

ARCHITECT STUDIO NORTH ARCHITECTURE • 3315 NORTH OAK TRAFFICWAY • KANSAS CITY, MO 64116 • 816.888.7380

PLUMBING DESIGN-BUILD BY GEN CONTRACTOR

MECHANICAL DESIGN-BUILD BY GEN CONTRACTOR

ELECTRICAL DESIGN-BUILD BY GEN CONTRACTOR

FIRE PROTECTION DESIGN-BUILD BY GEN CONTRACTOR

CONTRACTOR

FORGE CONSTRUCTION • 1307 UNION AVENUE • KANSAS CITY, MO 64101 • 816.608.1800

Tenant Improvements For:

H&R Block Depot

Located At:

Lee's Summit Logistics

1220 NW Main St Unit E • Lee's Summit, MO 64086

ARCHITECTURAL

A0.01 LEGENDS AND GENERAL NOTES

A0.02 SPECIFICATIONS

A0.03 WALL TYPES | DETAILS

A2.01 FLOOR PLANS

A4.01 INTERIOR ELEVATIONS | DETAILS

A8.01 DOOR & WINDOW SCHEDULE

A8.02 DOOR & WINDOW DETAILS

A8.03 FINISH SCHEDULE | FINISH PLAN

A9.01 REFLECTED CEILING PLAN

MECHANICAL
DESIGN-BUILD BY GEN CONTRACTOR TO
BE SUBMITTED UNDER SEPARATE COVER

PLUMBING
DESIGN-BUILD BY GEN CONTRACTOR TO
BE SUBMITTED UNDER SEPARATE COVER

ELECTRICAL

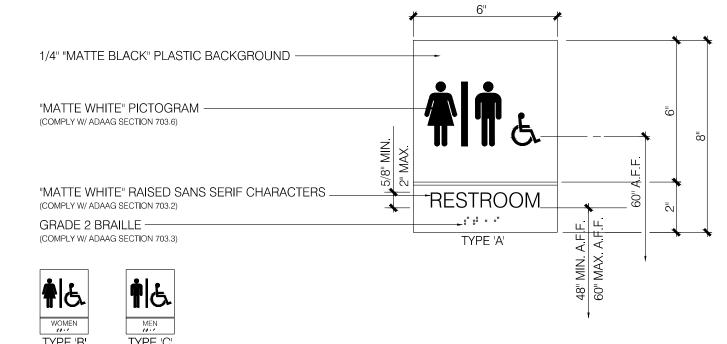
DESIGN-BUILD BY GEN CONTRACTOR TO
BE SUBMITTED UNDER SEPARATE COVER

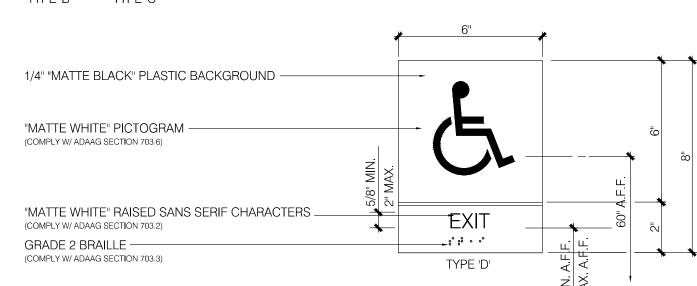
SIGNAGE REQUIREMENTS

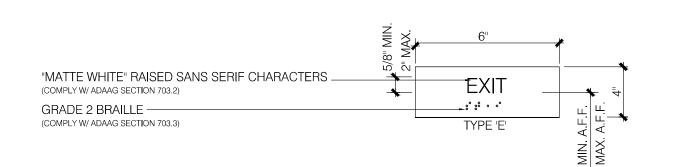
PERMANENT SIGNAGE COMPLYING WITH THE SPECIFICATIONS AND DETAILS BELOW SHALL BE FURNISHED AND INSTALLED AT THE FOLLOWING LOCATIONS:

LOCATION	SIGN TYPE
UNISEX TOILETS (NOT USED)	TYPE 'A'
WOMEN'S ROOMS	TYPE 'B'
MEN'S ROOMS	TYPE 'C'
ACCESSIBLE EXIT DISCHARGE	TYPE 'D'
EXIT DISCHARGE	TYPE 'E'

- 1. INTERIOR AND EXTERIOR SIGNS IDENTIFYING PERMANENT ROOMS AND SPACES SHALL COMPLY WITH ADAAG SECTIONS 703.1, 703.2, 703.3, 703.4, AND 703.5.
- 2. WHERE PICTOGRAMS ARE PROVIDED AS DESIGNATIONS OF PERMANENT INTERIOR ROOMS AND SPACES. THE PICTOGRAMS SHALL COMPLY WITH ADAAG SECTION 703.6 AND SHALL HAVE TEXT DESCRIPTORS COMPLYING WITH ADAAG SECTIONS 703.2 AND 703.5, ACCOMPANIED BY GRADE 2 BRAILLE COMPLYING WITH ADAAG SECTION 703.3.
- SIGNS SHALL BE MOUNTED PER THE DETAIL BELOW AND SO THAT TACTILE CHARACTERS ARE A MINIMUM OF 48" ABOVE THE FINISHED FLOOR OR GROUND SURFACE AS MEASURED FROM THE BASELINE OF THE LOWEST CHARACTER AND A MAXIMUM OF 60" ABOVE THE FINISHED FLOOR OR GROUND SURFACE AS MEASURED FROM THE BASELINE OF THE HIGHEST CHARACTER
- 4. SIGNS SHALL BE MOUNTED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR, ON THE RIGHT HAND SIDE OF DOUBLE DOORS WITH 2 ACTIVE LEAFS, AND ON THE INACTIVE LEAF OF DOUBLE DOORS WITH ONE ACTIVE LEAF., IF NO WALL SPACE EXISTS ON THE LATCH SIDE OF THE DOOR, SIGNS SHALL BE MOUNTED ON THE NEAREST ADJACENT WALL.







GENERAL NOTES

- 1. ALL CONSTRUCTION SHALL CONFORM TO THE MINIMUM STANDARDS OF THE APPLICABLE CODES INDICATED IN THE CODE SUMMARY COLUMN AND ALL LOCAL CODES PRESENTLY IN EFFECT UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED.
- ALL NEW CONSTRUCTION SHALL COMPLY W/ THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG) AND CHAPTER 11 "ACCESSIBILITY" OF THE INTERNATIONAL BUILDING CODE
- 3. THE OWNER SHALL OBTAIN AN PAY FOR ALL REQUIRED BUILDING PERMITS AND, LICENSES, AND UTILITY CHARGES. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL ARRANGE FOR ALL REQUIRED
- THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL VERIFY ALL DIMENSIONS & CONDITIONS ON THE JOB SITE PRIOR TO THE BIDDING OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES.
- IN CASES OF DISCREPANCY CONCERNING DIMENSIONS, QUANTITIES AND LOCATION, THE CONTRACTOR SHALL, IN WRITING, CALL TO THE ATTENTION OF THE ARCHITECT ANY DISCREPANCIES BETWEEN SPECIFICATIONS, PLANS, DETAILS OR SCHEDULES. THE ARCHITECT WILL THEN INFORM THE CONTRACTOR, IN WRITING, WHICH DOCUMENT TAKES PRECEDENCE. THERE SHALL BE NO ADJUSTMENT TO THE COST OR TIME OF THE WORK RESULTING FROM CLARIFICATION OF SUCH DISCREPANCIES.
- DIMENSIONS ON DRAWINGS ARE SHOWN TO FINISHED FACE OF WALLS AND PARTITIONS OF EXISTING OR NEW CONSTRUCTION UNLESS OTHERWISE NOTED. CEILING HEIGHT DIMENSIONS AND ALL OTHER VERTICAL DIMENSIONS ARE TO THE FINISHED FLOOR SURFACE UNLESS OTHERWISE NOTED.
- ALL MATERIALS SPECIFIED OR NOTED SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING SHOP DRAWINGS, PRODUCT DATA, OR SAMPLES PER THE SPECIFICATIONS. PRIOR TO FORWARDING TO THE ARCHITECT FOR REVIEW. THESE SUBMITTALS MUST BE REVIEWED BY THE CONTRACTOR FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATIONS OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL AFFIX HIS STAMP TO EACH SUBMITTAL INDICATING HIS REVIEW. SUBMITTALS FORWARDED WITHOUT A STAMP WILL BE RETURNED.
- CONTRACTOR SHALL GUARANTEE ALL WORK AS OUTLINED IN THE OWNER-CONTRACTOR AGREEMENT. 10. ALL CHANGES PROPOSED DURING CONSTRUCTION WHICH RESULT IN A CHANGE TO THE CONTRACT TIME AND/OR SUM SHALL BE SUBMITTED IN WRITING AND APPROVED BY THE OWNER BEFORE SUCH WORK
- SHALL COMMENCE. 11. CONTRACTOR SHALL FURNISH AND INSTALL CONCEALED FIRE-RETARDANT TREATED WOOD BLOCKING

BEHIND ALL WALL MOUNTED ITEMS AS REQUIRED FOR ADEQUATE SUPPORT.

- 12. CONTRACTOR SHALL COORDINATE ALL LOCK AND LATCH SETS AND FINAL KEYING WITH OWNER. DOUBLE KEYED LOCKS ARE NOT PERMITTED ON ANY REQUIRED OR MARKED EXIT. MATCH EXISTING KEYING SYSTEM IF ONE IS EXISTING.
- 13. ALL DOOR HARDWARE ON EXIT DOORS SHALL BE READILY OPERABLE FROM THE EGRESS SIDE WITHOUT
- THE USE OF A KEY, SPECIAL KNOWLEDGE, OR EFFORT.
- 14. CONTRACTOR SHALL PREPARE ALL SURFACES SCHEDULED TO RECEIVE NEW FINISHES IN ACCORDANCE W/ THE MANUFACTURER'S RECOMMENDATIONS FOR THE SUBSTRATE AND FINISH BEING APPLIED.
- 15. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL EXISTING CONSTRUCTION INDICATED TO REMAIN AND SHALL REPAIR AND/OR REPLACE ALL AREAS AND/OR MATERIALS DAMAGED DURING CONSTRUCTION AT A MINIMUM TO THE CONDITION WHICH EXISTED PRIOR TO CONSTRUCTION.
- 16. CONTRACTOR SHALL COORDINATE QUANTITY AND LOCATIONS OF FIRE EXTINGUISHERS WITH THE FIRE DEPARTMENT AND/OR BUILDING DEPARTMENT.
- 17. ALL HIGH-PILED STORAGE SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE APPLICABLE EDITION OF THE INTERNATIONAL FIRE CODE
- 18. ALL NEW GLASS AND GLAZING LOCATED IN HAZARDOUS LOCATIONS AS DEFINED IN IBC CHAPTER 24 SHALL MEET THE REQUIREMENTS FOR SAFETY GLAZING AS DEFINED IN CHAPTER 24
- 19. FURNITURE AND APPLIANCES INDICATED ON PLANS ARE FOR CONCEPTUAL PLANNING PURPOSES ONLY, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL VERIFY THE FINAL SPECIFICATIONS, LAYOUT, AND
- 20. CONTRACTOR SHALL COORDINATE CLEAR OPENINGS FOR ALL APPLIANCES PRIOR TO CONSTRUCTION OF
- 21. CONTRACTOR SHALL FURNISH AND INSTALL CONCEALED FIRE-RETARDANT TREATED WOOD BLOCKING BEHIND ALL CABINETS. TOILET ACCESSORIES. PLUMBING FIXTURES. AND OTHER WALL MOUNTED ITEMS AS REQUIRED FOR ADEQUATE SUPPORT.
- 22. INTERIOR FINISHES SHALL CONFORM TO IBC CHAPTER 8 AND SECTION 1210

CLEARANCE REQUIREMENTS WITH LANDLORD OR TENANT.

- 23. ALL GYPSUM BOARD AT BATHROOMS, LAUNDRIES, AND WET WALLS SHALL BE MOISTURE RESISTANT.
- 24. ALL CONSTRUCTION MATERIALS EXPOSED WITHIN PLENUMS SHALL BE NON-COMBUSTIBLE OR SHALL HAVE A MAXIMUM FLAME SPREAD RATING OF 25 AND MAXIMUM SMOKE DEVELOPED RATING OF 50.
- 25. ALL PIPING, LOW VOLTAGE WIRE AND CABLE, OPTICAL FIBER, PNEUMATIC TUBING, AND ALL DUCT AND DUCT COVERINGS, LININGS AND CONNECTORS INSTALLED WITHIN PLENUMS MUST BE RATED FOR
- 26. TENANT SHALL BE RESPONSIBLE FOR COORDINATION AND INSTALLATION OF VOICE AND DATA CABLING

DRAWING SYMBOLS LEGEND

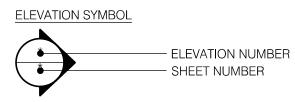
EXISTING CONSTRUCTION TO REMAIN.

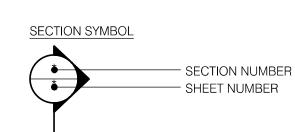
NEW CONSTRUCTION.

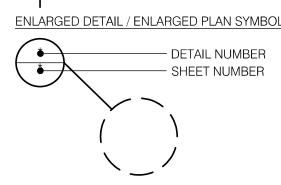
WALL TYPE DESIGNATION - REFERENCE FLOOR PLANS FOR LOCATIONS REFERENCE SHEET A0.03 FOR CONSTRUCTION REQUIREMENTS

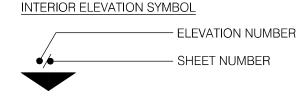
ROOM NAME AND NUMBER - REFERENCE FLOOR PLAN(S) FOR LOCATIONS. ### REFERENCE FINISH SCHEDULE FOR FINISHES.

> DOOR AND FRAME DESIGNATION - REFERENCE FLOOR PLAN(S) FOR LOCATIONS. REFERENCE DOOR AND FRAME SCHEDULE FOR REQUIREMENTS.









CONSTRUCTION NOTE

DEMOLITION NOTE

REVISION NOTE

RESTROOM ACCESSORY DESIGNATION - REFERENCE FLOOR PLAN(S) FOR LOCATIONS. REFERENCE DRAWING A2.01 FOR LEGEND.

GYPSI IM BOARD CONTROL JOINT - REFERENCE FLOOR PLAN(S) FOR LOCATIONS. REFERENCE DRAWING A0.03 FOR CONSTRUCTION REQUIREMENTS

WALL AND/OR COLUMN MOUNTED FIRE EXTINGUISHER (UL RATING 4A-80B:C) W/ MOUNTING BRACKET, ORDINARY HAZARD RATED FOR 1,500 SF PER UNIT OF A (6,000 SF PER EXTINGUISHER). REFERENCE FLOOR PLAN(S) FOR LOCATIONS. MOUNT SO CENTERLINE OF EXTINGUISHER IS 47" A.F.F.

SEMI-RECESSED FIRE EXTINGUISHER BY LARSEN'S MANUFACTURING COMPANY, WWW.LARSENSMFG.COM, ARCHITECTURAL SERIES AL2409-6R, W/MP10 FIRE EXTINGUISHER, CLEAR ALUMINUM SOLID DOOR, AND "FIRE" HANDLE W/ STANDARD FINSH. MOUNT SO CENTERLINE OF CABINET HANDLE IS 47" A.F.F.

CODE SUMMARY

PROPOSED USE(S)

PROJECT INFORMATION PROJECT NAME PROJECT ADDRESS



60'-0", 2 STORIES

PROJECT DESCRIPTION TENANT IMPROVEMENTS FOR A TECHNICAL OFFICE AND WAREHOUSE STORAGE COMPONENT SUPPORTING THE COMPANY'S EQUIPMENT NEEDS BY RECEIVING EQUIPMENT TO BE REPAIRED, STORED AND SHIPPED BACK OUT TO

COMPANY SITES APPLICABLE CODES INTERNATIONAL BUILDING CODE (IBC) 2018 EDITION 2018 EDITION INTERNATIONAL FIRE CODE (IFC) INTERNATIONAL MECHANICAL CODE (IMC) 2018 EDITION INTERNATIONAL PLUMBING CODE (IPC) 2018 EDITION NATIONAL ELECTRICAL CODE (NEC) 2017 EDITION

RI III DING DATA

TOTAL ALLOWABLE HEIGHT

DOILDING					
USE & OCCUPANCY CLASSIFICATION		CONSTRUCTION TYPE	GENERAL BUILDING HEIGHT & AREA LIMITATIONS		
USE	CLASSIFICATION		S1 Floor Area (At)	Stories, Height	
OFFICE	Group (B)	Type II-B, SPRINKLERED	92,000 SF	4 Stories, 75 FT. (*1)	
WAREHOUSE	Group (S-1)	Type II-B, SPRINKLERED	70,000 SF	3 Stories, 75 FT. (*2)	

*1: BUILDING HEIGHT LIMITED TO 2 STORIES PER U.L. AREA EXCEPTION TAKEN PER 507.5 *2: BUILDING HEIGHT LIMITED TO 1 STORY PER INCREASED TRAVEL DISTANCE EXCEPTION TAKEN PER 1017.2.2

BUILDING HEIGHT MODIFICATIONS

TOTAL CONSTRUCTED HEIGHT 42'-0", 1 STORY

BUILDING AREA MODIFICATIONS ONE-STORY, GROUP B,F,M,S

Automatic Sprinkler System Automatic sprinkler system throughout per Section 903.3.1.1 Surrounded and adjoined by public ways or yards not less than 60' in width Frontage: TOTAL ALLOWABLE AREA UNLIMITED TOTAL CONSTRUCTED BUIDLING SHELL AREA ±113,615 SF TOTAL PROPOSED TENANT AREA ±34,090 SF

* PROPOSED SPRINKLER IS AN ESFR (EARLY SUPPRESSION FAST RESPONSE) SYSTEM

ICC/ANSI A117.1-2009, ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES

OCCUPANCY SEPARATIONS NON-SEPARATED OCCUPANCIES (most restrictive occupancy classification determines allowable area)

MOST RESTRICTIVE OCCUPANCY GROUP ALLOWABLE AREA GROUP S-1, TYPE II-B, 60' YARDS, FULLY SPRINKLERED = UNLIMITED

FIRE-RESISTANCE RATING FOR BUILDING ELEMENTS (hours)

	,
BUILDING ELEMENT	CONSTRUCTION TYPE (II-B)
Primary structural frame	0 hours
Bearing walls (exterior)	0 hours
Non-bearing walls and partitions (interior)	0 hours
Non-bearing walls and partitions (exterior)	0 hours
Roof construction and associated secondary members	0 hours

CAL	CULATED OCCUPANT LOAD (t	enant)
STORA	E (150 SF/OCCUPANT) .GE (300 SF/OCCUPANT) HOUSE (500 SF/OCCUPANT)	8,027 SF/150 SF PER OCCUPANT = 54 OCCUPANTS 1,331 SF/300 SF PER OCCUPANT = 5 OCCUPANTS 24,732 SF/500 SF PER OCCUPANT = 50 OCCUPANTS
TOTAL	OCCUPANT LOAD	109 OCCUPANTS

* ACCESSORY USE AREAS (SEE CODE PLAN) NOT ADDITIVE TO TOTAL OCCUPANT LOAD, EMPLOYEE USE ONLY 748 SF NET/20 SF PER OCCUPANT = 38 OCCUPANTS TRAINING ROOM (20 SF/OCCUPANT)

MEANS OF EGRESS EGRESS WIDTH REQUIRED: EGRESS WIDTH PROVIDED: EXIT ACCESS TRAVEL DISTANCE

 $(109 \text{ occupants}) \times (.2^{\circ} \text{ per occupant}) = 21.8^{\circ}$ (4) Doors @ 33" CLR = 132" GROUP B SPRINKLERED = 300', GROUP S-1, SPRINKLERED = 400' Smoke and heat venting None required w/ ESFR sprinkler system per IBC Section 910.1, Exception 2

PLUMBING FIXTURES (per IPC table 403.1)										
occ	OCCUPANT LOAD		ORIES FEMALE	DRINKING FOUNTAINS	OTHER					
В	54 occ./2=27 men,27 women	wc:1 per 25 1st 50, then 1 per 50 lav: 1 per 40 1st 80, then 1 per 80 drinking fountain : 1 per 100	1.07	1.07	.67 *	.67 *	.54 *			
S	55 occ./2=27.5 men,27.5 women	water closet & lav:1 per 100 drinking fountain: 1 per 1,000	.27 *	.27 *	.27 *	.27 *	.05 *			
			*		*	*	*			
TOTAL			1.34	1.34 4	.94 2	.94 3	.59	1 service sinks		
		REQUIRED-	• /•	PROVIDED		$\sqrt{}$		– 1 H I , 1 LOW		
	<u>ASI-06</u>									

ENERGY CODE STATEMENT

AN ENERGY COST BUDGET (ECB) COMPLIANCE REPORT OR TOTAL BUILDING PERFORMANCE-BASED COMPLIANCE REPORT SHALL BE PROVIDED AND SUBMITTED UNDER SEPARATE COVER BY THE OWNER.

ENERGY COST BUDGET (ECB) - THE REPORT SHALL COMPLY WITH THE CURRENT MANDATORY PROVISIONS OF ASHRAE 90.1 AS ALLOWED BY THE IECC. THE REPORT MUST DEMONSTRATE THE DESIGN ENERGY COST DOES NOT EXCEED THE ENERGY COST BUDGET AS CALCULATED BY THE SIMULATION PROGRAM REQUIREMENTS; AND THE ENERGY EFFICIENCY LEVEL OF COMPONENTS SPECIFIED IN THE BUILDING DESIGN MEET OR EXCEED THE EFFICIENCY LEVEL USED TO CALCULATE THE DESIGN ENERGY COST.

TOTAL BUILDING PERFORMANCE-BASED COMPLIANCE - THE REPORT SHALL MEET THE MANDATORY REQUIREMENTS OF THE IECC. THE REPORT MUST DEMONSTRATE THE PROPOSED BUILDING/ DESIGN HAS AN ANNUAL ENERGY COST THAT IS LESS THAN OR EQUAL TO THE ANNUAL ENERGY COST OF THE STANDARD REFERENCED DESIGN.

PROFESSIONAL SERVICES DISCLAIMER

THIS DISCLAIMER SERVES NOTICE OF ACCEPTANCE OF RESPONSIBILITY AND DISCLAIMER OF RESPONSIBILITY AS TO THE CONTRACT DOCUMENTS PREPARED FOR H&R BLOCK DEPOT TENANT IMPROVEMENTS BY STUDIO NORTH

STUDIO NORTH ARCHITECTURE AND THE UNDERSIGNED ARCHITECT, ARE RESPONSIBLE FOR PREPARATION OF

THE FOLLOWING CONSTRUCTION DRAWINGS: TITLE

A0.01 LEGENDS AND GENERAL NOTES A0.02 SPECIFICATIONS WALL TYPES | DETAILS A0.03

FLOOR PLANS

A2.01

INTERIOR ELEVATIONS | DETAILS A8.01 DOOR & WINDOW SCHEDULE A8.02 DOOR & WINDOW DETAILS A8.03 FINISH SCHEDULE | FINISH PLAN A9.01 REFLECTED CEILING PLAN

THE UNDERSIGNED ARCHITECT AND STUDIO NORTH ARCHITECTURE DISCLAIM RESPONSIBILITY FOR ALL OTHER CONSTRUCTION DOCUMENTS, AND ANY OTHER SPECIFICATIONS, REPORTS, ESTIMATES, SHOP DRAWINGS, ETC. RELATING TO OR INTENDED TO BE USED FOR ANY PART OF THE ARCHITECTURAL OR ENGINEERING PROJECT, INCLUDING ANY GEOTECHNICAL ENGINEERING SERVICES, OR ENVIRONMENTAL REPORTS.

THIS NOTICE IS EXECUTED BY THE UNDERSIGNED AND AUTHENTICATED BY THE ARCHITECTURAL SEAL OF THE PERSON PREPARING THIS NOTICE.

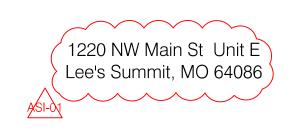


CONSTRUCTION As Noted on Plans Review

BY GEN CONTRACTOR DESIGN-BUILD BY GEN CONTRACTOR ELECTRICAL DESIGN-BUILD BY GEN CONTRACTOR FIRE PROTECTION DESIGN-BUILD BY GEN CONTRACTOR CONTRACTOR FORGE CONSTRUCTION

TENANT IMPROVEMENTS FOR:

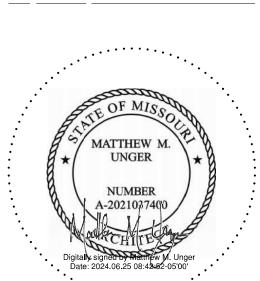
H&R BLOCK DEPOT



Project No. 2024-032 04.26.24 Issued For: Permit Submittal Drawn By: F. Crubaugh Reviewed By

Revisions No. Date Description

ASI-O 6.24.24 CITY COMMENTS ASI-O2 6.24.24 TENANT CHANGES





OVERALL PROJECT SCHEDULE. VOICE AND DATA CABLING AND EQUIPMENT 2. ELECTRONIC DOOR SECURITY HARDWARE

3. SYSTEMS OFFICE FURNITURE WAREHOUSE RACKING AND PRODUCTION EQUIPMENT 5. APPLIANCES

A. IF ANY PORTIONS OF THE PROJECT ARE INDICATED TO BE BID BY A COST PER UNIT ALLOWANCE, THE ALLOWANCE STATED IN THE DOCUMENTS IS THE COST TO THE CONTRACTOR OF THE PRODUCTS OR MATERIALS ONLY. ANY TAXES, FREIGHT, MARKUP, DELIVERY, AND LABOR SHALL BE IN ADDITION TO THE MATERIAL ALLOWANCE.

A. FOR ALTERNATES, THE CONTRACTOR SHALL FURNISH A SEPARATE ADD OR DEDUCTIVE PRICE FOR ALL MATERIAL, TAXES, FREIGHT, MARKUP, DELIVERY, LABOR, OVERHEAD AND PROFIT FOR THAT PORTION OF THE WORK. THE PROPOSED ALTERNATE MAY THEN BE ADDED OR DEDUCTED FROM THE CONTRACT SUM IF THE OWNER ACCEPTS THE ALTERNATE.

A. CONTRACTOR SHALL ELECTRONIC COPY OR FIVE (5) HARD COPIES OF EACH REQUIRED SHOP DRAWING OR PRODUCT DATA SUBMITTAL FOR ARCHITECT'S REVIEW. ARCHITECT SHALL RETAIN TWO (2) COPIES AND RETURN THREE (3) MARKED UP SUBMITTALS TO THE CONTRACTOR WHO SHALL BE RESPONSIBLE FOR ANY ADDITIONAL DUPLICATION IN THE NUMBER OF COPIES NECESSARY FOR DISTRIBUTION TO THE SUBCONTRACTOR, FIELD SUPERINTENDENT, ETC

1. PRIOR TO FORWARDING TO THE ARCHITECT, SUBMITTALS SHALL BE REVIEWED BY THE CONTRACTOR FOR CONFORMANCE WITH THE MEANS, METHODS, TECHNIQUES, SEQUENCES AND OPERATIONS OF CONSTRUCTION AND PROGRAMS INCIDENTAL THERETO, ALL OF WHICH REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL AFFIX HIS STAMP INDICATING HIS REVIEW. SUBMITTALS FORWARDED WITHOUT A STAMP WILL BE

RETURNED TO THE CONTRACTOR UNREVIEWED. 2. SUBMITTALS SHALL BE MADE FAR ENOUGH IN ADVANCE OF SCHEDULED CONSTRUCTION ACTIVITY TO ALLOW ARCHITECT A MINIMUM OF TEN (10) BUSINESS DAYS FOR INITIAL REVIEW AND A MINIMUM OF FIVE (5) BUSINESS DAYS FOR REVIEW OF RESUBMITTALS (IF REQUIRED).

A. CONSTRUCTION AND MATERIALS SHALL COMPLY WITH THE MOST RECENT STANDARDS IN EFFECT AS OF THE DATE OF THE CONSTRUCTION DOCUMENTS, UNLESS INDICATED OTHERWISE. 1.6 CLOSEOUT PROCEDURES

A. PUNCHLIST - PRIOR TO SCHEDULING A SUBSTANTIAL COMPLETION WALK-THROUGH TO DEVELOP A PUNCHLIST OF ITEMS REQUIRING COMPLETION, PROJECT SHALL BE FINAL CLEANED, TOUCH-UP PAINTED, AND DAMAGED CEILING TILE REPLACED. UPON ARRIVAL, IF THE ARCHITECT DETERMINES THE PROJECT IS NOT READY FOR WALK-THROUGH, THE PUNCHLIST SHALL BE RESCHEDULED. 1. WHEN THE CONTRACTOR CONSIDERS THE PUNCHLIST ITEMS FULLY COMPLETED, A FINAL WALK-THROUGH SHALL BE SCHEDULED TO REVIEW THE COMPLETED CONSTRUCTION. B. PRIOR TO PROJECT COMPLETION, CONTRACTOR SHALL SUBMIT/COMPLETE THE FOLLOWING:

1. ONE (1) SET OF CONSTRUCTION DRAWINGS NEATLY MARKED UP TO SHOW ACTUAL INSTALLATION WHERE INSTALLATION VARIES FROM THAT SHOWN ON ORIGINALLY ON THE CONSTRUCTION DOCUMENTS.

2. TWO (2) COPIES OF OPERATION AND MAINTENANCE MANUALS INCLUDING SUBCONTRACTOR AND SUPPLIER CONTACT INFORMATION, MAINTENANCE AND SERVICE INSTRUCTIONS. SCHEDULES, EMERGENCY INSTRUCTIONS, SPARE PARTS LISTS, WIRING DIAGRAMS, AND WARRANTY INFORMATION

3. TRAINING OF OWNER PERSONNEL ON USE AND MAINTENANCE OF MECHANICAL, ELECTRICAL,

PLUMBING, FIRE SPRINKLER, ALARM, SECURITY, IRRIGATION, AND OTHER BUILDING SYSTEMS.

DIVISION 6 - WOOD AND PLASTICS

6.1 INTERIOR ARCHITECTURAL WOODWORK

A. SUBMITTALS: SAMPLES OF FINISH MATERIALS, CATALOG CUTS OF HARDWARE, AND SHOP DRAWINGS INCLUDING DIMENSIONED PLANS, ELEVATIONS, AND SECTIONS.

B. QUALITY STANDARD: ARCHITECTURAL WOODWORK INSTITUTE'S "ARCHITECTURAL WOODWORK QUALITY STANDARDS" HARDBOARD: AHA A235.4

2. MEDIUM DENSITY FIBERBOARD: ANSI A208.2, GRADE MD, MADE WITH BINDER CONTAINING NO UREA FORMALDEHYDE 3. PARTICLEBOARD: ANSI A208.1, GRADE M-2

4. SOFT PLYWOOD: DOC PS 1 5. HARDWOOD PLYWOOD AND FACE VENEERS: HPVA HP-1, MADE WITH ADHESIVE CONTAINING NO UREA FORMALDEHYDE.

6. HIGH PRESSURE DECORATIVE LAMINATE: NEMA LD 3 7. HARDWARE: COMPLY WITH BHMA A156

a. HINGES: CONCEALED (EUROPEAN-TYPE) BHMA A156.9 b. PULLS: AS SPECIFIED ON DRAWINGS

c. DRAWER SLIDES: SIDE-MOUNTED, ZINC-PLATED FULL EXTENSION STEEL DRAWER SLIDES WITH STEEL BALL BEARINGS, COMPLYING WITH BHMA A 156,9, GRADE 1 AND RATED AS FOLLOWS: BOX DRAWERS: 100lbf; FILES DRAWERS: 200 lbf, PENCIL DRAWERS: 45 lbf. d. DOOR AND DRAWER LOCKS: BHMA A156.11

e. GROMMETS: MOLDED PLASTIC WITH CAPS; FURNISH IN COLOR AND LOCATIONS AS DIRECTED.

f. HARDWARE FINISH:SATIN CHROME BHMA 626 OR 652 OR SATIN STAINLESS STEEL: BHMA

D. INTERIOR WOODWORK 1. COMPLETE FABRICATION BEFORE SHIPPING TO PROJECT SITE TO MAXIMUM EXTENT FEASIBLE. DISASSEMBLE ONLY AS NEEDED FOR SHIPPING AND INSTALLING. WHERE NECESSARY FOR FITTING AT PROJECT SITE, PROVIDE FOR SCRIBING AND TRIMMING.

2. BACKOUT AND GROOVE BACKS OF FLAT MEMBERS, KERF BACKS OF OTHER WIDE, FLAT MEMBERS, EXCEPT WHERE ENDS WILL BE EXPOSED IN FINISHED WORK.

E. LAMINATE-CLAD CABINETS AND COUNTERTOPS: GRADE: CUSTOM 2. AWI TYPE OF CABINET CONSTRUCTION: FLUSH OVERLAY, UNLESS NOTED OTHERWISE ON

LAMINATE CLADDING

DRAWINGS.

a. VERTICAL SURFACES: HGS, UNLESS NOTED BELOW b. HORIZONTAL SURFACES: HGS, UNLESS NOTED BELOW

c. EDGES:HGS OR 3mm VINYL EDGE-BANDING PER DRAWINGS. 4. CABINET INTERIORS: WHITE MELAMINE W/ LIGHT EXTERIOR LAMINATES, BLACK MELAMINE W/

DARK EXTERIOR LAMINATES 5. SHELVING AND SUPPORTS: HIGH PRESSURE LAMINATE TO MATCH MELAMINE SUPPORTED ON STAINLESS STL. PINS F. INSTALLATION:

1. DO NOT DELIVER OR INSTALL WOODWORK UNTIL BUILDING IS ENCLOSED, WET WORK IS COMPLETED, HVAC IS OPERATING, AND WOODWORK IS CONDITIONED TO PREVAILING

CONDITIONS OF SPACE WHERE INSTALLED 2. INSTALL WOODWORK LEVEL AND PLUMB AND SHIM AS REQUIRED WITH CONCEALED SHIMS TO TOLERANCE OF 1/8"/96" AND TO COMPLY WITH REFERENCED QUALITY STANDARD FOR GRADE

3. SCRIBE AND CUT WOODWORK TO FIT ADJOINING WORK, SEAL CUT SURFACES, AND REPAIR 4. INSTALL TRIM WITH MINIMUM NUMBER OF JOINTS POSSIBLE USING FULL-LENGTH PIECES TO

GREATEST EXTENT POSSIBLE. STAGGER JOINTS IN ADJACENT AND RELATED MEMBERS.

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

A. SUBMITTALS: PRODUCT DATA FOR EACH TYPE OF INSULATION SPECIFIED

SURFACE BURNING CHARACTERISTICS FLAME SPREAD INDEX: 25 OR LES

2. SMOKE DEVELOPED INDEX: 50 OR LESS IN EXPOSED AREA PLENUMS. 3. SMOKE DEVELOPED INDEX OF 450 OR LESS IN ONE STORY APPLICATIONS COVERED WITH AN ALUMINUM FACER .032" THK OR CORROSION RESISTANT STEEL .0160" THK PER IBC 2603.4.1.4

C. INSULATION PRODUCTS NON-STRUCTURAL RIGID BOARD INSULATION: GLASS-FIBER-REINFORCED POLYISOCYANURATE FOAM CORE LAMINATED BETWEEN MIN. 1.25 MIL EMBOSSED, WHITE ACRYLIC COATED ALUMINUM FACER ON EXPOSED FACE AND MIN. 0.9 MIL SMOOTH ALUMINUM ON CONCEALED

FACE AND LISTED AS SUITABLE FOR INSTALLATION EXPOSED TO THE INTERIOR WITHOUT A THERMAL BARRIER. (DOW THERMAX WHITE FINISH INSULATION, OR APPROVED EQUAL) a. SIZE: 4' WIDE X MFR. MAX. LENGTH X THICKNESS AS REQUIRED TO ACHIEVE SPECIFIED R-VALUE

b. EDGE TREATMENT: SHIPLAP c. WARRANTY: 15 YEAR THERMAL PERFORMANCE

d. FASTENERS: HILTI-X-IE-G WITH PLASTIC WASHERS e. ASHESIVE: MANUFACTURER'S APPROVED ADHESIVE FOR ADHERING INSUALTION BOARDS TO WALL SURFACE

f. JOINT SEALANT: MANUFACTURER'S APPROVED SEALANT FOR SEALING CONCEALED SHIPLAP JOINTS. g. TRIM SYSTEM: PVC TOP AND BOTTOM CHANNELS AND T-BAR BATTEN CLOSURE SYSTEM

SPECIFICALLY DESIGNED FOR USE WITH PANELS h. TAPE: MANUFACTURER'S STANDARD WHITE FOIL TAPE FOR SEALING JOINTS IN FACE OF

. MINERAL FIBER OR GLASS FIBER BLANKET INSULATION: TYPE II, CLASS A, NON-REFLECTIVE VAPOR RETARDER MEMBRANE ON ONE FACE. FIBERS MANUFACTURED FROM GLASS, SLAG WOOL, OR ROCK WOOL.

INSTALL RIGID INSULATION IN AREAS AND IN THICKNESSES INDICATED OR AS REQUIRED TO PRODUCE R-VALUES INDICATED. a. INSTALL EACH BOARD WITH A CONTINUOUS BEAD OF ADHESIVE AROUND THE PERIMETER

OF THE BACK AND A "Z" PATTERN THROUGH THE MIDDLE OF EACH BOARD FOR THE HEIGHT OF THE BOARD AND THEN MECHANICALLY FASTEN EA. BOARD W/ HILTI FASTENERS W/ PLASTIC WASHERS @ 48" O.C. EA.

PRODUCE R-VALUES WHERE INDICATED. CUT AND FIT TIGHTLY AROUND OBSTRUCTIONS AND

b. SEAL ALL CONCEALED SHIPLAP JOINTS W/ APPROVED SEALANT. c. CUT AND FIT TIGHTLY AROUND OBSTRUCTIONS AND FILL VOIDS WITH SPRAY FOAM

INSULATION SUITABLE FOR EXPOSURE. d. CONTINUOUSLY SEAL ALL JOINTS IN FACE OF INSULATION W/ MANUFACTURER'S APPROVED SEALANT AND JOINT CLOSURE SYSTEM OR FOIL TAPE AS DETAILED. INSTALL BATT INSULATION IN AREAS AND IN THICKNESSES INDICATED OR REQUIRED TO

FILL VOIDS WITH INSULATION. 3. EXTEND VAPOR RETARDER TO EXTREMITIES OF AREAS TO BE PROTECTED FROM VAPOR TRANSMISSION. SECURE IN PLACE WITH ADHESIVES OR OTHER ANCHORAGE AS RECOMMENDED BY MANUFACTURER. OVERLAP AND SEAL WITH SUITABLE TAPE (DUCT TAPE IS 7.2 JOINT SEALANTS A. SUBMITTALS: PRODUCT DATA, AND SCHEDULE OF LOCATIONS FOR EACH TYPE OF SEALANT

B. ENVIRONMENTAL LIMITATIONS: DO NOT PROCEED WITH INSTALLATION OF JOINT SEALANTS WHEN AMBIENT AND SUBSTRATE TEMPERATURE CONDITIONS ARE OUTSIDE LIMITS PERMITTED BY JOINT SEALANT MANUFACTURER OR ARE BELOW 40 deg F (4.4 deg C). COMPATIBILITY: PROVIDE JOINT SEALANTS, JOINT FILLERS, AND OTHER RELATED MATERIALS THAT ARE

COMPATIBLE WITH ONE ANOTHER AND WITH JOINT SUBSTRATES UNDER SERVICE AND APPLICATION **CONDITIONS**

1. EXTERIOR TRAFFIC BEARING JOINTS WHERE SLOPE PERMITS USE OF POURABLE SEALANT: SINGLE COMPONENT, POURABLE URETHANE SEALANT, ASTM C 920, TYPE S; GRADE P; CLASS 2. INTERIOR JOINTS IN CERAMIC TILE AND OTHER HARD SURFACES IN KITCHENS, TOILET ROOMS, AND AROUND PLUMBING FIXTURES: SINGLE COMPONENT, MILDEW-RESISTANT SILICONE

SEALANT, ASTM C 920, TYPE S; GRADE NS, CLASS 25; USES NT, G, A, AND O; FORMULATED WITH 3. INTERIOR JOINTS AROUND PERIMETERS OF DOORS AND FRAMES: LATEX SEALANT, SINGLE COMPONENT, NONSAG, MILDEW-RESISTANT, PAINTABLE, ACRYLIC EMULSION SEALANT

4. ACOUSTICAL SEALANT FOR EXPOSED INTERIOR JOINTS: NONSAG, PAINTABLE, NONSTAINING, LATEX SEALANT COMPLYING WITH ASTM C 834. 5. ACOUSTICAL SEALANT FOR CONCEALED JOINTS: NONDRYING, NONHARDENING, NONSKINNING NONSTAINING, GUNNABLE, SYNTHETIC-RUBBER SEALANT RECOMMENDED FOR SEALING INTERIOR CONCEALED JOINTS TO REDUCE TRANSMISSION OF AIRBORNE SOUND.

JOINT SEALANT BACKING: CYLINDRICAL CLOSED CELL PVC ROD COMPLYING WITH ASTM C330; SIZE 30% TO 50% LARGER THAN JOINT WIDTH. ALL OPEN CELL BACKINGS SUCH AS "DENVER FOAM" ARE F. BOND-BREAKER TAPE: POLYETHYLENE TAPE OR OTHER PLASTIC TAPE RECOMMENDED BY SEALANT

MFR. FOR PREVENTING SEALANT FROM ADHERING TO RIGID, INFLEXIBLE JOINT-FILLER MATERIALS OR JOINT SURFACES AT BACK OF JOINT. G. INSTALLATION: COMPLY WITH ASTM C 1193; ASTM C 919 FOR ACOUSTICAL JOINTS; AND AS FOLLOWS: 1. REMOVE ALL LOOSE MATERIAL, CLEAN AND PRIME JOINTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS, AND PROTECT ADJACENT SURFACES.

INSTALL BOND-BREAKER TAPE WHERE JOINT BACKINGS ARE NOT USED. 3. INSTALL SEALANT TOOLED CONCAVE, FREE OF AIR POCKETS, FOREIGN EMBEDDED MATTER, RIDGES, AND SAGS, AND PROTECT UNTIL FULLY CURED. SEALANT WITH DUST AND DEBRIS EMBEDDED IN SURFACE SHALL BE CAUSE FOR REJECTION.

DIVISION 8 - DOOR AND WINDOWS

A. SUBMITTALS: PRODUCT DATA AND DOOR SCHEDULE INDICATING DOOR AND FRAME SIZES. TYPES, ELEVATIONS. DETAILS, AND HARDWARE WITH DOOR AND HARDWARE NUMBERING CORRESPONDING TO THOSE USED IN CONSTRUCTION DOCUMENTS.

1. HOT-ROLLED STEEL SHEETS: ASTM A1011/A 1011M

COMPLYING WITH ASTM C 834.

2. COLD-ROLLED STEEL SHEETS: ASTM A 1008/A 1008M OR ASTM A 620/A 620M 3. GALVANIZED STEEL SHEETS: ASTM A 653/A 653M, A40 OR G40 (ZF120 OR Z120) COATING STEEL DOORS: COMPLY WITH ANSI 250.8 FOR LEVEL AND MODEL AND ANSI A250.4 FOR PHYSICAL-ENDURANCE LEVEL INDICATED, 13/4" THICK PREPARED FOR MORTISED AND CONCEALED HARDWARE ACCORDING TO ANSI A 250.6 AND ANSI A115 SERIES STANDARDS AND REINFORCED TO RECEIVE SURFACE-APPLIED HARDWARE.

 INTERIOR DOORS: LEVEL 2, PHYSICAL PERFORMANCE LEVEL B (HEAVY DUTY), MODEL 1 (FULL)). STEEL FRAMES: ANSI A 250.8, CONCEALED FASTENING, PREPARED FOR MORTISED AND CONCEALED

HARDWARE ACCORDING TO ANSI A 250.6 AND ANSI A 115 SERIES STANDARDS AND REINFORCED TO RECEIVE SURFACE-APPLIED HARDWARE 1. STEEL SHEET THICKNESS FOR INTERIOR FRAMES: PER DOOR SCHEDULE

GLAZING STOPS: NONREMOVABLE ON SECURE SIDE OF INTERIOR DOORS; SCREW-APPLIED, REMOVABLE GLAZING STOPS ON INSIDE. 2. DOOR SILENCERS: GRAY RUBBER PUSH-IN TYPE; THREE ON STRIKE JAMB OF SINGLE DOORS;

TWO ON HEAD OF OF DOUBLE DOORS. 3. SUPPORTS AND ANCHORS: MIN. .042" THICK GALVANIZED STEEL SHEET 4. PRIMER: MANUFACTURER'S STANDARD FACTORY APPLIED COAT OF RUST-INHIBITIVE PRIMER COMPLYING WITH ANSI A250.10.

FRAMES: COMPLY WITH SDI 105

2. DOORS: COMPLY WITH ANSI A250.8. SHIM AS NECESSARY TO COMPLY WITH SDI 122 AND

8.2 FLUSH WOOD DOORS

JBMITTALS: PRODUCT DATA, PREFINISHED DOOR SKIN SAMPLES, AND DOOR SCHEDULE INDICATING DOOR AND FRAME SIZES. TYPES, ELEVATIONS, DETAILS, AND HARDWARE WITH DOOR AND HARDWARE NUMBERING CORRESPONDING TO THOSE USED IN CONSTRUCTION DOCUMENTS.

B. <u>DOORS:</u> SIZES, SPECIES, AND DESIGNS AS INDICATED COMPLYING WITH WDMA I.S.1-A . GRADE: PREMIUM

2. VENEER MATCHING: BOOK AND RUNNING 3. PAIR MATCHING AND SET MATCHING

CONSTRUCTION: a. INTERIOR VENEER: FIVE OR SEVEN PLY, STRUCTURAL COMPOSITE LUMBER CORES FABRICATION AND FINISHING:

 FACTORY FIT DOORS TO SUIT FRAME OPENINGS TO COMPLY WITH REFERENCED STANDARD. COMPLY WITH NFPA 80 FOR FIRE-RESISTANCE RATED DOORS. 2. FACTORY MACHINE DOORS FOR HARDWARE THAT IS NOT SURFACE APPLIED. 3. CUT AND TRIM OPENINGS TO COMPLY WITH REFERENCED STANDARDS.

4. LITE KITS: MATCHING WOOD STOPS 5. FACTORY FINISH DOORS FOR TRANSPARENT FINISH WITH STAIN AND MANUFACTURER'S STANDARD FINISH COMPARABLE TO AWI, SYSTEM TR-4, CONVERSION VARNISH OR AWI SYSTEM

INSTALLATION: COMPLY WITH WDMA'S "HOW TO STORE, HANDLE, FINISH, INSTALL, AND MAINTAIN WOOD DOORS" ALIGNED AND FITTED IN FRAMES WITH UNIFORM CLEARANCES AND BEVELS.

8.3 ACCESS DOORS AND FRAMES SUBMITTALS: PRODUCT DATA

AAMA 611

PRODUCTS: PRIME-PAINTED FLUSH, UNINSULATED ACCESS DOORS FOR WALLS AND CEILINGS WITH FRIMLESS FRAME AND SCREWDRIVER OPERATED LOCK FLUSH WITH FINISHED SURFACE. FIRE-RATED, SELF-LATCHING. AUTOMATIC CLOSING AT FIRE-RATED WALLS OR CEILINGS.

C. INSTALLATION: INSTALL FLUSH TO FINISHED DRYWALL SURFACE WITH FRAME TAPED AND SANDED FLUSH WITH WALL OR CEILING SURFACE AND FINISH TO MATCH ADJACENT SURFACE.

