

Addendum II

RE-BID 25-4090-02 Installation of Limited Use/Limited Application Elevator Q&A

- 1. Request a copy of the complete Building Plans and Specifications by posting on the solicitation website or by email.
 - a. See attached files.
- 2. Request copy of the TDLR-approved LU/LA Permit for this Project.
 - a. Permit will need to be acquired by installer.
- 3. Request suspension of further framing and drywall work on the 1st and 2nd floor elevator lobby walls until such time an elevator contractor provides a lobby frame opening for approval.
 - a. not putting sheet rock up, contractors will pull off if needed, 2nd floor has some on the back wall.

DISCUSSION: The rough-framed lobby opening appears too close to the right side wall for the elevator opening--there's insufficient room inside the pit for elevator cab clearance. We suspect both floors will require the frame to shift left by several inches in order to accommodate the elevator. Suspending lobby wall work until the elevator opening location is confirmed avoids cost to shift the openings to fit the elevator being installed.

- a. Provide specific dimensions for opening size and location. We can get building contractor to adjust opening.
- 4. Request confirmation of the applicable year code--2016, 2019, or 2022--for ASME A17.1?
 - a. City of Burnet follows IBC 2021. If there are any additional state or regulatory codes that LU/LA's need to abide by, they need to be followed as well.
- 5. Request Bid Due/Opening Date be moved to 5 days after response to RFI's to provide sufficient time to refine pricing and schedule.
 - a. Extended to December 02, 2025 per addendum I.
- 6. Please confirm if the elevator contractor or General Contractor responsible for providing, installing and piping the elevator sump pump and the sump pump grate. For piping, does it include the check valve and ball valve? If elevator contractor responsible, request detail/drawing that identifies the sump pump general path and connection point to the existing sanitary drain.
 - a. GC is taking care of this.

DISCUSSION: SOW, Specs and plans do not clarify who is providing sump pump or piping to drain. Concern is the plans show no piping path/connection for the sump pump. May require saw cutting concrete to route piping to 1st floor bathroom drain.

- a. GC has taken care of this.
- 7. Is there a required oil detector, pit water level alarm, or oil/water separator? If so, is the elevator contractor or General Contractor to provide and install? Where is it to be placed? Does it need to be connected to a building automation system?
 - a. Elevator contractor is required to provide all equipment and accessories needed to comply with code and manufacturer's warranty.



- 8. Please confirm if the elevator contractor or General Contractor to provide electrical service to the sump pump?
 - a. GC is taking care of this
- 9. Please confirm a smoke detector to be placed at 1st and 2nd floor elevator, and at the top of the elevator shaft?
 - a. If one is needed by code or manufacturer, elevator contractor will need to provide one.
- 10. Please confirm if the Elevator Contractor or General Contractor is to provide electrical service to the elevator controller where it needs to land within the hoistway for the elevator controller?
 - a. Elevator contractor to be responsible.
- 11. Please confirm if the Elevator Contractor or General Contractor is to include the cost of the smoke detector placement/install?
 - a. If one is needed by code or manufacturer, elevator contractor will need to provide one.
- 12. Request confirm if the elevator contractor or General Contractor is to included the cost of lowering the elevator pit if required?
 - a. Elevator contractor to be responsible.

DISCUSSION: Specification indicates Pit to be 13 inches or greater. Current pit depth is 12 inches.

- a. Correct
- 13. Request confirmation if Cibes Symmetry is the only acceptable LU/LA, or an equal alternate LU/LA Elevator Manufacturer is acceptable?
 - a. Alternates are acceptable with detailed reasoning as to why you are suggesting an alternate. Provide pricing for both Cibes Symmetry and alternate should there be one.

DISCUSSION: We believe more durable and cost-effective alternatives exist relative to a Cibes Symmetry?

- a. Alternates are acceptable with detailed reasoning as to why you are suggesting an alternate. Provide pricing for both Cibes Symmetry and alternate should there be one.
- 14. Request confirmation if the Elevator Contractor or General Contractor is to construct the Fire-Rated Hoistway?
 - a. Elevator contractor to be responsible. Shaft is built and EC should prep the shaft for elevator and any fire rating requirements per code.
- 15. Request confirmation if the Elevator Contractor or General Contractor is to perform fire caulking penetrations?
 - a. Elevator Contractor is to be responsible.
- 16. Request confirmation of any ADA Accessibility features required by ASME A17.1 (2022) code, such as: video monitoring, touchless controls, remote (off-site) callout.
 - a. Elevator contractor is responsible for providing all code required features. This unit has to be accessible and allow for card reader access control.



- 17. Request confirmation if the Elevator Contractor or General Contractor is responsible for providing telephone service to the LU/LA? Is the telephone service analog (POTS) or digital? Is the Elevator Contractor, General Contractor or County to pay the monthly telephone service bill?
 - a. Required telephone service to be the counties responsibility. County to pay bill.
- 18. Is there to be remote maintenance monitoring of the elevator--requires a seperate (dedicated) phone line?
 - Provide pricing for county to compare.
- 19. Is the elevator contractor or General Contractor responsible for providing and installing the elevator flooring? Please provide product data for the elevator flooring?
 - Flooring will be LVT, provided by client and installed by elevator contractor.
- 20. Is the elevator contractor to provide their own dumpster or can the elevator contractor use the General Contractor's dumpster? Same with Port-a-Potty?
 - a. If GC is still here, yes you can use it. They can not guarantee they will still be onsite.
- 21. Is the General Contractor installing a fire sprinkler head in the Hoistway?
 - This building is not sprinklered. The only fire suppression system in the building is going to be an inert gas system for the server room on the second floor.

PROJECT GENERAL NOTES

- THE CONTRACTOR, IN ACCORDANCE WITH THE PROVISIONS SET FORTH IN THESE CONTRACT DOCUMENTS, SHALL PROVIDE ALL MATERIALS, EQUIPMENT, LABOR AND SUPERVISION TO COMPLETE ALL WORK DESCRIBED HEREIN AND WHICH CAN BE REASONABLY INFERRED TO BE REQUIRED IN THESE DRAWINGS FOR CONSTRUCTION.
- PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR TO VERIFY ALL DIMENSIONS, AND CONDITIONS, AND SHALL NOTIFY ARCHITECT IN WRITING OF ANY DISCREPANCIES.

 PROCEEDING WITH WORK SHALL CONSTITUTE ACCEPTANCE BY THE CONTRACTOR THAT ALL CONDITIONS ARE ACCEPTABLE AND THE CONTRACTOR SHALL ASSUME FULL
- DO NOT SCALE DRAWINGS IF DIMENSIONS ARE IN QUESTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING CLARIFICATION FROM THE ARCHITECT BEFORE CONTINUING
- WITH CONSTRUCTION.

 4 CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, ACTS, AND COVENANTS, HAVING JURISDICTION.
- THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, INSPECTION FEES, AND DEPOSITS REQUIRED FOR THE PROVISION AND INSTALLATION OF ALL WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CALL FOR LOCAL INSPECTIONS AND OBTAIN APPROVAL FROM INSPECTORS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL INSURANCE AND NECESSARY INCIDENTALS
- SEAL ALL CRACKS AROUND STRUCTURAL MEMBERS, BRACING, PIPES, CONDUITS, DUCTS AND BETWEEN WALLS AND ROOF DECK WHERE AIR INFILTRATION BETWEEN CONDITIONED AND NON-CONDITIONED (EXTERIOR) SPACES MAY OCCUR (I.E. SEAL THE BUILDING ENVELOPE).
- 7 CONCEAL ALL PIPING IN GYPSUM WALLBOARD, TYPE 'X'. WHERE PIPING IS TOO LARGE, WALLS ARE TO BE FURRED-OUT THE MINIMUM REQUIRED TO CONCEAL PIPING. INFORM ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
- 8 PROVIDE DOUBLE STUDS, BLOCKING, AND/OR DIAGONAL BRACING AT JAMBS OF DOORS, AND ALL WALL OPENINGS.
- 9 PROVIDE TRANSITION STRIPS AT ALL CHANGES IN FLOOR FINISH.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND PERSONNEL DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, EXCAVATION PROTECTION, SCAFFOLDING, AND JOB SITE SAFETY. OBSERVATION VISITS TO THE SITE BY ARCHITECT, OWNER, OR ENGINEER SHALL NOT INCLUDE INSPECTION OF ABOVE ITEMS
- 11 FIRE EXTINGUISHERS SHALL BE PURCHASED AND INSTALLED BY THE CONTRACTOR PER LOCAL FIRE DEPARTMENT AND BUILDING CODE REQUIREMENTS.
- 12 ELECTRICAL PANEL AND FIRE EXTINGUISHER CABINETS LOCATED IN RATED PARTITIONS SHALL BE BACKED WITH DRYWALL TO MAINTAIN FIRE RATING
- 13 ALL DOORS PENETRATING "1 HOUR" CORRIDOR WALLS SHALL BE 45-MINUTE RATED DOORS UNLESS NOTED OTHERWISE.
- 14 PENETRATIONS THROUGH WALLS OR CEILINGS NOTED TO BE FIRE RATED SHALL BE FIRE SAFED AND SEALED TO MAINTAIN THE RATING. ALL WALL AND FLOOR CEILING PENETRATIONS SHALL BE PROTECTED BY PRODUCTS EQUIVALENT TO USG FIRE CODE SEALANT AND THERMAFIBER SAFING INSULATION PER MANUFACTURER'S INSTRUCTIONS AND CONFORMING TO SYSTEM WL-7001, WL-7002, WL-1027, WL-3023, WL-1039, AND/OR UL SYSTEM #CAJ-0032, CAJ-0032, CAJ-3045. DUCT WORK PENETRATIONS THROUGH RATED ASSEMBLIES SHALL BE PROVIDED WITH AN APPROPRIATELY TESTED/RATED FIRE AND SMOKE DAMPER.
- 15 CONTRACTOR TO PROVIDE FIRE / SMOKE DETECTION AND ALARM SYSTEM.
- 16 IT IS THE INTENT OF THE OWNER AND ARCHITECT THAT THIS PROJECT COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND TEXAS ACCESSIBILITY STANDARDS.
- THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL AGREE TO WARRANTY THE WORK, INCLUDING BOTH MATERIALS AND WORKMANSHIP, FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER. CONTRACTOR SHALL REMEDY, AT NO EXPENSE TO THE OWNER, ANY DEFECTS IN THE WORK WHICH BECOME APPARENT DURING THE WARRANTY PERIOD.

GENERAL NOTES

- 1 FIRE ALARM SYSTEM. A FIRE ALARM SYSTEM WILL BE INSTALLED PER THE FIRE CODE AND NFPA STANDARD 72. THE APPROVAL OF THIS SYSTEM WILL BE ADDRESSED THROUGH A DEFERRED SUBMITTAL. APPROVAL OF THE BUILDING PERMIT DOES NOT IMPLY APPROVAL TO INSTALL THE FIRE ALARM SYSTEM.
- 2 EMERGENCY SERVICES. NORMAL BUILDING LIGHTING WILL BE SUPPLIED FROM DEDICATED LIGHTING CIRCUITS AND EMERGENCY LIGHTING WILL BE SUPPLIED FROM THE SAME CIRCUITS. A SINGLE PRIMARY HOT FROM THE BREAKER WILL BE SPLIT BETWEEN THE SWITCH AND EMERGENCY HOT. THE PRIMARY HOT WILL SUPPLY THE LIGHTING FIXTURES AND WILL BE ROUTED THROUGH THE SWITCHES LOCATED ON THE CIRCUIT. THE EMERGENCY HOT WILL SUPPLY THE BACKUP BATTERIES ONLY. THE EMERGENCY HOT WILL BE INSTALLED AS AN UNSWITCHED, CONSTANT HOT. THE BREAKER SUPPLYING THE CIRCUITS MUST BE TURNED OFF TO CUT POWER TO THE EMERGENCY HOT. COORDINATE WITH MPE SYSTEMS DRAWINGS.
- PORTABLE FIRE EXTINGUISHERS. PORTABLE FIRE EXTINGUISHERS WILL BE INSTALLED SO THAT NO POINT IN THE BUILDING WILL BE LOCATED MORE THAN 75 FEET FROM AN EXTINGUISHER. THIS DISTANCE IS MEASURED BY THE PATH OF TRAVEL. THE MINIMUM RATING FOR AN EXTINGUISHER IS 2A:10BC. 5-LB DRY CHEMICAL UNITS, WHICH CARRY A 3A:40BC RATING. EXTINGUISHERS SHALL BE MOUNTED ADJACENT TO EXIT DOORS AND AT INTERMIDIATE LOCATIONS TO MEET TRAVEL DISTANCE REQUIREMENTS. EXTINGUISHERS MUST BE MOUNTED IN A VISIBLE AND ACCESIBLE LOCATION. THE TOP OF EXTINGUISHER SHALL NOT BE MORE THAN 5 FEET ABOVE THE FINISHED FLOOR LEVEL. EXTINGUISHERS MUST BE PROVIDED WITH A CURRENT INSPECTION TAG BY A LICENSED FIRE PROTECTION CONTRACTOR.
- 4 MAIN ELECTRICAL DISCONNECT. THE MAIN ELECTRICAL DISCONNECT MUST BE LOCATED ON THE EXTERIOR OF THE BUILDING AND APPROVED SIGNAGE TO BE PROVIDED AND INSTALLED TO IDENTIFY THE LOCATION OF THE MAIN ELECTRICAL DISCONNECT. THE DISCONNECT MUST BE A KNOX-VAULT 4500 SERIES POWER SHUTDOWN. PRIOR TO INSTALLATION, THE SIZE, DESIGN AND PLACEMENT OF IDENTIFICATION SIGNS MUST BE APPROVED BY THE FIRE DEPARTMEN. COORDINATE WITH MPE SYSTEMS DRAWINGS.
- MAIN GAS DISCONNECT. THE MAIN GAS DISCONNECT MUST BE LOCATED ON THE EXTERIOR OF THE BUILDING AND APPROVED SIGNAGE TO BE PROVIDED AND INSTALLED TO IDENTIFY THE LOCATION OF THE MAIN GAS DISCONNECT. PRIOR TO INSTALLATION, THE SIZE, DESIGN AND PLACEMENT OF IDENTIFICATION SIGNS MUST BE APPROVED BY THE FIRE DEPARTMENT. COORDINATE WITH MPE SYSTEMS DRAWINGS.
- 6 CARBON DIOXIDE SYSTEMS WITH MORE THAN 100 POUNDS (45.4 KG) OF CARBON DIOXIDE USED IN BEVERAGE DISPENSING APPLICATIONS SHALL COMPLY WITH THE 2015 INTERNATIONAL FIRE CODE, SECTIONS 5307.2 THROUGH 5307.5.2.

BURNET COUNTY ANNEX

127 EAST JACKSON STREET, BURNET TX 78611

PROJECT TEAM DIRECTORY:

OWNER:

BURNET COUNTY AUDITOR'S OFFICE 133 E JACKSON ST BURNET, TX 78611 CONTACT:JOE DON DOCKERY CELL #:512-715-5235

ARCHITECT OF RECORD:

LEVY DYKEMA
PROJECT #:LD10-23055
620 CONGRESS AVE., STE 100
AUSTIN, TEXAS 78701
WWW.LEVYDYKEMA.COM

MEP ENGINEER:

HOLLINGSWORTH PACK
PROJECT #:33-1408
3801 S CONGRESS AVE, STE 110
AUSTIN, TX
HOLLINGSWORTHPACK.COM
(512) 275-6060

STRUCTURAL ENGINEER:

STRUCTURES PE, LLP
PROJECT #:23.078
4315 GUADALUPE ST. STE 301
AUSTIN, TX
STRUCTURESTX.COM
(512)499-0919

GENERAL CONTRACTOR:

PROJECT #:TBD
TBD
TBD
TBD
TBD
CONTACT:TBD
CELL #:TBD

LOCATION MAP



SYMBOL LEGEND

COLUMN REFERENCE

VIEW FROM E. JACKSON ST.

TRUE	TRUE NORTH	XX/AX.X	EXTERIOR ELEVATION	LEVEL NAME ELEVATION	LEVEL HEAD, DATUM POINT	X	PARTITION TAG
PROJECT NORTH		X X XX/AX.X X	INTERIOR ELEVATION	x' - x" ROOM	SPOT ELEVATION	101	DOOR TAG
	PROJECT NORTH	×	Ref XX	NAME 101 150 SF	ROOM LABEL	X	GLAZING TAG
	AREA NOT IN CONTRACT		DETAIL CALLOUT	XX/AX.X	WALL SECTION		
	REVISION CLOUD & REVISION TAG/ NUMBER	?	KEY NOTE	XX/AX.X XX/AX.X	BUILDING SECTION		

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SHEET INDEX

			CURRENT REVISI	ON
SHEET #	SHEET NAME	#	DESCRIPTION	DATE
00 - GENER	AL			
G-001	COVER SHEET			
G-101	LIFE SAFETY PLAN	1	2ND FLOOR LAYOUT	8/11/2025
G-501	ACCESSIBILITY GUIDELINES			
G-502	ACCESSIBILITY GUIDELINES			

STOP OF TET

03 - STRUCT	ΓURAL		
S-000	STRUCTURAL NOTES		
S-001	STRUCTURAL NOTES		
S-002	STRUCTURAL NOTES		
S-003	SPECIAL INSPECTIONS		
S-100	FOUNDATION PLAN		
S-200	FRAMING PLAN		
S-201	ROOF FRAMING PLAN		
S-300	TYPICAL CONCRETE DETAILS		
S-301	SLAB ON GRADE FOUNDATION SECTIONS		
S-302	SLAB ON GRADE FOUNDATION SECTIONS		
S-303	CONCRETE REPAIR DETAILS		
S-600	TYPICAL WOOD DETAILS		
S-601	TYPICAL WOOD DETAILS		
S-610	TYPICAL WOOD SHEAR WALL DETAILS		
S-611	TYPICAL WOOD SHEAR WALL DETAILS		
S-612	TYPICAL WOOD SHEAR WALL DETAILS		
S-630	STICK FRAME FLOOR FRAMING DETAILS		
S-650	MONOSLOPE ROOF TRUSS DETAILS		

_	04A - ARCHI	ITECTURAL SITE		
	AS-101	ARCHITECTURAL SITE PLAN		

04B - ARCHITECTURAL DEMOLITION AD-101 DEMOLITION FLOOR PLANS AD-121 DEMOLITION ROOF PLAN & EXTERIOR ELEVATIONS

A-101	ARCHITECTURAL FLOOR PLANS	1	2ND FLOOR LAYOUT	8/11/202
A-111	REFLECTED CEILING PLANS	1	2ND FLOOR LAYOUT	8/11/202
A-121	ROOF PLAN			
A-131	FINISH PLANS	1	2ND FLOOR LAYOUT	8/11/202
A-201	EXTERIOR ELEVATIONS	1	2ND FLOOR LAYOUT	8/11/202
A-221	INTERIOR ELEVATIONS	1	2ND FLOOR LAYOUT	8/11/202
A-301	BUILDING SECTIONS	1	2ND FLOOR LAYOUT	8/11/202
A-311	WALL SECTIONS	1	2ND FLOOR LAYOUT	8/11/202
A-401	ENLARGED PLANS	1	2ND FLOOR LAYOUT	8/11/202
A-402	ENLARGED PLANS			
A-431	ENLARGED FINISH PLANS			
A-511	DETAILS	1	2ND FLOOR LAYOUT	8/11/202
A-512	STAIR DETAILS			
A-522	MILLWORK DETAILS			
A-602	INTERIOR PARTITION TYPES	1	2ND FLOOR LAYOUT	8/11/202
A-611	DOOR SCHEDULES AND DETAILS			
A-631	STOREFRONT & WINDOW SCHEDULE	1	2ND FLOOR LAYOUT	8/11/202

- MECHA	NICAL		
M-001	MECHANICAL COVER SHEET		
M-002	MECHANICAL DETAILS		
M-003	MECHANICAL SCHEDULES		
M-201	MECHANICAL HVAC PLANS - LEVEL 1		

07 - PLUMB	ING		
P-001	PLUMBING COVER SHEET		
P-002	PLUMBING DETAILS		
P-003	PLUMBING SCHEDULES		
P-101	PLUMBING DWV PLANS		
P-201	PLUMBING DOMESTIC WATER PLANS		
P-301	PLUMBING RISER DIAGRAMS		

, FLECTO	ICAL		
3 - ELECTR	CAL		
E-001	ELECTRICAL COVER SHEET		
E-002	ELECTRICAL SPECIFICATIONS		
E-003	ELECTRICAL DETAILS		
E-004	ELECTRICAL ONE-LINES & SCHEDULES		
E-201	ELECTRICAL LIGHTING PLAN		
E-301A	ELECTRICAL POWER PLAN		
E-301B	ELECTRICAL HVAC POWER PLAN		

REQUIREMENTS

IMPORTANT:

SHOULD A CONFLICT AND/ OR DISCREPANCY ARISE BETWEEN THE SPECIFICATIONS AND/ OR DRAWINGS, THE HIGHEST QUALITY AND QUANTITY SHALL BE PROVIDED AND INSTALLED.

IMPORTANT:

GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ALL TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR), TEXAS ACCESSIBILITY STANDARDS (TAS), AND AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS ARE MET.

IMPORTANT

THE ARCHITECT'S PACKAGE IS INTENDED TO BE VIEWED IN FULL COLOR. WORK INCORRECTLY INSTALLED AS A RESULT OF VIEWING THE DRAWINGS IN GRAYSCALE, SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO

Project Number: LD10-23055 © 2024 LEVY DYKEMA COVER SHEET

127 EAST JACKSON STREET,

ET COUNTY ANNEX

THE PURPOSE OF THE LIFE SAFETY PLANS IS TO ILLUSTRATE IN A SCHEMATIC FASHION, THE APPLICABLE EXITING, FIRE-RESISTANCE, AND LIFE SAFETY CONCEPTS UTILIZED BY THIS PROJECT;

INCLUDING, BUT NOT LIMITED TO: - OCCUPANCY CLASSIFICATIONS

- OCCUPANCY LOAD FACTORS - EXIT LOCATIONS, EXIT PATHS & CAPACITY

- FUNCTION OF SPACE - FIRE-RESISTANCE RATED CONSTRUCTION

- AND OTHER STRATEGIES RELATED TO THE CODE COMPLIANCE APPROACH OF THIS PROJECT. ADDITIONAL DETAILED REQUIREMENTS APPLY TO THE CONSTRUCTION OF PARTITIONS, FIRE RATED DOOR ASSEMBLIES, INTERIOR GLAZED OPENINGS, DUCTS, SMOKE AND FIRE DAMPERS AND THROUGH-PENETRATION FIRE STOPPING, IF APPLICABLE. REFER TO THE DRAWINGS OF

EACH DISCIPLINE FOR THESE REQUIREMENTS. ADDITIONAL DETAILED REQUIREMENTS SHOWN ELSEWHERE MAY REQUIRE CONSTRUCTION HAVING GREATER FIRE RATINGS, MORE EXTENSIVE FIRE-RATED CONSTRUCTION, OR MORE COMPLEX ASSEMBLIES THAN INDICATED. WHEN PROVIDED, THE ADDITIONAL DETAILED

FIRE BARRIERS SHALL EXTEND FROM THE TOP OF THE FOUNDATION OR FLOOR/CEILING ASSEMBLY BELOW TO THE UNDERSIDE OF THE FLOOR OR ROOF SHEATHING, SLAB OR DECK ABOVE AND SHALL BE SECURELY ATTACHED THERETO. SUCH FIRE BARRIERS SHALL BE CONTINUOUS THROUGH CONCEALED SPACES.

SHAFT ENCLOSURES SHALL BE CONSTRUCTED AS FIRE BARRIERS

FIRE PARTITIONS SHALL EXTEND FROM THE TOP OF THE FOUNDATION OR FLOOR/CEILING ASSEMBLY BELOW TO THE UNDERSIDE OF THE FLOOR OR ROOF SHEATHING, SLAB OR DECK ABOVE OR TO THE FIRE-RESISTANCE-RATED FLOOR/CEILING OR ROOF/CEILING ASSEMBLY ABOVE, AND SHALL BE SECURELY ATTACHED THERETO.

SMOKE BARRIERS SHALL FORM AN EFFECTIVE MEMBRANE CONTINUOUS FROM OUTSIDE WAL TO OUTSIDE WALL AND FROM THE TOP OF THE FOUNDATION OR FLOOR/CEILING ASSEMBLY BELOW TO THE UNDERSIDE OF THE FLOOR OR ROOF SHEATHING, DECK OR SLAB ABOVE, INCLUDING CONTINUITY THROUGH CONCEALED

SMOKE PARTITIONS SHALL EXTEND FROM THE TOP OF THE FOUNDATION OR FLOOR BELOW TO THE UNDERSIDE OF THE FLOOR OR ROOF SHEATHING, DECK OR SLAB ABOVE OR TO THE UNDERSIDE OF THE CEILING ABOVE WHERE THE CEILING MEMBRANE IS CONSTRUCTED TO LIMIT THE TRANSFER OF SMOKE.

DIRECTIONAL SIGNAGE SHALL BE PROVIDED AT EACH ELEVATOR LANDING THAT STATES "IN FIRE EMERGENCY, DO NOT USE THE ELEVATOR, USE THE STAIRS"

INTERIOR WALL & CEILING FINISHES SHALL HAVE A FLAME SPREAD INDEX RATING OF NO MORE THAN CLASS 'B' AT VERTICAL EXITS & EXIT PASSAGEWAYS, EXIT ACCESS CORRIDORS, AND OTHER EXIT WAYS.

INTERIOR WALL & CEILING FINISHES SHALL HAVE A FLAME SPREAD INDEX RATING OF NO MORE THAN CLASS 'C' AT ROOMS AND ENCLOSED SPACES.

ALL MATERIALS EXPOSED WITHIN DUCTS OR PLENUMS SHALL HAVE A FLAME SPREAD INDEX RATING OF NOT MORE THAN 25 AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 50. FIRE EXTINGUISHERS SHALL BE LOCATED SUCH THAT TRAVEL DISTANCE TO AN EXTINGUISHER SHALL NOT EXCEEED 75' (WHERE REQUIRED BY CODE).

14 LEVEL / AREA MAIN OCCUPANCY EXIT SIGN LOCATIONS MAY NOT BE SHOWN ON THIS SHEET. REFERENCE ELECTRICAL SHEETS FOR ALL EXIT SIGN LOCATIONS.

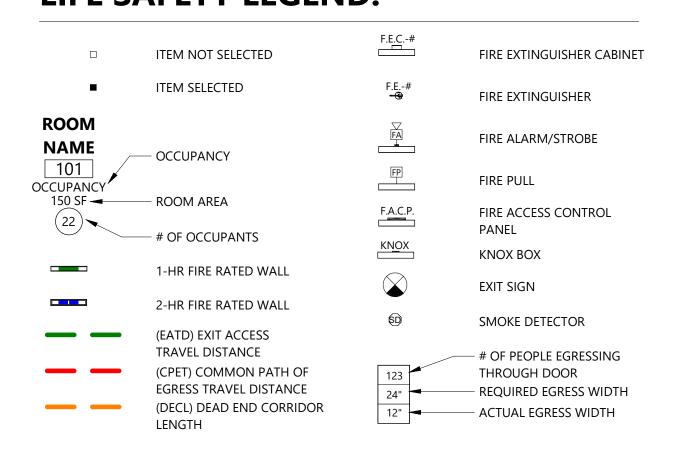
FIRE RESISTIVE ASSEMBLY DETAILS, IF APPLICABLE, ARE LOCATED ELSEWHERE IN THIS DRAWING SET. REFERENCE THE SHEET INDEX.

ELEVATOR HOISTWAY OPENINGS SHALL BE PROTECTED AS REQUIRED BY CODE,

CORRESPONDING TO THE RATING OF THE HOISTWAY. 17 EVERY ROOM / SPACE WITH AN ASSEMBLY OCCUPANCY SHALL HAVE THE OCCUPANT LOAD POSTED IN A CONSPICUOUS SPACE.

EACH PARTITION SHOWN ON THE DRAWINGS TO HAVE A FIRE AND/OR SMOKE RESISTANCE RATING SHALL BE IDENTIFIED AS SUCH WITH A LABEL ABOVE THE CEILING ON EACH SEGMENT OF THE WALL AND 6' - 0" MAX. EACH SIDE.

LIFE SAFETY LEGEND:



OCCUPANCY LOAD

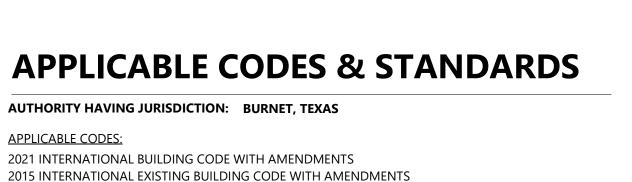
OCCUPANCY TYPE	AREA	OCCUPANT LOAD FACTOR	OCCUPANCY	
01 FIRST FLOOR				
BUSINESS	1,940 SF	100 SF	20	
02 SECOND FLOOR				
BUSINESS	1,935 SF	100 SF	20	

REQUIRED PLUMBING FIXTURES

		OCCUPANCY	WATER	CLOSETS	LAVA	TORIES	DRINKING	SERV
FLOOR	CLASSIFICATION	LOAD	MEN	WOMEN	MEN	WOMEN	FOUNTAINS	SINI
1ST FLOOR	BUSINESS	20	.4	.4	.25	.25	.2	1
2ND FLOOR	STORAGE	4	.02	.02	0.02	.02	0.004	0*
TOTAL		24	1	1	1	1	1**	1

**SEEKING ALTERNATE COMPLIANCE METHOD OF: TENANT STAFF TO UTILIZE EXISTING DRINKING FOUNTAINS IN CURRENT ANNEX OFFICE (WITHIN 500 FEET PER 2015 IPC) AND OWNER TO PROVIDE BOTTLED WATER TO THE PUBLIC. SEE LETTER EXHIBIT

> Project Number: LD10-23055 © 2024 LEVY DYKEMA **LIFE SAFETY PLAN**



2015 INTERNATIONAL FIRE CODE WITH AMENDMENTS

2014 NATIONAL ELECTRICAL CODE WITH AMENDMENTS

2012 TEXAS ACCESSIBILITY STANDARDS (TAS/TDLR)

BUILDING LIMITS

2015 NFPA 101 LIFE SAFETY CODE

TDLR NUMBER: TBD

BASIC OCCUPANCY GROUPS:

MAXIMUM BUILDING HEIGHT

ALLOWABLE STORIES ABOVE GRADE

ACTUAL STORIES ABOVE GRADE

ACTUAL BUILDING HEIGHT

MAX. FLOOR AREA:

ACTUAL FLOOR AREA:

TYPE OF CONSTRUCTION

PRIMARY STRUCTURAL FRAME

EXTERIOR NON-BEARING WALLS

INTERIOR NON-BEARING WALLS

EXTERIOR BEARING WALLS

INTERIOR BEARING WALLS

FLOOR CONSTRUCTION

ROOF CONSTRUCTION

OCCUPANCY

STAIRWAYS

OTHER EGRESS COMPONENTS

BUILDING ELEMENT

BUSINESS (GROUP B)

2021 INTERNATIONAL PLUMBING CODE WITH AMENDMENTS

2015 INTERNATIONAL MECHANICAL CODE WITH AMENDMENTS

2021 INTERNATIONAL ENERGY CONSERVATION CODE WITH AMENDMENTS

USE GROUP(S) AND CONSTRUCTION TYPE(S) PER IBC CHAPTERS 3, 4, 5, AND 6

USES & CONSTRUCTION TYPES:

40' - 0"

30' - 6"

9,000 SF

3,875 SF

MIN. FIRE-RESISTIVE REQUIREMENTS:

FIRE-RESISTIVE RATING REQUIREMENTS FOR BUILDING ELEMENTS (PER IBC TABLE 601):

SERVER ROOM CEILING (CLG-03): 1 HR FIRE RATED, UL P522 ROOF - CEILING ASSEMBLY

MINIMUM REQUIRED

0.3

V-B

REQ'D RTG

OCCUPANT

LOAD SERVED

SERVER ROOM FLOORING: 1 HR RATED, UL L521 FLOOR- CEILING ASSEMBLY

MEANS OF EGRESS SIZING:

MAXIMUM COMMON

PATH OF TRAVEL (IBC

TABLE 1006.2.1)

TYPE OF CONSTRUCTION:

ADDITIONAL FIRE-RESISTIVE RATINGS:

SHAFT ENCLOSURES (IBC 713.4)

EXIT ENCLOSURES (IBC 1023.2)

EXIT PASSAGEWAYS (IBC 1024.3)

BUILDING ELEMENT

<4 STORIES

<4 STORIES

RATING (HRS)

EXIT ACCESS

TRAVEL DISTANCE

(IBC TABLE 1017.2)

200'

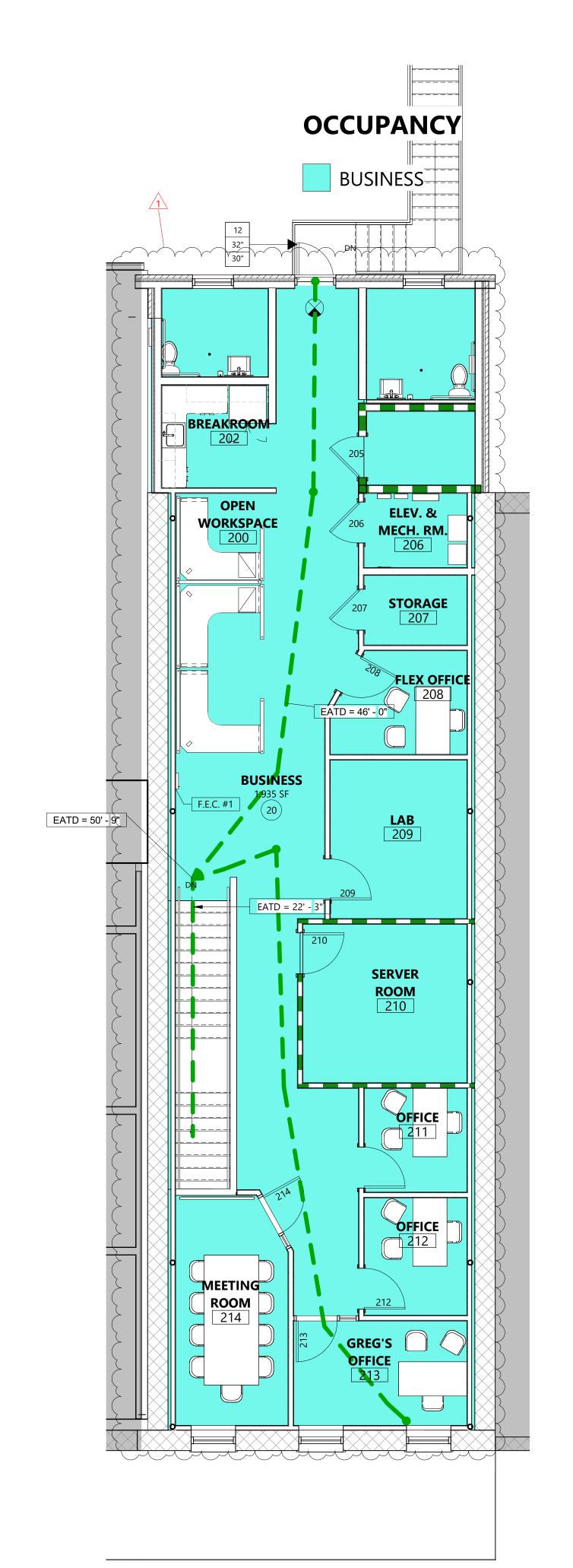
REQ'D RTG

DEAD END

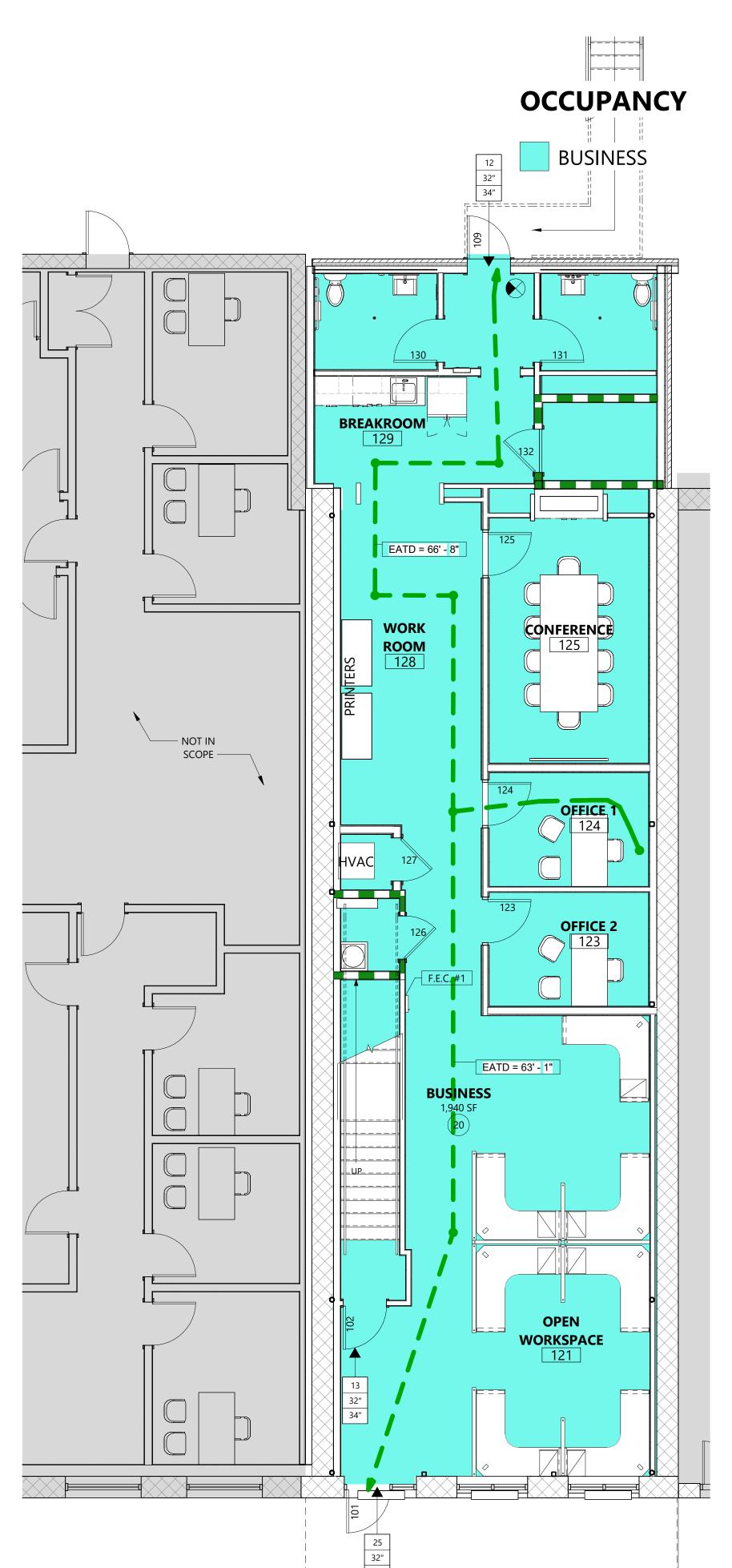
CORRIDOR LENGTH

(IBC 1020.5)

TYPE V: □ A ■ B



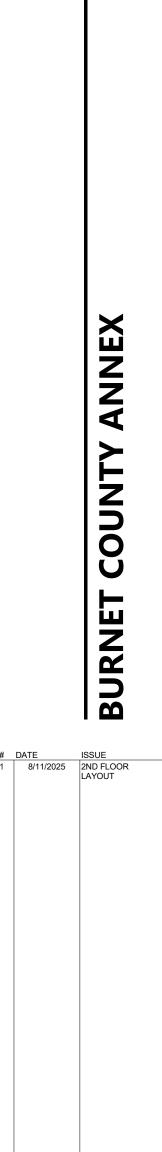
2 LIFE SAFETY PLAN - SECOND FLOOR
SCALE: 3/16" - 1' 0"

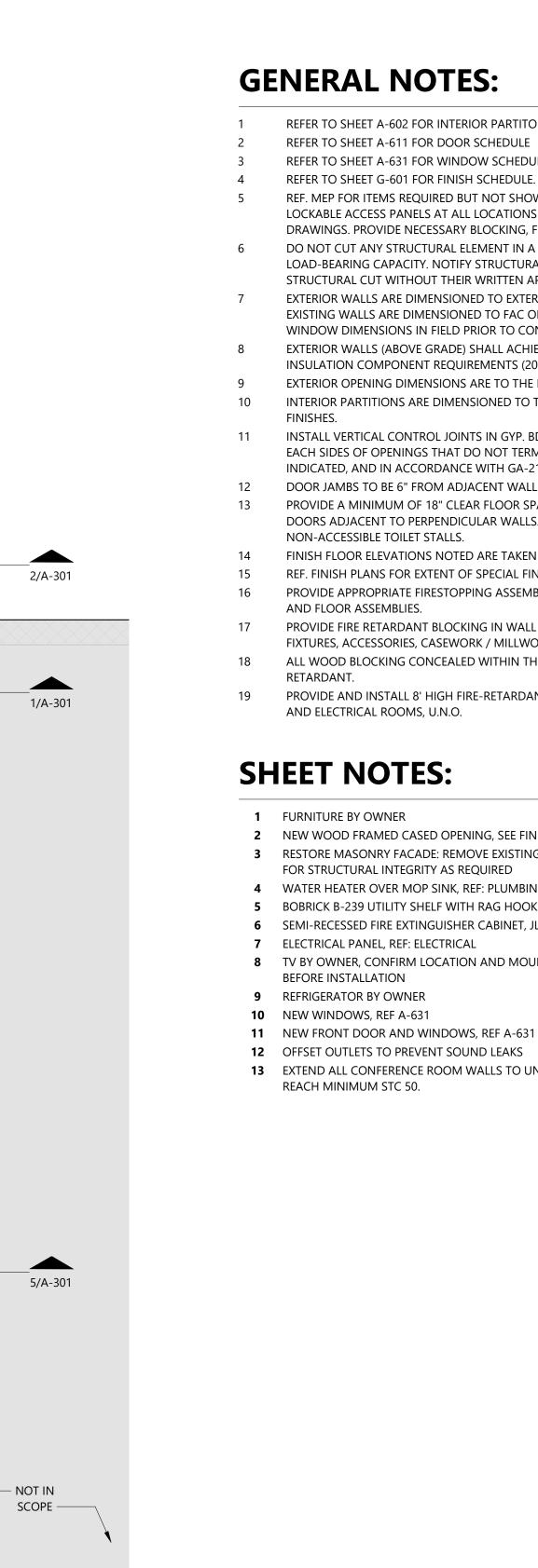


LIFE SAFTY PLAN - FIRST FLOOR

L------------

G-101



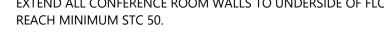


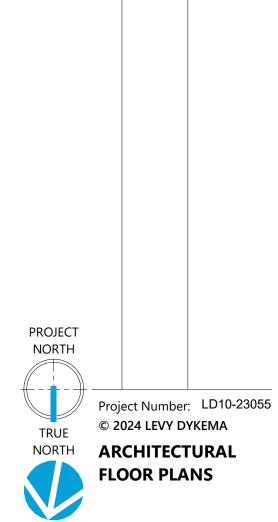
GENERAL NOTES:

- REFER TO SHEET A-602 FOR INTERIOR PARTITON TYPES.
- REFER TO SHEET A-611 FOR DOOR SCHEDULE
- REFER TO SHEET A-631 FOR WINDOW SCHEDULE
- REF. MEP FOR ITEMS REQUIRED BUT NOT SHOWN ON ARCHITECTURAL DRAWINGS. PROVIDE LOCKABLE ACCESS PANELS AT ALL LOCATIONS INDICATED AS NEEDING ACCESS ON MEP DRAWINGS. PROVIDE NECESSARY BLOCKING, FRAMING, ETC. FOR ACCESS PANELS.
- DO NOT CUT ANY STRUCTURAL ELEMENT IN A MANNER THAT WILL DIMINISH THEIR LOAD-BEARING CAPACITY. NOTIFY STRUCTURAL ENGINEER AND DO NOT PROCEED WITH ANY STRUCTURAL CUT WITHOUT THEIR WRITTEN APPROVAL
 - EXTERIOR WALLS ARE DIMENSIONED TO EXTERIOR FACE OF STUD OR EDGE OF SLAB. ALL EXISTING WALLS ARE DIMENSIONED TO FAC OF FINISH. VERIFY ALL EXISTING WALL AND
- WINDOW DIMENSIONS IN FIELD PRIOR TO CONSTRUCTION. EXTERIOR WALLS (ABOVE GRADE) SHALL ACHIEVE A MINIMUM OF R-20 THERMAL ENVELOPE
- INSULATION COMPONENT REQUIREMENTS (2015 IECC TABLE C402.1.3). EXTERIOR OPENING DIMENSIONS ARE TO THE ROUGH OPENING.
- INTERIOR PARTITIONS ARE DIMENSIONED TO THE FACE OF STUD AND DO NOT INCLUDE WALL
- INSTALL VERTICAL CONTROL JOINTS IN GYP. BD. WHERE WALL LENGTH EXCEEDS 30 FEET, AT EACH SIDES OF OPENINGS THAT DO NOT TERMINATE AT A CEILING, AT OTHER LOCATIONS INDICATED, AND IN ACCORDANCE WITH GA-216.
- DOOR JAMBS TO BE 6" FROM ADJACENT WALL.
- PROVIDE A MINIMUM OF 18" CLEAR FLOOR SPACE BETWEEN THE FACE OF THE STRIKE JAMB OF DOORS ADJACENT TO PERPENDICULAR WALLS. THIS REQUIREMENT DOES NOT APPLY TO NON-ACCESSIBLE TOILET STALLS.
- FINISH FLOOR ELEVATIONS NOTED ARE TAKEN FROM THE TOP OF STRUCTURAL CONCRETE.
- REF. FINISH PLANS FOR EXTENT OF SPECIAL FINISHES AND FLOOR FINISH PATTERNS.
- PROVIDE APPROPRIATE FIRESTOPPING ASSEMBLIES AT ALL PENETRATIONS OF RATED WALL AND FLOOR ASSEMBLIES.
- PROVIDE FIRE RETARDANT BLOCKING IN WALL AS REQUIRED FOR WALL MOUNTED TOILET FIXTURES, ACCESSORIES, CASEWORK / MILLWORK, SHELVING, EQUIPMENT AND SIGNAGE.
- ALL WOOD BLOCKING CONCEALED WITHIN THE BUILDING CONSTRUCTION SHALL BE FIRE RETARDANT.
- PROVIDE AND INSTALL 8' HIGH FIRE-RETARDANT PLYWOOD ON ALL WALLS IN THE MDF, IDF, AND ELECTRICAL ROOMS, U.N.O.

