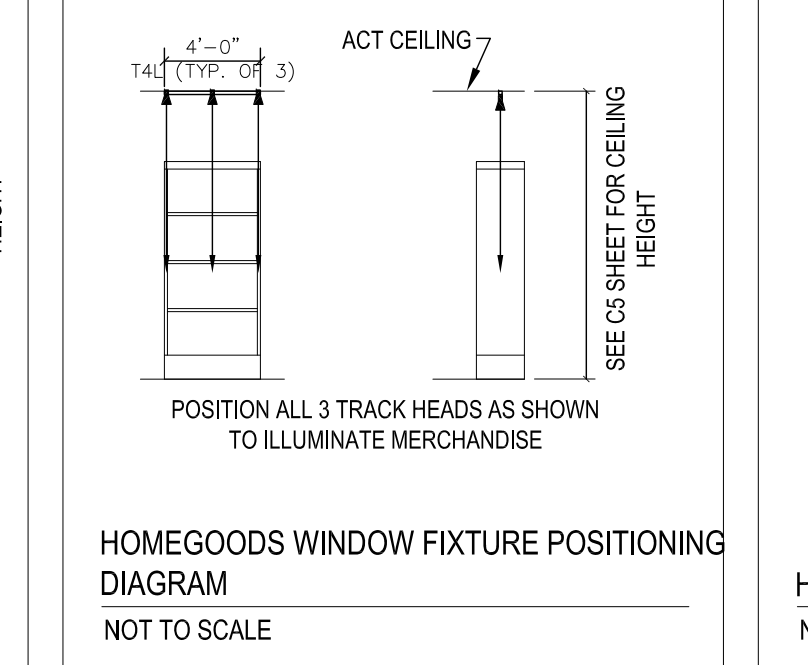
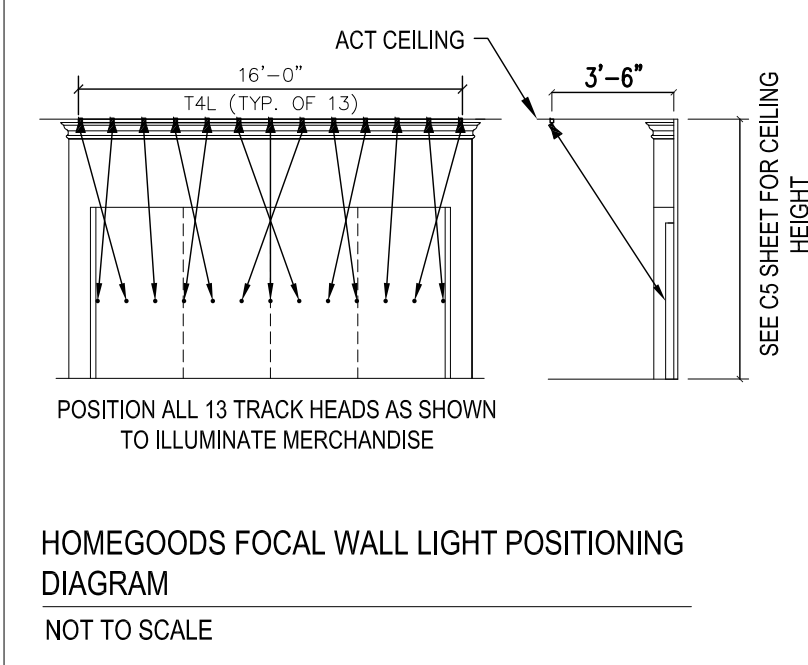
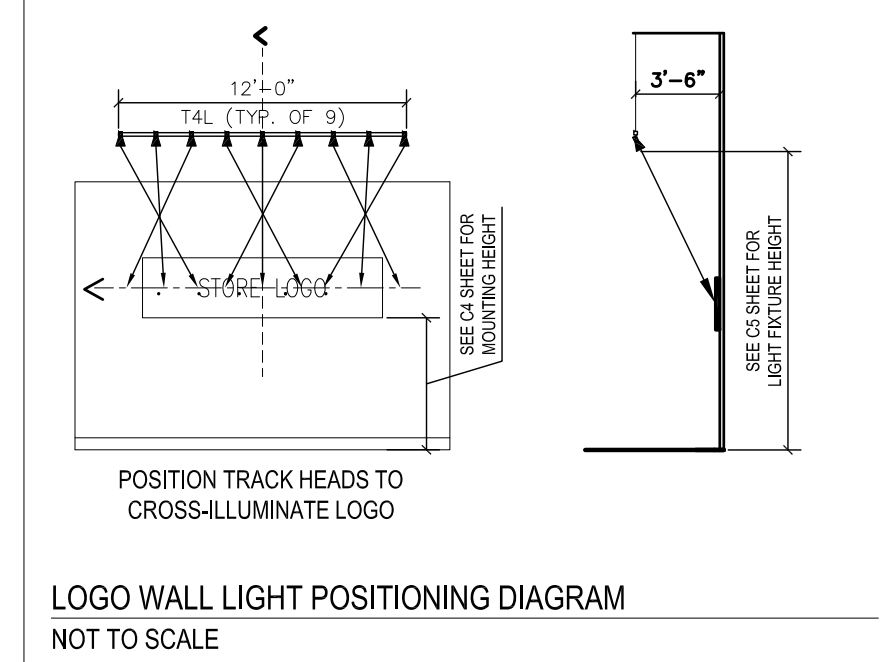
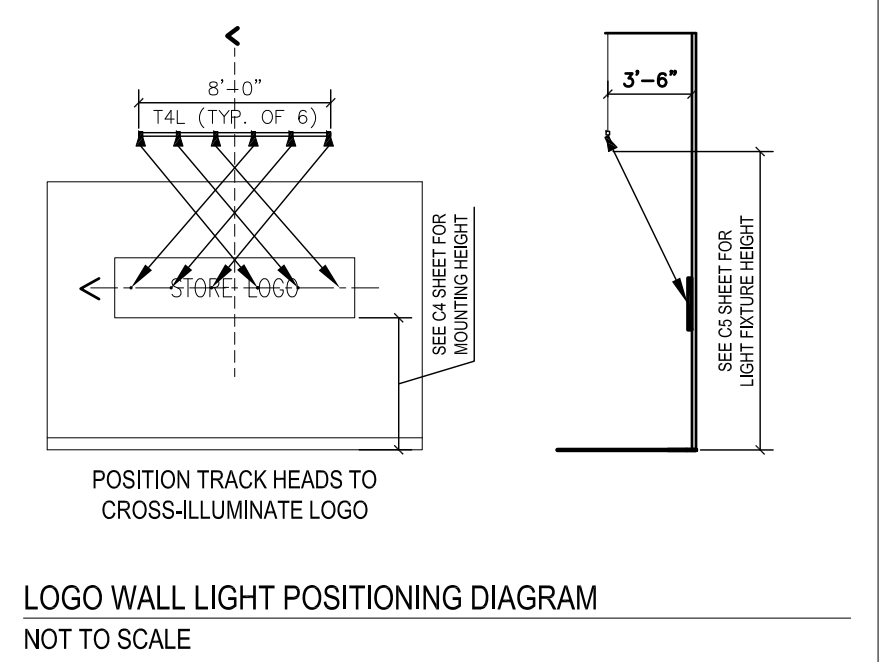
DO NOT "RAILROAD" VINYL WALL COVERING

ALL WORK SHALL BE COMPLETED IN A NEAT AND PROFESSIONAL MANNER.

LIGHTING SCHEDULE									
SYMBOL	SIZE	SYSTEM VOLTAGE	SYSTEM VOLTAGE	FIXTURE MOUNTING METHOD	LAMP QUANTITY	LAMP TYPE	MANUFACTURER	SPECIFICATION NUMBER (ORDERING INFORMATION)	REMARKS
A	2' X 4'	37	MULTI-VOLTAGE	Recessed	N/A	LED	ACQUITY (LITHONIA)	2ESL4 4BL E21 LP835 NATJ	
A4	14-3/4" x 43-9/16"	111	277V	Pendant	N/A	LED	ACQUITY (LITHONIA)	CADIN 16SL 277 E21 LP830 CS78W/20 (277 V)	E.C. TO FURNISH LOCKING RECEPTACLE AT OPEN DECK CEILING (SEE NOTE 4)
A6	5-1/2" x 3-7/8"	57	120V	Track	N/A	LED	CORTECH	CTL184V350-P	SEE AIMING ANGLE TABLE, THIS SHEET.
A14	14-3/4" x 43-9/16"	111	277V	Pendant	N/A	LED	ACQUITY (LITHONIA)	CADIN 16SL 277 E21 LP835 CS78W/20 (277 V)	E.C. TO FURNISH LOCKING RECEPTACLE AT OPEN DECK CEILING (SEE NOTE 4)
B	18"	120V	MULTI-VOLTAGE	Wall Mounted	1	LED	CRESENT	DCF400P3 (Desk Swing Arm) LED180P3WB30/25 (GE Lamp)	DOCKLIGHT
D	2' X 4'	37	MULTI-VOLTAGE	Recessed	N/A	LED	ACQUITY (LITHONIA)	2ESL4 F 4BL E21 LP835 NATJ	FOR GYPSUM BOARD CEILINGS, AND FLANGE KITS
E	EXIT SIGN	4.3	MULTI-VOLTAGE	Wall Mounted	N/A	LED	ACQUITY (LITHONIA)	LHQM-LED-R-120/277	QUANTUM LHQM EXIT SIGN/EMERGENCY LIGHT COMBO
F3	4" X 4"	45.2	MULTI-VOLTAGE	Surface	N/A	LED	HUBBELL (COLUMBIA)	LSR9K-4W-40VW-FA-EDU-HSG8-CSHC	
F4	4" X 4"	22.6	MULTI-VOLTAGE	Surface	N/A	LED	HUBBELL (COLUMBIA)	LSR9K-4W-40VW-FA-EDU-HSG4-CSHC	(16" WITH 3; 8" & 4" WITH 2)
G4	4" X 4"	45.2	MULTI-VOLTAGE	Pendant	N/A	LED	HUBBELL (COLUMBIA)	LSR9K-4W-40VW-FA-EDU-HSG4-CSHC	
H4	4" X 4"	22.6	MULTI-VOLTAGE	Pendant	N/A	LED	HUBBELL (COLUMBIA)	LSR9K-4W-40VW-FA-EDU-HSG4-CSHC	(16" WITH 3; 8" & 4" WITH 2)
G3	3" X 8"	46	MULTI-VOLTAGE	Valance	N/A	LED	GE	LKV-38-A-0-60-WW-1-35-V-Q-SM-WHITE	MUST BE MOUNTED STRAIGHT
H4	3" X 4"	23	MULTI-VOLTAGE	Valance	N/A	LED	GE	LKV-34-A-0-60-WW-1-35-V-Q-SM-WHITE	MUST BE MOUNTED STRAIGHT
H5	3" X 3"	16	MULTI-VOLTAGE	Valance	N/A	LED	GE	LKV-33-A-0-60-WW-1-35-V-Q-SM-WHITE	MUST BE MOUNTED STRAIGHT
K3	14.125" X 14.125"	22	277V	Recessed	N/A	LED	SPECTRUM	NC125QLED0A22L40K2/7T012MWF0	USE UNDER CANOPY
L	16" X 9-5/8"	32	MULTI-VOLTAGE	Wall Mounted	N/A	LED	EATON (SURELITE)	LDWP-GL-48-ED-EMLED-CD	
L1	16" X 9-5/8"	32	MULTI-VOLTAGE	Wall Mounted	N/A	LED	EATON (SURELITE)	LDWP-GL-48-ED	
LM	LIGHTED MIRROR	40	MULTI-VOLTAGE	Wall Mounted	N/A	LED	PHILIPS	OCLM-W-66NLED30K-LVV-PHD (MARSHALL'S WHITE)	WHITE
LM2	LIGHTED MIRROR	39	MULTI-VOLTAGE	Wall Mounted	N/A	LED	STYLMARK	620088-02	TJX PURCHASE. (NOT SUPPLIED BY NESCO)
LM3	LIGHTED MIRROR	40	MULTI-VOLTAGE	Wall Mounted	N/A	LED	PHILIPS	OCLM-W-66NLED30K-LVV-PHD-CC(PBS) (SILVER) TJ MAXX	BRIGHT PRISM SILVER
05	10" X 4"	73	MULTI-VOLTAGE	Recessed	2	F32T8	ACQUITY (LITHONIA)	WW GF 232 MVOLT CEUMH (RW) GR35H18 RFD	HIGH GLOSS WHITE REFLECTOR
07	2' X 2'	20.2	MULTI-VOLTAGE	Recessed	N/A	LED	ACQUITY (LITHONIA)	28T2 20L E21 LP830	
P2	16" DIAMETER	88	277V	Pendant	N/A	LED	SPECTRUM	PRSTP16LEDLX100L35KEX/LDW/H24X277(L7-20) PRIMER16GMPT (277V)	E.C. TO FURNISH LOCKING RECEPTACLE AT OPEN DECK CEILING (SEE NOTE 4)
Q	13.12" X 14.61"	56	277V	Pendant	N/A	LED	SPECTRUM	WA1212LEDLX60W35KEX/WA1315/CP13HMT96/GW (277)	BOTTOM OF FIXTURE MOUNTED AT 8"-8" AFF. CAN USE ELM6-LED, ELM-LT, or other Emergency lights in the Acuity ELM family WITH 90 MIN BATTERY BACKUP
R1	EMERGENCY	1.5	MULTI-VOLTAGE	Surface	N/A	LED	ACQUITY (LITHONIA)	ELM2-LED	
R1	EMERGENCY	6	MULTI-VOLTAGE	Recessed	N/A	LED	ACQUITY (LITHONIA)	ELRG	WITH 90 MIN BATTERY BACKUP
R2	EMERGENCY	1	MULTI-VOLTAGE	Wall Mounted	N/A	LED	ACQUITY (LITHONIA)	ELA- LED-T-WP-M12	CONNECTS TO REMOTE BATTERY "R2"
R3	EMERGENCY	6	MULTI-VOLTAGE	Wall Mounted	N/A	LED	ACQUITY (LITHONIA)	ELT24-W-R0	BATTERY PACK FOR REMOTE HEAD "R2"
S	18-25/32" X 7-5/8"	50	MULTI-VOLTAGE	Surface	N/A	LED	EATON	ENV-F02-LED-E1-BL3-GM	EXTERIOR WALL SCONCE - TJ MAXX
S1	15-25/32" X 7-5/8"	50	MULTI-VOLTAGE	Surface	N/A	LED	EATON	ENV-F02-LED-E1-BL3-WH	EXTERIOR WALL SCONCE - MARSHALL'S
S2	8" X 10"	14	277V	Surface	N/A	LED	SPECTRUM	NL1008LEDGV14W35KEX(17/1) CG/SP10CP104/AB (120V) NL1008LEDGV14W35KEX(17/1) CG/SP10CP104/AB (277V) NL1008LEDGV14W35KEX(17/1) CGW/SP10CP104/AB (120V) NL1008LEDGV14W35KEX(17/1) CGW/SP10CP104/AB (277V)	
S3	8" X 10"	14	277V	Surface	N/A	LED	SPECTRUM	NL1008LEDGV14W35KEX(17/1) CGW/SP10CP104/AB (120V) NL1008LEDGV14W35KEX(17/1) CGW/SP10CP104/AB (277V)	
T4L	2-7/8" X 2-1/16"	17	120V	Track	1	3000 DIM AF 50 (PHILIPS 435362)	PHILIPS/CORTECH	CTL603-P (LAMP HOLDER) 435362 (PHILIPS LAMP)	TRACK MOUNTED SPOT LIGHT
W	2' X 2'	104	277V	Recessed	N/A	LED	SPECTRUM	GC220RLEDGV 113 35K E(2) T.J.A. GW (277V)	
Y	2' X 2'	104	277V	Recessed	N/A	LED	SPECTRUM	GC220RLEDGV 113 35K E(2) T.J.A. GW (277V)	

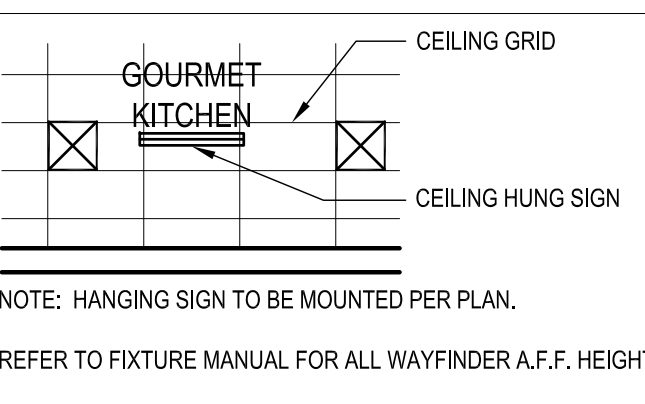
NOTE:
LIGHTING SCHEDULE IS FOR REFERENCE
ONLY REFER TO ELECTRICAL SHEET E1
FOR CONSTRUCTION

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°

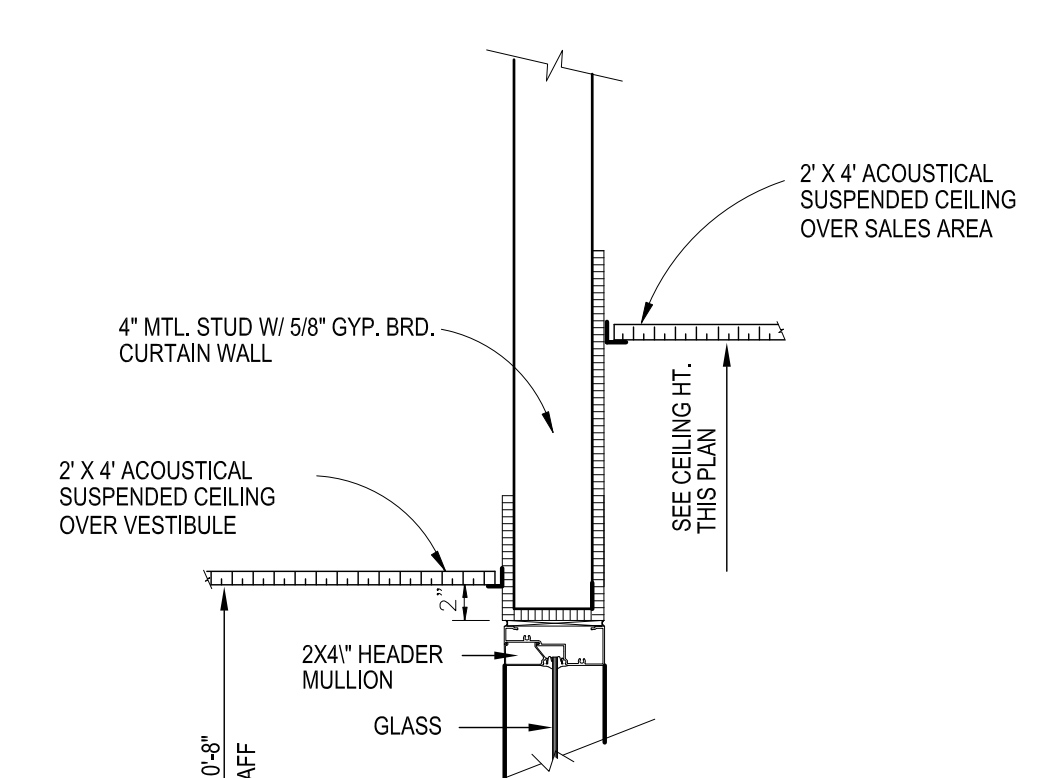
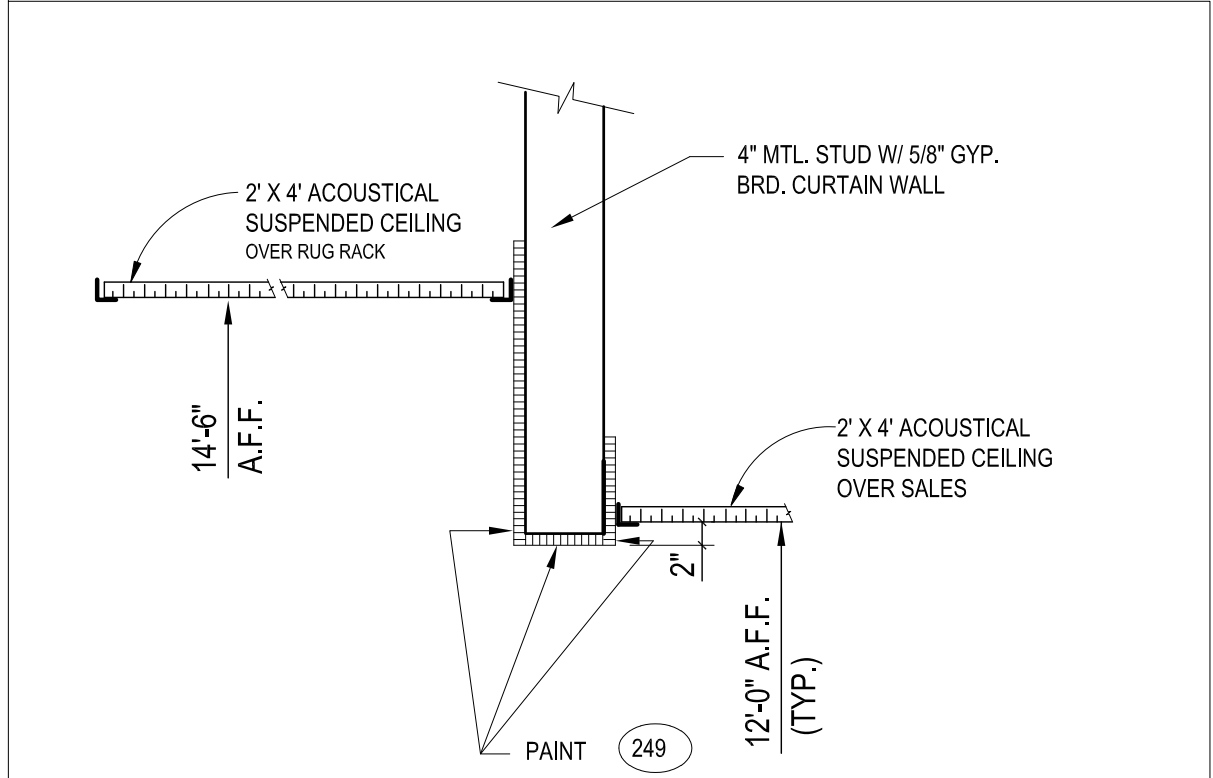


- LEGEND**
- NEW LIGHT (AS NOTED)
 - EXISTING LIGHT (AS NOTED)
 - RELOCATED LIGHT (AS NOTED)
 - EMERGENCY REMOTE HEADS
 - NEW LIGHT (AS NOTED)
 - EXISTING LIGHT (AS NOTED)
 - RELOCATED LIGHT (AS NOTED)
 - NEW LIGHT (AS NOTED)
 - EXISTING LIGHT (AS NOTED)
 - RELOCATED LIGHT (AS NOTED)
 - EMERGENCY EXIT SIGN/LIGHT COMBO. (SEE SPECS.)

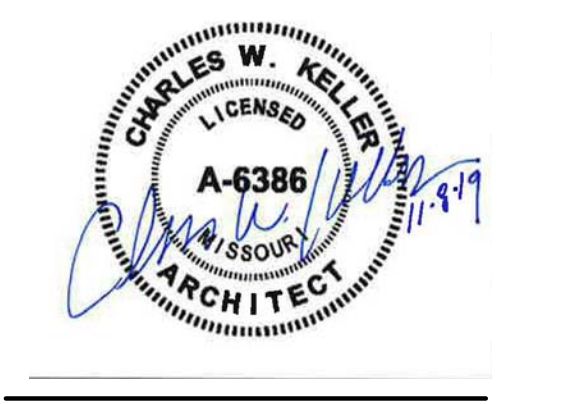
- LIGHTING NOTES:**
- STORE LIGHTING (SALES & SUPPORT) SHALL INCORPORATE QUANTUM ELM TYPE FIXTURES TO ACT AS EMERGENCY LIGHTS. NUMBER OF FIXTURES TO BE DETERMINED BY CODE.
 - NL-FIXTURES WILL BE WIRED BEFORE A SWITCH OR CONTACTOR. (FIXTURES WILL RUN 24 HOURS)
 - LAYAWAY STOCK & PROCESSING ROOM LIGHTING TO BE MOUNTED AT 13' AFF. (LIGHTING TO BE COORDINATED WITH HVAC & STRUCTURAL STEEL)
 - TYPE A4 PENDANT LIGHTING FITTED WITH LOCKING PLUG. NEMA L5-20P 20A, 120V NEMA L7-20P 20A, 277V. E.C. TO FURNISH AND INSTALL APPROVED LOCKING RECEPTACLE AT OPEN DECK CEILING. PER REQUIRED VOLTAGE. NEMA L5-20P 20A, 120V NEMA L7-20P 20A, 277V
 - SIGN** HANGING SIGNS PROVIDED AND INSTALLED BY TJX.
 - SECURE EXCESS CORD WITH TIE STRAP ABOVE LIGHT FIXTURE. COORDINATE WITH TJX PROJECT MANAGER.



NOTE: 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). 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.