8.4 ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS A. SUBMITTALS: PRODUCT DATA, FINISH SAMPLES, AND SHOP DRAWINGS INDICATING DESIGN LOADS, SYSTEM DIMENSIONS, TOLERANCES, DETAILS AT JOINTS AND PERIMETER CONDITIONS, FLASHING, CONNECTIONS TO WORK BY OTHERS, EXPANSION AND CONTRACTION JOINT LOCATIONS, AND ANY FIELD WELDING. FOR ENTRANCES, INCLUDE HARDWARE SCHEDULE

B. FABRICATOR: COMPANY SPECIALIZING IN MANUFACTURING ALUMINUM GLAZING SYSTEMS WITH MINIMUM THREE YEARS DOCUMENTED EXPERIENCE INSTALLER: COMPANY SPECIALIZING IN INSTALLING ALUMINUM GLAZING SYSTEMS WITH MINIMUM HREE YEARS DOCUMENTED EXPERIENCE

ALUMINUM SHEET: ASTM B 209 (ASTM B 209M), ALLOY AND TEMPER RECOMMENDED BY MANUFACTURER FOR TYPE OF USE AND FINISH INDICATED. 2. ALUMINUM EXTRUSIONS: ASTM B 221 (ASTM B221M), ALLOY AND TEMPER RECOMMENDED BY

MANUFACTURER FOR TYPE OF USE AND FINISH INDICATED. ALUMINUM FRAMED STOREFRONTS: AT INTERIOR LOCATIONS, PROVIDE MANUFACTURER'S STANDARD NON-THERMALLY BROKEN STOREFRONT SYSTEM MATCHING THE EXTERIOR SYSTEM. AT EXTERIOR LOCATIONS, PROVIDE MANUFACTURER'S STANDARD THERMALLY BROKEN, EXTRUDED ALUMINUM STOREFRONT SYSTEM CONSISTING OF FRAMING MEMBERS OF THICKNESS REQUIRED AND REINFORCED AS REQUIRED TO SUPPORT IMPOSED LOADS AND TO FIT THE DIMENSIONS AND DEPTHS INDICATED ON THE CONSTRUCTION DOCUMENTS AND COMPLYING WITH THE FOLLOWING: 1. STRUCTURAL PERFORMANCE: PROVIDE SYSTEMS, INCLUDING ANCHORAGE, CAPABLE OF

WITHSTANDING THE FOLLOWING LOADS: a. MAIN FRAMING MEMBER DEFLECTION: LIMITED TO 1/175 OF CLEAR SPAN OR ¾" WHICHEVER IS SMALLER.

b. STRUCTURAL TESTING: SYSTEMS WHEN TESTED ACCORDING TO ASTM E 330 AT 150 PERCENT OF INWARD AND OUTWARD WIND-LOAD DESIGN PRESSURE DO NOT EVIDENCE MATERIAL FAILURES, STRUCTURAL DISTRESS, DEFLECTION FAILURES, OR PERMANENT DEFORMATION OF MAIN FRAMING MEMBERS EXCEEDING 0.2 PERCENT OF CLEAR SPAN. 2. AIR INFILTRATION: LIMITED TO 0.06 CFM/SQ. FT. (0.03 L/s PER SQ. IN.) OF SYSTEM SURFACE AREA

WHEN TESTED ACCORDING TO ASTM E 283 AT A STATIC-AIR-PRESSURE DIFFERENCE OF 1.57 3. WATER PENETRATION: SYSTEMS DO NOT EVIDENCE WATER LEAKAGE WHEN TESTED ACCORDING TO ASTM E 331 AT MINIMUM DIFFERENTIAL PRESSURE OF 20 PERCENT OF POSITIVE WIND-LOAD DESIGN PRESSURE, BUT NOT LESS THAN 6.24 lbf/sq. ft. (300 Pa).

4. AVERAGE U-FACTOR: NOT MORE THAN 0.69 Btu/sq. ft. x h x deg. f (3.92 W/sq. m x K) PER AAMA 1503. 5. DOORS: 13/4" THICK GLAZED DOORS WITH MINIMUM 0.125" THICK EXTRUDED TUBULAR BAIL AND STILE MEMBERS. MECHANICALLY FASTENED CORNERS WITH REINFORCED BRACKETS THAT ARE DEEP PENETRATION AND FILLET WELDED OR THAT INCORPORATE CONCEALED TIE-RODS, SNAP-ON EXTRUDED ALUMINUM GLAZING STOPS, AND PREFORMED GASKETS.

a. INTERIOR DOORS: GLAZE WITH 1/4" CLEAR TEMPERED GLASS. PROVIDE ANSI/BHMA A156.16 SILENCERS. THREE ON STRIKE JAMB OF SINGLE DOOR FRAMES AND TWO ON HEAD OF b. EXTERIOR DOORS: GLAZE WITH INSULATED TEMPERED GLASS UNITS MATCHING STOREFRONT GLASS OR CLEAR INSULATED GLASS PER CONSTRUCTION DRAWINGS. PROVIDE COMPRESSION WEATHERSTRIPPING AT FIXED STOPS. AT OTHER LOCATIONS.

PROVIDE SLIDING WEATHERSTRIPPING RETAINED IN ADJUSTABLE STRIP MORTISED INTO DOOR EDGE. c. HARDWARE: PER DOOR SCHEDULE 6. FASTENERS AND ACCESSORIES: COMPATIBLE WITH ADJACENT MATERIALS, CORROSION-RESISTANT. NONSTAINING, AND NONBLEEDING. USE CONCEALED FASTENERS

EXCEPT FOR APPLICATION OF DOOR HARDWARE. FURNISH THERMALLY BROKEN HEAD AND JAMB CLIPS AND FURNISH END DAMS AT ALL SILL FLASHING. 7. FABRICATION: FABRICATE FRAMING IN PROFILES INDICATED. PROVIDE SUBFRAMES AND REINFORCING AS REQUIRED FOR A COMPLETE SYSTEM, FACTORY ASSEMBLE COMPONENTS TO GREATEST EXTENT POSSIBLE. DISASSEMBLE COMPONENTS ONLY AS NECESSARY FOR SHIPMENT AND INSTALLATION. a. DOORS FRAMING: REINFORCE TO SUPPORT IMPOSED LOADS. FACTORY ASSEMBLE DOOR

AND FRAME UNITS AND FACTORY INSTALL HARDWARE TO GREATEST EXTENT POSSIBLE. REINFORCE DOOR AND FRAME UNITS FOR HARDWARE INDICATED. CUT, DRILL, AND TAP FOR FACTORY-INSTALLED HARDWARE BEFORE FINISHING COMPONENTS. 8. ALUMINUM FINISH: COMPLY WITH NAAMM'S "METAL FINISHES MANUAL FOR ARCHITECTURAL AND METAL PRODUCTS" CLEAR ANODIC, ARCHITECTURAL CLASS I: AA-M12C22A41, COMPLYING WITH

. ISOLATE METAL SURFACES IN CONTACT WITH INCOMPATIBLE MATERIALS, INCLUDING WOOD, BY PAINTING CONTACT SURFACES WITH BITUMINUOUS COATING OR PRIMER, OR BY APPLYING SEALANT TAPE RECOMMENDED BY MANUFACTURER. 2. INSTALL FRAMING COMPONENTS TO PROVIDE A WEATHERPROOF SYSTEM AND TRUE IN

ALIGNMENT WITH ESTABLISHED LINES AND GRADES TO THE FOLLOWING TOLERANCES: a. VARIATION FROM PLANE: LIMIT TO ½" IN 12 FEET; ¼" OVER TOTAL LENGTH b. ALIGNMENT: FOR SURFACES ABUTTING LINE, LIMIT OFFSET TO ½6". FOR SURFACES MEETING AT CORNERS, LIMIT OFFSET TO \(\frac{1}{32} \). c. DIAGONAL MEASUREMENTS: LIMIT DIFFERENCE BETWEEN DIAGONAL MEASUREMENTS TO

d. PERIMETER JOINTS: ½" MAXIMUM. 3. INSTALL DOORS WITHOUT WARP OR RACK. ADJUST DOORS AND HARDWARE TO PROVIDE TIGHT FIT AT CONTACT POINTS AND SMOOTH OPERATION.

A. SUBMITTALS: PRODUCT DATA AND HARDWARE SCHEDULE INDICATING HARDWARE ITEM, FINISH, AND

QUANTITY LOCATED ON EACH DOOR WITH DOOR AND HARDWARE SET NUMBERING CORRESPONDING TO THOSE USED IN CONSTRUCTION DOCUMENTS. B. HARDWARE: FURNISH PRODUCTS AS SPECIFIED IN THE HARDWARE SETS CONTAINED IN THE

CONSTRUCTION DOCUMENTS AND AS FOLLOWS: a. APPROVED MANUFACTURERS: HAGER, MCKINNEY, IVES, AND STANLEY

b. QUANTITY: 3 HINGES FOR DOORS 90" OR LESS IN HEIGHT; 4 HINGES FOR DOORS MORE THAN 90" IN HEIGHT c. BEARING: BALL BEARING HINGES AT ALL LOCATIONS. d. MATERIAL: STAINLESS STEEL OR BRASS/BRONZE HINGES WITH STAINLESS STEEL PINS FOR

e. PINS: NONREMOVABLE PINS FOR EXTERIOR AND PUBLIC INTERIOR EXPOSURE; NON-RISING ELSEWHERE.

2. LOCKSETS AND LATCHSETS: a. BORED LOCKS AND LATCHES: BHMA A156.2, SERIES 4000, GRADE 1, (1) APPROVED PRODUCTS: SCHLAGE ND, SARGENT 10 LINE, CORBIN RUSSWIN, CL3300 b. EXIT DEVICES: BHMA A156.3, GRADE 1

(1) APPROVED PRODUCTS: SARGENT 80 SERIES, CORBIN RUSSWIN, VON DUPRIN 98/99 c. AUXILIARY LOCKS: BHMA A156.5, GRADE 1 d. INTERCONNECTED LOCKS AND LATCHES: BHMA A156.12, SERIES 5000, GRADE 1 e. MORTISE LOCKS AND LATCHES: BHMA A156.13, SERIES 1000, GRADE 1 (1) APPROVED PRODUCTS: SCHLAGE L SERIES, SARGENT 8200 SERIES, CORBIN RUSSWIN ML 2000 SERIES

f. TRIM: LEVER HANDLE STYLE PER CONSTRUCTION DOCUMENTS OR IF NOT SPECIFIED, MATCH BUILDING STANDARD. IF NOT SPECIFIED AND NO STANDARD EXISTS, MATCH SCHLAGE "RHODES"; TRIM ON EXIT DEVICES SHALL MATCH LOCKSETS g. CORES: FULL SIZE INTERCHANGEABLE W/ EVEREST 29 S123 KEYWAY STANDARD KEYING: PROVIDE CONSTRUCTION KEYING AND COORDINATE FINAL KEYING WITH OWNER'S MASTER-KEY SYSTEM. FURNISH KEY CONTROL SYSTEM, INCLUDING CABINET

a. APPROVED MANUFACTURERS LCN, NORTON, SARGENT b. LOCATION: MOUNT CLOSERS ON INTERIOR (ROOM SIDE) OF DOOR OPENING. PROVIDE REGULAR-ARM, PARALLEL-ARM, OR TOP-JAMB-MOUNTED CLOSERS AS NECESSARY.

c. OPTIONS: FURNISH ADJUSTABLE DELAYED OPENING (ADA ACCESSIBLE) FEATURE ON ALL 4. STOPS: FURNISH AND INSTALL WALL OR FLOOR STOPS AS APPROPRIATE FOR ALL DOORS WHETHER INDICATED OR NOT.

WEATHERSTRIPPING: AT ALL EXTERIOR DOORS AND AS SCHEDULED, PROVIDE WEATHERSTRIPPING ON HEAD AND JAMBS AND DRIP-SWEEP AT SILL. 6. SMOKE GASKETING: PROVIDE SMOKE GASKETING AT ALL FIRE-RATED DOORS 7. THRESHOLDS: PROVIDE THRESHOLDS AT ALL EXTERIOR DOORS AND AS SCHEDULED C. INSTALLATION: MOUNT HARDWARE IN LOCATIONS RECOMMENDED BY THE DOOR AND HARDWARE

INSTITUTE, UNLESS OTHERWISE INDICATED.

1. SAFETY GLASS: CATEGORY II MATERIALS COMPLYING WITH TESTING REQUIREMENTS IN 16 CFR

2. GLAZING PUBLICATIONS: WHERE APPLICABLE, COMPLY WITH WITH THE PUBLISHED RECOMMENDATIONS OF THE FOLLOWING: a. GANA PUBLICATIONS: "GLAZING MANUAL" AND "LAMINATED GLASS DESIGN GUIDE". b. SIGMA PUBLICATIONS: SIGMA TM-3000, "VERTICAL GLAZING GUIDELINES"

1. FLOAT GLASS: ASTM C 1036, TYPE I, QUALITY q3 2. HEAT-TREATED FLOAT GLASS: ASTM C 1048, TYPE I, QUALITY q3, HEAT STRENGTHENED OR FULLY TEMPERED WHERE INDICATED AND WHERE REQUIRED BY CODE OR INSTALLATION

3. MIRROR GLASS: ASTM C 1036, TYPE I, CLASS 1, QUALITY q1, SILVER COATED PER FS DDM411C, 6.0mm THICK, WITH EDGES FLAT POLISHED. C. FABRICATED GLASS PRODUCTS: SEALED INSULATING-GLASS UNITS: PREASSEMBLED UNITS COMPLYING WITH ASTM E 774 FOR CLASS CBA UNITS WITH TWO SHEETS OF GLASS SEPARATED BY A 1/2-INCH DEHYDRATED SPACE

FILLED WITH AIR. EXTERIOR GLASS COLOR TO MATCH EXISTING. INTERIOR GLASS SHALL BE a. WARRANTY: 10 YEAR WARRANTY TO INCLUDE REPLACEMENT OF SEALED UNITS EXHIBITING SEAL FAILURE, INTERPANE DUSTING OR MISTING.

GASKETS, AND OTHER GLAZING MATERIALS, UNLESS MORE STRINGENT REQUIREMENTS ARE CONTAINED IN GANA'S "GLAZING MANUAL". 2. SET GLASS LITES IN EACH SERIES WITH UNIFORM PATTERN, DRAW, BOW, AND SIMILAR

COMPLY WITH COMBINED RECOMMENDATIONS OF MANUFACTURERS OF GLASS, SEALANTS

3. AFTER GLASS INSTALLATION IS COMPLETE, REMOVE GLAZING MATERIALS AND LABELS FROM FINISHED SURFACES, AND THOROUGHLY CLEAN GLASS AND ADJACENT FRAMING AND SURFACES. REPEAT AS NECESSARY PRIOR TO FINAL WALK-THROUGH.

DIVISION 9 - FINISHES

9.1 GYPSUM BOARD ASSEMBLIES

A. STEEL FRAMING MEMBERS: COMPLY WITH ASTM C754 IN DEPTHS AND GAGES AS INDICATED IN THE CONSTRUCTION DRAWINGS AND AS FOLLOWS: 1. STEEL SHEET COMPONENTS: COMPLY WITH ASTM C645 WITH MANUFACTURER'S STANDARD

CORROSION-RESISTANT ZINC COATING. 2. TIE WIRE: ASTM A 641/A 641M, CLASS 1 ZINC COATING, SOFT TEMPER. .0625" DIAMETER OR DOUBLE STRAND OF .0475" DIAMETER WIRE. 3. WIRE HANGERS: ASTM A 641/A 641M, CLASS 1 ZINC COATING, SOFT TEMPER. .0162" DIAMETER.

B. PANEL PRODUCTS:PROVIDE IN THICKNESS AND TYPE INDICATED IN THE CONSTRUCTION DRAWINGS IN MAXIMUM LENGTHS AVAILABLE TO MINIMIZE END-TO-END BUTT JOINTS AND AS FOLLOWS 1. GYPSUM WALLBOARD: ASTM C 1396, TYPE 'X' WITH TAPERED EDGES, SAG-RESISTANT TYPE FOR 2. WATER-RESISTANT GYPSUM BACKING BOARD: ASTM C 630, TYPE 'X' ON ALL TOILET ROOM AND

SHOWER ROOM WALLS, BEHIND ALL PLUMBING FIXTURES, AND AS INDICATED 1. TRIM: ASTM 1047, FORMED FROM GALVANIZED OR ALUMINUM COATED STEEL SHEET, ROLLED ZINC, OR PLASTIC a. OUTSIDE CORNERS: PROVIDE CORNER BEAD UNLESS NOTED OTHERWISE

b. EXPOSED PANEL EDGES: PROVIDE LC-BEAD (J-BEAD) UNLESS NOTED OTHERWISE; USE TEAR-AWAY BEAD WHERE GYP. BD. MEETS WINDOW FRAMES OR CEILING GRID. c. CONTROL JOINTS: PROVIDE WHERE INDICATED OR APPROXIMATELY 30'-0" MAX. CONTACT ARCHITECT FOR LOCATIONS IF NOT INDICATED.

2. SOUND-ATTENUATION BLANKETS: ASTM C 665, TYPE I (UNFACED) 3. ACOUSTICAL SEALANT: COMPLY WITH ASTM C 834, NONSAG, PAINTABLE, NONSTAINING LATEX. 1. FRAMING: COMPLY WITH ASTM C 754 AND ASTM C 840 AND WITH U.S. GYPSUM'S "GYPSUM CONSTRUCTION HANDBOOK" ISOLATE FRAMING FROM BUILDING STRUCTURE TO PREVENT TRANSFER OF LOADING IMPOSED BY STRUCTURAL MOVEMENT AND PROVIDE BRACING AS

NECESSARY FOR PROPER SUPPORT WHETHER INDICATED OR NOT. 2. GYPSUM PANELS AND FINISH: COMPLY WITH ASTM C 840 AND GA-216. ISOLATE GYPSUM BOARD ASSEMBLIES FROM ABUTTING STRUCTURAL AND MASONRY WORK AND FINISH AS FOLLOWS: a. LEVEL 1 (EMBED TAPE AT JOINTS): AT CONCEALED AREAS UNLESS A HIGHER LEVEL IS INDICATED OR REQUIRED FOR FIRE-RESISTANCE-RATED ASSEMBLY

b. LEVEL 2 (EMBED TAPE AND APPLY SEPARATE FIRST COAT OF JOINT COMPOUND TO TAPE. FASTENERS, AND TRIM FLANGES AND SAND SMOOTH AFTER EACH COAT): AT SUBSTRATES BEHIND TILE c. LEVEL 4 (EMBED TAPE AND APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES AND SAND SMOOTH AFTER EACH

COAT): AT ALL WALLS RECEIVING FLAT, EGGSHELL, OR SATIN SHEEN PAINT OR d. LEVEL 5 (EMBED TAPE, APPLY SEPARATE FIRST, FILL, AND FINISH COATS OF JOINT COMPOUND TO TAPE, FASTENERS, AND TRIM FLANGES, AND APPLY THIN SKIM COAT OF JOINT COMPOUND OVER ENTIRE SURFACE AND SAND SMOOTH AFTER EACH COAT): AT ALL WALLS RECEIVING SEMI-GLOSS OR GLOSS SHEEN PAINT, AND ALL GYPSUM BOARD

9.2 CERAMIC TILE A. SUBMITTALS: PRODUCT DATA FOR SETTING AND GROUTING MATERIALS AND THREE (3) SAMPLES OF EACH TILE SPECIFIED FOR VERIFICATION PURPOSES. B. ATTIC STOCK: FURNISH 2% OF EACH TYPE OF CERAMIC TILE PACKAGED WITH PROTECTIVE COVERING

3. SETTING BED ACCESSORIES: ANSI A 108.1A

SIZE, UNLESS INDICATED OTHERWISE.

AND LABELED FOR STORAGE. C. TILE: COMPLY WITH STANDARD GRADE REQUIREMENTS IN ANSI A137.1 "SPECIFICATIONS FOR CERAMIC TILE" FOR PRODUCTS AND SIZES INDICATED IN THE CONSTRUCTION DOCUMENTS. D. INSTALLATION MATERIALS:

a. TYPICAL INTERIOR INSTALLATIONS: LATEX/POLYMER MODIFIED PORTLAND CEMENT COMPLYING WITH ANSI A108.5 AND ANSI 118.4. 2. GROUT: UNSANDED FOR JOINTS $\frac{1}{16}$ WIDTH OR LESS, SANDED FOR JOINTS GREATER THAN $\frac{1}{16}$ IN COLOR INDICATED OR TO BE SELECTED. a. TYPICAL INTERIOR INSTALLATIONS: STANDARD CEMENT GROUT WITH INTEGRAL STAIN INHIBITORS (TEC ACCUCOLOR XT, OR EQUAL)

E. INSTALLATION METHODS: COMPLY WITH TILE INSTALLATION STANDARDS IN ANSI'S "SPECIFICATIONS FOR THE INSTALLATIONS OF CERAMIC TILE" AND TCA'S "HANDBOOK FOR CERAMIC TILE INSTALLATION" THAT APPLY TO THE MATERIALS AND METHODS INDICATED BELOW 1. OVER GYPSUM BOARD: TCA W243 (THIN-SET MORTAR BONDED TO GYPSUM BOARD) ELEVATED CONCRETE SLABS: TCA F113 (THIN-SET MORTAR BONDED TO CONCRETE SLAB)

F. TERMINATIONS: WHERE CUT TILE IS SPECIFIED AS THE TOP COURSE ON WALL WAINSCOTING OR WALL BASE WITH AN EXPOSED TOP EDGE, THE FACTORY EDGE SHALL BE USED AS THE EXPOSED EDGE. G. CONFLICTS: IF NOT ADDRESSED ON DRAWINGS, WHERE ELECTRICAL DEVICES OR TOILET ACCESSORIES STRADDLE THE TRANSITION FROM THE TOP EDGE OF WAINSCOT WALL TILE TO GYPSUM BOARD SUBSTRATE, CONTACT ARCHITECT FOR RESOLUTION.

1. JOINT SIZE: SET TILE WITH THE SMALLEST GROUT JOINT ACHIEVABLE AND AS RECOMMENDED BY THE MFR. BASED ON THE TILE PRODUCT AND SUBSTRATE CONDITIONS, UNLESS NOTED 2. TILE PATTERN: LAY TILE IN PATTERNS AS INDICATED IN THE CONSTRUCTION DOCUMENTS. ALIGN JOINTS WHERE ADJOINING TILES ON FLOOR, BASE, WALLS, AND TRIM ARE THE SAME

AVOID REMOVAL OF GROUT COLOR BY USE OF EXCESS WATER DURING INSTALLATION. FADED OR CHALKY GROUT SHALL BE CAUSE FOR REJECTION. 4. SEALER: AFTER FULLY CURED, GROUT SHALL BE SEALED WITH TWO (2) COATS OF COMMERCIAL QUALITY PENETRATING SILICONE SEALER.

3. INSTALLATION: INSTALL GROUT PER MANUFACTURER'S INSTRUCTIONS, EXERCISING CARE TO

9.3 ACOUSTICAL TILE CEILINGS

A. SUBMITTALS: PRODUCT DATA ONLY B. ATTIC STOCK: FURNISH 2% OF EACH TYPE OF CEILING TILE PACKAGED WITH PROTECTIVE COVERING AND LABELED FOR STORAGE

C. ACOUSTICAL TILE PRODUCTS: PROVIDE CEILING TILE IN TYPE AND SIZES INDICATED IN THE CONSTRUCTION DOCUMENTS COMPLYING WITH ASTM E 1264, CLASS A MATERIALS, TESTED PER ASTM

D. SUSPENSION SYSTEM: PROVIDE HEAVY DUTY, DIRECT-HUNG, SUSPENSION SYSTEMS AS INDICATED IN

THE CONSTRUCTION DOCUMENTS COMPLYING WITH ASTM C 635. FURNISH ALUMINUM GRID IN SHOWERS, KITCHENS, AND OTHER HIGH-HUMIDITY AREAS. 1. ATTACHMENT DEVICES: SIZE FOR FIVE (5) TIMES THE DESIGN LOAD INDICATED IN ASTM C 635, TABLE 1, DIRECT HUNG UNLESS OTHERWISE INDICATED.

2. WIRE HANGERS, BRACES, AND TIES: ZINC-COATED CARBON-STEEL WIRE; ASTM A 641/ (A 641 M). CLASS 1 ZINC COATING, SOFT TEMPER WITH A YIELD STRENGTH AT LEAST THREE (3) TIMES THE HANGER DESIGN LOAD (ASTM C 635, TABLE 1, DIRECT HUNG), BUT NOT LESS THAN 0.135" 3. SEISMIC STRUTS: MANUFACTURER'S STANDARD PRODUCT DESIGNED TO ACCOMMODATE SEISMIC FORCES

COMPUTER ROOMS EMPLOYING DRY CHEMICAL FIRE-SUPPRESSION SYSTEMS, AND OTHER AREAS AS INDICATED. E. INSTALLATION: COMPLY WITH ASTM C 636 AND CISCA'S "CEILING SYSTEMS HANDBOOK" SEQUENCE WORK TO ENSURE ACOUSTICAL CEILINGS ARE NOT INSTALLED UNTIL BUILDING IS

4. HOLD-DOWN CLIPS: PROVIDE HOLD-DOWN CLIPS ON CEILING TILE IN ENTRANCE VESTIBULES

ENCLOSED, SUFFICIENT HEAT IS PROVIDED, DUST GENERATION ACTIVITIES HAVE TERMINATED, AND OVERHEAD WORK IS COMPLETED, TESTED, AND APPROVED. 2. INSTALL CEILING GRID AS INDICATED TO BE SYMMETRICAL ABOUT BOTH AXES OF EACH ROOM

5. PROVIDE MATCHING PERIMETER MOLDING INSTALLED IN BEAD OF ACOUSTICAL SEALANT AT ALL

USING NOT LESS THAN HALF-SIZE TILE UNLESS INDICATED OTHERWISE ON THE REFLECTED 3. SUPPORT SUSPENSION SYSTEM INDEPENDENTLY OF DUCTS, PIPES, AND CONDUITS. 4. SUPPORT FIXTURE LOADS USING SUPPLEMENTARY HANGERS LOCATED WITHIN 6" OF EACH

LOCATIONS WHERE CEILING INTERSECTS VERTICAL SURFACES. USE MATCHING PRE-FORMED CLOSURES AT ROUND OR CURVED OBSTRUCTIONS 6. FIELD-CUT EDGES SHALL MATCH PROFILE OF FACTORY EDGES.

CORNER OR SUPPORT FIXTURES INDEPENDENTLY.

9.4 RESILIENT FLOOR TILE AND WALL BASE

AND OUTSIDE CORNERS.

INSTRUCTIONS.

A. SUBMITTALS: PRODUCT DATA AND THREE (3) SAMPLES OF EACH TILE AND BASE SPECIFIED FOR VERIFICATION PURPOSES. B. <u>ATTIC STOCK</u>: FURNISH ONE (1) BOX FOR EACH 50 BOXES OR FRACTION THEREOF OF EACH TYPE OF FLOOR TILE AND 20' OF EACH COLOR AND TYPE OF WALL BASE PACKAGED WITH PROTECTIVE COVERING AND LABELED FOR STORAGE.

C. RESILIENT TILE PRODUCTS: PROVIDE FLOOR TILE IN TYPE AND SIZES INDICATED IN THE CONSTRUCTION DOCUMENTS COMPLYING WITH THE FOLLOWING: 1. VINYL COMPOSITION TILE: 12"x12"X1/8" COMPLYING WITH ASTM F 1066.

2. SOLID VINYL TILE: $12"X12"X_8"$ COMPLYING WITH ASTM F 1700 3. RUBBER FLOOR TILE: 24"X24"X/8" COMPLYING WITH ASTM F 1344. 4. STATIC DISSIPATIVE TILE: 12"X12"X/8" GROUNDED PER MFR. RECOMMENDATIONS. D. RESILIENT WALL BASE: ASTM TYPE TS (RUBBER, VULCANIZED THERMOSET) 1/8" THICK, FURNISHED IN COILS IN STYLES AND SIZES INDICATED IN THE CONSTRUCTION DOCUMENTS WITH JOB-FORMED INSIDE

E. INSTALLATION ACCESSORIES LEVELING AND PATCHING COMPOUNDS: LATEX-MODIFIED, PORTLAND CEMENT, OR BLENDED HYDRAULIC CEMENT-BASED FORMULATION PROVIDED OR APPROVED BY FLOORING MANUFACTURER TO SUIT RESILIENT PRODUCTS AND SUBSTRATE CONDITIONS.

2. ADHESIVES: WATER-RESISTANT TYPE RECOMMENDED BY MANUFACTURER TO SUIT RESILIENT PRODUCTS AND SUBSTRATE CONDITIONS. 1. PREPARE CONCRETE SUBSTRATES PER ASTM F 710. VERIFY THAT SUBSTRATES ARE DRY AND FREE OF CURING COMPOUNDS, SEALERS AND HARDENERS.

2. LAY OUT TILES SO WIDTHS AT OPPOSITE EDGES OF ROOM ARE EQUAL AND NOT LESS THAN 3. LAY TILES IN PATTERNS INDICATED WITH GRAIN DIRECTION ALTERNATING IN ADJACENT TILES, **UNLESS NOTED OTHERWISE** 4. CLEAN, SEAL, AND WAX RESILIENT FLOORING IN ACCORDANCE WITH MANUFACTURER'S

G. WALL BASE AND ACCESSORY INSTALLATION: 1. CONFIRM THAT SOLID BACKING IS PROVIDED BEHIND ALL WALL BASE. AREAS WHERE GYPSUM BOARD IS HELD MORE THAN ½" ABOVE SLAB SHALL BE FILLED IN PRIOR TO BASE INSTALLATION. 2. INSTALL WALL BASE WITH MANUFACTURER'S RECOMMENDED ADHESIVE IN MAXIMUM LENGTHS

POSSIBLE. APPLY TO WALLS, COLUMNS, PILASTERS, CASEWORK, AND OTHER PERMANENT 3. INSTALL TRANSITION STRIPS WHERE FLOORING MATERIALS MEET OR WHERE EDGE OF TILE IS EXPOSED AS INDICATED IN THE FINISH SCHEDULE

9.5 CARPET AND CARPET TILE A. SUBMITTALS: THREE (3) SAMPLES OF EACH CARPET OR CARPET TILE SPECIFIED FOR VERIFICATION

B. ATTIC STOCK: FURNISH FULL-WIDTH CARPET EQUAL TO 5% OF EACH TYPE AND COLOR CARPET INSTALLED, PACKAGED WITH PROTECTIVE COVERING AND LABELED FOR STORAGE. C. CARPET PRODUCTS: PROVIDE CARPET IN PATTERNS AND COLORS AND WITH BACKINGS AS INDICATED IN THE CONSTRUCTION DOCUMENTS WITH CRITICAL RADIANT FLUX CLASSIFICATION CLASS I, NOT LESS

THAN 0.45 W/SQ. CM PER ASTM E 648. ORDER ALL MATERIALS FROM THE SAME FACTORY DYE LOT. D. INSTALLATION: COMPLY WITH CRI 104, SECTION 6.1, "SITE CONDITIONS; TEMPERATURE AND HUMIDITY" FOR BROADLOOM PRODUCTS COMPLY WITH CRI 104, SECTION 8, "DIRECT GLUE-DOWN" AND SECTION 12 "CARPET ON STAIRS". FOR CARPET TILE COMPLY CRI 104, SECTION 13 "CARPET MODULES (TILES)". 1. VERIFY CARPET MATCH PRIOR TO CUTTING TO CONFIRM NO VARIATION BETWEEN DYE LOTS. 2. LAY CARPET TILE IN PATTERN AS INDICATED ON CONSTRUCTION DOCUMENTS AND SO WIDTHS

AT OPPOSITE EDGES OF ROOM ARE EQUAL AND NOT LESS THAN HALF-WIDTH. 3. LAY OUT BROADLOOOM CARPET TO LOCATE SEAMS IN AREAS OF LEAST TRAFFIC, AND OUT OF AREAS OF PIVOTING TRAFFIC. AT DOORWAYS, CENTER SEAMS UNDER DOOR IN CLOSED POSITION. BIND OR SEAL CUT EDGES AS RECOMMENDED BY CARPET MANUFACTURER. 4. MAINTAIN UNIFORMITY OF CARPET DIRECTION AND LAY OF PILE WITH PATTERN PARALLEL TO

5. INSTALL BROADLOOM CARPET IN MANUFACTURER'S RECOMMENDED CONTACT ADHESIVE AND CARPET TILE IN MANUFACTURER'S RECOMMENDED EASY RELEASE ADHESIVE. ROLL WITH APPROPRIATE ROLLER FOR COMPLETE CONTACT OF ADHESIVE TO CARPET BACKING. 6. TRIM CARPET NEATLY AND TIGHT TO WALLS AND AROUND INTERRUPTIONS

7. INSTALL TRANSITION STRIPS AT CARPET TERMINATIONS AS SPECIFIED ON THE CONSTRUCTION

A. SUBMITTALS: PRODUCT DATA AND THREE (3) DRAW-DOWN SAMPLES OF EACH COLOR AND SHEEN

B. ATTIC STOCK: FURNISH ONE (1) GALLON OF EACH PAINT COLOR AND SHEEN, IN CONTAINERS,

PROPERLY LABELED AND SEALED. C. PRODUCTS: PROVIDE MANUFACTURER'S BEST QUALITY PAINTS OF COLOR AND SHEEN AS INDICATED IN THE CONSTRUCTION DOCUMENTS THAT ARE FORMULATED AND RECOMMENDED BY MANUFACTURER FOR APPLICATION INDICATED. PROVIDE MATERIALS THAT ARE COMPATIBLE WITH ONE ANOTHER AND WITH SUBSTRATES. EQUIPMENT: APPLY COATINGS BY BRUSH, ROLLER, SPRAY, OR OTHER APPLICATORS

ACCORDING TO COATING MANUFACTURER'S WRITTEN INSTRUCTIONS. WHEN SPRAYED,

EXTERIOR COATINGS SHALL BE BACK-ROLLED FOLLOWING SPRAY APPLICATION. USE ROLLERS

FOR FINISH COAT ON INTERIOR WALLS AND CEILINGS. 2. PIGMENTED (OPAQUE) FINISHES: COMPLETELY COVER SURFACES TO PROVIDE A SMOOTH, OPAQUE SURFACE OF UNIFORM APPEARANCE. PROVIDE A FINISH FREE OF CLOUDINESS, SPOTTING, HOLIDAYS, LAPS, BRUSH MARKS, RUNS, SAGS, ROPINESS, OR OTHER SURFACE IMPERFECTIONS.

PAINT SYSTEMS - INTERIOR: PROVIDE THE FOLLOWING PAINT SYSTEMS FOR THE INTERIOR SUBSTRATE

NATURAL FINISH WOODWORK: ALKYD-BASED, SATIN VARNISH: TWO COATS OVER SEALER

1. GYPSUM BOARD: ACRYLIC ENAMEL; SHEEN AS INDICATED: TWO COATS OVER PRIMER

FERROUS METAL: SEMIGLOSS ACRYLIC ENAMEL: TWO COATS OVER FERROUS METAL PRIMER 4. ZINC COATED METAL: ACRYLIC ENAMEL; GLOSS: TWO COATS OVER GALVANIZED METAL PRIMER 9.7 FIBERGLASS REINFORCED PLASTIC PANELS (FRP): INSTALL FRP PANELS TO 8'-0" HIGH AND INCLUDING TRIM AND ACCESSORIES HIGH ON ALL WALLS BEHIND JANITOR SINKS AND MOP BASINS (COLOR PER SCHEDULE).

DIVISION 10 - SPECIALTIES

10.1 TOILET COMPARTMENTS A. SUBMITTALS: SHOP DRAWINGS INCLUDING DIMENSIONED PLANS, ELEVATIONS, CONNECTION DETAILS, AND DETAILS OF WALL SUPPORTS, PRODUCT DATA, AND COLOR CHARTS

> B. PANEL, PILASTER, AND DOOR MATERIALS (TYPE AS INDICATED ON DRAWINGS) a. STEEL SHEETS FOR COLOR COATED FINISH: MILL-PHOSPHATIZED, CORROSION RESISTANT STEEL SHEET: ASTM A 591/A 591M, CLASS C, OR ASTM A 653/A 653M. b. CORE MATERIAL: SOUND DEADENING HONEYCOMB OF RESIN-IMPREGNATED KRAFT PAPER

IN THICKNESS REQUIRED TO PROVIDE FINISHED THICKNESS OF 1" MINIMUM FOR DOORS, PANELS AND SCREENS, 11/4" MINIMUM FOR PILASTERS

C. PILASTER SHOES AND SLEEVES (CAPS): STAINLESS STEEL, NOT LESS THAN 3" HIGH) D. BRACKETS: STIRRUP, CHROME-PLATED, NONFERROUS, CAST ZINC ALLOY (ZAMAC), STAINLESS STEEL, OR CLEAR ANODIZED ALUMINUM. E. FABRICATION: MOUNTING AND BRACING TYPE AS INDICATED ON CONSTRUCTION DOCUMENTS

2. DOORS: 24" WIDE IN-SWINGING DOORS FOR STANDARD COMPARTMENTS: 36" WIDE

OUT-SWINGING DOORS WITH MINIMUM 32" WIDE CLEAR OPENING FOR HANDICAP ACCESSIBLE COMPARTMENTS, UNLESS NOTED OTHERWISE. 3. DOOR HARDWARE: CAST ZINC ALLOY (ZAMAC), STAINLESS STEEL, OR CLEAR ANODIZED ALUMINUM COMPLYING WITH AMERICANS WITH DISABILITIES ACT FOR HANDICAP ACCESSIBLE

a. HINGES: SELF-CLOSING, ADJUSTABLE TO HOLD DOOR OPEN AT ANY ANGLE UP TO 90 b. LATCHES AND KEEPERS: RECESSED UNIT DESIGNED FOR EMERGENCY ACCESS AND WITH

COMBINATION RUBBER-FACED DOOR STRIKE AND KEEPER. c. COAT HOOK: COMBINATION HOOK AND RUBBER-TIPPED BUMPER, SIZED TO PREVENT DOOR FROM HITTING COMPARTMENT-MOUNTED ACCESSORIES. d. DOOR BUMPER: RUBBER-TIPPED BUMPERS AT OUT-SWINGING DOORS

F. INSTALLATION: INSTALL UNITS RIGID, STRAIGHT, LEVEL, AND PLUMB WITH NOT MORE THAN ½" BETWEEN PILASTERS AND PANELS AND NOT MORE THAN 1" BETWEEN PANELS AND WALLS. PROVIDE BRACKETS. PILASTER SHOES, BRACING, AND OTHER COMPONENTS REQUIRED FOR A COMPLETE INSTALLATION. USE THEFT-RESISTANT EXPOSED FASTENERS FINISHED TO MATCH HARDWARE. USE SLEEVE NUTS FOR THROUGH-BOLT APPLICATIONS. 1. ALIGN BRACKETS FOR PILASTERS WITH BRACKETS AT WALLS.

2. SET HINGES ON IN-SWINGING DOORS TO HOLD OPEN APPROXIMATELY 30 DEGREES FROM

CLOSED POSITION WHEN UNLATCHED. SET HINGES ON OUT-SWINGING DOORS TO RETURN TO

A. REFERENCE CONSTRUCTION DRAWINGS FOR TYPE, SIZE, AND LOCATIONS FOR SIGNAGE B. MATERIALS: BLACK LAMINATE FACES WITH BLACK EDGES AND RAISED WHITE GRAPHICS AND TEXT

10.3 FIRE EXTINGUISHERS AND CABINETS: A. REFERENCE CONSTRUCTION DRAWINGS FOR TYPE, SIZE AND LOCATIONS OF FIRE EXTINGUISHERS

FULLY CLOSED POSITION.

e. DOOR PULL: PROVIDE AT OUT-SWINGING DOORS

10.4 TOILET AND BATH ACCESSORIES A. REFERENCE CONSTRUCTION DRAWINGS FOR TYPE, QUANTITY, AND LOCATIONS OF TOILET AND BATH ACCESSORIES.

A. REFERENCE CONSTRUCTION DRAWINGS FOR QUANTITY, AND LOCATION OF APPLIANCES TO BE

FURNISHED BY TENANT.

DIVISION 11 - EQUIPMENT

AND CABINETS.

DIVISION 12 - FURNISHINGS

A. SUBMITTALS: PRODUCT DATA AND MATERIAL SAMPLES FOR SHADE FABRIC OPTIONS AND FASCIA OPTIONS REPRESENTING MANUFACTURER'S FULL RANGE OF AVAILABLE PATTERNS AND COLORS.

B. WARRANTIES: 1. ROLLER SHADE HARDWARE, CHAIN, AND SHADECLOTH: 10 YEARS C. ACCEPTABLE MANUFACTURERS: MECHOSHADE SYSTEMS, INC., HUNTER-DOUGLAS CONTRACT

CONFIGURATION: ONE-PIECE UNITS EXTENDING FROM WINDOW HEAD TO SILL, UNLESS NOTED OTHERWISE, BETWEEN-JAMB MOUNTED. a. MANUALLY OPERATED, CHAIN DRIVEN, SUNSCREEN ROLLER SHADES, SHADE CLOTH: VISUALLY TRANSPARENT SINGLE THICKNESS, NON-RAVELING, ANTI-STATIC, FADE

OZ/SQ. YD - 20.70 OZ. SQ. YD. IN PATTERNS AND COLORS TO BE SELECTED FOM

MANUFACTURER'S FULL AVAILABLE RANGE. a. OPENNESS FACTOR: 3%

b. FIRE-TEST RESPONSE CHARACTERISTICS: COMPLY WITH NFPA 701-99 4. ACCESSORIES: a. FASCIA: FURNISH CONTINUOUS REMOVABLE EXTRUDED ALUMINUM FASCIA TO FULLY CONCEAL BRACKETS, SHADE ROLLER, AND FABRIC ON THE TUBE THAT ATTACHES TO SHADE MOUNTING BRACKETS WITHOUT THE USE OF ADHESIVES, MAGNETIC STRIPS OR EXPOSED FASTENERS. PROVIDE END CAPS WHERE WHERE MOUNTING CONDITIONS EXPOSE OUTSIDE OF ROLLER SHADE BRACKETS.

AND STAIN RESISTANT FABRIC CONTAINING PVC, POLYESTER, OR VINYL RANGING FROM 6.00

E. INSTALLATION: FURNISH AND INSTALL SHADES ON ALL EXTERIOR GLASS EXCEPT LOBBY AND VESTIBULE GLASS, UNLESS NOTED OTHERWISE. 1. INSTALL SHADES AFTER FINISH WORK IS COMPLETE AND AMBIENT TEMPERATURE AND HUMIDITY ARE AT LEVELS INTENDED FOR OCCUPANCY, EXCEPT AT TWO LOCATIONS WHERE BLINDS WILL

BE CONCEALED WITHIN FURRING. 2. ADJUST AND BALANCE SHADES TO OPERATE SMOOTHLY, EASILY, SAFELY, AND FREE FROM BINDING THROUGH ENTIRE OPERATIONAL RANGE. FABRIC SHALL HANG STRAIGHT WITHOUT

CURLING OR RAVELING AND SHALL NOT SHIFT MORE THAN 1/8" IN EITHER DIRECTION PER 8" OF SHADE HEIGHT DUE TO WARP DISTORTION OR WEAVE DESIGN.

3. CLEAN SURFACES JUST PRIOR TO OCCUPANCY

DIVISION 13 - SPECIAL CONSTRUCTION A. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF FIRE ALARM SYSTEMS. B. HORN/STROBE DEVICES: HORN/STROBE DEVICES SHALL BE "WHITE" AND SHALL BE CEILING MOUNTED

13.2 FIRE SUPPRESSION SYSTEMS A. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF FIRE SUPPRESSION SYSTEMS B. SUBMITTALS: SHOP DRAWINGS INDICATING LAYOUT AND PROPOSED HEIGHTS OF PIPING AND HEADS,

TO MAXIMUM EXTENT FEASIBLE; WALL-MOUNTED WHERE NECESSARY.

REQUIRED NUMBER OF SETS TO AUTHORITIES HAVING JURISDICTION FOR REVIEW, COMMENT, AND C. SPRINKLER HEADS AND ESCUTCHEONS: IN SUSPENDED ACOUSTICAL TILE CEILINGS, SPRINKLER HEADS SHALL BE PENDANT SEMI-RECESSED CHROME PLATED WITH CHROME PLATED ESCUTCHEONS. IN GYPSUM BOARD CEILINGS SPRINKLER HEADS SHALL BE CONCEALED WITH WHITE ENAMEL COVERS.

D. LAYOUT:SPRINKLER HEADS SHALL BE LAID OUT TO FALL IN "CENTER-OF-TILE" WHEN INSTALLED IN

SUSPENDED ACOUSTICAL TILE CEILINGS AND SHALL BE LAID OUT SYMMETRICALLY IN GYPSUM BOARD

DETAILED TO BE INSTALLED ON EXTERIOR WALLS ABOVE CEILINGS, ALL RETURN AIR MUST BE DUCTED.

AND PRODUCT DATA FOR VALVES, HEADS, AND ALARMS, INCLUDING CALCULATIONS. SUBMIT

DIVISION 15 - MECHANICAL 15.1 GENERAL A. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF MECHANICAL AND PLUMBING SYSTEMS.

B. IF ANY INTERSTITIAL SPACES WILL BE UTILIZED FOR RETURN AIR AND RIGID WALL INSULATION IS

"PLENUM RETURN IS PROHIBITED" DIVISION 16 - ELECTRICAL

A. CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF ELECTRICAL SYSTEMS. 16.2 WIRING DEVICES AND COVER PLATES:

DEVICE COLOR: WHITE THROUGHOUT, UNLESS NOTED OTHERWISE

DEVICE COVER PLATES: WHITE THROUGHOUT, UNLESS NOTED OTHERWISE.

1220 NW Main St Unit E Lee's Summit, MO 64086

Project No. 2024-032 04.26.24 Issued For: Permit Submittal Drawn By: F. Crubaugh Reviewed B

Matthew M. Unger - Architect

3315 N Oak Trafficway | Kansas City, MO 64116 816 | 888 | 7380 NP Studio North, LLC Missouri Certificate of Authorization No. A-2017040540 **DESIGN-BUILD**

BY GEN CONTRACTOR

BY GEN CONTRACTOR

BY GEN CONTRACTOR

BY GEN CONTRACTOR

CONTRACTOR FORGE CONSTRUCTION

FIRE PROTECTION

DESIGN-BUILD

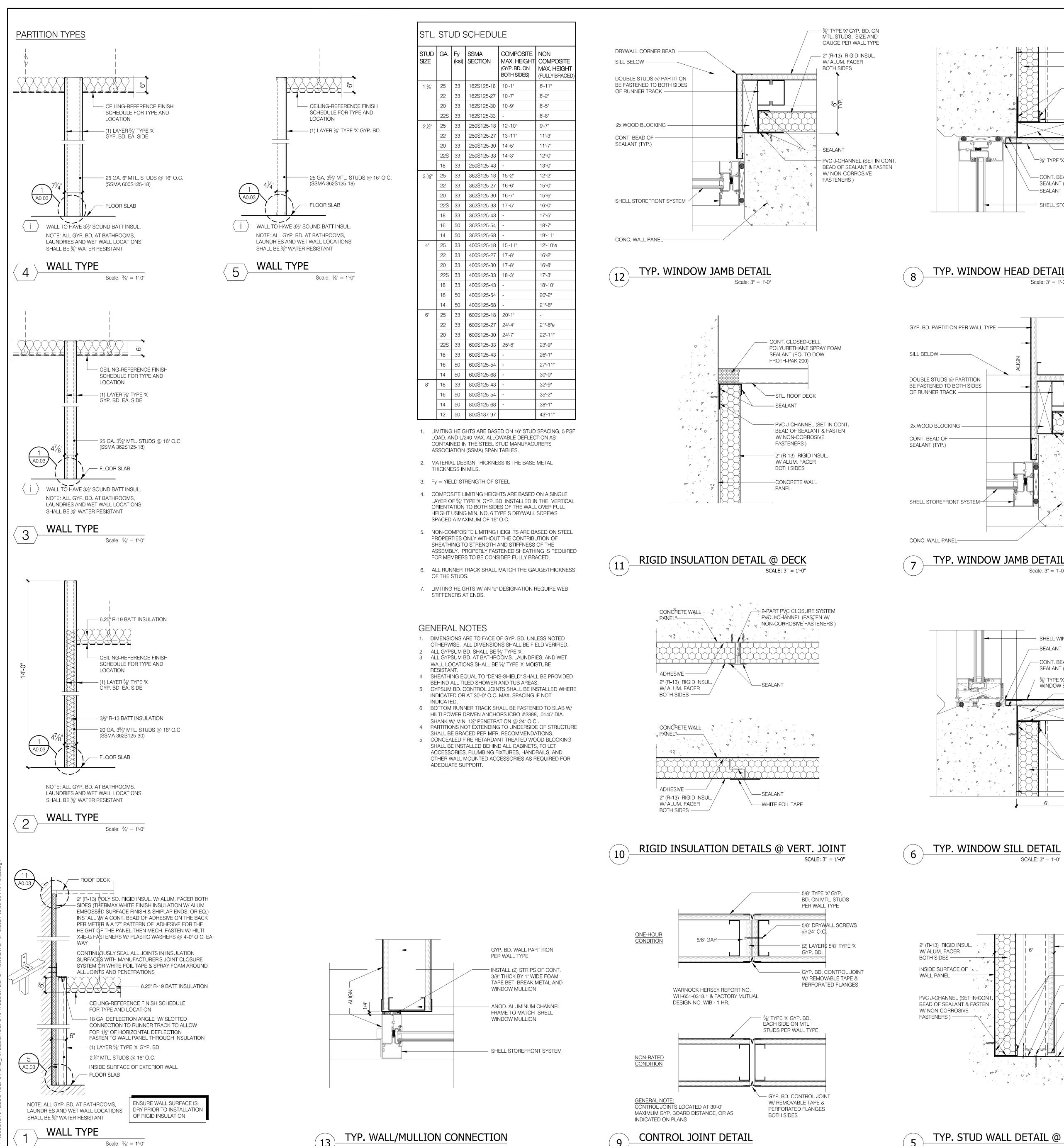
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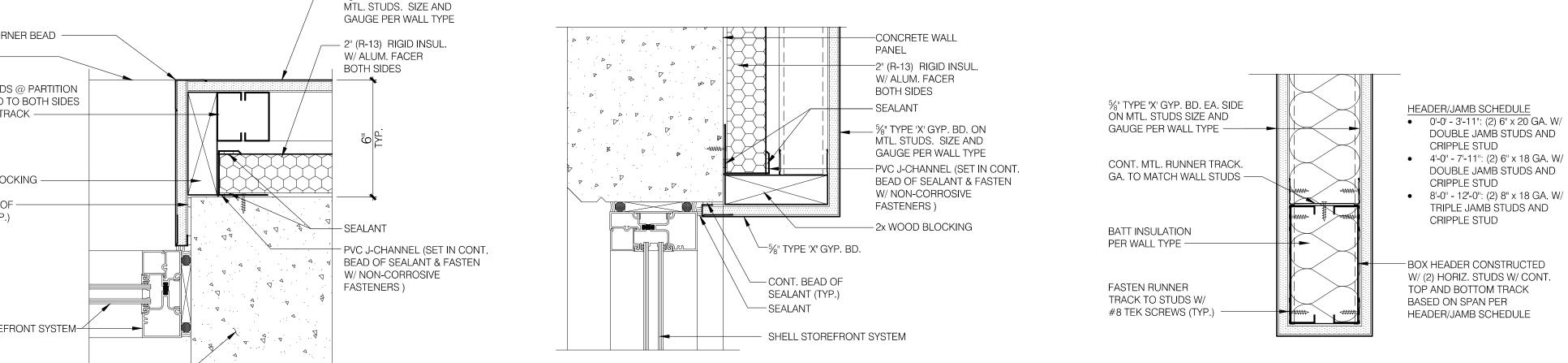
CONSTRUCTION As Noted on Plans Review

TENANT IMPROVEMENTS FOR:

No. Date Description SIN 6.24.24 CITY COMMENTS 6.24.24 <u>TENANT CHANGES</u>

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TYP. STUD WALL DETAIL @ BASE

₹ TYPE 'X' GYP. BD. ON

— CONT. SEALANT

PENETRATION.