SHEET NOTES:

- **1** FURNITURE BY OWNER
- 2 NEW WOOD FRAMED CASED OPENING, SEE FINISH SCHEDULE
- 3 RESTORE MASONRY FACADE: REMOVE EXISTING PLASTER AND PAINT. TUCK POINT MASONRY
- FOR STRUCTURAL INTEGRITY AS REQUIRED **4** WATER HEATER OVER MOP SINK, REF: PLUMBING
- 5 BOBRICK B-239 UTILITY SHELF WITH RAG HOOKS AND BROOM HOLDERS
- 6 SEMI-RECESSED FIRE EXTINGUISHER CABINET, JL INDUSTRIES AMBASSADOR 1017V10
- 8 TV BY OWNER, CONFIRM LOCATION AND MOUNTING HEIGHT WITH OWNER AND ARCHITECT
- BEFORE INSTALLATION
- 9 REFRIGERATOR BY OWNER
- **10** NEW WINDOWS, REF A-631 11 NEW FRONT DOOR AND WINDOWS, REF A-631
- **12** OFFSET OUTLETS TO PREVENT SOUND LEAKS
- 13 EXTEND ALL CONFERENCE ROOM WALLS TO UNDERSIDE OF FLOOR DECK ABOVE. WALLS MUST





2 ARCHITECTURAL FLOOR PLAN - SECOND FLOOR

SCALE: 3/16" = 1'-0"

13' - 4 1/2"

INITIAL DESIGN INTENT TO

MATCH ADJACENT

TO BE FINALIZED. -

23' - 11"

V.I.F.

6' - 0"

CLEAR

6' - 11"

4' - 5 1/2"

CLEAR

ROOM

8' - 7 1/2"

1' - 2 1/4"

4' - 9" CLEAR

OFFICE

MEN'S

RESTROOM

ELEV,

ELEV. &

- MECH. RM.

STORAGE

171 A3-S 8' - 3 1/2"

FLEX OFFICE

10' - 0"

209

A3-S

A3-S

A3-1F

SERVER ROOM 210 12' - 0"

12' - 8 3/8"

OFFICE

HALL

2/A-301

1/A-301

5/A-301

SCOPE —

1' - 2 3/4"

SHAFT

3' - 0" 4' - 5 3/4" 3' - 0" 4' - 11 1/4"

WOMEN'S

RESTROOM

BREAKROOM

OPEN

WORKSPACE

200

4' - 0 1/2"

2/A-301

1/A-301

5/A-301

- NOT IN

SCOPE -

BUILDING STAIR DESIGN.

NEW EGRESS STAIR DESIGN

ARCHITECTURAL FLOOR PLAN - FIRST FLOOR SCALE: 3/16" = 1'-0"

INITIAL DESIGN INTENT TO

NEW EGRESS STAIR DESIGN

2/A-202

11' - 2"

6' - 11 3/4" 8' - 8 1/4"

CONFERENCE

OFFICE 2

11' - 7 1/2"

WORKSPACE 121

16' - 3 1/4"

22' - 5 1/4" V.I.F.

22' - 5 1/4"

BUILDING STAIR DESIGN.

MATCH ADJACENT

TO BE FINALIZED. -

11' - 1 1/2"

WOMENS

RESTROOM

BREAKROOM

WORK

_ROOM

5' - 5 1/2"

2' - 11 3/41

2 A-401

UTILITY 126

5/A-301

NOT IN

SCOPE -

2/A-301

1/A-301

11' - 7 1/2" 🕌

2' - 8 7/8"

A-101







GENERAL NOTES: ARCHITECTURAL REFLECTED CEILING PLAN(S) AND ELECTRICAL PLAN(S) SHALL BE CONSIDERED AS ONE. ANY DESCREPANCIES BETWEEN THE TWO DISCIPLINES SHALL BE PRICED / BID BASED

- ON THE PLAN WITH THE HIGHEST QUANTITY AND / OR QUALITY. 2 PRIOR TO ROUGH-IN, CONTRACTOR TO COORDINATE WITH ARCHITECT SPECIFIC LOCATIONS OF ALL WALL- AND CEILING-MOUNTED MECHANICAL, ELECTRICAL, PLUMBING, LIFE SAFETY, SECURITY AND AUDIO VISUAL DEVICES.
 - REF. MEP FOR DESIGN OF THESE SYSTEMS (HVAC, CIRCUITING, LIGHTING, SPRINKLERS, ETC.)
- VERIFY FIELD CONDITIONS AND LOCATIONS OF ALL PLUMBING, DUCTS, STRUCTURAL ELEMENTS, AND OTHER APPLICABLE ITEMS. ARRANGE AND MODIFY NON-VIABLE ITEMS TO ENSURE ADEQUATE CLEARANCE FOR CEILING LAYOUT AS SHOWN.
- PROVIDE UNISTRUT METAL FRAMING SYSTEM AND CHAIN SECURED TO STEEL STRUCTURE AS REQUIRED FOR CEILING MOUNTED LIGHTING, FIRE ALARM DEVICES AND EQUIPMENT IN AREAS WHERE FINISHED CEILING IS EXPOSED (OPEN TO STRUCTURE).
- CEILINGS AND OTHER SUSPENDED ITEMS SHALL BE ATTACHED TO STRUCTURE BY FULLY EMBEDDED OR 'SHEAR' CONNECTION. PULL OUT CONNECTIONS ARE NOT ACCEPTABLE.
- MEASURE EACH CEILING AREA AND ESTABLISH LAYOUT OF ACT TO BALANCE BORDER WIDTHS AT OPPOSITE SIDES OF THE ROOM. BORDER WIDTHS SHOULD BE >1/2 TILE, U.N.O.
- ALL GYB. BD. CEILINGS SHALL BE 5/8" TYPE'X' GYPSUM BOARD ON SUSPENDED LIGHT-GAUGE FRAMING PER THE SPECIFICATIONS.
- REFER TO ELECTRICAL DRAWINGS FOR LIGHTING AND LIFE SAFETY EQUIPMENT
- LIGHT FIXTURES AND DEVICES TO BE CENTERED AS INDICATED.
- ALL LIGHT SWITCHES SHALL BE LOCATED 48" TO CENTERLINE ABOVE FINISH FLOOR AND BE LOCATED 6" FROM STRIKE SIDE OF DOOR, U.N.O. COORDINATE WITH ELECTRICAL DRAWINGS.
- 12 ALL THERMOSTRATS SHALL BE LOCATED 48" TO CENTERLINE ABOVE FINISH FLOOR. QUANTITY AND APPROXIMATE LOCATION OF THERMOSTATS SHALL BE DETERMINED BY MECHANICAL ENGINEER. LOCATIONS SHALL BE SUBMITTED TO ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. WHERE LIGHT SWITHC AND THERMOSTATS ARE ADJACENT, INSTALL BOTH ALIGNED HORIZONTALLY AT CENTERLINE. COORDINATE WITH MECHANICAL ENGINEER
- 13 FIRE SPRINKLER CONTRACTOR SHALL REFERENCE ALL DRAWINGS AND SPECIFICATIONS TO DETERMINE PROPER COVERAGE AND SPRINKLER HEAD LAYOUT / DESIGN.
- 14 FINAL SPRINKLER HEAD LOCATIONS SHALL BE SET BY ENGINEER AND COORDINATED WITH ARCHITECT. CENTER HEADS IN ACOUSTICAL TILE OR CEILING PANELS, U.N.O.
- PROVIDE CONTINUOUS SOUND BATT INSULATION ABOVE ALL TOILET ROOM CEILINGS.
- CEILING / SOFFIT HEIGHTS ARE NOTED ON THE REFLECTED CEILING PLANS. HEIGHTS ARE ABOVE
- 17 REF. INTERIOR ELEVATIONS FOR ADDITIONAL INFORMATION ABOUT CEILING HEIGHTS, MATERIALS, AND SPECIAL CONDITIONS.
- 18 ALL GYP. BD. CEILINGS AND SOFFITS TO BE PT-01, U.N.O. REF. DETAILS FOR ADDITIONAL INFORMATION.
- 19 EXPOSED (OPEN TO STRUCTURE) SURFACES TO BE PAINTED AS SCHEDULED.

SHEET NOTES:

- 1 CENTER LIGHT IN CEILING
- 1 FURNITURE BY OWNER
- 3 NO CEILING. OPEN TO STRUCTURE ABOVE
- 4 PROVIDE BATT INSULATION ABOVE CEILING
- 5 INTERIOR WALL-TO-CEILING TRANSITION, REF: TRANSITION SCHEDULE
- **6** REF: MEP FOR DUCT RUNS, SIZING, AND REGISTER LOCATIONS

TRANSITIONS SCHEDULE

EXPANSION JOINTS AND INTERIOR TRANSITIONS

EXTERIOR

ROOF EXPANSION JOINT: WALL-TO-WALL

INPRO 672 SERIES (G01) ROOF TO ROOF 1200 SERIES FOAM SEAL

INTERIOR

WALL-TO-WALL

WALL-TO-CEILING FLOOR-TO-FLOOR FLOOR-TO-WALL

INPRO 101 SERIES RECESS MOUNT A07 (A09 PER WALL TO CORNER CONDITION) INPRO 101 SERIES RECESS MOUNT A09 INPRO 105 SERIES SURFACE MOUNT A01 INPRO 105 SERIES SURFACE MOUNT A02

RCP LEGEND:

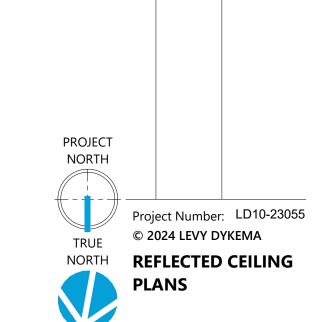


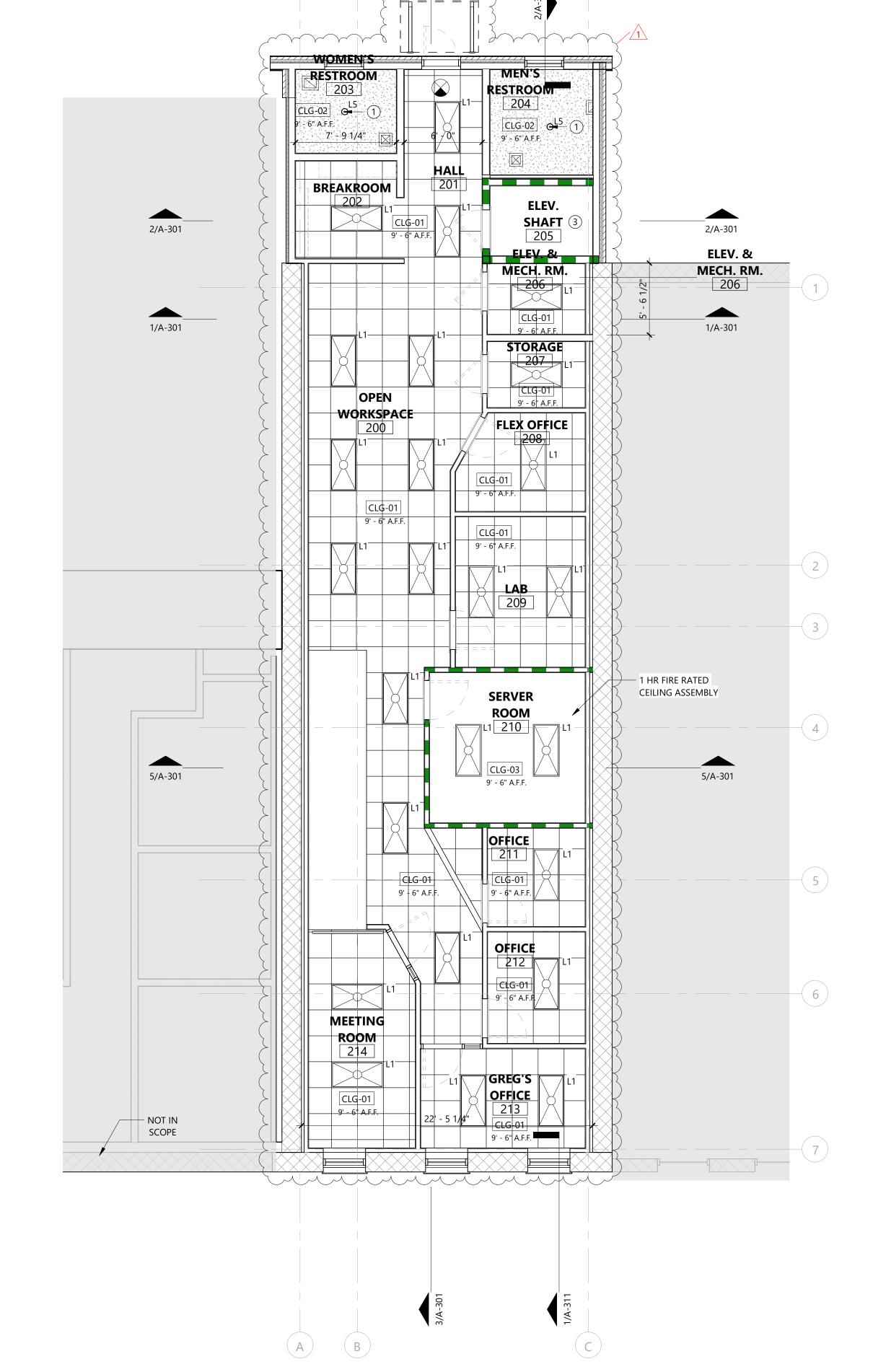
GYP BOARD CLG.



L1 - 2x4 TROFFER LIGHT

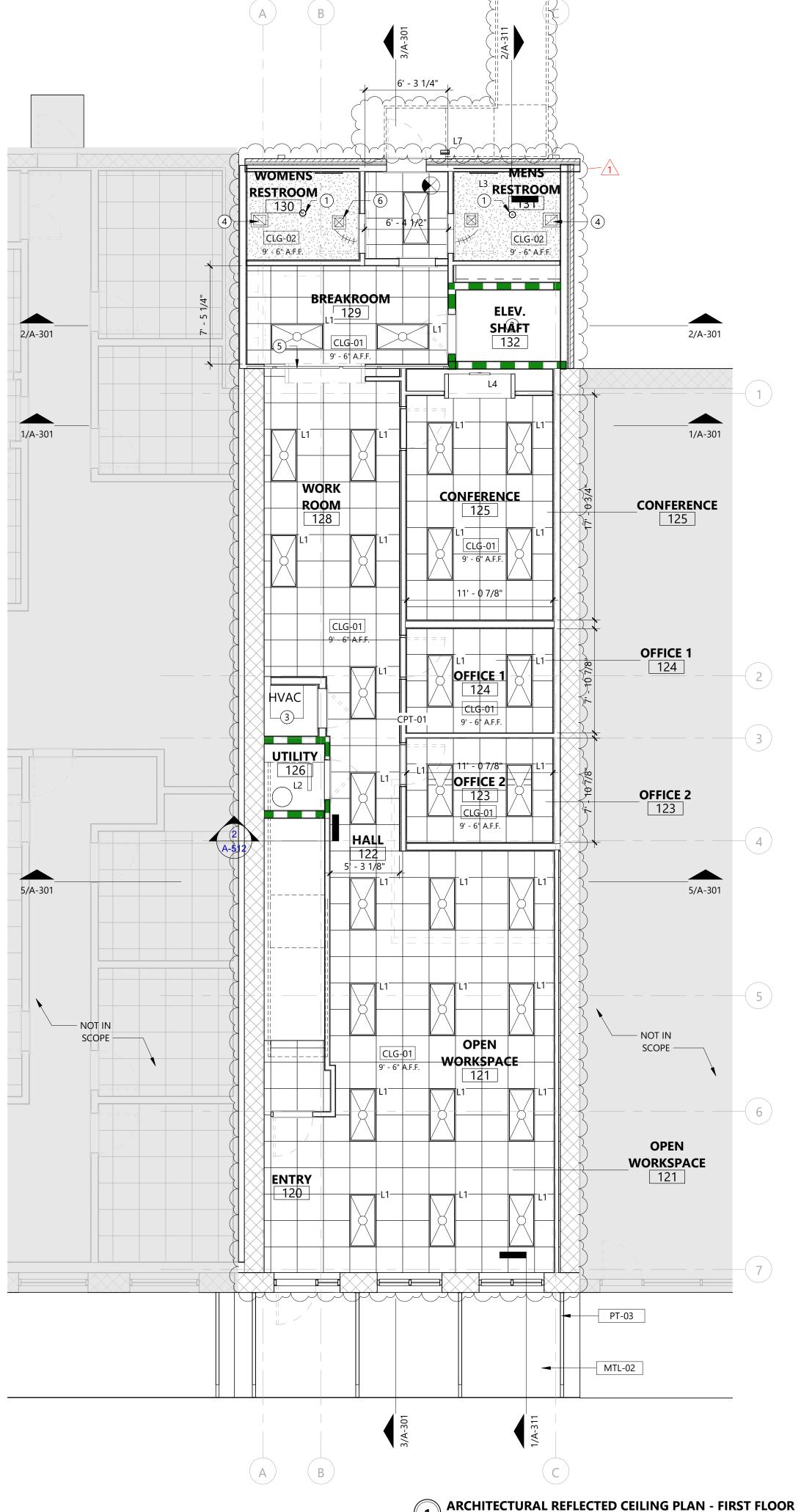
L5 - 6" RECESSED CAN LIGHT





ARCHITECTURAL REFLECTED CEILING PLAN - SECOND FLOOR

SCALE: 3/16" = 1'-0"



SCALE: 3/16" = 1'-0"





L2 - WALL-MOUNTED LINEAR STRIP LIGHT L3 - LED VANITY WALL SCONCE

L4 - LED WALL SCONCE

L7 - EXTERIOR LIGHT

CONC-01

CONC-02

CPT-01



BURNET

PROJECT NORTH Project Number: LD10-23055 © 2024 LEVY DYKEMA TRUE
NORTH
FINISH PLANS

GENERAL NOTES:

ALL WALLS AND COLUMNS TO BE PT-01, U.N.O.

ALL FINISH FLOORS TO BE CPT-01, U.N.O.

DO NOT USE RUBBER TRANSITION STRIPS.

CENTER FLOORING IN ROOM, U.N.O.

ALL WALL BASE TO BE RB-01, U.N.O.

INSTRUCTIONS DIFFER.

W: XX-XX

B: XX-XX

F: XX-XX

SCALE: 6" = 1'-0"

CARPET/ CONCRETE

SCALE: 6" = 1'-0"

BEGIN PAINTING FROM WALL EDGES AND CORNERS, U.N.O.

PROVIDE CLEAN TRANSITION IF PAINT ENDS AT OUTSIDE CORNER.

ALL SCHLUTER TRANSITION STRIPS TO BE ANODIZED ALUMINUM, U.N.O.

GRADE. LATICRETE FRACTURE BAN SC OR ARCHITECT APPROVAL EQUAL.

PROVIDE ATTIC STOCK FOR EACH FLOORING MATERIAL AND PAINT COLOR.

ALL OUTLET AND LIGHT SWITCH COLORS TO BE STANDARD WHITE, U.N.O.

REF. DOOR & HARDWARE SCHEDULE FOR DOOR AND FRAME FINISHES.

GENERAL ROOM FINISHES:

WALL, BASE, FLOOR.

SPECIFIC WALL FINISH

REFERENCE ELEVATION

FLOOR TRANSITION, RE: A-131

CARPET TO BE 1/8" HIGHER THAN

TRANSITION STRIP

SCHIENE,

- GROUT

THINSET MORTAR

CERAMIC TILE

TRANSITION STRIP, SCHLUTER

SATIN ANODIZED ALUMINUM

- FLOOR LEVELING COMPOUND,

- TRANSITION STRIP, SCHLUTER

SATON ANODIZED ALUMINUM

RENO RAMP K,

CONCRETE

EXTEND OUT 4'-0"

FOR FINISH

PREPARE SLAB AS REQUIRED PER FLOOR FINISH MANUFACTURER INSTRUCTIONS.

ALL MATERIAL CHANGES / TRANSITIONS TO OCCUR UNDER CENTERLINE OF DOOR, U.N.O.

GROUT JOINTS ON FLOOR TO BE 1/8" WIDE, U.N.O. GROUT JOINTS ON WALL TILE TO BE 1/8" WIDE, U.N.O. NOTIFY ARCHITECT IF MANUFACTURER'S RECOMMENDED INSTALLATION

PROVIDE CRACK ISOLATION MEMBRANE UNDER TILE AT ALL TILE FLOORING LOCATIONS ABOVE

<u>_____</u> A-431 **MENS** WOMENS **RESTROOM** RESTROOM 131 F: CONC - 02 F: CONC - 02 14 ALIGN GROUT JOINTS IN FLOOR TILE, WALL TILE AND TILE BASE, U.N.O. ELEV. BREAKROOM **SHAFT** F: CONC - 01 -**LEGEND:** 0 0 WORK CONFERENCE 125 B: RB-01 F: CPT-01 **OFFICE 1** B: RB-01 F: CPT-01 OFFICE 2 UTILITY B: RB-01 F: CPT-01 **OPEN** WORKSPACE 121 B: RB-01 (NONE AT EXISTING MAS. WALL) F: CPT-01 0 0 · -----MI TON —— NOT IN **ENTRY** 120 SCOPE —— SCOPE ----

FINISH PLAN - SECOND FLOOR

SCALE: 3/16" = 1'-0"

WOMEN'S

RESTROOM

F: CONC - 02 4

BREAKROOM

OPEN

WORKSPACE

B. RB-01

F: CPT-01.

MEETING

ROOM

214

B: RB-01

F: CPT-01

— NOT IN

SCOPE ———

X

MEN'S

RESTROOM

204

F: CONC - 02

ELEV.

SHAFT

4205

F: CONC - 0.1

MECH. RM. 206

B: RB-01

F CPT-01

STORAGE

B: RB-01

FLEX OFFICE

B: RB-01

B: RB-01 F: CPT-01

SERVER

ROOM 210

B: RB-01

F: CPT-01

OFFICE

211

B: RB-01 R CPT-01

OFFICE

B; RB-01

F: CPT-01

GREG'S OFFICE 213 B: RB-01 F: CPT-01

F: CPT-01

F: CPT-01

ELEV &

FINISH PLAN - FIRST FLOOR SCALE: 3/16" = 1'-0"

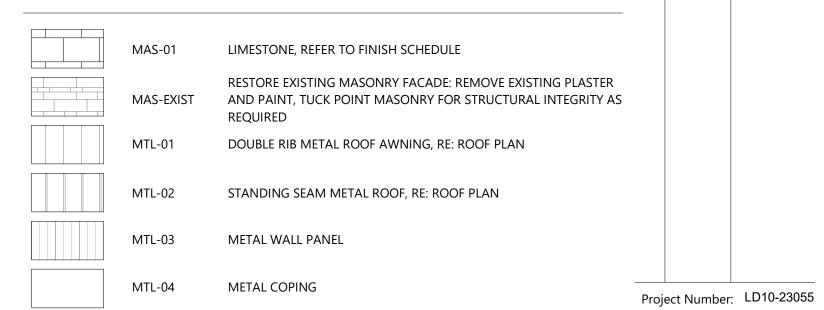
A-131

6

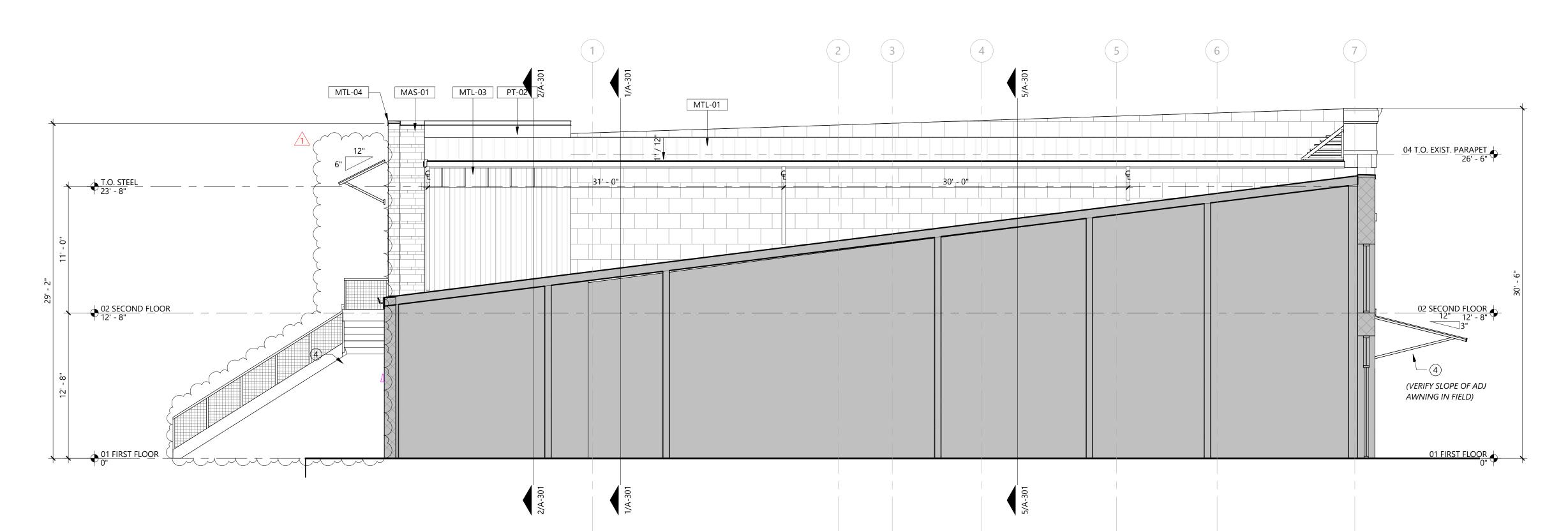
MI TON

SCOPE ——

MATERIAL LEGEND:



© 2024 LEVY DYKEMA SEE FINISH SCHEDULE FOR PAINT SELECTIONS **EXTERIOR**



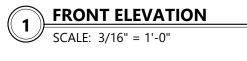
PARTIAL ELEVATION

SCALE: 3/16" = 1'-0"

MTL-04 CONC-01 T.O. STEEL 23' - 8" _ NOT IN SCOPE -02 SECOND FLOOR MTL-02 MAS-EXIST 26 56 00.01

REAR ELEVATION

SCALE: 3/16" = 1'-0"



GENERAL NOTES:

REFER TO SHEET A-6-11 FOR DOOR SCHEDULE.

REFER TO SHEET A-6-31 FOR STOREFRONT SCHEDULE.

REFER TO SHEET G-6-01 FOR FINISH SCHEDULE. EXPOSED EXTERIOR STEEL TO BE PRIMED AND PAINTED AS SCHEDULED.

WHERE INDICATED ON DRAWINGS PROVIDE EXPANSION JOINTS AT THE FOLLOWING LOCATIONS:

- AT SHELF ANGLES

- EVERY 30 FEET (MAXIMUM) ALONG WALLS

- AT OFFSETS IN WALLS

- AT INTERSECTIONS OF WALLS - WHERE SHORT RUNS OF MASONRY INTERFACE WITH LONG RUNS OF MASONRY

- NEAR CORNERS (15 FEET MAXIMUM) - AT COLUMNS

- AT FOUNDATIONS (BOND BREAK)

- AT FLOOR OR ROOF CONNECTION

- AT PARAPET WALLS

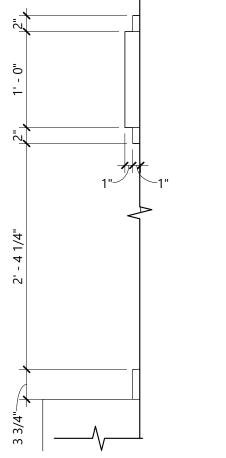
- WHERE MATERIALS WITH DIFFERENCE COEFFICIENTS OF THERMAL EXPANSION ARE JOINED

KEYED NOTES:

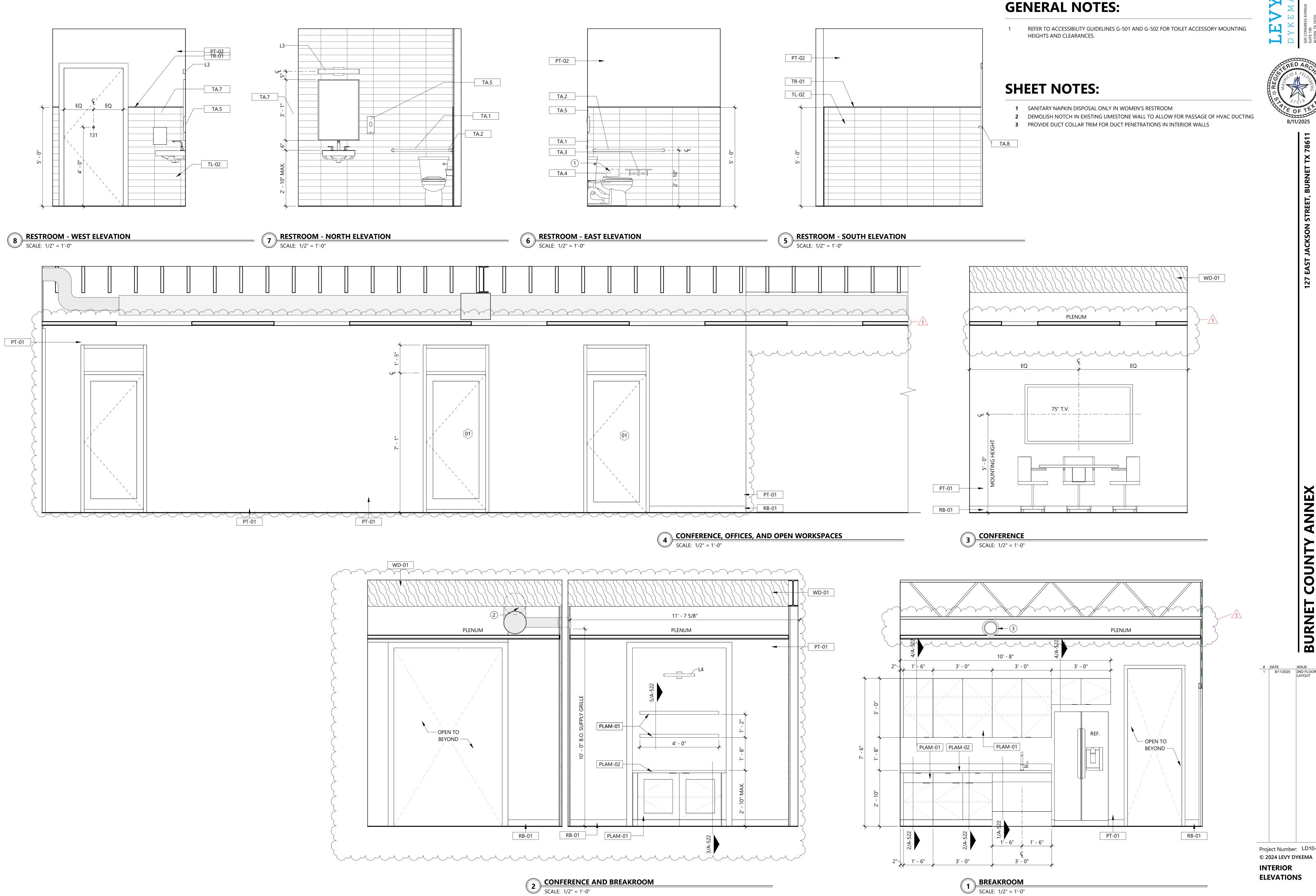
26 56 00.01 EXTERIOR WALL MOUNTED LIGHT FIXTURE, RE: ELECTRICAL FOR FIXTURE TYPE

SHEET NOTES:

- 1 RESTORE BOTH SIDES OF MASONRY FACADE: REMOVE EXISTING PLASTER AND PAINT. TUCK POINT MASONRY FOR STRUCTURAL INTEGRITY AS REQUIRED
- 2 RESTORED MASONRY LINTELS, SILLS AND CORNICES REMOVE EXISTING PLASTER AND PAINT. TUCK POINT MASONRY FOR STRUCTURAL INTEGRITY, AS REQUIRED
- 3 MATCH THE SPACING OF EXISTING BRACKET TO ADJACENT DOOR/WINDOW
- 4 DOUBLE RIB METAL ROOF [MTL-01] OVER STEEL TUBE AWNING BRACKETS WELDED TO BASE PLATE ANCHORED TO STONE WALL, REF: STRUCTURAL. REFERENCE ADJACENT ANNEX BUILDING FOR STEEL TUBE DIMENSION, PNT BLACK TO MATCH
- 5 EMSEAL 25V MASONRY CAVITY WALL EXPANSION JOINT, INSTALL PER MANUFACTURER'S RECOMMENDATIONS







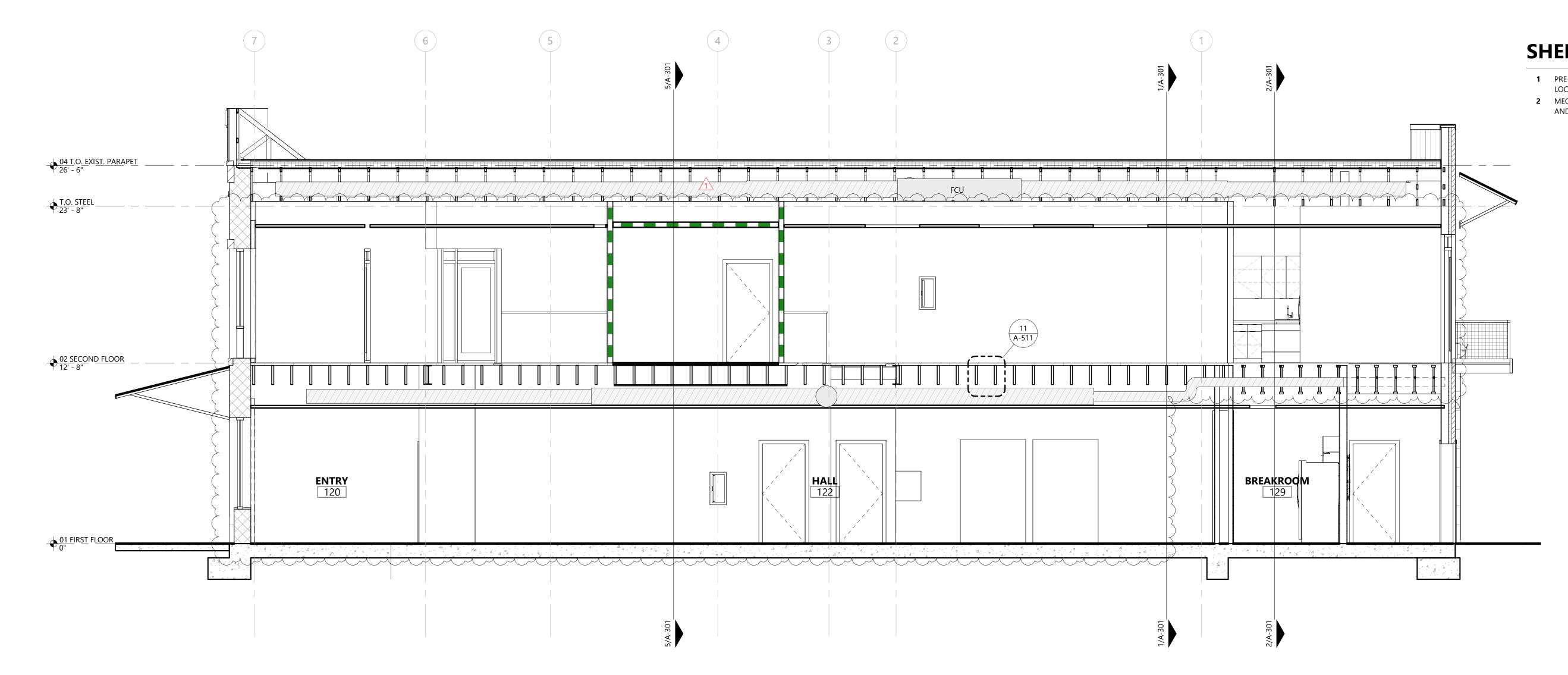




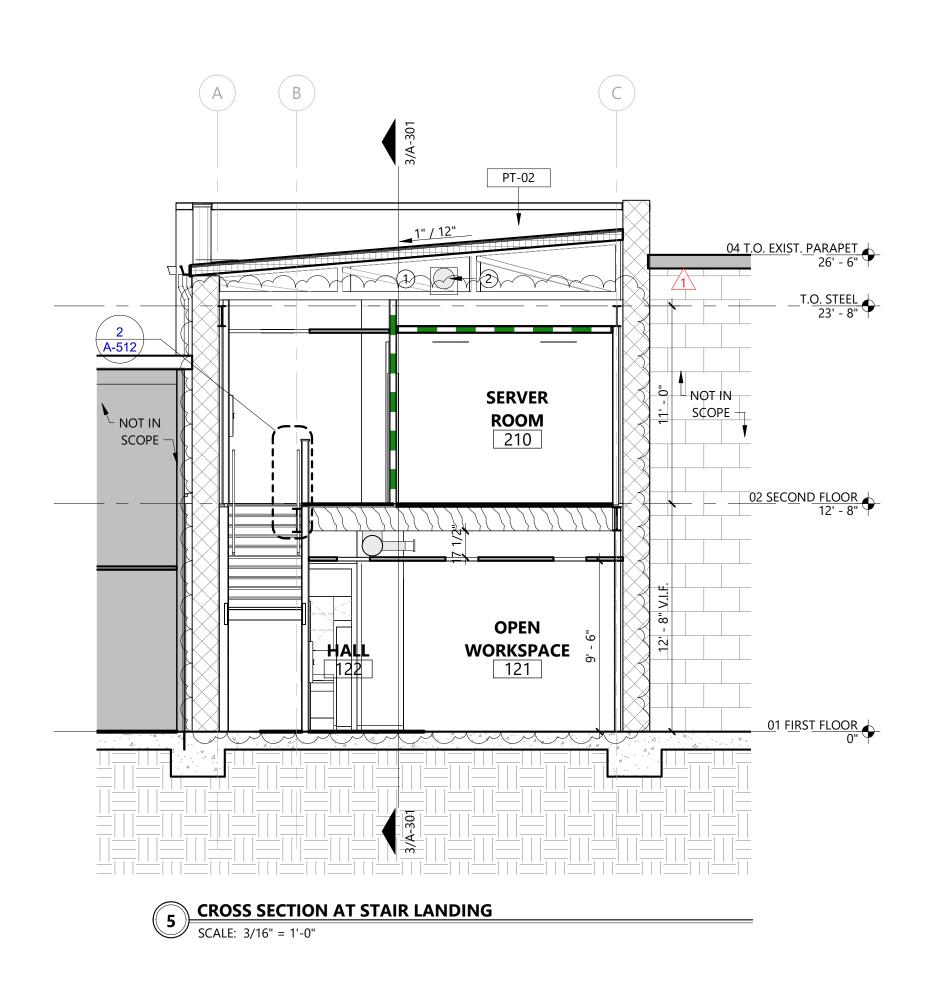


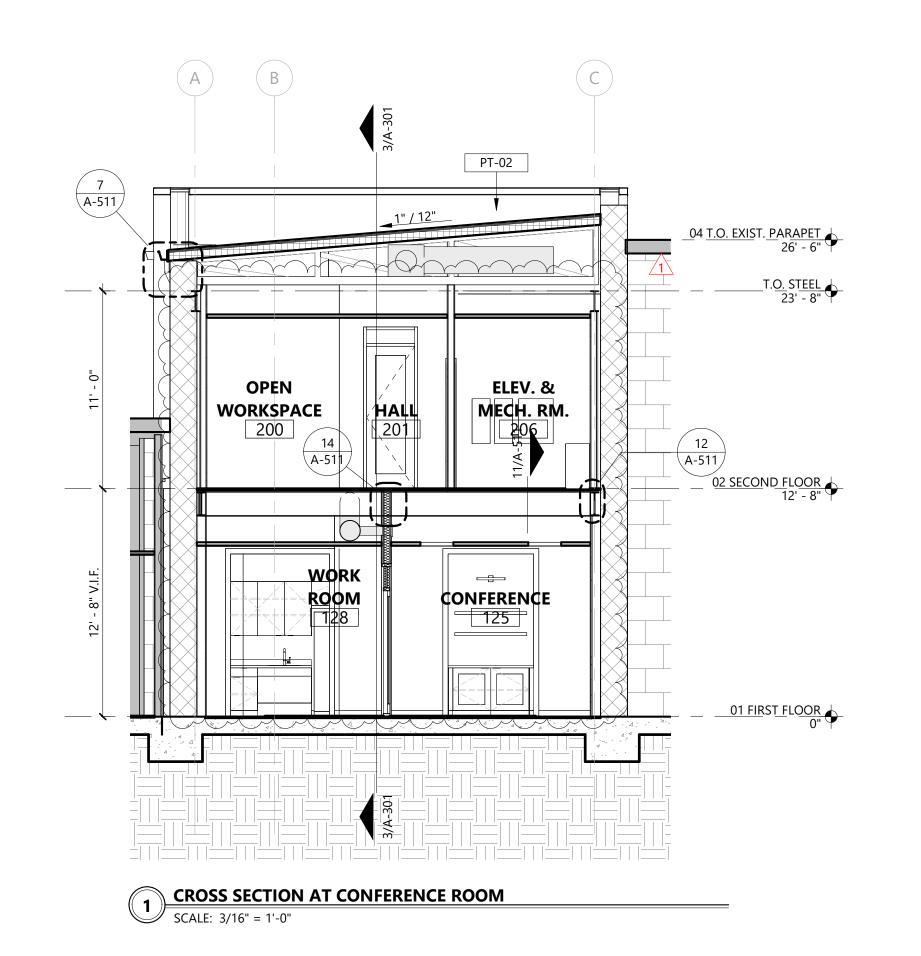
BURNET

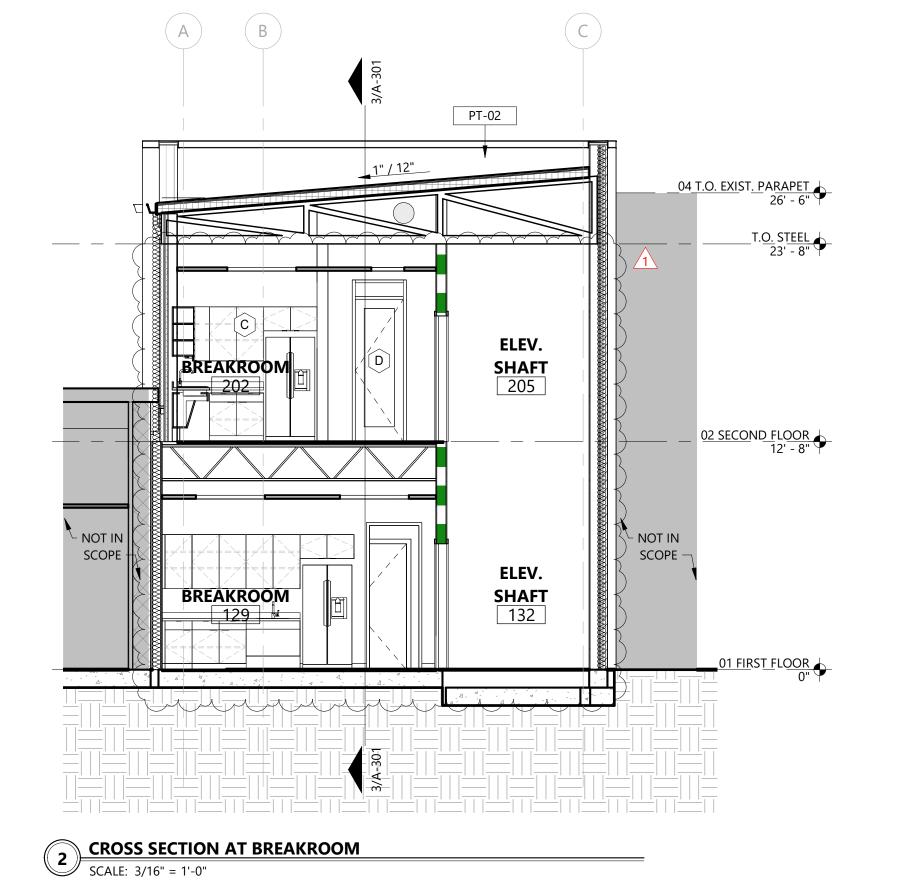
Project Number: LD10-23055 © 2024 LEVY DYKEMA **BUILDING SECTIONS**