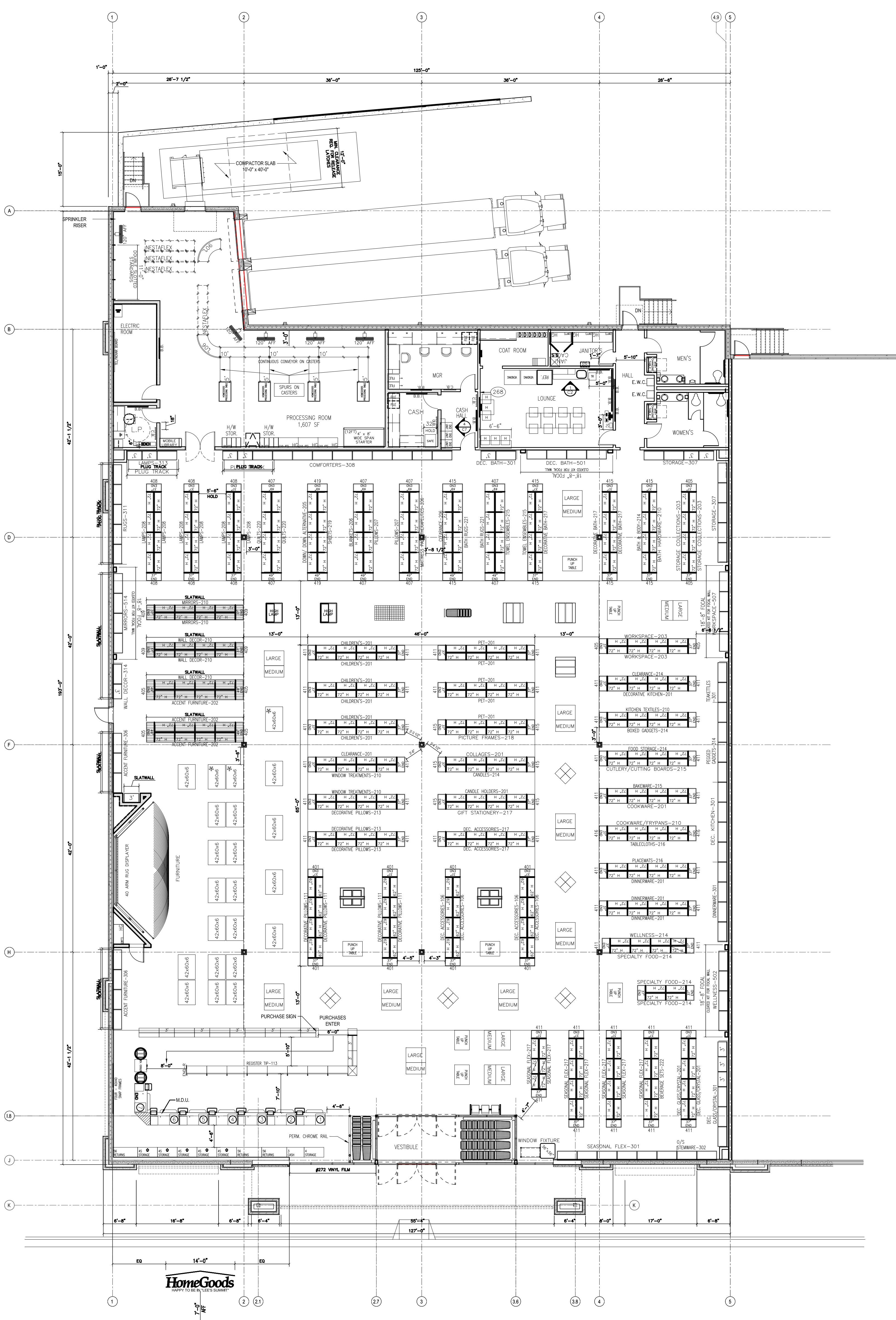
3 REFLECTED CEILING PLAN
3/32" = 1'-0"



HomeGoods
Tenant Improvements
Summit Orchards Lot 4B
492 NW Chipman Rd
Lee's Summit, MO 64086

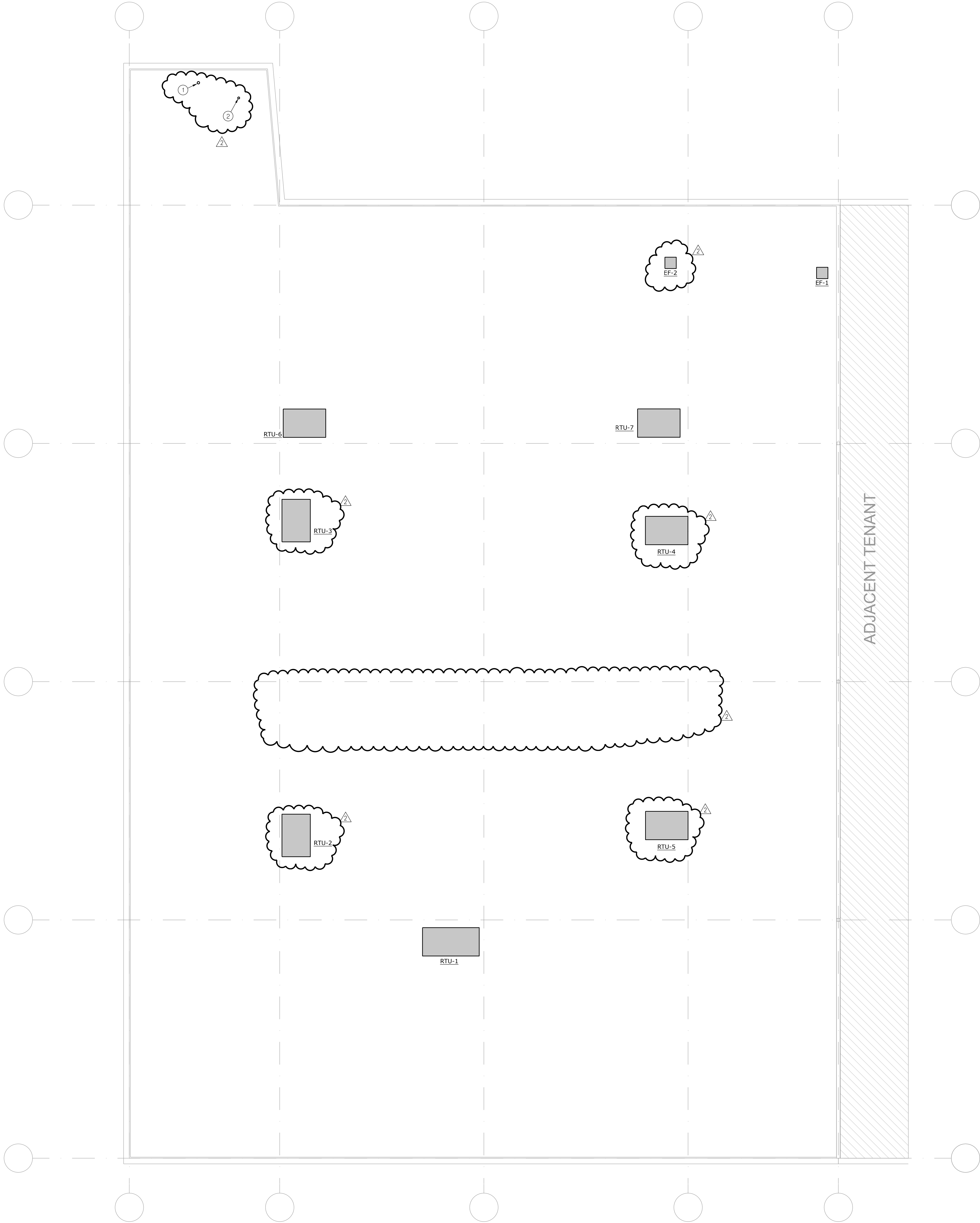
AREA ANALYSIS			
GROUND COVER	22,126 SF		
SALES AREA	81%	17,875 SF	
STOCKROOM		1,807 SF	
MEZZ. (IF APPLICABLE)		0 SF	
TOTAL CONSTRUCTION AREA		22,126 SF	

NOTE: REFER TO DOOR AND HARDWARE SCHEDULE ON DRAWING A2 FOR ALL ADA EXIT SIGN TYPES AND LOCATIONS.



Summit Orchards Shale & Co. - Lees Summit, MO
C:\Users\j225\OneDrive\Drawings\04-1923000_MO.dwg
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Prossato Porro Wednesday, December 18, 2019 3:48:42 PM

PROJECT NAME: SUMMIT ORCHARDS SHALE & CO.
LAST CORRECTION BY: J225
PLOT DATE: 11/18/19



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

- GENERAL NOTES:
1. INFORMATION SHOWN ON THE DRAWINGS IS INTENDED TO CONVEY SCOPE AND IS ARRANGED FOR DRAWING CLARITY. IT IS NOT TO BE TAKEN AS AN AS-BUILT CONDITION. THE SYSTEM INSTALLATION SHALL BE COORDINATED WITH STRUCTURE AND ALL OTHER TRADES TO PROVIDE FOR A COMPLETE AND WORKING SYSTEM.
 2. CAREFULLY COORDINATE ROUTING OF SERVICES WITH STRUCTURE AS WELL AS ALL OTHER TRADES TO MAINTAIN EQUIPMENT CLEARANCES.
 3. COORDINATE INSTALLATION AND PENETRATIONS OF ALL NEW SERVICES WITH STRUCTURAL PRIOR TO CUTTING.
 4. EXTEND ALL CONDENSATE DRAINS TO NEAREST ROOF DRAIN.
 5. PAINT ALL PVC PIPING ON ROOF TO PROVIDE FOR UV PROTECTION. PAINT NATURAL GAS PIPING ON ROOF FOR PROTECTION FROM WEATHER. PAINT COLOR PER ARCHITECT DIRECTION.
 6. ALL SERVICES SHOWN HALF TONE ARE EXISTING.

- MECHANICAL NOTES:
- 1 5" COMBUSTION AIR THRU ROOF. FURNISH & INSTALL W/ CAP & BIRD SCREEN.
 - 2 5" FLUE THROUGH ROOF. FURNISH AND INSTALL WITH FLUE CAP & BIRD SCREEN.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
STATE OF MISSOURI
CONTRACT NO. 1923000

SLAGGIE
ARCHITECTS

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888-756-1958
slaggie.com

smith&boucher
ENGINEERS
25501 west valley parkway, suite 200 olathe, ks 66061
phone 913.345.2127 fax 913.345.8613
project number 1923000

STATE OF MISSOURI
RYAN JEROD
DIEDERER
NUMBER
PE 20150063
11/18/19

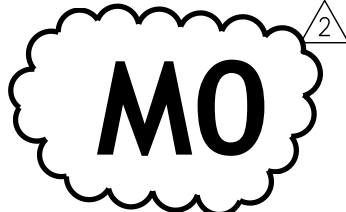
HomeGoods
Tenant Improvements
Summit Orchards Lot 4B
492 NW Chipman Rd
Lee's Summit, MO 64086

Revisions:
Add-01 City Comments 11/18/19
Add-02 Tenant Comments 12/18/19

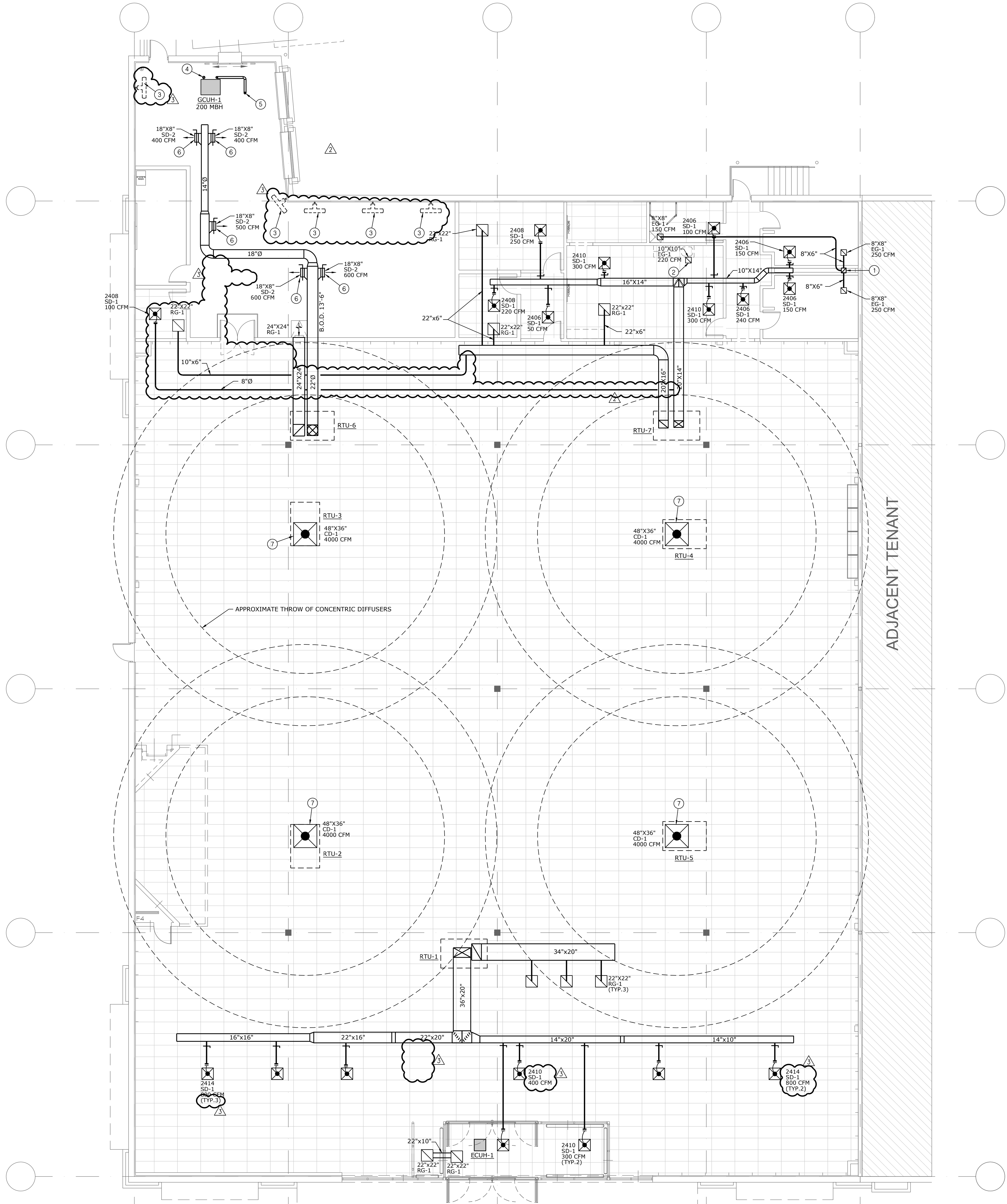
Project #: 180802-02

Construction / Permit Set
November 8, 2019

ROOF PLAN - MECHANICAL



PROJECT NAME: Summit Orchards Shell & Core - Lees Summit, MO
LAST CORRECTION BY: DATE: TIME:
PLOT BY: DATE: TIME:
Edmundson Thursday, January 9, 2020 2:56:34 PM
Charles Booby Thursday, January 9, 2020 3:15:52 PM



GENERAL NOTES:

1. INFORMATION SHOWN ON THE DRAWINGS IS INTENDED TO CONVEY SCOPE AND IS ARRANGED FOR DRAWING CLARITY. IT IS NOT TO BE TAKEN AS AN AS-BUILT CONDITION. THE SYSTEM INSTALLATION SHALL BE COORDINATED WITH STRUCTURE, CEILINGS, WALLS, AND ALL OTHER TRADES TO PROVIDE FOR A COMPLETE AND WORKING SYSTEM.
2. ALL DUCTWORK IS SHOWN DIAGRAMMATICALLY AND DOES NOT INCLUDE ALL OFFSETS, DROPS, AND RISES. CAREFULLY COORDINATE DUCT ROUTING WITH STRUCTURE AS WELL AS ALL OTHER TRADES TO MAINTAIN EQUIPMENT CLEARANCES, EQUIPMENT ACCESSIBILITY, DESIRED CEILING HEIGHTS, AND AESTHETICS. THE CONTRACTOR SHALL INCLUDE ANY NEEDED OFFSETS AND CHANGES OF DIRECTION IN THE BID PRICING.
3. COORDINATE ALL DUCT PENETRATIONS WITH STRUCTURAL PRIOR TO CUTTING FLOORS OR BEARING WALLS.
4. WALL MOUNTED DEVICES SUCH AS THERMOSTATS, TEMPERATURE SENSORS, HUMIDITY SENSORS, AND PRESSURE SENSORS ARE SHOWN ON PLANS FOR CLARITY AND GENERAL REFERENCE OF LOCATIONS. LOCATIONS SHOW ARE NOT TO BE CONSIDERED THE EXACT MOUNTING LOCATION. COORDINATE THE INSTALLATION OF ALL WALL MOUNTED DEVICES WITH THE ARCHITECTURAL ELEVATIONS AND OTHER TRADES WALL MOUNTED DEVICES. GROUP THE INSTALLATION OF ALL THE DEVICES TO THE EXTENT POSSIBLE AND LOCATED DEVICES SUCH THAT THEY DO NOT CONFLICT WITH MILL WORK, TELEVISIONS, FURNITURE, TEACHING BOARDS, AND OTHER SIMILAR OBSTRUCTIONS.
5. PROVIDE FIRESTOPPING AT PENETRATIONS OF ALL RATED WALLS. REFER TO CODE PLANS FOR LOCATIONS OF RATED WALLS.
6. FURNISH ALL EXPOSED DUCTWORK IN FINISHED SPACES WITH PAINTABLE FINISH.
7. DUCT SIZES SHOWN ARE SHEET METAL DIMENSIONS. WHERE DUCT LINER IS REQUIRED, DUCT SIZES ARE NOT REQUIRED TO BE INCREASED TO ACCOUNT FOR LINER.
8. ALL SERVICES SHOWN WITH HALF TONE LINE WEIGHT ARE EXISTING.
9. REFER TO NOVAR DRAWINGS FOR SENSOR LOCATIONS.

PLAN NOTES:

1. 10"x10" EXHAUST DUCT UP TO ROOF EXHAUST FAN, EF-1.
2. 10"x10" EXHAUST DUCT UP TO ROOF EXHAUST FAN, EF-2.
3. FURNISH AND INSTALL TPI MODEL CACU 24-W CIRCULATOR FAN. REFER TO DETAIL ON E2 FOR MORE INFORMATION.
4. 5" DUCT UP THROUGH ROOF W/CAP & BIRD SCREEN FOR COMBUSTION AIR.
5. 4" EXHAUST FLUE UP THROUGH ROOF.
6. MOUNTING ANGLE OF DIFFUSER TO BE 15° BELOW HORIZONTAL. REFER TO DETAILS ON M5.
7. CONNECT CONCENTRIC DIFFUSER TO RTU ON ROOF PER MANUFACTURER'S RECOMMENDATIONS.

HomeGoods
Tenant Improvements
Summit Orchards Lot 4B
492 NW Chipman Rd
Lee's Summit, MO 64086

Revisions:	
Add-01 City Comments	11/18/19
Add-02 Tenant Comments	12/18/19
Add-03 Tenant Comments	01/10/20

Project #: 180902-02

Construction / Permit Set
November 8, 2019

MECHANICAL PLAN

M1

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
KANSAS CITY, MISSOURI

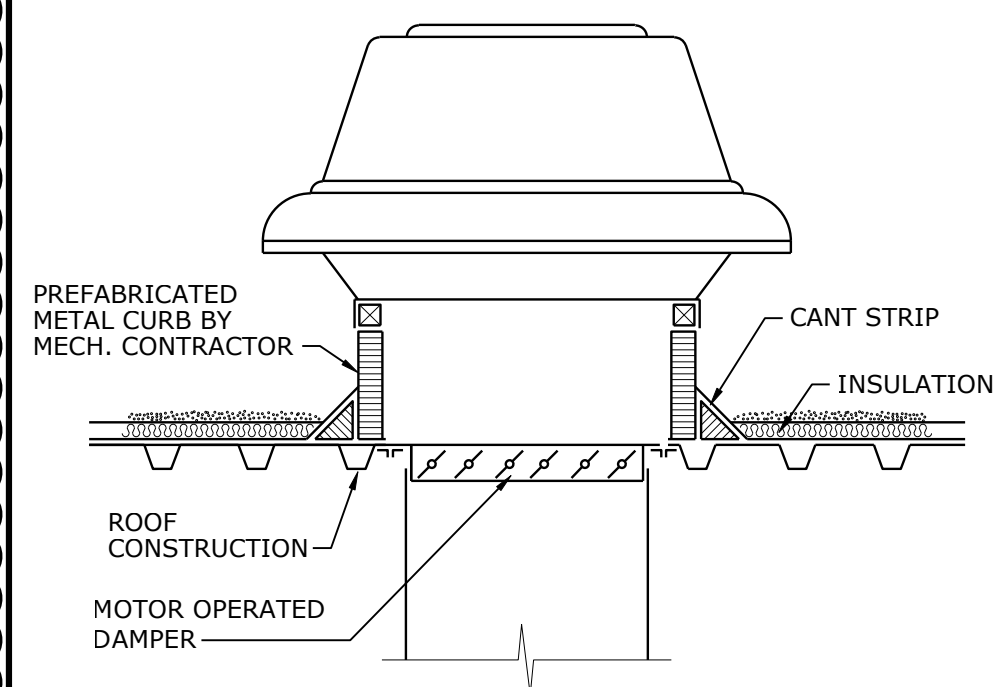
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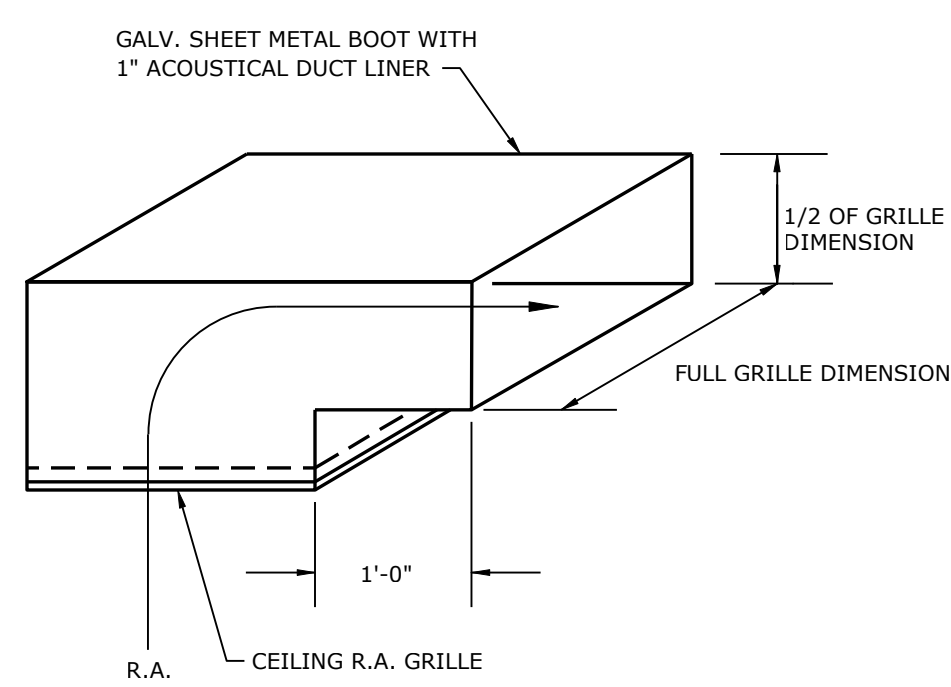
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phone 913.345.2127 fax 913.345.8617
project number 1923000

STATE OF MISSOURI
RYAN JERO
DIEDER
NUMBER
PE 20150065
1/18/19

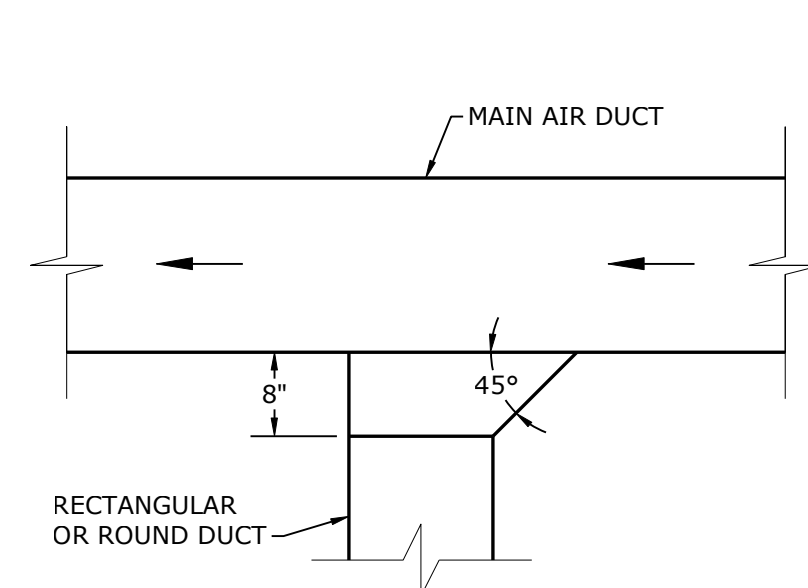


POWER ROOF VENTILATOR
NOT TO SCALE

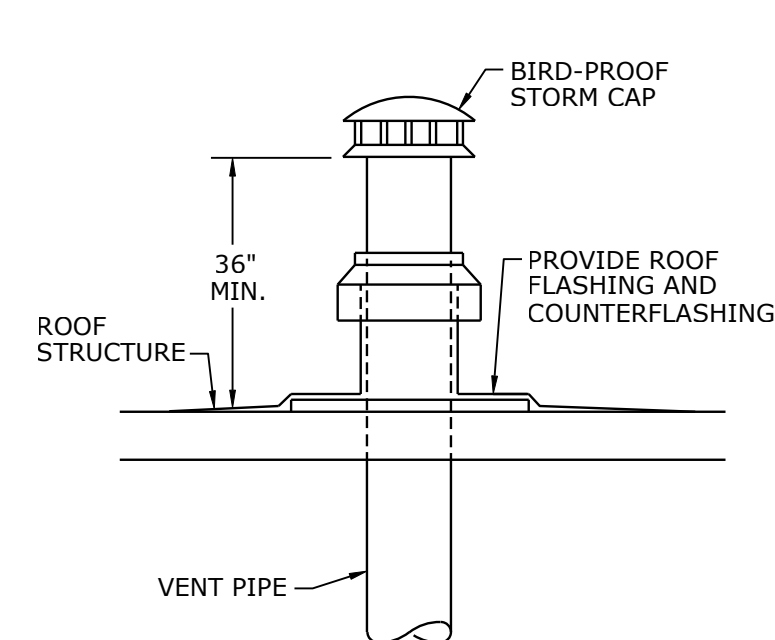


RETURN AIR BOOT DETAIL

NOT TO SCALE



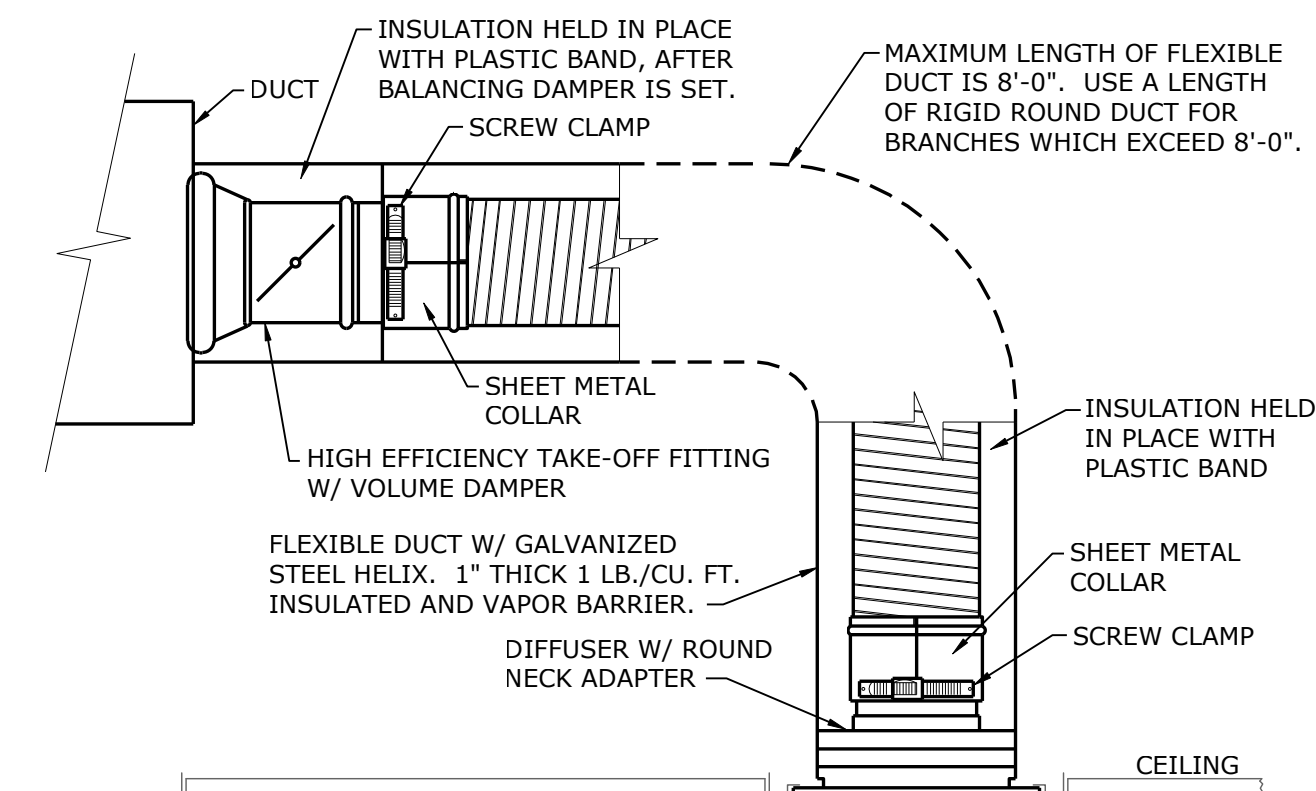
**TYPICAL BRANCH
DUCT TAKEOFF**
NOT TO SCALE