FLOOR SLAB

— FLOOR SLAB

MTL. STUDS. SIZE AND

GAUGE PER WALL TYPE

- CONT. MTL. RUNNER TRACK.

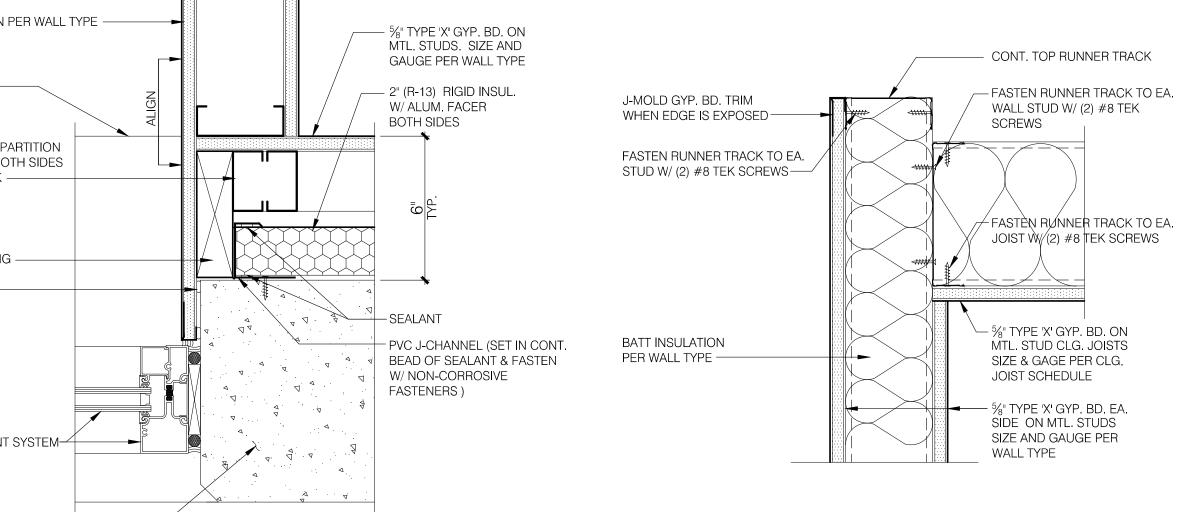
GA. TO MATCH WALL STUDS

- HILTI POWER DRIVEN ANCHORS

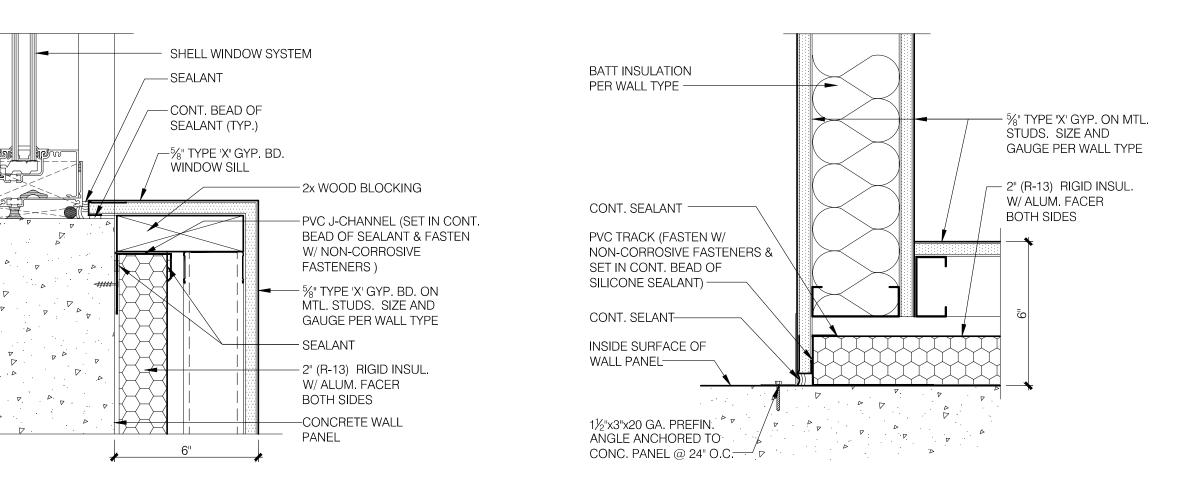
@ 24" O.C. ICBO #2388, .0145"

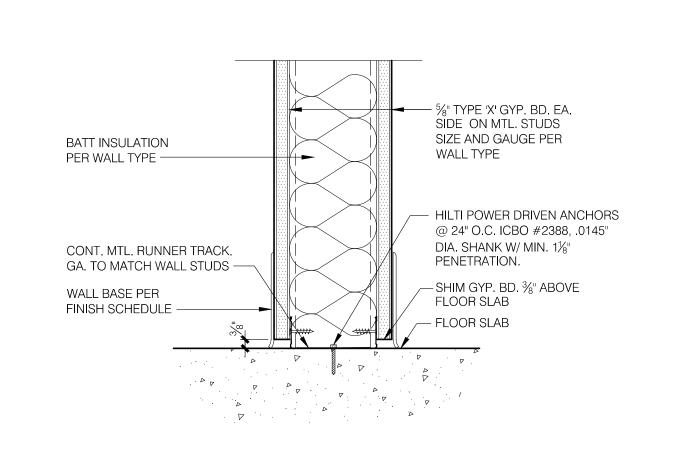
DIA. SHANK W/ MIN. 1 $\frac{1}{8}$ "

— SHIM GYP. BD. ¾" ABOVE



TYP. STUD WALL DETAIL @ GYP. BD. CEILING





TYP. STUD WALL DETAIL @ BASE

TENANT IMPROVEMENTS FOR:

H&R BLOCK

CONSTRUCTION As Noted on Plans Review

DESIGN-BUILD

DESIGN-BUILD

DESIGN-BUILD

DESIGN-BUILD

BY GEN CONTRACTOR

BY GEN CONTRACTOR

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BY GEN CONTRACTOR

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CONTRACTOR FORGE CONSTRUCTION

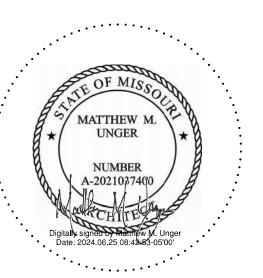
PLUMBING

ELECTRICAL

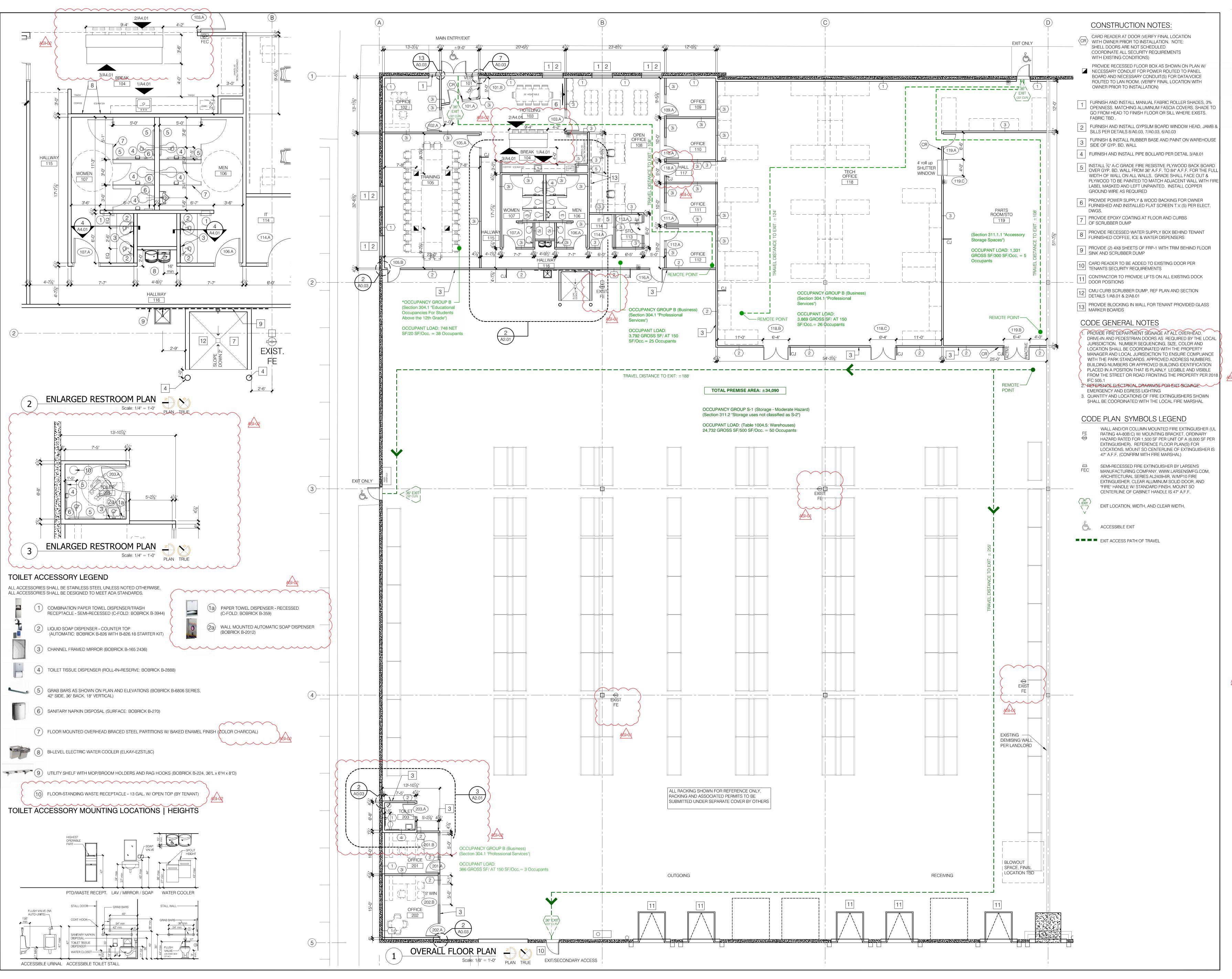
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Project No. 2024-032 04.26.24 Issued For: Permit Submittal Drawn By: F. Crubaugh Reviewed By Revisions No. Date Description

6.24.24 CITY COMMENTS 6.24.24 TENANT CHANGES



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CONSTRUCTION As Noted on Plans Review

3315 N Oak Trafficway | Kansas City, MO 64116 816 | 888 | 7380 NP Studio North, LLC Missouri Certificate of Authorization No. A-2017040540

> PLUMBING DESIGN-BUILD BY GEN CONTRACTOR DESIGN-BUILD BY GEN CONTRACTOR ELECTRICAL DESIGN-BUILD BY GEN CONTRACTOR FIRE PROTECTION DESIGN-BUILD BY GEN CONTRACTOR

CONTRACTOR FORGE CONSTRUCTION

TENANT IMPROVEMENTS FOR:

H&R BLOCK

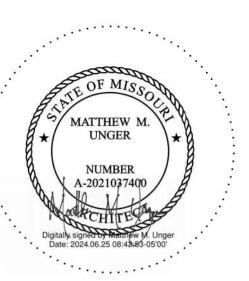
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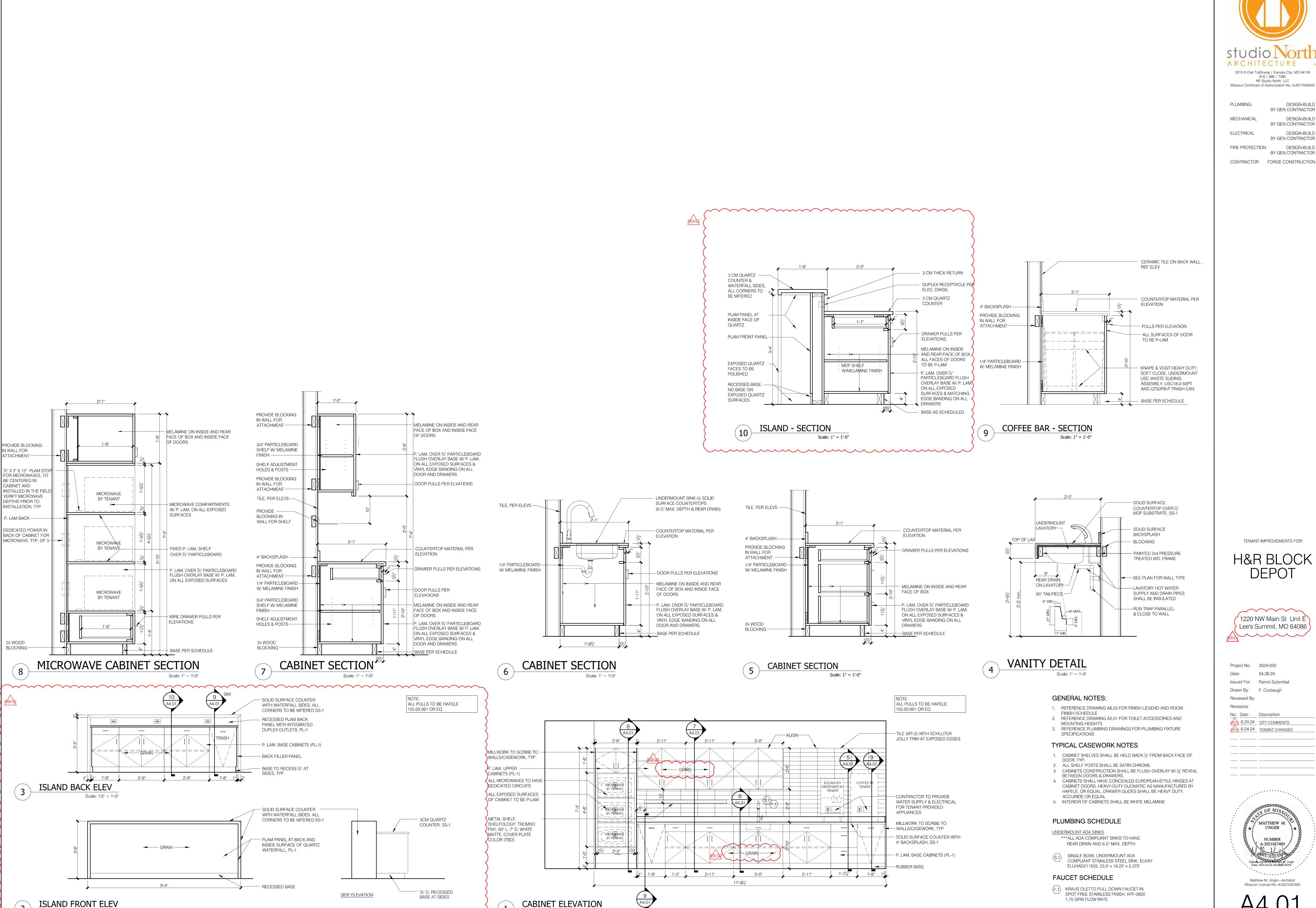
Revisions:

No. Date Description 6.24.24 CITY COMMENTS

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As Noted on Plans Review 3315 N Oak Trafficway | Kansas City, MO 64116 816 | 888 | 7380 NP Studio North, LLC

CONSTRUCTION

PLUMBING DESIGN-BUILD BY GEN CONTRACTOR DESIGN-BUILD BY GEN CONTRACTOR DESIGN-BUILD ELECTRICAL BY GEN CONTRACTOR

FIRE PROTECTION DESIGN-BUILD BY GEN CONTRACTOR CONTRACTOR FORGE CONSTRUCTION

TENANT IMPROVEMENTS FOR:

H&R BLOCK

~~~~ 1220 NW Main St Unit E Lee's Summit, MO 64086

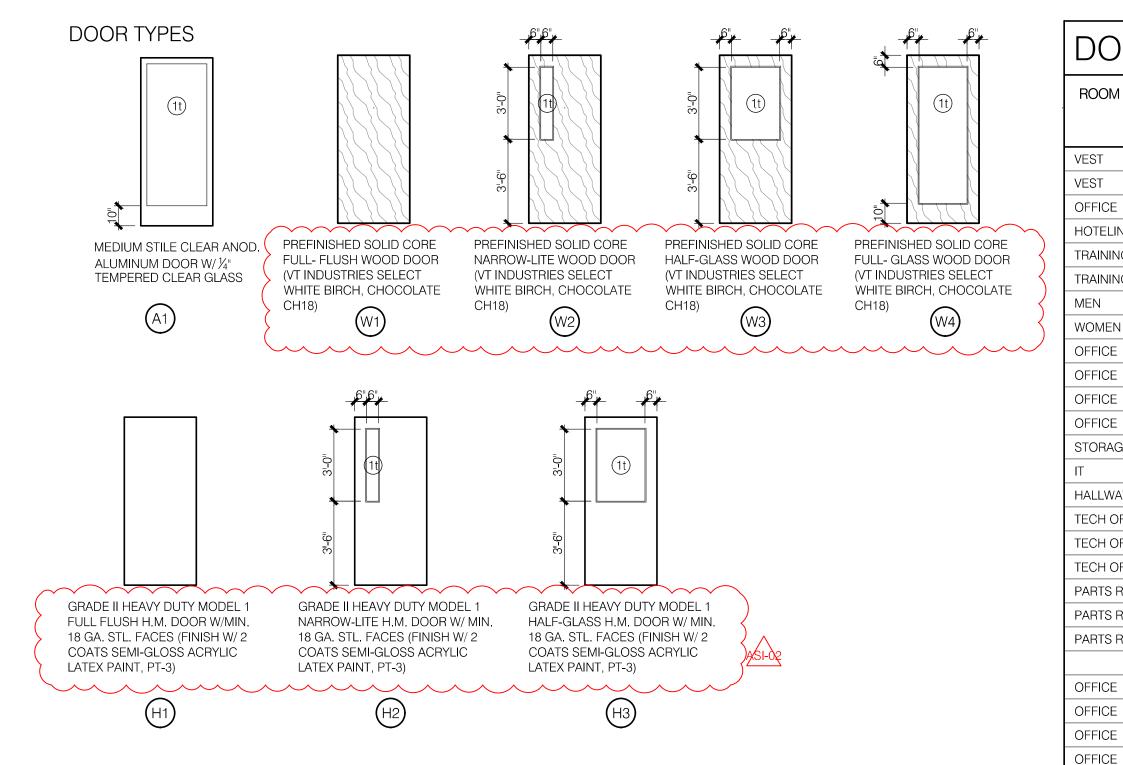
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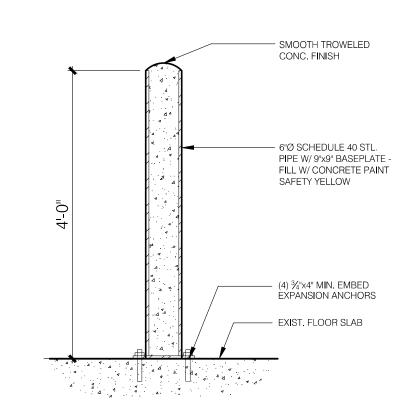
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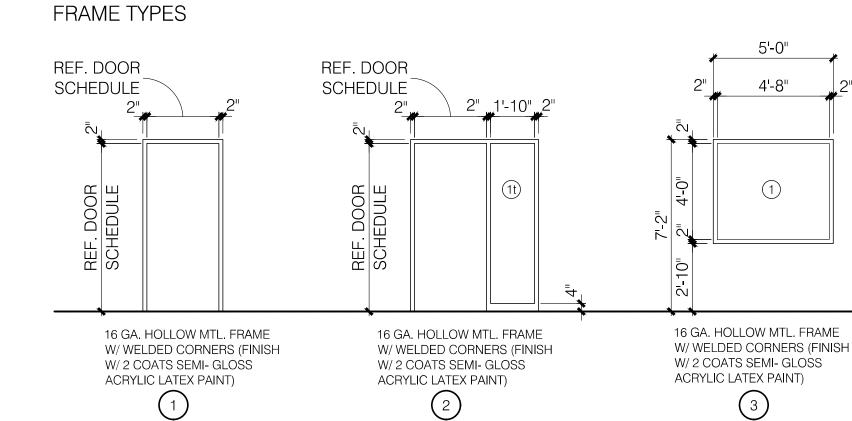
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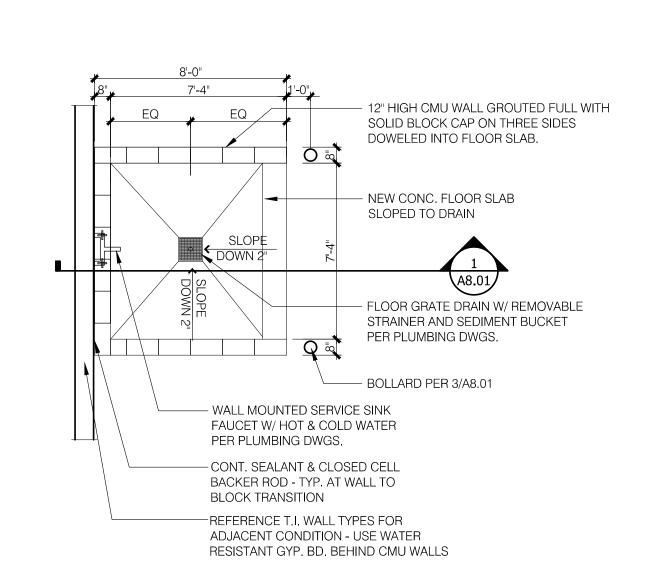
INTERIOR ELEVATIONS | DETAILS







# O" 2" SCHEDULE ELEV A ELEV B CLASS I CLEAR ANODIZED ALUMINUM DOOR FRAME



## HARDWARE SETS

| (AL) ALUMINUM DOORS |  |  |  |  |  |  |  |
|---------------------|--|--|--|--|--|--|--|
| SFT # ΔI 1          |  |  |  |  |  |  |  |

-CARD READER, PROXIMITY DETECTOR, KEYPAD -ELECTRIC STRIKE (FAIL SECURE FROM INGRESS, ALWAYS FREE TO EGRESS) -PUSH-TO-EXIT DEVICE -BATTERY BACKUP FOR ELECTRIC STRIKE, CARD READER AND PUSH-TO-EXIT

## (LA) LATCHSETS

| SEI # LA.1 | (INTERIOR SINGLE W/ LATCH)    |
|------------|-------------------------------|
| -HINGES    | ("HAGER" BB1279 4½ x4½)       |
| -LATCHSET  | ("SCHLAGE" ND-SERIES GRADE 1) |
| -WALL STOP | ("HAGER" 236 W)               |
| -SILENCERS | ("HAGER" 307D)                |
|            |                               |

SET # LA.2 (INTERIOR SINGLE W/ LATCH & CLOSER) ("HAGER" BB1279 4½ x4½) -LATCHSET ("SCHLAGE" ND-SERIES GRADE 1) -CLOSER ("LCN" 4000 SERIES) ("HAGER" 236 W) -WALL STOP -SILENCERS ("HAGER" 307D)

## (PP) PUSH/PULLS

| SET # PP.1<br>-HINGES<br>-PUSH/PULL | (INTERIOR SINGLE PUSH/PULL - TOILET ROOMS) $ {\rm ("HAGER"~BB1279~41\!\!/_2~x41\!\!/_2)} \\ {\rm ("HAGER"~30S/33E~4x16)} $ |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| -CLOSER                             | ("LCN" 4000 SERIES)                                                                                                        |
| -KICKPLATE                          | ("HAGER" 190S 8"x34")                                                                                                      |
| -WALL STOP                          | ("HAGER" 236 W)                                                                                                            |
| -SILENCERS                          | ("HAGER" 307D)                                                                                                             |

#### (LK) INTERIOR LOCKSETS SET # LK.1 (INTERIOR SINGLE W/ LOCK) -HINGES ("HA ("HAGER" BB1279 4½ x4½) -LOCKSET ("SCHLAGE" ND-SERIES GRADE 1) ("HAGER" 236 W)

-WALL STOP -SILENCERS ("HAGER" 307D) <u>SET # LK.2</u> ("HAGER" BB1279  $4\frac{1}{2} \times 4\frac{1}{2}$ ) -LOCKSET ("SCHLAGE" ND-SERIES GRADE 1) -CLOSER ("LCN" 4000 SERIES) -WALL STOP ("HAGER" 236 W) -SILENCERS ("HAGER" 307D) SET # LK.3 (INTERIOR SINGLE W/ ELECTRIC STRIKE)

("HAGER" BB1279 4½ x4½) -LOCKSET ("SCHLAGE" ND-SERIES GRADE 1) -CLOSER ("LCN" 4000 SERIES) -WALL STOP ("HAGER" 236 W) -SILENCERS ("HAGER" 307D) -CARD READER, PROXIMITY DETECTOR, OR KEYPAD

-BATTERY BACKUP FOR CARD READER AND ELECTRIC STRIKE

(BY OWNERS SECURITY VENDOR, CONTRACTOR TO PROVIDE CONDUIT AND PULL STRING TO FINAL LOCATION) -ELECTRIC STRIKE (FAIL SECURE FROM INGRESS SIDE ALWAYS FREE TO EGRESS, PROVIDED BY SECURITY VENDOR) 

## SET # LK.4 (INTERIOR PAIR W/ LOCK, CLOSERS & MANUAL FLUSH BOLTS)

**INACTIVE DOOR:** (1)-ELECTRIFIED HINGE (2)-STANDARD HINGES ("HAGER" BB1279  $4\frac{1}{2} \times 4\frac{1}{2}$ )

-MANUAL FLUSHBOLTS ("HAGER" 282D -12") -ELECTRIC STRIKE (FAIL SECURE FROM INGRESS SIDE ALWAYS FREE TO SECURITY VENDORS SPECIFICATION )

#### -SILENCERS ("HAGER" 307D) ACTIVE DOOR:

-HINGES ("HAGER" BB1279 4½ x4½) -LOCKSET ("SCHLAGE" ND-SERIES GRADE 1) -CLOSER ("LCN" 4040XP SERIES, WITH HOLD OPEN FUNCTION) -KICKPLATE ("HAGER" 190S 8"x34")

("HAGER" 236 W) -WALL STOP -SILENCERS ("HAGER" 307D)

(BY OWNERS SECURITY VENDOR, CONTRACTOR TO PROVIDE -CARD READER CONDUIT AND PULL STRING TO FINAL LOCATION)

#### DOOR AND WINDOW FRAME SCHEDULE HARDWARE RATING **ROOM NAME** FRAME DETAILS REMARKS DOOR/WINDOW SIZE (WxHx1 ¾" U.N.O.) | TYPE | MAT. | TYPE | MAT. | JAMB HEAD SILL LK.3 101.A 3'-0"x7'-0" 6/A8.02 7/A8.02 VEST WINDOW 8/A8.02 7/A8.02 SIM 101.B OFFICE 102.A 3'-0"x7'-0" | W1 | WD | 2 | HM | LK.1 1&3/A8.02 2&4/A8.02 HOTELING \* 103.A 3'-0"x7'-0" LA.1 W4 WD 1&3/A8.02 2&4/A8.02 TRAINING 105.A 3'-0"x7'-0" LA.1 W1 WD 1&3/A8.02 2&4/A8.02 TRAINING 105.B 3'-0"x7'-0" H2 HM 1A8.02 2/A8.02 LA.1 PP.1 106.A 3'-0"x7'-0" MEN W1 WD 1/A8.02 2/A8.02 WOMEN PP.1 107.A 3'-0"x7'-0" 1/A8.02 2/A8.02 W1 WD OFFICE 109.A 3'-0"x7'-0" LK.1 W1 WD 1&3/A8.02 2&4/A8.02 OFFICE 110.A 3'-0"x7'-0" W1 WD LK.1 1&3/A8.02 2&4/A8.02 OFFICE 111.A 3'-0"x7'-0" W1 WD 1&3/A8.02 2&4/A8.02 LK.1 OFFICE 112.A 3'-0"x7'-0" LK.1 W1 WD 1&3/A8.02 2&4/A8.02 STORAGE 113.A 3'-0"x7'-0" LK.1 W1 WD 1/A8.02 2/A8.02 3'-0"x7'-0" LK.1 114.A 1/A8.02 2/A8.02 W1 WD HALLWAY 116.A 3'-0"x7'-0" H3 HM 1A8.02 2/A8.02 LA.1 TECH OFFICE 118.A 3'-0"x7'-0" W3 WD 1/A8.02 2/A8.02 LA.1 PP.1 TECH OFFICE 118.B PAIR 3'-0"x7'-0" Н3 НМ 1/A8.02 2/A8.02 TECH OFFICE 118.C PAIR 3'-0"x7'-0" 1/A8.02 2/A8.02 PP.1 H3 HM PARTS ROOM/STO 119.A 3'-0"x7'-0" CR, 2 W1 WD 1/A8.02 2/A8.02 LK.3 PARTS ROOM/STO PAIR 3'-0"x7'-0" LK.4 CR, 1 119.B H3 HM 1/A8.02 2/A8.02 PARTS ROOM/STO 119.C WINDOW SHUTTER 11&5/A8.02 9/A8.02 9/A8.02 OFFICE 201.A 3'-0"x7'-0" 1/A8.02 2/A8.02 LK.1 H1 HM OFFICE WINDOW 3/A8.02 4/A8.02 201.B

H1 HM

H1 HM

Pull Side

1/A8.02

3/A8.02

1/A8.02

MANEUVERING CLEARANCES AT DOORS

NOTE: All doors in alcoves shall comply with the clearances for front approaches

24" preferred

2/A8.02

4/A8.02

2/A8.02

### REMARKS LEGEND

**TOILET** 

CR = CARD READER 1. DOOR CLOSERS TO HAVE HOLD OPEN OPTION 2. DOOR TO HAVE KICK PLATE

202.A

202.B

203.A

3'-0"x7'-0"

WINDOW

3'-0"x7'-0"

## **ABBREVIATIONS**

ALUMINUM CARD READER GLASS НМ HOLLOW METAL

MFR MANUFACTURER MHO MAGNETIC HOLD OPEN MAGNETIC LOCK

STEEL STL TRAFFIC IMPACT DOOR WD WOOD

## GLASS TYPE LEGEND

1) 1/4" CLEAR GLASS (1t) 1/4" CLEAR TEMPERED GLASS

(2t) 1/2" CLEAR TEMPERED GLASS

(3) INSULATED CLEAR GLASS

8t) INSULATED CLEAR TEMPERED GLASS

4) INSULATED TINTED GLASS

(4t) INSULATED TINTED TEMPERED GLASS

## GENERAL NOTES

1. ALL DOORS SHALL BE 1¾" THICK UNLESS NOTED

OTHERWISE. 2. ALL HARDWARE SHALL COMPLY WITH APPLICABLE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA)

3. ALL DOOR HARDWARE SHALL BE FINISH US26D OR EQUIVALENT.

4. ALL LATCHSETS AND LOCKSETS SHALL BE EQUIPPED WITH LEVER TYPE OPERATING TRIM.

6. CONTRACTOR'S HARDWARE CONSULTANT SHALL BE RESPONSIBLE FOR DETERMINING APPROPRIATE

5. ALL CLOSERS SHALL BE LOCATED ON ROOM SIDES

HARDWARE FUNCTION AND OPTIONS. 7. ALL DOORS SHALL BE EQUIPPED WITH

INTERCHANGEABLE CORES WITH EVEREST 29 S123

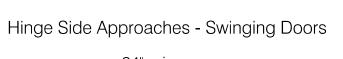
9. FLOOR STOP(S) SHALL BE FURNISHED WHERE

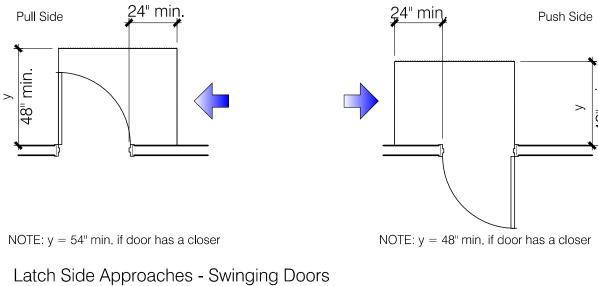
8. CONTRACTOR SHALL COORDINATE FINAL KEYING WITH OWNER/LANDLORD. ALL LOCKS SHALL BE MASTERKEYED TO PARK DEVELOPMENT STANDARD

ADJACENT WALL DOES NOT ACCOMMODATE WALL

# Pull Side NOTE: x = 36" min. if y = 60" x = 42" min. if y = 54"

Front Approaches - Swinging Doors





CONSTRUCTION As Noted on Plans Review

DESIGN-BUILD

DESIGN-BUILD BY GEN CONTRACTOR

DESIGN-BUILD

DESIGN-BUILD

BY GEN CONTRACTOR

BY GEN CONTRACTOR

BY GEN CONTRACTOR

3315 N Oak Trafficway | Kansas City, MO 64116

816 | 888 | 7380

Missouri Certificate of Authorization No. A-2017040540

CONTRACTOR FORGE CONSTRUCTION

NP Studio North, LLC

PLUMBING

ELECTRICAL

LK.1

LK.1

NOTE: x = 12" min. if door has both a closer and latch

NOTE: y = 48" min. if door

has both a closer and latch

Push Side

Push Side

Push Side

FIRE PROTECTION

H&R BLOCK

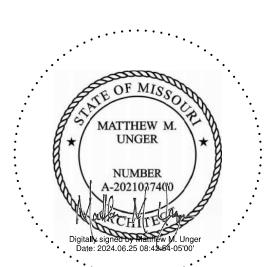
TENANT IMPROVEMENTS FOR:

 $^{\prime}$  1220 NW Main St $\,$  Unit E $\,$ Lee's Summit, MO 64086 

Project No. 2024-032 04.26.24 Issued For: Permit Submittal Drawn By: F. Crubaugh Reviewed By

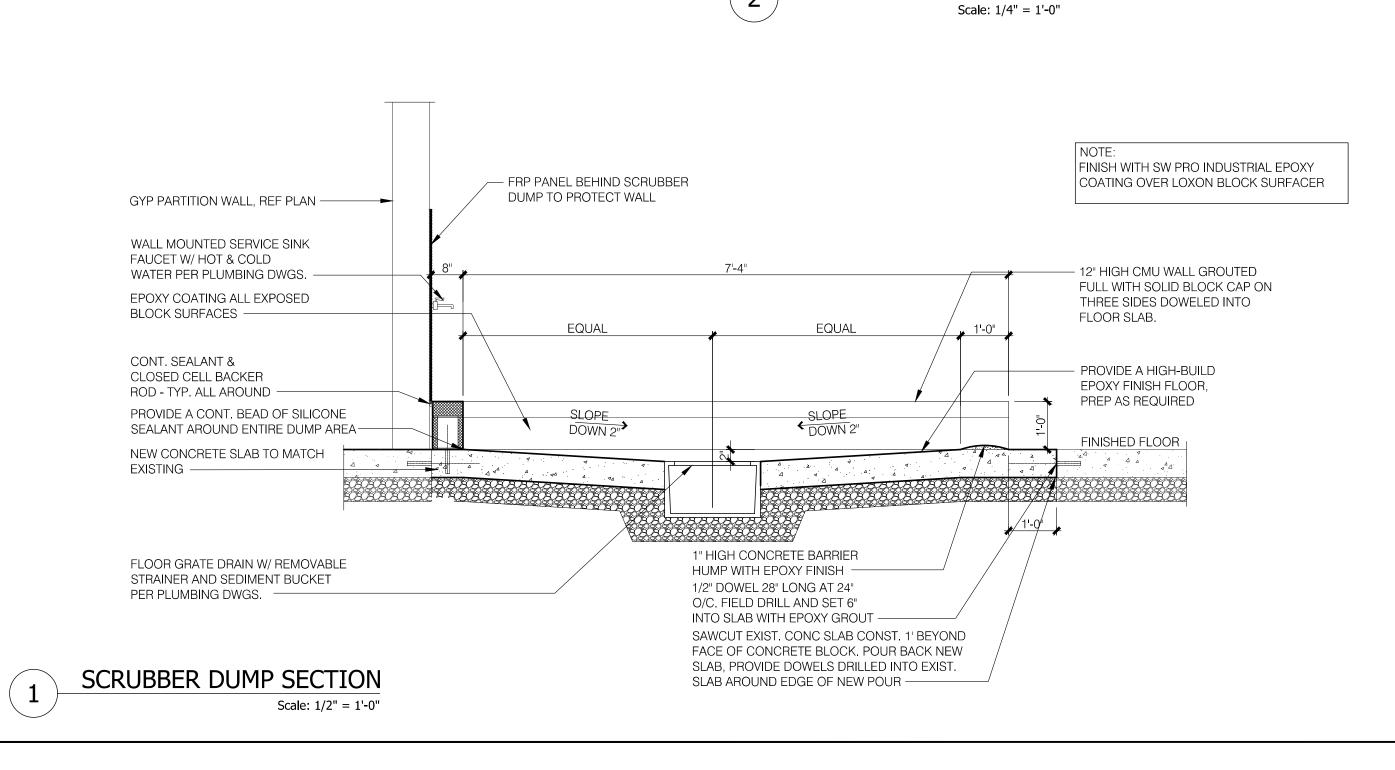
Revisions: No. Date Description 6.24.24 CITY COMMENTS

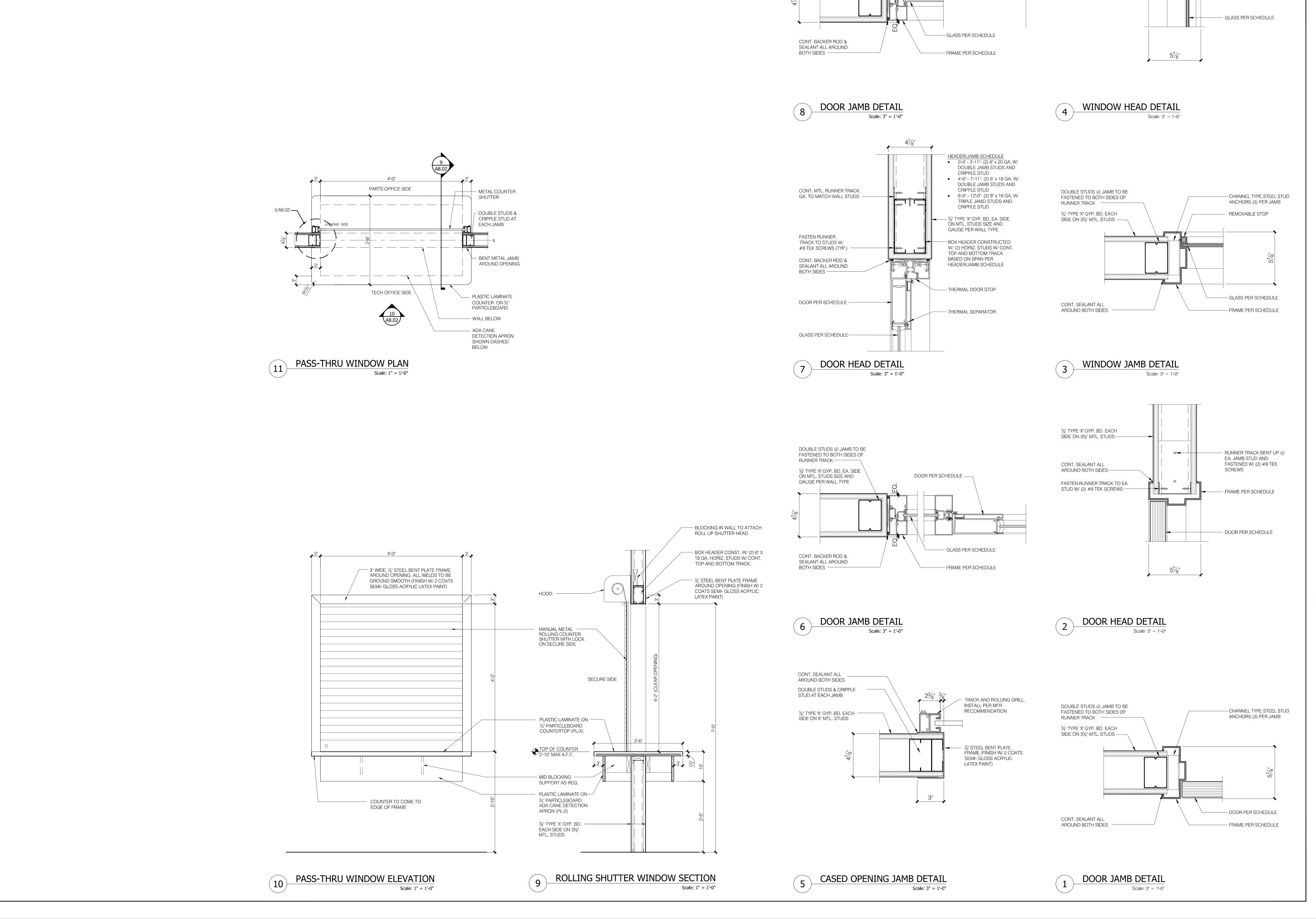
6.24.24 TENANT CHANGES



Matthew M. Unger - Architect Missouri License No. A-2021037400

DOOR & WINDOW SCHEDULE





CONSTRUCTION
As Noted on Plans Review - RUNNER TRACK BENT UP @ 3315 N Oak Trafficway | Kansas City, MO 64116 816 | 888 | 7380 NP Studio North, LLC Missouri Certificate of Authorization No. A-2017040540 PLUMBING DESIGN-BUILD

EA. JAMB STUD AND

SCREWS

FASTENED W/ (2) #8 TEK

FRAME PER SCHEDULE

- REMOVABLE STOP

5⁄8" TYPE 'X' GYP. BD. EACH SIDE ON 35/8" MTL. STUDS —

FASTEN RUNNER TRACK TO EA. STUD W/ (2) #8 TEK SCREWS -

CONT. SEALANT ALL AROUND BOTH SIDES—

DOUBLE STUDS @ JAMB TO BE

FASTENED TO BOTH SIDES OF

5⁄8" TYPE 'X' GYP. BD. EA. SIDE ON MTL. STUDS SIZE AND GAUGE PER WALL TYPE

RUNNER TRACK———

BY GEN CONTRACTOR DESIGN-BUILD BY GEN CONTRACTOR ELECTRICAL DESIGN-BUILD BY GEN CONTRACTOR FIRE PROTECTION **DESIGN-BUILD** BY GEN CONTRACTOR CONTRACTOR FORGE CONSTRUCTION

TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT

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1220 NW Main St Unit E

Lee's Summit, MO 64086

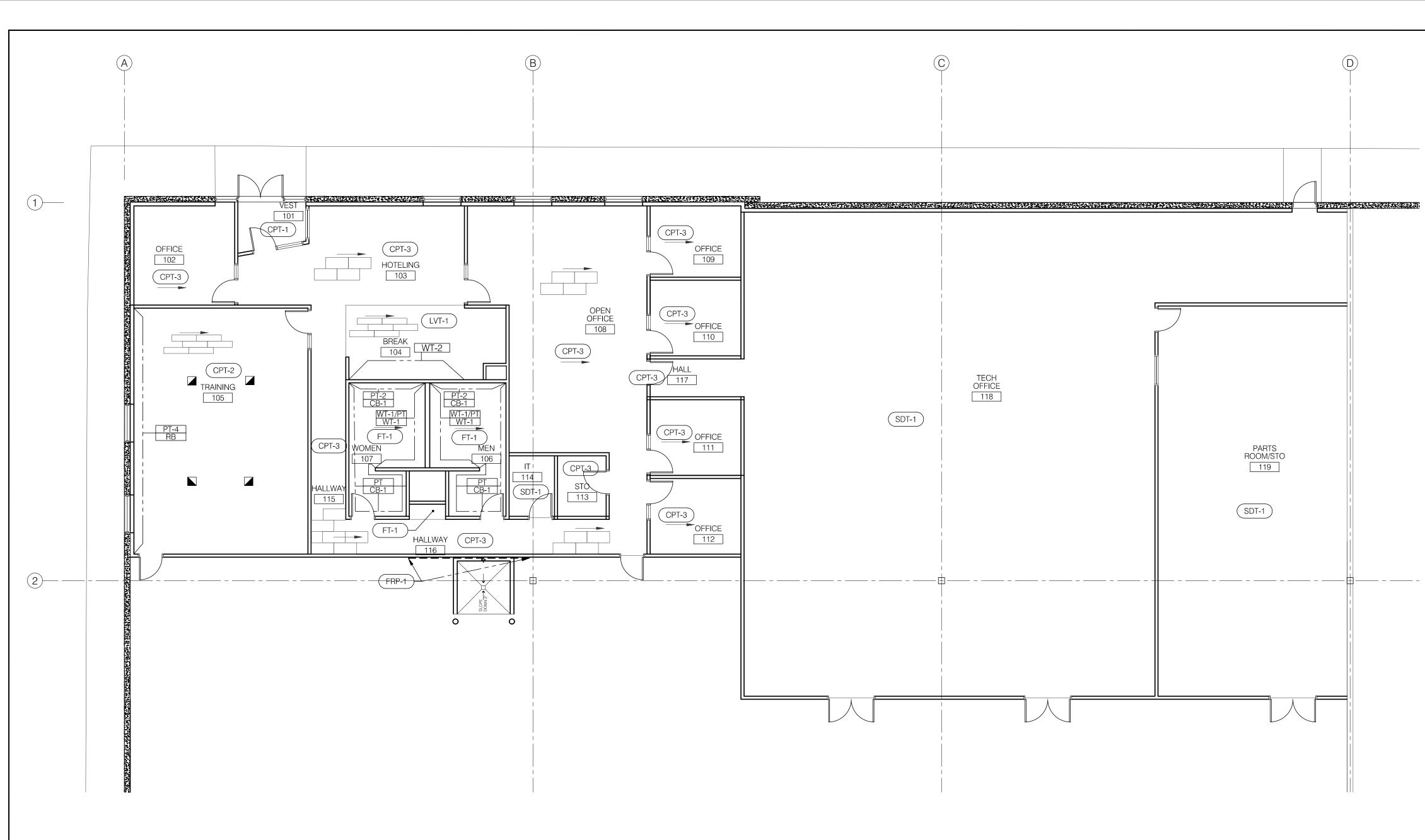
Project No. 2024-032 04.26.24 Issued For: Permit Submittal

Drawn By: F. Crubaugh Reviewed By: Revisions: No. Date Description 6.24.24 CITY COMMENTS

6.24.24 TENANT CHANGES

Matthew M. Unger - Architect Missouri License No. A-2021037400

DOOR & WINDOW DETAILS





ROOM FINISH SCHEDULE

ROOM		ROOM FLOOR BASE					WALLS				CEILING			REMARKS
NO.	NAME		N	Е	S	W	N	E	S	W	MAT.	FIN.	HGT.	
101	VEST	CPT-1	RB	RB	RB	RB	PT	PT	PT	PT	GB-1			
102	OFFICE	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
103	HOTELING	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
104	BREAK	LVT-1	RB	RB	RB	RB	PT	PT	PT	WT-2/PT	GB-1			2
105	TRAINING	CPT-2	RB	RB	RB	RB	PT-4	PT	PT	PT	SAT-1			
106	MEN	FT-1	WT-1/CB	СВ	СВ	WT-1/CB	WT-1/PT	PT-2	PT	WT-1/PT	GB-1			1, 3
107	WOMEN	FT-1	СВ	СВ	WT-1/CB	WT-1/CB	PT	PT-2	WT-1/PT	WT-1/PT	GB-1			1, 3
108	OPEN OFFICE	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
109	OFFICE	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
110	OFFICE	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
111	OFFICE	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
112	OFFICE	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
113	STORAGE	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
114	IT	SDT-1	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
115	HALLWAY	CPT-3	RB	-	RB	RB	PT	-	PT	PT	SAT-1			
116	HALLWAY	CPT-3	-	RB	_	RB	-	PT	-	PT	SAT-1			
117	HALL	CPT-3	-	RB	RB	RB	-	PT	PT	PT	SAT-1			
118	TECH OFFICE	SDT-1	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
119	PARTS ROOM/STO	SDT-1	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
201	OFFICE	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1			
202	OFFICE	CPT-3	RB	RB	RB	RB	PT	PT	PT	PT	SAT-1		\sim	\sim
203	TOILET	FT-1	СВ	СВ	СВ	СВ	FRP/PT4	FRP/PT4	FRP/PT4	FRP/PT4	GB-1			4

1. CB-1 TO OCCUR ON WALLS WITHOUT WT-1 2. REFERENCE SHEET A4.01 FOR LOCATION OF TILE AT MILLWORK ELEVATION

CPT-3: PROVIDED BY TENANT AND INSTALLED BY CONTRACTOR

3. REFERENCE FINISH PLAN FOR LOCATION OF FINISHES 4. FRP TO SIT ON TOP OF TILE BASE 48", PAINT ABOVE

FINISH SCHEDULE LEGEND

FLOOR FINISHES

CPT: (MODULAR CARPET TILE - INSTALL PER MFR'S INSTRUCTIONS) CPT-1: MFR: PATCRAFT, PATTERN: MOVING, COLOR: STROLL, INSTALLATION PATTERN: BRICK

REP: SARAH JENKINS, 913.237.7586 CPT-2: MFR: INTERFACE, PATTERN: WW870, COLOR: CHARCOAL WEFT, INSTALLATION PATTERN: ASHLAR REP: KATIE ALLEN, 816.673.5771

(5mm LUXURY VINYL TILE) **NOTE NO FLOORING TRANSITIONS REQUIRED BETWEEN 5mm LVT AND CARPET TILE** LVT-1: PROVIDED BY TENANT AND INSTALLED BY CONTRACTOR)

SDT: $(12"x12"x\frac{1}{8}" STATIC DISSIPATIVE TILE)$

SDT-1: MFR: ROPPE EDS, STYLE: STATIC DISSIPATIVE, COLOR: 750 CUMULUS WHITE, INSTALLATION PATTERN: RANDOM

FT: (FLOOR PORCELAIN TILE W/1/8" MAX. STAIN RESISTANT GROUT) PROVIDE CRACK BRIDGING MEMBRANE OVER ALL CONTROL JOINTS AND COLD JOINT IN SLAB FT-1: MFR: FLORIDA TILE, STYLE: EAST VILLAGE, COLOR: E. HOUSTON WARM GRAY, SIZE: 12X24, INSTALLATION PATTERN: RUNNING BOND, GROUT COLOR: TEC 939 MIST , REP: MARIANA EASTHAM, 608.982.7946

BASE FINISHES

RB: (VULCANIZED RUBBER WALL BASE) RB-1: SIZE: 4", STYLE: COVE, MFR: ROPPE:, COLOR: 193 BLACK BROWN

CB: (CERAMIC TILE W/ $\frac{1}{8}$) MAX. STAIN RESISTANT GROUT JOINTS (SEE MATCHING FLOOR TILE FOR GROUT SELECTION) CB-1: 6" CUT TILE TO MATCH FT-1, SCHLUTER JOLLY AT EXPOSED EDGES, CUT BASE TO OCCUR WHERE WALL TILE DOES NOT EXIST N: (NO FINISH)

WALL FINISHES

PT: (ACRYLIC LATEX PAINT - 2 FINISH COATS OVER PRIMER) ALL ACCENT PAINT LOCATIONS TBD PT-1: MFR: SHERWIN WILLIAMS, COLOR: SW7028 INCRÉDIBLE WHITE, SHEEN: EGGSHELL (FIELD COLOR) PT-2: MFR: SHERWIN WILLIAMS, COLOR: SW7624 SLATE TILE, SHEEN: EGGSHELL (BLUE ACCENT COLOR) PT-3: MFR: SHERWIN WILLIAMS, COLOR: SW7048 URBANE BRONZE, SHEEN: SEMI-GLOSS (HM DOOR AND FRAMES) PT-4: MFR: SHERWIN WILLIAMS, COLOR: SW6198 SENSIBLE HUE, SHEEN: EGGSHELL (GRAY ACCENT COLOR)

FRP: (FIBERGLASS REINFORCED PLASTIC WALL PANELS W/ STANDARD BATTENS, EDGE AND CORNER TRIM) FRP-1: MFR: MARLITE, COLOR: WHITE, HEIGHT: 48" (WIDTH OF SHEET)

WT: (WALL TILE W/1/8" MAX. STAIN RESISTANT GROUT JOINTS (SEE MATCHING FLOOR TILE FOR GROUT SELECTION) WT-1: MFR: LANDMARK, STYLE: JOURNEY, COLOR: NATURAL IVORY, SIZE: 8X40, INSTALLATION PATTERN: STACKED, GROUT COLOR: MAPEI 93 WARM GRAY , HEIGHT: 72", WALL TILE TO START AT FLOOR TILE, EXPOSED TOP AND CORNERS HAVE SCHLUTER JOLLY TRIM WT-2: MFR: TILEBAR, STYLE: CAVALLO, COLOR: MONACO GREEN, SIZE: 3X18, INSTALLATION PATTERN: STACKED, GROUT COLOR: LATICRETE 87 STORMY GREY, EXPOSED TOP AND CORNERS HAVE SCHLUTER JOLLY TRIM

N: (NO FINISH)

REP: ELIZABETH LESTER, 816-519-8622

CEILING FINISHES

SAT: (ACOUSTICAL CEILING TILE IN SUSPENDED GRID)

SAT-1: SIZE: 24"x24", MFR: USG, STYLE: ORION 75, GRID: 9/16" HEAVY DUTY WHITE

GB: (GYPSUM WALLBOARD W/ FLAT FINISH ACRYLIC LATEX PAINT - 2 FINISH COATS OVER PRIMER) GB-1: MFR: SHERWIN WILLIAMS, COLOR: SW 7005 "PURE WHITE", SHEEN: FLAT

N: (NO FINISH)

CASEWORK FINISHES

PL: (PLASTIC LAMINATE)

PL-1: (CABINET FRONTS), MFR: ARBORITE, COLOR: W490 CW NATURAL ARCADIAN OAK PL-2: (PASS TROUGH COUNTER), MFR: WILSONART, COLOR: 5013K-19 MUSHROOM

SS: (SOLID SURFACE)

SS-1: (COUNTERTOPS), TYPE: QUARTZ, MFR: WILSONART, COLOR: Q4063 VICENTIA

GENERAL FINISH NOTES

1. PAINT COLOR FOR HOLLOW MTL, DOORS AND FRAMES PT-TBD (SEMII-GLOSS SHEEN) 2. PROVIDE RUBBER TRANSITION STRIPS AT LOCATIONS WHERE DISSIMILAR FLOOR MATERIALS MEET 3. PROVIDE ALUMINUM "SCHLUTER" TRANSITION STRIPS WHERE CERAMIC TILE MEETS DISSIMILAR FLOOR MATERIALS 4. PROVIDE CONTINUOUS 6" BATT INSULATION ABOVE ALL CEILINGS

5. FURNISH AND INSTALL RUBBER WALL BASE (RB-1) AND PAINT (PT-TBD) ON WAREHOUSE FACE OF ALL GYP. BD. WALLS

TENANT IMPROVEMENTS FOR:

CONSTRUCTION
As Noted on Plans Review

DESIGN-BUILD BY GEN CONTRACTOR

DESIGN-BUILD BY GEN CONTRACTOR

BY GEN CONTRACTOR

BY GEN CONTRACTOR

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CONTRACTOR FORGE CONSTRUCTION

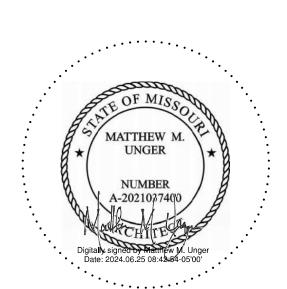
PLUMBING