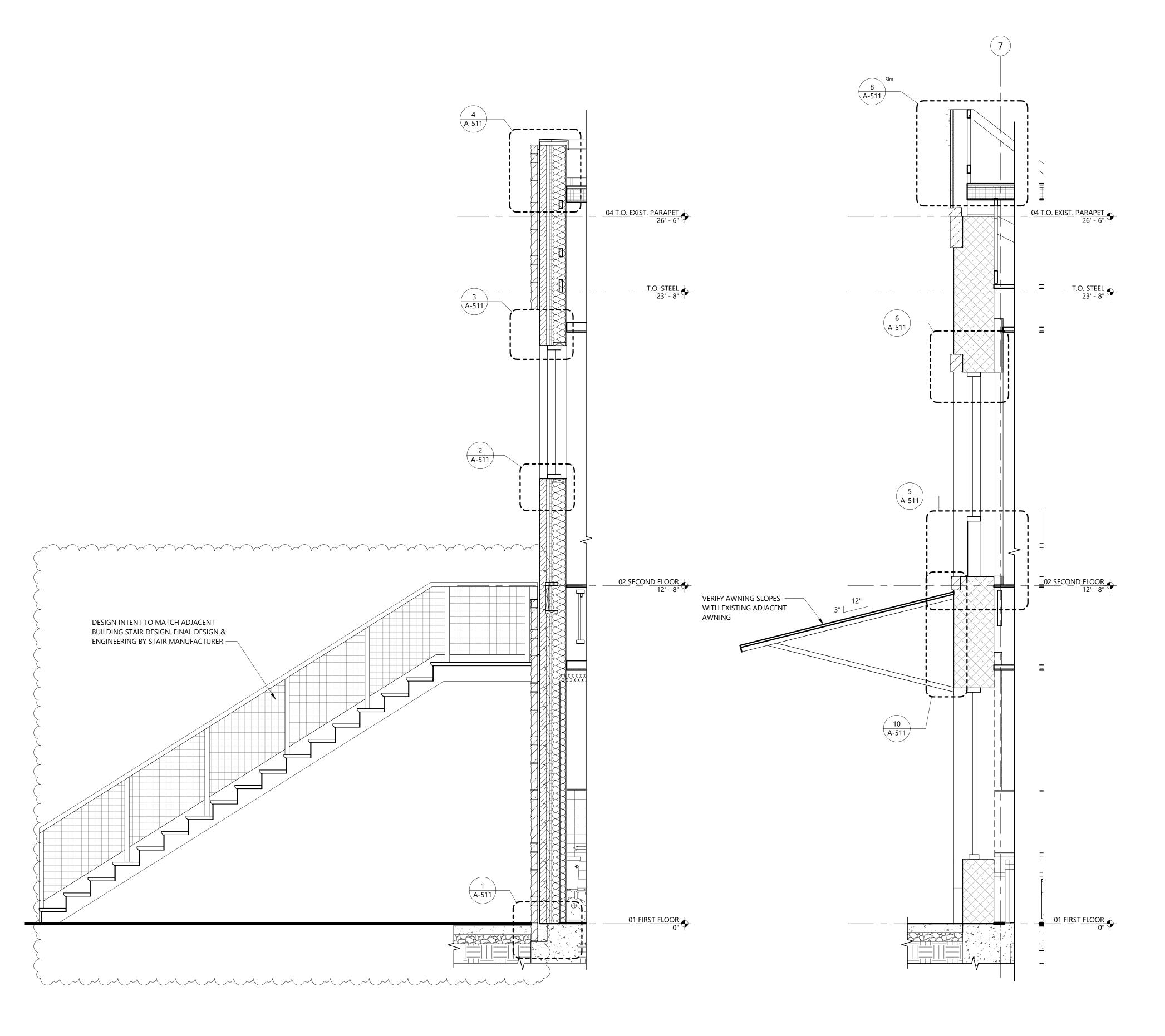
LONGITUDINAL SECTION AT HALL SCALE: 1/4" = 1'-0"











SECTION B

SCALE: 1/2" = 1'-0"

SECTION A

SCALE: 1/2" = 1'-0"

BURNET



GENERAL NOTES:

- REFER TO SHEET A-602 FOR INTERIOR PARTITON TYPES.
- REFER TO SHEET A-611 FOR DOOR SCHEDULE
- REFER TO SHEET A-631 FOR WINDOW SCHEDULE
- REFER TO SHEET G-601 FOR FINISH SCHEDULE.
- REF. MEP FOR ITEMS REQUIRED BUT NOT SHOWN ON ARCHITECTURAL DRAWINGS. PROVIDE LOCKABLE ACCESS PANELS AT ALL LOCATIONS INDICATED AS NEEDING ACCESS ON MEP DRAWINGS. PROVIDE NECESSARY BLOCKING, FRAMING, ETC. FOR ACCESS PANELS.
- DO NOT CUT ANY STRUCTURAL ELEMENT IN A MANNER THAT WILL DIMINISH THEIR LOAD-BEARING CAPACITY. NOTIFY STRUCTURAL ENGINEER AND DO NOT PROCEED WITH ANY STRUCTURAL CUT WITHOUT THEIR WRITTEN APPROVAL,
 - EXTERIOR WALLS ARE DIMENSIONED TO EXTERIOR FACE OF STUD OR EDGE OF SLAB. ALL EXISTING WALLS ARE DIMENSIONED TO FAC OF FINISH. VERIFY ALL EXISTING WALL AND WINDOW DIMENSIONS IN FIELD PRIOR TO CONSTRUCTION.
 - EXTERIOR WALLS (ABOVE GRADE) SHALL ACHIEVE A MINIMUM OF R-20 THERMAL ENVELOPE INSULATION COMPONENT REQUIREMENTS (2015 IECC TABLE C402.1.3).
 - EXTERIOR OPENING DIMENSIONS ARE TO THE ROUGH OPENING.
- INTERIOR PARTITIONS ARE DIMENSIONED TO THE FACE OF STUD AND DO NOT INCLUDE WALL
- INSTALL VERTICAL CONTROL JOINTS IN GYP. BD. WHERE WALL LENGTH EXCEEDS 30 FEET, AT EACH SIDES OF OPENINGS THAT DO NOT TERMINATE AT A CEILING, AT OTHER LOCATIONS INDICATED, AND IN ACCORDANCE WITH GA-216.
- 12 DOOR JAMBS TO BE 6" FROM ADJACENT WALL.
- PROVIDE A MINIMUM OF 18" CLEAR FLOOR SPACE BETWEEN THE FACE OF THE STRIKE JAMB OF DOORS ADJACENT TO PERPENDICULAR WALLS. THIS REQUIREMENT DOES NOT APPLY TO NON-ACCESSIBLE TOILET STALLS.
- 14 FINISH FLOOR ELEVATIONS NOTED ARE TAKEN FROM THE TOP OF STRUCTURAL CONCRETE.
- REF. FINISH PLANS FOR EXTENT OF SPECIAL FINISHES AND FLOOR FINISH PATTERNS.
- PROVIDE APPROPRIATE FIRESTOPPING ASSEMBLIES AT ALL PENETRATIONS OF RATED WALL AND FLOOR ASSEMBLIES.
- PROVIDE FIRE RETARDANT BLOCKING IN WALL AS REQUIRED FOR WALL MOUNTED TOILET FIXTURES, ACCESSORIES, CASEWORK / MILLWORK, SHELVING, EQUIPMENT AND SIGNAGE.
- 18 ALL WOOD BLOCKING CONCEALED WITHIN THE BUILDING CONSTRUCTION SHALL BE FIRE RETARDANT.
- PROVIDE AND INSTALL 8' HIGH FIRE-RETARDANT PLYWOOD ON ALL WALLS IN THE MDF, IDF, AND ELECTRICAL ROOMS, U.N.O.

SHEET NOTES:

- 1 INSTALL APPROPRIATE BUILDING CONTROL JOINT PER MANUFACTURER'S RECOMMENDATIONS
- 2 14" UPPER CABINETS
- **3** 24" BASE CABINETS
- **4** WATER HEATER OVER MOP SINK, REF: PLUMBING
- 5 BOBRICK B-239 UTILITY SHELF WITH RAG HOOKS AND BROOM HOLDERS
- 6 SEMI-RECESSED FIRE EXTINGUISHER CABINET, JL INDUSTRIES AMBASSADOR 1017V10
- **7** ELECTRICAL PANEL, REF: ELECTRICAL
- 8 PROVIDE TEMPORARILY FRAMED OUT FLOOR OVER ELEVATOR PIT, FLUSH WITH FINISH FLOOR,
- FINISHED WITH LVT. REMOVED DURING INSTALLATION OF FUTURE ELEVATOR, REF: STRUCTURAL
- 9 INTERIOR FLOOR TRANSITION, REF: TRANSITION SCHEDULE
- 10 INTERIOR FLOOR-TO-WALL TRANSITION, REF: TRANSITION SCHEDULE 11 INTERIOR WALL-TO-WALL TRANSITION, REF: TRANSITION SCHEDULE

TRANSITIONS SCHEDULE

EXPANSION JOINTS AND INTERIOR TRANSITIONS

EXTERIOR

TA.3

ROOF EXPANSION JOINT:

INPRO 672 SERIES (G01) ROOF TO ROOF WALL-TO-WALL 1200 SERIES FOAM SEAL

INTERIOR

WALL-TO-WALL

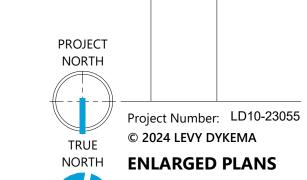
INPRO 101 SERIES RECESS MOUNT A07 (A09 PER WALL TO CORNER CONDITION)

WALL-TO-CEILING FLOOR-TO-FLOOR FLOOR-TO-WALL

INPRO 101 SERIES RECESS MOUNT A09 INPRO 105 SERIES SURFACE MOUNT A01 INPRO 105 SERIES SURFACE MOUNT A02

TOILET ACCECCODIEC VEV.

M	RK DESCRIPTION	MANUFACTURER	MODEL	COMMENTS
TA	36" STRAIGHT GRAB BAR	BOBRICK	B-6806X36	
TA	2 42" STRAIGHT GRAB BAR	BOBRICK	B-6806X42	
TA	TOILET TISSUE DISPENSER	BOBRICK	B-2840	
TA	SANITARY NAPKIN DISPOSAL	BOBRICK	B-270	
TA	WALL-MOUNTED SOAP DISPENSER	BOBRICK	B-2012	
TA	24" X 36" MIRROR	KOHLER	K-31364	ESSENTIAL COLLECTION
TA	RECESSED PAPER TOWEL DISPENSER/ WASTE RECEPTACLE	BOBRICK	B-36903	
TA	SURFACE-MOUNTED COAT HOOK	BOBRICK	B-9542	
TA	SHELF WITH MOP AND BROOM HOLDERS AND HOOKS	BOBRICK	B-239 X 34	



SCALE: 1/2" = 1'-0"

4' - 9 1/2"

4' - 2 1/4"

HVAC

(5)----

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====3'=7-1/2"=====

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4' - 0 3/8"

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TA.9

HALL 122

BREAKROOM & RESTROOMS - ENLARGED PLAN

9' - 1 7/8"

WOMENS

RESTROOM

7' - 8"

BREAKROOM

129

<u>`---</u>

TA.2

TA.4

TA.3

2/A-301

J6 —

2' - 2 1/4"

---H3-S

TA.8

6' - 8 1/8"

8' - 11 7/8"

RESTROOM

A6-1F

FUTURE ELEVATOR SHAFT

TA.5

2' - 2 5/8"

_____TA.7

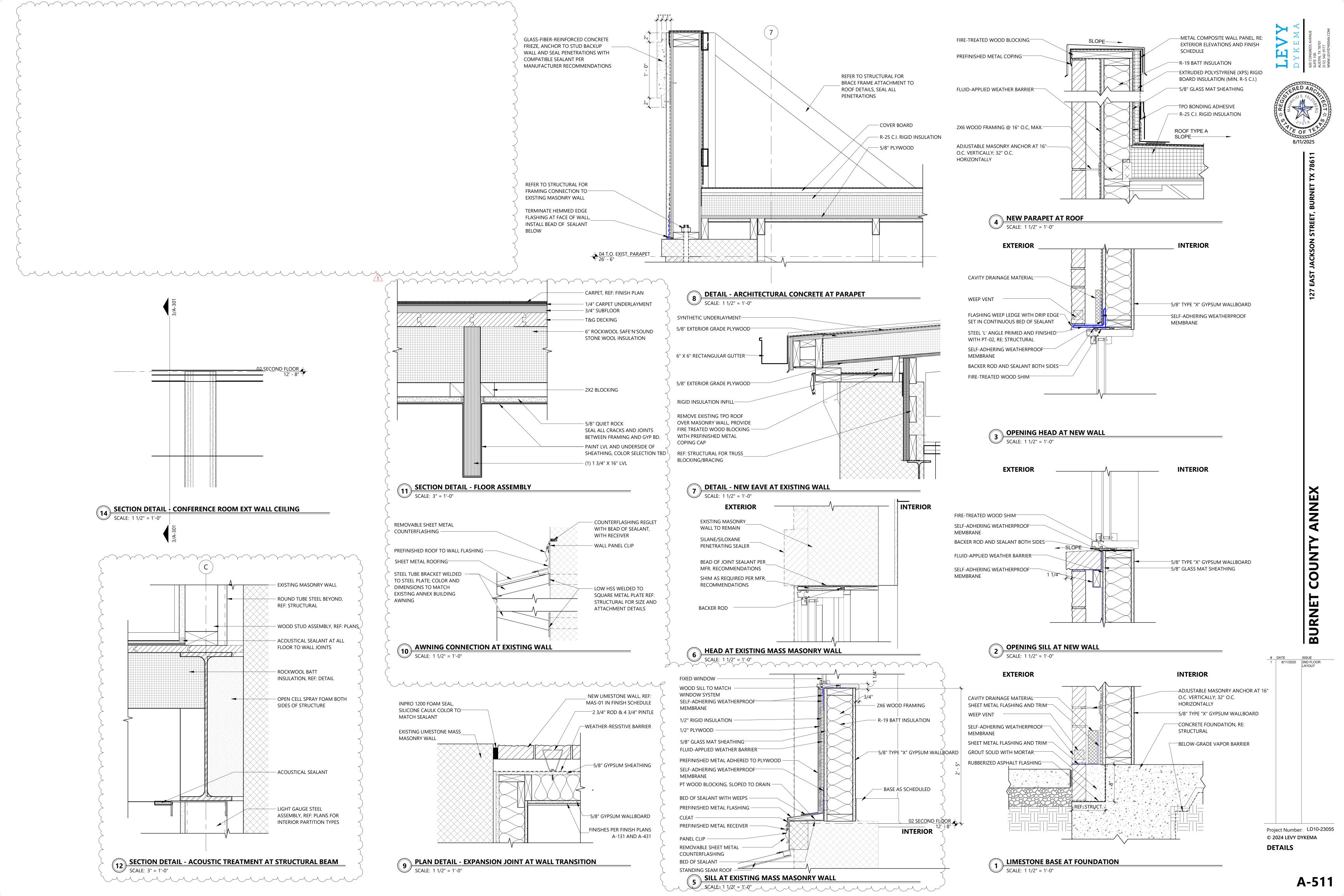
H3-S

2' - 9"

TA.8

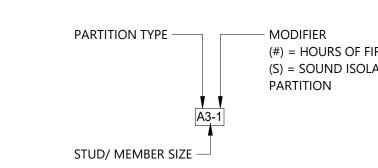
A-401

SCALE: 1/2" = 1'-0"





PARTITION TYPE ABBREVIATION



(#) = HOURS OF FIRE RATING (S) = SOUND ISOLATION

A-602

Project Number: LD10-23055

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PARTITION TYPES

INTERIOR

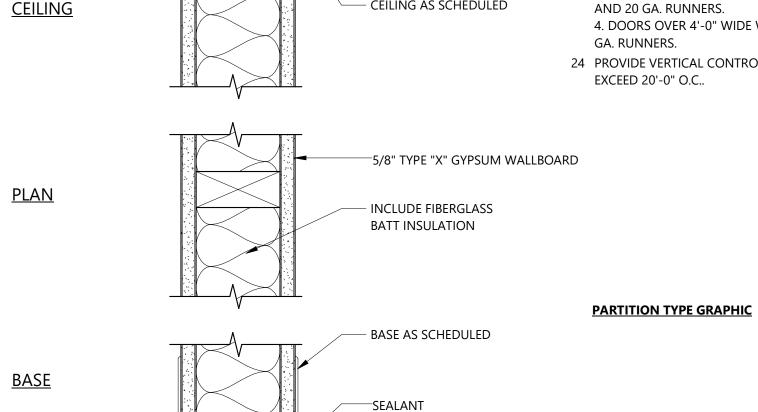
GENERAL NOTES: 1 UNLESS NOTED OTHERWISE, ALL NEW INTERIOR PARTITIONS ARE TYPE 'A3'.

25 FIREWALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY 2 ALL GYPSUM BOARD IS 5/8" THICK, TYPE 'X'. USE WATER-RESISTANT GYPSUM BOARD AT ALL WET AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING. SUCH IDENTIFICATION SHALL: 1. BE LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING OR ATTIC SPACES; 2. BE REPEATED AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; AND 3. INCLUDE LETTERING NOT LESS THAN 0.5 INCH IN HEIGHT, INCORPORATING THE SUGGESTED

GENERAL NOTES:

- WORDING:"FIRE AND/OR SMOKE BARRIER-PROTECT ALL OPENINGS," OR OTHER WORDING. 26 SOUND-ISOLATION PARTITIONS SHALL BE SEALED AIRTIGHT FOR FULL HEIGHT TO PREVENT PASSAGE OF AIRBORNE SOUND. TAPE AND FINISH ALL GYP. BD. JOINTS AND FASTENERS. INSTALL ACOUSTIC SEALANT AT PERIMETER AND AT ALL PENETRATIONS, UNLESS NOTED FIRE RATED, THEN USE FIRE STOP SEALANT.
- 27 PROVIDE 2X4 MIN SIZE FIRE-TREATED WOOD BLOCKING OR 6" 20 GA. STEEL STUD/RUNNER REINFORCEMENT BEHIND ALL WALL HUNG ITEMS. SECURE WOOD BLOCKING WITH MIN. 2 SCREWS @ EA. END AND 4 SCREWS @ EA. END FOR STEEL STUDS OR RUNNERS. PROVIDE BLOCKING AND
- STEEL BACKING ADEQUATE TO SUPPORT LOADS IMPOSED ON WALL. 28 CONTROL JOINTS, WHERE REQUIRED, SHALL BE LOCATED ON EACH SIDE OF A DOOR OPENING. REFER TO CONSTRUCTION ELEVATIONS OF WALL OPENINGS INDICATED ON DETAILS SHEET.
- 30 FURRING @ COLUMNS EXTENDS 4" ABOVE CEILING WITH STUDS BRACED BACK TO COLUMN EXCEPT WHERE FURRING FORMS ONE SIDE OF A FIRE-RATED PARTITION ASSEMBLY. AT THOSE CONDITIONS, THE FURRING MUST EXTEND TO THE STRUCTURE ABOVE.
- 31 CHASE WALLS REQUIRE 12" GYP. PANEL CROSS BRACES (OR 2 1/2" MIN. STEEL STUD CROSS BRACES) BETWEEN STUD ROWS @ 48" O.C. VERTICALLY.

- RIGID FINISHES.
 - LOCATIONS. USE CEMENT BACKER BOARD AT LOCATIONS SCHEDULED TO RECEIVE TILE OR OTHER 3 CEILING HEIGHTS MAY VARY ON EITHER OR BOTH SIDES OF THE PARTITION. REFER TO PLANS,
 - REFLECTED CEILING PLANS AND OR CEILING FINISH NOTES FOR CEILING HEIGHTS. 4 FLOOR TO FLOOR DIMENSIONS MAY VARY. REFER TO BUILDING SECTIONS, WALL SECTIONS, AND
 - OTHER CONSTRUCTION DOCUMENTS TO DETERMINE FLOOR TO FLOOR HEIGHTS. PROVIDE VERTICAL CONTROL JOINTS IN ACCORDANCE WITH GA-216 IN ALL FULL HEIGHT GYPSUM
 - BOARD PARTITIONS.
 - 6 UNLESS INDICATED OTHERWISE, ALL JOINTS SHALL BE TAPED AND FLOATED, INCLUDING FIRE RATED PARTITIONS, NON RATED PARTITIONS, EXPOSED SURFACES, CONCEALED SURFACES AND SURFACES ABOVE THE CEILING.
 - ALL STUDS ARE CONTINUOUS FROM SILL PLATE TO BOTTOM OF STRUCTURE ABOVE, UNLESS INDICATED OTHERWISE. FILL ALL VOIDS BETWEEN THE TOP RUNNER TRACK AND THE BOTTOM OF STRUCTURE WITH THE APPROPRIATE SEALANT OR FIRE STOPPING SYSTEM. WHERE THE DISTANCE EXCEEDS AVAILABLE STUD LENGTHS, SUBMIT A PROPOSED SPLICE DETAIL FOR REVIEW AND APPROVAL BEFORE INSTALLATION OF PARTITION.
 - 8 EXTEND FURRING TO 6" ABOVE CEILING. BRACE TO STRUCTURE OR WALL AT TOP AND AT MID-SPAN WHEN FURRING HEIGHT EXCEEDS 12'-0".
 - 9 PARTITION TYPE REFERENCES ARE INDICATED ON THE FLOOR PLANS. WHERE AREAS THAT ARE ENLARGED ELSEWHERE ARE REFERENCED, PARTITION TYPES ARE INDICATED ON THE ENLARGED PLANS ONLY.
 - 10 PARTITION TYPES DO NOT DETERMINE EXTERIOR WALL CONSTRUCTION. REFER TO WALL SECTIONS FOR EXTERIOR WALL CONSTRUCTION.
 - 11 DETAILED PARTITION TYPES ARE PROVIDED FOR GENERAL REFERENCE. ALL TYPES SHOWN ARE NOT NECESSARILY USED ON THIS PROJECT. REFER TO FLOOR PLANS FOR ACTUAL PARTITION TYPES
 - 12 WHERE ROOMS ARE SCHEDULED WITHOUT CEILINGS, PARTITIONS SHALL EXTEND TO STRUCTURE ABOVE UNLESS NOTED OTHERWISE.
 - 13 PENETRATIONS THROUGH PARTITIONS BY PIPES, CONDUIT, OR OTHER RIGID MEMBERS ARE TO BE THROUGH HOLES WHICH ARE AT LEAST 1" LARGER THAN THE PENETRATING MEMBER. THE HOLES ARE TO BE FILLED WITH FIBERGLASS AROUND THE MEMBER SO THAT THE MEMBER DOES NOT TOUCH THE WALL AND THEN THE FILLER IS TO BE SEALED OVER FULLY ON EACH SIDE OF THE WALL.
 - 14 THE ACTUAL THICKNESS OF PARTITIONS ARE INDICATED ON THE PLANS AND DO NOT INCLUDE FINISH MATERIALS. REFER TO THE ROOM FINISH SCHEDULE FOR FINISH MATERIALS.
 - 15 PARTITION TYPES DO NOT INCLUDE PARTIAL HEIGHT WALLS. REFER TO DETAILS FOR PARTIAL HEIGHT WALL INFORMATION.
 - 16 ALL CONCRETE MASONRY PARTITIONS EXTEND FROM THE FLOOR SLAB TO THE BOTTOM OF STRUCTURE ABOVE. THE BOTTOM OF STRUCTURE IS DEFINED AS THE BOTTOM OF THE ROOF DECK OR FLOOR DECK ABOVE. SEE PARTITION DETAILS AND STRUCTURAL DRAWINGS FOR ANCHORAGE AT TOP OF CONCRETE MASONRY PARTITIONS.
 - 17 WHEREVER LENGTH OF MASONRY PARTITIONS EXCEED 8'-0" BETWEEN LATERAL SUPPORTS AT PARTITION TOP, INSTALL 3"X3"X6" 12 GA. FORMED STEEL ANGLES ON EACH SIDE @ 4'-0" O.C. MAX. ANCHOR EACH ANGLE TO THE STRUCTURE WITH TWO FASTENERS @ 3" O.C. MAX. MASONRY SHALL STOP 1" BELOW THE STRUCTURE INCLUDING PROJECTING CONCRETE JOISTS, AND THE 1" SPACE SHALL BE FILLED WITH NON-COMBUSTIBLE COMPRESSIBLE FILLER. IF THE ANGLES CANNOT BE INSTALLED ON EACH SIDE OF THE MASONRY WALL, PROVIDE 9" LONG 12 GA. FORMED STEEL CHANNELS WITH 3" FLANGES AND WEB WIDTH EQUAL TO MASONRY WIDTH. SPACE @ 4'-0" O.C. MAX AND ANCHOR WITH THREE FASTENERS. ALL FASTENERS SHALL HAVE MIN. 3" IMBED INTO CONCRETE STRUCTURE. WELD OR SCREW FASTENERS INTO STEEL STRUCTURE.
 - 18 THE LOCATION OF FIRE RATED PARTITIONS ARE INDICATED ON THE FLOOR PLANS BY LINE SYMBOLS IN THE CENTER OF THE WALL OR BY GENERAL NOTE. THESE LOCATIONS SHALL COMPLY WITH THE UL DESIGN ASSEMBLY AS INDICATED BY THE PARTITION TYPE, INCLUDING THE APPLICATION OF FIRE STOPPING SEALANT AT THE PERIMETER OF THE PARTITION.
 - 19 CONSTRUCTION OF FIRE RATED PARTITIONS, INCLUDING TAPING, FLOATING, AND FINISHING OF GYPSUM BOARD FOR FULL HEIGHT TO STRUCTURE ABOVE SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TESTED ASSEMBLY TO ACHIEVE THE REQUIRED RATING.
 - 20 AT ALL LOCATIONS WHERE FIRE RATED PARTITIONS ABUT OR ATTACH TO A FIRE RATED STRUCTURAL MEMBER THE FIRE RATING OF BOTH THE PARTITION AND THE STRUCTURAL MEMBER SHALL BE MAINTAINED.
 - 21 WHERE ITEMS ARE RECESSED INTO A FIRE RATED PARTITION PROVIDE ADDITIONAL GYPSUM FIREPROOFING, OR FIRE STOPPING AROUND THE RECESSED PORTION OF THE ITEM AS REQUIRED TO MAINTAIN THE INDICATED FIRE RATING.
 - 22 FIRE RESISTANT SOUND ATTENUATION BLANKETS AND NON RATED SOUND ATTENUATION
 - BLANKETS SHALL BE CONTINUOUS FOR THE FULL HEIGHT OF THE PARTITION AND 3" THICK. 23 CONTROL JOINTS AND EXPANSION JOINTS IN FIRE RATED PARTITIONS SHALL BE CONSTRUCTED TO MAINTAIN THE FIRE RATING OF THE PARTITION. CONTROL JOINTS AND EXPANSION JOINTS IN NON RATED PARTITIONS SHALL BE CONSTRUCTED WITH SOUND ATTENUATION BLANKET MATERIAL WITHIN THE JOINT TO REDUCE SOUND TRANSMISSION.
 - 23 TYPICAL REINFORCEMENT FOR DOOR OPENINGS IN GYP. BD. WALL PARTITIONS: 1. DOORS UP TO 3'-0" WIDE WEIGHING NOT MORE THAN 100 LBS.: DOUBLE 20 GA. STEEL STUDS AND 20 GA. RUNNERS.
 - 2. DOORS 2'-8" WIDE TO 4'-0" WIDE WEIGHING NOT MORE THAN 200 LBS.: DOUBLE 20 GA.STEEL STUDS AND 20 GA. RUNNERS.
 - 3. DOORS UP TO 4'-0" WIDE WEIGHING NOT MORE THAN 300 LBS.: DOUBLE 20 GA. STEEL STUDS AND 20 GA. RUNNERS.
 - 4. DOORS OVER 4'-0" WIDE WEIGHING MORE THAN 300 LBS.: DOUBLE 16 GA. STEEL STUDS AND 16 GA. RUNNERS.
 - 24 PROVIDE VERTICAL CONTROL JOINTS IN CONCRETE MASONRY PARTITIONS AT A SPACING NOT TO EXCEED 20'-0" O.C..



– LINE OF STRUCTURE

— CEILING AS SCHEDULED

-SEALANT

<u>BASE</u> - FLOORING AS SCHEDULED

PARTITION TYPE 'H' RESILIENT CHANNEI

- LINE OF STRUCTURE /

<u>HEAD</u>

<u>CEILING</u>

≺RESILIENT CHANNEL, ÎNSTALL PER MFR. REC.

<u>BASE</u>

TYPE

∜5/8" TYPE "X" GYPSUM WALLBOARD

DECK ABOVE

- CEILING AS SCHEDULED

- ACOUSTICAL SEALANT

5/8" TYPE "X" GYPSUM

WALLBOARD (2 LAYERS)

- 3 1/2" FIBERGLASS BATT

@ 4'-0" O.C. VERTICALLY

BRACE EACH STUD

- BASE AS SCHEDULED

FLOORING AS SCHEDULED

COMMENTS:

NEW FRAMING ADJACENT TO EXISTING

MASS WALL

PARTITION TYPE 'J'

- LINE OF STRUCTURE

- CEILING AS SCHEDULED

5/8" TYPE "X" GYPSUM

WALLBOARD (2 LAYERS)

2X4 WOOD STUDS

3 1/2" FIBERGLASS INSULATION

- BASE AS SCHEDULED

- FLOORING AS SCHEDULED

16" O.C.

SEALANT

COMMENTS:

SOUNDPROOF CONFERENCE ROOM WALL

PARTITION TYPE 'L'

RESILIENT CHANNEL

STC

RATING

- 3 5/8" STEEL STUD,

EQ20 16" O.C.

SEALANT

<u>HEAD</u>

<u>CEILING</u>

1/2" RESILIENT CHANNEL,

INSTALL PER MFR. REC.

5/8" TYPE "X" GYPSUM

WALLBOARD (2 LAYERS)

<u>PLAN</u>

5/8" TYPE "X" GYPSUM

WALLBOARD (2 LAYERS)

1/2" RESILIENT CHANNEL,

INSTALL PER MFR. REC.

<u>BASE</u>

STUD UL DESIGN

NO.:

SIZE

3 1/2"

OPEN-CELL SPRAY FOAM GAPS,

<u>HEAD</u>

<u>CEILING</u>

AIR SPACE

<u>PLAN</u>

EXISTING WALL

STUD UL DESIGN FIRE

NO.:

TYPE

SIZE

RATING

OR STRUCTURE

CRACKS AND RUBBLE IN

PARTIALLY DEMOLISHED

EXISTING MASONRY WALL.

STUD	UL DESIGN			
SIZE	NO.:	FIRE RATING	STC	COMMENTS:
3 5/8"				
6"			53	BASED ON UL U305 INCLUDING
				RESILIENT CHANNEL

- LINE OF STRUCTURE

EXTEND WALL TO UNDERSIDE OF DECK

— LVL JOISTS, REF. STRUCTURAL

— CEILING AS SCHEDULED

5/8" TYPE "X" GYPSUM

- BASE AS SCHEDULED

- FLOORING AS SCHEDULED

WALLBOARD (2 LAYERS)

<u>HEAD</u>

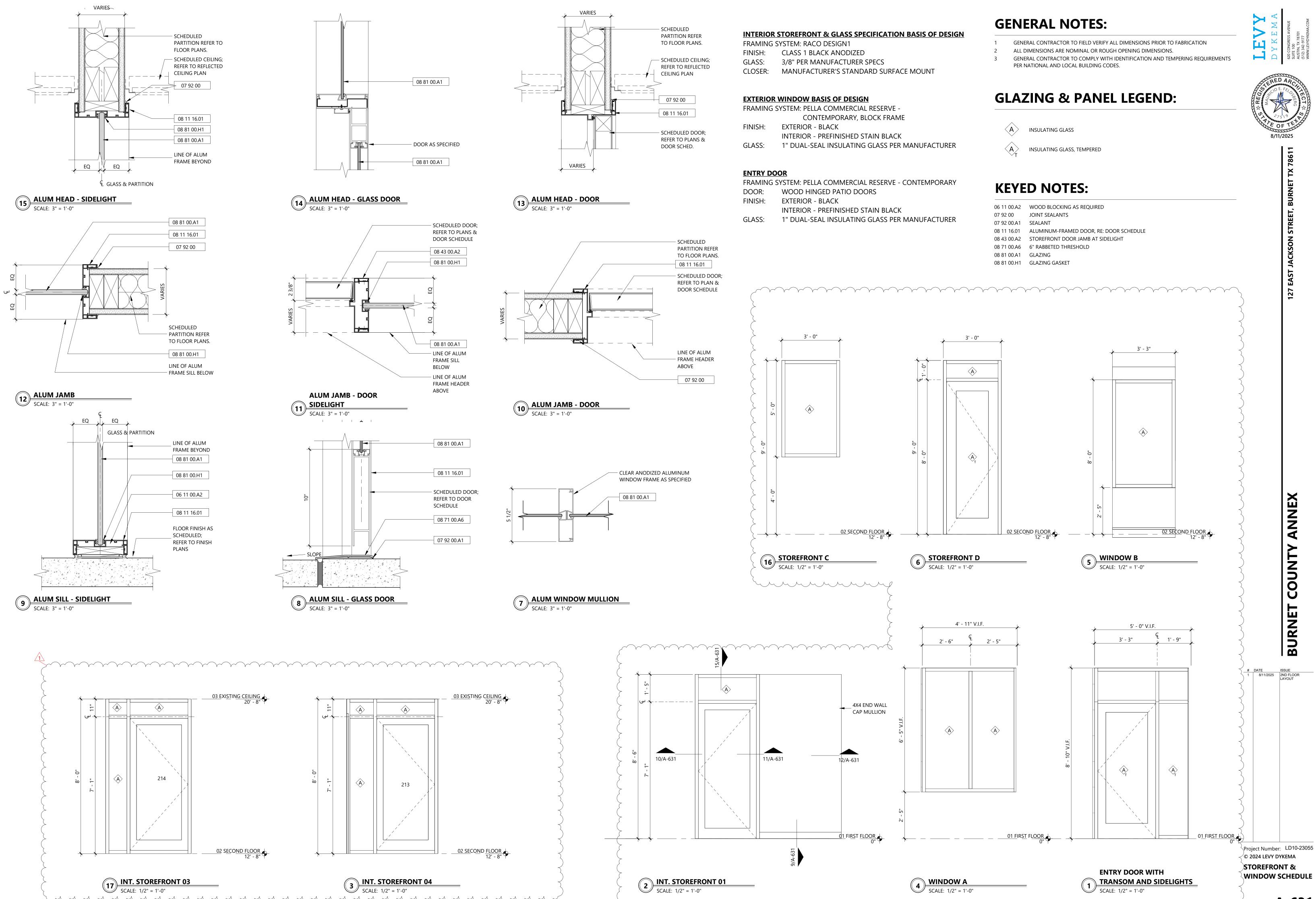
-SEALANT

ABOVE.

PARTITION TYPE 'A'

49

	STUD	UL			
TYPE	SIZE	ASSEMBLY	FIRE RATING	STC	COMMENTS:
	<varies></varies>				
A3	3 5/8"				
A3-1F	3 1/2"	U305	1 Hour Fire	34	
A3-S	3 5/8"			45	
A6	5 1/2"				
Λ6.1E	5 1/2"	LIZOE	1 Hour Eiro	26	



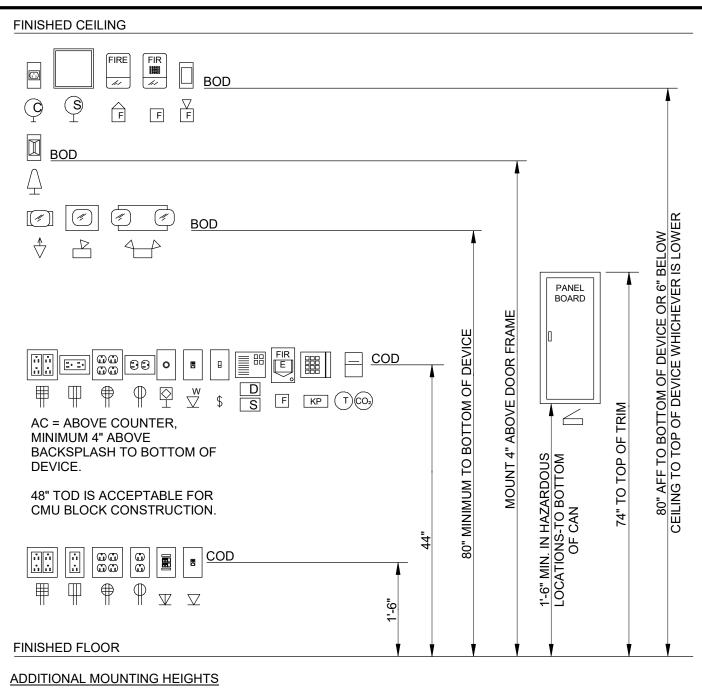
- 2. UNITED STATES OF AMERICA STANDARDS INSTITUTE USASI INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS - IEEE NATIONAL ELECTRICAL CODE - NEC NATIONAL FIRE PROTECTION ASSOCIATION - NFPA UNDERWRITER'S LABORATORIES - UL NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION - NEMA AMERICAN SOCIETY OF TESTING
- 3. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, PLANS AND THE SPECIFICATIONS, AND SHALL BE PERFORMED WITH THE LATEST INDUSTRY ACCEPTED STANDARDS.

MATERIALS - ASTM OCCUPATIONAL SAFETY AND HEALTH ACT - OSHA

- 4. THE INTENT OF THIS CONSTRUCTION PACKAGE IS TO ILLUSTRATE ALL THE WORK TO BE ACCOMPLISHED TO PROVIDE AN ELECTRICAL INSTALLATION COMPLETE IN EVERY RESPECT. 19. ALL EXTERIOR CONDUIT SHALL BE RIGID GALVANIZED STEEL CONDUIT. FITTINGS SHALL BE CARE HAS BEEN TAKEN TO INDICATE THE COMPLETE SCOPE OF WORK REQUIRED FOR THIS PROJECT, HOWEVER, IT IS NOT THE INTENT TO INDICATE EVERY CONFLICT WHICH MAY ARISE, AND PROVIDE FOR SUCH ON THESE DOCUMENTS. NO ASSURANCE IS GIVEN THAT THE PLANS COMPLETELY REFLECT ACTUAL JOB SITE CONDITIONS. IF IT IS DISCOVERED IN THE FIELD THAT ACTUAL LOCATIONS OR CONDITIONS DIFFER GREATLY FROM THOSE SHOWN, CONTRACTOR SHALL GET APPROVAL FROM OWNER PRIOR TO COMMENCING
- CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY THE PROPOSED INSTALLATION LOCATION AND ALL WORKING CONDITIONS SUCH AS STARTING TIME, NOISE LIMITATIONS, CONFINED SPACE LIMITATIONS, OFFSETS AND ROUTING ADJUSTMENTS THAT MAY BE REQUIRED, ETC., TO COMPLETE THE WORK. CONTRACTOR SHALL COORDINATE WITH THE OWNER REGARDING OBSTRUCTION OF ROADWAY OR DRIVEWAY AREAS, ON SITE MATERIALS AND EQUIPMENT STORAGE, AND BUILDING ACCESS. SITE INSPECTION SHALL DETERMINE CONDITION OF EXISTING ELEMENTS TO REMAIN AND BE PROTECTED.
- 6. CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY BRACING AND PROTECTING ALL WORK DURING CONSTRUCTION AGAINST DAMAGE, BREAKAGE, COLLAPSE, AND MISALIGNMENT ACCORDING TO APPLICABLE CODES, STANDARDS, AND GOOD CONSTRUCTION PRACTICES. CONTRACTOR SHALL TAKE PROPER PRECAUTIONS TO PROTECT ALL EXISTING OPERATIONS AND PROPERTY ADJACENT WITH WHICH WORK COMES IN CONTACT, OR OVER OR UNDER WHICH HE MAY TRANSPORT, HOIST, OR MOVE MATERIALS, EQUIPMENT, DEBRIS, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR 24. UNLESS OTHERWISE NOTED ALL 120V SINGLE PHASE CIRCUITS WILL REQUIRE A INDIVIDUAL AND/OR REPLACEMENT IN KIND OF ALL INADVERTENT DAMAGE TO EXISTING SYSTEMS.
- 7. ALL NECESSARY PERMITS, LICENSES, CERTIFICATES, TESTS, ETC., SHALL BE PROCURED AND PAID FOR BY THE CONTRACTOR.
- 8. THE DRAWINGS SHALL NOT BE SCALED FOR CONSTRUCTION INSTALLATION DIMENSIONS. ALL CONDUIT ROUTING ARE SHOWN IN APPROXIMATE LOCATIONS ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF CONDITIONS, AND SHALL PERFORM FIELD MEASUREMENTS PRIOR TO FABRICATION AND/OR PURCHASE OF ANY EQUIPMENT AND MATERIAL. REFERENCE ALL DETAILS FOR ADDITIONAL CONSTRUCTION REQUIREMENTS. DETAILS MAY NOT BE REFERENCED ON THE DRAWING(S), BUT ARE INTENDED TO BE TYPICAL THROUGHOUT UNLESS OTHERWISE NOTED.
- 9. DO NOT BEGIN WORK IF ANY DISCREPANCIES OR CONFLICTS EXIST OR ARE DISCOVERED BETWEEN SYSTEMS, UTILITIES, UNTIL THE DISCREPANCIES HAVE BEEN RESOLVED. IMMEDIATELY CALL SUCH DISCREPANCIES OR CONFLICTS TO THE ATTENTION OF THE OWNER'S CONSTRUCTION REPRESENTATIVE AND/OR ENGINEER. SHOULD ANY CONFLICTS OR AMBIGUITIES EXIST IN THE DRAWINGS, NOTES, OR SPECIFICATIONS, BRING THESE TO THE ATTENTION OF THE ENGINEER IMMEDIATELY BEFORE PROCEEDING WITH WORK.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING FULL COORDINATION WITH ALLTRADES TO ACCOMPLISH THE WORK AS INDICATED AND NOTED IN CONTRACT DOCUMENTS. COORDINATE WITH OWNER'S REPRESENTATIVE, AND MAINTAIN A SET OF ALL CHANGES BETWEEN THE DRAWINGS AND THE ACTUAL CONSTRUCTION. CONFLICTS ARISING DUE TO LACK OF COORDINATION SHALL BE THE RESPONSIBILITY OF, AND AT THE EXPENSE OF, THE CONTRACTOR. FINAL AS-BUILT DRAWINGS ARE TO BE DELIVERED TO THE OWNER/ENGINEER AND THE FINAL INVOICE FOR THE CONTRACT WILL NOT BE PAID UNTIL THESE AS-BUILT DRAWINGS ARE RECEIVED.
- 11. WORK AREAS ARE TO BE KEPT FREE OF DEBRIS AT ALL TIMES AND ARE TO BE LEFT BROOM CLEAN AT THE END OF EACH WORKING DAY. THE CONTRACTOR SHALL DISPOSE OF OFF-SITE, ALL MATERIALS REMOVED WHICH ARE NOT BE REINSTALLED OR SALVAGED ON THE PROJECT, UNLESS DIRECTED OTHERWISE BY OWNER. DISPOSAL OF MATERIAL SHALL BE IN ACCORDANCE WITH ACCEPTABLE METHODS APPROVED BY OWNER AND COORDINATED THROUGH OWNER'S COORDINATOR.
- 12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE RATING OF ALL PENETRATIONS THROUGH FIRE AND SMOKE RATED SURFACES. THE CONTRACTOR SHALL COMPLY WITH UL LISTING INSTRUCTIONS FOR PENETRATIONS THROUGH RATED SURFACES.
- 13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAINING OF HIS EMPLOYEES AND SUBCONTRACTORS IN THE RECOGNITION AND AVOIDANCE OF UNSAFE CONDITIONS, AND IN THE REGULATIONS AND HAZARDS WHICH APPLY TO THE AREA IN WHICH THE WORK WILL TAKE PLACE. ALL SAFETY EXPOSURES OR VIOLATIONS BROUGHT TO THE ATTENTION OF THE CONTRACTOR SHALL BE RECTIFIED IMMEDIATELY.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING PROTECTION OF PERSONS AND PROPERTY, AND FOR PROVIDING SAFE WORKING CONDITIONS THROUGHOUT THE WORK PROCESS. CONTRACTOR SHALL PROVIDE TEMPORARY COVERINGS FOR OPENINGS THROUGH WALLS OR FLOORS, AND PROVIDE TEMPORARY BARRIERS, PARTITIONS AND OR DUST BARRIERS WHERE REQUIRED TO MAINTAIN OSHA AND THE OWNER'S SAFETY STANDARDS AND TO PREVENT DAMAGE TO PROPERTY. ALL AREAS ADJACENT TO THE CONSTRUCTION AREA OR AFFECTED BY THE CONSTRUCTION MUST BE PROTECTED FROM DAMAGE, CLEANED AND RESTORED TO THEIR ORIGINAL CONDITION AT THE END OF THE PROJECT. WELDING BLANKETS SHALL BE UTILIZED FOR PROTECTION OF COMBUSTIBLE MATERIALS IN AREA WHERE WELDING OR CUTTING WITH A TORCH IS CONDUCTED.
- 15. ALL WORK SHALL BE GUARANTEED AGAINST DEFECTIVE MATERIALS AND WORKMANSHIP FOR A PERIOD OF NO LESS THAN ONE (1) YEAR AFTER THE DATE OF SUBSTANTIAL COMPLETION OR ACCEPTANCE OF THE WORK. THE CONTRACTOR SHALL REPAIR OR REPLACE, AT HIS OWN EXPENSE WHEN ORDERED TO DO SO, ALL WORK THAT MAY DEVELOP DEFECTS IN MATERIAL OR WORKMANSHIP WITHIN SAID PERIOD OF TIME. ALL EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS FOR SERVICE INTENDED. AS INTERPRETED BY THE ENGINEER, THE INSTALLATION OF ALL EQUIPMENT SHALL BE MADE BY EXPERIENCED CRAFTSMAN IN A NEAT, WORKMANLIKE MANNER. ALL MATERIALS, TOOLS, COSTS, AND SERVICES NECESSARY TO COMPLETELY

- ALL WORK SHALL BE PERFORMED PER 2020 NEC, AND ALL WORK SHALL BE PERFORMED IN 16. ALL PROPOSED EQUIPMENT INSTALLED ON THIS PROJECT SHALL BE NEW AND UNUSED UNLESS NOTED OTHERWISE. ALL EQUIPMENT SHALL BE LABELED AND LISTED FOR THE INTENDED USE. THE ELECTRICAL CONTRACTOR SHALL REMOVE ALL LABELS, DIRT, PAINT SPOTS, GREASE AND STAINS FROM ALL ELECTRICAL EQUIPMENT AND SHALL CLEAN ALL EQUIPMENT AS NECESSARY NO LOOSE PARTS OR SCRAPS OF EQUIPMENT SHALL BE LEFT ON THE PREMISES. EQUIPMENT LOCATION AND ROUTING IS APPROXIMATE AND SHALL BE PLACED TO PROVIDE PROPER ACCESS AND CLEARANCE FROM OTHER TRADES AND EQUIPMENT.
 - 17. ALL WIRING SHALL BE THWN/THHN, 98% CONDUCTIVITY COPPER, STANDARD CONDUCTOR, 600V INSULATION. ALL WIRING SHALL BE INSTALLED IN RIGID CONDUIT AND CONTINUOUS (WITHOUT
 - 18. A GREEN GROUNDING CONDUCTOR SHALL BE PROVIDED WITH ALL BRANCH AND FEEDER CIRCUITS. SIZE PER N.E.C. 250-122 UNLESS NOTED OTHERWISE. ALSO PROVIDE A SEPARATE DEDICATED INSULATED AND ISOLATED GROUNDING CONDUCTOR FOR ISOLATED GROUND CIRCUITS. UPON COMPLETION OF THE WORK, ALL PARTS OF THE ELECTRICAL INSTALLATION SHALL BE TESTED AND PROVED TO BE FREE OF UNWANTED GROUNDS AND OTHER DEFECTS.
 - STEEL THREADED TYPE. MOUNT THE CONDUIT AS HIGH AS POSSIBLE AND RUN PARALLEL AND PERPENDICULAR TO STRUCTURE. ALL OTHER CONDUIT SHALL BE EMT WITH STEEL COMPRESSION OR STEEL SET SCREW FITTINGS, 3/4" MIN., UNLESS NOTED OTHERWISE,
 - 20. KEEP RACEWAYS AT LEAST SIX INCHES AWAY FROM PARALLEL RUNS OF FLUES AND STEAM OR HOT WATER PIPES. INSTALL HORIZONTAL RACEWAY RUNS ABOVE WATER AND STEAM PIPING.
 - 21. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL PULL WIRES IN EMPTY RACEWAYS. USE NO. 14 AWG ZINC-COATED STEEL OR MONOFILAMENT PLASTIC LINE HAVING NOT LESS THAN 200-LB TENSILE STRENGTH.
 - 22. CHANNEL AND ANGLE SUPPORT SYSTEMS, HANGERS, ANCHORS, SLEEVES, AND FASTENERS SHALL BE DESIGNED TO PROVIDE SECURE SUPPORT FROM THE BUILDING STRUCTURE FOR ELECTRICAL COMPONENTS. SUPPORTING DEVICES SHALL BE HOT DIPPED GALVANIZED STEEL. CONFORM TO MANUFACTURER'S RECOMMENDATIONS FOR SELECTING SUPPORTS. SUPPORT PARALLEL RUNS OF HORIZONTAL RACEWAYS TOGETHER ON TRAPEZE OR BRACKET TYPE HANGERS.
 - 23. PULL BOXES SHALL BE GALVANIZED SHEET METAL WITH SCREW-ON COVERS AND WELDED SEAMS, STAINLESS STEEL NUTS, BOLTS, SCREWS AND WASHERS. BOXES SHALL BE SIZED IN ACCORDANCE WITH THE NEC.
 - NEUTRAL CONDUCTOR INCLUDING MULTI-CIRCUITS COMBINED IN SINGLE CONDUIT RUNS.