GAS VENT STACK DETAIL

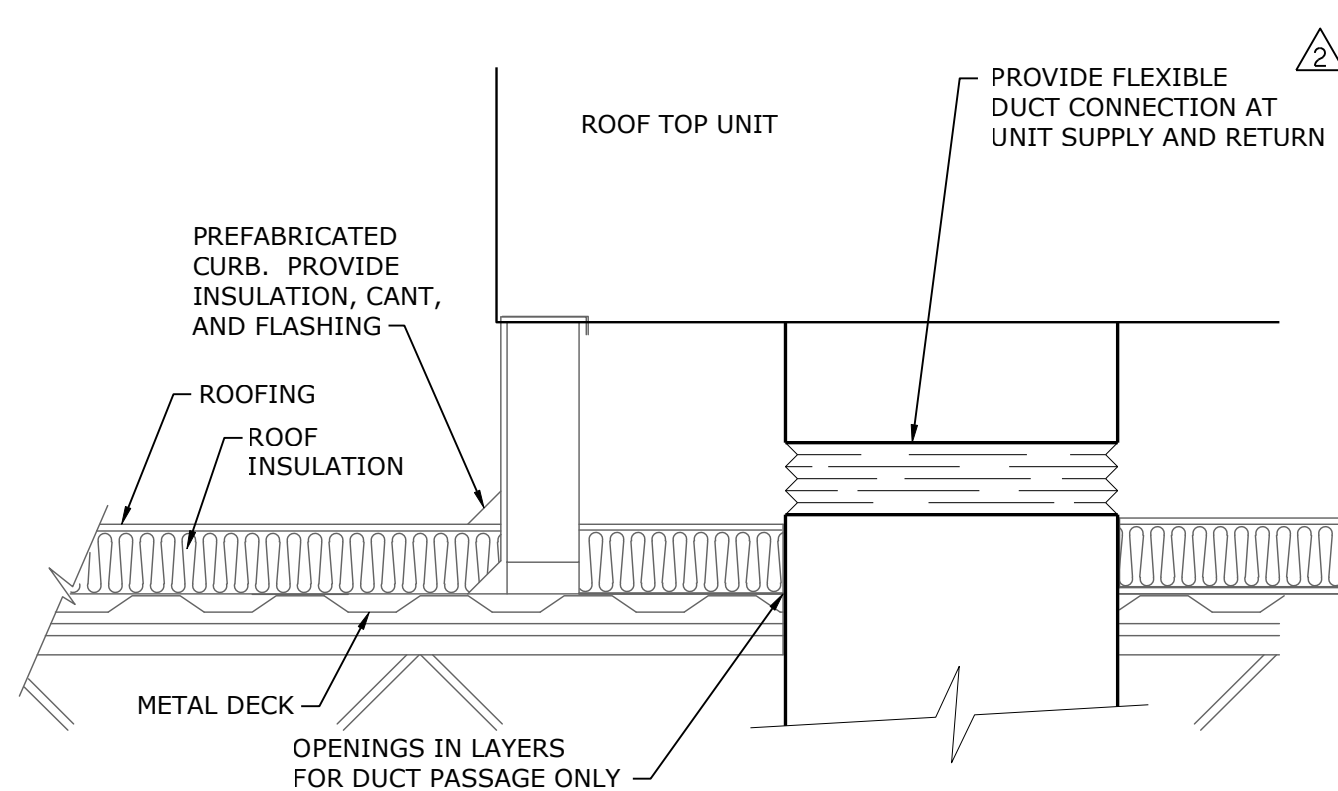
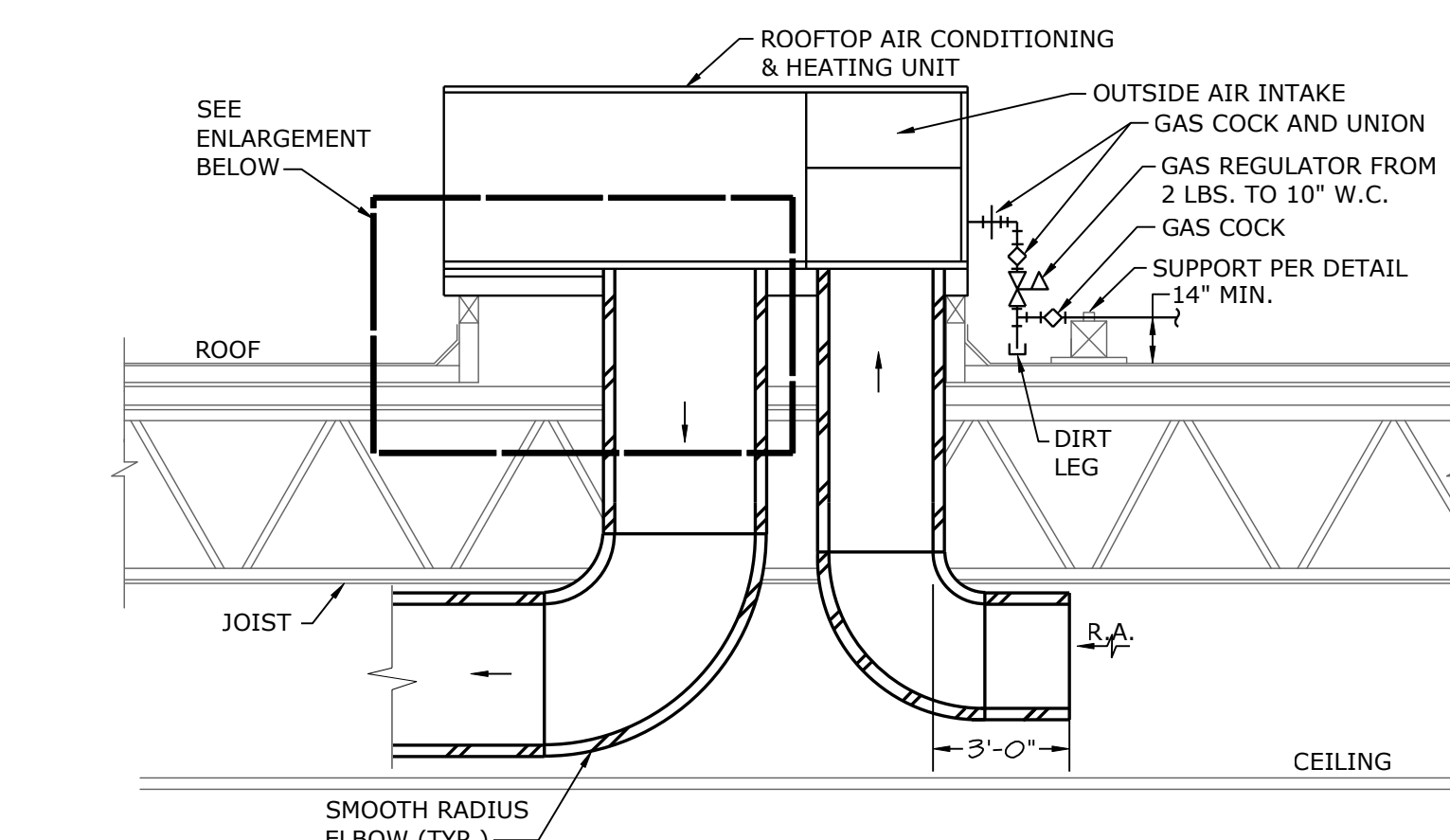
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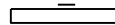
FLEXIBLE BRANCH DUCT DETAIL

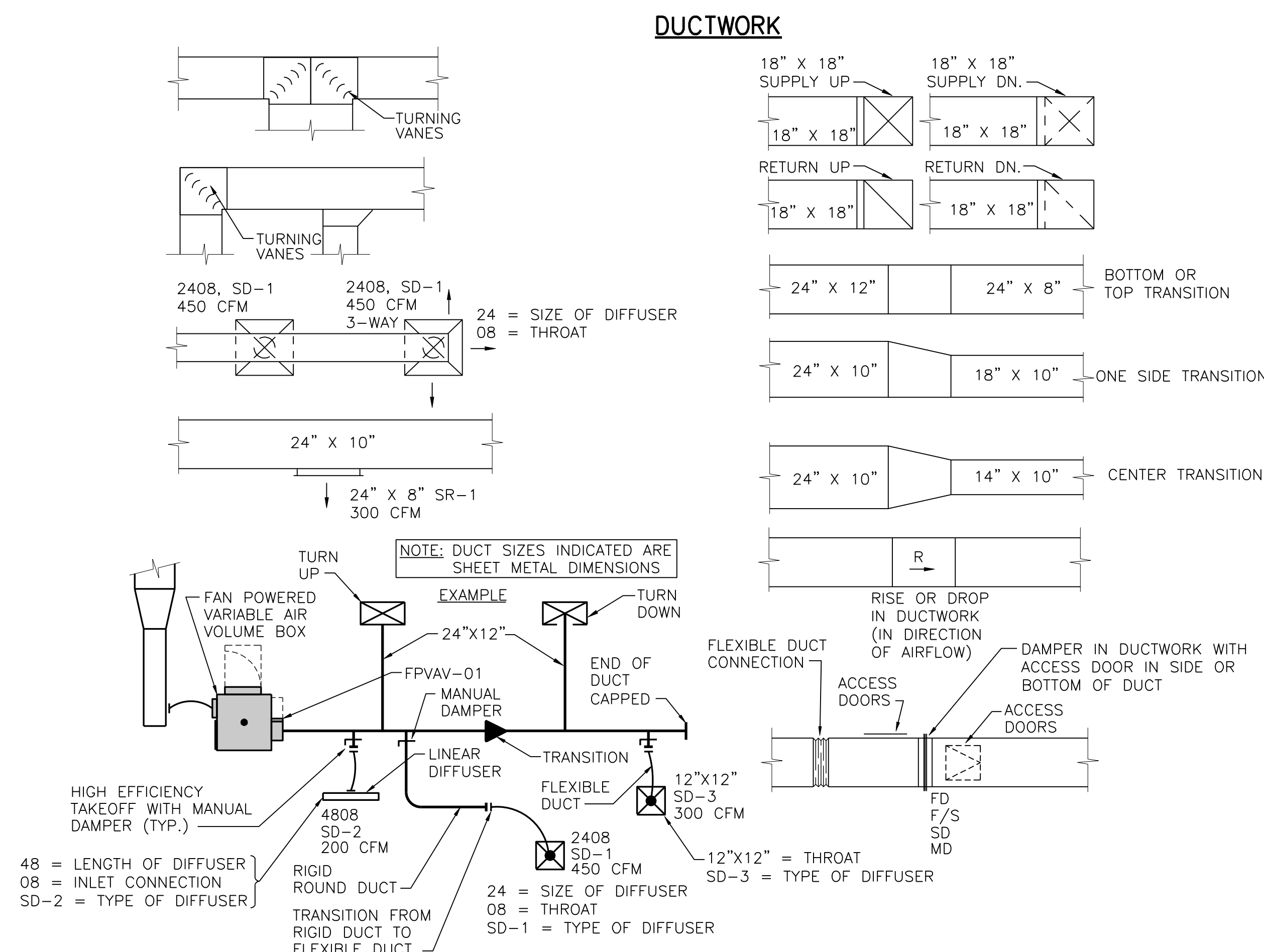
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ROOFTOP UNIT AND CURB DETAIL

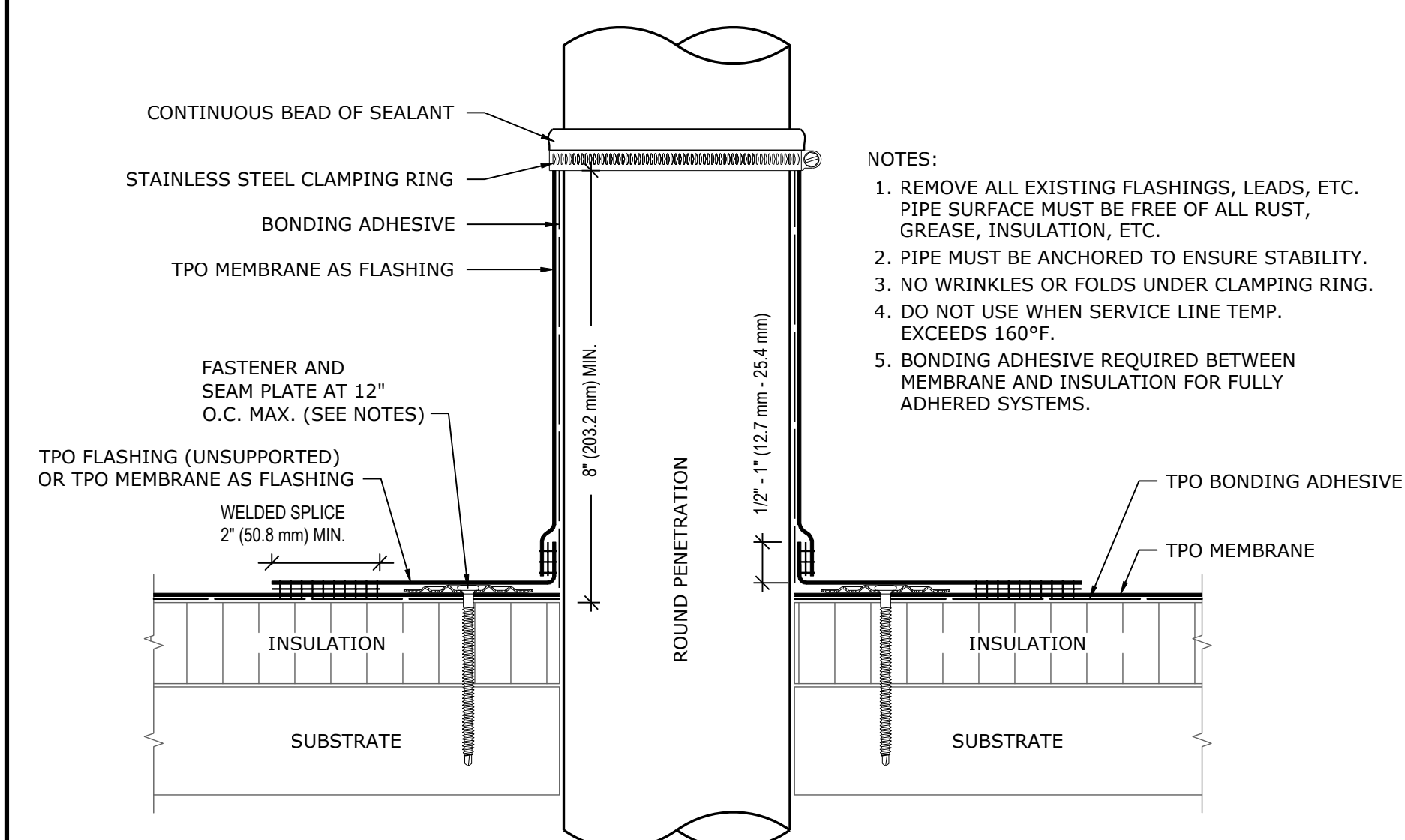
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- ## HVAC
- | | |
|---|---|
| — CWS — | CHILLED WATER SUPPLY |
| — CWR — | CHILLED WATER RETURN |
| — CHWS — | CHILLED/HOT WATER SUPPLY |
| — CHWR — | CHILLED/HOT WATER RETURN |
| — HWS — | HEATING HOT WATER SUPPLY |
| — HWR — | HEATING HOT WATER RETURN |
| — CTS — | COOLING TOWER SUPPLY |
| — CTR — | COOLING TOWER RETURN |
| — STM — | LOW PRESSURE STEAM |
| — RTN — | LOW PRESSURE CONDENSATE RETURN |
| — STM—50— | HIGH PRESSURE STEAM - NO'S GIVE GAUGE PRESSURE IN P.S.I. |
| — RTN—50— | HIGH PRESSURE RETURN - NO'S GIVE GAUGE PRESSURE IN P.S.I. |
| — RD — | REFRIGERANT DISCHARGE |
| — RL — | REFRIGERANT LIQUID |
| — RS — | REFRIGERANT SUCTION |
| — FOS — | FUEL OIL SUPPLY |
| — FOR — | FUEL OIL RETURN |
| — A — | COMPRESSED AIR |
| — D — | DRAIN (CONDENSATE) |
| H-T S | THERMOSTAT - ('S' DENOTES SENSOR) |
| H-H S | HUMIDISTAT - ('S' DENOTES SENSOR) |
| H-H | THERMOSTAT/HUMIDITY SENSOR |
| CO ₂ | CARBON DIOXIDE SENSOR |
| THC | THERMOSTAT/HUMIDITY SENSOR/CO ₂ SENSOR |
|  | HUMIDIFIER |
|  | SUPPLY AIR FLOW INDICATOR |
|  | RETURN AND EXHAUST AIR FLOW INDICATOR |
|  | SUPPLY DIFFUSER |
|  | SUPPLY STRIP DIFFUSER |
|  | RETURN GRILLE OR EXHAUST REGISTER |



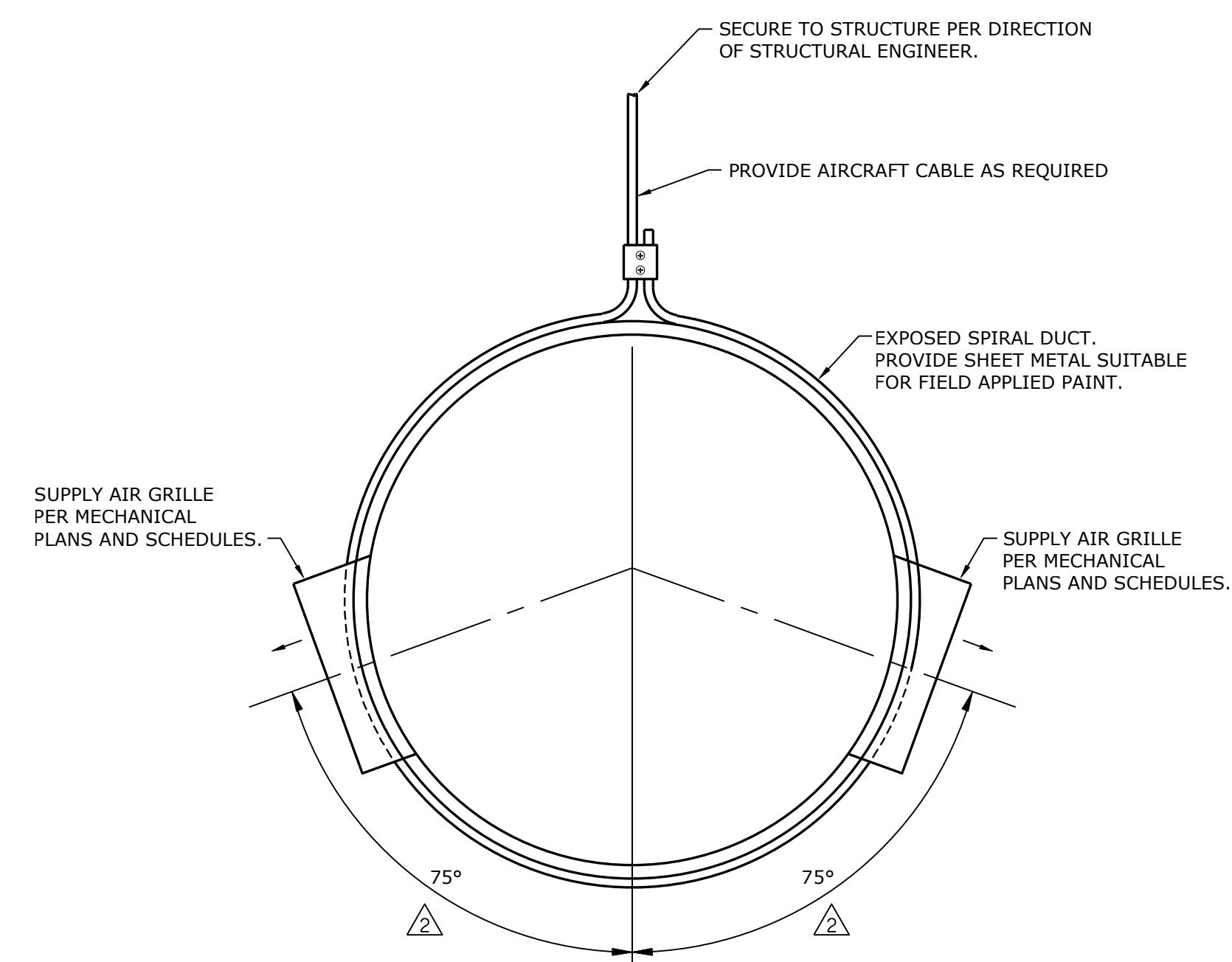
DUCTWORK

MECHANICAL PLAN SYMBOLS

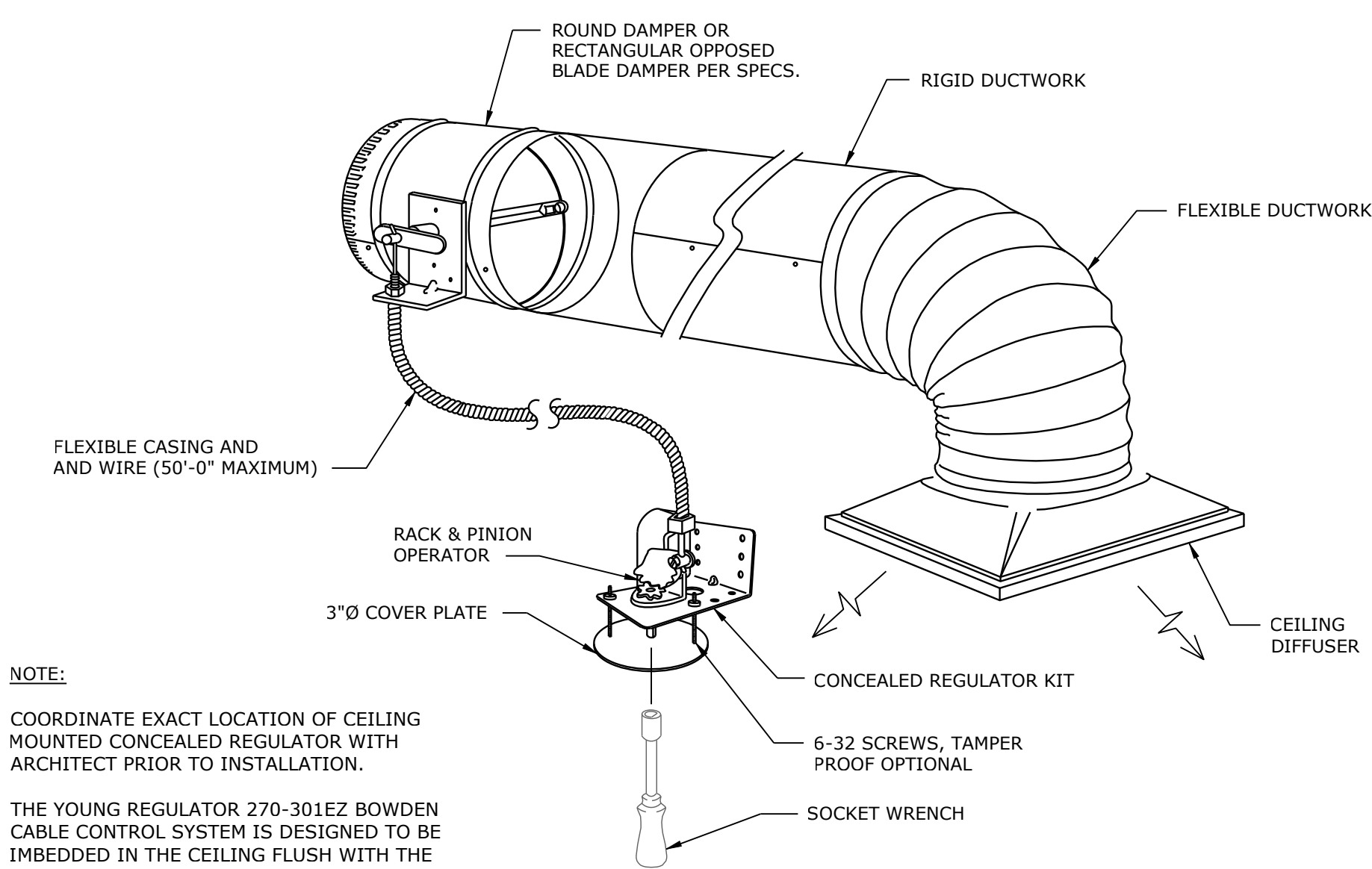


ROOF PENETRATION DETAIL

NOT TO SCALE



EXPOSED ROUND DUCT WITH ANGLED DIFFUSERS
NOT TO SCALE



DETAIL OF ADJUSTABLE DAMPERS LOCATED ABOVE INACCESSIBLE CEILINGS OR WALLS

NO SCALE

Summit Orchards Shale & Co. - Lees Summit, MO
192301 (192301) 192301
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Thursday, January 9, 2020 1:43:23 PM
Charles Booby

PROJECT NAME:
LOCATION:
LAST CORRECTION:
DATE:
TIME:
DRAWN BY:
DATE:
TIME:

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, 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 DELATE 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 CIRCLE DIMENSIONS.

SHEETMETAL DUCTWORK: PROVIDE SHEETMETAL DUCTWORK FABRICATED AND INSTALLED IN ACCORDANCE WITH ASHRAE AND SMACNA STANDARDS, FOR 1" W.G. PRESSURE CLASS. SEAL CLASS 7". SHEETMETAL SHALL BE GALVANIZED SHEET STEEL OF LOCK FORMING QUALITY, WITH G90 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 A624 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 GASKETING. 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 CEILING) GALVANIZED STEEL, COMPLYING WITH SMACNA STANDARDS. SPIRAL SEAM DUCTWORK SHALL HAVE SMACNA SEAM TYPE FL-1.

FLEXIBLE DUCT: PROVIDE FACTORY ASSEMBLED CLASS 1 AIR DUCT (UL 181) WITH 1" THICK 1 PPF 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" W.G. PRESSURE AND 0 TO 250°F TEMPERATURE. PROVIDE SCREW-OPERATED MANUAL ADJUSTABLE CLAMPING DEVICES. USE TWIST-LOCK TAP COLLARS AT CONNECTIONS INTO SHEETMETAL DUCTWORK. MAXIMUM EXTENDED LENGTH OF FLEXIBLE DUCT SHALL NOT EXCEED 4 FEET.

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

DUCT SEALANT: PROVIDE POLYMERIC RUBBER TAP SEALANT FOR USE ON BOTH INTERIOR LOCATED DUCTWORK AND DUCTWORK EXPOSED TO OUTDOOR CONDITIONS. SEALANT 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/SILOXANE ACTUATOR 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 I, 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 4.2 OR HIGHER WITH A 0.75 PCF DENSITY.

DUCT LINER (ALL RECTANGULAR SUPPLY AND RETURN DUCT): PROVIDE MINIMUM 1" THICK, 3 PCF DENSITY, NEOPRENE FOAM, LONG TEXTILE FIBER TYPE DUCT LINER, WITH SEALING ON 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 0.26 AT 75°F.

ROUND VOLUME DAMPERS: PROVIDE MINIMUM 20 GAUGE GALVANIZED STEEL FRAME AND BLADES, MINIMUM 5/8" 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 3/4" HEXAGONAL AXLE, MOLDED SYNTHETIC BEARINGS, WITH 3/8" SQUARE FLAT 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 4".

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 DUCTWORK. FOLLOW SMACNA GUIDELINES FOR SPACING SUPPORT, AND CONSTRUCTION. ALL BLADES SHALL BE DOUBLE THICKNESS AIRFOIL TYPE.

FLEXIBLE DUCT CONNECTORS: PROVIDE U.L. 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 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.

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 RISERS 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 DEPTH 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, IDENTIFYING 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 APPEARANCES 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 GROUDED 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.

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 DUCTWORK 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.

NOVAR SYSTEM NOTES

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

1. GENERAL CONTRACTOR

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

2. MECHANICAL CONTRACTOR

2.1. HORIZONTALLY MOUNT 2X4 J-BOX WITH CONDUIT (WIREFOLD IF EXPOSED IN FINISHED AREAS) AT LOCATIONS DESIGNATED ON NOVAR CONTROLS SITE SPECIFIC PLANS. THE J-BOXES ARE SHALL BE MOUNTED 60" AFF EXCEPT IN FITTING ROOM LOCATIONS WHERE J-BOXES SHALL BE MOUNTED 84" AFF. ON SALES FLOOR J-BOXES SHALL BE MOUNTED ON BACK SIDE OF COLUMNS WHEN VIEWED FROM FRONT OF STORE.

2.2. PROVIDE PERMANENT STRANDED 18/8 AWG NON SHIELDED CABLE (18/10 IF THE RTU IS EQUIPPED WITH A CO2 SENSOR) FROM EACH ROOFTOP UNIT TO THE NOVAR ETM (1-STAY) LOCATION SHOWN ON THE NOVAR PLAN THAT SUPERSEDES ANY MECHANICAL PLAN LOCATIONS. ALL CONTROL DEVICES SHALL BE APPROPRIATELY IDENTIFIED AND PERMANENTLY ATTACHED.

2.3. TEMPORARY THERMOSTATS SHALL BE INSTALLED AT THE ETM LOCATIONS AND THE ROOFTOP UNITS STARTED.

2.4. HVAC EQUIPMENT SHALL HAVE HAD MANUFACTURER'S RECOMMENDED STARTUP PROCEDURE PERFORMED AND BE OPERATIONAL IN ALL MODES BEFORE ARRIVAL OF NOVAR CONTROLS REPRESENTATIVE FOR FINAL NOVAR INSTALLATION.