~~~~ ′ 1220 NW Main St Unit E` > Lee's Summit, MO 64086 

Project No. 2024-032 04.26.24 Issued For: Permit Submittal Drawn By: F. Crubaugh Reviewed By:

Revisions:

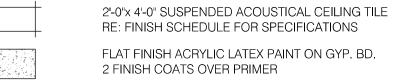
No. Date Description 6.24.24 CITY COMMENTS 6.24.24 TENANT CHANGES



\_\_\_\_

## REFLECTED CEILING PLAN LEGEND

- 1. ALL CEILING GRID SHALL BE SUPPORTED FROM STRUCTURAL MEMBERS. SUPPORT SHALL NOT BE FROM METAL FLOOR OR ROOF DECK.
- 2. ALL MECHANICAL ELEMENTS SHALL BE INDEPENDENTLY SUPPORTED FROM STRUCTURAL MEMBERS AND NO BUILDING ELEMENTS SHALL BE CONNECTED
- TO OR SUSPENDED FROM DUCTWORK. 3. IF ANY INTERSTITIAL SPACES WILL BE UTILIZED FOR RETURN AIR AND RIGID WALL INSULATION IS DETAILED TO BE INSTALLED ON EXTERIOR WALLS ABOVE CEILINGS, ALL RETURN AIR MUST BE DUCTED. "PLENUM RETURN IS PROHIBITED"







RE: ELECTRICAL DWGS. FOR SPECIFICATIONS DECORATIVE ACOUSTIC PENDANT MFR: LIGHTART, 22" ACOUSTIC EMPIRE SHADE, COLORS OUTSIDE SHADE: DUNE, INSIDE SHADE ZINC, WHITE CANOPY, CORD AND FRAME, 4000k, DIMMABLE, 800 LUMEN, 54° FLOOD REP: AMANDA SCOTT, CONVERGENCE, 781-572-7981 RE: ELECTRICAL DWGS. FOR SPECIFICATIONS

TENANT IMPROVEMENTS FOR:

# H&R BLOCK DEPOT

CONSTRUCTION
As Noted on Plans Review

DESIGN-BUILD

**DESIGN-BUILD** 

**DESIGN-BUILD** 

BY GEN CONTRACTOR

BY GEN CONTRACTOR

BY GEN CONTRACTOR

BY GEN CONTRACTOR

3315 N Oak Trafficway | Kansas City, MO 64116 816 | 888 | 7380 NP Studio North, LLC

Missouri Certificate of Authorization No. A-2017040540

FIRE PROTECTION DESIGN-BUILD

CONTRACTOR FORGE CONSTRUCTION

PLUMBING

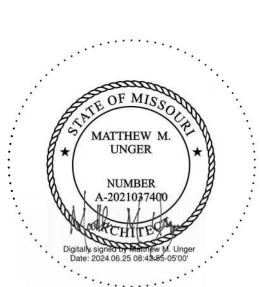
ELECTRICAL

Lee's Summit, MO 64086 <u>ASI-01</u>

Issued For: Permit Submittal Drawn By: F. Crubaugh

No. Date Description

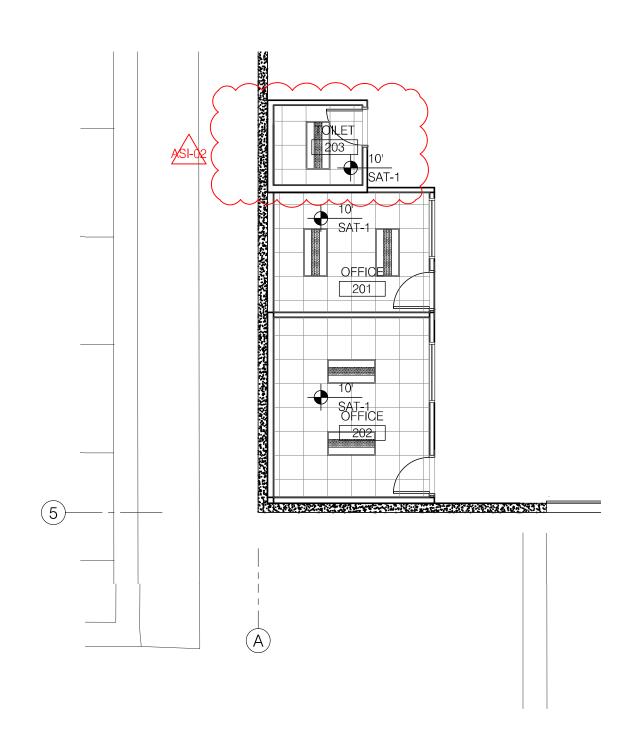
6.24.24 CITY COMMENTS 6.24.24 TENANT CHANGES



REFLECTED CEILING PLAN

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

PLAN TRUE



|                | DESIGN PARAMET                                         | <u>TERS</u>                            |
|----------------|--------------------------------------------------------|----------------------------------------|
| BU             | UILDING CODE                                           | 2018 INTERNATIONAL BUILDING CODE (IBC) |
| 00             | CCUPANCY CATEGORY                                      | 1                                      |
| LIV            | VE LOADS                                               |                                        |
| A.             | . ROOF — NON—REDUCIBLE                                 | 20 PSF                                 |
| В.             | . SLAB-ON-GRADE                                        | 350 PSF                                |
| RC             | OOF SNOW LOAD                                          |                                        |
| A.             | . GROUND SNOW LOAD, Pg                                 | 20 PSF                                 |
| В.             | . FLAT ROOF SNOW LOAD, Pf                              | 20 PSF                                 |
| C.             | . SNOW EXPOSURE FACTOR, Ce                             | 1.0                                    |
| D              | SNOW LOAD IMPORTANCE FACTOR, I                         | 1.0                                    |
| E.             | THERMAL FACTOR, Ct (BUILDING)                          | 1.0                                    |
| F.             | SNOW DRIFT                                             | PER REFERENCED CODE                    |
| WI             | IND DESIGN DATA                                        |                                        |
| A.             | · ULTIMATE WIND SPEED (3 SECOND GUST), V               | 109 MPH                                |
| В.             | ·                                                      | 1.00                                   |
| C.             |                                                        |                                        |
| D.             |                                                        | +/- 0.18                               |
| E.             |                                                        | 17 3.16                                |
| L.             |                                                        |                                        |
|                | 1) WALLS (500 SQUARE FEET EFFECTIVE WIND AREA)         | 07.7.00                                |
|                | END ZONES                                              | 23.7 PSF                               |
|                | INTERIOR ZONES                                         | 23.7 PSF                               |
|                | 2) ROOF (10 SQUARE FEET EFFECTIVE WIND AREA FOR DECK A | ·                                      |
|                | CORNER ZONES                                           | 89.1 PSF                               |
|                | END ZONES                                              | 65.4 PSF                               |
|                | INTERIOR ZONE 1                                        | 49.6 PSF                               |
|                | INTERIOR ZONE 2                                        | 28.5 PSF                               |
| F.             | WIDTH OF END ZONES, a                                  | 18.9 FI                                |
| EA             | ARTHQUAKE DESIGN DATA                                  |                                        |
| A.             | . SEISMIC IMPORTANCE FACTOR, I                         | 1.0                                    |
| В.             | . MAPPED SPECTRAL RESPONSE ACCELERATION, Ss            | 9.9 %                                  |
| C.             | . MAPPED SPECTRAL RESPONSE ACCELERATION, S1            | 6.8 %                                  |
| D.             | . SITE CLASS                                           |                                        |
| E.             | SPECTRAL RESPONSE COEFFICIENT, Sds                     | 0.086                                  |
| F.             | SPECTRAL RESPONSE COEFFICIENT, Sd1                     | 0.068                                  |
| G.             | . SEISMIC DESIGN CATEGORY                              | E                                      |
| Н.             | . STRUCTURAL SYSTEM                                    |                                        |
|                | 1) BASIC SEISMIC FORCE-RESISTING SYSTEM TYPE           | A. BEARING WALL SYSTEMS                |
|                | 2) VERTICAL ELEMENT TYPE                               | 2) ORDINARY PRECAST SHEAR WALLS        |
|                | 3) DESIGN BASE SHEAR, LRFD                             | 0.029 W                                |
|                | <b>,</b>                                               | 0.029                                  |
|                | •                                                      | 0.028                                  |
|                | 5) CONTROLLING RESPONSE MODIFICATION FACTOR, R         |                                        |
| J.             |                                                        | EQUIVALENT LATERAL FORCE               |
|                | EAD LOAD                                               | <u></u>                                |
| Α.             |                                                        | 0.3 PSF                                |
| В.             |                                                        | 0.7 PSF                                |
|                |                                                        | 2.0 PSF                                |
| C.             |                                                        | 3.0 PSF                                |
| C.<br>D.       | . SPRINKLERS                                           | 2.0 PSF                                |
| D.<br>E.       |                                                        |                                        |
| D.             | STEEL JOISTS                                           | 2.0 PSF                                |
| D.<br>E.       | STEEL JOISTS                                           | 2.0 PSF<br>2.0 PSF                     |
| D.<br>E.<br>F. | STEEL JOISTS . STEEL GIRDERS                           | 2.0 PSF                                |

## GENERAL NOTES

#### <u>GENERA</u>

- 1. STRUCTURAL ELEMENTS ARE NON-SELF SUPPORTING AND REQUIRE INTERACTION WITH OTHER ELEMENTS FOR STABILITY AND RESISTANCE TO LATERAL FORCES. FRAMING AND WALLS SHALL BE TEMPORARILY BRACED BY THE CONTRACTOR UNTIL PERMANENT BRACING, ROOF DECKS, AND WALLS HAVE BEEN INSTALLED AND CONNECTIONS BETWEEN THESE ELEMENTS HAVE BEEN MADE.
- 2. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION, UNLESS NOTED OTHERWISE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATION OF CONSTRUCTION AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO.
- 3. THE SIZE AND LOCATION OF EQUIPMENT PADS AND PENETRATIONS THROUGH THE STRUCTURE FOR MECHANICAL, ELECTRICAL, AND PLUMBING WORK SHALL BE VERIFIED BY THE CONTRACTOR. PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE STRUCTURAL ENGINEER. REFER TO MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR OPENING LOCATIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS.
- 4. USE ONLY DIMENSIONS INDICATED ON THE DRAWINGS. DO NOT SCALE DRAWINGS OR USE ANY DIMENSIONS TAKEN FROM ELECTRONIC DRAWING FILES. CONTRACTOR SHALL COORDINATE IN-PLACE DIMENSIONS BASED ON TOLERANCES OF THE RESPECTIVE TRADES.
- 5. ASSUME EQUAL SPACING IF NOT INDICATED ON DRAWINGS.
- 6. THE GENERAL NOTES ARE AN INTEGRAL PART OF THE CONTRACT DOCUMENTS AND SHALL BE USED IN CONJUCTION WITH THE STRUCTURAL DRAWINGS. WHERE REQUIREMENTS INDICATED ON THE STRUCTURAL DRAWINGS DIFFER FROM THE GENERAL NOTES, NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER.
- 7. THE STRUCTURAL DRAWINGS ARE NOT INTENDED TO BE AN INDEPENDENT SET OF THE CONSTRUCTION DOCUMENTS. SEE ARCHITECTURAL, MEP, CIVIL AND OTHER DRAWINGS FOR INFORMATION RELATED TO THE STRUCTURAL WORK. CONTRACTOR SHALL VERIFY COORDINATION OF THE DESIRED DETAILS PRIOR TO CONSTRUCTION AND NOTIFY THE ARCHITECT AND THE STRUCTURAL ENGINEER IF ADDITIONAL COORDINATION IS REQUIRED.
- 8. ARCHITECTURAL, MECHANICAL AND ELECTRICAL COMPONENTS AND SYSTEMS SHALL BE DESIGNED AND CONSTRUCTED TO RESIST SEISMIC FORCES AS DETERMINED IN CHAPTER 13 OF ASCE 7.

#### STRUCTURAL STEEL

F. HEADED STUD ANCHORS:

1. STRUCTURAL STEEL SHALL MEET THE FOLLOWING MINIMUM YIELD STRESS (Fy), UNLESS NOTED OTHERWISE:

|    |                                 | YIELD            | ASTM SPECIFICATION |
|----|---------------------------------|------------------|--------------------|
| •  | W, WT SHAPES:                   | 50 KSI           | A992               |
|    | BARS, PLATES, CHANNELS, ANGLES: | 36 KSI           | A36                |
|    | SQUARE, RECTANGULAR HSS:        | 50 KSI           | A500, GRADE C      |
| •  | ANCHOR RODS:                    | 36 KSI OR 55 KSI | F1554              |
| į. | ALL-THREAD RODS:                | 36 KSI           | A36                |

2. ALL STRUCTURAL STEEL SHALL ADHERE TO THE DETAILING, FABRICATION AND ERECTION REQUIREMENTS OF THE LATEST EDITIONS OF THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS AND THE AISC CODE OF PRACTICE.

65 KSI TENSILE STRESS A108, GRADES 1010-1020

- 3. BOLTS FOR STEEL BEAM AND COLUMN CONNECTIONS SHALL BE 3/4-INCH DIAMETER ASTM A325-N HIGH-STRENGTH BOLTS UNLESS NOTED OTHERWISE. ALL BOLTED CONNECTIONS ARE BEARING TYPE AND SHALL BE SNUG TIGHTENED UNLESS NOTED OTHERWISE. FOR PRETENSIONED OR SLIP-CRITICAL JOINTS, THE METHOD OF INSTALLATION SHALL BE TURN-OF-NUT WITH MATCH MARKING, TWIST-OFF-TYPE TENSION CONTROL BOLT ASSEMBLIES (ASTM F1852), OR DIRECT TENSION INDICATORS (ASTM F959).
- 4. WELDING SHALL MEET ANSI / AWS D1.1, STRUCTURAL WELDING CODE LATEST REVISION. ELECTRODES SHALL BE
- E70XX, LOW HYDROGEN. ALL STRUCTURAL STEEL WELDS SHALL BE PERFORMED BY A AWS CERTIFIED WELDER.

  5. WELDS NOT SPECIFICALLY SIZED ON THE STRUCTURAL DRAWINGS SHALL BE THE MINIMUM SIZE PER THE LATEST AWS
- 6. PROVIDE DOUBLE NUTS AND DOUBLE WASHERS FOR STEEL COLUMN ANCHOR BOLTS TO ALLOW FOR ADJUSTMENT IN BASE PLATE ELEVATION. PROVIDE 1 1/2 INCH NON-SHRINK GROUT UNDER BASE PLATE AFTER ERECTION. USE 2 1/2 INCHES NON-SHRINK GROUT WHEN COLUMN ANCHOR BOLTS ARE 1 1/4 INCH DIAMETER OR LARGER. NON-SHRINK GROUT SHALL BE NON-METALLIC WITH A MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI AT 28 DAYS.
- 7. SHEAR CONNECTORS SHALL BE A CARBON STEEL HEADED STUD TYPE ASTM A108 GRADES 1010 THRU 1020, AWS D1.1, TYPE B WITH ARC SHIELDS.
- 8. ALL CONNECTIONS ON THE STRUCTURAL DRAWINGS, UNLESS NOTED OTHERWISE, SHALL BE DESIGNED AND DETAILED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED, EMPLOYED OR RETAINED BY THE STEEL FABRICATOR. THE DESIGN AND DETAILING SHALL COMPLY WITH ALL APPLICABLE CODES AND SPECIFICATION SECTIONS
- 9. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INCLUDING THE COSTS FOR ALL MISCELLANEOUS STEEL IN THEIR BID REGARDLESS OF WHETHER THOSE ITEMS ARE INDICATED ON THE STRUCTURAL DRAWINGS. THESE COSTS SHALL INCLUDE BUT ARE NOT LIMITED TO MISCELLANEOUS STEEL ITEMS SHOWN ON ARCHITECTURAL, CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS SUCH AS SHELF ANGLES, GLAZING SUPPORTS AND LINTELS.
- 10. LEDGER ANGLES AND LINTELS IN EXTERIOR WALL SYSTEMS SHALL BE HOT DIPPED GALVANIZED PER ASTM A123.
- 11. ALL STRUCTURAL STEEL SHALL HAVE A COAT OF LIGHT GRAY PAINT TO PROVIDE PROTECTION AND GOOD APPEARANCE.

#### STEEL JOISTS

- STEEL JOISTS SHALL BE AS INDICATED ON THE PLANS AND SHALL BE IN ACCORDANCE WITH THE LATEST SPECIFICATIONS OF THE STEEL JOIST INSTITUTE (SJI) AND MEET THE FOLLOWING:
- A. JOISTS SHALL BE DESIGNED FOR THE UNIFORM LOAD CAPACITY (AS SPECIFIED IN THE SJI STANDARD LOAD TABLES) IN ADDITION TO THE CONCENTRATED LOADS SHOWN ON PLANS AND DETAILS.
- B. JOISTS THAT SUPPORT CONCENTRATED LOADS SHALL HAVE THEIR CHORDS DESIGNED TO WITHSTAND ALL BENDING STRESSES, OR THE LOADS SHALL OCCUR WITHIN 3 INCHES OF JOIST PANEL POINTS, OR THE JOIST SHALL BE REINFORCED PER THE "JOIST REINFORCING DETAIL" SHOWN HEREIN. CONCENTRATED LOADS SHALL BE CENTERED ON JOISTS AND NOT ATTACHED TO THE EDGE OF CHORD ANGLES.
- C. JOISTS SHALL RESIST THE NET UPLIFT PRESSURE AS INDICATED ON THE DETAILS 7 & 8/S4.1. THIS PRESSURE SHALL ACT ALONE. AN ALLOWABLE STRESS INCREASE IS NOT PERMITTED.
- D FOR ALL MEMBERS THAT REQUIRE SPECIFIC ORIENTATION, PROVIDE TAG AT ONE END AND DEFINE LOCATION OF TAGGED END ON ERECTION DRAWINGS.
- E. JOIST MANUFACTURER SHALL DETERMINE THE SEAT DEPTH AND WIDTH OF BEARING AND COORDINATE THE SAME WITH THE STEEL FABRICATOR. THE FOLLOWING SEAT DEPTHS ARE ASSUMED ON THE DRAWINGS: 2 1/2 INCHES FOR K-SERIES JOISTS, 5 INCHES FOR LH SERIES JOISTS).
- F. JOISTS SHALL BE FABRICATED TO PROVIDE OPENINGS FOR DUCTS AS SHOWN IN THE REQUIRED OPENING IN JOIST
- 2. K-SERIES AMD LH-SERIES JOISTS SHALL BE WELDED TO SUPPORTING STEEL WITH MINIMUM 1/8 INCH FILLET WELDS 2 INCHES LONG EACH SIDE OR WITH TWO 1/2 INCH DIAMETER ASTM A307 BOLTS OR THE EQUIVALENT, UNLESS NOTED OTHERWISE. WHEN NEAR OR AT A COLUMN, BOLT JOIST TO SUPPORTING STEEL IN CONFORMANCE WITH OSHA.
- 3. JOIST BRIDGING AND ERECTION STABILITY SHALL BE PROVIDED IN ACCORDANCE WITH THE OCCUPATIONAL SAFETY AND HAZARD ADMINISTRATION (OSHA) AND THE SPECIFICATIONS OF THE STEEL JOIST INSTITUTE (SJI).
- 4. JOIST RTU LOADS ARE PROVIDED ON THE ROOF FRAMING PLAN, REFERENCE PLANS AND DETAILS FOR LOAD LOCATIONS, VALUES AND SUPPORT FRAMING.
- 5. JOIST MANUFACTURER SHALL DESIGN THE COMPRESSION CHORD OF ALL JOISTS SUPPORTING ROOF TOP UNITS, SKY LIGHTS, AND OTHER STRUCTURES FOR AN UNBRACED LENGTH APPLICABLE TO THE CONDITIONS AT THE PROJECT WHERE THE UNBRACED LENGTH IS GREATER THAN THE SJI MAXIMUM. (REFERENCE ARCHITECTURAL AND MECHANICAL DRAWINGS)
- 6. DESIGN JOISTS FOR INTERNAL ROOF DRAINLINE AND FIRE SPRINKLER LINE LOCATIONS, IF REQUIRED. ADD 50 PLF FOR 8 INCH DIAMETER AND SMALLER, ADD 75 PLF FOR 10 INCH DIAMETER, ADD 102 PLF FOR 12 INCH DIAMETER, ADD 122 PLF FOR 14 INCH DIAMETER, ADD 200 PLF FOR 18 INCH DIAMETER. REFERENCE MECHANICAL DRAWINGS FOR EXACT LOCATION. CONTRACTOR SHALL OBTAIN FIRE LINE LOCATIONS AND SIZES PRIOR TO SUBMITTAL OF JOIST SHOP
- 7. JOIST DESIGNS SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED, EMPLOYED OR RETAINED BY THE JOIST MANUFACTURER.
- 8. SHOP DRAWING SHALL BE REVIEWED BY THE ARCHITECT AND STUCTURAL ENGINEER OF RECORD PRIOR TO JOIST
- 9. PROVIDE JOISTS CAPABLE OF WITH STANDING DESIGN LOADS INDICATED WITH LIVE LOAD DEFLECTIONS NO GREATER THAN L/240 OF THE SPAN.
- 10. JOISTS SHALL BE CAMBERED ACCORDING TO SJI'S "SPECIFICATIONS". JOIST AND JOIST GIRDERS SHALL BE SHOP PRIMED WITH MANUFACTURER'S STANDARD SHOP PRIMER.

### STEEL DECK

#### . ROOF DECK

- A. ROOF DECK SHALL BE GALVANIZED TYPE "B". DEPTH SHALL BE AS SHOWN ON DRAWINGS. ROOF DECK SHALL BE BOTTOM PRIMED WHITE
- B. ROOF DECK IS REQUIRED TO ACT AS A DIAPHRAGM. CONNECTIONS SHALL BE IN ACCORDANCE WITH STEEL DECK INSTITUTE SPECIFICATIONS. REFER TO THE ROOF DIAPHRAGM CONNECTION DIAGRAM FOR ATTACHMENT.
- C. DECKING SHALL BE CONTINUOUS OVER A MINIMUM OF (3) SPANS UNLESS NOTED OTHERWISE.
- D. NO HANGING LOADS SHALL BE ATTACHED TO ROOF DECK.

#### DEFERRED STRUCTURAL SUBMITTALS

- 1. THE FOLLOWING STRUCTURAL COMPONENTS SHALL BE DESIGNED AND SUBMITTED BY OTHERS FOR APPROVAL IN ACCORDANCE WITH DRAWINGS AND SPECIFICATIONS.
- ACCONDANCE WITH DIAWINGS AND SI ECHICATIONS.
- A. STRUCTURAL STEEL CONNECTIONS OF FRAMING AND BRACING ELEMENTS
- C. SEISMIC ANCHORAGE AND BRACING OF MEP COMPONENTS

B. TEMPORARY BRACING AND SUPPORT

2. DOCUMENTS FOR DEFERRED STRUCTURAL SUBMITTAL ITEMS SHALL BE DESIGNED, SEALED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED. THE DEFERRED SUBMITTAL DOCUMENTS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD WHO SHALL REVIEW THEM AND FORWARD THEM TO THE BUILDING OFFICIAL AS REQUESTED WITH A NOTATION INDICATING THAT THE DEFERRED SUBMITTAL DOCUMENTS HAVE BEEN REVIEWED AND BEEN FOUND TO BE IN GENERAL CONFORMANCE TO THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THE DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

#### SHOP DRAWINGS

- 1. SHOP DRAWINGS AND SUBMITTALS SHALL BE REVIEWED AND APPROVED BY THE CONTRACTOR PRIOR TO SUBMITTAL FOR THE ENGINEER'S REVIEW. THE STRUCTURAL ENGINEER'S REVIEW IS TO CHECK THE GENERAL CONFORMANCE OF THE SHOP DRAWINGS WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ANY ALTERATIONS FROM THE CONTRACT DOCUMENTS WHICH MAY INCLUDE QUANTITIES, DIMENSIONAL ERRORS OR OTHER ERRORS AND OMISIONS IN THE SHOP DRAWINGS.
- 2. SHOP DRAWINGS SHALL NOT BE REPRODUCTIONS OF THE CONTRACT DOCUMENTS.
- 3. THE FOLLOWING STRUCTURAL COMPONENTS SHALL BE SUBMITTED AS A SHOP DRAWING FOR REVIEW:
- A. STRUCTURAL STEEL
- B. ALL DEFERRED SUBMITTAL ITEMS

#### SPECIAL INSPECTIONS

- 1. THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS PER SECTION 1704 OF THE IBC. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN THE PROJECT
- 2. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO COMPLETION OF THAT PHASE OF WORK. A FINAL REPORT DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED AT A POINT IN TIME
- AGREED UPON BY THE PERMIT APPLICANT AND THE BUILDING OFFICIAL PRIOR TO THE START OF WORK.

  3. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE SPECIAL INSPECTOR REGARDING INDIVIDUAL INSPECTION FOR ITEMS LISTED ON THE STATEMENT OF SPECIAL INSPECTIONS AND AS NOTED ON THE BUILDING DEPARTMENT APPROVED PLANS. ADEQUATE NOTICE AND ACCESS TO APPROVED PLANS SHALL BE PROVIDED SO THAT THE SPECIAL INSPECTOR HAS TIME TO BECOME FAMILIAR WITH THE PROJECT.
- 4. FABRICATORS OF STRUCTURAL LOAD—BEARING MEMBERS AND ASSEMBLIES SHALL CONFORM TO THE REQUIREMENTS OF SECTION 1704.2 OF THE IBC.
- 5. THE FOLLOWING ITEMS REQUIRE SPECIAL INSPECTION PER SECTION 1700 OF THE REFERENCED BUILDING CODE.
- A. STRUCTURAL STEEL FABRICATIONS
- B. STRUCTURAL STEEL BOLTING AND WELDING
- C. ON SITE STRUCTURAL FRAMING

|               | A DDDE\/IATIONIC                         | KSI           | KIPS PER SQUARE INCH      |
|---------------|------------------------------------------|---------------|---------------------------|
|               | <u>ABBREVIATIONS</u>                     | LBS.          | POUNDS                    |
| A.B.          | ANCHOR BOLTS                             | LLH           | LONG LEG HORIZONTAL       |
| ACI           | AMERICAN CONCRETE INSTITUTE              | LLV           | LONG LEG VERTICAL         |
| AESS          | ARCHITECTURALLY EXPOSED STRUCTURAL STEEL | LONG.         | LONGITUDINAL              |
| A.F.F.        | ABOVE FINISHED FLOOR                     | MAX.          | MAXIMUM                   |
| ARCH.         | ARCHITECTURAL                            | MECH.         | MECHANICAL                |
| BAL.          | BALANCE                                  | MFR.          | MANUFACTURER              |
| B.L.          | BLOCK LINTEL                             | MIN.          | MINIMUM                   |
| BLDG.         | BUILDING                                 | MISC.         | MISCELLANEOUS             |
| B.O.          | BOTTOM OF                                | N.I.C.        | NOT IN CONTRACT           |
| B.O.D.        | BOTTOM OF DECK                           | NO.           | NUMBER                    |
| BRG.          | BEARING                                  | N.T.S.        | NOT TO SCALE              |
| C.J.          | CONTRACTION JOINT                        | N.S.          | NEAR SIDE                 |
| C.L.          | CENTER LINE                              | 0.C.          | ON CENTER                 |
| CLR.          | CLEAR                                    | O.D.          | OUTSIDE DIAMETER          |
| CMU           | CONCRETE MASONRY UNIT                    | 0.H.          | OPPOSITE HAND             |
| COL.          | COLUMN                                   | P.A.F.        | POWER ACTUATED FASTENER   |
| CONC.         | CONCRETE                                 | PCF           | POUNDS PER CUBIC FOOT     |
| CONST.        | CONSTRUCTION                             | PLF           | POUNDS PER LINEAR FOOT    |
| CONT.         | CONTINUOUS                               | P.M.E.J.      | PREMOLDED EXPANSION JOINT |
| D.B.A.        | DEFORMED BAR ANCHOR                      | PSF           | POUNDS PER SQUARE FOOT    |
| DIA.          | DIAMETER                                 | PSI           | POUNDS PER SQUARE INCH    |
| DWG.          | DRAWING                                  | QTY.          | QUANTITY                  |
| E.F.          | EACH FACE                                | RE:           | REFER                     |
| E.J.          | EXPANSION JOINT                          | REINF.        | REINFORCING               |
| ELEV.         | ELEVATION                                | REQD.         | REQUIRED                  |
| E.O.D.        | EDGE OF DECK                             | R.O.          | ROUGH OPENING             |
| E.O.S.        | EDGE OF SLAB                             | RTU           | ROOF TOP UNIT             |
| E.O.S.<br>EQ. | EQUAL                                    | SCHED.        | SCHEDULE                  |
| E.W.          | EACH WAY                                 | S.D.S.        | SELF-DRILLING SCREWS      |
| EXIST.        | EXISTING                                 | SIM.          | SIMILAR                   |
| FDN.          | FOUNDATION                               | SPECS.        | SPECIFICATIONS            |
| F.F.E.        | FINISHED FLOOR ELEV.                     | STD.          | STANDARD                  |
| F.S.          | FAR SIDE                                 | STL.          | STEEL                     |
| FTG.          | FOOTING                                  | T&B           | TOP AND BOTTOM            |
| GA.           | GAGE                                     | T.O.          | TOP OF                    |
| GALV.         | GALVANIZED                               | T.O.P.        | TOP OF PIER               |
| GALV.<br>G.B. | GRADE BEAM                               | T.O.W.        | TOP OF WALL               |
| ы.<br>HORIZ.  | HORIZONTAL                               | TRANS.        | TRANSVERSE                |
|               | HEADED STUD ANCHOR                       | TYP.          | TYPICAL                   |
| H.S.A.        |                                          | U.N.O.        | UNLESS NOTED OTHERWISE    |
| BC            | INTERNATIONAL BUILDING CODE              |               |                           |
| NFO.          | INFORMATION                              | VERT.<br>W.P. | VERTICAL<br>WORK POINT    |
| J.B.E.        | JOIST BEARING ELEVATION                  | W.F.          |                           |
| JT.           | JOINT                                    |               | WEIGHT                    |
| K             | UNIT OF 1,000 POUNDS (KIP)               | W.W.R.        | WELDED WIRE REINFORCEMENT |
|               |                                          |               |                           |



RELEASED FOR CONSTRUCTION

CUKKAN

5719 LAWTON LOOP E. DR. #212

INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753



wallace design collective, pc structural · civil · landscape · survey

CERTIFICATION

1703 wyandotte street, suite 200

kansas city, missouri 64108

816.421.8282 · 800.364.5858

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## PROJECT INFORMATION

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LEE'S SUMMIT LOGISTICS BUILDING B LOT 2

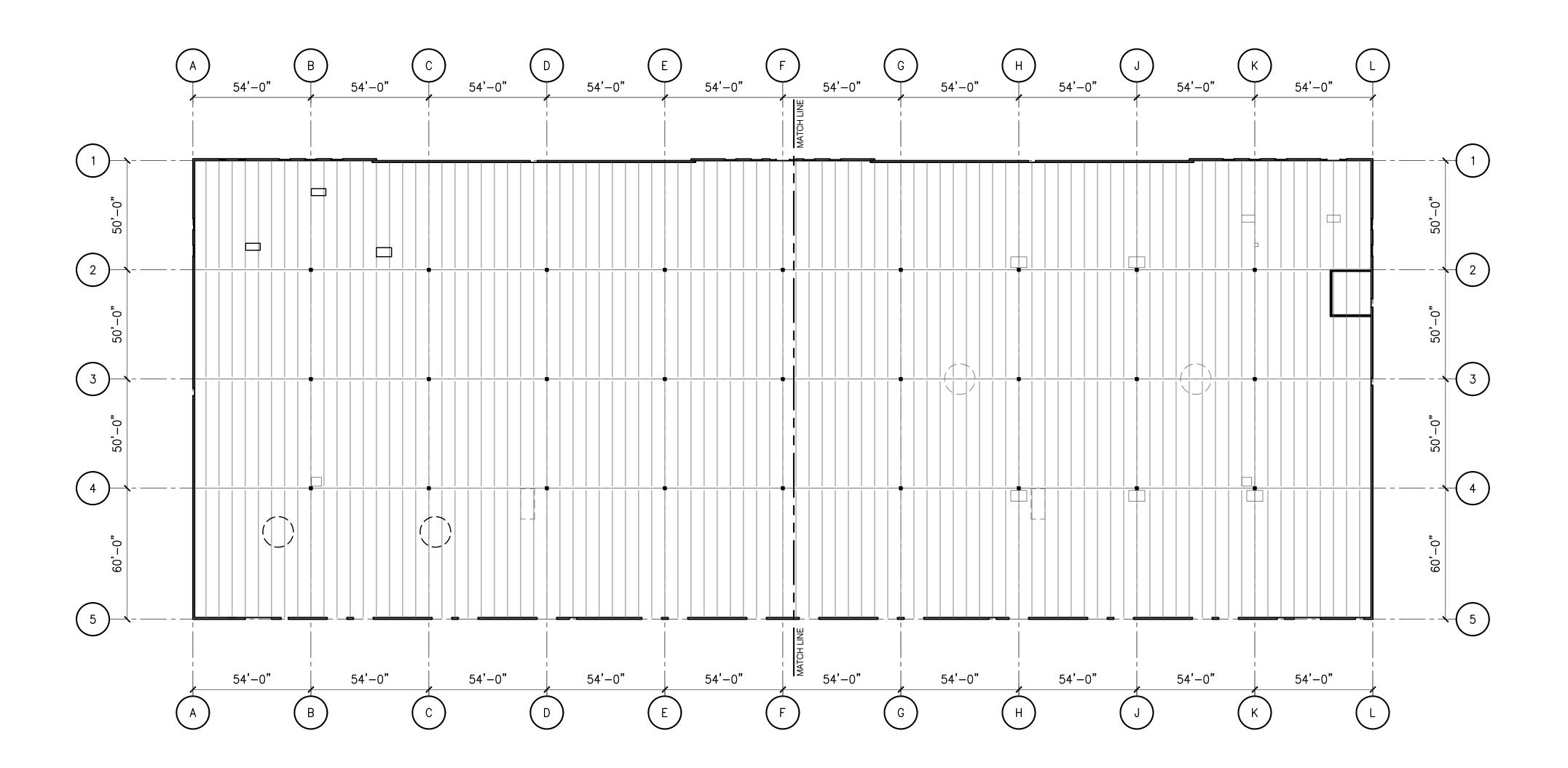
NW CORNER TUDOR RD & MAINST LEE'S SUMMIT, MO



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|  |   |

GENERAL

**SO.0** 



1 OVERALL FRAMING PLAN
SCALE: 1/32"=1'-0"



# CURRAN

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## PROJECT INFORMATION

LEE'S SUMMIT LOGISTICS BUILDING B LOT 2

NW CORNER TUDOR RD & MAINST LEE'S SUMMIT, MO



|       | ISSUE DATES |      |
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| ISSUE |             | DATE |
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210300 OVERALL FRAMING PLAN

**S2.0** 

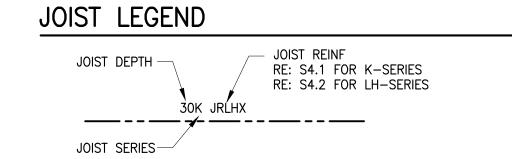
#### PLAN REFERENCE NOTES:

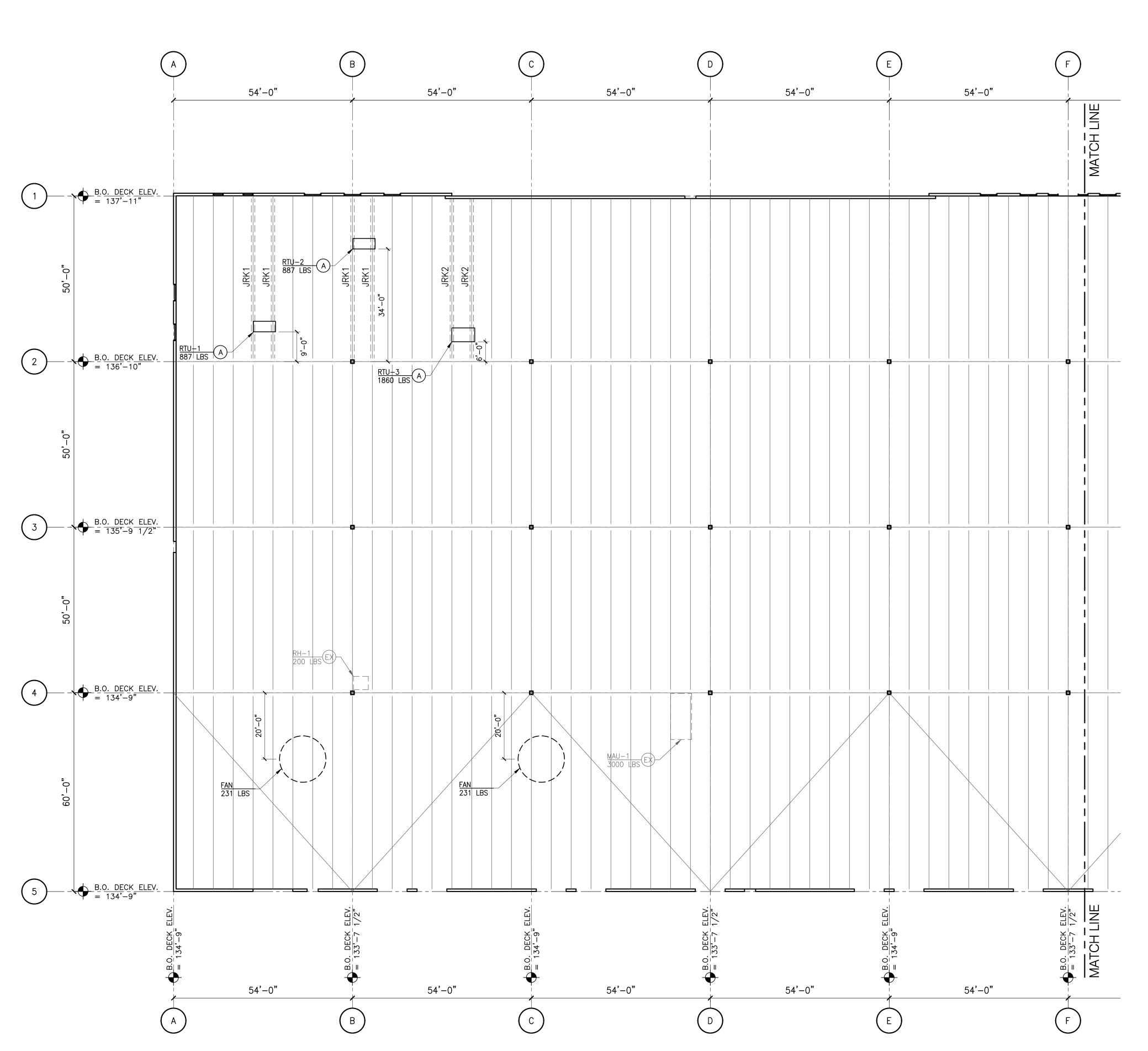
- (A) ROOF TOP EQUIPMENT, RE: ARCH./MEP.
  PROVIDE ANGLE FRAME AND CURB RE: 1/S4.0
- EXISTING BASE BUILDING ROOF TOP EQUIPMENT

#### <u>PLAN NOTES</u>

- 1. JOISTS SHALL BE REINFORCED PRIOR TO THE PLACEMENT OF THE ROOF TOP UNITS.
- CONTACT E.O.R. IF MECHANICAL EQUIPMENT LOCATIONS ARE DIFFERENT THAN SHOWN.