INTERIOR BOX MOUNTING HEIGHTS



—_{CB} 44" COD.

——•_{EPB} 44" COD.

——^oEPC 44" COD.

—⊸ 44" COD.

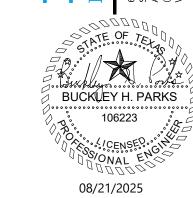
+---○ 44" COD.

	ITEMS BY	OTHERS			ITEMS BY ELEC	TRICAL CONT	TRACTOR				
UNIT					DISC	CONNECT		CONTROL DEVICES	INST.	FURN.	NOTES
ONT	DESCRIPTION	VOLTAGE	PHASE	FLA	DESCRIPTION	AMPS	NEMA ENCLOSURE	OCIVITIOE BEVIOLO	BY	BY	NOTES
CU-1-1	CONDENSING UNIT	208 V	1	36A	NON-FUSED	60A	NEMA 3R	FCU-1-1	MC	MC	4
CU-2-1	CONDENSING UNIT	208 V	1	32A	NON-FUSED	60A	NEMA 3R	FCU-2-1	MC	MC	4
CU-IT-MAIN	CONDENSING UNIT	208 V	1	34.0	NON-FUSED	60A	NEMA 3R	FCU-IT-MAIN	MC	MC	1, 4
CU-LAB	CONDENSING UNIT	208 V	1	22.0	NON-FUSED	30A	NEMA 3R	FCU-LAB	MC	MC	1, 4
EF-1-1 thru EF-1-3	EXHAUST FAN	120 V	1	1A	MOTOR RATED	15A	NEMA 1	OCCUPANCY SENSOR	EC	EC	2, 4
EF-2-1 & EF-2-2	EXHAUST FAN	120 V	1	1A	MOTOR RATED	15A	NEMA 1	OCCUPANCY SENSOR	EC	EC	2, 4
EWH-1	ELECTRIC WATER HEATER	208 V	1	12A	MOTOR RATED	20A	NEMA 1				4
FCU-1-1	FAN COIL UNIT	208 V	1	25A	NON-FUSED	30A	NEMA 1	THERMOSTAT	MC	MC	3, 4
FCU-2-1	FAN COIL UNIT	208 V	1	25A	NON-FUSED	30A	NEMA 1	THERMOSTAT	MC	MC	3, 4

MUNDELLENDER MENDELLENDER MENDELLENDE

FCU POWERED BY CU. PROVIDE WIRE AND CONDUIT PER NEC. INTERLOCK WITH OCCUPANCY SENSORS IN MEN'S AND WOMEN'S RESTROOMS. 3. UNIT PROVIDED WITH DUCT SMOKE DETECTOR, CONNECT TO FIRE ALARM SYSTEM. 4. ELECTRICAL CONTRACTOR TO MAKE FINAL CONNECTION AS NOTED IN PLANS.

LIGHTING		ABBREVIA	TIONS AND MISCELLANEOUS	DEVICES	AND POWER
SYMBOL	DESCRIPTION	SYMBOL AC	DESCRIPTION ABOVE COUNTER, 4" BACK SPLASH	SYMBOL	DESCRIPTION SWITCH - SPST
	LAY-IN OR RECESSED FIXTURE, SIZE ON PLANS	AC	AUTOMATIC TRANSFER SWITCH	\$	2 SINGLE POLE, DOUBLE THROW
	WALL MOUNTED FIXTURE, SIZE ON PLANS	AFG AFF	ABOVE FINISHED GRADE ABOVE FINISHED FLOOR		3 THREEWAY 4 FOURWAY
0	SURFACE MOUNTED FIXTURE, SIZE ON PLANS	BLG	BELOW GRADE		K KEY OPERATED P PILOT LIGHT
$\vdash \hspace{-0.05cm} -0.0c$	PENDANT OR SURFACE MOUNTED FIXTURE, SIZE ON PLANS	BOD C	BOTTOM OF DEVICE CONDUIT		WP WEATHERPROOF OS OCCUPANCY SENSOR (DUAL TECHNOLOGY)
• •	PENDANT MOUNTED FIXTURE, SIZE ON PLANS	CAS	CARD ACCESS SYSTEM		D DIMMER MC SPOT-MOMENTARY CONTACT
	SHADED FIXTURE INDICATES FIXTURE IS UNSWITCHED	CCTV CLG	CLOSED CIRCUIT TV CEILING		LV LOW VOLTAGE T TIMER SWITCH
	AND ALSO INDICATES EMERGENCY POWER.	COD	CENTER OF DEVICE		TS TEST SWITCH
0	RECESSED DOWNLIGHT FIXTURE	CU DVR	COPPER DIGITAL VIDEO RECORDER		VS VACANCY SENSOR (DUAL TECHNOLOGY) WITH DIMMING
Ø	SURFACE MOUNTED FIXTURE	(E) EC	EXISTING ELECTRICAL CONTRACTOR	OS ₁	OCCUPANCY SENSOR SWITCH (CEILING) - SUBSCRIPT IS TYPE
Ю	WALL MOUNTED FIXTURE	EF	EXHAUST FAN	\rightarrow	RECEPTACLE - SIMPLEX
\bigcirc	WALL WASH OR DIRECTIONAL FIXTURE	GC GND	GENERAL CONTRACTOR GROUND	⊕ _{CLG}	RECEPTACLE - DUPLEX, MOUNTING IN CEILING
♀	WALL SCONCE FIXTURE	LSI	FIELD ADJUSTABLE LONG TIME, SHORT TIME AND		GFI RECEPTACLE - DUPLEX, MOUNTING IN CEILING
<u> </u>	TRACK FIXTURE, SEE PLAN FOR SIZE AND HEADS	LSIG	INSTANTANEOUS FIELD ADJUSTABLE LONG TIME, SHORT TIME,		RECEPTACLE - DUPLEX GFI RECEPTACLE - DUPLEX (GROUND FAULT INTERRUPT)
-	CEILING FAN FIXTURE	MC	INSTANTANEOUS AND GROUND FAULT MECHANICAL CONTRACTOR		D DEVICE RECEPT W/2 USB PORTS DC DROP CORD
\otimes \otimes	CEILING MOUNTED, WALL MOUNTED EXIT	(N)	NEW		WP WEATHERPROOF COVER & WEATHER
	LIGHT (W/ DIRECTIONAL ARROWS) 1 HEAD REMOTE EMERGENCY LIGHT	NL PTZ	NIGHT LIGHT PAN-TILT-ZOOM		RESISTANT RECEPTACLE TR TAMPER RESISTANT
◇→ △→ A	2 HEAD EMERGENCY LIGHT BATTERY PACK	QTY	QUANTITY		S SURGE PROTECTED IG ISOLATED GROUND
	1 HEAD REMOTE EMERGENCY LIGHT BATTERY PACK	(R) SF	RELOCATED SURFACE		FILLED CENTER INDICATES HOSPITAL GRADE EMERGENCY RECEPTACLE
L17 484>	2 HEAD LIGHT WITH MOTION SENSOR	TBB	TELECOMMUNICATIONS BONDING BACKBONE	# #	RECEPTACLE - DOUBLE DUPLEX
△ ₩ △	SQUARE POLE MOUNTED FIXTURE, EXTERIOR	TC TMGB	TEMPERATURE CONTROL CONTRACTOR TELECOMMUNICATIONS MAIN GROUNDING BUS BAR	===	GFI RECEPTACLE - DOUBLE DUPLEX - SAME INDICATORS AS SHOWN FOR DUPLEX RECEPTACLE
	ROUND POLE MOUNTED FIXTURE, EXTERIOR	TTB	TELEPHONE TERMINAL BOARD	=	RECEPTACLE - 208V
\boxtimes	POST TOP FIXTURE, EXTERIOR	TYP UG	TYPICAL UNDERGROUND		R RANGE - NEMA 14-50R D DRYER - NEMA 10-30R
⊗	BOLLARD FIXTURE, EXTERIOR	UON	UNLESS OTHERWISE NOTED		W WELDER - NEMA 14-50R * NEMA CONFIGURATION AS NOTED
\hookrightarrow	DIRECTIONAL INGROUND FIXTURE, EXTERIOR	W/ WM	WITH WIRE MOLD		208V RECEPTACLE IN RECESSED FLOORBOX
FIRE ALAR	PM	WP	WEATHER PROOF (WHILE IN USE)		DUPLEX RECEPTACLE/GFI IN RECESSED FLOORBOX
SYMBOL	DESCRIPTION	XFMR a,b,c etc	TRANSFORMER SWITCH DESIGNATION		DOUBLE DUPLEX RECEPTACLE/GFI IN RECESSED FLOORBOX
F	STROBE (NUMBER INDICATES CANDELA RATING)	BN1L-2,4,6	CIRCUIT DESIGNATION, PANEL BN1L, CIRCUITS 2,4,6	<u> </u>	J-BOX - BOX INDICATES FLOOR MOUNTING -4"X4"X2-1/8" DEEP
F◀	SPEAKER/STROBE (NUMBER INDICATES CANDELA RATING)	1/E501 〈1〉	INDICATES DETAIL 1 ON SHEET E501 SHEET WORK NOTE	$\Box \bigcirc \bigcirc$	UNLESS OTHERWISE NOTED
F■	SPEAKER/STROBE (NUMBER INDICATES CANDELA RATING), CEILING MOUNTED	<u> </u>	SHEET DEMO WORK NOTE	P	POWER POLE
F∕d	SPEAKER		HOME RUN TO PANEL	T	THERMOSTAT/TEMPERATURE SENSOR BY MC OR TC, J-BOX
F	MANUAL PULLSTATION		CONDUIT CONCEALED IN CEILING OR WALL		AND CONDUIT TO CEILING BY EC
	IPS INDOOR PROTECTIVE SHIELD		CONDUIT CONCEALED UNDER FLOOR		CARBON MONOXIDE DETECTOR BY MC, J-BOX & CONDUIT TO CEILING BY EC
М	MAGNETIC DOOR HOLDER, BY DIV 28		LOW VOLTAGE CIRCUIT FIBER OPTIC CABLE	\$ _M	MANUAL MOTOR DISCONNECT/STARTER SWITCH
FSD	FIRE/SMOKE DAMPER		CABLE TRAY		EMERGENCY PUSHBUTTON
SD SD	SMOKE DETECTOR, SMOKE DETECTOR WALL MOUNTED		CIRCUIT, NUMBER OF HASH MARKS INDICATES NUMBER OF	R	RELAY
— ————————————————————————————————————	HEAT DETECTOR, HEAT DETECTOR WALL MOUNTED		CONDUCTORS IN CABLE/RACEWAY. GROUND WIRE IS NOT SHOWN BUT SHALL BE INCLUDED. NO HASH MARKS	(PC) (PC)+	PHOTOCELL, PHOTOCELL WALL MOUNTED
_			INDICATES 2 CONDUCTORS PLUS GROUND.	0 0	SPECIAL PURPOSE CONNECTION - BOX INDICATES FLOOR
TS)	CONNECTION TO TAMPER SWITCH, SWITCH BY OTHERS	SURVEILL	ANCE SYSTEM DESCRIPTION		MOUNTING - WORK AS NOTED
FS	CONNECTION TO FLOW SWITCH, SWITCH BY OTHERS	ф ф	CAMERA, CEILING AND WALL MOUNTED DOME, PTZ	Ŵ	ELECTRIC MOTOR CONNECTION
PS	CONNECTION TO PRESSURE SWITCH, SWITCH BY OTHERS	\$ \P	CAMILITA, CLICING AND WALL MOUNTED DOME, 1 12	\boxtimes	COMBINATION STARTER/DISCONNECT SWITCH
BD→	BEAM DETECTOR TRANSMITTER	♠♦♦	CAMERA, CEILING AND WALL MOUNTED DOME, FIXED	마	DISCONNECT SWITCH
BD-C	BEAM DETECTOR RECEIVER	\bigcirc	CAMEDA CELLING MOLINTED 200 DECDEE	\boxtimes	CONTACTOR
SD	DUCT SMOKE DETECTOR	(Φ)	CAMERA, CEILING MOUNTED, 360 DEGREE		CIRCUIT BREAKER
FARA	FIRE ALARM REMOTE ANNUNICATOR		CAMERA	VFD	VARIABLE FREQUENCY DRIVE
FACP	FIRE ALARM CONTROL PANEL	DVR	DIGITAL VIDEO RECORDER		CONTROL PANEL
FASP	FIRE ALARM SIGNAL EXTENDER PANEL	SPS	SURVEILLANCE POWER SUPPLY		LRP LIGHTING RELAY PANEL TCP TEMPERATURE CONTROL PANEL
COMMUNIC	CATIONS	M	MONITOR		GAP GENERATOR ANNUNCIATOR PANEL
SYMBOL	DESCRIPTION	SECURITY	SYSTEM		PACP PA CONTROL PANEL MGA MED GAS ALARM PANEL
	CATV JACK, WALL MOUNTED	SYMBOL	DESCRIPTION	TC	TIME CLOCK
⊠ _{CLG}	CATV JACK CEILING MOUNTED	CR V A	CARD READER	\leq	EXISTING PANELBOARD, SURFACE MOUNTED
	MICROPHONE OUTLET	DC	SPEAKER SIGNAL DEVICE DOOR CONTROLLER	6	EXISTING PANELBOARD, FLUSH MOUNTED
(S) (S)	SPEAKER, SPEAKER WALL MOUNTED	DS	DOOR SWITCH CONTACT	\leq	PANELBOARD, SURFACE MOUNTED
1€	CLOCK HANGER RECEPTACLE	KP PT	KEYPAD		PANELBOARD, FLUSH MOUNTED
⋈ E	EXISTING VOICE/DATA OUTLET	MRX	POWER TRANSFER SWITCH MOTION SENSOR REQUEST TO EXIT	or 🕰	ELECTRIC METER, BUILDING MOUNTED
⋈ 3	VOICE/DATA OUTLET - SUBSCRIPT INDICATES NUMBER OF CABLES/JACKS - NO SUBSCRIPT INDICATES 2 CABLES/JACKS	REX	MANUAL REQUEST TO EXIT	<u></u>	TRANSFORMER, INTERIOR
	VOICE/DATA OUTLET MOUNTED IN FLOORBOX - SUBSCRIPT	PS	POWER SUPPLY W/BATTERY, BY DIV 8, INSTALLED AND CONNECTED BY DIV 27		TRANSFORMER, EXTERIOR
3	INDICATES NUMBER OF CABLES/JACKS - NO SUBSCRIPT INDICATES 2 CABLES/JACKS	LX	CONNECTION TO REQUEST TO EXIT & LATCH BOLT		TRANSPORMER, EXTERIOR
⋈w	VOICE OUTLET - WALL MOUNTED	PRX	MONITORING CONNECTION TO PANIC REQUEST TO EXIT		
		ML	CONNECTION TO PANIC REQUEST TO EXIT CONNECTION TO MAGNETIC DOOR LOCK		
	DATA RACK	DPS	CONNECTION TO MAGNETIC DOOR POSITION SWITCH		
WAP) HWAP	WIRELESS ACCESS POINT, WIRELESS ACCESS POINT WALL	ES	CONNECTION TO ELECTRIC DOOR STRIKE		
	MOUNTED - 2 CABLES/JACKS	EL	CONNECTION TO ELECTRIC LATCH		
TVAI)					
WAI) TWAI)		AO	CONNECTION TO ELECTRIC AUTO OPENER		
		AO FA	CONNECTION TO ELECTRIC AUTO OPENER CONNECTION TO FIRE ALARM CONTACT		
(VAI)					
(Mai) (Wai)		FA	CONNECTION TO FIRE ALARM CONTACT INDICATES SECURITY DOOR 1 PANEL		
(VAI)		FA 1	CONNECTION TO FIRE ALARM CONTACT INDICATES SECURITY DOOR 1		



Project Number: 33-1408 © 2024 LEVY DYKEMA **ELECTRICAL COVER SHEET**

CAPITAL CONSULTING ENGINEERS

THIS WORK CONSISTS OF, BUT IS NOT NECESSARILY LIMITED TO, THE FURNISHING OF ALL LABOR, EQUIPMENT, APPLIANCES AND MATERIALS AND THE PERFORMANCE OF ALL OPERATIONS IN CONNECTION WITH THE INSTALLATION OF ALL ELECTRICAL WORK COMPLETED. IN STRICT ACCORDANCE WITH SPECIFICATIONS AND/OR DRAWINGS, APPLICABLE CODES, INCLUDING INCIDENTAL MATERIALS NECESSARY AND REQUIRED FOR THEIR

"PROVIDE" = FURNISHED AND INSTALLED COMPLETE. "OR EQUAL" = OR EQUAL AS APPROVED TO QUOTE BY ENGINEER, 10 DAYS PRIOR TO BID.

260000 - COMMON WORK RESULTS

- A. INTENT OF DRAWINGS: DRAWINGS ARE PARTLY DIAGRAMMATIC AND DO NOT SHOW EXACT LOCATION OF CONDUIT UNLESS SPECIFICALLY DIMENSIONED.
- 1. WORK SHALL BE ACCOMPLISHED BY WORKMEN SKILLED IN PARTICULAR TRADE, IN CONFORMANCE
- WITH BEST PRACTICES AND ACCEPTED STANDARDS. 2. WORK SHALL CONTRIBUTE TO EFFICIENCY OF OPERATION, ACCESSIBILITY, MAINTENANCE AND APPEARANCE. NO PART OF INSTALLATION SHALL INTERFERE WITH OPERATION OF ANY OTHER SYSTEM OR PART OF BUILDING. 3. NON-SATISFACTORY WORK SHALL BE CORRECTED AT NO ADDITIONAL EXPENSE TO OWNER.
- C. RESPONSIBILITY:
- 1. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF SATISFACTORY AND COMPLETE WORK IN ACCORDANCE WITH THE INTENT OF DRAWINGS AND SPECIFICATIONS. PROVIDE, AT NO EXTRA COST, INCIDENTAL ITEMS REQUIRED FOR COMPLETION OF WORK EVEN THOUGH NOT
- SPECIFICALLY MENTIONED OR INDICATED IN SPECIFICATIONS OR ON DRAWINGS. 2. IF, AT ANY TIME, AND IN ANY CASE, CHANGE IN LOCATION OF CONDUIT, OUTLETS, FIXTURES SWITCHES, PANELS, ELECTRICAL EQUIPMENT OR ASSOCIATED COMPONENTS, ETC., BECOMES NECESSARY DUE TO OBSTACLES OR INSTALLATION OF OTHER TRADES, SUCH REQUIRED CHANGES SHALL BE MADE BY CONTRACTOR AT NO EXTRA COST.
- 3. CONFLICTS DISCOVERED DURING CONSTRUCTION SHALL BE IMMEDIATELY CALLED TO THE ATTENTION OF THE ENGINEER FOR DECISION. DO NOT PROCEED WITH INSTALLATION IN AREA OF QUESTION UNTIL CONFLICT HAS BEEN FULLY RESOLVED.
- 4. COORDINATE ALL ELECTRICAL WORK WITH OTHER TRADES TO PREVENT UNNECESSARY DELAYS IN THE CONSTRUCTION SCHEDULE.
- 5. PROVIDE TEMPORARY ELECTRICAL POWER AND LIGHTING FOR ALL TRADES THAT REQUIRE SERVICE DURING THE COURSE OF THIS PROJECT. PROVIDE TEMPORARY SERVICE AND DISTRIBUTION AS REQUIRED. COMPLY WITH THE NFPA 70 AND OSHA REQUIREMENTS. (ENERGY COSTS BY GENERAL
- D. GUARANTEE-WARRANTY: THIS CONTRACTOR SHALL AND HEREBY DOES WARRANT AND GUARANTEE:
- 1. THAT ALL WORK EXECUTED UNDER THIS SECTION WILL BE FREE FROM DEFECTS OF MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THIS WORK. 2. THE CONTRACTOR AGREES TO, AT THE CONTRACTOR'S OWN EXPENSE, REPAIR AND REPLACE ALL SUCH DEFECTIVE MATERIALS AND WORK AND ALL OTHER WORK DAMAGED THEREBY WHICH BECOMES DEFECTIVE DURING THE TERM OF WARRANTY. AGREEMENT DOES NOT INCLUDE DAMAGES
- E. PERMITS, TESTS, CODES AND STANDARDS:
- ELECTRICAL CONTRACTOR TO PAY FOR ALL PERMITS AND FEES IN CONNECTION WITH THIS WORK WORK SHALL BE IN ACCORCDANCE WITH THE MOST RECENT EDITIONS OF ADOPTED LOCAL. STATE AND NATIONAL CODES AND ORDINANCES, THE STATE FIRE MARSHAL, AND UTILITY COMPANY REGULATIONS.
- 3. ELECTRICAL WORK SHALL CONFORM TO NATIONAL ELECTRICAL CODES, LATEST EDITIONS, AS A MINIMUM REQUIREMENT.
- 4. ALL MATERIAL TO CONFORM WITH APPLICABLE STANDARDS.
- F. DISCREPANCIES: PRIOR TO SUBMITTING BID, CONTRACTOR SHALL REFER ANY APPARENT DISCREPANCIES OR OMISSIONS TO ENGINEER FOR CLARIFICATION.
- G. PRIOR APPROVALS: ALL PROPOSED SUBSTITUTIONS SHALL BE RECEIVED BY THE ENGINEER 10 DAYS PRIOR TO BID. PRIORS RECEIVED AFTER 3 P.M. OF THE 10TH DAY WILL BE REJECTED. SUPPLY TECHNICAL DATA, PHOTOMETRICS AND DIMENSIONAL DRAWINGS SHOWING THAT SUBSTITUTES ARE EQUAL TO PRODUCT SPECIFIED. FAXED PRIOR APPROVALS WILL NOT BE ACCEPTED.
- H. SHOP DRAWING SUBMITTALS:
- IN ADDITION TO DISTRIBUTION REQUIREMENTS FOR SUBMITTALS SPECIFIED IN DIVISION 1 SECTION "SUBMITTALS," SUBMIT DRAWINGS FOR FINAL AND OFFICIAL APPROVAL THROUGH THE GENERAL CONTRACTOR AS LISTED BELOW. IF THE AUTHORITY HAVING JURISDICTION REQUIRES SHOP DRAWINGS TO HAVE A REGISTERED ENGINEERS STAMP AFFIXED, THIS SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO ACQUIRE SUCH STAMP AT CONTRACTOR'S COST A. ENGINEER - 2 COPIES.
- B. GENERAL CONTRACTOR 2 COPIES. C. SUBCONTRACTOR - COPIES AS REQUIRED.
- ADDITIONAL COPIES MAY BE REQUIRED BY INDIVIDUAL SECTIONS OF THESE SPECIFICATIONS COPIES OF PRICE LIST SHEETS ARE NOT ACCEPTABLE. MANUFACTURER'S NAME AND ADDRESS MUST APPEAR ON EACH SHEET. ALL COPIES SHALL BE COMPLETELY LEGIBLE. FAX COPIES ARE UNACCEPTABLE. ALL SHOP DRAWINGS NOT BOUND IN DUO-TANG, MEAD OR EQUIVALENT FOLDERS
- SHOP DRAWINGS SHALL INCLUDE A COMPLETED SPECIFICATION SHEET OF ALL EQUIPMENT ALONG WITH FABRICATION. INSTALLATION DRAWINGS. SETTING DIAGRAMS. SCHEDULES. PATTERN: TEMPLATES AND SIMILAR DRAWINGS. INSTALLATION DRAWINGS FOR FIRE ALARM SHALL BE DONE WITH A COMPUTER CADD PROGRAM AND INCLUDE NO OTHER SYSTEM. A BASIC FLOOR PLAN IN ELECTRONIC FORMAT CAN BE OBTAINED FROM THE PROJECT ENGINEER.

PROJECT CLOSE-OUT RECORD DOCUMENTS:

INDICATE THE FOLLOWING INSTALLED CONDITIONS:

- 1. PROVIDE THREE FULL SIZE SETS, UNLESS MORE ARE CALLED FOR UNDER DIVISION 1 (ONE FOR ENGINEER AND ONE FOR OWNER). IN ADDITION TO REQUIREMENTS CALLED FOR UNDER DIVISION '
- A. ACTUAL LOCATION OF ALL ELECTRICAL SERVICE GEAR/FEEDERS, PANEL/MOTOR/SPECIAL EQUIPMENT FEEDERS, ALL MAJOR UNDERGROUND OR UNDERSLAB CONDUITS, ALL CONDUIT STUBS FOR FUTURE USE, ANY CHANGE IN BRANCH CIRCUITRY FROM DRAWINGS, KEY JUNCTION BOXES AND PULL BOXES NOT INDICATED ON DRAWINGS, ANY CONTROL LOCATIONS OR INDICATOR LIGHTS NOT SHOWN ON DRAWINGS.
- B. ADDENDUM ITEMS, CHANGE ORDER ITEMS AND ALL CHANGES MADE TO DRAWINGS FROM BIDDING PHASE THROUGH TO PROJECT COMPLETION.
- C. ACTUAL EQUIPMENT AND MATERIALS INSTALLED. WHERE MANUFACTURER AND CATALOG NUMBER ARE INDICATED ON DRAWINGS, GENERALLY OR IN FIXTURE OR EQUIPMENT SCHEDULES,
- CHANGE TO REFLECT ACTUAL PRODUCTS INSTALLED D. CHANGE SERVICE PANEL AND BRANCH PANEL BREAKER LOCATIONS AND SCHEDULES TO REFLECT ACTUAL INSTALLED CONDITIONS.

J. PROJECT CLOSE-OUT MAINTENANCE MANUALS:

- 1. PREPARE 3 COPIES, UNLESS MORE ARE CALLED FOR UNDER DIVISION 1 (ONE FOR ENGINEER, TWO FOR OWNER).IN ADDITION TO REQUIREMENTS UNDER DIVISION 1, PROVIDE HEAVY DUTY, DURABLE 3-RING VINYL COVERED LOOSE-LEAF BINDER FOR EACH MANUAL SIZED TO RECEIVE 8.5 INCH BY 11 INCH PAPER. PROVIDE A CLEAR PLASTIC SLEEVE ON THE SPINE TO HOLD LABELS AND POCKETS IN THE COVER TO RECEIVE FOLDED SHEETS. IN MANUAL, INCLUDE ALL SHOP DRAWINGS, INSTALLATION/OPERATION/MAINTENANCE DATA FURNISHED WITH ELECTRICAL EQUIPMENT, VOICE/DATA TEST REPORTS, AND LETTERS FROM MANUFACTURER'S REPRESENTATIVES THAT THE FIRE ALARM. HAS BEEN COMPLETED AND TESTED TO SATISFY REQUIREMENTS/CODES. LIST PROJECT NAME, DATE, AND CONTRACTOR'S NAME, ADDRESS AND TELEPHONE NUMBER. INCLUDE INDEX SHEET FOR EACH SPECIFICATION SECTION INDICATING EQUIPMENT, WITH SUPPLIER AND SUPPLIER'S TELEPHONE NUMBER. PROVIDE TABBED DIVIDERS INDICATING MAJOR GROUPINGS OF
- 2. TURN OVER TO OWNER ALL SPARE EQUIPMENT AND DEVICES SPECIFIED AND SHOWN.

K. SUPPORTING EQUIPMENT:

- 1. UNLESS OTHERWISE INDICATED, FASTEN ELECTRICAL ITEMS AND THEIR SUPPORTING HARDWARE SECURELY TO THE BUILDING STRUCTURE, INCLUDING CONDUITS, RACEWAYS, CABLES, CABLE TRAYS, BUSWAYS, CABINETS, PANELBOARDS, TRANSFORMERS, BOXES, DISCONNECT SWITCHES, AND CONTROL COMPONENTS. FASTEN BY MEANS OF WOOD SCREWS OR SCREW-TYPE NAILS ON WOOD TOGGLE BOLTS ON HOLLOW MASONRY UNITS, CONCRETE INSERTS OR EXPANSION BOLTS ON CONCRETE OR SOLID MASONRY, AND MACHINE SCREWS, WELDED THREADED STUDS, OR SPRING-TENSION CLAMPS ON STEEL. THREADED STUDS DRIVEN BY A POWER CHARGE AND PROVIDED WITH LOCK WASHERS AND NUTS MAY BE USED INSTEAD OF EXPANSION BOLTS AND MACHINE OR WOOD SCREWS. DO NOT WELD CONDUIT, PIPE STRAPS, OR ITEMS OTHER THAN THREADED STUDS TO STEEL STRUCTURES. IN PARTITIONS OF LIGHT STEEL CONSTRUCTION, USE SHEET METAL SCREWS. ALL DEVICE BOXES IN SHEETROCK WALLS WILL BE TIGHT BEFORE, DURING AND AFTER INSTALLATION OF SHEFTROCK
- 2. PROVIDE SUPPORTS FOR ELECTRICAL ITEMS IN ACCORDANCE WITH NFPA 70 AND ALL OTHER APPLICABLE CODES.
- 3. CONTRACTOR RESPONSIBLE FOR PROVIDING WATERTIGHT CONDUIT PENETRATIONS AT ALL WATERTIGHT WALLS. FLOORS ROOFS AND MEMBRANES. CONTRACTOR ALSO RESPONSIBLE TO MAINTAIN FIRE RATING OF WALLS, FLOORS, ROOFS AND MEMBRANES PENETRATED.
- 4. WHEN APPLICABLE, CENTER WITHIN INSULATION ANY ELECTRICAL CONDUIT ROUTED IN ATTIC SPACE. PROVIDE SEALING AS PER NFPA 70 300-7 FOR ALL CONDUITS EXPOSED TO DIFFERENT

L. ELECTRICAL IDENTIFICATION:

- 1. APPLY CIRCUIT/CONTROL/ITEM DESIGNATION LABELS OF ENGRAVED PLASTIC LAMINATE FOR DISCONNECT SWITCHES, BREAKERS, PUSHBUTTONS, PILOT LIGHTS, FA DUCT DETECTION, MOTOR
- STARTERS, PANELBOARDS AND MAIN CONTROL PANEL AND SIMILAR SYSTEMS. 2. IDENTIFY ALL 120 VAC AND 208 VAC POWER RECEPTACLE COVER PLATES WITH PANEL AND CIRCUIT NUMBER UTILIZING A CLEAR LABEL WITH BLACK DESIGNATIONS. DESIGNATION EXAMPLE: L1-38.

260519 - CONDUCTORS AND CABLES

- B. ALL CONDUCTORS SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH NFPA 70. NEMA. UL NETA ATS-1995, AND ALL OTHER APPLICABLE CODES. ALL CONDUCTORS SHALL BE COPPER. ALUMINUM
- MINIMUM CONDUCTOR SIZE FOR LIGHT AND POWER SHALL BE #12 AWG COPPER. MINIMUM CONDUCTOR SIZE FOR CONTROL WIRING SHALL BE #14 AWG COPPER UNLESS NOTED OTHERWISE ON DRAWINGS. #10 AWG AND SMALLER SHALL BE SOLID WIRE AND #8 AWG AND LARGER SHALL BE STRANDED. PROVIDE MINIMUM #10 AWG FOR EXTERIOR LIGHTING CIRCUITS.
- D. MC CABLE ALLOWED, IN CONCEALED WALL AND CEILING SPACES.
- E. TIGHTEN ELECTRICAL CONNECTORS AND TERMINALS, INCLUDING SCREWS AND BOLTS, IN ACCORDANCE WITH MANUFACTURER'S PUBLISHED TORQUE TIGHTENING VALVES OR AS SPECIFIED IN UL CODES.
- F. COLOR CODE SECONDARY SERVICE, FEEDER, AND BRANCH CIRCUIT CONDUCTORS WITH FACTORY APPLIED COLOR AS FOLLOWS:

BI ACK YFI I OW BLUE PURPI F GREEN GROUND GREEN

260526 - GROUNDING AND BONDING

- A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE "COMMON WORK RESULTS" SECTION.
- INSTALL SEPARATE INSULATED EQUIPMENT GROUNDING CONDUCTORS FOR FEEDER AND BRANCH CIRCUITS IN COMPLIANCE WITH NFPA 70 ARTICLE 250.
- PROVIDE #6 AWG MINIMUM GREEN INSULATED COPPER CONDUCTOR IN RACEWAY FROM GROUNDING ELECTRODE SYSTEM TO EACH TELEPHONE, ALARM AND COMMUNICATIONS SYSTEM'S TERMINAL BOARD,
- D. SYSTEM GROUND: PROPERLY BOND SYSTEM NEUTRAL TO SYSTEM GROUND IN THE MAIN SERVICE APPARATUS. ALL OTHER NEUTRAL BUSSES, BARS, ETC., MUST BE ISOLATED FROM GROUND. ESTABLISH THE SYSTEM GROUND AS THE GROUNDING BUS IN MAIN SERVICE APPARATUS BY PROVIDING THE PROPER GROUND BUS IN THE MAIN SERVICE APPARATUS AND BY PROVIDING THE PROPER GROUNDING CONDUCTOR, INSTALLED IN RIGID STEEL CONDUIT, BONDED TO THE GROUNDING BUS AND EXTENDED TO THE GROUNDING POINT WHERE THE BOND SHALL BE MADE WITH THE PROPER COMBINATION. CONDUIT/CABLE GROUNDING CLAMP. UNLESS PROHIBITED BY LOCAL CODES, THE GROUNDING POINT SHALL BE ESTABLISHED ON THE INCOMING WATER MAIN, UFER GROUND AND STRUCTURAL STEEL. BUILDING METALLIC WATER PIPING SYSTEM MUST BE BONDED. AS REQUIRED BY CODES. TO THE GROUNDING BUS IN THE MAIN SERVICE APPARATUS. CAREFULLY CHECK THE DRAWINGS FOR ADDITIONAL GROUNDING REQUIREMENTS AND COMPLY WITH NFPA 70 AND ALL OTHER APPLICABLE
- **GROUNDING ELECTRODE:** UFER GROUND FABRICATED ACCORDING TO NFPA 70, PARAGRAPH 250-52(A)(3), USING A MINIMUM OF 20 FEET OF BARE COPPER CONDUCTOR NOT SMALLER THAN NO. 4 AWG. BOND GROUNDING CONDUCTOR BY CADWELD PROCESS TO REINFORCE STEEL IN AT LEAST 4 LOCATIONS AND

260533 - RACEWAYS AND BOXES

A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE "COMMON WORK RESULTS"

B. CONDUIT RACEWAY:

- 1. INDOORS, USE THE FOLLOWING, UNLESS OTHERWISE STATED:
- A. CONCEALED: EMT OR MC CABLE. EXPOSED: EMT, IMC OR RMC.

NFPA 70 AND APPLICABLE CODES.

CABINET OR EQUIPMENT LOCATION

- CONNECTION TO VIBRATING EQUIPMENT: FLEXIBLE METAL CONDUIT. 2. OUTDOORS, USE THE FOLLOWING, UNLESS OTHERWISE STATED:
- A. CONCEALED: RMC OR IMC.
- EXPOSED: RMC OR IMC. UNDERGROUND: SCHEDULE 40 PVC WITH SCHEDULE 80 PVC FITTINGS.
- CONNECTION TO VIBRATING EQUIPMENT: LIQUID TIGHT FLEXIBLE METAL CONDUIT. 4. CONCEAL CONDUIT AND CABLE, UNLESS OTHERWISE NOTED; CONDUIT IS PERMITTED TO BE EXPOSED IN EQUIPMENT ROOMS. ALL CONDUITS SHALL HAVE INSULATED GROUND WIRE INSTALLED. DO NOT INSTALL CONDUIT EMBEDDED IN SLABS. EMT FITTINGS SHALL BE STEEL, COMPRESSION OR
- C. OUTLET BOXES:
- CONFORM TO UL 514A, "METALLIC BOXES, ELECTRICAL," AND UL 514B, "FITTINGS FOR CONDUIT AND OUTLET BOXES." OUTLET BOXES SHALL BE METALLIC AND INSTALLED FLUSH IN ALL AREAS, EXCEPT MECHANICAL ROOMS, ABOVE LAY-IN CEILINGS, OR AS OTHERWISE INDICATED. MINIMUM SIZE TO BE 4 INCHES SQUARE BY 2-1/8 INCHES DEEP. BOXES SHALL BE OF TYPE, SHAPE, SIZE AND DEPTH TO SUIT EACH LOCATION AND APPLICATION. ALL FITTINGS SHALL BE STEEL

SET SCREW TYPE. ALL RACEWAYS SHALL BE INSTALLED AND SUPPORTED IN ACCORDANCE WITH

- 1. COMPLY WITH UL 50, "ELECTRICAL CABINETS AND BOXES," FOR BOXES OVER 100 CUBIC INCHES VOLUME. BOXES SHALL HAVE SCREWED OR BOLT-ON COVERS. SHALL BE SUITABLE FOR THE INTENDED APPLICATION AND SHALL BE LABELED.
- E. ALL MATERIALS SHALL BE UL LISTED, APPROPRIATE FOR INTENDED APPLICATION. ENTIRE RACEWAY SYSTEM SHALL BE IN ACCORDANCE WITH NEPA 70. ANSLINEMA, ULL AND ALL OTHER APPLICABLE CODES. 262416 - PANELBOARDS

A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE "COMMON WORK RESULTS" SECTION.

- B. MANUFACTURER: SIEMENS, SQUARE-D, GE OR CUTLER HAMMER.
- C. LOAD CENTERS ARE NOT ACCEPTABLE UNLESS SPECIFICALLY NOTED.
- PANELBOARDS SHALL HAVE ALUMINUM BUS INCLUDING NEUTRAL AND GROUND BARS. BREAKERS SHALL BE BOLT ON TYPE. ALL 3-POLE BREAKERS 30 AMP AND LARGER SHALL HAVE MINIMUM FEATURE OF A THERMAL MAGNETIC ADJUSTMENT FEATURE.
- PROVIDE TYPED CIRCUIT SCHEDULES FOR EXISTING PANELBOARDS WHERE LOADS HAVE CHANGED AND FRAMED TYPED CIRCUIT SCHEDULES FOR ALL NEW PANELBOARDS WITH IDENTIFICATION OF ITEMS CONTROLLED BY EACH INDIVIDUAL BREAKER. INDICATE ROOM NUMBERS OF ITEMS CONTROLLED OR ROOM NAME WHERE APPROPRIATE FOR OWNER'S CONVENIENCE. 262726 - WIRING DEVICES
- A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE "COMMON WORK RESULTS" SECTION.
- B. ACCEPTABLE MANUFACTURERS: PASS & SEYMORE, BRYANT, GE, HUBBELL, LEVITON.
- GENERAL LIGHT SWITCHES SHALL BE 20 AMP, 120/277 VOLT AC RATED AND INDUSTRIAL GRADE. GENERAL RECEPTACLES SHALL BE SELF GROUNDING 5-20R AND INDUSTRIAL GRADE. GFCI RECEPTACLES SHALL BE 20 AMP FEED THROUGH TYPE WITH TWO UTILIZATION POINTS. DO NOT
- CONNECT DOWNSTREAM DEVICES TO LOAD SIDE OF GFCI DIMMERS SHALL BE LUTRON NOVA SERIES, SIZED APPROPRIATELY FOR LOAD.
- 4. GENERAL DEVICE COLOR SHALL BE WHITE. EMERGENCY POWER DEVICE COLOR SHALL BE RED

D. DEVICE PLATES:

- 1. DEVICE PLATES SHALL HAVE OPENING FOR DEVICE INTENDED AND SHALL BE LEXAN. GENERAL DEVICE COLOR SHALL BE WHITE
- 2. ALL DEVICE PLATES SHALL HAVE A CLEAR LABEL WITH THE PANEL AND CIRCUIT NUMBER DESIGNATION IN BLACK
- 3. WEATHERPROOF RECEPTACLE COVERS SHALL BE A CORROSION RESISTANT DIE CAST METAL, MINIMUM 3 INCH DEEP. FLIP COVER WITH LATCH AND WITH PAD LOCKING PROVISIONS

262816 - CIRCUIT AND MOTOR DISCONNECTS

- A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE "COMMON WORK RESULTS FOR ELECTRICAL"
- B. MANUFACTURER: SAME AS PANELBOARD MANUFACTURER.
- C. DISCONNECTS SHALL BE HEAVY DUTY TYPE WITH CLASS R REJECTION FEATURE WHEN REQUIRED TO BE FUSIBLE. VOLTAGE RATING SHALL BE AT OR GREATER THAN THE APPLICATION VOLTAGE. PROVIDE NEMA 3R ENCLOSURE FOR EXTERIOR LOCATIONS. SERVICE SWITCHES SHALL BE UL LISTED FOR USE AS SERVICE EQUIPMENT.

262913 - MOTOR CONTROLLERS

- A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE "COMMON WORK RESULTS" SECTION.
- B. MANUFACTURER: SAME AS PANELBOARD MANUFACTURER.
- C. UNLESS SCHEDULED OTHERWISE. 3/4 HORSEPOWER OR LESS SINGLE-PHASE MOTORS SHALL HAVE 1 HP RATED MANUAL TOGGLE STARTERS WITH THERMAL OVERLOAD PROTECTION SIZED FOR THE MOTOR IN ACCORDANCE WITH NFPA 70. PROVIDE PILOT LIGHT FOR MANUAL STARTERS NOT IN SIGHT FROM MOTOR. UNITS LOCATED AT THE EXTERIOR OF THE BUILDING SHALL BE NEMA 3R RATED.
- D. STARTERS SHALL BE ACROSS-THE-LINE MAGNETIC TYPE, COMBINATION STARTER/DISCONNECT, FVNR. AND HP RATED, UNLESS OTHERWISE SCHEDULED. STARTER SHALL HAVE RESETABLE OVERLOAD PROTECTION ON ALL PHASES, CONSTRUCTED OF ONE-PIECE CLASS 20 CONSTRUCTION, PROVIDE 120 VOLT CONTROL, H-O-A AND INTERLOCKS WHERE INDICATED ON SCHEDULES. PROVIDE TWO N/O AUXILIARY CONTACTS. UNITS LOCATED AT THE BUILDING EXTERIOR SHALL BE NEMA 3R RATED.
- E. ALL MOTOR CONTROLLERS SHALL BE UL LISTED AND INSTALLED IN ACCORDANCE WITH NFPA 70, NEMA, AND MANUFACTURER'S RECOMMENDATIONS.