2.5. IN COLD WEATHER THE CONTRACTOR SHALL PROVIDE TEMPORARY THERMOSTAT TO OPERATE THE HEATERS IN RECEIVING.

2.6. BASEBOARD HEATERS SHALL BE FACTORY EQUIPPED WITH INTEGRAL THERMOSTATS AND INSTALLED IN ALL OFFICES, LOUNGE, RESTROOMS, AND SECURITY OFFICES WITH AT LEAST ONE EXTERIOR WALL WHEN LOCATED IN CLIMATE ZONES 4 AND 5. THE CIRCUITING FOR BASEBOARD HEATING SHALL BE THROUGH GE RELAY PANEL.

2.7. ELECTRIC VESTIBULE HEATERS SHALL BE FACTORY EQUIPPED WITH LOW VOLTAGE CONTROLS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: LOW VOLTAGE TRANSFORMER, AND TWO WIRE FIELD TERMINATION CONTROL POINT.

3. ELECTRICAL CONTRACTOR

3.1. PROVIDE THREE PHASE CIRCUIT BREAKER (20 AMPS) FOR THE VERIS WATTS TRANSUCIDER. THIS BREAKER MAY BE INSTALLED IN A LIGHTING DISTRIBUTION PANEL IF THE PANEL IS OF THE SAME VOLTAGE AS THE MAIN DISTRIBUTION PANEL.

3.2. INSTALL NOVAR PROVIDED CURRENT TRANSFORMERS (CTS).

3.3. CONNECT ALL CT WIRING TO THE VERIS WATTS TRANSUCIDER.

3.4. MOUNT AND POWER THE VERIS WATTS TRANSUCIDER.

3.5. PROVIDE 60MS (20 AMP, 1 POLE BREAKER AND 60MS#2 (20 AMP, 1 POLE BREAKER) POWER SIZES. THESE BREAKERS MUST ORIGINATE FROM THE SAME PHASE.

3.6. THE INSTALLATION PROGRAMMING, AND LABELING OF THE GE SOFTWARE PANEL IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR & GENERAL CONTRACTOR'S AGENTS.

YORK NATIONAL ACCOUNT

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 AT PHONE: (800)481-9738, FAX: (866) 406-9675.

FOR ALL OTHER INQUIRIES CONTACT DAN BILANCIA, NATIONAL ACCOUNT PRODUCT SPECIALIST AT (405)419-6537 FAX: (866)406-9675 OR EMAIL: dan.bilancia@jci.com.

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 LEADTIME FOR YORK RTU HVAC EQUIPMENT IS FOUR (4) WEEKS MANUFACTURING PLUS ONE (1) WEEK TRANSPORTATION DEPENDING ON THE LOCATION IN THE 48 STATES.

ANY NON-STANDARD OPTION MAY ADD TO THE STANDARD MANUFACTURING LEADTIME AND WILL BE CONFIRMED AT PLACEMENT OF ORDER.

HVAC EQUIPMENT WITH FACTORY TECHNICAT COATING OF CONDENSER COILS WILL HAVE AN ELEVEN WEEK LEADTIME.

NOTE: EQUIPMENT START-UP INSTRUCTION

YORK IS RESPONSIBLE FOR STARTUP AND COMMISSIONING OF THE ROOFTOP UNITS.

UNIT HEATER SCHEDULE - GAS

DESIGNATION	GCUH-1
HEATER TYPE	TUBULAR
LOCATION	PROCESSING
MOUNTING	WALL
MANUFACTURER	STERLING
MODEL	TF-200
UNIT DATA	
CFM	3200
VENT SIZE (IN)	5
HEATER INPUT (MBH)	200
HEATER OUTPUT (MBH)	166
VOLTAGE/PHASE	120/1
ELEC./CTRL. DATA	
PANEL & CIRCUIT	
WIRE & CONDUIT	
OVERCURRENT DEVICE	
DISCONNECT	
CONTROL	NOTE 1
REFERENCE DRAWING/DETAIL	M1
REMARKS	2

NOTES:
1. PROVIDE CONTROL THROUGH NOVAR CONTROLLER TEMPERATURE SENSOR AND CONTROL RELAYS.

FAN SCHEDULE

DESIGNATION	EF-1	EF-2
SERVICE	RESTROOM	LOUNGE
MANUFACTURER	YORK	YORK
FAN TYPE	DOWNBLAST	DOWNBLAST
MODEL	EVD13Q	EVD10R
WEIGHT (LBS)	40	29
UNIT DATA		
CFM	650	220
STATIC PRESSURE	0.5	0.5
FAN RPM	1177	1217
BRAKE HORSEPOWER	314 W	0.038
MOTOR HORSEPOWER	1/4	1/12
DRIVE	DIRECT	DIRECT
SONES	4.7	3.9
ELECTRICAL/CONTROL DATA		
VOLTAGE/PHASE	120/1	120/1
PANEL & CIRCUIT	AL-10	AL-12
WIRE & CONDUIT	(2)#12, #12G, 1/2" C.	(2)#12, #12G, 1/2" C.
OVERCURRENT DEVICE	15A-1P CB	15A-1P CB
DISCONNECT	30A-1P NF	30A-1P NF
CONTROL	NOTE 1	NOTE 1
DAMPER TYPE	PARALLEL BLADE	PARALLEL BLADE
REFERENCE DRAWING/DETAIL	M0	M0
REMARKS	2	2, 3

NOTES:
1. COORDINATE WITH CONTROL CONTRACTOR FOR VOLTAGE REQUIRED.
2. PROVIDE WITH FAN SPEED CONTROLLER
3. FAN TO BE CONTROLLED BY WALL MOUNTED TOGGLE ON/OFF SWITCH IN LOUNGE AREA.

ROOFTOP UNIT SCHEDULE - GAS HEAT

DESIGNATION	RTU-1	RTU-2	RTU-3	RTU-4	RTU-5	RTU-6	RTU-7
MANUFACTURER	YORK	YORK	YORK	YORK	YORK	YORK	YORK
MODEL NO.	ZJ150N18R4D5HCA1R1	ZJ120N18R4D5HCA1R2	ZJ120N18R4D5HCA1R2	ZJ120N18R4D5HCA1R2	ZJ120N18R4D5HCA1R2	ZJ078N12R4B5HCA1R2	ZT061N08R4B5HCA1R1
CFM	5000	4000	4000	4000	4000	2600	1760
TOTAL COOLING CAPACITY (MBH)	170.8	108	108	108	108	80.4	52.4
SENSIBLE COOLING CAPACITY (MBH)	121.3	81.3	81.3	81.3	81.3	58.8	37.7
ENT. AIR (DBWB)	80/67	80/67	80/67	80/67	80/67	80/67	80/67
LVG. AIR (DBWB)	57.5/56.1	58.1/57.0	58.1/57.0	58.1/57.0	58.1/57.0	59.1/57.2	58.2/56.6
MINIMUM E.E.R.	12.0	12.0	12.0	12.0	12.0	11.8	14
HEATING INPUT (MBH)	180	180	180	180	180	120	80
HEATING OUTPUT (MBH)	144	144	144	144	144	96	65
OUTSIDE AIR CFM	800	850	950	900	750	300	200
TOTAL S.P. (IN. W.C.)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
FAN BRAKE HP	5.10	2.95	2.95	2.95	2.95	1.97	1.12
FAN MOTOR HP	5.75	3.5	3.5	3.5	3.5	2.0	1.50
NO. OF COMPRESSORS	2	2	2	2	2	2	2
STAGES OF COOLING	2	2	2	2	2	2	2
SMOKE DETECTORS	YES, NOTE 3	YES, NOTE 3	YES, NOTE 3	YES, NOTE 3	YES, NOTE 3	YES, NOTE 3	YES, NOTE 3
RECEPTACLE	NOTE 4	NOTE 4	NOTE 4	NOTE 4	NOTE 4	NOTE 4	NOTE 4
POWERED RELIEF	NO	YES	YES	YES	YES	NO	NO
ECONOMIZER OPERATION	YES	YES	YES	YES	YES	YES	YES
FILTER							
TYPE	2" MERV 13	2" MERV 13	2" MERV 13	2" MERV 13	2" MERV 13	2" MERV 13	2" MERV 13
MIN. SQ. FT. AREA	---	---	---	---	---	---	---
VOLTAGE/PHASE	480/3	480/3	480/3	480/3	480/3	480/3	480/3
MINIMUM CIRCUIT AMPACITY	41.3	29.2	29.2	29.2	29.2	18.5	14.6
MAXIMUM OVERCURRENT PROTECTION	50	35	35	35	35	20	20
PANEL & CIRCUIT	AH-19.21.23	AH-25.27.29	AH-31.33.35	AH-37.39.41	AH-20.22.24	AH-26.28.30	AH-32.34.36
WIRE & CONDUIT	(3)#6, #10G, 3/4" C.	(3)#10, #10G, 1/2" C.	(3)#10, #10G, 1/2" C.	(3)#10, #10G, 1/2" C.	(3)#10, #10G, 1/2" C.	(3)#12, #12G, 1/2" C.	(3)#12, #12G, 1/2" C.
OVERCURRENT DEVICE	50A/3P CB	35A/3P CB	35A/3P CB	35A/3P CB	35A/3P CB	20A/3P CB	20A/3P CB
DISCONNECT	60A/3P NF	60A/3P NF	60A/3P NF	60A/3P NF	60A/3P NF	30A/3P NF	30A/3P NF
CONTROL SEQUENCE	RE: DRAWINGS	RE: DRAWINGS	RE: DRAWINGS	RE: DRAWINGS	RE: DRAWINGS	RE: DRAWINGS	RE: DRAWINGS
REFERENCE DRAWING/DETAIL	M0	M0	M0	M0	M0	M0	M0
REMARKS	NOTE 1, 2, 5.	NOTE 1, 2, 5.	NOTE 1, 2, 5.	NOTE 1, 2, 5.	NOTE 1, 2, 5.	NOTE 1, 2, 5.	NOTE 1, 2, 5.

NOTES:
1. PROVIDE WITH SINGLE POINT POWER CONNECTION.
2. FURNISH WITH FACTOR INSTALLED ROOF CURB, ETHALPY ECONOMIZER CONTROLLER, BURGLAR BARS, AND HAIL GUARD KIT.
3. FURNISH WITH FACTOR INSTALLED SMOKE DETECTOR IN RETURN AIR DUCT SECTION. FIRE ALARM CONTRACTOR TO CONNECT TO FIRE ALARM CONTROL PANEL AS REQUIRED.
4. FACTORY PROVIDED GF1 / WP RECEPTACLE, UNPOWERED. CONTRACTOR TO FIELD WIRE PER PLANS.
5. PROVIDE UNIT WITH MOTORIZED ACTUATOR ON RELIEF AIR DAMPER FOR INTERCONNECTION TO HONEYWELL JADE ECONOMIZER CONTROL.

DUCTWORK SCHEDULE

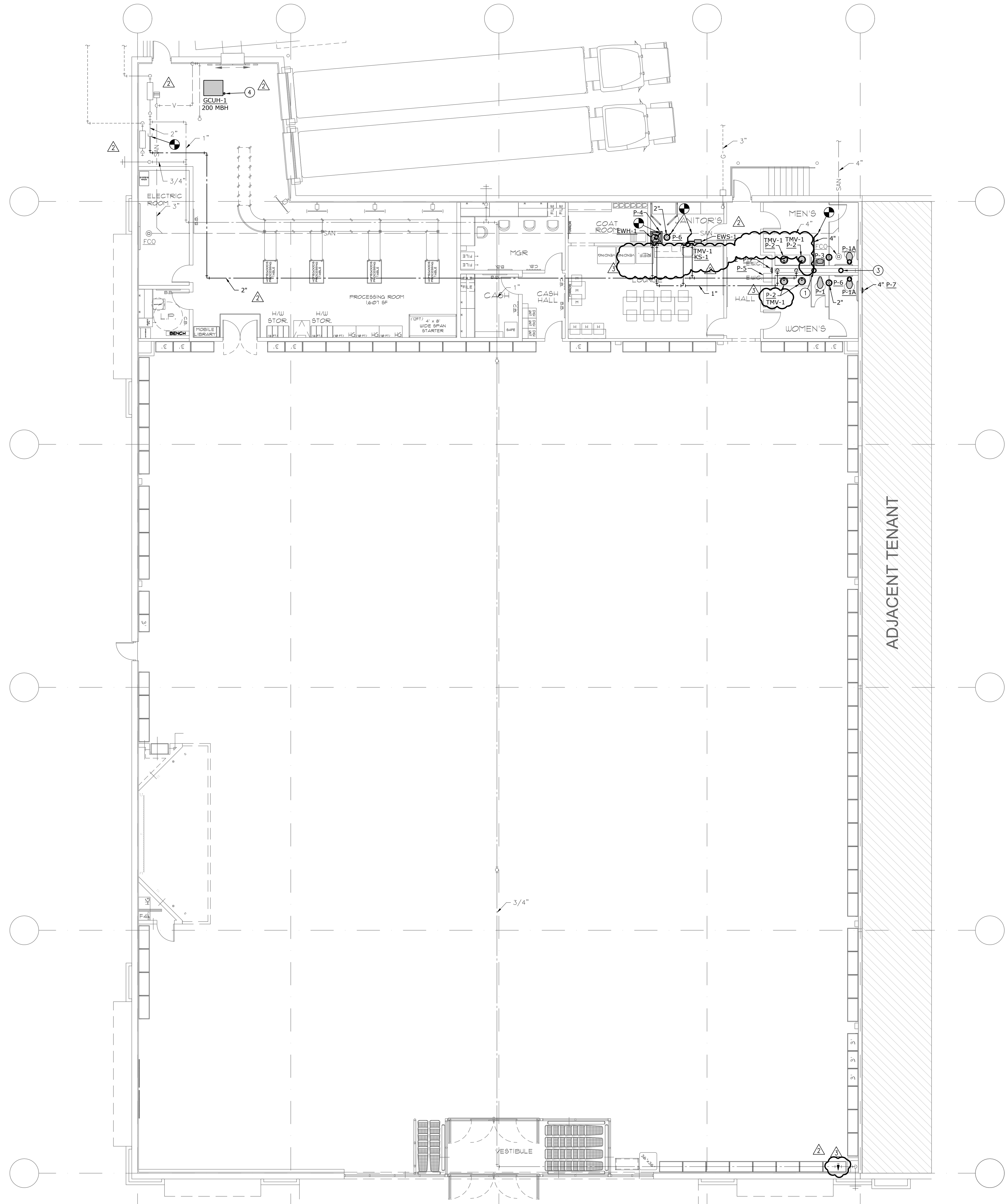
SERVICE	DUCT MATERIAL	DUCT SHAPE	CLASSIFICATION	SEAL CLASS	LEAKAGE CLASS	OTHER REQUIREMENTS
SUPPLY AIR DUCTS CONNECTED TO RTU	GALVANIZED STEEL	RECTANGULAR	2" WG POSITIVE	B	12	1", 3LB DENSITY LINER PAINTABLE WHERE EXPOSED
	GALVANIZED STEEL	ROUND/FLAT OVAL (EXPOSED)	4" WG POSITIVE SPIRAL SEAM/FLAT OVAL	B	3	PAINTABLE WHERE EXPOSED
RETURN AIR AND TRANSFER AIR DUCTWORK	GALVANIZED STEEL	RECTANGULAR	2" WG NEGATIVE	B	12	1", 3LB DENSITY LINER PAINTABLE WHERE EXPOSED
GENERAL EXHAUST DUCTS TO THE INLET OF THE FAN	GALVANIZED STEEL	RECTANGULAR OR ROUND	2" WG NEGATIVE	B - RECTANGULAR A - ROUND	12 - RECTANGULAR 3 - ROUND	PAINTABLE WHERE EXPOSED

NOTES:
1. SEE DUCTWORK INSULATION SCHEDULE FOR REQUIREMENTS ON DUCT INSULATION

GRILLE, REGISTER & DIFFUSER SCHEDULE

PLAN MARK	MANUFACTURER	MODEL NUMBER	SERVICE	MOUNT TYPE	VOLUME DAMPER	MATERIAL	COLOR	REMARKS
SD-1	TUTTLE & BAILEY	S1200	SUPPLY	LAY-IN	NOTE 1, 2	STEEL	WHITE	
SD-2	TUTTLE & BAILEY	104	SUPPLY	SIDEWALL	NOTE 3	STEEL	PAINTABLE	
CD-1	RUSKIN	01-510-22	SUPPLY	CONCENTRIC	YES	ALUMINUM	WHITE	
RG-1	TUTTLE & BAILEY	CRE500	RETURN	LAY-IN/SURFACE	NO	STEEL	WHITE	
EG-1	TUTTLE & BAILEY	CRE500	EXHAUST	LAY-IN/SURFACE	YES	STEEL	WHITE	

PROJECT NAME: Summit Orchards Shell & Core - Lees Summit, MO
LOCATION: 492 NW Chipman Rd
LAST CORRECTION BY: Charles Booby
DATE: 11/18/19
TIME: 1:55:16 PM
PLOTED BY: Charles Booby
DATE: 01/10/20
TIME: 3:16:57 PM



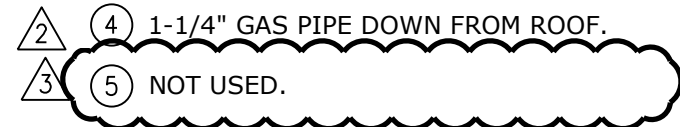
FLOOR PLAN - PLUMBING
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

1. INFORMATION SHOWN ON THE DRAWINGS IS INTENDED TO CONVEY SCOPE AND IS ARRANGED FOR DRAWING CLARITY. IT IS NOT TO BE TAKEN AS AN AS-BUILT CONDITION. THE SYSTEM INSTALLATION SHALL BE COORDINATED WITH STRUCTURE, CEILINGS, WALLS, AND ALL OTHER TRADES TO PROVIDE FOR A COMPLETE AND WORKING SYSTEM.
2. CAREFULLY COORDINATE PIPE ROUTING WITH NEW AND EXISTING STRUCTURE AS WELL AS ALL OTHER TRADES TO MAINTAIN EQUIPMENT CLEARANCES AND DESIRED CEILING HEIGHTS.
3. COORDINATE ALL PIPING PENETRATIONS WITH STRUCTURAL PRIOR TO CORE DRILLING.
4. PROVIDE SHUT OFF VALVES ABOVE ACCESSIBLE CEILING OR OTHER ACCESSIBLE LOCATION FOR ALL BRANCH PIPING AND INDIVIDUAL CONNECTIONS TO PLUMBING FIXTURES. WHERE STOPS ARE PROVIDED FOR INDIVIDUAL FIXTURES SHUT OFF VALVES ARE ALSO REQUIRED AT THE BRANCH CONNECTION. PLUMBING STOPS ARE NOT CONSIDERED A SUBSTITUTE FOR SHUT OFF VALVES.
5. AVOID ROUTING ANY PIPING THROUGH IT ROOMS OR ELECTRIC ROOMS. IN THE EVENT IT IS ABSOLUTELY NECESSARY, COORDINATE THE EXACT LOCATION SUCH THAT IT IS NOT DIRECTLY ABOVE ANY PANELS OR EQUIPMENT.
6. PROVIDE FIRESTOPPING AT PENETRATIONS OF ALL RATED WALLS. REFER TO CODE PLANS FOR LOCATIONS OF RATED WALLS.
7. ALL HOT WATER RECIRC BALANCE DEVICES SHALL BE 1 GPM CIRCUIT SETTERS UNLESS OTHERWISE NOTED.
8. REFER TO RISER DIAGRAM FOR ADDITIONAL PLUMBING INFORMATION.
9. ALL SERVICES SHOWN WITH HALF TONE LINE WEIGHT ARE EXISTING.

PLAN NOTES:

- ① 4" SAN UP INTO CHASE.
- ② 2" SAN UP TO 1-1/2" VENT.
- ③ 3" VENT THROUGH ROOF.
- ④ 1-1/4" GAS PIPE DOWN FROM ROOF.
- ⑤ NOT USED.



RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
PLUMBING
MISSOURI

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ENGINEERS

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phone 913.345.2127 fax 913.345.8617
project number 1923000

STATE OF MISSOURI
RYAN JEROD
DIEDER
NUMBER
PE 20150063
1/18/19

HomeGoods
Tenant Improvements
Summit Orchards Lot 4B
492 NW Chipman Rd
Lee's Summit, MO 64086

Revisions:	
△ Add-01 City Comments	11/18/19
△ Add-02 Tenant Comments	12/18/19
△ Add-03 Tenant Comments	01/10/20

Project #: 190902-02

Construction / Permit Set
November 8, 2019

PLUMBING PLAN

Summit Orchards Sheds & Cores - Lees Summit, MO
192501 V192501.dwg - C:\arch\Drawings\05-1925000_03.dwg
Hobson Thursday, January 9, 2020 1:55:19 PM
Charles Booby Thursday, January 9, 2020 3:17:34 PM

PROJECT NAME: LOCATION: NAME:
LAST CORRECTION: DATE: TIME:
PLOTED BY: DATE: TIME:

PART 1 - PLUMBING

1.1 DOMESTIC HOT AND COLD WATER PIPING

- A. ALL DOMESTIC HOT AND COLD WATER PIPING WITHIN THE BUILDING SHALL BE COPPER.
- B. COPPER PIPING INSTALLED UNDERGROUND SHALL BE SOFT TEMPER TYPE "K" AND INSTALLED WITHOUT JOINTS.
- C. ALL OTHER COPPER PIPING SHALL BE HARD TEMPER TYPE "L". ALL COPPER PIPING SHALL CONFORM TO ASTM-B-88 REQUIREMENTS. SERVICE PIPING OF CAST IRON OF DUCTILE IRON PIPE SHALL CONFORM TO USASI, AWWA AND FEDERAL SPECIFICATIONS.
- D. FITTINGS FOR USE WITH TYPE "K" AND "L" COPPER PIPING SHALL BE WROUGHT COPPER SOLDER-JOINT. UNIONS SHALL BE GROUND JOINT TYPE AND SHALL BE INSTALLED WHERE NECESSARY TO PROVIDE EASE OF DISCONNECTION OF THE PIPING SYSTEM. PRESS FITTINGS FOR COPPER WATER PIPING ARE ACCEPTABLE WHERE PERMITTED BY GOVERNING CODES.
- E. WHEN A CONNECTION BETWEEN COPPER PIPE AND FERROUS PIPE IS NECESSARY, SAID CONNECTION SHALL BE MADE BY USING BRASS CONVERTER FITTING.
- F. DRAINS INDICATED ON THE DRAWINGS AND AT LOW POINTS IN CONNECTION WITH THE HOT AND COLD WATER DISTRIBUTION SYSTEM SHALL CONSIST OF 1/2" FAUCET WITH HOSE THREADS. DRAINS SHALL BE INSTALLED AT LOW POINTS IN THE HOT AND COLD WATER PIPING AND ALL PIPING SHALL GRADE TO DRAIN.

1.2 VALVES FOR DOMESTIC WATER

- A. FOR PIPING 1/2" - 2": MILWAUKEE BA-150 BALL VALE, BRONZE, TEFLON SEATS AND PACKING, 400 LBS W.O.G., SOLDER END.

1.3 SOIL, WASTE, DRAIN AND VENT PIPING

- A. UNDERGROUND SOIL, WASTE, DRAIN AND VENT PIPE AND FITTINGS, THROUGHOUT THE BUILDING BELOW THE BASE SLAB TO THE LOCATIONS NOTED OUTSIDE OF THE BUILDING, SHALL BE COATED HUB-AND- SPIGOT SERVICE WEIGHT CAST IRON. SCHEDULE 40 PVC SOLID PLASTIC PIPE MAY BE USED WHERE PERMITTED BY GOVERNING CODES. NO-HUB PIPE WILL NOT BE PERMITTED UNDERGROUND.
- B. SOIL, WASTE, DRAIN, VENT PIPE, AND FITTINGS ABOVE GROUND INSIDE OF THE BUILDING SHALL BE SERVICE WEIGHT HUB-AND- SPIGOT OR NO-HUB CAST IRON PIPE. SCHEDULE 40 PVC SOLID PLASTIC PIPE MAY BE USED WHERE PERMITTED BY GOVERNING CODES. PVC PIPING RUN IN RETURN AIR PLENUM SPACE SHALL BE INSTALLED WITH A 1 HOUR RATED COVERING OVER ALL PIPE, FITTINGS AND VALVES.
- C. CHANGES IN PIPE SIZE ON SOIL, WASTE, AND DRAIN LINES SHALL BE MADE WITH REDUCING FITTINGS. CHANGES IN DIRECTION IN DRAINAGE PIPING SHALL BE MADE BY THE APPROPRIATE USE OF 45 DEGREE Y'S, LONG OR SHORT SWEEP QUARTER BENDS, SIXTH, EIGHTH, OR SIXTEENTH BENDS, OR BY A COMBINATION OF THESE OR EQUIVALENT FITTINGS. SINGLE AND DOUBLE SANITARY TEES AND SHORT QUARTER BENDS MAY BE USED IN DRAINAGE LINES ONLY WHERE THE DIRECTION OF FLOW IS FROM THE HORIZONTAL TO THE VERTICAL. QUARTER BENDS MAY BE USED IN SOIL AND WASTE LINES ON THE DISCHARGE FROM WATER CLOSETS IN SLAB OR GRADE AREAS.
- D. SEWER LINES SHALL BE LOCATED IN GENERAL AS SHOWN ON THE DRAWINGS. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN SUCH A MANNER AS TO MAINTAIN PROPER CLEARANCES AND SUFFICIENT SLOPE TO INSURE DRAINAGE.
- E. HORIZONTAL SOIL, WASTE, AND DRAIN PIPES SHALL BE GIVEN A GRADE OF NOT LESS THAN 1/4" PER FOOT FOR SIZES UP TO 3" UNLESS OTHERWISE SHOWN ON THE DRAWINGS OR APPROVED IN WRITING BY THE ENGINEER. HORIZONTAL SOIL, WASTE, AND DRAIN PIPES SHALL BE GIVEN A GRADE OF NOT LESS THAN 1/8" PER FOOT FOR SIZES 4" AND LARGER WHEN FIRST APPROVED BY THE ADMINISTRATIVE AUTHORITY.
- F. VENTS SHALL BE AIR AND WATER TIGHT.
- G. VENT CONNECTIONS SHALL BE INSTALLED ON ALL FIXTURES AND EQUIPMENT CONNECTED TO SOIL AND WASTE SYSTEMS AND ALL FLOOR DRAINS SHALL BE VENTED OR CONNECTED TO A VENTED LINE AS SHOWN ON THE DRAWINGS AND AS REQUIRED BY CODE.
- H. RISERS SHALL BE INSTALLED ABSOLUTELY PLUMB AND STRAIGHT. BRANCHES SHALL BE RUN IN STRAIGHT LINES AND PITCH UNIFORMLY TO MAINS.
- I. RISERS, BRANCHES AND MAINS SHALL BE CONCEALED IN THE CONSTRUCTION EXCEPT WHERE SHOWN OTHERWISE. BRANCHES FOR CLOSETS SHALL BE FINISHED AT THE WALL LINE WITH PROPER FLANGE TO RECEIVE THE FIXTURE WHEN SET, AND THEY SHALL BE TRUE AND LEVEL SO THAT CLOSET BASE WILL HAVE FULL BEARING ON THE WALL.
- J. ALL SOIL AND VENT STACKS SHALL OFFSET WHERE REQUIRED TO MISS OBSTRUCTIONS AND AS REQUIRED TO CLEAR FLOOR BEAMS AND SPANDREL BEAMS AT FLOOR LINES AND HUG WALL CONSTRUCTION ABOVE FLOOR.
- K. PROHIBITED FITTINGS. THE DRILLING AND TAPPING OF BUILDING DRAINS, SOIL, WASTE OR VENT PIPE AND THE USE OF SADDLE HUBS OR BANDS IS PROHIBITED. ANY FITTING OR CONNECTION WHICH HAS AN ENLARGEMENT CHAMBER OR RECESS WITH A LEDGE, SHOULDER OR REDUCTION OF THE PIPE AREA THAT OFFERS AN OBSTRUCTION TO THE FLOW IS PROHIBITED.
- L. PROHIBITED CONNECTIONS. NO FIXTURES, DEVICES OR CONSTRUCTION SHALL BE INSTALLED WHICH WOULD ALLOW A BACKFLOW CONNECTION BETWEEN A DISTRIBUTION SYSTEM OF WATER FOR DRINKING AND DOMESTIC PURPOSES TO THE DRAINAGE SYSTEM, SOIL OR WASTE PIPING SO AS TO PERMIT OR MAKE POSSIBLE THE BACKFLOW OF SEWAGE OR WASTE INTO THE WATER SYSTEM.