  RE: S4. SERIES FOR ADDITIONAL REINFORCEMENT REQUIRED FOR JOISTS PRIOR TO





1 ENLARGED PARTIAL FRAMING PLAN SCALE: 1/16"=1'-0"





CUKKAN

5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753



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LEE'S SUMMIT LOGISTICS BUILDING B LOT 2

NW CORNER TUDOR RD & MAINST LEE'S SUMMIT, MO



|       | <b>ISSUE DATES</b> |  |
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| ISSUE |                    |  |
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ENLARGED
PARTIAL
FRAMING PLAN

**S2.1** 

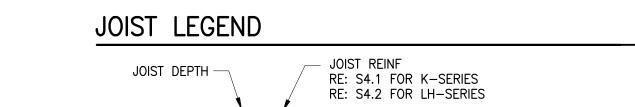
#### PLAN REFERENCE NOTES:

- A ROOF TOP EQUIPMENT, RE: ARCH./MEP.
  PROVIDE ANGLE FRAME AND CURB RE: 1/S4.0
- EXISTING BASE BUILDING ROOF TOP EQUIPMENT

## <u>PLAN NOTES</u>

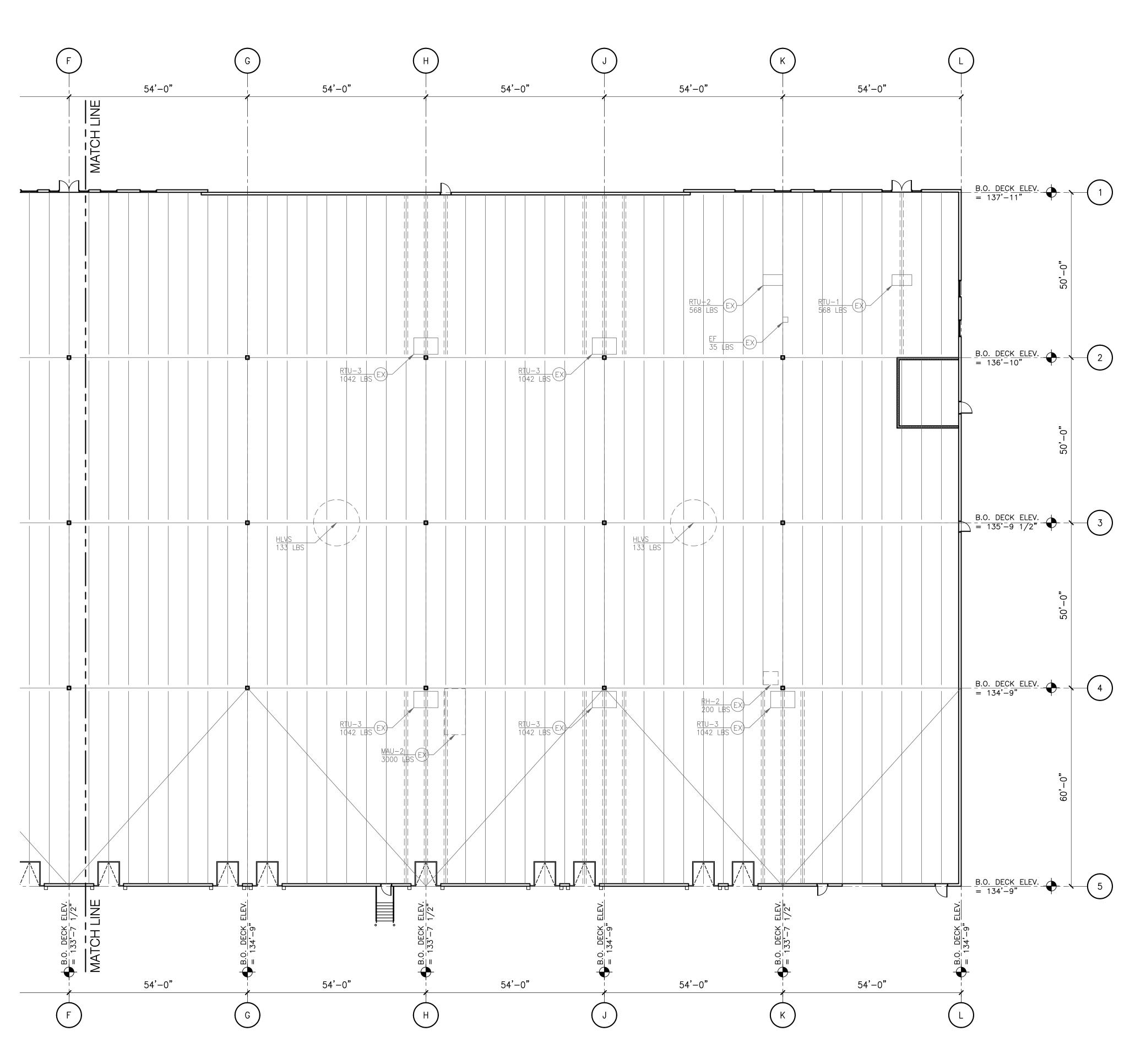
- JOISTS SHALL BE REINFORCED PRIOR TO THE PLACEMENT OF THE ROOF TOP UNITS.
   CONTACT E.O.R. IF MECHANICAL EQUIPMENT LOCATIONS ARE DIFFERENT THAN SHOWN.
- RE: S4. SERIES FOR ADDITIONAL REINFORCEMENT REQUIRED FOR JOISTS PRIOR TO

  INSTALLATION



30K JRĹHX

JOIST SERIES-



1 ENLARGED PARTIAL FRAMING PLAN SCALE: 1/16"=1'-0"





# CUKKAN

5719 LAWTON LOOP E. DR. #212 INDIANAPOLIS, IN 46216 O :: 317 . 288 . 0681 F :: 317 . 288 . 0753



wallace design collective, pc structural · civil · landscape · survey 1703 wyandotte street, suite 200 kansas city, missouri 64108 816.421.8282 · 800.364.5858

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### PROJECT INFORMATION

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LEE'S SUMMIT LOGISTICS BUILDING B LOT 2

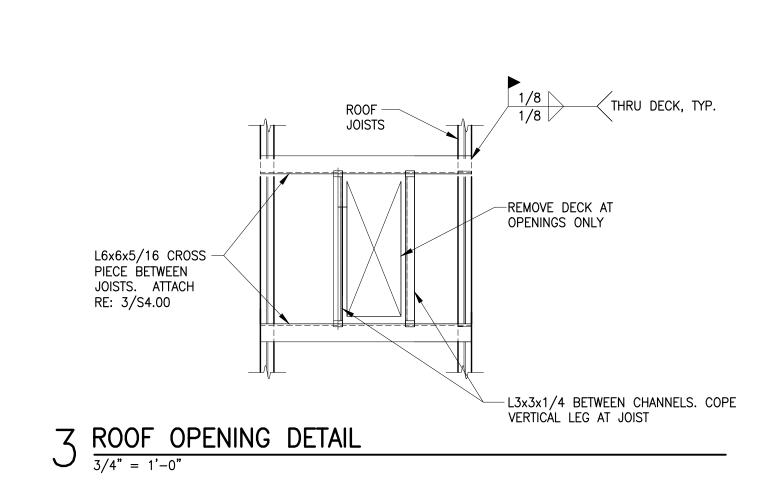
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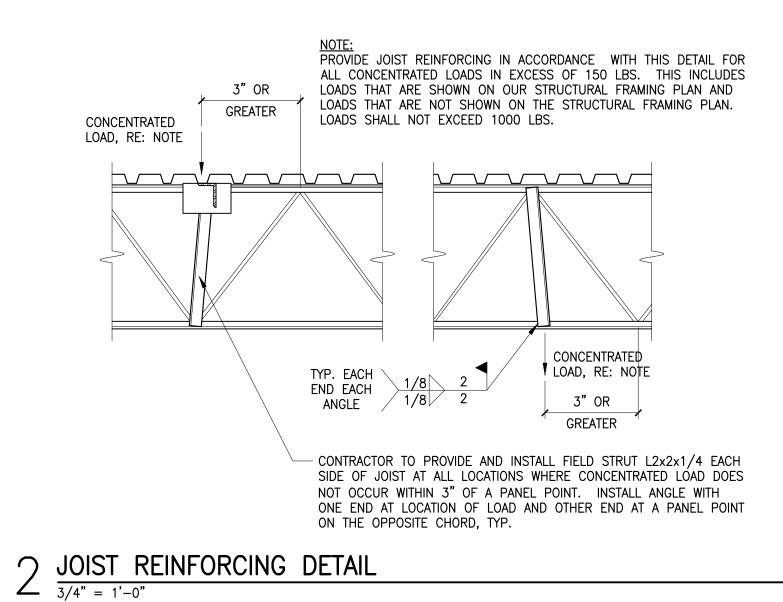


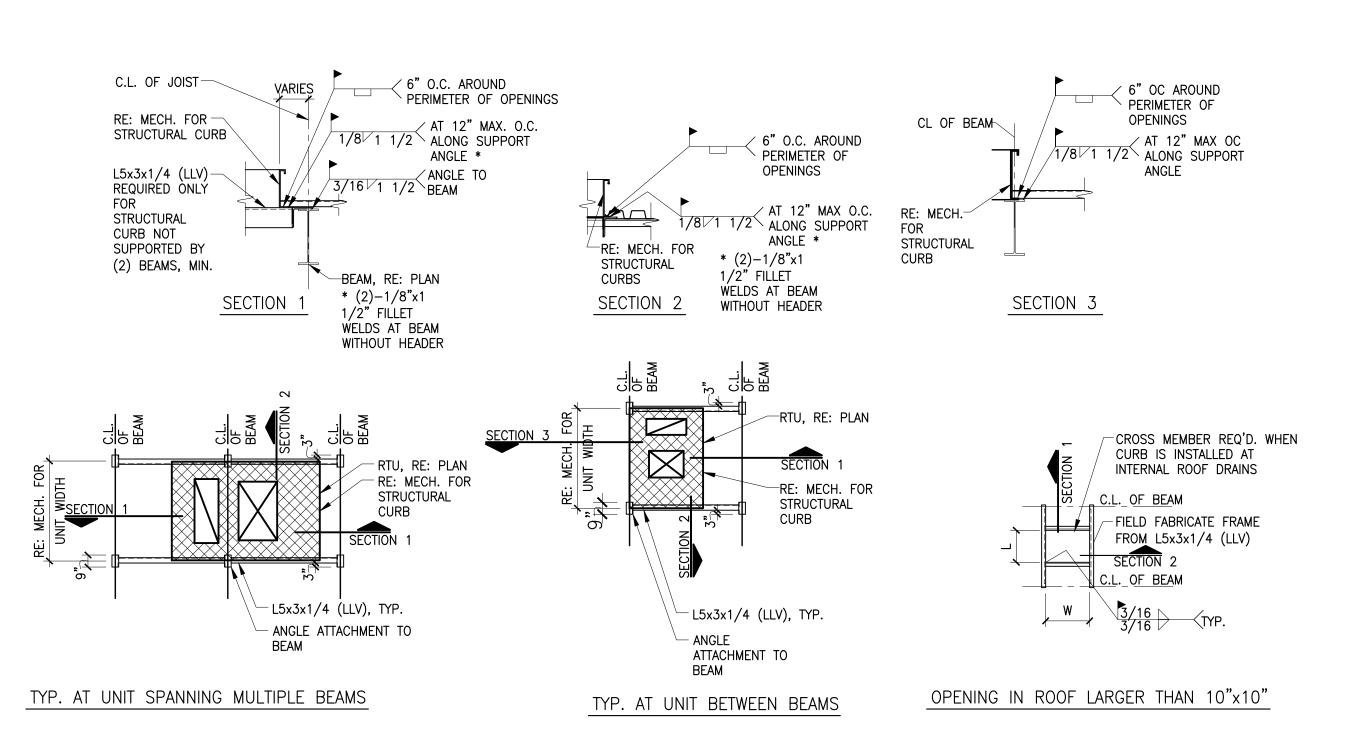
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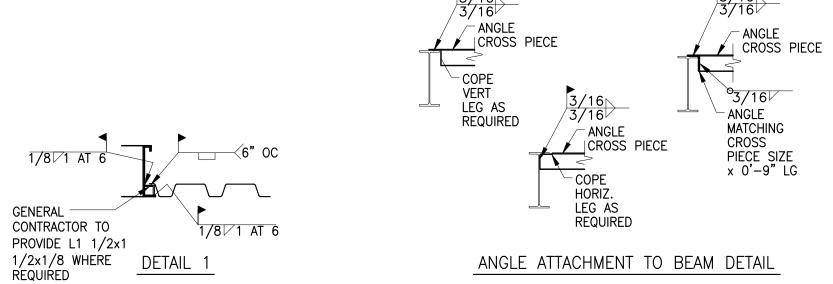
ENLARGED PARTIAL FRAMING PLAN

**S2.1** 









1. INSTALL CURBS, HEADERS, AND FRAMES AND WELD TO SUPPORT STEEL BEFORE DECK IS PLACED.
2. DESIGN BEAMS SUPPORTING RTU'S FOR TWO POINT LOADS. THE LOCATION OF THE LOADS AND THE SPACING BETWEEN THEM VARY.
RE: THIS DETAIL AND ROOF FRAMING PLAN FOR POINT LOADS AND LOCATIONS.
3. RTU CURBS SHALL BE STRUCTURAL, DESIGNED TO SPAN BETWEEN BEAMS AND SUPPORT EDGES OF DECK. CURBS TO BE FABRICAT

RE: THIS DETAIL AND ROOF FRAMING PLAN FOR POINT LOADS AND LOCATIONS.

3. RTU CURBS SHALL BE STRUCTURAL, DESIGNED TO SPAN BETWEEN BEAMS AND SUPPORT EDGES OF DECK. CURBS TO BE FABRICATED WITH LEDGE ANGLES (L2x2x1/4) AT MECHANICAL OPENINGS TO SUPPORT METAL DECK INSIDE OPENING NOT USED BY SUPPLY OR RETURN DUCT WORK. HEADERS ARE NOT REQUIRED FOR STRUCTURAL CURBS EXCEPT WHEN THE CURB DOES NOT SPAN BETWEEN TWO BEAMS OR THE CURB CANTILLO DEED ROOF PLANING OF PLANING

4. ATTACH DECK AROUND OPENING PER ROOF DIAPHRAGM CONNECTION DETAIL.
5. GENERAL CONTRACTOR SHALL COORDINATE RTU DIMENSIONS AND FRAMING LOCATIONS WITH THE STEEL FABRICATOR, MECHANICAL,

AND ERECTION SUBCONTRACTORS.

6. STEEL SUPPLIER TO FURNISH STOCK ANGLE FOR FIELD FABRICATED SUPPORT FRAMES.

7. RE: DETAIL 1 FOR CONN. OF DECK PARALLEL TO CURB (WHERE REQ'D.). 8. RE: MECH. FOR ROOF TOP UNIT ANCHORAGE TO CURBS.

1 MECHANICAL UNIT SUPPORT DETAIL  $\frac{3}{4}$ " = 1'-0"



CONSTRUCTION
As Noted on Plans Review

Development Services Departm
Lee's Summit, Missouri
07/08/2024

RELEASED FOR

CURRAN

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LEE'S SUMMIT LOGISTICS BUILDING B LOT 2

NW CORNER TUDOR RD & MAINST LEE'S SUMMIT, MO



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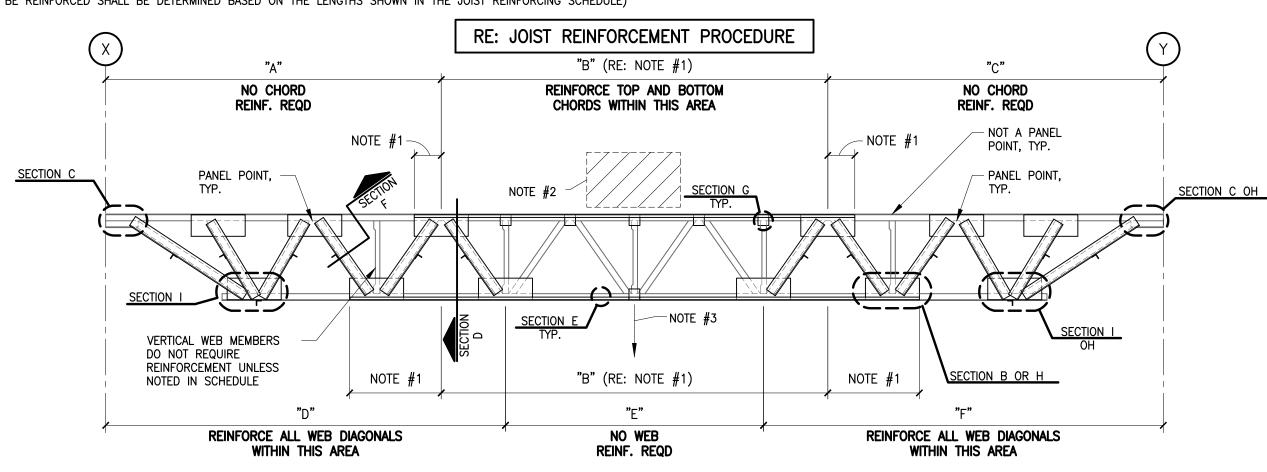
210300 FRAMING DETAILS

**S4.0** 

#### RE: JOIST REINFORCEMENT PROCEDURE "B" (RE: NOTE #1) NO CHORD REINFORCE TOP AND BOTTOM NO CHORD REINF. REQD CHORDS WITHIN THIS AREA ✓ NOTE #1 -PANEL POINT. SECTION I NOTE #1 "B" (RE: NOTE #1) NOTE #1 REINFORCE ALL WEB DIAGONALS NO WEB REINFORCE ALL WEB DIAGONALS WITHIN THIS AREA REINF. REQD. WITHIN THIS AREA

### JOIST ELEVATION WITH ROD WEBS

(NOTE: DIAGRAM IS GENERIC AND ACTUAL NUMBER OF WEBS TO BE REINFORCED IS NOT ACCURATELY SHOWN. ACTUAL NUMBER OF WEB MEMBERS TO BE REINFORCED SHALL BE DETERMINED BASED ON THE LENGTHS SHOWN IN THE JOIST REINFORCING SCHEDULE)



TO STEEL PLATE, NOT RODS

<u>SECTION B - (K-SERIES)</u>

## JOIST ELEVATION WITH ANGLE WEBS

SECTION A - (K-SERIES ROD WEB)

(NOTE: DIAGRAM IS GENERIC AND ACTUAL NUMBER OF WEBS TO BE REINFORCED IS NOT ACCURATELY SHOWN. ACTUAL NUMBER OF WEB MEMBERS TO BE REINFORCED SHALL BE DETERMINED BASED ON THE LENGTHS SHOWN IN THE JOIST REINFORCEMENT SCHEDULE)

## JOIST INSPECTION NOTES

## (REQUIRED AT ALL EXISTING JOISTS INDICATED TO BE REINFORCED)

#### A. EXISTING WEB MEMBER SHOP WELDS

VISUAL INSPECTION ACCEPTANCE CRITERIA. (INSPECTION MAY BE PERFORMED WITH PAINT IN PLACE):

- CRACK PROHIBITION: ANY CRACK SHALL BE UNACCEPTABLE, REGARDLESS OF SIZE OR LOCATION. WELD/BASE-METAL FUSION: NO EVIDENCE OF LACK OF FUSION BETWEEN ADJACENT LAYERS OF WELD METAL AND BETWEEN WELD METAL AND BASE METAL SHALL EXIST.
- CRATER CROSS SECTION: UNFILLED WELD CRATERS SHALL NOT BE INCLUDED IN THE EFFECTIVE LENGTH OF THE WELD. POROSITY: THE SUM OF SURFACE (PIPING) POROSITY DIAMETERS SHALL NOT EXCEED 1/16 INCH (2 MILLIMETERS) IN ANY 1 INCH (25 MILLIMETERS) OF EFFECTIVE WELD LENGTH.

#### B. REPAIR WELDS: (REFERENCE CONTRACTOR NOTES ON JOIST MODIFICATION DETAIL FOR WELD REPAIRS TO BE INCLUDED IN THE BID)

VISUAL INSPECTION ACCEPTANCE CRITERIA.

- (ALL REINFORCING AND REPAIR FIELD WELDS SHALL BE VISUALLY INSPECTED AND SHALL BE ACCEPTABLE IF THE CRITERIA OUTLINED BELOW ARE SATISFIED):
- CRACK PROHIBITION: ANY CRACK SHALL BE UNACCEPTABLE, REGARDLESS OF SIZE OR LOCATION.
- WELD/BASE-METAL FUSION: THOROUGH FUSION SHALL EXIST BETWEEN ADJACENT LAYERS OF WELD METAL AND BETWEEN WELD METAL AND BASE METAL. CRATÉR CROSS SECTION: ALL CRATERS SHALL BE FILLED TO PROVIDE THE SPECIFIED WELD SIZE, EXCEPT FOR THE ENDS OF INTERMITTENT FILLET WELDS OUTSIDE OF THEIR EFFECTIVE LENGTH.
- WELD PROFILES: WELD PROFILES SHALL BE IN CONFORMANCE WITH ANSI/AWS D1.1 SECTION 5.24. UNDERSIZED WELDS: THE SIZE OF A FILLET WELD IN ANY CONTINUOUS WELD MAY BE LESS THAN THE SPECIFIED NOMINAL SIZE (L) WITHOUT CORRECTION BY THE FOLLOWING AMOUNTS (U):

SPECIFIED NOMINAL WELD SIZE, IN. [MM] ALLOWABLE DECREASE FROM L, IN. [MM]  $\leq$  3/16 [5] ≤ 1/16 [2] 1/4 [6]  $\leq 3/32 [2.5]$ 

IN ALL CASES, THE UNDERSIZE PORTION OF THE WELD SHALL NOT EXCEED 10% OF THE WELD LENGTH.

<u>></u> 5/16 [8]

6. POROSITY: THE SUM OF SURFACE (PIPING) POROSITY DIAMETERS SHALL NOT EXCEED 1/16 INCH (2 MILLIMETERS) IN ANY 1 INCH (25 MILLIMETERS) OF DESIGN WELD LENGTH.

#### **CONTRACTOR NOTES:**

- A. RE: JOIST AND JOIST GIRDER GENERAL NOTES ON SHEET SO AND JOIST INSPECTION NOTES ON THIS SHEET FOR REQUIRED INSPECTIONS TO BE PERFORMED PRIOR TO PROCEEDING WITH JOIST MODIFICATIONS. 3. ALL WELDING ON EXISTING JOISTS SHALL BE PERFORMED USING EITHER THE GMAW OR FCAW PROCESS ONLY, SMAW OR "STICK" WELDING IS NOT ALLOWED. WIRE FOR FCAW PROCESS SHALL BE E71T-8 AND WIRE FOR GMAW PROCESS SHALL BE ER70S-6 (-GS WIRE IS NOT ALLOWED), WELDS SHALL BE PERFORMED BY OPERATORS CERTIFIED FOR THE PROCESS AND POSITIONS USED. THE TESTING AGENCY'S CERTIFIED WELDING INSPECTOR SHALL BE QUALIFIED AND EXPERIENCED WITH INSPECTION OF WELDS PERFORMED BY THESE PROCESSES. PRIOR TO COMMENCEMENT OF JOIST REINFORCING, CONTRACTOR SHALL PREPARE A MOCK UP FOR INSPECTION AND
- IF EXISTING JOIST BRIDGING INTERFERES WITH INSTALLATION OF REINFORCING, REMOVE BRIDGING AND REPLACE IMMEDIATELY UPON COMPLETION OF REINFORCING INSTALLATION. IF BRIDGING TABS FOR BOLTED BRIDGING INTERFERE WITH INSTALLATION OF REINFORCING, REMOVE TABS AND REPLACE IMMEDIATELY UPON COMPLETION OF REINFORCING INSTALLATION. NEW CONNECTIONS SHALL MATCH EXISTING.

APPROVAL BY THE CERTIFIED WELDING INSPECTOR BY JOINING TWO 5"x5"x1/8" PLATES WITH A 1/8" FILLET WELD AND ATTACHING A 5/8" DIA x 5" LONG ROD TO ONE PLATE WITH 2" LONG FLARE BEVEL.

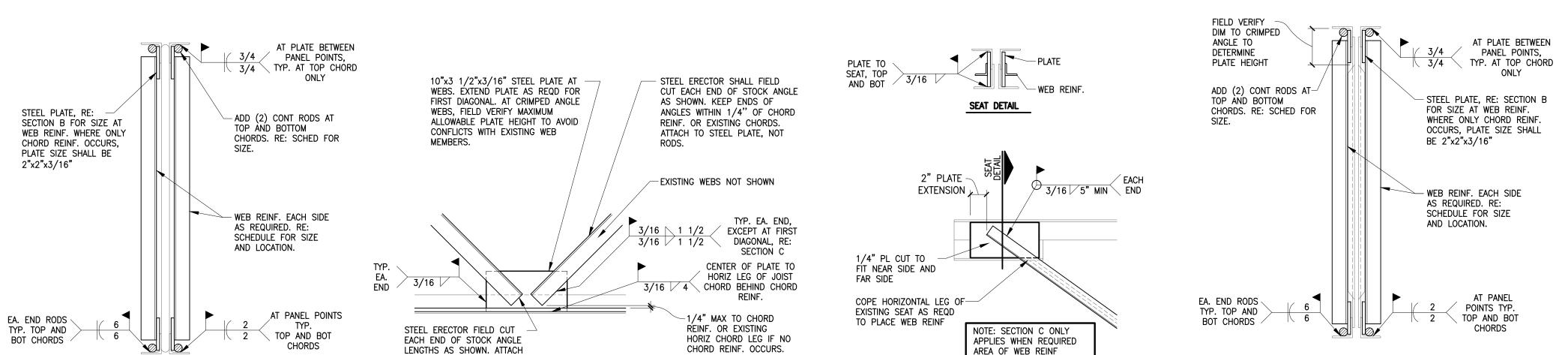
- STEEL ERECTOR SHALL FIELD CUT REINFORCEMENT TO FIT FROM STOCK LENGTHS. WEB REINF SHALL BE INSTALLED AS ONE PIECE AND NOT SPLICED AT ANY POINT ALONG THE LENGTH. REINFORCEMENT SHALL MEET THE STRUCTURAL STEEL REQUIREMENTS IN THE GENERAL NOTES ON SHEET SO.00t
- CONTRACTOR TO INCLUDE IN BID. AN ADDITIONAL 18" TOTAL LENGTH OF 3/16" FILLET WELDS AT EACH JOIST TO BE REINFORCED FOR REQUIRED REPAIRS THAT RESULT FROM THE JOIST INSPECTIONS. THESE REPAIRS MAY INCLUDE, BUT ARE NOT LIMITED TO WEB TO CHORD WELDS, BRIDGING WELDS, JOIST TO SUPPORT WELDS, OR ANY OTHER REPAIR WELDS REQUIRED BASED ON THE EXISTING JOIST INSPECTIONS.
- WHERE REQUIRED AREA OF WEB REINFORCING EXTENDS THROUGH THE JOIST SEAT, AND THE JOIST SEAT BEARS WITHIN AN EXISTING WALL, REMOVE CMU AND GROUT AS REQUIRED FOR INSTALLATION OF REINFORCING. ONCE THE REINFORCING HAS BEEN INSTALLED AND INSPECTED, REPLACE/REPAIR THE CMU AND GROUT TO MATCH EXISTING CONDITION PRIOR TO REMOVAL.
- REMOVE ALL PAINT AND DEBRIS FROM EXISTING JOIST AT LOCATIONS OF NEW WELDS FOR JOIST REINFORCING PRIOR TO INSTALLATION OF JOIST REINFORCING.
- ALL JOIST REINFORCING SHALL BE INSTALLED AND INSPECTED BEFORE APPLYING NEW LOADS. (I.E. RTU'S, BULKHEADS, FANS AND OTHER ROOF SUPPORTED ITEMS). CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REPLACEMENT OF EXISTING BUILDING ELEMENTS THAT PREVENT ACCESS TO INSTALL JOIST REINFORCING, INCLUDING SUSPENDED CEILINGS, DUCTWORK, RTU PLENUMS,
- LARGE PIPING, ETC. PRIOR TO INSTALLATION OF JOIST REINFORCING, CONTRACTOR SHALL REMOVE ALL LIVE LOADS FROM JOISTS TO BE REINFORCED. THIS INCLUDES BUT IS NOT LIMITED TO PONDED WATER, ICE, SNOW (REMOVE SNOW TO
- EXPOSE ROOFING MATERIAL), STAGED CONSTRUCTION MATERIALS/EQUIPMENT, ETC.
- PRIOR TO INSTALLATION OF JOIST REINFORCING, CONTRACTOR SHALL SURVEY EXISTING JOISTS TO BE REINFORCED FOR EXISTING DAMAGE OR REPAIRS. ANY JOIST DAMAGE FOUND SHALL BE CORRECTED BEFORE INSTALLATION OF REINFORCING. CONTACT ENGINEER OF RECORD FOR REQUIRED JOIST REPAIRS AT EXISTING DAMAGE AND/OR FOR DIRECTION REGARDING NEW REINFORCING AT EXISTING REPAIRS.

|                                  |                            |     | ICT DI      | EINFOF | RCEMENT SCHEDU             | ΠΕ  |            |     |      |      |             |       |
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| JOIST REINFORCEMENT DESIGNATION, | CHORD                      | (   | CHORD REINI | F.     | WED DEINE                  |     | WEB REINF. |     | CDAN | GRID | GRID        | NOTES |
| RE: SHEET S2.2                   | REINF.                     | "A" | "B"         | "C"    | WEB REINF.                 | "D" | "E"        | "F" | SPAN | "X"  | <b>"</b> Y" |       |
| JRK1                             | 1/2" DIA. ROD OR PL3/8"x1" | 18' | 14'         | 18'    | 3/8" DIA. ROD OR L1x1x3/16 | 19' | 12'        | 19' | 50'  | 1    | 2           | 1,2,4 |
| JRK2                             | 5/8" DIA. ROD OR PL1/2"x1" | 14' | 20'         | 16'    | 1/2" DIA. ROD OR L1x1x1/4  | 12' | 18'        | 20' | 50'  | 1    | 2           | 1,2,4 |

- NOTES: DIMENSION "B" IS THE MINIMUM REQUIRED LENGTH OF TOP AND BOTTOM CHORD REINFORCEMENT. FIELD VERIFY PANEL POINT LOCATIONS AND EXTEND TOP AND BOTTOM CHORD REINF. TO OUTER EDGE OF STEEL PLATE AT PANEL POINT.
- 2. RE: PLAN FOR NEW EQUIPMENT, RE: 1/S4.0 FOR ADDITIONAL REINFORCEMENT. DO NOT SET

4. REINFORCEMENT SHALL BE WELDED AT 12" O.C. ALONG LENGTH, RE: SECTION F

EQUIPMENT UNTIL ALL REINF. IS IN PLACE AND INSPECTED. 3. RE: ARCH FOR EXACT LOCATION OF SOFFITS AND MECH EQUIPMENT THAT WILL CAUSE CONCENTRATED LOADS IN EXCESS OF 100 LBS. RE: 2/S4.0 FOR ADDITIONAL REINFORCEMENT AT CONCENTRATED LOADS.



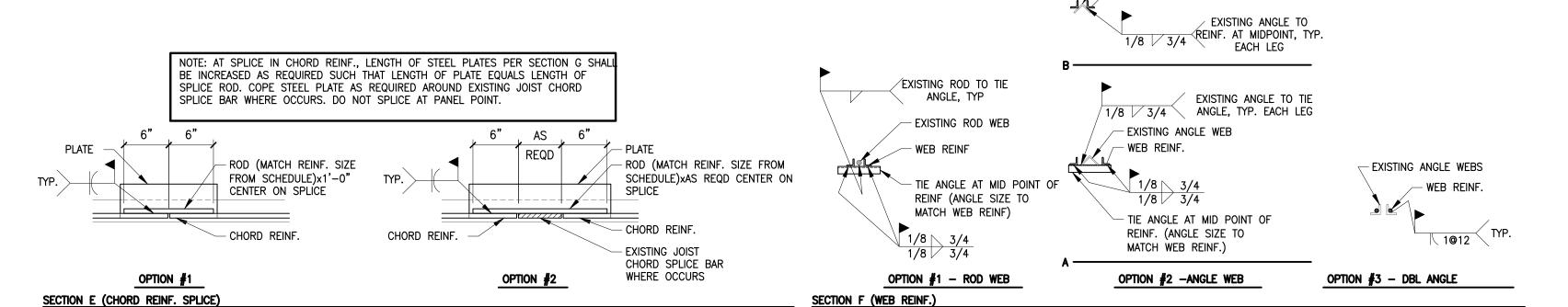
SECTION D - (K-SERIES ANGLE WEB) SECTION C - (K-SERIES)

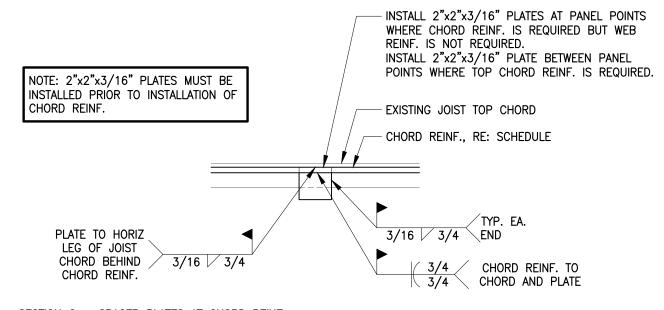
EXTENDS THROUGH SEAT

- EXISTING ANGLE WEB

(NOTE: DIAGRAM IS GENERIC AND ACTUAL NUMBER OF WEBS TO BE REINFORCED IS NOT ACCURATELY SHOWN. ACTUAL NUMBER OF WEB MEMBERS TO BE REINFORCED SHALL BE DETERMINED BASED ON THE LENGTHS SHOWN IN THE JOIST REINFORCEMENT SCHEDULE)

- WEB REINF.





SECTION G - SPACER PLATES AT CHORD REINF.

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CERTIFICATION

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LEE'S SUMMIT LOGISTICS **BUILDING B LOT 2** 

**NW CORNER TUDOR RD & MAINST** 

LEE'S SUMMIT, MO

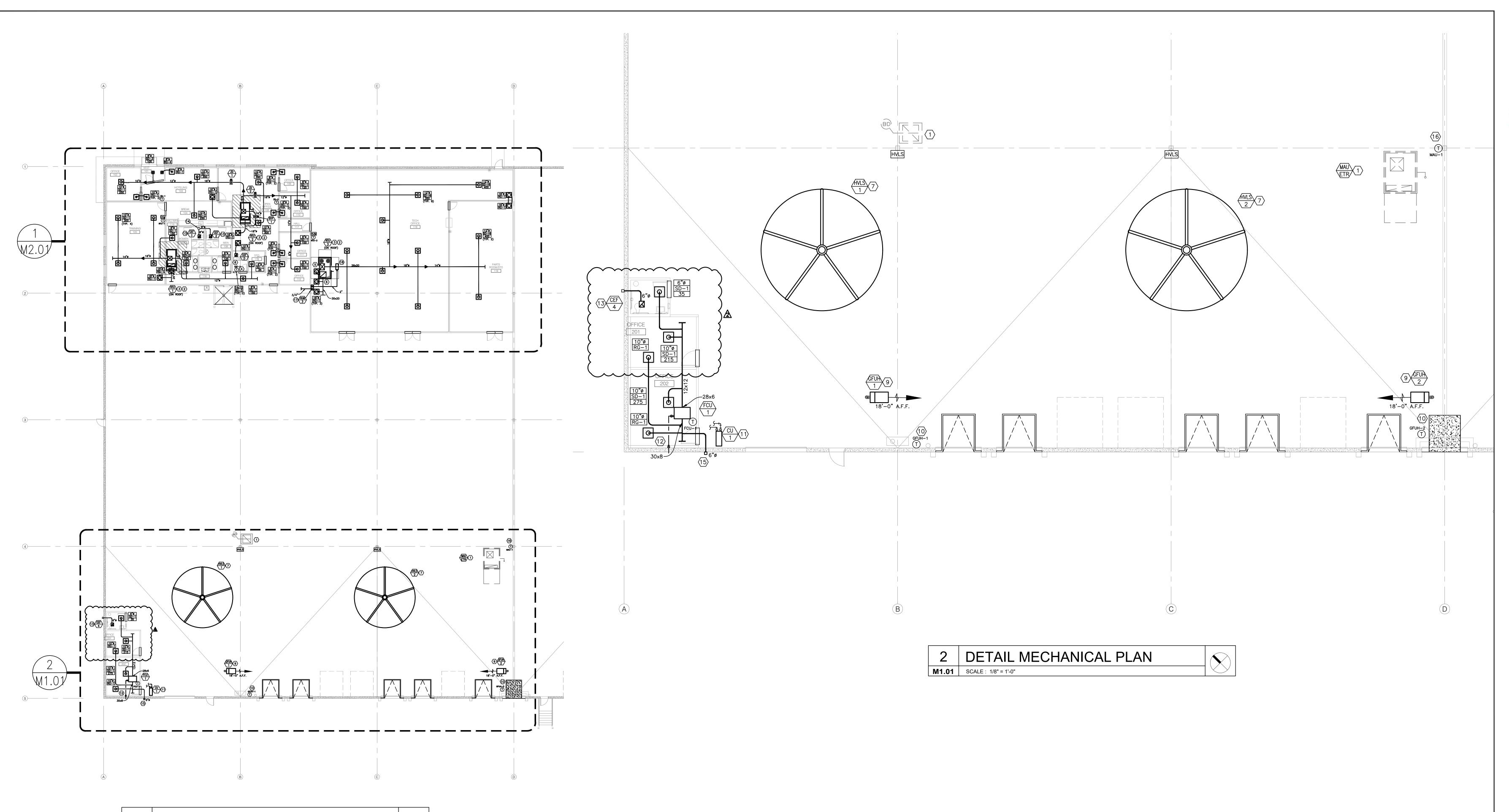


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K-SERIES JOIST REINFORCEMENT

210300



OVERALL MECHANICAL PLAN **M1.01** | SCALE : 1/16" = 1'-0"

## MECHANICAL GENERAL NOTES:

- 1. ALL MECHANICAL DUCTWORK SHALL BE GALVANIZED STEEL, CONSTRUCTED ACCORDING TO SMACNA STANDARDS.
- 2. ALL SUPPLY AIR AND RETURN AIR DUCTWORK SHALL BE EXTERNALLY INSULATED WITH 2" THICK, 3/4 LB DENSITY FIBERGLASS DUCT WRAP. ALL EXHAUST AIR DUCTWORK TO BE UN-INSULATED.
- 3. HVAC CONTRACTOR WILL CHECK EACH SYSTEM FOR PROPER OPERATION.
- 4. HVAC CONTRACTOR SHALL HAVE AN INDEPENDENT CONTRACTOR TO TEST & BALANCE HVAC SYSTEM TO THE PROPER AIRFLOWS AND STATIC PRESSURES. A COPY OF THE BALANCING REPORT WILL BE SUBMITTED TO THE OWNER UPON COMPLETION. AIR TO (+/-) 10%, WATER TO (+/-) 5%.
- 5. FLEXIBLE RUN-OUTS TO BE U.L. LISTED AND HAVE A MAXIMUM LENGTH OF 8'-0". DUCT RUNS TO BE SAME SIZE AS DIFFUSER NECK SIZE SHOWN.
- 6. AIR HANDLING UNITS SUPPLYING 2,000 CFM OR MORE SHALL HAVE A SMOKE DETECTOR INSTALLED IN THE RETURN AIR DUCTWORK. THE SMOKE DETECTOR SHALL BE INTERLOCKED TO SHUT DOWN ALL
- SUPPLY FANS UPON ALARM. 7. MAINTAIN MINIMUM 10'-0" FROM ALL PLUMBING VENTS AND EXHAUST VENTS TO
- ALL OUTSIDE AIR INTAKES. 8. DO NOT INSTALL PIPING OR DUCTWORK OVER ELECTRICAL PANELS.

## MECHANICAL PLAN NOTES:

- $\langle 1 \rangle$  existing shell building equipment to remain as currently installed.
- (2) ROUTE CONDENSATE PIPING TO DISCHARGE ON ROOF. (TYP ALL RTU'S) COORDINATE LOCATION OF RTU WITH FIRE SUPPRESSION PIPING AND STRUCTURE. PROVIDE INTERNALLY LINED
- SUPPLY AIR RETURN AIR DUCT DROP THRU ROOF. TRANSITION SUPPLY AIR AND RETURN AIR DUCTWORK BELOW ROOF DECK TO DUCTWORK AS SHOWN/NOTED AND PROVIDE WITH EXTERNAL DUCT INSULATION PER GENERAL NOTES.
- $\langle 4 \rangle$  LINE VOLTAGE THERMOSTAT FOR CEILING EXHAUST FAN CONTROL. THERMOSTAT TO BE INSTALLED BY ELECTRICIAN.
- $\langle 5 
  angle$  transition supply air from curb opening to 26x20 below roof.
- $\langle$  6 angle TRANSITION RETURN AIR FROM CURB OPENING TO 30×20 BELOW ROOF.
- $\langle 7 \rangle$  HVLS FAN CONTROLLER TO BE INSTALLED ON ADJACENT COLUMN. ALL CONDUIT, CONTROLS AND WIRING BY OTHERS. COORDINATE EXACT LOCATION OF HVLS FANS WITH FIRE SUPPRESSION PIPING AND WAREHOUSE LIGHTING. HVLS FANS TO BE INSTALLED PER NFPA GUIDELINES AND BE INTERLOCKED WITH FIRE ALARM TO SHUT DOWN UPON SIGNAL.
- ASSOCIATED INTERLOCK WIRING BY FIRE ALARM CONTRACTOR. (8) RTU ZONE CONTROLLER LOCATION. PROVIDE WITH REQUIRED 120V POWER.
- (9) GAS-FIRED UNIT HEATER FLUE THRU ROOF. VERIFY SIZING WITH EQUIPMENT MANUFACTURER. MAINTAIN A MINIMUM OF 10'-0" FROM EDGE OF ROOF. 5" FLUE FOR LENNOX MODEL LF25-200 MBH. INSTALL AT
- PROVIDE WITH WALL MOUNTED, HEATING ONLY THERMOSTAT MOUNTED ON WALL AT 4'-0" A.F.F. COORDINATE FINAL LOCATION WITH TENANT.
- (11) PROVIDE WALL BRACKET FOR INSTALLATION OF CONDENSING UNIT. PROVIDE WITH DRIP PAN.
- (12) ROUTE CONDENSATE THRU EXTERIOR WALL AND SPLASH ON GRADE.
- (13) CEILING MOUNTED EXHAUST AIR FAN TO BE INTERLOCKED WITH RESTROOM LIGHT SWITCH. (BY OTHERS)
- 10"ø EXHAUST AIR DUCTWORK UP THRU ROOF WITH WEATHERCAP. MAINTAIN A MINIMUM OF 10'-0" AWAY FROM OUTSIDE AIR INTAKES.

- (15) PROVIDE 6" OUTSIDE AIR THRU WALL WITH WEATHERCAP. WALL CORING BY OTHERS. (16) RELOCATE EXISTING MAU CONTROLLER AS REQUIRED.
- PROVIDE ELECTRIC STEAM GENERATING HUMIDIFIER. MOUNT ON WALL AT 2'-0" BELOW CEILING LEVEL TO TOP OF HUMIDIFIER. ROUTE STEAM PIPING TO DUCT MOUNTED STEAM MANIFOLD. PROVIDE DRAIN FROM HUMIDIFIER TO FLOOR DRAIN PROVIDED BY PLUMBER. PROVIDE 1/2" DOMESTIC WATER CONNECTION AND BACKFLOW AS REQUIRED. (BY OTHERS) PROVIDE 2" STEAM LINE FROM HUMIDIFIER TO DUCT MOUNTED DISPERSION TUBE. COORDINATE EXACT
- REQUIREMENTS WITH EQUIPMENT SUBMITTAL. (18) PROVIDE DUCT MOUNTED STEAM DISPERSION MANIFOLD. CONNECT TO STEAM AND PROVIDE CONDENSATE AS THE OURSED TO THE OWN (19) PROVIDE 6" EXHAUST AIR THRU WALL WITH WEATHERCAP. WALL CORING BY OTHERS. ) A

SD-1 SUPPLY AIR DIFFUSER - AS SCHEDULED

RG-1 RETURN AIR GRILLE - AS SCHEDULED RG-2 RETURN AIR GRILLE - AS SCHEDULED

EX-1 EXHAUST AIR GRILLE - AS SCHEDULED

EX-2 EXHAUST AIR GRILLE - AS SCHEDULED

THERMOSTAT OR ZONE DAMPER WITH ZONE/UNIT DESIGNATION. MOUNT AT 48" A.F.F.

EPIC COLOSSUS INDUSTRIAL (OR EQUAL) 24'-0" HVLS FAN. 2 HP @ 460/3 PHASE. MINIMUM OF 5-BLADES. PROVIDE WITH HANGING KIT AND STAND-ALONE UNIT CONTROLLER. (TYP. 2)

BYPASS DAMPER FOR DUCT STATIC PRESSURE CONTROL. PROVIDE WITH 120/24 V TRANSFORMER AND DUCT MOUNTED STATIC PRESSURE SENSOR.

BYPASS DAMPER TO BE 14". THERMOSTATIC ZONE DAMPER. PROVIDE WITH 120/24 V TRANSFORMER, DUCT MOUNTED TEMPERATURE SENSOR AND WALL MOUNTED THERMOSTAT.

DAMPER TO BE SIZED AS NOTED GFUH GFUH

1 2 LENNOX (OR EQUAL) GAS FIRED UNIT HEATER LF25-200A-1 120V/1 PHASE, 7 AMPS,
15 AMP MOCP, 200 MBH, 200LBS

PROVIDE WITH HANGING KIT HEATING ONLY THERMOSTAT AND 5" FILE THRU POOF PROVIDE WITH HANGING KIT, HEATING ONLY THERMOSTAT AND 5" FLUE THRU ROOF.

CO2 CARBON DIOXIDE SENSOR - MOUNT IN RETURN OR WALL AS SHOWN ETR EXISTING TO REMAIN

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1220 NW MAIN ST. - LEE'S SUMMIT, MO SCALE: AS NOTED DATE: 5/13/24 DRAWN BY: M.D.K APPROVED BY: G.M.M. DWG #

**△** ASI #2

816 | 888 | 7380 NP Studio North, LLC Missouri Certificate of Authorization No. A-2017040540

CONTRACTOR FORGE CONSTRUCTION

BY GEN CONTRACTOR

BY GEN CONTRACTOR

BY GEN CONTRACTOR

TENANT IMPROVEMENTS FOR:

H&R BLOCK

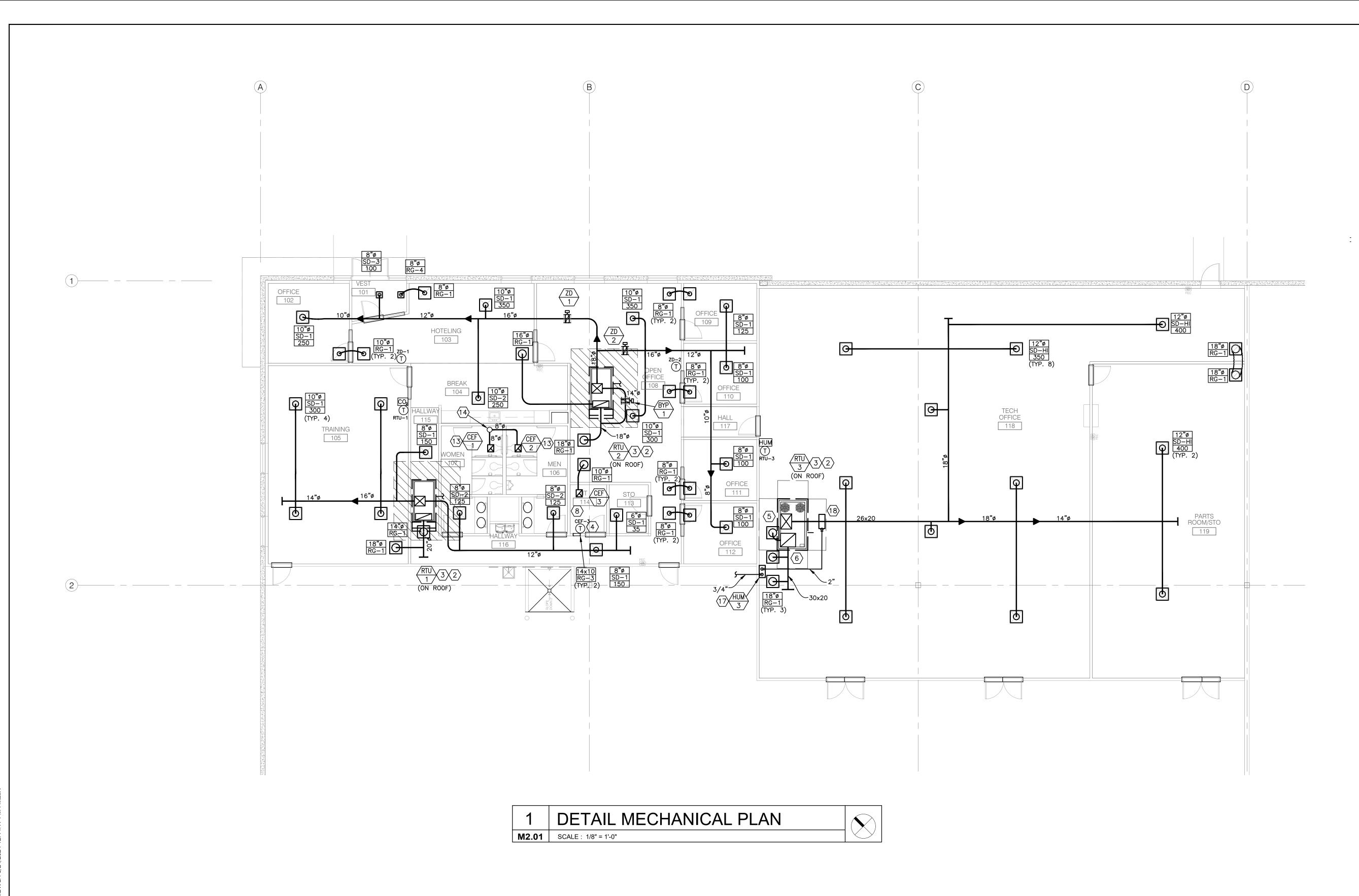
1220 NW Main St Lee's Summit, MO 64086

Project No. 2024-032 05.13.24 Issued For: Permit Submittal Drawn By: MDK

Reviewed By: GMM Revisions:

No. Date Description <u>★</u> 6/24/24 ASI #2

MECHANICAL PLAN



MECHANICAL PLAN NOTES:

 $\langle 1 \rangle$  existing shell building equipment to remain as currently installed.