265100 - LIGHTING

- A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE "COMMON WORK RESULTS" SECTION.
- MANUFACTURER, MODEL, STYLE, COLOR, SIZE, ETC., AS SCHEDULED. IF NO COLOR HAS BEEN SELECTED, PROVIDE FIXTURE WITH THE STANDARD FINISH AS PUBLISHED BY THE MANUFACTURER, ALL FIXTURES TO BE SUPPLIED AS COMPLETE HOUSING SOCKETS LAMP HOLDERS INTERNAL WORKING WIRE GUARDS LENS GUARDS, DIFFUSING MATERIALS OR LENSES, PENDANTS, HANGERS, CANOPIES, ALIGNERS, END CAPS. BALLASTS AND EMERGENCY BATTERY PACKS, PLASTER FRAMES, RECESSING BOXES, HOLD DOWN CLIPS, ANCHOR BOLTS, ETC. INSTALL PLUMB AND TRUE, FREE OF LIGHT LEAKS, WARPS, DENTS AND OTHER IRREGULARITIES.
- C. SUPPORT FOR RECESSED AND SEMI-RECESSED GRID-TYPE FLUORESCENT FIXTURES:
- ALL LIGHTING FIXTURES SHALL BE POSITIVELY ATTACHED TO THE SUSPENDED CEILING SYSTEM BY MECHANICAL MEANS AS SPECIFIED IN THE NATIONAL ELECTRIC CODE, SECTION 410-16 (C) UNLESS INDEPENDENTLY SUPPORTED. THE ATTACHMENT DEVICE, A MINIMUM OF TWO PER FIXTURE, SHALL HAVE A CAPACITY OF 100 PERCENT OF THE LIGHTING FIXTURE WEIGHT ACTING IN ANY DIRECTION. 2. PENDANT-HUNG LIGHTING FIXTURES SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE

USING NO. 9-GAGE WIRE OR AN APPROVED ALTERNATE SUPPORT WITHOUT USING THE CEILING

- SUSPENSION SYSTEM FOR DIRECT SUPPORT. LIGHTING FIXTURES WEIGHING LESS THAN 56 POUNDS SHALL HAVE. IN ADDITION TO THE REQUIREMENTS OUTLINED ABOVE, TWO NO. 12-GAGE HANGERS CONNECTED FROM OPPOSITE CORNERS OF THE FIXTURE HOUSING TO THE STRUCTURE ABOVE. THESE WIRES MAY BE SLACK 4. LIGHTING FIXTURES WEIGHING 56 POUNDS OR MORE SHALL BE SUPPORTED DIRECTLY FROM THE
- STRUCTURE ABOVE BY APPROVED HANGERS. D. SUPPORT FOR SUSPENDED FIXTURES: BRACE PENDANTS AND RODS OVER 48 INCHES LONG TO LIMIT SWINGING. SUPPORT STEM-MOUNTED, SINGLE-UNIT, SUSPENDED FLUORESCENT FIXTURES WITH TWIN-STEM HANGERS. FOR CONTINUOUS ROWS, USE TUBING OR STEM FOR WIRING AT ONE POINT AND TUBING OR ROD FOR SUSPENSION FOR EACH UNIT LENGTH OF CHASSIS, INCLUDING ONE AT EACH END.
- E. SURFACE-MOUNTED LIGHT FIXTURES ATTACHED TO A CEILING GRID SHALL BE ATTACHED WITH POSITIVE CLAMPING DEVICES THAT COMPLETELY SURROUND THE SUPPORTING MEMBERS. SAFETY WIRES SHALL BE ATTACHED BETWEEN THE CLAMPING DEVICE AND THE ADJACENT CEILING HANGER OR TO THE STRUCTURE ABOVE

DIVISION 27 - COMMUNICATIONS

270500 - TELE-DATA COMMUNICATIONS

- A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE "COMMON WORK RESULTS" SECTION.
- B. MANUFACTURERS: SIEMON, ICC, LEVITON, ORTRONICS, AMP, HUBBELL OR UNIPRISE.
- STANDARDS: MATERIALS SHALL HAVE NRTL LISTING IN COMPLIANCE WITH UL910. COMPLY WITH TIA/EIA-569-A AND NFPA 70 FOR PATHWAYS AND SPACES, NECA 1, BICSI TDMM AND NFPA 70 FOR EQUIPMENT ROOM INSTALLATIONS, NECA 1, BICSI ITSIM CHAPTER 6 AND TIA/EIA-568 FOR CABLE INSTALLATIONS, TIA/EIA 568 FOR COPPER CONNECTING HARDWARE, TIA/EIA-568 AND TIA/EIA-604 FOR FIBER CONNECTING HARDWARE, TIA/EIA-J-STD-607A, BICSI TDMM AND NFPA 70 FOR GROUNDING, TIA/EIA-568B AND TIA/EIA 526-14-A FOR TESTING, TIA/EIA-606-A CLASS 2 LEVEL, UL 969 AND NFPA 70 FOR
- D. TELEPHONE/DATA ROOMS: WHERE TERMINAL BOARDS ARE INDICATED ON THE CONSTRUCTION DOCUMENTS, PROVIDE 3/4-INCH THICK INTERIOR GRADE PLYWOOD FROM FLOOR TO CEILING WITH FIRE RETARDANT PAINT ON ALL SIDES. COORDINATE CONDUIT FROM THE TELEPHONE TERMINAL BOARD (TTB) TO EXTERIOR OF BUILDING: SIZE AND ROUTE AS DICTATED BY SERVING UTILITY COMPANY, PROVIDE TTB COMMUNICATION GROUNDING BUS AS REQUIRED BY SERVING UTILITY. MINIMUM #6 AWG IN PVC CONDUIT EXTENDED, SHORTEST AND MOST DIRECT ROUTE TO GROUND BAR AT MAIN SWITCH. TERMINATE IN GROUND BAR INSTALLED ON TTB. PROVIDE MINIMUM OF TWO QUAD-PLEX POWER RECEPTACLE 6 INCHES ABOVE FINISHED FLOOR AND ADDITIONAL AS INDICATED ON DRAWINGS
- E. VOICE/DATA WORKSTATION ROUGH-INS: PROVIDE 4 INCH SQUARE, 2-1/8-INCH DEEP 1-GANG ROUGH-IN WITH 3/4-INCH CONDUIT STUBBED TO CEILING SPACE WITH A 90 DEGREE BEND AND INSULATED THROAT
- WORKSTATION OUTLET ASSEMBLIES: (MODULES SHALL BE COLOR CODED FOR SERVICE TYPE FACEPLATE/JACK COLOR SAME AS SPECIFIED IN THE WIRING DEVICES SECTION).
- 1. WALL MOUNT TELEPHONE ASSEMBLY: STAINLESS STEEL WALL MOUNT PLATE WITH FLAT, CATEGORY 6, T568A/B, RJ45 MODULE. VOICE ONLY WALL JACK ASSEMBLIES: (1) ANGLED CATEGORY 6, T568A/B, RJ45 MODULE AND (1)
- BLANK MODULE IN A MODULAR STYLE FACEPLATE. FACEPLATE SHALL HAVE CLEAR VIEW LABEL DATA ONLY WALL JACK ASSEMBLIES: (1) ANGLED CATEGORY 6, T568A/B, RJ45 MODULE AND (1) BLANK
- MODULE IN A MODULAR STYLE FACEPLATE. FACEPLATE SHALL HAVE CLEAR VIEW LABEL COVERS. COMBINATION VOICE/DATA WALL JACK ASSEMBLIES: (3) ANGLED CATEGORY 6, T568A/B, RJ45 MODULES AND (3) BLANK MODULES IN A MODULAR STYLE FACEPLATE. FACEPLATE SHALL HAVE CLEAR VIEW LABEL COVERS.

- HORIZONTAL WORKSTATION CABLING: CATEGORY 6 UNSHIELDED TWISTED PAIR (UTP) CABLE, 4 PAIR. 283100 FIRE DETECTION AND ALARM COLOR CODED, THERMOPLASTIC-INSULATED CONDUCTORS IN POLYVINYL CHLORIDE (PVC) JACKET.
- LISE PLENLIM RATED CARLE IN SPACES LISED FOR AIR HANDLING. 2. VERTICAL BACKBONE CABLING: CATEGORY 6 UNSHIELDED TWISTED PAIR (UTP) CABLE, 25 PAIR FOR RUNS BETWEEN WIRING CLOSETS AND EQUIPMENT ROOMS. FIBER OPTIC BACKBONE CABLING: FACTORY FABRICATED, JACKETED, LOW-LOSS, GLASS-TYPE,

FIBER-OPTIC, MULTIMODE, GRADED INDEX, OPERATING AT 850 AND 1300 NANOMETERS. 12 STANDS

PER CABLE, 62.5 MICRON CORE DIAMETER, 125 MICRON CLADDING, MAXIMUM ATTENUATION OF MINUS 3.75 DB/KM AT 850 NM AND 1.5 DB/KM AT 1300NM. MINIMUM MODAL BANDWIDTH OF 160 MHZ/KM AT 850 NM AND 500 MHZ/KM AT 1300 NM AND OPERATING TEMPERATURE RANGE OF MINUS 20 TO 70 DEG C. H. WORKSTATION PATCH PANELS: WORKSTATION PATCH PANELS SHALL BE CATEGORY 6 IN 24 OR 48 PORT SIZES WITH REAR WIRE MANAGEMENT AND S110 TERMINATION BLOCKS. TELEPHONE PATCH PANELS SHALL BE CATEGORY 6 IN 24 OR 48 PORT SIZES WITH REAR WIRE MANAGEMENT AND S110

TERMINATION BLOCKS. ALL PATCH PANELS SHALL BE SEPARATED IN RACKS BY FRONT CABLE.

MANAGERS (1.75 INCH FOR 24 PORT AND 3.5 INCH FOR 48 PORT). PROVIDE 110 STYLE, HINGED PUNCHDOWN BLOCKS AND 4-PAIR, CATEGORY 6 CABLES BETWEEN TELEPHONE PATCH PANEL AND 110 BLOCKS. CROSS CONNECTING BY TELEPHONE COMPANY. ALL EQUIPPED SHALL BE SELECTED AND SIZED TO ACCOMMODATE INCOMING WORKSTATION CABLES PLUS 20 PERCENT SPARE CAPACITY. FIBER BACKBONE PATCH PANELS: FIBER BACKBONE PATCH PANELS SHALL BE RACK MOUNTED PATCH PANELS IN 24 OR 48 PORT SIZES EQUIPPED TO ACCOMMODATE FIBER BACKBONE CABLES PLUS 20

PERCENT SPARE CAPACITY. PATCH PANELS SHALL HAVE QUICK-CONNECT, SIMPLEX AND DUPLEX

TYPE SC COUPLERS WITH SELF-CENTERING, AXIAL ALIGNMENT MECHANISMS WITH INSERTION LOSS

- NO MORE THAN .5 DB. J. WORKSTATION PATCH CORDS (UTP): PROVIDE 4 PAIR CABLES IN APPROPRIATE LENGTHS FOR EACH WORKSTATION PATCH PANEL PORT (USED OR UNUSED), CATEGORY 6 RATED AND TERMINATED WITH AN R.I-45 PLUG AT EACH END. CABLES TO BE ROUTED FROM WORKSTATION PATCH PANELS TO TELEPHONE PATCH PANEL ABOVE OR OWNER'S HUB EQUIPMENT BELOW. LENGTH SHALL BE LONG ENOUGH TO BE ROUTED FROM THE WORKSTATION PORT THROUGH THE FRONT CABLE MANAGER. THROUGH THE SIDE CABLE MANAGER, THROUGH THE FRONT CABLE MANAGER TO THE TELEPHONE PATCH PORT OR OWNER'S HUB PORT. ALSO, PROVIDE 6 FOOT, CATEGORY 6 RATED PATCH CORDS
- K. FIBER BACKBONE PATCH CORDS: PROVIDE DUAL FIBER CABLES IN 36 INCH OR 72 INCH LENGTHS FOR
- EACH FIBER PATCH PANEL PORT. L. WORKSTATION WIRING INSTALLATION:

FOR EACH WORKSTATION JACK AT THE USER END.

- INSTALL CABLE WITHOUT DAMAGING CONDUCTORS OR JACKET. DO NOT BEND CABLE TO A SMALLER RADIUS THAN MINIMUM RECOMMENDED BY MANUFACTURER. DO NOT EXCEED MANUFACTURER'S RECOMMENDED PULLING TENSIONS. PULL CABLES SIMULTANEOUSLY WHERE MORE THAN ONE IS BEING INSTALLED IN THE SAME RACEWAY OR AT THE SAME LOCATION. USE PULLING COMPOUND OR LUBRICANT WHERE NECESSARY. COMPOUND USED MUST NOT DAMAGE CONDUCTOR OR INSULATION. USE PULLING METHODS THAT WILL NOT DAMAGE CABLE OR RACEWAY, INCLUDING FISH TAPE, CABLE,
- ROPE. AND WIRE-CABLE GRIPS. WIRING SHALL BE A MINIMUM OF 48 INCHES FROM TRANSFORMERS AND MOTORS >= 5 HP AND MINIMUM OF 5 INCHES FROM FLUORESCENT LIGHT FIXTURES.
- UTP WIRING METHOD: EXCEPT AS OTHER WISE INDICATED, INSTALL WIRING IN EMT RACEWAY. CONCEAL RACEWAY EXCEPT IN UNFINISHED SPACES AND AS INDICATED.
- B. UTP WIRING METHOD: INSTALL WIRING ABOVE ACCESSIBLE CEILINGS EXPOSED AND SUPPORTED TO STRUCTURE WITH ERICO CABLE CAT OR BLINE 2 INCH WIDE J HOOKS SUPPORTED TO STRUCTURE EVERY 30 INCHES TO 60 INCHES. INSTALL ALL OTHER WIRING IN EMT CONDUIT CONCEALED. CONCEAL RACEWAY EXCEPT IN UNFINISHED SPACES AS INDICATED. UTP WIRING METHOD: CABLE TRAY AS SPECIFIED AND EMT RACEWAY CONCEALED IN ALL OTHER END OF SECTION

AREAS. CONCEAL RACEWAY EXCEPT IN UNFINISHED SPACES AND AS INDICATED.

- FIBER BACKBONE CABLING METHOD: INSTALL IN MINIMUM 4 INCH EMT WITH BUSHED ENDS AND MINIMUM 3-COMPARMENT INNER DUCT RATED FOR PLENUM SPACES. WIRING IN WIRE CLOSETS AND CABINETS: INSTALL CONDUCTORS PARALLEL TO AND AT RIGHT ANGLES TO WALLS. BUNDLE, LACE, AND TRAIN THE CONDUCTORS TO TERMINAL POINTS WITH NO EXCESS. USE WIRE DISTRIBUTION SPOOLS AT POINTS WHERE CABLES ARE FANNED OR CONDUCTORS TURNED. CONNECT CONDUCTORS THAT ARE TERMINATED, SPLICED, OR INTERRUPTED
- TO TERMINAL BLOCKS. LABEL EACH TERMINAL WITH DESIGNATIONS APPROVED IN ACCORDANCE WITH FIA/TIA STANDARDS 5. CONDUCTOR TERMINATIONS: TERMINATE CONDUCTORS OF CABLES ON TERMINAL BLOCKS, PATCH

PANELS AND DEVICES USING TOOLS RECOMMENDED BY MANUFACTURER.

- M. IDENTIFICATION:
- 1. CABLE/WORKSTATION LABELS: USE A UNIQUE 5-SYLLABLE ALPHANUMERIC DESIGNATION. FIRST SYLLABLE IS TO IDENTIFY AND LOCATE THE WIRING CLOSET OR EQUIPMENT ROOM WHERE THE CABLE ORIGINATES. SECOND SYLLABLE IS TO IDENTIFY THE RACK NUMBER. THIRD SYLLABLE IS TO IDENTIFY THE PATCH PANEL OR TERMINAL BLOCKS TO WHICH THE CABLE TERMINATES. FOURTH AND FIFTH SYLLABLES ARE TO IDENTIFY THE PATCH PANEL PORT NUMBER. EXAMPLE: J2A33 (WIRING CLOSET J, RACK 2, PATCH PANEL A, PORT NUMBER 33). LABEL CABLES WITHIN WORKSTATION OUTLET BOXES, WHERE ACCESSIBLE IN CABINETS OR JUNCTION BOXES, AT REAR OF PATCH PANELS, AT TERMINATION BLOCKS AND ELSEWHERE AS INDICATED. PLACE LABELS WITH 4 INCHES OF CABLE TERMINATION POINT. CABLE LABELS SHALL BE VINYL OR VINYL CLOTH, SELF ADHESIVE, WRAPAROUND MARKERS WITH PREPRINTED NUMBERS AND LETTERS. LABEL EACH WORKSTATION JACK ON WORKSTATION FACEPLATE UNDER CLEAR VIEW COVERS WITH PREPRINTED LABEL
- 2. PATCH PANEL LABELING: LABEL EACH WORKSTATION PANEL WITH SELF ADHESIVE PREPRINTED SINGLE LETTER DESIGNATION (A THROUGH Z). LABEL PATCH PANELS USED AS A PATCH TO TELEPHONE CROSS CONNECT BLOCKS AS "TELEPHONE PATCH." IF MORE THAN ONE TELEPHONE PATCH PANEL, INCLUDE LETTER DESIGNATION. EXAMPLE: TELEPHONE PATCH A
- RACK LABELING: LABEL EACH RACK WITH ENGRAVED PLASTIC LAMINATE NUMBER DESIGNATION. EXAMPLE: RACK 1. WIRING CLOSET/EQUIPMENT ROOM: LABEL WIRING CLOSET WITH ENGRAVED PLASTIC LAMINATE LETTER DESIGNATION. PLACE LABEL MINIMUM 6 FEET ABOVE FINISHED FLOOR IN VISIBLE LOCATION WITH MINIMUM 2 INCH HIGH LETTERS.
- EXAMPLE: WIRING CLOSET J. CABLE SCHEDULE/MAP: POST AT A PROMINENT LOCATION IN EACH EQUIPMENT ROOM. LIST INCOMING AND OUTGOING CABLES AND THEIR DESIGNATIONS, ORIGINS, AND DESTINATIONS. PROTECT WITH A RIGID FRAME AND CLEAR PLASTIC COVER. OBTAIN PRINTED FLOOR PLAN FROM ENGINEER AND INDICATE EACH WORKSTATION JACK, RACK, AND CLOSET DESIGNATIONS. SEND COPY TO ENGINEER AND INCLUDE WITH AS-BUILT MANUALS/DRAWINGS
- N. FIELD QUALITY CONTROL:
- 1. TESTING AGENCY: PROVIDE A QUALIFIED NRTL, BICSI CERTIFIED TESTING AGENCY TO PERFORM TESTS AND
- 2. PERFORM TESTS AND INSPECTIONS AS FOLLOWS:
- A. VISUALLY INSPECT UTP AND OPTICAL FIBER CABLE JACKET MATERIALS FOR NRTL CERTIFICATION MARKINGS. INSPECT CABLING TERMINATIONS IN COMMUNICATIONS EQUIPMENT ROOMS FOR COMPLIANCE WITH COLOR-CODING FOR PIN ASSIGNMENTS, AND INSPECT CABLING CONNECTIONS FOR COMPLIANCE WITH TIA/EIA-568-B.1.

B. VISUALLY CONFIRM CATEGORY 6, MARKING OF OUTLETS, COVER PLATES, OUTLET/CONNECTORS, AND PATCH

- C. VISUALLY INSPECT CABLE PLACEMENT, CABLE TERMINATION, GROUNDING AND BONDING, EQUIPMENT AND PATCH CORDS, AND LABELING OF ALL COMPONENTS. UTP PERFORMANCE TESTS: TEST FOR EACH OUTLET AND MULTI-
- OUTLET ASSEMBLY. PERFORM THE FOLLOWING TESTS ACCORDING TO TIA/EIA-568-B.1 AND TIA/EIA-568-B.2:

LENGTH (PHYSICAL VS. ELECTRICAL, AND LENGTH REQUIREMENTS).

- INSERTION LOSS. NEAR-END CROSSTALK (NEXT) LOSS
- POWER SUM NEAR-END CROSSTALK (PSNEXT) LOSS.
- EQUAL-LEVEL FAR-END CROSSTALK (ELFEXT) POWER SUM EQUAL-LEVEL FAR-END CROSSTALK (PSELFEXT).
- 9) PROPAGATION DELAY.
- D. TEST UTP BACKBONE COPPER CABLING FOR DC LOOP RESISTANCE, SHORTS, OPENS, INTERMITTENT FAULTS, AND POLARITY BETWEEN CONDUCTORS. TEST OPERATION OF SHORTING BARS IN CONNECTION BLOCKS. TEST CABLES AFTER TERMINATION BUT NOT CROSS-CONNECTION. TEST INSTRUMENTS SHALL MEET OR EXCEED APPLICABLE REQUIREMENTS IN TIA/FIA-568-B 2 PERFORM TESTS WITH A TESTER THAT COMPLIES WITH PERFORMANCE REQUIREMENTS IN "TEST INSTRUMENTS (NORMATIVE)" ANNEX, COMPLYING WITH MEASUREMENT ACCURACY SPECIFIED IN "MEASUREMENT ACCURACY (INFORMATIVE)" ANNEX. USE ONLY TEST CORDS AND ADAPTERS THAT ARE QUALIFIED BY TEST EQUIPMENT MANUFACTURER FOR CHANNEL OR LINK TEST CONFIGURATION.
- E. OPTICAL FIBER CABLE TESTS: 1) TEST INSTRUMENTS SHALL MEET OR EXCEED APPLICABLE REQUIREMENTS IN TIA/EIA-568-B.1. USE ONLY TEST
- CORDS AND ADAPTERS THAT ARE QUALIFIED BY TEST EQUIPMENT MANUFACTURER FOR CHANNEL OR LINK TEST CONFIGURATION 2) LINK END-TO-END ATTENUATION TESTS:
- A) HORIZONTAL AND MULTIMODE BACKBONE LINK MEASUREMENTS: TEST AT 850 OR 1300 NM IN 1 DIRECTION ACCORDING TO TIA/EIA-526-14-A, METHOD B, ONE REFERENCE JUMPER.

REPORT OF TESTS AND INSPECTIONS: PREPARE A WRITTEN RECORD OF INSPECTIONS, TESTS, AND DETAILED TEST

- B) ATTENUATION TEST RESULTS FOR BACKBONE LINKS SHALL BE LESS THAN 2.0 DB. ATTENUATION TEST RESULTS SHALL BE LESS THAN THAT CALCULATED ACCORDING TO EQUATION IN TIA/EIA-568-B.1.
- 3) OPTICAL FIBER CABLE PERFORMANCE TESTS: PERFORM OPTICAL FIBER END-TO-END LINK TESTS ACCORDING TO TIA/EIA-568-B.1 AND TIA/EIA-568-B.3. 3. RETESTING: CORRECT DEFICIENCIES INDICATED BY TESTS AND COMPLETELY RETEST WORK AFFECTED BY SUCH
- DEFICIENCIES. VERIFY THAT THE TOTAL SYSTEM MEETS THE SPECIFICATIONS AND COMPLIES WITH APPLICABLE STANDARDS. CONTRACTOR WILL BE REIMBURSED FOR REPLACEMENT OF EXISTING CABLE UPON APPROVAL OF
- RESULTS IN THE FORM OF A TEST LOG. TAG ALL CABLES, TERMINAL BLOCKS, OUTLETS, AND OTHER COMPONENTS FOR WHICH TESTS HAVE BEEN SATISFACTORILY COMPLETED.

ACCEPTANCE: THIS IS TO BE A CERTIFIED EIA/TIA 568 CATEGORY 6 DATA SYSTEM. SUBMIT SYSTEM CERTIFICATES PRIOR TO FINAL ACCEPTANCE. DIVISION 28 - ELECTRONIC SAFETY AND SECURITY

- A. SUBMIT SHOP DRAWINGS IN ACCORDANCE WITH THE "COMMON WORK RESULTS" SECTION.
- B MANUFACTURER: SIMPLEX
- COMPLIANCE: FIRE ALARM DESIGN SHALL BE COMPLIANCE WITH INTERNATIONAL BUILDING CODES, NFPA 72, NFPA 13 AND NFPA 90A AND APPLICABLE GOVERNMENT AGENCY CODES.
- CONTROL PANEL TO BE INTELLIGENT ADDRESSABLE. WITH 150 PERCENT POWER SUPPLY BATTERY BACKUP AND INTEGRAL
- DACT DIALER. INSTALL SEMI-FLUSH. MANUAL STATIONS: INTELLIGENT ADDRESSABLE NON-CODED DOUBLE ACTION. MOUNT SEMIFLUSH IN RECESSED BACK BOXES. SURFACE INSTALLATIONS SHALL UTILIZE SURFACE BOX PROVIDED BY FIRE ALARM MANUFACTURER AND WIREMOLD
- AND SHALL COMPLY WITH ADA REQUIREMENTS. INSTALL IN CEILING. STROBES SHALL BE SYNCHRONIZED. SURFACE INSTALLATIONS SHALL UTILIZE SURFACE BOX PROVIDED BY FIRE ALARM MANUFACTURER AND WIREMOLD 700. BOX BY WIREMOLD NOT ACCEPTABLE. PHOTOELECTRIC SMOKE DETECTORS: INTELLIGENT ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR TO EMPLOY LIGHT

SCATTERING PRINCIPLE OF OPERATION. SMOKE DETECTOR SHALL ALARM WHEN SMOKE OBSCURATION LEVEL IN THE

HORN/STROBE UNITS: COMBINATION FLUSH MOUNT TYPE WITH WHITE FINISH. STROBE UNITS TO BE XENON STROBE TYPE

DETECTION CHAMBER REACHES THE 3 PERCENT PER FOOT LEVEL. DO NOT MOUNT SMOKE DETECTORS ANY CLOSER THAN 60 INCHES FROM HVAC AIR DIFFUSERS.

700 RACEWAY, BOX BY WIREMOLD NOT ACCEPTABLE.

- H. HEAT DETECTORS: INTELLIGENT ADDRESSABLE.
- FIXED TEMPERATURE TYPE, 135 DEG F RATE OF RISE TYPE, 135 DEG F. DUCT DETECTION (INDUSTRIAL, COMMERCIAL, EDUCATIONAL AND RETAIL): INTELLIGENT ADDRESSABLE PHOTOELECTRIC WITH SAMPLING TUBES (1) LOCATE IN SINGLE OR COMBINED RETURN AIR SYSTEMS GREATER THAN 2000 CFM UPSTREAM OF ANY FILTERS, AND (2) FOR RETURN SYSTEMS SERVING MORE THAN ONE FLOOR AND GREATER THAN 15,000 CFM, ALSO LOCATE IN RETURN AIR SYSTEM AT EACH STORY UPSTREAM OF THE CONNECTION BETWEEN THE RETURN AIR RISER AND ANY AIR DUCTS OR PLENUMS. COMPLY WITH IMC SECTION 606 FOR LOCATIONS: COMPLY WITH NFPA 72 FOR INSTALLATIONS. PROVIDE REMOTE TEST STATION ON WALL ADJACENT EACH UNIT, PROVIDE FAN SHUTDOWN RELAY WITHIN 3 FEET OF AIR
- HANDLER STARTER INTEGRATED WITH FACP FOR SHUTDOWN OF AIR HANDLER UNDER GENERAL ALARM. MAGNETIC DOOR HOLDERS SHALL BE FLOOR OR WALL MOUNTED AS INDICATED COMPLETE WITH MATCHING DOOR PLATE.
- ELECTROMAGNET: REQUIRES NO MORE THAN 3 W TO DEVELOP 25 LBF HOLDING FORCE. RATING: 120 VAC. MAIN VALVE SUPERVISORY SWITCHES SHALL BE FURNISHED BY OTHERS AND WIRED BY ELECTRICAL CONTRACTOR.
- L. FLOW AND TAMPER SWITCHES SHALL BE FURNISHED AND INSTALLED BY OTHERS AND WIRED BY ELECTRICAL
- BE MINIMUM #16 AWG FA CONDUCTOR ENCLOSED IN EMT. PROVIDE A LETTER OF VERIFICATION THAT THE FIRE ALARM SYSTEM HAS BEEN COMPLETED AND TESTED IN ACCORDANCE WITH NFPA PROCEDURES BY MANUFACTURER'S REPRESENTATIVE WITH AN ATTACHED COPY OF THE AHJ'S ACCEPTANCE

M. NOTIFICATION CIRCUITS SHALL BE WIRED CLASS A. INITIATION CIRCUITS SHALL BE WIRED CLASS B. CONDUCTORS SHALL

O. TRAINING: TRAIN OWNER'S PERSONNEL A MINIMUM OF 4 HOURS. SCHEDULE ONE WEEK IN ADVANCE.

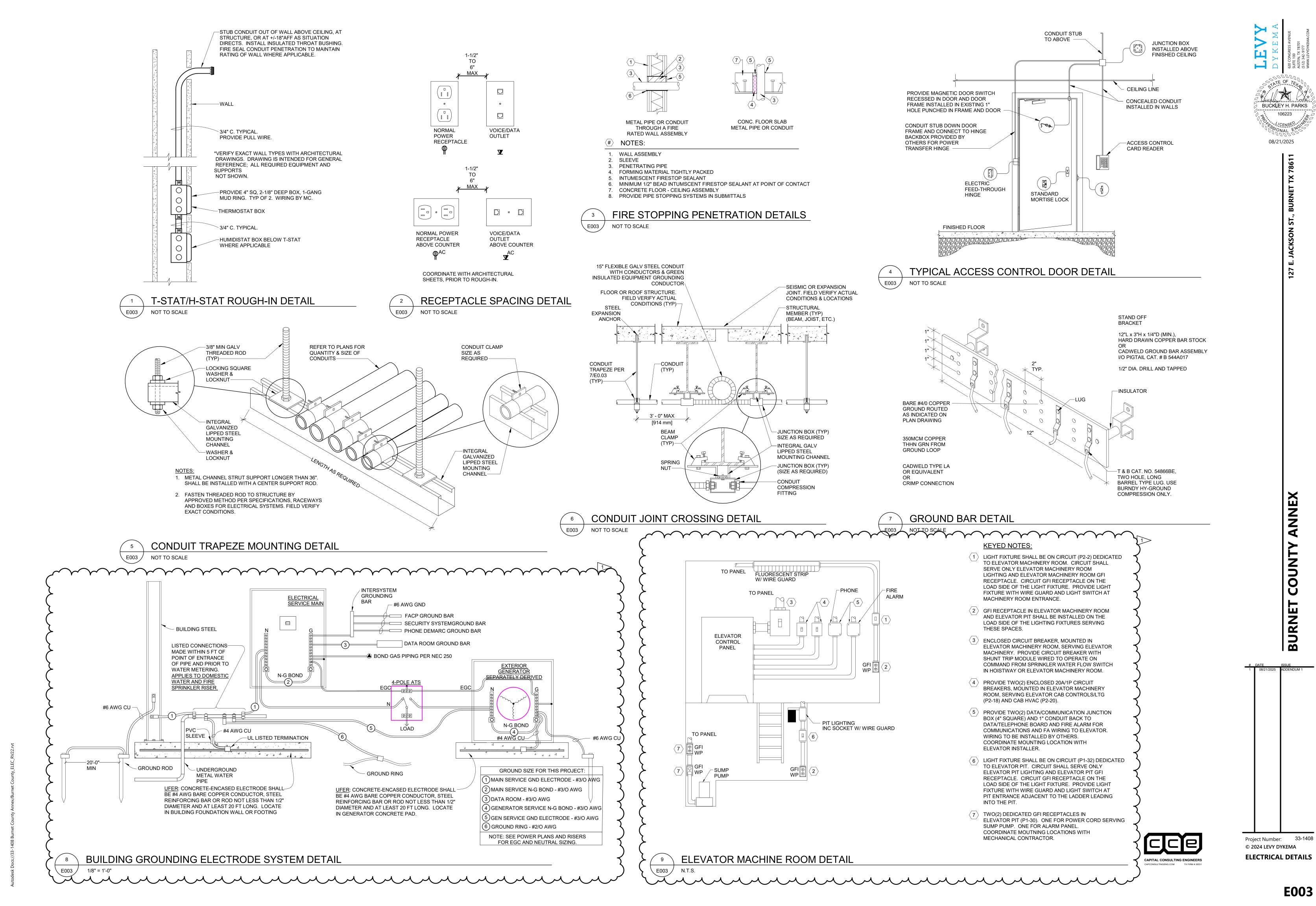
REPORT. THE LETTER SHALL BE INCLUDED WITH AS-BUILT MANUALS.



BUCKUEY H. PARKS

Project Number: 33-1408 © 2024 LEVY DYKEMA

ELECTRICAL



E003

、E004 /

ELECTRICAL ONE-LINE DIAGRAM

NOT TO SCALE

LIGHTING FIXTURE SCHEDULE

1. UON, ALL LIGHT FIXTURE SPECIFICATIONS AND FINISHES SHALL BE SELECTED AND APPROVED BY THE ARCHITECT AND TENANT PRIOR TO PURCHASE AND

INSTALLATION. SUBMITTALS SHALL INCLUDE
2. ACTUAL PAINT FINISH COLOR SAMPLE AND ARCHITECTURAL COLOR PAINT SELECTION BROCHURE FOR OPTIONS.

3. SEE ARCHITECTURAL SHEETS FOR MOUNTING HEIGHT AND DETAILS.

4. EMERGENCY FIXTURES SHALL HAVE 90-MINUTE BATTERY PACK/INVERTER PACK INSTALLED. 5. UON, VERIFY LAMP COLOR TEMPERATURE REQUIREMENTS (KELVIN) WITH THE OWNER AND ARCHITECT PRIOR TO PURCHASE.

6. UON, CONTROLS PRICING AND LIGHTING FIXTURE PRICING SHALL BE SEPERATE.

UON, WHEN SUBSTITUTING FIXTURES, CONTRACTOR SHALL FURNISH BREAK-OUT PRICING OF BOTH THE SPECIFIED AND SUBSTITUTE FIXTURES FOR COMPARISO...

		FIXTURE	MOUNTING	LAI	MP	FIXTURE	FIXTURE	NOTES
TYPE	MFGR	CATALOG NUMBER	TYPE	LAMP	NO.	VOLTAGE	WATTAGE	NOTES
L1	WILLIAMS	BAR-22-L30-835-DIM-UNV & BAR-22-L30-835-EM/10W-DIM-UNV	LAY IN	LED	1	120-277V	23	4
L1A	WILLIAMS	BAR-22-L20-835-DIM-UNV & BAR-22-L20-835-EM/10W-DIM-UNV	LAY IN	LED	1	120-277V	23	4
L2	COOPER	75S-2-LL25-835-DRV-UNV	SURFACE	LED	1	120-277V	18	3
L3	TECH	SLF-2-L13-935-HIA-DIM-UNV	WALL	LED	1	120-277V	10	3
L4	WILLIAMS	BAR-24-L40-835-DIM-UNV & BAR-24-L40-835-EM/10W-DIM-UNV	LAY IN	LED	1	120-277V	31	4
L5	WILLIAMS	6DR-TL-L20-835-EM10W-DIM-UNV-OW-OF-CS (EM MODE)	RECESSED	LED	1	120-277V	10	
L6	WILLIAMS	LRX4-4-L8-835-BMA-DIM-UNV	WALL	LED	1	120-277V	27	3
L7E	BEGA-US	LGL-FCW-25-SV-30-N-XX-EM	SURFACE	LED	1	120-277V	25	5
X	COOPER	EU-X-7-X-R	_	LED	1	120-277V	5	

		SPECIF ELBOAR		ONS	PHA			20		MOUN	SURE	RE	E ONE- CESSE PE 1		DIAGRA	ΑM		NOT	ES (NT)):				
:T /P. —	LOAD NAME	NT	СВ	Р		IRE SIZ		C SIZE (3/4" UON)	CKT NO	,	4	E	В		С	CKT NO	C SIZE (3/4" UON)		VIRE SI N GND		Р	СВ	NT	LOAD NAME
r. —	LIGHTING CONTACTOR		20	1	#12	#12	Х		1	500	360					2	~		W12/	#12	1	80		ARESTROOMS V
	1ST FLR LIGHTING		20	1	#10	#10	Х		3			954	0			4				_	1	20		SPARE
	EXTERIOR LIGHTING		20	1	#12	#12	Х		5					50	0	6					1	20		SPARE
	CONF. ROOM		20	1	#12	#12	Х		7	1080	360					8		(X)	#12	/# /\	1/	1/2	<u>بر</u>	BRKAM COUNTER
	HALL CORR. RECEPT.		20	1	#12	#12	Х		9			900	1000			10		X	#12	#12	1	20		REFRIGERATOR
	BRK RM CORR. RECEPT.		20	1	#12	#12	Х		11					1260	1260	12		Х	#12	#12	+	20		OFFICE 123
	WORKSPACE WRKSTN		20	1	#12	#12	X		13	720	180					14		Х	#12	#12	1	20		PRINTER
	WORKSPACE WRKSTN		20	1	#12	#12	X		15			720	180			16	~	~	¥42/	#12	1	20		PRÍNTER -
	EF-1-1 thru EF-1-3		20	1	#12	#12	X		17					360	0	18					1	20		SPARE
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	LIGHTING							2300			1	00.009	%			2300			Т	OTAL	CON	NECT	ED L	OAD: 94278
	MOTORS							39627			1	00.009	%			39627	7		Т	OTAL	CON	NECT	ED A	MPS: 262 A
	RECEPTACLES							40850			6	62.24%	6			25425	5	+						
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MODEL TYPE:	PANELBOA	ARD		PH/	SE:	3			ENC	LOSU	RE:	TYPE	Ξ1											
TYPE OF MAIN:	MLO			WIF	E:	4				TURES														
LOAD NAME		NT	СВ	Р		RE SI GND		C SIZE (3/4" UON)	CKT NO		A	I	В	(С	CKT NO	C SIZE (3/4" UON)		IRE S		Р	СВ	NT	LOAD NAME
2ND FLR LIGHTING			20	1	#10	#10	×		1	703	211					2		X	#12	#12	1	20		ELEVATOR ROOM LTG & GFCI
BREAKRM & RR'S GFCI			20	1		#12	-		3	700	211	900	3307			4		X	#8	#8	2	35		CU-1-1
OFFICE RECEPTS			20			#12	_		5			300	3301	1620	3307	6			#0					
CORR & STORAGE RECER	PTS		20	1		#12	_		7	1080	2600			1020	3307	8		X	#10		2	25		FCU-2-1
CONF. RM RECEPTS	.5		20	1		#12	-		9	1000	2000	1440	2600			10			.,					
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FRIDGE			20	1		#12	_		13	1000	3754			1110	0.01	14	~\		7-	1 100	_	رت ا	~	
SYSTEM FURNITURE			20	1		#12			15			360	720			16	Y .	Х	#12	#12	1	20		LAB QUAD
SYSTEM FURNITURE			20	1		#12			17					360	1000	18		Х	#12	#12	1	20		ELEVATOR CAB LTG
SYSTEM FURNITURE			20	1	#12	#12	Х		19	360	1500					20		Х	#12	#12	1	20		ELEVATOR CAB HVAC
SYSTEM FURNITURE			20	1	#12	#12	Х		21			360	720			1/2		Х	#12	#12	1	20		LAB QUAD
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PANEL 'PG' VIA 'ATS'			100	3	#1	#4	Х		37	7022	2000					38		Х	#10	#10	3	40		ELEVATOR
									39			14032	2000			40								
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		•							•	20	951	26	439	27	004		[]		ス		人			
										17	5 A	22	7 A	23	2 A									
LOAD CLASSIFICATION							CON	NECTED	LOAD		DEMA	ND FA	CTOR	ı	ESTIM	ATED	DEMAND						PAN	NEL TOTALS
EQUIPMENT								8500				100.00°	%			8500								
LIGHTING								797				100.00°	%			797				TOT	AL C	ONNE	CTE	D LOAD: 74394
MOTORS								33707				100.00°	%			3370	7			TOT	AL C	ONNE	CTE	D AMPS: 206 A
RECEPTACLES								31390				65.93%	6			2069	5							
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LOCATION: MANUFACTURER: MODEL TYPE: TYPE OF MAIN:	ELEV. MACH. F SEE PANELBOARD MCB	KIVI	VOI PH					MOL	RATIN JNTING LOSU TURES	G: RE:		ONE-LI ESSED 1		AGRAN	VI	NOTES	5 (NI):								
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SERVER RM LIGHTING		20	1	#12	#12	Х		1	62	2750					2		X	#10	#10	1	30		SERVER	RM 5-30R	
SERVER RM 5-30R		30	1	#10	#10	Х		3			2750	2750			4		X	#10	#10	1	30		SERVER	RM 5-30R	
SERVER RM 5-30R		30	1	#10	#10	Х		5					2750	1100	6		X	#12	#12	2	20		SERVER	RM 6-20R	
SERVER RM 5-30R		30	1	#10	#10	Х		7	2750	1100					8	-									
SERVER RM 6-20R		20	2	#12	#12	Х		9			1100	180			10		X	#10	#12	1	30		SERVER	RM 5-30R	
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SERVER RM 5-30R		30	1		#10			13	180	180					14		X	#10	#12	1	30			RM 5-30R	
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FCU & CU-IT-IVIAIIN		50	2	#6	#10	X		39 41			3330		3536	3536			X :		#0	2				UI-II-BACKUP	
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RECEPTACLES							19410				75.76%				14705								AMPS:		
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																	-						D AMPS		

GENERAL NOTES

- A. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL ELECTRICAL EQUIPMENT SHOWN AS NEW, UON.
- B. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL COSTS ASSOCIATED WITH THE INSTALLATION OF THE NEW ELECTRICAL SERVICE WITH UTILITY AND INCLUDE IN BID.
- C. PROVIDE ARC FLASH LABELING FOR ALL NEW EQUIPMENT AS REQUIRED PER NEC ARTICLE 110.16 AND NFPA-70E.
- D. ALL CONDUCTORS SHALL BE COPPER TYPE THWN-2 (EXTERIOR).
- E. ALL GROUNDING SHALL BE IN ACCORDANCE WITH NEC REQUIREMENTS.
- F. REFER TO SPECIFICATIONS, SCHEDULES, DETAILS AND GENERAL NOTES SHEET FOR ADDITIONAL SITE REQUIREMENTS.

SHEET WORK NOTES

- 1. UNLESS SUPPLIED BY THE UTILITY COMPANY, THE FAULT CURRENT LEVEL SHALL BE DETERMINED FROM TABLE 1 "SHORT-CIRCUIT CURRENTS AVAILABLE FROM VARIOUS SIZE TRANSFORMERS" (BASED ON WORST CASE IMPEDANCE) IN BUSSMANN'S ELECTRICAL PROTECTION HANDBOOK.
- 2. NEW METER SOCKET PER UTILITY REQUIREMENTS. METER SHALL BE INSTALLED ADJACENT TO DISTRIBUTION ENCLOSURE AS SHOWN.
- 3. EXTERIOR LUMINAIRES SHALL BE SWITCHED BY A CONTACTOR CONTROLLED BY A 24 HOUR, 7 DAY ASTRONOMICAL TIME CLOCK WITH HOLIDAY SCHEDULING IN CONJUNCTION WITH A ROOF MOUNTED PHOTOCELL. CONTACTOR AND TIME CLOCK TO BE MOUNTED ADJACENT TO PANEL.

- OWNER PROVIDED, OWNER INSTALLED GENERATOR. COORDINATE THE FOLLOWING WITH OWNER PRIOR TO ROUGH-IN:
- A. GENERATOR MOUNTING LOCATION. B. BLOCK HEATER CONDUIT AND CONDUCTORS, AS REQUIRED. C. REMOTE ANNUNCIATOR MOUNTING LOCATION AND CONDUIT
- REQUIREMENTS.

D. CONDUIT REQUIREMENTS BETWEEN 'ATS', REMOTE ANNUNCIATOR AND EPO. E. 100A/208V/3PH/4W NON-FUSED SAFETY DISCONNECT SWITCH LOCATION WITHIN SIGHT OF GENERATOR. F. GENERATOR PAD, IF REQUIRED.