1.4 WATER HAMMER ARRESTORS

- A. WATER HAMMER ARRESTORS SHALL BE PROVIDED FOR ALL QUICK CLOSING VALVES INCLUDING BUT NOT LIMITED TO DRINKING FOUNTAINS, DISHWASHERS, FAUCETS, FLUSHOMETER VALVES, ICE MAKERS, SELF-CLOSING VALVES, SPRING LOADED VALVES, AND WASHING MACHINES AND AS REQUIRED BY THE LOCAL INSPECTION AUTHORITY HAVING JURISDICTION.
- B. WATER HAMMER ARRESTORS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS AND SHALL CONFORM TO ASSE 1010 AND PER STANDARD PDI-WH-201.
- C. WATER HAMMER ARRESTOR SHALL BE SIOUX CHIEF MODEL OR APPROVED EQUAL. AIR CHAMBERS ARE NOT PERMITTED.

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 MANUFACTURERS' CATALOGS AND/OR 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 OR-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 3" AND SMALLER AND 1/8" PER FOOT FOR PIPE SIZES 4" AND 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" O.D. 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 OR-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 OBSOURE 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-VALUE 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 PLACED IN THE CEILING THE VALVES WILL BE LOCATED AT A MAXIMUM OF 12" ABOVE THE CEILING, AND NOTHING SHALL BE PLACED 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 DEFICIENTS 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

MARK	MANUFACTURER / MODEL	DESCRIPTION	FITTINGS		NOTE	PIPING CONNECTIONS			
			MANUFACTURER / MODEL	DESCRIPTION		CW	HW	SAN	VENT
P-1	AMERICAN STANDARD AFWALL 2257.101	WATER CLOSET SHALL BE A WALL HUNG SIPHON JET FLUSH WITH CHAIR CARRIER.	SLOAN OPTIMA ECOS 8111-1.6/1.1	FLUSH VALVE SHALL BE BATTERY POWERED FLUSHOMETER 1.6/1.1 GPM WITH 15 SECOND SHUTOFF.	3,4	1"	—	4"	2"
P-1A	AMERICAN STANDARD AFWALL 2257.101	ADA WATER CLOSET SHALL BE A WALL HUNG SIPHON JET FLUSH WITH CHAIR CARRIER.	OLSONITE 95SSCT SLOAN OPTIMA ECOS 8111-1.6/1.1	FLUSH VALVE SHALL BE BATTERY POWERED FLUSHOMETER 1.6/1.1 GPM WITH 15 SECOND SHUTOFF. COORDINATE HEIGHT OF FLUSH VALVE WITH ADA GRAB BAR.	3,4	1"	—	4"	2"
P-2	AMERICAN STANDARD AQUALYN 476.028	16"x10"x5-5/8" WHITE VITREOUS CHINA, SELF RIMMING, DROP-IN BOWL.	SLOAN OPTIMA EBF-650	BATTERY POWERED, DECK MOUNTED, LOW INTEGRATED BASE BODY FAUCET. 0.35GPM.	1,2,3,4,5	1/2"	1/2"	2"	1-1/2"
P-3	AMERICAN STANDARD WASHBROOK FLOWISE 6590.001	ADA URINAL SHALL BE WALL HUNG WASHOUT TYPE, TOP SPUD	SLOAN OPTIMA G2-8186.5	0.5GPF, BATTERY POWERED FLUSHOMETER.	4	3/4"	—	2"	1-1/2"
P-4	MUSTEE 63M	MOP SERVICE BASIN SHALL BE 24"x24"x10" BASIN WITH INTEGRAL STRAINER AND DRAIN.	MUSTEE 63.600A	WALL MOUNTED FAUCET WITH VACUUM BREAKER, WALL BRACE AND PAIL HOOK, #65.700 HOUSEHOLD BRACKET AND 65.600 MOP HANGER.		1/2"	1/2"	3"	2"
P-5	OASIS VERSACOOLER II PG8ACSL	DOUBLE B-LEVEL WALL HUNG ELECTRIC WATER FOUNTAIN. MOUNT PER ADA REQUIRED HEIGHT.	—	—	—	1/2"	—	2"	1-1/2"
KS-1	ELKAY LUSTERTONE LRAD172055	18 GAUGE, 304 STAINLESS STEEL, SINGLE BASIN, ADA COMPLIANT DROP-IN SINK WITH 1.5GPM AERATOR	KOHLER K-15171-F-CP	1.5GPM CHROME THREE HOLE, SINGLE HANDLE FAUCET	1,2,3	1/2"	1/2"	2"	1-1/2"
FPWH-1	JAY R. SMITH 5509QT	NON-FREEZE, VACUUM BREAK, 1/4-TURN KEY HANDLE, STAINLESS STEEL BOZ WITH NICKEL BRONZE COVER	—	—	—	3/4"	—	—	—
TPV-1	PRECISION PLUMBING PRODUCTS P1-500	TRAP PRIMER VALVE. DU-U DISTRIBUTION UNIT	—	—	—	—	—	—	—
TMV-1	SYMMONS 7-225-CK-MS	THERMOSTATIC MIXING VALVE IN WALL CABINET. MOUNT IN ACCESSIBLE LOCATON BELOW SINK, SET AT 106°F, ASSE 1070	—	—	—	1/2"	1/2"	—	—
EWS-1	GUARDIAN G1814	WALL MOUNTED EYE WASH WITH STAINLESS STEEL BOWL, 1/2" U.S. MADE CHROME PLATED BRASS STAY OPEN BALL VALVE, POWDER COATED CAST ALUMINIUM FLAG HANDLE AND WALL BRACKET. UNIT SHALL HAVE (2) POLYPROPYLENE GS PLUS SPRAY HEADS WITH INTEGRAL "FLIP-TOP" DUST COVERS, FILTERS AND 1.8-GPM FLOW CONTROL ORIFICES MOUNTED ON A CHROME PLATED BRASS EYE WASH ASSEMBLY. UNIT SHALL INCLUDE ANSI COMPLIANT 3/8IN. UN1 SHALL BE FULLY FACTORY ASSEMBLED AND HYDROSTATICALLY TESTED TO MEET OR EXCEED ANSI Z358.1 - 2009, AND COME WITH A FULL 2-YEAR WARRANTY.	GUARDIAN G3600	LEAD FREE THERMOSTATIC MIXING VALVES INCLUDED WITH A BUILT-IN COLD WATER BY-PASS, ROUGH BRONZE FINISH, SOLID BI-METAL THERMOSTAT, LOCKING TEMPERATURE REGULATOR WITH LIMIT STOP FACTORY SET FOR 90 DEGREES, INTEGRAL CHECK STOPS, AND DIAL THERMOMETER. PERFORMANCE: UNIT SHALL HAVE A FLOW RANGE OF 0.5-GPM TO 5-GPM WITH A MAXIMUM PRESSURE LOSS OF 20-PSI AND COME WITH A FULL 1-YEAR WARRANTY.	—	1/2"	1/2"	2"	—

NOTES:

1. PROVIDE WITH ALL MOUNTING HARDWARE AS REQUIRED.
2. PROVIDE WITH CHROME PLATED DRAIN, GRID STAINER, TAILPIECE, AND TRAP.
3. PROVIDE STAINLESS STEEL BRAIDED HOSE WITH KEVED STOP.
4. PROVIDE CAULK AROUND FIXTURE CONNECTION TO FLOOR/WALL. COLOR BY ARCHITECT / ID.
5. TRAP AND INSULATION TO BE TRUE BRO #103 E-2 OR EQUAL.

PIPE INSULATION SCHEDULE - PLUMBING

SERVICE	PIPE SIZE	INSULATION
DOMESTIC COLD WATER	1/2" - 2"	1/2" FIBERGLASS, ASJ
DOMESTIC HOT WATER		
RECIRCULATING HOT WATER	ALL	1" FIBERGLASS, ASJ
TEMPERED WATER		
EXPOSED FIXTURE WASTETRAPS AND DOMESTIC HOT AND COLD WATER	ALL	TRUBRO LAV AGUARD MOLDED PROTECTIVE PIPE COVER OVER 1/2" FIBERGLASS INSULATION
AT HANDICAPPED ACCESSIBLE SINKS AND LAVATORIES		

NOTES:

1. FOR ALL EXPOSED PIPING PROVIDE PAINTABLE PVC JACKET. (EXCLUDES MECHANICAL SPACES)
2. IF PEX PIPING IS USED, IT STILL REQUIRES INSULATION

DOMESTIC WATER EXPANSION TANK SCHEDULE		
DESIGNATION	ET-1	
UNIT DATA	MANUFACTURER	AMTROL
	MODEL	ST-12-C
	SERVICE	DOM. HOT WATER
UNIT DATA	MIN. TEMP. (°F)	40
	MAX. TEMP. (°F)	120
	LINE PRESSURE (PSIG)	60
	MAX. PRESSURE (PSIG)	125
	TANK SIZE (GAL)	6.4
	ACCEPTANCE (GAL)	0.5
	HEIGHT (IN.)	18
ELEC. CONTROL	DIAMETER (IN.)	12
	WEIGHT (LBS.)	26
REFERENCE DRAWING/DETAIL		P1
REMARKS		

DOMESTIC WATER HEATER - ELECTRIC		
DESIGNATION	EWH-1	
UNIT DATA	MANUFACTURER	STATE WATER HEATERS
	MODEL	PCE 20 10MSA
	SERVICE	DOM. HOT WTR
	CAPACITY (GALLONS)	20
	RECOVERY @ 80°F RISE (GPH)	23
ELEC. CONTROL	OUTLET TEMP. (°F)	120
	INPUT (KW)	4.5
	VOLTS/PHASE	208/1
	PANEL & CIRCUIT	AL-82.84
	WIRE & CONDUIT	(2)#10, #10G., 3/4"C.
ELEC. CONTROL	OVERCURRENT DEVICE	30A-2P CB
	DISCONNECT	30A-2P NF
REFERENCE DRAWING/DETAIL		P1
REMARKS		

NOTES:

DRAIN SCHEDULE

MARK	MANUFACTURER/ MODEL	DESCRIPTION	REMARKS
P-6	WADE 1100A	CAST IRON FLOOR DRAIN WITH ADJUSTABLE TOP AND 8" NICKEL BRONZE VANDAL RESISTANT SCREWS. PROVIDE WITH TRAP SEAL DEVICE.	1,2
P-7	WADE	ALL CLEANOUTS TO BE BRASS FINISH, WALL CLEANOUTS TO BE CHROME FINISH.	1,2

NOTES:

1. COORDINATE ALL LOCATIONS WITH (BUT NOT EXCLUDING) EQUIPMENT, HOUSE-KEEPING PADS, MILLWORK, AND STRUCTURAL.
2. REFER TO PLANS FOR OUTLET SIZE.

RELEASE FOR
CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
MISSOURI
SLAGGIE ARCHITECTS

ARCHITECTS

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smith&boucher
ENGINEERS

25501 west valley parkway, suite 200 olathe, ks 66061
phone 913.345.2727 fax 913.345.0671
project number 1923000

STATE OF MISSOURI
SEAL
RYAN JEROD
DIEDMER
NUMBER
PE 20150067
EXPIRATION
12/31/2021

HomeGoods

Tenant Improvements

Summit Orchards Lot 4B
492 NW Chipman Rd
Lee's Summit, MO 64086

Revisions:

Add-01 City Comments

11/18/19

Add-02 Tenant Comments

12/18/19

Add-03 Tenant Comments

01/10/20

Project #:

180902-02

Construction / Permit Set

November 8, 2019

SCHEDULES - PLUMBING

P3

Summit Orchards Shell & Core - Lees Summit, MO
192300_00.dwg
11/18/19 11:53:19 AM
Blee
Wednesday, December 18, 2019 3:51:37 PM
Prossato, Patro

PROJECT NAME:
LOCATION:
LAST CORRECTION BY: DATE: TIME:
PLOTTER BY: DATE: TIME:

ROOF PLAN - ELECTRICAL

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

- ELECTRICAL NOTES:
- FURNISH AND INSTALL WEATHER PROOF / GFI RECEPTACLE ON UNISTRUT UP THROUGH ROOF IN A PITCH PAN.
 - DUCT MOUNTED SMOKE DETECTOR FOR SHUTDOWN OF OUTSIDE AIR UNIT, LOCATE IN SUPPLY DUCT. MAKE CONNECTIONS TO UNIT AS REQUIRED FOR CORRECT OPERATION AS NOTED IN THE SPECIFICATIONS. UNIT TO ALSO SHUTDOWN UPON DETECTION OF SMOKE AT ANY OF THE FIRE/SMOKE DAMPERS ASSOCIATED WITH THIS EQUIPMENT.
 - WEATHER PROOF GFI RECEPTACLE FACTORY PROVIDED WITH EQUIPMENT. PROVIDE ELECTRIC CONNECTION AS NEEDED PER MANUFACTURER RECOMMENDATIONS.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
PLANNING & DESIGN
MISSOURI
ARCHITECTS

SLAGGIE

ARCHITECTS

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project number 1923000

STATE OF MISSOURI
RYAN JEROO
DIEDHNER
NUMBER
PE 20150065
11/18/19

HomeGoods
Tenant Improvements
Summit Orchards Lot 4B
492 NW Chipman Rd
Lee's Summit, MO 64086

Revisions:
1 Add-01 City Comments 11/18/19
2 Add-02 Tenant Comments 12/18/19

Project #: 190902-02

Construction / Permit Set
November 8, 2019

ROOF PLAN - ELECTRICAL

E0

PROJECT NAME: HomeGoods - Lees Summit, MO
LAST CORRECTION: 11/18/2019
DRAWN BY: Charles Body
CHECKED BY: Charles Body
DATE: 11/18/2019
TIME: 3:17:52 PM

△

PLAN NOTES:

- CONNECT TO GE LIGHTING RELAY PANEL IN THE ELECTRICAL ROOM FOR CUSTOMER LIGHTING. REFER TO GE LIGHTING RELAY PANEL SCHEDULE FOR ADDITIONAL INFORMATION. REFER TO SHEET E4. NOVAR IS TO PROGRAM THE PANEL.
- EXISTING SIGN AND CIRCUIT. REFER TO SHELL PACKAGE FOR INITIAL INSTALL. CONNECT TO LIGHTING RELAY PANEL ZONE 'S' AS INDICATED.

NOTE:
TIE HALL LIGHTS IN WITH
SALES FLOOR LIGHTING
ON ZONE 'A'

ADJACENT TENANT

FLOOR PLAN - LIGHTING

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

LIGHTING SCHEDULE									
SYMBOL	SIZE	SYSTEM WATTAGE	SYSTEM VOLTAGE	FIXTURE MOUNTING METHOD	LAMP QUANTITY	LAMP TYPE	MANUFACTURER	SPECIFICATION NUMBER (ORDERING INFORMATION)	REMARKS
A	2' X 4'	37	MULTI-VOLTAGE	Recessed	N/A	LED	ACUTY (LITHONIA)	2ESL4-4BL-E21-LP835-NAT1	
A4	14-3/4" X 43-9/16"	111	277V	Pendant	N/A	LED	ACUTY (LITHONIA)	CAD1N 16SL 277 E21 LP835 C578W/L20 (277 V)	E.C. TO FURNISH LOCKING RECEPTACLE AT OPEN DECK CEILING (SEE NOTE 4)
A6	5-1/2" X 3-7/8"	57	120V	TRACK	N/A	LED	CONTECH	CTL84V350-P	SEE AIMING ANGLE TABLE, THIS SHEET.
A14	14-3/4" X 43-9/16"	111	277V	Pendant	N/A	LED	ACUTY (LITHONIA)	CAD1N 16SL 277 E21 LP835 C578W/L20 (277 V)	E.C. TO FURNISH LOCKING RECEPTACLE AT OPEN DECK CEILING (SEE NOTE 4)
B	2' X 4'	37	MULTI-VOLTAGE	Recessed	1	LED	CRESENT	DC740CP3 (Dock Swing Arm)	DOCKLIGHT
D	2' X 4'	37	MULTI-VOLTAGE	Recessed	N/A	LED	ACUTY (LITHONIA)	2ESL4 F 4BL E21 LP835 NAT1	FOR GYPSUM BOARD CEILINGS, AND FLANGE KITS
E	EXIT SIGN	4.3	MULTI-VOLTAGE	Wall Mounted	N/A	LED	ACUTY (LITHONIA)	LHQH-LED-R-120/277	QUANTUM LIQHM EXIT SIGN/EMERGENCY LIGHT COMBO
F3	4" X 8"	45.2	MULTI-VOLTAGE	Surface	N/A	LED	HUBRELL (COLUMBIA)	LSR8K-4W-40WV-FA-EDU-HS08-CSHC	
F4	4" X 4"	22.6	MULTI-VOLTAGE	Surface	N/A	LED	HUBRELL (COLUMBIA)	LSR8K-4W-40WV-FA-EDU-HS04-CSHC	
G3	4" X 8"	45.2	MULTI-VOLTAGE	Pendant	N/A	LED	HUBRELL (COLUMBIA)	LSR8K-4W-40WV-FA-EDU-HS08-CSHC	(16" WITH 3" 8" & 4" WITH 2)
G4	4" X 4"	22.6	MULTI-VOLTAGE	Pendant	N/A	LED	HUBRELL (COLUMBIA)	LSR8K-4W-40WV-FA-EDU-HS04-CSHC	(16" WITH 3" 8" & 4" WITH 2)
H3	3" X 8"	46	MULTI-VOLTAGE	Valance	N/A	LED	GE	LKV-38-A-0-60-WW-T-35-V-Q-SM-WHITE	
H4	3" X 4"	23	MULTI-VOLTAGE	Valance	N/A	LED	GE	LKV-34-A-0-30-WW-T-35-V-Q-SM-WHITE	MUST BE MOUNTED STRAIGHT
H5	3" X 3"	16	MULTI-VOLTAGE	Valance	N/A	LED	GE	LKV-33-A-0-30-WW-T-35-V-Q-SM-WHITE	MUST BE MOUNTED STRAIGHT
K3	14.125" X 14.125"	22	277V	Recessed	N/A	LED	SPECTRUM	MC12SQLE0A22L40NE2/770112WFO	USE UNDER CANOPY
L	16" X 9-5/8"	32	MULTI-VOLTAGE	Wall Mounted	N/A	LED	EATON (SURELITE)	LDWP-GL-4B-ED-EMLED-CD	
LI	16" X 9-5/8"	32	MULTI-VOLTAGE	Wall Mounted	N/A	LED	EATON (SURELITE)	LDWP-GL-4B-ED	
LM	LIGHTED MIRROR	40	MULTI-VOLTAGE	Wall Mounted	N/A	LED	PHILIPS	OCLM-W-66NLED30K-UV-PHD (MARSHALL'S WHITE)	WHITE
LM2	LIGHTED 3-WAY MIRROR	39	MULTI-VOLTAGE	Wall Mounted	N/A	LED	STYLMARK	620098-02	TIIX PURCHASE. (NOT SUPPLIED BY NESCO)
LM3	LIGHTED MIRROR	40	MULTI-VOLTAGE	Wall Mounted	N/A	LED	PHILIPS	OCLM-W-66NLED30K-UV-PHD-CC(PBS) (SILVER) T3 MAXX	BRIGHT PRISM SILVER
O5	10" X 4"	73	MULTI-VOLTAGE	Recessed	2	F32TB	ACUTY (LITHONIA)	WW GF 232 MVOLT CEUMH (RWH GB35HT8 RFD	HIGH GLOSS WHITE REFLECTOR
O7	2' X 2'	20.2	MULTI-VOLTAGE	Recessed	N/A	LED	ACUTY (LITHONIA)	2RTL2 20L E21 LP830	
P2	18" DIAMETER	88	277V	Pendant	N/A	LED	SPECTRUM	PKSTP16LEDL00L30NKL0W/MC2AP9777(L7-20) PK16DRL6CNFRPT (277V)	E.C. TO FURNISH LOCKING RECEPTACLE AT OPEN DECK CEILING (SEE NOTE 4)
Q	13.12" X 14.61"	56	277V	Pendant	N/A	LED	SPECTRUM	WA1212LEDL6X6W35KE2/WA1315/CP13HMT96/GW (277)	BOTTOM OF FIXTURE MOUNTED AT 8'-8" AFF
R	EMERGENCY	1.5	MULTI-VOLTAGE	Surface	N/A	LED	ACUTY (LITHONIA)	ELM2-LED	"CAN USE ELM2-LED, ELM1-LT, or other Emergency lights in the Acuity ELM family
R1	EMERGENCY	6	MULTI-VOLTAGE	Recessed	N/A	LED	PHILIPS	ELRG	WITH 90 MIN BATTERY BACKUP
R2	EMERGENCY	1	MULTI-VOLTAGE	Wall Mounted	N/A	LED	ACUTY (LITHONIA)	ELA-LED-T-WP-M12	CONNECTS TO REMOTE BATTERY "R3"
R3	EMERGENCY	6	MULTI-VOLTAGE	Wall Mounted	N/A	LED	ACUTY (LITHONIA)	ELT24-W-R0	BATTERY PACK FOR REMOTE HEAD "R2"
S	15-25/32" X 7-3/4"	50	MULTI-VOLTAGE	Surface	N/A	LED	EATON	ENV-F02-LED-E1-BL3-GH	EXTERIOR WALL SCONCE - T3 MAXX
S1	15-25/32" X 7-3/4"	50	MULTI-VOLTAGE	Surface	N/A	LED	EATON	ENT-F02-LED-E1-BL3-WH	EXTERIOR WALL SCONCE - MARSHALLS
S2	8" X 10"	14	277V	Surface	N/A	LED	SPECTRUM	NL100BLEGV14W35KE1(U/F1) CG/S/SP/DCP104/AB (120V) NL100BLEGV14W35KE2(U/F1) CG/S/SP/DCP104/AB (277V)	
S3	8" X 10"	14	277V	Surface	N/A	LED	SPECTRUM	NL100BLEGV14W35KE1(U/F1) CG/S/SP/DCP104/AB (120V) NL100BLEGV14W35KE2(U/F1) CG/S/SP/DCP104/AB (277V)	
T4L	2-7/8" X 2-1/16"	17	120V	Track	1	77RA38/515 3000 DIM W/ S/D	PHILIPS/ CONTECH	CTL603P (LAMP HOLDER) 435362 (PHILIPS LAMP)	TRACK MOUNTED SPOT LIGHT
W	2' X 2'	104	277V	Recessed	N/A	LED	SPECTRUM	GC2208LEDGV 113 35K E(2) T1L GW (277V)	
Y	2' X 2'	104	277V	Recessed	N/A	LED	SPECTRUM	GC2208LEDGV 113 35K E(2) T1L GW (277V)	

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°

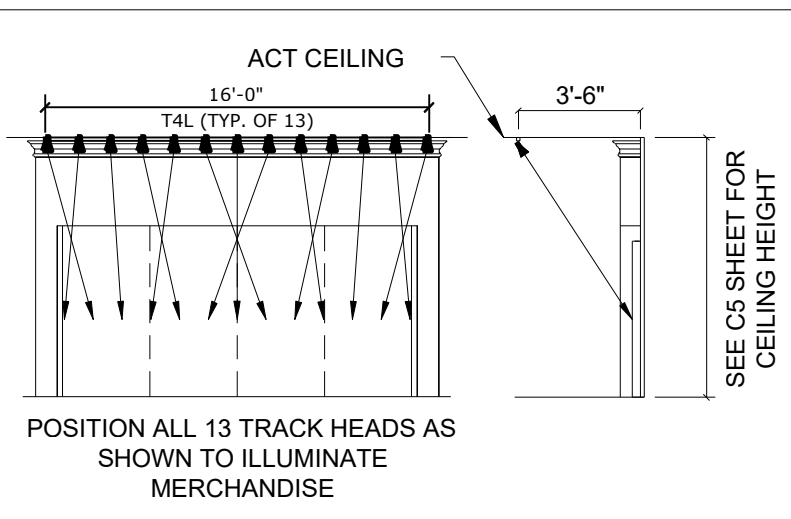
NOTE: LIGHTING PATTERN MUST REMAIN AS DRAWN AND ADHERE TO THIS PLAN. ALL LIGHT FIXTURES IN SALES AREA WILL BE MOUNTED @ 12'-0" A.F.F. TO THE UNDERSIDE OF THE FIXTURE. (SEE EXCEPTIONS). PLEASE CONTACT TIIX PROJECT MANAGER AND M.O.D. IMMEDIATELY IF THERE ARE ANY FIXTURE SPACING OR MOUNTING HEIGHT CONFLICTS.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

LEGEND

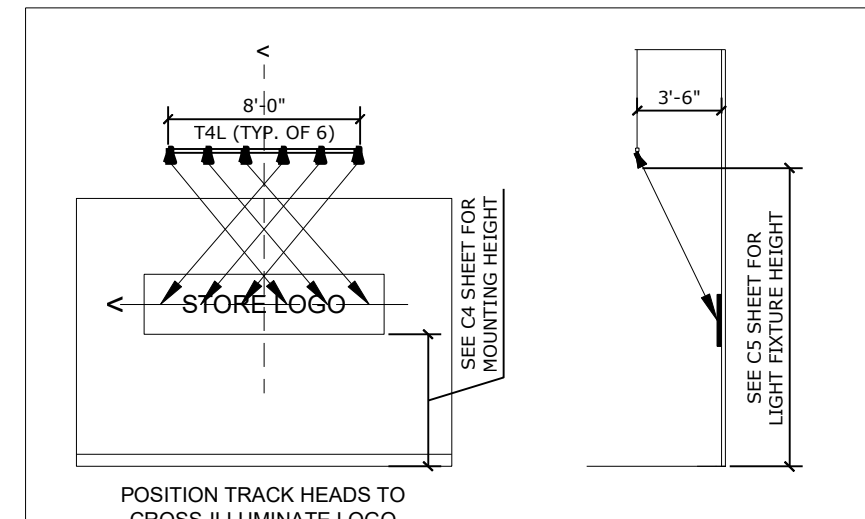
- NEW LIGHT (AS NOTED)
- EXISTING LIGHT (AS NOTED)
- RELOCATED LIGHT (AS NOTED)
- EMERGENCY REMOTE HEADS
- NEW LIGHT (AS NOTED)
- EXISTING LIGHT (AS NOTED)
- RELOCATED LIGHT (AS NOTED)
- NEW LIGHT (AS NOTED)
- EXISTING LIGHT (AS NOTED)
- RELOCATED LIGHT (AS NOTED)
- EMERGENCY EXIT SIGN/LIGHT COMBO. (SEE SPECS.)

LIGHTING NOTES:

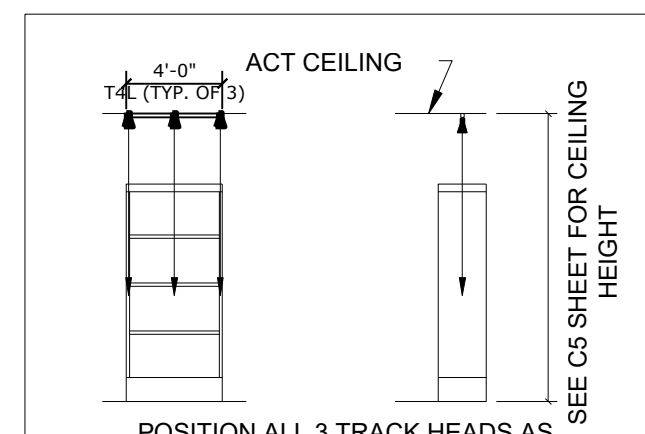
- STORE LIGHTING (SALES & SUPPORT) SHALL INCORPORATE QUANTUM ELM2 TYPE FIXTURES TO ACT AS EMERGENCY LIGHTS. NUMBER OF FIXTURES TO BE DETERMINED BY CODE.
- NL-FIXTURES WILL BE WIRED BEFORE A SWITCH OR CONTACTOR. (FIXTURES WILL RUN 24 HOURS)
- LAWAYWAY STOCK & PROCESSING ROOM LIGHTING TO BE MOUNTED AT 13' AFF. (LIGHTING TO BE COORDINATED WITH HVAC & STRUCTURAL STEEL)
- TYPE A4 PENDANT LIGHTING FITTED WITH LOCKING PLUG. NEMA L5-20P 20A, 125V NEMA L7-20P 20A, 277V E.C. TO FURNISH AND INSTALL APPROVED LOCKING RECEPTACLE AT OPEN DECK CEILING, PER REQUIRED VOLTAGE. NEMA L5-20R 20A, 125V NEMA L7-20R 20A, 277V
- SIGN HANGING SIGNS PROVIDED AND INSTALLED BY TIIX.
- SECURE EXCESS CORD WITH TIE STRAP ABOVE LIGHT FIXTURE. COORDINATE WITH TIIX PROJECT MANAGER.
- CIRCUIT ALL EMERGENCY LIGHTING WITH AN UNSWITCHED HOT CONDUCTOR. REFER TO PANEL SCHEDULE FOR CIRCUIT TO EMERGENCY FIXTURES AND EXIT SIGNS.