(2) ROUTE CONDENSATE PIPING TO DISCHARGE ON ROOF. (TYP ALL RTU'S)

 $3\,
angle$  coordinate location of RTU with fire suppression piping and structure. Provide internally lined SUPPLY AIR RETURN AIR DUCT DROP THRU ROOF. TRANSITION SUPPLY AIR AND RETURN AIR DUCTWORK BELOW ROOF DECK TO DUCTWORK AS SHOWN/NOTED AND PROVIDE WITH EXTERNAL DUCT INSULATION PER

 $\overline{\langle 4 \rangle}$  line voltage thermostat for ceiling exhaust fan control. Thermostat to be installed by electrician.

(5) TRANSITION SUPPLY AIR FROM CURB OPENING TO 26x20 BELOW ROOF.

 $\langle 6 \rangle$  transition return air from curb opening to 30x20 below roof.

TO HVLS FAN CONTROLLER TO BE INSTALLED ON ADJACENT COLUMN. ALL CONDUIT, CONTROLS AND WIRING BY OTHERS. COORDINATE EXACT LOCATION OF HVLS FANS WITH FIRE SUPPRESSION PIPING AND WAREHOUSE LIGHTING. HVLS FANS TO BE INSTALLED PER NFPA GUIDELINES AND BE INTERLOCKED WITH FIRE ALARM TO SHUT DOWN UPON SIGNAL. ASSOCIATED INTERLOCK WIRING BY FIRE ALARM CONTRACTOR. (8) RTU ZONE CONTROLLER LOCATION. PROVIDE WITH REQUIRED 120V POWER.

GAS-FIRED UNIT HEATER FLUE THRU ROOF. VERIFY SIZING WITH EQUIPMENT MANUFACTURER. MAINTAIN A MINIMUM OF 10'-0" FROM EDGE OF ROOF. 5" FLUE FOR LENNOX MODEL LF25-200 MBH. INSTALL AT

18'-0" A.F.F. PROVIDE WITH WALL MOUNTED, HEATING ONLY THERMOSTAT MOUNTED ON WALL AT 4'-0" A.F.F. COORDINATE FINAL LOCATION WITH TENANT.

(11) PROVIDE WALL BRACKET FOR INSTALLATION OF CONDENSING UNIT. PROVIDE WITH DRIP PAN.

(12) ROUTE CONDENSATE THRU EXTERIOR WALL AND SPLASH ON GRADE.

 $\langle \overline{13} \rangle$  CEILING MOUNTED EXHAUST AIR FAN TO BE INTERLOCKED WITH RESTROOM LIGHT SWITCH. (BY OTHERS)

10 0 EXHAUST AIR DUCTWORK UP THRU ROOF WITH WEATHERCAP. MAINTAIN A MINIMUM OF 10 0 AWAY FROM OUTSIDE AIR INTAKES.

(15) PROVIDE 6" OUTSIDE AIR THRU WALL WITH WEATHERCAP. WALL CORING BY OTHERS.

 $\overline{(16)}$  RELOCATE EXISTING MAU CONTROLLER AS REQUIRED.

PROVIDE ELECTRIC STEAM GENERATING HUMIDIFIER. MOUNT ON WALL AT 2'-0" BELOW CEILING LEVEL TO TOP OF HUMIDIFIER. ROUTE STEAM PIPING TO DUCT MOUNTED STEAM MANIFOLD. PROVIDE DRAIN FROM HUMIDIFIER TO FLOOR DRAIN PROVIDED BY PLUMBER. PROVIDE 1/2" DOMESTIC WATER CONNECTION AND BACKFLOW AS REQUIRED. (BY OTHERS) PROVIDE 2" STEAM LINE FROM HUMIDIFIER TO DUCT MOUNTED DISPERSION TUBE. COORDINATE EXACT REQUIREMENTS WITH EQUIPMENT SUBMITTAL.

PROVIDE DUCT MOUNTED STEAM DISPERSION MANIFOLD. CONNECT TO STEAM AND PROVIDE CONDENSATE AS 19) PROVIDE 6" EXHAUST AIR THRU WALL WITH WEATHERCAP. WALL CORING BY OTHERS.

3315 N Oak Trafficway | Kansas City, MO 64116 816 | 888 | 7380 NP Studio North, LLC Missouri Certificate of Authorization No. A-2017040540

CONSTRUCTION
As Noted on Plans Review

PLUMBING DESIGN-BUILD BY GEN CONTRACTOR **DESIGN-BUILD** BY GEN CONTRACTOR ELECTRICAL **DESIGN-BUILD** 

FIRE PROTECTION **DESIGN-BUILD** BY GEN CONTRACTOR CONTRACTOR FORGE CONSTRUCTION

BY GEN CONTRACTOR

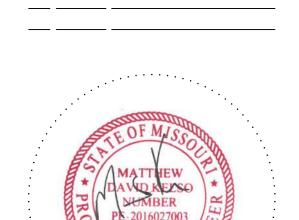
TENANT IMPROVEMENTS FOR:

# H&R BLOCK DEPOT

1220 NW Main St Lee's Summit, MO 64086

Project No. 2024-032 Issued For: Permit Submittal Drawn By: MDK Reviewed By: GMM

> Revisions: No. Date Description **A** 6/24/24 ASI #2



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2024 METRO AIR CONDITIONING CO.

1220 NW MAIN ST. - LEE'S SUMMIT, MO SCALE: AS NOTED DATE: 5/13/24 DRAWN BY: M.D.K

APPROVED BY: G.M.M. DWG #

**⚠** ASI #2

A. Division 15 shall be governed by all applicable provisions of the Contract Documents. The Mechanical Contractor shall furnish, install and connect all materials, equipment, apparatus, mechanical systems and incidentals required for complete and working installation. The Contractor shall supply all necessary labor, equipment, tools, insurance, taxes services; and The Contractor shall assume full responsibility for all obligations associated with completion of mechanical work as provided by the Contract Documents.

1.2 STANDARDS, REGULATIONS AND CODES:

A. The work shall comply with the edition of the applicable standards, regulations and codes currently in force of all State and location authorities having jurisdiction. Where quantities, sizes, or other requirements indicated on the drawings or herein specified are in excess of the standard or code requirements, the specifications and/or drawings shall govern. In the absence of other applicable local codes, acceptable to the Architect/Engineer, the Uniform Plumbing and Mechanical Codes shall apply to this work.

B. The Contractor shall comply with rules and regulations of public utilities and municipal departments affected by connections of services. The Contractor shall pay all fees associated there with.

C. The Mechanical Contractor shall be licensed to perform mechanical work in the municipality in which the project is

D. All products and types of construction shall meet or exceed the latest edition of applicable standards of manufacturer, testing, performance and installation.

1.3 LOCAL CONDITIONS:

A. The Contractor shall carefully examine the local conditions and existing installations and shall thoroughly familiarize himself with all existing conditions which may affect his work. The Contractor shall locate all existing utilities and protect them during the execution of the work.

B. The Contractor shall examine the Architectural, Mechanical and Electrical Drawings and Specifications to familiarize himself with the type of construction, materials, and equipment to be used for all work and how it will affect the installation of his contract.

1.4 CUTTING AND PATCHING:

A. All necessary cutting, drilling and patching shall be provided by this Contractor. Structural members shall not be disturbed without prior approval of the Architect. All areas disturbed by work performed under this Contract shall be neatly repaired and refinished to the condition of adjoining surfaces in a manner suitable to the Architect.

1.5 OPERATION DURING CONSTRUCTION:

A. Mechanical equipment shall not be used during construction unless instructed by the General Contractor. The mechanical contractor is responsible for the installation and operation, service and maintenance of all new equipment during construction and prior to acceptance by the Owner of the completed project at additional costs

B. Warranty periods shall not commence until final acceptance by the Owner/Substantial Completion.

1.6 SAFETY REGULATIONS:

A. All Mechanical work shall be performed in compliance with all applicable governing safety regulations, including OSHA regulations. Provide safety lights, guards and signs required. 1.7 HOUSEKEEPING:

A. The Contractor shall be responsible for keeping stocks of material and equipment stored on the premises in a neat and orderly manner.

B. The Contractor shall clean and maintain his portion of the work as specified in the General Conditions.

C. The Contractor shall remove from the premises all waste material present as a result of his work. 1.8 GRAPHIC REPRESENTATION AND JOB CONDITIONS:

A. The drawings shall serve as working drawings for the general layout of the various items of equipment; are diagrammatic unless specifically dimensioned; and do not necessarily indicate every required item. B. The Architectural drawings take precedence over the mechanical drawings in the representation of the general

C. Arrange work in a neat, well organized manner. Coordinate work with other trades involved.

1.9 GUARANTEES:

A. The Contractor shall guarantee all work performed and materials and equipment furnished under this contract, against defects in materials and workmanship for a period of one year from the Date of the Owner's Final Acceptance of the Work, or as noted in each section.

1.10 MOTORS AND CONTROLS:

A. All motors furnished under this specification shall be recognized manufacturer, of adequate capacity for the loads involved. All motors shall conform to the standards of manufacturer and performance of the National Electrical Manufacturers Association as shown in their latest publications.

1.11 PIPING IN ELECTRICAL ROOMS:

A. No piping except specifically noted otherwise will be permitted in electrical rooms. In rooms, where piping is indicated over electrical equipment, a suitable galvanized sheet metal pan or gutter piped to the drainage system shall be provided.

#### **END OF SECTION** SECTION 15100 - HEATING, VENTILATION AND AIR CONDITIONING

1.1 SCOPE:

A. The work included under this contract consists of providing all labor, materials, tools, transportation, services, etc., necessary to complete the installation of the heating, ventilating, and air conditioning systems and other items herein listed and as described in these specifications, as illustrated in the accompanying drawings or as directed

1.2 SHEET METAL:

A. Provide ductwork shown with necessary dampers. Construction of new galvanized prime grade steel sheets per ASHRAE and SMACNA Standards. Provide round or rectangular duct as indicated. Fabricate for the pressure and SMACNA seal class required.

B. Flexible duct shall be Wiremold WCK or acceptable equal maximum length shall be 8' - 0" or as noted/detailed. C. All duct sizes shown are actual size and include liner, where required.

1.3 GRILLES, REGISTERS, INLETS AND OUTLETS:

A. All supply grilles, registers and diffusers shall be as scheduled on the drawings and shall be ADC rated.

1.4 DUCTWORK ACCESSORIES:

A. Provide single thickness turning vanes in all supply duct turns.

B. Provide duct access doors for all internal mounted equipment. C. Provide 45° take-off fittings with volume damper for all round takeoffs to diffusers.

D. Provide dampers where shown and required. Balance and control dampers shall be opposed blade except air mixing dampers shall be parallel blade.

1.5 AIR CONDITIONING UNITS:

A. Air conditioning units shall be as scheduled. Units shall be standard catalogued products with the appropriate approval or certification by AGA, ARI and UL. Efficiencies shall conform to ASHRAE 90.1 standards.

1.6 FANS: A. Fans with accessories shall be as scheduled and shall be AMCA rated.

1.7 VIBRATION ISOLATION:

A. Duct flexible connection shall be non-combustible, 16 ounce canvas. Piping flexible connection shall be Flexonics 401H or acceptable equal.

1.8 MISCELLANEOUS MECHANICAL EQUIPMENT:

A. Provide constant, variable volume and/or fan powered boxes and accessories as scheduled. Acceptable manufacturers are E.H. Price or acceptable equal.

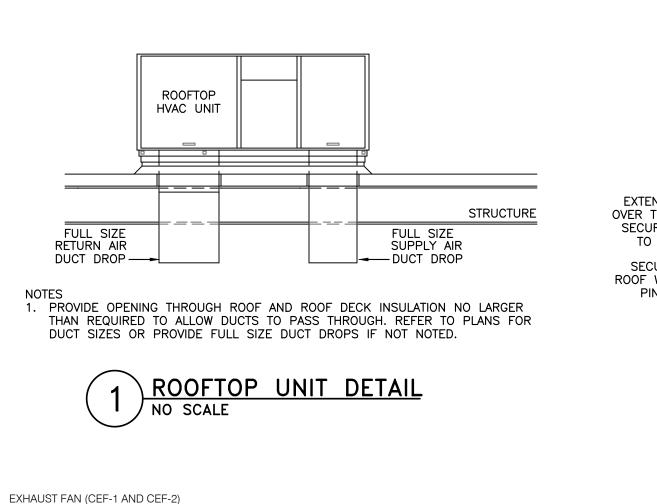
1.9 CLEANING:

A. Clean system by operating at least three hours prior to final acceptance with temporary filters. Remove all filters and replace with clean.

B. Use precleaned precharged refrigerant tube. Clean per manufacturers recommendations. 1.10 TESTING AND ADJUSTING:

A. Contractor shall operate and test the air conditioning and ventilation systems and instruct the Owner in its operation. Perform a series of general capacity and operating tests. The tests shall demonstrate the specified capacities of various pieces of equipment.

END OF SECTION



EACH UNIT SHALL BE FURNISHED WITH A THERMOSTAT TO BE INSTALLED IN THE SPACE. THE OCCUPANCY MODE SHALL BE

THE RTU SHALL CYCLE GAS HEATING STAGES IN RESPONSE TO HEATING DEMAND FROM THE THERMOSTAT. ON A CALL FOR

SPACE TEMPERATURE. THE SPACE HEATING TEMPERATURE SETPOINT SHALL BE ADJUSTABLE THRU THE PROGRAMMABLE

BELOW THE SETPOINT. WHEN ECONOMIZER MODE IS ENABLED, THE RETURN AND OUTSIDE AIR DAMPERS WILL MODULATE

THE BAROMETRIC RELIEF DAMPER CONSISTS OF A GRAVITY DAMPER THAT WILL OPEN TO RELIEVE EXCESS AIR AS BUILDING

MODULATE TO THE MINIMUM PER THE UNIT SCHEDULE DURING THE OCCUPIED MODE. THE OUTDOOR AIR DAMPER SHALL BE

UPON DETECTION OF SMOKE FROM THE RETURN DUCT SMOKE DETECTOR (BY OTHERS), THE FANS WILL CYCLE OFF AND

OUTDOOR AIR DAMPERS SHALL CLOSE. ONCE THE DETECTORS ARE RESET, THE UNIT WILL RETURN TO NORMAL CONTROL.

WHERE WALL MOUNTED CO2 SENSOR IS SHOWN/NOTED, THE CO2 SENSOR SHALL MODULATE THE OUTSIDE AIR DAMPER

WIRE THE SMOKE DETECTOR TO THE EMERGENCY SHUT DOWN OF THE RTU CONTROLLER.

SMOKE DETECTOR INSTALLATION BY OTHERS, AS NECESSARY. IT IS THE RESPONSIBILITY OF THE FIRE ALARM CONTRACTOR TO

WHEN UNIT IS NOT IN ECONOMIZER MODE AND THE SUPPLY FAN IS IN OPERATION. THE OUTDOOR AIR DAMPER SHALL

DURING UNOCCUPIED MODE, THE UNIT SHALL CONTROL TO THE UNOCCUPIED MODE SETBACK TEMPERATURE. IF THE UNOCCUPIED SETPOINT IS EXCEEDED, THE RTU SHALL HEAT OR COOL UNTIL THE ZONE TEMPERATURE IS WITHIN THE

THE FACTORY RTU CONTROLLER WILL INDEX THE UNIT INTO ECONOMIZER MODE IF THE OUTDOOR AIR DRY BULB/WET BULB IS

BETWEEN MINIMUM POSITION AND FULL OPEN AS NECESSARY TO MAINTAIN DISCHARGE AIR TEMPERATURE. THE RTU START-UP

THE EXHAUST FAN SHALL INTERLOCKED WITH WALL MOUNTED LIGHT SWITCH BY OTHERS.

ROOFTOP UNIT - CONSTANT VOLUME WITH SINGLE SETPOINT CONTROL (ALL RTU"S)

ECONOMIZERS SHALL BE 0-100% FULLY MODULATING WITH ENTHALPY CONTROL.

1. DESCRIPTION:

DAMPERS.

THERMOSTAT.

3. SUPPLY AIR FAN:

5. GAS HEATING:

ECONOMIZER:

UNIT ECONOMIZER.

**THERMOSTAT** 

FAN SHALL OPERATE CONTINUOUSLY.

4. MECHANICAL COOLING:

PROGRAMMABLE THERMOSTAT

TECHNICIAN SHALL SET THE

UNOCCUPIED MODE

PRESSURE INCREASES.

OUTSIDE AIR DAMPER

8. BAROMETRIC RELIEF DAMPER:

10. SMOKE DETECTION CONTROL:

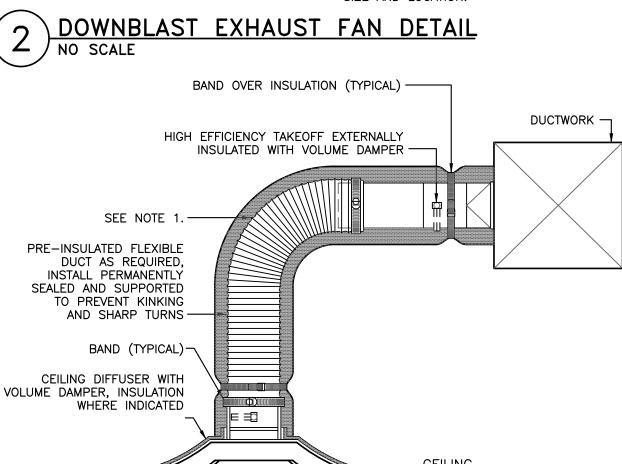
UNOCCUPIED SETPOINTS, PLUS OR MINUS AN OFFSET OF 6°F (ADJ.).

BETWEEN THE SCHEDULEDMINIMUM AND MAXIMUM VENTILATION LEVELS.

EXHAUST FAN WITH BIRDSCREEN SECURE EXHAUST FAN TO ROOF CURB WITH VIBRATION OVER TOP OF CURB. SECURE DUCTWORK - PREFABRICATED INSULATED TO CURB NAILER -CURB WITH TREATED WOOD SECURE CURB TO ROOF WITH SCREWS, PINS, OR BOLTSdash roof deck refer to ANGLE IRON ARCHITECTURAL DRAWINGS BY OTHERS (IF REQUIRED)— COUNTER BALANCED BACKDRAFT (UNLESS NOTED OTHERWISE) DAMPER, SECURE TO DUCT FROM ABOVE TO ALLOW SERVICE OR REMOVAL OF DAMPER FROM EXHAUST DUCT UP THROUGH ROOF. SEE PLANS FOR SIZE AND LOCATION. DOWNBLAST EXHAUST FAN DETAIL EACH SINGLE-ZONE PACKAGED ROOFTOP UNIT (RTU) WILL BE PROVIDED AS IDENTIFIED ON THE EQUIPMENT SCHEDULES, WITH DIRECT EXPANSION COOLING COIL, GAS HEAT, SINGLE-SPEED SUPPLY FAN, 2" FILTERS, ECONOMIZER, BAROMETRIC RELIEF.

BAND OVER INSULATION (TYPICAL) ----DETERMINED THROUGH A USER-ADJUSTABLE PROGRAMMABLE SCHEDULE WITH OR WITHOUT USER OVERRIDE BUTTON ON THE HIGH EFFICIENCY TAKEOFF EXTERNALLY INSULATED WITH VOLUME DAMPER -THE FAN MODE SHALL SHALL BE SELECTABLE FOR AUTO OR ON. WHEN AUTO IS SELECTED DURING UN-OCCUPIED HOURS, THE FAN SHALL CYCLE ON AND OFF WITH HEATING OR COOLING. WHEN ON IS SELECTED DURING OCCUPIED HOURS, THE SUPPLY EACH RTU SHALL CYCLE COOLING COMPRESSOR STAGES IN RESPONSE TO COOLING DEMAND FROM THE THERMOSTAT. THE SUPPLY FAN WILL BE ENERGIZED (AUTO MODE) AND STAGE COOLING CAPACITY TO MAINTAIN SPACE TEMPERATURE SETPOINT SEE NOTE 1. BASED ON FACTORY CONTROL SEQUENCES. THE SPACE COOLING TEMPERATURE SETPOINT SHALL BE ADJUSTABLE THRU THE PRE-INSULATED FLEXIBLE DUCT AS REQUIRED, INSTALL PERMANENTLY HEATING FROM THE ZONE SENSOR, THE SUPPLY FAN WILL BE ENERGIZED AND THE BURNER SHALL BE ENERGIZED TO MAINTAIN SEALED AND SUPPORTED TO PREVENT KINKING AND SHARP TURNS —

. EXTEND HARD METAL DUCT SO THAT MAXIMUM FLEXIBLE DUCT LENGTH DOES NOT



2. DUCTWORK BRANCH RUNOUTS TO BE SAME SIZE AS DIFFUSER NECK UNLESS NOTED OTHERWISE D. PERFORATED SUPPLY AIR GRILLE TO BE INSTALLED WITHOUT DEFLECTORS



| MARK  | MANUFACTURER | QUANTITY | MODEL   | LOCATION/ | SERVICE          |     | F        | AN   | 63       | ELECTRICAL | WEIGHT | NOTES   |
|-------|--------------|----------|---------|-----------|------------------|-----|----------|------|----------|------------|--------|---------|
|       |              |          |         | MOUNTING  |                  | CFM | ESP (IN) | RPM  | HP/WATTS | (V/PH)     | (LBS)  |         |
| CEF-1 | GREENHECK    | 1        | SP-A250 | CEILING   | RESTROOM EXHAUST | 225 | 0.375    | 1315 | 1000     | 120/1      | 24     | A, B, E |
| CEF-2 | GREENHECK    | 1        | SP-A250 | CEILING   | RESTROOM EXHAUST | 225 | 0.375    | 1315 | 1000     | 120/1      | 24     | A, B, E |
| CEF-3 | GREENHECK    | 1        | SP-A250 | CEILING   | IT ROOM          | 200 | 0.375    | 1315 | 1000     | 120/1      | 24     | A, D, D |
| CEF-4 | GREENHECK    | 1        | SP-A90  | CEILING   | RESTROOM EXHAUST | 75  | 0.25     | 1200 | 1000     | 120/1      | 20     | A, B, E |

| MARK  | MANUFACTURER | MODEL        | TYPE            | SU  | PPLY FAN | COOLIN      | G COIL      | HEATING     | G COIL |     | ELECTR | ICAL  | VENTILATION | WEIGHT | NOTES |
|-------|--------------|--------------|-----------------|-----|----------|-------------|-------------|-------------|--------|-----|--------|-------|-------------|--------|-------|
|       |              |              |                 | CFM | ESP (IN) | TH<br>(MBH) | SH<br>(MBH) | TH<br>(MBH) | °F     | MCA | MOCP   | V/PH  | (CFM)       | (LBS)  |       |
| FCU-1 | LENNOX       | MMDB018S4-2P | DUCTED FAN-COIL | 529 |          | 18          | 12          | 20          | 50°F   | 1   |        |       | 30          | 60     | F, G  |
| CU-1  | LENNOX       | MPC018S4S-1P | CONDENSING UNIT |     |          |             |             |             |        | 18  | 25     | 208/1 |             | 125    | A - E |

D. FURNISH WITH WALL MOUNTED LINE VOLTAGE THERMOSTAT. THERMOSTAT TO BE INSTALLED BY ELECTRICAL CONTRACTOR AND INTERLOCKED WITH ASSOCIATED LOUVER.

E. PROVIDE WITH UNIT MOUNTED SPEED CONTROLLER, HANGING BRACKET, BACKDRAFT DAMPER, ROUND DUCT CONNECTION AND WHITE GRILLE.

PROVIDE WITH WIRED TEMPERATURE CONTROLLER.

A. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH.

C. FAN TO OPERATE CONTINUOUSLY.

B. INTERLOCK EXHAUST FAN WITH RESTROOM LIGHT SWITCH.

FAN-COIL TO BE POWERED FROM CONDENSING UNIT POWER CIRCUIT. REFER TO INSTALLATION INSTRUCTIONS. SUPPORT CONDENSING FROM TILT WALL WITH CONDENSER HANGING BRACKET.

PROVIDE WITH 25'-0", 1/4" LIQUID AND 1/2" SUCTION PRE-INSULATED LINESET AS REQUIRED.

ELECTRICAL CONTRACTOR TO PROVIDE WIRING BETWEEN CU AND FCU.

ROUTE CONDENSATE TO DISCHARGE AT GRADE AS REQUIRED. HEATING CAPACITY BASED ON TEMPERATURES SHOWN.

MARK MANUFACTURER MODEL NOMINAL QUANTITY SERVICE

| RTU-1 LENNOX KGB060S4B 5 1 MAIN OFFICE CV 2,000 0.75 1.0 1 58/57 60 47 1 108 86 2 215 215 13 20 460/3 1,050 11.0 RTU-2 LENNOX KGB060S4B 5 1 MAIN OFFICE CV 2,000 0.75 1.0 1 58/57 60 47 1 108 86 2 215 215 13 20 460/3 1,050 11.0 RTU-3 LENNOX SGH120H4M 10 1 TECH ROOM CV 4,000 0.75 3.0 2 59/58 120 93 2 180 144 2 365 365 24 30 460/3 2,000 11.0 |       |        |           | TONNAGE |   |             | TYPE | CFM   | ESP<br>(IN) | HP  | 140,740 Marie 10 | SAT<br>(DB/WB) | TH<br>(MBH) |    | COOLING<br>STAGES |     |     | STAGES | VENTILATION<br>(CFM) | VENTILATION<br>(CFM) | MCA | MOCP | V/PH  | (LBS) | EER<br>(SEER) | IEER | i |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------|-----------|---------|---|-------------|------|-------|-------------|-----|------------------|----------------|-------------|----|-------------------|-----|-----|--------|----------------------|----------------------|-----|------|-------|-------|---------------|------|---|
|                                                                                                                                                                                                                                                                                                                                                     | RTU-1 | LENNOX | KGB060S4B | 5       | 1 | MAIN OFFICE | CV   | 2,000 | 0.75        | 1.0 | 1                | 58/57          | 60          | 47 | 1                 | 108 | 86  | 2      | 215                  | 215                  | 13  | 20   | 460/3 | 1,050 | 11.0          |      |   |
| RTU-3 LENNOX SGH120H4M 10 1 TECH ROOM CV 4,000 0.75 3.0 2 59/58 120 93 2 180 144 2 365 365 24 30 460/3 2,000 11.0                                                                                                                                                                                                                                   | RTU-2 | LENNOX | KGB060S4B | 5       | 1 | MAIN OFFICE | CV   | 2,000 | 0.75        | 1.0 | 1                | 58/57          | 60          | 47 | 1                 | 108 | 86  | 2      | 215                  | 215                  | 13  | 20   | 460/3 | 1,050 | 11.0          |      |   |
|                                                                                                                                                                                                                                                                                                                                                     | RTU-3 | LENNOX | SGH120H4M | 10      | 1 | TECH ROOM   | CV   | 4,000 | 0.75        | 3.0 | 2                | 59/58          | 120         | 93 | 2                 | 180 | 144 | 2      | 365                  | 365                  | 24  | 30   | 460/3 | 2,000 | 11.0          |      |   |
|                                                                                                                                                                                                                                                                                                                                                     |       |        |           |         |   |             |      |       |             |     |                  |                |             |    |                   |     |     |        |                      |                      |     |      |       |       |               |      |   |

A. EQUIPMENT SIZED FOR 100 DEGREE F AMBIENT TEMPERATURE.

. PROVIDE WITH 2", 30% EFFICIENT PLEATED THROWAWAY AIR FILTERS. PROVIDE WITH MANUFACTURERS STANDARD 14" INSULATED ROOF CURB.

PROVIDE WITH PLEATED FILTERS AND HAIL GUARDS. PROVIDE WITH FACTORY MOUNTED ENTHALPY ECONOMIZER WITH BAROMETRIC RELIEF DAMPER.

PROVIDE WITH 7-DAY PROGRAMMABLE THERMOSTAT.

RETURN AIR SMOKE DETECTOR FURNISHED AND INSTALLED BY OTHERS. DISCONNECT SWITCH AND GFCI OUTLET TO BE FURNISHED BY ELECTRICIAN. PROVIDE WITH FACOTRY MOUNTED HOT-GAS REHEAT COIL FOR DEHUMIDIFICATION.

THROUGH ROOF NO LARGER THAN REQUIRED TO ALLOW PASSAGE OF DUCTWORK. -THREADED PIPE TO PVC ADAPTER ON CONDENSATE WASTE DOUBLE SWING CONNECTION(S) REDUCER · INSTALL ROOFTOP UNIT LEVEL. FLASH & COUNTERFLASH ALL ROOF PENETRATING. CURB SHALL BE FULL PERIMETER TYPE. COORDINATE CURB INSTALLATION W/ STRUCTURAL FRAMING. 3 ROOFTOP UNIT CONNECTION DETAIL

TYPICAL ROOFTOP UNIT-PROVIDE OPENING

|       | G            | RILLE, I  | REGISTER      | & DIFFUS            | ER SCHE   | DULE   |          |         |
|-------|--------------|-----------|---------------|---------------------|-----------|--------|----------|---------|
| MARK  | MANUFACTURER | MODEL     | TYPE          | SIZE                | MOUNTING  | FINISH | MATERIAL | NOTES   |
| SD-1  | PRICE        | SPD       | SQUARE PLAQUE | 24" x 24"           | LAY-IN    | WHITE  | STEEL    | G       |
| SD-HI | PRICE        | SPD-HI    | SQUARE PLAQUE | 24" x 24"           | LAY-IN    | WHITE  | STEEL    | G       |
| SD-2  | PRICE        | SPD       | SQUARE PLAQUE | 24" x 24"           | SURFACE   | WHITE  | STEEL    | G, B    |
| SD-3  | PRICE        | SPD       | SQUARE PLAQUE | 12" x 12"           | LAY-IN    | WHITE  | STEEL    | G       |
| SD-4  | PRICE        | SPD       | SQUARE PLAQUE | 12" x 12"           | SURFACE   | WHITE  | STEEL    | G, B    |
| VAV-1 | PRICE        | VARITHERM | VAV           | 24" x 24"           | LAY-IN    | WHITE  | STEEL    | G       |
| LSD-1 | PRICE        | TBD       | LINEAR SLOT   | 4'-0" X (4) 1" SLOT | LAY-IN    | WHITE  | STEEL    | Н       |
| SG-1  | PRICE        | 520D      | WALL MOUNT    | AS NOTED            | WALL/DUCT | WHITE  | STEEL    | Α       |
| SG-2  | PRICE        | SDGE      | SPIRAL MOUNT  | AS NOTED            | DUCT      | MILL   | STEEL    | A, C    |
| RG-1  | PRICE        | PDDR      | PERFORATED    | 24" x 24"           | LAY-IN    | WHITE  | STEEL    | G       |
| RG-2  | PRICE        | PDDR      | PERFORATED    | 12" x 24"           | LAY-IN    | WHITE  | STEEL    | G       |
| RG-3  | PRICE        | 530RL     | WALL MOUNT    | AS NOTED            | WALL/DUCT | WHITE  | STEEL    | B, G    |
| RG-4  | PRICE        | PDDR      | PERFORATED    | 12" x 12"           | SURFACE   | WHITE  | STEEL    | B, G    |
| EX-1  | PRICE        | APDDR     | PERFORATED    | 24" x 24"           | LAY-IN    | WHITE  | ALUMINUM | A, B, G |
| EX-2  | PRICE        | APDDR     | PERFORATED    | 24" x 24"           | SURFACE   | WHITE  | ALUMINUM | G       |
| EX-3  | PRICE        | APDDR     | PERFORATED    | 12" x 12"           | LAY-IN    | WHITE  | ALUMINUM | A, B, G |
| EX-4  | PRICE        | APDDR     | PERFORATED    | 12" x 12"           | SURFACE   | WHITE  | ALUMINUM | A, B, G |

A. PROVIDE WITH DAMPER OPERABLE FROM FACE OF DEVICE.

B. PROVIDE WITH SURFACE MOUNT FRAME KIT FOR MOUNTING IN HARD CEILING/WALL C. PROVIDE WITH OPPOSED BLADE DAMPER AND MILL FINISH.

E. PROVIDE WITH 2KW ELECTRIC HEAT, WALL MOUNTED WIRELESS THERMOSTAT. F. PROVIDE WITH RETURN AIR LIGHT SHIELD.

G. PROVIDE WITH INSULATED BACKING

PROVIDE WITH FACTORY INSULATED SUPPLY PLENUM.

| MARK   | MANUFACTURER | QUANTITY | MODEL           | TYPE              | LOCATION/ | CAPACITY | TOTAL AIRFLOW | OUTSIDE AIR | KW                                      | E   | LECTRIC | CAL   | WEIGHT | NOTES |
|--------|--------------|----------|-----------------|-------------------|-----------|----------|---------------|-------------|-----------------------------------------|-----|---------|-------|--------|-------|
|        |              |          |                 | (GAS OR ELECTRIC) | MOUNTING  | (LBS/HR) | (CFM)         | (CFM)       |                                         | MCA | MOCP    | V/PH  | (LBS)  |       |
| HUM -1 | NEPTRONIC    | 1        | SKE4-N20M-480-3 | ELECTRIC          | SPACE     | 60       | 4,000         | 400         | 20                                      | 25  |         | 460/3 | 290    | A - E |
|        |              |          |                 |                   |           |          |               |             | *************************************** |     |         |       |        |       |

A. FIELD MOUNTED AIRLFOW PROVING SWITCH.

. PROVIDE WITH CONDENSATE DRAIN COOLER AS REQUIRED.

B. PROVIDE FACTORY MOUNTED DISCONNECT SWITCH. . PROVIDE FIELD MOUNTED HIGH-LIMIT HUMIDISTAT AND WALL MOUNTED HUMIDISTAT . WATER SUPPLY WITH SHUT-OFF VALVE AND BACKFLOW (IF REQUIRED) BY OTHERS.

| UNIT<br>SERVED | OCCUPANCY<br>CLASSIFICATION | AREA<br>(SQ. FT.) | PEOPLE<br>PER 1,000                     | FIXED<br>SEATING | QUANTITY<br>OF PEOPLE | REQUIRED<br>OUTSIDE AIR | REQUIRED<br>OUTSIDE AIR | TOTAL<br>REQUIRED | NOTE |
|----------------|-----------------------------|-------------------|-----------------------------------------|------------------|-----------------------|-------------------------|-------------------------|-------------------|------|
| RTU-1          | OFFICE                      | 105               | 5                                       | *****            | 1                     | 5                       | 0.06                    | 9                 | А    |
|                | CORRIDOR                    | 350               |                                         |                  |                       |                         | 0.06                    | 21                | А    |
|                | RESTROOMS                   | 340               | ***                                     |                  |                       | W. W. Ph                | 0.06                    | 20                | Α    |
|                | TRAINING/CLASSROOM          | 750               | 28                                      | 24               | 21                    | 5                       | 0.06                    | 165               | А    |
|                |                             |                   |                                         |                  |                       | REQUIRE                 | D VENTILATION           | 215               | CFM  |
| RTU-2          | OFFICE                      | 1,415             | 5                                       | ***              | 7                     | 5                       | 0.06                    | 120               | А    |
|                | LOBBY                       | 340               | 10                                      |                  | 3                     | 5                       | 0.06                    | 37                | А    |
|                | CORRIDOR/VEST               | 50                |                                         |                  |                       |                         | 0.06                    | 3                 | А    |
|                | BREAK ROOM                  | 240               | 25                                      |                  | 6                     | 5                       | 0.06                    | 44                | Α    |
|                |                             |                   |                                         |                  | ·                     | REQUIRE                 | D VENTILATION           | 205               | CFM  |
| RTU-3          | OFFICE                      | 5,100             | 5                                       | 10               | 26                    | 5                       | 0.06                    | 356               | А    |
|                |                             |                   | *************************************** |                  |                       | REQUIRE                 | D VENTILATION           | 356               | CFM  |
| FCU-1          | OFFICE                      | 325               | 5                                       |                  | 2                     | 5                       | 0.06                    | 28                | Α    |

B. VENTILATION IS BASED ON TOTAL QUANTITY OF PEOPLE TAKEN FROM NUMBER OF ACTUAL SEATING SHOWN ON ARCHITECTURAL FLOOR PLAN.

4. VENTILATION RATES ARE TAKEN FROM ASHRAE 62.1-2010 - VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY.

REFER TO EQUIPMENT SCHEDULES FOR ACTUAL VENTILATION AIRFLOWS.

OCCUPANCY REDUCED FROM 5 PEOPLE PER 1,000 SF TO ACTUAL OCCUPANTS PER TENANT.

| F    | AC   | KA    | GEI         | D R    | OOF           | TOP            | UN          | IT (        | DX C              | 001 | _ING/           | GAS    | HEAT)                |                   |     |        |       |        |               |      |          |
|------|------|-------|-------------|--------|---------------|----------------|-------------|-------------|-------------------|-----|-----------------|--------|----------------------|-------------------|-----|--------|-------|--------|---------------|------|----------|
| CE   | UNIT |       | SUPF        | PLY FA | AN            |                | COOLI       | NG COI      | _                 | (   | GAS HEAT        | ING    | MINIMUM              | DESIGN/MAX        | E   | LECTRI | CAL   | WEIGHT | ARI MINUMUM   | ARI  | NOTES    |
|      | TYPE | CFM   | ESP<br>(IN) | HP     | FAN<br>STAGES | SAT<br>(DB/WB) | TH<br>(MBH) | SH<br>(MBH) | COOLING<br>STAGES |     | OUTPUT<br>(MBH) | STAGES | VENTILATION<br>(CFM) | VENTILATION (CFM) | MCA | MOCP   | V/PH  | (LBS)  | EER<br>(SEER) | IEER |          |
| FICE | CV   | 2,000 | 0.75        | 1.0    | 1             | 58/57          | 60          | 47          | 1                 | 108 | 86              | 2      | 215                  | 215               | 13  | 20     | 460/3 | 1,050  | 11.0          | _    | A - H    |
| FICE | CV   | 2,000 | 0.75        | 1.0    | 1             | 58/57          | 60          | 47          | 1                 | 108 | 86              | 2      | 215                  | 215               | 13  | 20     | 460/3 | 1,050  | 11.0          |      | A - H    |
| MOC  | CV   | 4,000 | 0.75        | 3.0    | 2             | 59/58          | 120         | 93          | 2                 | 180 | 144             | 2      | 365                  | 365               | 24  | 30     | 460/3 | 2,000  | 11.0          |      | A - H, J |
|      |      |       |             |        |               |                |             |             |                   |     |                 |        |                      |                   |     |        |       |        |               |      |          |

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1220 NW MAIN ST. - LEE'S SUMMIT, MO SCALE: AS NOTED DATE: 5/13/24 DRAWN BY: M.D. APPROVED BY: G.M.M. DWG #

<u>/2</u> ASI#2

3315 N Oak Trafficway | Kansas City, MO 64116 816 | 888 | 7380 NP Studio North, LLC Missouri Certificate of Authorization No. A-2017040540 PLUMBING **DESIGN-BUILD** BY GEN CONTRACTOR

CONSTRUCTION As Noted on Plans Review

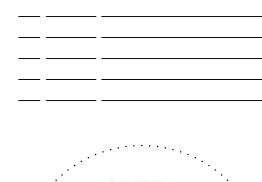
DESIGN-BUILD BY GEN CONTRACTOR ELECTRICAL DESIGN-BUILD BY GEN CONTRACTOR FIRE PROTECTION **DESIGN-BUILD** BY GEN CONTRACTOR CONTRACTOR FORGE CONSTRUCTION

TENANT IMPROVEMENTS FOR:

Lee's Summit, MO 6408

Project No. 2024-032 05.13.24 Issued For: Permit Submittal Drawn By: MDK Reviewed By: GMM

No. Date Description **2** 6/24/24 ASI #2







Missouri Certificate of Authorization No. A-2017040540

PLUMBING DESIGN-BUILD
BY GEN CONTRACTOR

MECHANICAL DESIGN-BUILD

MECHANICAL DESIGN-BUILD
BY GEN CONTRACTOR

ELECTRICAL DESIGN-BUILD
BY GEN CONTRACTOR

FIRE PROTECTION DESIGN-BUILD

BY GEN CONTRACTOR

CONTRACTOR FORGE CONSTRUCTION

TENANT IMPROVEMENTS FOR:

# H&R BLOCK DEPOT



Project No. 2024-032

Date: 04.26.24

Issued For: Permit Subr

Drawn By: F. Crubaug

HERITAGE ELECTRIC, L.L.C.