CAPCONSULTINGENG.COM TX FIRM # 26531

BUCKUEY H. PARKS 106223

08/21/2025

Project Number: 33-1408 © 2024 LEVY DYKEMA **ELECTRICAL** LIGHTING PLANS



L7E /5

WOMEN'S

STAIR 1

WORKSPACE

200

GENERAL NOTES

- A. REFER TO SPECIFICATIONS, SCHEDULES, DETAILS AND GENERAL NOTES SHEET FOR ADDITIONAL LIGHTING INSTALLATION REQUIREMENTS.
- B. CONTRACTOR SHALL COORDINATE LUMINAIRE LOCATIONS WITH THE ARCHITECTURAL ELEVATIONS AND RCP PRIOR TO INSTALLATION. VERIFY LOCATIONS AND MOUNTING METHODS AND MATERIALS THAT ARE UNCLEAR PRIOR TO ORDERING OR INSTALLING LUMINAIRES.
- C. CIRCUIT NUMBER AND FIXTURE TAG SHOWN ADJACENT TO EACH
- D. CIRCUIT EXIT SIGNS (UNSWITCHED) WITH THE ADJACENT

LIGHTING IN THE ROOM. **#** SHEET WORK NOTES

1. UON, CIRCUIT ALL LIGHTING IN THIS AREA TO PANEL 'P1'. 2. UON, GRCHTALL HONTING IN THIS AREA TO PANEL 'P2'

3. LUMINAIRES SHOWN HATCHED OR TAGGED "xE" AND ALL EXIT SIGNS SHALL BE PROVIDED WITH INTEGRAL BATTERY PACKS FOR 90 MIN OF EMERGENCY OPERATION. PROVIDE WITH VISIBLE

- SWITCH-LEG TO SERVE LUMINAIRE.
- 5. LUMINAIRES SHALL BE SWITCHED BY A CONTACTOR CONTROLLED BY A 24 HOUR, 7 DAY ASTRONOMICAL TIME CLOCK WITH HOLIDAY SCHEDULING. CONTACTOR AND TIME CLOCK TO PROVIDE SWITCH MOUNTED DUAL TECHNOLOGY OCCUPANCY

SENSOR WITH INTEGRAL ON/OFF CONTROL SWITCH AND DUAL

LIGHTING CONTROLS SYMBOLS LEGEND

- \$ os WALL MOUNTED OCCUPANCY SENSOR (DUAL TECH)
- \$ vs | WALL MOUNTED VACANCY SENSOR WITH DIMMING
- CEILING MOUNTED OCCUPANCY SENSOR (DUAL TECH)
- CEILING MOUNTED VACANCY SENSOR WITH DIMMING
- CORNER MOUNTED OCCUPANCY SENSOR (DUAL TECH)
- CORNER MOUNTED VACANCY SENSOR WITH DIMMING

MEN'S

RESTROOM

204

3840

38,40,42

STORAGE/

MECH.

11

22

PG-9,11 PG-4

ROOM 210

—11

ELECTRICAL POWER PLAN-SECOND FLOOR

\E301A /

3/16" = 1'-0"

ELEV. SHAFT

205

WOMEN'S

RESTROOM

203

BREAKROOM

OPEN WORKSPACE

GENERAL NOTES

- A. REFER TO SPECIFICATIONS, SCHEDULES, DETAILS AND GENERAL NOTES SHEET FOR ADDITIONAL ELECTRICAL EQUIPMENT AND SYSTEM INSTALLATION REQUIREMENTS.
- B. CONTRACTOR SHALL PROVIDE POWER TO ALL ITEMS SHOWN FROM THE PANEL AND CIRCUIT NUMBERS THAT ARE SHOWN ADJACENT TO THE LOAD (RECEPTACLE, DISCONNECT, JBOX, EQUIPMENT CONNECTION POINT, ETC). SIZE CIRCUIT PER PANEL
- C. EC'S SCOPE INCLUDES RACEWAY INFRASTRUCTURE FOR ALL ITEMS SHOWN ON THE SPECIAL SYSTEMS PLANS. RACEWAY REQUIREMENTS ARE DEFINED IN SPECIFICATION NOTES AND DETAILS, BUT SHALL BE FIELD VERIFIED BEFORE WORK.
- D. ALL IT CABLING, JACKS, EQUIPMENT RACKS, A/V AND NETWORKING EQUIPMENT WILL BE PROVIDED AND INSTALLED BY OTHERS. EC RESPONSIBLE FOR ALL ROUGH IN WORK AND
- E. COORDINATE TELECOMMUNICATIONS INFRASTRUCTURE REQUIREMENTS WITH OWNER'S IT REPRESENTATIVE PRIOR TO
- 1. UON, ALL CIRCUITS SHOWN IN THIS AREA WILL BE FED FROM
- 2. UON, ALL CIRCUITS SHOWN IN THIS AREA WILL BE FED FROM
- 3. TV MOUNTED ON WALL AT THIS LOCATION. PROVIDE (1) CHIEF PAC525 BOX BEHIND TELEVISION. (1) CHIEF BOX SHALL HAVE (1) QUAD AND (2) DATA DROPS WITH (2) 1-1/2" CONDUITS TO ABOVE ACCESSIBLE CEILING. COORDINATE ELEVATION WITH ARCHITECT AND INSTALLATION WITH TELEVISION BLOCKING AND MOUNTING EQUIPMENT. COORDINATE DETAILS WITH AV CONTRACTORS
- 4. PROVIDE ONE 2" CONDUIT (WITH PULL STRING) FROM THIS LOCATION TO EXTERIOR COMMUNICATION JUNCTION BOX. REFER TO ARCHITECTURAL PLANS TO DETERMINE CONDUIT RUN LENGTHS AND ROUTING. COORDINATE EXACT TERMINATION POINT WITH COMMUNICATIONS CONTRACTORS.
- LOCATION TO SECOND FLOOR DATA CLOSET. REFER TO ARCHITECTURAL PLANS TO DETERMINE CONDUIT RUN LENGTHS AND ROUTING. COORDINATE EXACT TERMINATION POINT WITH
- ISOLATED GROUND CONDUCTOR BONDED TO THE BUILDING
- MOUNTING COMMUNICATIONS EQUIPMENT ON ALL SERVER RM WALLS. WIDTH OF PANEL SHALL BE COORDINATED WITH INFORMATION TECHNOLOGIES CONTRACTOR. PAINT TO MATCH
- THIS LOCATION FOR BRANCH CIRCUIT AND DATA/VOICE TO SERVE SYSTEM FURNITURE THAT IS PROVIDED WITH INTEGRAL RECEPTACLES. PROVIDE COVER PLATE WITH ANGLE CONNECTOR AND FLEXIBLE METAL CONDUIT (FMC) FROM EACH JUNCTION BOX IN WALL TO CONNECTION POINT ON FURNITURE, PROVIDE POWER CONDUCTORS, AND MAKE ALL ELECTRICAL TERMINATIONS. COORDINATE JUNCTION BOX LOCATION AND INSTALLATION OF CONDUCTORS WITH FURNITURE PROVIDER. COORDINATE CIRCUIT COUNT WITH FURNITURE PRIOR TO ROUGH-IN. PROVIDE (4) DEDICATED CIRCUITS ACROSS A MAXIMUM OF (8) WORKSTATIONS. PROVIDE DEDICATED NEUTRAL AND GROUND WITH EACH CIRCUIT. PROVIDE CREDIT TO TENANT IF CIRCUIT COUNT IS LESS THAN 4. PROVIDE 1-1/2"
- COMMUNICATIONS CONTRACTOR. RECEPTACLE SHALL BE MOUNTED TO OWNER FURNISHED, OWNER INSTALLED LADDER
- 11. PROVIDE NEMA 6-20R. COORDINATE INSTALLATION WITH COMMUNICATIONS CONTRACTOR. RECEPTACLE SHALL BE MOUNTED TO OWNER FURNISHED, OWNER INSTALLED LADDER RACK ABOVE TELECOM RACK. COORDINATE FINAL LOCATIONS
- 12. ENCLOSED CIRCUIT BREAKER WITH LOTO PROVISIONS, SERVING ELEVATOR POWER UNIT. CIRCUIT BREAKER WITH SHUNT TRIP MODULE WIRED TO OPERATE ON COMMAND FROM SPRINKLER WATER FLOW SWITCH IN HOISTWAY OR ELEVATOR MACHINERY

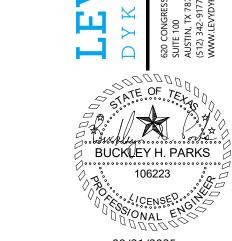
BUCKUEY H. PARKS 106223

08/21/2025

Project Number: 33-1408 © 2024 LEVY DYKEMA **ELECTRICAL POWER PLANS**

CAPITAL CONSULTING ENGINEERS

CAPCONSULTINGENG.COM TX FIRM # 2653



SHEET WORK NOTES

A. REFER TO SPECIFICATIONS, SCHEDULES, DETAILS AND

B. REFER TO ELECTRICAL EQUIPMENT SCHEDULE FOR DISCONNECT AND CONTROLS REQUIREMENTS.

PROVIDE NEUTRAL AND GROUND, U.N.O.

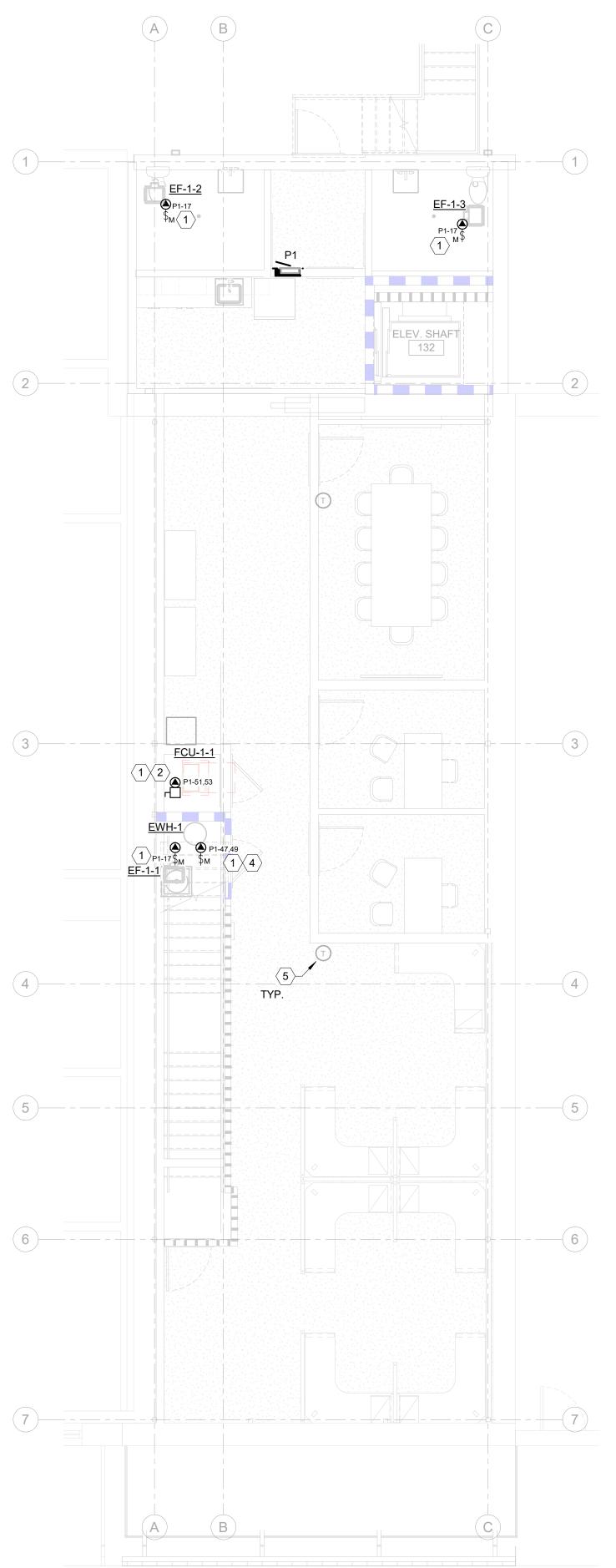
GENERAL NOTES SHEET FOR ADDITIONAL ELECTRICAL EQUIPMENT AND SYSTEM INSTALLATION REQUIREMENTS.

C. CONTRACTOR SHALL PROVIDE POWER TO ALL ITEMS SHOWN

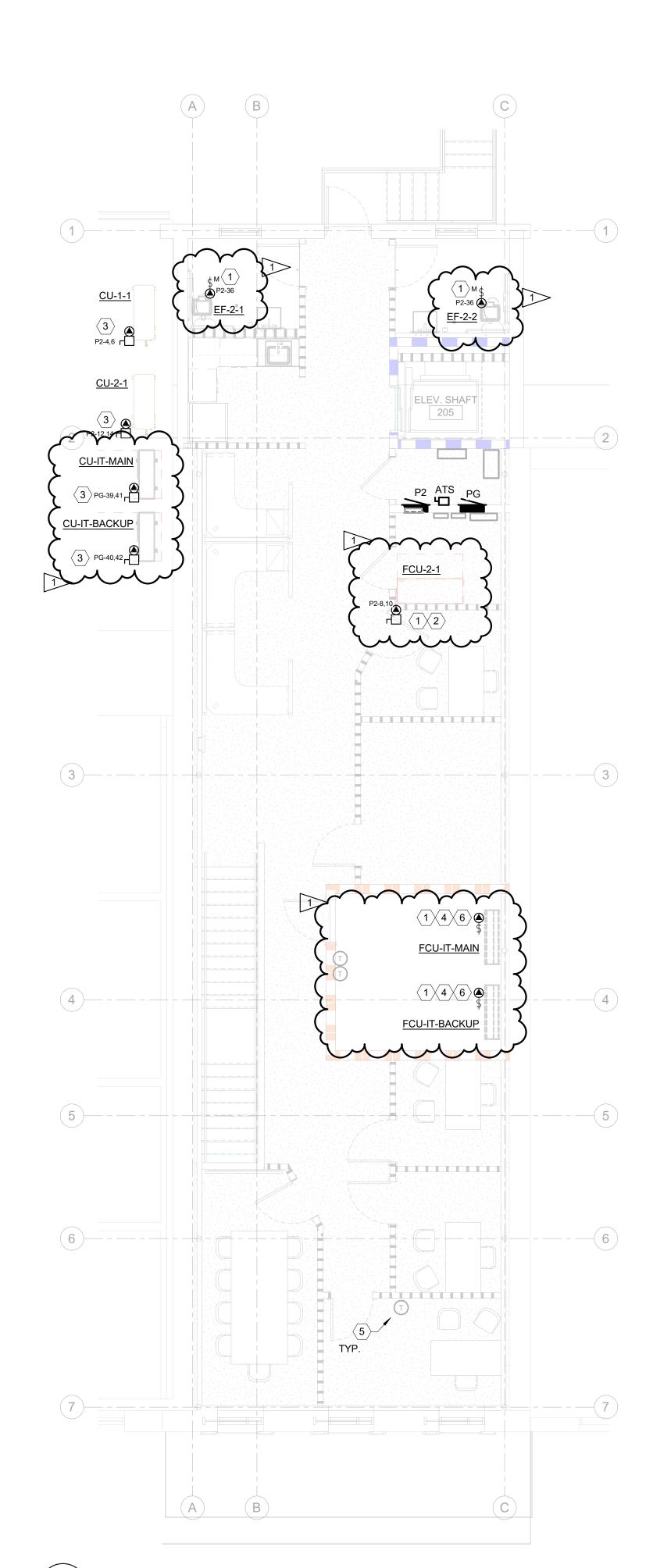
FROM THE PANEL AND CIRCUIT NUMBERS THAT ARE SHOWN ADJACENT TO THE LOAD. SIZE CIRCUIT PER PANEL SCHEDULE.

GENERAL NOTES

- 1. MOUNT EQUIPMENT TO STRUCTURE ABOVE CEILING ADJACENT TO LOAD TO BE SERVED, IN A VISIBLE AND ACCESSIBLE LOCATION, AND PROVIDED WITH WORKING SPACE. COORDINATE LOCATION WITH OTHER TRADES PRIOR TO ROUGH-IN. PROVIDE GFCI RECEPTACLE MOUNTED BELOW DISCONNECT. RECEPTACLE SHALL BE CIRCUITED TO NEAREST GENERAL PURPOSE CIRCUIT.
- 2. PROVIDE DUCT MOUNTED SMOKE DETECTOR IN AIR DUCT OF HVAC UNIT. DUCT DETECTOR TO BE WIRED TO SHUT DOWN UNIT UPON DETECTION OF SMOKE. PROVIDE DUCT DETECTOR WITH LED ALARM INDICATOR REMOTE MOUNTED TO BOTTOM OF CEILING BELOW UNIT SERVED. PROVIDE CONTROL POWER FOR DUCT DETECTOR FROM UNIT SERVED. COORDINATE REQUIREMENTS AND INSTALLATION WITH MECHANICAL CONTRACTOR AND INTERFACE WITH FIRE ALARM SYSTEM WITH FIRE ALARM CONTRACTOR.
- 3. MOUNT EQUIPMENT ON WALL ADJACENT TO LOAD TO BE SERVED, IN A VISIBLE AND ACCESSIBLE SPACE, AND PROVIDED WITH NEC REQUIRED CLEARANCES. COORDINATE LOCATION WITH OTHER TRADES PRIOR TO ROUGH-IN. PROVIDE GFCI RECEPTACLE MOUNTED BELOW DISCONNECT. RECEPTACLE SHALL BE CIRCUITED TO NEAREST GENERAL PURPOSE CIRCUIT.
- 4. PROVIDE 120V CONNECTION AND MOTOR RATED SWITCH FOR IT CIRCULATION PUMP. CIRCUIT TO NEAREST GENERAL PURPOSE
- 5. COORDINATE WITH MECHANICAL DRAWINGS FOR NEW IN 3/4" C. FROM INDOOR UNIT TO OUTDOOR UNIT. COORDINATE CONDUIT ROUTING WITH REFRIGERANT PIPING.



ELECTRICAL HVAC POWER PLAN-FIRST FLOOR E301B



ELECTRICAL HVAC POWER PLAN-SECOND FLOOR E301B 3/16" = 1'-0"

CAPCONSULTINGENG.COM TX FIRM # 26531

POWER PLANS

E301B

Project Number: 33-1408 © 2024 LEVY DYKEMA

ELECTRICAL HVAC

TO MAINTAIN PROPER CLEARANCES. ALL REUSED AIR DEVICES SHALL BE CLEANED AND REPAINTED AS REQUIRED TO RETURN

INSULATED TO MATCH EXISTING.

NO FAN POWERED TERMINAL UNITS SHALL HAVE SPRINKLER PIPING BLOCKING BOTTOM-MOUNTED ACCESS PANELS. OFFSET NEW AND EXISTING SPRINKLER PIPING AS TO WALLS WHERE ACCESS IS OBSTRUCTED SHALL BE RELOCATED AS REQUIRED.

MECHANICAL CONTRACTOR SHALL COORDINATE WITH ALL OTHER MEP TRADES TO

PROVIDE REMOTE DAMPER OPERATORS FOR ALL SPIN-IN DAMPERS LOCATED ABOVE INACCESSIBLE CEILINGS, OPERATORS SHALL BE ROTO-TWIST (OR APPROVED EQUAL) CABLE-TYPE OPERATORS, CONCEALED WITHIN DUCT RUN-OUT TO DEVICE, AND LENGTHS, MOUNTING CLIPS, AND ALL OTHER REQUIRED COMPONENTS FOR PROPER

9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BRING TO THE ENGINEER'S CFM TO THE ROOM ENCLOSED BY THE FULL HEIGHT WALLS.

10. FINAL LOCATION OF ALL NEW EQUIPMENT SHALL BE APPROVED BY BUILDING OWNER OR PROJECT MECHANICAL ENGINEER PRIOR TO INSTALLATION.

13. DURING CONSTRUCTION, SEAL ALL OPEN DUCTS WITH PLASTIC TO PREVENT DUST/DIRT. CLEAN ALL INTERIOR DUCT SURFACES PRIOR TO DUCT INSTALLATION. ALL VAV TERMINAL UNIT FILTERS SHALL BE MAINTAINED DURING CONSTRUCTION AND REPLACED AT THE END OF CONSTRUCTION. PROVIDE CONSTRUCTION FILTERS OVER AIR HANDLING UNIT INTAKES AND MAINTAIN FILTER MEDIA DURING CONSTRUCTION. REPLACE ALL FILTERS AT END OF CONSTRUCTION. ALL RETURN AIR INTAKES TO MECHANICAL ROOM SHALL BE COVERED WITH FILTER MEDIA DURING CONSTRUCTION. REMOVE UPON COMPLETION.

14. SEAL ALL NEW AND EXISTING PIPE, CONDUIT, AND DUCT PENETRATIONS THRU FIRE RATED WALLS WITH FIRE CAULKING, FIRE CAULKING SHALL BE EQUAL TO 3M BRAND CP25WP FIRE CAULK. INSTALL CAULKING IN STRICT ACCORDANCE WITH ALL MANUFACTURER'S RECOMMENDATIONS AND WRITTEN INSTRUCTIONS AND IN ACCORDANCE WITH ALL APPLICABLE UL DETAILS.

SPLITTER VANES SHALL BE LOCATED AND SECURED IN ACCORDANCE WITH SMACNA

SMACNA "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."

MECHANICAL GENERAL NOTES

GENERAL NOTES

2. DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT REFLECT ALL WORK AND MATERIALS REQUIRED TO COMPLETE

TO THE DESIGN SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR ARCHITECT/ENGINEER. THE

4. WHERE THE REQUIREMENTS OF THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THE CODES, THE

OMISSION OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS

THE CONTRACT DOCUMENTS, AND/OR REQUIRED BY THE NATURE OF THIS WORK.

MANUFACTURER'S CLEARANCES.

B. COORDINATION DRAWINGS

C. RECORD DRAWINGS

BEING REMOVED.

CLARIFICATION.

A. EQUIPMENT AND MATERIALS SHOP DRAWINGS

D. OPERATING AND MAINTENANCE MANUALS

E. FIRE STOP MATERIALS AND DETAIL

TRADES PRIOR TO INSTALLATION.

CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THAT THEY ARE NOT IN CONFLICT WITH THE CODES.

5. BEFORE SUBMITTING BIDS, EACH CONTRACTOR SHALL PERFORM A SITE VISIT AND UNDERSTAND THE CONDITIONS TO BE

6. MISUNDERSTANDING OF THE SCOPE OR AMOUNT OF WORK TO BE PERFORMED SHALL BE THE RESPONSIBILITY OF THE

ALL WORK WITH ADEQUATE ACCESS FOR OPERATION AND MAINTENANCE, AND TO MAINTAIN PROPER CODE AND

8. ALL EQUIPMENT AND MATERIAL TO BE FURNISHED AND INSTALLED ON THIS PROJECT SHALL BE UL OR ETL LISTED, IN

10. THE FOLLOWING SUBMITTAL DATA SHALL BE FURNISHED AND SHALL INCLUDE BUT NOT BE LIMITED TO:

ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, AND SUITABLE FOR ITS INTENDED USE ON THIS PROJECT.

9. THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL NEW EQUIPMENT, CONTROLS, AND FIXTURES TO BE PROVIDED

11. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL COORDINATE THE INSTALLATION OF DUCTWORK, PIPING,

CONDUIT, CABLE, ETC., IS FOUND TO BE IN CONFLICT WITH THE ARCHITECTURE, STRUCTURE OR OTHER TRADE WORK,

SHALL BE RELOCATED WITHOUT ADDITIONAL COST TO THE OWNER/TENANT. COORDINATE ALL WORK WITH ALL OTHER

PERFORMANCE NECESSARY FOR THE PROPER FUNCTIONING OF THE WORK. MATERIALS AND EQUIPMENT, WHICH ARE

13. DAMAGE CAUSED DURING CONSTRUCTION TO EXISTING MATERIALS/EQUIPMENT WILL BE REPAIRED OR REPLACED AT NO

ADDITIONAL COST TO OWNER. RE-SUPPORT ANY REMAINING PIPING OR DEVICES THAT WERE SUPPORTED BY WALLS

AT LEAST ONE (1) FULL HEATING SEASON AND ONE (1) FULL COOLING SEASON. DURING THE WARRANTY PERIOD THE

15. THE START OF THE CONTRACTOR'S WARRANTY PERIOD SHALL COMMENCE ON THE DATE OF "SUBSTANTIAL COMPLETION"

16. AREAS OF THE EXISTING BUILDING WILL BE OCCUPIED DURING CONSTRUCTION OF THIS PROJECT. NOISY, DUSTY, AND/OR

OTHER CONSTRUCTION OPERATIONS REQUIRED FOR WORK WHICH DISTURB OR CAUSE COMPLAINTS BY THE EXISTING

CONTRACTOR TO AVOID DISRUPTION OF EXISTING OCCUPANTS WILL BE PROVIDED AT NO COST TO THE OWNER/TENANT.

THE CONTRACTOR SHALL USE CONSTRUCTION METHODS AND MATERIALS WHICH SHALL NOT ADVERSELY AFFECT THE

17. PORTIONS OF THE BUILDING WILL BE IN USE AND OCCUPIED DURING THE CONSTRUCTION PERIOD OF THIS PROJECT. ALL

REPRESENTATIVE OF BUILDING MANAGEMENT AND THE OWNER AND A WRITTEN AUTHORIZATION FROM THE BUILDING

OWNER FOR SUCH DISRUPTION. AN ADDITIONAL ADVANCE NOTIFICATION OF SEVEN (7) DAYS SHALL BE GIVEN TO THE

DETERMINE THE EXISTING STRUCTURAL SYSTEM PRIOR TO CUTTING, DRILLING, OR CORING. THE CONTRACTOR SHALL X-

19. THIS CONTRACTOR SHALL SECURE ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED FOR HIS WORK, AND SHALL PAY

20. IN THE EVENT OF A CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS, THE CONTRACTOR SHALL PROVIDE PRICING

REFLECTING THE GREATEST COST. THE CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR

21. PENETRATIONS THROUGH FLOORS OR FIRE-RATED CONSTRUCTION SHALL BE FIRE RATED TO COMPLY WITH ASTM E-814

22. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, A COMPLETE SET OF "AS

BUILT" DRAWINGS PORTRAYING ACTUAL SITE CONDITIONS OF THE MECHANICAL, ELECTRICAL, PLUMBING AND FIRE

PROTECTION WORK. SUBMISSION SHALL CONSIST OF ONE SET OF PAPER COPIES AND ONE SET OF CAD FILES IN AUTOCAD

23. IN THE EVENT THAT MATERIALS, PRODUCTS, AND/OR PROCESSES BEING PROPOSED FOR THIS PROJECT CONTAIN, OR MAY

EMIT, ANY VOLATILE ORGANIC COMPOUNDS (VOC), FORMALDEHYDE FORMULATIONS, OR HAZARDOUS OUT-GASSING, AS

DETERMINED BY THE MANUFACTURER, A MATERIALS SAFETY DATA SHEET SHALL BE SUBMITTED AS PART OF THE SHOP

24. THE CONTRACTOR SHALL TAKE NOTE THAT THE DRAWINGS ARE SCHEMATIC IN NATURE AND INDICATE THE APPROXIMATE

25. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIALS FROM DAMAGE BY HIS WORK OR HIS

SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINAL ACCEPTANCE BY THE OWNER.

LOCATIONS OF THE HVAC AND PLUMBING SYSTEMS. LOCATE ALL ITEMS IN THE FIELD. COORDINATE WITH OTHER TRADES

PERSONNEL, AND SHALL CORRECT ALL DAMAGE CAUSED WITHOUT ADDITIONAL COST TO THE OWNER. THE CONTRACTOR

PROTECT ALL WORK AGAINST THEFT, INJURY, OR DAMAGE. CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON

SITE WHICH IS NOT IMMEDIATELY INSTALLED. THE CONTRACTOR SHALL CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT THE ENTRY OF DUST, DIRT, AND OBSTRUCTING MATERIAL.

18. THIS BUILDING MAY HAVE A STRUCTURAL SYSTEM UTILIZING POST-TENSIONED CABLES. THE CONTRACTOR SHALL

BUILDING SERVICES, UTILITIES, POWER, CHILLED WATER, FIRE PROTECTION, AND DOMESTIC COLD AND HOT WATER WHICH

WILL BE REQUIRED FOR THIS PROJECT MAY NOT BE DISRUPTED FOR ANY REASON WITHOUT PRIOR COORDINATION WITH A

MANAGER AND OWNER DESIGNATING A DATE, TIME, AND DURATION THAT ARE APPROVED BY THE BUILDING MANAGER AND

12. MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD CONDITION. THE COMMERCIALLY STANDARD ITEMS OF

EQUIPMENT AND THE SPECIFIC NAMES INDICATED ARE INTENDED TO IDENTIFY STANDARDS OF QUALITY AND

FOUND TO HAVE FACTORY DEFECTS SHALL BE REPLACED OR REPAIRED IN A MANNER ACCEPTABLE TO THE

CONTRACTOR SHALL GUARANTEE THE FOLLOWING IN A FORM SATISFACTORY TO THE OWNER/TENANT:

B. ALL APPARATUS WILL DEVELOP CAPACITIES AND PERFORMANCE CHARACTERISTICS SPECIFIED.

A. ALL WORK INSTALLED SHALL BE FREE FROM ANY AND ALL DEFECTS IN WORKMANSHIP AND/OR MATERIALS.

BUILDING OCCUPANTS SHALL NOT BE ACCEPTABLE. ALL AFTER-HOUR OR OVERTIME WORK REQUIRED BY THE

OWNER/TENANT AND ENGINEER AT NO ADDITIONAL COST TO THE OWNER/TENANT.

C. THE SYSTEMS SHALL OPERATE WITHOUT MALFUNCTION.

INDOOR AIR QUALITY OF THE EXISTING OCCUPIED AREAS.

BUILDING MANAGER AND OWNER PRIOR TO EACH DISRUPTION.

RAY ALL PENETRATIONS PRIOR TO CUTTING THE FLOOR SLAB.

(UL 1479), AND THE LOCAL AUTHORITY HAVING JURISDICTION.

TO ENSURE PROPER FIT AND ACCESS TO ALL ITEMS.

ALL FEES IN CONNECTION WITH SUCH PERMITS, LICENSES AND INSPECTIONS.

(CONTRACTOR SHALL UTILIZE OWNER'S LAYER STANDARDS IF EXISTING).

DRAWING PROCESS FOR REVIEW BY THE ARCHITECT/ENGINEER/ OWNER.

AS AGREED TO BY THE OWNER/TENANT.

WHICH IS EITHER EXISTING OR SHOWN ON THE CONTRACT DOCUMENTS, THE DUCTWORK, PIPING, CONDUIT, CABLE, ETC.,

CONDUIT, CABLE, ETC., WITH LIGHTING FIXTURES, SPECIAL CEILING CONSTRUCTION, AIR DISTRIBUTION EQUIPMENT, AND

THE STRUCTURE. PROVIDE ADDITIONAL RISES AND OFFSETS AS REQUIRED. IF, AFTER INSTALLED, NEW DUCTWORK, PIPING,

MET IN INSTALLING THE WORK, AND SHALL MAKE PROVISIONS FOR THE CONDITIONS IN HIS FINAL BID. FAILURE ON THE

PART OF THE CONTRACTOR TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE

CONTACTOR, AND SHALL NOT RESULT IN ANY ADDITIONAL COST TO THE OWNER. TENDER OF A PROPOSAL CONVEYS FULL

CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED AND/OR INDICATED, SCHEDULED, OR IMPLIED ON

7. ALL WORK SHALL BE CARRIED OUT IN A NEAT, WELL ORGANIZED MANNER. ALL SERVICES SHALL BE ROUTED PARALLEL AND

PERPENDICULAR TO THE PRIMARY LINES OF THE BUILDING. LOCATE ALL EQUIPMENT TO PROVIDE ACCESS AND ARRANGE

1. FURNISH AND INSTALL ALL ITEMS NECESSARY TO PROVIDE FULLY FUNCTIONING SYSTEMS AS INDICATED BY THE DESIGN

AND THE EQUIPMENT SPECIFIED. ELEMENTS OF THE WORK SHALL INCLUDE, BUT ARE NOT LIMITED TO, MATERIALS, LABOR

PROJECT. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT AS REQUIRED TO COMPLETE PROJECT

AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES. IF CONFLICT BETWEEN THE CONTRACT DOCUMENTS

AND THE LOCAL ENFORCING AUTHORITY EXISTS, THE LOCAL ENFORCING AUTHORITY SHALL APPLY. ANY MODIFICATIONS

CONTRACTOR SHALL REPORT TO THE ARCHITECT/ENGINEER AND SECURE HIS APPROVAL BEFORE PROCEEDING WITH ANY

WITHIN DESIGN. CONTRACTOR SHALL REQUEST ADDITIONAL INFORMATION AND DETAILS WHERE SCOPE IS UNCLEAR.

3. ALL WORK SHALL COMPLY WITH THE MOST RECENT ADOPTED VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS

SUPERVISION, SUPPLIES, EQUIPMENT, TRANSPORTATION, HOISTING/RIGGING, STORAGE, UTILITIES, AND ALL REQUIRED

- 1. ALL EXISTING DUCTWORK AND PIPING SIZES AND LOCATIONS SHOWN ARE FROM EXISTING RECORDS, DOCUMENTS, AND SITE OBSERVATIONS. MECHANICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND SHALL INCLUDE IN HIS BID THE COST OF REPLACEMENT, REPAIR, RELOCATION, OR REMOVAL OF EXISTING MEP ITEMS AS REQUIRED TO COMPLETE THE INSTALLATION OF ALL MECHANICAL SYSTEMS SHOWN ON THESE DRAWINGS PRIOR TO SUBMITTING A BID.
- THE CONTRACTOR SHALL VERIFY THAT ALL EXISTING AND NEW TERMINAL UNITS ARE MOUNTED SO THAT ALL REQUIRED SERVICING AND MAINTENANCE CLEARANCES ARE MAINTAINED AT THE BOTTOM AND SIDES OF EACH UNIT. COORDINATE WITH ALL NEW ARCHITECTURAL WALLS TO STRUCTURE AND RELOCATE TERMINAL UNITS AS REQUIRED
- IT IS ACCEPTABLE TO REUSE EXISTING AIR DEVICES IF THEY MATCH THE SCHEDULED MANUFACTURER AND MODEL NUMBER. NECK SIZE AND PERFORMANCE INDICATED IN THIS DRAWING SET. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND TAKE INVENTORY OF EXISTING AIR DEVICES WITHIN THE SPACE PRIOR TO SUBMITTING A BID. TO "LIKE-NEW" CONDITIONS.
- EXISTING TAKE-OFF CONNECTIONS MAY BE REUSED IF LOCATED WITHIN 3'-0" OF NEW CONNECTION SHOWN ON DRAWING. ALL TAKE-OFF CONNECTIONS NOT USED SHALL BE REMOVED AND DUCTWORK SHALL BE PATCHED WITH SHEET METAL, SEALED AND RE-
- REQUIRED. EXISTING FAN POWERED TERMINAL BOXES MOUNTED ABOVE OR ADJACENT
- MAINTAIN A MINIMUM OF 9" CLEAR SPACE FOR TENANT EQUIPMENT, CABLE TRAY, WIRING,
- ACCESSIBLE FOR BALANCING FROM FACE OF AIR DEVICE. PROVIDE REQUIRED CABLE INSTALLATION AND OPERATION.
- PRIMARY AND SECONDARY DUCTWORK SHALL HAVE EXTERNAL INSULATION INSTALLED ON TOP SIDE OF DUCTWORK PRIOR TO HANGING DUCTWORK TO ALLOW DUCT TO BE SUSPENDED WITH INSULATION TIGHT TO STRUCTURE. DO NOT COMPRESS INSULATION.
- ATTENTION ANY WALLS THAT EXTEND FROM THE FINISHED FLOOR TO STRUCTURE AND REQUIRE RETURN AIR PATHWAYS. RETURN AIR BOOTS SHALL BE INSTALLED TO PROVIDE CROSS SECTIONAL AREA EQUIVALENT TO 500 FPM OF AIRFLOW BASED ON THE SUPPLY
- 11. ROOF PENETRATIONS SHALL BE PERFORMED TO MAINTAIN THE WARRANTY ON THE ROOF. COORDINATE PENETRATIONS WITH THE ROOF MEMBRANE MANUFACTURER.
- 12. MOUNT ALL TEMPERATURE CONTROL DEVICES 48" ABOVE FINISHED FLOOR TO THE CENTER OF THE DEVICE TO COMPLY WITH THE REQUIREMENTS OF THE AMERICANS WITH **DISABILITIES ACT ANSI A117.1.**
- 14. THE WARRANTY PERIOD SHALL BE NO LESS THAN ONE (1) FULL YEAR, UNLESS SPECIFIED OTHERWISE AND SHALL INCLUDE

 - 15. CONTRACTOR SHALL MAINTAIN A SET OF CONSTRUCTION DOCUMENTS FOR THE SOLE PURPOSE OF INDICATING AS-BUILT CONDITIONS. SET SHALL NOT BE USED FOR ANY OTHER PURPOSE. AS-BUILT REVISIONS SHALL BE INDICATED USING RED PENCIL AND BE CLEARLY DRAWN AND LABELED TO BE LEGIBLE. ILLEGIBLE ENTRIES SHALL BE REVISED BY THE CONTRACTOR. PROVIDE AS-BUILT SET TO THE OWNER AT SUBSTANTIAL COMPLETION.
 - 16. CONTRACTOR SHALL COMPLETE START-UP FORMS AND CHECK-OUT UTILIZING MANUFACTURER CERTIFIED START-UP TECHNICIANS. EQUIPMENT START-UP AND CHECK-OUT FORMS SHALL BE INCLUDED IN THE O&M MANUALS.
 - 17. RADIUS ELBOWS 2 TIMES THE DUCT DIMENSION AND LARGER DO NOT REQUIRE SPLITTER VANES; PROVIDE SPLITTER VANES FOR ALL RADIUS ELBOWS 1.5 TIMES AND SMALLER. "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."
 - 18. RECTANGULAR ELBOWS SHALL INCORPORATE TURNING VANES. VANES SHALL BE SINGLE-THICKNESS GALVANIZED STEEL VANES SET IN GALVANIZED STEEL RUNNERS. VANES AND RUNNERS SHALL BE CONSTRUCTED AND SECURED IN ACCORDANCE WITH

APPLICABLE CODES AND STANDARDS

INTERIOR LOADS BASED ON ACTUAL LIGHTING, OCCUPANT AND EQUIPMENT LOADS.

MECHANICAL DESIGN CRITERIA

- BUILDING CODE 2015 IBC WITH CITY OF BURNET AMENDMENTS 2. FIRE CODE - 2015 IFC WITH CITY OF BURNET AMENDMENTS
- 3. ELECTRICAL CODE 2014 NEC WITH CITY OF BURNET AMENDMENTS. 4. MECHANICAL CODE - 2015 IMC WITH CITY OF BURNET AMENDMENTS
- 5. PLUMBING CODE 2015 IPC WITH CITY OF BURNET AMENDMENTS
- 6. OTHER 2015 INTERNATIONAL ENERGY CONSERVATION CODE WITH CITY OF BURNET AMENDMENTS 7. OTHER - MOST CURRENT ADOPTED VERSION OF NFPA 101, LIFE SAFETY CODE
- 8. OTHER FEDERAL DEPARTMENT OF JUSTICE AMERICANS WITH DISABILITIES ACT AND TEXAS ACCESSIBILITY STANDARDS.

2015 IECC ENERGY CODE COMPLIANCE

COMPLIANCE WITH 2015 IECC & CITY OF BURNET AMENDMENTS TO 2015 IECC.

EQUIPMENT SIZING AND PERFORMANCE:

MECHANICAL DESIGN CONDITIONS:

CLIMATE ZONE: 2A

SUMMER:

WINTER:

PROJECT LOCATION: BURNET, TEXAS

OUTDOOR DESIGN: 25°F DB

INDOOR DESIGN: 72°F DB

ROOF: U-VALUE = 0.047

FRONT GLASS:

WALLS:U - VALUE = 0.064

U - VALUE: 0.75

SHADE COEFF: 0.29

OUTDOOR DESIGN: 98°F DB / 74°F WB

BUILDING WALL & ROOF CONSTRUCTION INFORMATION:

INDOOR DESIGN: 75°F DB / 50% RH

MECHANICAL LEGEND AND SYMBOLS

SYMBOL

 (T)

CO2

NO2

DESCRIPTION

THERMOSTAT/TEMPERATURE SENSOR

THERMOSTAT/TEMPERATURE SENSOR

ACOUSTICALLY LINED SHEET METAL DUCT

REVERSE ACTING THERMOSTAT

CARBON MONOXIDE SENSOR

CARBON DIOXIDE SENSOR

NITROGEN DIOXIDE SENSOR

MANUAL BALANCING DAMPER

FLEX CONNECTOR

ACCESS DOORS

FIRE DAMPER

FIRE/SMOKE DAMPER

MOTORIZED DAMPER

TURNING VANE ELBOW

DAMPER & FLEX DUCT

RETURN GRILLE

EXHAUST GRILLE

COMMON

EXISTING

LEAVING WATER TEMPERATURE

MECHANICAL CONTRACTOR

OPPOSED BLADE DAMPER

POUNDS PER SQUARE INCH

REVOLUTIONS PER MINUTE

TEMPERATURE DIFFERENCE

TONS OF REFRIGERATION

TEMPERATURE CONTROL

VARIABLE FREQUENCY DRIVE

WATER PRESSURE DROP

VARIABLE AIR VOLUME

PHASE (ELECTRICAL)

LINEAR FEET

NORMALLY OPEN

NOT APPLICABLE

NOT TO SCALE

OUTSIDE AIR

PSI ABSOLUTE

PSI GAUGE

RETURN AIR

STANDARD

SUPPLY AIR

TEMPERATURE

THERMOSTAT

TOP OF DUCT

SUCTION

VACUUM

VELOCITY

VOLUME

VOLT

WITH

SENSIBLE HEAT

SPECIFICATION

SPECIFIC VOLUME

STATIC PRESSURE

RUN OUT

PRESSURE DROP

PERCENT

POUNDS

NOT IN CONTRACT

NORMALLY CLOSED

MAXIMUM

MINIMUM

NUMBER

45° LOW-LOSS TAKE-OFF FITTING W/

45° LOW-LOSS TAKE-OFF FITTING W/

RECTANGULAR/ROUND DUCT WITH 45°

THROW PATTERN SHOWN ON PLANS

THROW PATTERN SHOWN ON PLANS

CONNECT NEW WORK TO EXISTING

PRESSURE GAUGE W/ SNUBBER

LAY-IN SUPPLY DIFFUSER W/ FLEX DUCT.

DAMPER & RIGID ROUND DUCT

HIGH EFFICIENCY TAKE-OFF

SUPPLY DIFFUSER W/ FLEX DUCT.

W/ GUARD

HUMIDISTAT

DESCRIPTION

SYMBOL

——D—— DRAIN

——HWS—— HEATING WATER SUPPLY

— — —HWR— — — HEATING WATER RETURN

CWS—CHILLED WATER SUPPLY

— — — CWR— — — CHILLED WATER RETURN

-----RS----- REFRIGERANT SUCTION LINE

-----HG-REFRIGERANT HOT GAS LINE

——LPS—— LOW PRESSURE STEAM SUPPLY

— — -COND- — — STEAM CONDENSATE RETURN

BUTTERFLY VALVE

TRIPLE DUTY VALVE

FLEX CONNECTOR

HOSE END DRAIN VALVE

SAFETY RELIEF VALVE

MOTORIZED T.C. VALVE / 2-WAY

MOTORIZED T.C. VALVE / 3-WAY

MANUAL FLOW BALANCING VALVE

AUTOMATIC FLOW BALANCING VALVE

MECHANICAL ABBREVIATIONS

LWT

MAX

MC

MIN

NO

N/A

NIC

NO

OA

LBS

PD

PSI PSIA

PSIG

R/O

RA

SH

RPM

SPEC

STD

SUCT

TEMP

T STAT

TOD

TONS

TC VAC

VAV

VEL

VOL VFD

WPD

SP

SA

TD

SP VOL

OBD

NTS

PRESSURE / TEMP. TEST PLUG

_______ ECCENTRIC PLUG BALANCING VALVE

VALVE IN RISER

ELBOW UP

ELBOW DOWN

(CIRCUIT SETTER)

DIAL THERMOMETER

AMERICAN NATIONAL STANDARDS INSTITUTE

BRAKE HORSEPOWER. BOILER HORSEPOWER

PRESSURE REDUCING VALVE

— GLOBE VALVE

BALL VALVE

SWING CHECK VALVE

UNION

TEE UP

PIPE SIZE CHANGE

TEE DOWN

PIPE GUIDE

PIPE ANCHOR

ABOVE FINISHED FLOOR

ACTUAL CFM

APPROXIMATE

CUBIC FEET

CUBIC INCH

DECIBEL

DIAMETER

EXPANSION

FAHRENHEIT

FREQUENCY

GALLONS

HEAD

HEIGHT

FEET PER MINUTE

GAGE OR GAUGE

GENERAL CONTRACTOR

GALLONS PER HOUR

GALLONS PER MINUTE

GALLONS PER DAY

HUMIDITY, RELATIVE

LEAVING AIR TEMPERATURE

KILOWATT HOUR

HORSEPOWER

KILOWATT

FOOT OR FEET

FEET PER SECOND

AIR HANDLING UNIT

AMPERE (AMP, AMPS)

AIR PRESSURE DROP

BRITISH THERMAL UNIT

CUBIC FEET PER MINUTE

CFM, STANDARD CONDITIONS

DRY-BULB TEMPERATURE

ELECTRICAL CONTRACTOR

ENTERING AIR TEMPERATURE

EQUIVALENT DIRECT RADIATION

ENTERING WATER TEMPERATURE

BTU PER HOUR (THOUSAND)

BOTTOM OF DUCT

CENTER OF DUCT

DIAMETER, INSIDE

DIAMETER, OUTER

ACFM

AHU

ANSI

AMP

APD

BHP

BTU

BOD

MBH

CU FT

CU IN

CFM

COD

SCFM

DB

DIA

OD

DBT

EAT

EC

EDR

EXP

EWT

FPM

FPS

FT

ΗZ

GAL

G.C.

GPH

GPM

GPD

HD

HGT

RH

KW

KWH

LAT

APPROX

RL—RL—REFRIGERANT LIQUID LINE

——FOS— FUEL OIL SUPPLY

---FOR--- FUEL OIL RETURN

——DFS—— DRY FLUID SUPPLY

— — DFR— — DRY FLUID RETURN

— — —FOV— — — FUEL OIL VENT

——— GATE VALVE

STRAINER

- 1. LOAD CALCULATIONS HAVE BEEN PERFORMED IN ACCORDANCE WITH ASHRAE STANDARD 183 OR BY AN APPROVED COMPUTATIONAL PROCEDURE USING THE DESIGN PARAMETERS SPECIFIED IN CHAPTER 3 OF THE 2015 IECC.
- 2. EQUIPMENT HAS BEEN SELECTED PER 2015 IECC C403.2.2 EQUIPMENT SIZING.
- 3. VENTILATION AND THE ABILITY TO REDUCE OUTSIDE AIR TO IMC MINIMUMS SHALL BE PROVIDED PER 2015 IECC C403.2.6 VENTILATION.