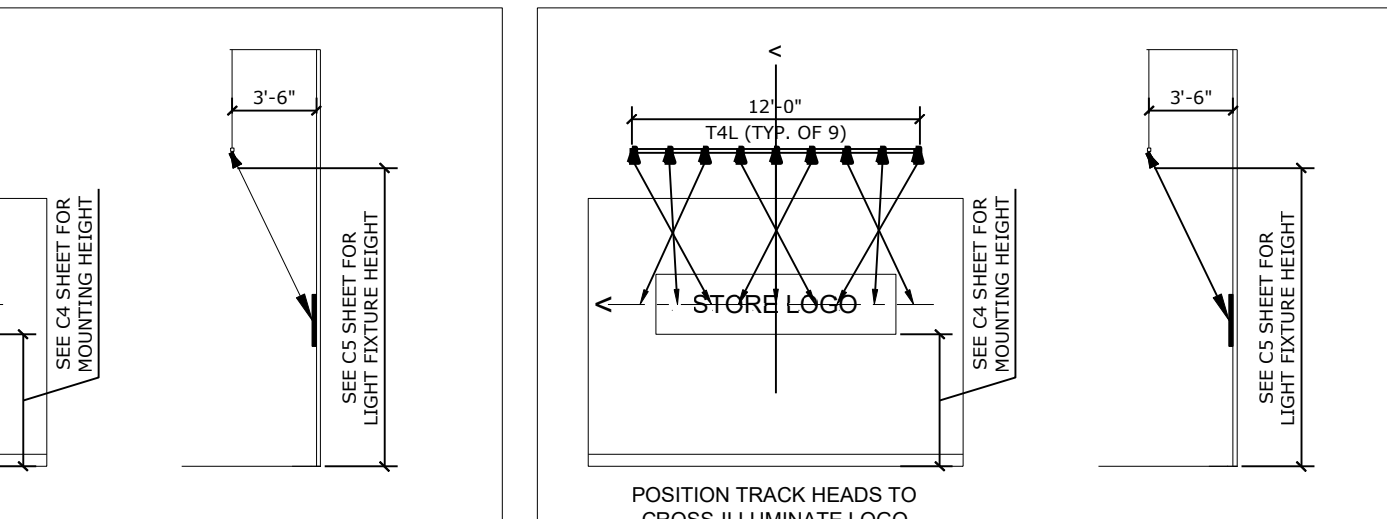
HOMEGOODS FOCAL WALL LIGHT POSITIONING DIAGRAM NOT TO SCALE



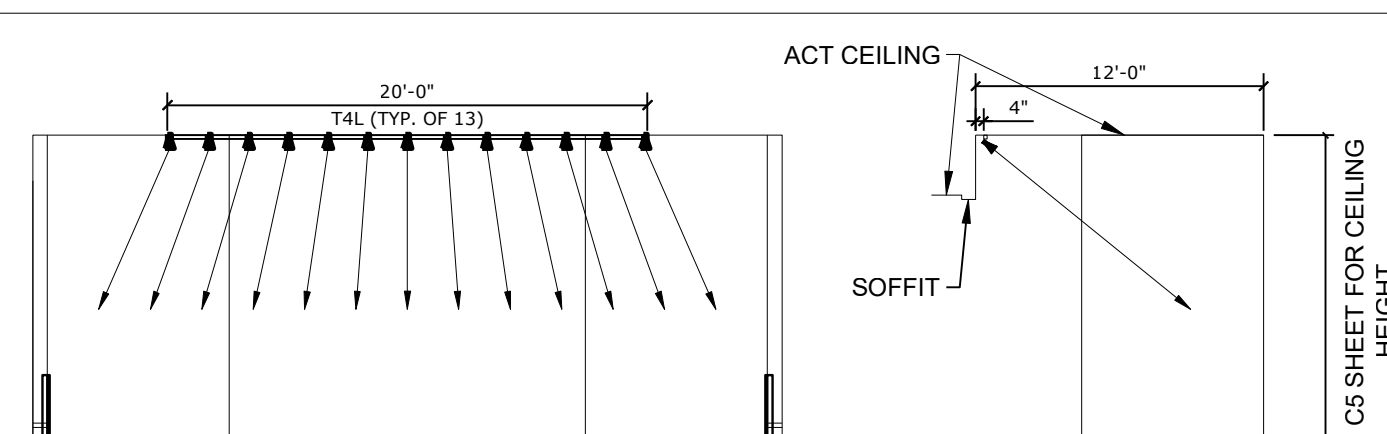
LOGO WALL LIGHT POSITIONING DIAGRAM NOT TO SCALE



HOMEGOODS WINDOW FIXTURE POSITIONING DIAGRAM NOT TO SCALE

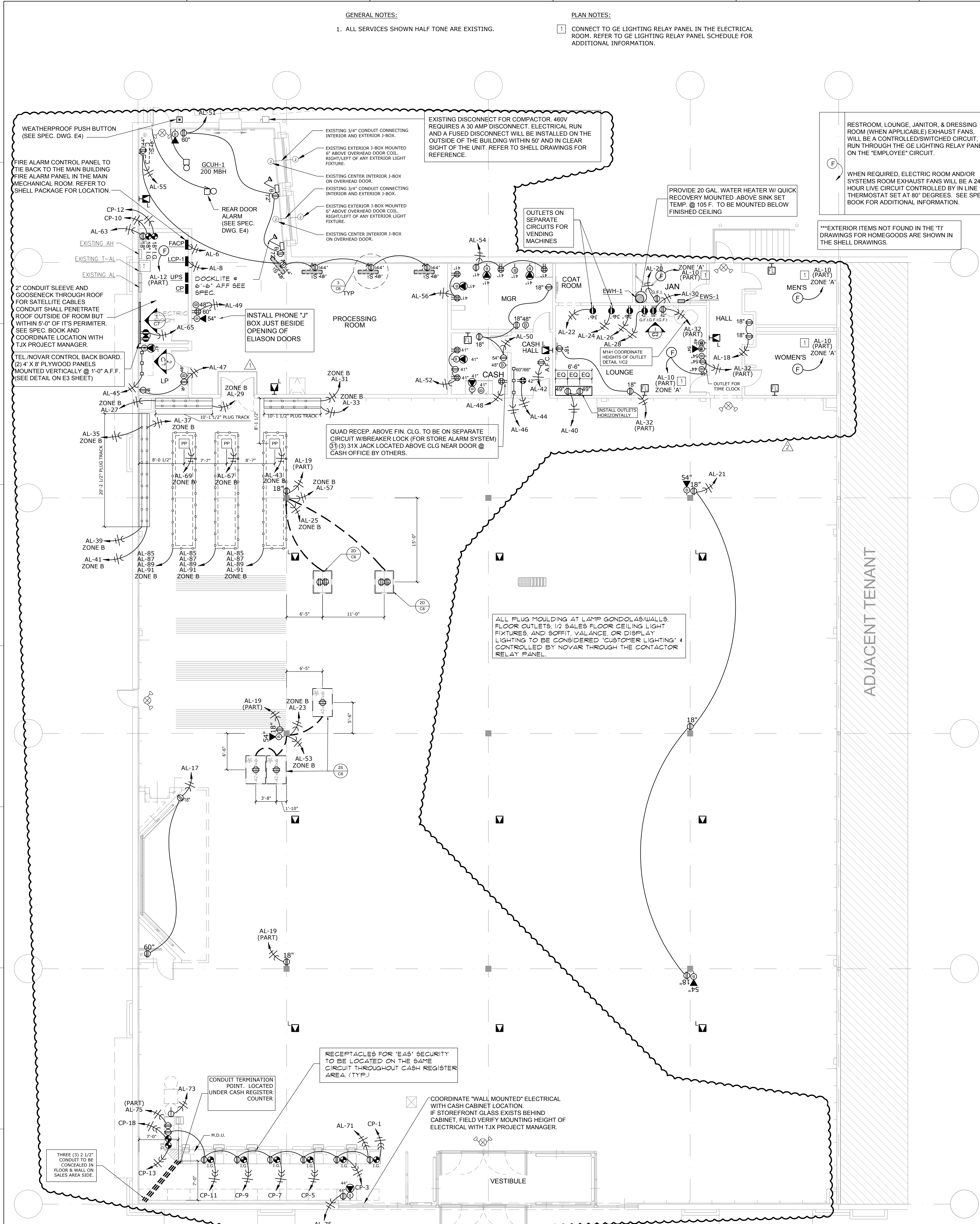


LOGO WALL LIGHT POSITIONING DIAGRAM NOT TO SCALE

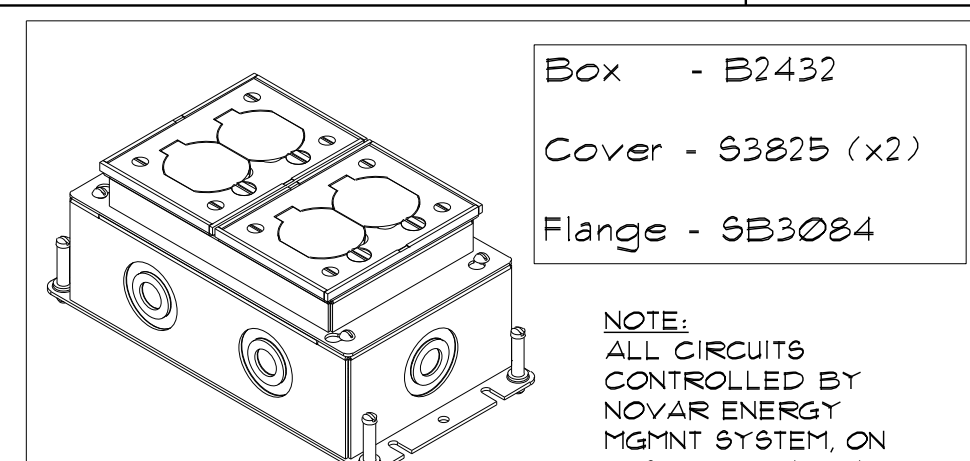


HOMEGOODS RUG RACK LIGHT POSITIONING DIAGRAM NOT TO SCALE

Summit Orchards, Inc. & Co. - Lee's Summit, MO
PROJECT NAME: HomeGoods Tenant Improvements
LAST CORRECTION: 11/18/2019 12:30:00 PM
DRAWN BY: J. B. Blee
CHECKED BY: J. B. Blee
DATE: 11/18/2019
TIME: 11:18 AM
PLotted BY: J. B. Blee
DATE: 11/18/2019
TIME: 11:18 AM

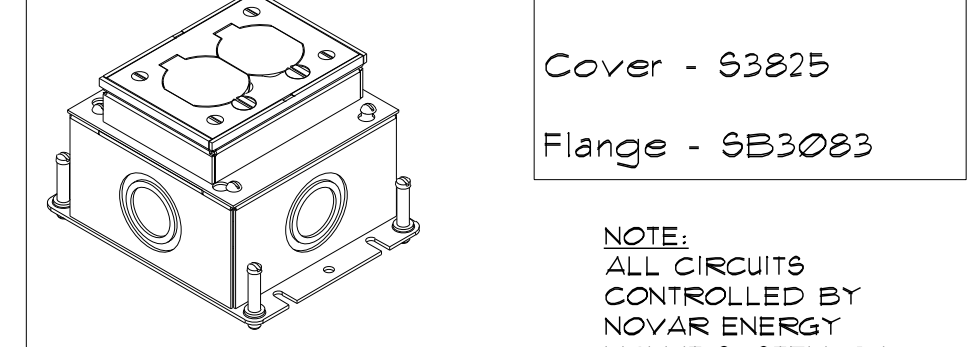


FLOOR PLAN - POWER
SCALE: 1/8" = 1'-0"



Box - B2432
Cover - S3B25 (x2)
Flange - SB30B4

NOTE:
ALL CIRCUITS
CONTROLLED BY
NOVAR ENERGY
MGMT SYSTEM, ON
CUSTOMER LIGHTING.



Box - B2431
Cover - S3B25
Flange - SB30B3

NOTE:
ALL CIRCUITS
CONTROLLED BY
NOVAR ENERGY
MGMT SYSTEM, ON
CUSTOMER LIGHTING.

COORDINATE BURGULAR
ALARM LOCATION WITH
TJX PROJECT
MANAGER

ALL ELECTRICAL DEVICE
COVERS TO BE BRUSHED
ALUMINUM

PROVIDE CONDUIT AND (2) J-BOXES WITH
BLANK PLATES AT LOCATION OF FIRE
ALARM PANEL

G.C. TO COORDINATE ELECTRIFIED
STORE FIXTURES WITH DEPARTMENT
LAYOUTS FROM THE FINAL FIXTURE PLAN.

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 NOVAR ENERGY MANAGEMENT SYSTEM. (4) FOUR
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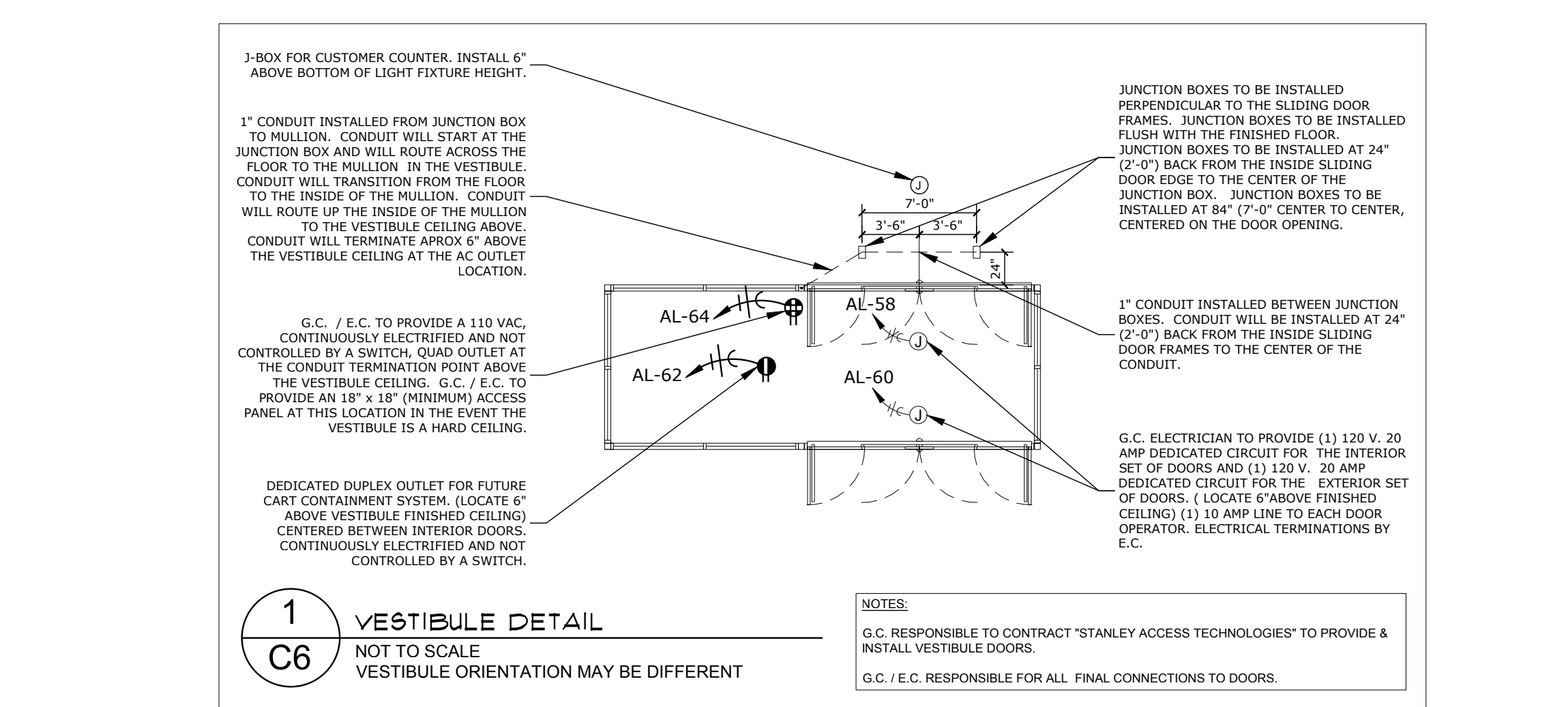
CEILING

- 4' x 8' OR 8' x 16' RAPID START FLUORESCENT STRIP LIGHTING FIXTURE 4-5/8" WIDE
- 1' x 4' RECESSED FLUORESCENT LIGHTING FIXTURE
- 2' x 4' RECESSED FLUORESCENT LIGHTING FIXTURE WITH 2, 3 OR 4 LAMPS AS SCHEDULED
- EXHAUST FAN CEILING RECESSED, ILG INDUSTRIES MODEL CCV 1000 CAT 10-135 WITH SPEED CONTROL MODEL LG-TRONIC CAT 1951
- EMERGENCY REMOTE LIGHT HEADS AND EXIT SIGN WALL MOUNTED, SEE SPECS.
- EXTERIOR SIGN JUNCTION BOX
- SINGLE OCCUPANCY SENSOR SWITCH (FIR) / REFER TO TJX SPECIFICATIONS FOR PRODUCT INFORMATION

UNISTRUT - 4' INCREMENTS
UNISTRUT - 6' INCREMENTS
UNISTRUT - 8' INCREMENTS

FLOOR/WALL

- 3' OR 4' FLUORESCENT STRIP LIGHTING FIXTURE 3/4" WIDE FOR VALANCE
- DEDICATED SINGLE RECEPTACLE
- EXTERIOR LUMINAIRE, SEE SPECS.
- DEDICATED DUPLEX RECEPTACLE
- DUPLEX CONVENIENCE OUTLET, CENTERLINE 18" AFF UNLESS OTHERWISE NOTED
- QUADRUPLUX OUTLET
- DEDICATED QUADRUPLUX RECEPTACLE
- QUADRUPLUX RECEPTACLE WITH ISOLATED GROUND
- DUPLEX RECEPTACLE WITH ISOLATED GROUND
- BLANKED OUTLET WITH 3/4" ENT RUN UP WALL TO ABOVE SUSPENDED CEILING, HEIGHT AS NOTED
- JUNCTION BOX, TO HEIGHT INDICATED
- THERMOSTAT
- EXIT SIGN (WALL MOUNTED), SEE SPECS.
- SINGLE POLE SWITCH
- SINGLE OCCUPANCY SENSOR SWITCH (FIR) / REFER TO TJX SPECIFICATIONS FOR PRODUCT INFORMATION
- THREE WAY SWITCH
- ELECTRICAL WATER COOLER, SEE SPECS.
- EMERGENCY TELEPHONE - WALL HUNG, RECESSED
- TELEPHONE-WALL HUNG
- TELEPHONE-DESK SET
- BELL WITH LOW VOLTAGE TRANSFORMER, CENTERLINE 30" AFF
- GPIE WITH LOW VOLTAGE TRANSFORMER, CENTERLINE 34" AFF, UNLESS OTHERWISE NOTED
- PUSH BUTTON, HEIGHT AS NOTED
- DOCK LIGHT
- PLUG MOLDING
- POWER POLE
- LOW VOLTAGE WIRING CONDUIT 4 JUNCTION BOX BY G.C. W/ PULL WIRE (TURNING BY OTHERS)
- WIRE-MOLD AL448000 SURFACE MOUNTED RACEWAY
- PHONE/DATA JACK
- EXTERIOR WALL LIGHT FIXTURE
- ELECTRIC STRIKE
- COMPACTOR DISCONNECT
- CENTRAL VAC UNIT
- CENTRAL VAC PORT TO BE MOUNTED CENTERLINE 30" AFF, UNLESS OTHERWISE NOTED
- FIRE ALARM STROBE LIGHT
- FIRE HORN, 'L' DENOTES COMBINATION HORN AND VISUAL FIRE LIGHT



SLAGGIE ARCHITECTS
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Kansas City, Missouri • Omaha, Nebraska
888-756-1958
slaggie.com

smith&boucher ENGINEERS
25501 west valley parkway, suite 200 • olathe, ks 66061
phone 913.345.2127 fax 913.345.0617
project number 1923000

HomeGoods
Tenant Improvements
Summit Orchards Lot 4B
492 NW Chipman Rd
Lee's Summit, MO 64086

Revisions:

Revision	Date
Add-01 City Comments	11/18/2019
Add-02 Tenant Comments	12/18/2019

Project #: 190902-02

Construction / Permit Set
November 8, 2019

POWER PLAN & ELECTRICAL SYMBOLS

E2

GENERAL CONTRACTOR

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

2) MECHANICAL CONTRACTOR

- A) HANG AND FINISH WITH CONDUIT (WIREMOLD IF EXPOSED IN FINISHED AREAS) AT THE LOCATIONS DESIGNATED ON THE NOVAT 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 (18/10 IF THE RTU IS EQUIPPED WITH A CO2 SENSOR WITH THE UNIT) FROM EACH ROOFTOP UNIT TO THE NOVAT ETM (T-STAT) LOCATION SHOWN ON THE NOVAT PLAN THAT SUPERSEDES ANY MECHANICAL PLAN LOCATIONS.
- C) TEMPORARY THERMOSTATS ARE TO BE INSTALLED AT THE ETM LOCATIONS AND THE ROOFTOP UNITS STARTED.
- D) HVAC EQUIPMENT ARE TO HAVE HAD A MANUFACTURER'S RECOMMENDED STARTUP PROCEDURE PERFORMED AND BE OPERATIONAL IN ALL MODES BEFORE THE ARRIVAL OF THE NOVAT CONTROLS REPRESENTATIVE FOR THE FINAL NOVAT INSTALLATION.

3) ELECTRICAL CONTRACTOR

- A) 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.
- B) INSTALL THE NOVAT PROVIDED CURRENT TRANSFORMERS (CTS).
- C) CONNECT ALL CT WIRING TO THE PHASE MONITOR.
- D) MOUNT AND POWER THE PHASE MONITOR.
- E) 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.
- F) THE INSTALLATION, PROGRAMMING, AND LABELING OF THE GE SOFTWARE PANEL IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

HVAC NOVAR INTERFACE (THE HVAC CONTRACTOR'S WORK PRIOR TO THE NOVAR CONTRACTOR'S WORK):

A) THERMOSTATS:

I) THE HVAC CONTRACTOR IS TO PROVIDE AND INSTALL A PERMANENT 18" (18/10) IF THE RTU IS EQUIPPED WITH A CO2 SENSOR WITH THE UNIT) THERMOSTAT WIRING FROM THE LOW VOLTAGE SECTION OF EACH HVAC UNIT TO THE FINAL LOCATION OF THE THERMOSTAT (LOCATION OF THE THERMOSTATS ARE IN ACCORDANCE WITH THE PLANS PRODUCED BY NOVAR AND SUPERSEDE THE MECHANICAL PRINT LOCATIONS)

II) THE HVAC CONTRACTOR IS TO INSTALL A TEMPORARY THERMOSTAT FOR EACH HVAC UNIT AT THESE LOCATIONS FOR TESTING AND OPERATIONS.

III) THE THERMOSTAT IS TO BE MOUNTED AT 60" A.F.F. EXCEPT IN THE FITTING ROOM WHERE THE THERMOSTAT IS TO BE MOUNTED AT 84" A.F.F. IF THERMOSTAT LOCATIONS CONFLICTS WITH A PHONE LOCATION, INSTALL THERMOSTAT SIX TO EIGHT INCHES ABOVE THE PHONE. IF PROVIDED, CO2 SENSORS ARE TO BE INSTALLED SIX INCHES DIRECTLY ABOVE THE THERMOSTAT

IV) IN COLD WEATHER, THE HVAC CONTRACTOR IS TO PROVIDE AND INSTALL TEMPORARY A THERMOSTAT FOR RECEIVING HEATERS.

B) SMOKE DETECTORS:

I) THE HVAC CONTRACTOR IS TO SUPPLY AND INSTALL SMOKE DETECTORS FOR THE HVAC EQUIPMENT, (AS WELL AS ANY ADDITIONAL DETECTORS REQUIRED BY THE BUILDING AND FIRE OFFICIALS HAVING JURISDICTION AND GOVERNING CODE). THE SMOKE DETECTORS ARE TO BE PHOTOELECTRIC.

2) AIR BALANCING:

I) UPON COMPLETION OF THE HVAC SYSTEM, AIR BALANCING IS TO BE PERFORMED BY AN INDEPENDENT CERTIFIED AIR BALANCING COMPANY.

II) THE CERTIFIED AIR BALANCING REPORT IS TO BE SUBMITTED TO THE T.J.X COMPANIES PROJECT MANAGER.

3) THE DISPOSABLE HVAC FILTERS ARE TO BE CHANGED JUST PRIOR TO THE STORE GRAND OPENING.

4) ALL ABANDONED HVAC EQUIPMENT IS TO BE PROPERLY REMOVED AND DISPOSED.

5) THE SPACE ABOVE THE CEILING IS NOT TO BE USED AS A RETURN AIR PLENUM.

6) ALL EQUIPMENT AND CONTROL DEVICES ARE TO BE APPROPRIATELY IDENTIFIED AND PERMANENTLY ATTACHED.

7) BASEBOARD HEATERS

A) BASEBOARD HEATERS ARE TO BE FACTORY EQUIPPED WITH INTEGRAL THERMOSTATS AND ARE TO BE INSTALLED IN ALL OFFICES, LOUNGE, RESTROOMS, AND SECURITY OFFICES THAT HAVE AT LEAST ONE OUTSIDE WALL (IN CLIMATE ZONES 4 AND 5).

THE CIRCUITING FOR BASEBOARD HEATING IS TO BE THROUGH THE GE RELAY PANEL.

8) VESTIBULE HEATERS

A) ELECTRIC VESTIBULE HEATERS ARE TO BE FACTORY EQUIPPED WITH LOW VOLTAGE CONTROLS, INCLUDING BUT NOT LIMITED TO THE FOLLOWING: POWER CONTRACTORS, LOW VOLTAGE TRANSFORMER AND A TWO WIRE FIELD TERMINATION CONTROL POINT.

9) EXHAUST FANS. EXHAUST FANS ARE TO BE CONTROLLED AS SHOWN ON T.J.X CRITERIA PLANS AND POWERED VIA EMPLOYEE LIGHT CONTRACTOR ON THE GE SOFTWARE CONTRACTOR PANEL.