841 N. MARTWAY

phone (913) 747 0528 fax (913) 747 0539

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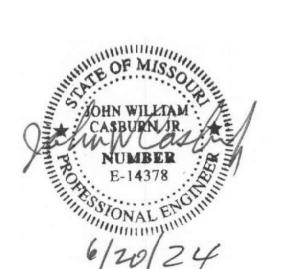
Olathe, Kansas

No. Date Description

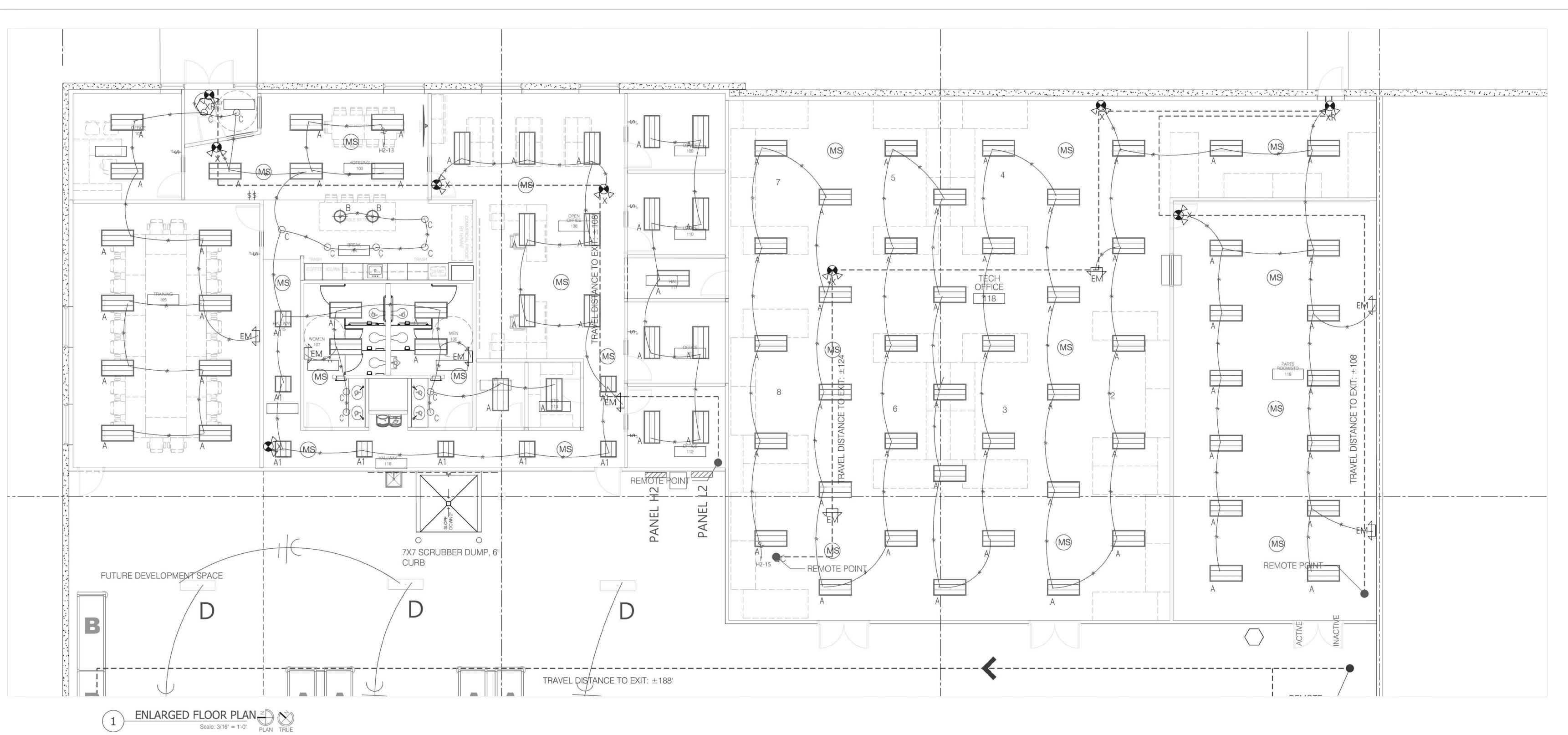
1 06/24/24 City Comments

2 06/24/24 Owner Changes

2 06/24/24 Owner Changes



E1.00



DEK 2 ENLARGED FLOOR PLAN Scale: 3/16" = 1'-0" PLAN TRUE

TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT

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FIRE PROTECTION DESIGN-BUILD

CONTRACTOR FORGE CONSTRUCTION

ELECTRICAL

**DESIGN-BUILD** BY GEN CONTRACTOR

**DESIGN-BUILD** BY GEN CONTRACTOR

**DESIGN-BUILD** BY GEN CONTRACTOR

BY GEN CONTRACTOR



Project No. 2024-032 04.26.24 Issued For: Permit Submittal Drawn By: F. Crubaugh Reviewed By:

No. Date Description
1 06/24/24 City Comments 2 <u>06/24/24</u> Owner Changes



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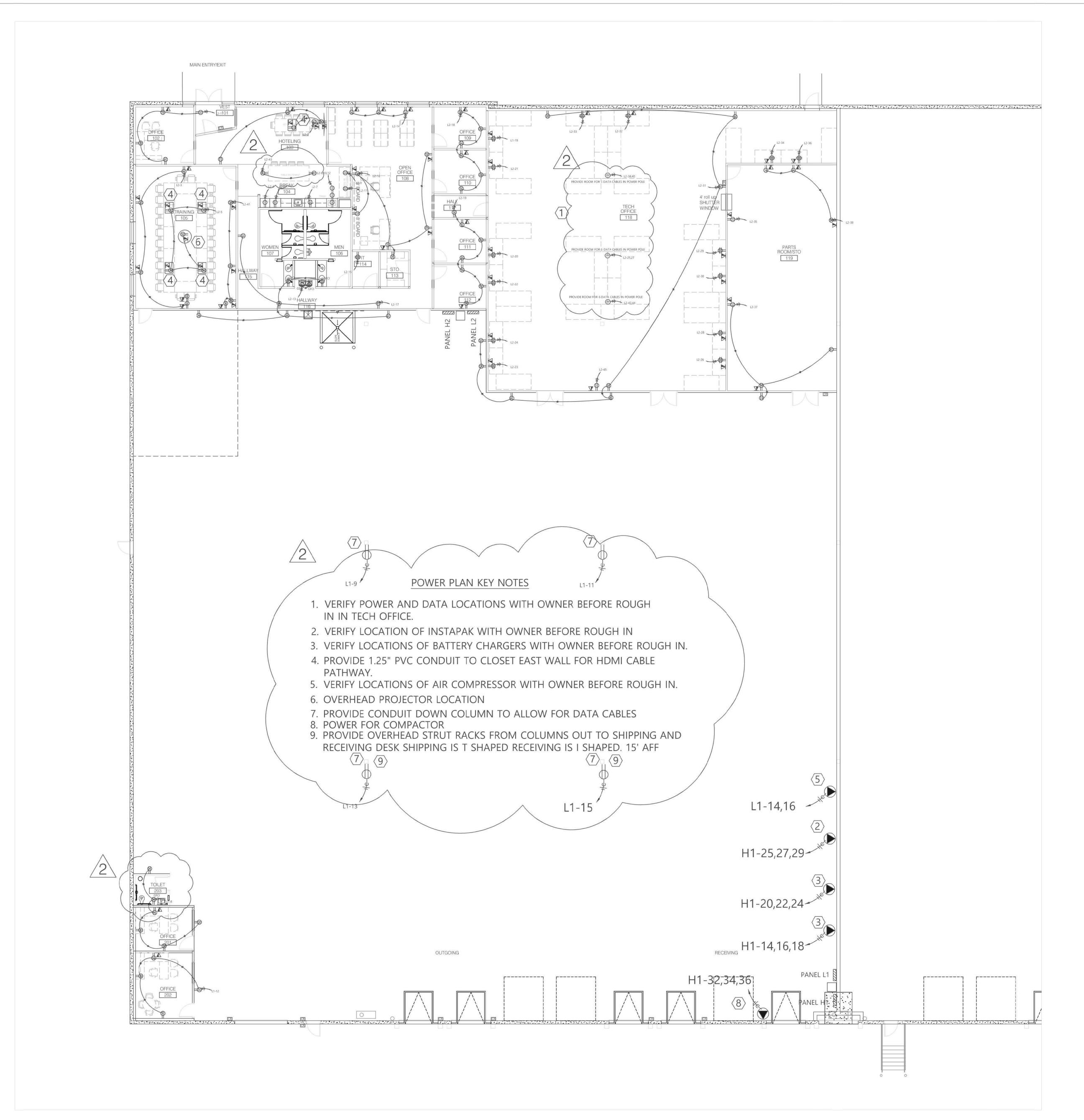
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ENLARGED LIGHTING

CASBURN IR NUMBER

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TENANT IMPROVEMENTS FOR:

## H&R BLOCK DEPOT

1220 NW Main St Unit E Lee's Summit, MO 64086

Project No. 2024-03

Date: 04.26.24

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phone (913) 747 0528 fax (913) 747 0539

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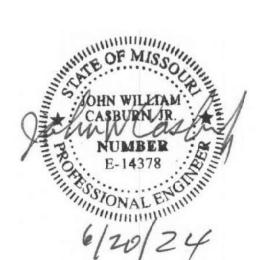
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Drawn By: F. Crubaugh
Reviewed By:

No. Date Description

1 06/24/24 City Comments

2 06/24/24 Owner Changes

2 06/24/24 Owner Changes



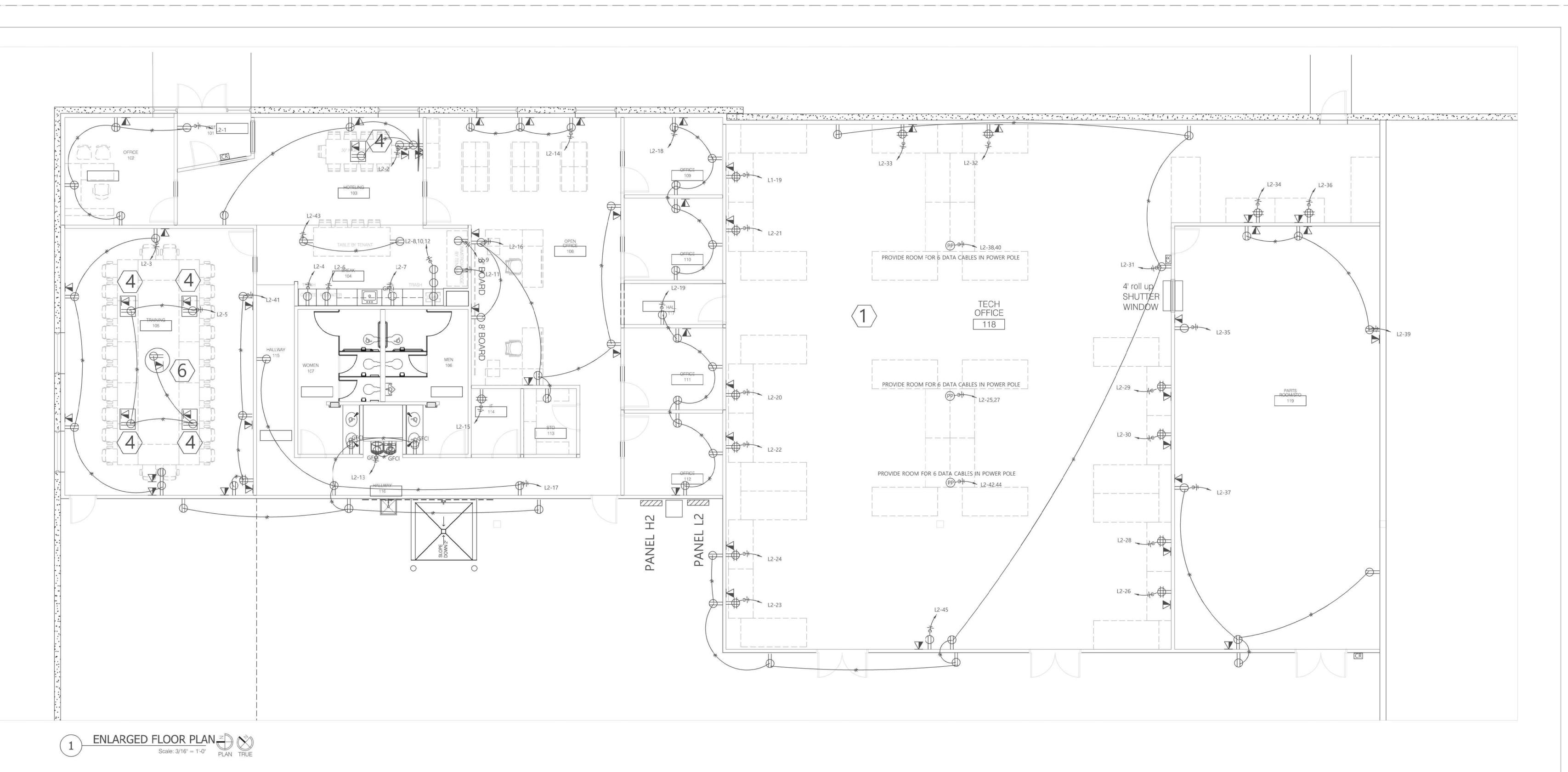
E2.00

OVERALL FLOOR PLAN

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

PLAN

TRUE



OFFICE 2001

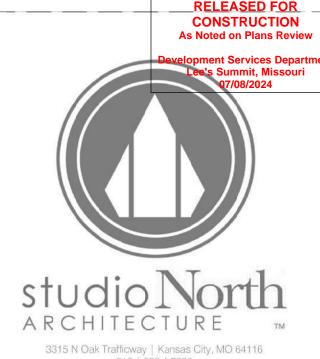
2 ENLARGED FLOOR PLAN Scale: 3/16" = 1'-0" PLAN TRUE

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Olathe, Kansas



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ELECTRICAL

DESIGN-BUILD
BY GEN CONTRACTOR

FIRE PROTECTION

DESIGN-BUILD
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TENANT IMPROVEMENTS FOR:

# H&R BLOCK DEPOT



Project No. 2024-032

Date: 04.26.24

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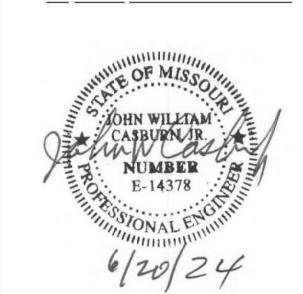
Drawn By: F. Crubaugh

Reviewed By:

No. Date Description

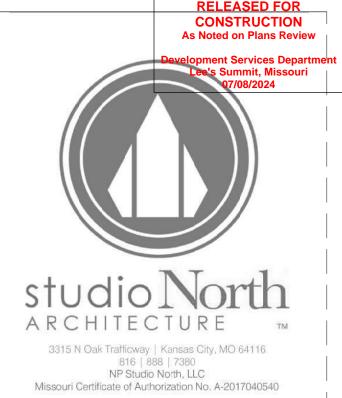
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E2.10
ENLARGED POWER





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TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT



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841 N. MARTWAY
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phone (913) 747 0528
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1 06/24/24 City Comments

1 06/24/24 City Comments 2 06/24/24 Owner Changes

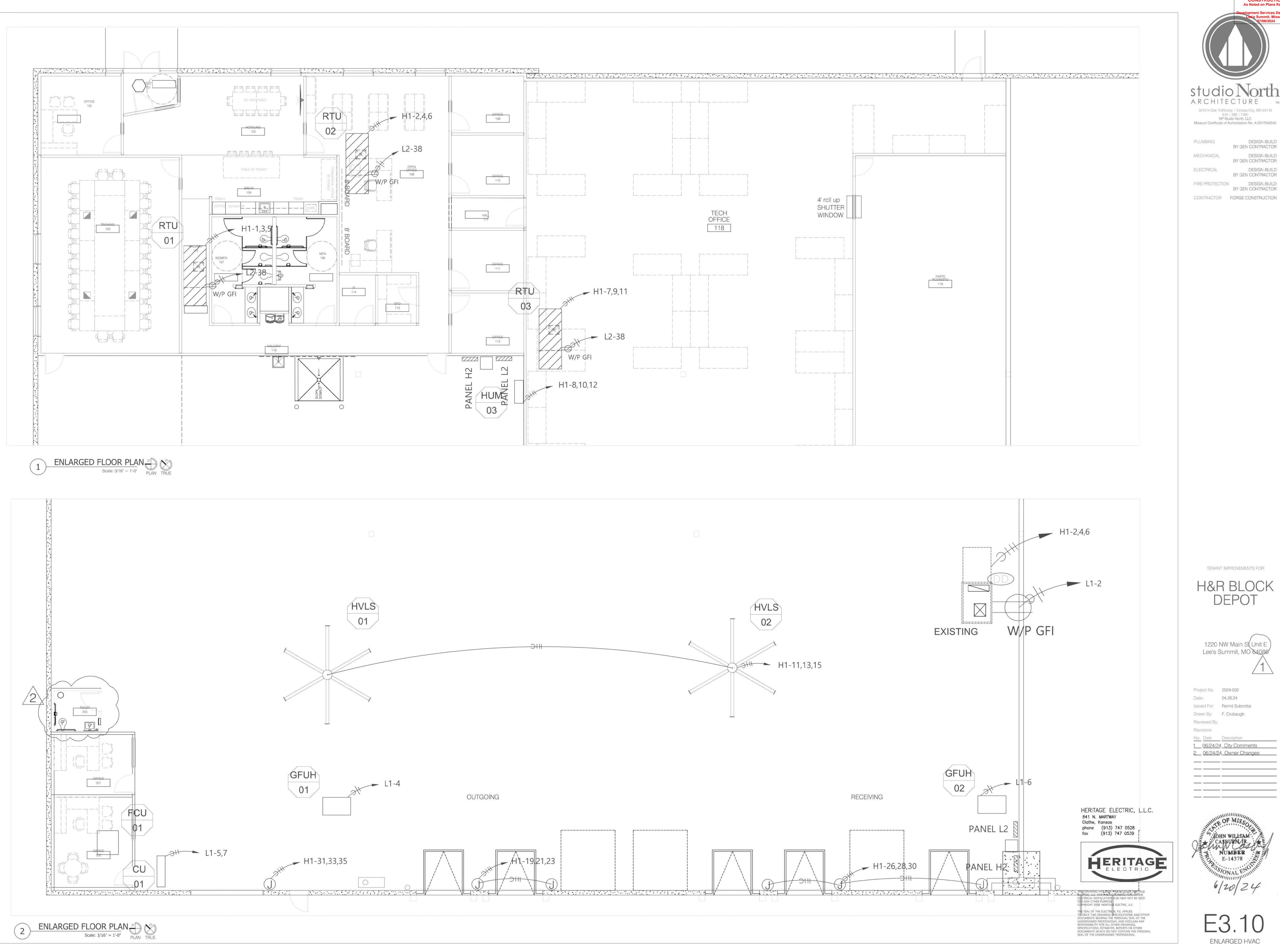


E3.00

OVERALL FLOOR PLAN

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

PLAN TRUE



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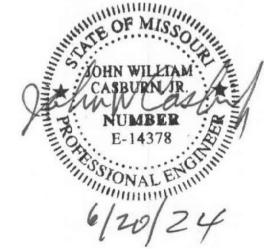
TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT

1220 NW Main S Unit E Lee's Summit, MO 64086

Project No. 2024-032

1 06/24/24 City Comments





Scope:

Provide electrical for new TI

All Electrical work shall be as per NEC 2017.

All work shall be done by qualified electricians.

All branch wiring shall be copper.

Devices shall be 20a commercial grade and color shall be by architect.

## **SPECIFICATIONS**

1. CONDUIT ABOVE GRADE SHALL BE EMT UNLESS OTHERWISE NOTED 2. CONDUIT BELOW GRADE SHALL BE RIGID PVC UNLESS OTHERWISE NOTED

3. CONNECTIONS SHALL BE MADE USING SET SCREW CONNECTORS 4. MC CABLE IS ACCETABLE FOR FINAL CONNECTIONS TO LIGHT FIXTURES PROVIDE WITH 10' WHIP ON ALL HIGHBAYS

5. BRANCH WIRING SHALL BE #12 THHN COPPER UNLESS OTHERWISE NOTED 6. WIRING SHALL BE AS PER CURRENT NEC 2005 7. WIRING DEVICES SHALL BE OF COMMERCIAL GRADE RATED AT 20 AMP

8. INSTALLATION SHALL ADHERE TO ADA STANDARDS 9. ALUMINUM XHHW-#2 CABLE MAY BE USED FOR FEEDERS LARGER THEN #2 OTHERWISE COPPER

10. REFER TO KCP&L STANDARDS MANUAL FOR 480 SERVICES 11. ALL LIGHTING/EQUIPMENT IN WAREHOUSE SHALL BE MOUNTED TO PROVIDE A MIN OF 36' CLEAR HEIGHT

|                          | SYMBOLS & LEGEND                                                                                                                                                                            |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AH 5 3 1                 | HOME RUN TO PANEL. CIRCUIT NUMBERS, PHASE, NEUTRAL AND GROUND CONDUCTORS INDICATED. ALL CONDUCTORS TO BE #12 EXCEPT WHERE NOTED CONDUIT TO BE 1/2" OR AS NOTED ON PLANS AND SPECIFICATIONS. |
|                          | CONDUIT INSTALLED CONCEALED ABOVE CEILING OR IN WALL.                                                                                                                                       |
| /-\                      | CONDUIT INSTALLED CONCEALED BELOW FLOOR SLAB OR UNDERGROUND                                                                                                                                 |
| \$                       | SINGLE POLE SWITCH, MOUNTED AT 46" O.C. A.F.F<br>UNLESS OTHERWISE NOTED.                                                                                                                    |
| \$                       | TWO POLE SWITCH, MOUNTED AT 46" O.C. A.F.F. UNLESS OTHERWISE NOTED                                                                                                                          |
| \$                       | THREE-WAY SWITCH, MOUNTED AT 46" O.C. A.F.F. UNLESS OTHERWISE NOTED                                                                                                                         |
| (13)                     | CEILING MOUNTED MOTION SENSOR<br>UNLESS OTHERWISE NOTED                                                                                                                                     |
| \$ <sup>D</sup>          | DIMMER SWITCH, MOUNTED AT 46" O.C. A.F.F UNLESS OTHERWISE NOTED.                                                                                                                            |
| <b>\$</b> <sup>1/1</sup> | WALL MOUNTED MOTION SENSOR, MOUNTED AT 46"<br>O.C. A.F.F. UNLESS OTHERWISE NOTED                                                                                                            |
| 4                        | EMERGENCY LIGHTING , MOUNTED AT 7'-6" A.F.F. UNLESS OTHERWISE NOTED                                                                                                                         |
| -                        | DUPLEX RECEPTACLE, MOUNTED AT 18" O.C. A.F.F. UNLESS OTHER WISE NOTED                                                                                                                       |
| #                        | QUADRAPLEX RECEPTACLES, MOUNTED AT 18" O.C.<br>A.F.F. UNLESS OTHERWISE NOTED.                                                                                                               |
| Ø                        | DUPLEX RECEPTACLE, MOUNTED AT CEILING                                                                                                                                                       |
| =                        | GFCI RECEPTACLE, MOUNTED AT 18" O.C. A.F.F. UNLESS OTHER WISE NOTED                                                                                                                         |
| =                        | GFCI FOURPLEX RECEPTACLE, MOUNTED AT 18" O.C. A.F.F. UNLESS OTHER WISE NOTED                                                                                                                |
| •                        | FLOOR MOUNTED RECEPTACLE                                                                                                                                                                    |
| 4                        | COMBINATION DATA / VOICE OUTLET, MOUNTED AT 18" O.C. A.F.F. WITH 3/4" CONDUIT TO ABOVE CEILING                                                                                              |
| •                        | PUSH BUTTON, MOUNTED AT 46" O.C. A.F.F., UNLESS OTHERWISE NOTED                                                                                                                             |
|                          | JUNCTION BOX                                                                                                                                                                                |
| Ó                        | DISCONNECT SWITCH                                                                                                                                                                           |
| ⊠                        | STARTER                                                                                                                                                                                     |
| 卤                        | COMBINATION DISCONNECT AND STARTER                                                                                                                                                          |
| Ó                        | EXHAUST FAN                                                                                                                                                                                 |
| Ó                        | MOTOR                                                                                                                                                                                       |
|                          | PANELBOARD                                                                                                                                                                                  |
| GFCI                     | GROUND FAULT INTERRUPTING                                                                                                                                                                   |
| D                        | DEDICATED                                                                                                                                                                                   |
| WP                       | WEATHERPROOF                                                                                                                                                                                |
| IG                       | ISOLATED GROUND                                                                                                                                                                             |
| AC                       | ABOVE COUNTER                                                                                                                                                                               |
| WP/GFCI                  | WEATHERPROOF GROUND FAULT INTERUPPTING                                                                                                                                                      |

ALL SYMBOLS NOT NECESSARILY REFERENCED ON PLAN

## BRANCH CIRCUIT COPPER CONDUCTOR AND CONDUIT SIZING CHART\*

| OVERCURRENT<br>PROTECTION DEVICE<br>RATING (AMPS) | REQUIRED<br>CONDUCTOR SIZE | EQUIPMENT<br>GROUNDING<br>CONDUCTOR SIZE | SINGE PHASE 2 WIRE<br>+ GND CONDUIT SIZE | SINGLE PHASE 3 WIRE<br>+ GND, CONDUIT<br>SIZE | THREE PHASE 3 WIRE<br>+ GND CONDUIT<br>SIZE | THREE PHASE 4 WIRE<br>+ GND CONDUIT SIZE |
|---------------------------------------------------|----------------------------|------------------------------------------|------------------------------------------|-----------------------------------------------|---------------------------------------------|------------------------------------------|
| 15                                                | 12 AWG                     | 12 AWG                                   | 3/4"                                     | 3/4"                                          | 3/4"                                        | 3/4"                                     |
| 20                                                | 12 AWG                     | 12 AWG                                   | 3/4"                                     | 3/4"                                          | 3/4"                                        | 3/4"                                     |
| 25                                                | 10 AWG                     | 10 AWG                                   | 3/4"                                     | 3/4"                                          | 3/4"                                        | 3/4"                                     |
| 30                                                | 10 AWG                     | 10 AWG                                   | 3/4"                                     | 3/4"                                          | 3/4"                                        | 3/4"                                     |
| 35                                                | 8 AWG                      | 10 AWG                                   | 3/4"                                     | 3/4"                                          | 3/4"                                        | 3/4"                                     |
| 40                                                | 8 AWG                      | 10 AWG                                   | 3/4"                                     | 3/4"                                          | 3/4"                                        | 3/4"                                     |
| 45                                                | 8 AWG                      | 10 AWG                                   | 3/4"                                     | 3/4"                                          | 3/4"                                        | 1"                                       |
| 50                                                | 8 AWG                      | 10 AWG                                   | 3/4"                                     | 3/4"                                          | 3/4"                                        | 1"                                       |
| 60                                                | 6 AWG                      | 10 AWG                                   | 1"                                       | 1"                                            | 1"                                          | 1-1/4"                                   |
| 70                                                | 4 AWG                      | 8 AWG                                    | 1"                                       | 1"                                            | 1"                                          | 1-1/4"                                   |
| 80                                                | 4 AWG                      | 8 AWG                                    | 1"                                       | 1-1/4"                                        | 1-1/4"                                      | 1-1/4"                                   |
| 90                                                | 3 AWG                      | 8 AWG                                    | 1"                                       | 1-1/4"                                        | 1-1/4"                                      | 1-1/4"                                   |
| 100                                               | 3 AWG                      | 8 AWG                                    | 1-1/4"                                   | 1-1/2"                                        | 1-1/2"                                      | 1-1/2"                                   |
|                                                   |                            |                                          |                                          |                                               |                                             |                                          |
|                                                   |                            |                                          |                                          |                                               |                                             |                                          |

## UNLESS OTHERWISE NOTED ON THE DRAWINGS

UNLESS OTHERWISE NOTED ON THE DRAWINGS, ALL BRANCH CIRCUITS AND FEEDERS TO BE PROVIDED WITH A NEUTRAL WIRE. ALL SIZING BASED ON 3 CURRENT CARRYING CONDUCTORS IN A RACEWAY OR CABLE CONDUCTORS SHALL BE DERATED IN ACCORDANCE WITH THE NEC IF 4 OR MORE CONDUCTORS ARE PLACED IN A RACEWAY OR CABLE ELECTRICAL FIELD PERSONAL RESPONSIBLE FOR VOLTAGE DROP CALCULATIONS.

|      |                      | LIGHT FI                                                                                                                                           | XTURE SCHEDU | JLE      |       |                                        |
|------|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--------------|----------|-------|----------------------------------------|
| TYPE | MANUFACTURER         | CATALOG NO.                                                                                                                                        | LAMPS        | MOUNTING | VOLTS | REMARKS                                |
| А    | LITHONIA LIGHTING    | STAKS-2X4-AL06-SWW7                                                                                                                                | LED          | CEILING  | UNV   | OR EQUAL                               |
| A1   | LITHONIA LIGHTING    | STAKS-2X2-AL03-SWW7                                                                                                                                | LED          | CEILING  | UNV   | OR EQUAL                               |
| В    | LIGHTART             | 22" ACOUSTIC EMPIRE SHADE,<br>OUTSIDE SHADE DUNE, INSDIE<br>SHADE ZINC, WHITE CANOPY CORD<br>AND FRAME 4000K DIMMABLE 800<br>LUMEN 54 DEGREE FLOOD | LED          | CEILING  | UNV   |                                        |
| С    | LITHONIA LIGHITNG    | LDN6-ALO2-SWW1-LO6-AR-LSS-MVO<br>LT                                                                                                                | LED          | CEILING  | UNV   | OR EQUAL                               |
| D    | HE WILLIAMS          | GH-2-L300-840-FA-DIM-UNV                                                                                                                           | LED          | CEILING  | 277   | PROVIDE WITH INTEGRAL MOTION SENSOR    |
| DR   | EXISTING TO RELOCATE |                                                                                                                                                    |              |          |       |                                        |
| DE   | HE WILLIAMS          | GH-2-L300-840-FA-DIM-UNV                                                                                                                           | LED          | CEILING  | 277   | SAME AS TYPE D ONLY WITH EM<br>BALLAST |
| DER  | EXISTING TO RELOCATE |                                                                                                                                                    |              |          |       |                                        |
| EM   | COMPASS              | CUS2Q                                                                                                                                              | LED          | WALL     | UNV   | OR EQUAL                               |
| X1   | Compass              | CCR                                                                                                                                                | LED          | WALL     | UNV   | OR EQUAL                               |
| EX   | COMPASS              | CCR                                                                                                                                                | LED          | WALL     | UNV   | EXISTING                               |
| ERH  | COMPASS              | CUWZ-PC                                                                                                                                            | LED          | WALL     | UNV   | EXISITNG                               |

### ELECTRICAL GENERAL NOTES

1. WORK INCLUDED. FURNISH ALL LABOR, MATERIAL, SERVICES AND SKILLED SUPERVISION NECESSARY FOR THE CONSTRUCTION, ERECTION, INSTALLATION CONNECTIONS, TESTING AND ADJUSTMENTS OF ALL CIRCUITS AND ELECTRICAL EQUIPMENT SPECIFIED HEREIN, OR NOTED ON THE DRAWINGS, AND ITS DELIVERY TO THE OWNER COMPLETE IN ALL RESPECTS READY FOR USE.

2. CONTRACT DRAWINGS THE CONTRACT DRAWINGS ARE SHOWN IN PART DIAGRAMMATIC, INTENDED TO CONVEY THE SCOPE OF WORK. INDICATING THE GENERAL ARRANGEMENT OF EQUIPMENT, CONDUIT AND OUTLETS. VERIFY SPACES FOR THE INSTALLATION OF THE MATERIALS BASED ON ACTUAL DIMENSIONS OF EQUIPMENT FURNISHED. IF A QUESTION EXISTS AS TO THE EXACT INTENDED LOCATION OF OUTLETS OR EQUIPMENT, OBTAIN INSTRUCTIONS FROM THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH WORK.

3. MINIMUM SIZE OF CONDUIT SHALL BE 1/2" UNLESS NOTED OTHERWISE.

4. ALL WIRING FOR LIGHTING, RECEPTACLE AND POWER CIRCUITS WHERE NOT SHOWN ON DRAWINGS SHALL BE WITH #12 CONDUCTORS, NUMBER AS REQUIRED IN CONDUIT SIZED PER N.E.C. PROVIDE EQUIPMENT GROUNDING CONDUCTOR FOR ALL BRANCH CIRCUITS AND FEEDERS. HOMERUNS TO PANEL SHALL BE IN INDIVIDUAL CONDUITS, UNLESS NOTED OTHERWISE, WITH CIRCUITS AS SHOWN.

5. THE USE OF TYPE 'MC' AND TYPE 'AC' CABLE IS PERMITTED IN ALL AREAS PER NEC AND LOCAL CODE REQUIREMENTS.

6. THE USE OF ALUMINUM CONDUCTORS WITH AMPACITY EQUIVALENT TO COPPER IS

PERMITTED IN ALL AREAS PER NEC REQUIREMENTS. 7. ALL JUNCTION BOXES, PULL BOXES, AND PANELBOARDS SHALL BE RIGIDLY ATTACHED TO

8. COORDINATE ALL WORK WITH OTHER TRADES AND EXISTING CONDITIONS AS REQUIRED TO PROPERLY INSTALL ALL SYSTEMS AS INTENDED, WITHIN THE CONFINES OF THE SPACE AVAILABLE, AND WITHOUT INTERFERENCES.

9. ALL CONDUIT, BOXES, ETC. SHALL BE CONCEALED OR MOUNTED FLUSH WITH CEILING OR WALL CONSTRUCTION, CONDUITS SHALL BE MOUNTED AS HIGH AS POSSIBLE. NO SURFACE MOUNTED CONDUIT, BOXES, ETC. WILL BE PERMITTED WITHOUT PERMISSION OF THE ENGINEER PRIOR TO INSTALLATION. ALL CONDUIT PENETRATIONS SHALL BE FIRE-CAULKED AS REQUIRED.

TENANT IMPROVEMENTS FOR:

CONSTRUCTION
As Noted on Plans Review

816 | 888 | 7380 NP Studio North, LLC Missouri Certificate of Authorization No. A-2017040540

FIRE PROTECTION DESIGN-BUILD

CONTRACTOR FORGE CONSTRUCTION

**DESIGN-BUILD** 

**DESIGN-BUILD** 

**DESIGN-BUILD** 

BY GEN CONTRACTOR

BY GEN CONTRACTOR

BY GEN CONTRACTOR

BY GEN CONTRACTOR



Project No. 2024-032 04.26.24

Issued For: Permit Submittal Drawn By: F. Crubaugh Reviewed By: Revisions:

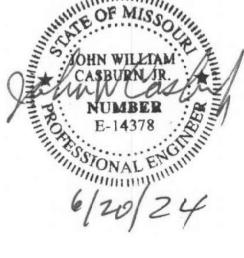
No. Date Description 2 06/24/24 Owner Changes

HERITAGE ELECTRIC, L.L.C.

841 N. MARTWAY Olathe, Kansas

phone (913) 747 0528 fax (913) 747 0539

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| ANE   | L: H1 400A                 | MLO  | 277  | 7/ 480 V, 3PH, | 4W.+GRND. |                    |        |          | NEW         |                                       |       |
|-------|----------------------------|------|------|----------------|-----------|--------------------|--------|----------|-------------|---------------------------------------|-------|
| СТ    | SERVES                     | VA   | ОСР  | WIRE           | PHASE     | WIRE               |        | OCP      | VA          | SERVES                                | ССТ   |
| 1     | WAREHOUSE LIGHTS           | 2475 | 20/1 | 2-#12,1-#12G   | A         | 2-#12-1-#12G       |        | 25/3     | 4432        | MAU-1 EXISTING                        | 2     |
| 3     | WAREHOUSE LIGHTS           | 2475 | 20/1 | 2-#12-1-#12G   | В         | 2-#12-1-#12G       |        |          | 4432        |                                       | 4     |
| 5     | OVERHEAD DOOR              | 200  | 20/3 | 4-#10-1-#12G   | С         | 2-#12-1-#12G       |        |          | 4432        |                                       | 6     |
| 7     |                            | 200  |      |                | A         | 4-#250 AL-1-#4 ALG |        | 200/3    | 45905       | PANEL H2                              | 8     |
| 9     |                            | 200  |      |                | В         | : 6                |        |          | 46010       |                                       | 10    |
| 11    | HVLS FAN                   | 1000 | 20/3 | 4-#10-1-#12G   | С         |                    |        |          | 42715       |                                       | 12    |
| 13    |                            | 1000 |      |                | A         | 3-#10-1-#12G       |        | 30/3     | 5400        | BATTERY CHARGER                       | 14    |
| 15    |                            | 1000 |      |                | В         |                    |        |          | 5400        |                                       | 16    |
| 17    | WAREHOUSE LIGHTS           | 2250 |      | 2-#12-1-#12G   | С         |                    |        |          | 5400        |                                       | 18    |
| 19    | OVERHEAD DOOR POWER        | 3000 | 20/3 | 3-#12-1-#12G   | A         | 3-#10-1-#12G       |        | 30/3     | 5400        | BATTERY CHARGER                       | 20    |
| 21    |                            | 3000 |      |                | В         |                    |        |          | 5400        |                                       | 22    |
| 23    |                            | 3000 |      |                | С         |                    |        |          | 5400        |                                       | 24    |
| 25    | INSTAPAK MACHINE           | 3400 | 20/3 | 3-#12-1-#12G   | A         | 3-#12-1-#12G       |        | 20/3     | 3000        | OVERHEAD DOOR                         | 26    |
| 27    |                            | 3400 |      |                | В         |                    |        |          | 3000        |                                       | 28    |
| 29    |                            | 3400 |      |                | С         | 1                  |        |          | 3000        |                                       | 30    |
| 31    | OVERHEAD DOOR              | 1500 | 20/3 | 3-#12-1-#12G   | A         | 3-#12-1-#12G       |        | 20/3     | 1500        | COMPACTOR                             | 32    |
| 33    |                            | 1500 |      |                | В         |                    |        |          | 1500        |                                       | 34    |
| 35    |                            | 1500 |      |                | С         |                    |        |          | 1500        |                                       | 36    |
| 37    |                            |      |      |                | A         | 3-#8,1#10G         | ,      | 100/3    | 7204        | TRANSFORMER                           | 38    |
| 39    |                            |      |      |                | В         | **                 |        | s        | 5724        | TRANSFORMER                           | 40    |
| 41    |                            |      |      |                | С         |                    |        | .5       | 5440        | TRANSFORMER                           | 42    |
| OTES: |                            |      |      |                | LOAD SU   | MMARY              | CONN   | NEC      | DEM         | LOAD BALANCE PER PHASE                |       |
|       | 1 NEMA 1 ENCLOSURE         |      |      |                | 1-LIGHTIN |                    | 7200   | 1.25     |             | PHASE A                               | 844   |
|       | 2 PROVIDE BOLT ON BREAKERS |      |      |                | 2-RECEPT  | 1000               | 18368  | NEC      |             | PHASE B                               | 830   |
|       |                            |      |      |                | 3-KITCHE  |                    | 0      | 0.65     | V200. 0,003 | PHASE C                               | 792   |
|       | •                          |      |      |                | 4-HVAC    |                    | 147926 | 1        | _ N         | LOWEST PHASE PLUS 10%                 | 132   |
|       |                            |      |      |                | 5-NON-CO  | NT                 | 73200  | 1        | 73200       | [10] 전통 | 87160 |
|       |                            |      |      |                | LARGEST   | This 10 5 11 P     | 0      | 0.25     | - 5         | PHASES ARE BALANCED                   | 37100 |
|       |                            |      |      |                | TOTAL V   | CT4457 2552        | 246694 | 10000000 | 244310      |                                       |       |
|       |                            |      |      |                | TOTAL A   |                    | 296.7  |          | 293.9       |                                       |       |

| ССТ    | SERVES                     | VA   | ОСР      | WIRE         | PHASE      | WIRE         |        | OCP      | VA        | SERVES                 | ССТ |
|--------|----------------------------|------|----------|--------------|------------|--------------|--------|----------|-----------|------------------------|-----|
| 1      | RTU 1                      | 3601 | 20/3     | 3-#12,1-#12G | A          | 3-#12,1-#12G |        | 20/3     | 3601      | RTU 2                  | 2   |
| 3      |                            | 3601 |          |              | В          | 1            |        |          | 3601      |                        | 4   |
| 5      |                            | 3601 |          |              | С          |              |        | 0        | 3601      |                        | 6   |
| 7      | RTU 3                      | 6648 | 25/3     | 3-#10,1-#12G | Α          | 3-#10,1-#12G |        | 30/3     | 6925      | HUM-1                  | 8   |
| 9      |                            | 6648 |          |              | В          |              |        |          | 6925      |                        | 10  |
| 11     |                            | 6648 |          |              | С          |              |        |          | 6925      |                        | 12  |
| 13     | OFFICE LIGHTING            | 2670 | 20/1     | 2-#12,1-#12G | Α          |              |        | 8        |           |                        | 14  |
| 15     | OFFICE LIGHTING            | 2695 | 20/1     | 2-#12,1-#12G | В          |              |        |          |           |                        | 16  |
| 17     |                            |      |          |              | С          |              |        |          |           |                        | 18  |
| 19     |                            |      |          |              | Α          |              |        |          |           |                        | 20  |
| 21     |                            |      |          |              | В          |              |        |          |           |                        | 22  |
| 23     |                            |      |          |              | С          |              |        |          |           |                        | 24  |
| 25     |                            |      |          |              | Α          | 3            |        |          |           |                        | 26  |
| 27     |                            |      |          |              | В          | 7.           |        |          |           |                        | 28  |
| 29     | 9                          |      |          |              | С          |              |        |          |           |                        | 30  |
| 31     |                            |      |          |              | A          |              |        |          |           |                        | 32  |
| 33     |                            |      |          |              | В          |              |        | â        |           |                        | 34  |
| 35     |                            |      |          |              | С          |              |        | ×        |           |                        | 36  |
| 37     |                            |      |          |              | A          | 3-#3,1#8G    |        | 100/3    | 18220     | TRANSFORMER            | 38  |
| 39     |                            |      |          |              | В          |              |        |          | 18420     | TRANSFORMER            | 40  |
| 41     |                            | 8.9  | <b>9</b> |              | С          |              |        | <b>.</b> | 18820     | TRANSFORMER            | 42  |
| NOTES: |                            |      |          |              | LOAD SUM   | IMARY        | CONN   | NEC      | DEM       | LOAD BALANCE PER PHASE |     |
|        | 1 NEMA 1 ENCLOSURE         |      |          |              | 1-LIGHTING | 3            | 5365   | 1.25     | 6706.25   | PHASE A                | 4   |
|        | 2 PROVIDE BOLT ON BREAKERS |      |          |              | 2-RECEPT A | ACLES        | 55460  | NEC      | 32730     | PHASE B                | 4   |
|        | 3                          |      |          |              | 3-KIT CHEN |              | 0      | 0.65     | (         | PHASE C                | 39  |
|        |                            |      |          |              | 4-HVAC     |              | 62325  | 1        | 62325     | LOWEST PHASE PLUS 10%  |     |
|        |                            |      |          |              | 5-NON-CON  | NT           | 0      | 1        | (         | 39595 + 10%            | 435 |
|        |                            |      |          |              | LARGEST I  | MOTOR        | 0      | 0.25     |           | PHASES ARE BALANCED    |     |
|        |                            |      |          |              | TOTAL VA   | į.           | 123150 |          | 101761.25 | 5                      |     |
|        |                            |      |          |              | III.U      |              |        |          | 122.4     |                        |     |

| Project Information                                             |                                                                                                                       |                                                                    |                                                 |                       |                          |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------|-----------------------|--------------------------|
| Energy Code:                                                    | 90.1 (2016) Standard                                                                                                  |                                                                    |                                                 |                       |                          |
| Project Title:                                                  | H&R Block Depot                                                                                                       |                                                                    |                                                 |                       |                          |
| Project Type:                                                   | New Construction                                                                                                      |                                                                    |                                                 |                       |                          |
| Construction Site:<br>1220 NW Main St<br>Lee's Summit, MO 64086 | Owner/Agent:                                                                                                          | Olathe, k<br>913-747-                                              | lansen<br>Electric<br>Iartway Drive<br>(S 66061 |                       |                          |
| Allowed Interior Lightin                                        | g Power                                                                                                               |                                                                    |                                                 |                       |                          |
|                                                                 | A<br>Area Category                                                                                                    | B<br>Floor Area<br>(ft2)                                           | C<br>Allowed<br>Watts / ft2                     |                       | D<br>ved Watts<br>B X C) |
| 1-Office                                                        |                                                                                                                       | 9440                                                               | 0.79                                            |                       | 7458                     |
| 2-Warehouse                                                     |                                                                                                                       | 24544                                                              | 0.48<br>tal Allowed Wa                          | V/10-00-00            | 1781                     |
| Fixture ID : Des                                                | A<br>scription / Lamp / Wattage Per Lamp / Ballast                                                                    | B<br>Lamps/<br>Fixture                                             | C<br># of<br>Fixtures                           | D<br>Fixture<br>Watt. | (C X D)                  |
| 1-Office<br>LED 1: A: 2X4: Other:                               |                                                                                                                       | 1                                                                  | 90                                              | 55                    | 4950                     |
| LED 2: A1: 2X2: Other:                                          |                                                                                                                       | 1                                                                  | 8                                               | 45                    | 360                      |
| LED 3: B: PENDENT: Other:<br>LED 4: C: CAN LIGHT: Other         |                                                                                                                       | 1                                                                  | 2<br>11                                         | 50<br>25              | 100<br>275               |
| 2-Warehouse                                                     | •                                                                                                                     | 1                                                                  |                                                 |                       | 2/5                      |
| LED 5: D: HIGHBAY: Other:                                       |                                                                                                                       | 1                                                                  | 32<br>Total Propose                             | 225<br>ed Watts =     | 7200<br>12885            |
| Interior Lighting PASSE                                         | S: Design 33% better than code                                                                                        |                                                                    |                                                 | [662504]              |                          |
|                                                                 | iance Statement  e proposed interior lighting design represented in culations submitted with this permit application. | this document is co<br>The proposed interi<br>on 4.1.1.0 and to co | or lighting sy                                  | stems ha              | ve been                  |

|       | L: L1 100                  | МВ   | 120  |              | COCKANA. POCHANINAWANIA                       | <b>+</b> 20.00000        |               |              |                           | NEW                     |     |
|-------|----------------------------|------|------|--------------|-----------------------------------------------|--------------------------|---------------|--------------|---------------------------|-------------------------|-----|
| T     | SERVES                     | VA   | OCP  | WIRE         | PHASE                                         | WIRE                     | j j           | OCP          | VA                        | SERVES                  | CCT |
| 1     | DOCK POWER                 | 800  | 20/1 | 2-#12,1-#12G | A                                             | 2-#12,1-#12G             |               | 20/1         | 840                       | GFCI RECEPTACLE         | 2   |
| 3     | DOCK POWER                 | 600  | 20/1 | 2-#12,1-#12G | В                                             | 2-#12,1-#12G             |               | 20/1         | 840                       | GFUH 1                  | 4   |
| 5     | CU-1                       | 2600 | 25/2 | 2-#12,1-#12G | С                                             | 2-#12,1-#12G             |               | 20/1         | 840                       | GFUH 2                  | 6   |
| 7     |                            | 2600 |      | 2-#12,1-#12G | A                                             | 2-#12,1-#12G             |               | 20/1         | 100                       | OFFICE RECEPS           | 8   |
| 9     | WAREHOUSE RECEP            | 1200 | 20/1 | 2-#12,1-#12G | В                                             | 2-#12,1-#12G             |               | 20/1         | 220                       | OFFICE LIGHTS           | 1   |
| 11    | WAREHOUSE RECEP            | 1200 | 20/1 | 2-#12,1-#12G | С                                             | 2-#12,1-#12G             | j             | 20/1         | 800                       | OFFICE RECEPS           | 1   |
| 13    | WAREHOUSE RECEP            | 1200 | 20/1 | 2-#12,1-#12G | A                                             | 2-#12,1-#12G             |               | 20/2         | 1664                      | AIR COMPRESSOR          | 1   |
| 15    | WAREHOUSE RECEP            | 1200 | 20/1 | 2-#12,1-#12G | В                                             | 2-#12,1-#12G             | (             |              | 1664                      |                         | 1   |
| 17    | SPARE                      |      | 20/1 | 2-#12,1-#12G | С                                             | 2-#12,1-#12G             |               | 20/1         |                           | SPARE                   | 1   |
| 19    | SPARE                      |      | 20/1 | 2-#12,1-#12G | A                                             | 192<br>193<br>194<br>195 |               | 20/1         |                           | SPARE                   | 2   |
| 21    | SPARE                      |      | 20/1 | 2-#12,1-#12G | В                                             | -                        |               | 20/1         |                           | SPARE                   | 2   |
| 23    | SPARE                      |      | 20/1 | •            | С                                             | -                        |               | 20/1         |                           | SPARE                   | 2   |
| 25    | SPARE                      |      | 20/1 |              | A                                             |                          |               | 20/1         |                           | SPARE                   | 2   |
| 27    | SPACE                      |      |      |              | В                                             | <del>22.</del> W         |               |              |                           | SPACE                   | 2   |
| 29    | SPACE                      |      |      |              | С                                             |                          | A             |              |                           | SPACE                   | 3   |
| 31    | SPACE                      |      |      |              | A                                             |                          |               |              | 1-                        | SPACE                   | 3   |
| 33    | SPACE                      |      |      |              | В                                             |                          | A             |              | V-1                       | SPACE                   | 3   |
| 35    | SPACE                      |      |      |              | С                                             | <u></u> 0                |               |              |                           | SPACE                   | 3   |
| 37    | SPACE                      |      |      | •            | A                                             | -                        | - 2           |              |                           | SPACE                   | 3   |
| 39    | SPACE                      |      |      | <u> </u>     | В                                             | <u>1250</u> 0.)          | 7             |              |                           | SPACE                   | 4   |
| 41    | SPACE                      |      |      |              | С                                             |                          |               |              | 5                         | SPACE                   | . 4 |
| OTES: |                            |      | -    |              | LOAD SUI                                      | MMADY                    | CONN          | NEC          | DEM                       | LOAD BALANCE PER PHASE  |     |
|       | 1 NEMA 1 ENCLOSURE         |      |      |              | 1-LIGHTIN                                     | 8200 BBB003              | 220           | 1.25         | Contraction (Contraction) | 5 PHASE A               |     |
|       |                            |      |      |              | 2-RECEPT                                      |                          | 3140          | NEC          |                           |                         |     |
|       | 2 PROVIDE BOLT ON BREAKERS |      |      |              | 763 24 00 00 00 00 00 00 00 00 00 00 00 00 00 | KARATATATATA             |               | C-07/12/52/5 | 1 22 111                  | 0 PHASE B<br>0 PHASE C  |     |
|       | 3                          |      |      |              | 3-KITCHEI                                     | N                        | 0             | 0.65         |                           |                         |     |
|       |                            |      |      |              | 4-HVAC                                        | NT                       | 6880          | 1            | 2,3765                    | 0 LOWEST PHASE PLUS 10% |     |
|       |                            |      |      |              | 5-NON-CO                                      |                          | 3328          | 1            | 332                       |                         |     |
|       |                            |      |      |              | LARGEST                                       | 130 (03) (50 (03) (15))  | 0             | 0.25         | - 1                       | 0 REBALANCE LOADS       |     |
|       |                            |      |      |              | TOTAL V                                       |                          | 13568<br>37.7 |              | 1362                      |                         |     |

| ANEL | .: L2 20                 | 00 MB | 120  | 208 V, 3PH,  | 4W.+GRND.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              |       |            |       | NEW PANEL              |         |
|------|--------------------------|-------|------|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-------|------------|-------|------------------------|---------|
| т    | SERVES                   | VA    | ОСР  | WIRE         | PHASE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | WIRE         |       | OCP        | VA    | SERVES                 | ССТ     |
| 1    | OFFICE RECEP             | 800   | 20/1 | 2-#12,1-#12G | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 800   | HOTELING               | 2       |
| 3    | TRAINGING ROOM RECEP     | 1200  | 20/1 | 2-#12,1-#12G | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1600  | COFFE MACHINE          | 4       |
| 5    | TRAINIING ROOM FLOOR BOX | 800   | 20/1 | 2-#12,1-#12G | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1600  | ICE/WATER              | 6       |
| 7    | BREAK ROOM GFCI          | 800   | 20/1 | 2-#12,1-#12G | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1500  | MICROWAVE              | 8       |
| 9    | REFIGERATOR              | 1200  | 20/1 | 2-#12,1-#12G | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1500  | MICROWAVE              | 10      |
| 11   | REFIGERATOR              | 1200  | 20/1 | 2-#12,1-#12G | С                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1500  | MICROWAVE              | 12      |
| 13   | DRINKING FOUNTAIN        | 800   | 20/1 | 2-#12,1-#12G | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 600   | OPEN OFFICE RECEPS     | 14      |
| 15   | IT ROOM QUAD             | 800   | 20/1 | 2-#12,1-#12G | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1200  | OPEN OFFICE RECEPS     | 16      |
| 17   | HALLWAY RECEP            | 1600  | 20/1 | 2-#12,1-#12G | С                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1200  | OFFICE RECEPS          | 18      |
| 19   | TECH OFFICE              | 1920  | 20/1 | 2-#12,1-#12G | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1400  | OFFICE RECEPS          | 20      |
| 21   | TECH OFFICE              | 1920  | 20/1 | 2-#12,1-#12G | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 22      |
| 23   | TECH OFFICE              | 1920  | 20/1 | 2-#12,1-#12G | С                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 24      |
| 25   | TECH OFFICE              | 1920  | 20/1 | 2-#12,1-#12G | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 26      |
| 27   | TECH OFFICE              | 1920  | 20/1 | 2-#12,1-#12G | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G | *     | 20/1       | 1920  | TECH OFFICE            | 28      |
| 29   | TECH OFFICE              | 1920  | 20/1 | 2-#12,1-#12G | С                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 30      |
| 31   | TECH OFFICE              | 1920  | 20/1 | 2-#12,1-#12G | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 32      |
| 33   | TECH OFFICE              | 1920  | 20/1 | 2-#12,1-#12G | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 34      |
| 35   | PARTS OFFICE             | 1920  | 20/1 | 2-#12,1-#12G | С                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 36      |
| 37   | PARTS OFFICE             | 1920  | 20/1 | 2-#12,1-#12G | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 38      |
| 39   | PARTS OFFICE             | 600   | 20/1 | 2-#12,1-#12G | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 40      |
| 41   | CONFERENCE ROOM          | 600   | 20/1 | 2-#12,1-#12G | С                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 42      |
| 43   | KIT CHEN ISLAND POWER    | 400   | 20/1 | 2-#12,1-#12G | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 2-#12,1-#12G |       | 20/1       | 1920  | TECH OFFICE            | 44      |
| 45   | TECH OFFICE              | 1000  | 20/1 | 2-#12,1-#12G | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |       | 20/1       |       | SPARE                  | 46      |
| 47   | SPARE                    |       | 20/1 |              | С                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |       | 20/1       |       | SPARE                  | 48      |
| 49   | SPACE                    |       |      |              | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |       |            |       | SPACE                  | 50      |
| 51   | SPACE                    |       |      |              | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              | 10    |            |       | SPACE                  | 52      |
| 53   | SPACE                    |       |      |              | С                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |       |            |       | SPACE                  | 54      |
| 55   | SPACE                    |       |      |              | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              | 2     |            |       | SPACE                  | 56      |
| 57   | SPACE                    |       |      |              | В                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |       |            |       | SPACE                  | 58      |
| 59   | SPACE                    |       |      |              | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |       |            |       | SPACE                  | 60      |
| 61   | SPACE                    |       |      |              | A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |              |       |            |       | SPACE                  | 62      |
| TES: |                          |       |      |              | LOAD SU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MMADV        | CONN  | NEC        | DEM   | LOAD BALANCE PER PHASE |         |
|      | NEMA 1 ENCLOSURE         |       |      |              | 1-LIGHTIN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 0     | 1.25       |       | PHASE A                | 224     |
|      |                          |       |      |              | The consequence of the constant of the constan | 1576         |       | 1.00000001 |       | PHASE B                | 0200019 |
|      | PROVIDE BOLT ON BREAKERS |       |      |              | 2-RECEPT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              | 66940 | NEC        |       |                        | 225     |
| 3    |                          |       |      |              | 3-KIT CHE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |              | 0     | 0.65       |       | PHASE C                | 219     |
|      |                          |       |      |              | 4HVAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | NT           | 0     | 1          | 1 0   | LOWEST PHASE PLUS 10%  | 044     |
|      |                          |       |      |              | 5-NON-CO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 500-002      | 0     | *          | 1 0   | 21940 + 10%            | 241     |
|      |                          |       |      |              | LARGEST                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |              | ·     | 0.25       |       | PHASES ARE BALANCED    |         |
|      |                          |       |      |              | TOTAL V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SECOL.       | 66940 |            | 38470 | 1                      |         |
|      |                          |       |      |              | TOTAL A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | MPS          | 185.8 |            | 106.8 |                        |         |