HVAC SYSTEM CONTROLS & CRITERIA

- 4. TEMPERATURE CONTROL SYSTEM SHALL HAVE A MINIMUM DEAD BAND OF 5°F AS REQUIRED BY 2015 IECC SECTION C403.2.4.1.2 DEADBAND.
- 5. HVAC SYSTEMS SHALL BE EQUIPPED WITH AUTOMATIC CONTROLS CAPABLE OF PROVIDING NIGHT SETBACK, SEVEN DIFFERENT DAILY SCHEDULES AND OPTIMUM START PER THE REQUIREMENTS OF 2015 IECC SECTION C403.2.2.4.2 OFF-HOUR CONTROLS.
- 6. OUTSIDE AIR DAMPERS, EXHAUST OUTLETS AND RELIEF OUTLETS SHALL BE PROVIDED WITH DAMPERS THAT COMPLY WITH 2015 IECC SECTION C403.2.4.3 SHUTOFF DAMPERS. DAMPER SHALL AUTOMATICALLY CLOSE WHEN SYSTEM OR SPACES SERVED ARE NOT IN USE OR DURING WARM-UP, COOL-DOWN AND SETBACK. DAMPER MAXIMUM LEAKAGE RATE SHALL NOT EXCEED 4.0 CFM/SF AT 1" WATER GAUGE.
- ALL DUCTWORK SHALL BE CONSTRUCTED AND SEALED IN ACCORDANCE WITH 2015 IECC SECTION C403.2.9 CONSTRUCTION OF HVAC SYSTEM ELEMENTS. DUCTWORK INSTALLED ON THIS PROJECT IS CLASSIFIED AS LOW PRESSURE (BELOW 2" WATER GAUGE).
- 8. DUCTWORK SHALL BE INSULATED TO THE APPROPRIATE R-VALUE AS LISTED IN THE SPECIFICATIONS ON THIS PROJECT. INSULATION SHALL COMPLY WITH 2015 IECC C403.2.9 DUCT AND PLENUM INSULATION AND SEALING.

TEST, ADJUST AND BALANCING REQUIREMENTS:

9. EACH SUPPLY AIR DEVICE AND ZONE TERMINAL DEVICE SHALL BE EQUIPPED WITH MEANS FOR AIR BALANCING IN ACCORDANCE WITH THE REQUIREMENTS OF CHAPTER 6 OF THE IMC. AIR SYSTEMS SHALL BE BALANCED IN A MANNER TO FIRST MINIMIZE THROTTLING LOSSES THEN, FOR FANS WITH SYSTEM POWER GREATER THAN 1 HP, FAN SPEED SHALL BE

ADJUSTED TO MEET DESIGN FLOW CONDITIONS.

SHEET LIST

DRAWING SHEET TITLE MECHANICAL COVER SHEET MECHANICAL DETAILS MECHANICAL SCHEDULES

Project Number: 33-1408

MECHANICAL COVER

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SHEET



DYKEMACOM

BELLON

BELLON

BELLON

BOUTE 100

AUSTRIN, TX 78701

(512) 342-9177

WWWW.LEVYDYKEMACOM

127 E JACKSON ST. BURNET TX

3URNET COUNTY ANNEX

Project Number: 33-1408
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MECHANICAL

DETAILS

765

T-1

S-3

S-4

S-5

R-1

R-2

TRANSFER GRILLE

(1) COORDINATE WITH ARCHITECTURAL DRAWINGS FOR REQUIRED MOUNTING TYPES.

(2) COORDINATE WITH ARCHITECT AND GC FOR FINAL COLOR OF AIR DEVICE.

PAR

(3) AIR DEVICES FROM ALTERNATE MANUFACTURER EQUAL TO SCHEDULED MODELS ARE ACCEPTABLE (PRICE, METALAIRE, ETC.).

22x10

(4) AIR DEVICES LOCATED IN INACCESSIBLE CEILINGS TO BE PROVIDED WITH REMOTE OPERARABLE SINGLE BLADE AIR DAMPERS.

(5) PLAQUE AIR DEVICES TO BE PROVIDED WITH BACKPAN INSULATION.

(6) MECHANICAL CONTRACTOR TO SIZE BRANCH DUCTWORK TO MAINTAIN AT LEAST ≤ 800 FPM OR AS INDICATED ON PLANS.

				EXHA	UST FAN SO	CHEDULE						
JAG	MANUFACTURER	MODEL	SERVICE	LOCATION	FAN TYPE	DRIVE TYPE	AIR VOLUME	EXT. STATIC		ELEC	WEIGHT	NOTES
	MANOLAGIONEN	MODEL	OLIVIOL	LOCATION	TANTIL	DIGITE THE	(CFM)	PRESSURE (IN WG)	POWER	MOTOR SIZE	(LBS)	NOTES
EF-1-1, 2, & 3 EF-2-1 & 2	GREENHECK	SP-A50-90-VG	REFER TO PLANS	CEILING	CENTRIFUGAL	DIRECT	75	0.25	120/60/1	6 W	12	1 - 3

24x12

(1) FANS PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR.

(2) PROVIDE MANUFACTURER'S INTEGRAL BACKDRAFT DAMPER, VIBRATION ISOLATION KIT, AND DECORATIVE GRILLE.

(3) COORDINATE WITH ELECTRICAL CONTRACTOR FOR INSTALLATION AND WIRING OF DISCONNECTING MEANS. ELECTRICAL TO INTERLOCK WITH LIGHTS. PROVIDE LIGHT SWITCH WITH TIME-DELAY RELAY.

(4) ALTERNATE MANUFACTURERES: COOK, METALAIRE

(1) NEMA-3R DISCONNECT SWITCH PROVIDED WITH EQUIPMENT, WIRED BY EC

T. O.				
TAG	FCU-1-1	FCU-2-1		FCU-IT-MAIN & BACKUP
MANUFACTURER	TRANE	TRANE	7	MITSUBISHI
MODEL	TEM8A0C48V41+TDR	TEM8A0D60V51+TDR	\succ	PKA-A36AKA8
TYPE	DX SPLIT HEAT PUMP	DX SPLIT HEAT PUMP		DX SPLIT COOLING ONLY
SIZE	4 TON	5 TON		3 TON
ORIENTATION	MULTIPOSITION	MULTIPOSITION	$\overline{}$	WALL MOUNT
WEIGHT (LBS)	174	174	>	46
SUPPLY FAN SECTION			\succ	
DESIGN AIRFLOW (CFM)	1530	2010	(830
` <i>'</i>	210	220	1	-
, ,	0.5	0.5		N/A
` '			$\overline{}$	74 WATTS
` ,			>	0.6
	-	-		
	95	95	1	95
			<u> </u>	80 / 67
			/	33.40
		00.00	\succ	
	17	17	(N/A
` '			\	N/A
` '			~	N/A
,	0.00	00	\leftarrow	1 477 1
·	208-230/60/1	208-230/60/1	\leftarrow	POWERED BY OUTDOOR UNIT
			(-	-
` '			}	_
			<u> </u>	_
			\leftarrow	_
, , , ,			\leftarrow	(1 - 6, & 8)
	,	` ,	\leftarrow	CU-IT-MAIN & BACKUP
			$\overline{}$	MITSUBISHI
			/	PUY-AK36NL
			igg(COOLING ONLY HEAT PUMP
				3.0 TON
			\leftarrow	
. ,	245	245	}_	224
	4 / 00001	4 / TIMUNI DOTADIY	<u> </u>	4 / TIAVINI DOTADY
			$\overline{}$	1 / TWIN ROTARY
			_	R-454B
	VAKIABLE	VARIABLE	\leftarrow	VARIABLE
,	405.0	105.0	}_	105.0
			<u> </u>	105.0
	12.0 / 19.0	11.0 / 19.0	igcup	12.0 / 20.3
	000 000/00//	000 000 000		000 000/00//
			\subset	208-230/60/1
			>	34.0
				56
NOTES / ACCESSORIES	(9 - 11)	(9 - 11)	((9 - 11)
/ ACCESSORIES:			7	mmm
	ORIENTATION WEIGHT (LBS) SUPPLY FAN SECTION DESIGN AIRFLOW (CFM) DESIGN OUTSIDE AIRFLOW (CFM) DESIGN ESP (IN WTR) MOTOR RATING (HP) FLA (AMPS) COOLING SECTION AMBIENT (°F) MIXED AIR (EAT) DESIGN CONDITIONS DB/WB (°F) COOL CAPACITY (AHRI TOTAL MBH) HEAT PUMP HEATING AMBIENT (°F) CAPACITY (MBH) HSPF2 (AHRI 210/240 - 2023) ELECTRICAL VOLTAGE/PH AUX. HEATER CAPACITY (208/240) AMPS MCA (AMPS) (208/230) MOCP (AMPS) (208/230) NOTES / ACCESSORIES TAG MANUFACTURER MODEL TYPE SIZE WEIGHT (LBS) COMPRESSOR INFORMATION NO./TYPE REFRIGERANT STAGES EFFICIENCY (AHRI 210/243) AMBIENT DB EER2/SEER2 (AHRI 210/2440 - 2023) ELECTRICAL VOLTAGE/PH MCA MOCP NOTES / ACCESSORIES A 1 DISCONNECT PROVIDED AND INSTALLED BY ELECT	SIZE	SIZE	SIZE

(2) MANUFACTURER WIRED CONTROLS

(3) AUXILIARY DRAIN PAN WITH FLOAT SWITCH W/ AUTOMATIC SHUT DOWN UPON DETECTION OF WATER

(4) FILTER RACK AND FILTER

(5) MANUFACTURER'S 7-DAY PROGRAMMABLE THERMOSTAT

BUILDING EXHAUST

SERVICE

126 UTILITY

130 WOMEN'S RESTROOM

131 MEN'S RESTROOM

TOTAL EXHAUST (CFM)

BUILDING EXHAUST

SERVICE

203 WOMEN'S RESTROOM

204 MEN'S RESTROOM

TOTAL EXHAUST (CFM)

1,560 SQUARE FT

1,767 SQUARE FT

VENTILATION / PRESSURE CALCS - 2ND FLOOR

TAG

EF-2-1

EF-2-2

mentioned the survival of the

AIR FLOW

(CFM)

0

75

75

150

207

60

0.04

AIR FLOW

(CFM)

75

75

150

219

70

0.04

VENTILATION / PRESSURE CALCS - 1ST FLOOR

TAG

EF-1-1

EF-1-2

EF-1-3

OUTSIDE AIR INTAKE

REQUIRED MIN. VENTILATION RATE (CFM)

TOTAL BUILDING PRESSURIZATION (CFM)

BUILDING PRESSURIZATION RATE (CFM/SF)

OUTSIDE AIR INTAKE

REQUIRED MIN. VENTILATION RATE (CFM)

TOTAL BUILDING PRESSURIZATION (CFM)

(1) TOTAL APPROXIMATE AREA

BUILDING PRESSURIZATION RATE (CFM/SF)

(1) TOTAL APPROXIMATE AREA

TAG

FCU-1-1

TOTAL OA (CFM)

TAG

FCU-2-1

TOTAL OA (CFM)

AIR FLOW

(CFM)

210

210

(2) *INTERMITTENT USAGE, TWO FAN OPERATIONAL SIMULTANEOUSLY.

AIR FLOW

(CFM)

220

220

(2) *INTERMITTENT USAGE, TWO FAN OPERATIONAL SIMULTANEOUSLY.

(6) COORDINATE DISCONNECT SIZE AND REQUIREMENTS WITH ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR TO PROVIDE AND INSTALL.

(7) PROVIDE AND INSTALL LITTLE GIANT MODEL #553201, 1/18 HP MOTOR, 115V/1PH WITH CORDED PLUG. MINIMUM PERFORMANCE 1.7 GPM AT 20-FT OF HEAD.

(8) PROVIDE AND INSTALL MANUFACTURER'S PREFERRED CONDENSATE PUMP BLUEDIAMOND #MAXIBLUE

(9) PROVIDE LOCKING REFRIGERANT PORT CAPS (10) HAIL GUARDS, ANTI-SHORT CYCLE TIMER, HIGH PRESSURE SWITCH

(11) DEFROST CONTROL

	Outside 1 I III		SCHE		mala = 1 00 1 01)00 f "		
	Outside air shall be provided	ın acco	ordance with A	ASHRAE Sta	ndard 62.1-20	022 as follow	S:	
			Rp	Pz	Ra	Az		
	BREAK		5	25	0.12	1,000		
	CORRIDOR		<u>-</u>		0.06	1,000		
	EXHAUSTED		_	_	-	-		
	OFFICE SPACE		5	5	0.06	1,000		
	STORAGE		5	2	0.06	1,000		
	STORAGE		3	2	0.00	1,000		
	Vbz	=	RpPz + RaA	Z				
	Ez	=	8.0					
	Voz	=	Vba / Ez					
	Room	Qty.	Rp	Pz	Ra	Az	Vbz	Voz
-011 4 4		α.y.	(CFM/P)	(People)	(CFM/SF)	(SF)	(CFM)	(CFM)
FCU-1-1	120 ENTRY	1	5	2	0.06	261	25.7	32.1
	121 OPEN WORKSPACE	1	5	5	0.06	340	45.4	56.8
	121 HALL	1	0	0	0.06	3 4 0 71	45.4	5.3
	123 OFFICE 2	1		1				
		1	5	1	0.06	87	10.2	12.8
	124 OFFICE 1	1	5	1	0.06	87	10.2	12.8
	125 CONFERENCE*	1	5	10	0.06	196	36.8	46.0
	126 UTILITY	1	0	0	0.00	20	0.0	0.0
	127 MECH	1	0	0	0.00	14	0.0	0.0
	128 WORKROOM*	1	5	2	0.06	223	18.4	23.0
	129 BREAKROOM	1	5	1	0.06	115	11.9	14.9
	129 BREAKROOM (EXIT)	1	0	0	0.06	46	2.8	3.4
	130 WOMENS RESTROOM	1	0	0	0.00	46	0.0	0.0
	131 MENS RESTROOM	1	0	0	0.00	54	0.0	0.0
	Total			22.0		1,560.0		207.0
							PROVIDED	210.0
CU-2-1								
	200 OPEN SPACE	1	5	3	0.06	152	24.1	30.2
	201 HALL	1	0	0	0.06	653	39.2	49.0
	202 BREAKROOM*	1	5	1	0.06	61	6.2	7.7
	203 WOMENS RESTROOM	1	0	0	0.00	50	0.0	0.0
	204 MENS RESTROOM	1	0	0	0.00	64	0.0	0.0
	206 ELEV & MECH RM	1	0	0	0.00	41	0.0	0.0
	207 STORAGE	1	0	0	0.06	38	2.3	2.8
	208 FLEX OFFICE	1	5	1	0.06	70	9.2	11.5
	209 LAB	1	10	1	0.18	140	35.2	44.0
	211 OFFICE	1	5	1	0.06	57	8.4	10.5
	212 OFFICE	1	5	1	0.06	64	8.8	11.1
	213 GREGS OFFICE*	1	5	2	0.06	102	0.0 11.1	13.9
	2 10 OILOU OI I IOL	l		9				
	214 MEETING ROOM*	1		9	0.06	136	30.7	38.3
	214 MEETING ROOM*	1	5			4 000 0		0400
	214 MEETING ROOM* Total	1	5	19.0		1,628.0	DD0\#555	219.0
		1	5			1,628.0	PROVIDED	219.0 220.0
		1	5				PROVIDED	

mentioned and the second

08/26/2025

NOTES

1 - 6

1 - 6

1 - 6

1 - 4

1 - 4

1 - 6

WHITE

STEEL

LAY-IN

Project Number: 33-1408

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MECHANICAL SCHEDULES

M003

GENERAL NOTES

THE INSTALLATION.

CONSTRUCTION DOCUMENTS.

CLEARANCES FOR ALL NEW EQUIPMENT.

ARCHITECTURAL CEILING FINISHES.

AVOID INSTALLATION CONFLICTS.

SHEET WORK NOTES

UNIT (FCU) UPON DETECTION OF WATER.

COORDINATE WITH FIRE ALARM CONTRACTOR.

TO AVOID CONFLICTS.

ADDITIONAL INFORMATION.

INFORMATION.

BALANCING DAMPER.

FOR CONTINUATION.

TERMINATION.

MINIMUM 1/8"/FT.

A. REFER TO MECHANICAL COVER SHEET DRAWING FOR SYMBOLS, ABBREVIATIONS, SPECIFICATIONS, AND ADDITIONAL INFORMATION.

B. DUE TO DRAWING SCALE, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED.

C. FINAL LOCATION OF ALL NEW EQUIPMENT, PRIOR TO EQUIPMENT INSTALLATION, SHALL BE APPROVED BY BUILDING OWNER AND PROJECT MECHANICAL ENGINEER IF LOCATION DIFFERS FROM

D. MAINTAIN CODE REQUIRED AND MANUFACTURER'S RECOMMENDED

F. COORDINATE INSTALLATION OF ALL EQUIPMENT, DUCTWORK, AIR DEVICES, AND ACCESSORIES WITH ALL OTHER TRADES SO AS TO

APPLICABLE, RUN BRANCH DUCTWORK WITHIN ROOF TRUSSES. COORDINATE WITH NEW PLUMBING, ELECTRICAL AND FIRE UTILITIES

. PROVIDE AND INSTALL FAN COIL UNIT (FCU) VERTICALLY WITH RETURN AIR PLENUM/SUPPORT BELOW AIR HANDLER IN SECONDARY CONTAINMENT PAN. FIELD COORDINATE FINAL INSTALLATION LOCATION AND ORIENTATION WITH ALL OTHER TRADES. REFER TO VERTICAL AIR HANDLER UNIT DETAIL FOR

PROVIDE AND INSTALL FAN COIL UNIT (FCU) HORIZONTALLY IN SECONDARY CONTAINMENT PAN. FIELD COORDINATE FINAL

TO HORIZONTAL AIR HANDLER UNIT DETAIL FOR ADDITIONAL

INSTALLATION LOCATION AND HEIGHT WITH OTHER TRADES. REFER

PROVIDE P-TRAP AT EQUIPMENT CONNECTION PER DETAILS AND PROVIDE INTEGRAL FLOAT SWITCH IN CONDENSATE DRAIN PAN. INTEGRAL FLOAT SWITCH TO AUTOMATICALLY SHUT OFF FAN COIL

PROVIDE AND INSTALL DEDICATED SMOKE DETECTOR AS REQUIRED BY CODE AND LOCAL AHJ, IN THE RETURN DUCT OF UNITS 2,000 CF OR GREATER OR WHERE COMBINED CFM OF SHARED RETURN CFM

EXCEEDS 2,000 CFM. DETECTORS SHALL BE CONNECTED TO THE ALARM SYSTEM TO GENERATE SUPERVISORY NOTIFICATION. UPON DETECTION, UNIT SHALL SHUT DOWN AUTOMATICALLY AND ALARM.

PROVIDE MOTORIZED BACKDRAFT DAMPER. UPON UNIT FAN. ENERGIZING, DAMPER SHALL OPEN AND PROVIDE CODE MINIMUM OA PER SCHEDULE. OUTSIDE AIR DUCT TO CONNET TO FAN COIL

UNIT (FCU) RETURN AIR PLENUM, DOWNSTREAM OF RETURN AIR

. ROUTE 8"Ø OUTSIDE AIR DUCT UP TO ROOF. TERMINATE AT ROOF. WITH ROOF CAP EQUAL TO LUXURY METAL #SJV826. COORDINATE WITH ROOFING CONTRACTOR FOR INSTALLATION AND FLASHING SC AS NOT TO VOID ROOF WARRANTY. TRANSITION AS REQUIRED TO DUCT CONNECTION SIZE AT OUTSIDE AIR INTAKE. REFER TO M301

. ROUTE 3/4" CONDENSATE DRAIN PIPE FROM FAN COIL UNIT (FCU) MOP SINK AS SHOWN. REFER TO MANUFACTURER'S AHU

8. ROUTE PUMPED CONDENSATE DRAIN PIPE FROM FAN COIL UNIT

9. 3/4" INSULATED CONDENSATE DRAIN SHALL TERMINATE AT MOP SINK RIM WITH 1" AIR GAP. COORDINATE WITH PLUMBING

10. ROUTE 3/4" INSULATED CONDENSATE DOWN FROM LEVEL 2 TO LEVEL 1, AND TIE INTO 3/4" INSULATED CONDENSATE FROM FCU-1-

11. PROVIDE AND INSTALL THERMOSTAT WITH REMOTE SENSOR 54" A.F.F. COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE EMPTY J-BOX AND CONDUIT FOR THERMOSTAT LOCATION. UTILIZE

12. PROVIDE AND INSTALL THERMOSTAT WITH REMOTE SENSOR 54" A.F.F. COORDINATE WITH ELECTRICAL CONTRACTOR TO PROVIDE EMPTY J-BOX AND CONDUIT FOR THERMOSTAT LOCATION.

SCHEDULES AND DETAILS. REFER TO DETAILS AND SCHEDULES FOR

TEMPERATURE AVERAGING FOR FCU-1-1 UNIT CONTROL.

13. PROVIDE AND INSTALL AIR TRANSFER DUCT/DEVICES PER

14. PROVIDE AND INSTALL CONDENSING UNIT ON WALL OF ANNEX, ACCESSIBLE FROM ADJACENT ROOF STRUCTURE. COORDINATE WITH MANUFACTURER TO PROVIDE WALL MOUNTING BRACE FOR CONDENSING UNITS. ROUTE REFRIGERANT PIPING THROUGH WATERTIGHT PENETRATION TO SERVE FAN COIL UNIT INDOORS. AL INSULATED REFRIGERANT PIPING EXPOSED TO THE ELEMENTS SHALL BE PROVIDED WITH ALUMINUM METAL JACKET FOR

15. TERMINATE EXHAUST AT EXTERIOR WALL WITH MANUFACTURER'S WALL CAP. MAINTAIN CODE REQUIRED MINIMUM 10-FT CLEARANCE

16. PROVIDE AND INSTALL 8"Ø OUTSIDE AIR INTAKE EQUAL TO BROAN 643FA WITH INSECT SCREEN ON INTAKE. ROUTE 8" ROUND OUTSIDE AIR DUCT TIGHT TO STRUCTURE TO RETURN OF FAN COIL UNIT.

17. INSTALL FAN COIL UNIT (FCU) ON WALL AT APPROX. 9'-0" A.F.F. PER

CAPITAL CONSULTING ENGINEERS CAPCONSULTINGENG.COM TX FIRM # 26531

MANUFACTURER'S INSTALLATION INSTRUCTIONS.

CONTRACTOR FOR FINAL TERMINATION.

ADDITIONAL INFORMATION.

TO ALL OUTSIDE AIR INTAKES. TYPICAL.

(FCU) DRAIN CONNECTION TIGHT TO STRUCTURE AND CONTINUE TO

GRAVITY HEADER (REFER TO DETAILS). ROUTE CONDENSATE DRAIN AS HIGH AS POSSIBLE TO ACCOMMODATE FALL TO DISCHARGE LOCATION. REFER TO FCU MANUFACTURER'S INSTALLATION REQUIREMENTS. ALL PIPING SHALL BE INSULATED AND SLOPED AT

INSTALLATION REQUIREMENTS. ALL PIPING SHALL BE INSULATED AND SLOPED AT MINIMUM 1/8"/FT. TERMINATE INSULATED CONDENSATE DRAIN PIPING WITH INDIRECT CONNECTION. COORDINATE WITH PLUMBING CONTRACTOR FOR FINAL

COORDINATING ALL FINAL AIR DEVICE/LOUVER COLORS TO MATCH

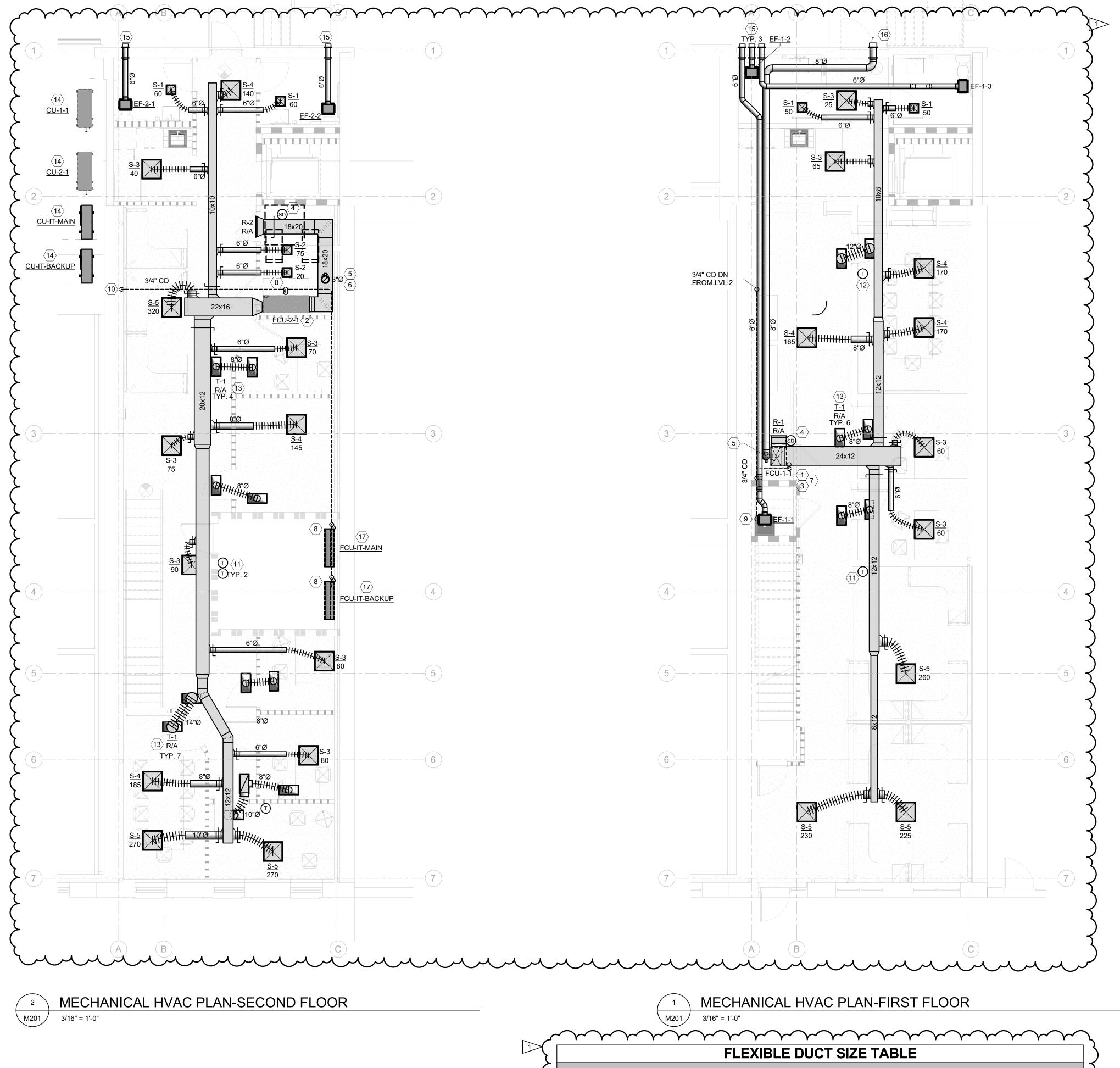
E. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR

G DUCTWORK SHALL BE KEPT TIGHT TO STRUCTURE. WHERE

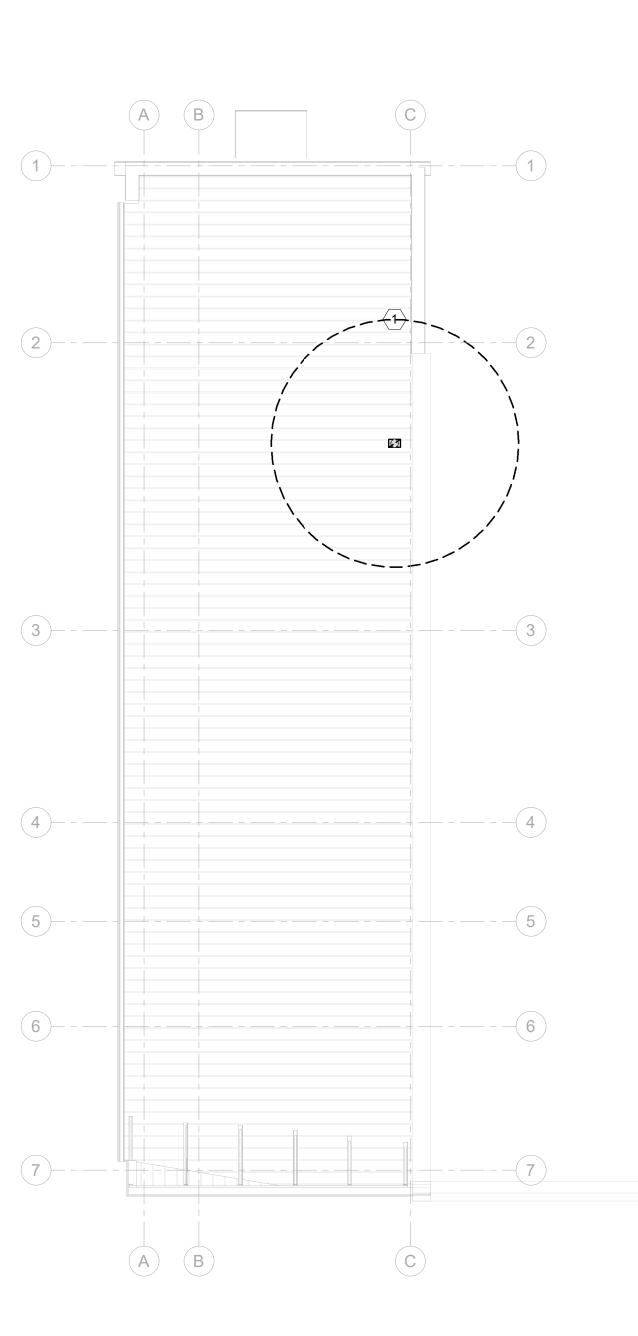
THE CONTRACTOR SHALL EXAMINE FIELD CONDITIONS AND FURNISH

THE NECESSARY FITTINGS WHICH MAY BE REQUIRED TO COMPLETE

Project Number: 33-1408 © 2024 LEVY DYKEMA TRUE NORTH **MECHANICAL HVAC**



FLEXIBLE DU	CT SIZE TABLE	
AIRFLOW (CFM)	FLEXIBLE DUCT SIZE	
0 - 100	6" RND	
101 - 225	8" RND	
226 - 400	10" RND	
401 - 650	12" RND	
651 - 925	14" RND	
NOTES:		
FLEXIBLE DUCTWORK EQUIVALENT TO FLEXMASTER 6M		



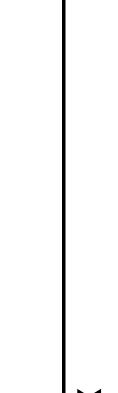
MECHANICAL ROOF PLAN



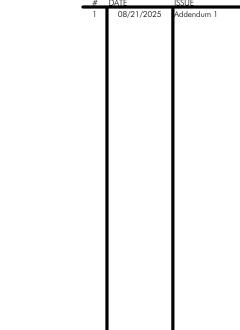
- A. REFER TO MECHANICAL COVER SHEET DRAWING FOR SYMBOLS, ABBREVIATIONS, SPECIFICATIONS, AND ADDITIONAL INFORMATION.
- B. DUE TO DRAWING SCALE, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, AND ACCESSORIES WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL EXAMINE FIELD CONDITIONS AND FURNISH THE NECESSARY FITTINGS WHICH MAY BE REQUIRED TO COMPLETE THE INSTALLATION.
- C. FINAL LOCATION OF ALL NEW EQUIPMENT, PRIOR TO EQUIPMENT INSTALLATION, SHALL BE APPROVED BY BUILDING OWNER AND PROJECT MECHANICAL ENGINEER IF LOCATION DIFFERS FROM CONSTRUCTION DOCUMENTS.
- D. MAINTAIN CODE REQUIRED AND MANUFACTURER'S RECOMMENDED CLEARANCES FOR ALL NEW EQUIPMENT.
- E. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL FINAL AIR DEVICE/LOUVER COLORS TO MATCH ARCHITECTURAL CEILING FINISHES.
- F. COORDINATE INSTALLATION OF ALL EQUIPMENT, DUCTWORK, AIR DEVICES, AND ACCESSORIES WITH ALL OTHER TRADES SO AS TO AVOID INSTALLATION CONFLICTS.
- G. DUCTWORK SHALL BE KEPT TIGHT TO STRUCTURE. WHERE APPLICABLE, RUN BRANCH DUCTWORK WITHIN ROOF TRUSSES. COORDINATE WITH NEW PLUMBING, ELECTRICAL AND FIRE UTILITIES TO AVOID CONFLICTS.

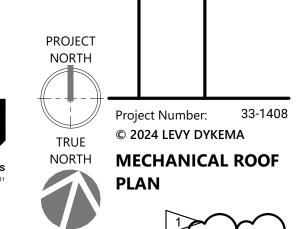
SHEET WORK NOTES

1. PROVIDE AND INSTALL ROOF CAP EQUAL TO LUXURY METAL #SJV826. COORDINATE WITH ROOFING CONTRACTOR FOR INSTALLATION AND FLASHING SO AS NOT TO VOID ROOF WARRANTY. ROOF CAP TO BE LINDING VENT. OUTLET AND PLUMBING VENT.



08/26/2025







2015 IECC ENERGY CODE COMPLIANCE

HEAT TRAPS SHALL BE PROVIDED ON NONCIRCULATING WATER HEATING SYSTEMS ON BOTH

INLET AND OUTLET CONNECTIONS. HEAT TRAPS MAY BE PRE-FABRICATED OR FIELD-FABRICATED BY CREATING A LOOP OR INVERTED U-SHAPED ARRANGEMENT ON THE INLET AND OUTLET PIPES. REFER TO WATER HEATER DETAIL.

PIPE INSULATION FOR THE SPECIFIED NONCIRCULATING SERVICE HOT WATER SYSTEM IS REQUIRED FOR ALL PIPING IN THE FOLLOWING CATEGORIES: a) THE FIRST 8' OF OUTLET PIPING FROM ANY CONSTANT-TEMPERATURE.

NONCIRCULATING STORAGE SYSTEM. b) THE INLET PIPING BETWEEN THE STORAGE TANK AND A HEAT TRAP IN A NONCIRCULATING STORAGE SYSTEM.

INSULATION SHALL COMPLY WITH PIPE INSULATION SPECIFICATIONS AS INDICATED ON THIS DRAWING PER TABLE C403.2.10 MINIMUM PIPE INSULATION THICKNESS.

SERVICE WATER HEATING EQUIPMENT SHALL MEET MINIMUM FEDERAL EFFICIENCY

WATER-HEATING EQUIPMENT SHALL BE PROVIDED WITH CONTROLS THAT ALLOW THE USER TO SET THE WATER TEMPERATURE TO 140°F.

GENERIC PLUMBING REQUIREMENTS:

REQUIREMENTS INCLUDED IN THE NATIONAL APPLIANCE ENERGY CONSERVATION ACT AND THE ENERGY POLICY ACT OF 1992, WHICH MEET OR EXCEED 2015 IECC AND ASHRAE 90.1 FOR ENERGY EFFICIENCY AND STANDBY LOSS.

PLUMBING PIPING & MATERIALS

DOMESTIC WATER PIPING

ASTM B88. TYPE L HARD DRAWN COPPER TUBING, WITH SOLDERED JOINTS. ASME B16.22, WROUGHT COPPER AND BRONZE FITTINGS, OR PRESSURE SEALED FITTINGS AND JOINTS COMPLYING WITH ASTM B584

BELOW GRADE:

ASTM D1785, SCHEDULE 80 PVC, WITH SOLVENT WELDS.

TO CARBONATORS: ASTM A312, TYPE 304 SCHEDULE 40 STAINLESS STEEL, WITH

THREADED FITTINGS.

VENT PIPING ABOVE CEILINGS:

ALL VENT PIPING ABOVE CEILINGS SHALL BE SERVICE WEIGHT, NO-HUB CAST IRON PIPE AND DRAINAGE FITTINGS WITH HEAVY DUTY COUPLINGS.

WHEN CEILING CAVITY IS A RETURN AIR PLENUM, PROVIDE TRANSITION TO PVC WASTE AND VENT PIPING AS REQUIRED, PRIOR TO ENTERING PLENUM (IF APPLICABLE). PVC SHALL NOT BE EXPOSED IN A RETURN AIR PLENUM.

WASTE & VENT PIPING

ABOVE GRADE:

ASTM A74, HUBLESS CAST IRON, WITH CISPI 301 SPIGOT BEAD ENDS FOR COUPLING

ASTM D2665, SCHEDULE 40 PVC JOINED WITH SOLVENT WELDS.

BELOW GRADE:

ASTM A74, CAST IRON, HUB AND SPIGOT TYPE, JOINED WITH ASTM C564 NEOPRENE

COMPRESSION GASKETS. ASTM D2665, SCHEDULE 40 PVC JOINED WITH SOLVENT WELDS.

SOFTDRING TUBING CONDUIT:

BELOW GRADE:

ASTM D2665, SCHEDULE 40 PVC JOINED WITH SOLVENT WELDS. PROVIDE LONG RADIUS FITTINGS AND PULL STRING.

DOMESTIC WATER VALVES:

DOMESTIC WATER: BALL VALVES, 2" AND SMALLER, ASTM B 584, BRONZE BODY AND BONNET, 2-PIECE CONSTRUCTION, CHROME-PLATED BRASS BALL, FULL PORT, BLOWOUT PROOF, BRASS OR BRONZE STEM. TEFLON SEAT AND SEALS, STEM EXTENSION FOR VALVES INSTALLED IN INSULATED PIPING, AND THREADED ENDS.

DRAWING	SHEET TITLE
P001	PLUMBING COVER SHEET
P002	PLUMBING DETAILS
P003	PLUMBING SCHEDULES
P101	PLUMBING DWV PLANS
P201	PLUMBING DOMESTIC WATER PLANS
P301	PLUMBING RISER DIAGRAMS

REQUIREMENTS SPECIFIC TO WATER HEATING:

REFER TO THE ARCHITECTURAL PLANS AND DETAILS FOR EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL PLUMBING FIXTURES. REFER TO THE ARCHITECTURAL PLANS AND DETAILS FOR EXACT LOCATIONS OF ALL FLOOR

PLUMBING GENERAL NOTES

ALL SANITARY AND VENT PIPING SHALL BE ROUTED AT A SLOPE OF NOT LESS THAN 1/4" PER FOOT, UNLESS OTHERWISE NOTED.

THE PLUMBING CONTRACTOR SHALL COORDINATE EXACT ROUTING OF ALL PIPING WITH THE

GENERAL NOTES

FURNISH AND INSTALL ALL ITEMS NECESSARY TO PROVIDE FULLY FUNCTIONING SYSTEMS AS INDICATED BY THE DESIGN

SUPERVISION, SUPPLIES, EQUIPMENT, TRANSPORTATION, HOISTING/RIGGING, STORAGE, UTILITIES, AND ALL REQUIRED

DRAWINGS ARE SCHEMATIC IN NATURE AND DO NOT REFLECT ALL WORK AND MATERIALS REQUIRED TO COMPLETE

WITHIN DESIGN. CONTRACTOR SHALL REQUEST ADDITIONAL INFORMATION AND DETAILS WHERE SCOPE IS UNCLEAR.

3. ALL WORK SHALL COMPLY WITH THE MOST RECENT ADOPTED VERSION OF ALL APPLICABLE LAWS, RULES, REGULATIONS

SHALL REPORT TO THE ARCHITECT/ENGINEER AND SECURE HIS APPROVAL BEFORE PROCEEDING WITH ANY

DOCUMENTS SHALL TAKE PRECEDENCE PROVIDED THAT THEY ARE NOT IN CONFLICT WITH THE CODES.

OR FAULTY INSTALLATION OF ANY WORK COVERED BY THE CONTRACT DOCUMENTS.

CONTRACT DOCUMENTS, AND/OR REQUIRED BY THE NATURE OF THIS WORK.

AND THE EQUIPMENT SPECIFIED. ELEMENTS OF THE WORK SHALL INCLUDE, BUT ARE NOT LIMITED TO, MATERIALS, LABOR,

PROJECT. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT AS REQUIRED TO COMPLETE PROJECT

AND ORDINANCES OF ALL FEDERAL, STATE AND LOCAL AUTHORITIES. IF CONFLICT BETWEEN THE CONTRACT DOCUMENTS

THE DESIGN SHALL BE MADE WITHOUT ADDITIONAL COST TO THE OWNER OR ARCHITECT/ENGINEER. THE CONTRACTOR

BEFORE SUBMITTING BIDS, EACH CONTRACTOR SHALL PERFORM A SITE VISIT AND UNDERSTAND THE CONDITIONS TO BE

MISUNDERSTANDING OF THE SCOPE OR AMOUNT OF WORK TO BE PERFORMED SHALL BE THE RESPONSIBILITY OF THE

CONTACTOR, AND SHALL NOT RESULT IN ANY ADDITIONAL COST TO THE OWNER. TENDER OF A PROPOSAL CONVEYS FULL

CONTRACTOR AGREEMENT OF THE ITEMS AND CONDITIONS SPECIFIED AND/OR INDICATED, SCHEDULED, OR IMPLIED ON THE

ALL WORK SHALL BE CARRIED OUT IN A NEAT, WELL ORGANIZED MANNER. ALL SERVICES SHALL BE ROUTED PARALLEL AND

PERPENDICULAR TO THE PRIMARY LINES OF THE BUILDING. LOCATE ALL EQUIPMENT TO PROVIDE ACCESS AND ARRANGE

ALL WORK WITH ADEQUATE ACCESS FOR OPERATION AND MAINTENANCE, AND TO MAINTAIN PROPER CODE AND

8. ALL EQUIPMENT AND MATERIAL TO BE FURNISHED AND INSTALLED ON THIS PROJECT SHALL BE UL OR ETL LISTED. IN

10. THE FOLLOWING SUBMITTAL DATA SHALL BE FURNISHED AND SHALL INCLUDE BUT NOT BE LIMITED TO:

ACCORDANCE WITH THE AUTHORITY HAVING JURISDICTION, AND SUITABLE FOR ITS INTENDED USE ON THIS PROJECT.

9. THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL NEW EQUIPMENT, CONTROLS, AND FIXTURES TO BE PROVIDED

11. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL COORDINATE THE INSTALLATION OF DUCTWORK, PIPING,

STRUCTURE. PROVIDE ADDITIONAL RISES AND OFFSETS AS REQUIRED. IF, AFTER INSTALLED, NEW DUCTWORK, PIPING,

CONDUIT, CABLE, ETC., IS FOUND TO BE IN CONFLICT WITH THE ARCHITECTURE, STRUCTURE OR OTHER TRADE WORK.

SHALL BE RELOCATED WITHOUT ADDITIONAL COST TO THE OWNER/TENANT. COORDINATE ALL WORK WITH ALL OTHER

12. MATERIALS AND EQUIPMENT SHALL BE NEW AND IN GOOD CONDITION. THE COMMERCIALLY STANDARD ITEMS OF

WHICH IS EITHER EXISTING OR SHOWN ON THE CONTRACT DOCUMENTS, THE DUCTWORK, PIPING, CONDUIT, CABLE, ETC.