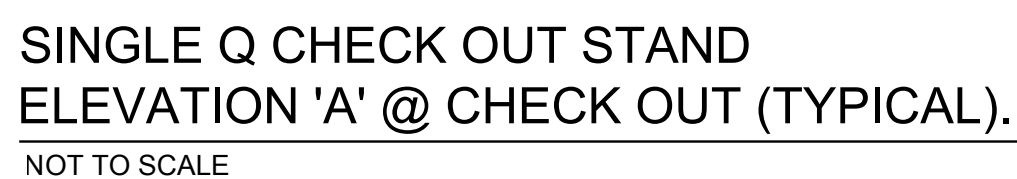
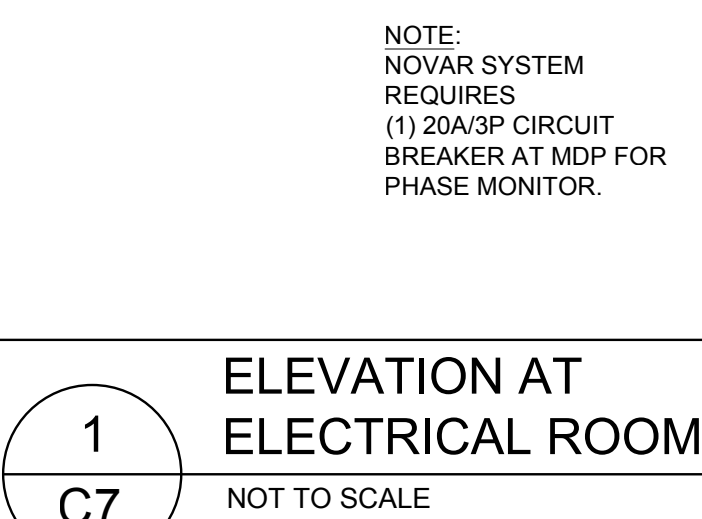
1) **NIGHT LIGHTING:**
A) NIGHT LIGHTS ARE TO BE ON 24 HOURS A DAY AND ONLY IN THE SALES AREA.
B) THE CIRCUIT FOR NIGHT LIGHTING IS NOT TO BE CONNECTED TO THE GE RELAY PANEL, OR EMERGENCY LIGHTING. THE
C) NIGHT LIGHTS ARE TO BE ONLY 1 CIRCUIT IN MOST SITUATIONS.
2) **NIGHT LIGHTING "RULE OF THUMB" IS 1) NIGHT LIGHT FOR EVERY 3,500 SQUARE FEET OF SALES AREA (ROUND UP), AND SHOULD BE EVENLY DISTRIBUTED. (REFER TO T.XX 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 AUTHORITY.
B) AT A MINIMUM, THE EMERGENCY LIGHTING IS TO BE AS FOLLOWS:
1) ALL ROOMS AND SPACES ARE TO HAVE AT LEAST (1) EMERGENCY LIGHT.
2) THE SALES AREA IS TO HAVE THE EMERGENCY LIGHT PER 100 SQUARE FEET OF FLOOR AREA, AND SHOULD BE EVENLY DISTRIBUTED THROUGHOUT THE SPACE. PATHS OF EGRESS SHOULD BE OF PRIMARY COVERAGE.
3) 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 LOOKS INSTALLED AT THE PANEL.
D) THE EMERGENCY LIGHTS ARE TO BE LITHONIA LIGHTING, MODEL HELM2, 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 CHAIN IN THE RELAY PANEL. THIS LIGHTING IS OVERRIDDEN BY A LIGHT SENSOR SUPPLIED AND INSTALLED BY NOVAR.

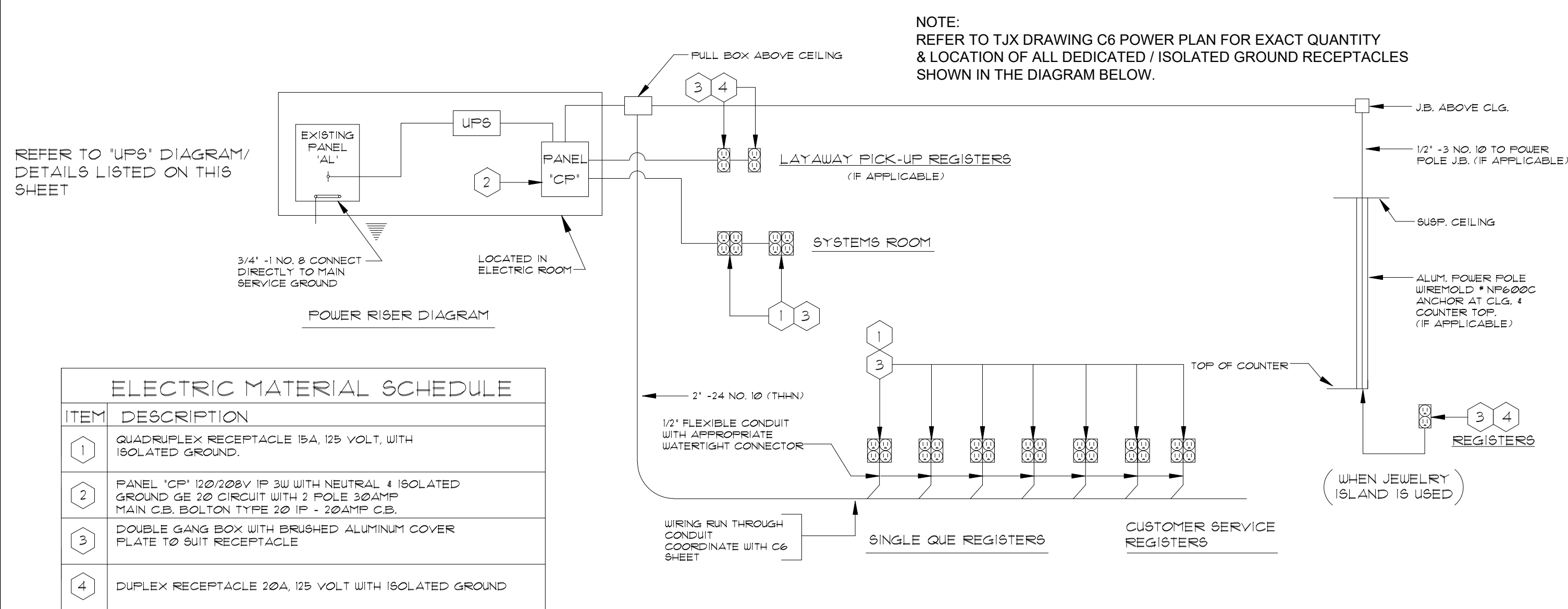
4) **SIGNS AND CANOPY LIGHTS:**
A) THIS INCLUDES THE BUILDING, WALL, LIGHTED UNDER CANOPY, ETC. SIGNS AS WELL AS ANY CANOPY LIGHTS (IF NOT BEING CONTROLLED BY THE LANDLORD'S HOUSE PANEL).
B) THESE CIRCUITS ARE TO BE RUN THROUGH THE GE RELAY PANEL.
C) NOVAR WILL CONTROL THESE CIRCUITS BY A SEPARATE CHAIN IN THE RELAY PANEL.

- 1) ONE HALF OF THE SALES AREA CEILING LIGHTS (ALTERNATE ROWS).
- 2) ALL PERIMETER LIGHTING.
- 3) ALL PENDANT LIGHTING.
- 4) JEWELRY COUNTER LIGHTING.
- 5) LAMP PENDANT PLUGMOLD (ON WALLS AND FLOOR GONDOLAS).
- 6) FLOOR OUTLETS FOR LAMP PENDANT.
- 7) CEILING MOUNTED CHANDELIER FIXTURE OUTLETS.
- 8) ANY SPECIALTY LIGHTING (I.E. WALL SCULPTES, ETC.).
- 9) OFF SALES AREA.
- 10) PENDANT LIGHTS IN THE FITTING ROOM.
- 11) LIGHTED MIRRORS IN THE FITTING ROOM.
- 12) 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 LIGHTS", "CANDY 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. SOFTWARE RELAY PANEL PROGRAMMING:**
 - A) SOFTWARE LIGHTING GROUPS
 - 1) THE SCM SHALL ALLOW ANY GROUP OF RELAYS WITHIN THE PANEL TO BE ASSOCIATED ("SOFTWARED") 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 CHANNEL TO BE CONTROLLED. THE LED FOR EACH RELAY "SOFTWARED" TO THE CHANNEL SELECTED WILL BE FLASHING OFF. PRESS THE ASSOCIATED RELAY CONTROL BUTTON TO ADD/DELETE THAT RELAY TO/FROM GROUP.
 - 2) .PRESS THE CHANNEL PUSH-BUTTON ON THE LEDS WILL STOP FLASHING AND THE CHANNEL PUSH BUTTON AND ASSOCIATED SWITCH INPUTS WILL NOW CONTROL THE RELAYS SELECTED.
 - B) TURNING A CHANNEL OFF/WILL SEQUENCE ALL OF THE RELAYS WITHIN THAT GROUP OFF INDIVIDUALLY.
 - C) CONTROLLING A SOFTWARE GROUP.
 - 1) EACH CHANNEL SHALL HAVE ASSOCIATED PUSH-BUTTON WITHIN THE PANEL TO TOGGLE THE CHANNEL OFF.
 - 2) EACH CHANNEL SHALL ALSO HAVE TWO SEPARATE SWITCH OR DRY CONTACT INPUTS THAT WILL ALLOW THE CHANNEL TO BE CONTROLLED REMOTELY.
 - 3) THE CHANNEL SHALL RESPOND TO THE LAST INPUT.
 - 4) THE GROUP 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.
- 8) **GROUP STATUS**
 - 1) 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.
 - 2) EACH CHANNEL SHALL ALSO HAVE AN ASSOCIATE DRY CONTACT CLOSURE OF PILOT CONTACT WHICH TRACKS THE LED OPERATION DESCRIBED ABOVE.
- 9) **CONTROLLING AN INDIVIDUAL RELAY**
 - 1) EACH RELAY SHALL HAVE AN ASSOCIATED CONTROL BUTTON WITH LED STATUS INDICATION MOUNTED WITHIN THE LOW VOLTAGE SECTION OF THE PANEL.



Summit Orchards Shell & Core - Lees Summit, MO
PROJECT NAME: Construction \ JMS
LAST CORRECTION: 11/18/2019
DRAWN BY: Charles Body
DATE: 11/18/2019
TIME: 3:18:30 PM

PROJECT NAME: Construction \ JMS
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TIME: 3:18:30 PM

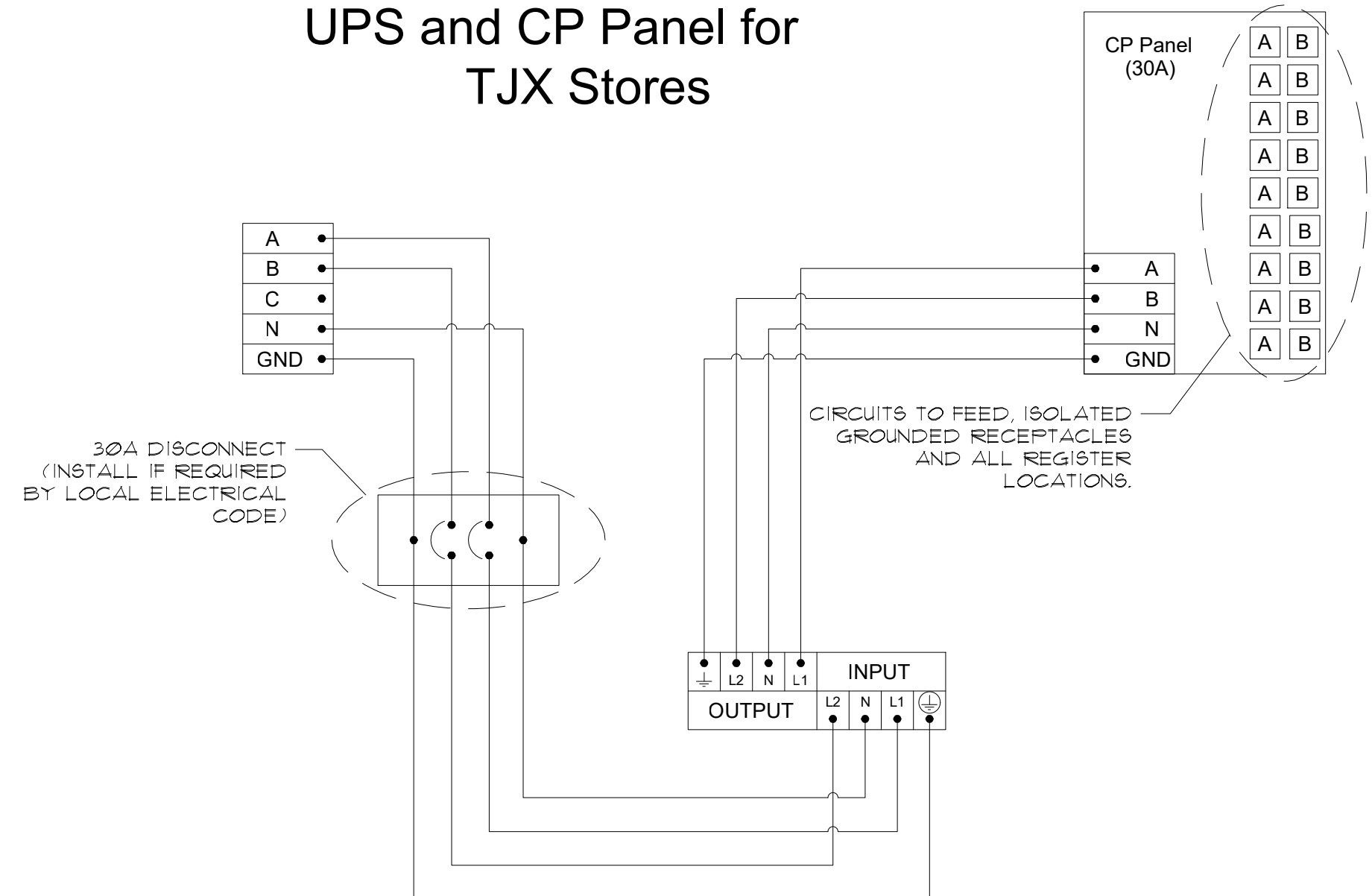


- NOTES**
- TJX SHALL BRING IN AN OUTSIDE CONTRACTOR TO SUPPLY, RUN AND TERMINATE THE LOW VOLTAGE COMMUNICATION WIRING. THIS INCLUDES THE LOW VOLTAGE WIRING FOR REGISTERS, FOS, AS WELL AS THE CABLE FOR THE TIME CLOCK, ACS AND MANAGERS OFFICE TO LAYAWAY CABLES.
 - CABLES TO BE RUN IN ONE PIECE FROM REGISTER TO REGISTER.
 - ALL LOW VOLTAGE WIRING TO BE INSTALLED ABOVE HUNG CLG. AND SHALL BE KEPT A MINIMUM OF 5'-0" FROM FLUORESCENT LIGHTING FIXTURES.
 - CONTRACTOR IS RESPONSIBLE FOR CONDUIT AND FULL STRINGS.
- NOTES**
- CONVENIENCE OUTLETS AT SERVICE DESK SHALL NOT BE CONNECTED TO CP PANEL.
- P.O.S. AC 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-----NO VOLTAGE
- NOTES**
- 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.
 - ALL WIRING SHALL BE TYPE "THW" OR "THHN" COPPER RUN IN CONDUIT.
 - 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.
 - ALL GROUND CONNECTORS SHALL BE ISOLATED (PURE GROUND ONLY) AND SHALL NOT BE GROUNDED TO ANY METAL ENCLOSURES.
 - THE ELECTRICAL CONTRACTOR SHALL LABEL ALL PANELS, RECEPTACLES, SWITCHES, ETC. TO IDENTIFY VOLTAGES AND FUNCTION.
 - 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

Liebert GXT4 6kVA UPS and CP Panel for TJX Stores



TJX LIEBERT GXT4 6kva UPS installation guidelines

- LIEBERT CONTACT INFORMATION**
- LIEBERT TECHNICAL SUPPORT
PHONE: 800 - 222 - 5877 Option #1 Hardware Support
EMAIL: liebert_upstech@emerson.com
- GENERAL INFORMATION:**
- GCs or Electrical Contractors are not required to purchase the UPS.
- TJX provides all units from a third party location; DO NOT CALL LIEBERT WITH DELIVERY CONCERNS.
- The units are a Liebert GXT3 6kva tower UPS - 16.9" (H) x 6.8" (W) x 26.1" (D) and weigh 132 pounds total. The units arrive in three separate boxes via FEDEX.
- Wiring diagram is included on the TJX criteria, sheet C7.
- Installation does NOT require Liebert to be onsite.
- INSTALLATION:**
- Electrical Contractor responsibilities:
- Unpack/set/place the UPS, placement must conform to local and national codes.
 - UPS ships in three boxes, UPS, Internal Battery pack and SNMP card. Please refer to the UPS Manual, ships with the unit, for proper installation. Starts on Page 12.
 - Terminate wiring at input and output of UPS.
 - Ensure distribution wiring, CP Panel, and disconnect are correctly installed.
- START UP**
- Electrical Contractor responsibilities:
- Unit must be turned on and taken out of BYPASS after installation is complete.
 - Confirm the UPS is the only source feeding the CP Panel.
 - Call LIEBERT at the above number to troubleshoot any issues with Start up.
 - Provide support for LIEBERT if wiring issues arise during Start Up.
 - After UPS is Turned on and taken out of BYPASS without any issues, the TJX PM must be notified that UPS installation is complete and the UPS is functional without issues.

- NOTES:**
- LIEBERT RECOMMENDED WIRE SIZE, INCLUDING GROUND WIRE, # 15" COPPER WIRE (5.0AUG (4mm). MAXIMUM WIRE ACCEPTED BY TERMINAL BLOCK IS 5AUG (6mm).
 - LIEBERT RECOMMENDS INSTALLING A UL489 APPROVED BREAKER UPSTREAM OF UNIT.
 - THE INSTALLER MUST PROVIDE CIRCUIT BREAKER PROTECTION ACCORDING TO LOCAL CODES. THE UTILITY DISCONNECT SHOULD BE WITHIN SIGHT OF THE UPS OR HAVE AN APPROPRIATE LOCK OUT. MAINTAIN SERVICE SPACE AROUND THE UPS OR USE FLEXIBLE CONDUIT.
 - THE INSTALLER MUST PROVIDE OUTPUT DISTRIBUTION PANELS, CIRCUIT BREAKER PROTECTION, OR EMERGENCY DISCONNECTS ACCORDING TO LOCAL CODES.
 - OUTPUT CIRCUITS MUST NOT SHARE A COMMON.
 - CP PANEL WILL SERVICE ALL REGISTER POWER BLADE SERVER, IDF, AND BMS POWER ONLY. NO OTHER CIRCUIT TO BE FED FROM CP.

BMS 1	NOVAR PANEL
BMS 2	NOVAR RELAY PANEL
BMS 3	GE RELAY PANEL

*** ALL DELIVERY QUESTIONS SHOULD ***
BE DIRECTED TO TJX SYSTEMS
IMPLEMENTATION AT 508-475-8105

UPS DIAGRAM

LIGHTING RELAY PANEL - "LCP-1"

RELAY #	RELAY AREA DESCRIPTION	CIRCUIT	LOCAL OVERRIDE	ZONE	NOTES
1	EMPLOYEE LIGHTING - SALES NORTH HALF #1	AH-9	N/A	B	1
2	EMPLOYEE LIGHTING - SALES SOUTH HALF #1	AH-13	N/A	A	1
3	CUSTOMER LTG	AH-15	N/A	B	1
4	EMPLOYEE LTG	AH-11	N/A	A	1
5	PROCESSING ROOM LTG	AH-5	N/A	A	1
6	EMPLOYEE LIGHTING - OFFICES	AH-7	N/A	A	1
7	ECUH-1 (UNIT HEATER)	AH-8	N/A	A	1
8	EXTERIOR SIGN - FRONT	AL-1	N/A	S	1
9	EXTERIOR SIGN - SIDE	AL-1	N/A	S	1
10	EXTERIOR SIGN - REAR	AL-3	N/A	S	1
11	CUSTOMER LIGHTING - SOUTH WEST TRACK	AL-7	N/A	B	1
12	CUSTOMER LIGHTING - NORTH WEST TRACK	AL-9	N/A	B	1
13	CUSTOMER LIGHTING - NORTH TRACK	AL-11	N/A	B	1
14	CUSTOMER LIGHTING - EAST TRACK	AL-13	N/A	B	1
15	CUSTOMER LIGHTING - SOUTH EAST TRACK	AL-15	N/A	B	1
16	QUAD FLOOR BOX	AL-23	N/A	B	1
17	QUAD FLOOR BOX	AL-25	N/A	B	1
18	REC - PLUG MOULD NW SET 1	AL-27	N/A	B	1
19	REC - PLUG MOULD NW SET 2	AL-29	N/A	B	1
20	REC - PLUG MOULD NE SET 1	AL-31	N/A	B	1
21	REC - PLUG MOULD NE SET 2	AL-33	N/A	B	1
22	REC - PLUG MOULD W SET 1	AL-35	N/A	B	1
23	REC - PLUG MOULD W SET 2	AL-37	N/A	B	1
24	REC - PLUG MOULD W SET 3	AL-39	N/A	B	1
25	REC - PLUG MOULD W SET 4	AL-41	N/A	B	1
26	POWER POLE #1	AL-43	N/A	B	1
27	REC FLOOR BOX	AL-53	N/A	B	1
28	WALL MOUNTED FANS	AL-55	N/A	A	1
29	REC FLOOR BOX	AL-57	N/A	B	1
30	REC - GONDOLA WEST SET 1	AL-85	N/A	B	1
31	REC - GONDOLA WEST SET 2	AL-87	N/A	B	1
32	REC - GONDOLA WEST SET 3	AL-89	N/A	B	1
33	REC - GONDOLA WEST SET 4	AL-91	N/A	B	1
34	REC - GONDOLA MIDDLE SET 1	AL-93	N/A	B	1
35	REC - GONDOLA MIDDLE SET 2	AL-95	N/A	B	1
36	REC - GONDOLA MIDDLE SET 3	AL-97	N/A	B	1
37	REC - GONDOLA MIDDLE SET 4	AL-99	N/A	B	1
38	REC - GONDOLA EAST SET 1	AL-101	N/A	B	1
39	REC - GONDOLA EAST SET 1	AL-103	N/A	B	1
40	REC - GONDOLA EAST SET 1	AL-105	N/A	B	1
41	REC - GONDOLA EAST SET 1	AL-107	N/A	B	1
42	EXHAUST FANS 1 & 2	AL-10	N/A	A	1
43	EBUH-1	AL-68	N/A	A	1
44	EBUH-2	AL-70	N/A	A	1
45	EBUH-3	AL-72	N/A	A	1
46	EBUH-4	AL-74	N/A	A	1
47	EBUH-5	AL-76	N/A	A	1
48	ECUH-1	AL-80	N/A	A	1

- CABINET REQUIREMENTS:**
- BASIS OF DESIGN IS AN GE RELAY PANEL SYSTEM. ALL PRODUCT SUBSTITUTIONS SUBMITTED MUST BE APPROVED BY BRAND.
 - ALL RELAYS TO BE RATED FOR 20A (MINIMUM) - NORMALLY CLOSED.
 - SEVEN DAY TIME CLOCK INCLUDING SKIP-A-DAY CAPABILITY.
 - NOVAR WILL PROGRAM THE GE LIGHTSWEEP SOFTWARE AS PART OF THE COMMISSIONING PROCESS AND TO BE PART OF THE BMS SYSTEM.
 - INSTALL PHOTOCELL AS NEEDED FACING NORTH ON TOP OF THE ROOF.
 - REFER TO SHELL PACKAGE FOR OTHER EXTERIOR LIGHTING IN THE REAR AND NOT LOCATED HERE.
1. COORDINATE SCHEDULED ON/OFF WITH ZONES: A,B,C,D,S

PANEL CP

MAIN BUS AMPS:	30 A	AIC:	22,000 A	EQUIP & ISO. GRND. BUSES
MAIN BREAKER:	30 A	SECTIONS:	1-24 SPACE	
VOLTAGE:	208Y/120 V	MOUNTING:	SURFACE	
PHASES/WIRES:	1 PH / 3 W	LOCATION:		

CIRCUIT DESCRIPTION	POLES	AMPS	CKT NO	CKT NO	AMPS	POLES	CIRCUIT DESCRIPTION
REG 01	1	20	1	2	20	1	SPARE
REG 02	1	20	3	4	20	1	SPARE
REG 03	1	20	5	6	20	1	SPARE
REG 04	1	20	7	8	20	1	SPARE
REG 05	1	20	9	10	20	1	SYSTEMS 1
REG 06	1	20	11	12	20	1	SYSTEMS 2
REG 07	1	20	13	14	20	1	SPARE
BMS #1 - NOVAR PANEL	1	20	15	16	20	1	BMS #2 - NOVAR RELAY PANEL
BMS #3 - GE RELAY PANEL	1	20	17	18	20	1	DEDICATED QUAD - FRONT DESK
SPARE	1	20	19	20	20	1	SPARE
SPARE	1	20	21	22	20	1	SPARE
SPARE	1	20	23	24	20	1	SPARE

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) UL APPROVED, 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.
- DOOR ALARM SYSTEM SHALL BE WHEELLOCK 38GV23 FROM GRAINGER INDUSTRIES MODEL #CH12092 WITH WEATHERPROOF PUSH BUTTON.