STUCIO NOTTO
ARCHITECTURE

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816 | 888 | 7380
NP Studio North, LLC
Missouri Certificate of Authorization No. A-2017040540

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CONSTRUCTION
As Noted on Plans Review

PLUMBING

DESIGN-BUILD
BY GEN CONTRACTOR

MECHANICAL

DESIGN-BUILD
BY GEN CONTRACTOR

ELECTRICAL

DESIGN-BUILD
BY GEN CONTRACTOR

FIRE PROTECTION

DESIGN-BUILD

BY GEN CONTRACTOR

CONTRACTOR FORGE CONSTRUCTION

TENANT IMPROVEMENTS FOR:

# H&R BLOCK DEPOT



Project No. 2024-032

Date: 04.26.24

Issued For: Permit Submittal

Drawn By: F. Crubaugh

Reviewed By:

Revisions:

No. Date Description
1 06/24/24 City Comments
2 06/24/24 Owner Changes

HERITAGE ELECTRIC, L.L.C. 841 N. MARTWAY Olathe, Kansas phone (913) 747 0528 fax (913) 747 0539

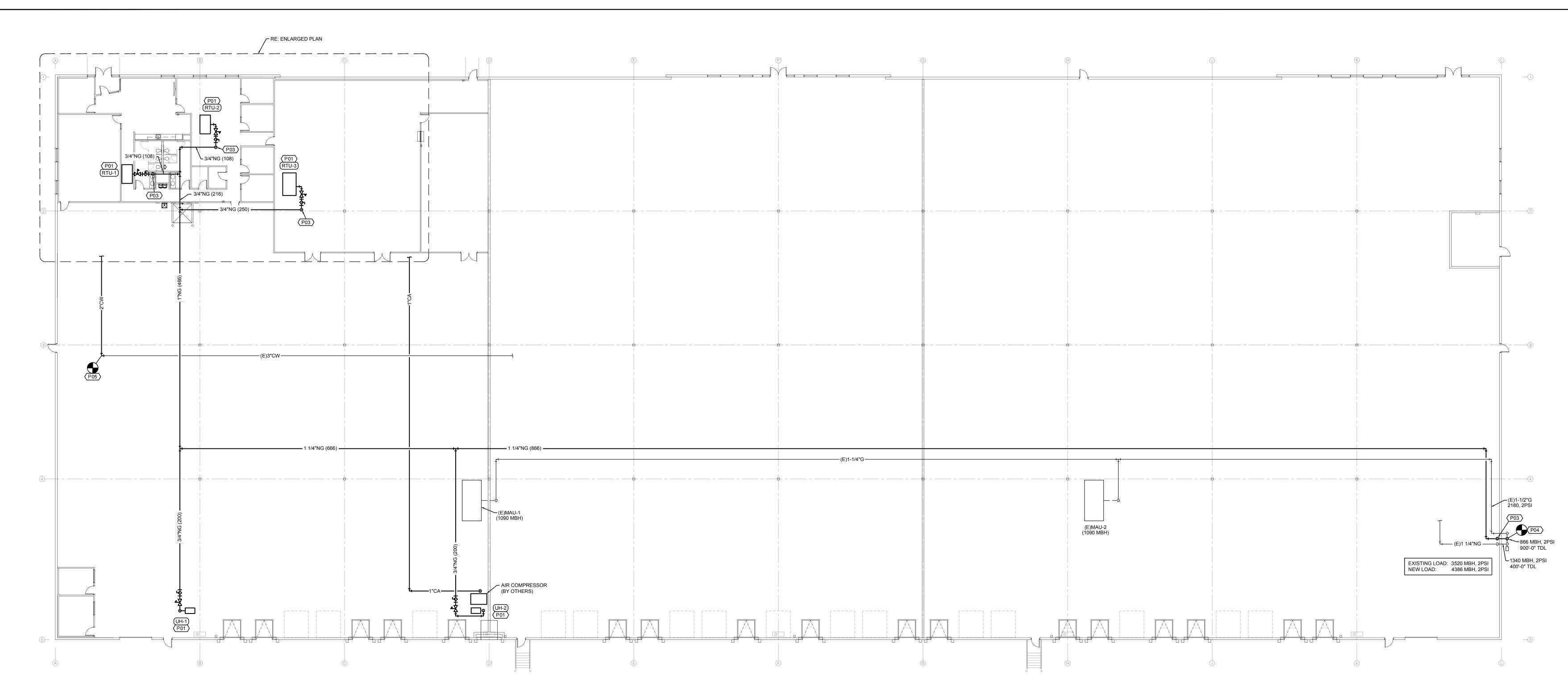


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E5.00 PANEL SCHEDULE



# FLOOR PLAN-PLUMBING SCALE:1/16"=1'-0"

## F# FLOOR PLAN NOTES

- 1. CONNECT TO MECHANICAL EQUIPMENT WITH GAS COCK, DIRT LEG, AND UNION. PROVIDE PRESSURE REGULATOR WITHIN 10'-0" OF UNIT CONNECTION. INLET: 2PSI, OUTLET: 7" WC.
- 2. ROUTE GAS PIPING UP TIGHT TO INTERIOR AND SUSPENDED ACROSS CEILING SPACE AS INDICATED.
- 3. ROUTE GAS PIPING UP THROUGH ROOF, RE: DETAIL.
- CONNECT TO EXISTING GAS PIPING AS CLOSE TO METER AS POSSIBLE.

  CONNECT TO EXISTING COLD WATER STUBOUT, FIELD VERIEY EXACT SIZE
- CONNECT TO EXISTING COLD WATER STUBOUT. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPING.

Development Services Departing Summit, Missouri 07/08/2024

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DESIGN-BUILD
BY GEN CONTRACTOR

FIRE PROTECTION
DESIGN-BUILD
BY GEN CONTRACTOR

CONTRACTOR FORGE CONSTRUCTION



Lankford Fendler

+ associates

1730 Walnut Street Kansas City, Missouri 64108
1915 Frederick Avenue, St. Joseph, Missouri 64501

Phone: 816.221.1411 | Fax: 816.221.1429

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COA No. 2006001168

TENANT IMPROVEMENTS FOR:

H&R BLOCK DEPOT

1220 NW Main St Lee's Summit, MO 64086

Project No. 2024-032

Date: 04.26.24

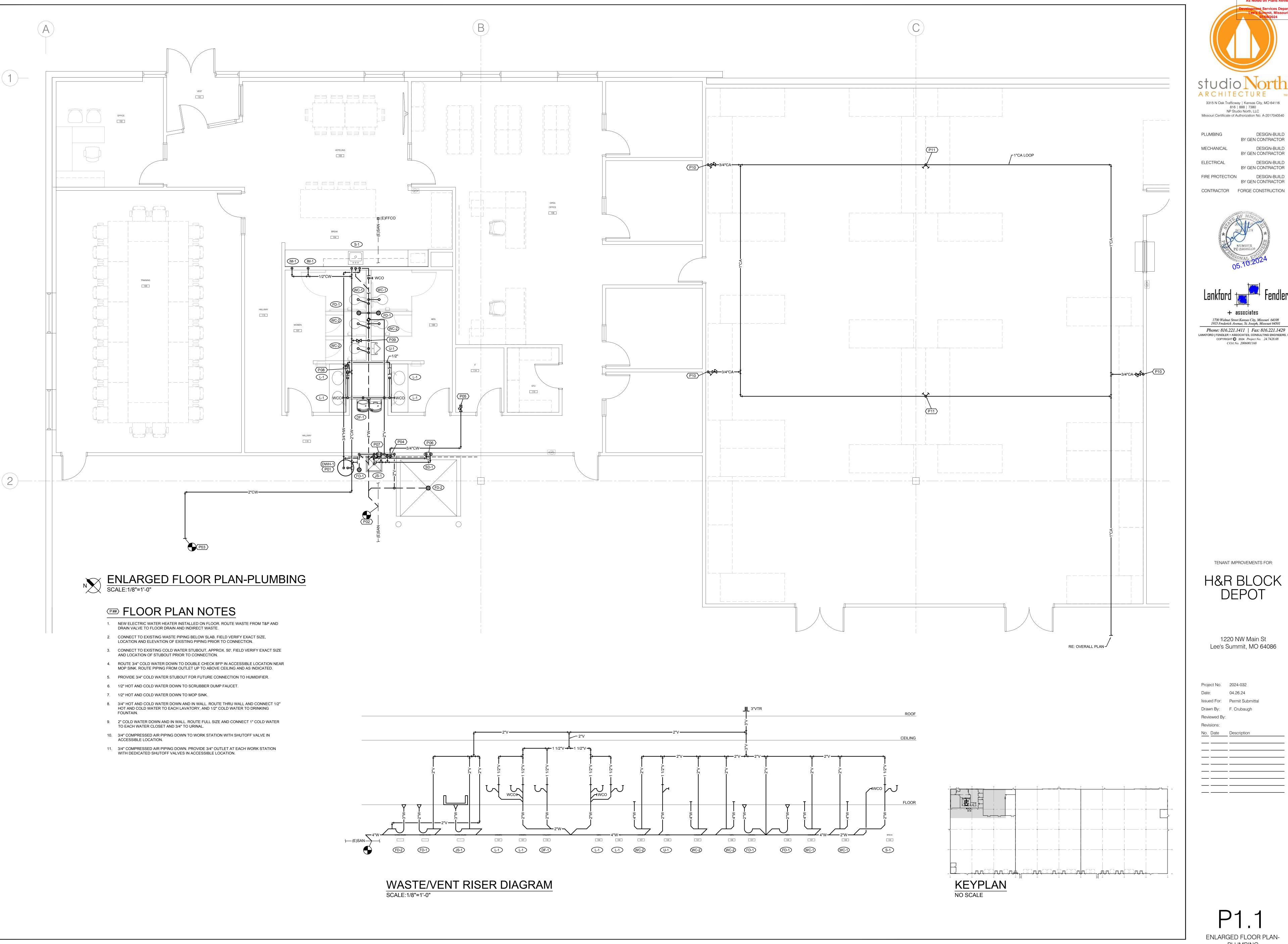
Issued For: Permit Submittal

Drawn By: F. Crubaugh

Reviewed By:

Revisions:

No. Date Description



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TENANT IMPROVEMENTS FOR:

# H&R BLOCK DEPOT

1220 NW Main St Lee's Summit, MO 64086

Project No. 2024-032 Issued For: Permit Submittal Drawn By: F. Crubaugh Reviewed By: Revisions:

ENLARGED FLOOR PLAN-

PLUMBING

A. The work included under this contract consists of providing all labor, materials, tools, transportation, services, etc., necessary to complete the installation and to provide complete working systems of the Plumbing Systems, including hot and cold water, waste and vent, storm drainage, fixtures, equipment and other items described in

PLUMBING SPECIFICATIONS

- these specifications, as illustrated in the accompanying drawings or as directed by the Architect/Engineer. B. Extend piping systems as indicated on contract documents or to point of connection as follows:
- Points of connection within the existing building.

#### 2.0 PIPING, FITTINGS AND VALVES:

D. Domestic water, interior, above ground -

- A. Provide hot and cold water supply to each and every fixture, piece of equipment and to systems where makeup water is required.
- B. Provide service valves for each item of equipment, at branch piping, fixture groups, individual fixtures and elsewhere as indicated or required. Provide balance valves, strainers, check valves and other valves as indicated or required by the application
- C. Provide a union or flanged connection between each item of equipment and its service valve. Copper to ferrous pipe connections shall have isolation coupling, flange or union.
- 1. Pipe, copper tube: 2-1/2" and Smaller Type "L" hard temper copper, wrought or cast copper fittings, Lead free 95/5 or Eagle Hard Silvabrite or "CB" solder joints, or roll grooved mechanical joints or pressure seal
- joint fittings with EPDM O-ring seals.
- 2. Provide valves where indicated on the drawings, where required by code, or required for service.
- a. 1/4 turn Service -1) 1/2" thru 2" - Nibco 585-66-LF bronze lead free, 600 PSIG, full port, stainless steel ball and stem. 2) Provide isolation valves where indicated on drawing, including at branches, terminations, each piece
- b. Check, Strainers and Miscellaneous -1) Check - 1/2" thru 2" - Nibco 413-Y-LF bronze lead free, 200 PSIG, PTFE seats, Y-pattern check
- 2) Check 1/2" thru 2" Nibco 480-Y-LF lead free, 200 PSIG, PTFE seats, spring loaded, resilient disc,

including but not limited to dishwashers, clothes washers, ice makers, electronic faucets and similar items.

- spring loaded inline non-slam check valve, in pump discharge. 3. Securely anchor and support piping, valves and fittings, with adequate provisions for expansion and
- contraction. Grade lines, free of traps, to low point at cut-off and drain valve. 4. Hot and cold supply lines to have manufactured pre-charged piston type water hammer arresters sized and installed in accordance with PDI-WH 201. Install at each solenoid actuated quick closing valve location

#### E. Natural Gas --

- Pipe above ground:
- a. 2" and smaller Schedule 40 black steel piping with threaded fittings.

Sioux Chief, JR Smith or equal. Provide access panel where required.

of equipment and elsewhere as required by code.

- b. 4" and smaller Schedule 40 black steel pipe with pressure seal steel fittings. Viega Megapress XL, Apollo PowerPress or equal.
- Valves & Connectors:
- a. Shutoff Service -1) 1/2" thru 1" - Nibco GB-1A, brass body, chrome plated brass ball, PTFE seats, screwed ends, 5 PSIG per CGA, lever handle.
- 2) 1/2" thru 2" Nordstrom 142, iron lubricated tapered plug valve, 200 PSIG, threaded ends.
- b. Regulator, 3/4" thru 1-1/2" Fisher type S, spring loaded diaphragm, 1.5" WC to 2.5 PSIG discharged pressure, threaded, vented to atmosphere.
- c. Flex Connectors, Metraflex GASCT 300 series stainless steel braided hose with carbon steel threaded
- 3. Natural gas piping in return air plenum, where permitted shall be either installed in vented fabricated enclosure; sleeved and vented; or welded or one piece.
- 4. Paint exterior natural gas piping with corrosion inhibiting paint, color to be selected. F. Sanitary sewer, vent, interior --
- 1. Pipe Standard weight cast iron hubless with no-hub shielded mechanical joints; solid wall schedule 40
- PVC, ABS with solvent cement joints; vents may be galvanized malleable iron. 2. Plastic piping shall not be allowed in return air plenums.
- 3. Floor or equipment drains shall be provided at all locations where equipment is indirect wasted. Floor drains shall be provided outside all ADA showers for roll-in applications or where there is no threshold.
- 4. All gravity drainage shall be graded per code but not less than 1/8" per foot unless noted otherwise, except that piping sizes up thru 2-1/2" shall be sloped at 1/4" per foot. Piping sizes up thru 4" to be sloped at 1/4" per foot where possible and where required by local codes.
- 5. Vents shall be sloped upward in direction of flow.

#### G. Sanitary sewer, vent, below grade --

- 1. Pipe Standard weight cast iron hubless with no-hub heavy duty mechanical joint fittings; solid wall schedule 40 PVC, ABS with solvent cement joints.
- 2. All gravity drainage shall be graded per code but not less than 1/8" per foot unless noted otherwise, except that piping sizes up thru 2-1/2" shall be sloped at 1/4" per foot. Piping sizes up thru 4" to be sloped at 1/4" per foot where possible and where required by local codes.
- 3. Vents below grade shall be 2" minimum size and shall be sloped up in direction of flow.

- 1. Pipe Copper tube -Type "L" hard temper, wrought or cast copper fittings, Lead free 95/5 or Eagle Hard Silvabrite or "CB" solder
- 2. Valves, service 1/2" 2" Nibco S-585-70, 1/4 turn, 600 PSIG, full port, stainless steel ball and stem. 3. Outlets - Terminate with male pipe with air valve rated for compressed air, chrome angle stop,
- compression fitting, equipment connection in accordance with equipment vendor requirements.
- 4. All pipe material, joints and outlets to be in accordance with dental vendor drawings and details. 3.0 CLEANOUTS, TEST TEES, TRAPS AND TRAP SEALS:
- A. Provide cleanout at the base of each stack or riser, at ends of runs greater than 100', each 135° aggregate change of direction in horizontal piping, where indicated on the drawings or as required by code. Cleanouts shall be the same size as pipe up to 4" diameter, 4" cleanouts for larger pipe unless otherwise noted.
- B. Where trap primers are not specified provide all floor and hub drains with trap seal with EPDM or silicone diaphragm, conforming to requirements of ASSE 1072 or 1017.2. Provent Proset Series SG22 or TG22, Sioux

A. All traps shall be deep seal type with liquid seal not less than specified by code.

- Chief series 835, Rectorseal SS series or acceptable equal.
- 4.0 SLEEVES AND SEALS, FLASHINGS, ROOF PIPE SUPPORTS AND UV PROTECTION:
- A. Flash all pipes and vents extending through roof. Flashing details shall be in accordance with roof manufacturer's requirements.
- B. Continuous roof piping penetrations shall be made weather tight, conform to roof manufacturer warranty. C. Roof pipe supports shall be prefabricated with UV resistant rubber base, unistrut channel and pipe clamp, length and height for consistent pipe elevation to suit application. Mi-Fab C6 series or acceptable equal.
- D. Plastic piping without UV inhibiters which is exposed to UV radiation from sunlight shall be protected by coating with a UV resistant paint.

a distributing supply or waste so as to make possible the backflow or back-siphonage of polluted water into the

- 5.0 CROSS- CONNECTIONS AND INTERCONNECTIONS: A. No plumbing device or piping shall be installed which will provide cross-connection or interconnection between
- potable water supply system. Where the possibility of back-siphonage exists, water supply to the fixture shall be introduced through a suitable backflow preventer device suitable for the hazard protected. Installed backflow preventers must be approved through the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research. 1. They may be an air gap, anti-syphon valve, atmospheric vacuum breaker, pressure vacuum breaker,
- double check, reduced pressure backflow preventer or as otherwise required by the authority having 6.0 PLUMBING EQUIPMENT:
- A. Water heaters, pumps, expansion tanks and other equipment shall be as scheduled or by acceptable equal by one of the following:
- Water Heaters: A.O. Smith, State, Rheem, Bradford White Expansion Tanks: Watts, Amtrol, Armstrong, Elbi, Taco, Wessels.

## B. Water Heater Installation

- 1. Pipe water heater drains and/or pan drains to indirect waste per code and as noted or detailed. Water heater P&T relief valves shall be piped independently, indirectly wasted 6" above receptor per code and as
- 2. Install vacuum relief valve on each bottom fed storage water heater, installed above the top of the water heater on cold water inlet piping.
- 3. Mount water heaters on concrete floor pads, suspended from structure on steel rods, on steel floor stands or wall bracket steel frames as indicated on drawings.
- 4. Suspended heaters up to 50 gallons may be mounted utilizing prefabricated steel support platform, HoldRite SWHP series or acceptable equal.
- 5. Where water heaters are mounted overhead, on wood floor or other location requiring containment, mount water heaters in drain pan with 1" minimum drain, HoldRite QP series, acceptable equal or field fabricated
- 6. Water piping connections to water heaters shall be metallic, no plastic piping is permitted within 18" of a water heater connection. Stainless steel flexible connectors with union ends may be used, HoldRite or acceptable equal. Provide 18" minimum flexible corrugated copper or braided stainless steel connector hoses with compression ends for water heaters with 3/4" water connections.

- A. Pipe insulation shall conform to the International Energy Conservation Code.
- B. Insulate all cold water, hot water piping, Owens Corning or acceptable equal. 1. Cold water piping insulation: 1" fiber glass sectional pipe covering with universal vapor barrier jacket.
- 2. Hot Water piping insulation: 1" (pipe sizes up thru 1-1/4") 1-1/2" (pipe sizes 1-1/2" and above) fiber glass
- sectional pipe covering with universal all service jacket.
- C. At Contractor's option, Armacell AP Armaflex unicellular insulation or acceptable equal with 25/50 flame and smoke rating with equal thermal performance may be substituted for fiberglass products.
- D. Seal all joints on cold water insulation to maintain vapor barrier.
- E. Insulation shall run continuously thru hangers and supports without interruption.
- F. Refer to plumbing fixture schedule for protective insulation of fixture drains and water piping for compliance with ADA requirements for People with Disabilities. 1. Pipe coverings may be omitted where protection from injury (such as shrouds or casework) is provided by
- 2. Provide comparable protection for accessory items such as disposers where items are exposed to contact beneath ADA designated fixtures.

## 8.0 PIPE SUPPORTS AND ROUTING:

- A. Hangers and Supports 1. Piping shall be supported in accordance with industry standards including support methods, sizes and
- spacing. All supports and installation shall conform to MSS SP58 and 69 and Fed Spec WW-H-171E and 2. Pipe Slopes: Install hangers and supports to provide indicated or required pipe slopes to provide for
- 3. Each piping system shall be independently supported with no piping bearing on another and installed such
- that no weight of piping is borne by the equipment 4. Space hangers and supports within maximum piping span length indicated in MSS SP-58. Install building attachments at required locations for proper piping support.
- 5. Hangers shall be designed to allow for expansion and contraction of pipe lines and shall be of adequate size to permit covering when required. Provide protective saddles and blocking where supporting insulated piping to prevent crushing insulation.
- 1. Piping shall be routed as shown on drawings, parallel to building lines unless otherwise shown, coordinated with building structure and other trades. Adjust pipe routing and drop locations with necessary
- pipe offsets or changes in elevation to accommodate beams and other obstructions. 9.0 EQUIPMENT AND PIPE LABELS:
- A. Equipment labels shall be provided for all plumbing equipment and shall be self-adhesive engraved plastic, blue with white lettering, sized, minimum 1-1/2" high, and located for viewing from ground or floor level. Label shall indicate drawing designation or unique equipment number. B. Pipe labels for domestic water, waste, and vent piping shall be preprinted, color-coded, with 1-1/2" lettering
- ceilings in finished spaces; machine rooms; accessible maintenance spaces such as shafts, tunnels, and plenums; and locations as follows: 1. Near each valve and control device.

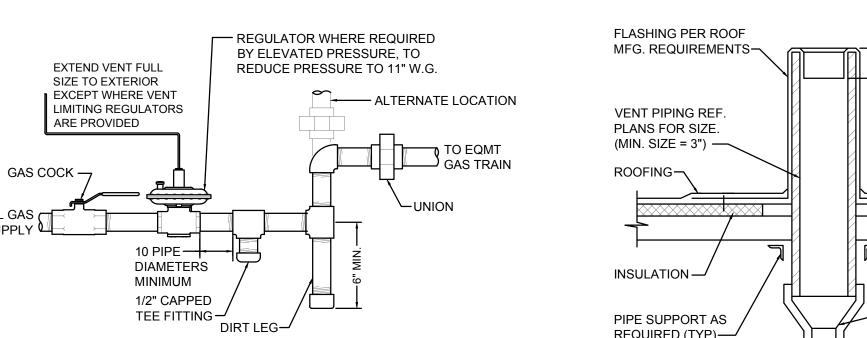
indicating service, and showing flow direction, locate pipe labels where piping is exposed or above accessible

- 2. Near each branch connection, excluding short takeoffs for fixtures and terminal units. Where flow pattern is not obvious, mark each pipe at branch.
- 3. Near major equipment items and other points of origination and termination.
- 4. Spaced at maximum intervals of 50 feet along each run. Reduced intervals to 25 feet in areas of congested
- 5. On piping above removable acoustical ceilings, omit intermediately spaced labels.
- 10.0 MISCELLANEOUS
- A. Indirect wastes shall discharge full size thru an air gap to a floor, equipment drain, sanitary floor sink or hub drain. The floor or equipment drain grate shall be fitted with a funnel, the sanitary floor sink shall have a partial grate or the grate shall be omitted. Drains shall be located so they are accessible and not a tripping hazard.
- B. Provide escutcheons at all penetrations of exposed walls and ceilings. Escutcheons shall be chrome plated brass in occupied areas, prime paint finish for unoccupied areas unless otherwise noted. Escutcheons for exterior or moist areas shall be brass.
- 11.0 PROTECTION OF WORK
- A. Protection 1. Protect and cover piping and fixture waste and water openings to prevent entry of dirt and debris.
- 2. Cover and protect fixtures and plumbing equipment to prevent damage.
- 12.0 TEST, ADJUSTMENTS AND CLEANING:
- A. Soil, waste and vent piping testing: 1. Initial Piping Water Test: Fill with water to the top of the highest point of the system extending through roof. Systems may be tested in whole or part. The system shall remain leak free under test for a minimum
- a. Gravity Drain Test: Either 10' water column or at a pressure not less than 10% above that the piping will be subjected to during nominal operation
- b. Where applicable, isolate new portions of the system(s) piping with test tee and Oatey Clean Seal inflatable plug prior to testing.
- 2. Final Piping Test: The completed system(s) shall be visually inspected to determine compliance with all codes and standards. Where required by the building official, the completed system shall be smoke tested with all traps water filled and system pressured to 1" WC for a minimum period of fifteen (15) minutes.
- B. Water, gas, and compressed air line testing: 1. Water piping shall be purged and tested with compressed air or water at 50 PSIG above the operating pressure but not to exceed the pressure rating of piping system materials for a period of 2 hours with no
- 2. Natural gas lines shall be inspected and blown out with dry compressed air or nitrogen to purge of debris and tested at 1-1/2 times the operating pressure or a minimum of 25 PSIG pressure with no measurable pressure drop. All test procedures including duration of test shall be in accordance with NFPA 54 and the
- 3. Compressed air lines shall be blown out with dry compressed air or nitrogen to purge of debris and tested at 1-1/2 times the operating pressure or a minimum of 150 PSIG air pressure for a period of 2 hours with no measurable pressure drop.
- 4. Where applicable, isolate new portions of pressure piping from existing piping with valves prior to testing. C. After successful testing, sterilize water system with an approved solution in accordance with local health
- Contractor to submit all test data and other documentation for record.
- 13.0 FIXTURE BRANCH PIPING: A. Fixture branch and connection sizes shall be as shown in the plumbing fixture schedule on the drawings and
- not less than required by code. B. Minimum waste or vent size below slab on grade shall be 2".
- 14.0 PLUMBING FIXTURES: A. Refer to plumbing fixture schedule for plumbing fixtures and accessories. Include all fittings and accessories
- as required for a complete working system. B. Where required for ADA compliance, provide lavatory and sink offset drain and tailpiece assembly.
- C. At contractor option, flexible stainless steel braided hose, 125 PSIG rated, with non-toxic liner and compression fittings may be used in lieu of chrome plated brass riser tube. Where ADA complinace is required, provide flexible insulation wrap on braided water supplies in lieu of specified molded vinyl wrap.

END OF SECTION

| ARK NO. | FIXTURE TYPE               | MANUFACTURER                            | MODEL NO.               | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | MINI | MUM CON      | NECTION | SIZE      |
|---------|----------------------------|-----------------------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------|---------|-----------|
| ARK NO. | FIXTURETTPE                | WANDFACTURER                            | WIODEL NO.              | DESCRIPTION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | cw   | нw           | WASTE   | VENT      |
| WC-1    | WATER CLOSET<br>(ADA)      | AMERICAN-STANDARD                       | 3043.001 "MADERA"       | FLOOR MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA, HIGH EFFICIENCY, DIRECT FED SIPHON JET ACTION, FULLY GLAZED 2" TRAP WAY, ELONGATED BOWL, WITH 1-1/2" TOP SPUD, 16-1/2" RIM HEIGHT.  SLOAN "G2 OPTIMA PLUS" 8111-1.6-OR (1.6 GPF) BATTERY OPERATED ELECTRONIC DIAPHRAGM FLUSH VALVE WITH MANUAL RELEASE, VACUUM BREAKER AND ANGLE STOP.  ACCESSORIES: BEMIS 1055SSC WHITE OPEN FRONT SEAT LESS COVER WITH SELF SUSTAINING CHECK HINGES, BOLTS AND CAPS.  NOTE: MOUNT FLUSH VALVE TO WIDE SIDE OF FIXTURE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 1"   | -            | 4"      | 2"        |
| WC-2    | WATER CLOSET               | AMERICAN-STANDARD                       | 2234.001 "MADERA"       | FLOOR MOUNTED FLUSH VALVE, WHITE VITREOUS CHINA, HIGH EFFICIENCY, DIRECT FED SIPHON JET ACTION, FULLY GLAZED 2" TRAP WAY, ELONGATED BOWL, WITH 1-1/2" TOP SPUD. 15" RIM HEIGHT. SLOAN "G2 OPTIMA PLUS" 8111-1.6-OR (1.6 GPF) BATTERY OPERATED ELECTRONIC DIAPHRAGM FLUSH VALVE WITH MANUAL RELEASE, VACUUM BREAKER AND ANGLE STOP. ACCESSORIES: BEMIS 1055SSC WHITE OPEN FRONT SEAT LESS COVER WITH SELF SUSTAINING CHECK HINGES, BOLTS AND CAPS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 1"   | -            | 4"      | 2"        |
|         |                            | *************************************** | T 0,500 004             | ANALTER VIETE COLOR COLOR DE LA CALLE CE COLOR COLOR DE LA CALLE CE COLO | 0.44 | <del>-</del> | T 0"    | T 4 4 101 |
| U-1     | URINAL<br>(ADA)            | AMERICAN-STANDARD                       | 6590.001<br>"WASHBROOK" | WHITE VITREOUS CHINA, WALL-HUNG, HIGH EFFICIENCY WASHOUT FLUSH ACTION, INTEGRAL FLUSHING RIM, 3/4" TOP SPUD, 2" OUTLET. SLOAN "OPTIMA PLUS" G2 8186-1.0 (1.0 GPF) BATTERY OPERATED ELECTRONIC FLUSH VALVE WITH MANUAL RELEASE, VACUUM BREAKER AND ANGLE STOP. ACCESSORIES: J. R. SMITH URINAL SUPPORT. NOTE: MOUNT FIXTURE RIM 17" ABOVE FINISHED FLOOR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3/4" | -            | 2"      | 1-1/2"    |
| L-1 T   | LAVATORY (ADA)             | D'VONTZ                                 | DV1813RTUWH             | 18" x 13" RECTANGULAR VITREOUS CHINA, WITH FRONT OVERFLOW AND UNDER COUNTER MOUNT.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 1/2" | 1/2"         | 1-1/2"  | 1-1/2"    |
|         |                            | 5.0                                     |                         | ZURN Z6915-XL BATTERY POWERED, DECK MOUNTED, FAUCET WITH 4" CENTERS, SENSOR OPERATION, AND 0.5 GPM OUTLET.  ACCESSORIES: PROVIDE WATTS LFG480 THERMOSTATIC MIXING VALVE, GRID DRAIN WITH TAILPIECE, SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH ANGLE STOPS AND CONCEALED ARM LAVATORY SUPPORT. PROVIDE WITH FULLY MOLDED FLEXIBLE VINYL INSULATION KIT COVER TRAP, SUPPLIES AND STOPS, TRUEBRO E-Z LAV GUARD.  NOTE: MOUNT FIXTURE RIM 31" ABOVE FLOOR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |      | <i>"-</i>    | , ,,_   |           |
| S-1     | SINK (ADA)                 | DAYTON                                  | DCFU2816                | SINGLE COMPARTMENT UNDERMOUNT SINK, 18 GA, TYPE 304 STAINLESS STEEL, 6-1/2" DEEP BOWL.  AMERICAN STANDARD 7077300 "COLONY PRO" SINGLE HOLE, DECK MOUNTED FAUCET WITH CERAMIC OPERATING CARTRIDGE, SINGLE LEVER HANDLE, AND PULL DOWN SPRAY.  ACCESSORIES: STRAINER WITH 1-1/2" TAILPIECE, 1-1/2" 17 GA. SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED RISERS WITH ANGLE STOPS.  GARBAGE DISPOSAL: MOEN GXP33C PRO SERIES 1/3 HP WITH POWER CORD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1/2" | 1/2"         | 2"      | 1-1/2"    |
|         |                            |                                         |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |              |         |           |
| JS-1    | JANITOR SINK               | ZURN                                    | Z1996-24                | SIZE 24" X 24" X 10", COMPOSITE SERVICE SINK WITH COMPOSITE DRAIN, STAINLESS STEEL STRAINER, 3" DRAIN CONNECTION. ZURN Z843M1 WITH QUARTER TURN CERAMIC OPERATING CARTRIDGES, VACUUM BREAKER SPOUT WITH PAIL HOOK AND WALL BRACE, 3/4" MALE HOSE THREAD OUTLET, 369 LEVER HANDLES, FLANGED ADJUSTABLE SUPPLY ARM AND INTEGRAL SUPPLY STOPS AND CHECK VALVES. ACCESSORIES: EXTRUDED VINYL BUMPER GUARDS ON EXPOSED SIDES, RUBBER HOSE WITH STAINLESS STEEL WALL BRACKET.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1/2" | 1/2"         | 3"      | 2"        |
| SD-1    | SCRUBBER DUMP              | ZURN                                    | Z843M1                  | WALL MOUNTED FAUCET WITH QUARTER TURN CERAMIC OPERATING CARTRIDGES, VACUUM BREAKER SPOUT, PAIL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1/2" | 1/2"         |         | т—        |
| J.J. 1  | OOLODDEN DOINIL            | ZONY                                    | Z043WI                  | HOOK AND WALL BRACE, 3/4" MALE HOSE THREAD OUTLET, 369 LEVER HANDLES, FLANGED ADJUSTABLE SUPPLY ARM AND INTEGRAL SUPPLY STOPS AND CHECK VALVES.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 114  | 1/4          | _       |           |
| DF-1    | DRINKING FOUNTAIN<br>(ADA) | ELKAY                                   | EZSTL8LC                | ADA BARRIER-FREE BI-LEVEL COOLER, 8.0 G.P.H. (50° F WATER WITH 90° F AIR TEMPERATURE), PUSH BAR ACTIVATION, STAINLESS STEEL COOLER TOP, HEAVY GAUGE VINYL CLAD STEEL CABINET WITH GREY FINISH. 120V/1PH/60HZ.  ACCESSORIES: 17 GA. SEMI-CAST BRASS P-TRAP WITH CLEANOUT, CHROME-PLATED SUPPLY AND STOP, J.R. SMITH FLOOR MOUNTED TYPE SUPPORT WITH "PRO-SET" UPRIGHTS.  NOTES: MOUNT WITH SPOUT 35" ABOVE FINISH FLOOR.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 1/2" | -            | 1-1/2"  | 1-1/2"    |
| IM-1    | ICE MAKER WALL BOX         | SIOUX CHIEF                             | 696-G1000 SERIES        | RECESSED ICE MAKER WALL BOX WITH QUARTER TURN VALVE AND 1/2" INLET. ABS COVER.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1/2" | _            | T -     | Т -       |
|         |                            | 1                                       | 1                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      | I.           | L       |           |
| FD-1    | FLOOR DRAIN                | ZURN                                    | FD-2210                 | GENERAL PURPOSE, PVC BODY WITH ADJUSTABLE STRAINER HEAD, ROUND NICKEL BRONZE STRAINER, AND SEEPAGE OPENINGS. OUTLET SIZE PER PLANS.  NOTE: PROVIDE WITH RECTORSEAL TRAP SEAL IN OUTLET OF FLOOR DRAIN. MATCH OUTLET SIZE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | -    | -            | 2"      | 1-1/2     |
|         |                            |                                         |                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |              |         |           |
| FD-2    | EQUIPMENT DRAIN            | WATTS                                   | FD-344-Y                | EPOXY COATED CAST IRON BODY WITH ANCHOR FLANGE, WEEPHOLES, AND ROUND DUCTILE IRON STRAINER.  NOTE: PROVIDE WITH RECTORSEAL TRAP SEAL IN OUTLET OF FLOOR DRAIN. MATCH OUTLET SIZE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | -    | -            | 3"      | 1-1/2     |

| WATER HEATER SCHEDULE (ELECTRIC) |                                    |                                                                                                        |                 |                   |                |                                  |            |                                         |    |       |
|----------------------------------|------------------------------------|--------------------------------------------------------------------------------------------------------|-----------------|-------------------|----------------|----------------------------------|------------|-----------------------------------------|----|-------|
|                                  |                                    |                                                                                                        |                 | TANK              |                |                                  | ELECTRICAL |                                         |    |       |
| MARK<br>NO.                      | MANUFACTURER                       | MODEL<br>NO.                                                                                           | TANK<br>LINING  | CAPACITY<br>(GAL) | INPUT<br>(KW)  | THERMAL EXPANSION TANK MODEL NO. | VOLT       | Ø                                       | HZ | NOTES |
| DWH-1                            | RHEEM                              | ELD40                                                                                                  | GLASS           | 40                | 6              | PLT-5                            | 208        | 1                                       | 60 | 1,2,3 |
|                                  |                                    |                                                                                                        | <u> </u>        | <u> </u>          |                |                                  |            | *************************************** |    |       |
| NOTES:                           | 1. PROVIDE WITH TEM                | PROVIDE WITH TEMPERATURE AND PRESSURE RELIEF VALVE AND DRAIN.                                          |                 |                   |                |                                  |            |                                         |    |       |
|                                  | <ol><li>PROVIDE WITH CON</li></ol> | PROVIDE WITH CONTROL THERMAL EXPANSION TANK, WATTS MODEL SCHEDULED WITH WATTS SCV SERVICE CHECK VALVE. |                 |                   |                |                                  |            |                                         |    |       |
|                                  | 3. COORDINATE FINAL                | . ELECTRICAL REQUIR                                                                                    | EMENTS WITH ELE | ECTRICAL CONTRAC  | TOR PRIOR TO F | PURCHA SE.                       |            |                                         |    |       |



## POINT-OF-USE MIXING VALVE NO SCALE

COLD WATER SUPPLY

- POINT-OF-USE THERMOSTATIC

FROM WALL

MIXING VALVE

RECOMMENDATIONS.

ENERGY CODE.

CONNECTIONS.

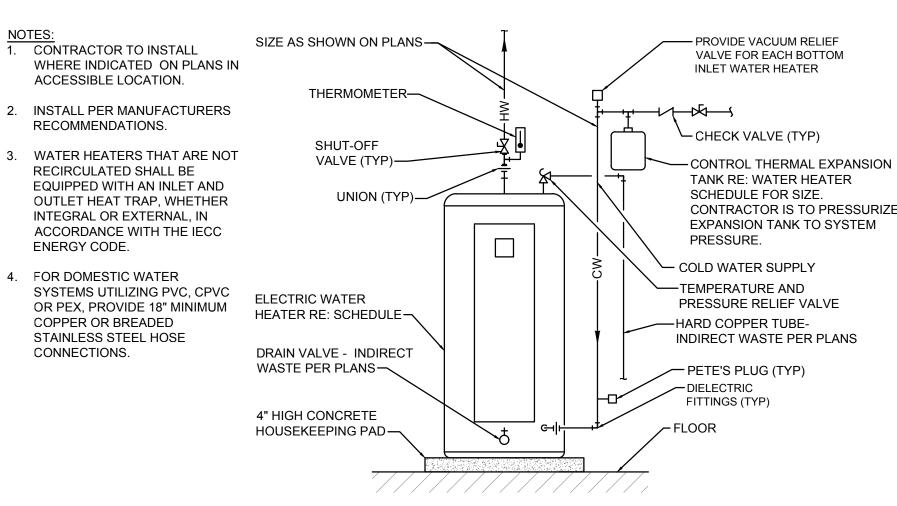
110° TEMPERED WATER

HOT WATER SUPPLY

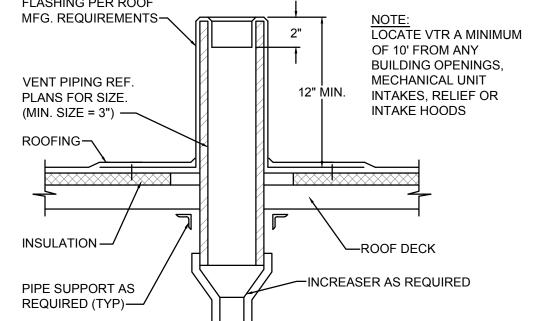
TO LAVATORY -

FROM WALL -





ELECTRIC WATER HEATER DETAIL



-VENT PIPE (INSULATED IN

SPECIFIED OR REQUIRED)

CEILING SPACE WHERE

GENERAL NOTES (TYPICAL ALL SHEETS)

A. PLUMBING CONTRACTOR IS RESPONSIBLE TO SEE THAT WORK MEETS AND IS IN

C. CUTTING AND PATCHING OF FLOORS, WALLS, CEILING, ETC., REQUIRED IN STRICT

D. COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION TO AVOID

F. INSTALL ELASTOMERIC JOINT SEALER AROUND ALL PIPES PASSING THRU INTERIOR

INSTALL SEALER ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS.

H. PLUMBING CONTRACTOR SHALL PROVIDE PRO-SET SYSTEMS 'TRAP GUARD' IN ALL

PLUMBING CONTRACTOR SHALL MAKE FINAL CONNECTION TO ALL EQUIPMENT BY

OF EXISTING UTILITIES, STUBOUTS AND/OR CONNECTIONS.

FROM PROJECT SITE AND DISPOSED OF BY CONTRACTOR.

OTHERS. VERIFY CONNECTIONS SIZES AND REQUIREMENTS.

FLOOR DRAIN TRAPS WITHIN PROJECT SCOPE OF WORK

PLUMBING SYMBOLS

——V—— SANITARY VENT ABOVE GROUND/FLOOR

GAS SHUT-OFF COCK

CHECK VALVE

SHUT OFF VALVE

PIPE DROP/PIPE RISE

**BOTTOM OUTLET TEE** 

EXISTING TO REMAIN

FINISHED FLOOR CLEANOUT

SANITARY VENT THROUGH ROOF

**EQUIPMENT TYPE AND DESIGNATION** 

PLUMBING FIXTURE DESIGNATION

TOP OUTLET TEE

WALL CLEAN OUT

SANITARY WASTE BELOW GROUND/FLOOR

FLOOR DRAIN OR EQMT FLOOR DRAIN

EXISTING TO REMAIN

NEW PIPING

——CW—— COLD WATER

----NG---- NATURAL GAS

———CA——— COMPRESSED AIR

-----HW----- HOT WATER

——₩——

**→ →** 

<del>-</del>0-

WCO⊢

ETR

BUILDING OWNER REQUIREMENTS.

ROUTING CONFLICTS.

ACCORDANCE WITH ALL REQUIREMENTS OF FEDERAL, STATE, AND LOCAL LAWS AND

CODES AND/OR REQUIREMENTS, INCLUDING HEALTH CODES AND BUILDING OWNER.

RECORD DRAWINGS PROVIDED BY THE OWNER AND DO NOT REFLECT EXACT EXISTING

CONDITIONS. CONTRACTOR TO FIELD VERIFY EXACT DEPTH AND/OR LOCATIONS ON JOB

SITE. CONTRACTOR SHALL REROUTE NEW WORK TO ACCOMMODATE EXACT LOCATIONS

B. ALL EXISTING PIPING SHOWN ON DRAWINGS IS SCHEMATIC AND IS BASED ON EXISTING

ACCORDANCE WITH THE RULES AND REGULATIONS OF THE ARCHITECT'S AND/OR

E. ANY MATERIAL REMOVED THAT OWNER DOES NOT WISH TO RETAIN SHALL BE REMOVED

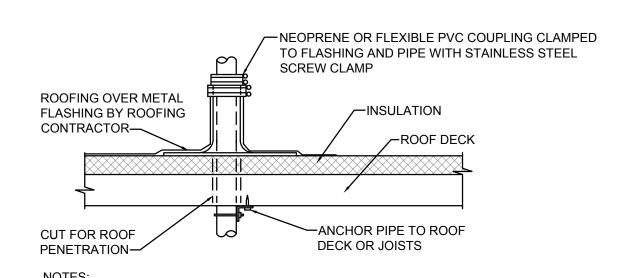
NON-RATED CONCRETE AND MASONRY WALLS, GYPSUM-BOARD PARTITIONS, AND

CONCRETE FLOOR/ROOF SLABS. FOR FIRE RATED INTERIOR CONCRETE AND MASONRY

WALLS, GYPSUM-BOARD PARTITIONS, AND CONCRETE FLOOR/ROOF SLABS SEAL ALL

PIPES. INSTALL FIRESTOP MATERIALS IN ALL GAPS PRIOR TO SEALANT APPLICATION.

## **VENT THRU ROOF DETAIL** NO SCALE



REFER TO PLANS FOR PIPE SIZE(S) AND LOCATION(S). LOCATE PENETRATION MINIMUM 18" FROM ADJACENT WALLS OR ANY EQUIPMENT CURBS, PARAPETS, EXPANSION JOINTS, ETC

2. VERIFY FLASHING AND COUNTERFLASHING WITH ROOF MFG. COMPLY WITH ROOF WARRANTY REQUIREMENTS.

3. FLASHING AND COUNTER FLASHING IS BY ROOFING CONTRACTOR. PLUMBING CONTRACTOR SHALL COORDINATE INSTALLATION.

> SINGLE PIPE **ROOF PENETRATION DETAIL**

CONSTRUCTION As Noted on Plans Review

3315 N Oak Trafficway | Kansas City, MO 64116 816 | 888 | 7380 NP Studio North, LLC Missouri Certificate of Authorization No. A-2017040540

PLUMBING **DESIGN-BUILD** BY GEN CONTRACTOR DESIGN-BUILD BY GEN CONTRACTOR ELECTRICAL DESIGN-BUILD BY GEN CONTRACTOR

FIRE PROTECTION DESIGN-BUILD BY GEN CONTRACTOR CONTRACTOR FORGE CONSTRUCTION



1730 Walnut Street Kansas City, Missouri 64108 1915 Frederick Avenue, St. Joseph, Missouri 64501 Phone: 816.221.1411 | Fax: 816.221.1429 LANKFORD | FENDLER + ASSOCIATES, CONSULTING ENGINEERS, INC COPYRIGHT **②** 2024 *Project No.* 24.7428.08

COA No. 2006001168

TENANT IMPROVEMENTS FOR:

1220 NW Main St Lee's Summit, MO 64086

| Date:         | 04.26.24         |  |  |  |  |  |
|---------------|------------------|--|--|--|--|--|
| Issued For:   | Permit Submittal |  |  |  |  |  |
| Drawn By:     | F. Crubaugh      |  |  |  |  |  |
| Reviewed By:  |                  |  |  |  |  |  |
| Revisions:    |                  |  |  |  |  |  |
| No. Date      | Description      |  |  |  |  |  |
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Project No. 2024-032

DETAILS, & SCHEDULES