CONDUIT, CABLE, ETC., WITH LIGHTING FIXTURES, SPECIAL CEILING CONSTRUCTION, AIR DISTRIBUTION EQUIPMENT, AND THE

EQUIPMENT AND THE SPECIFIC NAMES INDICATED ARE INTENDED TO IDENTIFY STANDARDS OF QUALITY AND PERFORMANCE NECESSARY FOR THE PROPER FUNCTIONING OF THE WORK. MATERIALS AND EQUIPMENT WHICH ARE FOUND TO HAVE

FACTORY DEFECTS SHALL BE REPLACED OR REPAIRED IN A MANNER ACCEPTABLE TO THE OWNER/TENANT AND ENGINEER

13. DAMAGE CAUSED DURING CONSTRUCTION TO EXISTING MATERIALS/EQUIPMENT WILL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO OWNER. RE-SUPPORT ANY REMAINING PIPING OR DEVICES THAT WERE SUPPORTED BY WALLS BEING

14 THE WARRANTY PERIOD SHALL BE NO LESS THAN ONE (1) FULL YEAR, UNLESS SPECIFIED OTHERWISE AND SHALL INCLUDE

AT LEAST ONE (1) FULL HEATING SEASON AND ONE (1) FULL COOLING SEASON. DURING THE WARRANTY PERIOD THE

15. THE START OF THE CONTRACTOR'S WARRANTY PERIOD SHALL COMMENCE ON THE DATE OF "SUBSTANTIAL COMPLETION"

17. THIS CONTRACTOR SHALL SECURE ALL PERMITS, LICENSES AND INSPECTIONS REQUIRED FOR HIS WORK, AND SHALL PAY

18. IN THE EVENT OF A CONFLICT BETWEEN DRAWINGS AND/OR SPECIFICATIONS, THE CONTRACTOR SHALL PROVIDE PRICING

19. PENETRATIONS THROUGH FLOORS OR FIRE-RATED CONSTRUCTION SHALL BE FIRE RATED TO COMPLY WITH ASTM E-814 (UL

20. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, A COMPLETE SET OF "AS BUILT"

21. IN THE EVENT THAT MATERIALS, PRODUCTS, AND/OR PROCESSES BEING PROPOSED FOR THIS PROJECT CONTAIN, OR MAY EMIT, ANY VOLATILE ORGANIC COMPOUNDS (VOC), FORMALDEHYDE FORMULATIONS, OR HAZARDOUS OUT-GASSING, AS DETERMINED BY THE MANUFACTURER, A MATERIÁLS SAFETY DATA SHEET SHALL BE SUBMITTED AS PART OF THE SHOP

22. VERIFY LOCATIONS OF EXISTING VALVES LOCATED WITHIN SCOPE OF WORK. MODIFY EXISTING OR PROVIDE NEW MEANS OF

NAMEPLATES SHALL BE BLACK SURFACE, WHITE CORE LAMINATED WITH ENGRAVED LETTERS. PLATES SHALL BE A MINIMUM

23. PLUMBING EQUIPMENT SHALL BE IDENTIFIED BY MEANS OF NAMEPLATES PERMANENTLY ATTACHED TO THE EQUIPMENT.

24. THE CONTRACTOR SHALL TAKE NOTE THAT THE DRAWINGS ARE SCHEMATIC IN NATURE AND INDICATE THE APPROXIMATE LOCATIONS OF THE HVAC AND PLUMBING SYSTEMS. LOCATE ALL ITEMS IN THE FIELD. COORDINATE WITH OTHER TRADES TO

25. AFTER COMPLETION OF INSTALLATION, BUT PRIOR TO SUBSTANTIAL COMPLETION. CONTRACTOR SHALL CERTIFY IN WRITING THAT PRODUCTS AND MATERIALS INSTALLED AND PROCESSES USED DO NOT CONTAIN ASBESTOS OR POLYCHLORINATED

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK, MATERIALS, AND EQUIPMENT UNTIL FINAL ACCEPTANCE BY THE OWNER. PROTECT ALL WORK AGAINST THEFT, INJURY, OR DAMAGE AND CAREFULLY STORE MATERIAL AND EQUIPMENT RECEIVED ON SITE WHICH IS NOT IMMEDIATELY INSTALLED. THE CONTRACTOR SHALL CLOSE OPEN ENDS OF WORK WITH TEMPORARY COVERS OR PLUGS DURING CONSTRUCTION TO PREVENT THE ENTRY OF DUST, DIRT, AND OBSTRUCTING MATERIAL. THE CONTRACTOR SHALL PROTECT ALL EQUIPMENT AND MATERIALS FROM DAMAGE DUE TO WATER, SPRAY-ON

26. THE CONTRACTOR SHALL PROTECT THE WORK, EQUIPMENT, AND MATERIALS FROM DAMAGE BY HIS WORK OR HIS PERSONNEL, AND SHALL CORRECT ALL DAMAGE THUS CAUSED WITHOUT ADDITIONAL COST TO THE OWNER. THE

FIREPROOFING, CONSTRUCTION DEBRIS, ETC. IN A MANNER ACCEPTABLE TO THE ENGINEER AND/OR OWNER.

DRAWINGS PORTRAYING ACTUAL SITE CONDITIONS OF THE MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION WORK. SUBMISSION SHALL CONSIST OF ONE SET OF PAPER COPIES AND ONE SET OF CAD FILES IN AUTOCAD (CONTRACTOR

REFLECTING THE GREATEST COST. THE CONFLICT SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR

DETERMINE THE EXISTING STRUCTURAL SYSTEM PRIOR TO CUTTING, DRILLING, OR CORING. THE CONTRACTOR SHALL X-RAY

A. ALL WORK INSTALLED SHALL BE FREE FROM ANY AND ALL DEFECTS IN WORKMANSHIP AND/OR MATERIALS.

16. THIS BUILDING MAY HAVE A STRUCTURAL SYSTEM UTILIZING POST-TENSIONED CABLES. THE CONTRACTOR SHALL

CONTRACTOR SHALL GUARANTEE THE FOLLOWING IN A FORM SATISFACTORY TO THE OWNER/TENANT

B. ALL APPARATUS WILL DEVELOP CAPACITIES AND PERFORMANCE CHARACTERISTICS SPECIFIED.

MET IN INSTALLING THE WORK, AND SHALL MAKE PROVISIONS FOR THE CONDITIONS IN HIS FINAL BID. FAILURE ON THE PART

OF THE CONTRACTOR TO COMPLY WITH THIS REQUIREMENT SHALL NOT BE CONSIDERED JUSTIFICATION FOR THE OMISSION

AND THE LOCAL ENFORCING AUTHORITY EXISTS, THE LOCAL ENFORCING AUTHORITY SHALL APPLY. ANY MODIFICATIONS TO

WORK OF ALL OTHER TRADES. PROVIDE OFFSETS IN PIPING WHERE REQUIRED BY COORDINATION OF TRADES.

INSTALL ALL FLOOR DRAINS AND FLOOR SINKS SUCH THAT GRATING IS FLUSH WITH ADJACENT FLOORING SURFACE. FLOOR SHALL SLOPE TO DRAIN. COORDINATE ALL REQUIREMENTS WITH ARCHITECT AND GENERAL CONTRACTOR PRIOR TO INSTALLATION.

WHERE THE REQUIREMENTS OF THE CONTRACT DOCUMENTS EXCEED THE REQUIREMENTS OF THE CODES, THE CONTRACT THE PLUMBING CONTRACTOR SHALL CLEAN, FLUSH, AND DISINFECT ALL COLD WATER AND HOT WATER PIPING AND ALL FIXTURES PRIOR TO COMPLETION OF WORK.

VENTS THROUGH ROOF TO BE LOCATED A MINIMUM OF 15'-0" HORIZONTALLY AWAY FROM

OUTSIDE AIR INTAKES.

FLOOR DRAINS NOT RECEIVING REGULAR-USE DRAINAGE ARE TO BE TRAP PRIMED. PROVIDE BACKFLOW PREVENTION AS REQUIRED BY THE LOCAL CROSS CONNECTION CONTROL DEPT. STANDARDS WHERE NOT PROVIDED OR INADEQUATELY PROVIDED BY EQUIPMENT MANUFACTURER.

10. INSTALL PIPING AS HIGH AS POSSIBLE UNLESS OTHERWISE NOTED.

11. VERIFY DIMENSIONS FROM ARCHITECTURAL DRAWINGS AND FROM ACTUAL MEASUREMENTS AT JOBSITE.

12. PROVIDE SADDLES AND SHIELDS FOR SUPPORT OF INSULATED PIPING TO PREVENT CRUSHING.

13. PIPING PENETRATIONS THROUGH PERIMETER BEAMS, FOUNDATION ON GRADE, AND STRUCTURAL FLOORS SHALL BE SLEEVED. COORDINATE SLEEVE LOCATIONS AND SIZES WITH STRUCTURAL PRIOR TO POUR.

14 PROVIDE DIELECTRIC UNIONS AT DISSIMILAR MATERIALS.

15. PROVIDE ESCUTCHEONS AT ALL FINISHED WALL AND CEILING PIPING PENETRATIONS.

16. ALL PIPING SHALL BE IDENTIFIED AS TO TYPE OF USE, SERVICE, AND DIRECTION OF FLOW. LOCATE MARKERS AT EACH VALVE, AT ENTRIES TO WALLS, AND ON 20' CENTERS ON STRAIGHT RUNS OF PIPE. PROVIDE A FLOW ARROW AT EACH IDENTIFICATION MARKER. PIPE MARKERS SHALL BE SETON "SETMARK" OR EQUAL.

17. COORDINATE WORK COMPLETELY WITH ALL OTHER TRADES.

18. INSTALL PIPING FREE OF SAGS AND BENDS. PROVIDE NON-METALLIC COATED HANGERS WHERE IN DIRECT CONTACT WITH COPPER PIPING.

19. PROVIDE ENGINEERED WATER HAMMER ARRESTERS SIZED AND PLACED IN ACCORDANCE WITH STANDARD PDI-WH 201. AIR CHAMBERS SHALL NOT BE ALLOWED.

20. PROVIDE FLEXIBLE EXPANSION FITTINGS SUITABLE FOR SANITARY (DWV) AND RAINWATER PIPING WHERE PIPING ENTERS EXPANSIVE SOILS TO ALLOW FOR 4" OF DIFFERENTIAL MOVEMENT.

21. ALL FLOOR PENETRATIONS MUST BE SEALED WITH FIRE CAULK.

LOCATED INSIDE OR OUTSIDE THE BUILDING.

22. MAKE ALL NECESSARY EXCAVATIONS, CUTTING OF PAVING, CONCRETE, ETC., REMOVAL OF UNUSABLE SPOIL MATERIAL, ALL BACKFILLING WITH STABILIZED FILL, AND PERFORM TEMPORARY PATCH PAVING REPAIRS NECESSARY FOR PROPER EXECUTION OF THE WORK. BACKFILL SHALL BE MECHANICALLY COMPACTED TO A DENSITY OF 95% OF THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT AS DETERMINED BY THE STANDARD PROCTOR COMPACTION

23. PROVIDE MINIMUM 1" AIR GAP AT DRAIN DISCHARGE FOR ALL INDIRECT WASTE PIPING.

24. DISCHARGE PIPING FROM A DISHWASHER SHALL BE LOOPED UP AND SECURELY FASTENED TO THE UNDERSIDE OF THE COUNTER OR AN APPROVED DISHWASHER AIR-GAP FITTING IS

25. COMPRESSION TANKS SUPPLIED AT EACH WATER HEATER SHALL BE SECURED TO A WALL WITH

(2) 1" x 14 GA. GALVANIZED STRAPS. PROVIDE LAG BOLTS AND BLOCKING AS REQUIRED. 26. AN ATMOSPHERIC VACUUM BREAKER OR OTHER APPROVED BACKFLOW PREVENTION DEVICE. MUST BE INSTALLED ON ALL THREADED HOSE BIBB, WALL HYDRANT, OR FAUCET CONNECTIONS

SHEET LIST

CAPCONSULTINGENG.COM TX FIRM # 2653

PLUMBING LEGEND AND SYMBOLS

DESCRIPTION

MODIFICATIONS.

MANUFACTURER'S CLEARANCES.

B. COORDINATION DRAWINGS

TRADES PRIOR TO INSTALLATION.

C. RECORD DRAWINGS

A. EQUIPMENT AND MATERIALS SHOP DRAWINGS

AT NO ADDITIONAL COST TO THE OWNER/TENANT.

C. THE SYSTEMS SHALL OPERATE WITHOUT MALFUNCTION.

ALL PENETRATIONS PRIOR TO CUTTING THE FLOOR SLAB.

1479), AND THE LOCAL AUTHORITY HAVING JURISDICTION.

SHALL UTILIZE OWNER'S LAYER STANDARDS IF EXISTING).

DRAWING PROCESS FOR REVIEW BY THE ARCHITECT/ENGINEER/OWNER.

ACCESS WHERE REQUIRED BECAUSE OF NEW CONSTRUCTION.

OF 3" LONG BY 1" WIDE WITH WHITE LETTERS 1/4" HIGH.

ENSURE PROPER FIT AND ACCESS TO ALL ITEMS.

ALL FEES IN CONNECTION WITH SUCH PERMITS, LICENSES AND INSPECTIONS.

AS AGREED TO BY THE OWNER/TENANT.

D. OPERATING AND MAINTENANCE MANUALS

E. FIRE STOP MATERIALS AND DETAILS

SHUTOFF VALVE

BUTTERFLY VALVE

GAS SHUT-OFF COCK

SWING CHECK VALVE

SPRING CHECK VALVE

HOSE END DRAIN VALVE

AUTOMATIC AIR VENT

DIELECTRIC UNION

DIAL THERMOMETER

PIGTAIL FOR STEAM

ECCENTRIC PLUG BALANCING VALVE

PIPE ANCHOR

SOLENOID VALVE

VALVE IN RISER

TEE UP

TEE DOWN

—⊃ ELBOW DOWN

PIPE CAP

CONNECT TO EXISTING

NEW PIPING

NORMALLY OPEN (VALVE)

OVERFLOW RAIN LEADER

NORMALLY CLOSED (VALVE)

EXISTING PIPING

PIPING TO BE REMOVED

UNION

PRESSURE REDUCING VALVE

WATER OUTLET (TYPE INDICATED)

SLEEVE (PIPE) THRU WALL OR FLOOR

FLEX CONNECTOR (TYPE INDICATED)

AUTOMATIC FLOW BALANCING VALVE

PRESSURE GAUGE - PROVIDE WITH

BACKFLOW PREVENTER (TYPE INDICATED)

TEMPERATURE & PRESSURE RELIEF VALVE

GLOBE VALVE

STRAINER

──────── GATE VALVE

——⊣Ó⊢—— BALL VALVE

──ऄ──

DE

PLUMBING ABBREVIATIONS

MAX

RWL

SHT

SCW

SOC

SOV

UP

US

UTR

VTR

WCO

PLUMBING DESIGN CRITERIA

ALL PLUMBING WORK AND MATERIALS SHALL COMPLY WITH THE 2015 IPC WITH CITY OF BURNET AMENDMENTS.

——⊣亡⊢—— L.P. VALVE

———— ELBOW UP

MAXIMUM

MINIMUM

NATURAL GAS

OVER HEAD

SHEET

VENT

VALVE

WASTE

ROUGH-IN ONLY

RAIN WATER LEADER

SOFT COLD WATER

SHUT OFF VALVE

UNDERGROUND

UNDER SLAB

UP THRU ROOF

VENT THRU ROOF

WALL CLEANOUT

TRAP PRIMER LINE

SHUT OFF COCK (GAS)

PIPE RISE TO NEXT LEVEL

DESCRIPTION

SYMBOL

----SCW-----

—AW——

-----V-----

____AV____

——F——

S=.XXX

----NG-----

——CW—— DOMESTIC COLD WATER

——HW—— DOMESTIC HOT WATER

WASTE

VFNT

——HWC—— DOMESTIC HOT WATER RECIRC.

ACID WASTE

ACID VENT

CO/WCO |--- CLEANOUT/ WALL CLEANOUT

DRAIN

----FND----- FOUNDATION DRAINAGE

—RWL—— RAIN WATER LEADER

FIRE SERVICE

PCR—PUMPER CONDENSATE RETURN

NATURAL GAS

O——O OXYGEN - MEDICAL

—MA—— AIR - MEDICAL

——DA—— AIR - DENTAL

-----MV------ VACUUM - MEDICAL

——DV—— VACUUM - DENTAL

ABOVE CEILING

ACID VENT

BG

CD

CO

CKV

CW

CX

(A)

DN

DTL

(E)

FCO

FND

GCO

HW HWC

IDW

I.E.

IRR

LPG

C.I.N.H.

ACID WASTE

CLEANOUT

PIPE DROP

DETAIL **EXISTING**

CHECK VALVE

COLD WATER

FIRE SERVICE

HOT WATER

IRRIGATION

GENERAL GUIDELINES:

DRAINAGE FIXTURE UNITS

WATER SUPPLY FIXTURE UNITS

WATER SUPPLY PIPE SIZING

FLOOR CLEANOUT

FOUNDATION DRAIN

GRADE CLEANOUT

INDIRECT WASTE

INVERT ELEVATION

LOW WATER CUTOFF

SANITARY DRAINAGE AND VENT PIPING

SIZED PER TABLE 710.1(1) OF THE 2015 IPC.

SIZED PER TABLE 709.1 OF THE 2015 IPC.

SIZED PER TABLE E103.3(2) OF THE 2015 IPC.

SIZED PER TABLE E103.3(5) OF THE 2015 IPC.

DRAIN PIPE SHALL SLOPÉ PER 2015 IPC SECTION 704.1

BELOW GRADE

COMPRESSED AIR

CONDENSATE DRAIN

CONNECT TO EXISTING

PIPE DROP TO NEXT LEVEL

HOT WATER CIRCULATION

LIQUEFIED PETROLEUM GAS

CAST IRON NO HUB

ABOVE FINISHED FLOOR

BELOW FINISHED FLOOR

FLOOR CLEANOUT

GRADE CLEANOUT

CONDENSATE DRAIN

OVERFLOW RAIN LEADER

CONDENSATE RETURN

EVACUATION - ANESTHESIA

NITROGEN - MEDICAL

MEDICAL GAS OUTLET

MEDICAL GAS CONSOLE

MASTER MEDICAL GAS ALARM PANEL

AREA MEDICAL GAS ALARM PANEL

MEDICAL GAS EMERGENCY

SHUTOFF VALVE BOX

SLOPE DOWN IN DIRECTION OF FLOW

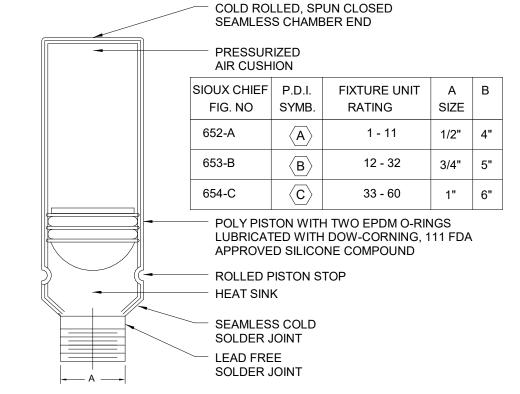
SOFT COLD WATER

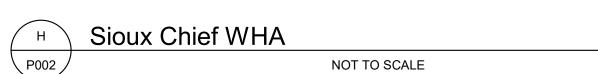
© 2024 LEVY DYKEMA **PLUMBING COVER** SHEET

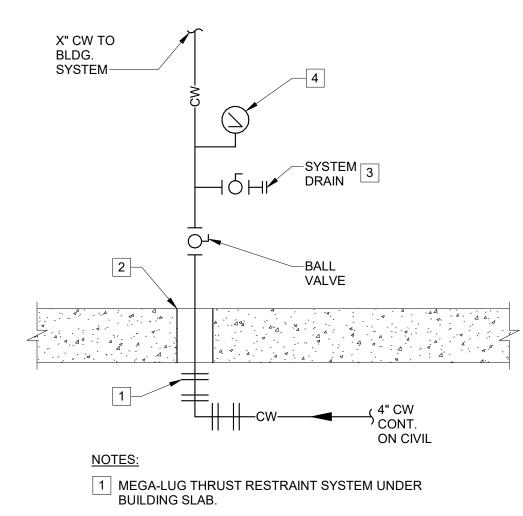
Project Number: 33-1408



WATER HAMMER ARRESTOR BY SIOUX CHIEF 650 - 660 SERIES HYDRA-RESTER.
REQUIRED IN PIPING SYSTEMS. WATER HAMMER ARRESTERS SHALL HAVE SUFFICIENT
VOLUME OF AIR TO DISSIPATE THE CALCULATED KINETIC ENERGY GENERATED IN THE
PIPING SYSTEM. ARRESTERS SHALL BE EFFECTIVE WHEN INSTALLED AT ANY ANGLE.
ARRESTERS SHALL BE APPROVED FOR INSTALLATION WITH NO ACCESS PANEL REQUIRED.
WATER HAMMER ARRESTERS SHALL BE SIZED AND PLACED PER MANUFACTURER'S
INSTRUCTIONS.





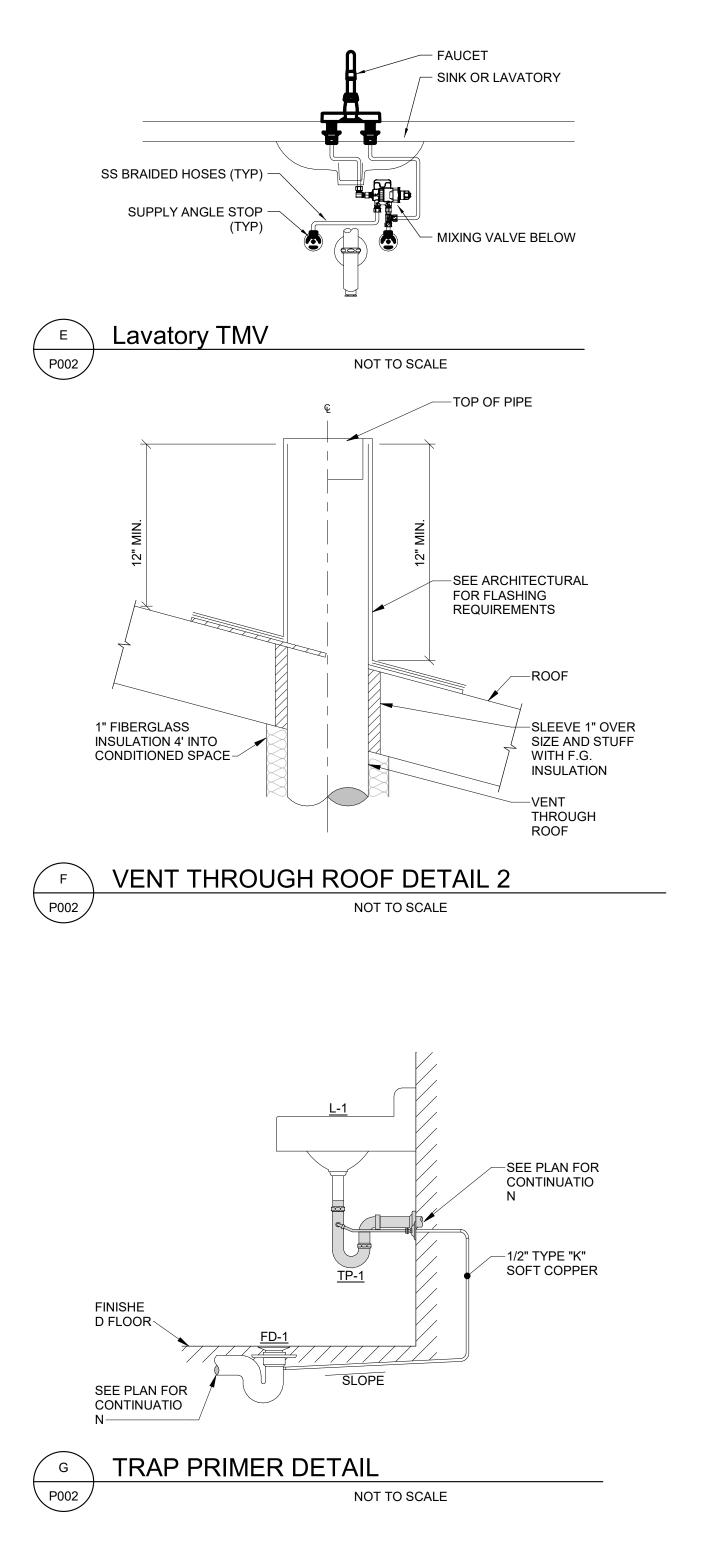


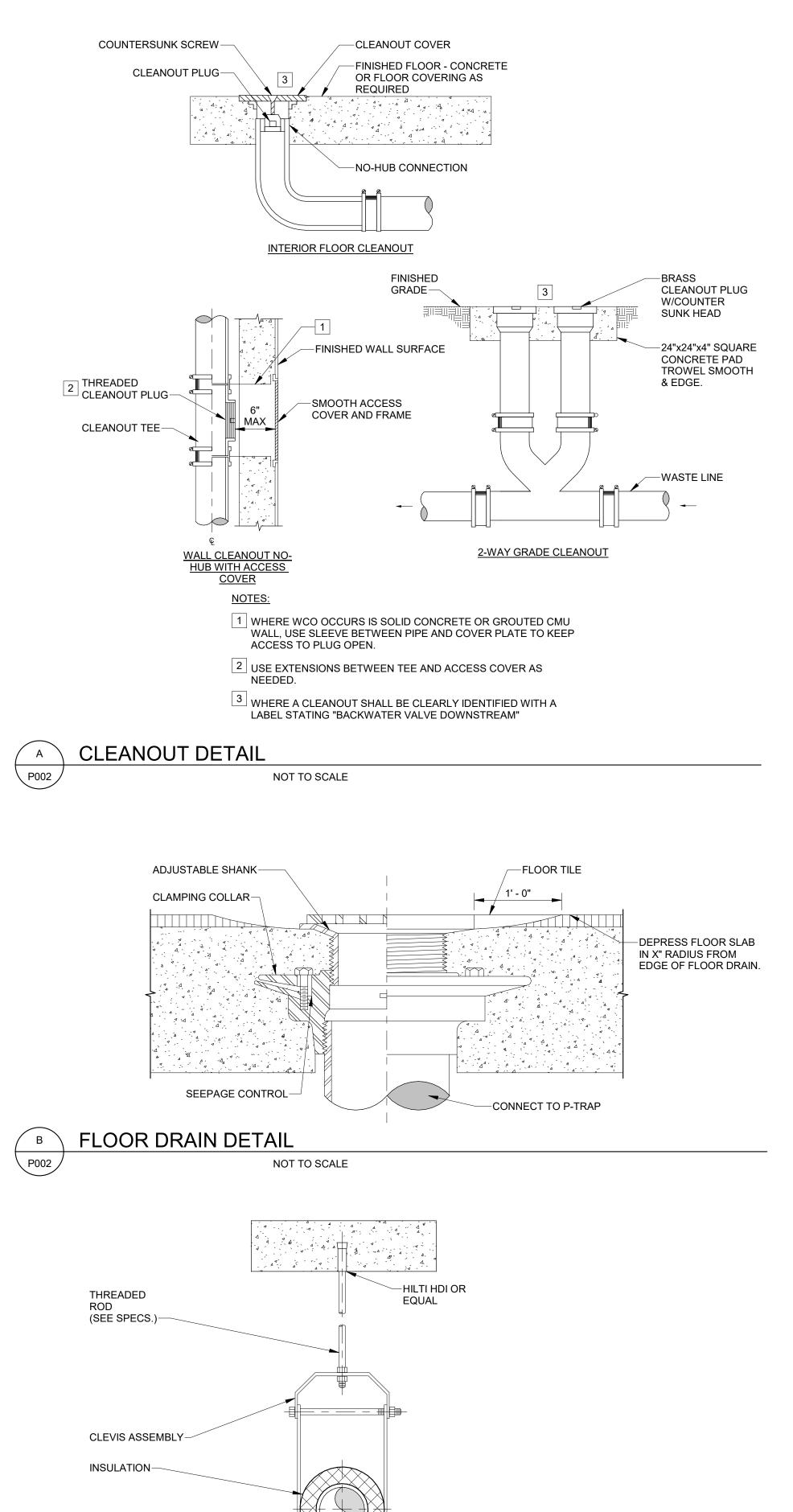
2 SLEEVE AND SEAL WATER TIGHT THRU FLOOR.

3 1" BALL VALVE WITH 3/4" MALE HOSE THREAD.

4 3 1/2"Ø PRESSURE GAUGE READS 0-100 PSI.







PROTECTIVE

NOM. SIZE | THRU 3/4" |

√ P002

PIPE HANGER DETAIL

SHIELD (18 GA. X 12" LONG)

DOMESTIC COLD WATER PIPING

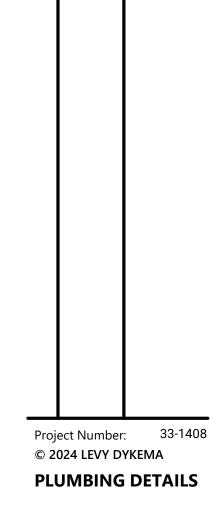
MAXIMUM PIPE/TUBING SUPPORT SPACING, FEET

NOT TO SCALE

9 10 12 14

CAPITAL CONSULTING ENGINEERS

CAPCONSULTINGENG.COM TX FIRM # 26531



COUNTY

BURNET

BRIAN D. HOCKMAN

08/26/2025

SCHEDULES

			PLUMBING FIXTURE SCHI	EDULE				
				CONNECTIONS (INCHES)				
TAG	DESCRIPTION	MANUFACTURER - MODEL	TRIM & ACCESSORIES	HW	CW	w	v	DESCRIPTION AND NOTES
CP-1	CIRCULATION PUMP	TACO #003B	PROVIDE WITH TACO #265-3 DIGITAL TIMER AND AQUASTAT FOR PUMP CONTROL	3/4	-	-	-	1/40 HP, 120/1/60, 0.5 GPM @ 4 FT HEAD, BRONZE CONSTRUCTION. COORDINATE OPERATING TIMES WITH OWNER
EWH-1	ELECTRIC WATER HEATER	A.O. SMITH DEL-10S-2.5	CONTAINMENT PAN W/ DRAIN, WALL MOUNT (HOLDRITE 30-SWHP-WM OR EQUAL), CP-1 AND XT-1 AS SCHEDULED	3/4	3/4	-	-	10 GALLON ELECTRIC STORAGE WATER HEATER, 2.5 KW, 10 GPH AT 100 DEG F RISE, T&P RELIEF ASSEMBLY, SET AT 120 DEG F DISCHARGE, PROVIDE XT-1 EXPANSION TANK, 208V1PH, 25 FLA
FCO	FLOOR CLEANOUT	JAY R. SMITH #4020	FLANGE W/ FLASHING CLAMP	-	-	-	-	CAST IRON BODY, ABS CLEANOUT PLUG WITH GASKET, NICKEL BRONZE COVER, ADJUSTABLE HOUSING FOR FLUSH INSTALLATION, REFER TO PLANS FOR PIPE SIZE
L-1	LAVATORY (ADA)	KOHLER SOHO #K-2053-N	FAUCET: KOHLER #K-23484-4N-CP, TRAP, S.S. BRAIDED HOSES, 1/4 TURN ANGLE STOPS, WALL ESCUTCHEONS, TRUEBRO PIPE GUARDS	1/2	1/2	2	2	WHITE VITREOUS CHINA WALL MOUNT SINK, 0.5 GPM THREEE HOLE COUNTER MOUNT FAUCET IN CHROME, BASKET STRAINER, CHROME TAILPIECE AND P-TRAP. ADA COMPLIANT
MS-1	MOP SINK	FIAT #MSB2424	FAUCET: FIAT #830-AA, MOP HANGER	1/2	1/2	3	2	24"x24"x12" MOLDED STONE MOP SINK, CHROME PLATED SERVICE FAUCET WITH VACUUM BREAKER, WALL BRACE, PAIL HOOK, AND HOSE THREAD
SA-1	SHOCK ARRESTOR	SIOUX CHIEF HYDRARESTER 650 SERIES	-	-	*	,	-	FACTORY PRECHARGED WATER HAMMER ARRESTOR, *REFER TO MANUFACTURER LITERATURE FOR SIZING CRITERIA AND MODEL SELECTION
SK-1	BREAK ROOM SINK	ELKAY LUSTERTONE #LRAD221965	FAUCET: KOHLER #K-7505-CP, TRAP, S.S. BRAIDED HOSES, 1/4 TURN ANGLE STOPS, WALL ESCUTCHEONS	1/2	1/2	2	2	18 GA STAINLESS STEEL SINGLE BOWL COUNTERMOUNT SINK, 6" DEEP, 1.5 GPM SINGLE HOLE COUNTER MOUNT FAUCET IN CHROME, BASKET STRAINER, CHROME TAILPIECE AND P-TRAP.
SP-1	ELEVATOR SUMP PUMP	BELL & GOSSETT #ELKT2EC0311L	HIGH WATER FLOAT ALARM SWITCH	-	-	2	-	AUTOMATIC OPERATION ELEVATOR SUMP PUMP, 1/3 HP, 120V/1PH, 50 GPM AT 17 FT HEAD. PROVIDE HIGH ALARM FLOAT. COORDINATE INSTALLATION OF ALARM PANEL WITH ARCH.
TMV-1	TEMPERATURE MIXING VALVE	WATTS #LFUSG-B	-	1/2	1/2	-	-	THERMOSTATIC MIXING VALVE, LEAD FREE BRASS BODY, 0.35 GPM, INTEGRAL CHECK VALVES, SET AT 110°F OUTLET TEMPERATURE, INSTALL AT ALL LAV-1 FIXTURES
TP-1	TRAP PRIMER	PRECISION PLUMBING PRODUCTS #LTP-1500	-	-	1/2	-	-	BRASS CONSTRUCTION, FULLY AUTOMATIC TRAP PRIMER. PROVIDE WITH SHUTOFF VALVE FOR MAINTENANCE.
wco	WALL CLEANOUT	JAY R. SMITH #4402C	-	-	-	-	-	STAINLESS STEEL COVER, REFER TO PLANS FOR SIZE
WB-1	REFRIGERATOR WALL BOX	IPS WATER TITE	-	-	1/2	-	-	WALL BOX WITH 1/4 TURN ANGLE STOP, WALL FLANGE, AND INTEGRAL WATER HAMMER ARRESTOR
WC-1	WATER CLOSET (ADA)	KOHLER KINGSTON #K-25087	-	-	1/2	4	2	VITREOUS CHINA, TWO PIECE FLOOR MOUNTED WITH ELONGATED BOWL, GRAVITY SIPHON JET, 1.28 GPF, MATCHING SEAT WITH STAINLESS STEEL POSTS, ADA COMPLIANT HEIGHT
WH-1	WALL HYDRANT	WOODFORD #B65	-	-	3/4	-	-	ANTI-SIPHON FREEZELESS WALL HYDRANT. CHROME WITH ANTI-SIPHON VACUUM BREAKER HOSE THREAD, STAINLESS STEEL STEM WITH KEY OPERATOR, CONCEALED RECTANGULAR BOX
XT-1	EXPANSION TANK	AMTROL #ST-5-C	-	-	3/4	-	-	2 GALLON EXPANSION TANK, 0.45 ACCEPTANCE FACTOR, CERTIFIED FOR POTABLE WATER USAGE

			<u>PSI</u>
		AVAILABLE WATER PRESSURE	60.0
		PRESSURE LOSS AT METER	15.0
	ELEVATION OF	MIN. PRESSURE REQUIRED (FLUSH TANK)	8.0
	HIGHEST FIXTURE	14	
	(FEET)	STATIC PRESSURE LOSS (ELEV)	6.0
		TOTAL AVAILABLE PRESSURE	31.0
		DISTANCE TO LAST FIXTURE (IN FT.)	60
		TOTAL DEVELOPED LENGTH (IN FT.)	72
		PEAK FLOW (IN GPM)	24
		ALLOWABLE FRICTION LOSS/100 FT	43.0
FIXTURE	QTY	WSFU EA.	TOTAL WSF
WATER CLOSET (FLUSH TANK)	4.0	5.00	20.0
LAVATORY	4.0	1.50	6.0
BREAK SINK	2.0	2.00	4.0
MOP SINK	1.0	3.00	3.0
		TOTAL WSFU	33.0
		EQUIVALENT GPM	24.3



SHEET WORK NOTES

PROJECT MECHANICAL ENGINEER.

CLEARANCES FOR ALL NEW EQUIPMENT.

GENERAL NOTES

THE INSTALLATION.

PIPING TO EXISTING.

1. 4" SANITARY WASTE TO SITE. CONNECT TO EXISTING SANITARY WASTE MAIN IN ALLEY. CONTRACTOR SHALL VERIFY IN THE FIELD THE EXACT LOCATION AND DEPTH OF LINE PRIOR TO INSTALLATION OF NEW PLUMBING. CONFIRM ADEQUATE DEPTH AND PIPE SIZE.

A. REFER TO PLUMBING COVER SHEET DRAWING FOR SYMBOLS, ABBREVIATIONS, SPECIFICATIONS, AND ADDITIONAL INFORMATION.

OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED.

C. THE CONTRACTOR SHALL EXAMINE FIELD CONDITIONS AND FURNISH THE NECESSARY FITTINGS WHICH MAY BE REQUIRED TO COMPLETE

B. DUE TO DRAWING SCALE IT IS NOT POSSIBLE TO INDICATE ALL

D. FINAL LOCATION OF ALL NEW EQUIPMENT PRIOR TO EQUIPMENT INSTALLATION SHALL BE APPROVED BY BUILDING OWNER OR

E. MAINTAIN CODE REQUIRED AND MANUFACTURER'S RECOMMENDED

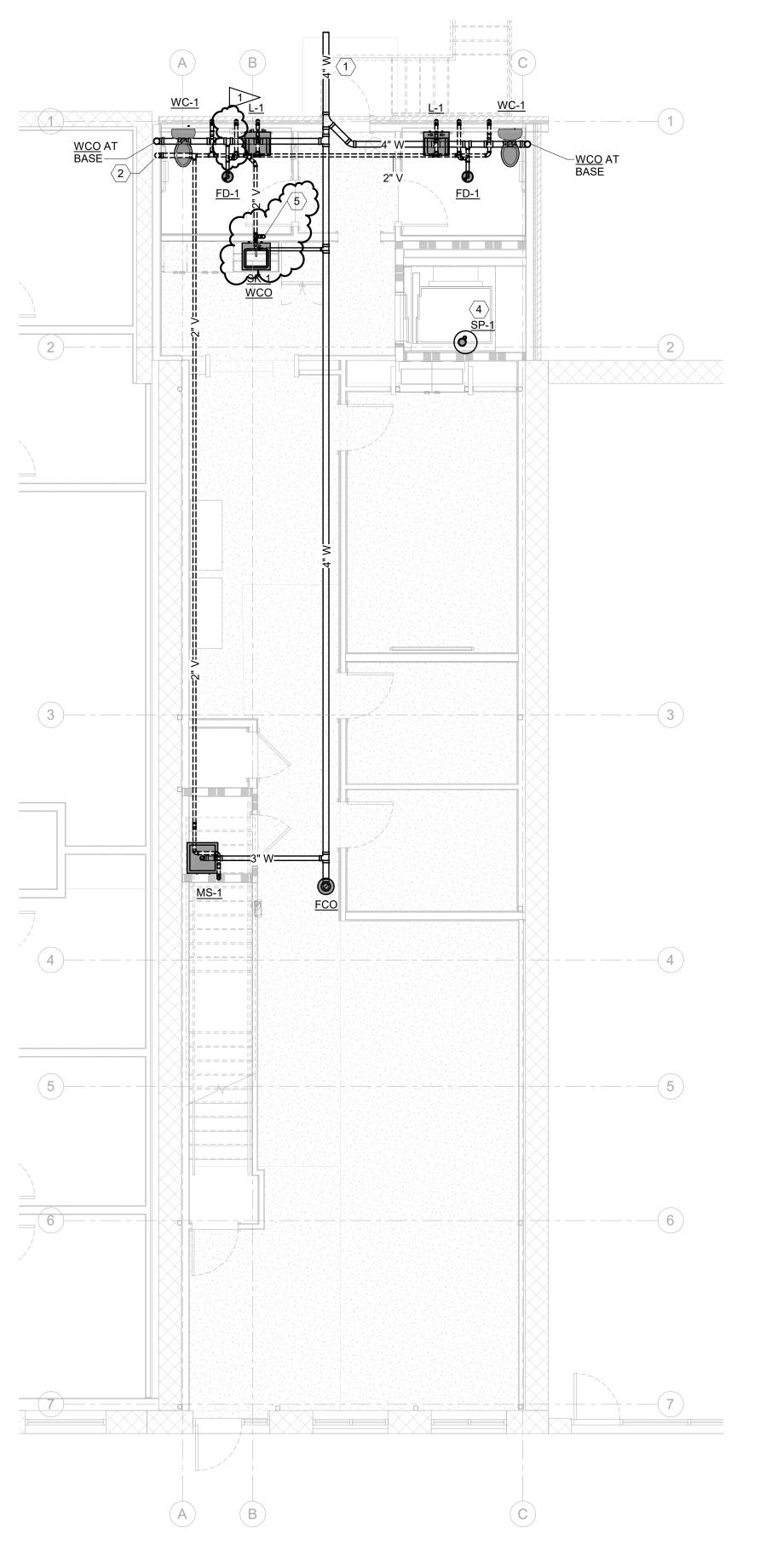
F. PLUMBING CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS IN THE FIELD. ROUTE NEW SANITARY WASTE AND DOMESTIC WATER

- 2. 3" VENT UP TO LEVEL 2.
- FINAL TERMINATION AND FLASHING.

 PROVIDE AND INSTALL SUMP PUMP IN ELEVATOR PIT. ROUTE 2" SUMP PUMP DISCHARGE PIPING TO APPROVED DISCHARGE LOCATION. COORDINATE ROUTING OF PIPING WITH ARCHITECTURA AND IN THE FIELD.

3. 3" VENT TO ROOF. COORDINATE WITH ROOFING CONTRACTOR FOR

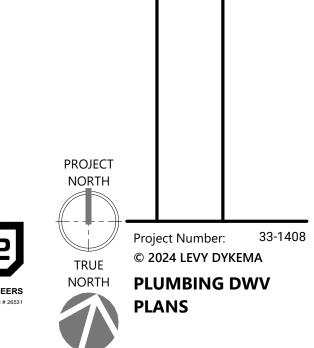
. 2" SANITARY WASTE FROM LAVATORY AND BREAK SINK ON LVL 2 DOWN IN WALL. CONNECT TO 2" SANITARY WASTE PIPING FOR









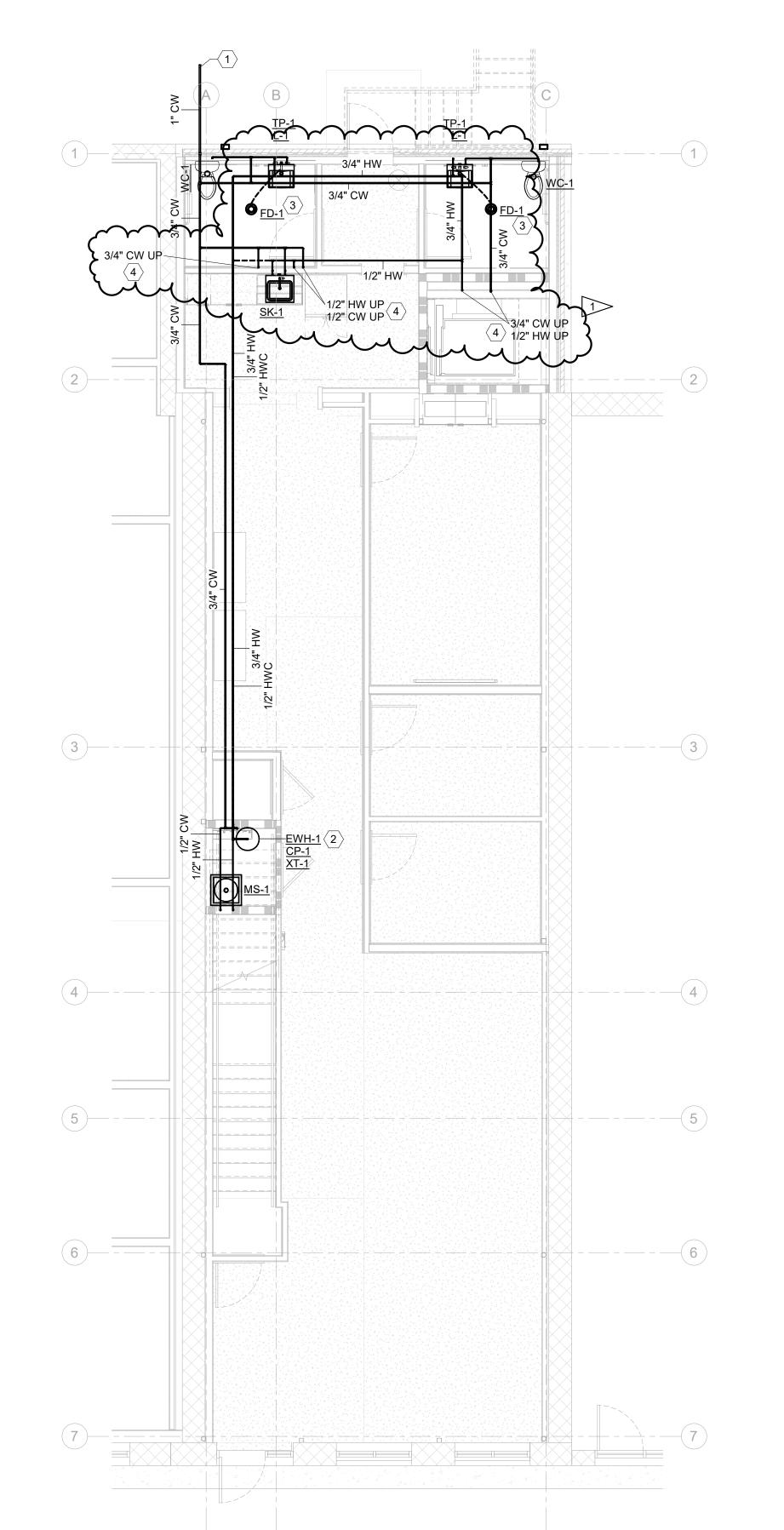






PLUMBING DOMESTIC W&G PLAN-SECOND FLOOR 3/16" = 1'-0"

P201



3/16" = 1'-0"

GENERAL NOTES A. REFER TO PLUMBING COVER SHEET DRAWING FOR SYMBOLS, ABBREVIATIONS, SPECIFICATIONS, AND ADDITIONAL INFORMATION. B. DUE TO DRAWING SCALE IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS AND ACCESSORIES WHICH MAY BE REQUIRED. C. THE CONTRACTOR SHALL EXAMINE FIELD CONDITIONS AND FURNISH THE NECESSARY FITTINGS WHICH MAY BE REQUIRED TO COMPLETE



- E. MAINTAIN CODE REQUIRED AND MANUFACTURER'S RECOMMENDED CLEARANCES FOR ALL NEW EQUIPMENT.
- F. PLUMBING CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS IN THE FIELD. ROUTE NEW SANITARY WASTE AND DOMESTIC WATER PIPING TO EXISTING.

SHEET WORK NOTES

THE INSTALLATION.

- PLUMBING CONTRACTOR SHALL COORDINATE WITH WATER UTILITY PROVIDER TO RELOCATE EXISTING WATER METER TO NEW LOCATION OUTSIDE OF NEW BUILDING FOOTPRINT. PROVIDE AND INSTALL METER AND 1" LINE SIZE AS REQUIRED PER WATER CALCULATION ON SHEET P003.
- 2. WATER HEATER MOUNTED TIGHT TO STRUCTURE ABOVE CUSTODIAN CLOSET DOOR. COORDINATE WITH GENERAL CONTRACTOR FOR INSTALLTION OF WALL SUPPORT.
- 3. ROUTE 1/2" TRAP PRIMER LINE FROM LAVATORY SINK TAILPIECE,