*** CIRCUIT NEEDED ONLY WHEN REQUESTED BY
SYSTEMS FOR REMOTE COMPUTER EQUIPMENT
CONNECTION AND IS OUTLET.

TYPICAL CP PANEL

NOT TO SCALE

PANEL AH

MAIN BUS AMPS:	600 A	AIC:	22,000 A	EQUIPMENT GROUND BUS
MAIN BREAKER:	600 A	SECTIONS:	1 - 42 SPACE	
VOLTAGE:	480Y/277 V	MOUNTING:	out o	
PHASES/WIRES:	3 PH / 4 W	LOCATION:		

CIRCUIT DESCRIPTION	POLES	AMPS	CKT NO	CKT NO	AMPS	POLES	CIRCUIT DESCRIPTION
LTG - EXIT SIGNS	1	20	1	2	30	3	TRASH COMPACTOR
LTG - EMERGENCY	1	20	3	4			
LTG - PROCESSING, LP RM	1	20	5	6			
LTG - NORTH EASTERN ROOMS	1	20	7	8	15	1	ECUH-1 (UNIT HEATER)
LTG - SALES NORTH HALF #1	1	20	9	10			1 PREPARED SPACE
LTG - SALES NORTH HALF #2	1	20	11	12			1 PREPARED SPACE
LTG - SALES SOUTH HALF #1	1	20	13	14			1 PREPARED SPACE
LTG - SALE SOUTH HALF #2, WEST	1	20	15	16			1 PREPARED SPACE
LTG - SALES NIGHT LIGHTS	1	20	17	18			1 PREPARED SPACE
RTU-1	3	50	19	20	35	3	RTU-5
			21	22			
			23	24			
			25	26	20	3	RTU-6
			27	28			
			29	30			
			31	32	20	3	RTU-7
			33	34			
			35	36			
			37	38	70	3	45 KVA TRANSFORMER
			39	40			PANEL 'AL'
			41	42			

PANEL AL

MAIN BUS AMPS:	600 A	AIC:	22,000 A	EQUIPMENT GROUND BUS
MAIN BREAKER:	150 A	SECTIONS:	2 - 62 SPACE	
VOLTAGE:	208Y/120 V	MOUNTING:	SURFACE	
PHASES/WIRES:	3 PH / 4 W	LOCATION:		

CIRCUIT DESCRIPTION	POLES	AMPS	CKT NO	CKT NO	AMPS	POLES	CIRCUIT DESCRIPTION
(E)LTG - BUILDING SIGNAGE	1	20	1	2	20	1	OVERHEAD DOOR 1 (E)
(E)LTG - BUILDING SIGNAGE	1	20	3	4	20	1	OVERHEAD DOOR 2 (E)
SPARE	1	20	5	6	20	1	FIRE ALARM CONTROL PANEL (FACP)
LTG - SOUTH WEST TRACK	1	20	7	8	15	1	LTG CNTRL PNL (LCP-1)
LTG - NORTH WEST TRACK	1	20	9	10	15	1	EF-1 & EF-2
LTG - NORTH TRACK	1	20	11	12	20	1	SPARE
LTG - EAST TRACK	1	20	13	14	20	1	ROOF RECEPTACLE NORTH
LTG - SOUTH EAST TRACK	1	20	15	16	20	1	ROOF RECEPTACLE SOUTH
REC - RUG AREA & STORAGE	1	20	17	18	20	1	REC - HALL DRINKING FOUNTAIN
REC - WEST HALF COLUMN	1	20	19	20	20	1	REC - JANITOR
REC - EAST HALF COLUMN	1	20	21	22	20	1	REC - LOUNGE VENDING #1
REC - DUPLEX FLOOR BOX	1	20	23	24	20	1	REC - LOUNGE VENDING #2
REC - QUAD FLOOR BOX	1	20	25	26	20	1	REC - DED. OUTLET NORTH WALL #1
REC - PLUG MOULD NW SET 1	1	20	27	28	20	1	REC - DED. OUTLET NORTH WALL #2
REC - PLUG MOULD NW SET 2	1	20	29	30	20	1	REC - DED. OUTLET NORTH WALL #3
REC - PLUG MOULD NE SET 1	1	20	31	32	20	1	REC - GENERAL + TIME CLK
REC - PLUG MOULD NE SET 2	1	20	33	34	20	1	SPARE
REC - PLUG MOULD W SET 1	1	20	35	36	20	1	SPARE
REC - PLUG MOULD W SET 2	1	20	37	38	20	1	SPARE
REC - PLUG MOULD W SET 3	1	20	39	40	20	1	REC - SOUTH WALL HORIZONTAL
REC - PLUG MOULD W SET 4	1	20	41	42	20	1	REC - CASH HALL ABOVE CEILING
POWER POLE #1	1	20	43	44	20	1	REC - CASH HALL - QUAD
REC - LP OFFICE	1	20	45	46	20	1	REC - CASH HALL - PLUG MOULD
REC - LP OFFICE PLUG MOULD	1	20	47	48	20	1	REC - CASH - ABOVE CEILING QUAD
REC - PROCESS RM - DED. QUAD	1	20	49	50	20	1	REC - GEN. CASH & MGR ROOM
REC - PROC. RM - DOCK LTG/GEN	1	20	51	52	20	1	REC - CASH - WEST WALL
REC FLOOR BOX	1	20	53	54	20	1	REC - MGR ROOM - NORTH WALL
REC - WALL MNTED CIRC. FANS	1	20	55	56	20	1	REC - MGR ROOM - WEST WALL
REC - FLOOR BOX	1	20	57	58	20	1	VESTIBULE INTERIOR DOOR
REC - ROOF TOP UNITS 1-4	1	20	59	60	20	1	VESTIBULE EXTERIOR DOOR
REC - ROOF TOP UNITS 5-7	1	20	61	62	20	1	REC - (FUTURE) VESTIBULE CART
ELECTRICAL ROOM - SECURITY	1	20	63	64	20	1	REC - QUAD VESTIBULE CEILING
REC TELEPHONE BACKBOARD	1	20	65	66	20	1	VESTIBULE SPARE
POWER POLE #2	1	20	67	68	15	1	EBUH-1 (UNIT HEATER)
POWER POLE #3	1	20	69	70	15	1	EBUH-2 (UNIT HEATER)
REC - REGISTERS	1	20	71	72	15	1	EBUH-3 (UNIT HEATER)
REC - DEDICATED REGISTER AREA	1	20	73	74	15	1	EBUH-4 (UNIT HEATER)
REC - FRONT END C.O. AREA	1	20	75	76	20	1	EBUH-5 (UNIT HEATER)
UPS	2	30	77	78	20	1	SPARE
			79	80	20	1	SPARE
PANEL 'CP' - ISOLATED GROUND	2	30	81	82	30	2	ECUH-1 (WATER HEATER)
			83	84			
			85	86	20	1	SPARE
			87	88	20	1	SPARE
			89	90	20	1	SPARE
			91	92	20	1	SPARE
			93	94	20	1	SPARE
			95	96	20	1	SPARE
			97	98	20	1	SPARE
			99	100	20	1	SPARE
			101	102	20	1	SPARE
			103	104	20	1	SPARE
			105	106	20	1	SPARE
			107	108	20	1	SPARE
			109	110	20	1	SPARE
			111	112	20	1	SPARE
			113	114	20	1	SPARE
			115	116	20	1	SPARE
			117	118			PREPARED SPACE
			119	120			PREPARED SPACE
			121	122			PREPARED SPACE
			123	124			PREPARED SPACE
			125	126			PREPARED SPACE

- Revisions:**
- Add-01 City Comments 11/18/19
 - Add-02 Tenant Comments 12/18/19
 - Add-03 Tenant Comments 01/10/20

Project #: 180902-02

Construction / Permit Set
November 8, 2019

ELECTRICAL DETAILS AND
SCHEDULES

E4



Summit Orchards Shell & Core - Lees Summit, MO
Project Location: 1923000_E5.dwg
Blee Tuesday, December 17, 2019 2:55:21 PM
Prosanto Patra Wednesday, December 18, 2019 3:53:15 PM

PROJECT NAME: PROJECT LOCATION: NAME:
LAST CORRECTION: DATE: TIME:
PLOTED BY: DATE: TIME:

- CONDUIT AND WIRE**
- ARROWS INDICATE CONDUIT AND WIRE HOME RUN(S) TO PANEL WITH 2-#12 AWG CONDUCTORS UNLESS NOTED OR OTHERWISE REQUIRED.
- CONDUIT RUN CONCEALED IN WALL OR ABOVE CEILING.
- CONDUIT RUN UNDERGROUND OR CONCEALED IN FLOOR SLAB.
- TELEPHONE CONDUIT
- LOW VOLTAGE CONDUIT AND WIRING

- LIGHTING**
- BATTERY OPERATED EMERGENCY LIGHT (WALL MOUNTED)
- SURFACE/RECESSED LIGHT FIXTURE
- FLUORESCENT LIGHT FIXTURE
- FLUORESCENT STRIP FIXTURE
- SHADING DENOTES EMERGENCY FIXTURE
- POLE MOUNTED LIGHT FIXTURE
- EXIT LIGHT - DOUBLE FACE - ARROWS AS SHOWN
- EXIT LIGHT - SINGLE FACE - ARROWS AS SHOWN
- LIGHTING SWITCHES-SINGLE POLE, 3-WAY, 4-WAY, KEY, LOW VOLTAGE, PILOT LIGHT
- DIMMER WITH SINGLE POLE SWITCH
- DIMMER WITH THREE WAY SWITCH (WATTAGE NOTED)
- WALL MOUNTED MOTION SENSOR
- DENOTES A WALL MOUNTED FIXTURE

- WIRING DEVICES**
- DUPLEX RECEPTACLE.
- LINE THRU DEVICE INDICATES ABOVE COUNTER
- DUPLEX RECEPTACLE WITH ISOLATED GROUND (SINGLE AND FOURPLEX SIMILAR)
- FOURPLEX RECEPTACLE
- SINGLE RECEPTACLE
- CEILING MOUNTED RECEPTACLE
- MULTI-SERVICE FLOOR BOX
- FLOOR BOX W/DUPLEX RECEPTACLE
- SPECIAL RECEPTACLE W/NEMA CONFIGURATION AS NOTED
- CLOCK RECEPTACLE

- COMMUNICATIONS**
- TELEPHONE OUTLET
- LINE THRU DEVICE INDICATES ABOVE COUNTER
- DATA OUTLET
- TELEPHONE/DATA OUTLET
- FLOOR BOX WITH COMMUNICATIONS OUTLET
- TELEVISION ANTENNA OUTLET

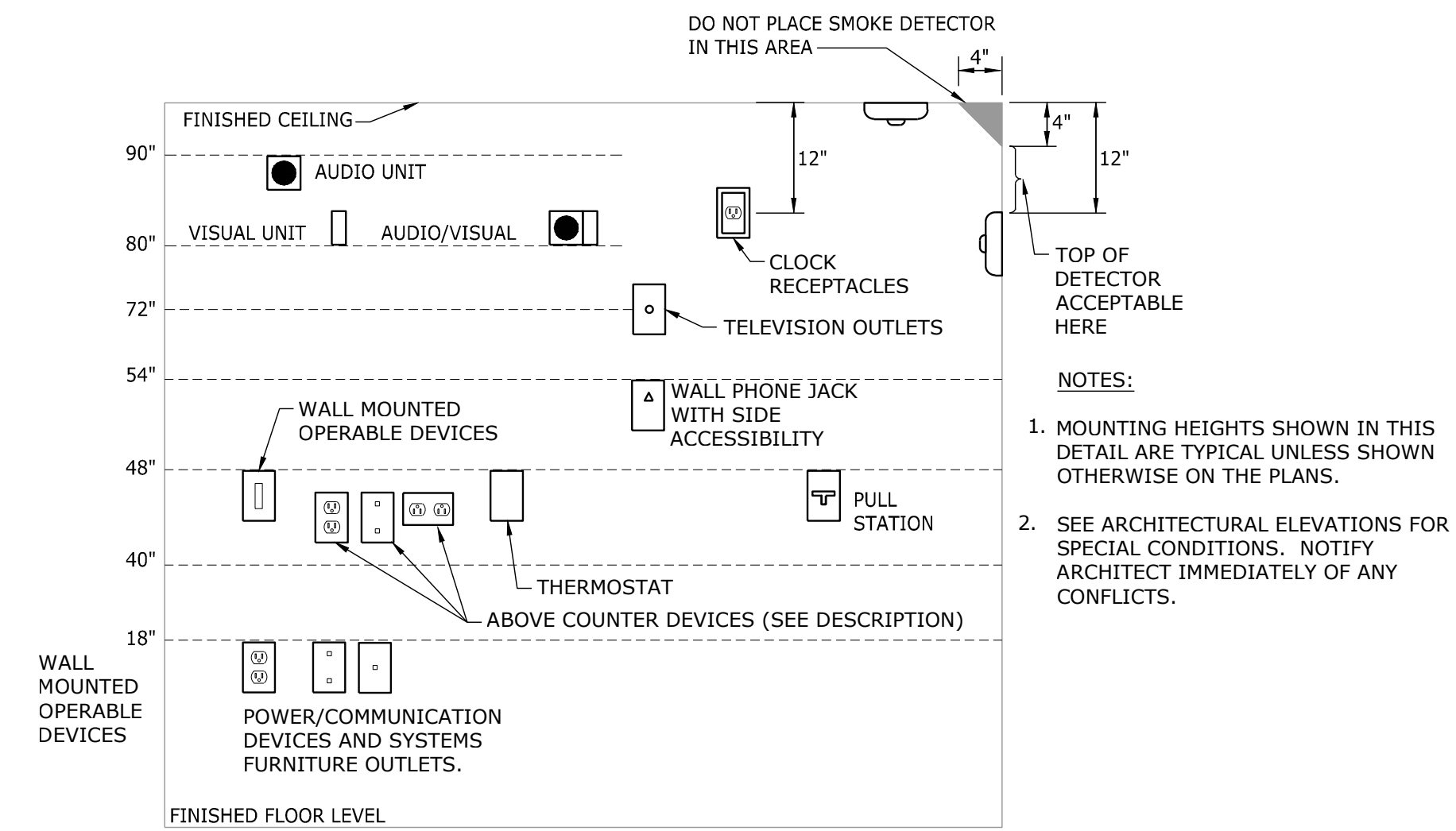
- PUBLIC ADDRESS**
- MICROPHONE OUTLET
- SPEAKER. ('H' DENOTES HORN TYPE)
- SPEAKER VOLUME CONTROL
- SPEAKER CONDUIT AND WIRING
- PUBLIC ADDRESS AMPLIFIER AND CABINET
- BUZZER
- BELL
- INTERCOM OUTLET
- INTERCOM OUTLET - MASTER
- CLOCK SYSTEM RECEPTACLE WITH SINGLE FACE ('D' DENOTES DOUBLE FACE)

- POWER DEVICE AND CONTROLS**
- THERMOSTAT
- DISCONNECT SWITCH. 30A-3P, NON-FUSED EXCEPT AS NOTED
- MANUAL MOTOR STARTER
- MAGNETIC MOTOR STARTER
- COMBINATION MOTOR STARTER AND DISCONNECT SWITCH
- MOTOR
- PANELBOARD (SEE ONE-LINE)
- DISTRIBUTION PANELBOARD
- CONTACTOR
- AUTOMATIC TRANSFER SWITCH
- PHOTOCELL
- JUNCTION BOX
- PUSHBUTTON
- TRANSFORMER

- FIRE ALARM**
- MANUAL PULL STATION
- PHOTOELECTRIC DETECTOR ('D' DENOTES IN DUCT) ('B' DENOTES BEAM-TYPE) ('R' DENOTES IN RETURN AIR PLENUM)
- FIRE ALARM STROBE LIGHT
- FIRE HORN. ('L' DENOTES COMBINATION HORN AND VISUAL FIRE LIGHT)

ELECTRICAL SYMBOLS AND ABBREVIATIONS

"SOME SYMBOLS AND ABBREVIATIONS ON THIS LEGEND MAY NOT BE USED. REFER TO FLOOR PLANS FOR ALL SYMBOLS AND ABBREVIATIONS."



- NOTES:**
1. MOUNTING HEIGHTS SHOWN IN THIS DETAIL ARE TYPICAL UNLESS SHOWN OTHERWISE ON THE PLANS.
 2. SEE ARCHITECTURAL ELEVATIONS FOR SPECIAL CONDITIONS. NOTIFY ARCHITECT IMMEDIATELY OF ANY CONFLICTS.

VISUAL UNIT (FIRE ALARM NOTIFICATION DEVICES) DEVICE 80" ABOVE HIGHEST FLOOR LEVEL OR 6" BELOW CEILING WHICH EVER IS LOWER (ADA 2010). BOTTOM OF DEVICE 80" AFF (NFPA).

AUDIO UNIT (FIRE ALARM NOTIFICATION DEVICE) TOP OF UNIT AT LEAST 90" AFF OR 6" BELOW CEILING WHICH EVER IS LOWER (NFPA).

AUDIO/VISUAL UNIT (FIRE ALARM NOTIFICATION DEVICE) LOCATION DETERMINED BY VISUAL UNIT REQUIREMENTS (NFPA).

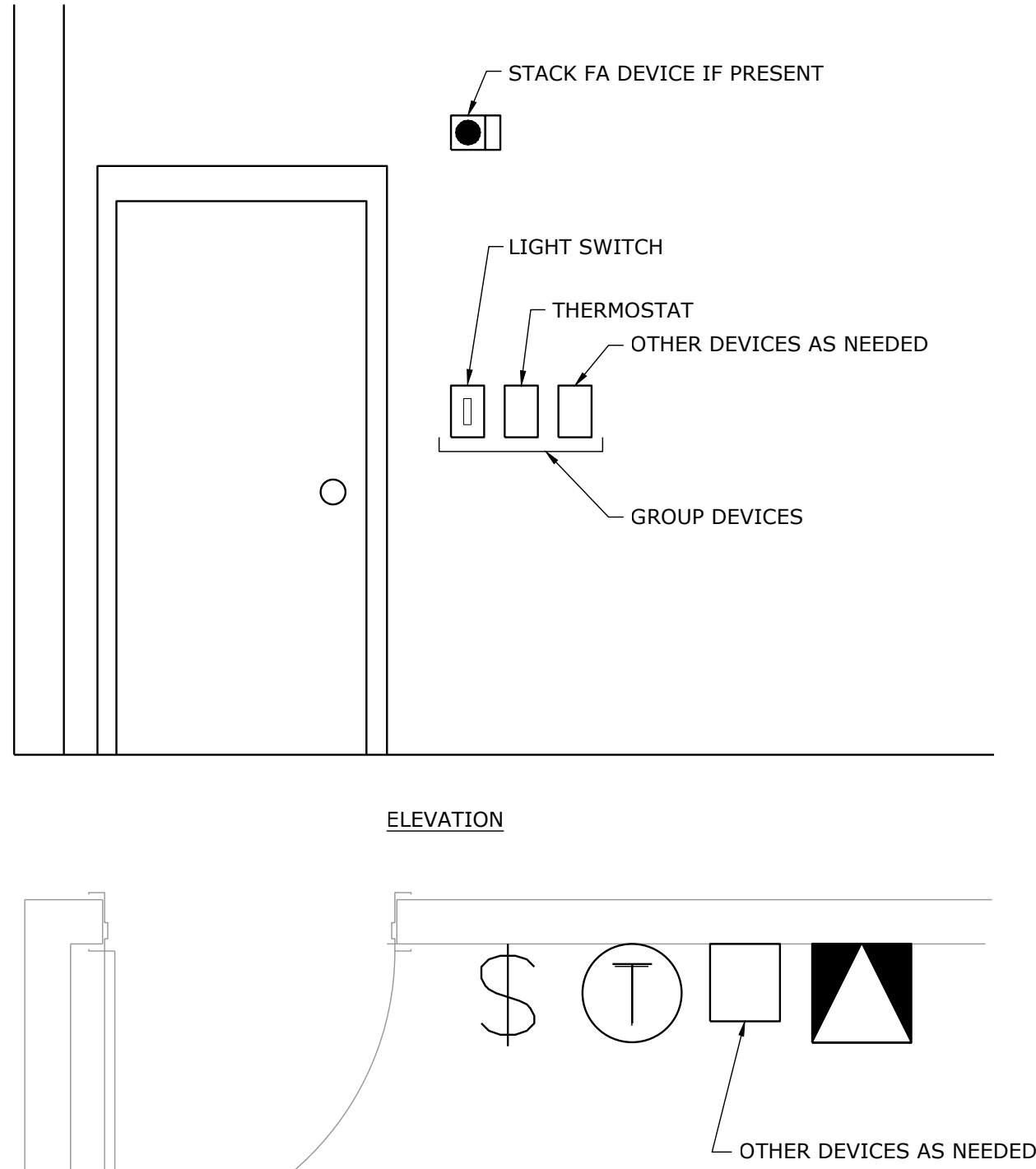
PULL STATION (FIRE ALARM ACTIVATION DEVICE) HIGHEST OPERABLE PART SHALL NOT BE MORE THAN 48" ABOVE THE FLOOR (FRONT APPROACH) ADA 2010. OPERABLE PART (T-HANDLE) SHALL BE NOT LESS THAN 42" AFF (NFPA).

WALL MOUNTED OPERABLE DEVICES

OPERABLE DEVICES SHALL BE LOCATED 48" AFF. TO THE TOP OF OPERABLE PORTION OF DEVICE. WALL MOUNTED TELEPHONES WITH SIDE ACCESSIBILITY MAY BE MOUNTED UP TO 54" AFF. WALL MOUNTED OPERABLE DEVICES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: ADJUSTABLE THERMOSTATS OR CO2 SENSORS LIGHTING SWITCHES/DIMMERS/CONTROLS PUSH BUTTONS OTHER CONTROL OR "CALL" DEVICES

POWER/COMMUNICATION DEVICES:

OUTLETS SHALL BE LOCATED 18" AFF TO THE TOP OF THE BOX. *ABOVE COUNTER DEVICES (PLAN DESIGNATION 4) SHALL BE LOCATED AT 48" TO THE TOP OF THE BOX, MOUNTED VERTICALLY UNLESS ABOVE CASEWORK. WHEN ABOVE CASEWORK LOCATE THESE DEVICES AT 2" ABOVE BACKSPASH OF COUNTER TOP MEASURED TO THE BOTTOM OF DEVICE. VERIFY W/ ARCHITECTURAL DETAILS.



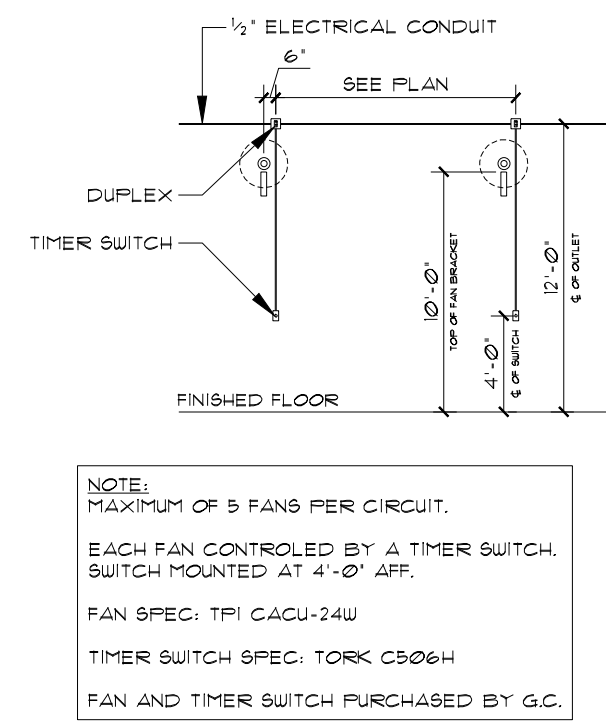
ELEVATION

PLAN

*FOR GENERAL MOUNTING REFERENCE ONLY, REFER TO PLANS FOR ALL DEVICE LOCATIONS AND QUANTITIES

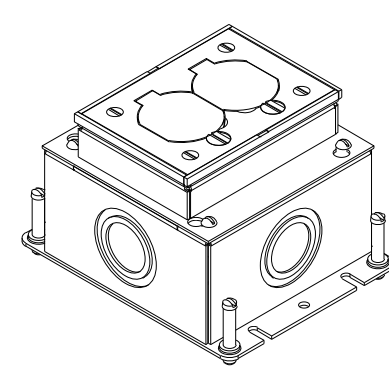
WALL MOUNTED DEVICES: MOUNTING HEIGHTS

NO SCALE



DET
LOC

ELECTRICAL ELEVATION @
WALL MOUNTED CIRCULATORS
NOT TO SCALE

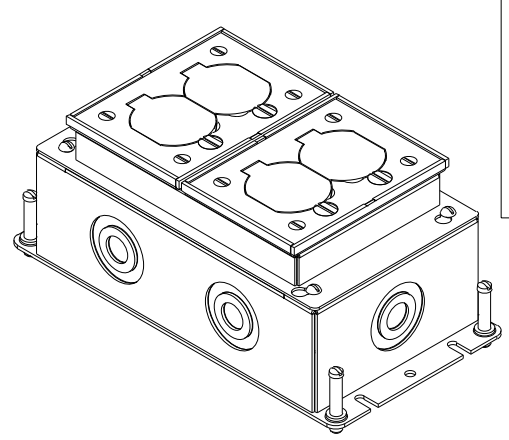


Box - B2431
Cover - 93025
Flange - 9B3083

NOTE:
ALL CIRCUITS
CONTROLLED BY
NOVAE ENERGY
MGMT SYSTEM ON
CUSTOMER LIGHTING.

DET
LOC

SINGLE HUBBELL FLOOR
BOX ASSEMBLY DETAIL
NOT TO SCALE

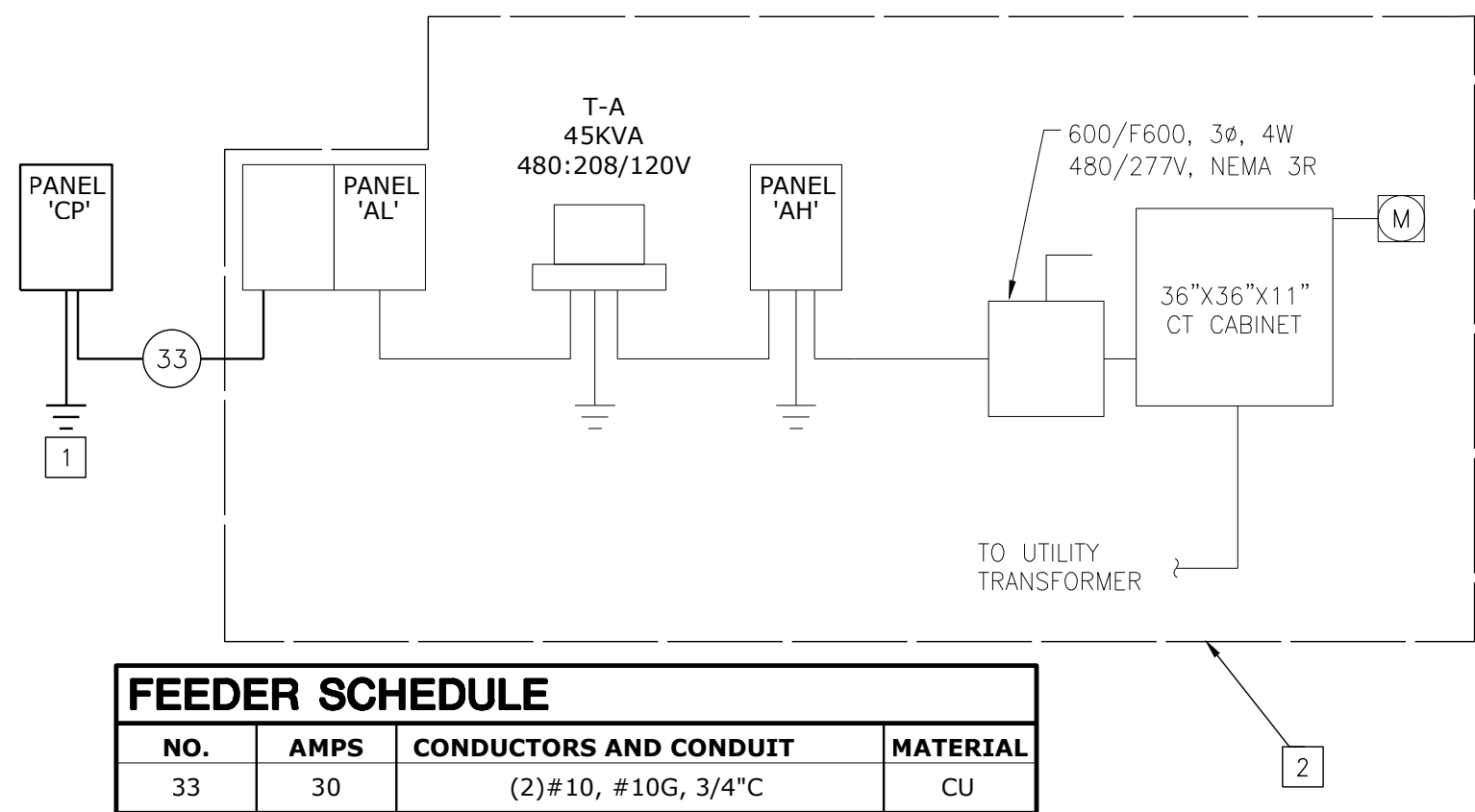


Box - B2432
Cover - 93025 (x2)
Flange - 9B3084

NOTE:
ALL CIRCUITS
CONTROLLED BY
NOVAE ENERGY
MGMT SYSTEM ON
CUSTOMER LIGHTING.

DET
LOC

DOUBLE HUBBELL FLOOR
BOX ASSEMBLY DETAIL
NOT TO SCALE



FEEDER SCHEDULE			
NO.	AMPS	CONDUCTORS AND CONDUIT	MATERIAL
33	30	(2)#10, #10G, 3/4\"C	CU

CU = COPPER CONDUCTORS

PLAN NOTES:

1. PROVIDE AN ISOLATED GROUND FOR CLEAN POWER.
2. REFER TO SHELL PACKAGE FOR EXISTING ELECTRICAL EQUIPMENT AND SERVICE INFORMATION.

ONE-LINE DIAGRAM

NOT TO SCALE

HomeGoods

Tenant Improvements

Summit Orchards Lot 4B

492 NW Chipman Rd

Lee's Summit, MO 64086



Revisions:

1. Add-01 City Comments 11/18/19
2. Add-02 Tenant Comments 12/18/19

Project #:

180902-02

Construction / Permit Set

November 8, 2019

ELECTRICAL SYMBOLS,
ABBREVIATIONS & DETAILS

E5

1. INFORMATION SHOWN ON THE DRAWINGS IS INTENDED TO CONVEY SCOPE AND IS ARRANGED FOR CLARIFYING CLARITY. IT IS NOT TO BE TAKEN AS AS-BUILT CONDITION. THE SYSTEM INSTALLATION SHALL BE COORDINATED WITH STRUCTURE AND ALL OTHER TRADES TO PROVIDE FOR A COMPLETE AND WORKING SYSTEM.
2. CAREFULLY COORDINATE ROUTING OF SERVICES WITH STRUCTURE AS WELL AS ALL OTHER TRADES TO MAINTAIN EQUIPMENT CLEARANCES.
3. COORDINATE INSTALLATIONS AND PENETRATIONS OF ALL NEW SERVICES WITH STRUCTURE PRIOR TO CUTTING.
4. EXTEND ALL CONDENSATE DRAINS TO NEAREST ROOF DRAIN.
5. PAINT ALL PVC PIPING ON ROOF TO PROVIDE FOR UV PROTECTION. PAINT NATURAL GAS PIPING ON ROOF FOR PROTECTION FROM WEATHER. PAINT COLOR PER ARCHITECT DIRECTION.
6. ALL SERVICES SHOWN HALF TONE ARE EXISTING.

① 1-1/4" GAS PIPE DOWN TO GCUH-1



HomeGoods

Tenant Improvements

Summit Orchards Lot 4B
492 NW Chipman Rd
Lee's Summit, MO 64086

Project #: 180902-0

ROOF PLAN - PLUMBING

ROOF PLAN - PLUMBING

P0